Tractors 6R 230 and 6R 250 (MY22-)

(Serial No. 6-cylinder engines 6068U -)

JOHN DEERE

OPERATOR'S MANUAL

Tractors 6R 230 and 6R 250 (MY22-)

OMAL234787 ISSUE D4 (ENGLISH)

CALIFORNIA

Proposition 65 Warning

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects, and other reproductive harm.

If this product contains a gasoline engine:

⚠ WARNING

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

The State of California requires the above two warnings.

John Deere GmbH & Co. KG
John Deere Werk Mannheim
North American Edition
PRINTED IN U.S.A.

Introduction

Foreword

READ THIS OPERATOR'S MANUAL carefully to learn how to operate and service your machine correctly. Failure to do so could result in personal injury or machine damage. This manual and the safety signs on your machine may also be available in other languages (see your John Deere dealer[1] to order).

THIS OPERATOR'S MANUAL SHOULD BE CONSIDERED a permanent part of your machine and should remain with the machine when you sell it.

MEASUREMENTS in this manual are given in both metric and customary U.S. units of measure. Use only correct replacement parts and mounting hardware. Metric and inch mounting hardware may require a specific metric or inch wrench.

The designations RIGHT and LEFT are relevant to the direction of forward travel of the tractor.

ENTER THE PRODUCT IDENTIFICATION NUMBERS (PIN) in the Specifications or Serial Numbers sections, at the corresponding point. Please note down all numbers exactly. In the event of a theft, they can be important for the police investigations. Your John Deere dealer also needs these numbers when you order spare parts. It is advisable to note down these numbers at a secure place away from the machine.

BEFORE DELIVERING THIS MACHINE, your dealer performed an inspection.

THIS TRACTOR WAS BUILT ONLY for normal agricultural applications or similar tasks ("INTENDED USE"). Use in any other way is considered as contrary to the intended use. The manufacturer accepts no liability for damage or injury resulting from this misuse, and these risks must be borne solely by the user. Intended use also includes compliance with all operating, maintenance, and servicing conditions specified by the manufacturer.

THIS TRACTOR MAY ONLY be used, serviced, and repaired by persons who are familiar with it and who have been instructed in the corresponding safety provisions (accident prevention). The accident prevention regulations, all other generally recognized regulations on safety and occupational medicine, and the road traffic regulations must be observed at all times. Any arbitrary modifications carried out on this tractor will relieve the manufacturer of all liability for any resulting damage or injury.

REGISTER USED PRODUCTS. If you purchased used John Deere products from an authorized John Deere dealer, the warranty registration information was updated by the dealer and requires no further information on your part.

If you purchased used John Deere products at an auction, through a trader, or from a farmer, please register it now. John Deere and John Deere dealers value their customer’s safety and satisfaction. Your local John Deere dealer is best-equipped to provide you with excellent support for your machine. Please enter your product details and your address online, using the John Deere website corresponding to your country. Then select the dealer of your choice and you will receive a voucher for a discount for purchasing John Deere parts.

LX25458,MY20,000096D-19-12JAN23

Emissions Performance and Tampering

Operation and Maintenance

The engine, including the emissions control system, shall be operated, used, and maintained in accordance with the instructions provided in this manual to maintain the emissions performance of the engine within the requirements applicable to the engine's category/ certification.

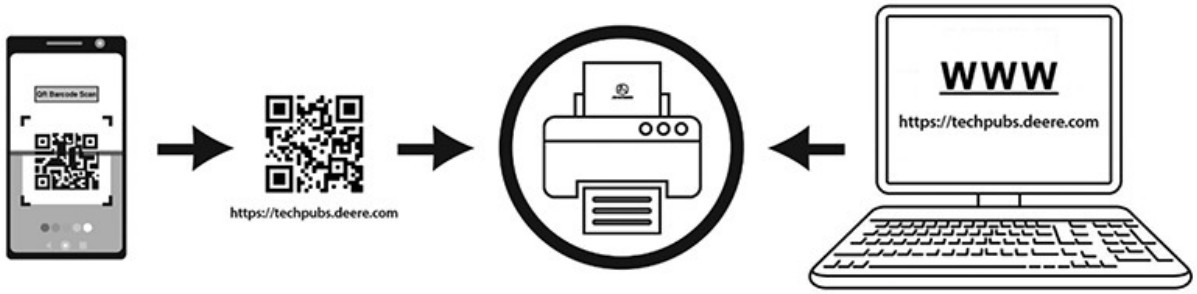
Tampering

No deliberate tampering with or misuse of the engine emissions control system shall take place; in particular with regard to deactivating or not maintaining an exhaust gas recirculation (EGR) or a DEF dosing system. Tampering with an engine’s emissions control system will void the European Union (EU) type approval and applicable emissions-related warranties.

DX,EMISSIONS,PERFORM-19-12JAN18

[1] *or your authorized dealer*

Download Instructions



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Glossary

	O	Medium speed
	++	Fastest speed
Revolutions per Minute	rpm	Abbreviation
Air-Conditioning System	A/C	System used for conditioning the air in the operator's cab
Alternating Current	AC	Electrical current that reverses its direction at regularly recurring intervals
Accessories	ACC	Secondary electrical system
Armrest Control Unit	ACU	Armrest control for operating the tractor functions
AutoQuad Plus Transmission	AQ+	Partial power-shiftable transmission
Air Quality System	AQS	System used to control conditioned air in the operator's cab
Automatic Temperature Control	ATC	Abbreviation
Cold Cranking Amperes	CCA	Amperage of a battery at low temperatures
CommandCenter™	CC	Computerized system for tractor monitoring
Component Technical Manual	CTM	Technical manual for component maintenance
Diesel Exhaust Fluid	DEF	**D**iesel **E**xhaust **F**luid
Direct Current	DC	Electrical current flowing in one direction only
Diesel particulate filter	DPF	Abbreviation
Dynamic Weighing System	DWS	System for recording weights and quantities (front loader)
Engine Control Unit	ECU	Computerized system used to govern engine speed
Electric-Hydraulic:	EH	Electrically controlled hydraulic valve functions
Electro-Hydraulic Depth Control	EHDC	Abbreviation
Electro-Hydraulic Selective Control Valve	EH-SCV	Selective control valve driven with electrical magnetic switches
Electronics	ELX	Abbreviation
Electronic Self-Leveling	ESL	Electronic self-leveling of the loader tool (front loader)
Forward Set Speed	FSS	Speed control for Infinitely Variable Transmission
Gallons per Minute	gpm	Volume flow, measured for the period of one minute
Hitch Control Unit	HCU	Computerized system used to control hitch functions
Heavy-Duty Type	HD	Abbreviation
High Intensity Discharge	HID	A specific type of Xenon worklights that are used for front lighting
Hitch Slip Command	HSC	Computer supported system for supporting the draft response control of the hitch
Instrument Control Unit	ICU	Computerized system controlling tractor warning functions
Ignition	IGN	Control for starting and stopping the engine
Implement Management System	IMS	System used to control functions when turning at end of a field
International Standards Organization	ISO	Abbreviation
Electronic Operator Support	iTEC	Abbreviation for **I**ntelligent **T**otal **E**quipment **C**ontrol
Liters per Minute	l/min	Volume flow, measured for the period of one minute
Leveling to Horizon	LTH	Automatic alignment of the loader tool when changing the driving conditions (tilt/inclination), (front loader)
Mechanical front-wheel drive	MFWD	Mechanically powered front axle
PowrQuad-Plus Transmission	PQ+	Partial power-shiftable transmission
Pressure Control Valve	PCV	Device to regulate pressure in a system
Product identification number	PIN	Serial number for product identification
Power Take-Off	PTO	Abbreviation
Return-to-Position	RTP	Bring loader boom and loader tool automatically to preselected position (front loader)
Control Unit for SCV Valve	SCU	Computerized system used to control selective control valve functions
Selective Control Valve	SCV	Device used to control remote hydraulic functions
Slow Moving Vehicle	SMV	Warning sign on the rear of the tractor
Tractor-Implement Automation	TIA	Abbreviation for **T**ractor **I**mplement **A**utomation Included in TIM.
Tractor Implement Management	TIM	Abbreviation for **T**ractor **I**mplement **M**anagement ISOBUS application
Front axle suspension	TLS	Abbreviation for **T**riple **L**ink **S**uspension

LX25458,MY20,000096F-19-03SEP20

Trademarks

Trademarks	
AutoPowr™	Trademark of Deere and Company
AutoPowr™/IVT™	Trademark of Deere and Company
AutoQuad™ II	Trademark of Deere and Company
AutoQuad™ PLUS	Trademark of Deere and Company
AutoTrac™	Trademark of Deere and Company
Bio Hy-Gard ™	Trademark of Deere and Company
ClimaTrak™	Trademark of Deere and Company
ComfortGard™	Trademark of Deere and Company
ComfortGard Deluxe™	Trademark of Deere and Company
CommandARM™	Trademark of Deere and Company
CommandCenter™	Trademark of Deere and Company
CommandPRO™	Trademark of Deere and Company
CommandQuad™	Trademark of Deere and Company
Cool-Gard™ II	Trademark of Deere and Company
CoolScan™	Trademark of Deere and Company
CoolScan PLUS™	Trademark of Deere and Company
Deere	Trademark of Deere and Company
Eco Shift™	Trademark of Deere and Company
EasyGuide™	Trademark of Deere and Company
DieselScan™	Trademark of Deere and Company
FieldCruise™	Trademark of Deere and Company
Field Doc™	Trademark of Deere and Company
Field Office™	Trademark of Deere and Company
GreenStar™	Trademark of Deere and Company
Hy-Gard™	Trademark of Deere and Company
ILS™	Trademark of Deere and Company
iTEC™	Trademark of Deere and Company
iTEC™ Basic	Trademark of Deere and Company
iTEC™ Pro	Trademark of Deere and Company
IVT™	Trademark of Deere and Company
IVT Selector™	Trademark of Deere and Company
JDLink™	Trademark of Deere and Company
JDOffice™	Trademark of Deere and Company
John Deere	Trademark of Deere and Company
Oilscan™	Trademark of Deere and Company
Parallel Tracking™	Trademark of Deere and Company
Plus-50™	Trademark of Deere and Company
PowerTech™	Trademark of Deere and Company
PowerTech™ Plus	Trademark of Deere and Company
PowerZero™	Trademark of Deere and Company
PowrQuad™	Trademark of Deere and Company
PowrQuad™ PLUS	Trademark of Deere and Company
PowrReverser™	Trademark of Deere and Company
Service ADVISOR™	Trademark of Deere and Company
SERVICEGARD™	Trademark of Deere and Company
StarFire™	Trademark of Deere and Company
StarFire™ iTC	Trademark of Deere and Company
StellarSupport™	Trademark of Deere and Company
SyncroPlus™	Trademark of Deere and Company
TLS™	Trademark of Deere and Company
Tractor-Implement Automation™	Trademark of Deere and Company

LX25458,MY20,0000970-19-05MAY23

Recognize Safety Information

T81389—UN—28JUN13

This is a safety-alert symbol. When you see this symbol on your machine or in this manual, be alert to the potential for personal injury.

Follow recommended precautions and safe operating practices.

DX,ALERT-19-03OCT22

Understand Signal Words

TS187—19—30SEP88

DANGER; The signal word DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

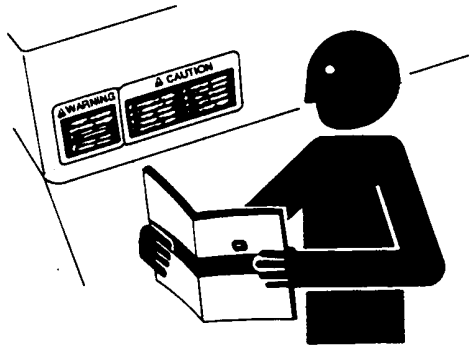
WARNING; The signal word WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION; The signal word CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury. CAUTION may also be used to alert against unsafe practices associated with events which could lead to personal injury.

A signal word—DANGER, WARNING, or CAUTION—is used with the safety-alert symbol. DANGER identifies the most serious hazards. DANGER or WARNING safety signs are located near specific hazards. General precautions are listed on CAUTION safety signs. CAUTION also calls attention to safety messages in this manual.

DX,SIGNAL-19-05OCT16

Follow Safety Instructions



TS201—UN—15APR13

Carefully read all safety messages in this manual and on your machine safety signs. Keep safety signs in good condition. Replace missing or damaged safety signs. Be sure new equipment components and repair parts include the current safety signs. Replacement safety signs are available from your John Deere dealer.

There can be additional safety information contained on parts and components sourced from suppliers that is not reproduced in this operator's manual.

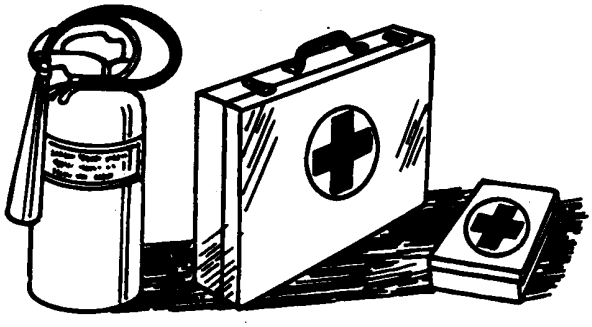
Learn how to operate the machine and how to use controls properly. Do not let anyone operate without instruction.

Keep your machine in proper working condition. Unauthorized modifications to the machine may impair the function and/or safety and affect machine life.

If you do not understand any part of this manual and need assistance, contact your John Deere dealer.

DX,READ-19-01AUG22

Prepare for Emergencies



TS291—UN—15APR13

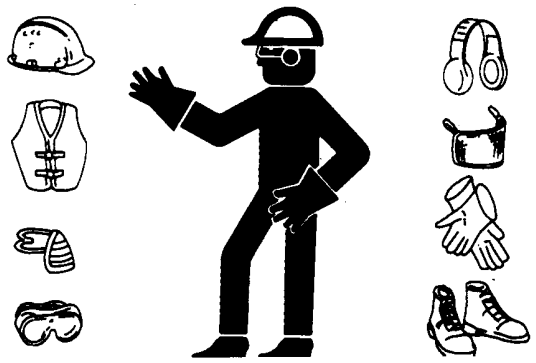
Be prepared if a fire starts.

Keep a first aid kit and fire extinguisher handy.

Keep emergency numbers for doctors, ambulance service, hospital, and fire department near your telephone.

DX,FIRE2-19-03MAR93

Wear Protective Clothing



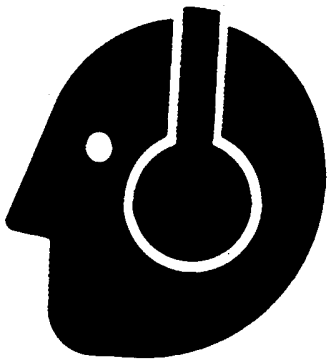
TS206—UN—15APR13

Wear close fitting clothing and safety equipment appropriate to the job.

Operating equipment safely requires the full attention of the operator. Do not wear radio or music headphones while operating machine.

DX,WEAR2-19-03MAR93

Protect Against Noise



TS207—UN—23AUG88

There are many variables that affect the sound level range, including machine configuration, condition and maintenance level of the machine, ground surface, operating environmental, duty cycles, ambient noise, and attachments.

Exposure to loud noise can cause impairment or loss of hearing.

Always wear hearing protection. Wear a suitable hearing protective device such as earmuffs or earplugs to protect against objectionable or uncomfortable loud noises.

DX,NOISE-19-03OCT17

Handle Fuel Safely—Avoid Fires

TS202—UN—23AUG88

Handle fuel with care: it is highly flammable. Do not refuel the machine while smoking or when near open flame or sparks.

Always stop engine before refueling machine. Fill fuel tank outdoors.

Prevent fires by keeping machine clean of accumulated trash, grease, and debris. Always clean up spilled fuel.

Use only an approved fuel container for transporting flammable liquids.

Never fill fuel container in pickup truck with plastic bed liner. Always place fuel container on ground before refueling. Touch fuel container with fuel dispenser nozzle before removing can lid. Keep fuel dispenser nozzle in contact with fuel container inlet when filling.

Do not store fuel container where there is an open flame, spark, or pilot light such as within a water heater or other appliance.

DX,FIRE1-19-12OCT11

Handle Starting Fluid Safely

TS1356—UN—18MAR92

Starting fluid is highly flammable.

Keep all sparks and flame away when using it. Keep starting fluid away from batteries and cables.

To prevent accidental discharge when storing the pressurized can, keep the cap on the container, and store in a cool, protected location.

Do not incinerate or puncture a starting fluid container.

Do not use starting fluid on an engine equipped with glow plugs or an air intake heater.

DX,FIRE3-19-14MAR14

Fire Prevention

To reduce the risk of fire, your tractor should be regularly inspected and cleaned.

- Birds and other animals may build nests or bring other flammable materials into the engine compartment or onto the exhaust system. The tractor should be inspected and cleaned prior to the first use each day.
- A build up of grass, crop material and other debris may occur during normal operation. This is especially true when operating in very dry conditions or conditions where airborne crop material or crop dust is present. Any such build up must be removed to ensure proper machine function and to reduce the risk of fire. The tractor must be inspected and cleaned periodically throughout the day.
- Regular and thorough cleaning of the tractor combined with other routine maintenance procedures listed in the Operator's Manual greatly reduce the risk of fire and the chance of costly downtime.
- Do not store fuel container where there is an open flame, spark, or pilot light such as within a water heater or other appliance.
- Check fuel lines, tank, cap, and fittings frequently for damage, cracks or leaks. Replace if necessary.

Follow all operational and safety procedures posted on the machine and the Operator's Manual. Be careful of hot engine and exhaust components during inspection and cleaning. Before carrying out any inspection or cleaning, always shut OFF the engine, place the transmission in PARK or set parking brake, and remove the key. Removal of the key will prevent others from starting the tractor during inspection and cleaning.

DX,WW,TRACTOR,FIRE,PREVENTION-19-12OCT11

In Case of Fire

TS227—UN—15APR13

CAUTION: Avoid personal injury.

Stop machine immediately at the first sign of fire. Fire may be identified by the smell of smoke or sight of flames. Because fire grows and spreads rapidly, get off the machine immediately and move safely away from the fire. Do not return to the machine! The number one priority is safety.

Call the fire department. A portable fire extinguisher can put out a small fire or contain it until the fire department arrives; but portable extinguishers have limitations. Always put the safety of the operator and bystanders first. If attempting to extinguish a fire, keep your back to the wind with an unobstructed escape path so you can move away quickly if the fire cannot be extinguished.

Read the fire extinguisher instructions and become familiar with their location, parts, and operation before a fire starts. Local fire departments or fire equipment distributors may offer fire extinguisher training and recommendations.

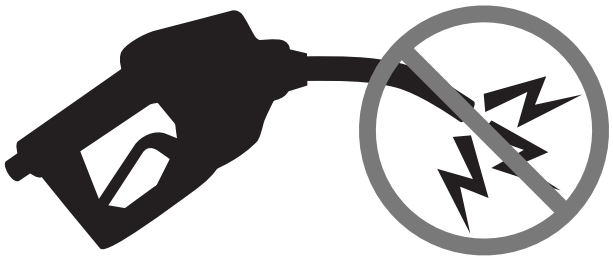
If your extinguisher does not have instructions, follow these general guidelines:

1. Pull the pin. Hold the extinguisher with the nozzle pointing away from you, and release the locking mechanism.
2. Aim low. Point the extinguisher at the base of the fire.
3. Squeeze the lever slowly and evenly.
4. Sweep the nozzle from side-to-side.

DX,FIRE4-19-22AUG13

Avoid Static Electricity Risk When Refueling

RG22142—UN—17MAR14



RG21992—UN—21AUG13

The removal of sulfur and other compounds in Ultra-Low Sulfur Diesel (ULSD) fuel decreases its conductivity and increases its ability to store a static charge.

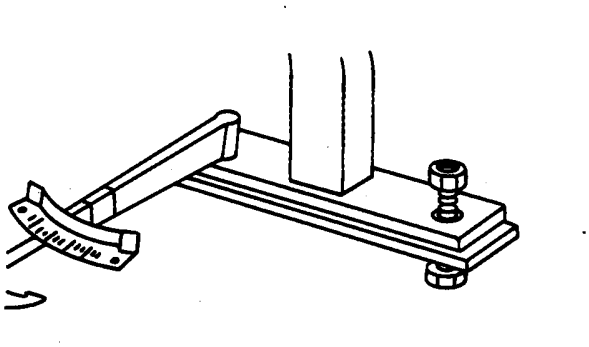
Refineries may have treated the fuel with a static dissipating additive. However, there are many factors that can reduce the effectiveness of the additive over time.

Static charges can build up in ULSD fuel while it is flowing through fuel delivery systems. Static electricity discharge when combustible vapors are present could result in a fire or explosion.

Therefore, it is important to ensure that the entire system used to refuel your machine (fuel supply tank, transfer pump, transfer hose, nozzle, and others) is properly grounded and bonded. Consult with your fuel or fuel system supplier to ensure that the delivery system is in compliance with fueling standards for proper grounding and bonding practices.

DX,FUEL,STATIC,ELEC-19-12JUL13

Keep ROPS Installed Properly



TS212—UN—23AUG88

Make certain all parts are reinstalled correctly if the roll-over protective structure (ROPS) is loosened or removed for any reason. Tighten mounting bolts to proper torque.

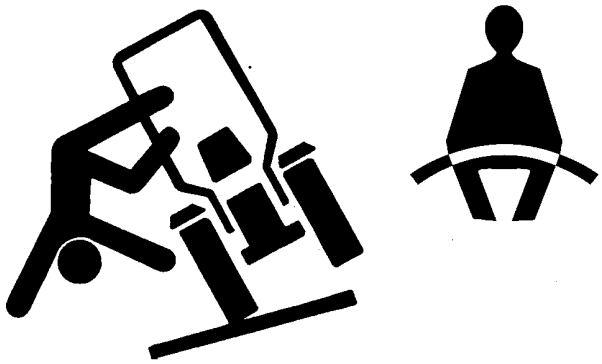
The protection offered by ROPS will be impaired if ROPS is subjected to structural damage, is involved in an overturn incident, or is in any way altered by welding, bending, drilling, or cutting. A damaged ROPS should be replaced, not reused.

The seat is part of the ROPS safety zone. Replace only with John Deere seat approved for your tractor.

Any alteration of the ROPS must be approved by the manufacturer.

DX,ROPS3-19-12OCT11

Use Foldable ROPS and Seat Belt Properly



TS1729—UN—24MAY13

Avoid crushing injury or death during rollover.

- If this machine is equipped with a foldable rollover protective structure (ROPS), keep the ROPS in the fully extended and locked position. USE a seat belt when you operate with a ROPS in the fully extended position.
  - Hold the latch and pull the seat belt across the body.
  - Insert the latch into the buckle. Listen for a click.
  - Tug on the seat belt to make sure that the belt is securely fastened.

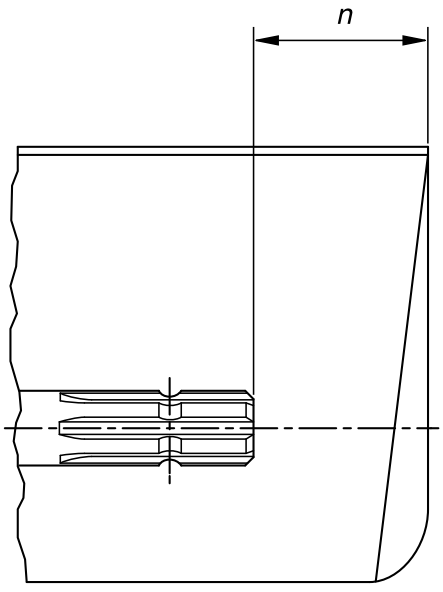
- Snug the seat belt across the hips.

- If this machine is operated with the ROPS folded (for example, to enter a low building), drive with extreme caution. DO NOT USE a seat belt with the ROPS folded.
- Return the ROPS to the raised, fully extended position as soon as the machine is operated under normal conditions.

DX,FOLDROPS-19-22AUG13

Stay Clear of Rotating Drivelines

TS1644—UN—22AUG95



H96219—UN—29APR10

Entanglement in rotating driveline can cause serious injury or death.

Keep tractor master shield and driveline shields in place at all times. Make sure rotating shields turn freely.

Only use power take-off driveshafts with adequate guards and shields.

Wear close fitting clothing. Stop the engine and be sure that PTO driveline is stopped before making adjustments, connections, or cleaning out PTO driven equipment.

Do not install any adapter device between the tractor and the primary implement PTO driveshaft that will allow a 1000 rpm tractor shaft to power a 540 rpm implement at speeds higher than 540 rpm.

Do not install any adapter device that results in a portion of the rotating implement shaft, tractor shaft, or the adapter to be unguarded. The tractor master shield shall overlap the end of the splined shaft and the added adaptor device as outlined in the table.

The angle at which the primary implement PTO driveshaft can be inclined may be reduced depending on the shape and size of the tractor master shield and the shape and size of the guard of the primary implement PTO driveshaft.

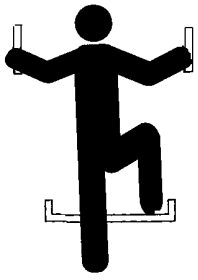
Do not raise implements high enough to damage the tractor master shield or guard of primary implement PTO driveshaft. Detach the PTO driveline shaft if it is necessary to increase implement height. (See Attching/ Detaching PTO Driveline)

When using Type 3/4 PTO, inclination and turning angles may be reduced depending on type of PTO master shield and coupling rails.

PTO Type	Diameter	Splines	n ± 5 mm (0.20 in.)
1	35 mm (1.378 in.)	6	85 mm (3.35 in.)
2	35 mm (1.378 in.)	21	85 mm (3.35 in.)
3	45 mm (1.772 in.)	20	100 mm (4.00 in.)
4	57.5 mm (2.264 in.)	22	100 mm (4.00 in.)

DX,PTO-19-28FEB17

Use Steps and Handholds Correctly



T133468—UN—15APR13

Prevent falls by facing the machine when getting on and off. Maintain 3-point contact with steps, handholds, and handrails.

Use extra care when mud, snow, or moisture present slippery conditions. Keep steps clean and free of grease

or oil. Never jump when exiting machine. Never mount or dismount a moving machine.

DX,WW,MOUNT-19-12OCT11

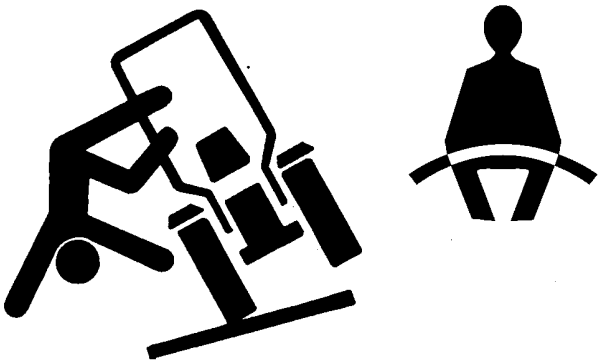
Read Operator's Manuals for ISOBUS Controllers

In addition to GreenStar™ Applications, this display can be used as a display device for any ISOBUS Controller that meets ISO 11783 standard. This includes capability to control ISOBUS implements. When used in this manner, information and control functions placed on the display are provided by the ISOBUS Controller and are the responsibility of the ISOBUS Controller manufacturer. Some of these functions could pose a hazard to either the operator or a bystander. Read the Operator's Manual provided by the ISOBUS Controller manufacturer and observe all safety messages in manual and on ISOBUS Controller product prior to use.

NOTE: ISOBUS refers to the ISO Standard 11783

DX,WW,ISOBUS-19-15JUL15

Use Seat Belt Properly



TS1729—UN—24MAY13

Avoid crushing injury or death during rollover.

This machine is equipped with a rollover protective structure (ROPS). USE a seat belt when you operate with a ROPS.

- Hold the latch and pull the seat belt across the body.
- Insert the latch into the buckle. Listen for a click.
- Tug on the seat belt latch to make sure that the belt is securely fastened.
- Snug the seat belt across the hips.

Replace entire seat belt if mounting hardware, buckle, belt, or retractor show signs of damage.

Inspect seat belt and mounting hardware at least once a year. Look for signs of loose hardware or belt damage, such as cuts, fraying, extreme or unusual wear, discoloration, or abrasion. Replace only with replacement parts approved for your machine. See your John Deere dealer.

DX,ROPS1-19-22AUG13

Operating the Tractor Safely

You can reduce the risk of accidents by following these simple precautions:

- Use your tractor only for jobs it was designed to perform, for example, pushing, pulling, towing, actuating, and carrying a variety of interchangeable equipment designed to conduct agricultural work.
- Operators must be mentally and physically capable of accessing the operator's station and/or controls, and operating the machine properly and safely.
- Never operate machine when distracted, fatigued, or impaired. Proper machine operation requires the operator's full attention and awareness.
- This tractor is not intended to be used as a recreational vehicle.
- Read this operator's manual before operating the tractor and follow operating and safety instructions in the manual and on the tractor.
- Follow operation and ballasting instructions found in the operator's manual for your implements/ attachments, such as front loaders.
- Follow the instructions outlined in the operator's manual of any mounted or trailed machinery or trailer. Do not operate a combination of tractor-machine or tractor-trailer unless all instructions have been followed.
- Make sure that everyone is clear of machine, attached equipment, and work area before starting engine or operation.
- Stay clear of the three-point linkage and pickup hitch (if equipped) when controlling them.
- Keep hands, feet, and clothing away from power-driven parts.

Driving Concerns

- Never get on or off a moving tractor.
- Complete any required training prior to operating vehicle.
- Keep all children and nonessential personnel off tractors and all equipment.
- Never ride on a tractor unless seated on a John Deere approved seat with a seat belt.
- Keep all shields/guards in place.
- Use appropriate visual and audible signals when operating on public roads.
- Move to side of road before stopping.
- Reduce speed when turning, applying individual

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brakes, or operating around hazards on rough ground or steep slopes.

- Stability degrades when attached implements are at high position.
- Couple brake pedals together for road travel.
- Pump brakes when stopping on slippery surfaces.
- Regularly clean fenders and fender valances (mud flaps) if installed. Remove dirt before driving on public roadways.

Heated and Ventilated Operator's Seat

- An overheated seat heater can cause a burn injury or damage to the seat. To reduce the risk of burns, use caution when using the seat heater for extended periods of time, especially if the operator cannot feel temperature change or pain to the skin. Do not place objects on the seat, such as a blanket, cushion, cover, or similar item, which can cause the seat heater to overheat.

Towing Loads

- Be careful when towing and stopping heavy loads. Stopping distance increases with speed and weight of towed loads, and on slopes. Towed loads with or without brakes that are too heavy for the tractor or are towed too fast can cause loss of control.
- Consider the total weight of the equipment and its load.
- Hitch towed loads only to approved couplings to avoid rearward upset.

Parking and Leaving the Tractor

- Before dismounting, shut off SCVs, disengage PTO, stop engine, lower implements/attachments to ground, place implement/attachment control devices in neutral, and securely engage park mechanism, including the park pawl and park brake. In addition, if the tractor is left unattended, remove key.
- Leaving transmission in gear with engine off will NOT prevent the tractor from moving.
- Never go near an operating PTO or an operating implement.
- Wait for all movement to stop before servicing machinery.

Common Accidents

Unsafe operation or misuse of the tractor can result in accidents. Be alert to hazards of tractor operation.

The most common accidents involving tractors are:

- Tractor rollover
- Collisions with motor vehicles
- Improper starting procedures
- Entanglement in PTO shafts
- Falling from tractor
- Crushing and pinching during hitching

DX,WW,TRACTOR-19-08MAY19

Avoid Backover Accidents

PC10857XW—UN—15APR13

Before moving machine, be sure that all persons are clear of machine path. Turn around and look directly for best visibility. Use a signal person when backing if view is obstructed or when in close quarters.

Do not rely on a camera to determine if personnel or obstacles are behind the machine. The system can be limited by many factors including maintenance practices, environmental conditions, and operating range.

DX,AVOID,BACKOVER,ACCIDENTS-19-30AUG10

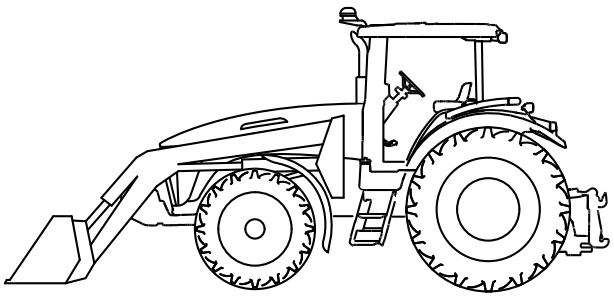
Limited Use in Forestry Operation

The intended use of John Deere tractors when used in forestry operations is limited to tractor-specific applications like transport, stationary work such as log splitting, propulsion, or operating implements with PTO, hydraulic, or electrical systems.

These are applications where normal operation does not present a risk of falling or penetrating objects. Any forestry applications beyond these applications, such as forwarding and loading, requires fitment of application-specific components including Falling Object Protective Structure (FOPS) and/or Operative Protective Structures (OPS). Contact John Deere dealer for special components.

DX,WW,FORESTRY-19-12OCT11

Operating the Loader Tractor Safely



TS1692—UN—09NOV09

When operating a machine with a loader application, reduce speed as required to ensure good tractor and loader stability.

To avoid tractor rollover and damage to front tires and tractor, do not carry load with your loader at a speed over 10 km/h (6 mph).

To avoid tractor damage do not use a front loader or a sprayer tank if the tractor is equipped with a 3 Meter Front Axle.

Never allow anyone to walk or work under a raised loader.

Do not use loader as a work platform.

Do not lift or carry anyone on loader, in bucket, or on implement or attachment.

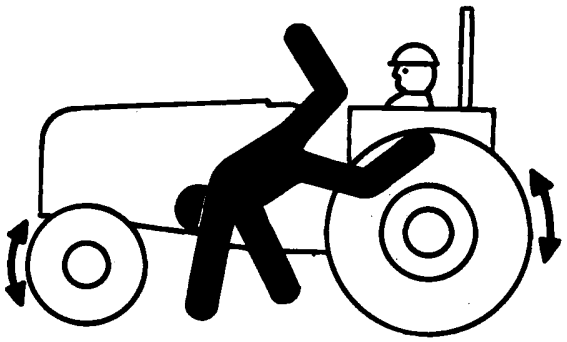
Lower loader to ground before leaving operators station.

The Rollover Protective Structure (ROPS) or cab roof, if equipped, may not provide sufficient protection from load falling onto the operators station. To prevent loads from falling onto the operators station, always use appropriate implements for specific applications (that is, manure forks, round bale forks, round bale grippers, and clampers).

Ballast tractor in accordance to Ballast Recommendations in PREPARE TRACTOR section.

DX,WW,LOADER-19-18SEP12

Keep Riders Off Machine



TS290—UN—23AUG88

Only allow the operator on the machine. Keep riders off.

Riders on machine are subject to injury such as being struck by foreign objects and being thrown off of the machine. Riders also obstruct the operator's view resulting in the machine being operated in an unsafe manner.

DX,RIDER-19-03MAR93

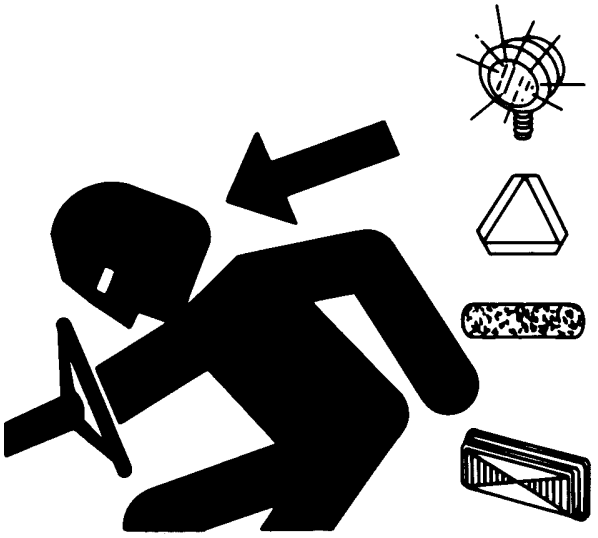
Instructional Seat

TS1730—UN—24MAY13

The instructional seat, if so equipped, has been provided only for training operators or diagnosing machine problems.

DX,SEAT,NA-19-22AUG13

Use Safety Lights and Devices



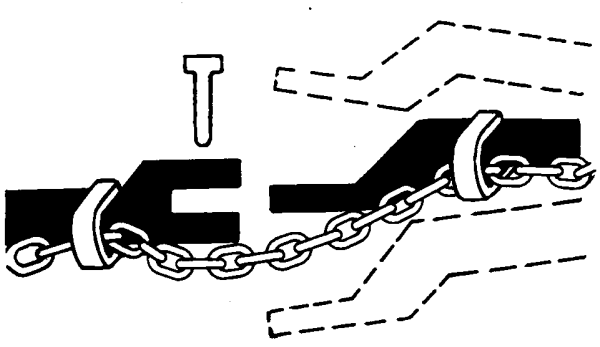
TS951—UN—12APR90

Prevent collisions between other road users, slow moving tractors with attachments or towed equipment, and self-propelled machines on public roads. Frequently check for traffic from the rear, especially in turns, and use turn signal lights.

Use headlights, flashing warning lights, and turn signals day and night. Follow local regulations for equipment lighting and marking. Keep lighting and marking visible, clean, and in good working order. Replace or repair lighting and marking that has been damaged or lost. An implement safety lighting kit is available from your John Deere dealer.

DX,FLASH-19-07JUL99

Use a Safety Chain



TS217—UN—23AUG88

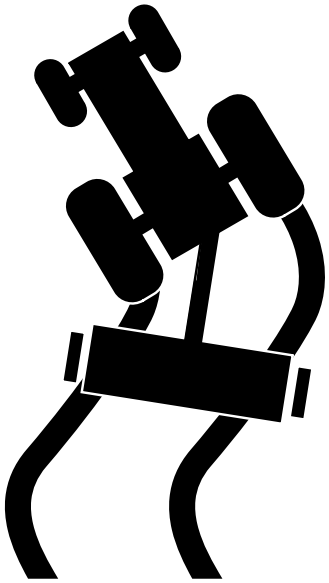
A safety chain will help control drawn equipment should it accidentally separate from the drawbar.

Using the appropriate adapter parts, attach the chain to the tractor drawbar support or other specified anchor location. Provide only enough slack in the chain to permit turning.

See your John Deere dealer for a chain with a strength rating equal to or greater than the gross weight of the towed machine. Do not use safety chain for towing.

DX,CHAIN-19-03MAR93

Transport Towed Equipment at Safe Speeds



TS1686—UN—27SEP06

Do not exceed the maximum transport speed. This towing unit may be capable of operating at transport speeds that exceed the maximum allowable transport speed for towed implements.

Before transporting a towed implement, determine from signs on the implement or information provided in the implement's operator manual the maximum transport speed. Never transport at speeds that exceed the implement's maximum transport speed. Exceeding the implement's maximum transport speed can result in:

- Loss of control of the towing unit/implement combination
- Reduced or no ability to stop during braking
- Implement tire failure
- Damage to the implement structure or its components

Implements shall be equipped with brakes if the maximum fully loaded weight is greater than 1500 kg (3307 lbs) and greater than 1.5 times the weight of the towing unit.

Example: Implement mass is 1600 kg (3527 lbs) and towing unit mass is 1600 kg (3527 lbs), example implement is not required to have brakes.

Implements without brakes: Do not transport at speeds greater than 32 km/h (20 mph).

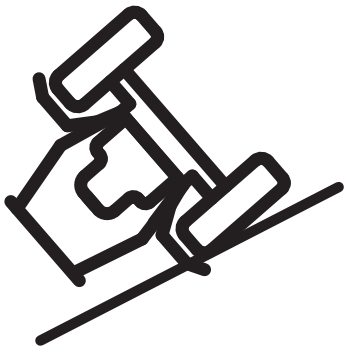
Implements with brakes:

- If the manufacturer does not specify a maximum transport speed, do not tow at speeds greater than 40 km/h (25 mph).
- When transporting at speeds up to 40 km/h (25 mph) the fully loaded implement must weigh less than 4.5 times the towing unit weight.
- When transporting at speeds between 40—50 km/h (25—31 mph) the fully loaded implement must weigh less than 3.0 times the towing unit weight.

When towing a trailer, become familiar with the braking characteristics and ensure the compatibility of the tractor/trailer combination in regard to the deceleration rate.

DX,TOW1-19-28FEB17

Use Caution on Slopes, Uneven Terrain, and Rough Ground



RXA0103437—UN—01JUL09

Avoid holes, ditches, and obstructions which cause the tractor to tip, especially on slopes. Avoid sharp uphill turns.

Driving forward out of a ditch, mired condition, or up a steep slope could cause the tractor to tip over rearward. Back out of these situations if possible.

Danger of overturn increases greatly with narrow tread setting, at high speed.

Not all conditions that can cause a tractor to overturn are listed. Be alert for any situation in which stability may be compromised.

Slopes are a major factor related to loss-of-control and tip-over accidents, which can result in severe injury or death. Operation on all slopes requires extra caution.

Uneven terrain or rough ground can cause loss-of-control and tip-over accidents, which can result in severe injury or death. Operation on uneven terrain or rough ground requires extra caution.

Never drive near the edge of a gully, drop-off, ditch, steep embankment, or a body of water. The machine could suddenly roll over if a wheel goes over the edge or the ground caves in

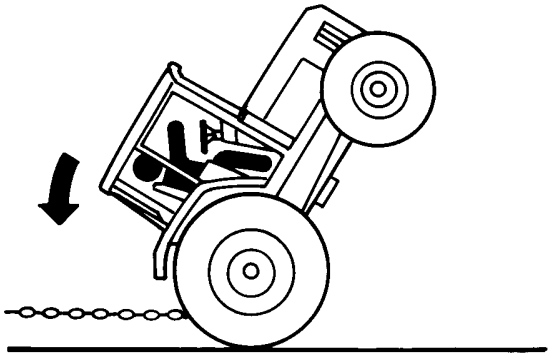
Choose a low ground speed so you will not have to stop or shift while on a slope.

Avoid starting, stopping, or turning on a slope. If the tires lose traction, disengage the PTO and proceed slowly, straight down the slope.

Keep all movement on slopes slow and gradual. Do not make sudden changes in speed or direction, which could cause the machine to roll over.

DX,WW,SLOPE-19-28FEB17

Freeing a Mired Machine



TS1645—UN—15SEP95

TS263—UN—23AUG88

Attempting to free a mired machine can involve safety hazards such as the mired tractor tipping rearward, the towing tractor overturning, and the tow chain or tow bar (a cable is not recommended) failing and recoiling from its stretched condition.

Back your tractor out if it gets mired down in mud. Unhitch any towed implements. Dig mud from behind the rear wheels. Place boards behind the wheels to provide a solid base and try to back out slowly. If necessary, dig mud from the front of all wheels and drive slowly ahead.

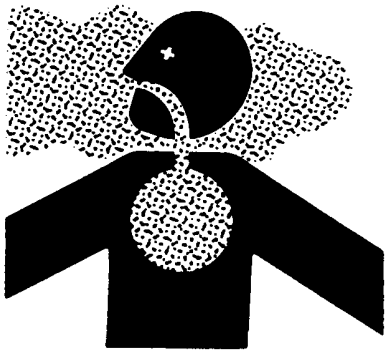
If necessary to tow with another unit, use a tow bar or a long chain (a cable is not recommended). Inspect the chain for flaws. Make sure all parts of towing devices are of adequate size and strong enough to handle the load.

Always hitch to the drawbar of the towing unit. Do not

hitch to the front pushbar attachment point. Before moving, clear the area of people. Apply power smoothly to take up the slack: a sudden pull could snap any towing device causing it to whip or recoil dangerously.

DX,MIRED-19-07JUL99

Avoid Contact with Agricultural Chemicals



TS220—UN—15APR13

TS272—UN—23AUG88

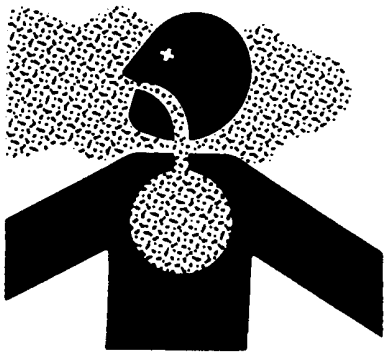
This enclosed cab does not protect against inhaling vapor, aerosol or dust. If pesticide use instructions require respiratory protection, wear an appropriate respirator inside the cab.

Before leaving the cab, wear personal protective equipment as required by the pesticide use instructions. When re-entering the cab, remove protective equipment and store either outside the cab in a closed box or some other type of sealable container or inside the cab in a pesticide resistant container, such as a plastic bag.

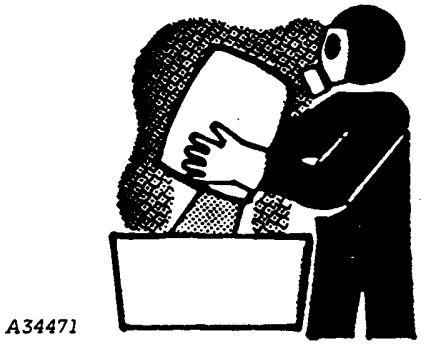
Clean your shoes or boots to remove soil or other contaminated particles prior to entering the cab.

DX,CABS-19-25MAR09

Handle Agricultural Chemicals Safely



TS220—UN—15APR13



A34471—UN—11OCT88

Chemicals used in agricultural applications such as fungicides, herbicides, insecticides, pesticides, rodenticides, and fertilizers can be harmful to your health or the environment if not used carefully.

Always follow all label directions for effective, safe, and legal use of agricultural chemicals.

Reduce risk of exposure and injury:

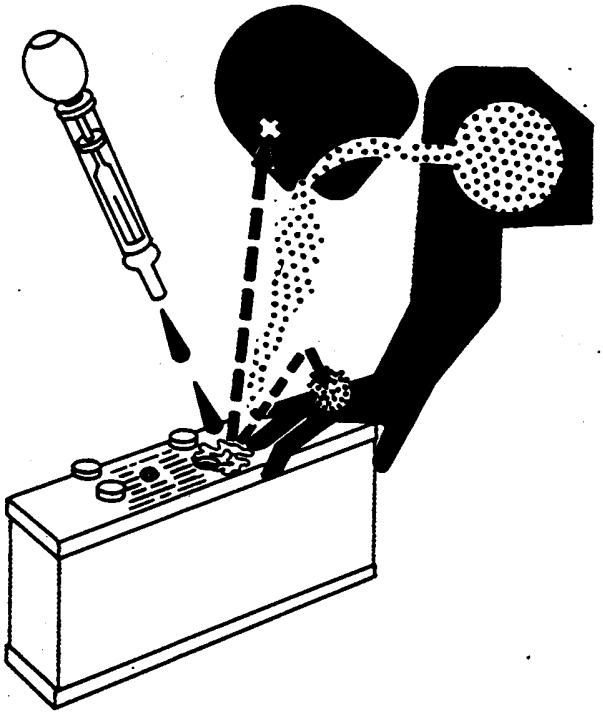
- Wear appropriate personal protective equipment as recommended by the manufacturer. In the absence of manufacturer's instructions, follow these general guidelines:
  - Chemicals labeled **'Danger'**: Most toxic. Generally require use of goggles, respirator, gloves, and skin protection.
  - Chemicals labeled **'Warning'**: Less toxic. Generally require use of goggles, gloves, and skin protections.
  - Chemicals labeled **'Caution'**: Least toxic. Generally require use of gloves and skin protection.
- Avoid inhaling vapor, aerosol or dust.
- Always have soap, water, and towel available when working with chemicals. If chemical contacts skin, hands, or face, wash immediately with soap and water. If chemical gets into eyes, flush immediately with water.
- Wash hands and face after using chemicals and before eating, drinking, smoking, or urination.

- Do not smoke or eat while applying chemicals.
- After handling chemicals, always bathe or shower and change clothes. Wash clothing before wearing again.
- Seek medical attention immediately if illness occurs during or shortly after use of chemicals.
- Keep chemicals in original containers. Do not transfer chemicals to unmarked containers or to containers used for food or drink.
- Store chemicals in a secure, locked area away from human or livestock food. Keep children away.
- Always dispose of containers properly. Triple rinse empty containers and puncture or crush containers and dispose of properly.

DX,WW,CHEM01-19-24AUG10

Handling Batteries Safely

TS204—UN—15APR13



TS203—UN—23AUG88

Battery gas can explode. Keep sparks and flames away from batteries. Use a flashlight to check battery electrolyte level.

Never check battery charge by placing a metal object across the posts. Use a voltmeter or hydrometer.

Always remove grounded (-) battery clamp first and replace grounded clamp last.

Sulfuric acid in battery electrolyte is poisonous and strong enough to burn skin, eat holes in clothing, and cause blindness if splashed into eyes.

Avoid hazards by:

- Filling batteries in a well-ventilated area
- Wearing eye protection and rubber gloves
- Avoiding use of air pressure to clean batteries
- Avoiding breathing fumes when electrolyte is added
- Avoiding spilling or dripping electrolyte
- Using correct battery booster or charger procedure.

If acid is spilled on skin or in eyes:

1. Flush skin with water.
2. Apply baking soda or lime to help neutralize the acid.
3. Flush eyes with water for 15—30 minutes. Get medical attention immediately.

If acid is swallowed:

1. Do not induce vomiting.
2. Drink large amounts of water or milk, but do not exceed 2 L (2 qt.).
3. Get medical attention immediately.

WARNING: Battery posts, terminals, and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm. **Wash hands after handling.**

DX,WW,BATTERIES-19-02DEC10

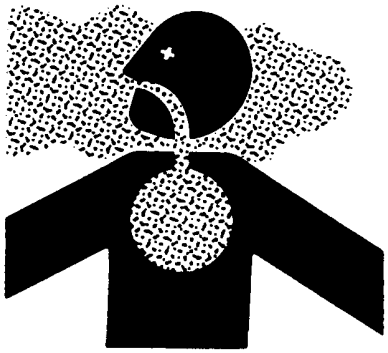
Avoid Heating Near Pressurized Fluid Lines

TS953—UN—15MAY90

Flammable spray can be generated by heating near pressurized fluid lines, resulting in severe burns to yourself and bystanders. Do not heat by welding, soldering, or using a torch near pressurized fluid lines or other flammable materials. Pressurized lines can accidentally burst when heat goes beyond the immediate flame area.

DX,TORCH-19-10DEC04

Remove Paint Before Welding or Heating



TS220—UN—15APR13

Avoid potentially toxic fumes and dust.

Hazardous fumes can be generated when paint is heated by welding, soldering, or using a torch.

Remove paint before heating:

- Remove paint a minimum of 100 mm (4 in.) from area to be affected by heating. If paint cannot be removed, wear an approved respirator before heating or welding.
- If you sand or grind paint, avoid breathing the dust. Wear an approved respirator.
- If you use solvent or paint stripper, remove stripper with soap and water before welding. Remove solvent or paint stripper containers and other flammable material from area. Allow fumes to disperse at least 15 minutes before welding or heating.

Do not use a chlorinated solvent in areas where welding will take place.

Do all work in an area that is well ventilated to carry toxic fumes and dust away.

Dispose of paint and solvent properly.

DX,PAINT-19-24JUL02

Handle Electronic Components and Brackets Safely

TS249—UN—23AUG88

Falling while installing or removing electronic components mounted on equipment can cause serious injury. Use a ladder or platform to easily reach each mounting location. Use sturdy and secure footholds and handholds. Do not install or remove components in wet or icy conditions.

If installing or servicing a RTK base station on a tower or other tall structure, use a certified climber.

If installing or servicing a global positioning receiver mast used on an implement, use proper lifting techniques and wear proper protective equipment. The mast is heavy and can be awkward to handle. Two people are required when mounting locations are not accessible from the ground or from a service platform.

DX,WW,RECEIVER-19-24AUG10

Practice Safe Maintenance

TS218—UN—23AUG88

Understand service procedure before doing work. Keep area clean and dry.

Never lubricate, service, or adjust machine while it is moving. Keep hands, feet, and clothing away from power-driven parts. Disengage all power and operate controls to relieve pressure. Lower equipment to the ground. Stop the engine. Remove the key. Allow machine to cool.

Securely support any machine elements that must be raised for service work.

Keep all parts in good condition and properly installed. Fix damage immediately. Replace worn or broken parts. Remove any buildup of grease, oil, or debris.

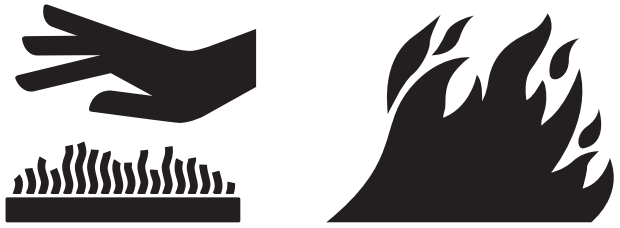
On self-propelled equipment, disconnect battery ground cable (-) before making adjustments on electrical systems or welding on machine.

On towed implements, disconnect wiring harnesses from tractor before servicing electrical system components or welding on machine.

Falling while cleaning or working at height can cause serious injury. Use a ladder or platform to easily reach each location. Use sturdy and secure footholds and handholds.

DX,SERV-19-28FEB17

Avoid Hot Exhaust



RG17488—UN—21AUG09

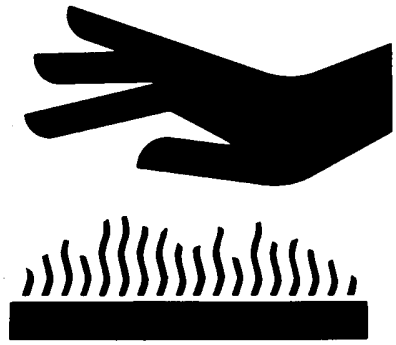
Servicing machine or attachments with engine running can result in serious personal injury. Avoid exposure and skin contact with hot exhaust gases and components.

Exhaust parts and streams become very hot during operation. Exhaust gases and components reach temperatures hot enough to burn people, ignite, or melt common materials.

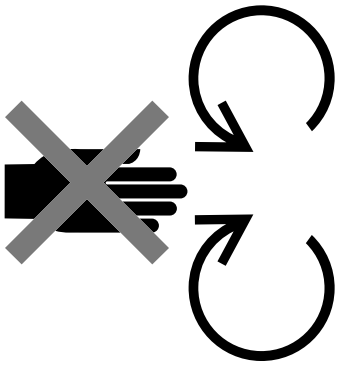
DX,EXHAUST-19-20AUG09

Clean Exhaust Filter Safely

TS227—UN—15APR13



TS271—UN—23AUG88



TS1693—UN—09DEC09

TS1695—UN—07DEC09

During exhaust filter cleaning operations, the engine may run at elevated idle and hot temperatures for an extended period of time. Exhaust gases and exhaust filter components reach temperatures hot enough to burn people, or ignite or melt common materials.

Keep machine away from people, animals, or structures which may be susceptible to harm or damage from hot exhaust gases or components. Avoid potential fire or explosion hazards from flammable materials and vapors near the exhaust. Keep exhaust outlet away from people and anything that can melt, burn, or explode.

Closely monitor machine and surrounding area for smoldering debris during and after exhaust filter cleaning.

Adding fuel while an engine is running can create a fire or explosion hazard. Always stop engine before refueling machine and clean up any spilled fuel.

Always make sure that engine is stopped while hauling machine on a truck or trailer.

Contact with exhaust components while still hot can result in serious personal injury.

Avoid contact with these components until cooled to safe temperatures.

If service procedure requires engine to be running:

- Only engage power-driven parts required by service procedure
- Ensure that other people are clear of operator station and machine

Keep hands, feet, and clothing away from power-driven parts.

Always disable movement (neutral), set the parking brake or mechanism and disconnect power to attachments or tools before leaving the operator's station.

Shut off engine and remove key (if equipped) before leaving the machine unattended.

DX,EXHAUST,FILTER-19-12JAN11

Work In Ventilated Area

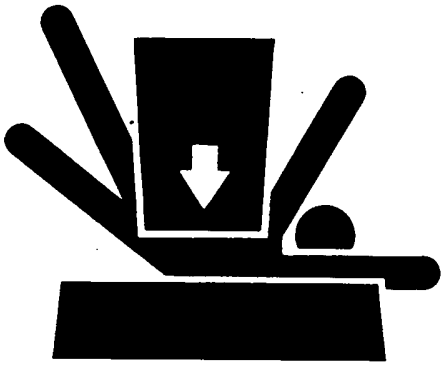
TS220—UN—15APR13

Engine exhaust fumes can cause sickness or death. If it is necessary to run an engine in an enclosed area, remove the exhaust fumes from the area with an exhaust pipe extension.

If you do not have an exhaust pipe extension, open the doors and get outside air into the area.

DX,AIR-19-17FEB99

Support Machine Properly



TS229—UN—23AUG88

Always lower the attachment or implement to the ground before you work on the machine. If the work requires that the machine or attachment be lifted, provide secure support for them. If left in a raised position, hydraulically supported devices can settle or leak down.

Do not support the machine on cinder blocks, hollow tiles, or props that may crumble under continuous load.

Do not work under a machine that is supported solely by a jack. Follow recommended procedures in this manual.

When implements or attachments are used with a machine, always follow safety precautions listed in the implement or attachment operator's manual.

DX,LOWER-19-24FEB00

Prevent Machine Runaway

TS177—UN—11JAN89

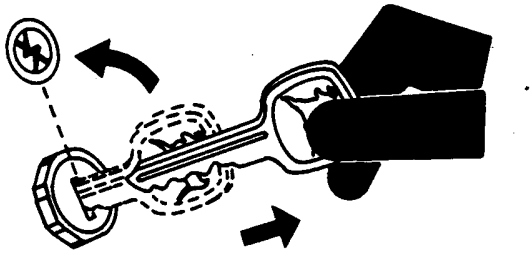
Avoid possible injury or death from machinery runaway.

Do not start engine by shorting across starter terminals. Machine will start in gear if normal circuitry is bypassed.

NEVER start engine while standing on ground. Start engine only from operator’s seat, with transmission in neutral or park.

DX,BYPAS1-19-29SEP98

Park Machine Safely



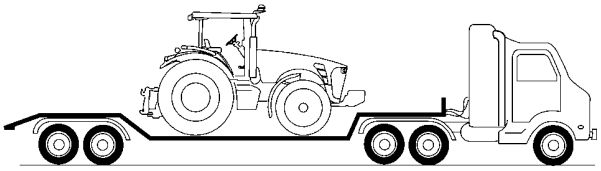
TS230—UN—24MAY89

Before working on the machine:

- Lower all equipment to the ground.
- Stop the engine and remove the key.
- Disconnect the battery ground strap.
- Hang a "DO NOT OPERATE" tag in operator station.

DX,PARK-19-04JUN90

Transport Tractor Safely



RXA0103709—UN—01JUL09

A disabled tractor is best transported on a flatbed carrier. Use chains to secure the tractor to the carrier. The axles and tractor frame are suitable attachment points.

Before transporting the tractor on a low-loader truck or flatbed rail wagon, make sure that the hood is secured over the tractor engine and that doors, roof hatch (if equipped) and windows are properly closed.

Never tow a tractor at a speed greater than 10 km/h (6 mph). An operator must steer and brake the tractor under tow.

DX,WW,TRANSPORT-19-19AUG09

Service Cooling System Safely

TS281—UN—15APR13

Explosive release of fluids from pressurized cooling system can cause serious burns.

Shut off engine. Only remove filler cap when cool enough to touch with bare hands. Slowly loosen cap to first stop to relieve pressure before removing completely.

DX,WW,COOLING-19-19AUG09

Service Accumulator Systems Safely

TS281—UN—15APR13

Escaping fluid or gas from systems with pressurized accumulators that are used in air conditioning, hydraulic, and air brake systems can cause serious injury. Extreme heat can cause the accumulator to burst, and pressurized lines can be accidentally cut. Do not weld or use a torch near a pressurized accumulator or pressurized line.

Relieve pressure from the pressurized system before removing accumulator.

Relieve pressure from the hydraulic system before removing accumulator. Never attempt to relieve hydraulic system or accumulator pressure by loosening a fitting.

Accumulators cannot be repaired.

DX,WW,ACCLA2-19-22AUG03

Service Tires Safely

RXA0103438—UN—11JUN09

Explosive separation of a tire and rim parts can cause serious injury or death.

Do not attempt to mount a tire unless you have the proper equipment and experience to perform the job.

Always maintain the correct tire pressure. Do not inflate the tires above the recommended pressure. Never weld or heat a wheel and tire assembly. The heat can cause an increase in air pressure resulting in a tire explosion. Welding can structurally weaken or deform the wheel.

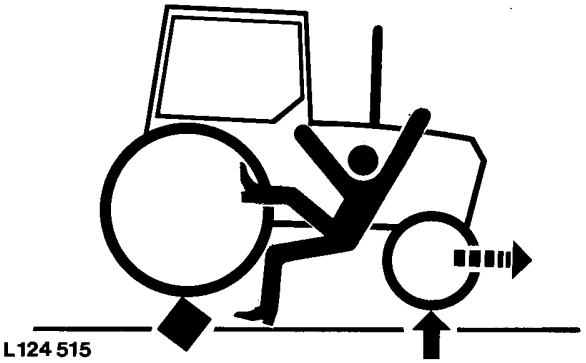
When inflating tires, use a clip-on chuck and extension hose long enough to allow you to stand to one side and NOT in front of or over the tire assembly. Use a safety cage if available.

Check wheels for low pressure, cuts, bubbles, damaged rims, or missing lug bolts and nuts.

Wheels and tires are heavy. When handling wheels and tires use a safe lifting device or get an assistant to help lift, install, or remove.

DX,WW,RIMS-19-28FEB17

Service Front-Wheel Drive Tractor Safely

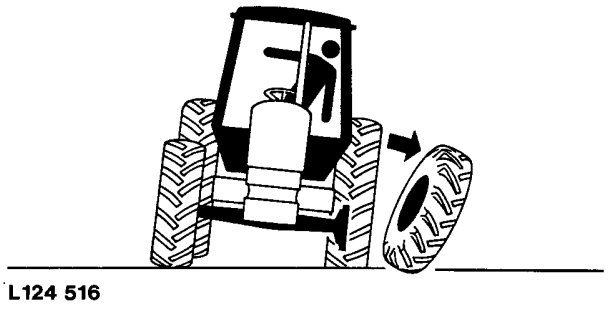


L124515—UN—06AUG94

When servicing front-wheel drive tractor with the rear wheels supported off the ground and rotating wheels by engine power, always support front wheels in a similar manner. Loss of electrical power or transmission hydraulic system pressure will engage the front driving wheels, pulling the rear wheels off the support if front wheels are not raised. Under these conditions, front drive wheels can engage even with switch in disengaged position.

DX,WW,MFWD-19-19AUG09

Tightening Wheel Retaining Bolts/Nuts

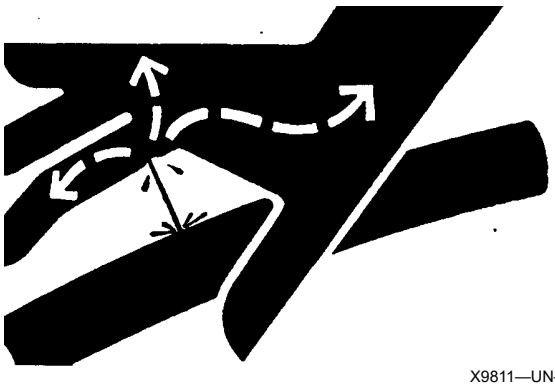


L124516—UN—03JAN95

Torque wheel retaining bolts/nuts at the intervals specified in section Break-In Period and Service.

DX,WW,WHEEL-19-12OCT11

Avoid High-Pressure Fluids



X9811—UN—23AUG88

Inspect hydraulic hoses periodically – at least once per year – for leakage, kinking, cuts, cracks, abrasion, blisters, corrosion, exposed wire braid or any other signs of wear or damage.

Replace worn or damaged hose assemblies immediately with John Deere approved replacement parts.

Escaping fluid under pressure can penetrate the skin causing serious injury.

Avoid the hazard by relieving pressure before disconnecting hydraulic or other lines. Tighten all connections before applying pressure.

Search for leaks with a piece of cardboard. Protect hands and body from high-pressure fluids.

If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be surgically removed within a few hours or gangrene may result. Doctors unfamiliar with this type of injury should reference a knowledgeable medical source. Such information is available in English from Deere & Company Medical Department in Moline, Illinois, U.S.A., by calling 1-800-822-8262 or +1 309-748-5636.

DX,FLUID-19-12OCT11

Do Not Open High-Pressure Fuel System

TS1343—UN—18MAR92

High-pressure fluid remaining in fuel lines can cause serious injury. Do not disconnect or attempt repair of fuel lines, sensors, or any other components between the high-pressure fuel pump and nozzles on engines with High Pressure Common Rail (HPCR) fuel system.

Only technicians familiar with this type of system can perform repairs. (See your John Deere dealer.)

DX,WW,HPCR1-19-07JAN03

Store Attachments Safely

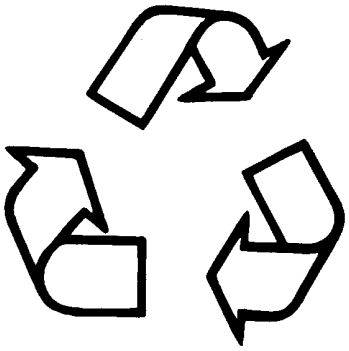
TS219—UN—23AUG88

Stored attachments such as dual wheels, cage wheels, and loaders can fall and cause serious injury or death.

Securely store attachments and implements to prevent falling. Keep playing children and bystanders away from storage area.

DX,STORE-19-03MAR93

Decommissioning — Proper Recycling and Disposal of Fluids and Components



TS1133—UN—15APR13

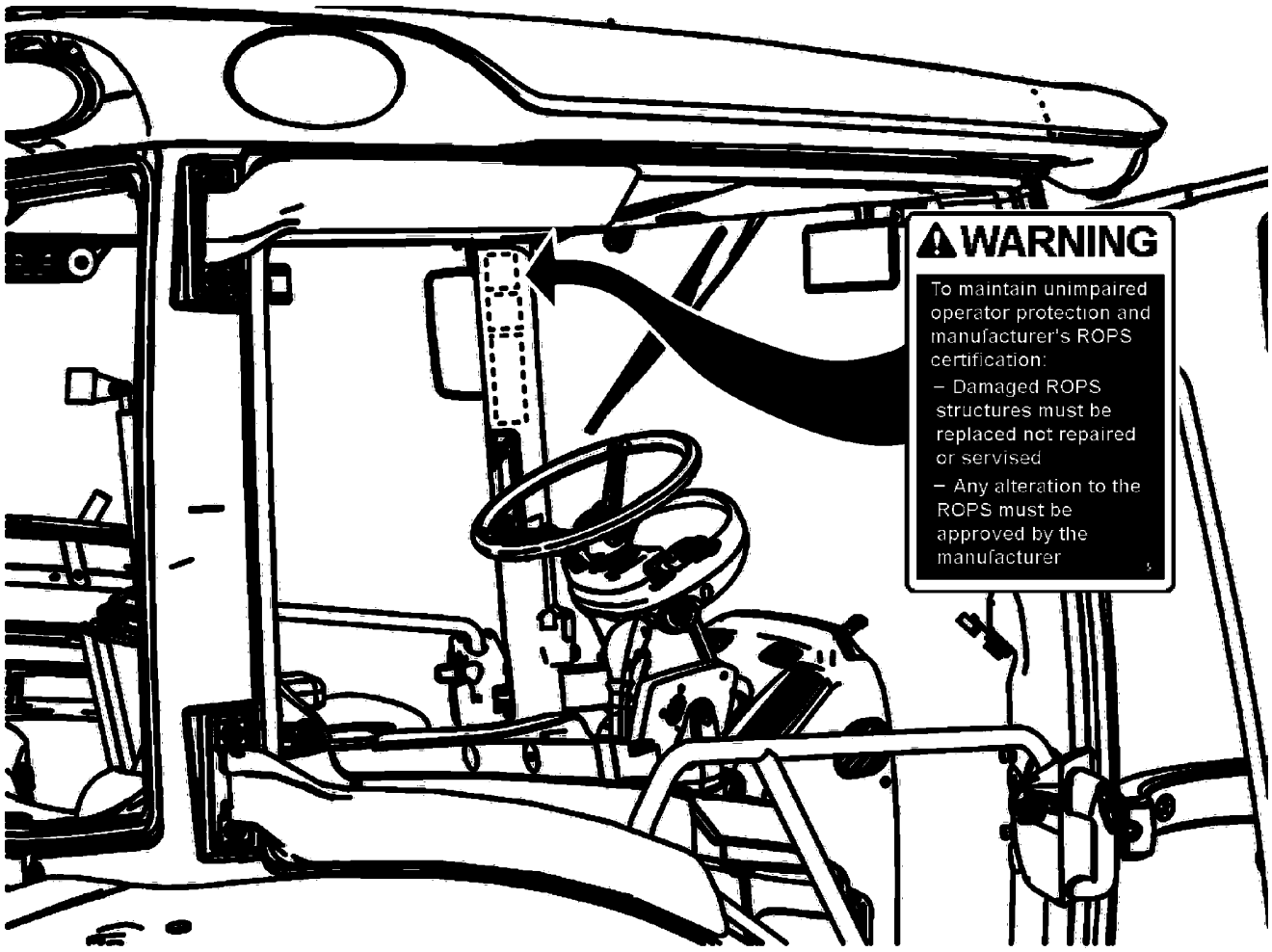
Safety and environmental stewardship measures must be taken into account when decommissioning a machine and/or component. These measures include the following:

- Use appropriate tools and personal protective equipment such as clothing, gloves, face shields or glasses, during the removal or handling of objects and materials.
- Follow instructions for specialized components.

- Release stored energy by lowering suspended machine elements, relaxing springs, disconnecting the battery or other electrical power, and releasing pressure in hydraulic components, accumulators, and other similar systems.
- Minimize exposure to components which may have residue from agricultural chemicals, such as fertilizers and pesticides. Handle and dispose of these components appropriately.
- Carefully drain engines, fuel tanks, radiators, hydraulic cylinders, reservoirs, and lines before recycling components. Use leak-proof containers when draining fluids. Do not use food or beverage containers.
- Do not pour waste fluids onto the ground, down a drain, or into any water source.
- Observe all national, state, and local laws, regulations, or ordinances governing the handling or disposal of waste fluids (example: oil, fuel, coolant, brake fluid); filters; batteries; and, other substances or parts. Burning of flammable fluids or components in other than specially designed incinerators may be prohibited by law and could result in exposure to harmful fumes or ashes.
- Service and dispose of air conditioning systems appropriately. Government regulations may require a certified service center to recover and recycle air conditioning refrigerants which could damage the atmosphere if allowed to escape.
- Evaluate recycling options for tires, metal, plastic, glass, rubber, and electronic components which may be recyclable, in part or completely.
- Contact your local environmental or recycling center, or your John Deere dealer for information on the proper way to recycle or dispose of waste.

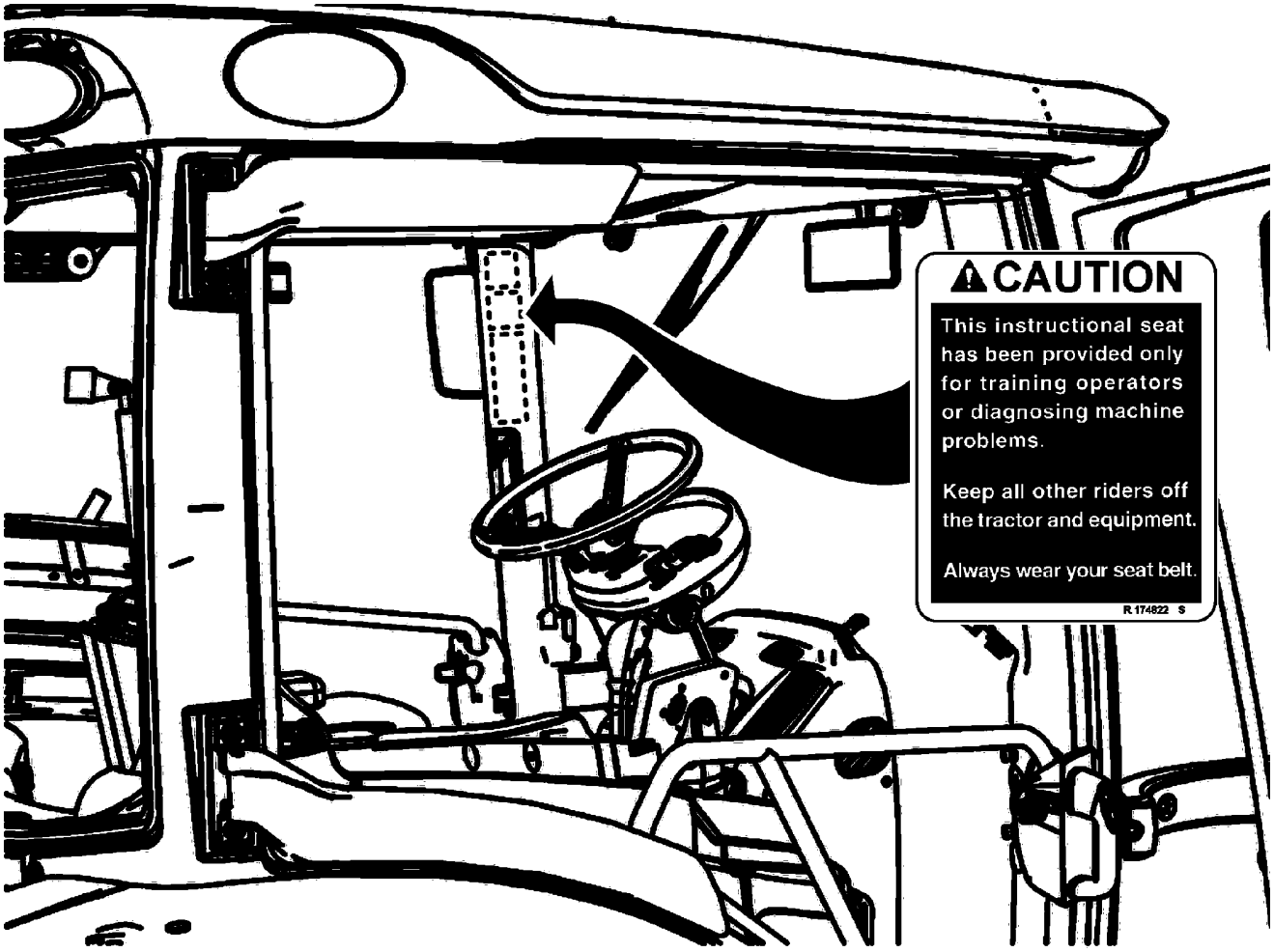
DX,DRAIN-19-01JUN15

Do Not Modify ROPS



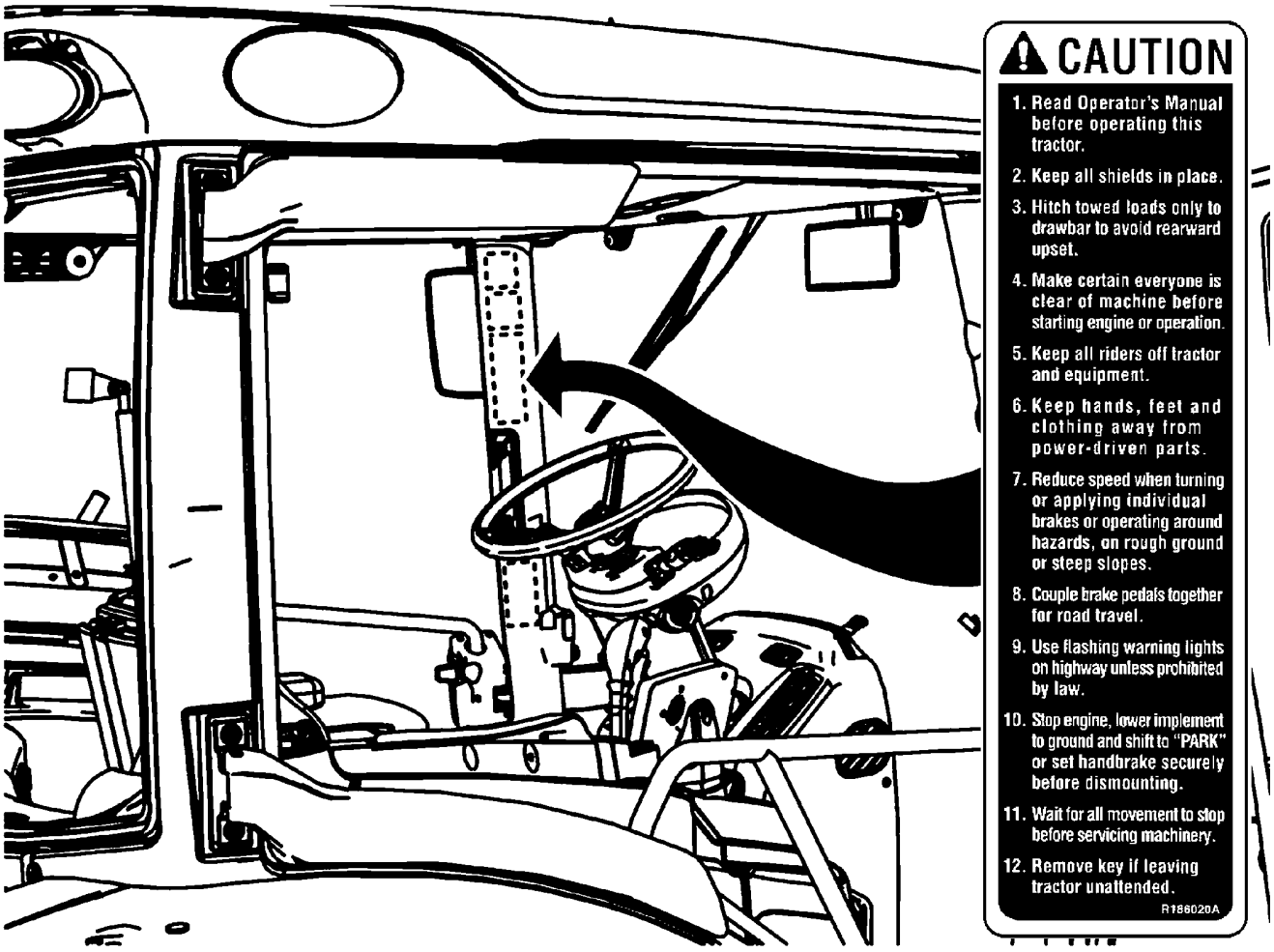
LX1054604—19—06OCT11
OULXA64,NA01,6R,CAB,0005F11-19-22SEP23

Use of Instructional Seat (If Equipped)



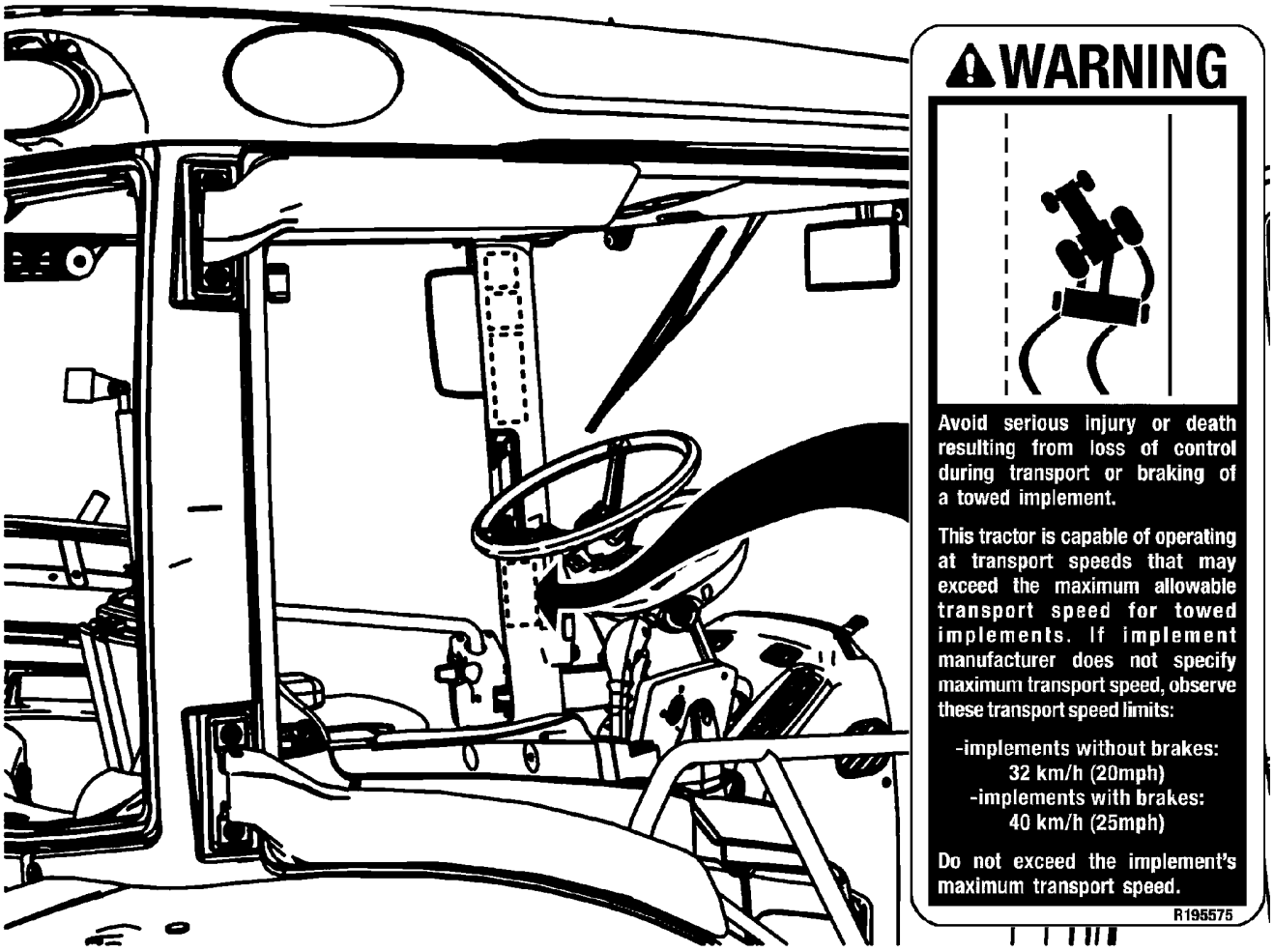
LX1054603—19—06OCT11
OULXA64,NA02,6R,CAB,,0005F12-19-22SEP23

Operate the Tractor Safely



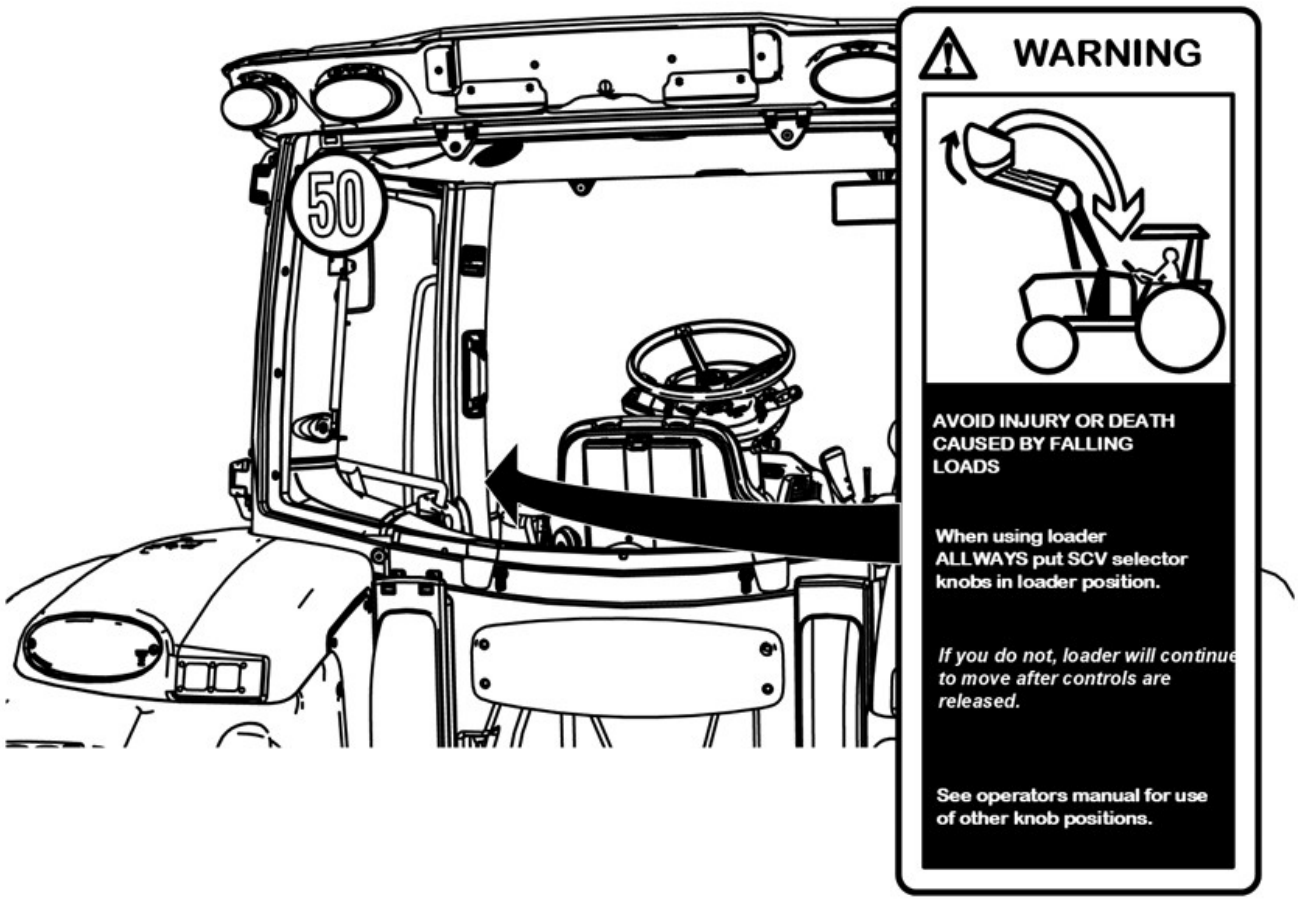
LX1054607—19—06OCT11
OULXA64,NA03,6R,CAB,0005F13-19-22SEP23

Tow Trailer Safely (not on Tractors up to 30 km/h)



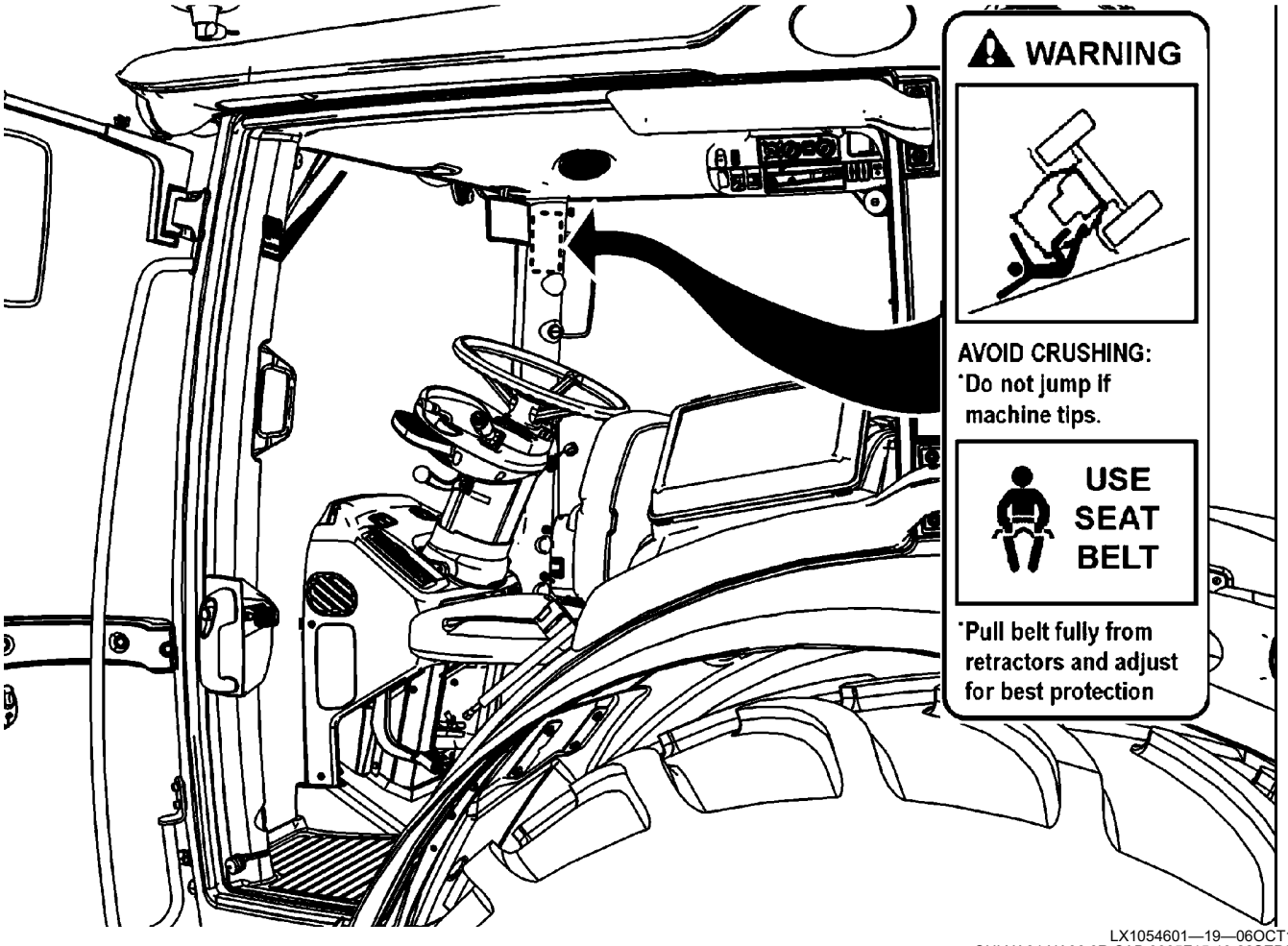
LX1054606—19—06OCT11
OULXA64,NA04,6R,CAB,0005F14-19-22SEP23

Caution When Operating Front Loader (on Tractors with Mechanical Selective Control Valves)



LX514872—19—11MAY22
OULXA64,NA05,6R,CAB,0005F16-19-22SEP23

Use the Seat Belt

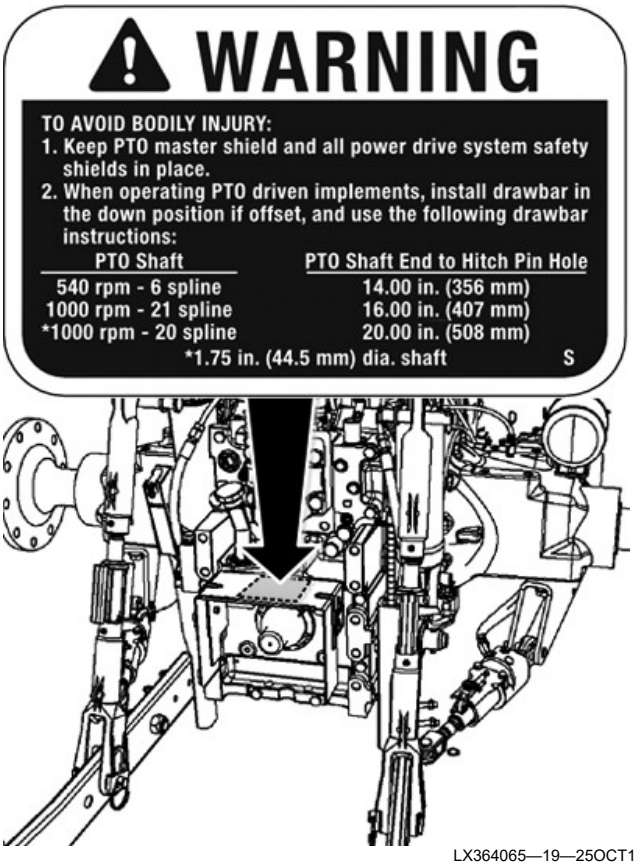


LX1054601—19—06OCT11
OULXA64,NA06,6R,CAB,0005F15-19-22SEP23

Caution When Operating Front PTO

LX364339—19—17MAY19
OULXA64,NA07,ALL,000577D-19-21SEP23

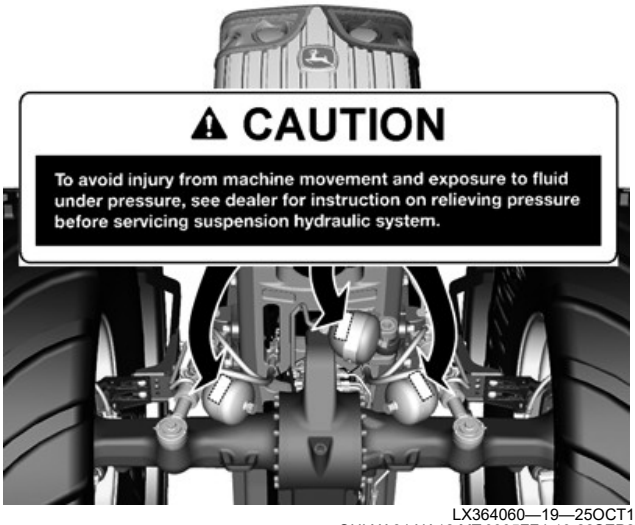
Caution When Operating Rear PTO



LX364065—19—25OCT18

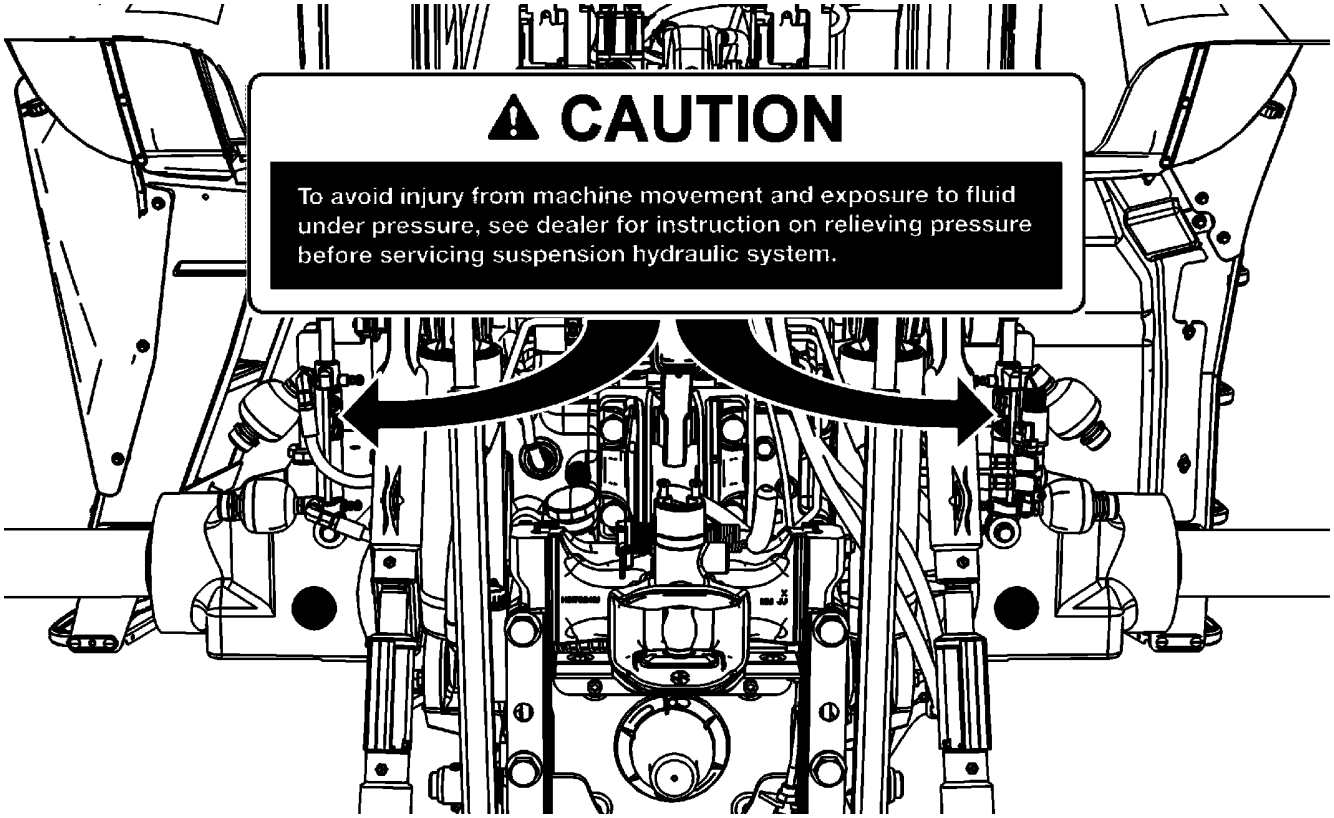
OULXA64,NA08,6R,0005F18-19-22SEP23

Pressure Accumulators (Suspended Front-Wheel Drive Axle, If Equipped)



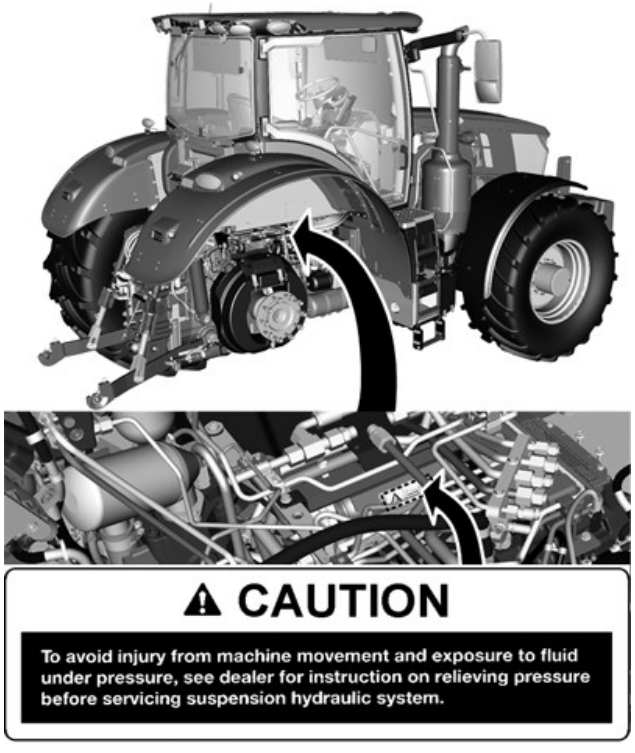
LX364060—19—25OCT18
OULXA64,NA12,MT,0005FF4-19-22SEP23

Pressure Accumulators (Cab Suspension, If Equipped)



LX1054655—19—03FEB12
OULXA64,NA13,6R,0005F1B-19-22SEP23

Pressure Accumulator (Brake System)



LX364059—19—25OCT18
OULXA64,NA17,6R,0005FF3-19-22SEP23

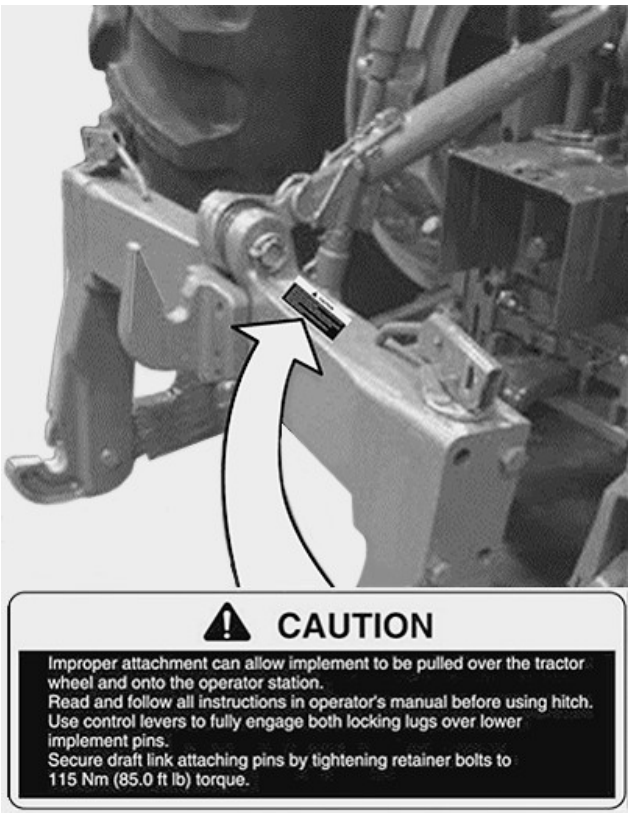
Electrical Coolant Heater of Engine (If Equipped)

LX364342—19—21MAR19

Safety Decal on Connection Cable / Older Version Shown

OULXA64,NA18,ALL,0005782-19-21SEP23

3-Point Quick-Coupler (If Equipped)



LX203978—19—10MAR14
OULXA64,NA19,ALL,0005F20-19-22SEP23

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LX25458,00009AE-19-05JUN20

Identification View

LX514785—UN—22SEP21

Tractor Shown with Optional Equipment

OULXA64,MW67,0005EB1-19-21SEP21

Operator's Manual—General Information

General Information and Scope of Manual

This manual is not a detailed service manual. It contains information meant primarily for machine operation and routine maintenance. For more detailed service information, order a Technical Manual through your authorized John Deere dealer.

IMPORTANT: Depending on the regional peculiarities and individual vehicle configuration, the specifications are only applicable if the corresponding equipment is available.

The configuration can be found in the order information of the vehicle.

Subsequent additions and conversions must also be taken into account.

- The technical information in this Operator's Manual corresponds to the current information at the time of printing.
- Country and model-specific deviations are possible. Consider that your tractor is not equipped with all the options described here.
- Depending on the country, not all models and equipment variants mentioned are available.
- Contact an authorized dealer if you have any questions about optional equipment and the relevant specifications.

LX25458,00009B0-19-30MAR23

How to Use This Manual

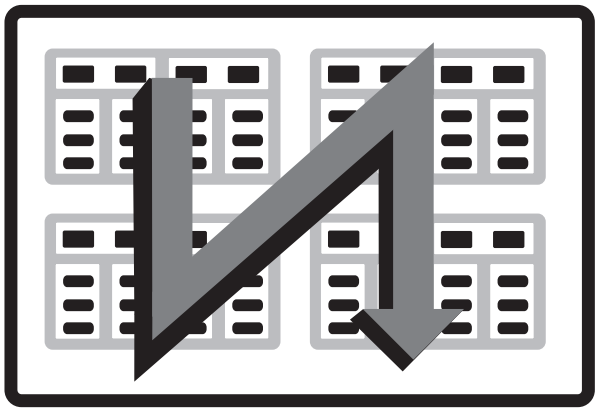
The information in this Operator's Manual is divided into sections. The sections are organized with the typical machine features or functional systems together (Engine, Electrical, Hydraulic, Transmission, and so forth). These sections are identified at the top of each page. Specific information within each section is organized into blocks. These blocks are enclosed in boxes and the main blocks are identified with a heading at the top left. Page numbers identify the section as well as the number of the page in the section.

By reviewing this manual frequently you learn which section to turn to for specific information. For example:

- Safety information is covered at the beginning.
- Operation of all features and systems is covered in the first half of the manual.
- Maintenance intervals are in the middle of the manual.
- Maintenance of all the features and systems is covered in the second half of the manual.
- Specifications are covered at the end.

A detailed table of contents appears before the Glossary. An alphabetical index is at the very end of the manual.

The contents of the Operator's Manual are displayed column by column from left to right.

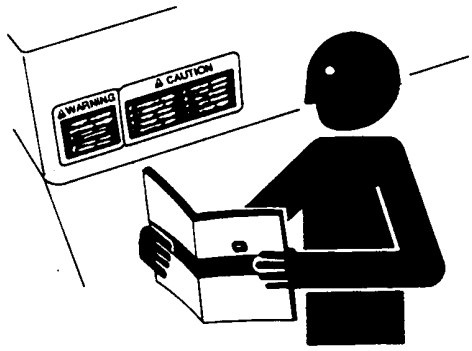


W28329—UN—18OCT17

The texts and graphs are displayed in the columns as shown sequentially from top to bottom.

LX25458,MY20,00009B1-19-28MAR23

Comply with Operator's Manuals of Implement Manufacturers



TS201—UN—15APR13

CAUTION: Disregarding the manufacturer's specifications on implements and trailers, as well as the relevant Operator's Manuals, poses the risk of severe or fatal injury.

Before operating the tractor in conjunction with a mounted implement or trailer, it is the responsibility of the operator to become familiar with the relevant Operator's Manuals. Operator errors may have serious consequences.

Operator's Manuals and the safety decals on mounted implements and trailers provide important information on how to operate them safely. For this reason, it is important to make yourself familiar with them before

starting work. Operator's Manuals must be provided to all operators of the tractor.

LX25458,MY20,00009B2-19-27MAR23

US EPA Qualified Emergency Use — SCR Derate Override Option

NOTE: This is a US EPA only option.

IMPORTANT: Operating the engine without emissions related derates could damage the aftertreatment system.

Description: US EPA Qualified Emergency Use – SCR Derate Override Option

Under the US EPA's regulations the Qualified Emergency SCR Derate Override Option (Emergency SCR Derate Override) is considered an Auxiliary Emission Control Device (AECD), which is only permitted during qualified emergency situations. To ensure compliance with US EPA regulations governing this type of AECD it is important that operators read the following information and comply with the requirements.

Emergency SCR Derate Override enables a Selective Catalyst Reduction (SCR) equipped application to operate without emissions-related derates for a specified period of time during qualified emergency situations. A qualified emergency situation is one in which the condition of an engine's emission controls poses a significant direct or indirect risk to human life. An example of a direct risk is an emission control condition that inhibits the performance of an engine being used to rescue a person from a life-threatening situation. An example of an indirect risk is an emission control condition that inhibits the performance of an engine being used to provide electrical power to a data center that routes ''911'' emergency response telecommunications.

Emergency SCR Derate Override Activation / Reporting

The operator can activate the Emergency SCR Derate Override through the operator interface. Once activated, the engine can operate free of emissions-related derates for 120 hours. If the derate condition is corrected during the 120 hours, the Emergency SCR Derate Override can be paused in order to preserve the remainder of time for future use. The option expires along with any remaining time 240 hours after the Emergency SCR Derate Override is activated.

When the Emergency SCR Derate Override has expired, the engine informational Diagnostic Trouble Code (DTC) is displayed to the operator upon every engine start and every hour until acknowledged by the operator. To clear the DTC and reset the Emergency SCR Derate Override timer for future use, the operator (or other person responsible for the engine/equipment) must submit a report to the John Deere Dealer Technical Assistance Center, which must include the following:

- Contact name, mail and email addresses, and telephone number for responsible company or entity
- Description of the emergency situation, the location of the engine during the emergency, and the contact information for an official who can verify the emergency situation (such as a county sheriff, fire marshal, or hospital administrator)
- Reason for the Emergency SCR Derate Override activation during the emergency situation, such as the lack of diesel exhaust fluid, or the failure of an emission-related sensor when the engine was needed to respond to an emergency situation
- Engine's serial number
- Description of the extent and duration of the engine operation while the Emergency SCR Derate Override was active, including a statement describing whether or not the Override was manually deactivated after the emergency situation ended

In no event may this report be submitted to John Deere or other qualified service provide later than 60 calendar days after the Emergency SCR Derate Override is activated.

LEGAL Notification

The following actions by the operator are an improper use of the Emergency SCR Derate Override and are prohibited by the Clean Air Act and US EPA regulations:

- Activating the Emergency SCR Derate Override for something other than a qualified emergency situation;
- Failing to disable the Emergency SCR Derate Override after a qualified emergency situation ends; and,
- Failing to notify John Deere and send it reports as required in this Operators Manual and federal regulations. Note: John Deere is required to report to the US EPA the operator's failure to report to it any Emergency SCR Derate Override event (to the extent it becomes aware of such event).

The maximum civil penalty the US EPA may assess under 40 CFR 1068.101 is $4,454 for each day an engine or piece of equipment is operated in violation of the requirements associated with the Emergency SCR Derate Override.

US EPA regulations governing the Emergency SCR Derate Override can be found at 40 CFR §1039.665, as may be amended.

DX,SCR,EMRGNCY,OVERIDE,US-19-24JAN18

Important Engine Information

The guarantee does not apply to engine and drivetrain damage caused by impermissible engine settings.

Manipulations violate the emission regulations that apply to this engine and may be subject to prosecution.

LX25458,00009B4-19-27MAR23

Engines with Turbocharger

Most damage to the turbocharger is caused by not following the correct procedure when starting and shutting off the engine. After starting and before shutting off, idle the engine without load for at least 30 seconds.

IMPORTANT: If the engine stalls when in operation, restart it IMMEDIATELY. This will prevent the turbocharger from overheating.

LX25458,00009B5-19-05JUN20

Engine Protection

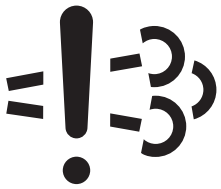
Malfunctions in the fuel system and engine are indicated by the red STOP light, yellow CAUTION light and blue INFO light coming on. In addition, a message appears on the Corner Post Display.

NOTE: For more information on possible errors and diagnostic trouble codes, see the component manual for the fuel system.

LX25458,MY20,00009B6-19-08SEP20

Required Machine Stop Warning

Machine Stop Mandate Occurs



RG22491—UN—21AUG13

IMPORTANT: In some situations, machine engine power may be reduced as described. On notification, immediately place the machine in a safe state and or move it to a safe location. A mandated machine stop can only be removed by a service technician.

Engine Emissions System Malfunction Indicator illuminates when an emission-related fault occurs.

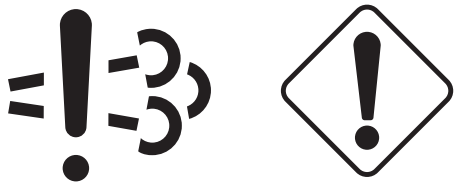
RG22492—UN—21AUG13

Warning Indicator illuminates when a condition exists which requires operator action.

RG22493—UN—21AUG13

Engine Stop Indicator illuminates when a condition exists which requires immediate operator action and service.

Emission System Fault Has Occurred



RG26361—UN—04SEP14

30 minutes remaining, Engine Emissions System Malfunction and Warning Indicators are illuminated and alarm sounds to warn operator of emissions-related fault. “Less than 30 minutes to Power Restriction” displayed on machines with display.

- Engine power is normal.
- Machine operation is normal.
- Place machine in a safe state.
- Contact service provider.

RG26972—UN—26MAR15

20 minutes remaining, Engine Emissions System Malfunction and Engine Stop Indicators are illuminated and alarm sounds to warn operator of emissions-related fault. “Less than 20 minutes to Power Restriction” displayed on machines with displays.

- Engine power and torque are reduced.
- Key Off - Key On will temporarily provide full power.
- Place machine in a safe state.
- Contact service provider.

RG26972—UN—26MAR15

2 minutes or less remaining, Engine Emissions System Malfunction and Engine Stop Indicators are illuminated and alarm sounds to warn operator of emissions-related fault which has not been corrected. “Power Restriction” displayed on machines with displays.

- Engine power is idle only.
- Place machine in a safe state.
- Contact service provider.

DX,MACHSTOPWARN,AG-19-02OCT15

Access the Engine Menu

Option I

Press engine button to call up the engine menu.

LX373132—UN—26MAY21

Option II

1. Select **Menu** button.

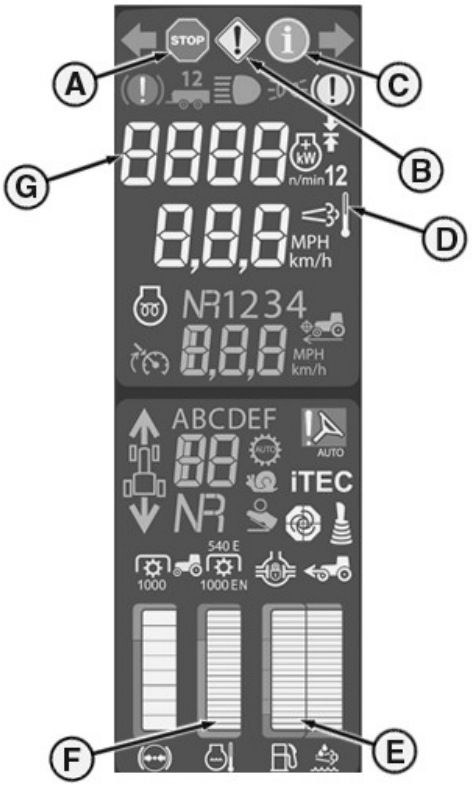
RXA0127004—UN—20JUL12

Menu Button → Tractor Settings Tab → Engine Button

2. Select **Tractor Settings** tab.
3. Select **Engine** button.

OULXA64,6R,MW67,0005F3F-19-25OCT21

Check Engine Indicator Lights and Displays



LX372994—UN—06APR21

A—Red STOP Indicator
B—Yellow ATTENTION Indicator
C—Blue INFO Indicator
D—High Exhaust Temperature Indicator
E—Fuel Gauge
F—Coolant Temperature Gauge
G—Engine Speed

A - STOP Indicator: Flashes and an audible alarm sounds continuously if a serious malfunction occurs. Diagnostic trouble codes are present that require a machine shutdown. Stop immediately, reduce engine speed, then SHUT OFF engine, or engine damage occurs. Have the problem diagnosed by an authorized dealer if necessary.

B - ATTENTION Indicator: Flashes and an audible alarm sounds five times if a malfunction occurs. Diagnostic trouble codes are present, although an immediate machine shutdown is not required. Access the diagnostic menu to determine if diagnostic trouble codes are present. See Section 300B. Have the problem diagnosed by an authorized dealer if necessary.

C - INFO Indicator: Illuminates continuously to indicate a possible problem. Diagnostic trouble codes can be present. Access the diagnostic menu to determine if diagnostic trouble codes are present. See Section 300B. Have the problem diagnosed by an authorized dealer if necessary.

D - High Exhaust Temperature Indicator: Illuminates during the automatic exhaust filter cleaning.

E - Fuel Gauge: Indicates the volume of fuel left in the tank. As volume is reduced, bars disappear from the display. Avoid running out of fuel to prevent damage to engine components.

F - Coolant Temperature Gauge: Indicates the engine coolant temperature. If indicator bars reach the red zone on the display, shut down the engine. Clean debris from grilles, radiator, and coolers. Allow the engine to cool completely, then check coolant level and fan belt tension.

G - Engine Speed: Engine revolutions per minute (rpm) are represented in hundreds.

OULXA64,6R,0005CCB-19-27MAR23

Intelligent Power Management (Power Boost)

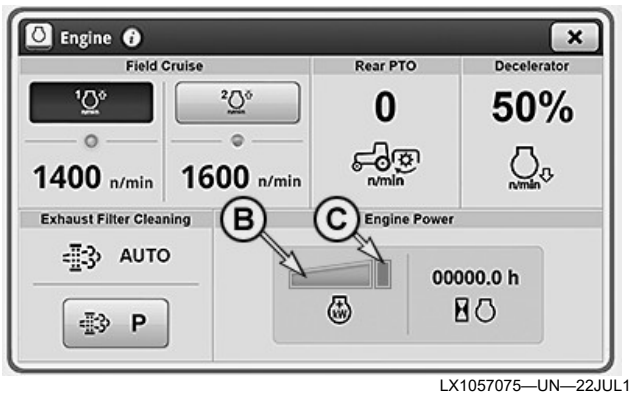
Deactivate or Activate Power Boost

NOTE: Power boost is activated automatically when starting the engine.

1. Press engine button.

LX373132—UN—26MAY21

2. Press icon (B).

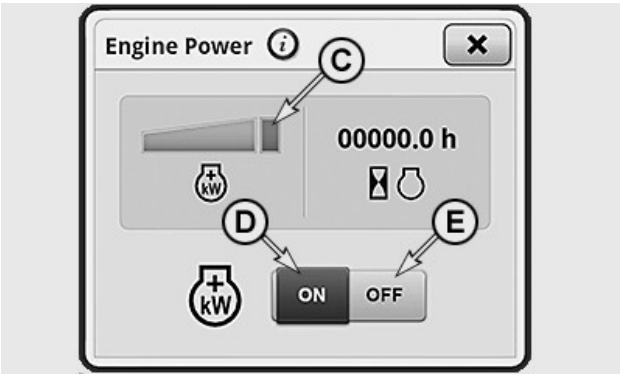


LX1057075—UN—22JUL13

Power Boost

B—Engine Power below Rated Power
C—Power above Rated Power

3. Make selection with button (D) or (E).



LX1057076—UN—31JUL13

Power Boost

C—Power above Rated Power
D—Enable IPM Button
E—Disable IPM Button

4. The indicator light (see arrow) lights up while power boost is active.

LX372972—UN—14JUL21

Symbol for Power Boost

Engine Power Display

Fields (B) and (C) display the current engine power (light green or dark green color).

- Field (B) represents the power range up to rated engine power.
- Field (C) represents the John Deere power bulge (above rated power).

  The power boost achieved by the Intelligent Power Management system for PTO operation, hydraulic operation, and transport work is displayed (dark green color).
- In addition, a **+** sign appears in the engine icon in the corner post display.

If power boost is activated at the CommandCenter™, then the following applies:

a) Transport work
The power boost is provided automatically when travel speed exceeds 15 km/h (9.3 mph). Maximum power boost becomes available from a speed of 20 km/h (12.4 mph). This power boost persists until the travel speed drops below 10 km/h (6.2 mph).

b) When work is performed with the rear PTO
When work is performed with PTO-powered devices, the power boost is provided steplessly starting from a travel speed of 1 km/h (0.6 mph). The power boost is provided only if the electronics of the tractor detect a significant power need at the rear PTO. A maximum power boost first becomes available from a speed of 2,5 km/h (1.5 mph). Here too, the condition is that the load on the rear PTO has to be correspondingly high.

c) When work is performed with the hydraulic system
The tractor is equipped with the "Hydraulic IPM" feature, which can measure the power demand of hydraulic implements, and power boost is provided steplessly and independent of the vehicle speed.

NOTE: When working with the PTO, the power boost is done basically only if there is a significant power need at the rear PTO.

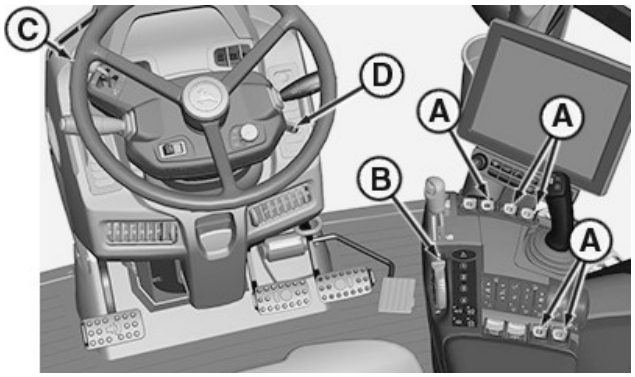
The power boost depending on the PTO is not available for working with the front PTO.

OULXA64,6R,MW670005F3E-19-13APR23

Starting the Engine

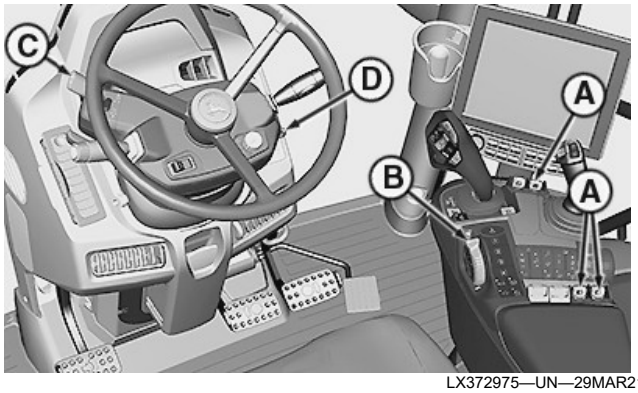
CAUTION: Never operate the engine in a closed building. Danger of poisoning!

Close hood before starting engine.



LX372974—UN—29MAR21
Tractor with AutoPower™/IV™

A—SCV Control Levers
B—Hand Throttle
C—Reverse Drive Lever
D—Key Switch



LX372975—UN—29MAR21
Tractor with CommandPRO™ Joystick

A—SCV Control Levers
B—Hand Throttle
C—Reverse Drive Lever
D—Key Switch

1. Shift SCV levers (A) to neutral position.
2. Set hand throttle (B) to lowest speed.
3. Do not push the speed control pedal.
4. Activate "Neutral" with the reverse drive lever (C) and engage the park lock.
5. Turn key in key switch (D) one position to the right.
6. Wait until the glow-plug indicator light (E) goes out.

LX372993—UN—09APR21
E—Glow-Plug Indicator Light

7. Turn key in key switch (D) clockwise to end position. As soon as engine starts, release key.

NOTE: In cold ambient temperatures, an engine preheater countdown will appear in the corner post display. To allow best engine cold start performance, an engine starting event should happen only once timer reaches 0. The countdown duration depends on the fuel, coolant and intake air temperatures.

Do not operate starting motor for more than 30 seconds at a time. Turn key in key switch to “zero”. Wait at least one minute before attempting to start again.

After starting the engine, wait 2 seconds before

operating switches or controls, while the tractor completes its self-check.

IMPORTANT: During the warm-up phase, operate the tractor at moderate load only. Once operating temperature has been reached (see temperature indicator), full power becomes available.

NOTE: Until a coolant temperature of 20°C (68°F) is reached, the engine will rotate at an increased lower idle speed (at least 1050 rpm). Engine speed depends on the transmission type.

Please note:

When the engine is stopped and restarted, various functions are reset to their default settings.

Functions that are reset to the default when restarted. Some functions depend on the equipment of the tractor.	
Feature	Reset to default
User-defined assignment of functions to operating elements	Upon restart, observe the driver information, e.g. of the CommandCenter™.
Vibration dampening of the front loader	OFF
AutoTrac™	OFF
Power take-off	OFF
Remote control of the PTO	OFF
Differential lock	OFF (the selection "AUTO" remains)
Reverse drive lever	If forward or backward was selected last, the system will reset to park lock or NEUTRAL after restart.
In CommandPRO™, setting the slow forward and reverse (joystick in the left shift gate)	0 to 2 km/h (0 to 1 mph)
Travel set speed (if a travel set speed was used last)	OFF (disabled), the settings are retained.
Motor, speed memory (if a speed memory was used last)	OFF (disabled), the settings are retained.
For IVT™ transmission, AutoClutch mode	If the last setting was AutoClutch ON, ON will remain after restart. If the last setting was AutoClutch OFF, it will be reset to ON after restart.
Multi-function lever, electrical	Locked
E-SCVs	Locked
iTEC™	OFF

OULXA64,6R,MW67,0005F3D-19-12DEC23

Engine Start with an Auxiliary Battery

CAUTION: Starting the tractor with an auxiliary battery is only permissible if this tractor is equipped for jump-starting with connections approved by John Deere. If a tractor is not equipped with connections for jump-starting, the discharged or defective battery must be replaced by a battery with sufficient charge. Have this work done by an authorized dealer.

CAUTION: Danger of injury, danger of explosion! Safety measures must be observed. See *Handling Batteries Safely* in Section 05 and *Battery – Disconnecting the Battery Circuit* in Section 220B.

CAUTION: Always connect the batteries with the correct polarity.

CONNECTING: Connect positive terminal (+) first and then negative terminal (-)! DISCONNECTING: Disconnect the negative terminal (-) first and then the positive terminal (+)! Incorrect connection will result in serious damage to electrical system.

IMPORTANT: Cables used for jump-starting must be connected only to the (+) and (-) terminals provided for this purpose.

- **For jump-starting, use certified jump-start cables designed for the tractor application with cross-section 70 mm² only.**
- **Use only jump-start cables with insulated terminals.**
- **DO NOT USE jump-start cable with damaged isolation.**

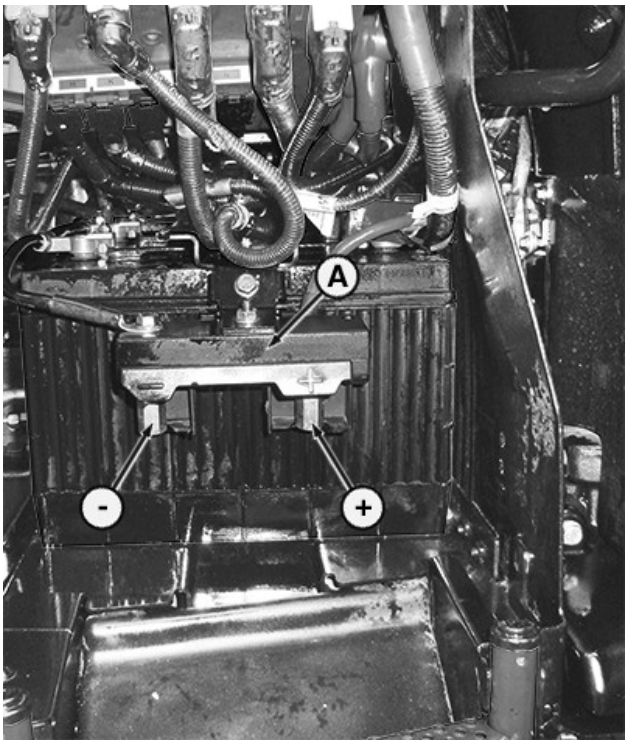
IMPORTANT: If the engine is to be started using an auxiliary battery or run for a short time without battery, do not raise engine speed above 1000 rpm. Furthermore, use additional current (lights) while engine is running.

IMPORTANT: With battery disconnected, insulate the positive battery cable (+) properly to protect the alternator from damage. See also *Important Instructions Regarding Alternator* in Section 210.

Most tractors are equipped with connections for jump-starting.[1]

[1] *If there are no jumper connections, the discharged battery needs to be replaced with a charged battery.*

LX288855—UN—27JUL16



LX266925—UN—05AUG16

To jump-start, lift up cover (A), then connect positive terminals (+) first before connecting negative terminals (-).

Once work is finished, first disconnect negative terminal (-) and then positive terminal (+). Close cover (A) again.

OULXA64,6R,MW67,0005F3C-19-20APR23

Shutting Off the Engine

IMPORTANT: Do NOT shut off the engine while the tractor is moving (not even when it is rolling to a stop). To do so could damage the electronics as well as the transmission.

IMPORTANT: After heavy-duty work or driving at high engine speeds, do not shut off the engine immediately; wait for a few minutes with the engine running at low idle speed. This prevents the engine compartment from becoming too hot.

IMPORTANT: Lower mounted implement(s) or equipment to the ground before leaving the tractor. Pull the key out of the main switch.

IMPORTANT: Before leaving the tractor, confirm that the key switch is in the STOP position (A). If the key switch is *not* in the STOP position, the battery might discharge.

LX372976—UN—29MAR21

Key Switch

A—STOP Position

1. Stop the tractor.
2. Engage park lock.
3. Then turn the key switch counterclockwise into STOP position (A) to shut off the engine.

OULXA64,6R,0005C05-19-19MAR21

Battery Disconnect System (If Equipped)

The battery disconnect system switches the on-board voltage on or off automatically.

On-board voltage can be switched on by:

- opening the door,
- switching on the hazard warning lights, or
- switching on the ignition with the key switch.

NOTE: If the on-board voltage has been switched on and no other electrical components have been switched on, the on-board voltage will be disconnected automatically after 5 minutes.

After the ignition is switched off (key switch in position (A), the on-board voltage is switched off automatically after 4 minutes at the latest when the door is closed.

LX372976—UN—29MAR21

Key Switch

A—STOP Position

IMPORTANT: When shutting off the engine (key switch in position (A), wait 4 minutes until disconnecting or removing the battery.

Switching off may be delayed by the following:

- The door has not been closed
  ► switched off automatically after 5 minutes
- Egress light is active
  ► switched off automatically after the duration of lighting has elapsed, 5 minutes maximum
- Vehicle lights have not been switched off
  ► automatically switched off after 5 minutes
- Hazard warning lights are on
  ► automatically switched off when battery protection voltage is reached

OULXA64,6R,0005C06-19-27MAR23

Tow-Starting

IMPORTANT: Do not try to start the engine by tow-start.

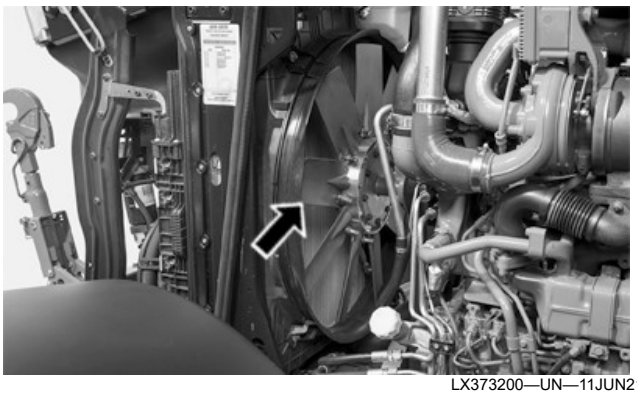
In case of start problems, see Starting the Engine With an Auxiliary Battery" in this Section.

If the engine cannot be started, transport the tractor on a flatbed carrier.

IMPORTANT: Observe information given in Section 110.

LX25458,ALL,00009BF-19-23NOV20

Use Reversible Fan (If Equipped)



LX373200—UN—11JUN21

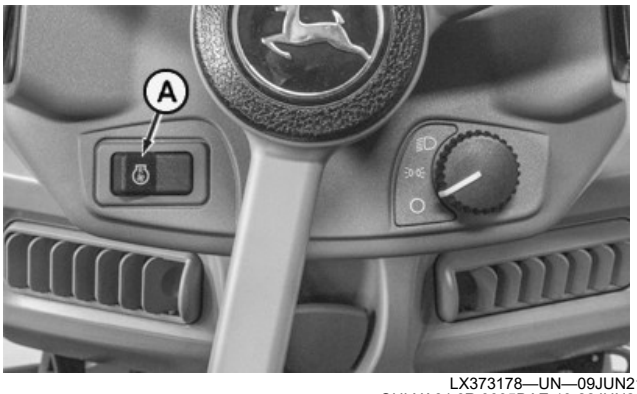
Reversible Fan

The reversible fan is used to blow dirt from the protective screen of the hood.

Do not switch ON the reversible fan at engine speed more than 2100 rpm (rated), for example at downhill operation.

Activation of reverse function of fan is not recommended at the engine high speed and high load operating condition.

Press switch (A) for few seconds to blow the dirt from the protective screen.



LX373178—UN—09JUN21
OULXA64,6R,0005DAE-19-22JUN21

Fill the Fuel Tank

TS202—UN—23AUG88

CAUTION: Handle fuel with care: It is highly flammable. Do not refuel the machine while smoking or when near open flame or sparks.

Always stop engine before refueling machine. Refuel only outdoors.

Prevent fires by keeping machine clean of accumulated trash, grease, and debris. Always clean up spilled fuel.

IMPORTANT: To prevent damage to tractor fuel injection system and other components, never put diesel exhaust fluid (DEF) into fuel tank or fuel system.

NOTE: If the fuel level indicator begins to FLASH, then the level of the fuel is in the reserve range.

Fill fuel tank!

NOTE: Never run the tank completely dry, otherwise the system must be bled.

LX514797—UN—28OCT21

Example: Fuel Tank

A—Fuel Tank

Fill fuel tank (A) at the end of each day using only ultra-low sulfur fuel. This prevents condensation in tank as moist air cools.

Each time the fuel tank is filled, screw the cap back onto the filler neck.

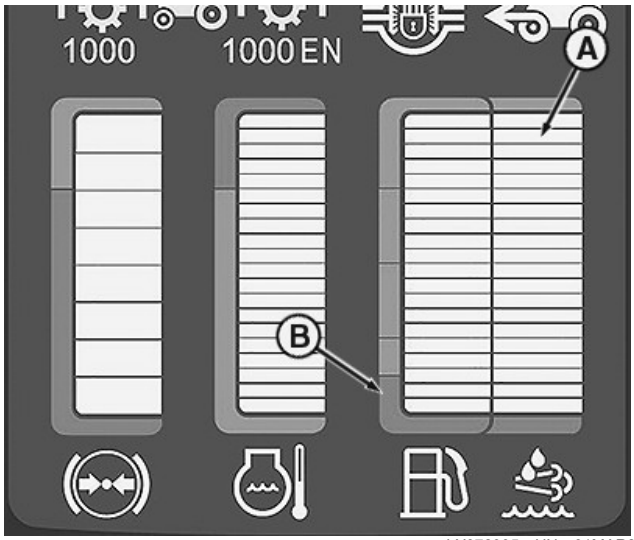
OULXA64,6R,0005C08-19-17APR23

Fill the DEF Tank

CAUTION: DEF contains urea. Do not get the substance in eyes. In case of contact, immediately rinse eyes with large amounts of water for a minimum of 15 minutes. Do not take internally. If any DEF was ingested, contact a physician immediately. Reference Material Safety Data Sheet (MSDS) for additional information.

IMPORTANT: Never put DEF in diesel fuel tank, or diesel fuel in DEF tank.

If DEF is spilled or contacts any surface other than the storage tank, immediately clean the surface with clear water. DEF is corrosive to painted and unpainted metallic surfaces and can distort some plastic and rubber components.



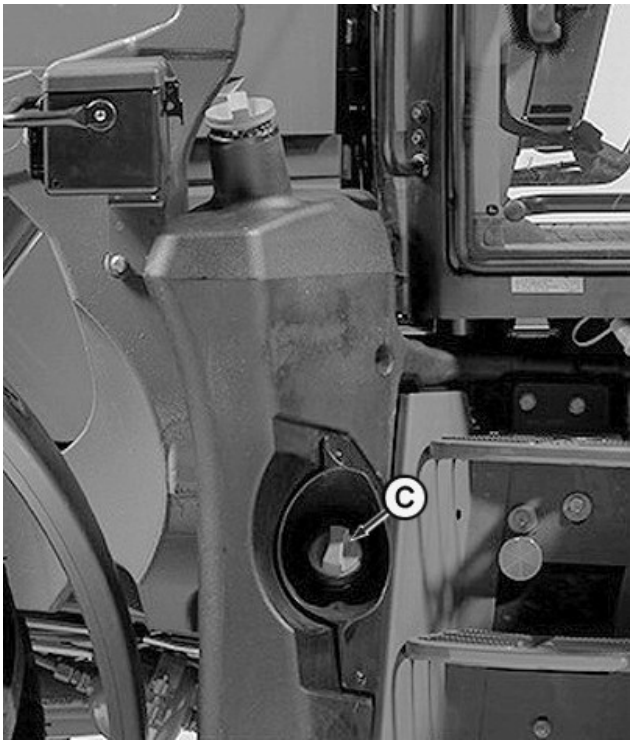
LX372995—UN—31MAR21

A—DEF Tank Fluid Level Indicator
B—Topmost Red Mark

Fill DEF tank every time tractor is refueled. If this is not possible, monitor DEF level and top up as needed. To avoid significant changes in tractor performance, always keep the DEF level above the topmost red mark (B).

NOTE: Spilled diesel exhaust fluid, if left to dry or if only wiped away with a cloth, leaves white residues. Aside from cosmetic issues, an improperly cleaned DEF spill may interfere with diagnosis of selective catalytic reduction (SCR) system leakage problems.

Fill DEF tank:



LX514798—UN—28OCT21

Example: DEF Tank Cap

C—DEF Tank Cap

1. Before using containers, funnels, etc. to dispense DEF, wash and rinse items thoroughly with distilled water to remove contaminants.
2. Wipe DEF tank cap (C) and area around cap and filler neck to reduce chance of contaminating DEF.
3. Remove DEF tank cap (C).
4. Using funnel, carefully pour DEF into tank, watching level through filler neck.
5. Securely tighten DEF tank cap (C).
6. Remove spilled DEF thoroughly and clean only with distilled water.

If an unapproved fluid, such as diesel fuel, or engine coolant is added to vehicle DEF tank, drain tank and rinse with distilled water, then refill tank.

OULXA64,6R,0005CCC-19-17APR23

Cold-Weather Operation

Cold Start Aids

LX1045750—UN—03DEC10

Depending on tractor equipment, various cold-weather starting aids are available to assist in starting the engine at temperatures below 0 °C (32 °F).

These include e. g. coolant preheater, transmission oil preheater or charge pump preheater.

OULXA64,0005C0A-19-19MAR21

Coolant Heater

CAUTION: Avoid tripping hazard resulting in serious personal injury.

Obstacles in the area of the access step lead to tripping and thus to falling off the machine.

Remove all obstacles before getting on or off the machine.

These include in particular compressed-air hoses, electrical lines of coolant heater, and ground fault circuit interrupter (GFCI).

IMPORTANT: Observe the electrical voltage of the regional power grid.

The coolant heater must be suitable for the regional power grid. Depending on the coolant heater, an operating voltage of either 230 V or 120 V is permissible; never for both. Connector (A) allows only the connection to the appropriate power grid.

LX514799—UN—28OCT21

NOTE: If equipped, the transmission oil preheater and charge pump preheater are also operated by means of connector (A).

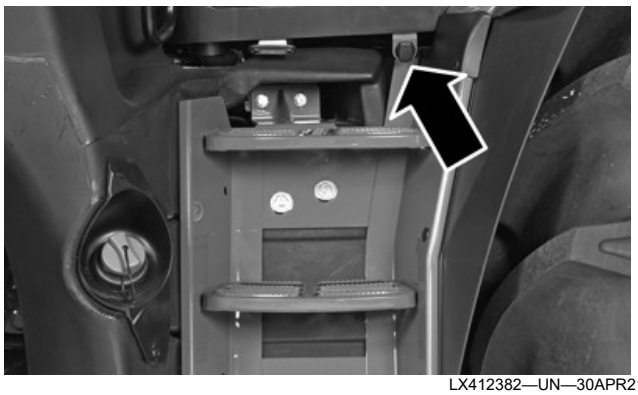
At an ambient temperature of -15°C (5°F), the heating process takes about 2 hours. Extend the heating period if the ambient temperature is lower.

OULXA64,6R,0005C0B-19-19APR23

Connecting the Coolant Heater to a 230 V Power Grid

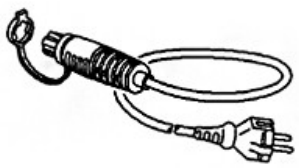
The following description applies to tractors intended for use in European countries with a 230 V power supply.

LX514238—UN—01FEB22



LX412382—UN—30APR21

Preheating System Socket



LX514240—UN—01FEB22

Adapter Cord, EU 230 V, AL159497

CAUTION: Danger to life from electric shock and fire.

A short circuit to ground can lead to fatal electric shock. Damaged, energized cables and electric components can cause tractor components to carry live voltage without this being noticed, and it can also cause circuits to short. This can cause fires, and touching these components can lead to fatal electric shock.

For this reason, the preheating system must always be connected to a socket with a maximum current of 15 A and a fault current monitoring. If an extension cable is used, it must meet the general requirements for outdoor operation, and it must be suitable for a current load of at least 15 A.

The Adapter Cord AL159497 (used in Europe) is allowed only if the 230 V power grid connected to is protected by an integrated GFCI (Ground Fault Circuit Interrupter). This Adapter Cord does NOT provide any protection in the case of a ground fault or other malfunctions.

CAUTION: Avoid tripping hazard resulting in serious personal injury.

Obstacles in the area of the access step lead to tripping and thus to falling off the machine.

Remove all obstacles before getting on or off.

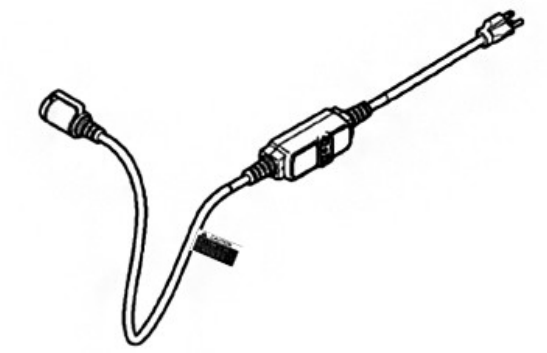
230 V Preheating System Adapter Cord		
Country/Region	Power Grid Complies with the Standard	Adapter Cord
Europe	230 V AC supply per EN 50160	AL159497

OULXBER,0003157-19-27MAR23

Ground Fault Circuit Interrupter (GFCI), 120 V

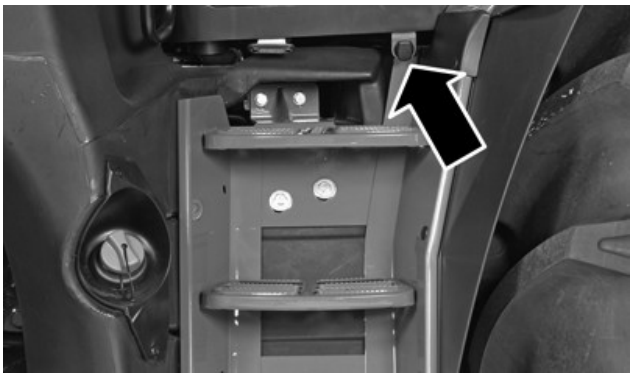
The following description applies to tractors intended for use in countries with a 120 V power supply.

LX514238—UN—01FEB22



LX514239—UN—10FEB22

Example: GFCI AL214182



LX412382—UN—30APR21

Preheating System Socket

CAUTION: Danger to life from electric shock and fire.

A short circuit to ground can lead to fatal electric shock. Damaged, energized cables and electric components can cause tractor components to carry live voltage without this being noticed, and it can also cause circuits to short. This can cause fires, and touching these components can lead to fatal electric shock.

For this reason, the preheating system must always be connected to a socket with a maximum current of 15 A and a fault current monitoring. If an extension cable is used, it must meet the general requirements for outdoor operation, and it must be suitable for a current load of at least 15 A.

When the electrical preheating system is connected to the power grid, a ground fault circuit interrupter (GFCI) must be used. Test the functionality before using the GFCI. Testing is only possible if the GFCI provides a test function (versions II and III).

The GFCI protects the user only if he touches the vehicle's preheating system components. The GFCI does not protect against electric shock due to possible defects or failures in an extension cord or other wiring supplying the GFCI, as well as in the event of a short circuit between hot and neutral conductor.

In addition to the descriptions in this Operator's Manual, the information attached to the GFCI must also be observed.

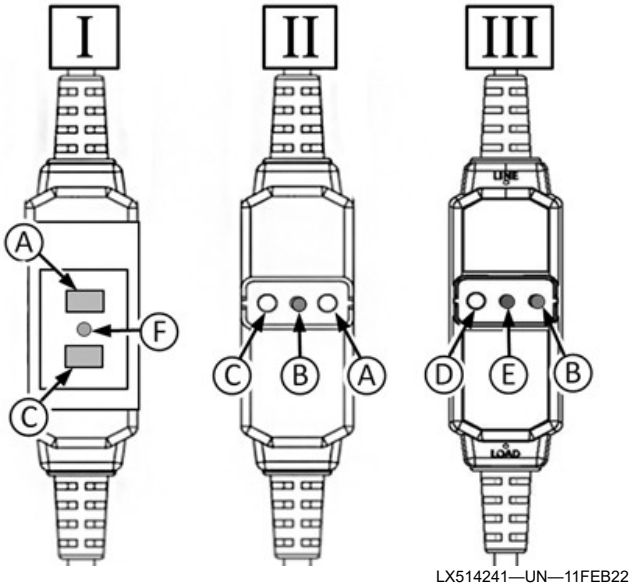
CAUTION: Avoid tripping hazard resulting in serious personal injury.

Obstacles in the area of the access step lead to tripping and thus to falling off the machine.

Remove all obstacles before getting on or off.

NOTE: Locate the socket to connect the electric preheating system to the vehicle, see the arrow.

Ground Fault Circuit Interrupters (GFCI), Identify the Different Versions



LX514241—UN—11FEB22

GFCI Versions

A—Reset Button
B—Operation Indicator Light (green)
C—Test Button
D—Reset/Test Button (2 in 1)
E—Fault Indicator Light (red)
F—Operation Indicator Light

Functions Included	Version I	Version II	Version III
Auto Self-Test	no	no	yes
Manually Self-Test	yes	yes	yes
Auto-Reset	no	yes	yes
Manually Reset	yes	yes	yes
Part Number	AL214182	AL221662	AL237293

120 V Ground Fault Circuit Interrupter (GFCI)		
Country/Region	Power Grid Complies with the Standard	GFCI
North America	120 V AC supply per ANSI C84.1 range B	Version I: AL214182 Version II: AL221662 Version III: AL237293
Other Countries		

Operating Instructions

Operating Instruction, Version I:

NOTE: For Version I only, every time the electrical preheating system is switched on (regardless of timer), the reset button (A) at the ground fault circuit interrupter (GFCI) must be pressed before it is used.

1. Connect the GFCI to the socket of the electrical preheating system.
2. Connect the GFCI to the electric power grid.
3. Press and release the reset button (A). The operation indicator light (F) must light on.
4. Test the GFCI before each use: Press test button (C) and make sure the light (F) turns off. This indicates that the test was successful. DO NOT OPERATE THE PREHEATING SYSTEM IF THE GFCI TEST FAILS.
5. Press and release the reset button (A) to reactivate the device. The GFCI is ready for use when the light (F) is on.

If the reset fails, there is a fault in the electrical system. Never use a GFCI if the functionality is not

guaranteed. Check and repair the preheating system as necessary.

Operating Instruction, Version II:

1. Connect the GFCI to the socket of the electrical preheating system.
2. Connect the GFCI to the electric power grid.
3. The green light (C) must light on. If the green light is not on, press and release the reset button (B).
4. Test the GFCI before each use: Press test button (D) and make sure the green light (C) turns off. This indicates that the test was successful. DO NOT OPERATE THE PREHEATING SYSTEM IF THE GFCI TEST FAILS!
5. Press and release the reset button (B) to reactivate the device. The GFCI is ready for use when the green light (C) is on. If the reset fails, there is a fault in the electrical system.

Operating Instruction, Version III:

1. Connect the GFCI to the socket of the electrical preheating system.
2. Connect the GFCI to the electric power grid.
3. The green light (G) must light on. If the green light is not on, press and release the reset/test button (E).
4. Test the GFCI before each use: Press reset/test button (E). The red fault indicator light (F) begins flashing while the green operation indicator light (G) remains steady on. After the test sequence, the red light (F) will turn off and the green light (G) will remain on to indicate that the test was successful. DO NOT OPERATE THE PREHEATING SYSTEM IF THE GFCI TEST FAILS!
5. The GFCI is ready for use when the green light (C) is on, and the red light is off.

If the reset or the test fails, there is a fault in the electrical system. Never use a GFCI if the functionality is not guaranteed. Check and repair the preheating system as necessary.

NOTE: Version II and III only, the AUTOMATIC RESET function automatically restores power to connect the devices after they are disconnected or after power interruptions.

For all GFCIs, use only with mating or larger (smaller numerical value) extension cord for 15 rated devices and 12 AWG, or larger for 20 A rated devices, plugged into the load (receptacle/ connector) side of the GFCI device.

OULXA64,ALL,0005785-19-27MAR23

Exhaust Filter Cleaning, General Information

The tractor is equipped with an efficient exhaust filter system. Sensors monitor the condition of the exhaust system and initiate the cleaning process when load on exhaust filter becomes excessive.

1. Passive exhaust filter cleaning always takes place in phases when the engine is at medium or high load.
2. The automatic exhaust filter cleaning is started as soon as the soot in the exhaust filter reaches a certain level.
3. Manually initiated exhaust filter cleaning with tractor parked enables the operator to start the cleaning process manually when a corresponding message appears on the digital display.
4. For the service cleaning, it is necessary to contact an authorized dealer.

More information on exhaust filter cleaning can be found on the following pages.

IMPORTANT: Recommended practice is to keep automatic exhaust filter cleaning activated. See relevant text in this Section.

Comply with safety instructions; see Clean Exhaust Filter Safely in Section 05.

LX373013—UN—12APR21

An indicator light comes on to show that the exhaust filter is currently being cleaned (see arrow).

Tips for avoiding the service cleaning or filter cleaning with tractor parked:

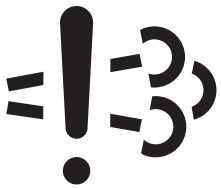
- Activate automatic exhaust filter cleaning.
- Avoid unnecessary idling.
- Do not interrupt cleaning processes unless it is absolutely necessary.
- If possible, do not shut off the engine while the exhaust filter cleaning indicator light is still on.
- Only use fuels with very low sulfur content.
- Take note of the information displayed for the operator, and act accordingly.

NOTE: It is important to use high-quality consumables. Use only consumables that are specified in Sections 200A to 200E.

OULXA64,6R,0005CCD-19-28APR21

Required Machine Stop Warning

Machine Stop Mandate Occurs



RG22491—UN—21AUG13

IMPORTANT: In some situations, machine engine power may be reduced as described. On notification, immediately place the machine in a safe state and or move it to a safe location. A mandated machine stop can only be removed by a service technician.

Engine Emissions System Malfunction Indicator illuminates when an emission-related fault occurs.

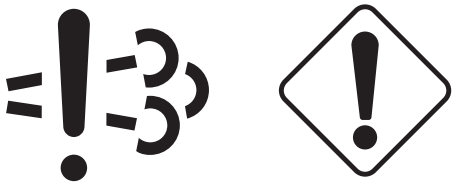
RG22492—UN—21AUG13

Warning Indicator illuminates when a condition exists which requires operator action.

RG22493—UN—21AUG13

Engine Stop Indicator illuminates when a condition exists which requires immediate operator action and service.

Emission System Fault Has Occurred



RG26361—UN—04SEP14

30 minutes remaining, Engine Emissions System Malfunction and Warning Indicators are illuminated and alarm sounds to warn operator of emissions-related

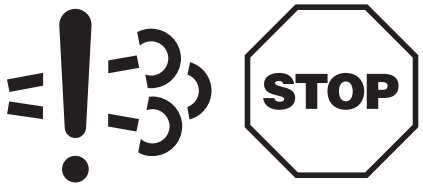
fault. “Less than 30 minutes to Power Restriction” displayed on machines with display.

- Engine power is normal.
- Machine operation is normal.
- Place machine in a safe state.
- Contact service provider.

RG26972—UN—26MAR15

20 minutes remaining, Engine Emissions System Malfunction and Engine Stop Indicators are illuminated and alarm sounds to warn operator of emissions-related fault. “Less than 20 minutes to Power Restriction” displayed on machines with displays.

- Engine power and torque are reduced.
- Key Off - Key On will temporarily provide full power.
- Place machine in a safe state.
- Contact service provider.



RG26972—UN—26MAR15

2 minutes or less remaining, Engine Emissions System Malfunction and Engine Stop Indicators are illuminated and alarm sounds to warn operator of emissions-related fault which has not been corrected. “Power Restriction” displayed on machines with displays.

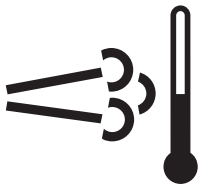
- Engine power is idle only.
- Place machine in a safe state.
- Contact service provider.

DX,MACHSTOPWARN,AG-19-02OCT15

Aftertreatment Indicators Overview

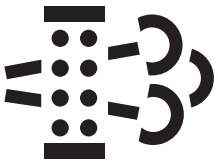
RG22487—UN—21AUG13

Diesel Exhaust Fluid Indicator



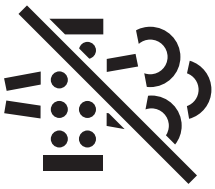
RG22488—UN—21AUG13

Engine Emissions Temperature Indicator



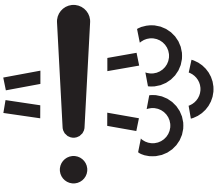
RG22489—UN—21AUG13

Exhaust Filter Indicator



RG22490—UN—21AUG13

Auto Cleaning Disabled Indicator



RG22491—UN—21AUG13

Engine Emissions System Malfunction Indicator

RG22492—UN—21AUG13

Warning Indicator

RG22493—UN—21AUG13

Engine Stop Indicator

IMPORTANT: The operator will be informed by the operator warning system when the emission control system does not function correctly and/or an engine malfunction is detected by the engine control unit. Ignoring the operator warning signals will lead to an emission related derate, resulting in an effective disablement of non-road mobile machinery operation.

It is essential to take prompt action to rectify any incorrect operation, use or maintenance of the emissions control system in accordance with the rectification measures indicated by the warnings referenced below.

The Diesel Exhaust Fluid (DEF) indicator illuminates when the DEF is low. Fill DEF tank.

When the DEF indicator is combined with the warning indicator or engine stop indicator engine performance is reduced by the Engine Control Unit (ECU) because the DEF is below a measurable level. Fill DEF tank.

When engine emissions temperature indicator illuminates exhaust gas temperature is high, elevated idle is active, or exhaust filter cleaning is in process. The machine can be operated as normal unless the operator determines the machine is not in a safe location for high exhaust temperatures and disables auto cleaning.

When engine emissions temperature indicator is combined with the warning indicator or engine stop indicator engine performance is reduced by the ECU because the exhaust gas temperature is higher than expected. Follow Diagnostic Trouble Code (DTC) procedure or see your authorized servicing dealer.

When the exhaust filter indicator illuminates the exhaust filter cleaning is in process, aftertreatment system has a fault, or the exhaust filter is in need of cleaning and the operator has disabled auto exhaust filter cleaning. If conditions are safe, the operator should enable the auto exhaust filter clean setting or perform manual service regeneration or follow DTC procedure.

When the exhaust filter indicator is combined with the warning indicator engine performance is reduced by the ECU because there is an aftertreatment system fault or the soot level of the exhaust filter is moderately high. If conditions are safe, the operator should enable the auto exhaust filter clean function. If conditions are not safe, the operator should move the machine to a safe location and engage the auto exhaust filter cleaning mode. Perform manual service regeneration or follow DTC procedure.

When the exhaust filter indicator is combined with the engine stop indicator engine performance is further reduced by the ECU because there is an aftertreatment system fault or the soot level of the exhaust filter is extremely high. If this combination is present, see your authorized servicing dealer.

The auto cleaning disabled indicator illuminates when the operator has engaged the request to disable the auto exhaust filter cleaning function. This icon remains illuminated until the operator re-engages automatic exhaust filter cleaning from the diagnostic gauge. Disabling auto mode is not recommended for any situation unless it is safety-related or if the fuel tank lacks the required fuel to complete the cleaning process.

The engine emissions system malfunction indicator illuminates when engine emissions are outside of normal operating range or engine emissions system fault. Follow DTC procedure or see your authorized servicing dealer.

When the engine emissions system malfunction indicator is combined with the warning indicator engine performance is reduced by the ECU because the engine emissions are outside of normal operating range or engine emissions system fault. Follow DTC procedure or see your authorized servicing dealer.

DX,AFTRTREAT,INDCATRS-19-12FEB18

Access the Engine Menu

See Engine Menu in Section 20.

OULXA64,6R,0005C86-19-26MAR21

Exhaust Filter Cleaning Overview

Overview:

IMPORTANT: The area over and surrounding the engine during a manual exhaust filter cleaning must be free of any flammable objects. Exhaust reaches temperatures as high as 550°C (1022° F).

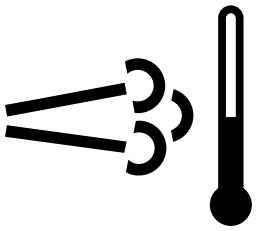
The exhaust filter requires periodical maintenance. Some of the maintenance is transparent to the operator. During continuous heavy loads and other conditions, the engine creates enough heat to remove accumulated soot in the exhaust filter naturally.

When the exhaust filter has accumulated higher levels of soot, the corner post display requests an exhaust filter cleaning. During this request, the equipment must be located or moved to a suitable location with adequate ventilation. Engine speed must be kept above 1200 rpm and filter cleaning allowed to finish uninterrupted. If using the machine to perform work, most of the time the filter cleaning occurs with little to no noticeable impact on the application.

The symbols which appear on the operator interface are shown. These symbols appear within the corner post display.

In addition to the symbols, there are notifications, alarms, and diagnostic trouble codes associated with exhaust filter cleaning. These messages appear on the information display to make the operator aware.

Emission System Temperature/Filter Cleaning Indicator:



H94829—UN—13OCT09

Emission System Temperature/Filter Cleaning Symbol

This indicator appears on the corner post display as a lighted icon. When this icon is illuminated, the emission system temperature is high enough to allow an automatic filter cleaning to occur or a filter cleaning is occurring.

Automatic exhaust filter cleaning is started when sulfur or urea deposits in the exhaust filter reach a certain level and the engine speed is above 1200 rpm. Engine system temperature/filter cleaning symbol remains illuminated during the exhaust filter cleaning. Automatic exhaust filter cleaning is initiated and performed without any intervention on the part of the operator.

Auto Filter Cleaning Icon:

RXA0152960—UN—21JUL16

Auto Filter Cleaning Selection

This icon is found in the engine menu on the information display. Changes to this setting will reduce machine performance over time. Selecting this option in the engine menu allows the operator to choose between Automatic Cleaning and Cleaning Disabled.

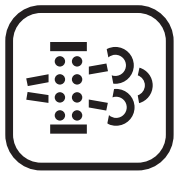
Leave the setting at Automatic Cleaning" at all times unless a condition exists where high exhaust temperatures are unacceptable. Each time the key is cycled off, the setting reverts to automatic cleaning.

CAUTION: Under certain circumstances, high exhaust temperatures associated with exhaust filter cleaning could pose a risk of fire. Changing the setting to Cleaning Disabled may be desirable for certain applications. Operations involving exhaust ducts in combined space and close to combustible materials, etc. should considered in this connection.

IMPORTANT: Disabling the filter cleaning process frequently leads to reduced engine performance and requires a parked exhaust filter cleaning more frequently.

NOTE: For additional display navigation information, see Basic Menu Navigation in Section 30AA.

Filter Cleaning Icon:



RXA0152961—UN—21JUL16

Filter Cleaning Selection

IMPORTANT: If operator disregards indicators and continues to operate machine without allowing an automatic cleaning, engine performance is reduced. A parked exhaust filter cleaning procedure must be performed. Continued disregard requires a John Deere dealer to perform a service exhaust cleaning procedure.

This icon is found in the engine menu on the information display. When allowed, a parked filter cleaning can be performed through this menu. If the exhaust filter has not been allowed to perform automatic cleaning on a regular basis or becomes plugged, a parked cleaning is required. If the system does not require a parked cleaning, the filter cleaning icon is unavailable to select.

Parked Filter Cleaning:

CAUTION: Parked exhaust filter cleaning creates high exhaust temperatures and takes 30—45 minutes to complete. Park machine in an area with adequate ventilation away from combustible materials.

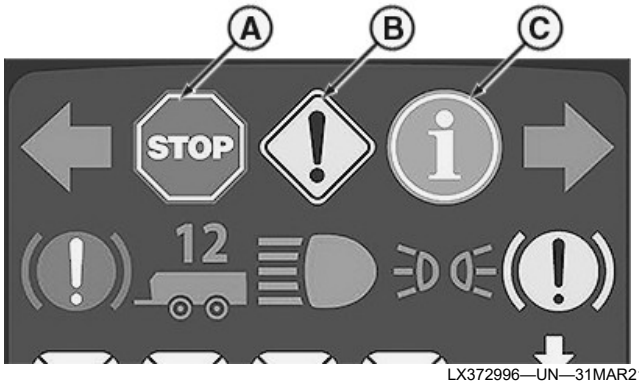
IMPORTANT: Once the parked cleaning process is initiated, allow it to finish uninterrupted.

1. Check the fuel level. Fill if needed.
2. Park the machine in a suitable space, disengage PTO and any auxiliary functions, and lower any implements all the way to the ground.
3. Set engine speed to low idle.
4. Use NO other machine functions while exhaust filter cleaning is taking place. Excluded are functions that are required for an emergency shutdown of the machine.
5. Select the Filter Cleaning Icon in the information display.

6. The message Initiate Parked Filter Cleaning appears on the display. Press Start.
7. A list of conditions to be met appears next. If all of the boxes are checked, depress the Enter/Accept button on the navigation pad to begin.
8. Select Next and press the Enter/Accept key again to initiate the process.
9. Allow the process to run without interruption. Engine speed increases without any input from the operator. A progress bar is shown on the information display during the process.
10. A message Exhaust Filter Cleaning Complete appears if the process has been completed successfully. Select OK to leave the menu.
11. If the process does not complete, an error message appears related to one of the following conditions:
    a. Throttle was not set to low idle.
    b. Machine not in park and wheel speed detected.
    c. PTO speed detected.
    d. Filter cleaning could not be completed. If this error occurs, it is recommended to take the machine to your John Deere dealer for service.
12. Continue machine operations as normal.

NOTE: If not returning machine to operation, allow engine time to return to normal operating temperature before stopping engine.

Service Exhaust Filter Cleaning



LX372996—UN—31MAR21

A—STOP Indicator
B—Warning Indicator
C—Information Display

IMPORTANT: Repeated cancelation or ignoring STOP indicator (A), warning indicator (B), or information indicator (C) to perform a parked exhaust filter cleaning procedure causes additional engine power limitations which eventually lead to a dealer required service.

When STOP indicator (A) is illuminated and a corresponding emissions diagnostic trouble code occur at the same time, contact your John Deere dealer.

Tips for avoiding service cleaning:

- Use ultra low sulfur fuel.
- Avoid unnecessary idling.
- Avoid disabling exhaust filter cleaning unless it is necessary.
- Avoid interrupting cleaning process unless it is necessary.
- If possible, do not shut off the engine while the exhaust filter cleaning indicator light is still on.
- Take note of information displayed for the operator and act accordingly.

OULXA64,6R,0005C87-19-27MAR23

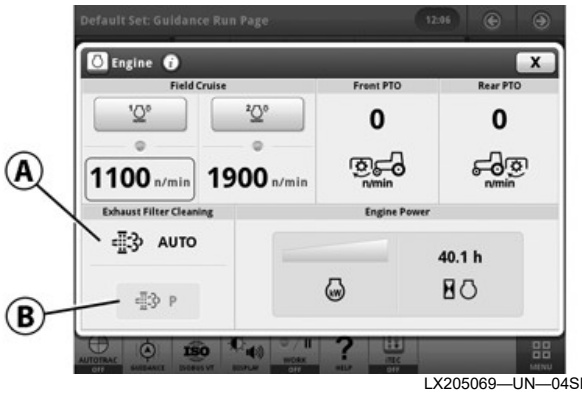
AUTO Exhaust Filter Cleaning

Automatic exhaust filter cleaning can be activated or deactivated. To change the setting, proceed as follows:

1. Press engine button.

LX373132—UN—26MAY21

2. Select **Automatic Exhaust Filter Cleaning** (A).

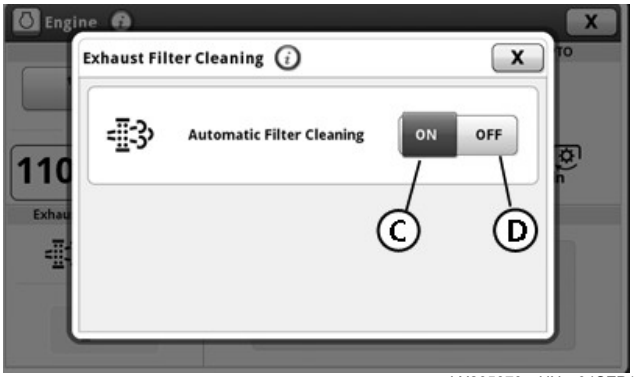


LX205069—UN—04SEP13

A—Access AUTO Exhaust Filter Cleaning
B*—Access Parked Exhaust Filter Cleaning

**Depending on exhaust filter soot level, the display for parked filter cleaning (B) may be active or inactive (grayed out).*

3. Select **button (C)**** to activate automatic exhaust filter cleaning.



LX205070—UN—04SEP13

C—Activate Automatic Exhaust Filter Cleaning
D—Deactivate Automatic Exhaust Filter Cleaning

4. Select **button (D)**** to deactivate automatic exhaust filter cleaning.

   ***In all languages other than English, "1" is used here for activate and "0" for deactivate.*

The indicator (see arrow) comes on when exhaust filter system is performing exhaust filter cleaning.

LX373013—UN—12APR21

Auto mode allows Exhaust Filter System to perform exhaust filter cleaning whenever required. The indicator light (see arrow) on the instrument panel and the CommandCenter™ prompts provide operator information related to exhaust filter system activity.

IMPORTANT: Deactivate automatic exhaust filter cleaning (D) when the tractor is temporarily connected to an indoor ducted exhaust system for diagnostic and repair activities.**

IMPORTANT: Recommended practice is to select automatic exhaust filter cleaning. Repeatedly interrupting an exhaust filter cleaning process and ignoring prompts to carry out exhaust filter cleaning will result in a reduction in engine performance and may make it necessary to carry out service-cleaning at your John Deere dealer.

Comply with safety instructions; see Clean Exhaust Filter Safely in Section 05.

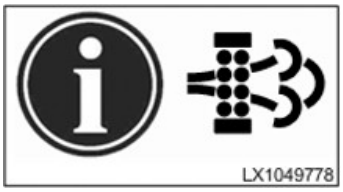
IMPORTANT: During exhaust filter cleaning operation, there may be higher exhaust gas temperatures and engine may operate at elevated idle.

OULXA64,6R,MW67,0005F40-19-25OCT21

Parked Exhaust Filter Cleaning

Preparation and General Information:

Parked Filter Cleaning cannot be performed unless the engine control unit registers a rising soot level at the exhaust filter. In such a case, the relevant information is displayed to the operator, and this information must be noted. See points 1 and 2 at Exhaust Cleaning System, Information for Operator in this Section. Time required for Parked Filter Cleaning is dependent upon the exhaust filter soot level, ambient temperature and current exhaust gas temperature. Parked Filter Cleaning may take up to 40 minutes.



LX1049778—UN—22JUL10

Exhaust filter cleaning with tractor parked can be performed.

LX1049777—UN—22JUL10

Exhaust filter cleaning with tractor parked has to be performed.

IMPORTANT: Select a suitable space to park the tractor and lower any implements all the way down to the ground.

No other tractor functions may be used while Parked Filter Cleaning is taking place. Excluded from this are functions that may be required for an emergency shut-down of the tractor.

Do not start exhaust filter cleaning if the fuel gauge has been showing a low fuel level for a long time.

NOTE: Parked Filter Cleaning cannot be initiated if automatic exhaust filter cleaning is already active.

During exhaust filter cleaning, the engine control unit assumes control of the engine functions. It is normal for engine speed to change during the cleaning process.

Initiate Parked Filter Cleaning:

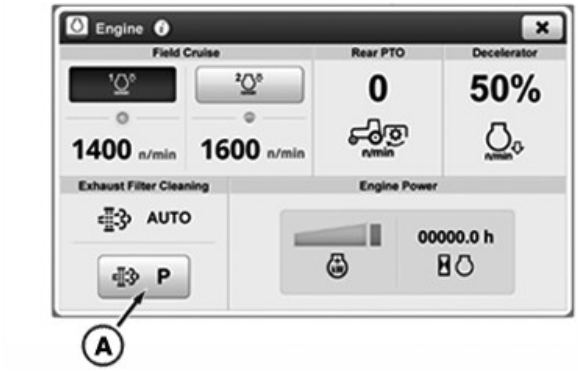
CAUTION: Comply with Clean Exhaust Filter Safely in Section 05.

Exhaust filter cleaning can be interrupted at any time by accelerating, engaging a gear, pressing the cancel button, or shutting down the engine.

1. Press engine button.

LX373132—UN—26MAY21

2. Select Parked Exhaust Filter Cleaning (A).

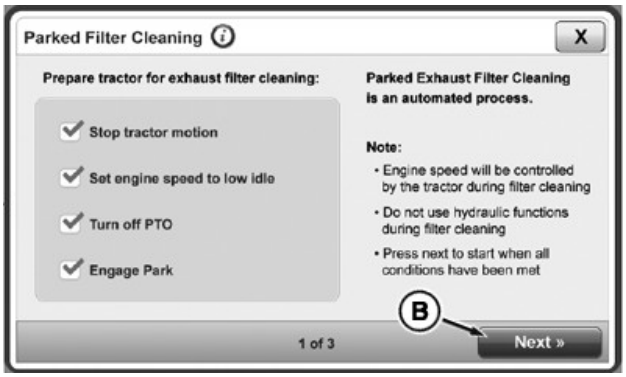


RXA0130120—UN—02JAN13

Preconditions for Parked Filter Cleaning:

- Stop tractor motion
- Set engine speed to low idle.
- Turn off PTO.
- Engage park lock.

3. If any of these preconditions are not met, Parked Filter Cleaning will not start.
4. Select Next button (B) once conditions are met.



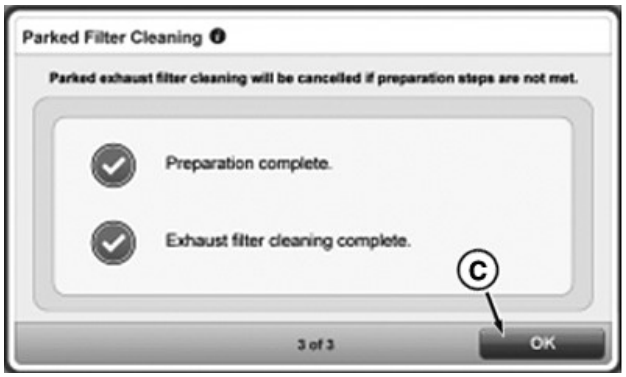
RXA0131035—UN—18FEB13

Preconditions for Parked Filter Cleaning

5. Once process is started, a status screen is displayed.

Parked Filter Cleaning takes place in two stages, Preparation and Cleaning. During the preparation stage, the engine control unit controls engine speed to increase exhaust temperature. During cleaning, a bar graph shows progress.

6. As soon as exhaust filter cleaning is completed, press the OK button (C).



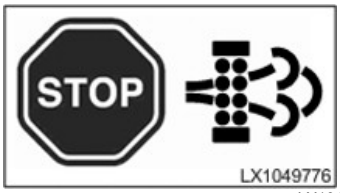
RXA0127501—UN—09AUG12

Parked Filter Cleaning Completed

IMPORTANT: Do not shut off the engine immediately after exhaust filter cleaning. Run the engine for a few minutes at low idle to allow the exhaust system to cool down sufficiently. This is not necessary if tractor operation is resumed immediately after exhaust filter cleaning.

OULXA64,6R,MW67,0005F41-19-13APR23

Exhaust Filter, Service Cleaning



LX1049776—UN—22JUL10

If level of soot at exhaust filter is extreme, the icon shown opposite appears and engine power is reduced. In this case, contact a dealer authorized by John Deere to perform a service cleaning.

Automatic exhaust filter cleaning and parked filter cleaning are no longer possible at this time.

*NOTE: If the tractor is switched off after this icon appears, it will not reappear immediately if the engine is restarted, and the tractor is **briefly** capable of operating, albeit with reduced power. In this situation, contact your dealer.*

Tips for avoiding service cleaning:

- Deactivate automatic filter cleaning only if necessary.
- Avoid unnecessary idling.
- Do not interrupt cleaning processes unless it is absolutely necessary.
- If possible, do not shut off the engine while the exhaust filter cleaning indicator light is on.
- Take note of the information displayed for the operator, and act accordingly.

OULXA64,6R,0005C8A-19-26MAR21

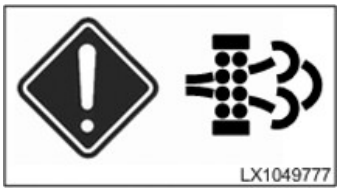
Exhaust Cleaning System, Information for Operator

1. Blue INFO Indicator and Exhaust Filter Indicator

LX1049778—UN—22JUL10

Description	Recommended procedure
High level of soot at exhaust filter, the exhaust filter requires cleaning. Note: Engine power is reduced if no exhaust cleaning is carried out.	Activate automatic exhaust filter cleaning, see **Automatic Exhaust Filter Cleaning** in this Section. Increase engine speed or engine load to allow exhaust filter cleaning. Alternatively, **Parked Filter Cleaning** may be carried out; see relevant text in this Section. If more messages appear on the CommandCenter™, comply with these where practicable.

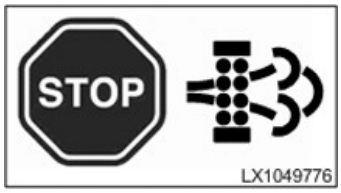
2. Warning Alert and Exhaust Filter Indicator



LX1049777—UN—22JUL10

Description	Recommended procedure
Very high level of soot at exhaust filter, the exhaust filter requires cleaning. Note: Engine power is reduced.	Perform **Exhaust Filter Cleaning with Tractor Parked**; see relevant text in this Section.

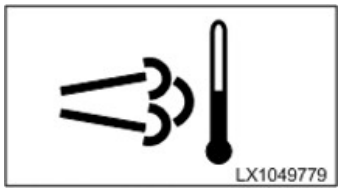
3. Engine Stop Indicator and Exhaust Filter Indicator



LX1049776—UN—22JUL10

Description	Recommended procedure
Extreme level of soot in exhaust filter. When this level of contamination is reached, service cleaning must be performed. Note: Engine power is reduced.	Contact your John Deere dealer and get the dealer to service-clean the exhaust filter. See **Service Cleaning** in this Section.

4. Engine Emission Temperature Indicator



LX1049779—UN—22JUL10

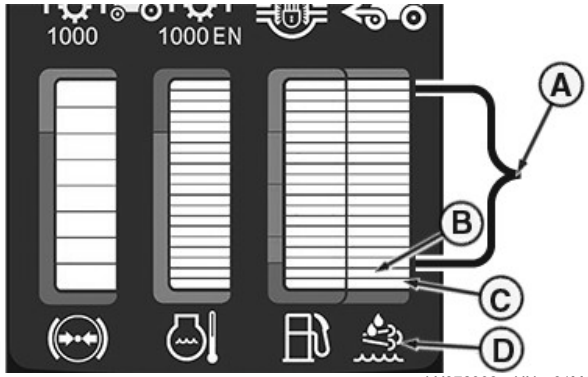
Description	Recommended procedure
This icon lights up when exhaust filter cleaning is taking place. Engine may run at increased idle speed, exhaust temperature may be high.	Do not interrupt automatic exhaust filter cleaning unless absolutely necessary; see **Automatic Exhaust Filter Cleaning** in this Section. If more messages appear on the CommandCenter™, comply with these where practicable.

OULXA64,6R,0005C8B-19-26MAR21

DEF (Diesel Exhaust Fluid) Level Gauge

IMPORTANT: It is unlawful to tamper with or remove any component of the aftertreatment system. It is also unlawful to use Diesel Exhaust Fluid (DEF) that does not meet the specifications provided.

IMPORTANT: Using incorrect or unapproved replacement parts can cause damage to vehicle's aftertreatment system and impair its proper functioning. When repairing the exhaust system, never interchange aftertreatment components between Interim Tier 4/Stage III B and Final Tier 4/Stage IV equipped vehicles.



LX372998—UN—31MAR21

A—Normal DEF Level
B—Low DEF Level 1
C—Low DEF Level 2
D—DEF Symbol

SCR system monitors the quality of the DEF. If an incorrect urea concentration is detected in the DEF, system will display a diagnostic trouble code.

The SCR exhaust aftertreatment process is a system that uses DEF and other components in the exhaust cleaning system to reduce exhaust emissions.

Tractor electronic systems monitor DEF level to ensure proper performance. The operator is informed by indicator lights and diagnostic trouble codes when the DEF level becomes critical. To maintain unrestricted tractor performance, it is recommended practice to fill up the DEF tank every time the tractor is refueled. See Fill the DEF Tank in Section 20.

For more information, see Section 200B.

Normal DEF Level:

• When DEF level is within range (A), the DEF symbol (D) is on and the tractor operates normally. Always try to keep the level within this range.

Low DEF Level 1:

When DEF level drops below 10% (B), the lowest bar of the DEF level gauge flashes and a diagnostic trouble code is displayed. This has no effect on tractor operation, but it is urgently recommended that the DEF tank be refilled.

Low DEF Level 2:

When DEF level approaches zero (C), DEF symbol (D) flashes also. Engine power is reduced and a diagnostic trouble code is displayed. The DEF tank must be refilled to make the tractor operate normally again.

DEF at Low Temperatures:

The freeze point of DEF is approx. -11°C (12°F). At this temperature or colder, DEF cannot be used in the aftertreatment system. The tractor systems detect that the temperature is too cold and permit the engine to be operated despite the shortage of DEF. This operational state is flagged up by a diagnostic trouble code.

To thaw the DEF, heat is fed into DEF tank from the engine cooling system. Once the DEF has thawed, the SCR system functions as normal. However, if the DEF does not thaw within 40 minutes, another diagnostic trouble code is displayed and engine power is reduced.

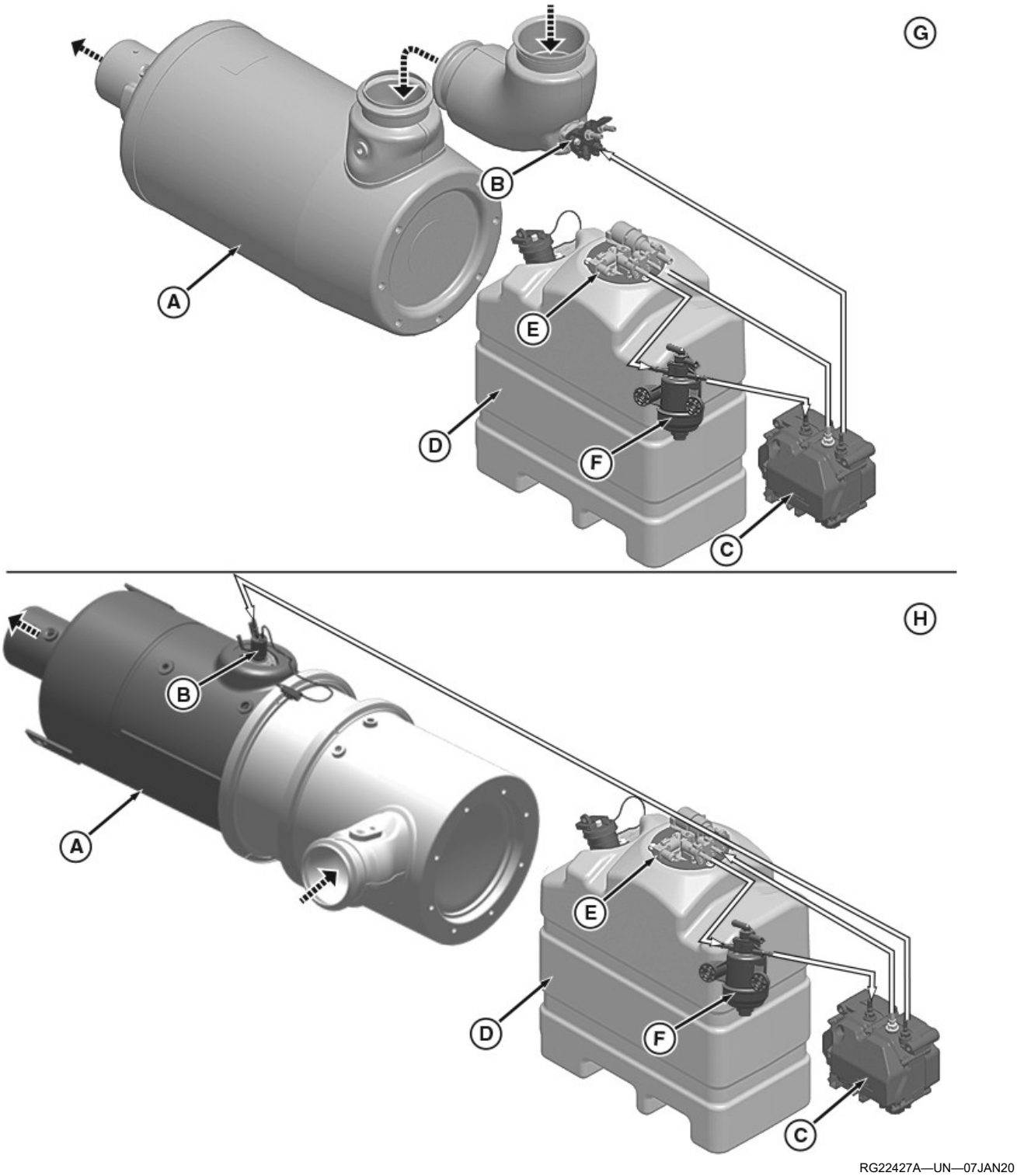
NOTE: The quality of the DEF is not degraded by freezing and thawing.

If desired, a lockable cap can be ordered for the DEF tank as a John Deere accessory.

* DEF (Diesel Exhaust Fluid) = A urea-based fluid used in exhaust aftertreatment systems.

OULXA64,6R,0005CCE-19-27MAR23

Selective Catalytic Reduction (SCR) System Overview



RG22427A—UN—07JAN20

SCR System

A—SCR Catalyst
B—DEF Dosing Injector
C—DEF Dosing Unit
D—DEF Tank
E—DEF Tank Header Assembly
F—Inline DEF Filter (If Equipped)
G—Modular Canning Configuration
H—Inline Canning Configuration

IMPORTANT: Do not remove battery leads for at least 4 minutes after engine stops. The SCR system automatically purges itself of Diesel Exhaust Fluid (DEF) immediately after the engine is stopped. If adequate time is not allowed for lines to be purged, residual DEF can freeze and possibly damage components of the SCR system during cold-weather exposure.

In order to comply with national and local emission requirements, this engine series contains a Selective Catalytic Reduction (SCR) system. The main components of the SCR system include the SCR catalyst (A), DEF dosing injector (B), DEF dosing unit (C), DEF tank (D), and DEF tank header assembly (E). The SCR system is effective at reducing the nitrogen oxides (NOx) emissions. NOx is a major component of smog and acid rain.

During combustion, NOx molecules are formed in the exhaust. DEF is injected into the exhaust stream before the SCR catalyst. Through a chemical reaction in the SCR, NOx is converted into nitrogen and water.

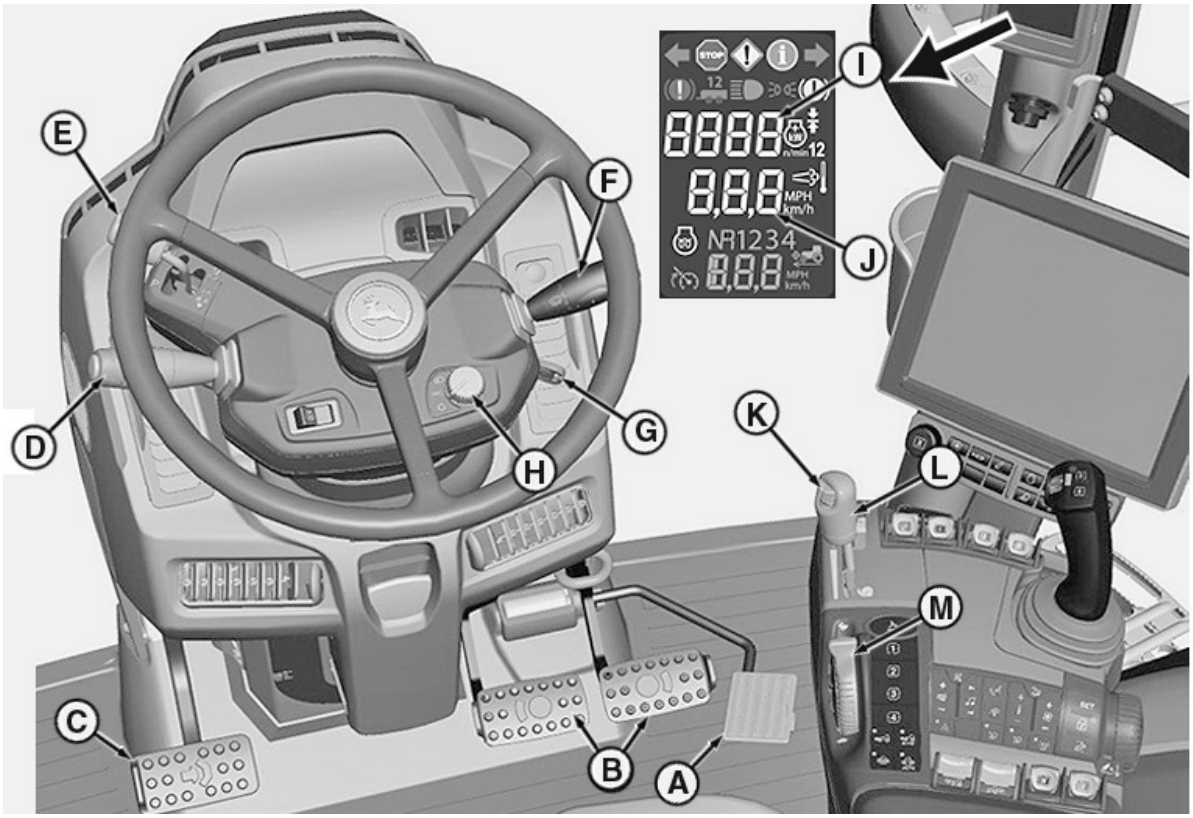
Water vapor is a normal by-product of combustion. During cold-weather operation at low exhaust temperatures, this water vapor can condense and resemble white smoke from the exhaust. This will dissipate as operating temperature increases and the water is further vaporized. This situation is considered normal.

A DEF solution begins to crystallize and freeze at -11 °C (12 °F). With climate temperatures that can range much colder than this, DEF is expected to freeze in the DEF tank. For this reason, the DEF tank contains a heating element that provides rapid thawing of DEF upon start-up. The heating element cycles to maintain fluidity during operation as needed. DEF is not dosed upon initial start-up, therefore it is not necessary to have liquid DEF at cold start-up.

If DEF quality deteriorates and it is no longer within specifications, the engine can derate. DEF should be crystal clear with a light ammonia smell. If DEF appears cloudy, has a colored tint, or has a profound ammonia smell, it is likely not within specification.

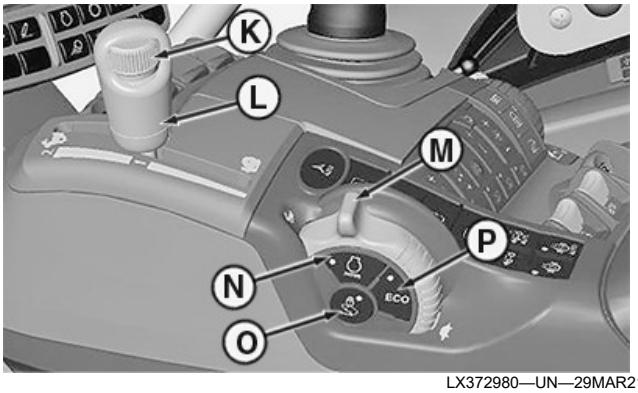
DX,SCR,OVERVIEW-19-30MAR20

Vehicle Controls with AutoPowr™/IVT™ Transmission



LX372979—UN—29MAR21

Vehicle Controls with AutoPowr™/IVT™ Transmission



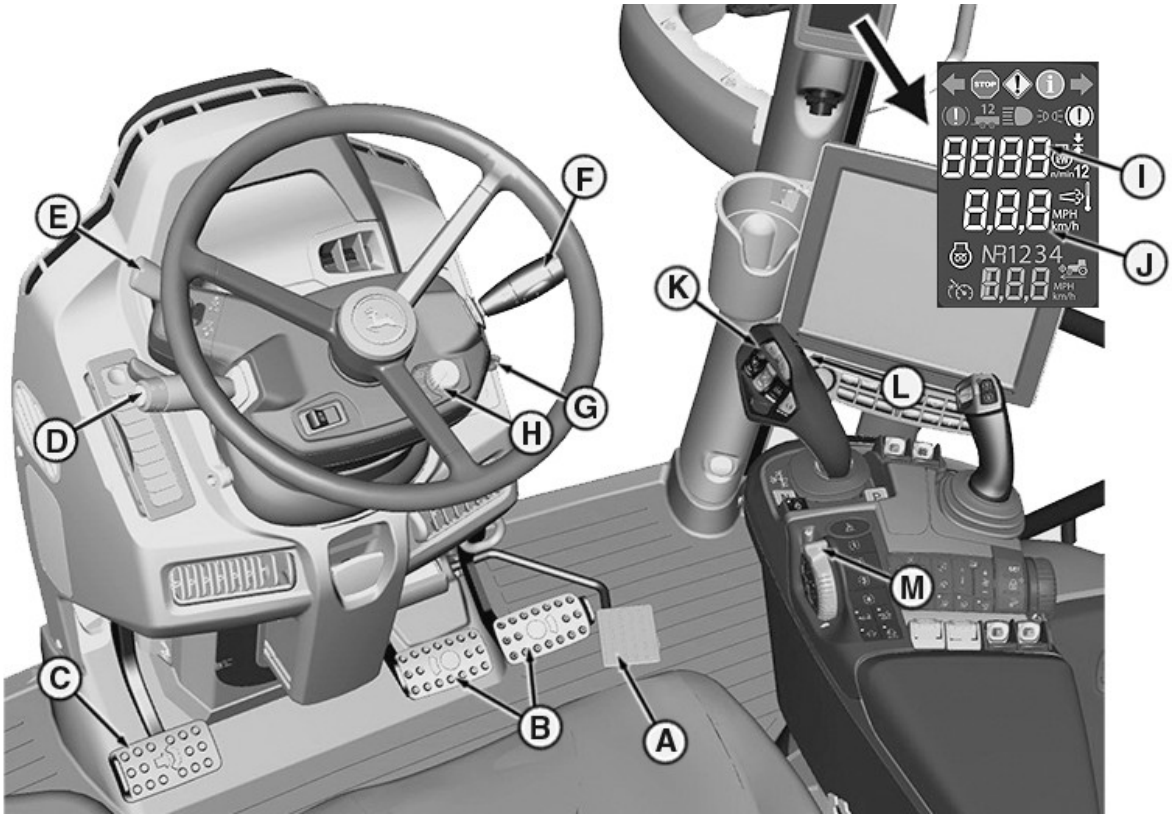
LX372980—UN—29MAR21

Vehicle Controls on Hand Throttle

A—Speed Control Pedal
B—Left and Right Brake Pedals
C—Clutch Pedal
D—Turn-Signal Lever/Horn
E—Reverse Drive Lever
F—Wiper Switch
G—Key Switch
H—Light Switch
I—Engine Speed (rpm)
J—Travel Speed (km/h or mph)
K—Speed Wheel
L—Shift Lever
M—Hand Throttle
N—FieldCruise™, ON/OFF
O—Save/Delete Pedal Position
P—ECO Mode, Minimum Engine Speed ECO, ON/OFF

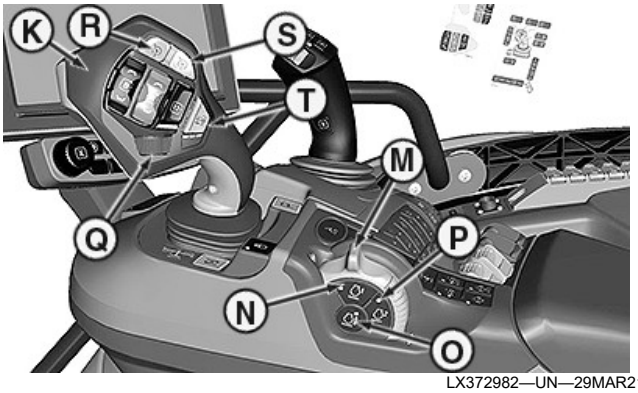
OULXA64,6R,0005C70-19-09JUN21

Vehicle Controls with AutoPowr™/IVT™ Transmission and CommandPRO™ Joystick



LX372981—UN—29MAR21

Vehicle Controls with AutoPowr™/IVT™ Transmission and CommandPRO™ Joystick



LX372982—UN—29MAR21

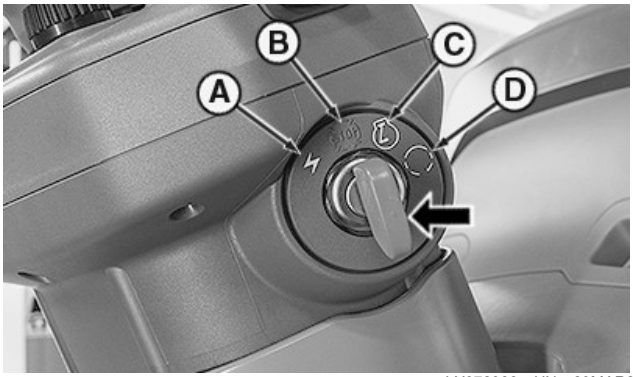
Vehicle Controls on Joystick and Hand Throttle

A—Speed Control Pedal (travel speed)
B—Left and Right Brake Pedals
C—Clutch Pedal
D—Turn-Signal Lever/Horn
E—Reverse Drive Lever
F—Wiper Switch
G—Key Switch
H—Light Switch
I—Engine Speed (rpm)
J—Travel Speed (km/h or mph)
K—CommandPRO™ Joystick (direction of travel and travel speed)
L—Activation Button on CommandPRO™ Joystick
M—Hand Throttle Module (engine speed)
N—Engine Set Speed 1, ON/OFF
O—Engine Speed Automatic Mode/Constant
P—Engine Set Speed 2, ON/OFF
Q—Adjustment Wheel for Maximum Travel Speed
R—Preselection - Travel Set Speed 2
S—Preselection - Travel Set Speed 1
T—Characteristic for Change in Travel Speed (low/medium/high)

OULXA64,6R,0005C71-19-17AUG21

Key Switch

IMPORTANT: Before leaving the tractor, confirm that the key switch is in the STOP position (B). If the key switch is *not* in the STOP position, the battery may discharge.



LX372983—UN—29MAR21

Key Switch, Positions

Position		Consumer	Supplier
A	ACC	Operator's Seat 12-volt Power Outlet Socket / Cigarette Lighter Radio[a] Cooling Compartment[a]	Battery
B	STOP	On-board circuit OFF Engine OFF	—
C	IGN	On-board circuit ON Engine OFF	Battery
	RUN	On-board circuit ON Engine is running Battery is charging	Alternator
D	START	On-board circuit ON Consumers of ACC position OFF Starting motor is activated and engine is started	Battery

[a] *If equipped*

OULXA64,6R,0005C72-19-30MAR21

Immobilizer

RXA0108294—UN—24JUN10

A—Key with Chip and Transponder for Communication with the Immobilizer
B—Customary Key without Additional Function

A tractor with immobilizer can only be operated with a special key (A) that has an integrated chip with valid activation code. Customary keys (B) or keys that have a code unknown to the immobilizer cannot be used. The engine will start, but will be automatically shut off again after a short period. Additional attempts will cause the tractor engine to turn, but not to start.

After accidental start attempt with incorrect key: Insert a valid key into the key switch and turn on the ignition. **DO NOT START**. Wait at least 3 seconds and then start the engine.

NOTE: Immobilizer keys (A) can be identified because they are slightly thicker than a normal customary key (B). Immobilizer keys only work on the tractors for which they have been programmed.

Ex works, two keys are provided for tractors with immobilizer. Up to three additional keys can be ordered through an authorized dealer.

IMPORTANT: In the event of losing a key, immediately contact an authorized dealer. The dealer can deactivate the lost key by programming the immobilizer accordingly. This prevents the tractor from unauthorized operation by the potential finder of the key.

NOTE: To ensure uninterrupted tractor productivity, it is recommended to replace lost keys as quickly as possible.

OULXA64,000536C-19-23SEP21

Secondary Brake System

CAUTION: The secondary brake system cannot and must NOT be used as a park brake.

When braking with the secondary brake system, the following trailer brakes are activated:

- **Air trailer brake[1]**
- **Dual-line hydraulic trailer brake[1]**

The braking effect of the trailer brakes may be weaker than when actuated by the service brake.

LX1049730—UN—20APR10

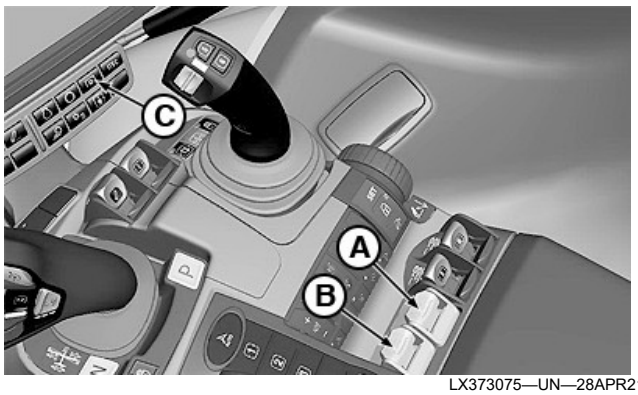
In the event of service brake failure, the secondary brake system can be used to brake the tractor. Pull lever (A) upward to obtain a braking effect.

CAUTION: The park lock needs to be engaged to park the tractor. The following trailer brakes are activated:

- **Air trailer brake[1]**
- **Dual-line hydraulic trailer brake[1]**

OULXA64,6R,0005BEA-19-24SEP21

PTO Controls



LX373075—UN—28APR21

A—Rear PTO Switch
B—Front PTO Switch

LX314987—UN—15AUG17

Remote Control Button

D—PTO, Remote Control

For more information, see Sections 60A, 60B, and 60C.

OULXA64,6R,MW67,0005F50-19-25OCT21

Premium Front Hitch Controls

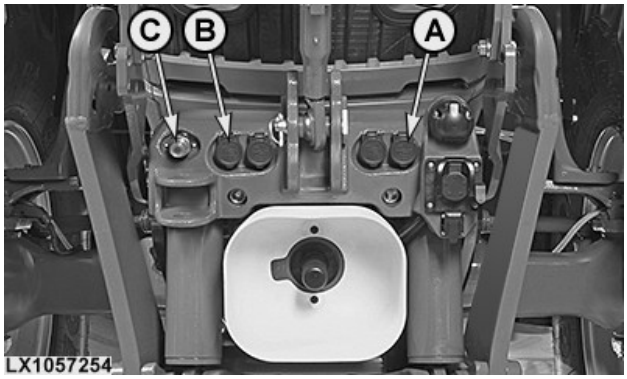
CAUTION: Avoid crushing hazard with possibly fatal consequences.

When working in the area of the hitch, unexpected movements can be triggered. This can cause serious crushing injuries.

Always lower implements first and depressurize the hydraulic system before any repair or maintenance work. Shut down the motor and secure it against being switched on again.

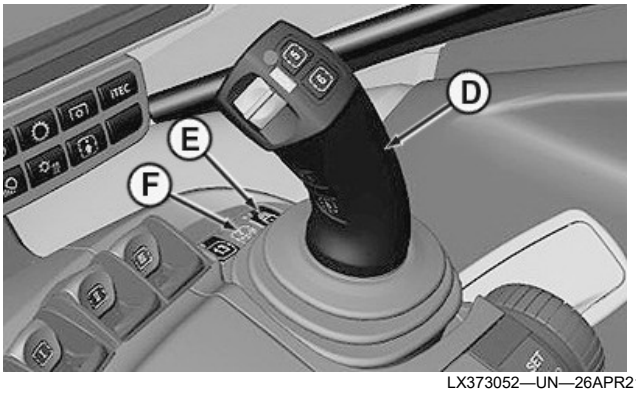
Always lock unneeded control elements against being actuated unintentionally!

[1] *If equipped*



LX1057254—UN—10SEP13

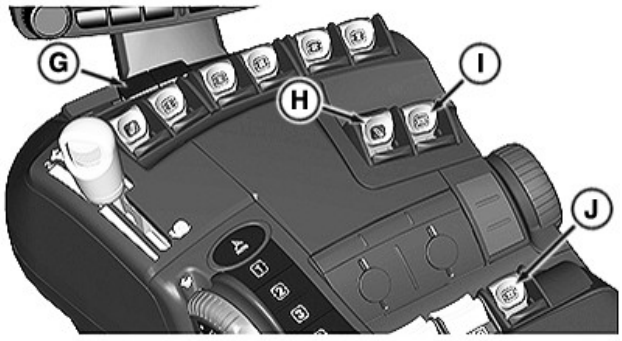
A—SCV XIV Couplers
B—SCV XV Couplers (Option)
C—Pressure-Free Oil Return Circuit



LX373052—UN—26APR21

Operation with Joystick on CommandARM™

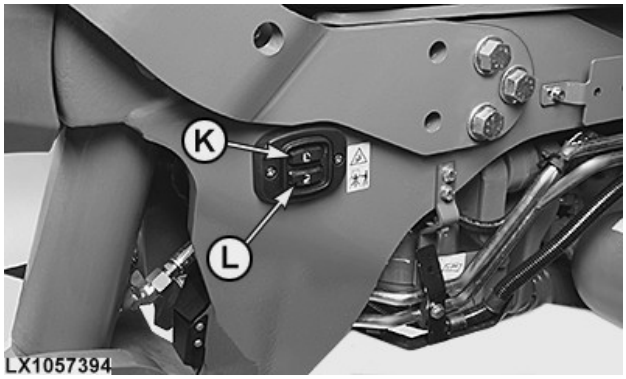
D—Joystick
E—Lock Button, Joystick ON/OFF
F—Indicator Light, Joystick Enabled



LX266796—UN—18MAR16

Operation with SCV Levers XIV and XV - CommandARM™

G—Lock Button, SCVs ON/OFF
H—Control Lever, Lift/Lower Front Hitch and Float
I—SCV XIV Control Lever
J—SCV XV Control Lever (optional)



LX1057394—UN—15JAN14

Remote Control, Lift/Lower

K—Switch, Lift Front Hitch
L—Switch, Lower Front Hitch

For more information, see Section 60D.

NOTE: The remote control overrides the control lever in the cab.

SCV XIV and SCV XV cannot be used simultaneously. Corresponding functions can only be performed successively, but not at the same time. This is especially important to comply with iTEC™ sequences.

OULXA64,6R,MW67,0005F51-19-25OCT21

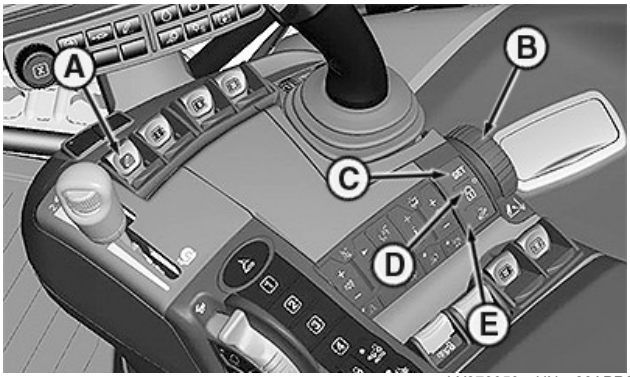
Rear Hitch Controls

CAUTION: Avoid crushing hazard with possibly fatal consequences.

When working in the area of the hitch, unexpected movements can be triggered. This can cause serious crushing injuries.

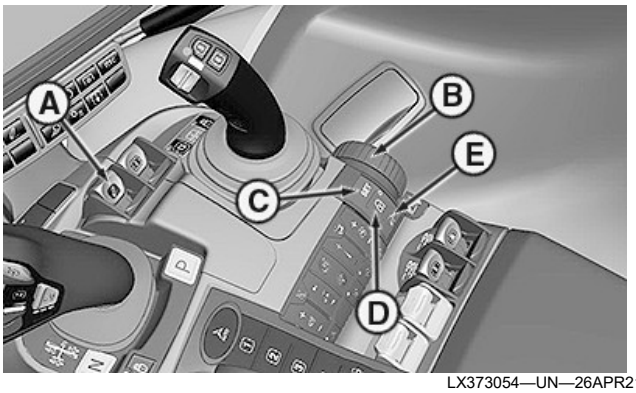
Always lower implements first and depressurize the hydraulic system before any repair or maintenance work. Shut down the motor and secure it against being switched on again.

Always lock unneeded control elements against being actuated unintentionally!



LX373053—UN—26APR21

CommandARM™ without CommandPRO™ Joystick



LX373054—UN—26APR21

CommandARM™ with CommandPRO™ Joystick

A—Depth Control Lever (raise/lower/float position)
B—Control Knob, Depth Control (raise/lower)
C—Set Button, Saving the Selected Operating Depth
D—Button, Transport Lock/Dampening
E—Button for Moving to Saved Operating Depth, or Quick Lowering

LX373055—UN—26APR21

Hitch - Remote Control

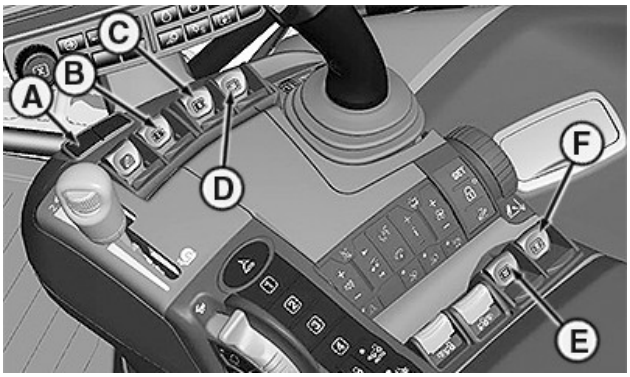
F—Hitch, Remote Control

For more information, see Section 60E.

OULXA64,6R,MW67,0005F52-19-25OCT21

Electronic Selective Control Valves (SCV), Controls

CAUTION: Always lock unneeded control elements against being actuated unintentionally!



LX373057—UN—26APR21

A—Lock Button of SCV Control Lever ON/OFF
B—SCV I Control Lever
C—SCV II Control Lever
D—SCV III Control Lever
E—SCV IV Control Lever
F—SCV V Control Lever

LX314985—UN—15AUG17

Remote Control for Assigned Rear SCV

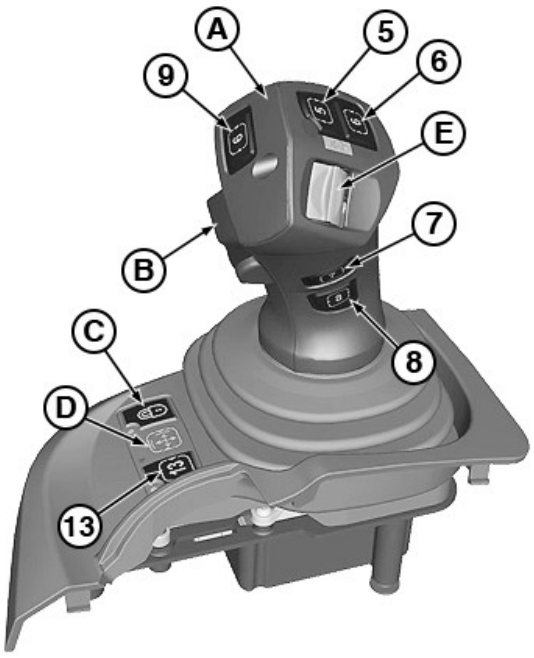
G—Remote Control for Assigned Rear SCV

For more information, see Section 70, 70A, 70B, and 70C.

OULXA64,6R,MW67,0005F53-19-18JAN22

Electrical Joystick

CAUTION: Risk of injury due to sudden movements and accidents if using the front loader with iTEC™ at the same time. Unforeseeable movements can cause fatal accidents.



LX373059—UN—28APR21

Electrical Joystick on CommandARM™

5—Gearshift Button, Upshift (default assignment)
6—Gearshift Button, Downshift (default assignment)
7—Button for Diverter Valve 1 (default assignment)[2]
8—Button for Diverter Valve 2 (default assignment) [23]
9—Not Used (default assignment)
13—Button for Activating Loader Suspension System (default assignment)
A—Joystick
B—Raise/Lower Rocker Switch
C—Lock Button, Joystick ON/OFF
D—Indicator Light, Joystick Enabled
E—Rocker Switch for Change Direction of Travel

LX373133—UN—26MAY21

F—Button for Controls Setup

On tractors with electrically actuated joystick, buttons (5) to (9), (13), and rocker switch (B) can be activated or disabled.

RTP - Front Loader with Return-to-Position Function:[3]

Toggle the set point range with button (8).

For more information, see Section 70D.

[2] On front loader with return-to-position (RTP), this button is used to toggle the set point range.
[3] Not on CommandARM™ with electrical joystick on European tractors.

CAUTION: Press Controls Setup button (F) to find out how the buttons are currently assigned. Misuse may result in accidental death.

CAUTION: Always lock unneeded control elements against being actuated unintentionally!

OULXA64,6R,MW67,0005F54-19-19JAN22

Front-Wheel Drive Controls

LX373062—UN—28APR21

A—Manual Lock Button
B—Autolock Button

For more information, see Section 50A.

OULXA64,6R,MW67,0005F55-19-25OCT21

Differential Lock Controls

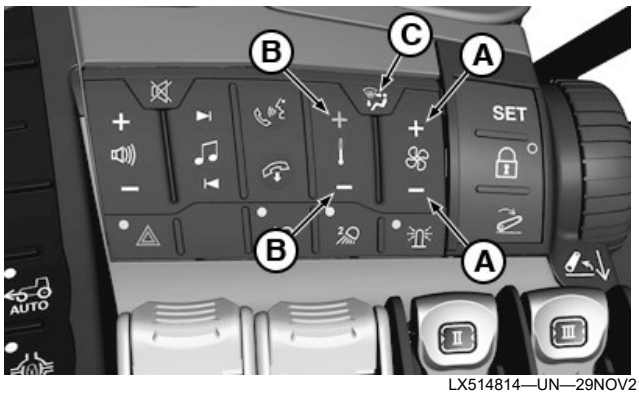
LX373064—UN—28APR21

A—Manual Lock Button
B—Autolock Button

For more information, see Section 50B.

OULXA64,6R,MW67,0005F56-19-25OCT21

Heating and Ventilation Controls



LX514814—UN—29NOV21

A—Blower Control Button, +/—
B—Temperature Control Button, +/—
C—Air Circulation Button

For more information, see Section 90F.

OULXA64,6R,MW67,0005F57-19-25NOV21

Radio A—Additional Phone Controls

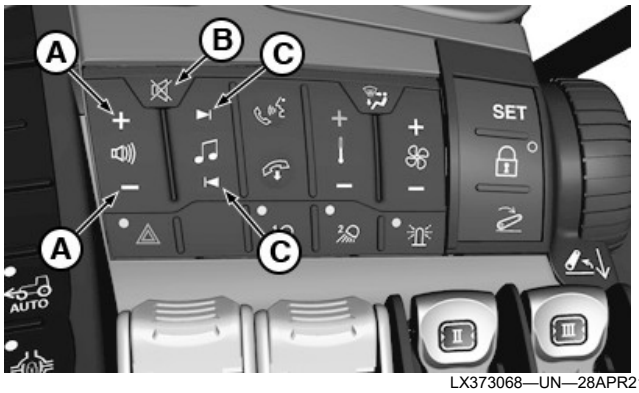
LX514734—UN—28JUN21

A—Push to Talk/Accept Call Button
B—End Call Button

For more information, see relevant Operator's Manual of the radio.

OULXA64,6R,MW67,0005F59-19-28MAR23

Radio A—Additional Radio Controls



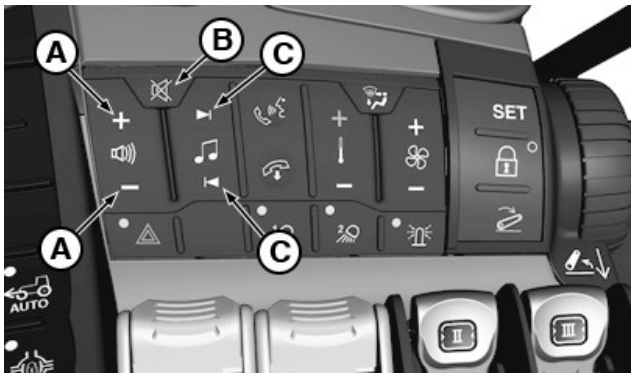
LX373068—UN—28APR21

A—Volume Control Buttons, +/–
B—Mute Button
C—Buttons for Station and Track Control

For more information, see relevant Operator's Manual of the radio.

OULXA64,6R,MW67,0005F58-19-28MAR23

Touchscreen Radio—Additional Radio Controls



LX373068—UN—28APR21

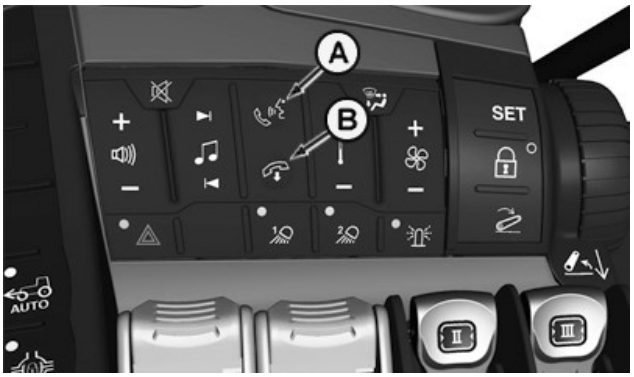
Additional Radio Controls on CommandARM™

A—Volume Control Buttons, +/–
B—Mute Button
C—Buttons for Station and Track Control

For more information, see relevant Operator's Manual of the radio.

oulxa64,6R,MW67,1661850317925-19-28MAR23

Touchscreen Radio—Additional Phone Controls



LX514734—UN—28JUN21

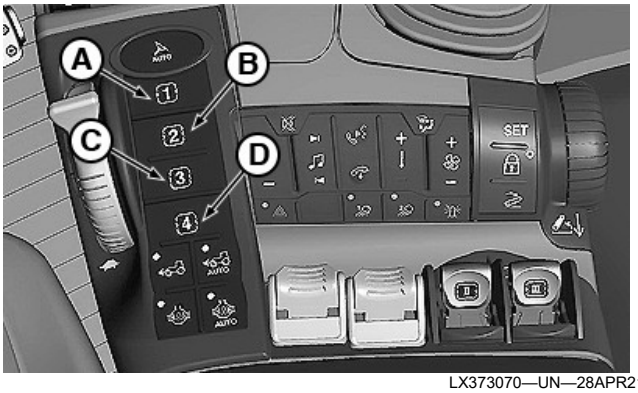
Additional Phone Control on CommandARM™

A—Push to Talk/Accept Call Button
B—End Call Button

For more information, see relevant Operator's Manual of the radio.

oulxa64,6R,MW67,1661850447020-19-28MAR23

Intelligent Total Equipment (iTEC™), Controls



LX373070—UN—28APR21

A—iTEC™ Sequence Button 1
B—iTEC™ Sequence Button 2
C—iTEC™ Sequence Button 3[4]
D—iTEC™ Sequence Button 4[4]

For more information, see Section 40A.

OULXA64,6R,MW67,0005F5A-19-25OCT21

AutoTrac™ Controls

LX373072—UN—28APR21

A—AutoTrac™ Resume Button

The resume button (A) activates the AutoTrac™ steering system.

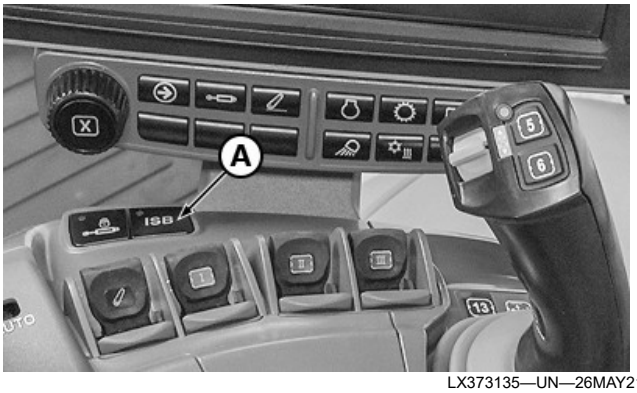
NOTE: To use the AutoTrac™ steering system, the following additional equipment is required:

- *StarFire™*
- *GreenStar™ activation*

Refer to the Operator's Manual of the AutoTrac™ steering system for more information.

OULXA64,6R,MW67,0005F5B-19-25OCT21

ISOBUS Button (ISB)



LX373135—UN—26MAY21

A—ISOBUS Button (ISB)

IMPORTANT: Before using ISOBUS implements, check whether the signal from the ISOBUS button can be used by the implement.

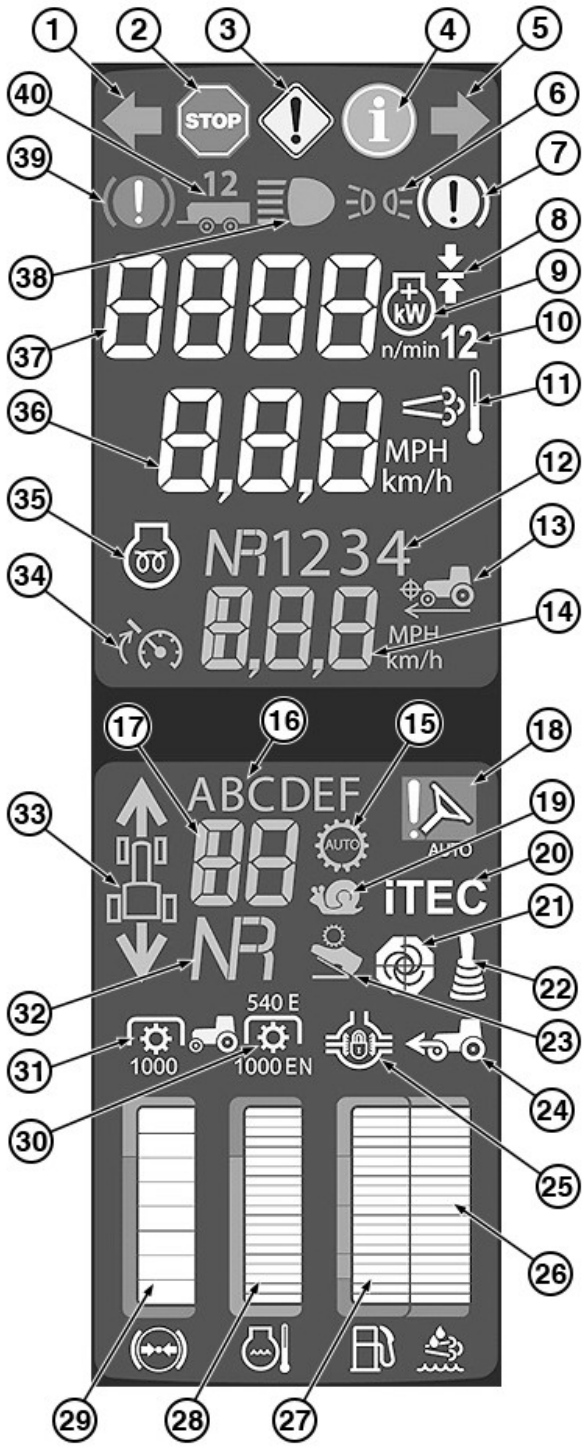
When the ISOBUS button is pressed, the signal is sent to the attached ISOBUS implement to switch into the safe state specified by the implement manufacturer. The Operator's Manual of the implement is decisive and specifies whether this signal should be used.

OULXA64,6R,MW67,0005F5C-19-25OCT21

[4] *With CommandARM™ only*

Corner Post Display

Corner Post Display, Overview



LX514829—UN—19JAN22

1—Left Turn Signal Indicator
2—Red STOP Alert Indicator
3—Amber Service Alert Indicator
4—Blue Information Alert Indicator
5—Right Turn Signal Indicator
6—Parking Light
7—Yellow Warning Indicator, Brake System
8—Maximum Engine Speed (Engine Set Speed) or Manual Engine Speed Indicator
9—Intelligent Power Management (IPM)
10—Engine Set Speed 1 or 2
11—Exhaust Filter Cleaning
12—Direction of Travel F/R and Available Gears 1—4[1], or Speed Band 1, or 2[2]
13—Travel Set Speed Indicator[3]
14—Travel Set Speed Value (mph or km/h)
15—Automatic Shifting
16—Available Ranges[4] Illuminates with 17
17—Current Gear[1] Illuminates with 16
18—AutoTrac™ or Warning Indicator for Steering System
19—Creeper Mode
20—iTEC™
21—Tractor Automation Indicator
22—ISO Aux Function (ISOBUS)
23—Speed Control Pedal Mode[2]
24—Front-Wheel Drive
25—Differential Lock
26—DEF Level Gauge
27—Fuel Level Gauge
28—Coolant Temperature
29—Trailer Air Brake Pressure Gauge
30—Rear PTO
31—Front PTO
32—Direction of Travel (Neutral or Park)[5]
33—Direction of Travel (Forward or Reverse)
34—CommandPRO™ Maximum Travel Set Speed or Travel Set Speed 1, or 2
35—Engine Preheater
36—Speedometer, Travel Speed (mph or km/h)
37—Revolution Counter, Engine Speed (rpm)
38—High-Beam Headlight
39—Red Warning Indicator, Brake System
40—Trailer Warning Indicator (1/2)

Test the control lights:

- As the engine is started, all the lights (icons) should light up for about 1 second. If not, a defective LED or blown fuse may be the cause. Replace part.
- Turn key switch into first position to the right IGN and all lights (icons) light up for about 1 second. If not, a defective LED or blown fuse may be the cause. Replace part.

NOTE: Only the icons with available functions light up.

OULXA64,6R,0005CF0-19-27MAR23

[1] Not with AutoPower™/IVT™ transmission
[2] Only with AutoPower™/IVT™ transmission
[3] Not with AutoQuad™ PLUS Transmission
[4] Only with DirectDrive transmission
[5] Park not with AutoQuad™ PLUS Transmission

Corner Post Display

RXA0168459—UN—29MAY19

Corner Post Display

NOTE: Some items only display if the machine is equipped with the associated option.

RXA0167737—UN—06MAY19

Left Turn Signal Indicator
- flashes when left turn signal or hazard lights are on.

RXA0167738—UN—06MAY19

Right Turn Signal Indicator
- flashes when right turn signal or hazard lights are on.

LX373087—UN—04MAY21

Parking Lights Indicator
- illuminates when parking lights are on.

RXA0167739—UN—06MAY19

High-Beam Headlight Indicator
- illuminates when high beam headlights are on.

RXA0167740—UN—06MAY19

Trailer Warning Indicator
- trailer symbol and 1 FLASH when turn signal or hazard lights are on and one trailer is attached. Symbol, 1, and 2 FLASH when turn signal or hazard lights are on and two trailers are attached.

RXA0167741—UN—06MAY19

Engine Preheat Indicator
- illuminates when the key is in the run position. Indicator turns off when the engine can be started.

RXA0167742—UN—06MAY19

Revolution Counter
- displays engine speed in revolutions per minute (rpm). If (- - - -) is displayed, no speed signal is being received.

RXA0167743—UN—06MAY19

Intelligent Power Management (IPM) Indicator
- illuminates when IPM is active.

RXA0167744—UN—06MAY19

Maximum Engine Speed Indicator
- illuminates when the maximum engine set speed limit is active.

RXA0167745—UN—06MAY19

Manual Engine Speed Indicator[a]
- illuminates when engine speed is in manual mode on machines equipped with CommandPRO™ joystick.

[a] *Not with AutoQuad™ PLUS transmission*

RXA0167746—UN—06MAY19

Engine Set Speed Number
- illuminates 1 when engine set speed one is active. Illuminates 2 when engine set speed two is active.

RXA0167747—UN—06MAY19

Exhaust Filter Cleaning Indicator
- illuminates when exhaust filter cleaning is active.

RXA0167748—UN—06MAY19

Speedometer
- displays travel speed in either miles per hour (mph) or kilometers per hour (km/h), depending on operator-selected units (U.S. or metric). If (**- - -**) is displayed, no speed signal is being received. When the engine preheat indicator is activated, engine start time is displayed.

LX373083—UN—04MAY21

Direction of Travel and Available Gears[a]
- displays active direction of travel and the available gear 1—4.
- Displays F if the machine is in forward.
- Displays R if the machine is in reverse.

[a]*Only with DirectDrive transmission*

RXA0167749—UN—06MAY19

Travel Set Speed Direction and Number[a]
- displays the active set speed direction and number (1 or 2).
- Displays F if the machine is in forward.
- Displays R if the machine is in reverse.

[a]*Only with AutoPower™/IVT™ transmission*

RXA0167750—UN—06MAY19

Travel Set Speed Indicator[a]
- illuminates when travel set speed one or two is active.

[a]*Only with AutoPower™/IVT™ transmission*

RXA0167751—UN—06MAY19

Travel Set Speed Value[a]
- displays speed value (in orange) for the active set speed. Displays MAX set speed if CommandPRO™ joystick is equipped and set speed is not active. Displays (**- - -**) if no MAX set speed or set speed signal is being received.

[a]*Not with AutoQuad™ PLUS transmission*

RXA0167752—UN—06MAY19

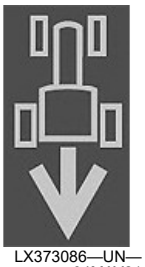
CommandPRO™ Travel Set Speed Indicator
- illuminates when CommandPRO™ travel set speed one or two is active.

LX514828—UN—27JAN22

CommandPRO™ Maximum Travel Set Speed Indicator
- illuminates when CommandPRO™ MAX travel set speed is active.

LX373085—UN—04MAY21

Direction of Travel Indicator (Forward)
- tractor symbol and top arrow illuminate when the machine is in forward.


LX373086—UN—04MAY21

Direction of Travel Indicator (Reverse)
- tractor symbol and bottom arrow illuminate when in reverse.

LX373084—UN—04MAY21

Available Ranges Indicator[a]
- displays selected range mode (depends on selected range mode) and illuminates with the current gear indicator.

[a]*Only with DirectDrive transmission*

RXA0167755—UN—06MAY19

Current Gear Indicator[a]
- displays the gear machine is in and illuminates with the available ranges indicator.

[a]*Not with AutoPower™/IVT™ transmission*

RXA0167756—UN—06MAY19

Neutral/Park Indicator
- Displays N if the machine is in neutral.
- Displays P[a] if the machine is in park.

[a]*Not with AutoQuad™ PLUS transmission*

RXA0167757—UN—06MAY19

AutoTrac™ Indicator
- illuminates when AutoTrac™ is active.

RXA0167758—UN—06MAY19

Automatic Shifting Indicator[a]
- illuminates when the auto-shift is on.

[a] *Not with AutoQuad™ PLUS transmission*

RXA0167759—UN—06MAY19

Creeper Mode Indicator[a]
- illuminates when set speed is reduced below 2 km/h (1 mph).

[a] *Not with AutoQuad™ PLUS transmission*

RXA0167760—UN—06MAY19

Speed Control Pedal Mode Indicator[a]
- illuminates when the pedal mode is active.

[a] *Not with AutoQuad™ PLUS transmission*

RXA0167761—UN—30MAY19

iTEC™ Indicator
- illuminates when iTEC™ is active.

RXA0167762—UN—06MAY19

Tractor Automation Indicator
- illuminates when the tractor automation is active.

RXA0167763—UN—06MAY19

ISO Aux Implement (ISOBUS) Indicator
-illuminates when the function of implement is active.

RXA0167764—UN—06MAY19

Differential Lock Indicator
- illuminates when the differential lock is active.

RXA0167765—UN—06MAY19

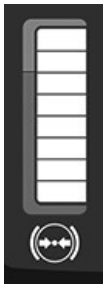
Front-Wheel Drive Indicator
- illuminates when front-wheel drive is active.

RXA0167766—UN—06MAY19

Front PTO Indicator
- tractor and front PTO symbols illuminate when front PTO is active. 1000 illuminates when 1000 mode is active.

RXA0167767—UN—06MAY19

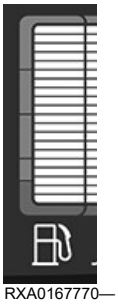
Rear PTO Indicator
- tractor and rear PTO symbols illuminate when rear PTO is active. PTO gear information illuminates for the corresponding active PTO gear.


RXA0167768—UN—06MAY19

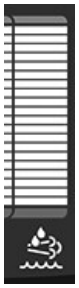
Trailer Air Brake Pressure Gauge
- displays a percent of the air pressure for trailer air brake. Segments in the red zone indicate brake pressures from no pressure (0%) to low pressure (66%). Segments in the green zone indicate brake pressures from just above low pressure (66.4%) to the full pressure (100%). When air pressure is low, segments in red zone FLASH.

RXA0167769—UN—06MAY19

Coolant Temperature Gauge
- displays the engine coolant temperature between 40—120°C (104—248°F). All segments are off when coolant temperature is below 40°C (104°F). All segments are lit when temperature is 120°C (248°F) and above. When temperature reaches red zone, segments in the red zone and icon FLASH.


RXA0167770—UN—06MAY19

Fuel Level Gauge
- displays the fuel level in tank. Each lighted segment represents 5% of fuel tank total capacity. When the fuel tank is full, all segments are lit. When the fuel level is low, segments in red zone FLASH. When the fuel level reaches red zone, an alarm signal sounds once.


RXA0167771—UN—06MAY19

Diesel Exhaust Fluid (DEF) Level Gauge
- displays diesel exhaust fluid level. Each lighted segment represents 5% of DEF tank total capacity. When DEF tank is full, all segments are lit. When the DEF level is low, segments in red zone FLASH. When the DEF level reaches red zone, an alarm signal sounds once. DEF tank should be filled whenever fuel tank is filled.

NOTE: Diesel exhaust fluid is only used on Final Tier 4/Stage V engine equipped tractors. DEF gauge not displayed on machines equipped with other engines.

Alert Indicators:

Alert indicators are accompanied by an informative message, diagnostic trouble code, and/or fault description shown on CommandCenter™. For more information on CommandCenter™ alerts, see STOP, Service Alert, and Information Indicators in Section 300B of this Operator's Manual.

RXA0167772—UN—06MAY19

STOP Alert Indicator
- flashes and an alarm pattern sounds continuously, indicating a serious malfunction requiring immediate attention.STOP Alert Indicator — flashes and an alarm pattern sounds continuously, indicating a serious malfunction requiring immediate attention.

RXA0167773—UN—06MAY19

Service Alert Indicator
- flashes and an alarm pattern sounds five times, indicating a performance or operational problem has been detected and must be resolved as soon as possible.

RXA0167774—UN—06MAY19

Information Alert Indicator
- illuminates continuously and an alarm pattern sounds for 2 seconds, indicating a possible fault condition.

Warning Indicators:

When a warning occurs:

- Park the tractor on a level ground and prevent the tractor from rolling away.
- Diagnostic diagnostic trouble code (DTC) display on CommandCenter™. Follow instructions to fix the fault.
- If the fault cannot be fixed, see your John Deere dealer.

RXA0167775—UN—06MAY19

Steering Warning Indicator
- illuminates when AutoTrac™ is active or lights up red whenever a serious fault occurs in the steering system. Note the following:
  - Bring the vehicle to a standstill immediately.
  - Park the vehicle on level ground and take precautions to prevent it from rolling away by applying chock blocks.
  - Follow the instructions of the information display.
  - If possible, rectify the cause. Otherwise, contact an authorized dealer.

RXA0167776—UN—06MAY19

Yellow Brake Warning Indicator
- illuminates when a malfunction occurs in the brake system. Note the following:
  - Park the vehicle on level ground and take precautions to prevent it from rolling away by applying chock blocks.
  - Follow the instructions of the information display.
  - If possible, rectify the cause. Otherwise, contact an authorized dealer.

RXA0167777—UN—06MAY19

Red Brake Warning Indicator
- indicates the following:
- Shines red, until the trailer air brake has reached operating pressure.
- Lights up red if a serious fault occurs in the brake system. Note the following:

- Bring the vehicle to a standstill immediately.
- Park the vehicle on level ground and take precautions to prevent it from rolling away by applying chock blocks.
- Follow the instructions of the information display.
- If possible, rectify the cause. Otherwise, contact an authorized dealer.

- Lights up red when park lock cannot be engaged. Note the following:

- Park the vehicle on level ground and take precautions to prevent it from rolling away by applying chock blocks.
- Follow the instructions of the information display.
- If possible, rectify the cause. Otherwise, contact an authorized dealer.

OULXA64,6R,0005D4A-19-27MAR23

Warning Indicators

RXA0109847—UN—20AUG10

A—Red STOP Indicator
B—Amber Service Alert Indicator
C—Blue INFO Indicator

NOTE: All warning indicators for STOP, ATTENTION, and INFO are accompanied by a message, a diagnostic trouble code, and/or a fault description on the information display.

Audible alarms (beeps or sounds continuously) support the warning lights and/or messages on the information display.

See also Warning Indicators for Stop, Attention, and Information and Safety Warnings in Section 300B.

Warning Indicators:

A - STOP: The light flashes and an uninterrupted alarm signal sounds. A serious malfunction has occurred, requiring immediate attention or the tractor will be damaged.

B - SERVICE:
The light flashes and the alarm signal sounds five times, which indicates a performance problem or malfunction that has to be rectified as soon as possible.

C - INFO:
Light comes on continuously and alarm sounds for 2 seconds, indicating a fault condition.

OULXA64,6R,0005CF1-19-07APR21

Digital Indicators - Revolution Counter, Travel Speed, Transmission, and Set Speed

LX514830—UN—19JAN22

A – Revolution Counter: Displays engine speed. If "- - - " is displayed, no speed signal is being received.

B – Speedometer: Displays travel speed in either miles per hour or kilometers per hour, depending on operator selected units (U.S. or metric).

If "- - - -" is displayed, no speed signal is being received.

C – Travel Set Speed Indicator:[6] Shows what speed is set using the set speed adjuster.

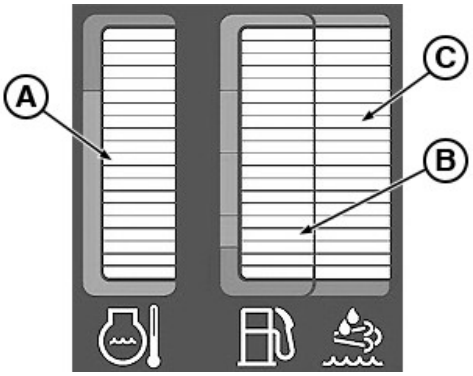
D – Transmission Information: Shows if transmission is in Neutral – N or Park – P[7].

If there is no range and gear signal, nothing is displayed.

OULXA64,6R,0005CF2-19-18JAN22

[6] *Not with AutoQuad™ PLUS transmission*
[7] *Park not with AutoQuad™ PLUS transmission*

Gauges - Coolant Temperature, DEF Level, and Fuel Level



LX373082—UN—03MAY21

A – Coolant Temperature Gauge: The display range represents temperatures between 40°C (104°F) and 120°C (248°F). All segments are off when coolant temperature is below 40°C (104°F). All segments are lit when temperature is above 120°C (248°F).

B – Fuel Level Monitor: Each displayed segment stands for 5% of the capacity. When fuel tank is full, all segments are lit. If only the lowest segment is lit, only approx. 5% fuel is left. If fewer than two segments are displayed, a signal sounds and the red zone starts to flash.

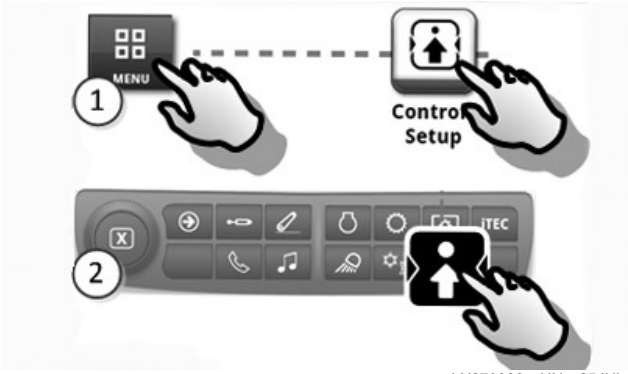
C – Display for DEF Fluid Level (if Equipped): Each displayed segment stands for 5% of the capacity. When DEF tank is full, all segments are lit. If two segments are displayed, a signal sounds and the red zone starts to flash.

NOTE: The DEF tank fluid level indicator is only installed on tractors with Final Tier 4/Stage V engines.

Urgent recommendation: Top up the DEF tank whenever fuel is filled in.

OULXA64,6R,0005CF3-19-07APR21

Controls with Variable Functions



LX279003—UN—25JUL16

The machine can be equipped with variable-function controls

CAUTION: High risk of injury with severe consequences and possible machine damage through malfunction.

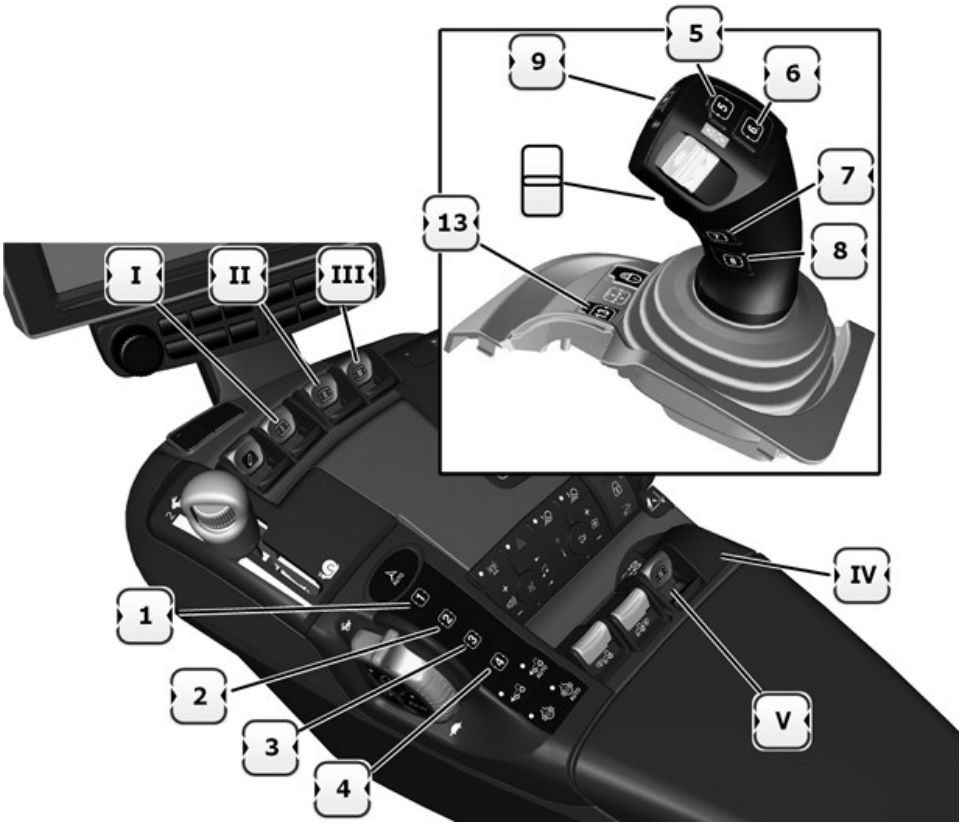
Lack of knowledge about the current functions of control elements can cause unintended actions.

To prevent incorrect operation, all operators must familiarize themselves with the machine settings before operating the machine. All operators of the machine must be kept up to date with the machine settings, especially when the settings have been changed. Do not change operators at short notice (operator changeover without shutting down engine). New drivers must familiarize themselves with the current settings. After each restart of the machine, the display informs about the fact that the functions of control elements can change. Use this notice to familiarize yourself with changed functions. The current settings can be viewed in the Machine Settings menu. Access with (1) or (2).

OULXA64,6R,0005CCF-19-06APR21

Controls Setup—General Information (without CommandPRO™ Joystick)

Overview of Buttons and Switches with Variable Function



LX514021—UN—05AUG21

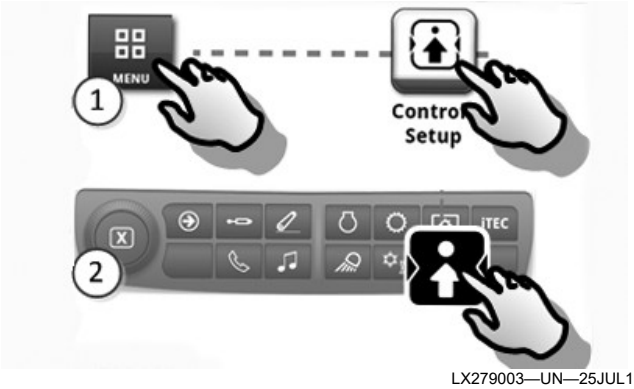
The illustration also shows the electrical joystick which is optional equipment.

IMPORTANT: For more information on setting up the controls, refer to the text under specific subjects. For example, see Sections 30 and 70.

Switches, CommandARM™	Default Setting	Electrical Joystick	Default Setting
[1]	iTEC™ sequence 1	Function of axes of movement	SCVs XI, XII, and XIII. See text regarding joystick.
[2]	iTEC™ sequence 2	[5]	No function assigned if equipped with AutoPowr™ transmission.
[3]	iTEC™ sequence 3	[6]	No function assigned if equipped with AutoPowr™ transmission.
[4]	iTEC™ sequence 4	[7]	Front loader, diverter valve 1
SCV Control		[8]	Front loader, diverter valve 2
e.g. [I], [II], [III] etc.	Function assigned as indicated on the switches (control valve numbers).	[9]	No function
		[13]	Front loader, suspension
Note: SCV XIV and SCV XV cannot be used simultaneously. This is especially important when setting up iTEC™ sequences.			

Access to the Controls Setup

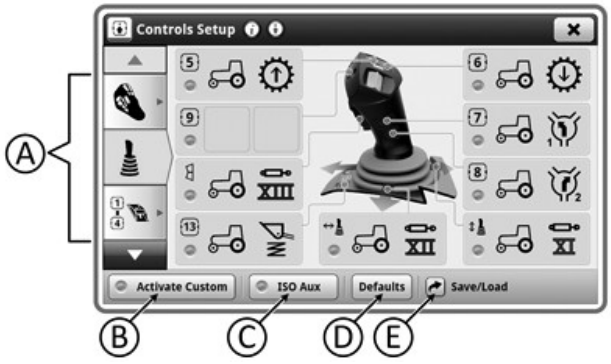
Open the dialog for setting up the controls, with (1) or (2).



LX279003—UN—25JUL16

Open Dialog for Setting Up Controls

Access the control by selecting the relevant tab on the left edge (A) of the touchscreen. In the shown example the electrical joystick was selected.



LX514024—UN—05AUG21

A—Selecting the Controls
B—Activates the Custom Settings (green indicator light = activated)
C—Switch ISO Aux on and off (green indicator light = On)
D—Activates the Default Settings (green indicator light = activated)
E—Save or retrieve Machine Settings

Custom Settings can be saved in the Settings Manager and retrieved from there.

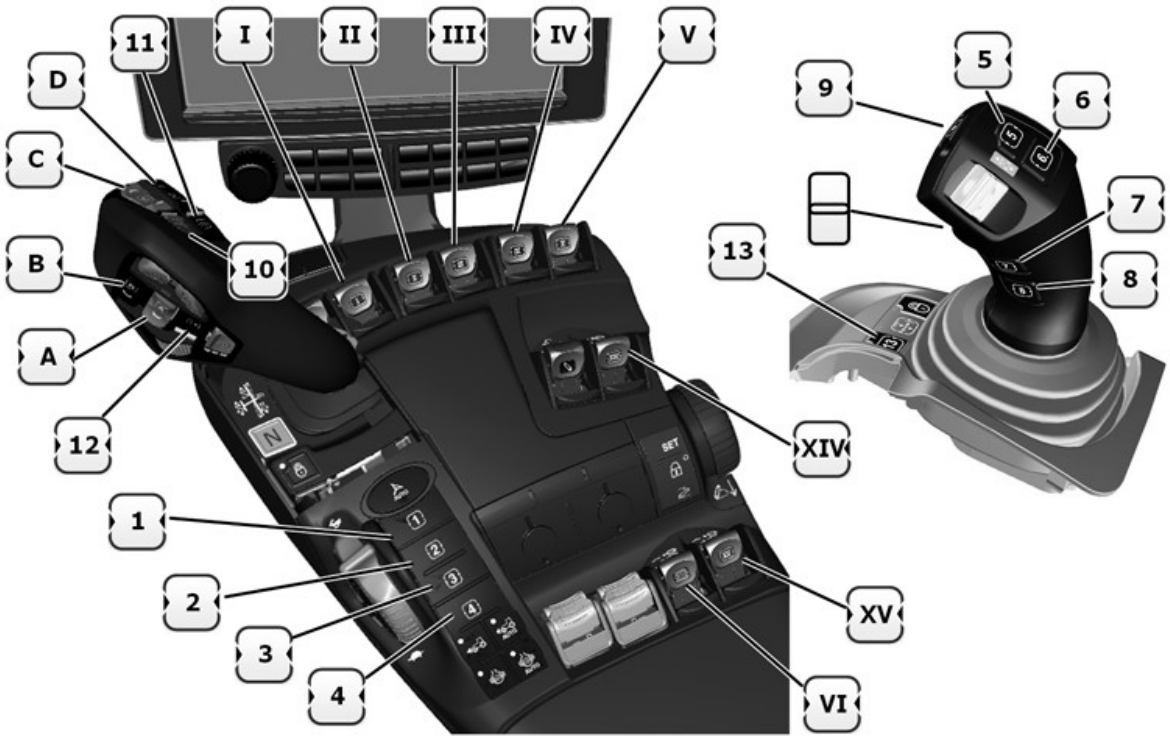
- See Controls Setup—Activating Edit.
- See Controls Setup—Assignment of Functions.
- See Controls Setup—Custom Settings (Settings Manager).

More information on setting up controls can be found in Sections 30D, 70C, and 70D.

OULXA64,6R,0005C31-19-16AUG21

Controls Setup—General Information (with CommandPRO™ Joystick)

Overview of Buttons and Switches with Variable Function



LX514022—UN—05AUG21

The illustration also shows the electrical joystick which is optional equipment.

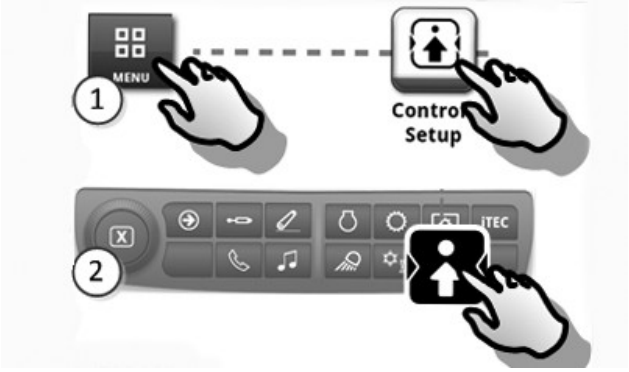
IMPORTANT: For more information on setting up the controls, refer to the text under specific subjects. For example, see Sections 30 and 70.

CommandPRO™ Joystick	Default Setting	Electrical Joystick	Default Setting
[A]	Rear hitch	Function of axes of movement	SCVs XI, XII, and XIII. See text regarding joystick.
[B]	Front Hitch	[5]	No function assigned if equipped with AutoPowr™ transmission.
[C]	SCV I	[6]	No function assigned if equipped with AutoPowr™ transmission.
[D]	SCV II	[7]	Front loader, diverter valve 1
[10]	Engine set speed 1	[8]	Front loader, diverter valve 2
[11]	Engine set speed 2	[9]	No function
[12]	AutoTrac™	[13]	Front loader, suspension

iTEC™	Default Setting	SCV Control	Default Setting
[1]	iTEC™ sequence 1	All switches	Function assigned as indicated on the switches (control valve numbers).
[2]	iTEC™ sequence 2		
[3]	iTEC™ sequence 3		
[4]	iTEC™ sequence 4		
Note: SCV XIV and SCV XV cannot be used simultaneously. This is especially important when setting up iTEC™ sequences.			

Access to Controls Setup

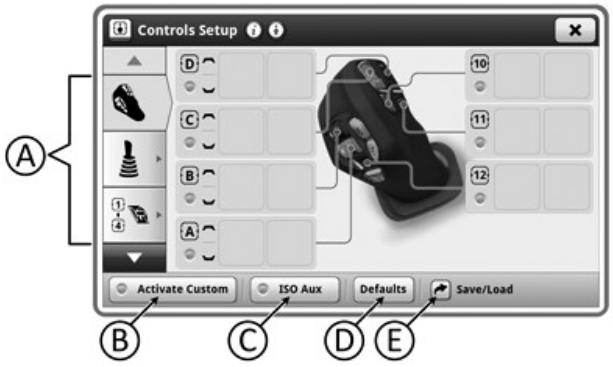
Open the dialog for setting up the controls, with (1) or (2).



LX279003—UN—25JUL16

Open Dialog for Setting Up Controls

Access the control by selecting the relevant tab on the left edge (A) of the touchscreen. In the shown example the electrical joystick was selected.



LX514025—UN—05AUG21

A—Selecting the Controls
B—Activates the Custom Settings (green indicator light = activated)
C—Switch ISO Aux on and off (green indicator light = On)
D—Activates the Default Settings (green indicator light = activated)
E—Save or retrieve Machine Settings

Custom Settings can be saved in the Settings Manager and retrieved from there.

- See Controls Setup—Activating Edit.
- See Controls Setup—Assignment of Functions.
- See Controls Setup—Custom Settings (Settings Manager).

More information on setting up controls can be found in Sections 30D, 70C, and 70D.

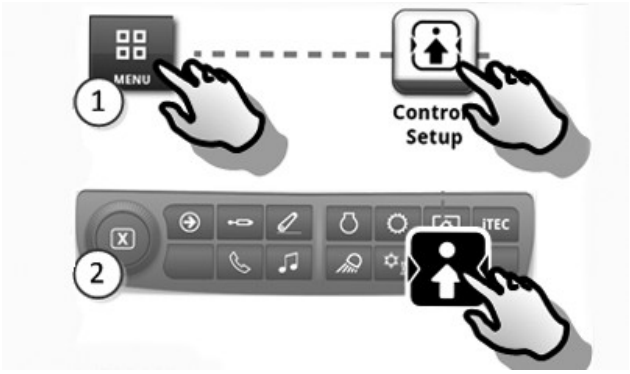
OULXA64,6R,0005C32-19-24SEP21

Controls Setup—Assignment of Functions

- See Controls Setup—General Information.
- See Controls Setup—Custom Settings (Settings Manager).

Settings for different operating conditions can be saved and retrieved as Custom Settings in the Settings Manager.

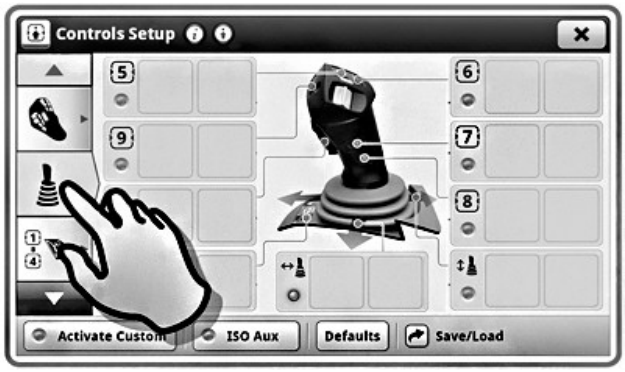
Open the dialog for setting up the controls, with (1) or (2).



LX279003—UN—25JUL16

Open Dialog for Setting Up Controls

The procedure described here uses the electrical joystick as an example.

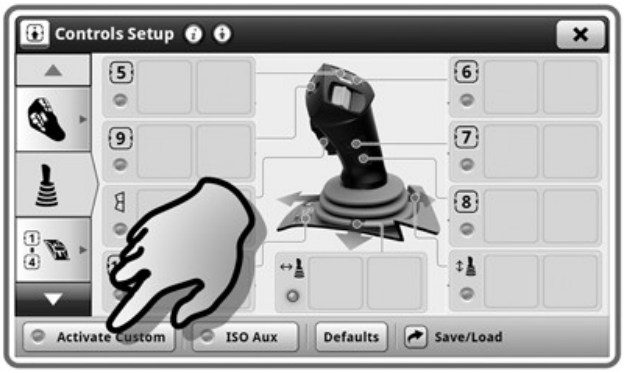


LX514026—UN—05AUG21

Access the control by selecting the relevant tab on the left edge of the touchscreen.

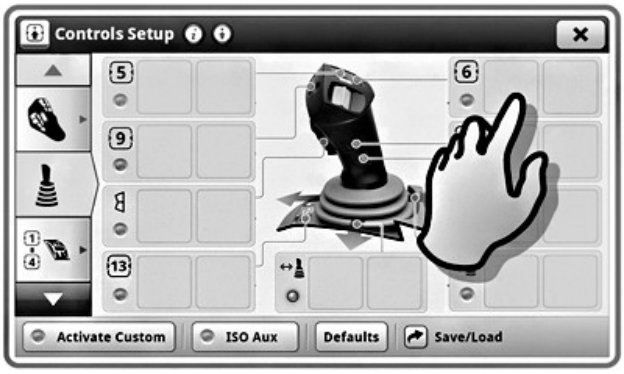
If no selection is possible (boxes grayed out), editing must be activated first, see Controls Setup—Activating Edit.

- If desired, a button can remain without any function assigned to it.
- Change an existing assignment by selecting it again for a new assignment.
- See also Controls Setup—Resetting to Default.



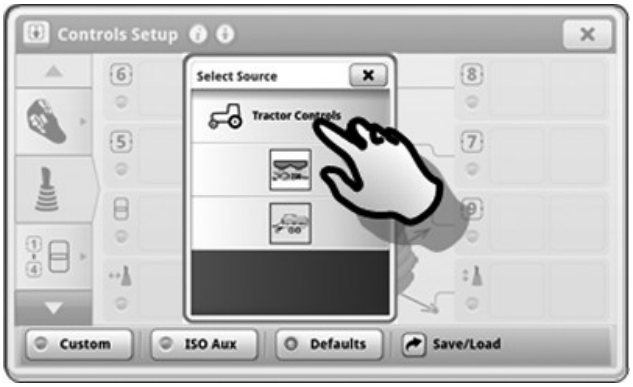
LX514027—UN—05AUG21

Press Custom Settings button; the indicator light in the button shines green.



LX514028—UN—05AUG21

Select a button (or one of the axes of movement) to assign a function to it. The example shows button **[6]**.



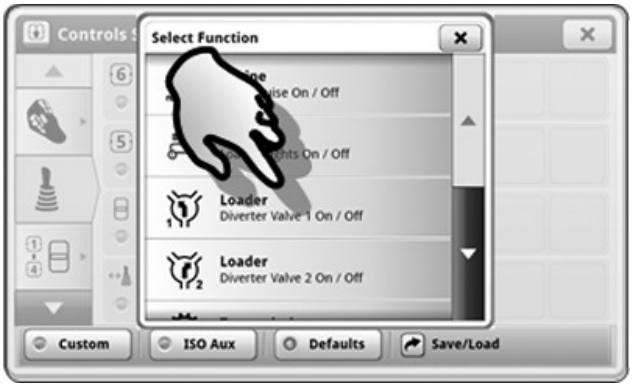
LX279006—UN—12AUG16

Functions are arranged in groups, and the groups are listed in a box from which they can be selected. Display varies depending on how tractor is equipped. Select the desired group, e.g. **Tractor Functions**.

Other groups shown in the example:

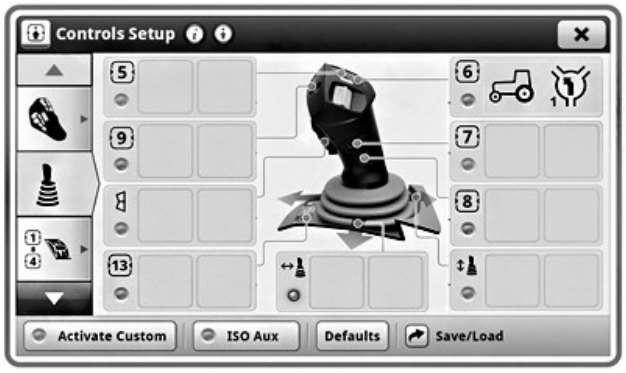
Group - ISO Aux functions

Group - Implement functions



LX279007—UN—12SEP16

Select one of the listed functions. The example shows **Diverter Valve 1**.



LX514029—UN—05AUG21

Once a function has been selected, it is assigned to button **[6]** and the function is displayed on the touchscreen.

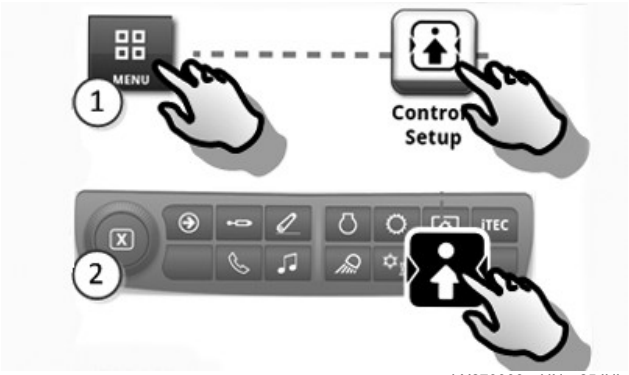
When the tractor is operated, pressing button [6] activates diverter valve 1.

Repeat this procedure to assign functions to other buttons.

OULXA64,6R,0005C33-19-06AUG21

Controls Setup—Independent Mode for Toggle Switch

- The independent mode applies for toggle switches **[A], [B], [C]** and **[D]** of the **CommandPRO™ joystick**.
- In independent mode, a different function can be assigned to each switch position of the toggle switch.



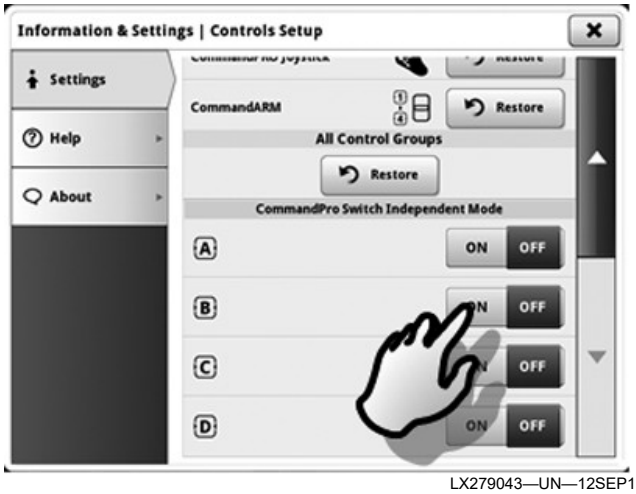
LX279003—UN—25JUL16

Open Dialog for Setting Up Controls

Open the dialog for setting up the controls, see (1) or (2).

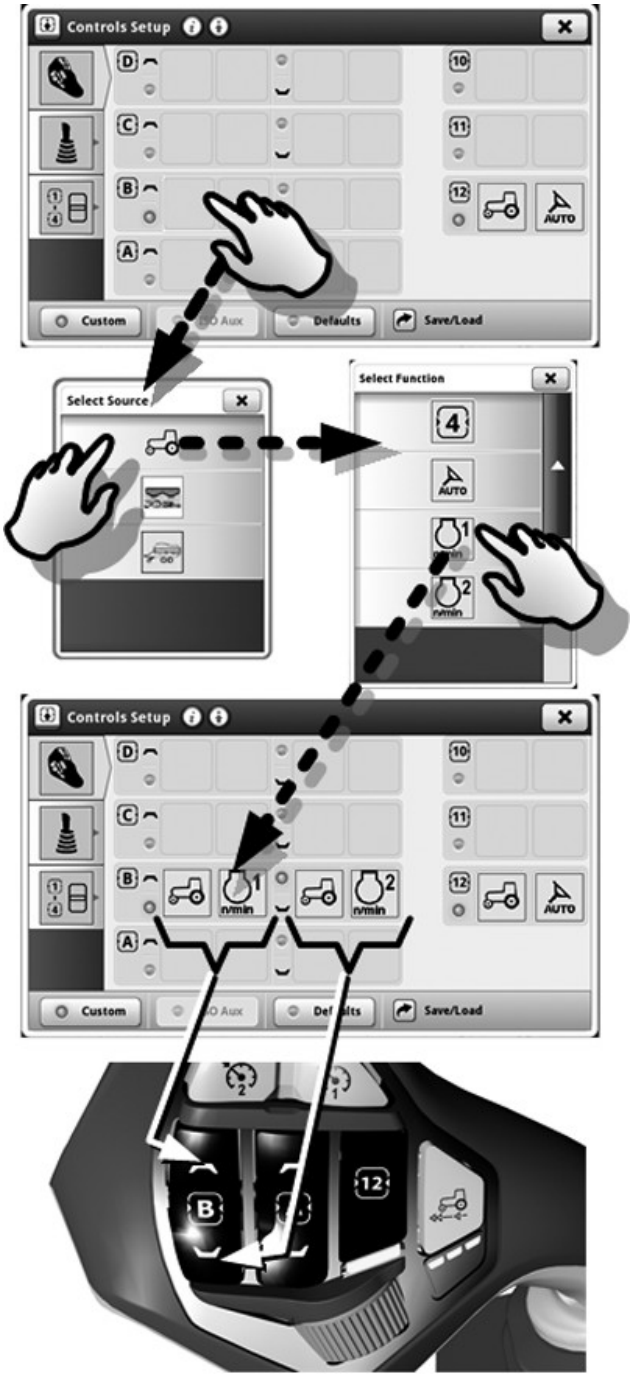
LX299194—UN—19JAN17

1. Access the tab for the CommandPRO™ joystick.
2. Activate Custom.
3. Open Advanced Settings.



LX279043—UN—12SEP16

Turn on independent mode for toggle switches **[A], [B], [C]** or **[D]**. **[B]** is shown in the example.



LX299195—UN—19JAN17

Return to the controls setup page and select the toggle switch. Successively assign a function to each switch position.

If the independent mode is on, this is indicated by a green indicator light on the display.

1. Select desired group (e.g. tractor functions).
2. In the next step, select the function to be assigned (e. g. engine set speed 1).

Repeat the step to assign a function to the second switch position.

Once assignment has been completed, each position of the toggle switch appears with the relevant function.

Assignment shown as an example:	
Press top end of toggle switch **[B]**.	Engine set speed 1
Press bottom end of toggle switch **[B]**.	Engine set speed 2

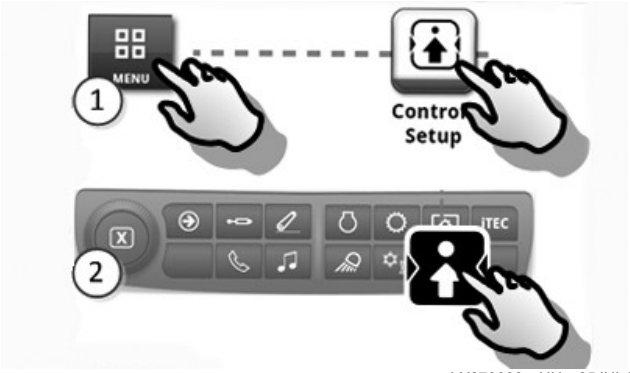
OULXA64,6R,0005C34-19-06AUG21

Controls Setup—Resetting to Default

NOTE: Reset to Default is described here.

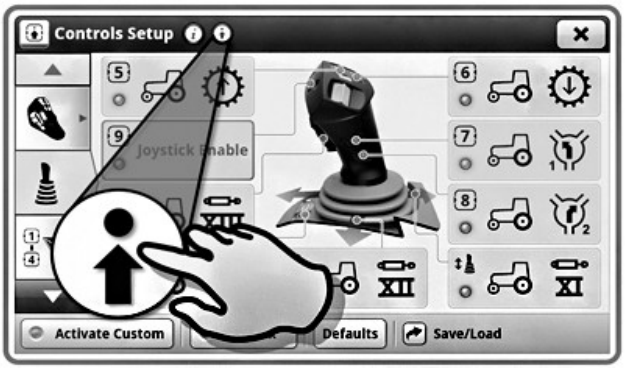
An alternative method is to toggle between Custom Setting and Default Setting. See below.

Open the dialog for setting up the controls, with (1) or (2).



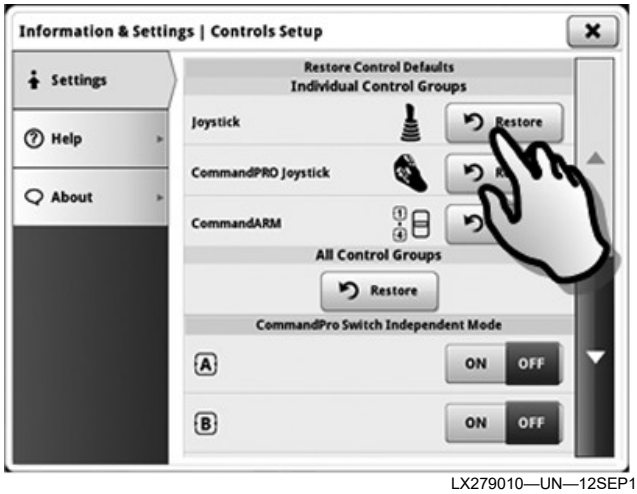
LX279003—UN—25JUL16

Open Dialog for Setting Up Controls



LX514031—UN—05AUG21

Open Advanced Settings.



LX279010—UN—12SEP16

Select the desired control from the list of controls and press the Restore button.

Then an information box opens, and when it is confirmed, the procedure is complete.

NOTE: The button at the bottom edge of the screen allows all the controls to be reset to the factory setting at once.

Then, the control is displayed with the default setting.

LX514030—UN—05AUG21

A quick change from Custom Setting to Default Setting can be made by pressing the button shown. As confirmation, the indicator light in the button shines green.

NOTE: Press the bottom left button to change back to the previous Custom Setting. The indicator lights in the buttons shine green to show which settings are currently activated.

OULXA64,6R,0005C35-19-08FEB22

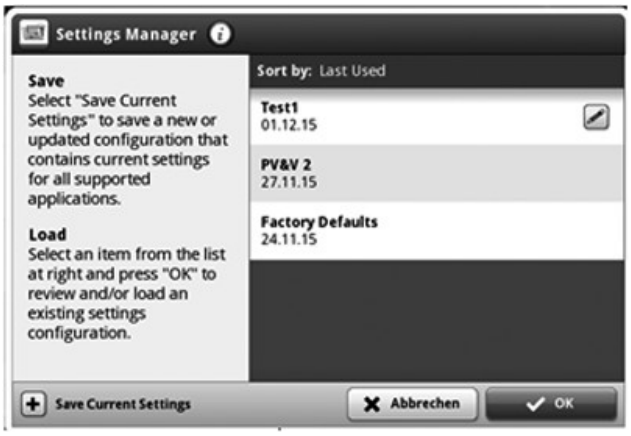
Controls Setup—Custom Settings (Settings Manager)

LX279013—UN—25JUL16

LX279014—UN—25JUL16

NOTE: The current machine setting can be saved and retrieved again later if required. The Settings Manager permits the saving and retrieval of all or only some machine settings.

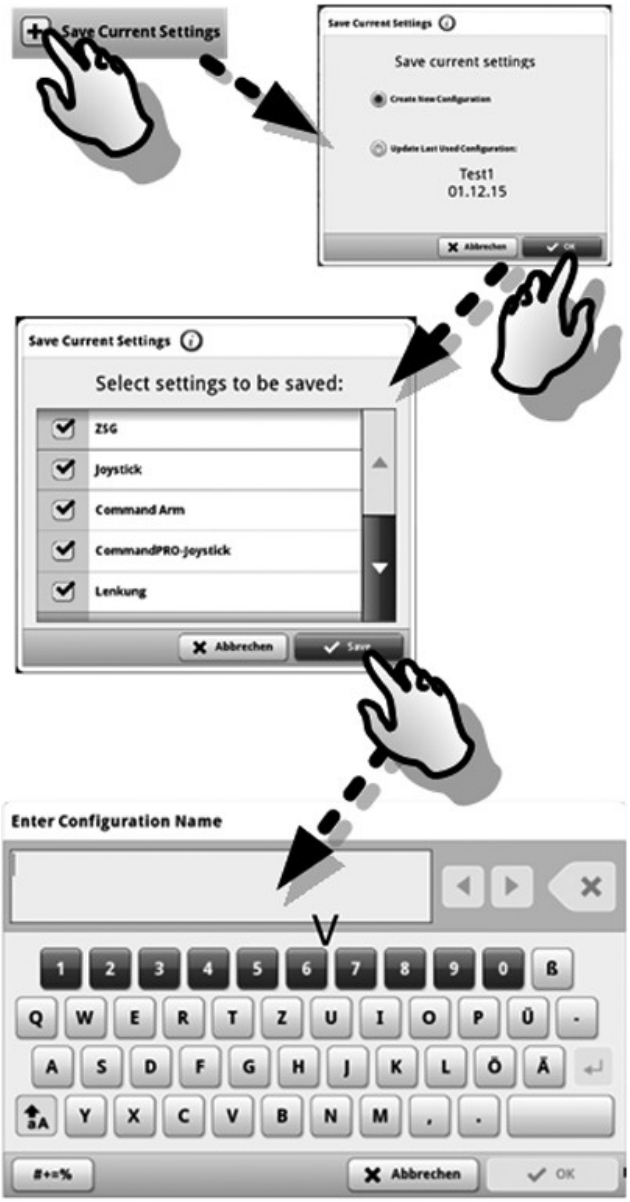
Press Menu button and retrieve Custom Settings (Settings Manager).



LX279015—UN—25JUL16

All the available Custom Settings are displayed in the Settings Manager.

Retrieve Settings	Select a Custom Setting and press **OK**.
Save Settings	Press the **[+]** button.
Edit the entry.	Press the Pencil Icon
Cancel	Press **[x]**.



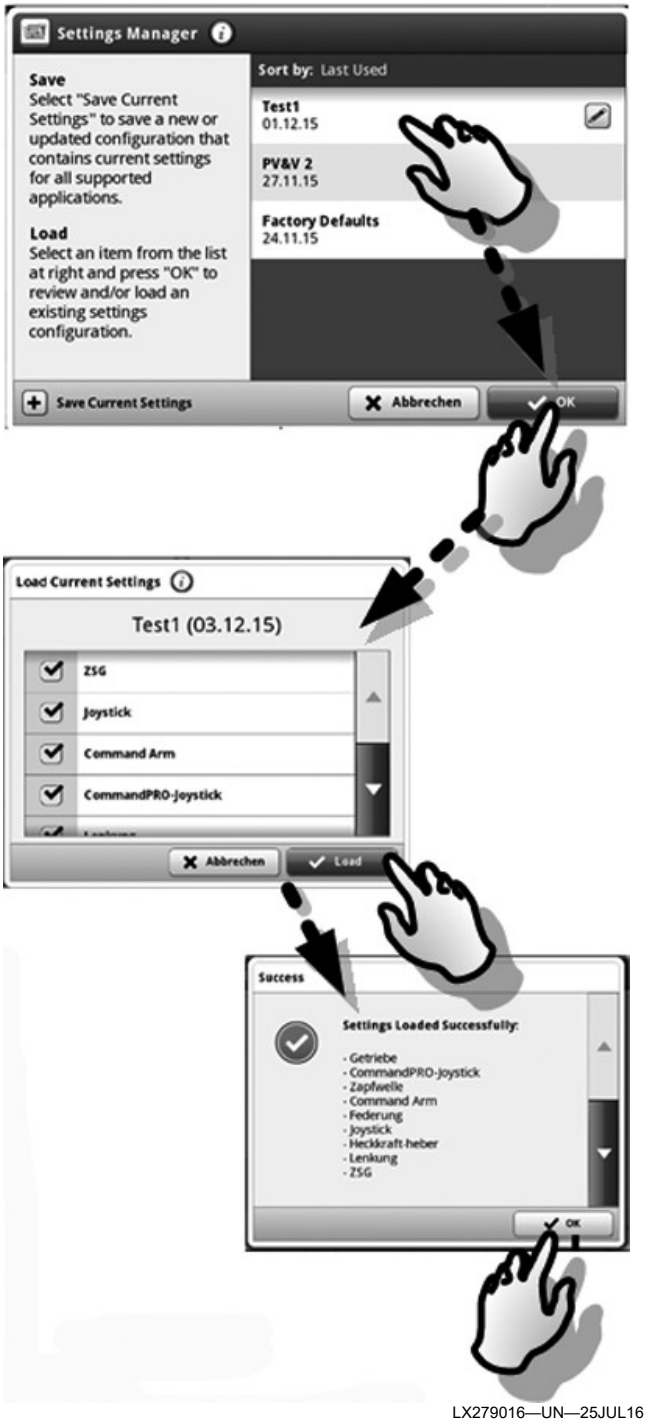
LX279017—UN—25JUL16

Save Current Settings:

1. Before accessing the Settings Manager, all the settings must be completed.
2. Access Custom Settings (Settings Manager).
3. Pressing button **[+]** opens a box where two options may be selected.
   - Compile a new Custom Setting.
   - Replace existing Custom Setting.

   Make a selection and press **OK**.
4. In the next box, select the machine settings that are to be saved.

   Place a check mark (tick) at the selection and press the **Save** button.
5. Key in the name of the Custom Setting and then confirm it with **OK**.



LX279016—UN—25JUL16

Retrieve and Activate Settings:

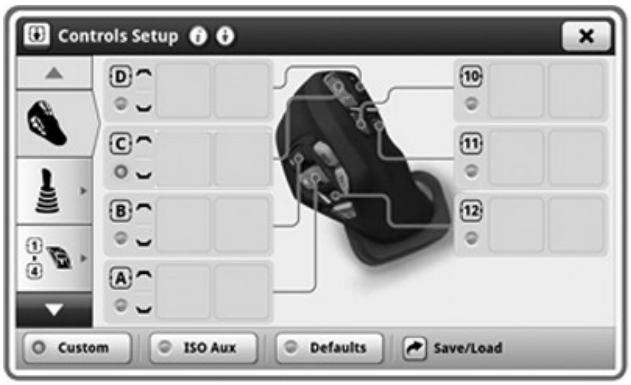
1. Access Custom Settings (Settings Manager).
2. Select the desired custom setting.
3. In the next box, select the desired machine settings and then restore them at the **load** button.
4. Confirm the message about successful loading of the Custom Setting with **OK**.

CAUTION: To prevent incorrect operation, operators must familiarize themselves with the machine settings. Make sure that all operators of the machine familiarize themselves with the current machine settings.

OULXA64,6R,0005C36-19-19MAR21

Lock Out the Button Functions with CommandPRO™ Joystick

LX279018—UN—12AUG16



LX279036—UN—20JAN17

Lock Out the Function of the Buttons Shown.

CAUTION: Lock out the button functions if they are not required for this task in hand.

Press the button with the lock symbol to switch the button functions on and off.

- An illuminated LED in the lock button means locked out.
- Pressing the lock button in the normal way releases the lock and the LED goes out.

CommandPRO™ Joystick - List of Buttons Affected
[A]
[B]
[C]
[D]
[10]
[11]
[12]

OULXA64,6R,0005C37-19-19MAR21

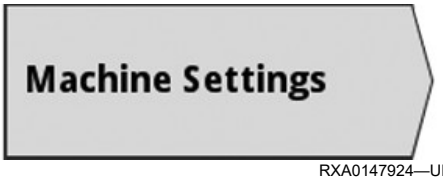
Generation 4 and G5 Displays

For additional information on display hardware and software functionality, reference the Display Operator's Manual and the Help Center application on the display. To obtain a copy of the Operator's Manual, contact your dealer, use the Help Center application on the display, or visit techpubs.deere.com.

DX,PC,DISPLAY,REFERENCE-19-23JUN23

Machine Settings Overview

Machine Settings tab allows selection of application main pages. Available applications vary depending on tractor configuration.



RXA0147924—UN—13APR15

Audio

RXA0134978—UN—07AUG13

Audio

- Use Audio application to adjust audio settings.
- For more information, see Operating the Radio Section of this Operator's Manual.

Engine

RXA0134955—UN—07AUG13

Engine

- Use engine application to adjust exhaust filter system settings or engine speed.
- For more information, see the Aftertreatment and Transmission - General Information Sections in this Operator's Manual.

Heater/Ventilation/Air-Conditioning System

RXA0134979—UN—07AUG13

Heater/Ventilation/Air-Conditioning System

- Use HVAC application to adjust heater, ventilation, and air-conditioning settings.
- For more information, see HVAC Section of this Operator's Manual.

Lights

RXA0134956—UN—07AUG13

Lights

- Use Lights application to adjust lights settings.
- For more information, see the Lights Section of this Operator's Manual.

Maintenance and Calibrations

RXA0134981—UN—07AUG13

Maintenance and Calibrations

- Use Maintenance and Calibrations application to add/edit service intervals and perform ground radar and wheel slip calibrations.

Phone

RXA0134982—UN—07AUG13

Phone

- Use Phone application to make/receive calls through CommandCenter™.
- For more information, see Operating the Radio Section of this Operator's Manual.

Power Take-Off

RXA0134957—UN—07AUG13

PTO Driveline

- Use PTO application to adjust PTO settings.

- For more information, see the Front PTO and Rear PTO Sections in this Operator's Manual.

Rear Hitch

RXA0134958—UN—07AUG13

Rear Hitch

- Use Rear Hitch application to adjust rear hitch settings.
- For more information, see the Rear Hitch Section of this Operator's Manual.

SCV

RXA0134983—UN—07AUG13

SCV

- Use SCV application to adjust SCV settings.
- For more information, see the Selective Control Valves (SCV) - Settings Section of this Operator's Manual.

Spring Assembly

RXA0134976—UN—07AUG13

Spring Assembly

- Use Suspension application to adjust suspension settings.
- For more information, see the Front-Wheel Drive and Operator's Cab Sections in this Operator's Manual.

Transmission

RXA0134984—UN—07AUG13

Transmission

- Use the Transmission application to adjust the transmission settings.
- For more information, see appropriate transmission Section of this Operator's Manual.

OULXA64,0005CAC-19-19MAR21

Automation Status Overview

RXA0135012—UN—12AUG13

- Use Automation Status application to see which tractor functions are being controlled and their current status.
- It can be found on Applications tab of the display menu.

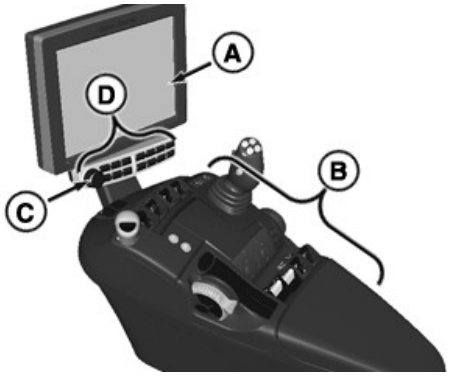
OULXA64,0005CAD-19-19MAR21

Navigate Generation 4 or G5 CommandCenter™

NOTE: Images are reference and may differ by tractor configuration or operator settings. As operator pages through CommandCenter™, more in-depth information is presented, allowing operator to fine tune tractor functions.

Navigate in the CommandCenter™ pages.

Use Touchscreen CommandCenter™ buttons or icons to make selection. For input boxes, use either key pad, or select input box and scroll adjustment dial (C) to desired value. Yellow highlight box appears around selected input box and indicates adjustment dial is active.



RXA0130496—UN—09APR13

CommandCenter™ and CommandARM™

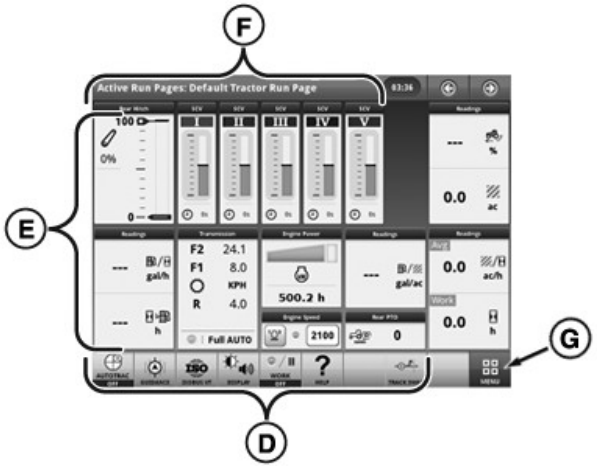
A—CommandCenter™ is attached to the CommandARM™ (B) and allows the operator to display selected pages that are necessary for operating the tractor. The touchscreen of the display allows the

operator to touch options on screen to move through pages and access tractor functions.

B—CommandARM™ consists of buttons, a joystick (if equipped), switches, and shortcut buttons with which the operator can manage tractor and implement functions.

C—Adjusting Dial/Close Button allows the operator to change values in input boxes. Rotating adjustment dial clockwise raises input box values. Rotating adjustment dial counterclockwise lowers input box values. Push button one time to close window. Push and hold to close all open windows.

D—Shortcut Keys allow the operator to access specific functions without going through CommandCenter™ menu.



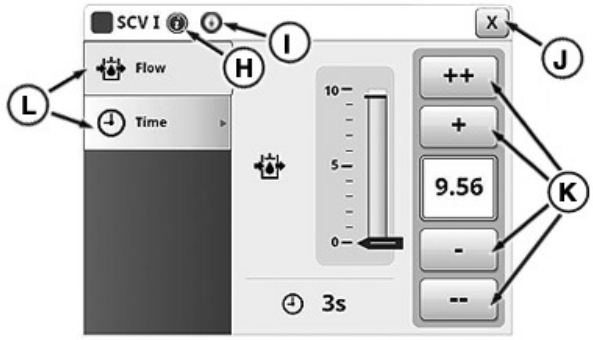
RXA0134342—UN—01AUG13

Run Page

E—Modules of the run pages are areas in which functions can be called up quickly.

F—Title bar can be selected on any run page to change the run page in the drop-down slat.

G—Menu lists all applications installed on display and machine. Select left-hand tabs to view different groups of applications.



RXA0126052—UN—23APR13

Module Functions

H—Help Button is accessed by pressing title bar to view help for page when available.

I—Advanced Settings Button is accessed by pressing title bar to edit additional settings when available.

J—Close Button is pressed to close current page.

K—Increase/Decrease Value Buttons are used to change value within input boxes. Use ++ and - - buttons to make larger incremental changes when adjusting value, rather than touching + or - buttons. For areas that require tighter adjustments, only + and - buttons are available.

L—Tabs allow operator to change to different Section topic.

OULXA64,0005CAE-19-14AUG23

Compatible Displays

Genaration 4 CommandCenter™ may be configured to run with the following John Deere displays connected at corner post.

- GreenStar™ 3 2630 Display
- 4640 Universal Display

G5 CommandCenter™ may be configured to run with the following John Deere universal displays connected at the corner post.

- GreenStar™ 3 2630 Display
- 4640 Universal Display
- G5 Universal Display

OULXA64,0005CAF-19-14AUG23

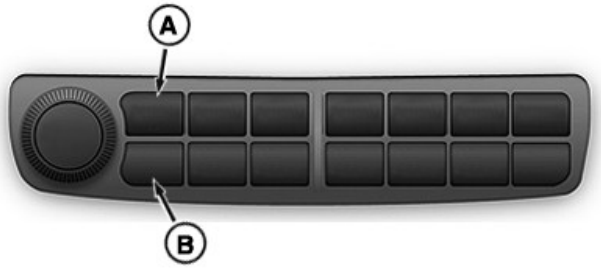
Power Display On and Off

The Generation 4 or G5 CommandCenter™ display is switched on and off by the tractor's key switch.

- **Warm start** occurs if the CommandCenter™ display was running in the last 24 hours. Display rests in hibernation state for that time. Display powers up quickly (approx. 10 seconds).
- **Cold boot** occurs if display is not operated for 24 hours or more, or if unswitched power has been disconnected. During this period, display shuts down completely to conserve battery power. Next power up will take approximately 60 seconds.

NOTE: After turning off engine, avoid turning key switch back on until display screen has gone black.

- **Hard reset** is required when display is unresponsive for more than a few minutes under normal operating conditions.



RXA0148512—UN—25JUN15

Navigation Bar

A—Upper Button
B—Bottom Button

Perform hard reset by pressing left-most upper and lower buttons (A and B) on the navigation bar simultaneously for 5 seconds. If the display is not reset, remove fuses F02/15_LCS and F02/15_PLB in the LCS and PLB fuse boxes and re-insert them after 5 seconds. For more information, see Fuse and Relays (LCS) in Section 220B. If the problem continues, see an authorized dealer.

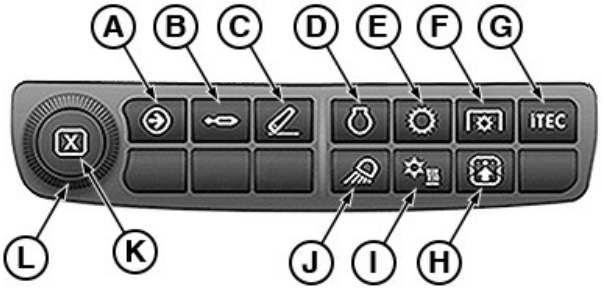
OULXA64,0005CB0-19-25JUL23

Shortcut Buttons

Generation 4 or G5 CommandCenter™ navigation bar shortcut buttons allow operator direct access to specific applications.

LX373143—UN—26MAY21

Shortcut Button on Side Console



LX373136—UN—26MAY21

Shortcut Button on CommandCenter™

A—Next Run Page
B—SCV
C—Rear Hitch
D—Engine
E—Transmission
F—PTO
G—iTEC™
H—Setting Up the Controls
I—Heater/Ventilation/Air-Conditioning System
J—Lights
K—Close Button
L—Adjusting Dial

NOTE: If the CommandCenter™ is unresponsive for more than a few minutes under normal operating conditions, then reset the display. To reset the display, refer to Power Display On and Off in this Section of the Operator's Manual.

OULXA64,0005CB1-19-14AUG23

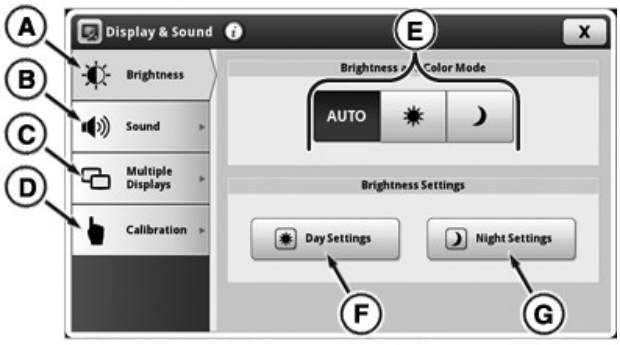
Navigate to Display and Sound

1. Select **Menu**.

RXA0135345—UN—30AUG13

Menu → System Tab → Display and Sound Icon

2. Select **System** tab.
3. Select the **Display and Sound** icon.



RXA0137085—UN—19NOV13

Display and Sound Page

A—Brightness Tab
B—Sound Tab
C—Multiple Displays Tab
D—Display Calibration Tab
E—Day/Night Mode Buttons
F—Day Settings
G—Night Settings

OULXA64,0005CB2-19-19MAR21

Navigate to the Section Multiple Displays

CAUTION: Implement detected.

Improper operation can cause unintended implement movement.

To avoid death or serious injury to a bystander, understand how this display operates the functions of the implement.

Read and understand the implement Operator's Manual.

Message occurs when system detects an ISOBUS implement. For more information, read Operator's Manuals for ISOBUS Implements.

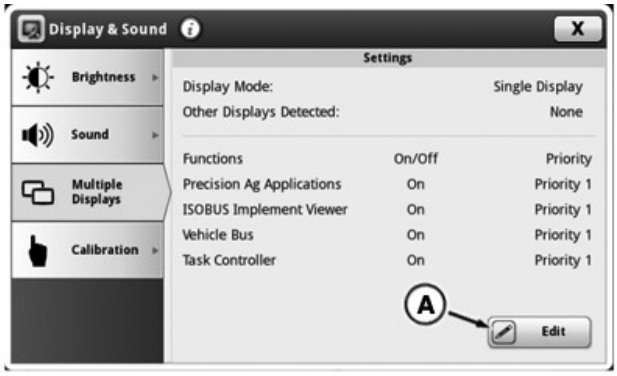
In some cases it may be necessary to operate with more than one ISO terminal display. Configure the CommandCenter™ so that it recognizes a second ISO display and functions together with it.

1. Select **Menu**.

RXA0130611—UN—21FEB13

Menu → System Tab → Display and Sound Icon → Multiple Displays Tab

2. Select **System** tab.
3. Select **Display and Sound** icon.
4. Select **Multiple Displays** tab.



RXA0134343—UN—01AUG13

Multiple Displays Page

A—Edit Button

OULXA64,0005CB3-19-19MAR21

Navigate to Date and Time

1. Select **Menu.**

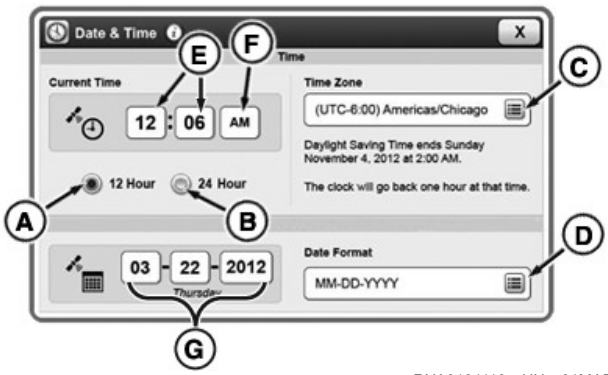
RXA0126215—UN—11JUN12

Menu → System Tab → Date and Time Icon

2. Select **System** tab.
3. Select **Date and Time** icon.

RXA0131038—UN—25FEB13

Date and Time Page with GPS Sync Enabled



RXA0131113—UN—01MAR13

Date and Time Page with GPS Sync Disabled

A—12 Hour Time Format Radio Button
B—24 Hour Time Format Radio Button
C—Time Zone Drop Down List
D—Date Format Drop Down List
E—Time Input Boxes
F—AM/PM Input Box
G—Date Input Boxes

OULXA64,0005CB4-19-19MAR21

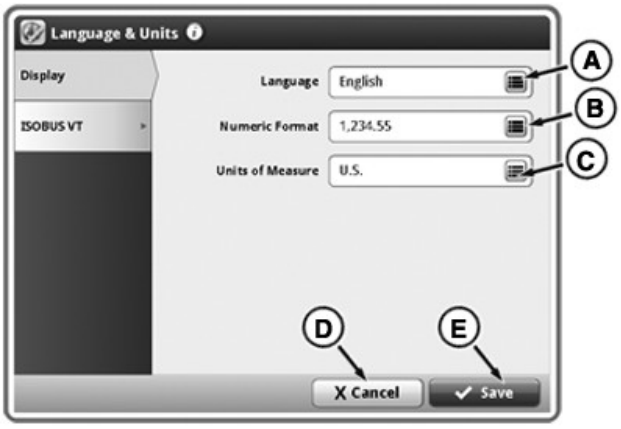
Navigate to Language and Units

1. Select **Menu**.

RXA0126213—UN—17MAY12

Menu → System Tab → Language and Units Icon

2. Select **System** tab.
3. Select **Language and Units** icon.



RXA0132009—UN—23APR13

Language and Units Page

A—Language Drop Down List
B—Numeric Format Drop Down List
C—Units of Measurement Drop Down List
D—Cancel Button
E—Save Button

OULXA64,0005CB5-19-19MAR21

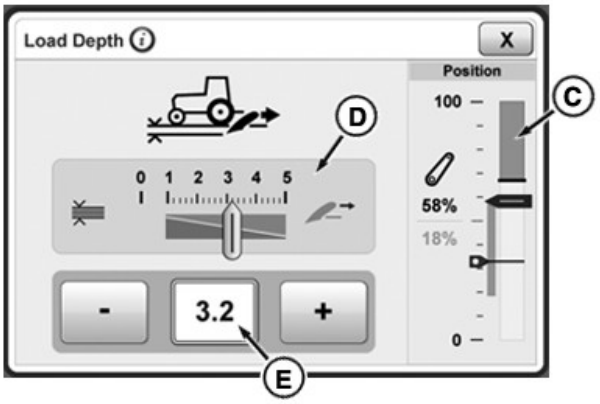
Change Pages and Values

Various methods are provided to allow selection and modification of CommandCenter™ pages and values.

LX1057487—UN—05DEC14

Input Boxes

- **A—Section Tab:** To switch to a different Section, click on the tab for the desired Section.
- **B—Icons:** Select to open application.



RXA0130123—UN—23APR13

menu

- **C—Bar Graph:** To change a value, use the increase (+) or decrease (-) button.
- **D—Slider Bar:** To change a value, select slider bar module and use increase (+) or decrease (-) button.
- **E—Input Box:** Use increase (+) or decrease (-) button to adjust value. To enter new values or text, select desired input box.

NOTE: When changing values using the adjusting dial, increasing the speed of the adjusting dial rotation also increases the speed of value changes.

If a large range of values is available, a numeric keypad appears, allowing direct input of desired value.

OULXA64,0005CB6-19-19MAR21

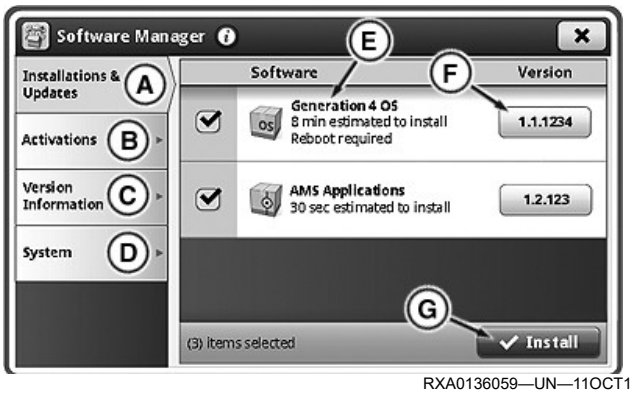
Navigate to Software Manager

1. Select **Menu**.

RXA0136061—UN—11OCT13

Menu → System Tab → Software Manager Icon

2. Select **System** tab.
3. Select **Software Manager** icon.



RXA0136059—UN—11OCT13

A—Installations and Updates Tab
B—Activations Tab
C—Version Information Tab
D—System Tab
E—Software Type
F—Software Version
G—Install Button

OULXA64,0005CB7-19-19MAR21

Factory and Service ADVISOR™ Installed Onscreen Help

Tractor Application Help Package is installed at factory and with Service ADVISOR™ or Service ADVISOR™ Remote for eight languages listed below:

- Chinese
- English
- French
- German
- Italian
- Portuguese
- Russian
- Spanish

Generation 4 or G5 Operating System Help Package is installed for all languages at factory.

For instructions on how to install and update onscreen help packages, see Update Display Software in Generation 4 ot G5 Display Operator's Manual.

OULXA64,0005CB8-19-14AUG23

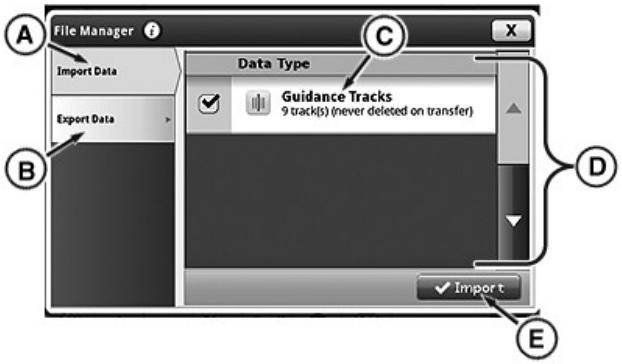
Navigate to File Manager

1. Select **Menu**.

RXA0136064—UN—11OCT13

Menu → System Tab → File Manager Icon

2. Select **System tab.**
3. Select **File Manager** icon.



RXA0136062—UN—11OCT13

File Manager Page

A—Import Data Tab
B—Export Data Tab
C—Data Type
D—Scroll Bar
E—Import Button

OULXA64,0005CB9-19-19MAR21

Export Custom Tractor Settings

NOTE: The export and import of customer tractor settings can only be performed with a software from MY23.5.

RXA0136064—UN—11OCT13

Menu → System Tab → File Manager IconSelect Menu on touchscreen.

1. Select System tab.
2. Select File Manager icon.
3. Select Export tab (A).

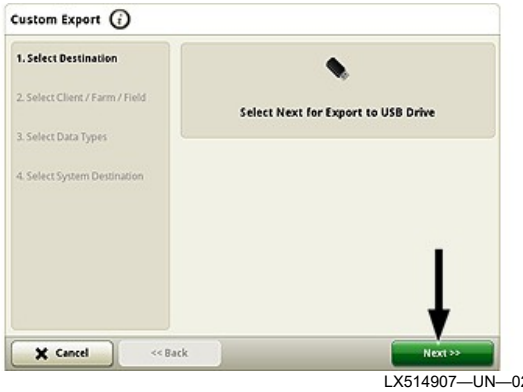
LX514906—UN—02DEC22

Depending on the tractor configuration, the following tractor settings can be linked together using the Settings Manager:

- SCV
- Front and Rear PTO
- Front and Rear Hitch
- Reconfigurable Controls
- Transmission
- Engine
- iTEC™
- ATTA
- JD Horst Sprayer
- JD Balers

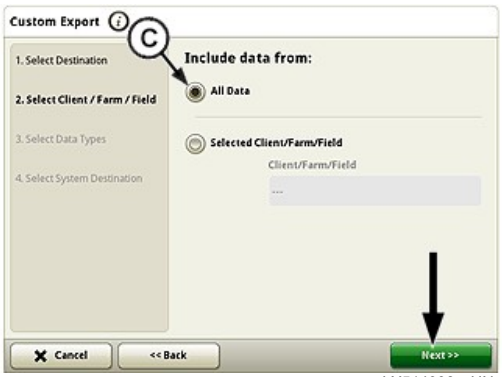
NOTE: For more details on tractor settings, see Settings Manager in the Display Operator's Manual and the Help Center application on the display.

1. Select Custom Export icon (B).
2. Press Next.



LX514907—UN—02DEC22

3. Select All Data (C).

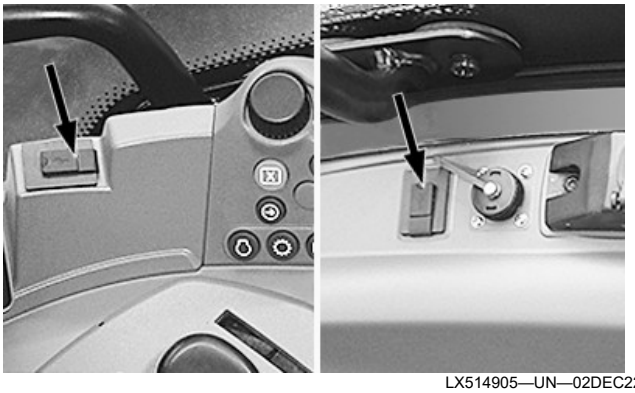


LX514908—UN—02DEC22

4. Press Next.
5. Select Settings Configurations (D).

LX514909—UN—02DEC22

6. Press Next.
7. Insert USB drive into USB port and press OK.



LX514905—UN—02DEC22

Side Console without/with CommandARM™

LX514910—UN—02DEC22

8. Press OK and remove USB drive.

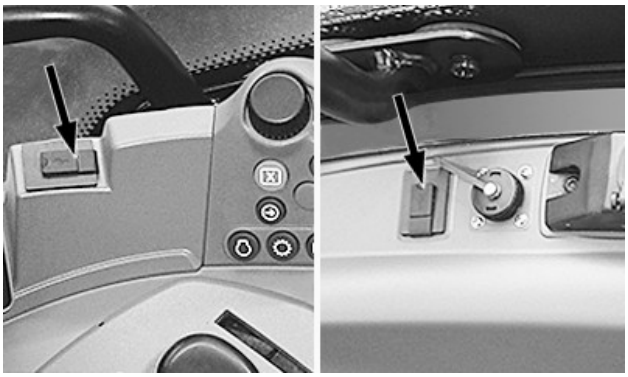
LX514911—UN—02DEC22

oulxa64,6R,AIII,1669792919689-19-13DEC22

Import Custom Tractor Settings

NOTE: The export and import of customer tractor settings can only be performed with a software from MY23.5.

1. Insert USB drive into USB port.



LX514905—UN—02DEC22

Side Console without/with CommandARM™

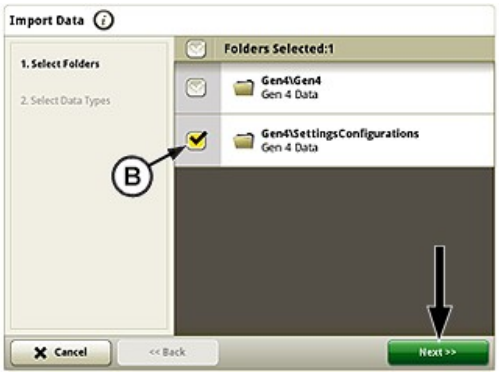
RXA0136064—UN—11OCT13

Menu → System Tab → File Manager Icon

2. Select Menu on touchscreen.
3. Select System tab.
4. Select File Manager icon.
5. Select Import tab (A).

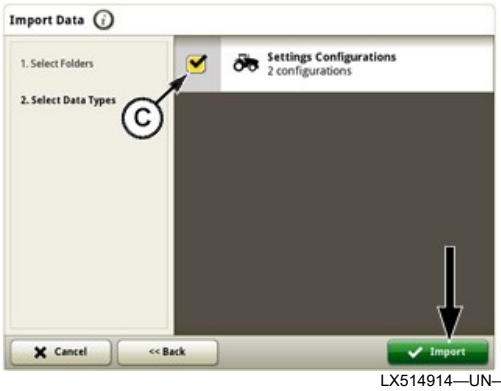
LX514912—UN—02DEC22

6. Press Next.
7. Select Gen4/SettingsConfigurations (B).



LX514913—UN—02DEC22

8. Press Next.
9. Select Settings Configurations (C).



LX514914—UN—02DEC22

10. Press Import.
11. Press OK.

LX514915—UN—02DEC22

12. Remove USB drive.

NOTE: For more details on tractor settings, see Settings Manager in the Display Operator's Manual and the Help Center application on the display.

oulxa64,6R,AIII,1669795736365-19-12DEC22

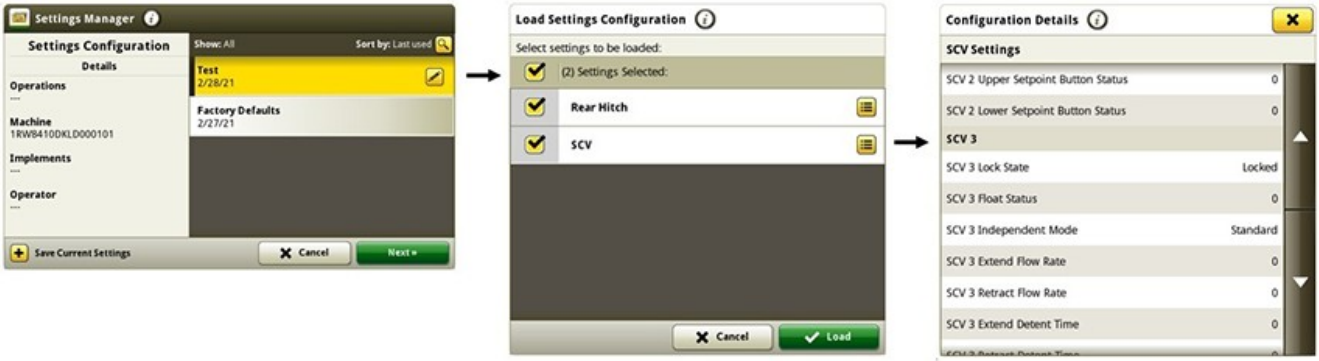
Navigate to Settings Manger

1. Select Menu on touchscreen.

LX514918—UN—06DEC22

Menu → Applications Tab → Settings Manger Icon

2. Select Applications Tab.
3. Select Settings Manger.



LX514919—UN—07DEC22

Example: Settings Manger → Load Settings → Settings Details

Depending on the tractor configuration, the following tractor settings can be linked together using the checkboxes:

- ☐ SCV
- ☐ Front and Rear PTO
- ☐ Front and Rear Hitch
- ☐ Reconfigurable Controls
- ☐ Transmission
- ☐ Engine
- ☐ Layout Manager
- ☐ iTEC™
- ☐ ATTA
- ☐ JD Horst Sprayer
- ☐ JD Balers

These tractor settings can be transferred to other tractors. See Export Custom Tractor Settings in this section.

NOTE: For more details on tractor settings, see Settings Manager in the Display Operator's Manual and the Help Center application on the display.

oulxa64,6R,AII,1669799417213-19-13DEC22

Navigate to Diagnostics Center

1. Select **Menu**.

RXA0127110—UN—11JUL12

Menu → System Tab → Diagnostics Center Icon

2. Select **System tab.**
3. Select **Diagnostics Center** icon.

RXA0130617—UN—31JAN13

Diagnostics

A—Application Diagnostics
B—Controller Diagnostics
C—Diagnostic Trouble Codes
D—Display
E—CAN Bus Info

OULXA64,0005CBA-19-12DEC22

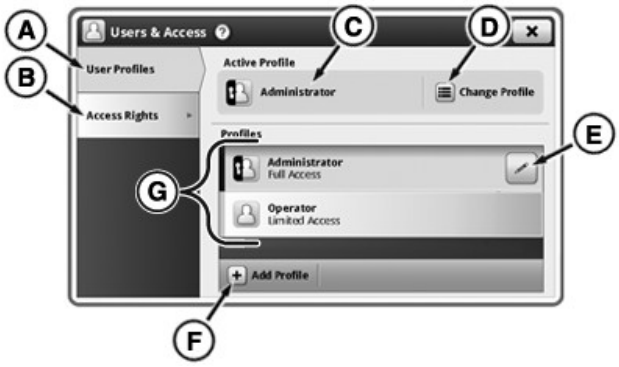
Navigate to Users and Access

1. Select **Menu**.

RXA0129658—UN—16NOV12

Menu → System Tab → User and Access Icon

2. Select **System tab.**
3. Select **Users and Access** icon.



RXA0142766—UN—19JUN14

Users and Access Page

A—User Profiles Tab
B—Access Groups Tab
C—Active Profile
D—Change Profile Button
E—Edit Button
F—Add Profile Button
G—Profile List

OULXA64,0005CBB-19-19MAR21

Navigate to Layout Manager

1. Select **Menu**.

RXA0126688—UN—07JUN12

Menu → Applications Tab → Layout Manager Icon

2. Select **Applications** tab.
3. Select **Layout Manager** icon.

RXA0143562—UN—10JUL14

Layout Manager Page

A—Active Set Tab
B—Shortcut Bars Tab
C—All Run Pages Tab

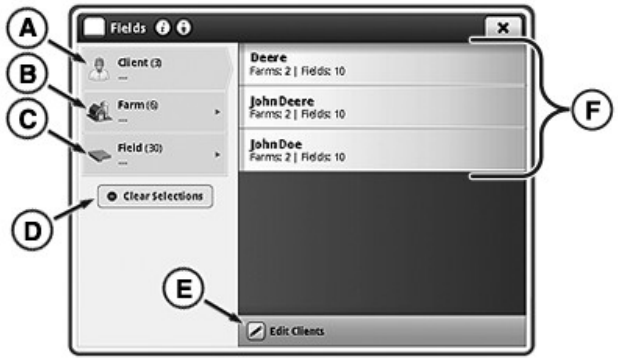
NOTE: Layout Manager opens in last used run page.

OULXA64,0005CBC-19-19MAR21

Navigate to Fields Page

RXA0142762—UN—19JUN14

Menu → Applications Tab → Fields Icon



RXA0142620—UN—19JUN14

Fields Page

A—Client Tab
B—Farm Tab
C—Field Tab
D—Clear Selections Button
E—Edit Clients Button
F—Client/Farm/Field List

1. Select **Menu**.
2. Select **Application** tab.
3. Select **Fields** icon.

OULXA64,0005CBD-19-19MAR21

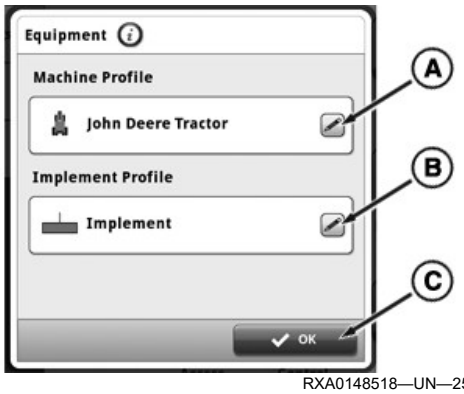
Navigate to Equipment Manager

1. Select **Menu**.

RXA0135344—UN—30AUG13

Menu → Applications Tab → Equipment Manager Icon

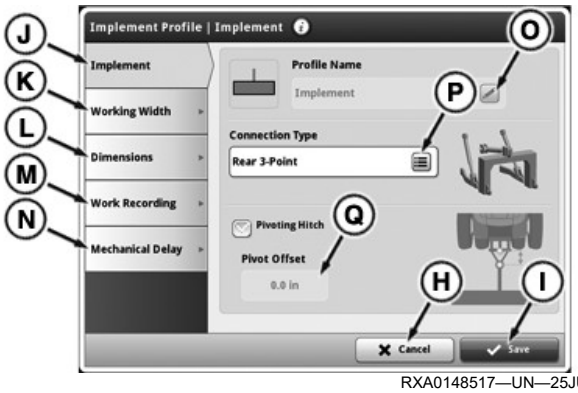
2. Select **Applications** tab.
3. Select **Equipment Manager** icon.
4. Press Machine Profile (A) or Implement Profile (B) Selection button.



RXA0148518—UN—25JUN15

RXA0148519—UN—25JUN15

Machine Profile Page



RXA0148517—UN—25JUN15

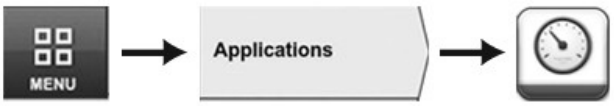
Implement Profile Page

A—Machine Profile Selection Box
B—Implement Profile Selection Box
C—OK Button
D—General Tab
E—GPS Offsets Tab
F—Connection Offsets Tab
G—Machine Profile Name Input Box
H—Cancel Button
I—Save Button
J—Implement Tab
K—Working Width Tab
L—Dimensions Tab
M—Work Recording Tab
N—Mechanical Delay Tab
O—Implement Profile Name Input Box
P—Connection Type Selection Box
Q—Pivot Offset Input Field

OULXA64,0005CBE-19-19MAR21

Navigate to Machine Monitor

1. Select **Menu**.

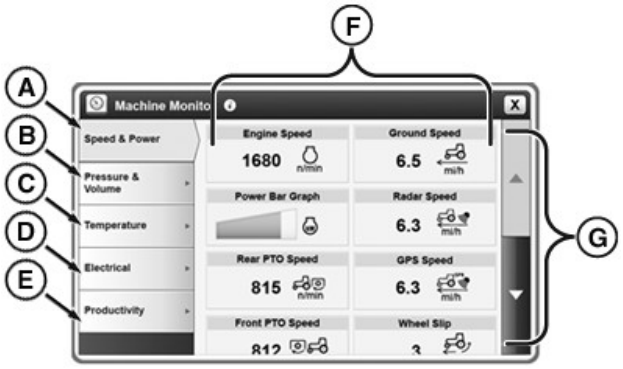


RXA0126813—UN—12JUN12

Menu → Applications Tab → Machine Monitor Icon

2. Select **Applications** tab.

3. Select **Machine Monitor** icon.



RXA0126814—UN—12JUN12

Machine Monitor Page

A—Speed and Power Tab
B—Pressure and Volume Tab
C—Temperature Tab
D—Electrical System Tab
E—Productivity Tab
F—Machine Monitor Measurement Display
G—Scroll Bar

OULXA64,0005CBF-19-19MAR21

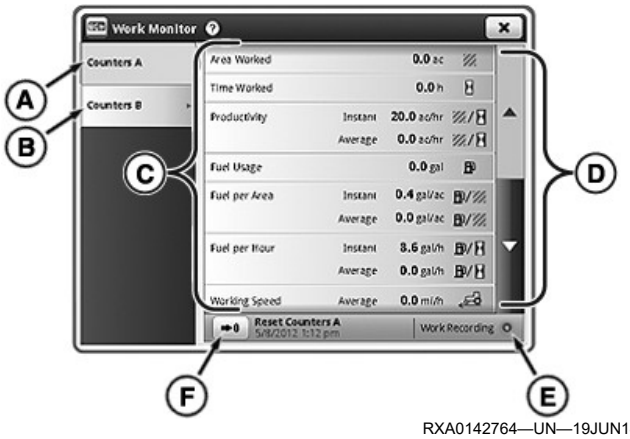
Navigate to Work Monitor

1. Select **Menu**.

RXA0135359—UN—03SEP13

Menu → Applications Tab → Work Monitor Icon

2. Select **Applications** tab.
3. Select **Work Monitor** icon.



RXA0142764—UN—19JUN14

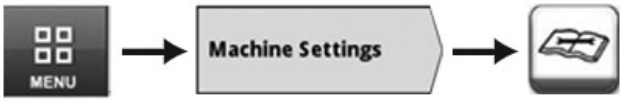
Work Monitor Page

A—Counters A Tab
B—Counters B Tab
C—Work Monitor List
D—Scroll Bar
E—Work Recording Light
F—Reset Counters Button

OULXA64,0005CC0-19-19MAR21

Navigate to Maintenance and Calibrations

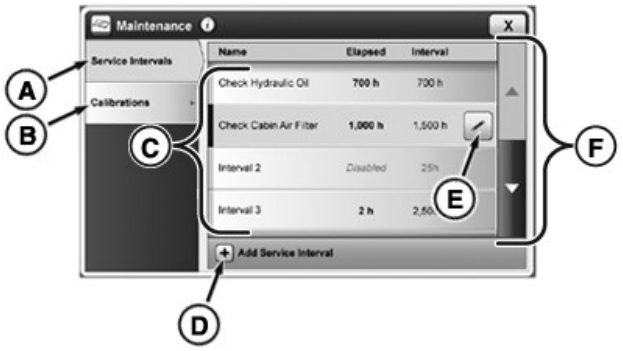
1. Select **Menu**.



RXA0147925—UN—13APR15

Menu → Machine Settings Tab → Maintenance and Calibrations Icon

2. Select **Machine Settings** tab.
3. Select **Maintenance and Calibrations** icon.



RXA0135274—UN—26AUG13

Maintenance and Calibrations Page

A—Service Intervals Tab
B—Calibrations Tab
C—Service Intervals List
D—Add Service Interval Button
E—Edit Service Interval Button
F—Scroll Bar

OULXA64,0005CC1-19-19MAR21

Radar Calibration

CAUTION: Avoid personal injury. Perform calibration in safe and open area that is clear of objects and bystanders.

Perform radar calibration if:

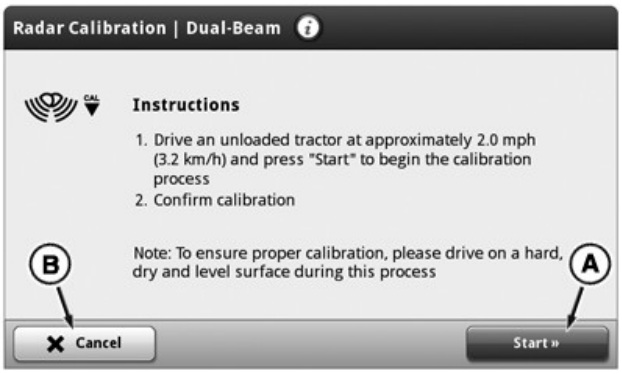
- Radar speed and wheel speed are not equal even though wheel slip is not present.
- Radar device was installed/replaced.
- Tire size was changed.
- Ballast of tractor was changed.

1. Select **Menu**.

RXA0147926—UN—13APR15

Menu → Machine Settings Tab → Maintenance and Calibrations Icon → Calibrations Tab → Radar Calibration Icon

2. Select **Machine Settings** tab.
3. Select **Maintenance and Calibrations** icon.
4. Select **Calibration** tab.
5. Select **Radar Calibration** icon.
6. Drive the non-loaded tractor onto a hard, dry and level surface at about 3,2 km/h (2.0 mph).
7. Select Start button (A) to begin radar calibration process.

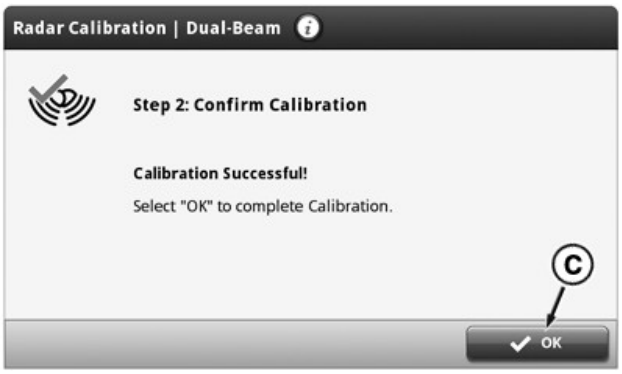


RXA0147580—UN—10MAR15

A—Start Button
B—Cancel Button

NOTE: Radar calibration can be canceled by selecting Cancel button (B).

8. Select OK button (C) to complete radar calibration.



RXA0147581—UN—10MAR15

If radar calibration is unsuccessful after three attempts, see an authorized dealer.

OULXA64,0005CC2-19-19MAR21

Wheel Slip Calibration

CAUTION: Avoid personal injury. Perform calibration in safe and open area that is clear of objects and bystanders.

Perform wheel slip calibration if:

- Radar calibration has been performed.
- Wheel slip is displayed when wheel slip should not be present.
- Tire size was changed.
- Ballast of tractor was changed.

1. Select **Menu**.

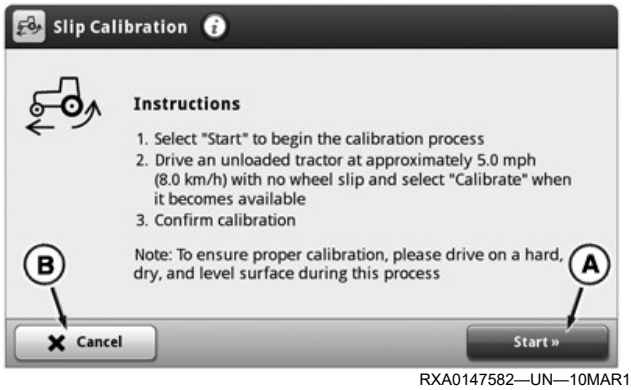
RXA0147928—UN—13APR15

Menu → Machine Settings Tab → Maintenance and Calibrations Icon → Calibrations Tab → Wheel Slip Calibration Icon

2. Select **Machine Settings** tab.
3. Select **Maintenance and Calibrations** icon.
4. Select **Calibration** tab.

NOTE: Tractor must be in motion for slip calibration icon to appear.

5. Select **Wheel Slip Calibration** icon.
6. Drive the non-loaded tractor onto a hard, dry and level surface at least 8 km/h (5 mph).
7. Select Start button (A) to begin wheel slip calibration process.



RXA0147582—UN—10MAR15

A—Start Button
B—Cancel Button

NOTE: Slip calibration can be canceled by selecting Cancel button (B).

8. Select Calibrate button.

RXA0147584—UN—10MAR15

D—OK Button

9. Select OK button (D) to complete wheel slip calibration.

If wheel slip calibration is unsuccessful after three attempts, see an authorized dealer.

OULXA64,0005CC3-19-19MAR21

Navigate to Controls Setup

The Controls Setup page allows user to assign various controls with various tractor and implement functions. Once completed, function may be performed by activating assigned device.

Improper operation can cause unintended machine and/or implement movements.

NOTE: Some ISOBUS joysticks may not be able to be assigned to tractor and implement functions.

CAUTION: Injury hazard with possibly fatal consequences!

Bystanders can be caught by the machine and/or the implement and get trapped.

- **Do not stand in the danger zone of the machine and the implement.**
- **Read the Operator's Manual for the ISOBUS control unit.**
- **The users must know which function is mapped to each control.**
- **Check if the controls are properly labeled.**

IMPORTANT: ISOBUS functions can only be assigned to an ISOBUS joystick.

The message above is displayed when the ISOBUS control unit or ISO Aux is enabled. If necessary, check or modify the assignment for the ISOBUS joystick. Immediately after message, operator can decline or accept by pressing appropriate buttons. If Cancel is selected, all ISOBUS joysticks are disabled. If Accept is selected, all ISOBUS joysticks are enabled.

Example:

Two ISOBUS-compliant joysticks are used to control a towed sprayer with an ISOBUS control unit. The sprayer has two controlled functions: pump ON/OFF and boom ON/OFF. Using the Controls Setup feature, each function may be assigned to one of the ISOBUS joystick switches.

Open Page for Controls Setup.

Option 1:
Press Controls Setup shortcut button on navigation bar.

LX373144—UN—26MAY21

Controls Setup Shortcut Button on Side Console

LX373145—UN—26MAY21

Controls Setup Shortcut Button on Navigation Bar

LX373137—UN—28MAY21

Assignment of the Controls of the Joystick

A—Joystick Mode Icon
B—Select Controls and Functions of the Joystick

Option 2:

1. Select **Menu**.

RXA0130061—UN—01AUG13

Menu → Applications Tab → Controls Setup Icon

2. Select **Applications** tab.
3. Select **Controls Setup** icon.

LX373137—UN—28MAY21

Assignment of the Controls of the Joystick

A—Joystick Mode Icon
B—Select Controls and Functions of the Joystick

OULXA64,0005CC4-19-25MAY21

Controls

PC15329—UN—08JUL13

Enable or Disable Controls

From the left-hand side of the Controls Setup page, select one of the following controls:

- Tractor joystick
- ISOBUS joystick
- Tractor functions
- ISOBUS implement

Assignments

NOTE: Certain functions are assigned automatically by implement to specific joystick buttons and cannot be modified by the operator.

Depending on the selected control, the following combinations (assignments) are possible:

Tractor joystick

- Input + Source + Function

ISOBUS joystick

- Input + Implement t + Function

Tractor functions

- Functions + Implement + Input

ISOBUS implement

- Function + Implement + Input

PC17393—UN—28MAY14

A—Remove Assignment
B—Add or Edit Assignment

Setup and Manage the Assignments

To add or edit any assignment, select the desired control, select Input or Function, and press either Edit or tap anywhere in the selectable area. Once assignment is completed, a status icon is shown.

PC17280—UN—10SEP13

ON/OFF Toggle

ISO Aux

ISO Aux toggle enables ISOBUS multi-function lever messages to be sent to the implement.

Set ISO Aux to OFF to disable the implement functions. Set to ON to activate implement functions and store them in implement.

These functions are stored until operator edits corresponding assignment.

LX314896—UN—30MAY17

Loader Mode

In this mode, joystick is set up for operating front loader. For more information, refer to SCV advanced settings.

OULXA64,0005CC5-19-19MAR21

Controls Setup

PC15326—UN—08JUL13

Controls Setup configures integrated tractor joystick, CommandARM™ levers, 1—4 buttons, and third-party devices to control tractor or implement functions. ISO Aux implements configure to tractor joystick or third-party device.

Set up assignments:

1. Select Menu.
2. Select Applications tab.
3. Select Controls Setup application.
4. Select from following tabs on left-hand side of page:

NOTE: Unlock tractor joystick to activate default and custom (manually set) assignments. See Joystick, Electrical — Lock Function (Transport Lock) in Section 70D of this Operator's Manual.

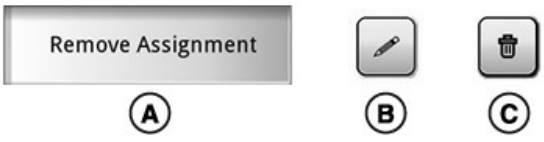
- **CommandPRO™ Joystick:** Assign to control tractor and implement functions (for example: rear hitch).
- **Integrated Tractor Joystick:** Assign to control tractor and implement functions (e.g. front hitch).
- **CommandARM™ Levers and 1—4 Buttons:** Assign to control tractor and implement functions (for example: rear hitch)
- **Third-Party Devices:** Any mechanism, John Deere, or non-John Deere, attached to ISOBUS. Once attached, assign to control tractor and implement functions (for example: trailer).
- **ISO Aux Implements:** Assign implement function (e.g. trailer) to a specific button on the tractor joystick.

5. Select reconfigurable assignment module.

   Depending on selected source, the following combinations (assignments) are possible:

- **Integrated Tractor Joystick, CommandARM™ Levers, 1—4 buttons, and Third-Party Devices:** Input + Source + Function
- **ISO Aux Implements:** Function + Device + Input

Manage Assignments:

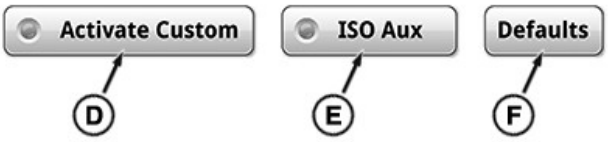


RXA0156706—UN—11JAN17

To edit assignments for tractor joystick, CommandARM™ levers, or 1—4 buttons, select desired reconfigurable assignment module. To remove assignment, select Remove button (A) (in source overlay).

To edit assignments for third-party devices or ISO Aux implements, select Edit button (B) in desired reconfigurable assignment module. To remove assignment, select Trash button (C).

Activate Custom, ISO Aux, and Defaults:



RXA0166821—UN—05MAR19

Select the Activate Custom and ISO Aux buttons to enable custom assignments for ISO Aux implements.

Activate Custom (D): Enables all customized assignments across all groups.

ISO Aux (E): Determines if messages from tractor joystick are sent to ISO Aux implement. Select to enable implement functions. Select again to disable. Functions are stored until operator edits corresponding assignment.

Defaults (F): Clears and restores any custom control assignments to factory default settings.

OULXA64,0005CC6-19-19MAR21

Automation Status

Automation Status gives operator the ability to control tractor functions externally. Automation Status displays which tractor functions are being controlled and their current status.

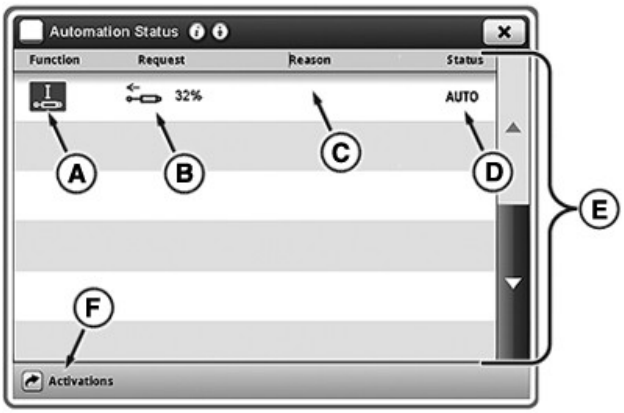
SCV Function Example: SCV status set to AUTO. Implement actively controls SCV 1. Implement requests SCV flow to be set at 32% in extend direction.

1. Select **Menu**.

RXA0135014—UN—12AUG13

Menu → Applications Tab → Automation Status Icon

2. Select **Applications** tab.
3. Select **Automation Status** icon.



RXA0135016—UN—12AUG13

Automation Status Page

A—Function
B—Request
C—Reason
D—Status
E—Scroll Bar
F—Activations Button

Press Activations button (F) to navigate to Software Manager application.

OULXA64,0005CC7-19-19MAR21

Read ISOBUS Control Unit Operator's Manual

CAUTION: ISOBUS control unit detected

Improper operation can cause unintended machine movement.

To avoid death or serious injury to a bystander, understand how this display operates the functions of the machine.

Read ISOBUS Controller's Operator's Manual.

Message shown above displays when system detects an ISOBUS control unit. For more information, read the Operator's Manual for the ISOBUS control unit.

Generation 4 or G5 CommandCenter™ display can be used as display device for any control unit meeting ISO 11783 (ISOBUS) standard. This includes capability to control ISOBUS control unit. When used in this manner, information and control unit functions placed on the display are provided by the control unit and are the responsibility of the control unit manufacturer. Some of these control unit functions could represent a hazard either to operator or bystander. Read Operator's Manual provided by control unit manufacturer and observe all safety instructions in the manual and on control unit prior to use.

OULXA64,0005CC8-19-14AUG23

Use Video Display Capability Properly

Avoid Backover Accidents

RXA0109491—UN—05AUG10

Avoid Backover Accidents

CAUTION: Before moving machine, be sure that all persons are clear of machine path. Give audible warning by sounding horn. The driver has to turn around and look straight for best possible visibility. Use mirrors to assist in checking all around machine. Keep windows and mirrors clean, adjusted, and in good condition. Use a signal person when backing if view is obstructed or when in close quarters.

Do not rely on a camera to determine if personnel or obstacles are behind the machine. The system can be limited by many factors including maintenance practices, environmental conditions, and operating range.

CAUTION: Read and understand Avoid Backover Accidents in Safety Section.

IMPORTANT: Avoid damage to equipment. Correctly understand whether the camera is mirrored and whether the video application is mirrored.

- **Mount camera in a sturdy and secure location.**
- **Understand camera's field of view.**
- **Keep camera properly serviced.**
- **Keep camera lens clean.**

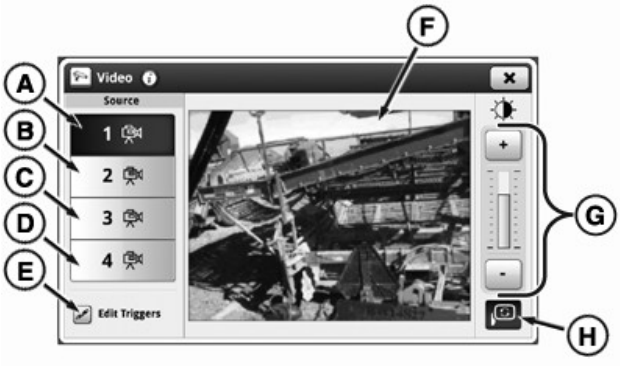
OULXA64,0005CC9-19-19MAR21

Navigate to Video Application

RXA0144375—UN—06AUG14

Menu → Applications Tab → Video Icon

1. Select **Menu**.
2. Select **Applications** tab.
3. Select **Video** icon.



RXA0131114—UN—03SEP13

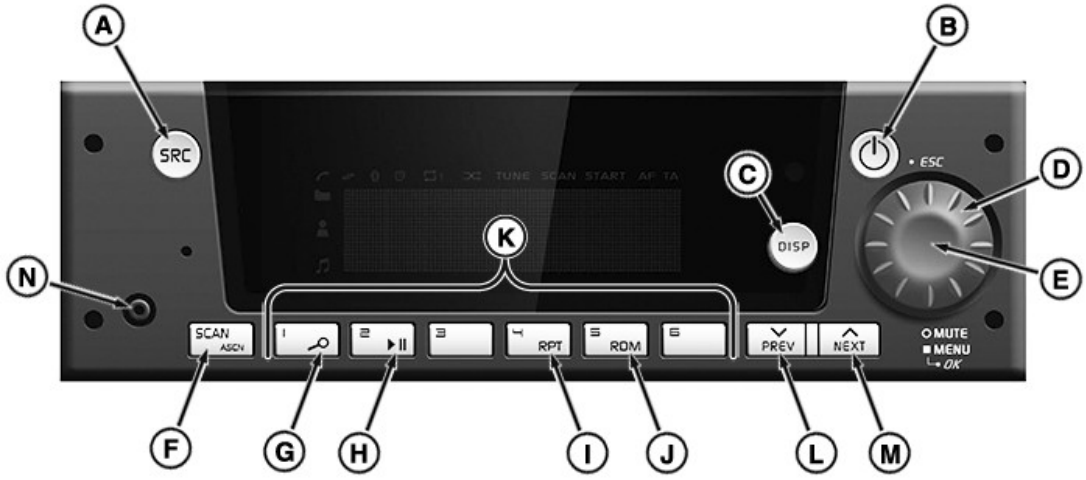
Video Applications Settings Page

A—Input 1 Button
B—Input 2 Button
C—Input 3 Button
D—Input 4 Button
E—Edit Triggers Button.
F—Video Display Screen
G—Brightness Adjustment Bar
H—Mirror Image Button

OULXA64,0005CCA-19-19MAR21

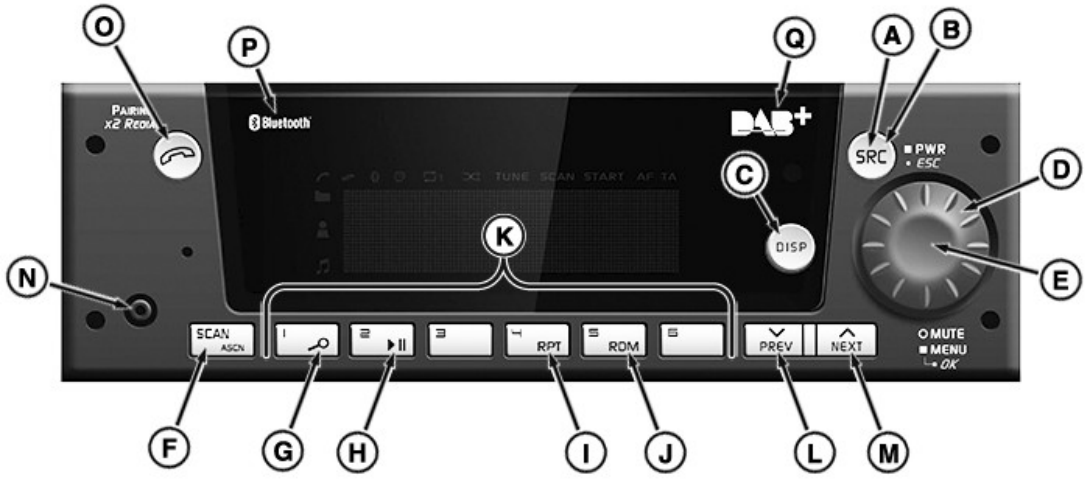
Radio A—Operation

Radio A—Controls and Instruments



RXA0169547—UN—09JUL19

Option 1



RXA0169555—UN—09JUL19

Option 2

Option	AM/FM Radio	Auxiliary	USB	Bluetooth®	DAB+
1	X	X	—	—	—
2	X	X	X	X[a]	X[b]

[a] *Bluetooth® may not be available in all locations.*
[b] *Not available in North America.*

A—SRC - press to change radio source (FM, AM, WX/LW, DAB, USB/iPod®, Front AUX, or Rear AUX). Available sources depend on radio option and location.

B—PWR/ESC:

- **Power** - press to turn on radio. Press and hold to turn off radio.
- **Escape** - in menu, press to exit one level. In Bluetooth®, press to reject or cancel call.

C—DISP:

- **Display Source** - with ignition on, select to change source display.
- **Display Clock** - with ignition off, press to display clock for a few seconds.

D—Volume - turn clockwise to increase volume or counterclockwise to decrease volume.

E—MUTE/MENU/OK:

- **Mute** - short press (less than 2 seconds) to silence volume. Press again to unmute.

- **Menu** - long press (4 seconds or more) to enter menu.
- **OK** - press to make a selection while in menu.

F—SCAN/ASCN:

- **Scan** - short press (less than 2 seconds) to scan stations/tracks. Press again to stop scanning.
- **AutoScan** - long press (4 seconds or more) to store strongest six stations of current band. See Scan and AutoScan in Radio Operation - AM/FM Radios A Section of this Operator's Manual.

G—Browse - press to initiate a search for a track on a USB drive.

H—Play/Pause - press to play or pause media.

I—RPT - press to repeat current track. Press again to repeat track list. Press a third time to disable repeat.

J—RDM - press to play tracks in random order. Press again to disable random play.

K—Presets:

- **Select Preset** - press a button with a number (1 through 6) to go to stored station.
- **Store Preset** - press and hold to store a station on selected numbered button (1 through 6). See Presets in Radio Operation - AM/FM Radios A Section of this Operator's Manual.

L—PREV:

NOTE: Button configuration for tuner can be changed. See Tuner Configuration in Radio Operation - AM/FM Radios A Section of this Operator's Manual.

- **Previous Track/Station** - press to go to previous track/station.
- **Rewind** - press and hold to rewind track.

M—NEXT:

NOTE: Button configuration for tuner can be changed. See Tuner Configuration in Radio Operation - AM/FM Radios A Section of this Operator's Manual.

- **Next Track/Station** - press to go to next track/station.
- **Fast-Forward** - press and hold to fast-forward track.

N—Front AUX Input - insert connector for auxiliary (AUX) device. Displays as F AUX in sources only when connected.

O—Phone (Bluetooth® required):

- **Bluetooth® Menu** - without device connected, press to display Bluetooth® menu.
- **Incoming Call** - with device connected, short press (less than 2 seconds) to answer call.
- **Dial Menu** - with device connected, long press (4 seconds or more) to display the dial menu.

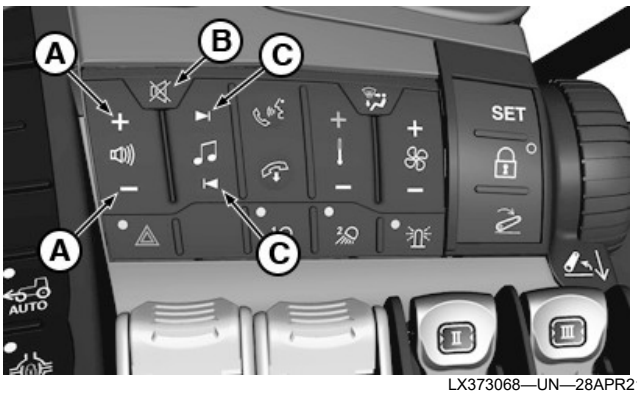
P—Bluetooth® - indicates that radio is Bluetooth® ready.

Q—DAB+ - indicates that radio is Digital Audio Broadcasting (DAB+) ready.

For more information, see relevant Operator's Manual of the radio.

OULXA64,0005DFC-19-28MAR23

Radio A—Additional Radio Controls



LX373068—UN—28APR21

A—Volume Control Buttons, +/–
B—Mute Button
C—Buttons for Station and Track Control

For more information, see relevant Operator's Manual of the radio.

OULXA64,6R,MW67,0005F5E-19-25OCT21

Radio A—Additional Phone Controls

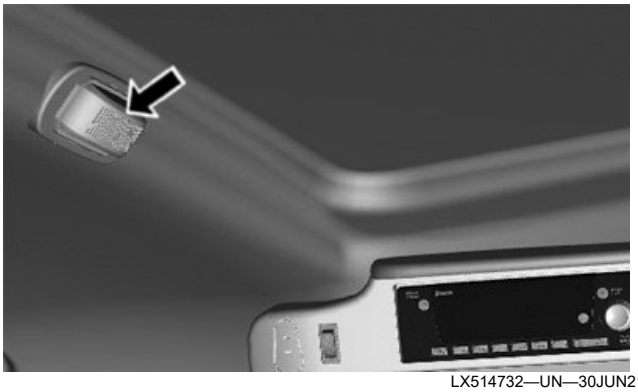
LX514734—UN—28JUN21

A—Push to Talk/Accept Call Button
B—End Call Button

For more information, see relevant Operator's Manual of the radio.

OULXA64,6R,MW67,0005F5F-19-25OCT21

Radio A—Microphone for Bluetooth Applications



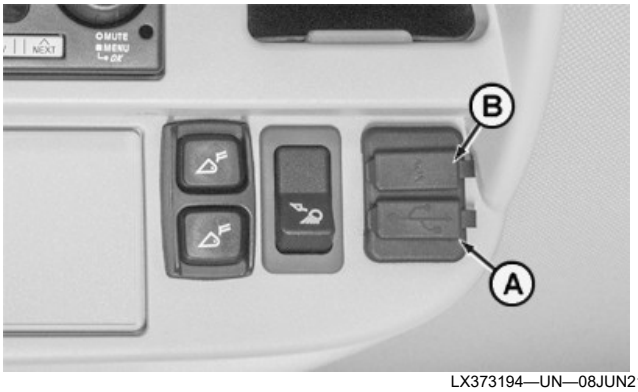
LX514732—UN—30JUN21

For more information, see Operator's Manual of relevant radio.

OULXA64,6R,0005DA3-19-24JUN21

Radio A—Auxiliary and USB Inputs

IMPORTANT: This USB port is only suitable for the transmission of audio data. Do not connect any other equipment.



LX373194—UN—08JUN21

A—USB Input Connection for USB Devices
B—Auxiliary Input Connection for Auxiliary Devices

For more information, see Operator's Manual of relevant radio.

OULXA64,6R,0005D9F-19-15JAN24

FM, MW, LW and DAB/DAB+-Compliant Radio Antenna (Europe Only)

The tractor is equipped with an antenna that supports the frequency ranges FM, MW, LW, and DAB/DAB+.

When connecting a radio, make sure that the radio provides a 12-volt connection for the antenna (ISO 10487).

OULXA64,SP,EU,0005762-19-14OCT20

Touchscreen Radio—Operation

Touchscreen Radio—Controls and Instruments

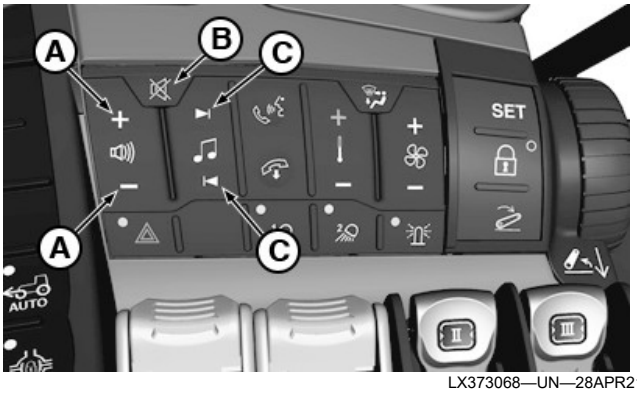
RXA0164285—UN—24AUG18

A—Display: 6.5 inch Capacitive Touchscreen.
B—Home Page: Press to display home page.
C—Power/Mute: Press to power on, press and hold to power off, and press to mute when powered on. During media play back, pauses when muting and plays when unmuting.
D—Volume: Turn clockwise to increase volume or counterclockwise to decrease volume.
E—Camera Display: Press to display camera image if connected.
F—Previous/Rewind: Press to go to previous available station/file. Press and hold to rewind the file.
G—Next/Forward: Press to go to next available station/file. Press and hold to fast-forward file.
H—Projection Mode: Press to move between current page and Apple CarPlay® or Android Auto (if equipped).
I—Select: Press to make a selection.
J—Scroll: Turn clockwise to move down in list or counterclockwise to move up in list.
K—Push-To-Talk (PTT): Press to use voice commands.

For more information, see relevant Operator's Manual of the radio.

oulxa64,6R,1661846931538-19-28MAR23

Touchscreen Radio—Additional Radio Controls



LX373068—UN—28APR21

Additional Radio Controls on CommandARM™

A—Volume Control Buttons, +/–

B—Mute Button
C—Buttons for Station and Track Control

For more information, see relevant Operator's Manual of the radio.

oulxa64,6R,MW67,1661850317925-19-28MAR23

Touchscreen Radio—Additional Phone Controls

LX514734—UN—28JUN21

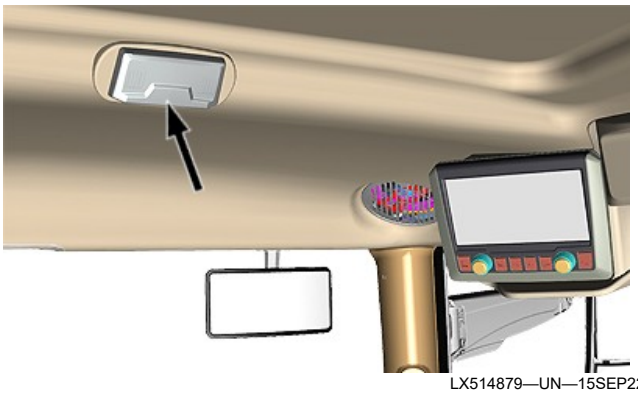
Additional Phone Control on CommandARM™

A—Push to Talk/Accept Call Button
B—End Call Button

For more information, see relevant Operator's Manual of the radio.

oulxa64,6R,MW67,1661850447020-19-28MAR23

Touchscreen Radio—Microphone for Bluetooth Applications



LX514879—UN—15SEP22

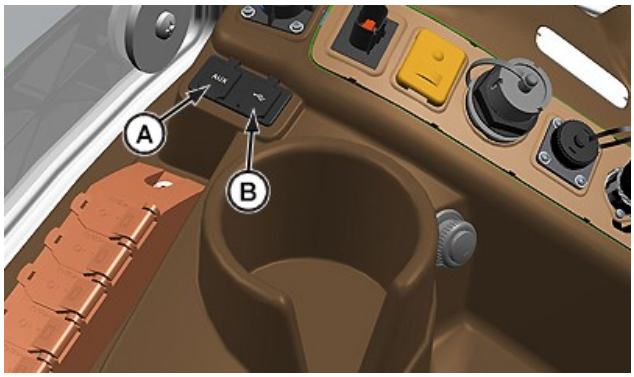
Microphone for Bluetooth Applications

For more information, see Operator's Manual of relevant radio.

oulxa64,6R,MW67,1661847313937-19-15SEP22

Touchscreen Radio—Auxiliary and USB Inputs

IMPORTANT: This USB port is only suitable for the transmission of audio data. Do not connect any other equipment.



LX514880—UN—02SEP22

Auxiliary and USB Inputs

A—Auxiliary Input Connection for Auxiliary Devices
B—USB Input Connection for USB Devices

For more information, see Operator's Manual of relevant radio.

oulxa64,6R,MW67,1661847419338-19-15JAN24

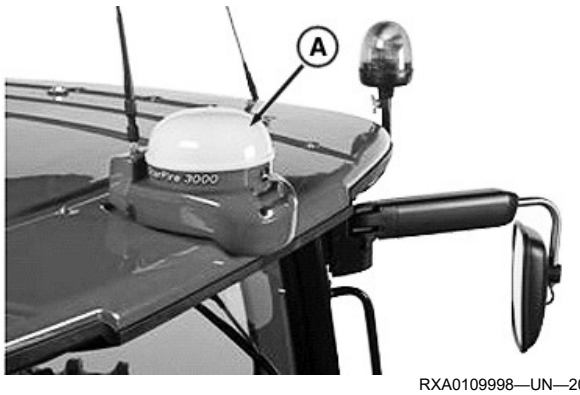
FM, MW, LW and DAB/DAB+-Compliant Radio Antenna (Europe Only)

The tractor is equipped with an antenna that supports the frequency ranges FM, MW, LW, and DAB/DAB+.

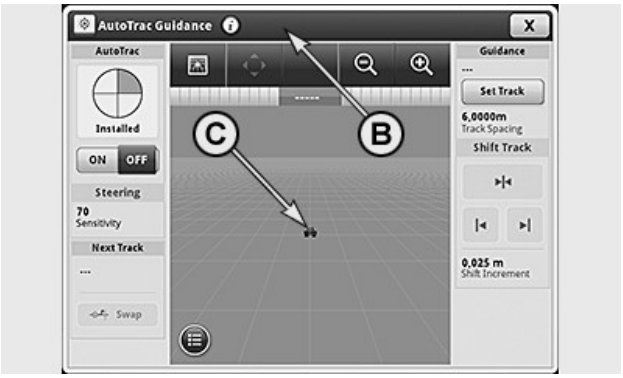
When connecting a radio, make sure that the radio provides a 12-volt connection for the antenna (ISO 10487).

OULXA64,SP,EU,0005762-19-14OCT20

AutoTrac™ Steering System (If Equipped)



RXA0109998—UN—20AUG10



LX1057426—UN—29JUL14

GreenStar™ Display

A—Position Receiver
B—GreenStar™ display in the CommandCenter™
C—Marker

NOTE: Electrohydraulic steering is required for AutoTrac™ to function. Refer to AutoTrac™ Operator's Manual for detailed instructions.

- The AutoTrac™ steering system uses the StarFire™ position receiver (A) and the GreenStar™ display (B) in the CommandCenter™ to support the operator during steering of the tractor.
- The operator has to enter the width of the implement minus the desired track overlap into the GreenStar™ display.

  The operator has to drive the track in a straight line in the first pass to enter the start and end points of the desired stretch. For further variations of the track guidance of the steering system, refer to the AutoTrac™ Operator's Manual.
- To activate AutoTrac™, press the AutoTrac™ button on the CommandARM™ or on the side console after the GreenStar™ display has been enabled. Marker (C) represents the current position of the tractor on the display. By referring to the other information shown on the display, the operator can compare the current position of the tractor with the set track.
- AutoTrac™ is a straight-line guidance system. The operator can take control of the tractor at any time by actively turning the steering wheel. Travel speed is controlled exclusively by the operator, who uses the brake or actuates the speed control pedal or hand throttle. Operator has to turn the vehicle back at end of each pass and to go around any field obstacles.

NOTE: When using AutoTrac™, achievable travel speeds are 0.5 to 30 km/h (forward) and 0.5 to 10 km/h (0.3 to 18.6 mph) (reverse).

NOTE: If required, minimum speed may be reduced to 0.1 km/h (0.06 mph). Contact an authorized dealer.

OULXA64,6R,0005C38-19-19MAR21

Variable Ratio Steering (If Equipped)

IMPORTANT: The function can only be activated if the oil temperature is above 0°C.

At travel speeds below 15 km/h (9 mph), the "variable ratio steering" function increases the steering angle of the front wheels in proportion to the turning of the steering wheel. With a relatively small turn of the steering wheel, a greater steering angle can be achieved at the front wheels. If the engine is switched off and restarted, the last setting is retained.

CAUTION: When the tractor is moving at the threshold of approx. 15 km/h (9 mph), the operator must be aware that the steering characteristics may change. To avoid irritation, switch off "variable ratio steering."

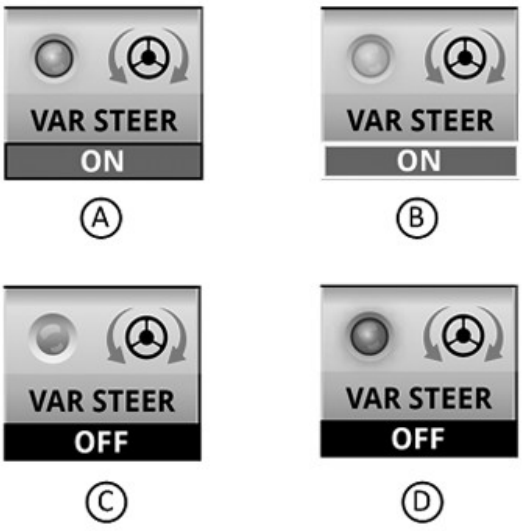
LX279030—UN—04AUG16

LX279031—UN—04AUG16

Switch function on or off:

1. Press menu button on touchscreen.
2. Press button for steering settings.
3. Press ON or OFF button.

NOTE: Current status is indicated by a message and an indicator light with variable color. If the engine is switched off and restarted, the last setting is retained.



LX279032—UN—04AUG16

The layout manager allows the status display to be shown at the bottom edge of the touchscreen.

A – Green indicator light, system switched on and active (provided that travel speed remains below 15 km/h (9 mph)).

B – Orange indicator light, system switched on, but not active, because travel speed exceeds 15 km/h (9 mph).

C – Indicator light off, system switched off.

D – Red indicator light, system switched off due to a fault. Contact an authorized John Deere dealer.

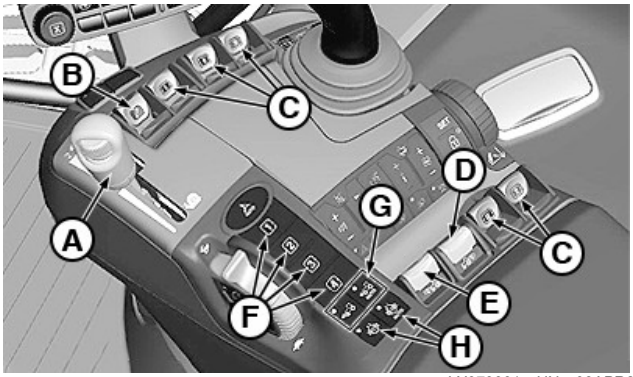
OULXA64,6R,0005C39-19-24SEP21

iTEC™ Controls and Functions (CommandARM™)

Intelligent Total Equipment Control, iTEC™, allows multiple recurring tasks to be performed with touch of one button.

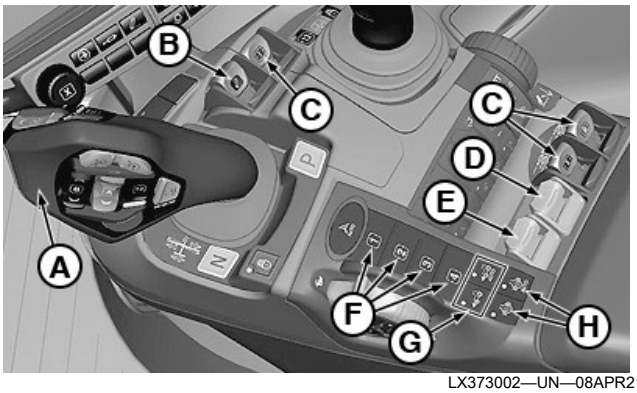
One sequence, consisting of a series of functions, operations, and distances can be used for example when entering a field, and a second sequence may be used at water obstacle in the middle of the field. Each sequence can have up to 20 functions. Independent of the power supply, sequences are saved until they are deleted or overwritten.

A sequence is a course of events from start of first function to completion of last function that the operator can start by pressing one of the sequence buttons.



LX373001—UN—08APR21

CommandARM™ Controls without AutoPowr™/IVT™



LX373002—UN—08APR21

AutoPowr™/IVT™ with CommandPRO™ Joystick

iTEC™ Functionality		
	Component	**Function(s)**
A	Speed Control Lever, AutoPowr™/IVT™	Change the travel set speed
	CommandPRO™ Joystick	Activate travel set speed
B	Rear Hitch (if equipped)	Lift, lower, and lower fast
C	SCVs (CommandARM™)	Extend, retract, float, and cancel
D	Rear PTO (if equipped)	On/Off
E	Front PTO (if equipped)	On/Off
F	Sequence Buttons	1/2/3/4
G	Front-Wheel Drive	On/Off/Auto
H	Differential Lock	On/Off/Auto
	Front Hitch (if equipped)	Lift, lower, float, and cancel

iTEC™ pages are accessed through CommandCenter™.

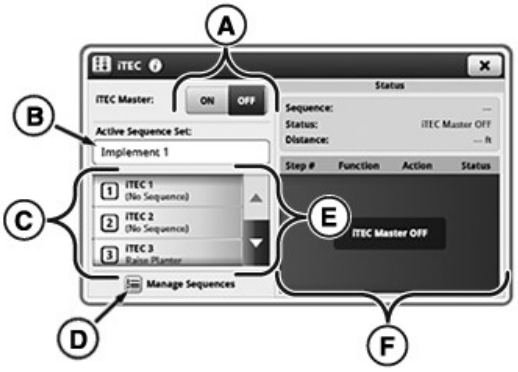
OULXA64,6R,MW67,0005F62-19-19JAN22

CommandCenter™ Pages Descriptions and Functions

To access the iTEC™ main page, press the iTEC™ button.

LX373138—UN—26MAY21

iTEC™ Button on CommandARM™



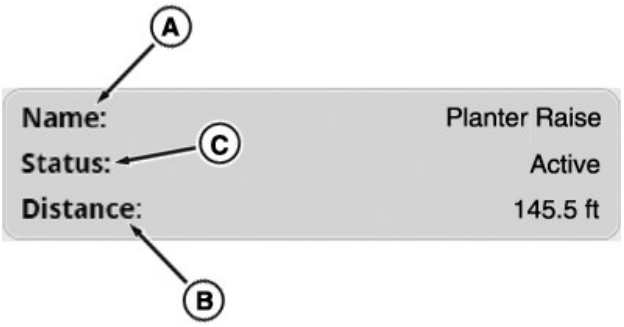
RXA0158043—UN—02MAR17

iTEC™ Main Page

- **A — iTEC™ Master ON/OFF Toggle:** Toggle iTEC™ Master ON/OFF.
- **B — Active Sequence Set:** Select or create sequence set.
- **C — Assignments List:** List of sequences assigned to iTEC™ buttons.
- **D — Manage Sequences:** Edit sequence and assign buttons.
- **E — Scroll Bar:** Scroll up or down.
- **F — Status Area:** Shows status of each iTEC™ sequence step as sequence progresses.

OULXA64,6R,MW67,0005F63-19-25OCT21

Status Area



RXA0131243—UN—08MAR13

Status Area on Main Page

- **A — Name:** Name of sequence that is currently running.
- **B — Distance:** Displays accumulated distance while iTEC™ sequence is running.
- **C— Status:** Indicator of current iTEC™ status.
  - **Off** - No sequence execution possible.
  - **Ready** - Waiting for iTEC™ button to which a sequence is assigned to be pressed.
  - **Active** - iTEC™ sequence execution active.
  - **RPM Limit** - Engine speed is out of range[1]
  - **Park** - Transmission indicates that park lock is engaged[1]
  - **Operator Presence** - No operator presence, no iTEC™ execution allowed. Operator returns to seat[1]
  - **Wheel Speed Low** - Wheel speed < 0.5 km/h (0.3 mph), execution is paused.
  - **Complete** - Sequence successfully completed.
  - **Aborted** - Sequence execution aborted by operator or active abort condition.
  - **Error** - One or more sequence steps did not execute.

OULXA64,0005CF7-19-07APR21

All Sequences Page

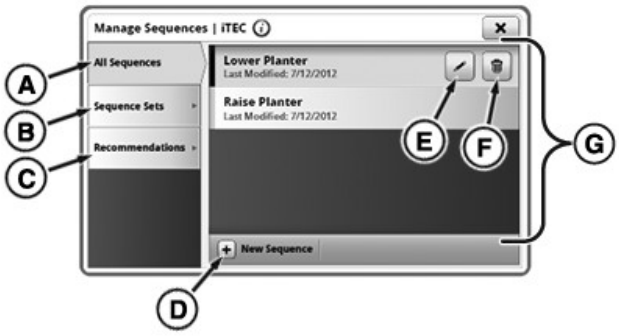
Select **Manage Sequences** button on iTEC™ main page.

RXA0129723—UN—06MAR13

Manage Sequences Button

iTEC is a trademark of Deere & Company

[1] *Sequence pauses or cannot start if this condition exists. Correct condition to resume sequence.*



RXA0158044—UN—02MAR17

iTEC™ All Sequences Page

- **A—All Sequences Tab:** View available, delete saved, edit saved, or add new sequences.
- **B—Sequence Sets Tab:** View assigned sequences or give sequence assignment.
- **C—Recommendations (AutoLearn):** View and edit learned sequences.
- **D—New Sequence Button:** Manually program new sequence.
- **E — Edit Button:** Edit saved sequence.
- **F— Trash Button:** Delete saved sequence.
- **G— Sequence List:** List of saved sequences.

OULXA64,0005CF8-19-07APR21

Add New Sequence

NOTE: For complete list of functions available, see CommandCenter™ Pages Descriptions and Functions in this Section of this Operators Manual.

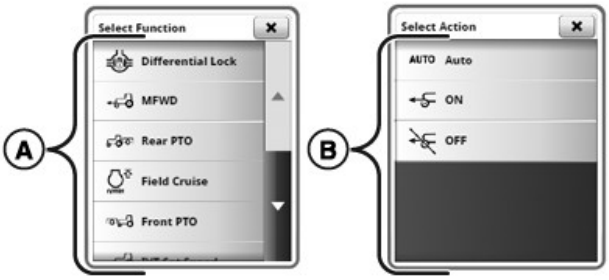
From iTEC™ main page, use following steps:

1. Select Manage Sequences button.

RXA0158059—UN—02MAR17

Enter Step Distance Page

2. Select All Sequences tab.
3. Select New Sequence button.
4. Select Add Step button.
5. Select from the list of functions (A).

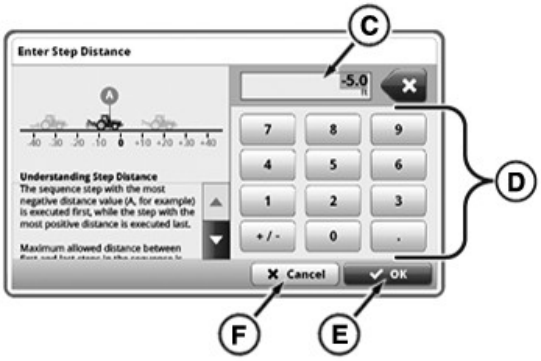


RXA0158057—UN—02MAR17

Select Function and Action Pages

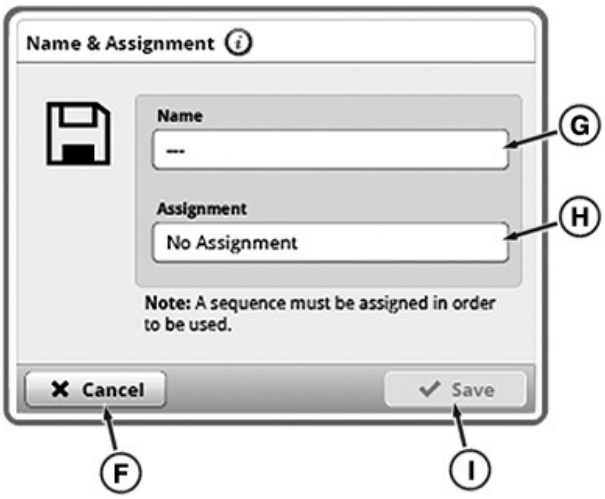
A—Select Functions List
B—Select Action List

6. Select from the list of actions (B).
7. On Enter Step Distance page, use keypad (D) to enter distance into Step Distance box (C).



RXA0158047—UN—02MAR17

Enter Step Distance Page



RXA0158048—UN—02MAR17

Name & Assignment Page

C—Step Distance Box
D—Keypad
E—OK Button

F—Cancel Button
G—Sequence Name Box
H—Sequence Assignment Box
I—Confirm Button

NOTE: Select Cancel button (F) to exit editing process without saving changes.

8. Select OK button (E).
9. Repeat steps 4—8 to add steps to sequence.
10. Press Next button to continue.
11. Select the Sequence Name input box (G). Type name of sequence. Select OK button when complete.

NOTE: A sequence must be assigned in order to be used.

12. Select input box (C) for assigning a sequence. If desired, select assignment. Select OK button when complete.
13. Select Confirm button (I) to save sequence.

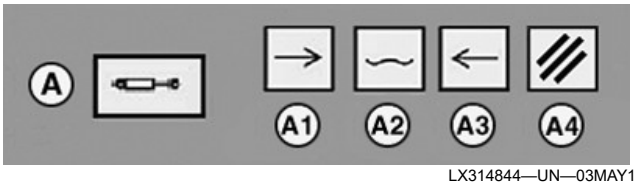
OULXA64,0005CF9-19-07APR21

Sequence, Available Functions and Measures

NOTE: SCV XIV and SCV XV cannot be used simultaneously within a sequence. Corresponding functions can only be performed successively, but not at the same time.

A — SCVs (I to XIII)

A-1 Extend
A-2 Float
A-3 Retract
A-4 Cancel



LX314844—UN—03MAY17

Function/Action

B — Rear Hitch

B-1 Raise to Lift Limit
B-2 Lower to Lower Set Point
B-3 Lower Fast

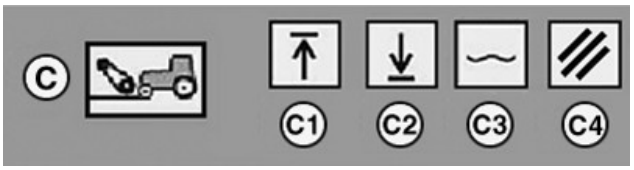
LX314845—UN—03MAY17

Function/Action

C — Front Hitch[a]

C-1 Raise
C-2 Lower
C-3 Float
C-4 Cancel

[a]*European edition only*



LX314846—UN—03MAY17

Function/Action

D — Transmission

D-1 Gear - Preselect Gear

LX314847—UN—03MAY17

Function/Action

E — Automatic Transmission (If Equipped)

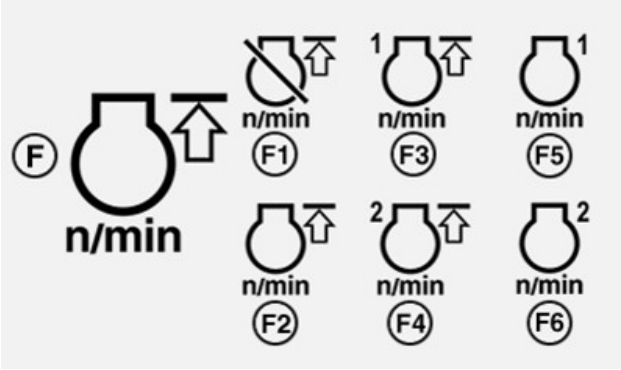
E-1 Depending on transmission type: Shift to highest pre-selected gear or resume automatic shifting.

LX314848—UN—03MAY17

Function/Action

F - Engine Speed Limitation

F-1 Engine Speed Limit OFF
F-2 Engine Speed Limit ON (PowrQuad™ or AutoQuad™)
F-3 Engine Speed Limit 1 ON (AutoPowr™/IVT™ without CommandPRO™ or DirectDrive)
F-4 Engine Speed Limit 2 ON (AutoPowr™/IVT™ without CommandPRO™ or DirectDrive)
F-5 Engine Speed Limit 1 ON (AutoPowr™/IVT™ with CommandPRO™)
F-6 Engine Speed Limit 2 ON (AutoPowr™/IVT™ with CommandPRO™)



LX315099—UN—28MAR18

Function/Action

G — Travel Set Speed (AutoPowr™/IVT™ or DirectDrive)

G-1 Set to Maximum Travel Speed

NOTE: PTO speed has priority.

LX314850—UN—03MAY17

Function/Action

H — Activate Travel Set Speed (only with CommandPRO™)

H-1 Travel Set Speed 1
H-2 Travel Set Speed 2
H-3 Maximum Travel Set Speed

LX314851—UN—03MAY17

Function/Action

I — Rear PTO ON/OFF

LX314852—UN—03MAY17

Function/Action

J — Front PTO[a] ON/OFF

[a] *European edition only*

LX314853—UN—29MAY17

Function/Action

K — Differential Lock ON/OFF/AUTO

LX314854—UN—03MAY17

Function/Action

L — Front-Wheel Drive ON/OFF/AUTO

LX314855—UN—03MAY17

Function/Action

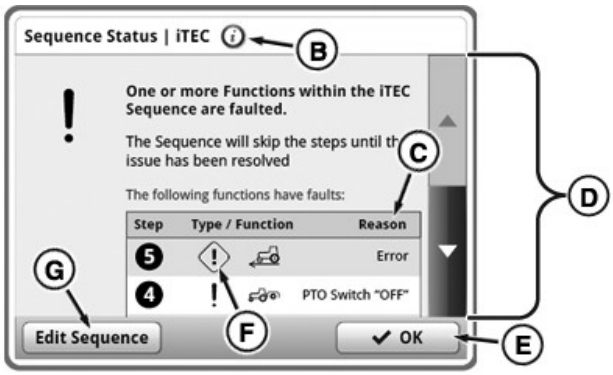
OULXA64,0005CFA-19-05JUL21

Sequence Step Status

NOTE: To view status page, on any iTEC™ page, press Information button (B). General status page lists all functions that are part of the sequences of current selected implement (assignment set).

RXA0131170—UN—05MAR13

Sequence Bar



RXA0131609—UN—25JUL13

Sequence Status Page

A— Information Alert
B— Information Button
C— Reason (text description)
D— Scroll Bar
E— OK Button
F— Fault Alert
G— Edit Sequence Button

Whenever sequence execution is not possible or is interrupted, iTEC™ system displays Information Alert (A) or Fault Alert (F) next to sequence or sequence step. To access sequence status page (to read the steps with errors), press **Alert Symbol** next to a sequence (in assignment area or sequence assignment tab). Use scroll bars (D) to scroll up and down list. To edit sequence, select Edit Sequence button (G). Press **Alert Symbol** next to a sequence step (while in EDIT) for information about the issue dealing with specific step. Both views show a short reason (C) for the issue.

OULXA64,0005CFB-19-07APR21

Edit or Remove Sequence

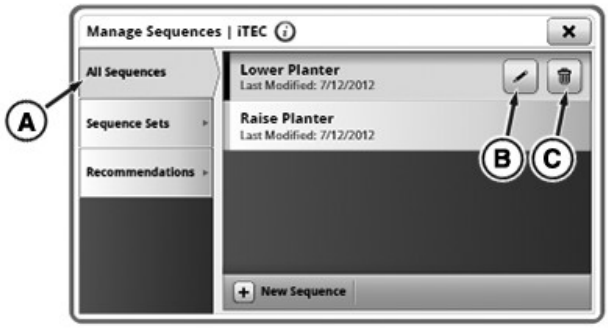
From iTEC™ main page, use following steps:

1. Select Manage Sequences button.

RXA0129723—UN—06MAR13

Manage Sequences Button

2. Select All Sequences tab.



RXA0158049—UN—02MAR17

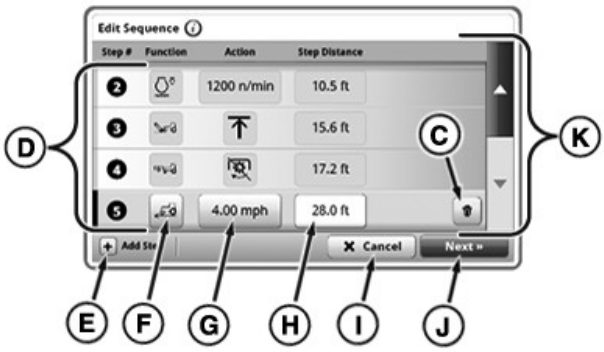
All Sequences Page

A—All Sequences Tab
B—Edit Button
C—Trash Button

3. Select desired sequence.

NOTE: Trash button (C) removes sequence or step within sequence.

4. To update sequence steps, select Edit button (B).
5. Select the desired step that is to be edited. If needed, use scroll bar (K) to locate step.



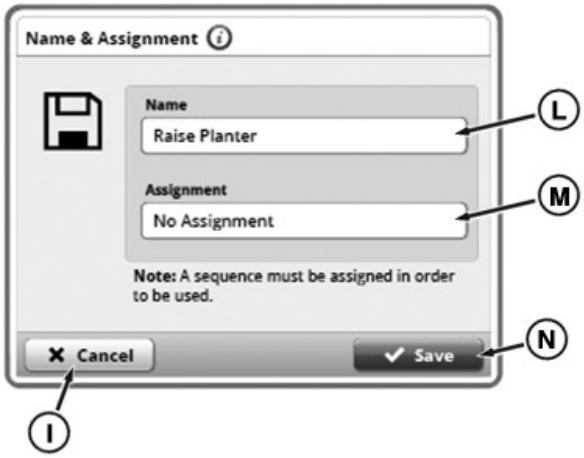
RXA0158050—UN—02MAR17

Edit Sequence Page

D—Sequence Step List
E—Add Step Button
F—Step Function Button
G—Step Action Button
H—Step Distance Box
I—Cancel Button
J—Next Button
K—Scroll Bar

NOTE: To exit editing process without saving changes, select Cancel button (I).

6. To edit the step, press buttons for Add Step (E), Step Function (F), or Step Action (G) or select the Step Distance input box (H).
7. Select Next button (J).
8. If needed, edit sequence name (L) or sequence assignment (M).



RXA0158051—UN—02MAR17

Name & Assignment Page

I—Cancel Button
L—Sequence Name Box
M—Sequence Assignment Box
N—Save Button

9. Select Save button.

OULXA64,0005CFC-19-07APR21

Sequence Sets Page

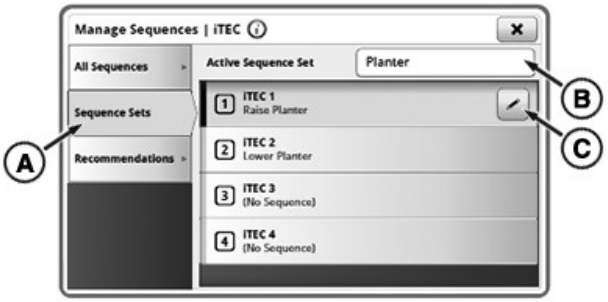
From iTEC™ main page, use following steps:

1. Select **Manage Sequences** button.

RXA0129723—UN—06MAR13

Manage Sequences Button

2. Select Sequence Sets tab (A).



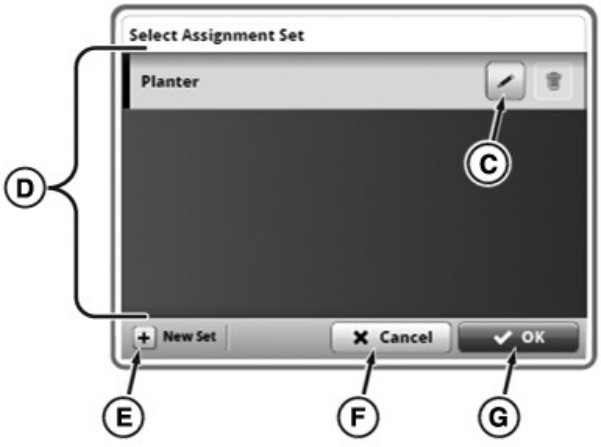
RXA0158311—UN—15MAR17

A—Sequence Sets Tab
B—Active Sequence Set Input Box
C—Edit Button

3. If needed, select Active Sequence Set (B) and follow steps 4—6. If not, go to step 7.

NOTE: To exit page without saving changes, select Cancel (F) or Close (I) button.

4. Select sequence set from Sequence Set list (D).
5. If necessary, select the Edit (C) or New Sequence Set (E) buttons.

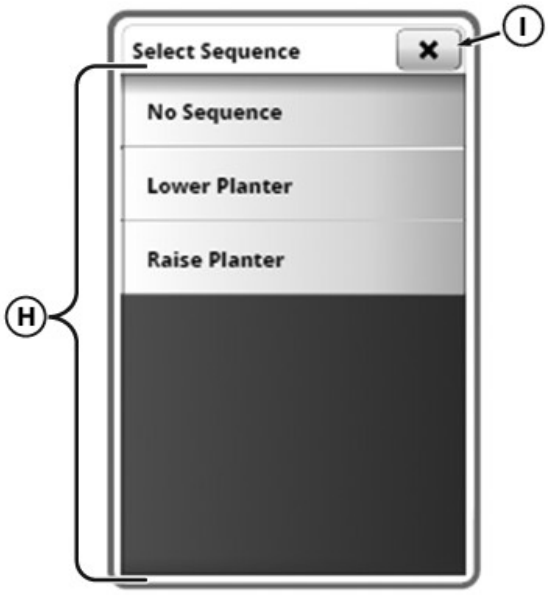


RXA0158312—UN—15MAR17

Active Sequence Set Page

D—Sequence Set List
E—New Sequence Set Button
F—Cancel Button
G—OK Button

6. Press OK button (G).
7. Select the desired iTEC™ button to assign the sequence set.
8. Select Edit button (C).
9. Select sequence from list of sequences (H).



RXA0158313—UN—15MAR17

H—Sequence List
I—Close Button

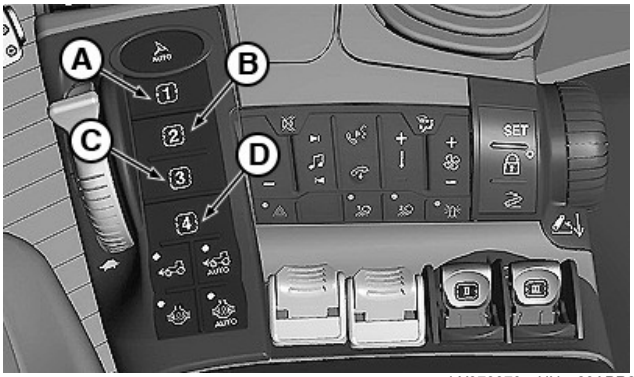
OULXA64,0005CFD-19-07APR21

Perform Sequence

The iTEC™ sequence execution requires certain tractor controls be operated in a particular way. The sequence is NOT executed if the tractor is in park position. Shift lever must be in forward position when executing set speeds, gears, or automatic gear shift. Tractor travel speed must be at least 0.5 km/h (0.31 mph).

Only with PTO switches in ON position.
If a PTO function is included in sequence, PTO must be engaged manually, using PTO switch, for initial engagement.

Before performing sequence using SCV functions, relevant SCV levers must be in neutral position.

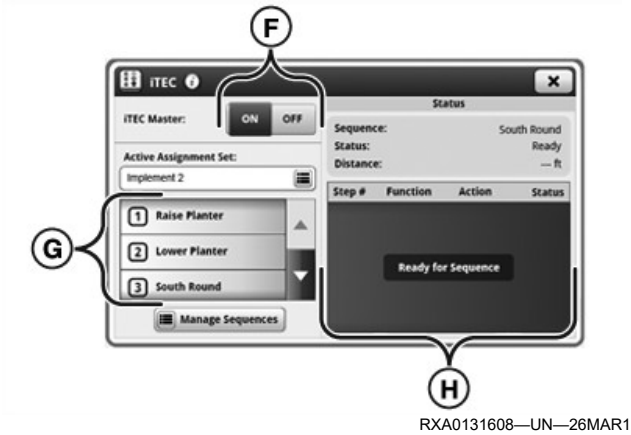


LX373070—UN—28APR21

A—iTEC™ Sequence Button 1
B—iTEC™ Sequence Button 2
C—iTEC™ Sequence Button 3[2]
D—iTEC™ Sequence Button 4[2]

LX372997—UN—14APR21

E—iTEC™ Indicator



RXA0131608—UN—26MAR13

iTEC™ Main Page

F—Master Toggle
G—Assignment List
H—Status Area

Abort current sequence at any time by again pressing same iTEC™ **Sequence** button (A—D) used for starting sequence. Currently active commanded functions are canceled (for example, hitch motion or SCV flow stops if previously initiated as part of sequence).

During sequence execution, a function can be manually controlled at any time without execution of sequence being interrupted. iTEC™ ignores manually controlled functions for the rest of sequence. Relevant alert icon for this function appears in Status area (H).

1. Turn iTEC™ Master Toggle (F) to ON position.
2. On CommandARM™, select the iTEC™ sequence button (A—D).
3. Sequence appears in Status area (H) and shows progression of steps.

OULXA64,6R,MW67,0005F64-19-19JAN22

Recommendations (AutoLearn)

When AutoLearn is ON, the system learns every action the machine completes in the background. When the same patterns, actions, or steps are recognized, AutoLearn creates a sequence. AutoLearn then recommends an assignment to an iTEC™ button.

Sequences can be deleted when no longer needed. When a sequence is deleted, all button assignments clear and sequence is no longer available for use.

From iTEC™ main page, use following steps:

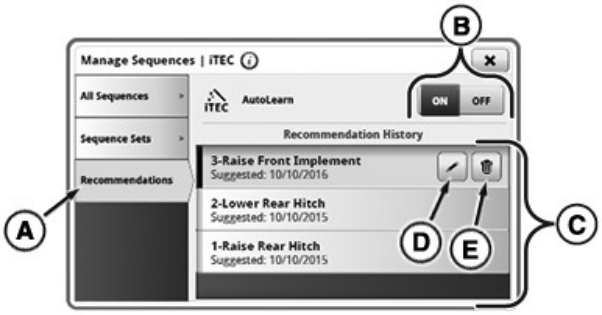
1. Select Manage Sequences button.

RXA0129723—UN—06MAR13

Manage Sequences Button

NOTE: AutoLearn is ON by default. To turn AutoLearn OFF, use AutoLearn ON/OFF toggle (B).

2. Select Recommendations (AutoLearn) tab (A).



RXA0158056—UN—02MAR17

Recommendations (AutoLearn) Page

A—Recommendations (AutoLearn) Tab
B—AutoLearn ON/OFF Toggle
C—Recommendation History
D—Edit Button
E—Trash Button

3. Review recommendation history (C).

[2] With CommandARM™ only

4. To edit or assign recommended sequence, select Edit button (D).
5. To remove sequence from list, select Trash button (E).

OULXA64,0005CFF-19-27MAR23

TIM and TIA™—Tractor-Implement Management (General)

TIM or TIA™: ISOBUS applications for the automation of functions and for the interaction between the tractor and the implement. Note: The speed control function only applies to tractors with AutoPowr™/IVT™ transmission. For TIM and TIA™—the descriptions in this Section must be observed.

TIM *(Tractor-Implement Management)*: Automation of the tractor based on the industrial policy of the AEF[1]. Compatible implements are listed in the AEF ISOBUS database, see www.aef-online.org.

TIA™ *(Tractor-Implement Automation)*: Is a John Deere-specific name for a device automation system and continues to be supported. ISOBUS-compatible implements that are compatible and approved by John Deere can request and control tractor functions.

CAUTION: The user is responsible for the safe use of the Tractor-Implement Management.

CAUTION: Although the phrases *transfer control* and *withdraw control* are commonly used with TIM or TIA™—at *NO time is the implement in total control* of an operation.

The operator can take control of the automated functions *AT ANY TIME*.

The operator is responsible for ensuring that the operation of the implement does not result in personal injury or property damage. Observe the Operator's Manual from the implement manufacturer for operating the implement.

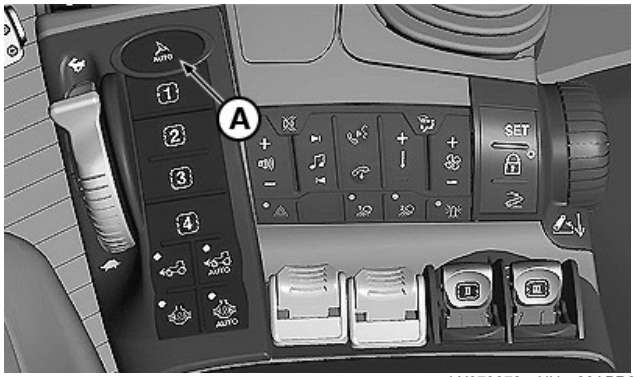
Do not use automated functions if they pose a danger to public transport or to people in the danger zone.

If you have any questions, contact a dealer authorized by John Deere.

OULXA64,0005C46-19-19MAR21

TIM/TIA™—Operator Controls

AutoTrac™ Resume Button (A)



LX373072—UN—28APR21

NOTE: The implement prescribes exactly how it is to be operated in TIM.

Follow implement Operator's Manual instructions to operate the implement.

OULXA64,6R,MW67,0005F65-19-25OCT21

TIM/TIA™—Activating the Implements

1. Before the authorized dealer can request the activation code from StellarSupport™, find and note the following data on the type plates:
   a. Full tractor serial number
   b. Brand of implement
   c. Model of implement
2. Send the noted data to the dealer.
3. Wait until the dealer provides the 24- or 26-digit activation code.
4. Use one of the following options to access the page for entering the code:

   Option I

   a. Access CommandCenter™ menu and select tab (A).

LX1057492—UN—05DEC14

CommandCenter™ Menu

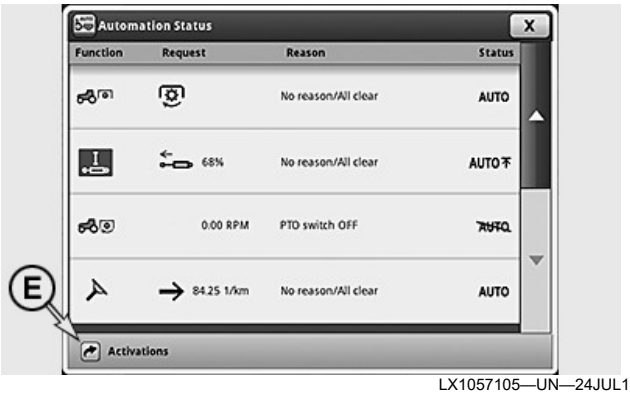
A—System Tab
B—Software Manager

[1] *Agricultural Industry Electronics Foundation*

b. Press button (B).

Option II

Select button (E) on the status page.



LX1057105—UN—24JUL13

TIM/TIA™ Status Page

5. Select tab (C).

LX1057104—UN—23JUL13

Page for Entering Code

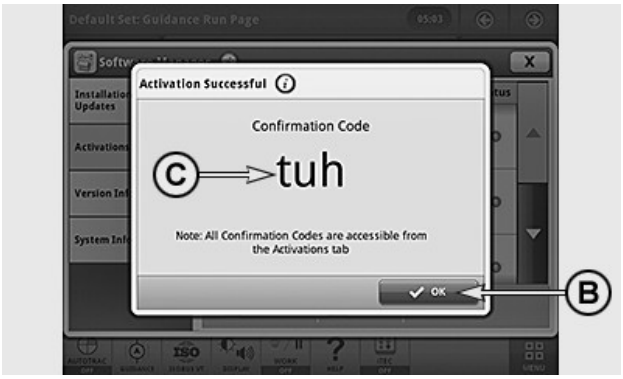
6. Select Enter Code button (D).
7. Select input box (F) and use the keyboard to enter the activation code.

LX1057106—UN—23JUL13

NOTE: When activating the Tractor-Implement Automation, some keyboard characters on the keyboard are grayed out and are not used in activation codes. If the received activation code includes any characters that are grayed out on the Tractor-Implement Automation Activation page keyboard, request that the dealer reconfirm the activation code.

8. Confirm entry with button (G).
9. If the activation code has been keyed in correctly, a page appears with the functions that are enabled for the currently activated implement.

LX1057108—UN—23JUL13



LX1057109—UN—23JUL13

A—Confirm Code
B—Complete Procedure
C—Confirmation Code

10. Confirm code with button (A).
11. The confirmation code appears, indicating that the code has been accepted.

NOTE: If any response codes not covered in the table are received after entering an Activation Code, double check the code, retry entering it, and if that does not work, contact the dealer.

12. Press button (B) to close the procedure.
13. If the activation code is wrong, an error code appears. See also the table of frequently-encountered error codes and text descriptions.

Error Codes, Text Descriptions, and Corrective Actions		
Frequently-encountered error codes	Text displayed	Corrective action
0	Code Accepted	Not needed
5	Implement Already Activated	N/R (not required), implement should work as expected
6 and 11	Space Unavailable for Activation	Contact your dealer for assistance
17	Demonstration Activation Replaced With Permanent Activation	Not needed

*NOTE: An **unknown implement no.** is displayed on the TIM/TIA™ status page in the component list until the implement is connected to the tractor for the first time.*

OULXA64,0005C48-19-04MAY23

TIM/TIA™—Requirements for Rear Hitch

Before transferring control to the implement, perform all necessary steps to prepare the implement as indicated in the Operator's Manual of the implement.

While operating, implement has ability to control hitch depth.

NOTE: Operator sets raise limit using tractor CommandCenter™. This limit cannot be exceeded by implement.

The following preconditions have to be met before transferring implement control:

- Operator is sitting on seat.
- No faults present at the hitch.
- Hitch is not locked.
- Do not touch any hitch control buttons.
- Tractor travel speed > 0.5 km/h (0.3 mph).

Transfer control using the AutoTrac™ resume switch (see Operator's Manual of the implement).

NOTE: In TIA mode, on a tractor that is standing still, only the implements authorized by John Deere can control the hitch depth.

To withdraw control:

- Press hitch control button.
- Lock hitch (transport lock).
- Actuate fender switch (if equipped).

OULXA64,0005C49-19-04MAY23

TIM/TIA™—Requirements for PTO

Before transferring control to the implement, perform all necessary steps to prepare the implement as indicated in the Operator's Manual of the implement.

While operating, implement has ability to engage/disengage PTO and change PTO speed.

The following preconditions have to be met before transferring implement control:

- Operator is sitting on seat.
- No PTO system faults.
- PTO remote control off.
- The PTO is on (only in the case of PTO switches with detent position).
- Tractor travel speed > 0.5 km/h (0.3 mph).

Transfer control using the AutoTrac™ resume switch (see Operator's Manual of the implement).

NOTE: In TIA mode, on a tractor that is standing still, only the implements authorized by John Deere can turn on the PTO. However, all implements approved by John Deere can turn off the PTO.

To withdraw control, turn PTO switch off.

OULXA64,0005C4A-19-04MAY23

TIM/TIA™—Requirements for Electronic Selective Control Valves (SCV)

Before transferring control to the implement, perform all necessary steps to prepare the implement as indicated in the Operator's Manual of the implement.

While operating, implement has ability to:

- Control selective control valves (SCVs) as follows during operations:
  - Retract SCV
  - Extend SCV
  - SCV in neutral position
  - SCV in float position
- Change SCV flow rate up to operator set limit.

NOTE: Using tractor's CommandCenter™, operator sets SCV flow limit which cannot be exceeded by implement.

The following preconditions have to be met before transferring assigned control inputs:

- Operator is sitting on seat.
- SCVs are without faults.
- The SCV control levers are in neutral position.
- The SCVs are not locked (lock button for SCVs).

Transfer control using the AutoTrac™ resume switch (see Operator's Manual of the implement).

NOTE: In TIA mode, on a tractor that is standing still, only the implements authorized by John Deere can control the SCV flow. However, all implements approved by John Deere can stop the oil flow.

To withdraw control:

- Actuate corresponding SCV control lever.
- Lock SCV (lock button for SCVs).
- Actuate SCV fender remote control switch (if equipped).
- Remove inputs assigned to SCVs

OULXA64,0005C4B-19-04MAY23

TIM/TIA™—Requirements for Guidance

Before transferring control to the implement, perform all necessary steps to prepare the implement as indicated in the Operator's Manual of the implement.

While operating, implement has ability to automatically steer tractor.

The following preconditions have to be met before transferring implement control:

- Operator is sitting on seat.
- Steering system must be functional.
- AutoTrac™ is **OFF.**
- Steering wheel is not moving.
- Travel speed is below the maximum automated speed.
- Transmission is not in park position.

Transfer control using the AutoTrac™ resume switch (see Operator's Manual of the implement).

To withdraw control:

- Turn steering wheel left or right.
- Shift revers drive lever to park position.

OULXA64,0005C4C-19-04MAY23

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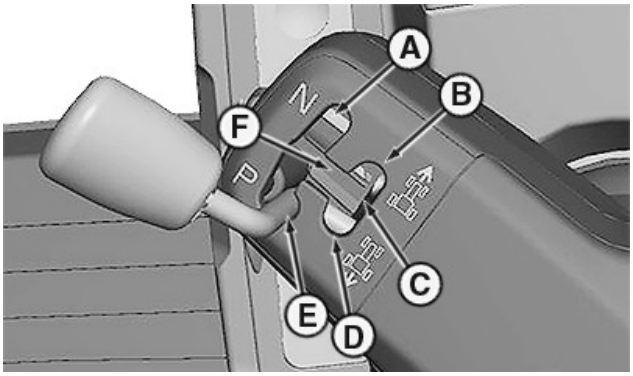
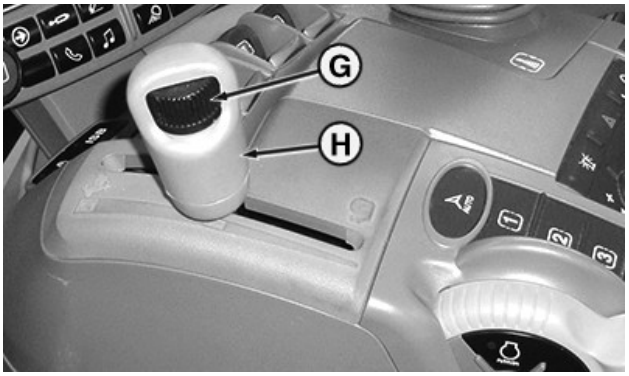
TIM/TIA™—Requirements for AutoPowr™/IVT™



LX373005—UN—09APR21

Reverse Drive Lever — AutoPowr™/IVT™

A—Neutral Position
B—Forward Position
C—PowerZero™ Position
D—Reverse Position
E—Corner Park Position
F—Center Park Position



LX267007—UN—06DEC16

Speed Control Lever — AutoPowr™/IVT™

G—Speed Wheel
H—Speed Control Lever

Before transferring control to the implement, perform all necessary steps to prepare the implement as indicated in the Operator's Manual of the implement.

While operating, implement has ability to:

- Accelerate the tractor up to the speed limit set by the operator.
- Stop the tractor.
- Start to drive the tractor again, with the approval of the operator.

NOTE: The maximum speed for each speed band is adjusted by the operator using the speed wheel (G) and speed control lever (H), and is dependent directly on engine speed.

In speed control pedal mode, maximum speed is also affected by the speed control pedal.

To drive faster than the safe creeper speed of about 0.6 – 2 km/h (0.37 – 1.24 mph) while in speed control pedal mode, the operator has to move the speed control pedal to the desired position. For more information, see also ***AutoPowr™/IVT™ – Speed Control Pedal Mode*** *in Section 50J.*

The implement ***cannot*** *command a maximum travel speed higher than the preset maximum speed.*

Approval to start driving the tractor again after stopping:

- Move the reverse drive lever from Forward Position (B) to Center Park Position (F), and then move the reverse drive lever back through PowerZero™ (C) to Forward Position (B).
- Actuate clutch pedal or brake pedal while the tractor rolls to a stop and hold the pedal while the tractor is stationary. Releasing the pedal causes the tractor to start moving.

NOTE: An example of when it would be necessary to give approval for tractor movement is after a round baler stops the tractor from ejecting a full bale.

The following preconditions have to be met before transferring implement control:

- Operator is sitting on seat.
- No faults present at the AutoPowr™.
- Reverse drive lever must be in Center Park (F), PowerZero™ Position (C), or Forward Position (B).

Transfer control using the AutoTrac™ resume switch (see Operator's Manual of the implement).

To withdraw control using the reverse drive lever:

- When driving: Move lever out of Forward Position (B).
- During stopping: Move lever to reverse position (D), neutral position (A) or corner park position (E).

To withdraw control using the speed control lever or the speed wheel:

- Increasing the speed if the implement commands stopping the tractor will end the travel speed Auto Mode.
- Increasing the speed **can** end the Auto Mode. The implement has all information to inform the operator that this intervention will end the travel speed Auto Mode (see implement Operator's Manual).

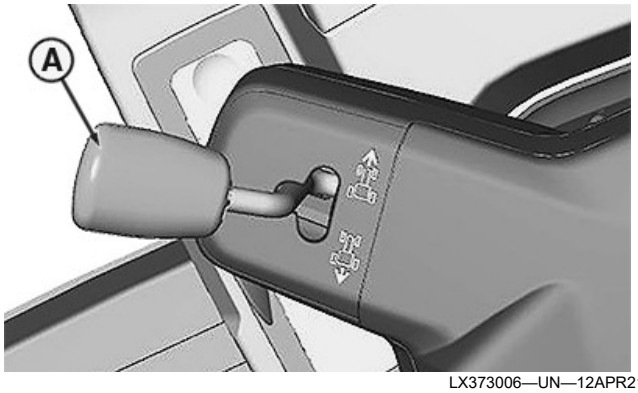
NOTE: Reducing the speed is always allowed.

It is allowed to increase the limit set by the operator within 2 seconds after starting the travel speed Auto Mode.

The current travel speed can be limited by other processes (e.g. iTEC). This limit will be observed, however, it will not be considered as an intervention by the operator.

OULXA64,0005C4D-19-27MAR23

TIM/TIA™—Requirements for AutoPowr™/IVT™ Transmission with CommandPRO™ Joystick



LX373006—UN—12APR21

Reverse Drive Lever — CommandPRO™ Joystick

A—Reverse Drive Lever in Neutral Position

LX373007—UN—09APR21

B—Travel speed Adjustment Wheel
C—CommandPRO™ Joystick (direction of travel and travel speed)

Before transferring control to the implement, perform all necessary steps to prepare the implement as indicated in the Operator's Manual of the implement.

While operating, implement has ability to:

- Accelerate the tractor up to the speed limit set by the operator.
- Stop the tractor.
- Start to drive the tractor again, with the approval of the operator.

NOTE: Maximum travel speed is regulated by the operator with speed wheel (B). While the automation is active, the implement can accelerate the vehicle up to the set maximum travel speed.

To grant permission for starting to drive, operate one of the following controls (while the tractor is not moving):

- Move the reverse drive lever (A) forward, to the position for forward travel, and release it.
- CommandPRO™ joystick (C):
  - With the activation button pressed, move the joystick forward to set it to forward travel, and release it.
  - Move joystick to the front left for forward travel and release it.
- Briefly depress speed control pedal and release. Releasing the pedal causes the tractor to start moving.

NOTE: An example of when it would be necessary to give approval for tractor movement is after a round baler stops the tractor from ejecting a full bale.

The following preconditions have to be met before transferring implement control:

- Operator is sitting on seat.
- No faults present at the AutoPowr™.
- Transfer with reverse drive lever (A) or CommandPRO™ joystick (C).
  - Move the reverse drive lever forward, to the position for forward travel, and release it.
  - With the activation button pressed, move the joystick forward to set it to forward travel, and release it.

Transfer control using AutoTrac™ resume switch (see implement Operator's Manual).

To cancel the control function (stop Auto Mode), operate one of the following controls:

- Operate the Brake pedal.
- Reverse drive lever (A)
  - When driving:
    Move the lever to the reverse position.
  - During stopping:
    Move the lever to the reverse position.
- CommandPRO™ joystick (C):
  - Any movement of the joystick.
- Speed control pedal:
  - During driving:
    If the speed increases further, beyond the speed requested by the implement, the Auto Mode ends.

NOTE: Some implements inform the operator which actions will stop the Auto Mode for the travel speed (see Operator's Manual of the implement).

NOTE: Reducing the speed is always allowed.

It is allowed to increase the limit set by the operator within 2 seconds after starting the travel speed Auto Mode.

The current travel speed can be limited by other processes (e.g. iTEC™). This limit will be observed, however, it will not be considered as an intervention by the operator.

OULXA64,0005C4E-19-18JAN22

TIM/TIA™—Operating the Tractor-Implement Automation

1. Connect the TIM/TIA™-compatible implement(s) to the tractor using the ISOBUS connection.
2. Configure the TIM/TIA™-compatible implements for automated operation. See Operator's Manual of implement manufacturer.
3. Press **AutoTrac**™ resume button (A).

LX373072—UN—28APR21

NOTE: The implement prescribes exactly how it is to be operated in TIM/TIA™.

4. Follow implement Operator's Manual instructions to operate the implement.

OULXA64,0005F66-19-25OCT21

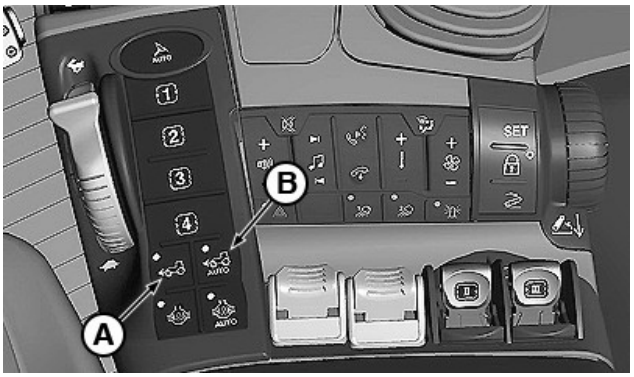
Drive Systems, Overview

- Front-Wheel Drive
- Differential Lock
- Brakes
- Transmission – General Information
- AutoPowr™/IVT™ Transmission
- AutoPowr™/IVT™ Transmission with CommandPRO™ Joystick

OULXA64,6R,MW67,0005F67-19-25OCT21

Front-Wheel Drive—Manual Engagement and Disengagement

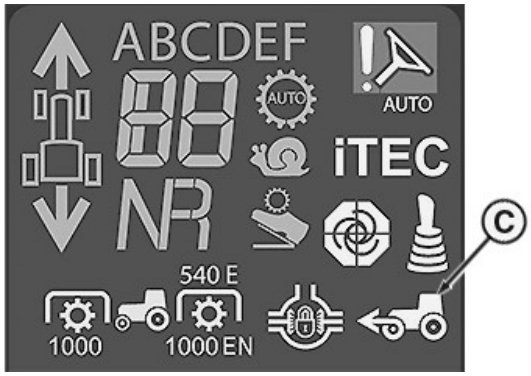
Switch on front-wheel drive with button (A).



LX373062—UN—28APR21

A—Manual Lock Button
B—Autolock Button

The front-wheel drive can be engaged and disengaged in all gears (forward and reverse), even on-the-go and under load. If the front-wheel drive is switched on manually, the indicators (A) and (C) light up.



LX373008—UN—09APR21

Front-Wheel Drive Indicator

C—Front-Wheel Drive Indicator

Information on engaging the front-wheel drive during braking:

- When braking, the front-wheel drive is always engaged when the brake pedals are locked together. For the duration of the automatic activation of the front-wheel drive, the indicator (C) will light up.
- After the braking process, the front-wheel drive returns to the last operating condition (remains ON or switches OFF).
- Disengage front-wheel drive for driving on public roads at speeds above 23 km/h (14.3 mph).

The dealer can activate or deactivate the Automatic Selection of Front-Wheel Drive at 5 km/h (3.1 mph) feature via diagnostic address CCU046.

Feature	
Checked	Front-wheel drive will be engaged only if braking starts at travel speeds above 5 km/h (3.1 mph).
Deactivated	Front-wheel drive is always engaged during braking.

OULXA64,6R,MW67,0005F68-19-25OCT21

Front-Wheel Drive—Automatic Engagement and Disengagement

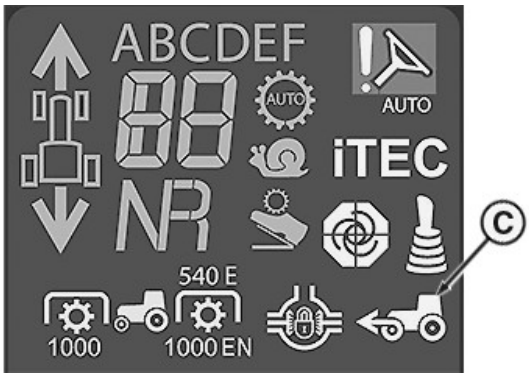
Automatically Enable Engagement/Disengagement of Front-Wheel Drive

Switch on automatic front-wheel drive mode with button (B).

LX373062—UN—28APR21

A—Manual Lock Button
B—Autolock Button

NOTE: Indicator on button (B) is illuminated as long as automatic mode is active. In the meantime, indicator (C) signals the current status of the front-wheel drive (ON or OFF).



LX373008—UN—09APR21

Front-Wheel Drive Indicator

C—Front-Wheel Drive Indicator

Driving situations in which front-wheel drive is automatically switched ON:

- Travel speed is below 19 km/h (11.8 mph) and the steering angle is less than custom shutoff angle[1].
- Steering angle is less than custom shutoff angle[1].

[1] *See custom shutoff angle (if equipped)*

Driving situations in which front-wheel drive is automatically switched OFF:

- Travel speed is greater than 23 km/h (14.3 mph).
- Pressing button (A) switches to manual mode.
- Pressing button (B) disables auto mode.
- Steering angle is greater than custom shutoff angle[2].

Front-Wheel Drive—Automatic Engaging/ Disengaging via Custom Shutoff Angle (If Equipped)

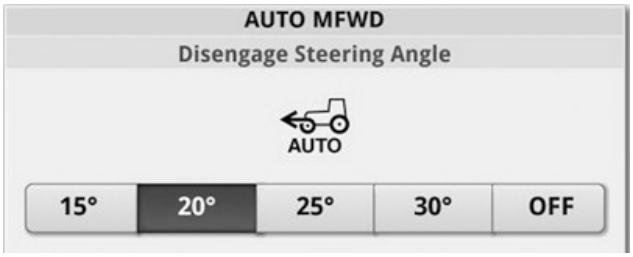
IMPORTANT: The maximum shutoff angle for automatic engaging/disengaging of the front-wheel drive depends on the following factors:

- **Type of tire**
- **Tread width**
- **Steering stop**

Due to tolerances in the set steering angle stop, it is possible that the set steering angle for disengaging the front-wheel drive is not reached on one or both steering sides. To ensure disengaging on both sides, the next smaller steering angle has to be selected.

To change the shutoff angle, see Front-Wheel Drive—Automatic Disengagement Depending on the Steering Angle (Optional) in this Section.

The following automatic custom shutoff angles are available:



LX514748—UN—17AUG21

OULXA64,6R,MW67,0005F69-19-13APR23

Front-Wheel Drive—Smart MFWD (Optional)

The smart MFWD automatically engages and disengages the front-wheel drive depending on the rear wheel slip. The smart MFWD reduces stress for the operator, fuel consumption, and wear.

OULXA64,6R,0005BFF-19-08APR21

Front-Wheel Drive—Automatic Disengagement Depending on the Steering Angle (Optional)

This function switches the front-wheel drive off automatically once a predefined steering angle is reached. This improves the steering capability of the tractor.

Activate and change settings:

1. Press transmission button.

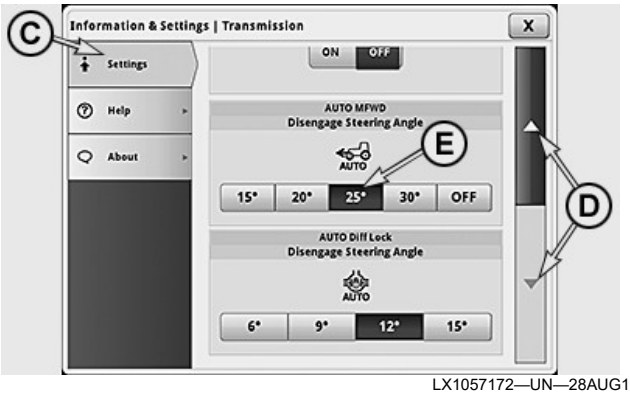
LX373139—UN—26MAY21

2. Press icon (B) for advanced settings.

LX1057170—UN—28AUG13

AutoPowr™ Illustrated

3. Press tab (C).



LX1057172—UN—28AUG13

4. Navigate to automatic shutoff with the arrow buttons (D).
5. Switch off or select the desired value (E) for the steering angle at which automatic shutoff is to occur.

   Changes take effect immediately.

[2] *See custom shutoff angle (if equipped)*

NOTE: The maximum possible shutoff angle depends on the tire type, tread width, steering stop, and can be less than the angle shown on the display.

IMPORTANT: As a result of tolerances in the set steering angle stop, it is possible that the set steering angle is not reached on one or both of the steering sides. To ensure that shutoff occurs on both sides, select the next smaller steering angle shown on the display.

OULXA64,6R,MW67,0005F6A-19-13APR23

Tractor Equipped with Front Suspension Option

IMPORTANT: If faults occur in the regulating system, the amber Service Alert indicator (B) on the display lights up and a message appears at the CommandCenter™. In this case, operation of the suspension system is impaired or the system does not operate at all. Drive slowly so as not to impair safety or damage components. See an authorized John Deere dealer immediately.

RXA0109847—UN—20AUG10

A—Red STOP Indicator
B—Amber Service Alert Indicator
C—Blue INFO Indicator

The level control of the axle works fully automatically as soon as the travel speed exceeds 1.5 km/h (0.9 mph).

The level control responds to load changes (such as attaching or removing a device, for example) as soon as the tractor starts moving.

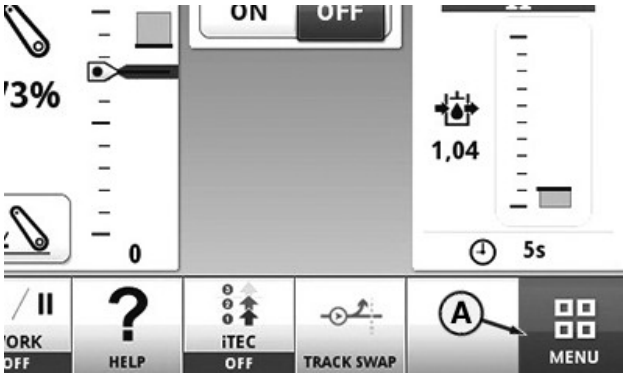
In the event of a fault in the control system, an amber Service alert (B) or a red STOP indicator (A) light up and a corresponding message is displayed on the information display. Observe the error message and eliminate the cause.

If the amber Service Alert indicator (B) lights up, the tractor is still able to drive.

NOTE: Drive carefully at higher travel speeds.

If the red STOP indicator (A) lights up, stop immediately and switch off the engine. Observe the error message on the information display and eliminate the cause.

1. Press Menu button (A) to access the CommandCenter™ menu.



LX266827—UN—20JUN16

Menu Button

2. Select suspension systems (B).

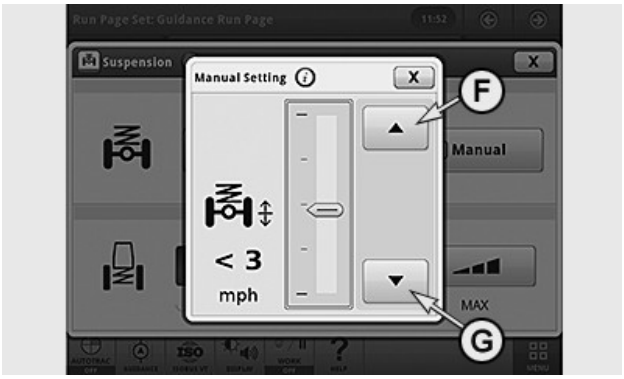
LX1057490—UN—05DEC14

3. Select one of operating modes: AUTO (C), MAX (D), or MANUAL (E).

LX1057085—UN—17JUL13

NOTE: The active mode is displayed on a dark background.

4. In manual mode, the front of the tractor can be raised with button (F) and lowered with button (G).



LX1057086—UN—17JUL13

Operating Modes		
AUTO (C)	**MAX (D)**	**MANUAL (E)**
The suspension responds automatically to conditions.	Suspension is set to maximum hardness (e.g. for operation with front loader).	The Manual Settings page is accessed and the axle settles in its mid-position.
Travel speed, surface characteristics, tractor load, and heavy implements at the rear are all taken into account.	Level control of the axle is active at a travel speed of 0.5 km/h (0.3 mph) and above. Additionally there is a delay when moving from standstill: Control is not activated until the tractor has traveled a distance of 5 m (16 ft).	The tractor front part can be raised or lowered manually by pressing buttons (F) or (G) (e.g. to attach implements). The bar graph shows the current position. Close the page to exit.
	When the speed exceeds 35 km/h (22 mph), the hardness of the suspension is reduced below MAX to provide more comfort.	The manual setting is overridden as soon as travel speed exceeds 5 km/h (3 mph). The system returns to its previous setting (**AUTO** or **MAX**).
	When speed drops below 25 km/h (15 mph), the MAX setting is reactivated.	

OULXA64,6R,0005C01-19-27MAR23

Differential Lock

Differential Lock—Manual Engaging/ Disengaging

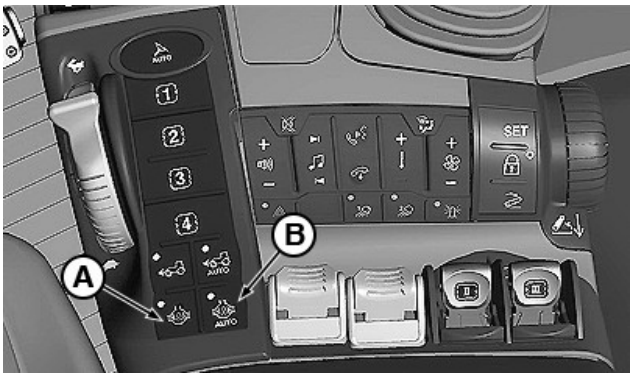
IMPORTANT: Do not attempt to turn with differential lock engaged!

Do not switch on the differential lock in the event of very large speed differences or while turning.

The differential lock levels out any speed differences between wheels on the same axle. Differential lock latches the wheels together to provide the best traction possible for slippery field conditions.

To engage differential lock:

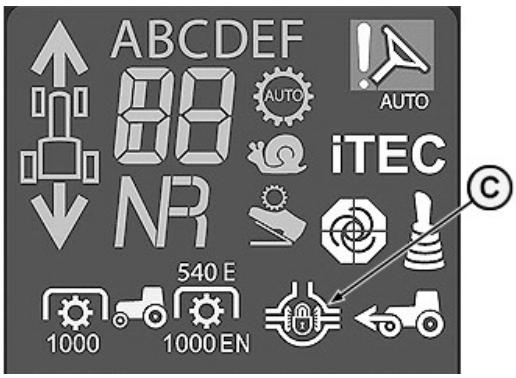
- Press button (A).



LX373064—UN—28APR21

A—Manual Lock Button
B—Autolock Button

NOTE: If the differential lock is switched on manually, indicator lights (A) and (C) will light up.



LX373081—UN—17AUG21

C—Differential Lock Indicator

To disengage differential lock:

- Press button (A) again.
- Press one or both brake pedals.

To re-engage the differential lock operator must press button again.

OULXA64,6R,MW67,0005F6B-19-25OCT21

Differential Lock—Automatic Engaging/ Disengaging

IMPORTANT: Do not attempt to turn with differential lock engaged!

Do not switch on the differential lock in the event of very large speed differences or while turning.

NOTE: Automatic engaging/disengaging of the differential lock is only available on tractors with front-wheel drive axles.

The differential lock levels out any speed differences between wheels on the same axle. In case of unequal slippage, the traction can be improved.

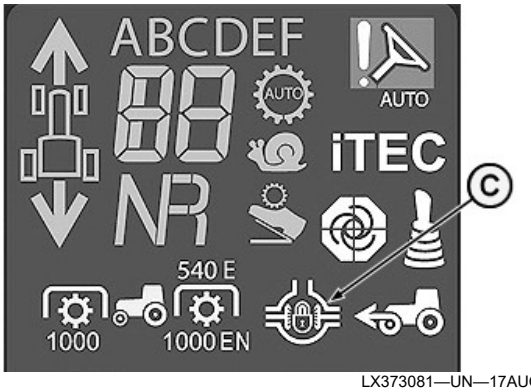
Differential Lock—Automatic Engaging/ Disengaging

Press button (B).

LX373064—UN—28APR21

A—Manual Lock Button
B—Autolock Button

NOTE: Indicator light (B) is illuminated as long as the differential lock is in auto mode. In the meantime, indicator (C) signals the current status of the differential lock (ON or OFF).



LX373081—UN—17AUG21

C—Differential Lock Indicator

Driving situations in which differential lock is automatically switched ON:

- Travel speed is less than 19 km/h (11.8 mph), the

steering angle is less than custom shutoff angle[1] and neither brake pedal is applied.

Driving situations in which differential lock is automatically switched OFF:

- Travel speed is greater than 23 km/h (14.3 mph)
- One or both brake pedals are pressed.
- Pressing button (A) switches to manual mode.
- Steering angle is greater than custom shutoff angle[1].

OULXA64,6R,MW67,0005F6C-19-25OCT21

Differential Lock—Automatic Engaging/ Disengaging via Custom Shutoff Angle (If Equipped)

This function switches the differential lock drive off automatically once a predefined steering angle is reached.

Activate and change settings:

1. Press transmission button.

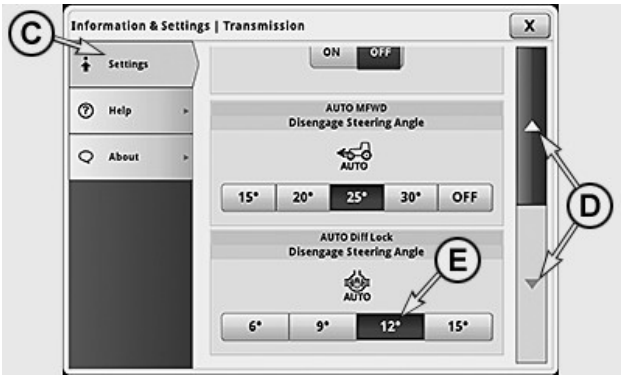
LX373139—UN—26MAY21

2. Press button (B) for advanced settings.

LX1057170—UN—28AUG13

AutoPowr™ Illustrated

3. Press tab (C).



LX1057171—UN—28AUG13

4. Navigate to automatic shutoff with the arrow buttons (D).
5. Switch the automatic shutoff on or off.
6. Select the desired value (E) for the steering angle at which there should be an automatic shutoff.

NOTE: The maximum possible shutoff angle depends on the tire type, tread width, and steering stop, and can be less than the angle shown on the display.

7. The settings are saved when leaving the transmission page.

OULXA64,6R,MW67,0005F6D-19-25OCT21

[1] *See custom shutoff angle (if equipped)*

Hydraulic Service Brakes

LX373014—UN—15APR21

IMPORTANT: Brake system warning light (D) lights up or flashes when one of the following situations occurs:

(D) - Lights up red until the trailer air brake has reached operating pressure.

- **Do not drive the vehicle until operating pressure has been reached.**

(D) - Lights up red whenever a serious fault occurs in the brake system. Note the following:

- **Bring the vehicle to a standstill immediately.**
- **Park the vehicle on level ground and take precautions to prevent it from rolling away by applying chock blocks.**
- **Follow commands on CommandCenter™.**
- **If possible, resolve cause, otherwise contact dealer.**

(D) - Flashes red when park lock cannot be engaged. Note the following:

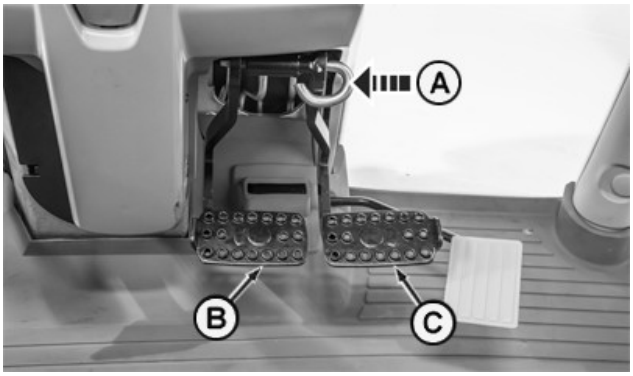
- **Park the vehicle on level ground and take precautions to prevent it from rolling away by applying chock blocks.**
- **Follow commands on CommandCenter™.**
- **If possible, resolve cause, otherwise contact dealer.**

(D) - Lights up yellow whenever a fault occurs in the brake system. Note the following:

- **Park the vehicle on level ground and take precautions to prevent it from rolling away by applying chock blocks.**
- **Follow commands on CommandCenter™.**
- **If possible, resolve cause, otherwise contact dealer.**

The tractor's service brake is hydraulically boosted and delivers high braking force for relatively low pressure on the brake pedals. To actuate, press both brake pedals using whatever force is required. If required, the service brake can be applied independently from the right and left tractor side (single wheel brake). Depending on operating conditions, certain special conditions affect usage.

Driving on Roads



LX373204—UN—16JUN21

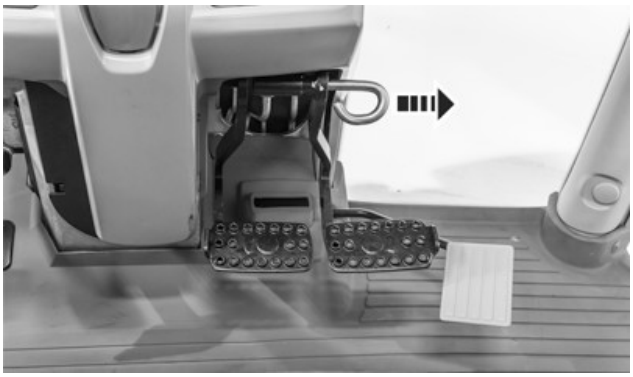
Driving on Public Roads - Brake Pedals Locked Together

A—Brake Pedal Latching Pin
B—Left Brake Pedal
C—Right Brake Pedal

When driving on public roads and other hardened roads, always keep the two pedals coupled together. As a general rule, do not uncouple the brake pedals unless circumstances dictate otherwise. If only one of the two pedals is depressed accidentally, there is a danger of the vehicle skidding. With brake pedals not coupled together, vehicle speed is restricted electronically.

NOTE: If the brake pedals are not locked together, the maximum permissible top speed is reduced to 40 km/h (25 mph).

Field Operation



LX373205—UN—16JUN21

Field Operation - Brake Pedals Uncoupled

When operating in the field, the pedals may be uncoupled if necessary:

- Uncouple the brake pedals: Turn the locking bolt upwards for 1/4 turn, pull it out and then turn it downwards.
- Lock the brake pedals: Turn the locking bolt upwards for 1/4 turn, press it in and then turn it downwards.

This allows steering corrections to be made by depressing one of the pedals:

- Press left brake pedal ► tractor moves to the left
- Press right brake pedal ► tractor moves to the right

The single-wheel brake can be used as a steering aid when driving tight bends. This is only permissible when driving very slowly.

IMPORTANT: On tractors with AutoPowr™/IVT™ transmission, pay attention to the special features when using individual brake pedals.

- **See AutoPowr™/IVT™—Use Individual Brake Pedals in Section 50J.**
- **See CommandPRO™ Joystick—Use Individual Brake Pedals in Section 50K.**

IMPORTANT: After field use, make sure to lock the brake pedals together again.

CAUTION: When the engine is running, make sure that the pedals cannot be pushed all the way, even when maximum force is applied. If the brake pedals reach the stop during braking, contact an authorized John Deere dealer immediately.

NOTE: When braking with both pedals simultaneously, front-wheel drive engages automatically to produce an additional braking effect on the front wheels. In this case the front-wheel drive indicator comes on.

On tractors with AutoClutch function: the clutch automatically separates when the brakes are actuated and engages when the brakes are released. AutoClutch is deactivated if the single-wheel brake is actuated and the motor speed simultaneously is higher than approx. 900 rpm. This means: When one brake pedal is depressed for steering, the clutch is not activated as long as the engine speed is above 900 rpm.

OULXA64,0005D39-19-27JUL23

Secondary Brake System

CAUTION: The secondary brake system cannot and must NOT be used as a park brake.

When braking with the secondary brake system, the following trailer brakes are activated:

- **Air trailer brake[1]**
- **Dual-line hydraulic trailer brake[1]**

The braking effect of the trailer brakes may be weaker than when actuated by the service brake.

LX1049730—UN—20APR10

In the event of service brake failure, the secondary brake system can be used to brake the tractor. Pull lever (A) upward to obtain a braking effect.

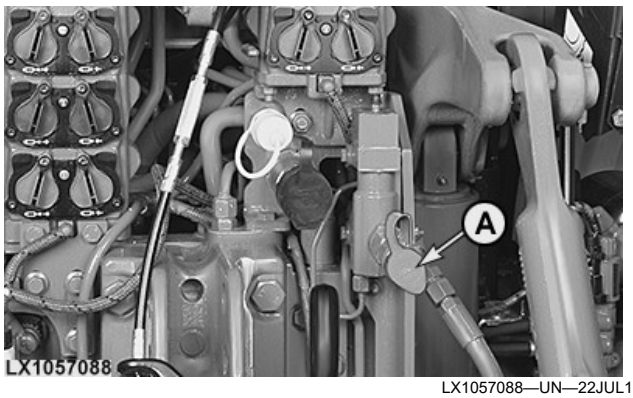
CAUTION: The park lock needs to be engaged to park the tractor. The following trailer brakes are activated:

- **Air trailer brake[1]**
- **Dual-line hydraulic trailer brake[1]**

OULXA64,6R,0005BEA-19-24SEP21

Single-Line Hydraulic Trailer Brake (If Equipped)

CAUTION: Never exceed a speed of 25 km/h (15 mph) when traveling with hydraulically braked trailers.



LX1057088—UN—22JUL13

1. Pull dust cover off coupler (A).
2. Make sure the connections are absolutely clean.
3. Connect hydraulic hose.
4. After uncoupling, seal coupler (A) with a dust cap.

The trailer brake is actuated by the service brake. The

[1] *If equipped*

braking effect depends on the force with which the brake pedal is pressed.

IMPORTANT: To prevent undue wear on the brakes, observe the following:

- **Make sure that the hydraulic hose is connected.**
- **When driving downhill, select the same gear used for driving uphill.**
- **Make sure that the hydraulic trailer brake has been checked and is operating properly.**
- **Before uncoupling and when parking the tractor, always engage the park lock.**
- **The single-line hydraulic trailer brake is *NOT* activated when the park lock is engaged.**

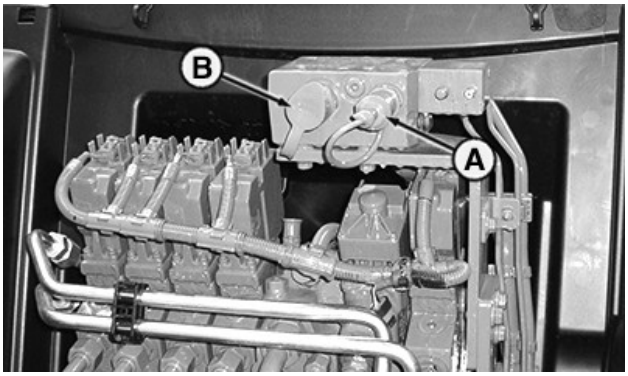
IMPORTANT: Operate the trailer in accordance with the manufacturer's instructions. This is particularly important when operating the park brake of the trailer.

OULXA64,6R,0005BF0-19-18MAR21

Dual-Line Hydraulic Trailer Brake* (If Equipped)

***with autodetect**

IMPORTANT: Do not connect trailer with CUNA brake system to single-line trailer brake.



LX315017—UN—10OCT17

A—Pressure Line for Dual-Line or Single-Line Trailer Brake
B—Pilot Oil for Dual-Line Trailer Brake

Trailers with dual-line or single-line trailer brakes[a] can be attached to the hydraulic trailer brake.

[a]*Not for trailer with CUNA brake system*

The switching between dual-line and single-line brake operation takes place automatically.

Press down on service brake to operate hydraulic trailer brake.

The braking effect depends on the force with which the brake pedal is pressed.

When braking with the secondary brake system, the braking effect of the trailer brake may be less than when pressing the service brake.

Connect Trailer

1. Remove caps from the connections.
2. Make sure the connections are absolutely clean.
3. Connect hydraulic hoses as follows, depending on the trailer type:

Trailer type with:	Hydraulic connection		Maximum travel speed
- Dual-line trailer brake	A	B	Without restriction
- Single-line trailer brake[a]	A	—	25 km/h (16 mph)

[a]*Not for trailer with CUNA brake system*

Seal the connections with the protector caps whenever the hoses are disconnected.

IMPORTANT: To prevent undue wear on the brakes, observe the following:

- **Make sure that hydraulic hoses are connected.**
- **When driving downhill, select the same gear used for driving uphill.**
- **Make sure that the hydraulic trailer brake has been checked and is operating properly.**
- **Before uncoupling and when parking the tractor, always engage the park lock to make the connection lines pressure-free.**
- **Engaging the park lock activates the spring-loaded accumulators of the trailer (dual-line hydraulic trailer brake).**

IMPORTANT: Operate the trailer in accordance with manufacturer's instructions. This is particularly important when operating the park brake of the trailer.

OULXA64,6R,0005BF1-19-11JUN21

Air Trailer Brake (If Equipped)

CAUTION: When driving the tractor, keep within the legal speed limit.

LX373014—UN—15APR21

IMPORTANT: Warning light (D) of the brake system will light up or FLASH if one of the following situations occurs:

(D) - Lights up red until the air pressure of the pneumatic trailer brake has reached operating pressure.

- **Do not drive the vehicle until operating pressure has been reached.**

(D) - Lights up red as soon as a serious fault occurs in the brake system. Note the following:

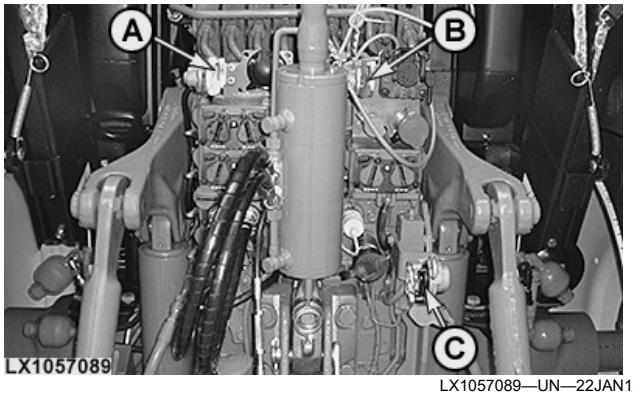
- **Bring the vehicle to a standstill immediately.**
- **Park the vehicle on level ground and take precautions to prevent it from rolling away by applying chock blocks.**
- **Follow the instructions on the display.**
- **If possible, rectify the cause. Otherwise, contact an authorized dealer.**

(D) - Lights up red when park lock cannot be engaged. Note the following:

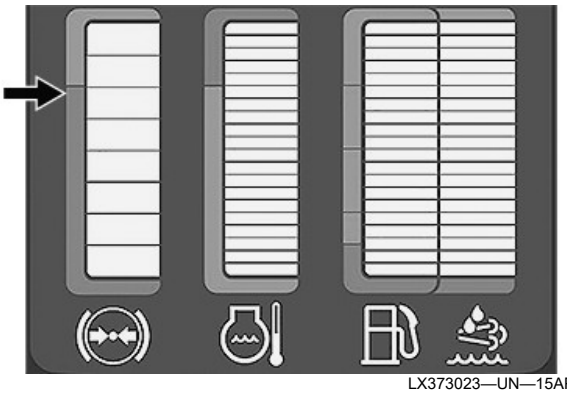
- **Park the vehicle on level ground and take precautions to prevent it from rolling away by applying chock blocks.**
- **Follow the instructions on the display.**
- **If possible, rectify the cause. Otherwise, contact an authorized dealer.**

(D) - Lights up yellow as soon as a fault occurs in the brake system. Note the following:

- **Park the vehicle on level ground and take precautions to prevent it from rolling away by applying chock blocks.**
- **Follow the instructions on the display.**
- **If possible, rectify the cause. Otherwise, contact an authorized dealer.**



LX1057089—UN—22JAN14



LX373023—UN—15APR21

Air Pressure Gauge

A—Yellow Connection (dual-line brake)
B—Red Connection (dual-line brake, supply)
C—Black Connection (single-line brake, if equipped)

IMPORTANT: Only start driving with a trailer once the pressure gauge has reached approx. 800 kPa (8 bar) (116 psi)!

Avoid unnecessary wear on brakes:

- Make sure pressure hoses are connected.
- When driving downhill, use the same gear as when driving uphill on the same route.
- Make sure that the trailer brake has been checked and is operating flawlessly.

Trailers with dual-line brakes be connected at connections (A) and (B).

Trailers with single-line brake be connected at connection (C).

Make sure that the connections are clean before joining the compressed air hoses. Seal the connections with the dust protector caps whenever the hoses are disconnected.

IMPORTANT: When operating with a trailer:

1. **Remember to set the manually-operated brake valve on the trailer's air brake system (if equipped) in accordance with the weight of the trailer's load!**

2. **Check the compressed-air tank daily for condensed water (see Section 220D). If condensed water is detected, replace the air dryer cartridge.**
3. **When parking the tractor, always engage the park lock.**

NOTE: Engaging the park lock also activates the service brake of the trailer.

If there is a pressure decrease in the compressed air brake system, the braking effect of the trailer is reduced. When operating a trailer, the Operator's Manual of the respective manufacturer has to be observed.

OULXA64,6R,0005BF2-19-15MAY23

Trailer Brake Test

CAUTION: Danger of accidents! Keep area of potential danger clear of bystanders and objects.

When parking a tractor with a trailer on a slope, make sure that it remains stationary. Use chock blocks as appropriate.

If weather conditions change (e.g. rain, snow, or ice), move the vehicle and trailer to a level area capable of bearing their weight.

IMPORTANT: Perform the trailer brake test only for trailers with the following types of trailer brakes:

- **Air trailer brake**
- **Dual-line hydraulic trailer brake**

1. Bring tractor and trailer to a standstill on a slope, apply the brakes, and engage park lock.

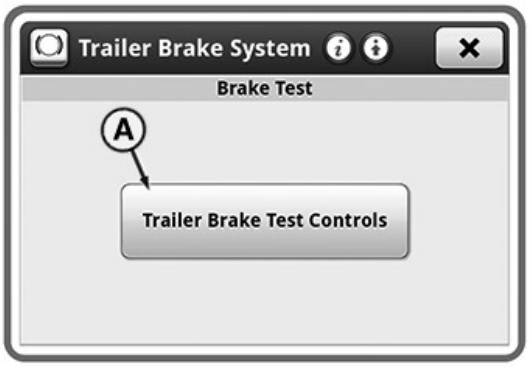
NOTE: In extremely cold temperatures, it may take up to 20 seconds for park to engage.

2. Run the engine.
3. Do not apply brakes.
4. Access the CommandCenter™ menu.

LX266918—UN—20JUL16

Menus button → Trailer brake system →

5. Select button for trailer brake system.
6. Select button (A) and follow the instructions on the CommandCenter™.



LX266919—UN—20JUL16

7. Press button (B) for at least 5 seconds. The trailer brake is released and a test is performed to make sure that the tractor remains stationary.

LX266920—UN—20JUL16

IMPORTANT: The tractor must not move.

If the tractor moves, press the brake pedals immediately and release button (B).

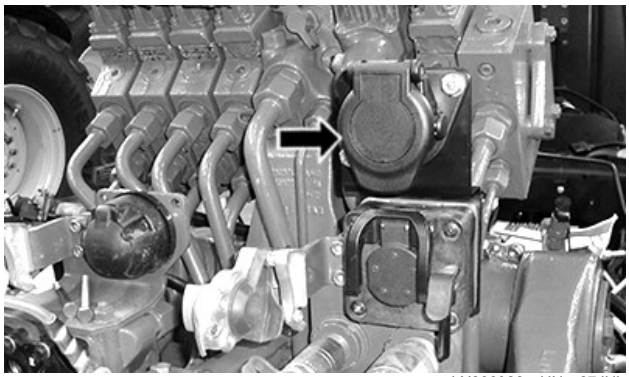
The tractor and trailer have failed the test to make sure that they remain stationary.

Find somewhere else to park the tractor and trailer safely.

OULXA64,6R,0005BF3-19-14APR21

Trailer Brake System Socket

This socket provides power to the trailer and allows data to be exchanged between the tractor and a trailer braking system. Various functions are monitored depending on the brake system, and additional functionalities may be available when using trailers with electronic braking system. Before operating, read the trailer manufacturer's operating instructions and observe all safety instructions. Check with your authorized dealer whether the functions are supported by your tractor.



LX266922—UN—27JUL16

CAUTION: Do not operate the tractor when a warning message is displayed. Follow the instructions given and if in doubt contact your authorized dealer.

NOTE: When connecting the trailer cable to the socket, the trailer's electronic braking system performs a self-diagnosis (if equipped). Under certain circumstances, the tractor acknowledges this with a message (CCU 516942.12, brake warning light lights up with a warning signal). Contact your authorized dealer if this message does not disappear after a short time.

OULXA64,6R,0005BF4-19-18APR23

Park the Tractor with AutoPowr™/IVT™

IMPORTANT: Engage park lock only when the tractor is stationary.

IMPORTANT: When engaging the park lock, the following trailer brakes are activated:

- **Air Trailer Brake (If Equipped)**
- **Dual-Line Hydraulic Trailer Brake (If Equipped)**

Engage park lock when parked or when operating the tractor in stationary position.

LX372924—UN—27OCT20

Park Lock Engaged on AutoPowr™/IVT™

NOTE: In extremely cold temperatures, it may take up to 20 seconds for park to engage.

When engaging park lock on slopes, remember to actuate the service brake as well.

OULXA64,SP,EU,00057B2-19-26OCT20

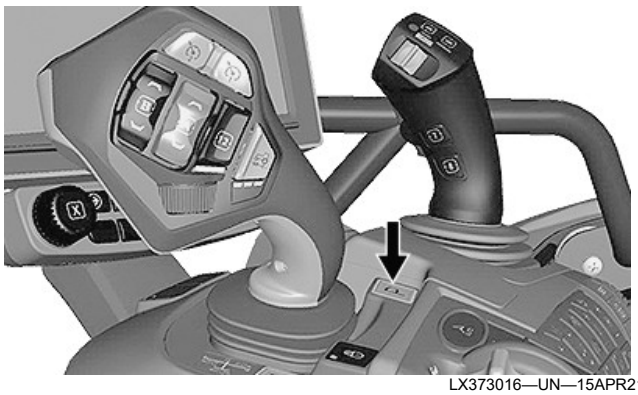
Parking the Tractor with AutoPowr™ and CommandPRO™ Joystick

IMPORTANT: Engage park lock only when the tractor is stationary.

IMPORTANT: When engaging the park lock, the following trailer brakes are activated:

- **Air trailer brake (if equipped)**
- **Dual-line hydraulic trailer brake (if equipped)**

Engage park lock when parked or when operating the tractor in stationary position.



LX373016—UN—15APR21

NOTE: In extremely cold temperatures, it may take up to 20 seconds for park to engage.

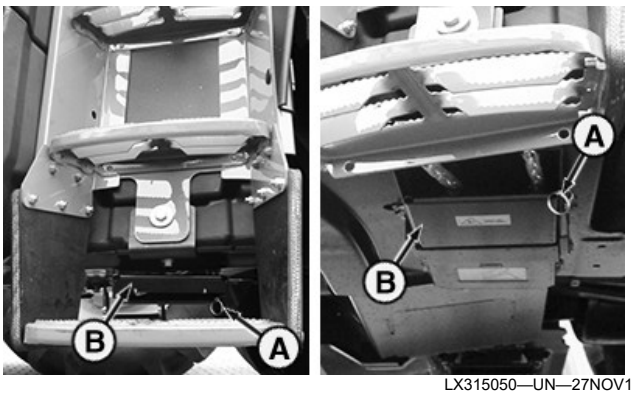
When engaging park lock on slopes, remember to actuate the brake pedals as well.

OULXA64,6R,0005BF5-19-14APR21

Chock Block

When parking the tractor on sloping ground, proceed as follows:

1. Release lock (A).



LX315050—UN—27NOV17

Left Access Step Shown

2. Remove chock block (B) from bracket.
3. Place chock block as shown in front of or behind the rear wheel.

LX315051—UN—27NOV17

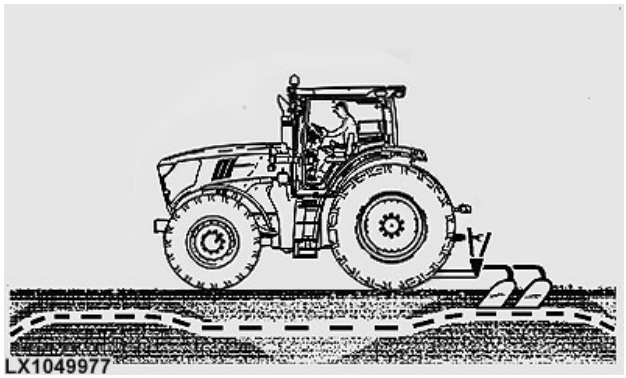
NOTE: When the chock block is not in use, place it in the bracket as shown and fasten the lock (A).

OULXA64,6R,MW67,0005F6E-19-25OCT21

Reduce Fuel Consumption

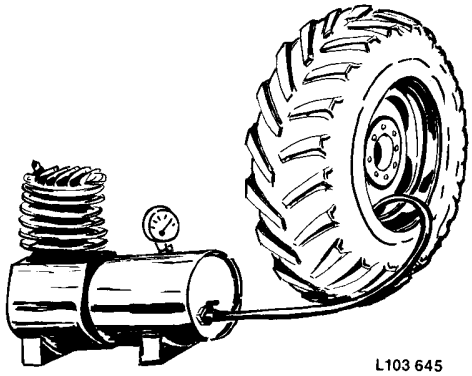
Service Tractor Properly

- Replace air cleaner element, fuel, engine oil, and transmission and hydraulic oil filters on time. See Section 210A to 210C.
- Use only John Deere filters.
- Use only the recommended oils and lubricants. See Section 200 to 200E.
- Have the fuel system checked regularly by an authorized dealer.
- Have the hitch control checked regularly by an authorized dealer.



LX1049977—UN—18MAY11

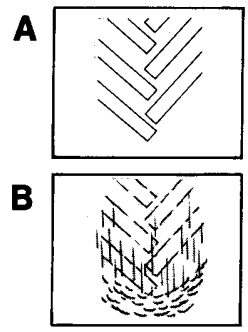
Drive with Correct Tire Pressure



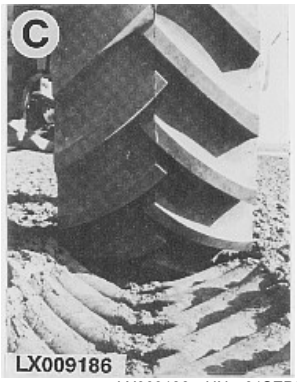
L103645—UN—15AUG94

Adjust tire pressure to the workload (refer to authorized dealers or tire manufacturer).

Choose Correct Ballast



LX009185—UN—01SEP94



LX009186—UN—01SEP94

A—Too Much Ballast
B—Too Little Ballast
C—Correct Ballast

Select ballast so that there is 10-15 % slippage. Reduce ballast if the workload is light.

Select Correct Gear

LX373017—UN—15APR21

Engine Speed

Always drive in highest possible gear with reduced engine speed.

Select the gear so that the speed (A) of the unloaded engine is reduced by 150-250 rpm during operation.

NOTE: Reduce the speed to less than 2000 rpm for light workloads. Select the gear so that the speed is reduced by 200-300 rpm.

OULXA64,6R,0005D3A-19-30AUG23

Notes on Changing to a Different Size of Tire

IMPORTANT: Before changing to a different size of tire, see the notes in Section 80.

LX25458,00009ED-19-05JUN20

Transmission, Information on Maximum Speed

Tractors authorized for a top speed of 50 km/h can be permanently downrated to 40 km/h. This may be advisable, if particular legal requirements for 50 km/h tractors cannot be met. Examples include a different class of driver's license, or similar restrictions. If top speed is changed, this must be recorded in the vehicle documents.

For more information, refer this issue to an authorized John Deere dealer.

NOTE: It is only possible to uprate the tractor from 40 km/h to 50 km/h if the tractor was equipped for 50 km/h before leaving the factory.

For tractors that have been equipped for a top speed of 50 km/h ex works and whose top speed has been reduced to 40 km/h, no declaration of conformity can be issued, for legal reasons.

OULXA64,6R,0005D48-19-28APR21

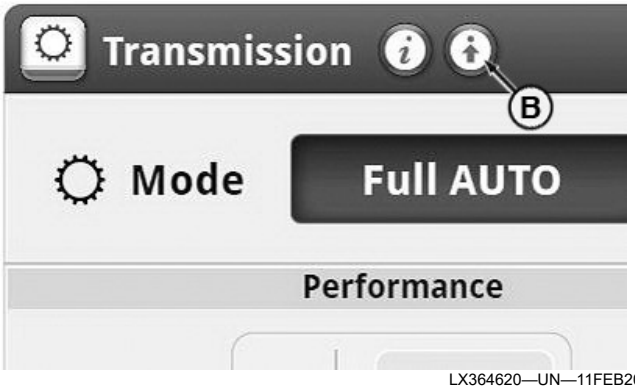
Switch the Backup Alarm ON or OFF (If Equipped)

Use of the backup alarm serves to prevent accidents and may be required by regional legislation. When the backup alarm is activated, an audible warning signal sounds when the direction of travel is commanded to reverse. The warning signal alerts people in the area to the tractor driving in reverse.

1. Press transmission button.

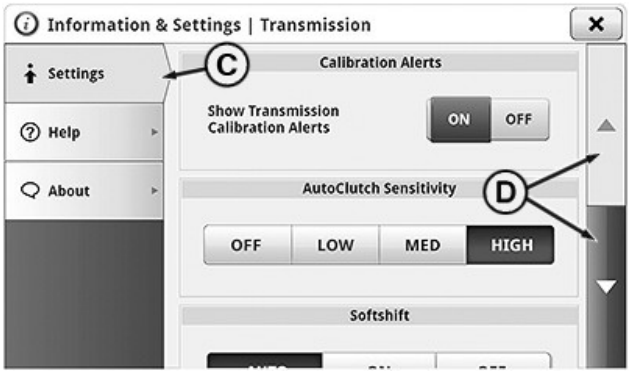
LX373139—UN—26MAY21

2. Select icon (B).



LX364620—UN—11FEB20

3. Select tab (C).



LX364621—UN—11FEB20

4. Navigate to the backup alarm with the arrow buttons (D).

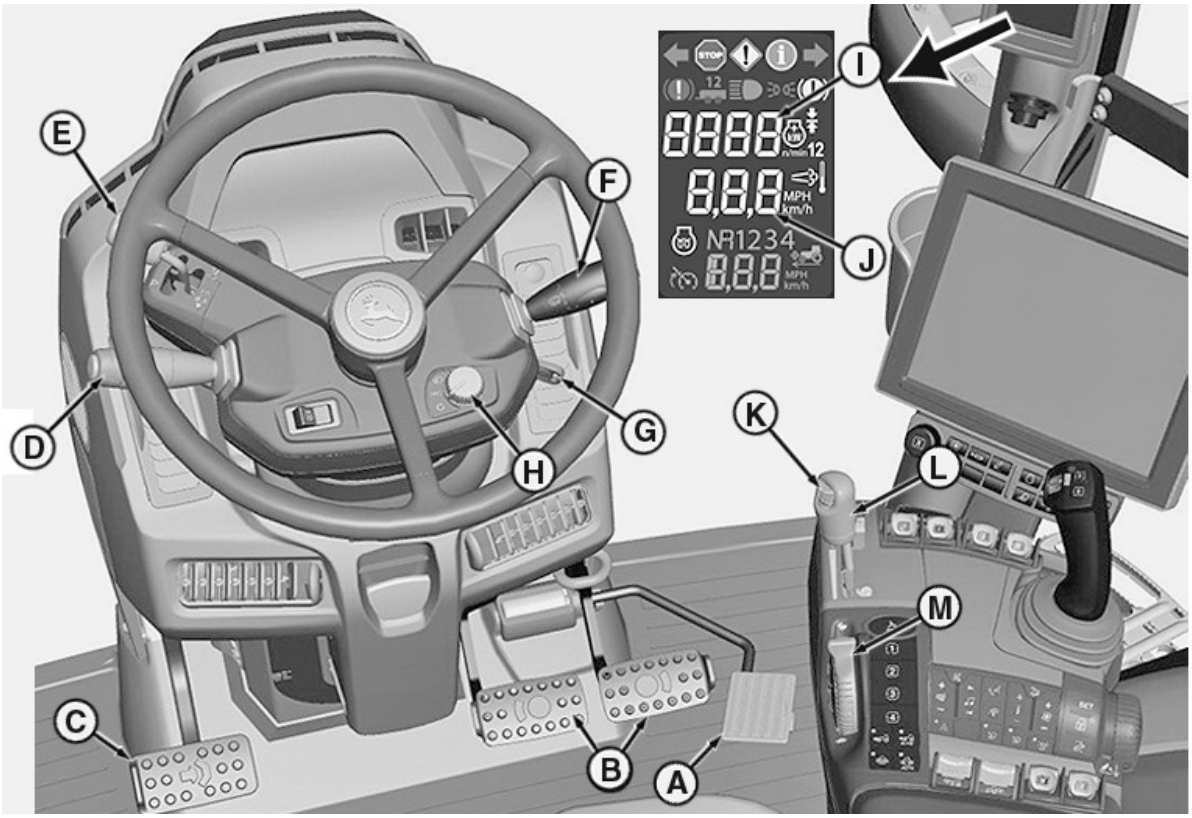
LX364622—UN—11FEB20

5. Switch the backup alarm (E) ON or OFF.

   The settings are saved when you leave the page.

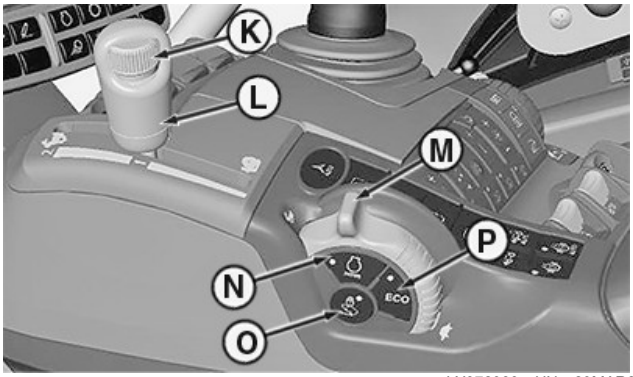
OULXA64,6R,MW67,0005F70-19-25OCT21

AutoPowr™/IVT™—Controls



LX372979—UN—29MAR21

Vehicle Controls with AutoPowr™/IVT™ Transmission



LX372980—UN—29MAR21

Vehicle Controls on Hand Throttle

A—Speed Control Pedal
B—Left and Right Brake Pedals
C—Clutch Pedal
D—Turn-Signal Lever/Horn
E—Reverse Drive Lever
F—Wiper Switch
G—Key Switch
H—Light Switch
I—Engine Speed (rpm)
J—Travel Speed (km/h or mph)
K—Speed Wheel
L—Shift Lever
M—Hand Throttle
N—FieldCruise™, ON/OFF
O—Save/Delete Pedal Position
P—ECO Mode, Minimum Engine Speed ECO, ON/OFF

The AutoPowr™/IVT™ transmission enables infinitely variable travel speeds. Maximum speeds may vary slightly due to tire size.

- Forward travel: from 30 m/h (10 ft/h) up to 50 km/h (31 mph).
- Reverse travel: from 30 m/h (10 ft/h) up to 30 km/h (18.6 mph).

OULXA64,6R,0005D5B-19-05MAY21

AutoPowr™/IVT™—Park Lock

IMPORTANT: Avoid damage to the transmission.

Incorrect operation can result in high loads on the transmission, which can lead to material damage.

Engage park lock only when the tractor is stationary.

IMPORTANT: When engaging the park lock, the following trailer brakes are activated:

- **Air trailer brake (if equipped)**

- **Dual-line hydraulic trailer brake (if equipped)**

LX372924—UN—27OCT20

Reverse drive lever position - park lock engaged

- Prevents the tractor from rolling away.
- Used for work with stationary tractor.

To park the tractor, proceed as follows:

1. Bring the tractor to a standstill.
2. Move the reverse drive lever as shown into P position.

When the park lock is engaged, P is indicated on the corner post display.

OULXA64,6R,0005D5F-19-20JAN22

AutoPowr™/IVT™—Reverse Drive Lever

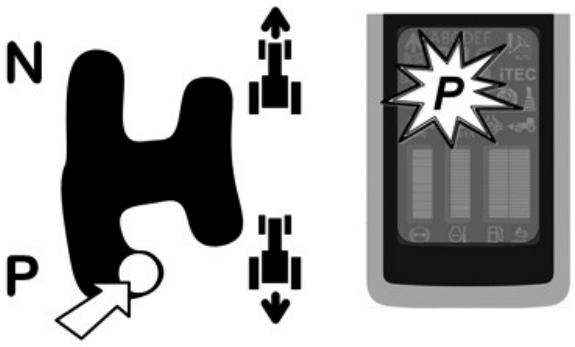
LX514784—UN—06SEP21

Reverse Drive Lever

NOTE: Engaging the park lock also activates the trailer brake.

To change the direction of travel, the clutch does not need to be operated.

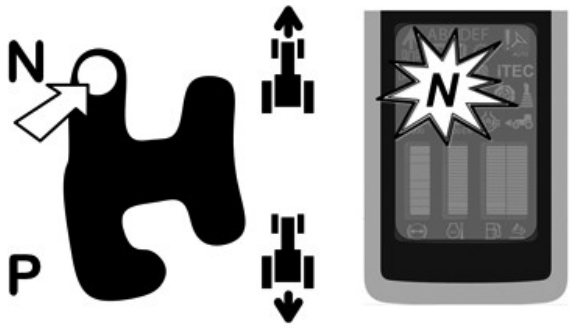
Park Position:



LX514757—UN—18AUG21

In this position, park lock is applied to hold the tractor stationary. This prevents the tractor from rolling away. The corner post display shows **P**. When the tractor is stopped, select the park position. The reverse drive lever is locked in park position. Engaging the park lock also activates the trailer brake. **Before leaving the tractor, always move reverse drive lever to park position.**

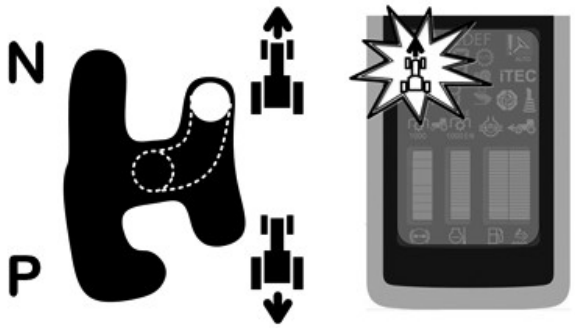
Neutral Position:



LX514756—UN—18AUG21

The park lock is not active and the drivetrain from the transmission to the wheels is interrupted. The tractor can roll freely. The corner post display shows **N**. The reverse drive lever is locked in neutral position.

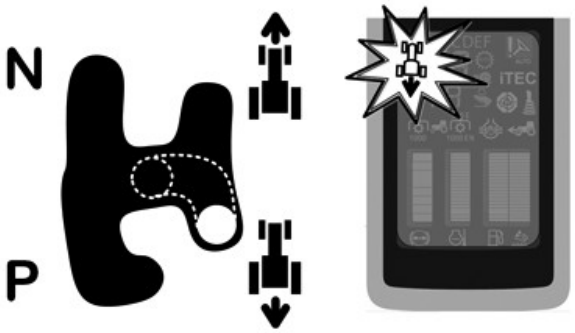
Forward Travel:



LX514758—UN—18AUG21

Forward driving direction is selected. The reverse drive lever is not held in the forward position, but returns to the middle position. The corner post display shows the symbol of forward travel.

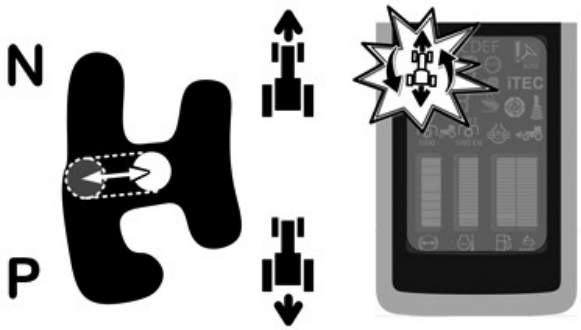
Reverse Travel:



LX514759—UN—18AUG21

Reverse driving direction is selected. The reverse drive lever is not held in the reverse position, but returns to the middle position. The corner post display shows the symbol of reverse travel.

Power Zero™:



LX514760—UN—18AUG21

The reverse drive lever must be moved to the left side of the shift gate. Power Zero™ is used to briefly hold the tractor stationary on a relatively flat surface after forward or backward travel. The corner post display shows both symbols of forward and reverse travel. *If the lever is moved from Forward or Reverse to the Power Zero™ position, the transmission decelerates the tractor until it is stationary. When the tractor is stationary, power remains at the transmission. Depending on speed and load, Power Zero™ cannot reliably bring tractor to a stop if already in motion.* After the reverse drive lever has been released, it moves back to the middle position and Power Zero™ remains active. To command a direction of travel from Power Zero™, the reverse drive lever must be actively moved to the forward or reverse position.

Switching from Forward or Reverse to the Park position:
If the lever is moved from Forward or Reverse directly to Park position, the tractor decelerates to a stop. Remember to actuate the brake pedals as well when driving downhill. When the tractor comes to a standstill, the park lock is activated automatically.

NOTE: While driving, the direction of travel can be changed with the rocker switch on the electrical joystick.

OULXA64,6R,0005BBB-19-27MAR23

AutoPowr™/IVT™—Speed Control Lever

The AutoPowr™/IVT™ transmission enables infinitely variable travel speeds. Maximum speeds may vary slightly due to tire size.

- Forward travel: from 30 m/h (10 ft/h) up to 50 km/h (31 mph).
- Reverse travel: from 30 m/h (10 ft/h) up to 30 km/h (18.6 mph).

LX1057166—UN—23SEP13

A—Speed Control Lever
B—Speed Wheel
1—Speed Band 1
2—Speed Band 2

Travel speed is regulated using the speed control lever. Two speed bands are available, (1) and (2):

Speed Band	Travel Set Speed	
	Forward MIN	Forward MAX
(1)	2 km/h (1 mph)	30 km/h (19 mph)
(2)	> 2 km/h (1 mph)	50 km/h (31 mph) Optional 40 km/h (25 mph)
	Creeper Min.	Creeper Max.
(1)	30 m/h (0.02 mph)	2 km/h (1 mph)
(2)	40 m/h (0.03 mph)	15 km/h (10 mph)

The highest speed of speed band (1) determines the lowest speed of speed band (2). The transition from range (1) to range (2) is smooth.

The maximum achievable speeds (travel set speed) of the speed bands are set with adjustable wheel (B). See *AutoPowr™/IVT™ Settings* on the following pages for details.

Creeper Mode:

- Activates when (1) is set to a value lower than 2 km/h (1 mph).
- Deactivates when (1) is set to a value higher than 2 km/h (1 mph) or (2) is set to a value higher than 15 km/h (10 mph).

Reverse speeds depend on the setting for the ratio to the forward speeds. See relevant text in this Section.

The travel set speed (MAX achievable speed in speed band 1 or 2) is reached when:

- Hand throttle or speed control pedal is pressed down fully.
- Speed control lever is at the end of its travel in speed band 1 or 2.
- Tire size setting is correct (calibrated).

If the speed control pedal or hand throttle is not at the end of its travel, the tractor will move at a corresponding speed. If the speed control lever is not at the end of its travel in a speed band, the tractor will similarly operate at a corresponding speed.

Speed wheel (B) does not have a stop and can be *infinitely* adjusted. It makes a change in relation to the previous setting. If the travel set speed is changed with speed wheel (B) while the tractor is moving, the change is always based on the last setting. Turning the speed wheel will directly increase or decrease the last travel set speed (maximum achievable speed). Any changes are stored in the tractor's electronics.

OULXA64,6R,0005D59-19-20JAN22

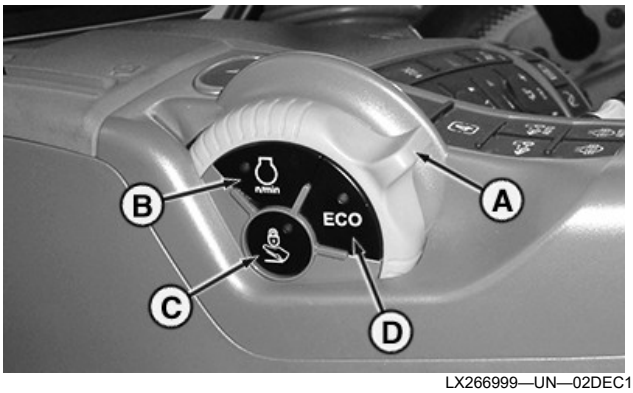
AutoPowr™/IVT™—Speed Control Pedal and Hand Throttle

The AutoPowr™/IVT™ transmission enables infinitely variable travel speeds. Maximum speeds may vary slightly due to tire size.

NOTE: In manual mode, automatic engine speed reduction at low loads is not active.

Speed is controlled by the position of the hand throttle and speed control pedal. The signal used for control is always the signal that commands the higher engine speed.

Set the desired engine speed with hand throttle (A).



LX266999—UN—02DEC16

A—Hand Throttle
B—Maximum Engine Speed ON/OFF
C—Save/Delete Pedal Position
D—ECO Mode, Minimum Engine Speed ECO ON or ECO OFF

Maximum Engine Speed can be switched ON and OFF directly using button (B).

Button (C) allows the speed control pedal position to be saved. To save position of speed control pedal, proceed as follows:

1. Set desired pedal position.
2. Press button (C), then release it.
3. Release the pedal within two seconds. If a pedal position is stored, the indicator light in button (C) lights up.

NOTE: Pedal position cannot be saved if one of the following applies:

- *Reverse drive lever in park position*
- *Reverse drive lever in neutral*
- *Brake pedal pressed*

To delete the saved pedal position, do one of the following:

- Press button (C) again.
- Apply brake.
- Move the reverse drive lever to park position.
- Set the speed control pedal position to the saved position once again.

Once the saved pedal position has been deleted, indicator light in button (C) turns off.

If the speed control pedal or hand throttle is moved to command a higher engine speed, the engine speed increases. When load-dependent engine speed reduction is active, once the set travel speed has been reached, engine speed is adjusted automatically as required.

Button (D) allows the operator to toggle between the minimum engine speeds ECO ON and ECO OFF.

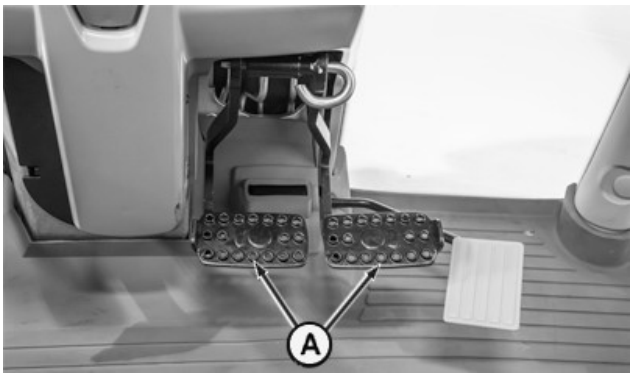
NOTE: Button (D) is active in custom mode only.

If the reverse drive lever is in forward or reverse, the tractor can be accelerated up to the set speed using the speed control pedal or hand throttle. The current travel speed of the vehicle depends directly on the position of the speed control pedal or hand throttle. Engine speed is directly affected by the position of the speed control pedal only in Manual mode.

Whenever the speed control pedal or the hand throttle is actuated, the values set in the CommandCenter™ for automatic control and maximum engine speed are taken into account. This means, for instance, that even at full throttle, the value for the maximum engine speed will not be exceeded. In AUTO mode, the engine turns only as fast as needed, even at full throttle. As long as the speed control pedal and the hand throttle are actuated at full throttle at the same time, the load-dependent engine speed reduction is not active.

OULXA64,6R,0005D5C-19-20JAN22

AutoPowr™/IVT™—Brake Pedals



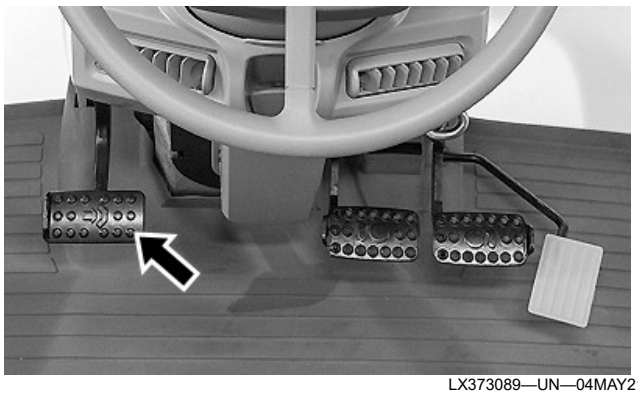
LX373201—UN—16JUN21

If **both** brake pedals are depressed when driving the tractor, the speed will be reduced or the tractor stops. Thanks to the automatic clutch function, there is no need to depress the clutch pedal when braking.

When the brakes are released again, the tractor automatically accelerates up to the speed currently commanded by the speed control pedal or hand throttle.

OULXA64,6R,0005D5D-19-15JUN21

AutoPowr™/IVT™—Clutch Pedal



LX373089—UN—04MAY21

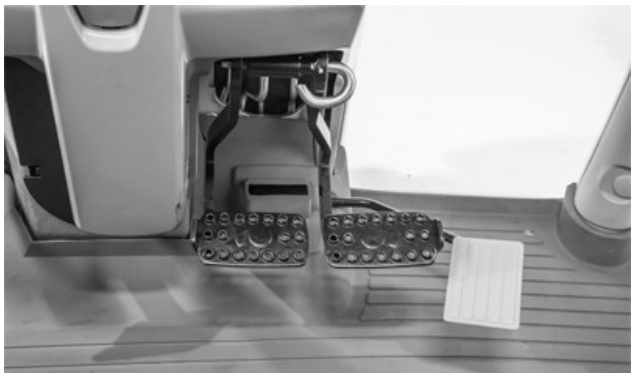
Clutch Pedal

Thanks to the AutoClutch (automatic clutch) function, there is no need to press the clutch pedal when stopping the tractor.

IMPORTANT: When AutoClutch is switched off, the clutch pedal needs to be pressed to stop the tractor.

OULXA64,6R,0005D5E-19-10JUN21

AutoPowr™/IVT™—Special Features when Maneuvering the Tractor



LX373202—UN—16JUN21

The brake pedals are equipped with an automatic clutch function (AutoClutch). Partially pressing **both** of the brake pedals allows the tractor to *creep* - this makes it easier to back up to an implement, for example. Fully depressing the two brake pedals stops the tractor with power still at the transmission. There is no need to depress the clutch pedal. However, be aware that:

- Full torque remains available even at very slow speeds. In certain conditions, even obstacles will not bring the tractor to a standstill.
- After the brakes are released, the tractor automatically accelerates up to the travel speed currently commanded by the hand throttle or speed control pedal.

NOTE: When engaging park lock on slopes, remember to actuate the brake pedals as well.

Also depress the brake pedals when turning on a downhill slope, as this will make the tractor change direction faster.

IMPORTANT: With the speed control lever it is possible to preset large speed reductions in a very short time. For safety reasons, the speed is moderately reduced by the AutoPowr™/IVT™ drive unit, e.g. to avoid the break-out of attached traction loads. Always use the brake pedals to brake quickly.

OULXA64,6R,0005BBC-19-07FEB22

AutoPowr™/IVT™—Cold-Weather Starting

LX1045750—UN—03DEC10

LX372924—UN—27OCT20

Oil temperatures below freeze point can cause inadequate lubrication and problems with hydraulic valves.

If the tractor is started in such climatic conditions, an automatic function prevents the drive system from engaging too soon. This INFORMATION FOR OPERATOR is displayed: Transmission Warm-up Routine is Active.

Start warm-up routine:

1. Start the engine.
2. Move reverse drive lever to park position.

   If the reverse drive lever is not in park position, this INFORMATION FOR OPERATOR is displayed: Transmission Warm-up Routine cannot be Activated, Park Lock must be Engaged.
3. The warm-up routine starts automatically. Refer to the table.
4. The tractor can only be driven after the specified duration has passed.

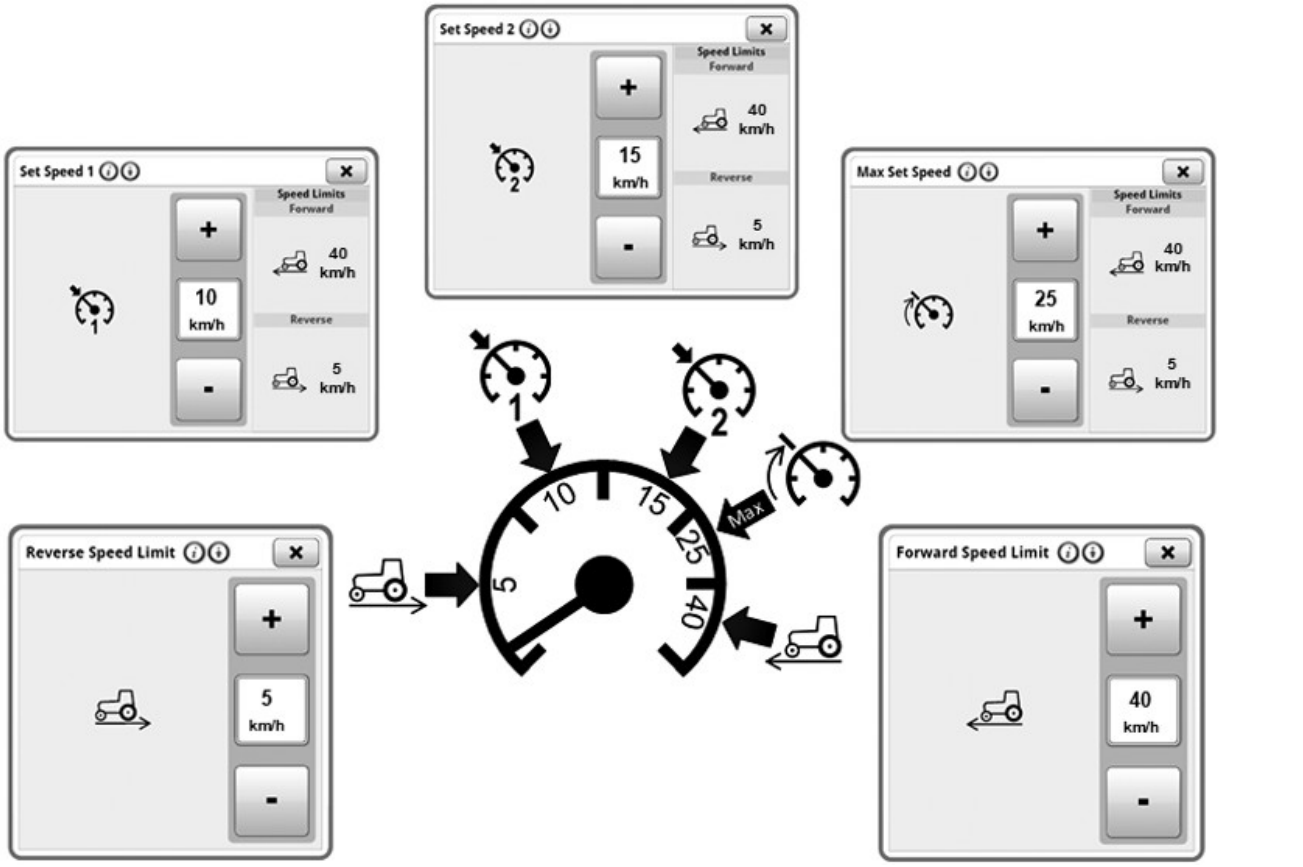
Duration of the warm-up routine, depending on the temperature:

Temperature Range	Warm-up time
above -7°C (19.4°F)	None
between -8°C (17.6°F) and -15°C (5°F)	approx. 95 seconds
between -16°C (3.2°F) and -20°C (-4°F)	approx. 155 seconds
between -21°C (-5.8°F) and -30°C (-22°F)	approx. 245 seconds

NOTE: At temperatures below -30° C (-22°F) only the transmission input shaft is turned. The warm-up phase starts as soon as the transmission oil temperature has reached -30°C (-22°F). During the warm-up routine, engine speed may rise to 1200 rpm.

OULXA64,6R,0005BBD-19-30AUG21

AutoPowr™/IVT™—Set Travel Speed

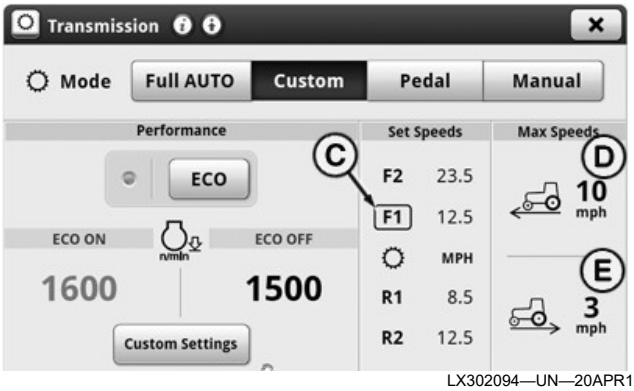


LX514245—UN—04FEB22

Travel Speed Settings, Overview

The maximum speed in a speed band is adjusted using speed wheel (A) and speed control lever (B).

LX1057255—UN—23SEP13



LX302094—UN—20APR17

A—Speed Wheel
B—Speed Control Lever
C—Speed Band Marker
D—Maximum Forward Speed
E—Maximum Reverse Speed

NOTE: The maximum speed setting is shown on the instrument panel by means of the LEDs on the circumference of the speed display.

On the transmission page, a frame appears round the band selection (D) that is currently activated, and the set maximum speed is displayed.

Changing the Speed Band: With the transmission in Park, Neutral, or at Powered Zero, move the speed wheel (A) left or right to change the speed band. The currently activated speed band is shown in the display (in this example F1).

LX514078—UN—30SEP21

Example: F1 selected

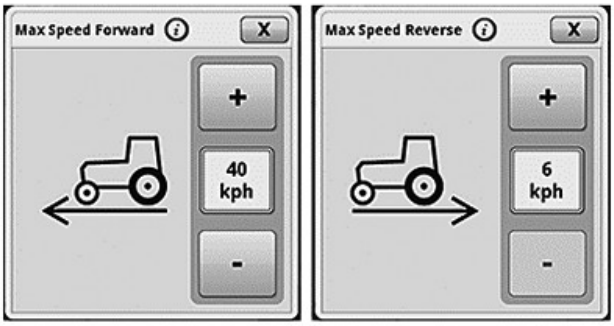
Limit Maximum Speed for Forward and Reverse Travel

Maximum speed for forward and reverse can always be limited on the transmission page. These set maximum travel speeds ***cannot*** be changed using speed wheel (A) or overridden using the speed control pedal or hand throttle.

To adjust, press the transmission button and access the transmission page.

Actuate the display field for forward travel (D) or reverse travel (E).

Use the +/- buttons to set the desired travel speed.



LX267078—UN—05APR17

Max Speed: Forward/Reverse

Increasing the speeds does not change the dynamic behavior of the tractor.

The maximum speed set in boxes (D) and (E) always takes utmost priority, even if a higher speed has been selected in another setting.

OULXA64,6R,0005BBE-19-04FEB22

AutoPowr™/IVT™—Maximum Engine Speed

By means of the maximum engine speed, engine speed can be limited to a range from 1050 to 2100 rpm.

Changes to maximum engine speed take effect immediately.

Limiting engine speed in light load situations may improve fuel economy.

Maximum engine speed can be employed for certain applications, for example for operating the PTO when bales are pressed.

Two different maximum engine speeds can be set, enabling operator to toggle quickly from one to the other.

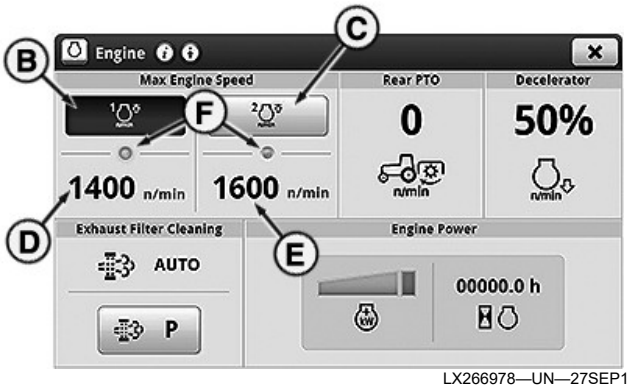
Adjust Maximum Engine Speed

1. Press engine button.

LX373132—UN—26MAY21

Engine Button

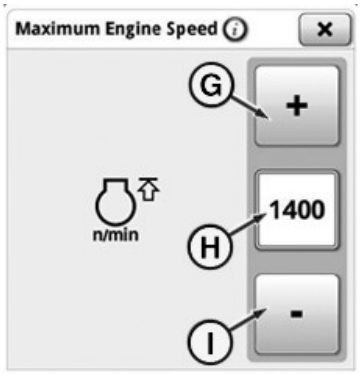
2. Press button (D) or (E).



LX266978—UN—27SEP16

B—Maximum Engine Speed 1 ON/OFF
C—Maximum Engine Speed 2 ON/OFF
D—Value of Maximum Engine Speed 1 (status: activated)
E—Value of Maximum Engine Speed 2
F—Indicator, Maximum Engine Speed Switched ON

3. Use button (G) or (I) to set the desired speed.



LX514781—UN—27AUG21

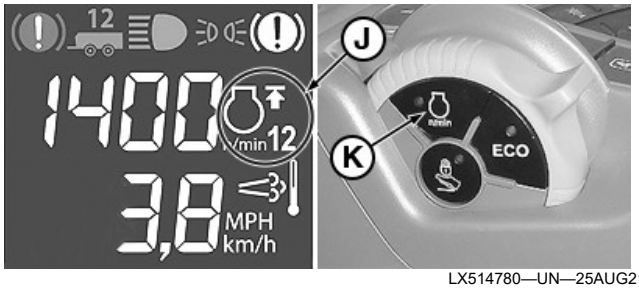
G—Increase speed
H—Speed Setting
I—Decrease Speed

Switch Maximum Engine Speed ON or OFF

1. Press engine button.
2. Press button (B) or (C) to switch maximum engine speed 1 or maximum engine speed 2 ON or OFF.

NOTE: If maximum engine speed has been activated, maximum engine speed remains active when the engine is restarted.

When maximum engine speed is switched on, indicators (F) and (J) light up together with figures "1" or "2." On the CommandARM™, the indicator light in button (K) also lights up.



LX514780—UN—25AUG21

J—Indicator, Maximum Engine Speed 1 or 2
K—Maximum Engine Speed ON/OFF

Button (K) allows maximum engine speed to be switched ON and OFF directly.

3. Close page.

OULXA64,6R,0005BBF-19-18JUN21

AutoPowr™/IVT™—Set Operating Mode

The transmission offers four operating modes to get the most fuel efficiency and load control from your tractor. Press the gear button and the desired operating modes can be set on the page shown.

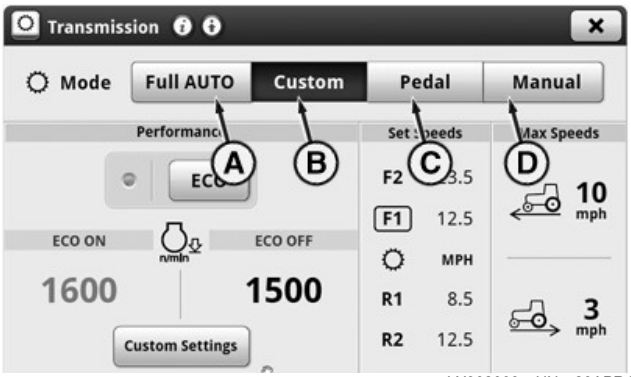
Set Operating Mode

1. Press transmission button.

LX373139—UN—26MAY21

Transmission Button

2. Select desired operating mode (A) or (B).



LX302093—UN—20APR17

A—Full Auto
B—Custom
C—Speed Control Pedal Mode
D—Manual

NOTE: The active mode is displayed on a dark background.

A — Full Auto
The minimum engine speed for best fuel economy when operating the tractor under light load is automatically set.
The engine speed droop of the auto-shift is automatically set for use of full power when the tractor is operated under full load.

B — Custom
Operator can choose the Fuel Economy Minimum Engine Speed, Auto-Shift Engine Speed Droop, and Load Anticipation reaction.

C – Speed control pedal mode
Operator can control wheel speed regardless of engine speed by using the speed control pedal. This uses the hand throttle to maintain a constant engine speed. This is important for certain jobs where the engine speed should be kept constant, regardless of the wheel speed (e.g. mowing).

D — Manual
Tractor performs as if equipped with a normal transmission and reacts to controls. In this mode there are no Fuel Economy or Load Control functions active.

A — Full Auto	B — Custom
• Automatic load control ON. • Fuel Economy Feature ON. • Load anticipation for hitch ON. • Load anticipation for selective control valves ON. • Load anticipation for front and rear PTO ON.	• Automatic load control ON. • Engine Speed Droop with PTO ON is adjustable. • Engine Speed Droop with PTO OFF is adjustable. • Engine speed reduction ECO ON and ECO OFF are adjustable. • Load anticipation for front and rear hitch is adjustable. • Load anticipation for front and rear PTO is adjustable. • Load anticipation for SCVs is adjustable.

C – Speed control pedal mode	D – Manual
• Control driving speed regardless of engine speed. • Hand throttle to MINIMAL automatically switches to AUTO operating mode. • Hand throttle above MINIMAL commands engine speed independent from wheel speed.	• Automatic load control OFF. • Fuel Economy feature OFF. • Use if the application causes unwanted load steering. • Use when operating on steep and/or slippery slopes.[a]

[a] *See AutoPowr™/IVT™ — Operation on Hillsides in Slippery Conditions in this Section.*

OULXA64,6R,0005BC0-19-10JUN21

AutoPowr™/IVT™—Set Engine Speed Reduction (Custom Setting)

This function allows fuel economy to be improved.

If the speed commanded by the speed control pedal or hand throttle has been reached, the engine speed that is required to maintain travel speed will be reduced automatically.

Input boxes ECO ON (C) and ECO OFF (D) allow a minimum engine speed to be selected which will not be reduced any further by the engine speed reduction function. Selecting ECO (B) allows the operator to toggle between the minimum engine speeds in ECO ON (C) and ECO OFF (D).

NOTE: The value can be incrementally configured from 900 rpm to 2100 rpm.

NOTE: In ECO mode, the driving behavior becomes more sluggish due to the particularly fuel-efficient engine and transmission control.

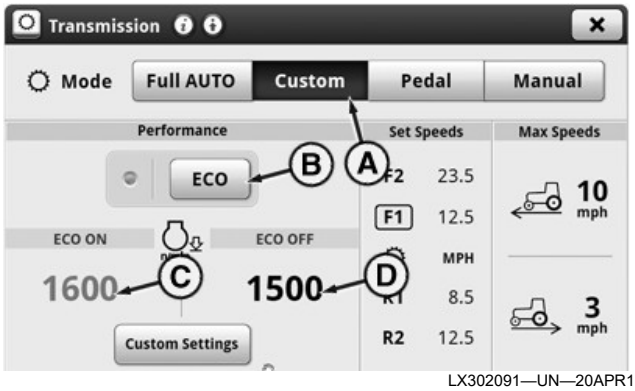
Adjust Minimum Engine Speed

1. Press transmission button.

LX373139—UN—26MAY21

Transmission Button

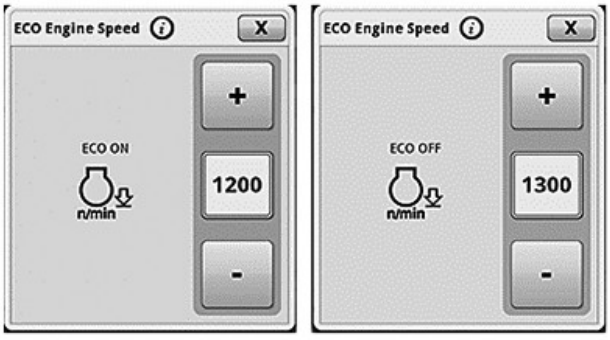
2. Select tab (A).



LX302091—UN—20APR17

A—Tab
B—ECO
C—ECO ON
D—ECO OFF

3. If desired, switch on ECO with button (B).
4. Select input box (C) or (D).
5. Use the +/- buttons to set the desired engine speed.



LX267079—UN—05APR17

6. To save, close page.

OULXA64,6R,0005BC1-19-10JUN21

AutoPowr™/IVT™—Set Engine Droop (Custom Setting)

This function reduces engine speed fluctuations when working with the PTO.

If engine speed is reduced under load, an adjustable automatic control ensures that e.g. a lower gear is selected to keep engine speed at a constant level when operating a rear PTO.

Engine droop intensity depends on the setting, which corresponds to a percentage of the set speed.

Example:

With a preselected engine speed of about 2000 rpm, the setting of the engine droop to 10% means that the gear ratio is reduced when the speed drops to about 1800 rpm.

This would correspond to a drop in PTO speed from 540 to about 490 rpm.

Engine speed droop also influences the shifting behavior when upshifting in Auto mode. The higher the value set for engine speed droop, the sooner the tractor will shift up.

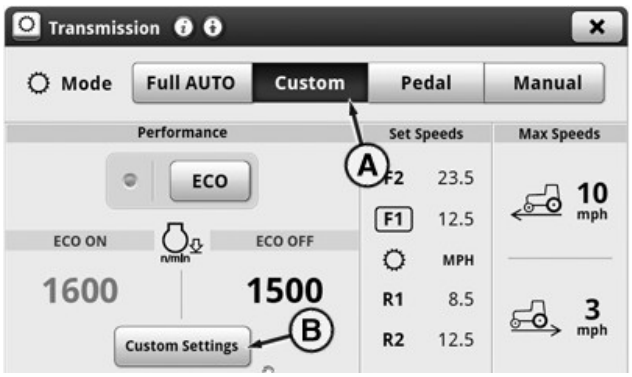
Set Engine Droop

1. Press transmission button.

LX373139—UN—26MAY21

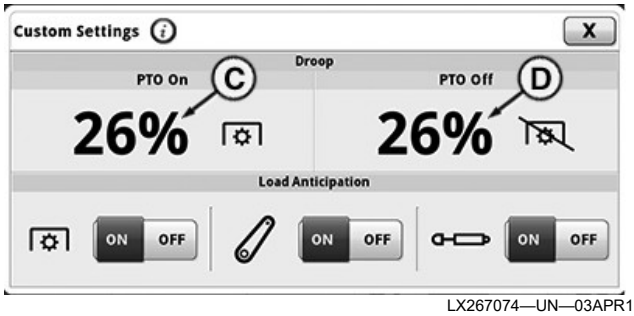
Transmission Button

2. Select tab (A).



LX302092—UN—20APR17

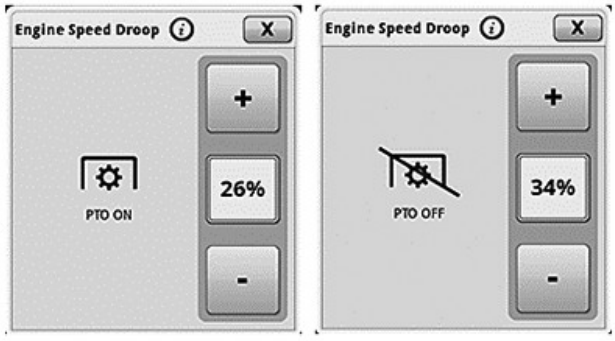
3. Select Custom Settings (B).
4. Select engine droop for when PTO operation is ON (C) or OFF (D).



LX267074—UN—03APR17

NOTE: Engine speed droop percentage can be set from 4% to 30%.

5. With the +/- buttons, set the desired % values.



LX267080—UN—05APR17

6. To save, close page.

OULXA64,6R,0005BC2-19-10JUN21

AutoPowr™/IVT™—Adjust Engine Speed for Additional Load Anticipation

If the engine speed has been reduced depending on the load, the engine speed can be adjusted if additional load is anticipated.

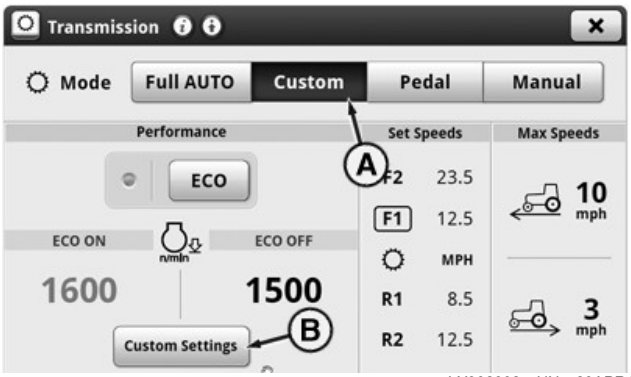
Adapt Engine Speed

1. Press transmission button.

LX373139—UN—26MAY21

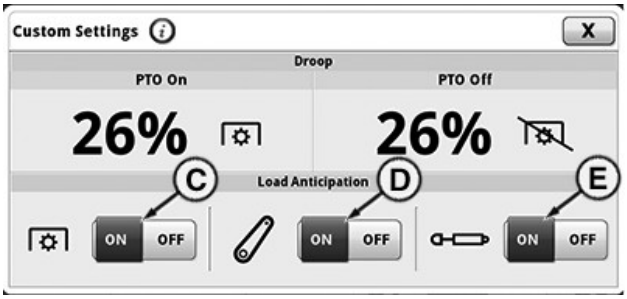
Transmission Button

2. Select tab (A).



LX302092—UN—20APR17

3. Select Custom Settings (B).
4. Switch corresponding load ON or OFF.



LX267075—UN—03APR17

Additional load anticipations

(C) - Front and rear PTO

When front or rear PTO is engaged, the engine speed is permanently increased.

(D) - Front and rear hitch

When the hitch is moved, the engine speed is increased for a short period.

(E) - SCVs

When SCVs are actuated, the engine speed is increased while the valves are actuated.

5. To save, close page.

OULXA64,6R,0005BC3-19-10JUN21

AutoPowr™/IVT™—Set Reverse/Forward Speed Ratio

This function allows a different travel speed to be selected automatically when direction of travel is changed.

Maximum reverse speed is 30 km/h (18 mph) regardless of ratio.

A setting that causes the vehicle speed to drop to less than 2 km/h (1 mph) when changing direction will automatically activate creeper mode.

Set Ratio

1. Press transmission button.

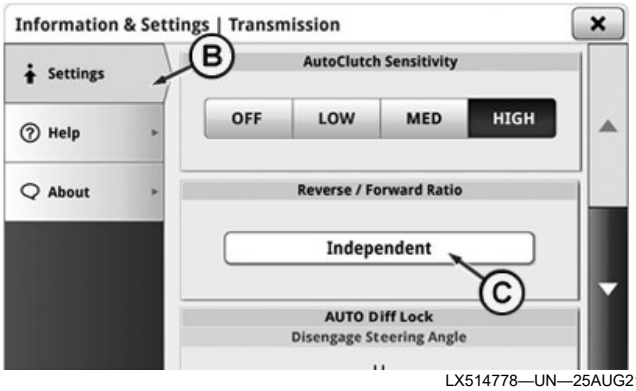
LX373139—UN—26MAY21

Transmission Button

2. Select advanced settings icon (A).

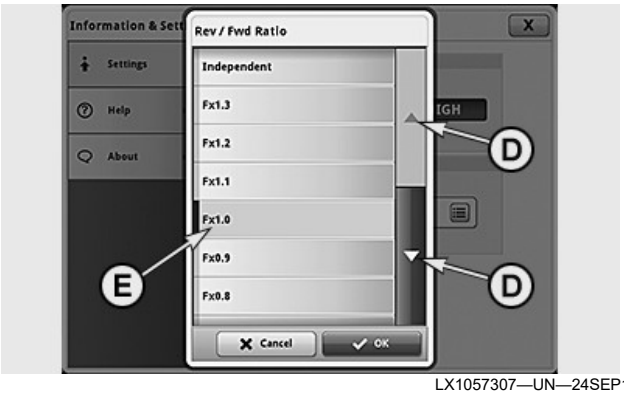
LX1057305—UN—24SEP13

3. Select tab (B).



LX514778—UN—25AUG21

4. Select input box (C) for forward/reverse speed.
5. Use arrow buttons (D) to set the desired ratio.



LX1057307—UN—24SEP13

D—Arrow Buttons
E—Reverse/Forward Speed Ratio

6. To save, press the OK button.

- In speed band 1, reverse speeds can be set to a maximum of 30% higher (select 1.3) and 70% (select 0.3) lower than forward speeds. A setting such as this only takes effect if the maximum speed in a speed band is adjusted using the speed wheel.

  In speed band 2, the forward to reverse speed ratio is 1:1 up to 22 km/h (14 mph). Above that speed, it changes automatically to 40:30 or 50:30.

- If **Independent** is selected, any speed can be set in speed bands 1 and 2 for each direction of travel. This does not apply to creeper mode.

OULXA64,6R,0005BC4-19-10JUN21

AutoPowr™/IVT™—AutoClutch Sensitivity

AutoClutch is an automatic clutch function. When AutoClutch is switched on, the clutch pedal does not need to be pressed to stop the tractor.

If both brake pedals are depressed when driving the tractor, the speed will be reduced or the tractor stops. When the brakes are released again, the tractor automatically accelerates up to the speed currently commanded by the speed control pedal or hand throttle.

CAUTION: When AutoClutch is switched off, the clutch pedal needs to be pressed to stop the tractor.

IMPORTANT: The AutoClutch function operates only when the brake pedals are coupled together. Actuating a pedal individually (e.g. to steer) does NOT actuate the automatic clutch function.

NOTE: For driving maneuvers using the steering brake (only one brake pedal is depressed), engine speed must not drop below 900 rpm, otherwise the AutoClutch function becomes active again.

Set AutoClutch sensitivity:

1. Press transmission button.

LX373139—UN—26MAY21

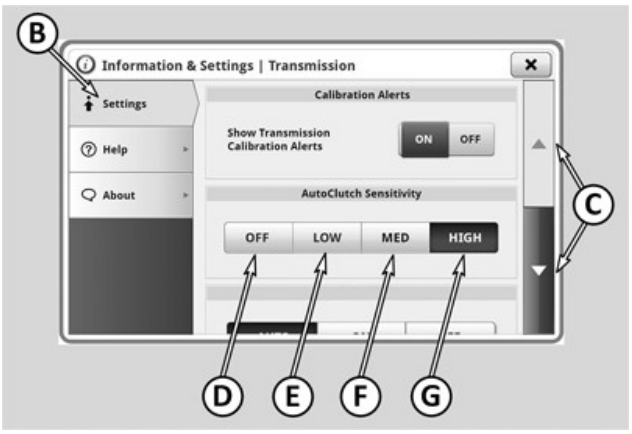
Transmission Button

2. Actuate icon (A) for advanced settings in the first line of the transmission page.

LX1057305—UN—24SEP13

Transmission page

3. Select tab (B) and use arrow buttons (C) to select the AutoClutch input box.



LX203981—UN—14MAR14

B—Settings Tab
C—Arrow Keys
D—AutoClutch OFF[1]
E—Low Sensitivity
F—Medium Sensitivity
G—High Sensitivity

4. Various possible selections (D) to (G) are displayed.
5. Make the desired selection by pressing the button.
6. To save, close page.

IMPORTANT: AutoClutch remains switched on after start-up. If AutoClutch is switched off by the operator, it switches on again automatically the next time the tractor is started.

NOTE: If desired, the sensitivity setting can be displayed directly on the CommandCenter™ status monitor.

Meaning of buttons (D) to (G)	
(D)	Switch off the auto coupling function by pressing the **OFF**[a] button. When OFF is marked (dark background), then AutoClutch is switched off. It can be switched off only if the brake pedals are NOT pressed.

[1] *If function is present.*

(E)	Low: is recommended for driving downhill with a trailer, particularly if ground conditions are difficult.
(F)	Medium: is primarily for driving with a trailer in moderately hilly terrain.
(G)	High: is primarily for driving without a trailer or with a trailer on level ground.

[a] *If function is present.*

*NOTE: When **Medium** and **Low** settings are selected, more force is required to press the brake pedal.*

OULXA64,6R,0005BC5-19-10JUN21

AutoPowr™/IVT™—Operation on Hillsides in Slippery Conditions

1. Press transmission button.

LX373139—UN—26MAY21

Transmission Button

2. Press button (A) to activate the **Manual** operating mode.

LX1057309—UN—24SEP13

NOTE: AutoClutch sensitivity should be set to low.

The tractor performs as if equipped with a normal transmission and reacts to controls. No Fuel Economy or Load Control functions are active in this mode.

CAUTION: Risk of accident with severe or fatal injury.

On slopes with slippery ground, the tractor wheels can lose traction. A vehicle with wheels that are blocked or sliding sideways is uncontrollable.

Observe the following precautions:

Always pay attention to the ground conditions and inclines and drive in a cautious, anticipatory way. Reduce the speed before reaching a hazardous area.

Always reduce speed gradually, never abruptly. This applies to both reducing the engine speed and to speed reduction by means of the transmission. Couple the brake pedals together and operate them gently.

Be aware that strong steering movements can result in loss of control over vehicle.

Braking of tractor and trailer (in particular when driving downhill)[2]:

IMPORTANT: See AutoPowr™/IVT™—Sensitivity in this Section if necessary to adjust the sensitivity correctly.

To brake a hitched-up unit (tractor plus trailer) under control, a stretching of the hitch-up is necessary for stable driving characteristics.

When there are speed reductions that are commanded by the driver, there may be strong braking characteristics by the tractor. These braking characteristics may be caused by the gear transmission and the engine and may be quite intensive at slow travel speeds.

To keep the hitched-up unit stretched in this situation, be sure to increase the engine speed to 1200 rpm at least and that the braking is primarily done by the tractor's main brake. As an alternative, the clutch pedal can be pressed at the same time as the service brake is pressed. In both cases, the trailer brake is actuated sufficiently to stretch the hitched unit. This provides the best possible driving stability during stopping or when slowing down for changing directions.

OULXA64,6R,0005BC7-19-10JUN21

AutoPowr™/IVT™—Use Creeper Mode

- Speed band 1 = Rear Section of the shift gate of the speed control lever.
- Speed band 2 = Front Section of the shift gate of the speed control lever.

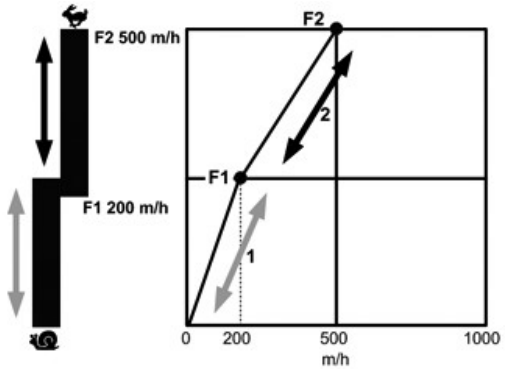
Activate creeper mode:

Creeper mode is entered automatically when a travel set speed of less than 2 km/h (1 mph) is selected in speed band 1.

Default ratio between speed bands 1 and 2 is 1:2.5 in

[2] *Valid for tractors with AutoPowr™/IVT™ transmission and pneumatic and hydraulic trailer brake system.*

creeper mode. This is done to eliminate rapid acceleration when speed control lever is moved into speed band 2.



LX299198—UN—23FEB17

Example: Travel set speed F1 is set to 200 m/h (656 ft/h). This means that travel set speed F2 is automatically adjusted to 500 m/h (1640 ft/h).

The default ratio may be temporarily overridden (such as when making headland turns) by moving the speed control lever in speed band 2 to a maximum of 15 km/h (10 mph). Moving the lever back to speed band 1 resets the values to the previous setting.

Exit creeper mode:

Set the value for travel set speed F1 to above 2 km/h (1 mph) or value for travel set speed F2 to above 15 km/h (10 mph).

OULXA64,6R,0005BC8-19-15JUN21

AutoPowr™/IVT™—Use Individual Brake Pedals

CAUTION: Risk of severe personal injury and property damage.

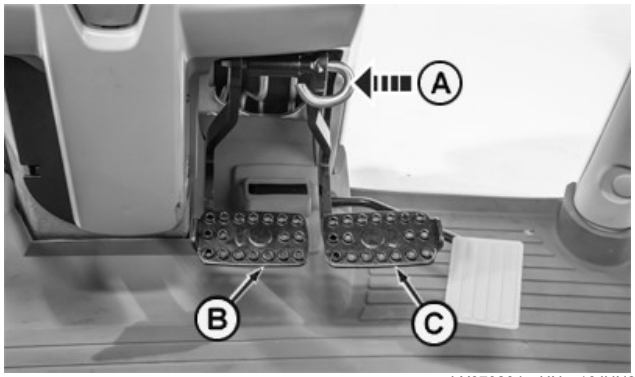
Braking with only one brake pedal is only intended for field work with slow travel.

Braking the tractor at high engine speed requires greater brake pedal force.

Avoid injury due to sudden or unexpected acceleration.

When the brake pedals are released, the tractor automatically accelerates to the driving speed currently set by the speed control pedal and speed control lever.

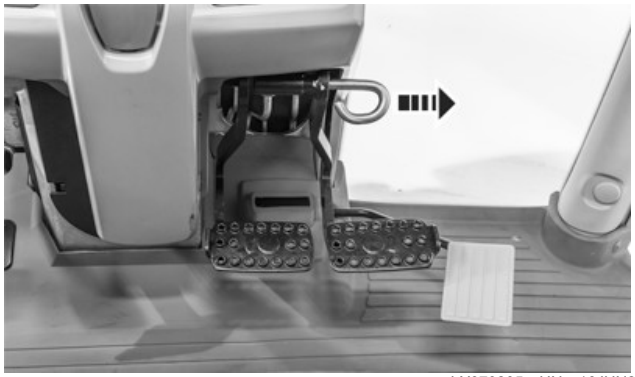
IMPORTANT: This description does not apply to tractors with CommandPRO™ joystick. See CommandPRO™ Joystick – Using Individual Brake Pedals, in Section 50K.



LX373204—UN—16JUN21

Locked Brake Pedals

A—Brake Pedal Latching Pin
B—Left Brake Pedal
C—Right Brake Pedal



LX373205—UN—16JUN21

Unlocked Brake Pedals

Driving along curves during field work

Unlock and lock the brake pedals.

- Uncouple the brake pedals: Turn the locking bolt (A) upwards for 1/4 turn, pull it out and then turn it downwards.
- Lock the brake pedals: Turn the locking bolt (A) upwards for 1/4 turn, press it in and then turn it downwards.

Use brake pedals individually to initiate directional corrections at low speed.

- Press left brake pedal (B) ► tractor moves to the left
- Press right brake pedal (C) ► tractor moves to the right

At low idle, AutoClutch feature stops tractor if operator depresses only one brake pedal. IT IS NOT NECESSARY TO DEPRESS THE CLUTCH PEDAL.

IMPORTANT: When AutoClutch is switched off, the clutch pedal needs to be pressed to stop the tractor.

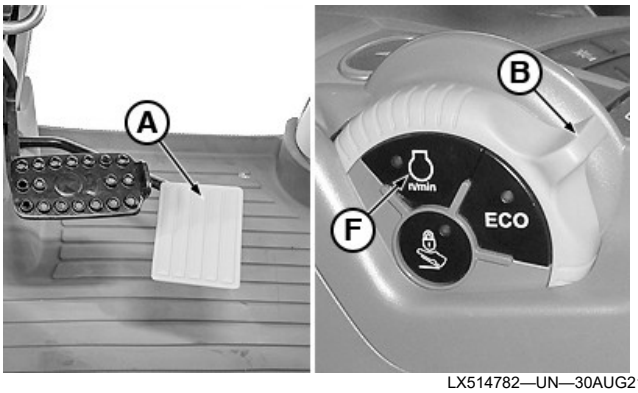
Directional corrections when attaching implements or trailers:

To assist in hooking up implement, depress either brake pedal while slowly increasing engine speed until desired turn is achieved. Returning engine speed to low idle while continuing to depress a brake pedal slows tractor to stop.

OULXA64,6R,0005BC9-19-15JUN21

AutoPowr™/IVT™—Speed Control Pedal Mode

Speed control pedal mode is a function that allows the operator to control wheel speed regardless of engine speed using the speed control pedal (A). This uses the hand throttle (B) to maintain a constant engine speed.



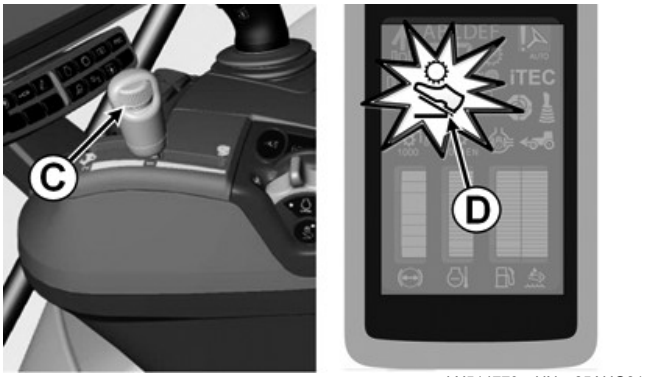
LX514782—UN—30AUG21

A—Speed Control Pedal
B—Hand Throttle
F—Save Engine Speed

When the speed control pedal is released, the vehicle is slowed down to a slow travel speed. To come to a complete stop, brake pedal with AutoClutch function must be used.

To cover transport applications with speed control pedal (A) only, the operator can leave hand throttle (B) in its lowest position; engine speed is increased or decreased from the drive strategy based on fuel economy settings. When hand throttle (B) is not at its lowest position, engine speed is controlled directly by hand throttle (B) while the speed control pedal (A) controls wheel speed only.

This means that the vehicle might not reach the wheel speed commanded by speed wheel (C), if the operator is holding the engine speed at low rpm via the hand throttle.



LX514779—UN—25AUG21

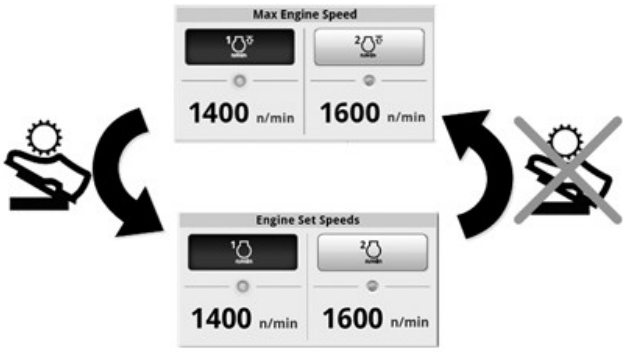
Adjustment Wheel/Indicator

LX1057318—UN—24SEP13

C—Speed Wheel
D—Indicator Light
E—Pedal Operating Mode (speed control pedal mode)

NOTE: When speed control pedal mode (E) is active, indicator light (D) comes on; when the speed control pedal mode is disabled, light (D) turns off.

In Pedal Mode, the maximum engine speed setting on the engine page is replaced by two engine set speeds. If an engine set speed is activated through the display or by pressing button (F), the engine set speed is approached promptly regardless of the hand throttle position.



LX514246—UN—07FEB22

Speed Control Pedal Mode is intended for applications where it is important to keep the engine speed at a constant rpm independent from wheel speed (mowing for example).

Activate the Speed Control Pedal Mode

Before speed control pedal mode can be activated, the reverse drive lever must be in park. Then press the transmission button to call up the transmission page. On the transmission page, press Pedal button (E) to activate the speed control pedal mode.

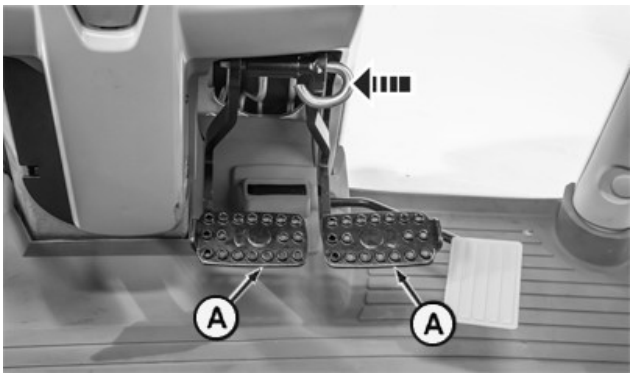
To deactivate the speed control pedal mode, move the reverse drive lever to park and activate a different mode on the transmission page.

OULXA64,6R,0005BCA-19-14FEB22

AutoPowr™/IVT™—Stop and Park the Tractor

CAUTION: Risk of severe injuries and material damage.

Avoid injury due to losing control of tractor. Couple brake pedals (A) together when driving on roads.



LX373203—UN—16JUN21

A—Brake Pedals

1. Reduce the throttle to a low engine speed.
2. Actuate both brake pedals (A). **It is not necessary to depress clutch.** Brakes activate AutoClutch (automatic clutch function within transmission) to stop tractor.
3. Move speed control lever to slowest position.
4. Shift reverse drive lever to PARK position.
5. Lower implements and shut off PTO.
6. Shut off engine and withdraw ignition key.

Stop Tractor with AutoClutch

Actuate both brake pedals. **It is not necessary to press clutch, reduce throttle, or move speed control lever.** Brakes will activate AutoClutch. When brakes are released, tractor accelerates to currently commanded speed.

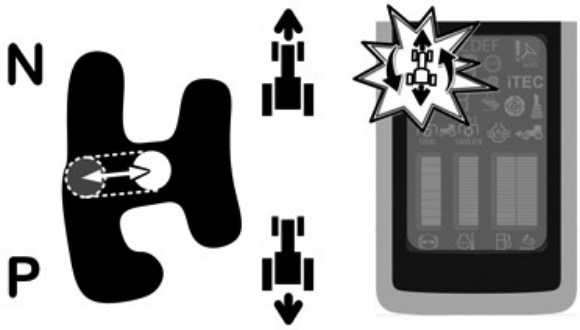
CAUTION: AVOID PERSONAL INJURY. Braking tractor while commanding a high engine speed will require a higher brake pedal force.

Avoid injury due to sudden or unexpected acceleration. When brake pedals are released, tractor will automatically accelerate to speed currently commanded by throttle and speed control lever.

Use PowerZero™ Position

LX514784—UN—06SEP21

Reverse Drive Lever



LX514760—UN—18AUG21

Power Zero™

Move reverse drive lever to PowerZero™ position to temporarily hold tractor stationary.

After the reverse drive lever has been released, it moves back to the middle position and Power Zero™ remains active. After 60 seconds, the park lock is automatically engaged.

NOTE: Depending on speed and load, PowerZero™ may not bring the tractor to a stop if already in motion.

Use Neutral Position

NEUTRAL position is obtained (with engine running) by shifting reverser to the Neutral position. Tractor will roll freely in the neutral position.

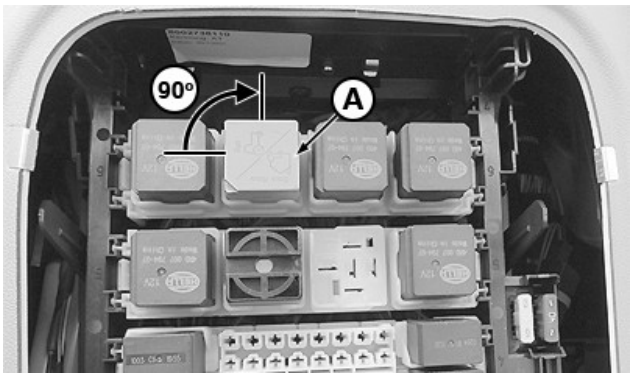
Use PARK Position

CAUTION: Before leaving the tractor, always move reverse drive lever to PARK position.

Transmission PARK position holds tractor stationary.

OULXA64,6R,0005BCB-19-01SEP21

AutoPowr™/IVT™—Come-Home Mode



LX514800—UN—28OCT21

If there is an electrical fault in the transmission, the tractor can possibly still be driven in come-home mode.

To do this, stop the engine, pull out the connector (A) (fuse/relay box), rotate it 90° to the right, and reinsert it.

The wording *Come Home* must be vertical on the left-hand side. Then restart the engine.

See also Fuses and Relays (LCS) with AutoPowr™/IVT™ Transmission in Section 220B.

In Come-Home Mode:

1. Maximum speed is 9 km/h (5.6 mph).
2. The AutoClutch function is disabled.
3. The Power Zero function is disabled.
4. The transmission runs at a fixed ratio.
5. Ground speed can be varied through engine speed only.
6. Changing direction is possible only when the machine is stopped and the clutch pedal is pressed.

To start, proceed as follows:

1. Press the clutch pedal and hold it down.
2. Use the reverse drive lever to select direction of travel.
3. Start by releasing the clutch pedal.

OULXA64,6R,0005BCC-19-07FEB22

AutoPowr™/IVT™—Towing the Tractor

If the tractor needs to be towed and park lock cannot be released, follow the instructions in Section 110:

1. Towing the tractor.
2. Release the Park Lock Manually.

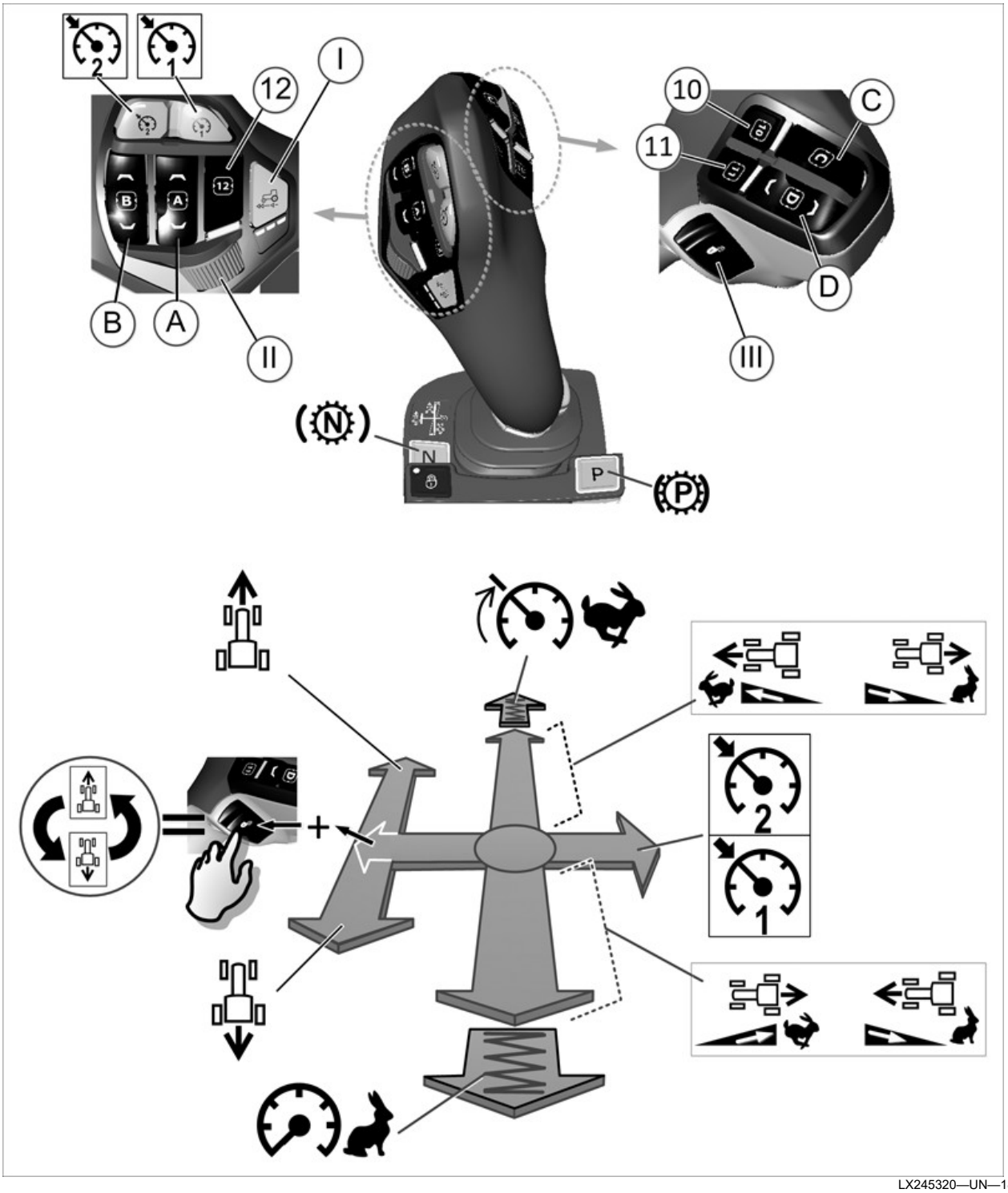
OULXA64,6R,0005BCD-19-01AUG23

Backup Alarm (If Equipped)

See Switch the Backup Alarm ON or OFF (If Equipped) in Section 50D.

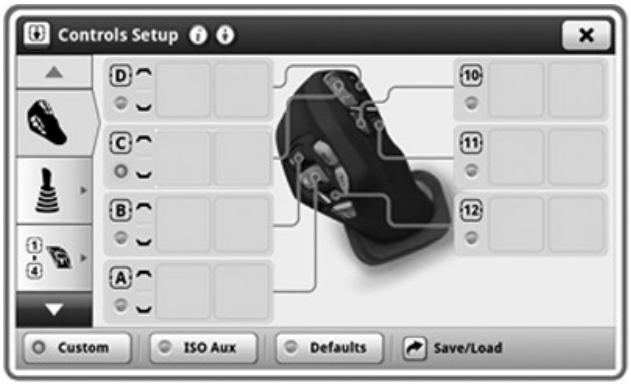
OULXA64,6R,0005BCE-19-30APR21

CommandPRO™ Joystick—Basic Functions



LX245320—UN—18SEP15

10—Custom Function
11—Custom Function
12—Custom Function
A—Custom Function
B—Custom Function
C—Custom Function
D—Custom Function
I—Acceleration Characteristics (increase in speed) Low/Medium/High
II—Travel Speed Adjustment Wheel
III—Activation Button



LX279036—UN—20JAN17

The figure shows buttons on the CommandPRO™ joystick to which customer-defined functions can be assigned. See CommandPRO™ Joystick—Assignment of Functions in this Section.

OULXA64,0005B9E-19-11JUN21

CommandPRO™ Joystick—Park Lock

CAUTION: Always engage the park lock before leaving the cab.

Engage Park Lock:

Press button **P**. Indicator light (P) will glow as long as the park lock is engaged.

LX514051—UN—11AUG21

Disengage Park Lock:

The park lock is disengaged automatically by commanding any direction of travel. The indicator light for the selected direction of travel will come on in the corner post display.

Alternatively, push button **N**. Indicator light (N) in the corner post display will glow as long as the transmission is in neutral (park lock disengaged).

LX514050—UN—11AUG21

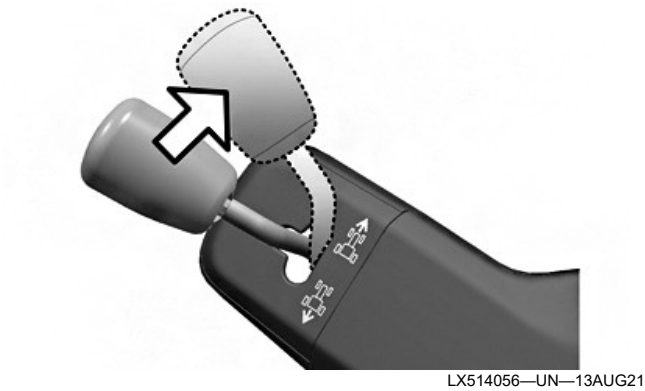
OULXA64,0005B9F-19-27MAR23

CommandPRO™ Joystick—Start to Drive

Starting to drive with the speed control pedal:

IMPORTANT: Whenever the icon for a direction of travel flashes, the tractor can be accelerated using the speed control pedal.

Move the reverse drive lever in the desired direction of travel and release it.



LX514056—UN—13AUG21

The icon for the chosen direction of travel flashes, but the tractor does not yet move.

LX514057—UN—13AUG21

To start to drive and accelerate, press the speed control pedal.

LX514034—UN—09AUG21

The position of the speed control pedal dictates the speed of the vehicle.

NOTE: Starting to drive is shown and described in forward direction.

Starting to drive using the CommandPRO™ joystick with activation button pressed:

Press and hold the activation button and move the CommandPRO™ joystick in a direction of travel.

LX245306—UN—18SEP15

The icon for the selected direction of travel lights up and the vehicle accelerates according to the joystick position.

The activation button may be released to continue accelerating. Move the joystick out of the center position in the direction of travel to increase travel speed.

OULXA64,0005BA0-19-13AUG21

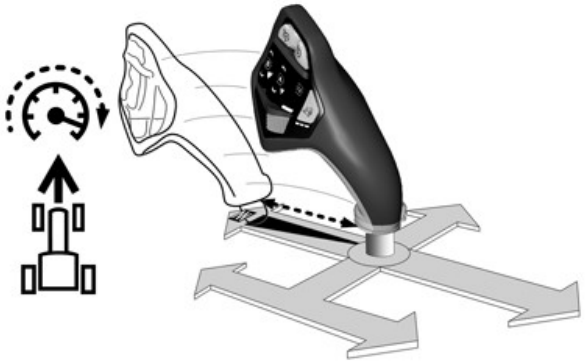
CommandPRO™ Joystick—Increase and Reduce Travel Speed

CAUTION: The lever functions differ depending on whether forward or reverse is selected.

Precondition: The vehicle is already moving. See CommandPRO™ Joystick—Starting to Drive in this Section.

Forward Travel:

- Push joystick forward ↑ to increase travel speed.
- Push joystick forward ↑ beyond the perceptible point of resistance to activate maximum travel set speed.



LX514035—UN—09AUG21

- Pull joystick backward ↓ to reduce travel speed.
- Pull joystick backward ↓ beyond the perceptible point of resistance to reduce travel speed automatically to zero.

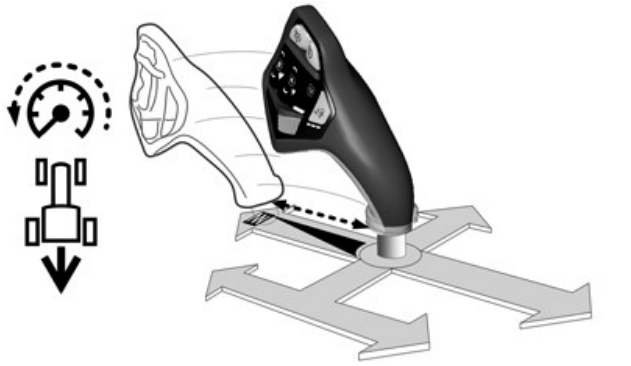
LX514036—UN—09AUG21

- While tractor is driving forward push the joystick to the left and forward, then release the joystick to initiate coasting to zero speed.

LX514058—UN—13AUG21

Reverse Travel:

- Push joystick forward ↑ to reduce travel speed.
- Push joystick forward ↑ beyond the perceptible point of resistance to reduce travel speed automatically to zero.



LX514037—UN—09AUG21

- Pull joystick backward ↓ to increase travel speed.

LX514038—UN—09AUG21

- While tractor is driving backward push the joystick to the left and rearward, then release the joystick to initiate coasting to zero speed.

LX514059—UN—13AUG21

Brakes:

- Actuating the brake pedal will decrease travel speed. When the brake pedal is released, the vehicle coasts down to zero speed.
- To resume driving, the joystick must be moved briefly out of the center position and into the direction of travel.

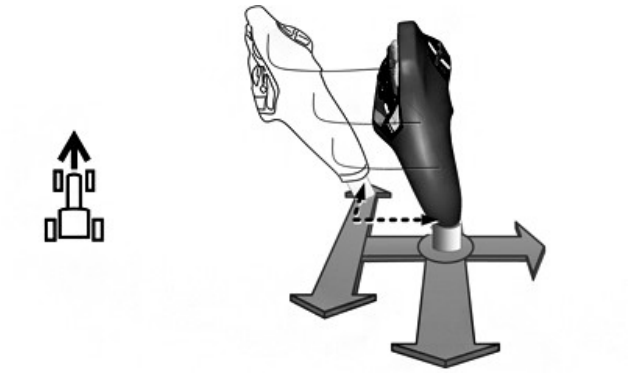
OULXA64,0005BA1-19-28JAN22

CommandPRO™ Joystick—Change Direction of Travel

NOTE: The valid command for changing direction is always the current (last) one. To accelerate, see CommandPRO™ Joystick—Increase and Reduce Travel Speed.

Change direction of travel:

- Move reverse drive lever to opposite direction of travel.

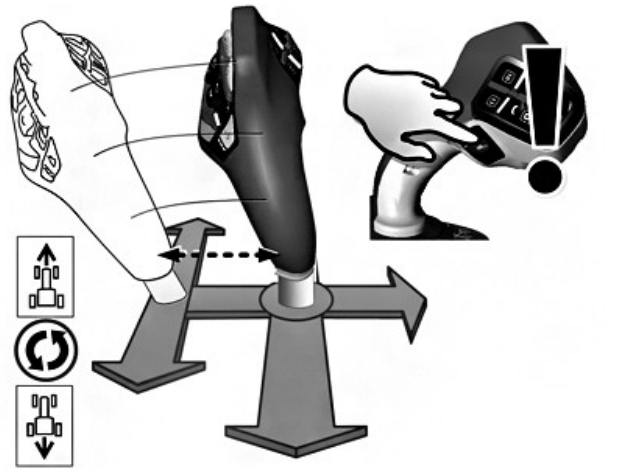


LX514060—UN—17AUG21

- Move joystick in opposite direction of travel to front left or rear left and then back to center position.

LX514052—UN—17AUG21

- Press and hold the activation switch, move the joystick all the way to the left, and release it.



LX514053—UN—11AUG21

The indicator lights in the display show the currently selected direction of travel.

⚠ CAUTION: When changing direction of travel, a number of different settings affect how the tractor behaves. See the relevant Section:

- **CommandPRO™ Joystick—Set the Characteristics for Increasing and Decreasing Travel Speed**
- **CommandPRO™ Joystick—Set the Characteristics for Changing Direction of Travel**

When the backup alarm is activated, an audible warning signal sounds when the direction of travel is commanded to reverse. See Switch the Backup Alarm On or Off (If Equipped) in Section 50D.

OULXA64,0005BA2-19-17AUG21

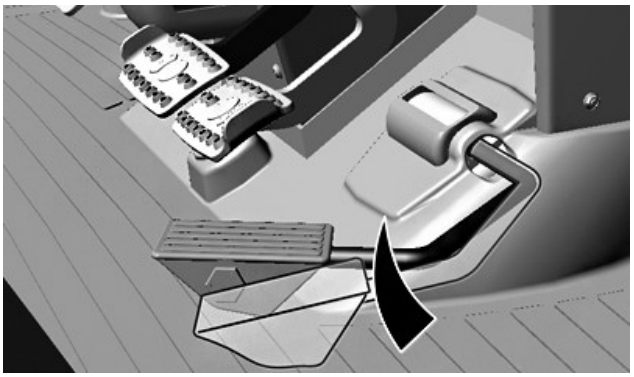
CommandPRO™ Joystick—Change Travel Speed using the Speed Control Pedal

NOTE: Travel speed is controlled by the speed control pedal or the CommandPRO™ joystick. It is possible to switch between these two controls at any time.

If a speed has been commanded with the joystick, travel speed control can be assumed by requesting a higher travel speed with the speed control pedal.

Assume speed control with the speed control pedal:

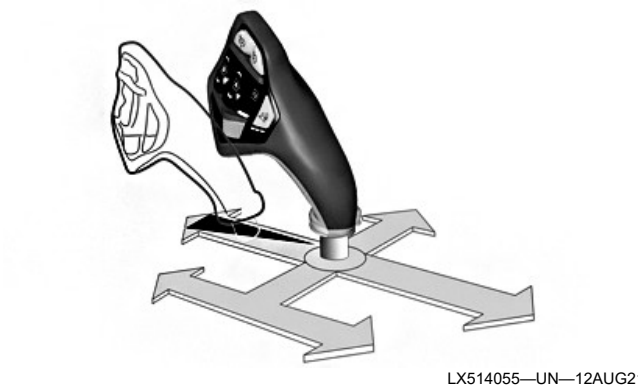
Actuate the speed control pedal until the position corresponding to current travel speed is reached (synchronize). After control has been assumed with the speed control pedal, travel speed changes according to the speed control pedal position. When the speed control pedal is released, the tractor decelerates to a stop. When the speed control pedal is actuated again, the tractor starts to move.



LX514054—UN—12AUG21

Assume speed control with the CommandPRO™ joystick:

While briefly moving CommandPRO™ joystick in direction of travel, release the speed control pedal.



LX514055—UN—12AUG21

Influence of travel set speed on speed control using the speed control pedal:

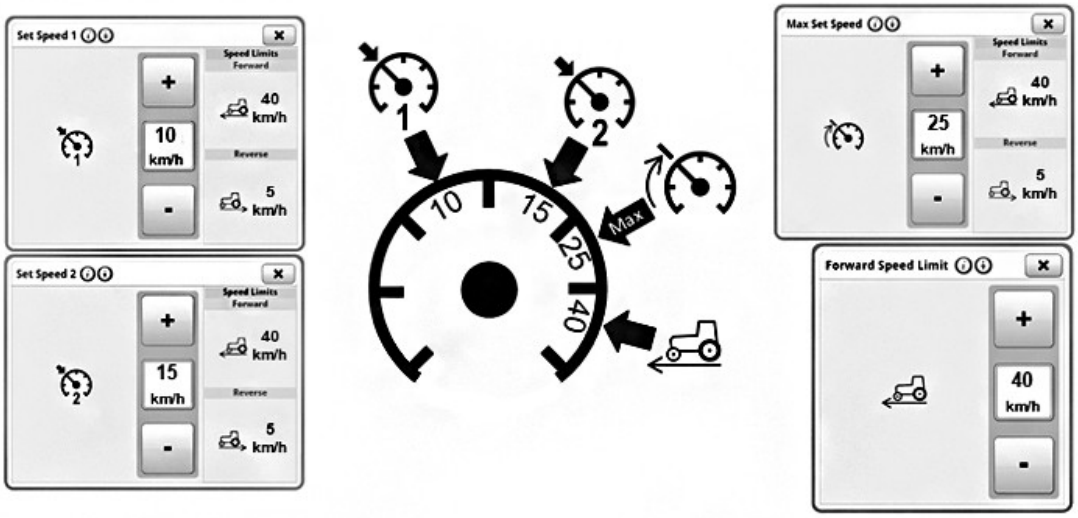
The speed control pedal can be used to accelerate regardless of an activated travel set speed.

The maximum achievable top speed is dependent on the set maximum speed. The relevant travel speed is indicated on the corner post display.

OULXA64,0005BA3-19-16AUG21

CommandPRO™ Joystick—Comfort Function for Quick Adjustment of the Speed Control Pedal Range

Function is available only if NO set speed is active, for example while the travel speed is commanded by the speed control pedal.



LX412386—UN—17MAY21

Overview, Example of Travel Speed Settings

Shortcut to Set the Speed Control Pedal Range to the Forward Speed Limit:

- Quickly turn the adjusting wheel a short distance in the accelerating direction. Maximum set speed jumps to the forward speed limit. From now on the speed control pedal is able to command speeds up to the adjusted forward speed limit. By default, the forward speed limit represents the road speed limit of the tractor.

LX412388—UN—11AUG21

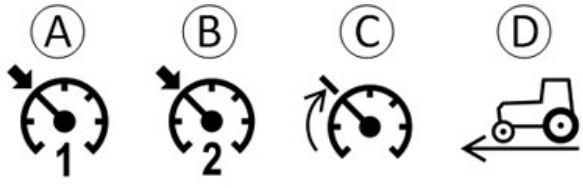
Change Pedal Range to Forward Speed Limit

Shortcut to Set the Speed Control Pedal Range to a Predefined Travel Set Speed:

- Quickly turn the adjusting wheel a short distance in the decelerating direction. Maximum set speed jumps to the preselected travel set speed 1 or 2 (depending on which is preselected). The travel speed returns to travel set speed 1 or travel set speed 2 (depending on which travel set speed is preselected).

LX412389—UN—11AUG21

Change Pedal Range to Preselected Travel Set Speed



LX412387—UN—17MAY21

Set Speed Icons

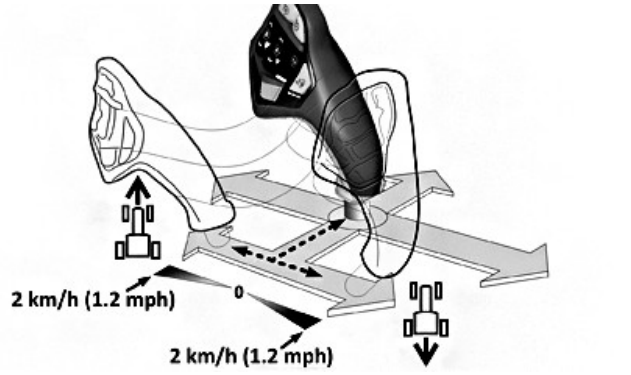
A—Travel Set Speed 1
B—Travel Set Speed 2
C—Max. (Travel) Set Speed
D—Forward Travel Speed Limit

OULXA64,6R,MY22,0005D62-19-16AUG21

CommandPRO™ Joystick—Slow Forward and Reverse Travel

Functions in left shift gate of joystick:

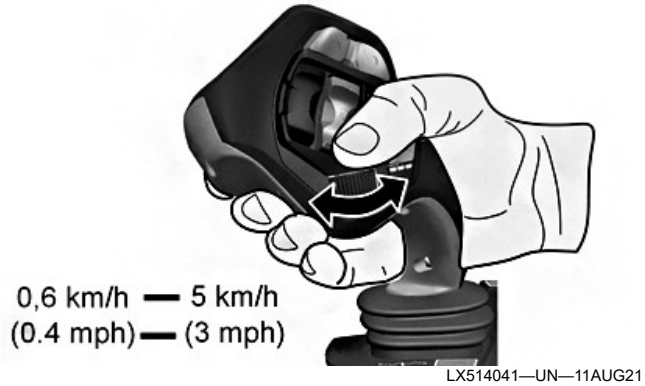
Move CommandPRO™ joystick to left and forward or left and backward. The vehicle moves very slowly in the selected direction. Travel speed is dependent on the position of the joystick and can be set between 0 and 2 km/h (1 mph).



LX514040—UN—10AUG21

Travel speed can also be affected by pressing the two brake pedals. The tractor can be driven very slowly, in order to back up to an implement, for example.

When the joystick is held in the left shift gate, the maximum travel speed that can be reached in the left shift gate can be reduced to 0.6 km/h (0.4 mph) or increased up to 5 km/h (3 mph) by means of the speed wheel. *The set value is displayed in the CommandCenter™ for about 3 seconds.* The value is reset to 2 km/h every time the tractor is started.



LX514041—UN—11AUG21

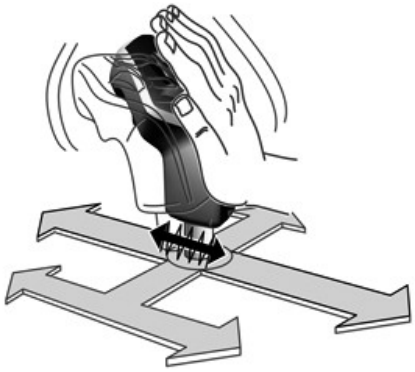
If the joystick is moved backward to the center of the left gate, travel speed is reduced until the vehicle stops completely.

NOTE: Move the joystick back into the main gate, if travel speeds higher than 2 km/h (1 mph) are desired. Further acceleration can also be achieved by pressing the speed control pedal.

OULXA64,0005BA4-19-28JAN22

CommandPRO™ Joystick—Triggering the Travel Speed

In this context, "triggering" means flicking the CommandPRO™ joystick forward or backward to command a change in speed. This changes the travel speed by a fixed value per pulse.



LX514039—UN—09AUG21

As a result, the slowest speed change possible is commanded. The extent of the change in speed depends on the currently active setting of the acceleration characteristics. See CommandPRO™ Joystick—Set the Characteristics for Increasing and Decreasing Travel Speed.

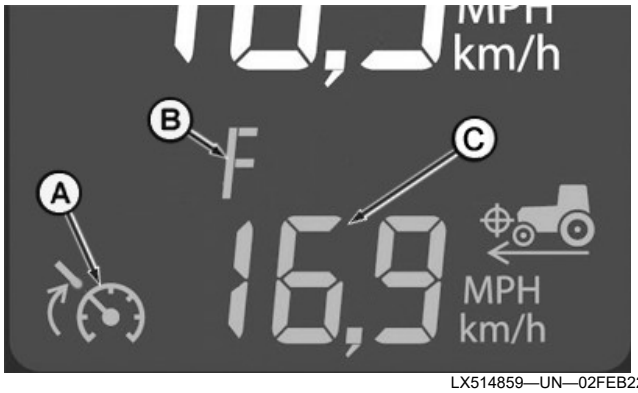
OULXA64,0005BA5-19-10AUG21

CommandPRO™ Joystick—Maximum Speed/Stopping

Set a maximum speed (maximum travel set speed):

Maximum speed is set using the speed wheel in the CommandPRO™ joystick.

When the maximum set speed is active, the display will show the following settings:



LX514859—UN—02FEB22

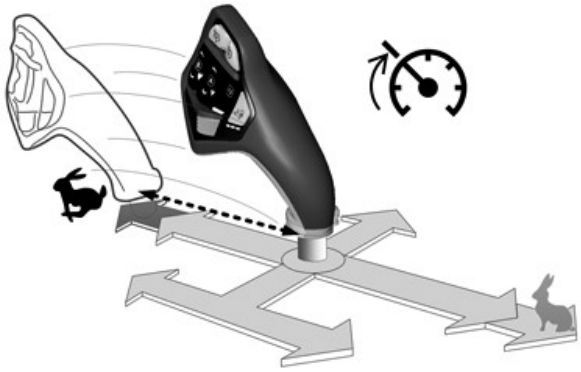
A—Icon of Maximum Travel Set Speed
B—Direction of Travel, Forward
C—Value of Maximum Travel Set Speed

See also CommandPRO™ Joystick—Set and Store Travel Speeds (Travel Set Speed).

Retrieve maximum travel set speed (forward travel only):

Move the joystick all the way forward beyond the perceptible point of resistance at the end of the shift gate. As a result, the vehicle accelerates automatically until the set maximum speed is reached (maximum travel set speed). Acceleration continues even if the joystick is moved into center position again.

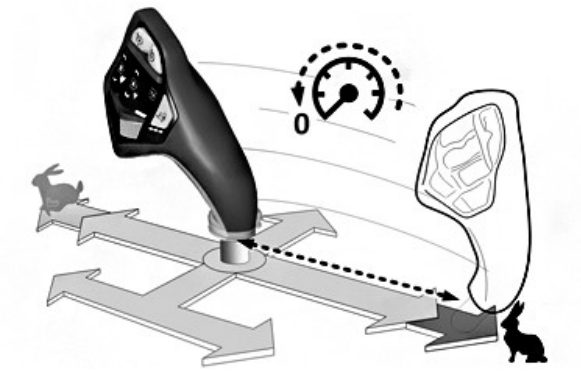
During acceleration, the maximum travel set speed icon is shown in the display.



LX514042—UN—10AUG21

Stop / interrupt travel (when moving forward or reverse):

Move the joystick all the way back beyond the perceptible point of resistance at the end of the shift gate. As a result, the vehicle decelerates to a stop automatically. Travel speed is reduced even if the lever is moved into center position again. When the vehicle comes to a stop, the direction of travel icon in the display flashes.



LX514043—UN—10AUG21

NOTE: Travel speed is also reduced by actuating the brake pedal. When the brake pedal is released, the vehicle coasts down.

To resume driving, the joystick must be moved forward or backward out of the center position.

Acceleration and deceleration characteristics can be adjusted in three stages. See CommandPRO™ Joystick—Set the Characteristics for Increasing and Decreasing Travel Speed in this Section.

OULXA64,0005BA6-19-28JAN22

CommandPRO™ Joystick—Set the Characteristics for Increasing and Decreasing Travel Speed

LX514044—UN—10AUG21

Press the set button to change between three settings. Three LEDs next to the set button indicate the currently activated setting.

Characteristics for increasing and decreasing travel speed:

Soft – One LED lights up

LX514045—UN—10AUG21

Normal – Two LEDs light up

LX514046—UN—10AUG21

Strong – Three LEDs light up

LX514047—UN—10AUG21

The setting influences the following:

- Characteristic for acceleration and deceleration when commanding a change in speed with the joystick.
- Characteristic for acceleration when commanding a change in speed with the speed control pedal.
- Speed change value when flicking the joystick forward or backward (triggering).
- Vehicle behavior when commanding a change in direction of travel.
- Vehicle behavior when operating on hillsides and in slippery conditions.

OULXA64,0005BA7-19-10AUG21

CommandPRO™ Joystick—Set and Store Travel Speeds (Travel Set Speed)

Travel Set Speed

Saving and retrieving travel speeds and top speed limit.

Maximum travel set speed (forward travel only)

LX245314—UN—18SEP15

Maximum Travel Set Speed

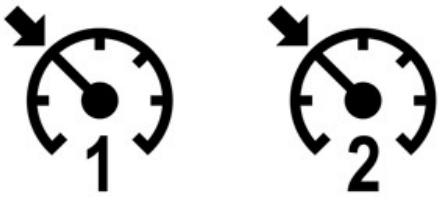
After a maximum travel set speed has been activated, travel speed is automatically adjusted to the value set by the speed wheel.

To activate, push the joystick forward beyond the perceptible point of resistance, and release.

To deactivate:

1. Move the joystick forward or backward to select a different travel speed.
2. Apply brakes.
3. Assume control with the speed control pedal.

Travel set speeds 1 and 2

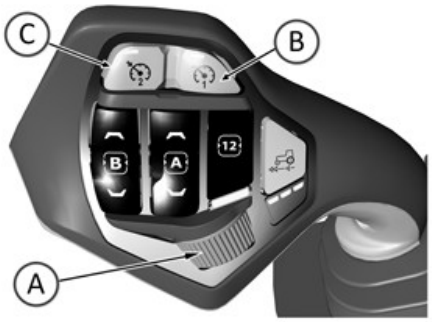


LX245313—UN—18SEP15

Travel Set Speeds 1 and 2

After a travel set speed has been activated, travel speed is automatically adjusted to the saved value.

Travel Speed Adjustment Wheel



LX245315—UN—18SEP15

A—Travel Speed Adjustment Wheel
B—Travel Set Speed 1
C—Travel Set Speed 2

With the adjustment wheel (A), the travel speeds for the following travel set speeds can be changed (explained in more detail below):

- Maximum Travel Set Speed
- Travel Set Speed 1
- Travel Set Speed 2

Situation 1:

- Maximum travel set speed active or no travel set speed active

Effect: Turning speed wheel (A) will change the top speed which can be achieved (maximum travel set speed)

Situation 2:

- Travel set speed 1 or 2 active

Effect: Turning speed wheel (A) will change the value of the active travel set speed.	
Travel set speed 1 active	Speed wheel changes travel set speed 1
Travel set speed 2 active	Speed wheel changes travel set speed 2

NOTE: In all other situations (maximum travel set speed active or not active, driving with joystick or with speed control pedal) the speed wheel changes maximum travel set speed.

Select Travel Set Speed 1 or 2 (at standby):

LX514048—UN—12AUG21

A—Adjustment Wheel
1—Travel Set Speed
2—Travel Set Speed

Selecting travel set speed 1 or 2 is achieved by pressing one of the two buttons shown. In the joystick, the relevant LED next to the buttons glows in acknowledgment.

NOTE: This procedure does not yet cause a change in travel speed, but brings one of the travel set speeds to standby.

Retrieve Travel Set Speed 1 or 2 (activate)

NOTE: Only the selected travel set speed (LED on joystick on) can be retrieved.

1. Push the joystick to the right and release (in this case the activation button must NOT be pressed). This recalls and activates the selected travel set speed. The tractor accelerates or decelerates until the set travel speed is reached.
2. Toggling between travel set speeds 1 and 2 is possible on-the-go. Pressing button 1 or 2 makes the tractor accelerate or decelerate automatically to the speed setting in the activated travel set speed.
3. Press travel set speed button 1 or 2 for at least 2 seconds to accept the current travel speed as new value. An audible confirmation signal sounds.

Deactivate a Travel Set Speed

1. Move the joystick forward or backward to select a different travel speed.
2. Apply brakes.
3. Assume control with the speed control pedal.
4. While tractor is driving forward, push the joystick to the left and forward, then release the joystick to initiate coasting to zero speed.

LX514058—UN—13AUG21

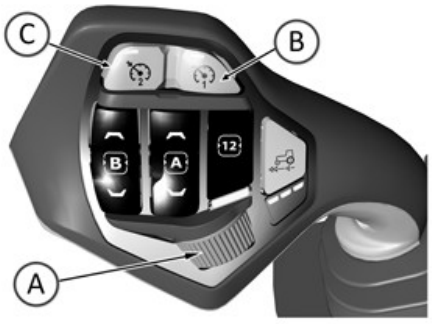
5. While tractor is driving backward, push the joystick to the left and rearward, then release the joystick to initiate coasting to zero speed.

LX514059—UN—13AUG21

Indicator Lights:

- See Section 30A.

Set the Travel Set Speed



LX245315—UN—18SEP15

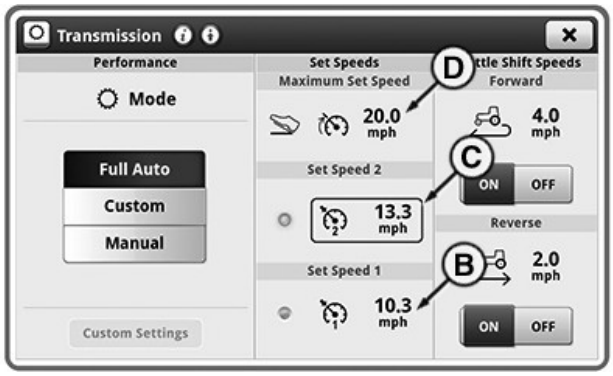
A—Travel Speed Adjustment Wheel
B—Travel Set Speed 1
C—Travel Set Speed 2

When a travel set speed is active, speed wheel (A) can be used to change the setting.

Press and hold B or C for about 5 seconds to store the maximum set speed. An audible signal will sound to confirm.

The travel set speed can also be set using the CommandCenter™:

1. Access the Transmission page.

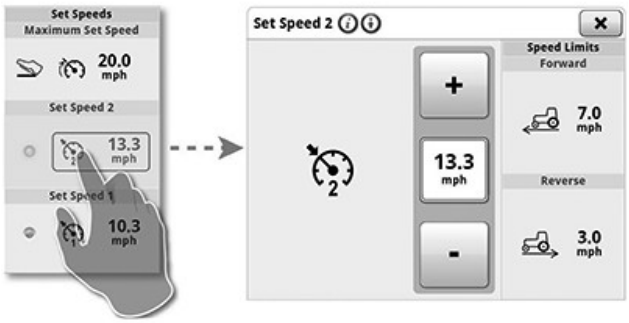


LX266947—UN—25AUG16

CommandCenter™, Transmission Page

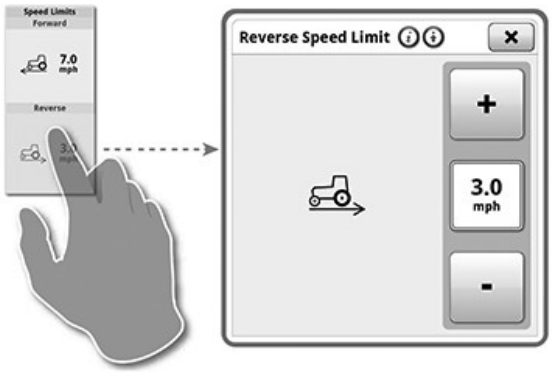
B—Travel Set Speed 1
C—Travel Set Speed 2
D—Maximum Travel Set Speed

2. Select the relevant travel set speed.



LX266929—UN—08AUG16

CommandCenter™, Travel Set Speed



LX266934—UN—11AUG16

Limit Travel Speed ⇒ +/- Buttons

3. Use the +/- buttons to set the desired travel speed.
4. Changes will be saved automatically after exiting the page.

OULXA64,0005BA8-19-07FEB22

CommandPRO™ Joystick—Limit Maximum Speed for Forward and Reverse Travel

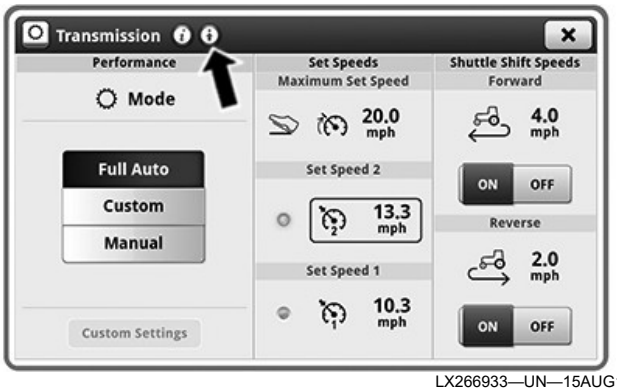
This function is used to put a rigid restriction on maximum travel speed in forward and reverse.

The set maximum travel speeds CANNOT be altered using the speed wheel or speed control pedal.

One maximum travel speed can be set in each direction of travel.

NOTE: Characteristics for increasing and decreasing travel speed are not affected by this.

To make a setting, access the Transmission page and select Advanced Settings.



LX266933—UN—15AUG16

Transmission Page ⇒ Advanced Settings

Select a direction of travel and use the **+/-** buttons to set the desired travel speed.

Changes will be saved automatically after exiting the page.

OULXA64,0005BA9-19-11JUN21

CommandPRO™ Joystick—Target Travel Speed when Changing Direction of Travel

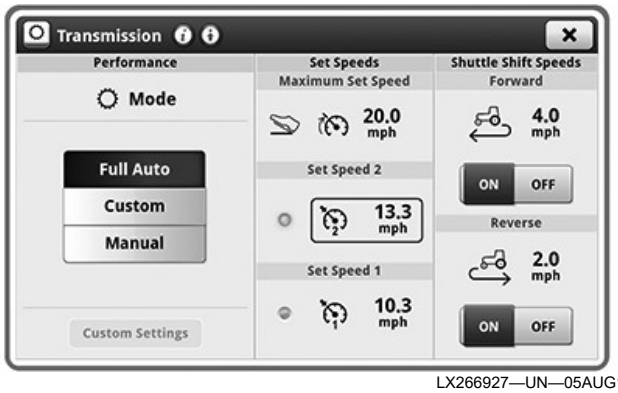
IMPORTANT: If this function is NOT activated, every time the tractor changes its direction of travel it automatically accelerates to the speed it was driven at previously. Restricted to 30 km/h (18 mph) in reverse.

This function is used to set (or activate) a travel speed to which the tractor accelerates when it changes direction of travel.

In each direction of travel, one desired travel speed may be set, activated, or disabled.

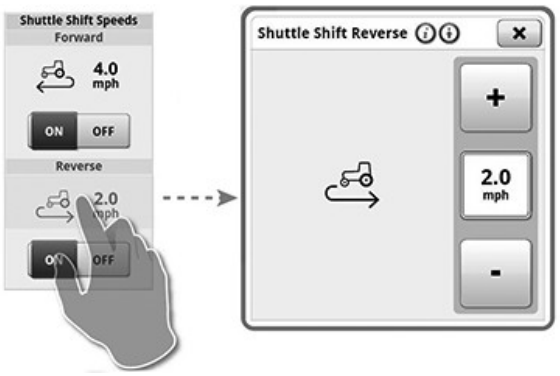
NOTE: At travel speeds below 2 km/h (1 mph), acceleration is restricted to 2.5 times after direction has been changed.

To alter, access the Transmission page and press the relevant button.



LX266927—UN—05AUG16

Use the **+/-** buttons to set the desired travel speed.



LX266928—UN—05AUG16

Changes will be saved automatically after exiting the page.

NOTE: In addition, the characteristics for increasing and decreasing travel speed can be set. See CommandPRO™ Joystick—Set the Characteristics for Increasing and Decreasing Travel Speed in this Section.

OULXA64,0005BAA-19-11JUN21

CommandPRO™ Joystick—Engine Speed / Hand Throttle Module

The hand throttle module on the CommandARM™ is used to control engine speed.

Integral to the hand throttle module are three buttons for constant engine speed:

LX266943—UN—15AUG16

- **n/min 1**, engine set speed 1
  Used to activate, deactivate or store an engine speed, which is set automatically after activation.
- **n/min 2**, engine set speed 2
  Used to activate, deactivate or store an engine speed, which is set automatically after activation.
- **n/min**, mode for manual engine speed control
  Used to activate or deactivate the mode. After activation, engine speed is determined by the position of the hand throttle module.

Indicator lights:

- When one of the engine set speeds or manual engine speed control is activated, the LED in the corresponding button on the hand throttle module lights up.
- The corresponding indicator light in the display and on the engine page light up to indicate constant engine speed.

LX514049—UN—10AUG21

LX267004—UN—05DEC16

Automatic mode:
In automatic mode, the position of the hand throttle module determines the lower engine speed threshold. In this mode, engine speed is automatically altered to suit the current driving condition.

Example: If lower engine speed is set to 1350 rpm using the hand throttle module, this means in automatic mode that engine speed may vary between 1350 rpm and rated engine speed depending on load.

- Automatic mode becomes active automatically every time the engine is started.
- Changing from automatic mode to constant engine speed mode is done by pressing one of the buttons on the hand throttle module:
  - **n/min 1**, engine set speed 1
  - **n/min 2**, engine set speed 2
  - **n/min**, manual engine speed control
- Pressing the button again reengages the automatic mode.

Constant engine speed mode:
In this mode, automatic mode is deactivated and the automatic control is not active.

Changes in travel speed are possible only by using the speed control pedal or the joystick and have no effect on engine speed, regulating travel speed only.

In constant engine speed mode, engine speed remains constant. Engine speed is commanded solely by the settings in engine set speeds 1 or 2, and by the position of the hand throttle module.

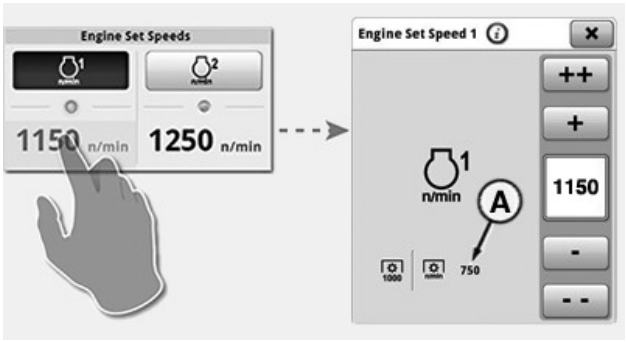
Constant engine speed mode is displayed by the corresponding icons in the display.

NOTE: To achieve higher travel speeds, the engine speed setting in constant speed mode must be increased.

Set and store the constant engine speed:

To store, set the desired engine speed with the hand throttle module and press button **n/min 1** or **n/min 2** until an acoustic alarm is heard. This procedure applies only to engine set speeds **n/min 1** and **n/min 2**.

Alternatively, the values can be set on the engine page in CommandCenter™.



LX315098—UN—19FEB18

Press the **n/min** button for manual engine speed control and set the desired engine speed with the hand throttle module.

When the engine speed is being set, the PTO speed (A) is converted as shown.

Retrieving (activating) engine set speed n/min 1 or n/min 2 or manual engine speed control n/min: After pressing one of the buttons, engine speed will be set to the set or stored value automatically. Engine control ensures that engine speed remains constant. There is an LED in each button, which lights up when activated.

Pressing the button again deactivates the constant engine speed mode and Auto mode becomes active again.

OULXA64,0005BAB-19-10AUG21

CommandPRO™ Joystick—PTO Operation / Engine Speed Setting

LX266943—UN—15AUG16

Jobs requiring a constant PTO speed:

Enable engine set speed or manual engine speed control mode. See CommandPRO™ Joystick - Engine Speed / Hand Throttle Mode.

NOTE: During operation, engine speed commanded by the engine set speed can be increased at short notice by means of the hand throttle module.

Jobs requiring a minimum PTO speed:

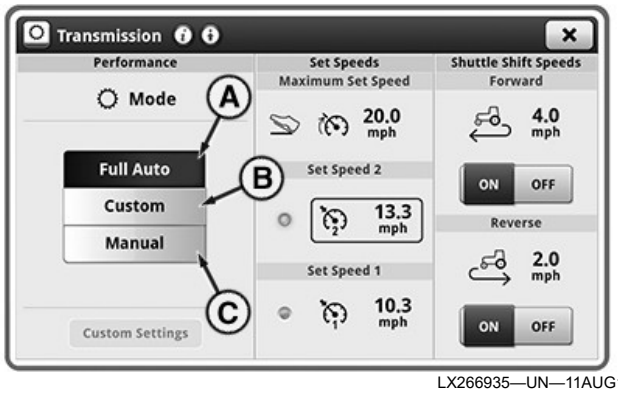
In Custom Mode, set minimum engine speed. See CommandPRO™ Joystick—Set Engine Speed Increase (Custom Setting).

Jobs requiring a linear ratio of PTO speed to travel speed:

See “Manual” operating mode in CommandPRO™ Joystick—Setting the Operating Mode on the following pages.

OULXA64,0005BAC-19-11JUN21

CommandPRO™ Joystick—Set the Operating Mode



LX266935—UN—11AUG16

To set the relevant operating mode, press the Transmission button and select the desired operating mode on the page shown.

A — Full Auto

In Full Auto mode, settings are automatically adjusted to suit various driving conditions.

Engine speed is automatically reduced when there is a slight load.

Engine droop is automatically set for use of full power.

B — Custom

The following can be chosen by the operator:

- Minimum engine speed
- Type of tractor work for activating the minimum engine speed
- Engine droop

NOTE: Custom settings have no effect on the automatic mode.

C — Manual

In this mode, there is a linear relation between travel speed and PTO speed when the PTO is engaged.

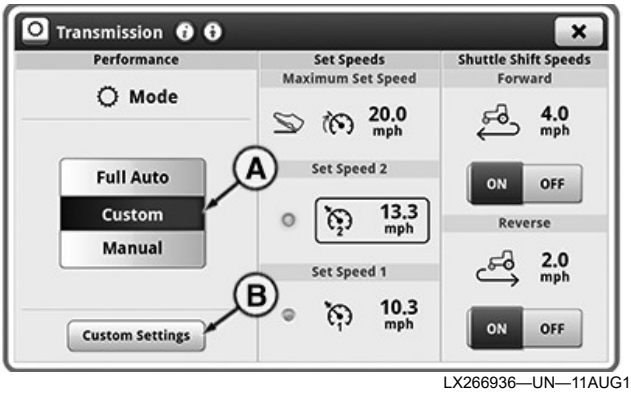
- When stationary, low idle speed is commanded.
- At maximum speed, rated engine speed is prescribed.
- Engine speed is not altered to suit load-dependent requirements.
- Under load, engine speed may drop below the set or stored value.

	A — Full Auto	B — Custom	C — Manual
• Automatic load control	ON	ON	OFF
• Function for increasing engine speed to anticipate load	Automatic (ON/OFF)	Adjustable	OFF
• Limiting engine speed droop while the front and/or rear PTO is switched on	ON	Adjustable	OFF
• Limiting engine speed droop while the front and rear PTOs are switched off	ON	Adjustable	OFF

OULXA64,0005BAD-19-11JUN21

CommandPRO™ Joystick—Reset Custom Setting to Default

Press button (A) and then button (B).

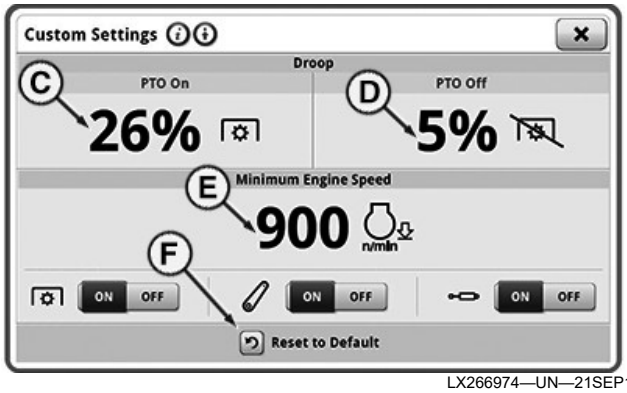


LX266936—UN—11AUG16

Page for Custom Settings, Accessing

A—Custom Mode
B—Custom Settings

Button (F) allows Custom Settings (C), (D), and (E) to be restored to the factory settings.



LX266974—UN—21SEP16

Reset to Factory Setting

C—Engine Droop with PTO ON
D—Engine Droop with PTO OFF
E—Minimum Engine Speed
F—Reset to Factory Setting

AUTO appears in the input boxes and the settings for Auto mode are active.

After a reset to factory defaults, the behavior in custom mode is the same as in auto mode.

OULXA64,0005BAE-19-11JUN21

CommandPRO™ Joystick—Set Engine Speed Increase (Custom Setting)

If engine speed must not drop below a threshold, a

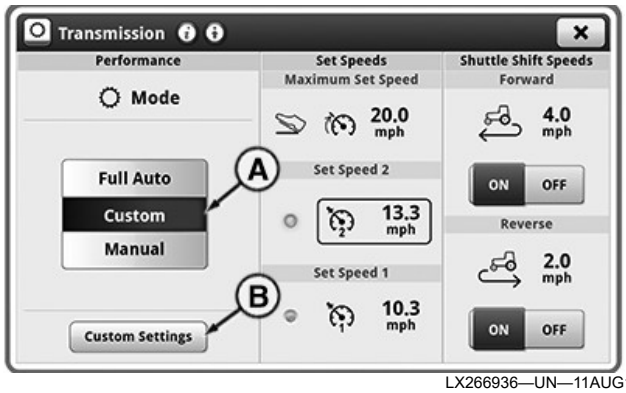
minimum engine speed may be set, dependent on the following tractor work:

- PTO operation
- Rear hitch operation
- SCV operation

NOTE: Custom settings have no effect on the automatic mode.

To set a minimum engine speed, access the Transmission page.

Press button (A) and then button (B).

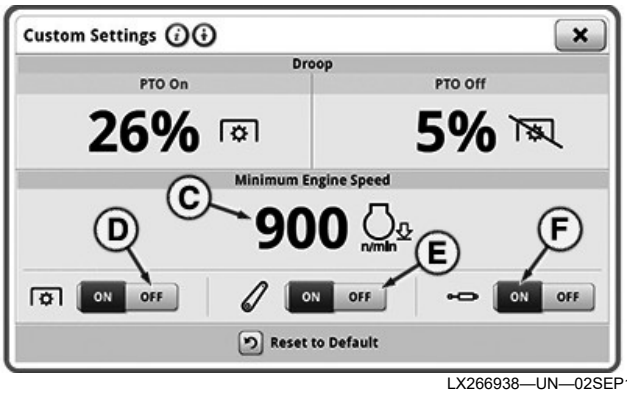


LX266936—UN—11AUG16

Page for Custom Settings, Accessing

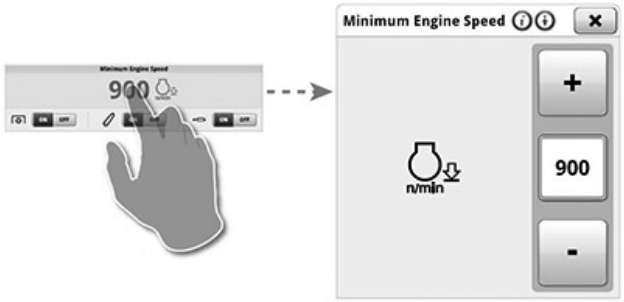
A—Custom Mode
B—Custom Settings

Select display field (C) and use the +/- buttons to set the desired minimum engine speed.



LX266938—UN—02SEP16

Minimum Engine Speed



LX266937—UN—11AUG16

C—Minimum Engine Speed
D—Increase Engine Speed Automatically when Operating the PTO (front and/or rear PTO)
E—Increase Engine Speed Automatically when Operating the Rear Hitch
F—Increase Engine Speed Automatically when Operating the SCVs

NOTE: The value can be incrementally configured from 900 rpm to 2100 rpm.

Set the value to AUTO (first entry in the list of numerical values) to let the tractor determine if engine speed needs to be increased for a short time when an SCV or the hitch generates load after activation.

If a numerical value is set, the tractor always increases engine speed to this value when PTO, hitch, or SCV is activated and the switches (D), (E), (F) are set to ON.

The custom setting can be reset to the factory setting.

See CommandPRO™ Joystick - Reset Custom Setting to Default in this Section.

Automatic engine speed increase when activating PTO, hitch, and/or SCVs (Custom)

The automatic engine speed increase can be activated (ON) or deactivated (OFF) when one or more of the following functions is/are activated:

(D) PTO operation ON (front and/or rear PTO)
► Engine speed is permanently increased when the PTO shaft is engaged

(E) Rear hitch operation ON
►The engine speed is briefly increased if the hitch is lowered while driving

(F) SCV operation ON
► Engine speed is increased temporarily or permanently depending on SCV usage
See also Electronic Selective Control Valves (SCV), Set Flow Time and Electronic Selective Control Valves (SCV), Set Flow Rate in Section 70C.

Enable or disable automatic engine speed increase

1. Set desired engine speed (C).
2. Select desired function and activate it with the ON button or deactivate it with the OFF button.

3. To save, close page.

OULXA64,0005BAF-19-09MAR23

CommandPRO™ Joystick—Set Engine Droop (Custom Setting)

Set engine droop:
In order to keep engine speed as constant as possible when operating a rear PTO, the transmission automatically adjusts the ratio as load increases.

Engine droop intensity depends on the setting, which corresponds to a percentage of the currently commanded engine speed.

Example: Based on a commanded engine speed of about 2000 rpm, setting the engine speed droop to 10% means that the transmission is regulated down in the event of a speed decrease to about 1800 rpm. This would correspond to a drop in PTO speed from 540 to about 490 rpm accordingly.

Engine speed droop also influences the shifting behavior when upshifting in Auto mode. The higher the value set for engine droop, the sooner the tractor will shift up.

NOTE: With rear PTO switched on or off, engine droop percentage can be set as follows:

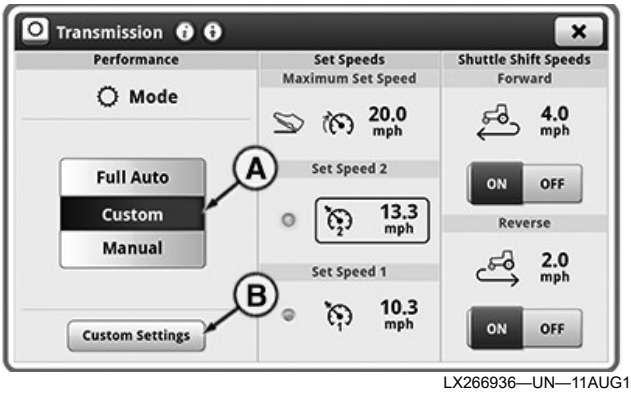
— Rear PTO ON, from 5% to 30%,

— Rear PTO OFF, from 5% to 30%

Set the droop to AUTO to use a universal setting with a lower value.

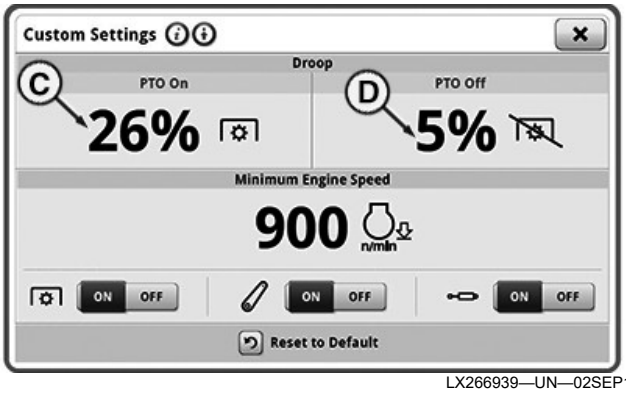
To set engine speed droop, access the Transmission page.

Press button (A) and then button (B).



LX266936—UN—11AUG16

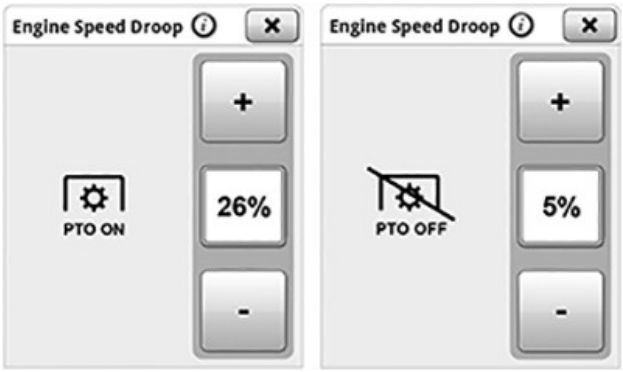
Select display field (C) or (D).



LX266939—UN—02SEP16

Set Engine Droop

Use the +/- buttons to set the desired engine droop with PTO ON or PTO OFF. To save, close page.



LX315049—UN—27NOV17

The custom settings can be restored to the factory settings.

See CommandPRO™ Joystick—Reset Custom Setting to Default) on the following pages.

OULXA64,0005BB0-19-04FEB22

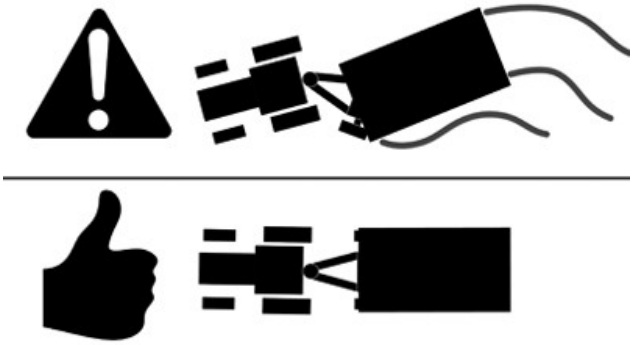
CommandPRO™ Joystick—Operating on Hillsides in Slippery Conditions

CAUTION: Personal injury may result if control of the tractor is lost while operating on hillsides. The tractor wheels may slip on slippery slopes, causing skidding. Observe the following precautions:

- Select travel speed that ensures safe operation on hillsides.
- Do not use the speed control lever to decelerate too quickly.
- Set the characteristics for increasing and decreasing travel speed to *soft*.

Braking of tractor and trailer (in particular when driving downhill)[1]:

[1] *This is valid for tractors with AutoPowr™/IVT™ transmission and pneumatic and hydraulic trailer brake system.*

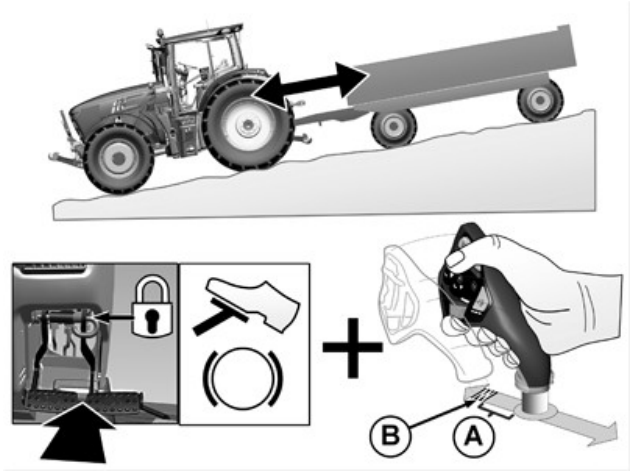


LX514244—UN—11FEB22

For stable driving characteristics, it is necessary to stretch the coupled unit.

When there is a travel speed reduction commanded by the driver using the CommandPRO™ Joystick—there may be strong braking characteristics by the tractor. These braking characteristics may be caused by the gear transmission and the engine and may be intensive at slow travel speeds.

To keep the hitched unit stretched in this situation, be sure that braking is primarily done by the tractor's main brake. As an alternative, the clutch pedal can be pressed at the same time as the service brake is pressed. In both cases, the trailer brake is actuated sufficiently to stretch the hitched unit. This provides the best possible driving stability during stopping or when slowing down for changing directions.



LX514243—UN—03FEB22

Comply with the following conditions to control the travel speed and keep the hitched unit stretched: Lock the brake pedals together. If the joystick is pushed into a direction of travel (A) and at the same time the two brake pedals are pressed, the tractor and trailer are stretched by the activated trailer brake while remaining at constant speed.

To accelerate, move the CommandPRO™ joystick beyond the perceptible point of resistance (B).

OULXA64,0005BB1-19-03FEB22

CommandPRO™ Joystick—Use Creeper Mode

Creeper mode is activated automatically when a travel set speed is reduced below 2 km/h (1 mph).

The tractor exits creeper mode if all travel set speeds are greater or equal to 2 km/h (1 mph), or if one travel set speed is set higher than 15 km/h (10 mph).

In creeper mode, the vehicle response to acceleration commands is reduced when travel speed is below 2 km/h (1 mph). This allows a travel speed fine-tuning in creeper mode. When travel speed exceeds 2 km/h (1 mph), acceleration rate will increase significantly.

Active creeper mode is indicated through the snail symbol on the primary display.

LX412384—UN—07MAY21

OULXA64,0005BB2-19-16AUG21

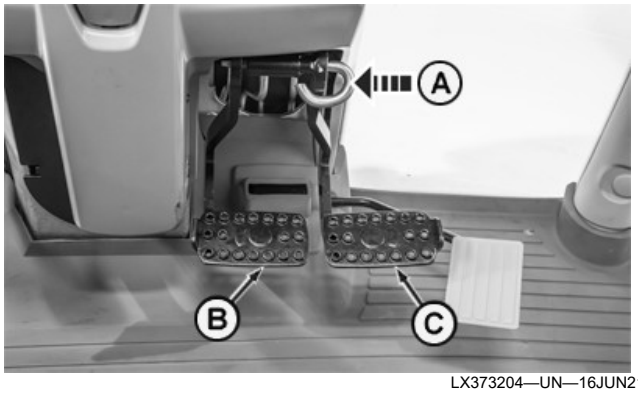
CommandPRO™ Joystick—Use Individual Brake Pedals

CAUTION: Risk of severe injuries and material damage.

Braking with only one brake pedal is only intended for field work with slow travel.

Observe the following:

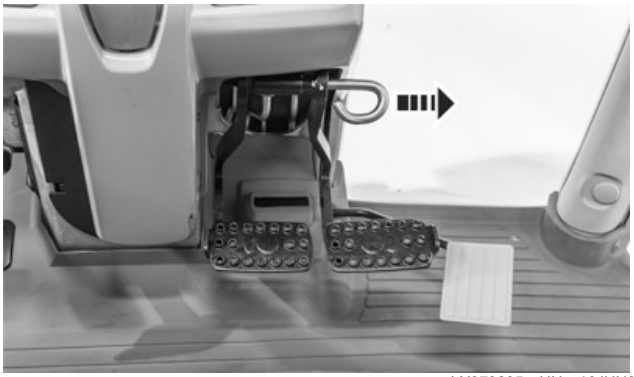
- **If only one brake pedal is pressed, travel speed will NOT be reduced.**
- **With the brake pedals unlocked, the clutch pedal and both brake pedals must be depressed simultaneously if emergency braking is required.**



LX373204—UN—16JUN21

Locked Brake Pedals

A—Brake Pedal Latching Pin
B—Left Brake Pedal
C—Right Brake Pedal



LX373205—UN—16JUN21

Unlocked Brake Pedals

Driving along curves during field work

Unlock and lock the brake pedals.

- Uncouple the brake pedals: Turn the locking bolt (A) upwards for 1/4 turn, pull it out and then turn it downwards.
- Lock the brake pedals: Turn the locking bolt (A) upwards for 1/4 turn, press it in and then turn it downwards.

Use brake pedals individually to initiate directional corrections at low speed.

- Press left brake pedal (B) ► tractor moves to the left
- Press right brake pedal (C) ► tractor moves to the right

AutoClutch Function:

CAUTION: Risk of severe injuries and material damage.

If only one brake pedal is pressed, travel speed will NOT be reduced.

Observe the following:

- **Regardless of engine speed, the AutoClutch function is NOT activated on tractors with CommandPRO™ joystick when only one brake pedal is depressed.**
- **The brake pedals must be locked together to activate the AutoClutch function.**

OULXA64,0005BB3-19-16JUN21

CommandPRO™ Joystick—Stop and Park the Tractor

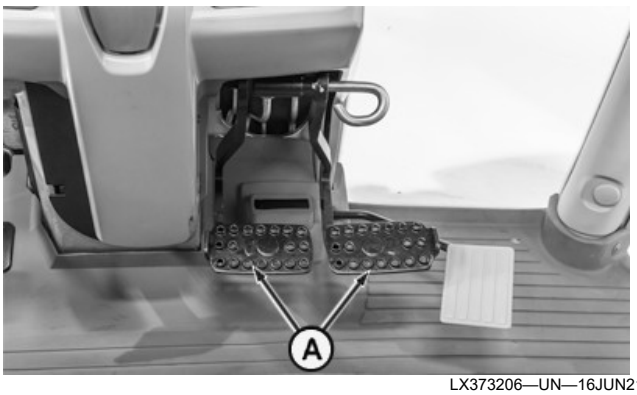
CAUTION: Risk of severe injuries and material damage.

Avoid injury due to losing control of tractor.

Observe the following:

- **If only one brake pedal is pressed, travel speed will NOT be reduced.**
- **Regardless of engine speed, the AutoClutch function is NOT activated on tractors with CommandPRO™ joystick when only one brake pedal is depressed.**
- **Always lock the brake pedals together when driving on the road.**
- **Press both brake pedals to stop the tractor.**
- **Engage the park lock before leaving the cab.**

1. Press both brake pedals to stop the tractor. **It is not necessary to depress the clutch.**



LX373206—UN—16JUN21

A—Brake Pedals

2. Press button **P**. Indicator light (P) will glow as long as the park lock is engaged.

LX514051—UN—11AUG21

P—Park Lock

3. Lower implements and shut off PTO.
4. Shut off engine and withdraw ignition key.

OULXA64,0005BB4-19-11AUG21

CommandPRO™ Joystick—Cold-Weather Starting

LX1045750—UN—03DEC10

To avoid damage to components at temperatures below freezing, an automatic function prevents the drive system from engaging too soon.

After the engine has started, the warm-up routine starts automatically.

The park lock cannot be disengaged until the tractor has reached its operating temperature.

LX514061—UN—17AUG21

Disengaging the Park Lock is Disabled

The time required for the transmission to warm up will vary depending on the temperature:

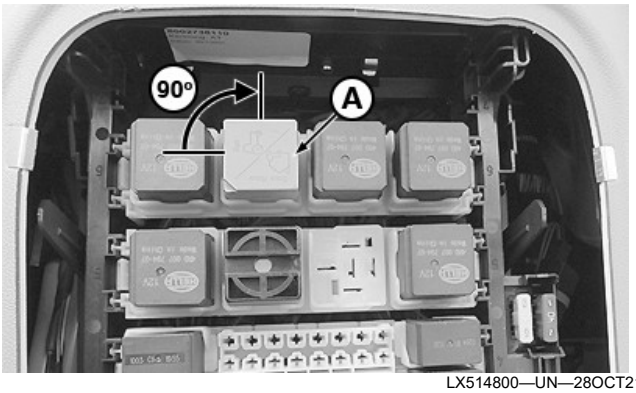
Temperature Range	Warm-Up time
above -7°C (19.4°F)	None
between -8°C (17.6°F) and -15°C (5°F)	approx. 95 seconds
between -16°C (3.2°F) and -20°C (-4°F)	approx. 155 seconds
between -21°C (-5.8°F) and -30°C (-22°F)	approx. 245 seconds

At temperatures below -30°C (-22°F) only the transmission input shaft is turned. The warm-up routine starts as soon as the transmission oil temperature has reached -30°C (-22°F).

NOTE: During the warm-up routine, the engine speed may rise to 1200 rpm.

OULXA64,0005BB5-19-17AUG21

CommandPRO™ Joystick—Come-Home Mode



LX514800—UN—28OCT21

If there is an electrical fault in the transmission, the tractor can possibly still be driven in come-home mode.

To do this, stop the engine, pull out the connector (A) (fuse/relay box), rotate it 90° to the right, and reinsert it.

Then restart the engine.

See also Fuses and Relays (LCS) with AutoPowr™/IVT™ Transmission in Section 220B.

In Come-Home Mode:

1. Maximum speed is 9 km/h (5.6 mph).
2. Power Zero™ function is disabled. The transmission runs at a fixed ratio. Ground speed can be varied through engine speed only.
3. Changing direction is possible only when the machine is stopped and the clutch pedal is pressed.
4. The clutch pedal and the brake pedal need to be applied to stop.
5. Travel speed can be matched only by changing engine speed (hand throttle or speed control pedal).

To start, proceed as follows:

1. Press the clutch pedal and hold it down.
2. Use the reverse drive lever or the CommandPRO joystick to select direction of travel.
3. Start by releasing the clutch pedal.

OULXA64,0005BB6-19-04FEB22

CommandPRO™ Joystick—Towing the Tractor

If the tractor needs to be towed and park lock cannot be released, follow the instructions in Section 110:

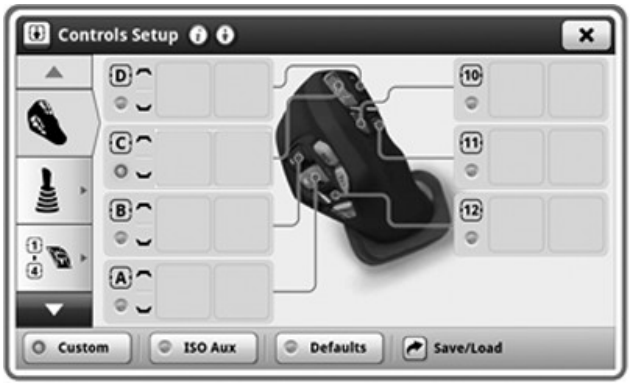
1. Towing the Tractor

2. Release the Park Lock Manually

OULXA64,6R,0005BB7-19-10AUG23

CommandPRO™ Joystick—Assignment of Functions

Default assignments:



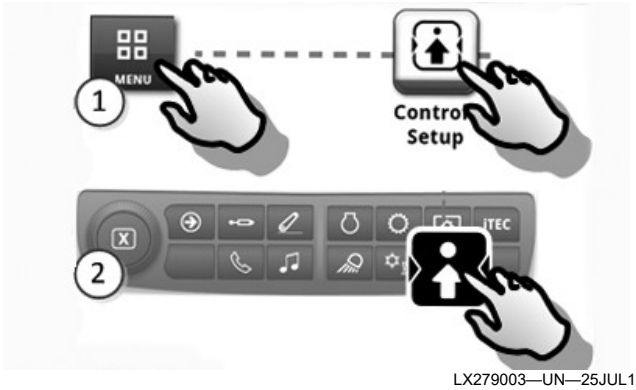
LX279036—UN—20JAN17

The illustration shows the buttons on the CommandPRO™ joystick to which functions can be assigned.

The table shows the default assignments.

CommandPRO™ joystick	Default assignment
[A]	Rear hitch
[B]	Front hitch
[C]	SCV I
[D]	SCV II
[10]	Engine set speed 1
[11]	Engine set speed 2
[12]	AutoTrac™

Change the default assignments:



LX279003—UN—25JUL16

Select one of methods shown below to access the Controls Setup page.

1. Press menu button on touchscreen.
2. Press button at CommandCenter™™.

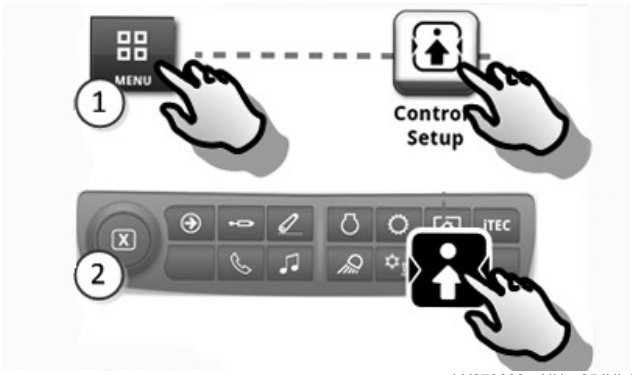
CommandCenter™ is a trademark of Deere & Company

Instructions can be found in Section 30C of this Operator's Manual.

- See Controls Setup, Assignment of Functions.
- See Controls Setup, Custom Settings (Settings Manager).

Toggle Switches on CommandPRO™ Joystick in Independent Mode

- The independent mode applies for toggle switches **[A], [B], [C]** and **[D]** of the CommandPRO™ joystick.
- In independent mode, a different function can be assigned to each switch position of the toggle switch.



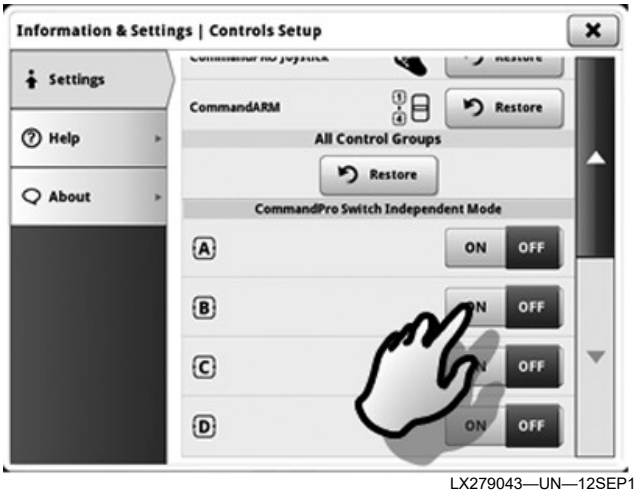
LX279003—UN—25JUL16

Open Dialog for Setting Up Controls

Open the dialog for setting up the controls, see (1) or (2).

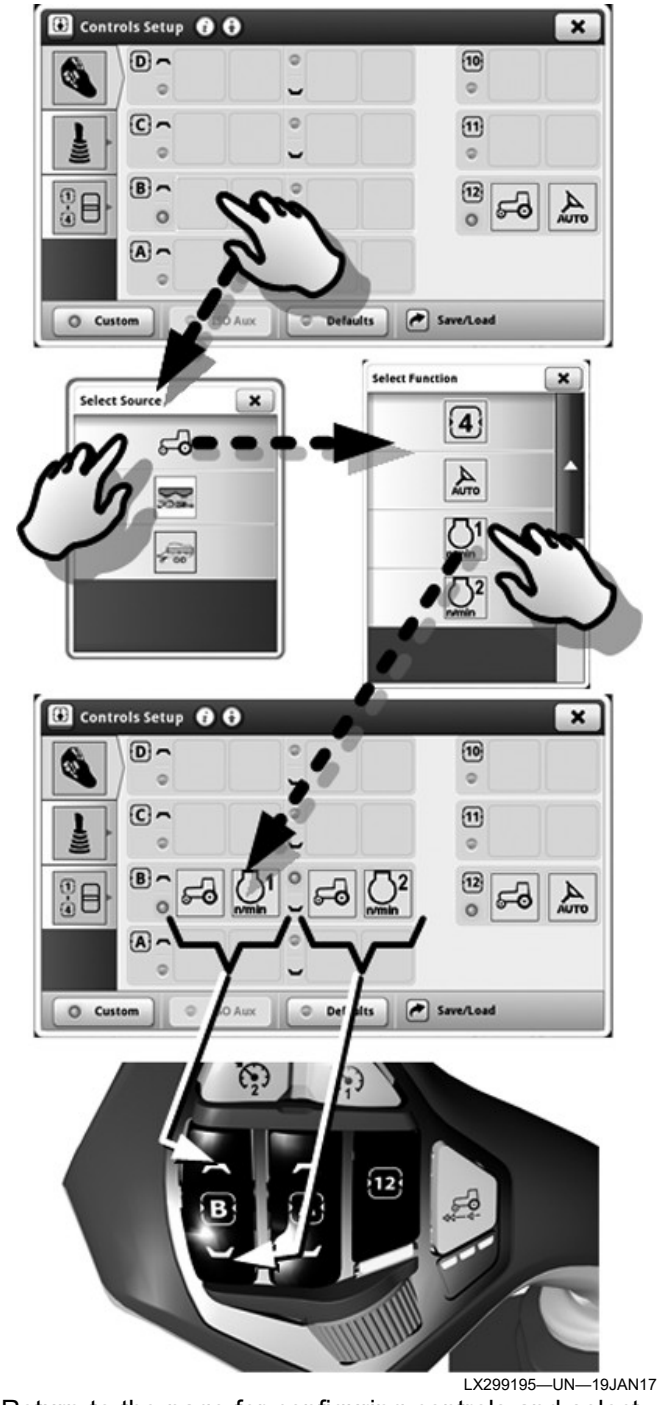
LX299194—UN—19JAN17

1. Access the tab for the CommandPRO™ joystick.
2. Activate Custom.
3. Open Advanced Settings.



LX279043—UN—12SEP16

Turn on independent mode for toggle switches **[A], [B], [C],** or **[D]**. **[B]** is shown in the example.



LX299195—UN—19JAN17

Return to the page for configuring controls and select the toggle switch. Successively assign a function to each switch position.

If the independent mode is on, this is indicated by a green indicator light on the display.

1. Select desired group (e.g. tractor functions).
2. In the next step, select the function to be assigned (e. g. engine set speed 1).

Repeat the step to assign a function to the second switch position.

Once assignment has been completed, each position of the toggle switch appears with the relevant function.

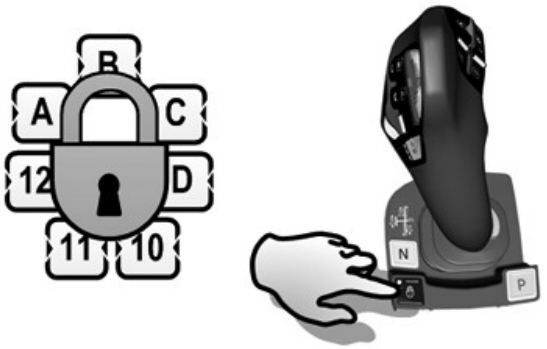
Assignment shown as an example:	
Press top end of toggle switch **[B]**.	Engine set speed 1
Press bottom end of toggle switch **[B]**.	Engine set speed 2

Control the float position of the front hitch with switch [A] or [B]:

The function for using the float position is explained in Section 60D.

OULXA64,0005BB8-19-11JUN21

CommandPRO™ Joystick—Lock Out Functions



LX279018—UN—12AUG16

CAUTION: Lock out the button functions if they are not required for the task in hand.

Press the button with the lock symbol to switch the button functions on and off.

- An illuminated LED in the lock button means "locked out."
- Pressing the lock button in the normal way releases the lock and the LED goes out.

CommandPRO™ Joystick - List of Buttons Affected
[A]
[B]
[C]
[D]
[10]
[11]
[12]

OULXA64,0005BB9-19-11JUN21

Backup Alarm (If Equipped)

See Switch the Backup Alarm ON or OFF (If Equipped) in Section 50D.

OULXA64,6R,0005BCE-19-30APR21

Hitch—Maximum Lifting Force

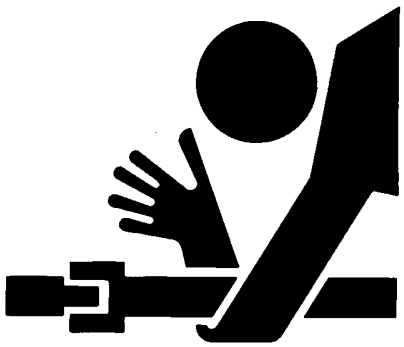
Information on maximum lifting force can be found in the Specifications section.

NOTE: When driving on public roads, observe legal restriction with regard to axle loads and tire load capacity. Due to these legal restrictions, maximum permitted lifting force may be less than the stated value.

LX25458,MY20,00009FE-19-19JUN23

PTO Shaft—General Information

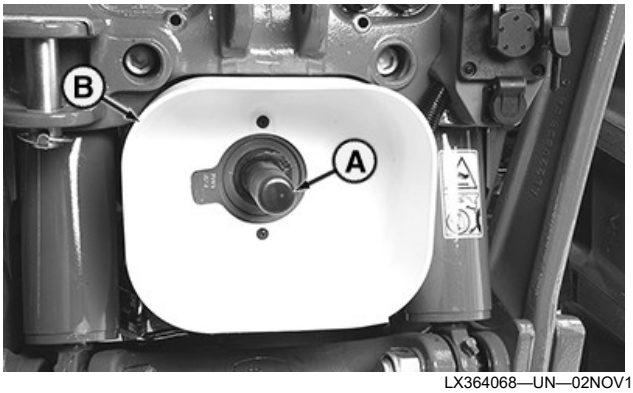
Front PTO—PTO Shield



TS276—UN—23AUG88

CAUTION: Remove protective cap (A) only when a PTO-driven implement is to be attached.

As soon as the implement is removed, reinstall protective cap!



LX364068—UN—02NOV18

Protective Cap and PTO Shield

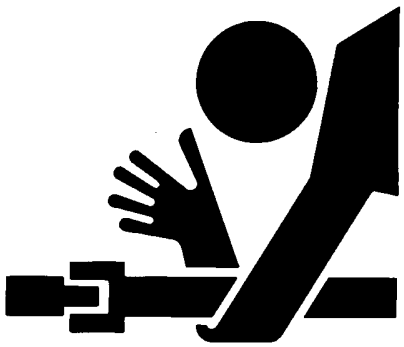
CAUTION: Operate the PTO shaft only if there is a PTO shield (B). Switch off the PTO before raising the implement.

CAUTION: Before using the PTO, the maximum permissible angle of articulation on the universal-jointed shaft needs to be determined. During operation, there must be no contact between the PTO guard and the universal-jointed shaft.

When connecting the PTO shaft, wear gloves.

OULXA64,6M,000561C-19-15JUN23

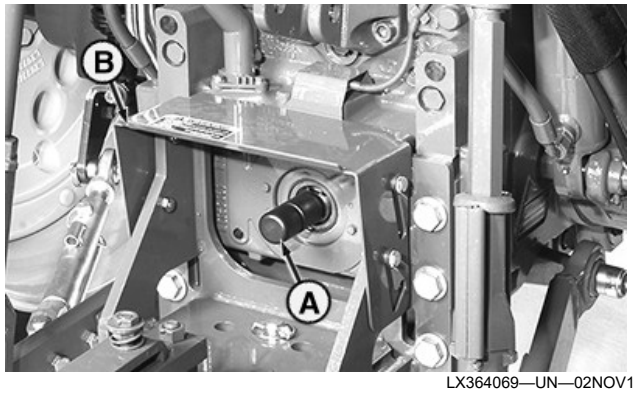
Rear PTO—PTO Shield



TS276—UN—23AUG88

CAUTION: Remove protective cap (A) only when a PTO-driven implement is to be attached.

As soon as the implement is removed, reinstall protective cap!



LX364069—UN—02NOV18

The master shield (B) can be folded up to allow an implement to be connected, but it must be folded down again afterwards. *There are various versions of PTO guard that are not shown here.*

CAUTION: Never operate PTO unless the master shield is in the position shown. Switch off the PTO before raising the implement.

CAUTION: Before using the PTO, the maximum permissible angle of articulation on the universal-jointed shaft needs to be determined. During operation, there must be no contact between the PTO guard and the universal-jointed shaft. This is important when turning corners.

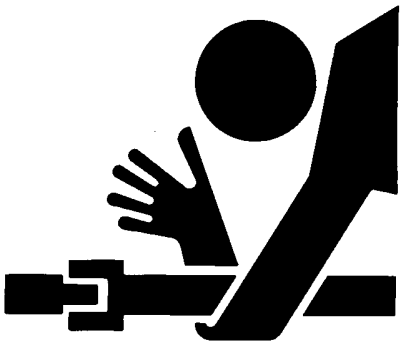
With type 3 PTOs using a 45 mm (1.77 in) diameter shaft with 20 splines, clearance in the area of the PTO shield may be restricted. Bear this in mind when operating to avoid unnecessary damage.

When connecting the PTO, wear gloves.

CAUTION: Always put a guard (C) on the universal-jointed shaft and take action to prevent it from turning with the shaft. Do not operate the universal-jointed shaft unless a guard is installed that covers the PTO shaft completely and does not turn with the shaft.

LX1049906—UN—18FEB11
OULXA64,6M,000561D-19-15JUN23

None-Rotating PTO Guard



TS276—UN—23AUG88

CAUTION: Danger to life from rotating parts.

Clothing or body parts can be caught in rotating parts. This leads to life-threatening injuries.

If no attachment is connected, the PTO shaft must be covered with the non-rotating PTO guard.

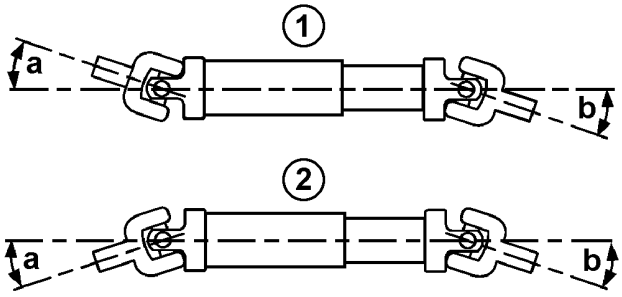
LX514250—UN—12MAY22

When the rear PTO is not in use, cover the PTO drive shaft with the non-rotating PTO guard.

Align the PTO guard with the two pins and turn clockwise until it clicks into place.

oulxa64,1652677773998-19-23MAY22

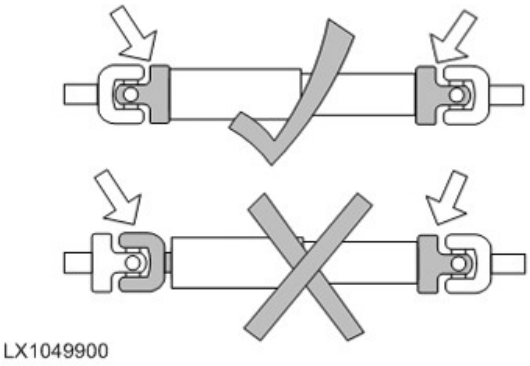
Operating Instructions



LX1049749

LX1049749—UN—21MAY10

Observe angle of articulation of universal-jointed shaft.



LX1049900—UN—22FEB11

Correctly align the yokes of the joints to each other.

1—Z-Shaped Layout
2—W-Shaped Layout

As far as possible, angles (a) and (b) at the universal joints should be the same at both ends of the universal-jointed shaft.

In applications where this is not the case (for example, sharp turns with PTO engaged), it is recommended to use a continuous-velocity driveshaft.

NOTE: The two schematic drawings do not show any shields on the universal-jointed shaft. A shield is mandatory when using universal-jointed shafts.

IMPORTANT: Only operating conditions described in the Operator's Manuals of the various implements are permitted. This applies particularly to maximum permissible angle of articulation, to the use of overrunning couplers, freewheel clutches and overload clutches, and to the prescribed amount of overlap when shaped pipes are pushed together.

IMPORTANT: Before using a PTO-driven implement, ensure that the universal-jointed shaft is lubricated regularly. Comply with instructions in the Operator's Manual provided by the manufacturer.

IMPORTANT: On multi-component telescoping universal-jointed shafts, the yokes at each end must be aligned as shown. The yokes at each end must NOT be at 90° to one another (see arrows in illustration on the right).

LX25458,MY20,0000A00-19-30MAR23

PTO Speeds

The engine speeds at which standard PTO speeds are achieved are listed under Engine in the Specifications Section.

LX25458,0000A01-19-16MAY22

PTO Options

IMPORTANT: With the 540 series rear PTO, implements may only be operated if their power input never exceeds 115 kW (156 PS, 154 hp).

The tractor may be equipped with one of the following PTO versions:

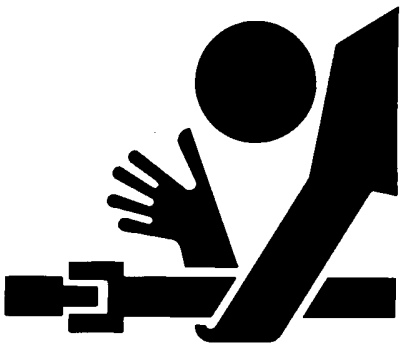
Rear PTO	Application
• Clockwise-rotating and shiftable	1000/540/540E
• Clockwise-rotating and shiftable	1000/1000E/540E

Front PTO	Application
• Clockwise-rotating (viewed in direction of travel)	1000

IMPORTANT: The front PTO may drive implements only if their power input does not exceed 115 kW (156 PS, 154 hp).

OULXA64,0005F73-19-25SEP23

Front PTO



TS276—UN—23AUG88

CAUTION: Danger to life from rotating components.

Unsuitable components, missing protective equipment, or improper handling of the PTO shaft can lead to serious accidents.

- **Only connect and disconnect the PTO shaft, and carry out other work when the engine is at standstill.**
- **Switch off the engine and remove the ignition key to prevent unauthorized starting of engine.**
- **Use only suitable PTO shafts recommended by the manufacturer.**
- **Use only undamaged components.**
- **Install all guards properly before operating the PTO shaft.**
- **Only operate PTO shafts at permissible speeds; see also the specifications from the implement manufacturer.**
- **Switch on the PTO only after danger zone is clear of people. See also Safety Instructions in Section 05 and Operating Instructions in 60A of this Operator's Manual.**

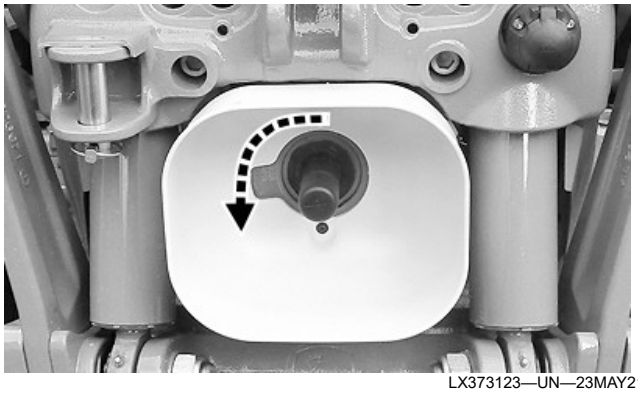
CAUTION: Remove protective cover only when a PTO-driven implement is to be attached.

As soon as the implement is removed, reinstall protective cap.

IMPORTANT: The clockwise-rotating front PTO (viewed in direction of travel) operates at a rated speed of 1000 rpm (engine speed 1965 rpm). The front PTO has one of the following PTO stub shafts:

- **6 teeth for Europe**
- **21 teeth for North America**

IMPORTANT: The front PTO may drive implements only if their power input never exceeds 115 kW (156 PS; 154 hp).



LX373123—UN—23MAY21

Clockwise-Rotating front PTO (Viewed in Direction of Travel)

NOTE: If the PTO switches off automatically and cannot be restarted immediately, comply with the relevant diagnostic trouble codes. If there is high resistance to starting or if the oil is very cold, this is registered by the control software and the PTO is switched off. The PTO cannot be restarted until 30 seconds have elapsed.

OULXA64,6R,MW67,0005EB4-19-25OCT21

Engage and Disengage the Front PTO

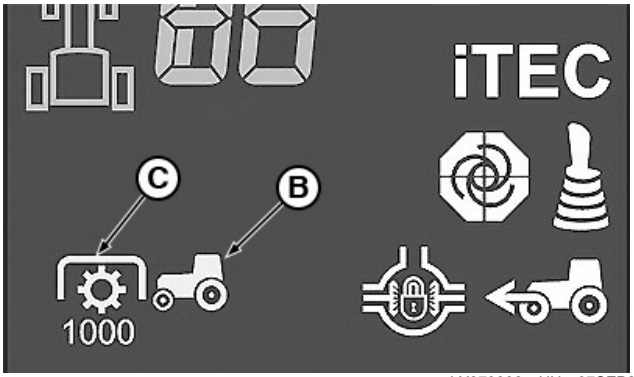
CAUTION: Always disengage the PTO when not in use.

CAUTION: High-inertia implements do not come to a standstill the moment a PTO is shifted to the disengaged position. Do NOT approach the implement while it is coasting down. Do not work on the implement until it has stopped.

1. To switch on the PTO, press switch (A) down and then forward. Depending on the equipment of the tractor, the switch remains in this position or returns to its home position.

LX373095—UN—12MAY21

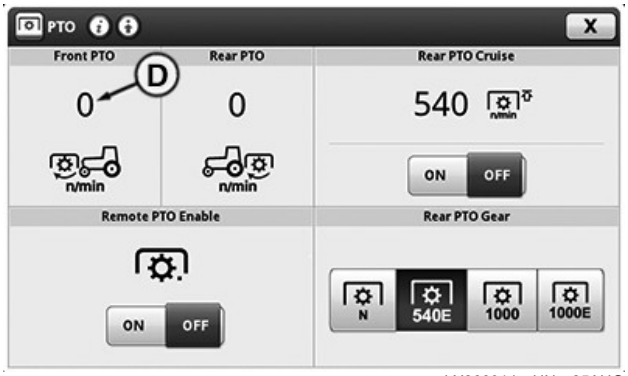
2. The PTO starts to rotate and indicators (B) and (C) light up.



LX373096—UN—07SEP21

B—PTO Indicator
C—Front PTO Indicator

3. The current speed (D) of the PTO is displayed on the PTO page in the CommandCenter™.



LX266914—UN—25AUG16

4. To switch off the PTO, pull switch (A) back.
5. The indicator lights go out and **0** (D) is displayed in the PTO speed window when the PTO stub shaft has stopped rotating.

NOTE: If the engine is shut off and then restarted while the PTO is running, the PTO will not operate.

The indicator light (C) goes out but indicator light (B) remains on.

To continue working, disengage the PTO and engage it again.

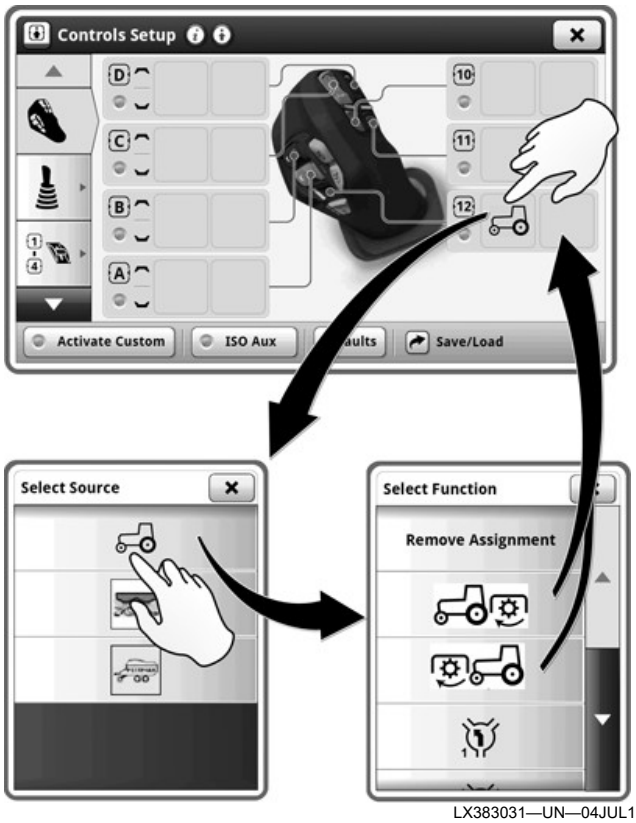
On tractors with AutoPowr™, an alarm sounds if the operator leaves the seat while the PTO is still running.

OULXA64,6R,MW67,0005F71-19-25OCT21

Operate PTO with CommandPRO™ Joystick

⚠ CAUTION: Observe the safety regulations in this Operator's Manual regarding PTO operation.

Also see Controls Setup - Assignment of Functions in Section 30C.



LX383031—UN—04JUL19

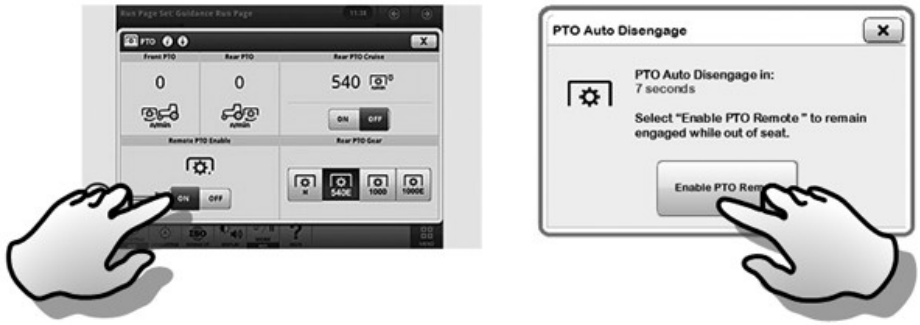
Front and rear PTO can be operated with button [10], [11], or [12]. To do so, the function must be assigned to the desired button. The image shows button [12], for example.

If a PTO assignment is active, the LED on the button lights up.

Engage and disengage the PTO	
Function:	**Operation:**
TURN ON	1. Select forward/reverse direction of travel (direction indicator is lit permanently or flashes). 2. Press assigned button.
TURN OFF	• Press assigned button. The PTO can be disengaged in any situation via the assigned button.

OULXA64,6R,0005B9A-19-27MAR23

Front PTO—PTO Automatic Shutoff Function (If Equipped)



LX299228—UN—02JUN17

Remote Control Mode

CAUTION: Accidents can cause severe or fatal injuries. Clothing and body parts can get caught in rotating parts. Do not perform any service work with the engine running. Avoid danger area and only turn on the PTO when there are no people in the danger area. In some situations, the PTO is shut off automatically.

NOTE: An automatic shutoff function may be active under certain conditions when the PTO is in operation. Various scenarios are presented in the following.

Scenarios

The automatic PTO shutoff function activates if (scenario 1):

1. Tractor is standing still, PTO is on.
2. The operator gets off the seat.
3. Within the next 7 seconds, the PTO stays on and an acoustic alarm sounds.
4. Two possibilities:
   a. The operator sits down again within 7 seconds - PTO stays ON, acoustic alarm turns OFF.
   b. The operator remains standing - PTO turns OFF automatically after 7 seconds, acoustic alarm turns OFF.

PTO operation without operator on the operator's seat (scenario 2):

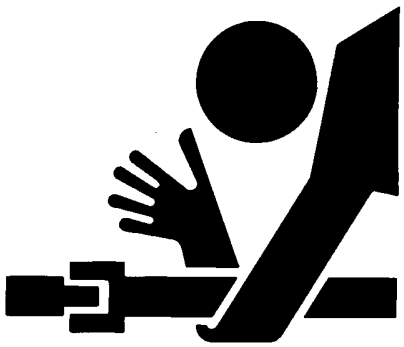
1. Tractor is standing still.
2. The operator is on the seat and turns ON the PTO.
3. In the CommandCenter™, the operator activates the remote control mode of the PTO.
4. When the operator leaves the seat, the PTO stays ON.

PTO operation without operator on the operator's seat (scenario 3):

1. Tractor is standing still.
2. The operator is on the seat and turns ON the PTO.
3. When the operator leaves the seat, the PTO stays ON, the acoustic alarm turns ON and information for the operator is displayed.
4. Different options:
   a. The operator sits down again within 7 seconds - PTO stays ON, acoustic alarm turns OFF.
   b. The operator remains standing and confirms the information displayed (remote control mode ON) - PTO stays ON, acoustic alarm turns OFF.
      • *On tractors with CommandPRO™, the PTO switch can also be actuated again.*
   c. The operator remains standing and does NOT confirm the information displayed - PTO automatically disengages, acoustic alarm is switched off.

OULXA64,6R,0005B9B-19-15JUN23

Rear PTO



TS276—UN—23AUG88

CAUTION: Danger to life from rotating components.

Unsuitable components, missing protective equipment, or improper handling of the PTO shaft can lead to serious accidents.

- **Only connect and disconnect the PTO shaft, and carry out other work when the engine is at standstill.**
- **Switch off the engine and remove the ignition key to prevent unauthorized starting of engine.**
- **Use only suitable PTO shafts recommended by the manufacturer.**
- **Use only undamaged components.**
- **Install all guards properly before operating the PTO shaft.**
- **Only operate PTO shafts at permissible speeds; see also the specifications from the implement manufacturer.**
- **Switch on the PTO only after danger zone is clear of people. See also Safety Instructions in Section 05 and Operating Instructions in 60A of this Operator's Manual.**

CAUTION: Remove protective cover only when a PTO-driven implement is to be attached.

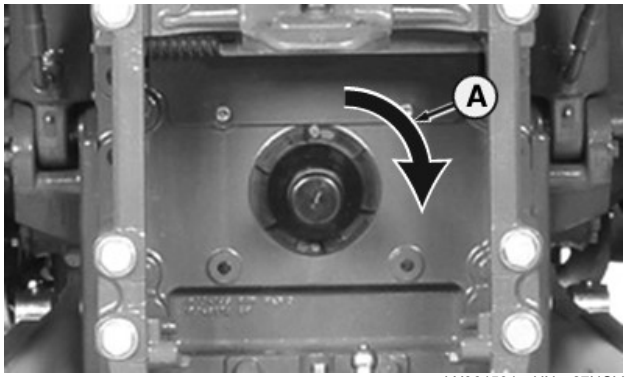
As soon as the implement is removed, re-install the protective cover!

IMPORTANT: The rear PTO can be equipped with different PTO stub shafts and PTO power output depending on the equipment.

• See Rear PTO—Change the PTO Stub Shaft in this Section.

• For the corresponding standard speeds, see Engine in Section 500A.

IMPORTANT: Only operate implements with the rear PTO if their power requirement corresponds to that of the PTO power output.



LX364534—UN—27NOV19

A—Direction of Rotation

NOTE: If the PTO switches off automatically and cannot be restarted immediately, comply with the relevant diagnostic trouble codes. If the oil is very cold, this is registered by the control software and the PTO is switched off. The PTO cannot be restarted until 30 seconds have elapsed.

OULXA64,6R,0005B8F-19-23SEP21

Engage and Disengage the Rear PTO

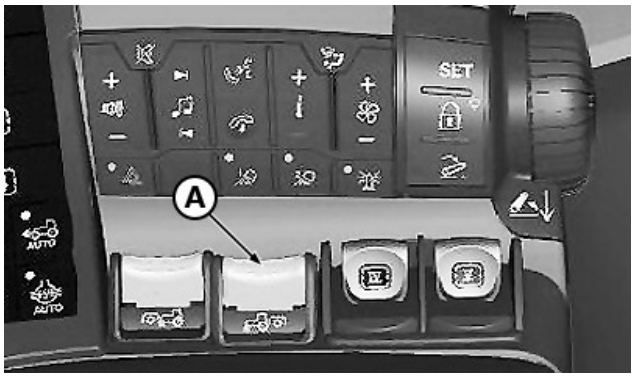
CAUTION: Always disengage the PTO when not in use.

CAUTION: High-inertia implements do not come to a standstill the moment a PTO is shifted to the disengaged position. Do NOT approach the implement while it is coasting down. Do not work on the implement until it has stopped.

NOTE: On tractors with AutoQuad™ PLUS transmissions, the electronic SoftShift has to be switched OFF during PTO operation.

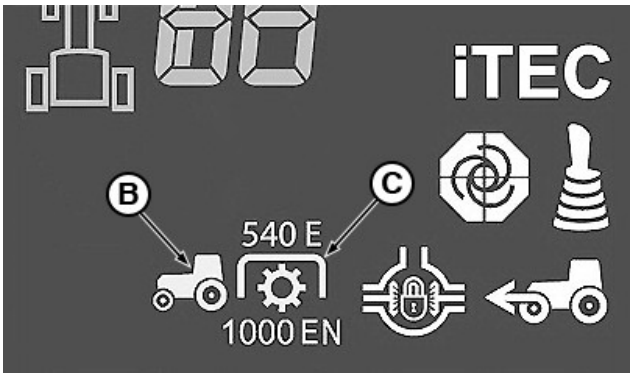
See AutoQuad™ PLUS Transmission, SoftShift in Section 50G.

1. To switch on the PTO, press switch (A) down and then forward. Depending on the equipment of the tractor, the switch remains in this position or returns to its home position.



LX373099—UN—12MAY21

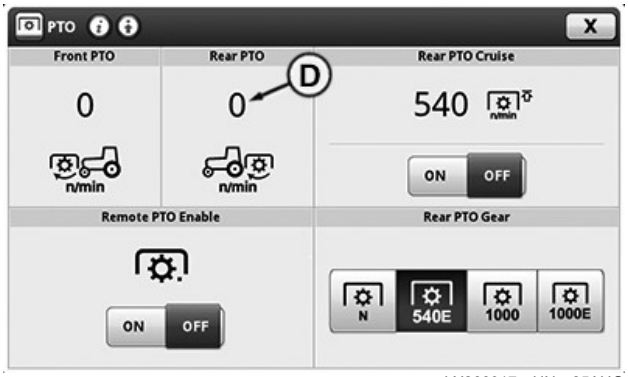
2. The PTO starts to rotate and indicators (B) and (C) light up.



LX373097—UN—07SEP21

B—PTO Indicator
C—Rear PTO Indicator

3. The current speed (D) of the PTO is displayed on the PTO page in the CommandCenter™.



LX266917—UN—25AUG16

NOTE: The PTO speed limit can be activated for the rear PTO. For more information, see the following pages.

4. To switch off the PTO, pull switch (A) back.
5. The indicators go out when the PTO stub shaft has stopped rotating and **0** is displayed on the PTO page.

NOTE: If the engine is shut off and then restarted while the PTO is running, the PTO will not operate.

Indicators (B) and (C) remain on.

To continue working, disengage the PTO and engage it again.

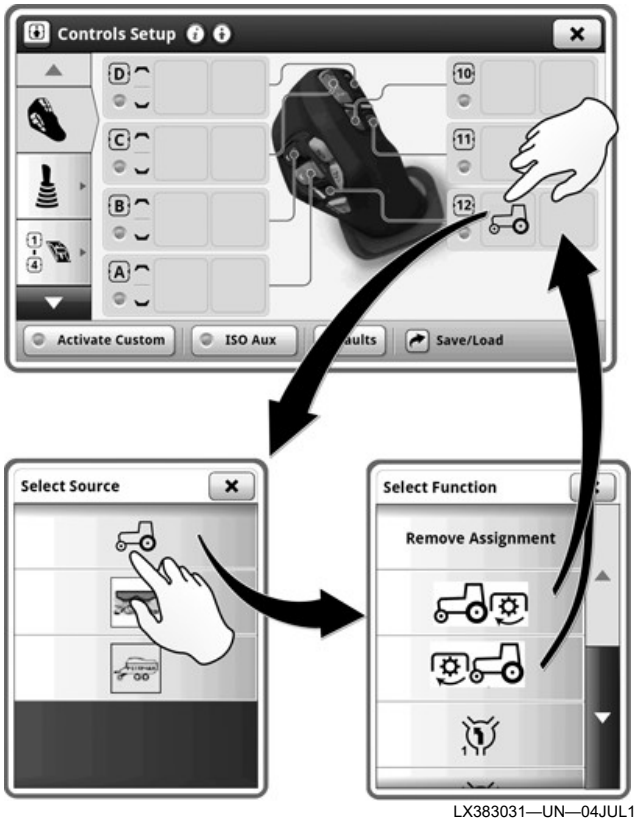
On tractors with AutoPowr™, an alarm sounds if the operator leaves the seat while the PTO is still running.

OULXA64,6R,MW67,0005F74-19-25OCT21

Operate PTO with CommandPRO™ Joystick

⚠ CAUTION: Observe the safety regulations in this Operator's Manual regarding PTO operation.

Also see Controls Setup - Assignment of Functions in Section 30C.



LX383031—UN—04JUL19

Front and rear PTO can be operated with button [10], [11], or [12]. To do so, the function must be assigned to the desired button. The image shows button [12], for example.

If a PTO assignment is active, the LED on the button lights up.

Engage and disengage the PTO	
Function:	**Operation:**
TURN ON	1. Select forward/reverse direction of travel (direction indicator is lit permanently or flashes). 2. Press assigned button.
TURN OFF	1. Press assigned button. The PTO can be disengaged in any

Engage and disengage the PTO	
	situation via the assigned button.

OULXA64,6R,0005B91-19-23SEP21

Rear PTO—Select Standard Speed (Shiftable PTO)

CAUTION: Engine must be shut off when an implement is being connected.

CAUTION: Before engaging the PTO, make sure that selected PTO speed is correct for the implement attached. Incorrect speed could result in severe damage to the implement.

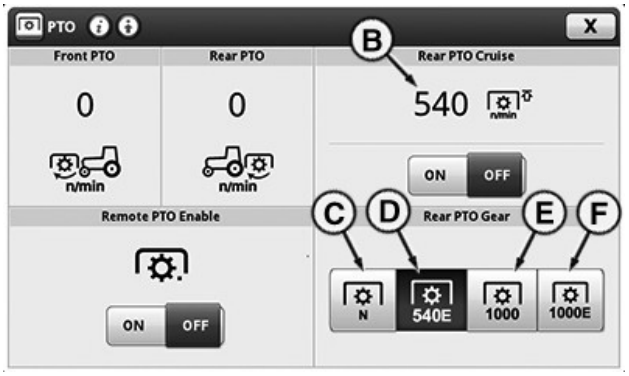
Danger of accidents!

The PTO is engaged and disengaged as described under **Engage and Disengage Rear PTO**. The PTO must be disengaged to select standard PTO speed.

1. Press button (A).

LX373102—UN—26MAY21

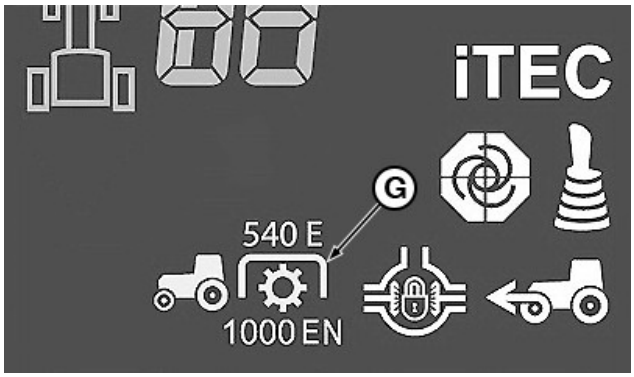
2. Select desired standard speed (C) to (F) (e.g. 540E).



LX314839—UN—25APR17

B—Selected PTO Speed
C—PTO Speed Neutral
D—PTO Speed 540E
E—PTO Speed 1000
F—PTO Speed 1000E

3. The selected PTO speed (B) appears in the display box.
4. Use the ON/OFF buttons to activate or deactivate the selected PTO speed.
5. When the PTO is on, the selected/active PTO speed is displayed by the indicators (G).



LX373100—UN—07SEP21

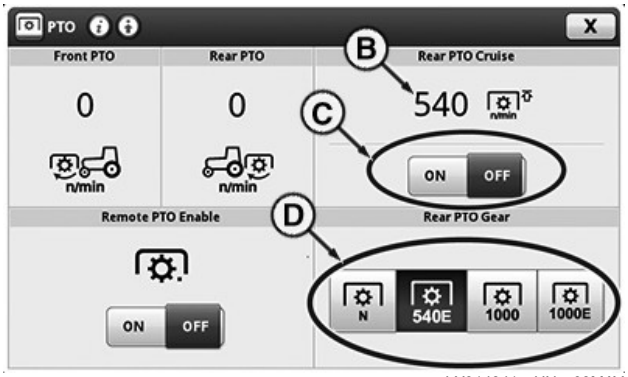
OULXA64,6R,MW67,0005F76-19-28AUG23

Rear PTO—Fine Adjustment of PTO Speeds (Shiftable PTO)

1. Press button (A).

LX373102—UN—26MAY21

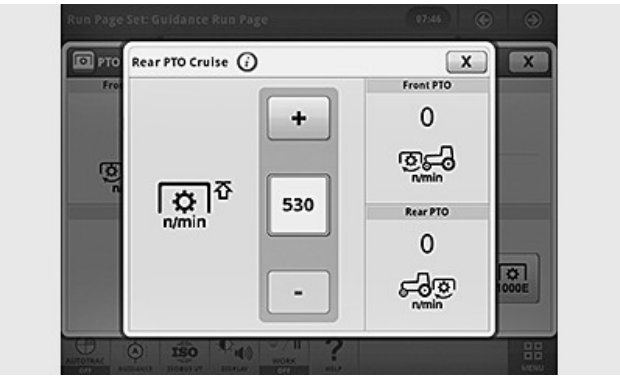
2. Select desired standard speed (D) (e.g. 540E).



LX314841—UN—08MAY17

B—Selected PTO Speed
C—Selected PTO Speed ON/OFF
D—Standard Speed

3. The selected PTO speed (B) appears in the display box.
4. Select PTO speed (B).
5. With the +/-buttons, set the rear speed limit.



LX1057272—UN—10SEP13

Set the Rear PTO Speed Limit

6. To save, close page.
7. Use the ON/OFF buttons (C) to activate or deactivate the selected PTO speed.

When PTO speed (B) is activated, engine speed is restricted so that the set PTO speed is not exceeded even at full throttle.

When the PTO is switched off, the engine can be operated over its full speed range again.

NOTE: When the PTO speed is changed, the newly selected maximum PTO speed is automatically activated.

*If an engine speed limit is set on the engine timing page, the lower setting applies. Additionally see **Use Maximum Engine Speed** in the Section on the respective transmission.*

OULXA64,6R,MW67,0005F77-19-28AUG23

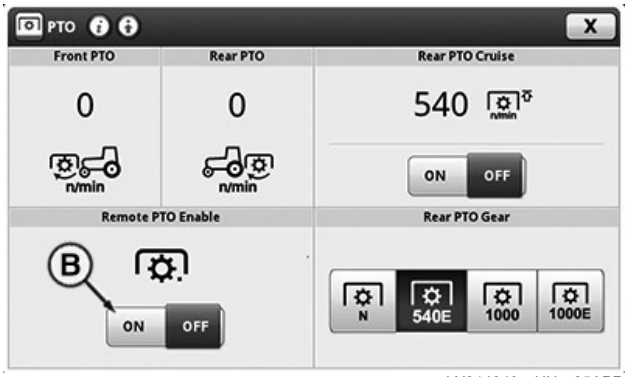
Rear PTO—Remote Control and Function

The PTO is engaged and disengaged as described under **Engage and Disengage Rear PTO**. If the rear PTO is to be operated from outside the cab, the remote control for the rear PTO has to be activated **first**.

1. Press button (A).

LX373102—UN—26MAY21

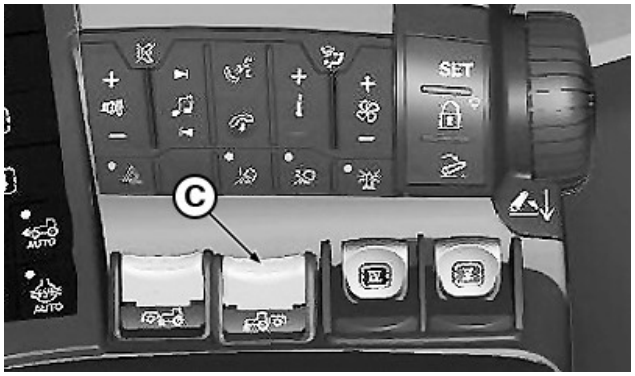
2. Press ON button (B).



LX314840—UN—25APR17

Switch On Remote Control

3. Engage the rear PTO with switch (C).



LX373104—UN—12MAY21

- PTO has not started yet.
- Hazard warning lights are flashing.
- An audible warning will sound.

Button (D) at the fender is activated for engaging the rear PTO.

LX314987—UN—15AUG17

Remote Control Button

4. The rear PTO can be switched on for test operation or continuous operation as follows, using button (D):
   a. **Test Operation**

      Press button (D) and release it after less than 4 seconds (the hazard warning lights FLASH and there are audible warning signals).

The rear PTO starts up for a short while and comes to a standstill again.

b. **Continuous Operation**

Press button (D) (approx. 4 seconds) until the hazard warning lights go out and there are no longer any audible warning signals.

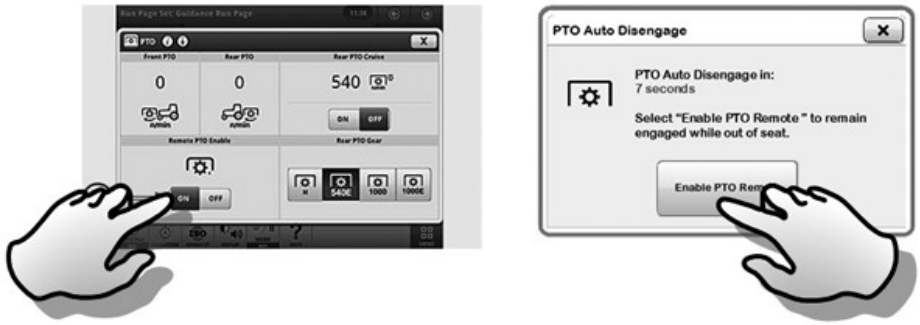
The rear PTO constantly runs at the set PTO speed.

5. To switch off the rear PTO, actuate button (D) (the hazard warning lights FLASH and there are audible warning signals) or actuate switch (C) in the operator's cab.

NOTE: If the rear PTO was switched on with the switch in the operator's cab, the PTO can be switched off with button (D). It is not possible to use button (D) to switch it on again.

OULXA64,6R,MW67,0005F78-19-28AUG23

Rear PTO—PTO Automatic Shutoff Function (If available)



LX299228—UN—02JUN17

Remote Control Mode

CAUTION: Accidents can cause severe or fatal injuries. Clothing and body parts can get caught in rotating parts. Do not perform any service work with the engine running. Avoid danger area and only turn on the PTO when there are no people in the danger area. In some situations, the PTO is shut off automatically.

NOTE: An automatic shutoff function may be active under certain conditions when the PTO is in operation. Various scenarios are presented in the following.

Scenarios

The automatic PTO shutoff function activates if (scenario 1):

1. Tractor is standing still, PTO is ON.
2. The operator gets off the seat.
3. Within the next 7 seconds, the PTO stays ON and an acoustic alarm sounds.
4. Two possibilities:
   a. The operator sits down again within 7 seconds - PTO stays ON, acoustic alarm turns OFF.
   b. The operator remains standing - PTO turns OFF automatically after 7 seconds, acoustic alarm turns OFF.

PTO operation without operator on the operator's seat (scenario 2):

1. Tractor is standing still.
2. The operator is on the operator's seat and activates the remote control mode of the PTO in the CommandCenter™.
3. The operator can leave the seat and switch the PTO ON/OFF by means of the remote control switch.

PTO operation without operator on the operator's seat (scenario 3):

1. Tractor is standing still.
2. The operator is on the seat and turns ON the PTO.
3. In the CommandCenter™, the operator activates the remote control mode of the PTO.
4. When the operator leaves the seat, the PTO stays ON and can be controlled with the remote control switch.

PTO operation without operator on the operator's seat (scenario 4):

1. Tractor is standing still.
2. The operator is on the seat and turns ON the PTO.
3. When the operator leaves the seat, the PTO stays

ON, the acoustic alarm turns ON, and information for the operator is displayed.

4. Different options:
   a. The operator sits down again within 7 seconds - PTO stays ON, acoustic alarm turns OFF.
   b. The operator remains standing and confirms the information displayed (remote control mode ON) - PTO stays ON, acoustic alarm turns OFF. The PTO can be controlled with the remote control switch.

      • *On tractors with CommandPRO™, the PTO switch can also be actuated again.*

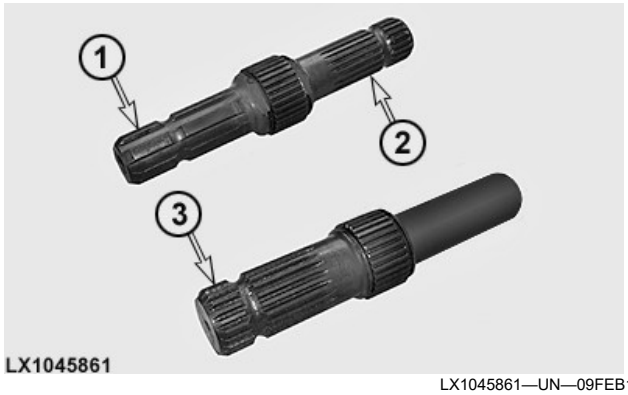
   c. The operator remains standing and does NOT confirm the information displayed - PTO automatically turns OFF, acoustic alarm turns OFF.

OULXA64,6R,0005B95-19-15JUN23

Rear PTO—Change the PTO Stub Shaft

CAUTION: Engage park and shut off engine. Remove the ignition key to prevent unauthorized starting of engine.

The rear PTO may be operated using different rear PTO stub shafts.

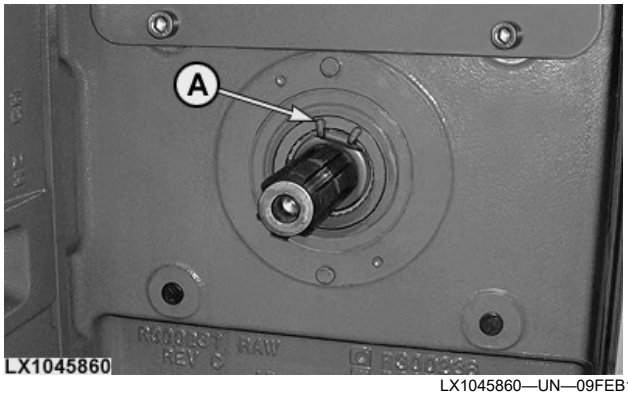


LX1045861—UN—09FEB11

	PTO Stub Shaft	Rated output of implement
1	Type 1 / 6 splines at 540 rpm	up to 70 kW
1	Type 1 / 6 splines at 1000 rpm*	up to 110 kW
2	Type 2 / 21 splines at 1000 rpm	up to 130 kW
3	Type 3 / 20 splines at 1000 rpm	up to 300 kW

* Not for North America

To change the PTO stub shaft, switch off the engine and remove any impurities from the stub shaft.



LX1045860—UN—09FEB11

A—Snap Ring

Use pliers to compress snap ring (A), and remove the PTO stub shaft together with the snap ring.

Before installing the PTO stub shaft, clean it and apply John Deere™ HD MOLY GREASE.

To install, place snap ring (A) in the groove of PTO stub shaft and compress it with pliers, then install the stub shaft in the PTO housing. Make sure snap ring (A) is seated correctly.

With the engine switched off, it must be possible to turn the PTO stub shaft by hand.

OULXA64,6R,0005B96-19-15JUN23

Rear PTO—Connect an Implement

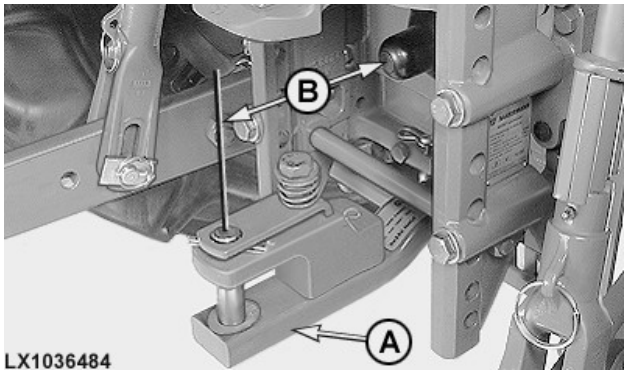
CAUTION: Shut off engine and disengage PTO before attaching PTO-driven attachment.

CAUTION: High-inertia implements do not come to a standstill the moment the PTO is shifted to the disengaged position. Do NOT approach the implement while it is coasting down. Do not work on the implement until it has stopped.

CAUTION: Before attempting to clean, adjust or lubricate a PTO-driven machine, the three-point hitch or the universal-jointed shaft, always make sure the PTO is switched off, the tractor engine is shut off and the ignition key is removed.

IMPORTANT: Observe the operating instructions in Section 60A and in this Section.

1. Align drawbar (A) parallel to PTO shaft and lock it in position.



LX1036484—UN—23JAN06

2. Distance (B) between the end of the PTO shaft and the hole in the drawbar end varies depending on which type of PTO stub shaft is used. The distance must be correct.

PTO stub shaft	Distance to drawbar	
	CAT II	CAT III
Type 1 / 6 Splines . . .	350 mm (13.8 in)	350 mm (13.8 in)
Type 2 / 21 Splines . .	400 mm (15.7 in)*	400 mm (15.7 in)
Type 3 / 20 Splines . .	—	500 mm (19.7 in)

* Not on tractors with AutoPowr™ or DirectDrive transmission

If PTO splines are not aligned with the grooves in the driveshaft, keep the engine shut off and select **N** window on the PTO page at the CommandCenter™. Then turn the PTO shaft manually to the correct position.

OULXA64,6R,EU,0005B97-19-15JUN23

Premium Front Hitch

CAUTION: It is important to observe the maximum permissible axle loads and the load capacity of the tires when using the front hitch.

CAUTION: A front-mounted implement adversely affects the driving characteristics of the tractor. Adjust vehicle handling to the change in driving dynamics of the tractor.

CAUTION: Always lower front-mounted implements to the ground when the tractor is left unattended.

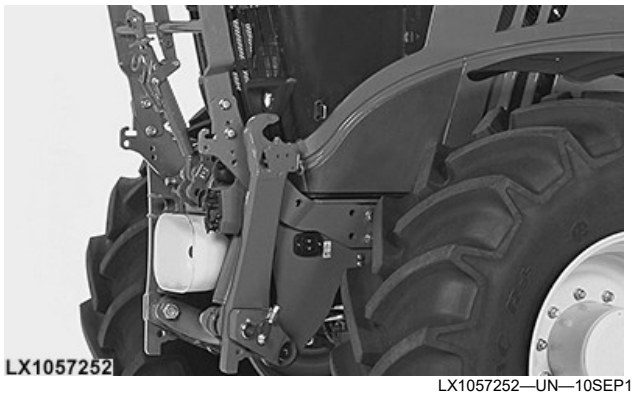
CAUTION: Lower front-mounted implement to the ground and stop the engine before connecting the implement to one of the front quick-couplers.

CAUTION: Always bear in mind that the dimensions of the tractor front have changed, especially when leaving the farm or the fields, and on roads and junctions. If in doubt, ask for a second person to assist.

CAUTION: Comply with lighting requirements. Headlights and turn signals may be concealed by the front-mounted implement. In this case, use additional lighting.

CAUTION: When the front hitch is not in use, always fold up the draft links (transport position) and lock them.

Depending on how the tractor is equipped, the front hitch can be operated from a front-hitch control lever or from the joystick.

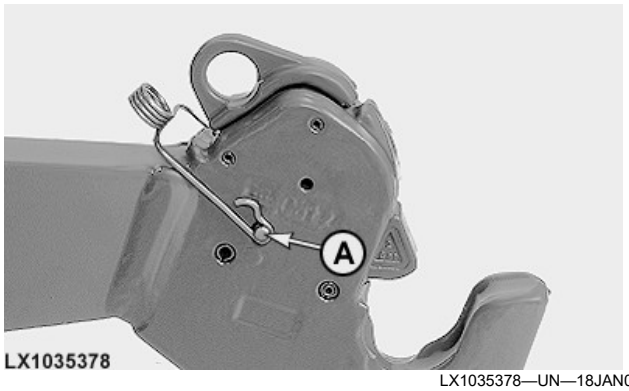


LX1057252—UN—10SEP13

Lock for Draft Link Hooks

CAUTION: When implements with asymmetrical load (e.g. side-mounted mowing units) are attached, or when driving through high-growing bushes and trees (e.g. when working in the forest), the draft link coupler hooks must be prevented with a locking pin from opening accidentally.

A — Lock parts kit AL165485

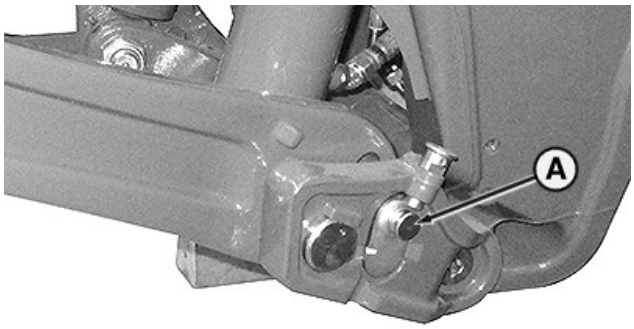


LX1035378—UN—18JAN05

Use John Deere AL165485 lock parts kit at both of the coupler hooks.

Draft Link Positions

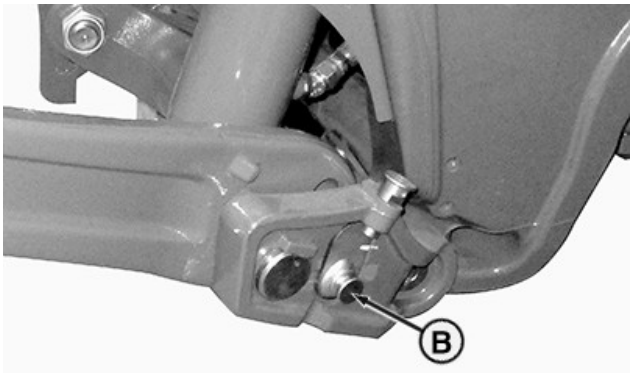
A — Draft links with vertical float



LX364166—UN—29NOV18

Draft Link with Vertical Float

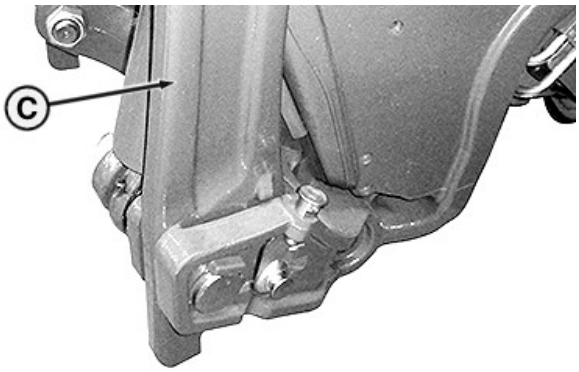
B — Draft links locked



LX364167—UN—28NOV18

Draft Links Locked

C — Draft links in transport position

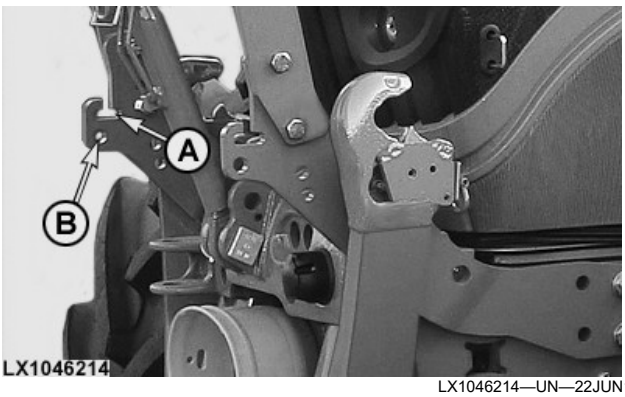


LX364168—UN—28NOV18

Draft Links in Transport Position

Brackets for Mower Deck Springs (If Equipped)

A — Opening for chain



LX1046214—UN—22JUN11

Opening (A) allows attachment of the chain for cutting height limit.

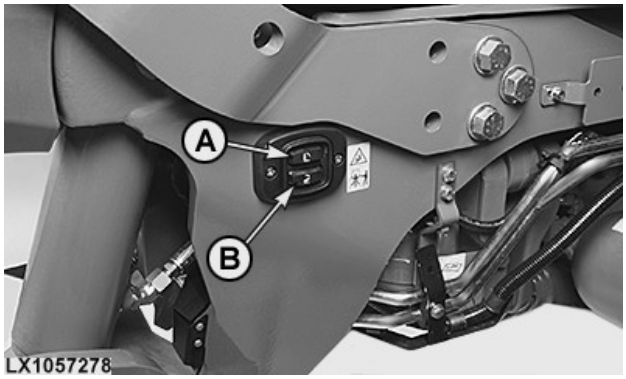
NOTE: Move the SCV for lowering the mower deck to its float position.

B — Bore for spring

The spring for dampening can be hooked into bore (B).

Remote Control

With buttons (A) and (B), the front hitch can be raised or lowered. The limits set for the lifting height or operating depth is not taken into account.



LX1057278—UN—11SEP13

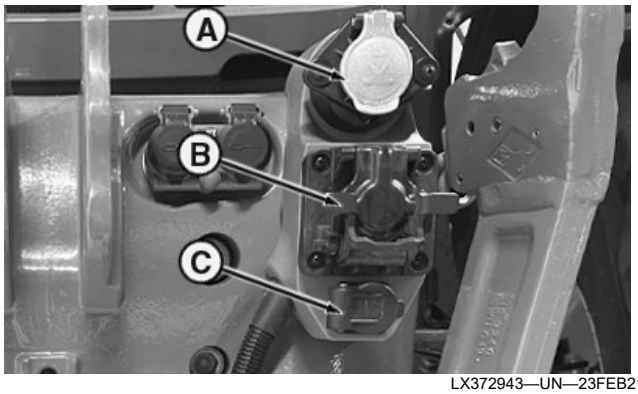
A — Raise implement

B — Lower implement

For safety reasons, the hitch rises and drops at a slower rate.

NOTE: The remote control overrides the control lever in the cab.

Front Sockets



LX372943—UN—23FEB21

Front Hitch (Premium)

A — Seven-terminal implement socket

The socket (A) is used to connect lights, flashers, and electrical devices installed on the implement. Always use auxiliary light on towed implement when tractor signals and other lights are obscured.

NOTE: Suitable connectors can be obtained from a dealer authorized by John Deere.

B — ISOBUS socket (ISB)

An implement meeting ISO Standard 11783 may be connected at socket (B).

C — 3-terminal power outlet socket (12 V, ECE)

Pin 15/30 of the 3-terminal power outlet socket provides

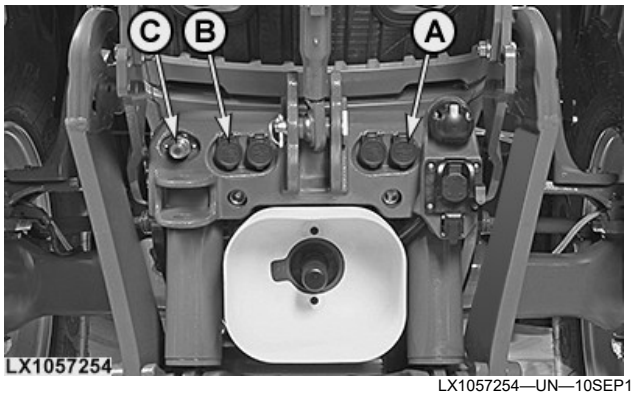
a MAX permanent direct current of 25 A. Terminal 82 provides a MAX permanent direct current of 5 A. Terminal 31 is ground.
Turn key in key switch to the right to supply power to terminal 82. Terminal 15/30 is supplied with power even when the ignition is switched off.

IMPORTANT: During operation of electrical consumers with high current consumption, the maximum permitted current load of the supply circuit (25 A) must not be exceeded.

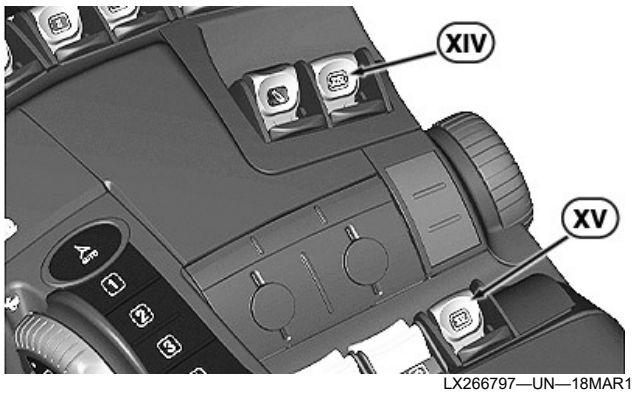
Front Couplers

CAUTION: The hydraulic system has a maximum pressure of 20000 kPa (200 bar) (2900 psi). For your own protection and to assure proper functioning of the system, use only genuine John Deere parts.

Couplers (A) and (B) are actuated by means of the control levers of selective control valves **XIV** and **XV**. When operating manually, functions can be performed successively, but not at the same time. SCV XIV and SCV XV cannot be used simultaneously within an iTEC™ sequence.



LX1057254—UN—10SEP13



LX266797—UN—18MAR16

A — Couplers, Selective Control Valve XIV

B — Couplers, Selective Control Valve XV (optional)

*NOTE: Use couplers (B) of selective control valve **XV** only for auxiliary functions. SCV XIV and SCV XV cannot be used simultaneously.*

Couplers (A) and (B) allow hydraulic hose to be connected and disconnected only if there is no pressure.

To connect the hose union, press it firmly into the coupler.

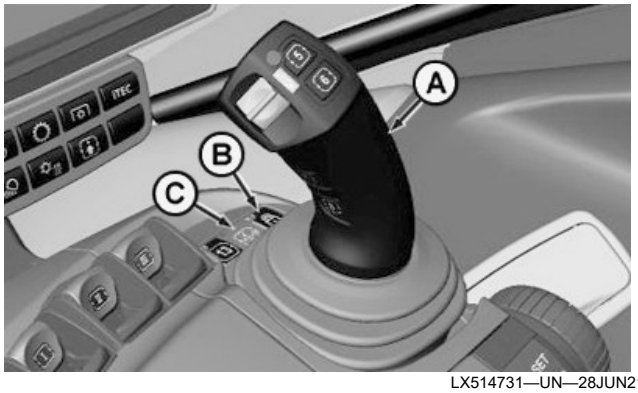
To disconnect the hose, give it a firm pull.

C — Pressure-Free Return Circuit

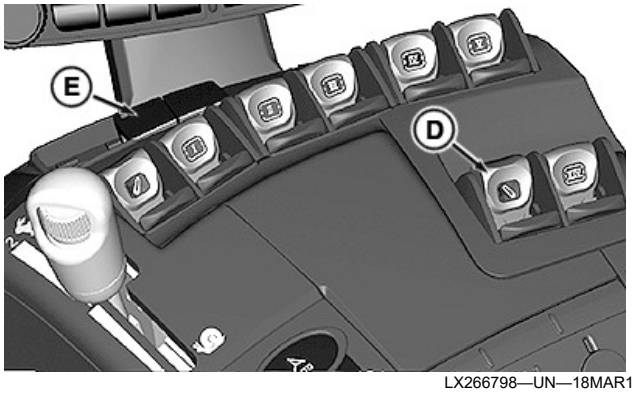
This connection ensures pressure-free oil return.

Controls

The front hitch is supplied with oil through selective control valve X. The front hitch is controlled by means of joystick (A) or depth control lever (D) of the front hitch.



LX514731—UN—28JUN21



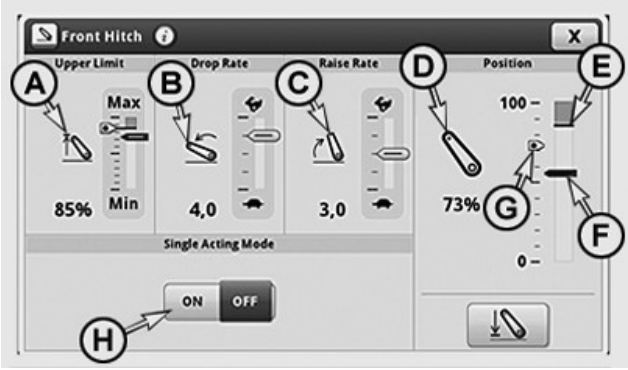
LX266798—UN—18MAR16

A—Joystick
B—Lock Button, Joystick ON/OFF
C—Indicator Light, Joystick Enabled
D—Depth Control Lever, Front Hitch (raise, lower, float position)
E—Lock Button, Selective Control Valves ON/OFF

IMPORTANT: When the front hitch is not in use, the joystick (A) or control lever (D) has to be locked. To do so, press lock button (B) and make sure that the indicator light (C) or (E) of the lock button is lit. The joystick or control lever can still be moved, but the front hitch should not move. Otherwise there is risk of the front hitch being actuated unintentionally, which could cause severe accidents.

OULXA64,6R,NA,0005F8C-19-27OCT21

Premium Front Hitch—Set Transport Position and Operating Depth



LX514835—UN—19JAN22

A—Display Field for Raise Height Limit
B—Display Field for Rate-of-Drop
C—Display Field for Raise Rate
D—Front Hitch Position/Status Display
E—Currently Set Raise Height Limit
F—Current Position of Front Hitch
G—Saved Operating Depth
H—Front Hitch Mode, Single-Acting ON/OFF

To avoid accidental damage to the tractor and mounted implement, set the desired transport position and operating depth. The hitch system regulates the oil flow so that the hitch slows down as it approaches the set endpoints.

When front hitch mode "single-acting" is ON (H), the front hitch lowers in a pressure-free state due to the weight of the implement.

Raise height limit (A), raise rate (C), and rate-of-drop (B) of the front hitch can also be set. See the following pages.

1. To set the transport position and operating depth, select the menu button.

RXA0132258—UN—22MAY13

Menu Button → Tractor Settings → Front Hitch

2. Select Tractor Settings.
3. Select Font Hitch.
4. Select front hitch position/status indicator (D).
5. Adjust the raise height limit, transport position, and operating depth by moving the thresholds.
6. Close the page to save changes.

OULXA64,6R,0005B83-19-15JUN23

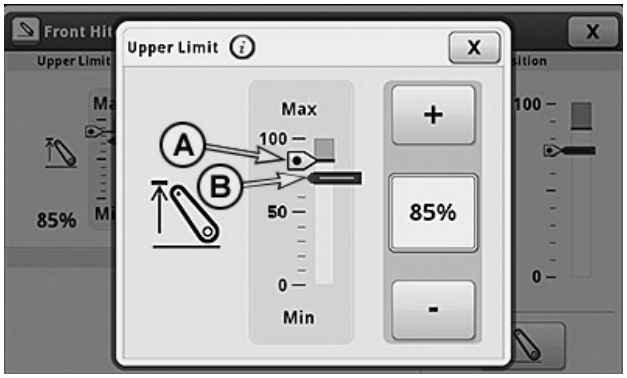
Premium Front Hitch—Set the Raise Height Limit

1. To adjust the raise height limit, select the menu button.

RXA0132258—UN—22MAY13

Menu Button → Tractor Settings → Front Hitch

2. Select Tractor Settings.
3. Select front hitch.
4. Select the display field for raise height limit.
5. Use the +/- buttons to set the desired raise height limit (A).



LX1057406—UN—07MAY14

A—Raise Height Limit
B—Current Position of Front Hitch

6. Close the page to save changes.

NOTE: Changes to the raise height limit take place immediately.

NOTE: If the raise height limit (A) is set below the current hitch position (B), the hitch follows raise height limit (A).

OULXA64,6R,0005B84-19-15JUN23

Premium Front Hitch—Set Rate-of-Drop

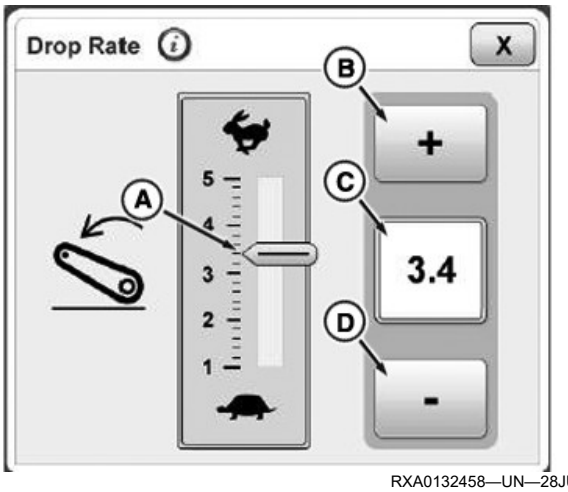
1. To set the rate-of-drop, select the menu button.

RXA0132258—UN—22MAY13

Menu Button → Tractor Settings → Front Hitch

2. Select Tractor Settings.
3. Select front hitch.
4. Select display field for rate-of-drop.

5. Use the +/- buttons to set the desired rate-of-drop (A).



RXA0132458—UN—28JUN13

A—Rate-of-Drop
B— (+) Button
C—Display Box
D— (—) Button

6. Close the page to save changes.

OULXA64,6R,0005B85-19-15JUN23

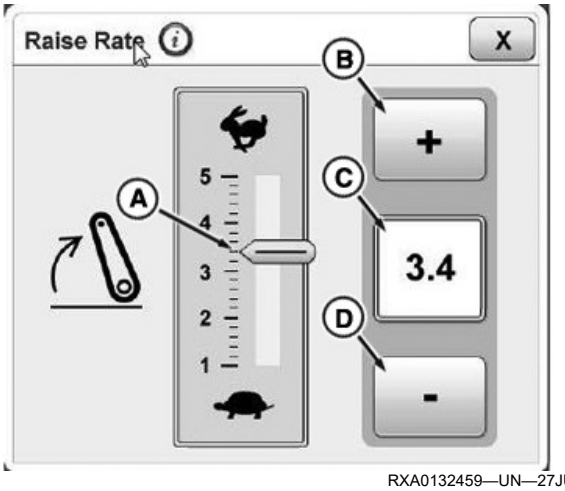
Premium Front Hitch—Set the Raise Rate

1. To set the raise-rate, select the menu button.

RXA0132258—UN—22MAY13

Menu Button → Tractor Settings → Front Hitch

2. Select Tractor Settings.
3. Select front hitch.
4. Select display box for raise rate (B).
5. Use the +/– buttons to set the desired raise rate (A).



RXA0132459—UN—27JUN13

A—Raise Rate
B— (+) Button
C—Display Box
D— (—) Button

6. Close the page to save changes.

OULXA64,6R,0005B86-19-15JUN23

Premium Front Hitch—Activate Single-Acting Mode

NOTE: The single-acting mode is a prerequisite for activating the float position.

LX361224—UN—12NOV18

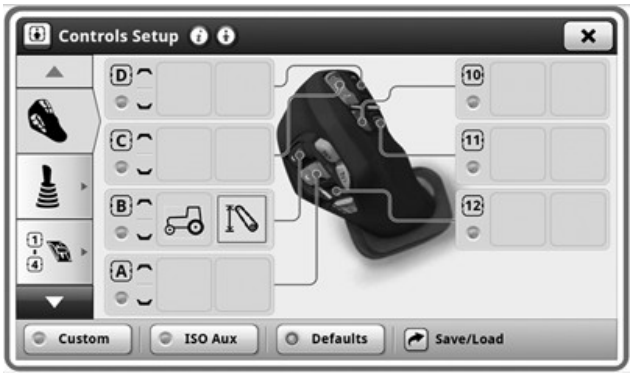
Access the front hitch page in CommandCenter™ and activate single-acting mode.

OULXA64,6R,0005B87-19-15JUN23

Premium Front Hitch—Automatically Activate Float Position (with CommandPRO™ Joystick)

NOTE: These instructions show the necessary steps when selecting the function for the first time. Repeat steps if changes have been made to the saved operating depth or the mode in the meantime.

1. Assign the raise/lower function to a corresponding switch on the CommandPRO™ joystick. The picture shows an example.



LX361237—UN—20NOV18

Assign Functions

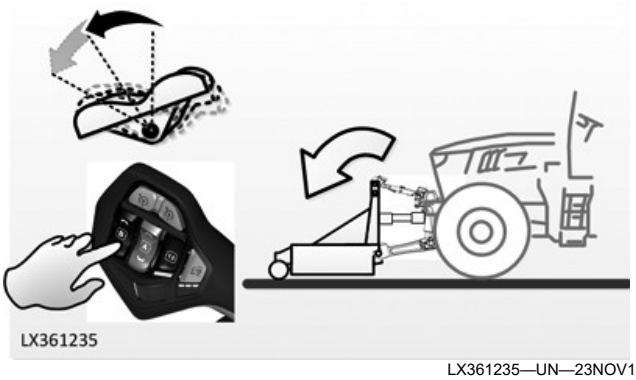
2. Activate single-acting mode.

LX361225—UN—12NOV18

Activate Single-Acting Mode

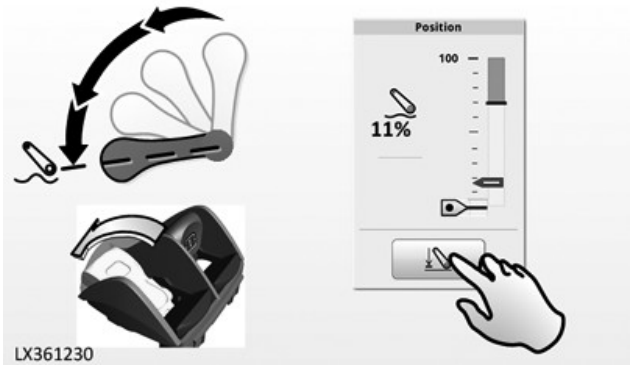
3. Lower implement to operating depth.

NOTE: This prevents the implement from falling down after activation of the float position.



LX361235—UN—23NOV18

4. **Set bottom save point of the operating depth to zero percent (one-time):** Assign the front hitch raise/lower function to a control element, e. g. SCV lever. Put it in float position and press the button to save the working depth. Regardless of the current position of the hitch, the value of zero percent is saved.

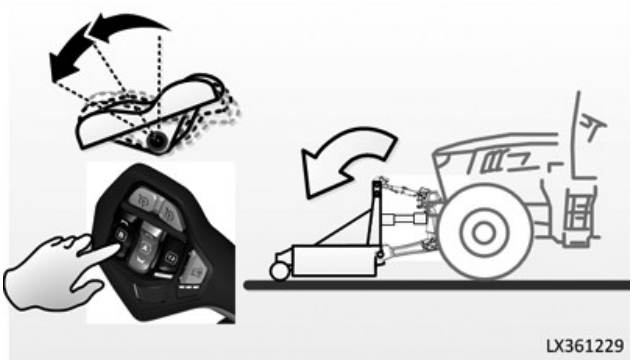


LX361230—UN—23NOV18

5. The float position is automatically activated from now on.

   Requirements:

   - The lower switch is switched beyond the point of resistance to the second position.
   - The position of the front hitch remains unchanged for a few seconds after lowering.

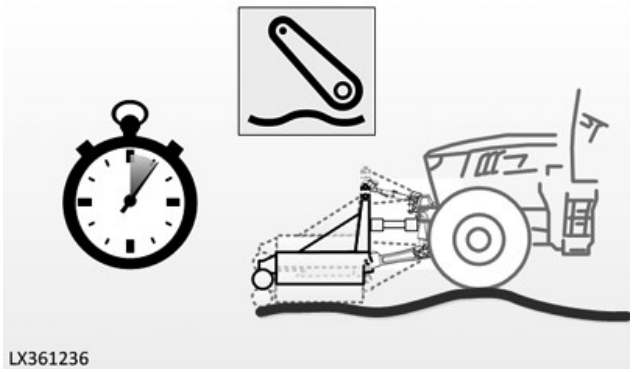


LX361229—UN—23NOV18

Press Switch into Second Position

NOTE: The system monitors the position of the front hitch after lowering the implement. If the system does not detect a change in position within the next few seconds, it assumes that the implement is at the desired operating depth. The float position is then activated automatically.

NOTE: Steps 1 to 4 are no longer necessary for repeated activation of the float position. After lowering to operating depth, the float position is activated automatically.



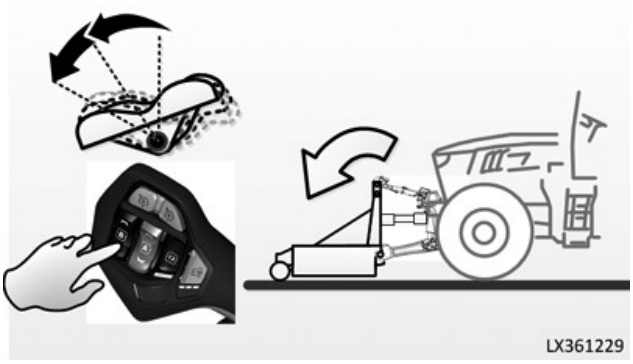
LX361236—UN—12NOV18

Activate automatic float position repeatedly (with CommandPRO™ joystick)

Requirements:

- Single-acting mode activated
- Operating depth set to zero percent
- The raise/lower function assigned to a corresponding switch on the CommandPRO™ joystick

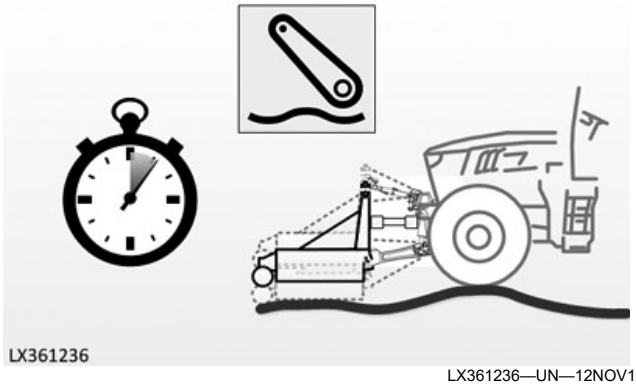
1. Lower the front-mounted implement. Switch the lower switch beyond the point of resistance to the second position.



LX361229—UN—23NOV18

Press Switch into Second Position

2. If the position remains unchanged for a few seconds, the float position is automatically activated.



LX361236—UN—12NOV18

NOTE: The float position is activated independently of the current hitch position.

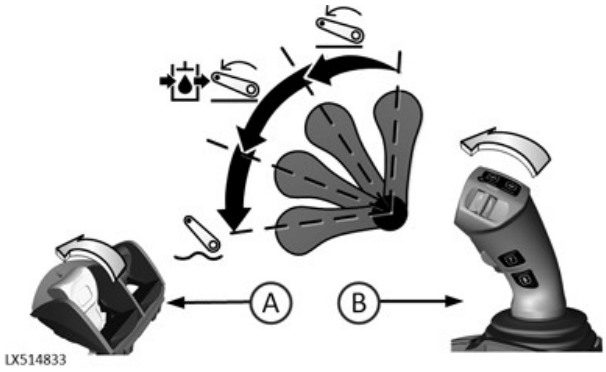
OULXA64,6R,0005B88-19-15JUN23

Premium Front Hitch—Activate Float Position

The descriptions are for tractors with electric SCV control levers or/and electrical joystick.

The pictures always show an SCV control lever. With the electrical joystick lever, the functions for operating the front hitch are the same.

NOTE: Note the mode of the electrical joystick.



LX514833—UN—19JAN22

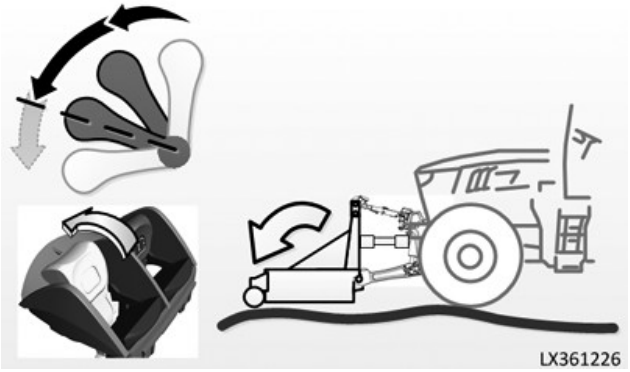
Switch Positions with Standard Configuration

A—SCV Control Lever
B—Electrical Joystick

1. Activate single-acting mode.

LX361225—UN—12NOV18

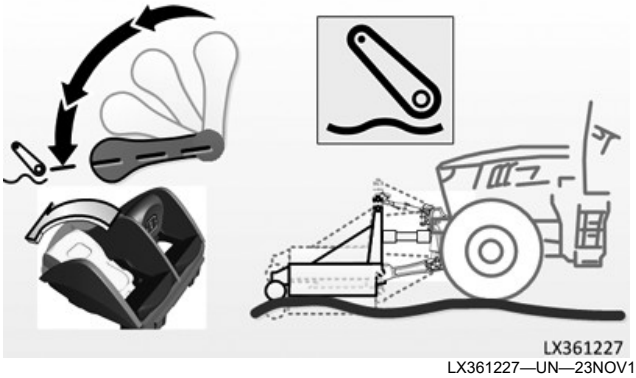
2. Move switch or joystick to the first or second switching position. Lower the front-mounted implement.



LX361226—UN—23NOV18

Lower Front-Mounted Implement

3. Activate float position once the front-mounted implement has reached the desired depth.



LX361227—UN—23NOV18

Activate Float Position

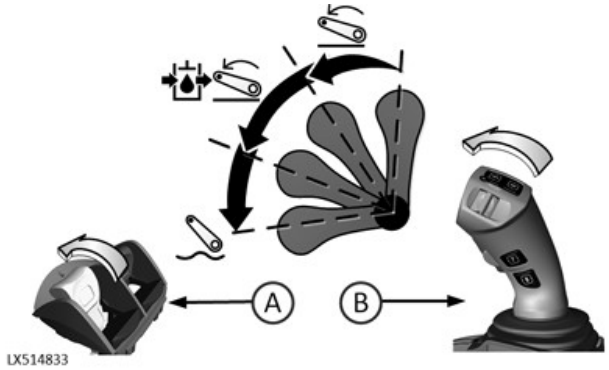
OULXA64,6R,0005B89-19-15JUN23

Premium Front Hitch—Activate Float Position Automatically

The descriptions are for tractors with electric SCV control levers or/and electrical joystick.

The pictures always show an SCV control lever. With the electrical joystick, the functions for operating the front hitch are the same.

NOTE: Note the mode of the electrical joystick.



LX514833—UN—19JAN22

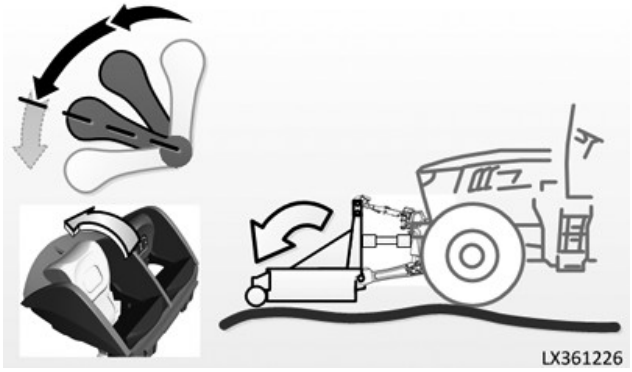
Switch Positions with Standard Configuration

A—SCV Control Lever
B—Electrical Joystick

1. Activate single-acting mode.

LX361225—UN—12NOV18

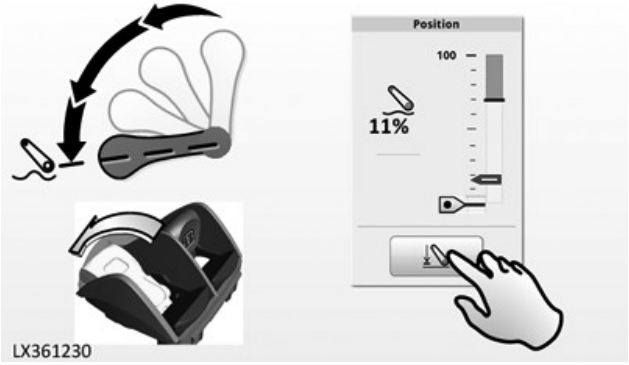
2. Move switch or joystick to the first or second switching position. Lower the front-mounted implement.



LX361226—UN—23NOV18

Lower Front-Mounted Implement

3. **Set bottom save point of the operating depth to zero percent (one-time):** Assign the front hitch functions to a control element e.g. the SCV lever for raise/lower. Put it in float position and press the button to save the working depth. Regardless of the current position of the hitch, the value of zero percent is saved.

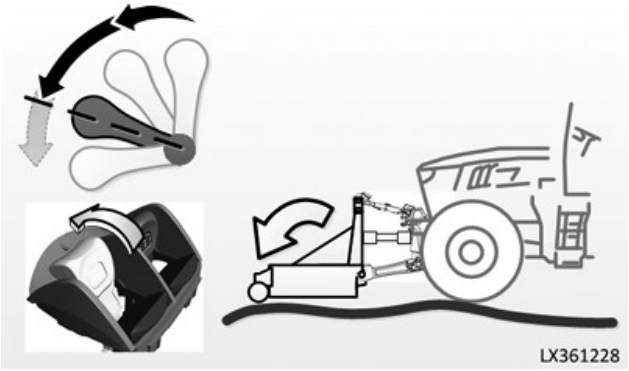


LX361230—UN—23NOV18

4. The float position is automatically activated from now on.

   Requirements:

   - The lower switch is switched beyond the first point of resistance to the second position.
   - The position of the front hitch remains unchanged for a few seconds after lowering.

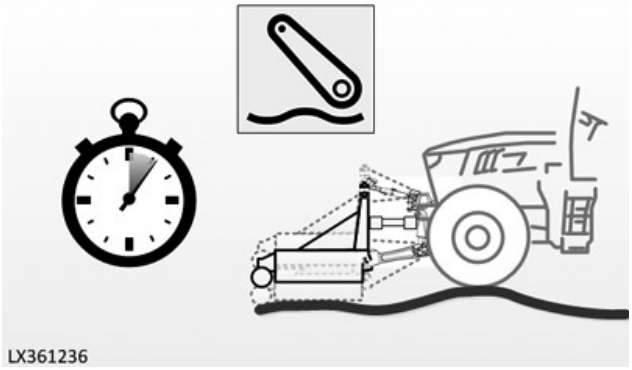


LX361228—UN—23NOV18

Switch in Second Position

NOTE: The system monitors the position of the front hitch after lowering the implement. If the system does not register a change in position within the next few seconds, it assumes that the implement is at the desired operating depth. The float position is then activated automatically.

NOTE: Steps 1 to 4 are no longer necessary for repeated activation of the float position. After lowering to operating depth, the float position is activated automatically.



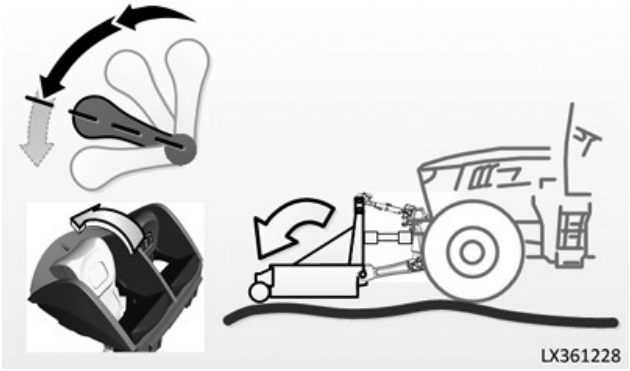
LX361236—UN—12NOV18

Activate automatic float position repeatedly

Requirements:

- Single-acting mode activated
- Operating depth set to zero percent

1. Lower the front-mounted implement to desired operating depth. Actuate the switch beyond the first point of resistance to the second position.

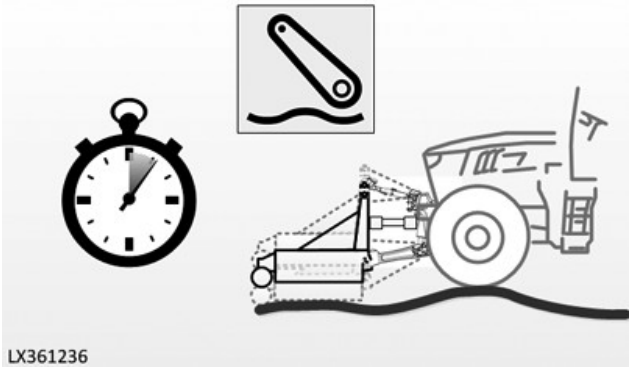


LX361228—UN—23NOV18

Switch in Second Position

NOTE: The float position is activated independently of the current hitch position.

2. If the position remains unchanged for a few seconds, the float position is automatically activated.



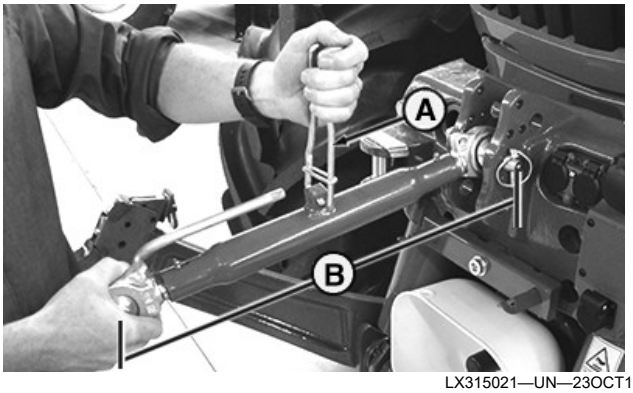
LX361236—UN—12NOV18

OULXA64,6R,0005B8A-19-15JUN23

Front Hitch—Center Link

IMPORTANT: Before starting up, make sure that a raised implement cannot make contact with the tractor. In this case, pay attention to the settings for center link length and maximum raising height.

Length of center link can be adjusted using adjusting handle (A). Hold the center link as shown and adjust to the required length by turning adjusting handle.



LX315021—UN—23OCT17

A—Adjusting Handle
B—Length

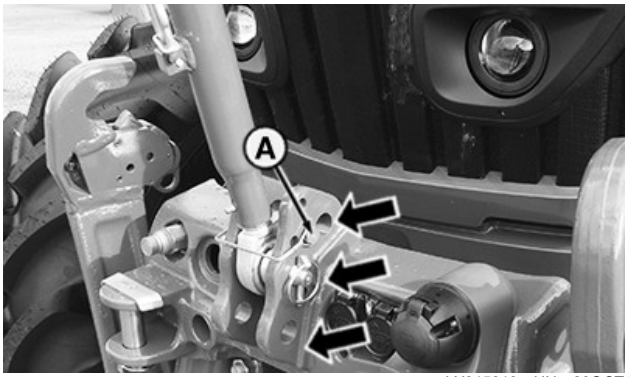
Center Link Length	Minimum Length	Maximum Length
CAT2	500 mm (19.7 in)	760 mm (29.9 in)
CAT3	530 mm (20.9 in)	730 mm (28.7 in)
Hydraulic Center Link Length		
CAT2	565 mm (22.2 in)	710 mm (28.0 in)
CAT3	565 mm (22.2 in)	710 mm (28.0 in)

DO NOT deviate from the specified dimensions. Grooves in the thread indicate the maximum permitted setting. The threads must not be unscrewed any further out of the receiver. After adjusting, push handle down again over center link. Insert attaching pin through implement mast and center link, and secure.

OULXA64,ALL,000562A-19-15JUN23

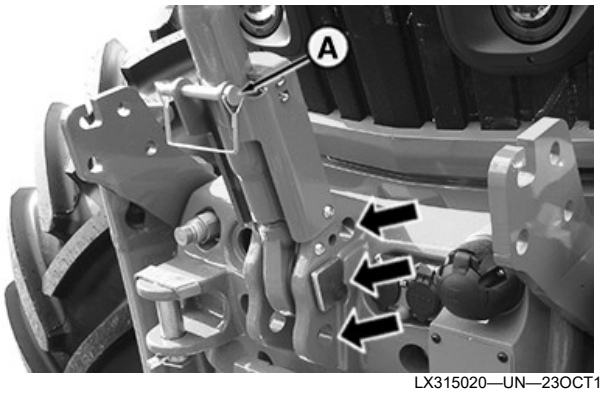
Front Hitch—Center Link Positions

The center link can be attached to the tractor in any one of three positions.



LX315019—UN—23OCT17

Center Link Shown without Coupler Hook



LX315020—UN—23OCT17

Center Link Shown with Coupler Hook

Use the uppermost position for work that requires a smaller implement tilt angle and a higher lifting force.

Use the lowest position for work that requires a larger implement tilt angle and a lower lifting force.

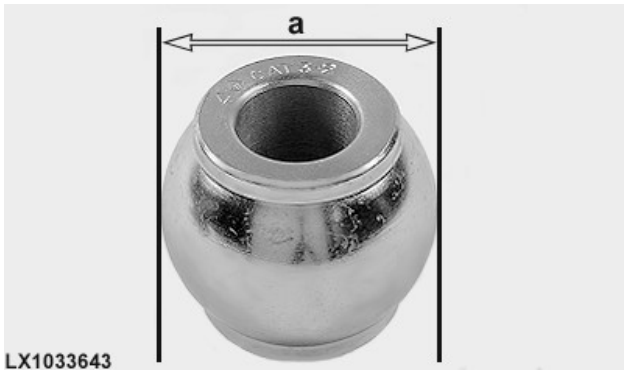
IMPORTANT: When the center link is not being used, position the center link as shown and secure with locking pin (A). Make sure that the safety clip of the locking pin (A) is positioned correctly.

OULXA64,ALL,000562B-19-15JUN23

Front Hitch—Hook-Type Center Link

IMPORTANT: The matching ball has to be used.

This center link is intended for category III balls.

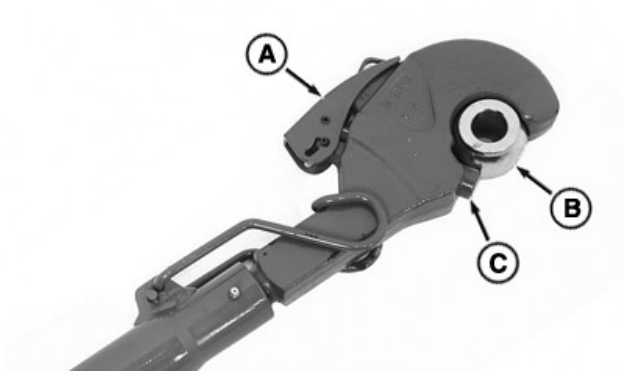


LX1033643—UN—17MAY04

Category	Ball Diameter (a)
III	60 mm (2.4 in)

Hook Operation

With control element (A), the hook can be operated manually.



LX234778—UN—30NOV15

A—Control Element
B—Ball
C—Pin

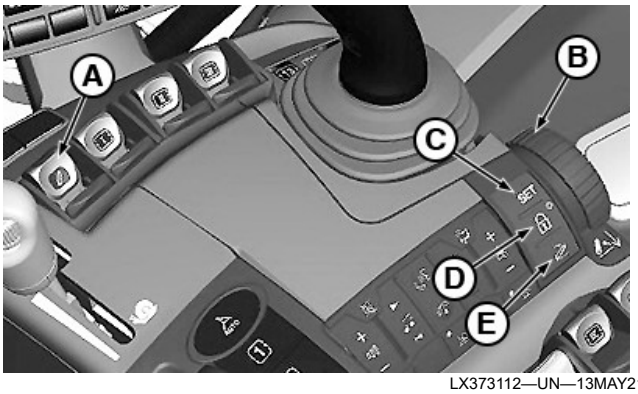
IMPORTANT: Make sure that the coupler hooks are correctly latched:

- **Control element (A) has to be flush against coupler hook.**
- **Ball (B) should have no noticeable play.**
- **Pin (C) should cover the ball.**

OULXA64,ALL,000562C-19-15JUN23

Rear Hitch—Operation with CommandARM™

IMPORTANT: Changes to hitch position are immediate.



LX373112—UN—13MAY21

Controls used to control hitch functions directly:

A	Depth Control Lever (Raise, Lower, and Float Position of Rear Hitch)
B	Depth Control Knob (Raise and Lower the Rear Hitch)
C	SET Button, Saves the Set Operating Depth
D	Transport Lock/Hitch Dampening
E	Button, Move to Saved Operating Depth (SET Point)/Quick-Lower

For settings and visual display in the CommandCenter™, see Rear Hitch—Settings and Functions in CommandCenter™ on the following pages.

NOTE: Changes to the hitch settings are saved only if the SET button is pressed.

Set Operating Depth

- Use lever (A) or depth control knob (B) to lower the implement to the desired operating depth.
- Press SET button (C) to save the operating depth (SET point).

NOTE: If the hitch is lowered while the tractor is stopped, the stored operating depth (SET point) is deactivated. If the saved operating depth should be used again, press button (E).

Turn Around at End of Field

- At the end of the field, pull depth control lever (A) backwards into the click position and release. The rear hitch is raised to the upper setting limit.
- After turning, lower the rear hitch either by pushing lever (A) forward to its click position, or by pressing and releasing button (E). The rear hitch drops automatically to the position of the saved operating depth or to the percentage value.

  If button (E) is held down for a long time, quick raise/lower is activated. See also Rear Hitch—Set Operating Depth in this Section.

NOTE: Setting an operating depth below the set operating depth functions only while the tractor is moving.

Transport Lock/Hitch Dampening

CAUTION: Danger of accidents resulting in severe injury and property damage.

When transport lock and hitch dampening are NOT activated, implements can be lowered unintentionally.

Load-change reactions might lead to critical driving situations.

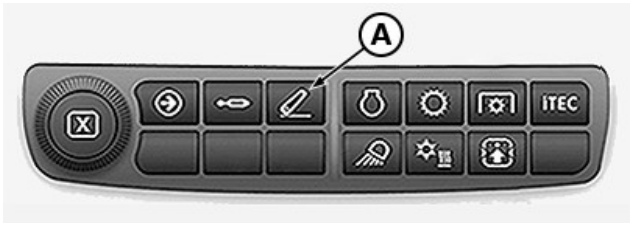
When driving with raised implement and when not using the hitch, ALWAYS activate the transport lock/dampening.

Transport lock/hitch dampening (D) is selected for transport or operations where the rear hitch is not used. For more information, see Rear Hitch—Use the Depth Control Lever in this Section.

OULXA64,6R,0005B62-19-14JUN23

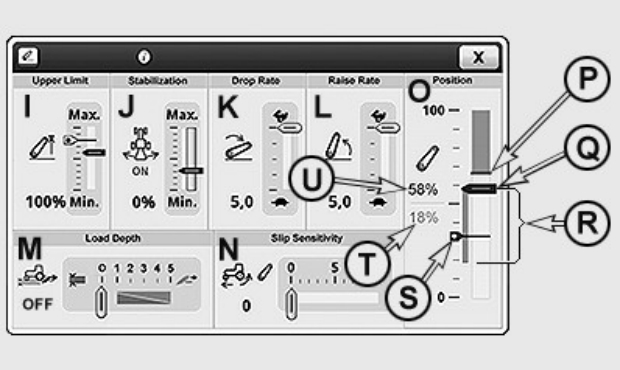
Rear Hitch—Settings and Functions in CommandCenter™ (Standard Version)

Press rear hitch button (A) for accessing the rear hitch page.



LX373116—UN—26MAY21

If a function (I to O) is selected, a desired change can be set in the context menu. Changes take effect immediately. For more information, see the following pages.



LX1056989—UN—24NOV14

Rear Hitch Page

The following functions are displayed on the hitch page:

I . . . Raise Height Limit

J . . Lock Height of Stabilizer Bar

K . . Rate-of-Drop

L. . . Raise Rate

M . . Draft/Depth Control

N . . Slip Sensitivity

O . . Position/Status Display

In position/status display **(O)**, the following functions are represented:

P . . Currently Set Raise Height Limit

Q . . Current Hitch Position

R . . Remaining Motion of Hitch

S . . Saved Operating Depth (SET Point)

T . . Percentage Value of the Desired Operating Depth

U . . Percentage Value of Current Hitch Position

Pressing SET (C) saves the current operating depth/hitch position (Q). If depth control lever (A) is in its float position when the SET button is pressed, 0% is saved as the operating depth. The saved operating depth (S) (SET point) is represented by a narrow bar with an arrow on the left.

LX373113—UN—13MAY21

A—Depth Control Lever
B—Depth Control Knob
C—SET Button

Current hitch position (Q) is also represented as a percentage (%) value (U).

When the hitch is lowered fully, the percentage (%) value for hitch position is 0%. When the hitch is raised fully, the percentage (%) value for hitch position is 100%.

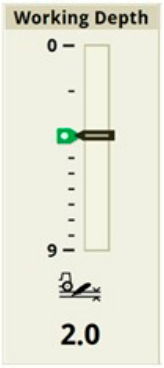
If depth control lever (A) or depth control knob (B) is used to set the hitch to a new operating position, the remaining hitch motion (R) appears until the set operating depth/height is reached.

OULXA64,6R,MW67,0005F79-19-28AUG23

Rear Hitch—Linear Hitch Mode (Optional)

The linear hitch mode enables a reproducible working depth after manual depth correction. Temporary working depth corrections can be made during field use without affecting the stored working depth.

In order to use the linear hitch functionality, it must be activated first by your authorized dealer. Once activated, the linear hitch mode can be switched ON and OFF. When activated, it displays a graphic showing the range of hitch working depth.



LX514304—UN—23MAR23

Working Depth

Switching the Linear Hitch Mode ON and OFF: Open the advanced settings screen and select linear hitch mode ON or OFF.

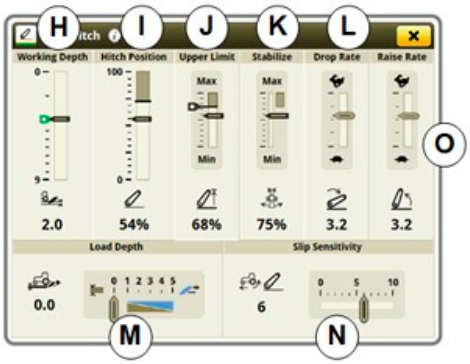
LX514298—UN—03MAY23

Linear Hitch Mode ON and OFF

NOTE: Tractors with linear hitch functionality activated have a new layout for the rear hitch page. The appearance differs from the standard rear hitch page.

oulxa64,6R,1678698650023-19-19JUN23

Rear Hitch—Linear Hitch Mode ON



LX514299—UN—21MAR23

Linear Hitch Mode ON

H—Working Depth (not present with linear hitch mode OFF)
I—Hitch Position
J—Upper Limit
K—Stabilize
L—Drop Rate
M—Load Depth
N—Slip Sensitivity
O—Raise Rate

Hitch Behavior with Linear Hitch Mode ON:

The position indicator (Q) follows the setting commanded with the depth control knob or the depth control lever. The graphic represents the working depth range of the hitch.

Press the set button (C) to store the current working depth as desired set point.

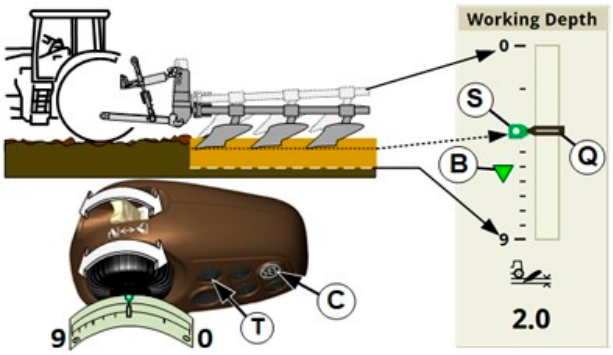
The current working depth can be corrected manually during field work if a correction of the working depth is required, for example if the soil or draft conditions change.

Methods to restore the working depth set point after a manual working depth adjustment:

1. Move the depth control lever in the relevant direction (raising or lowering).
2. Turn the depth control knob in the relevant direction (raising or lowering).
3. Press the button (T) to move the hitch to the saved working depth (set point).

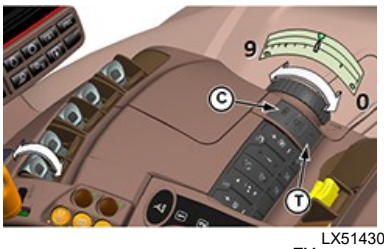
With all of these three methods, the hitch working depth set point (S) will be selected the next time the implement is lowered or raised.

The linear hitch mode does not affect other rear hitch functions, see descriptions in this section.



LX514302—UN—04MAY23

With Side Console



LX514303—UN—12MAY23

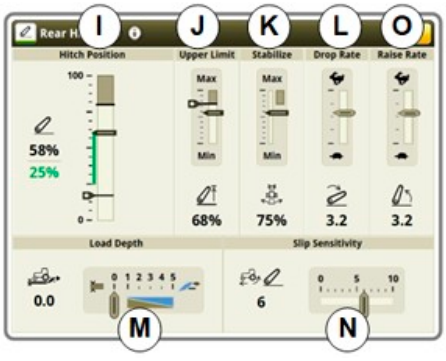
With CommandARM™

B—Indicator for the Current Direction of Movement
C—Set Button
Q—Position Indicator (represents the current position ot the hitch)
S—Working Depth Set Point
T—Button (used to move hitch to saved operating depth)

oulxa64,6R,1678699249279-19-14JUN23

Rear Hitch—Linear Hitch Mode OFF

This page shows the rear hitch with linear hitch mode OFF. The working depth graphic is not displayed.



LX514300—UN—21MAR23

Linear Hitch Mode OFF

I—Hitch Position
J—Upper Limit
K—Stabilize
L—Drop Rate
M—Load Depth
N—Slip Sensitivity

O—Raise Rate

oulxa64,6R,1678699310022-19-14JUN23

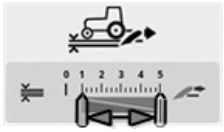
Rear Hitch—General Information on Electronic Hitch Sensing (Standard Mode)

Basic requirements for effective control of the hitch and optimal power transmission during tillage:

- Correct tire pressure and sufficient tread depth
- Optimal ballasting and weight split
- Correct gear selection and engine speed
- Optimally adjusted implement
- Correct setting of the electronic hitch sensing

Various applications in soil tillage require different modes of electronic hitch sensing.

Draft control (set to 1 to 5):



LX341499—UN—25APR18

Draft Control

If the preset value is exceeded, the hitch raises the implement to reduce the draft response. Optionally (for radar equipment), wheel slip can also be monitored to regulate draft response when needed. Typical application: mounted tractor plow.

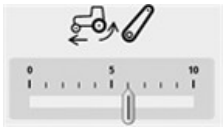
Depth control (set to 0):

LX341500—UN—25APR18

Depth Control

The depth control causes the hitch to move towards the preselected operating depth. The draft response has no effect on the depth control. Typical application: fertilizer spreader.

Wheel slip control (optional):

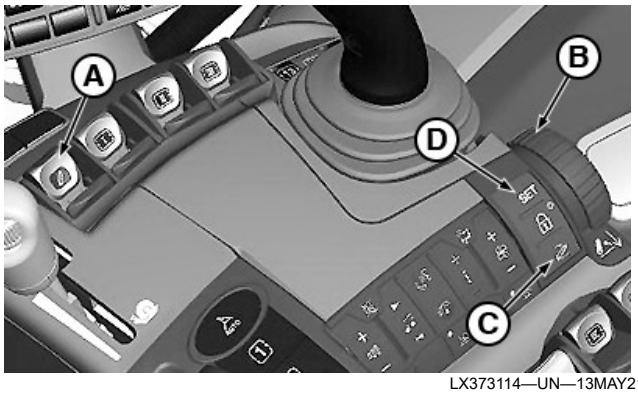


LX341501—UN—25APR18

Wheel Slip, Adjust Sensitivity

As additional equipment, a wheel slip dependent regulation can be used. This requires a travel speed sensor (e.g. radar). The true travel speed is determined by radar and compared with the wheel speed. A difference between the two values is an indicator of wheel slip. Setting a value specifies how aggressively the hitch control responds to wheel slip. The maximum wheel slip is between 8% and 12%.

Float position:
Self-supporting implements require operation in floating position. This allows the implement to follow the ground contour unhindered.



LX373114—UN—13MAY21

A—Depth Control Lever
B—Depth Control Knob
C—Button, Move to Saved Operating Depth (SET Point)
D—SET Button

Activate Float Position:

Option 1:
Operation via lever (A) in detent position, without saved operating depth (SET point)

1. Lower the implement with lever (A) to the ground.
2. Press lever (A) fully forward beyond the click position into the detent position.

Option 2:
Operation via lever (A) in click position or button (C), with operating depth saved at 0% (SET point)

1. Lower the hitch until the implement rests on the ground.
2. Press lever (A) fully forward into the detent position.
3. Save operating depth with SET button (D). Operating depth is saved at 0%.

   Every time the implement is raised, it can be lowered to the saved operating depth (0%/float position) using lever (A) in click position or button (C). For this purpose, lever (A) does not need to be brought into the float position.

Option 3 (only adjustable when the tractor is stopped):
Operation via lever (A) in click position or button (C), with saved desired operating depth (SET point)

1. Lower the hitch until the implement rests on the ground.
2. Use control knob (B) to set the desired operating depth (green bar in CommandCenter™).
3. Save the desired operating depth with SET button (D). The lower end of the green bar is saved as the new operating depth (SET point). When driving, the new desired operating depth is set automatically.

Every time the implement is raised, it can be lowered to the desired operating depth (0%/float position) using lever (A) in click position or button (C). For this purpose, lever (A) does not need to be brought into the detent position.

During tillage, the SET button saves any operating depth that is between the desired working depth and the completely lowered hitch position.

Function problems:

After stopping with the implement lowered, the hitch swings up and down:

• Adjust the operating depth with the depth control (lever A or control knob B) until the movement stops. When resuming operation, use (C) to restore the stored operating depth.

• If there is a radar sensor, reduce the aggressiveness of the wheel slip control.

• Switch off wheel slip control.

• Set operating depth and draft control to lower values, e.g. to 1. Test setting and gradually increase to higher values until a satisfactory result is achieved.

Draft control reacts too aggressively:

• Decrease the value for the draft control.

• Reduce value for the wheel slip control.

Draft control reacts too slowly:

• Select a higher value for the draft control.

• Activate wheel slip control and adapt to the situation.

The operating depth is not maintained:

• Set the value for the control to **0** - set the operating depth and save with the SET button.

Hitch does not go down completely to the set operating depth

• If the implement was replaced with a different one or was unattached, re-set the lower operating depth.

• If the Rear Hitch Settings were recalled by Settings Manager while the tractor was driving, stops driving and re-set the lower operating depth.

Nonsensical reaction of the draft control:

• Depending on the setting, there may be a conflict between draft control and wheel slip control. Set reasonable values to solve the problem.

Tractor wheels spin or tractor gets bogged down:

• Set lower operating depth.

• Set the draft control to a higher value.

• Activate wheel slip control or set higher value.

• Adjust the pressures of the tires as recommended by the tire manufacturer.

• Ballast the tractor correctly.

Hitch swings up and down during operation:

• Rate of raise and drop are set too fast. For an improvement, set a value of 2 for raising and lowering.

• If there is a radar sensor, reduce the aggressiveness of the wheel slip control.

• Switch off wheel slip control.

• Set operating depth and draft control to lower values, e.g. to 1. Test setting and gradually increase to higher values until a satisfactory result is achieved.

• Adjust the pressures of the tires as recommended by the tire manufacturer.

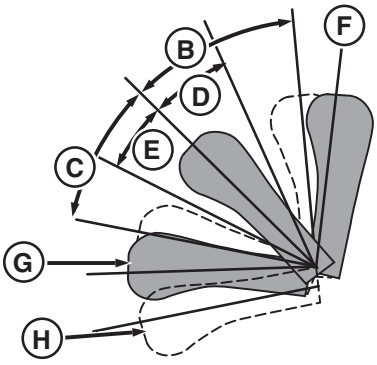
• Ballast the tractor correctly.

OULXA64,6R,MW67,0005F7A-19-28AUG23

Rear Hitch—Use the Depth Control Lever

IMPORTANT: Changes to operating depth are immediate.

LX373117—UN—13MAY21



RXA0104294—UN—11AUG09

Depth Control Lever

Depth control

A . . Depth Control Lever (Raise, Lower, and Float Position of Rear Hitch)
B . . Raise Rear Hitch Quickly
C . . Lower Rear Hitch Quickly
D . . Raise Rear Hitch Slowly
E . . Lower Rear Hitch Slowly
F . . Click Position, Raise
G . . Click Position, Lower
H . . Float Position (Detent Position)
I . . . SET Button, Save Operating Depth
J. . . Transport Lock/Hitch Dampening
K . . Button, Move to Saved Operating Depth (SET Point)

Movements of depth control lever (A) in areas (D) and (E) cause the rear hitch to be raised or lowered. Raise or lower rate depends on how far lever (A) is moved from center position.

- Lever (A) will not raise rear hitch above upper height limit, but will move hitch below the saved operating depth (SET point).
- A short duration “flick” of lever (A) out of neutral to position (D) or (E) will change hitch position incrementally to a small extent.

Set and save operating depth:

1. Set desired depth with control lever (A).
2. Press SET button (I) to save the set operating depth.

   Every time the SET button (I) is pressed, the currently set operating depth is saved.

NOTE: By pressing button (K), the saved operating depth is approached.

Click positions:

1. Pull lever (A) into click position (F) and release.
   ► Hitch is raised to the preset raise height limit.
2. Press lever (A) into click position (G) and release.
   ► Hitch is lowered to saved operating depth (SET point).
3. Press lever (A) into click position (G) and hold.
   ► Hitch is lowered to below the saved operating depth.

   If the tractor is moving and lever (A) is released, the hitch raises to the saved operating depth (SET point).

   If necessary, set operating depth with control lever (A). If lever (A) is pushed to the forward click position and released, the rear hitch returns to the saved operating depth.

Float position (detent position):

Float position (H) holds the rear hitch lower valve open continuously. This allows an implement with gauge wheels to follow ground contours and makes it easier to dismount the implement. See also Rear Hitch—Use the Float Position in this Section.

Transport lock/hitch dampening:

CAUTION: Danger of accidents resulting in severe injury and property damage.

When transport lock and hitch dampening are NOT activated, implements can be lowered unintentionally.

Load-change reactions might lead to critical driving situations.

When driving with raised implement and when not using the hitch, ALWAYS activate the transport lock/dampening.

Block rear hitch and activate hitch dampening:

1. Raise rear hitch with lever (A).
2. Press button for transport lock/hitch dampening (J). The indicator light of button (I) lights up.

   Lever (A) is deactivated against unintentional lowering of the rear hitch.

   • The rear hitch can be raised after lowering to the previously set transport position. To do so, pull lever (A) into click position Raise (F) and hold.

   • Hitch dampening interrupts tractor pitching/rocking that can occur when transporting rear hitch-mounted equipment. See also Rear Hitch—Hitch Dampening in this Section.

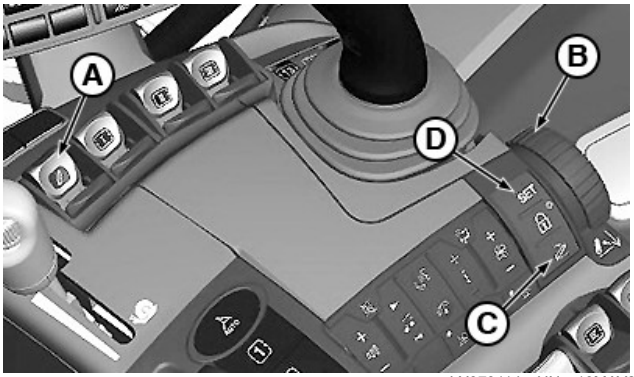
Release rear hitch and deactivate hitch dampening:

Press button (J) for transport lock/hitch dampening. The indicator light of button (I) will go off.

OULXA64,6R,MW67,0005F7B-19-28AUG23

Rear Hitch—Set Operating Depth

IMPORTANT: Changes to operating depth are immediate.



LX373114—UN—13MAY21

CommandARM™

Depth control, controls

A . . Depth Control Lever (Raise, Lower, and Float Position of Rear Hitch)

B . . Depth Control Knob (Raise and Lower the Rear Hitch)

C . . Button, Move to Saved Operating Depth (SET Point)/Quick-Lower

D . . SET Button

Set and save operating depth

1. Push lever (A) forward or turn control knob (B) forward and set the desired operating depth.
2. Press SET button (D) to save the set operating depth (SET point).

   Every time the SET button (D) is pressed, the currently set operating depth is saved.

Automatic lowering to saved operating depth (SET point)

- Press lever (A) forward into click position (noticeable resistance) and release.
- Press button (C), then release.

NOTE: With button (C) the rear hitch is immediately lowered to the previously set operating depth at the set lowering speed.

Drop below saved operating depth

- Press lever (A) forward into click position (noticeable resistance) and hold.
- Rotate control knob (B) forward.

NOTE: Dropping below the saved operating depth and the quick raise/lower function can only be activated while the tractor is driving.

Activate quick raise/lower function (drop below saved operating depth)

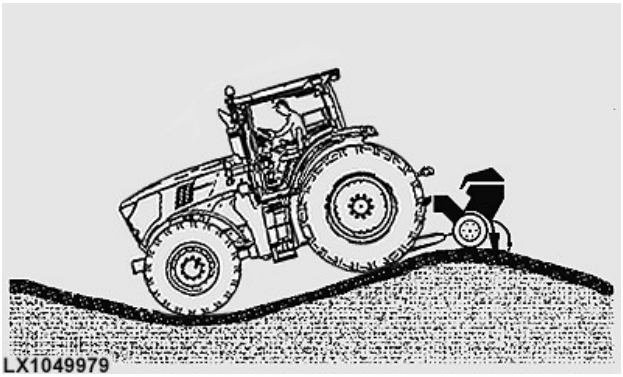
- Press and hold button (C).

  The quick raise/lower function lowers the rear hitch slightly below the saved operating depth. After the button is released, the hitch will be raised automatically to the saved operating depth. This allows improved tillage in compacted soils (e.g. at the headland).

OULXA64,6R,MW67,0005F7C-19-28AUG23

Rear Hitch— Use the Float Position

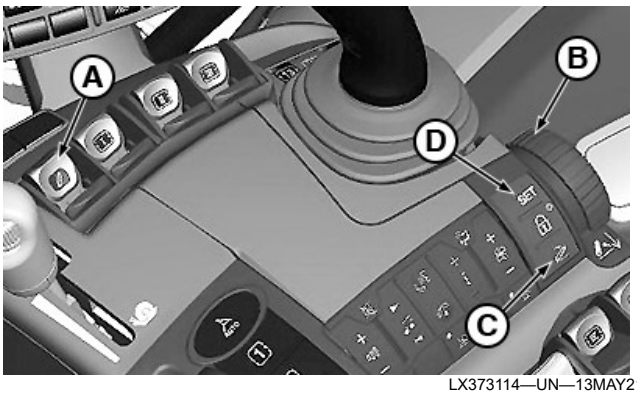
NOTE: In float position (for implements with gauge wheel), implement can move freely up and down to follow ground contours independently of the tractor.



LX1049979—UN—18MAY11

Implement in Float Position

Activate float position



LX373114—UN—13MAY21

A—Depth Control Lever
B—Depth Control Knob
C—Button, Move to Saved Operating Depth (SET Point)
D—SET Button

Option 1:
Operation via lever (A) in detent position, without saved operating depth (SET point)

1. Lower the implement with lever (A) to the ground.
2. Press lever (A) fully forward beyond the click position into the detent position.

Option 2:
Operation via lever (A) in click position or button (C), with operating depth saved at 0% (SET point)

1. Lower the hitch until the implement rests on the ground.
2. Press lever (A) fully forward into the detent position.

3. Save operating depth with SET button (D). Operating depth is saved at 0%.

   Every time the implement is raised, it can be lowered to the saved operating depth (0%/float position) using lever (A) in click position or button (C). For this purpose, lever (A) does not need to be brought into the detent position.

Option 3 (only adjustable when the tractor is stopped): Operation via lever (A) in click position or button (C), with saved desired operating depth (SET point)

1. Lower the hitch until the implement rests on the ground.
2. Use control knob (B) to set the desired operating depth (green bar in CommandCenter™).
3. Save the desired operating depth with SET button (D). The lower end of the green bar is saved as the new operating depth (SET point). When driving, the new desired operating depth is set automatically.

   Every time the implement is raised, it can be lowered to the desired operating depth (float position) using lever (A) in click position or button (C). For this purpose, lever (A) does not need to be brought into the detent position.

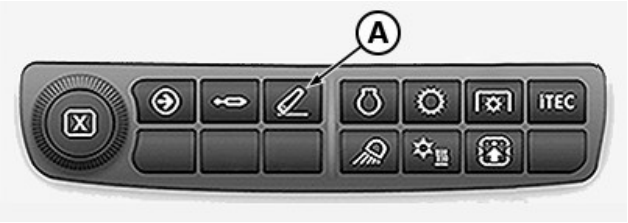
   During tillage, the SET button saves any operating depth that is between the desired working depth and the completely lowered hitch position.

OULXA64,6R,MW67,0005F7D-19-28AUG23

Rear Hitch—Set the Raise Height Limit

IMPORTANT: Changes to the raise height limit take place immediately.

1. Press rear hitch button (A).

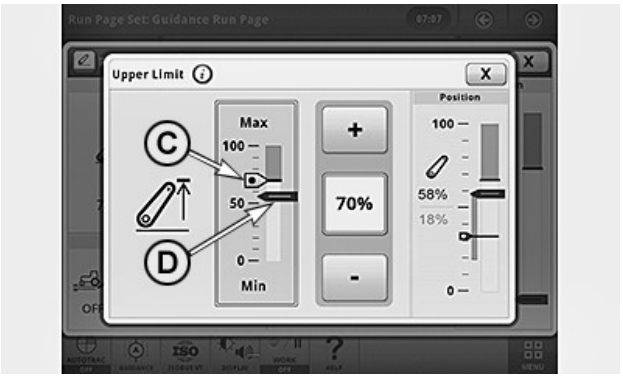


LX373116—UN—26MAY21

2. Select display field for raise height limit (B).

LX1056990—UN—24NOV14

3. Use the +/- buttons to set the raise height limit (C).



LX1057237—UN—09SEP13

NOTE: If the raise height limit (C) is set below the current hitch position (D), the hitch is lowered to the newly set raise height limit (C).

OULXA64,6R,MW67,0005F7E-19-28AUG23

Rear Hitch—Adjust the Rate-of-Drop

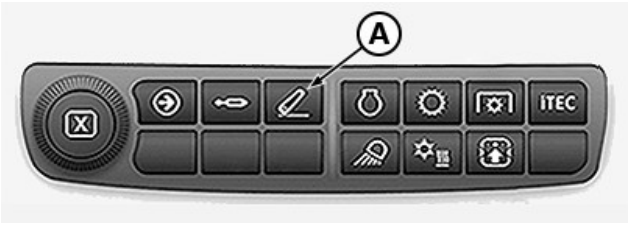
CAUTION: Risk of injury due to implements being lowered too quickly.

If implements are being lowered too quickly, there is a risk of injury due to abrasion and crushing.

- **Before lowering, make sure that there are no persons near or under the implement. Send anyone there away if necessary.**
- **Set the rate-of-drop so that a complete lowering takes at least 2 seconds.**

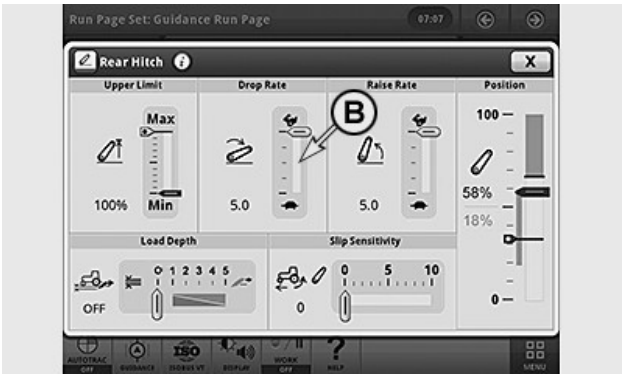
IMPORTANT: Changes to rate-of-drop are effective immediately.

1. Press rear hitch button (A).



LX373116—UN—26MAY21

2. Select display cell for rate-of-drop (B).

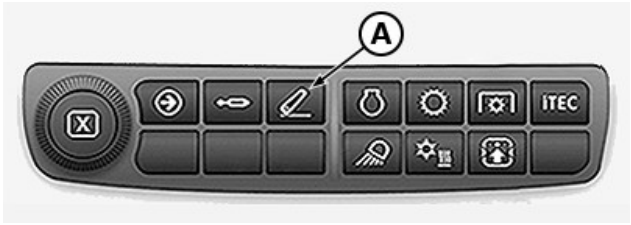


LX1056991—UN—24NOV14

3. Use the +/- buttons to set the rate-of-drop (C).

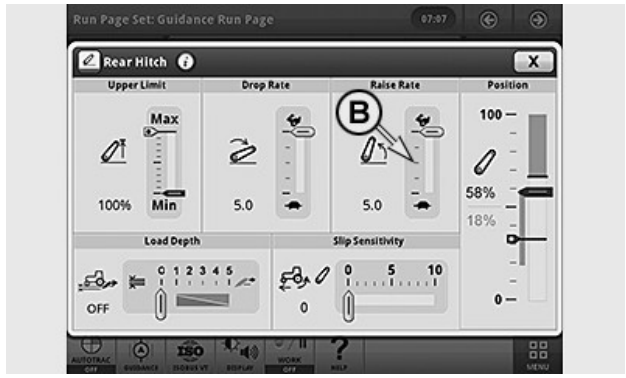
LX1057238—UN—09SEP13

OULXA64,6R,MW67,0005F7F-19-28AUG23



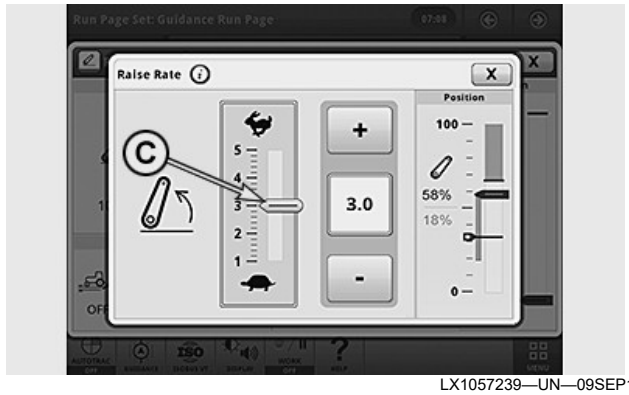
LX373116—UN—26MAY21

2. Select display cell for raise rate (B).



LX1056992—UN—24NOV14

3. Use the +/- buttons to set the raise rate (C).



LX1057239—UN—09SEP13

OULXA64,6R,MW67,0005F80-19-28AUG23

Rear Hitch—Set the Raise Rate

CAUTION: Risk of injury due to implements being raised too quickly.

If implements are being raised too quickly, there is a risk of injury due to abrasion and crushing.

- **Before raising, make sure that there are no persons near or under the implement. Send anyone there away if necessary.**
- **Set the raise rate so that a complete raising takes at least 5 seconds.**

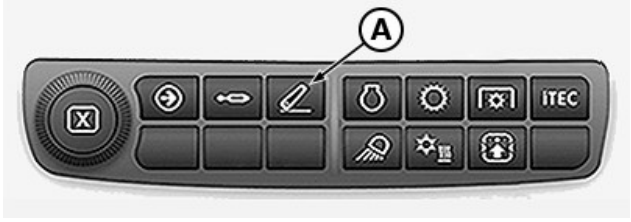
NOTE: Changes to raise rate are immediate.

1. Press rear hitch button (A).

Rear Hitch—Draft/Depth Control Adjustment

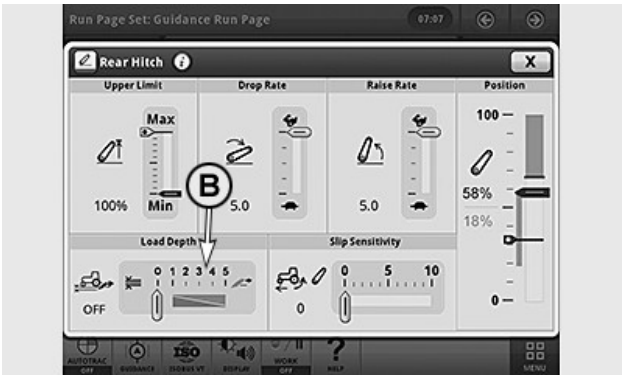
NOTE: Draft/depth control adjustment changes the draft responsiveness only. Operating depth is set with the depth control lever.

1. Press rear hitch button (A).



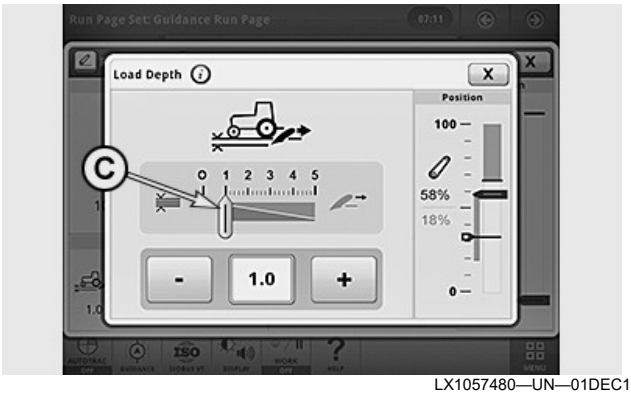
LX373116—UN—26MAY21

2. Select display field for draft/depth control (B).



LX1056993—UN—24NOV14

3. Use the +/– buttons to set the desired draft/depth control (C).

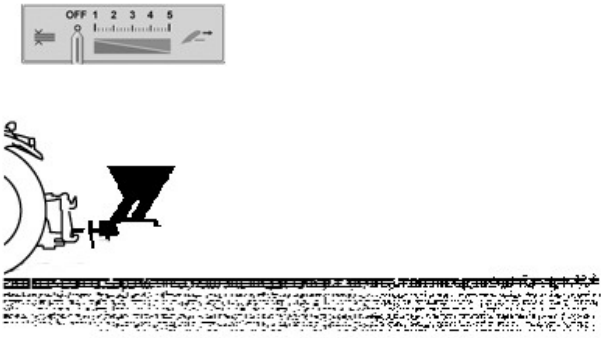


LX1057480—UN—01DEC14

- Depth control is activated when it is set to zero. See Rear Hitch—Using Position Control.
- Higher settings are used for draft control. See Rear Hitch—Using Draft Control in this Section.

OULXA64,6R,MW67,0005F81-19-28AUG23

Rear Hitch—Use the Depth Control



RXA0128370—UN—25SEP12

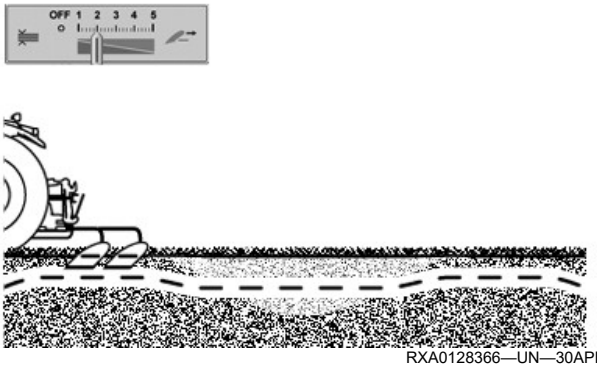
Hitch Held at Selected Position

Use position control to operate non-ground engaging implements and implements that fully rest on gauge wheels for depth control.

To adjust depth control by means of the draft/depth control function, set draft response to OFF.

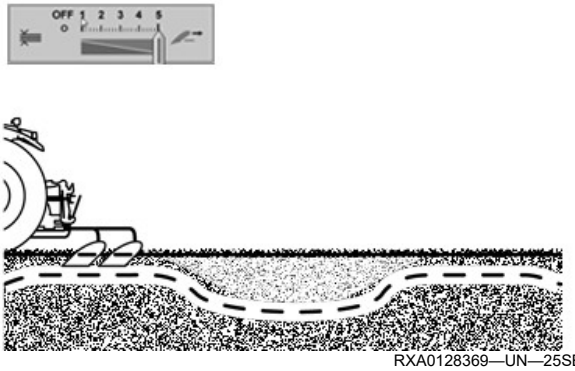
OULXA64,0005B6C-19-14JUN23

Rear Hitch—Use Draft Control



RXA0128366—UN—30APR13

Middle Response Controls Depth Better if Soil Varies

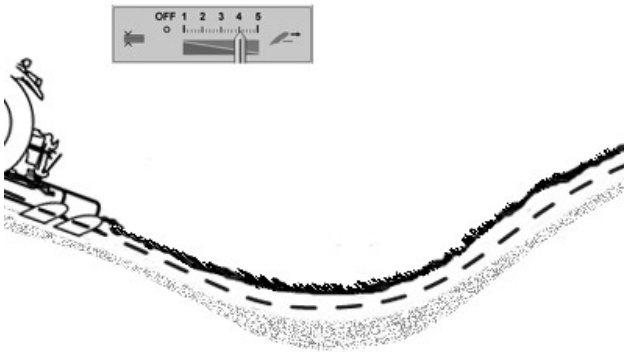


RXA0128369—UN—25SEP12

High Response Causes More Depth Variation If Soil Varies

RXA0143421—UN—08JUL14

Low Response Causes More Depth Variation in Rolling Terrain



RXA0143422—UN—08JUL14

Higher Response Controls Depth Better In Rolling Terrain

The draft control is used to maintain the operating depth of tillage equipment without float function in rolling terrain.

The draft control prevents the height and tilt of the tractor, as well as sinking rear wheels, from causing the implement to penetrate the soil too far.

If the soil density/resistance vary, higher responsiveness settings cause greater fluctuations when the operating depth is regulated. Best setting depends on implement type and field conditions.

- Higher values provide more/faster draft response.
- Lower values provide less/slower draft response.

Recommended setting values for the draft/depth control, depending on the implement type:

Integral Field Cultivator	2—4
Mounted Plow	1.5—3
Integral Ripper/Subsoiler	1—3

The setting for the draft/depth control changes the draft responsiveness only. Use depth control lever of the hitch to control/change operating depth.

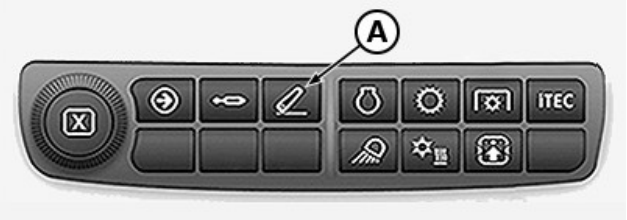
NOTE: Low draft response settings may slow the rate of drop of some implements. To make the implement penetrate the soil faster, hold the depth control lever in the front click position. Hitch lowers at the drop rate selected.

OULXA64,0005B6D-19-14JUN23

Rear Hitch—Adjust Slip Sensitivity (If Equipped)

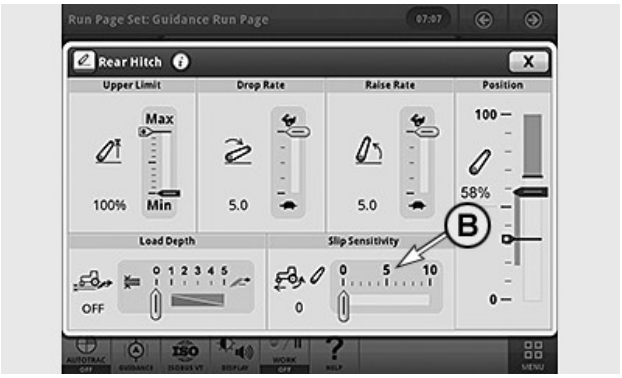
NOTE: Slip sensitivity is available only in conjunction with the radar sensor or GreenStar™. Slip sensitivity setting is independent of the draft control setting. Draft control has to be activated.

1. Press rear hitch button (A).



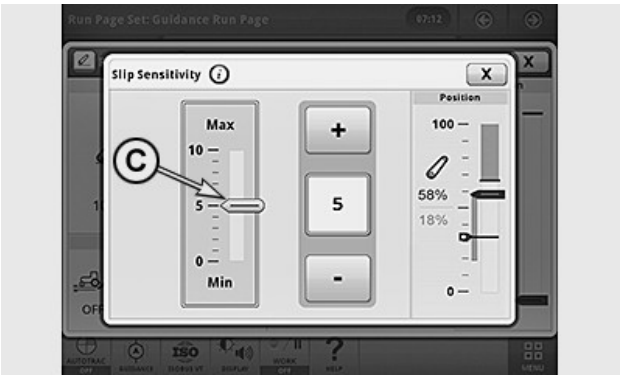
LX373116—UN—26MAY21

2. Select display field for slip sensitivity (B).



LX1056994—UN—24NOV14

3. Use the +/– buttons to set the desired slip sensitivity (C).



LX1057241—UN—10SEP13

Slip sensitivity is dependent on this setting, but also varies with soil conditions.

Response Setting Guidelines[a]

Subsoiler	5—7
Plow	7—9
V-Ripper	8—10

[a] *Appropriate setting will depend on implement type, soil conditions, and tractor equipment.*

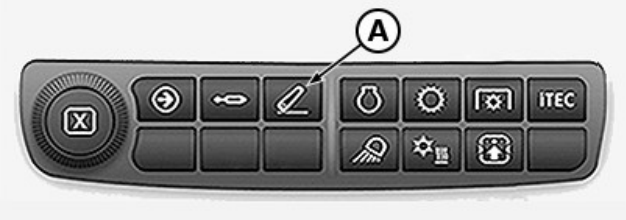
In relation to the condition of the soil, slip sensitivity controls the extent to which the implement is raised when wheel slippage occurs.

OULXA64,6R,MW67,0005F82-19-28AUG23

Rear Hitch—Set Locking Height of the Stabilizer Bar (If Equipped)

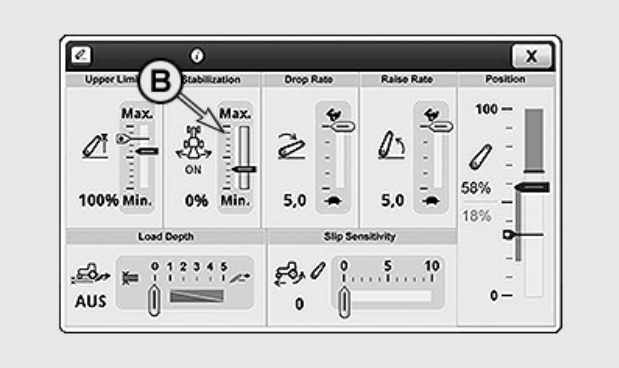
IMPORTANT: Changes to the rear hitch stabilization take effect immediately.

1. Press rear hitch button (A).



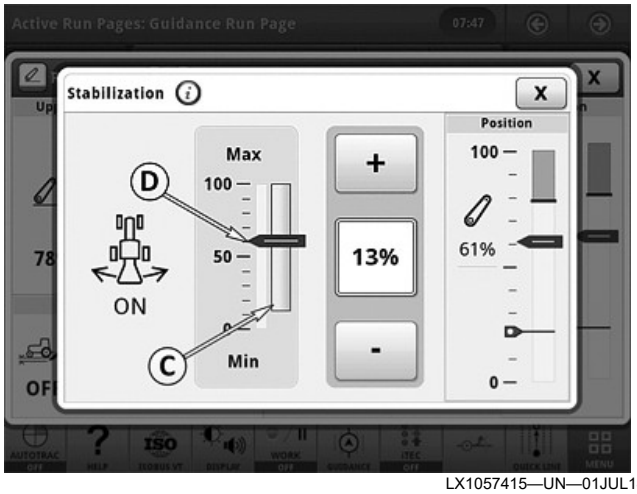
LX373116—UN—26MAY21

2. Select the display for the locking height of the stabilizer bars (B).



LX1056995—UN—24NOV14

3. With +/– buttons, set the desired locking height (C) beyond which the stabilizer bars are to be locked.



LX1057415—UN—01JUL14

C—Locking Height of the Stabilizer Bars
D—Current Hitch Position

OULXA64,6R,MW67,0005F83-19-28AUG23

Rear Hitch—Driving under Load with Mounted Implement

IMPORTANT: The mass of the implement may be such that the implement moves up and down slightly even when the transport lock is on and hitch dampening is active.

Always raise the implement high enough to provide sufficient clearance between the implement and the road surface.

Transport with implement without own chassis:

1. Use lever (A) or depth control knob (B) to raise the implement all the way.

LX373118—UN—13MAY21

2. Engage transport lock (C).

   The indicator light on button (C) lights up when the transport lock is activated.

NOTE: The transport lock can be enabled across the entire raising height. When raised about 50%, hitch dampening also becomes active.

Transport with implement with own chassis:

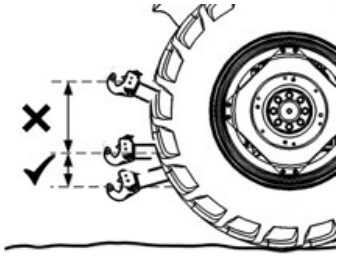
Press depth control lever (A) all the way forward into float position (detent position).

NOTE: Using the remote control, the height of the rear hitch can be changed with activated transport lock.

If the transport lock was activated before switching off the tractor, the transport lock remains enabled when the tractor is restarted.

Be sure to consider other points:

- Do not exceed the maximum trailer load (see table).
- Secure coupler hooks against unintentional opening (see description in this Section).
- Use anti-twist trailer hitches and observe manufacturer's instructions.
- Raise draft links only so high until they are aligned horizontally.



LX341502—UN—11JUN18

Permissible towable load when transporting an implement with its own chassis
Rear hitch with CAT II • Maximum towable load 10000 kg (22046 lb)*
Rear hitch with CAT III • Maximum towable load 12000 kg (26455 lb)*
* Observe the maximum permissible towable loads in Section 500A. If lower values are given there, those specifications are binding.

OULXA64,6R,MW67,0005F84-19-28AUG23

Rear Hitch—Hitch Dampening

IMPORTANT: The mass of the implement may be such that the implement moves up and down slightly even when the transport lock is on and hitch dampening is active.

Always raise the implement high enough to provide sufficient clearance between the implement and the road surface.

The tractor is equipped with a hitch dampening function that prevents the tractor from pitching when traveling with a raised implement.

NOTE: The transport lock can be enabled across the entire raising height. When raised about 50%, hitch dampening also becomes active.

NOTE: Automatic engagement of dampening is activated before the tractor leaves the factory.

Automatic engagement of hitch dampening can be disabled in Advanced Settings. Vehicle behavior may vary depending on implement.

Activate rear hitch dampening automatically:

1. Use lever (A) or depth control knob (B) to raise the implement above 50%.

LX373118—UN—13MAY21

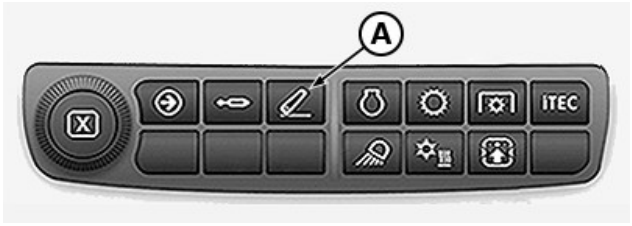
2. Activate transport lock/hitch dampening (C).

   The indicator light on button (C) lights up when the transport lock/hitch dampening is activated. Rate-of-drop must not be set at the minimum value.

Hitch dampening is deactivated automatically as soon as transport lock/hitch dampening (C) is switched off.

Activate or disable automatic engagement of dampening:

1. Press rear hitch button (A).



LX373116—UN—26MAY21

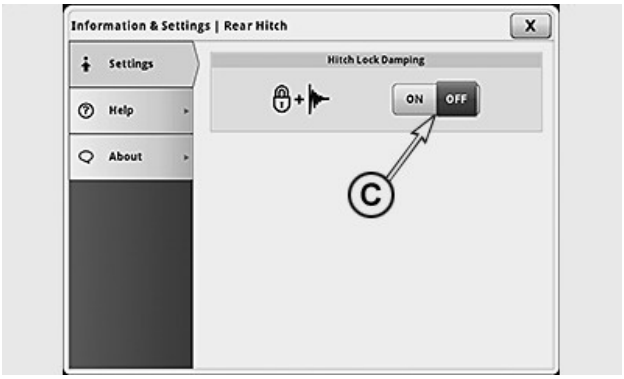
CommandArm™

2. Press icon for Advanced Settings (B).

LX1056996—UN—24NOV14

Rear Hitch Page

3. Activate or deactivate automatic engagement of dampening (C).



LX1057421—UN—09JUL14

4. To save, close page.

OULXA64,0005F85-19-28AUG23

Rear Hitch—Remote Control

Actuate rear hitch with remote buttons. The limits set for the lifting height or operating depth are not taken into account.

LX314988—UN—15AUG17

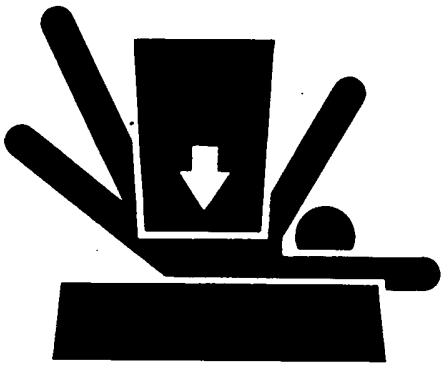
Remote Control Switch

- Push upper switch - Raise implement
- Push lower switch - Lower implement

For safety reasons, the hitch rises and drops at a slower rate.

OULXA64,0005B72-19-14JUN23

Rear Hitch—Direct Actuation



TS229—UN—23AUG88

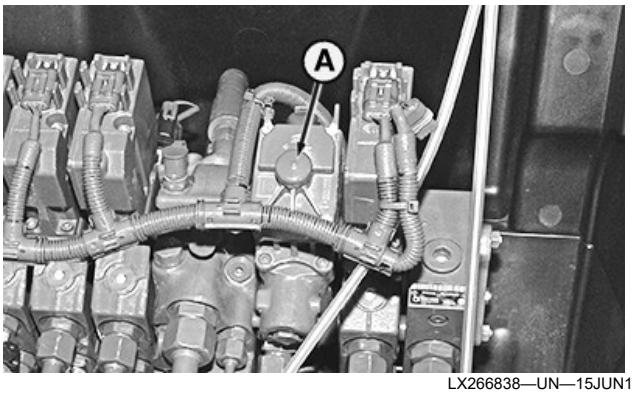
CAUTION: Risk of injury due to direct control of the rear hitch and implements!

There is a risk of injury from abrasion and crushing due to direct control of the rear hitch and implements if the electric control fails.

• Before raising, make sure that there are no persons near or under the rear hitch or implement. Send anyone there away if necessary.

Direct actuation of rear hitch must be performed only while sitting on the operator's seat.

In the event of electrical failure of the rear hitch electrical control system, the rear hitch can be actuated as follows:



LX266838—UN—15JUN16

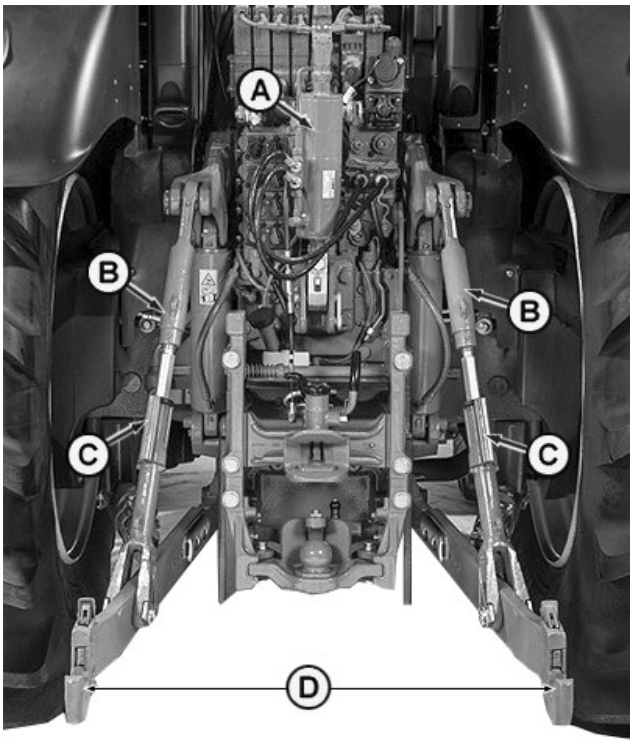
1. Keep engine running.
2. Take off the protective cap.
3. **From the operator's seat**, use a flat tip screwdriver or suitable coin to turn the screw until the rear hitch is raised or lowered to the desired position.

NOTE: It is possible to lower the hitch by direct actuation even when the engine is not running.

4. See an authorized John Deere dealer.

OULXA64,0005B73-19-14JUN23

Three-Point Hitch



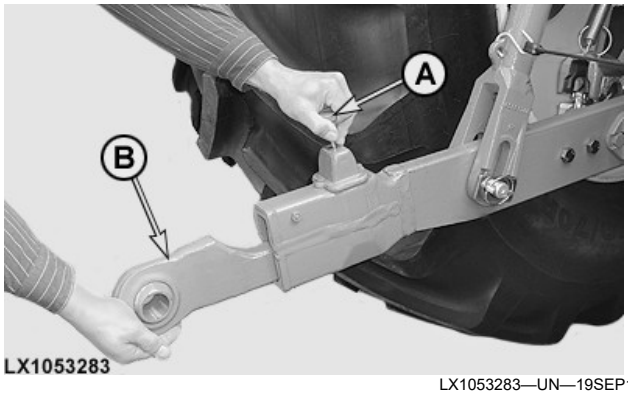
LX514795—UN—28OCT21

A—Center Link
B—Lift Links
C—Adjusting Handles for Lift Links
D—Draft Links

Tractors may be equipped with flat steel draft links, telescopic draft links, or quick-coupling (hook-type) draft links.

OULXA64,6R,MW67,0005F86-19-18JAN23

Telescopic Draft Links



LX1053283—UN—19SEP11

These draft links are intended for Category II and Category IIIN implements.

To facilitate hitching of implements, extend the draft links to the rear.

1. Lift lock pin (A).
2. Pull telescopic draft links (B) to the rear.

After attaching and securing implements to draft links, reverse the tractor until the lock pins snap into place. Make sure that the draft links are locked by driving a short distance in forward direction.

LX25458,0000A15-19-05JUN20

Quick-Coupling (Hook-Type) Draft Links

IMPORTANT: Use only correct balls!

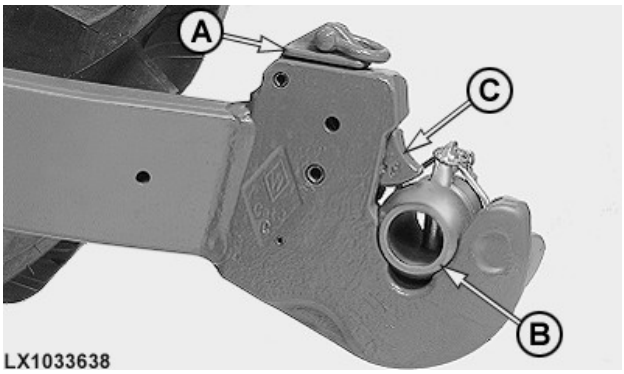
These draft links are intended for category III balls.

LX1033644—UN—17MAY04

Category	Ball Diameter (a)
III	64 mm (2.5 in)

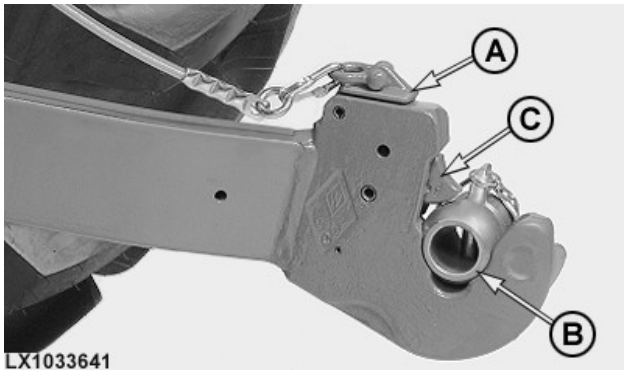
Operate the Coupler Hook

Coupler hooks can be operated manually or by cable using control element (A).



LX1033638—UN—17MAY04

Coupler Hook, Manual Operation



LX1033641—UN—17MAY04

Coupler Hook, Cable Operation

A—Control Element
B—Ball
C—Pin

IMPORTANT: Make sure that the coupler hooks are correctly latched:

- **Control element (A) has to be flush against coupler hook.**
- **Ball (B) should have no noticeable play.**
- **Pin (C) should cover the ball.**

For coupler hook with cable operation:

After hitching up, check the routing of the cable so that an accidental opening by excessive slack or catching by high vegetation or branches can be avoided.

Lock for Draft Link Hooks

CAUTION: There is a risk of injury due to unintentional opening of the draft link coupler hooks.

Unintentional opening of the lower link catch hooks can lead to crushing.

Secure draft link coupler hook against unintentional opening as shown.

Avoid the following situations:

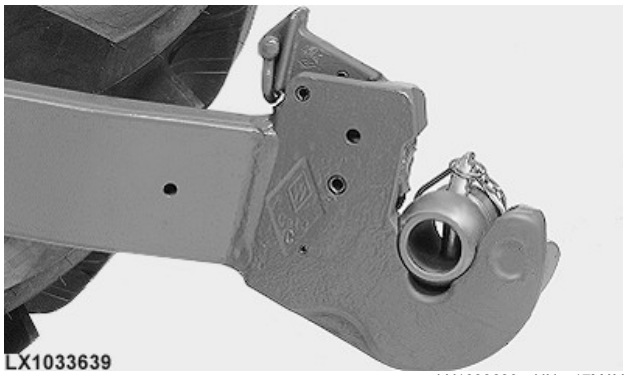
- **Attaching devices with asymmetric load (e.g. side boom mower decks)**
- **Driving through high vegetation**
- **Forest operation**
- **Pulling implements with their own undercarriage**

Use John Deere AL165485 lock parts kit at both of the coupler hooks.

LX1033645—UN—17MAY04

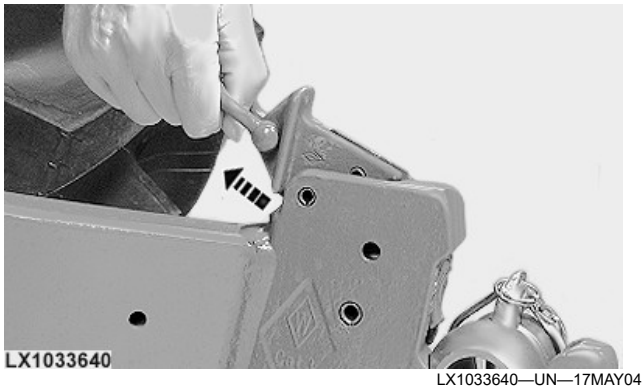
A—Lock Parts Kit

The coupler hooks can be locked in opened position.

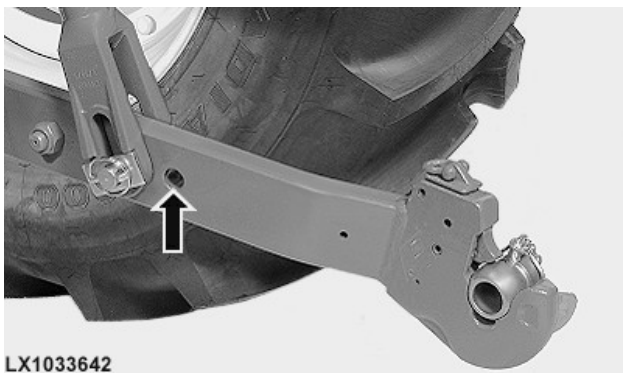


LX1033639—UN—17MAY04

To close the coupler hooks again, first pull the control part at an upward angle.



LX1033640—UN—17MAY04



LX1033642—UN—17MAY04

NOTE: For very heavy, short devices, the lift links can be attached in the rear hole of the draft links. This reduces the lifting height, but the lifting force is increased.

LX25458,MY20,0000A16-19-17SEP20

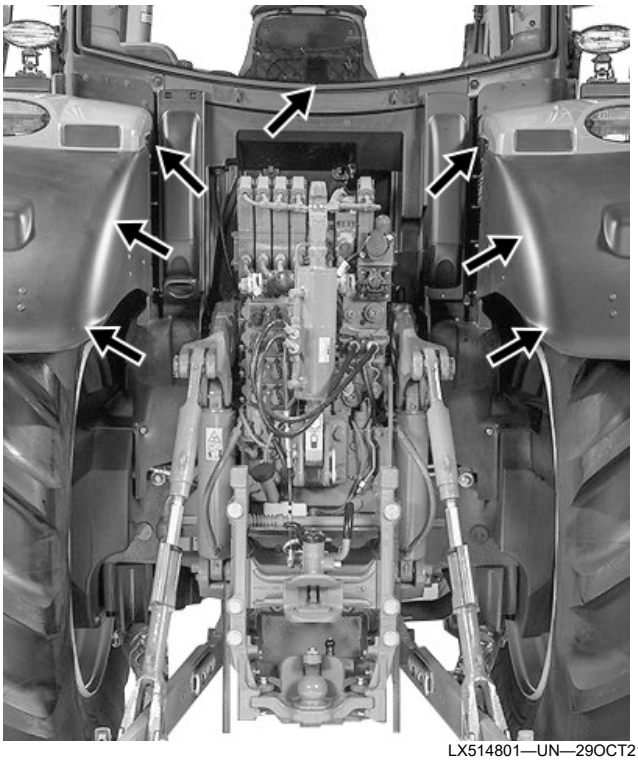
Attach Three-Point Hitch Mounted and Drawn Implements

CAUTION: Crushing hazard with possibly fatal consequences!

Body parts can be caught between tractor and implement, and get trapped.

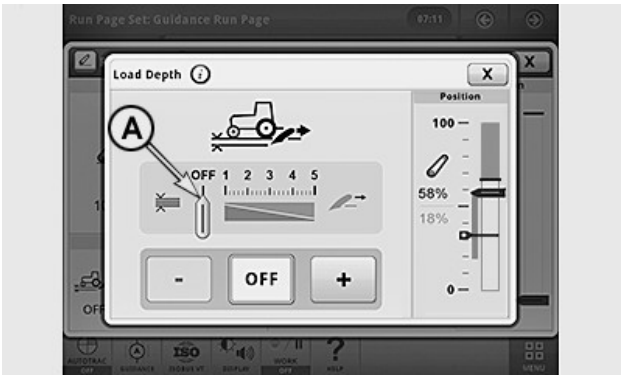
Stay clear of hitch area (between the tractor and implement). Do not stand under suspended loads. Operate the remote control of the rear hitch from a safe position. Apply the park lock when hitching or unhitching implements and proceed with caution.

Be sure not to damage exposed parts of cab and tractor components (see arrows) when attaching three-point hitch mounted or drawn implements.



LX514801—UN—29OCT21

When attaching an implement, first make sure that draft/depth control (A) is set to **OFF**.



LX1057226—UN—05SEP13

IMPORTANT: Avoid damage due to insufficient clearances.

When the hitch is raised, the device may come into contact with the cab tractor components.

Carry out a trial attachment and check clearances.

Check clearances and stops:

- Carefully raise the implement through the complete lifting range. Stop the process immediately in case there is a risk of contact with the tractor. Adjust the center link, if necessary.
- Observe whether there is any contact between the tractor and the implement when turning. Readjust the draft link stops if necessary.
- To widen the clearance between lift links and the tires, mount the lift links in the front bore of the draft links.
- Comply with instructions under Hydraulic Center Link.
- Set the draft link stops so that lateral movements are no longer possible after the implement is lifted out.
- Even if no implement is available, the draft link stops need to be set so that contact between draft links and tires can be prevented.

When the drawbar is attached, move the drawbar into one of the following positions and lock it:

- Front, short position
- Swiveled to the left
- Swiveled to the right

OULXA64,6R,MW67,0005F87-19-29OCT21

Leveling Implement

To level implement from side-to-side, adjust one of the lift links. Adjust center link to level fore/aft.

OULXA64,0005B76-19-17MAR21

Center Link

IMPORTANT: Damage due to too small clearance between installed and hitched devices.

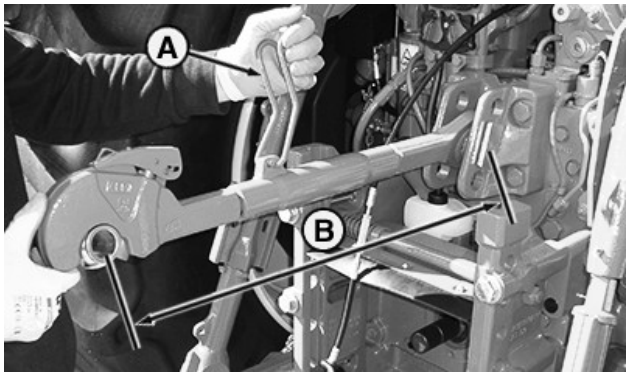
When the hitch is raised, the device may come into contact with the cab tractor components.

Carry out a trial attachment and check clearances with attached or hitched device in every position.

Observe following settings for this:

- **Center link length**
- **Maximum lift height**

1. Adjust center link length to the required length by turning adjusting handle (A).



LX315110—UN—17APR18

A—Adjusting Handle
B—Length

Center Link Lengths	CAT3
Minimum length	700 mm (27.6 in)
Maximum length	885 mm (34.8 in)

IMPORTANT: Damage due to wrong adjustment length.

When setting the center link lengths, faulty settings and incorrect operation may occur.

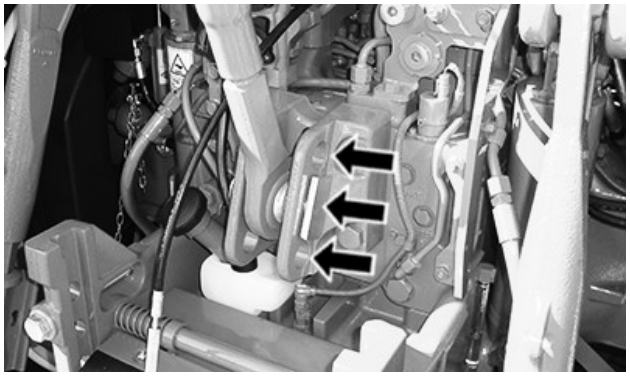
- **Do not exceed specified dimensions downwards/upwards.**
- **Grooves in the threads indicate the maximum permitted setting.**
- **The threads must not be unscrewed out of the receiver.**

2. After adjusting, push handle down again over center link.
3. Insert attaching pin through implement mast and center link, and secure.

OULXA64,6R,MW67,0005FF2-19-29OCT21

Center Link Positions

The center link can be attached to the tractor in any one of three different positions.



LX315105—UN—17APR18

The lowest position provides maximum tilt angle but less lifting force, and should be used when working with a plow.

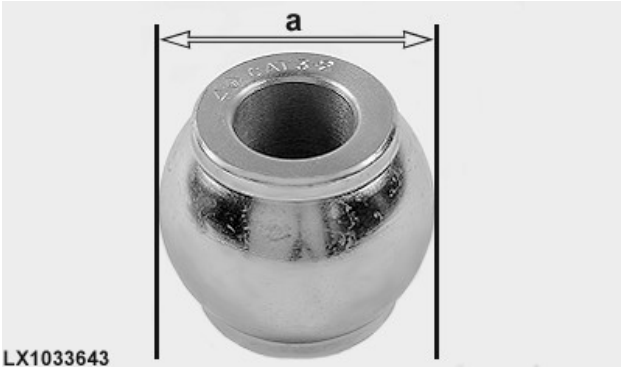
The highest position provides greater lifting force and minimum tilt angle, and can be used when working with machines such as direct drills.

OULXA64,0005B78-19-29SEP21

Hook-Type Center Link

IMPORTANT: Use only correct balls!

This center link is intended for category III balls.

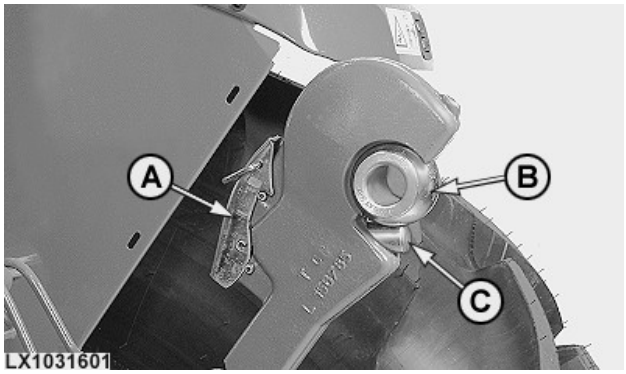


LX1033643—UN—17MAY04

Category	Ball Diameter (a)
III	60 mm (2.4 in)

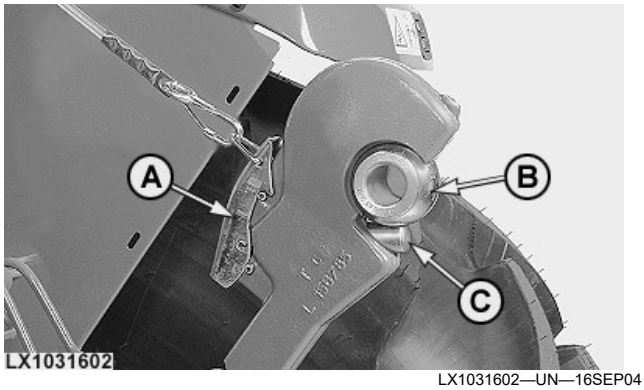
Hook Operation

Coupler hooks can be operated manually or by cable using control element (A).



LX1031601—UN—16SEP04

Coupler Hook, Manual Operation



LX1031602—UN—16SEP04

Coupler Hook, Cable Operation

A—Control Element
B—Ball
C—Pin

IMPORTANT: Make sure that the coupler hook is correctly latched:

- **Control element (A) has to be flush against coupler hook.**
- **Ball (B) should have no noticeable play.**
- **Pin (C) should cover the ball.**

For coupler hook with cable operation:

After hitching up, check the routing of the cable so that an accidental opening by excessive slack or catching by high vegetation or branches can be avoided.

LX25458,ALL,CAT2,0000A1B-19-09OCT20

Hydraulic Center Link

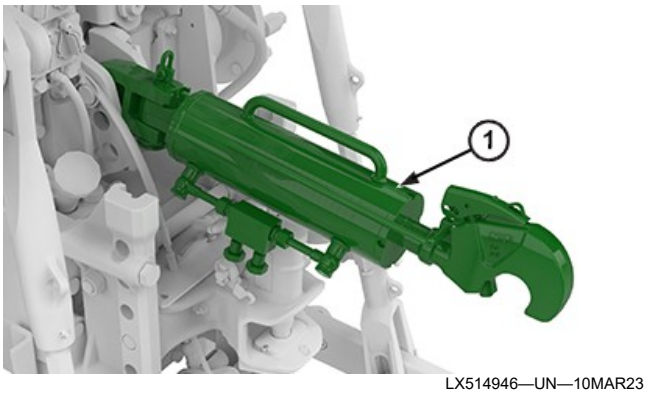
IMPORTANT: Exercise caution, center link is heavy and can damage hydraulic hoses and other components if it tilts down during installation or removal.

The handle (C) of version (2) is also an oil line. In order to avoid damage, any manipulation of it is prohibited. Otherwise, oil leakage may occur, with oil escaping under high pressure.

IMPORTANT: Check the following before putting into operation:

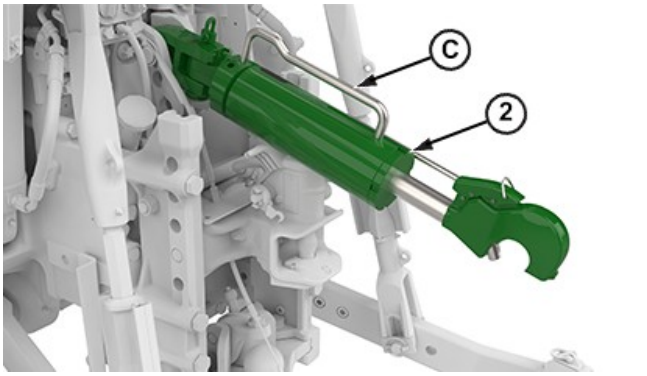
- **When raising the implement, make sure that it does not come in contact with the tractor.**
- **Pay attention to the length of the center link and maximum raising height.**

Two versions of hydraulic center links are available.



LX514946—UN—10MAR23

Version 1: Hydraulic Center Link with a Handle and Separate Oil Line



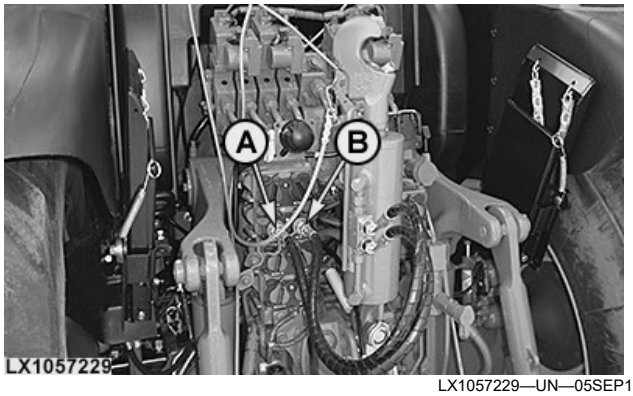
LX514947—UN—10MAR23

Version 2: Hydraulic Center Link with Oil Line Integrated in the Handle

The length of the center link can be adjusted when seated in the operator's seat using the SCV III. In addition, the center link can be actuated using remote control switches on the fender.

Attached to the hydraulic center link is a measuring rod that is intended to facilitate adjustment of the center link when in operation. For this purpose, the rod has marks on it to assist in positioning. The rod is not suitable for use as a handhold when in transport or during installation and removal.

Route the hydraulic hoses so that the loops face away from coupling area of the center link. Connect supply line (A) with the left port on SCV III and supply line (B) with the right port on SCV III.



LX1057229—UN—05SEP13

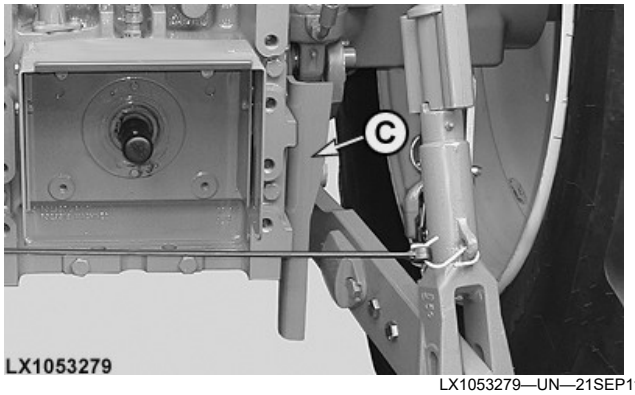
A—SCV III Left, Connection of the Upper Lead of the Center Link
B—SCVIII Right, Connection of the Lower Line of the Center Link

IMPORTANT: Take extreme care when setting the MAX lift limit and make sure that there is adequate clearance at all tractor components. Remember that retracting the hydraulic center link brings the implement closer to the tractor.

Use the depth control to raise the implement fully. **Carefully** move the raise height limit mark (D) towards MAX until the implement reaches its highest possible position.

LX1057230—UN—05SEP13

If severe wear occurs at guide rails (C) on the PTO housing, the rails must be replaced with new ones in order to prevent the center link from coming into contact with the hydraulic block.



LX1053279—UN—21SEP11

Guide Rails

If the hydraulic center link is not used, ensure the following:

1. The center link is fully retracted.
2. The center link is installed in one of the top two positions.
3. The center link is fully engaged in latch of the tractor.

Pay attention to the heavy weight when mounting and dismounting the center link.

OULXA64,0005B79-19-14JUN23

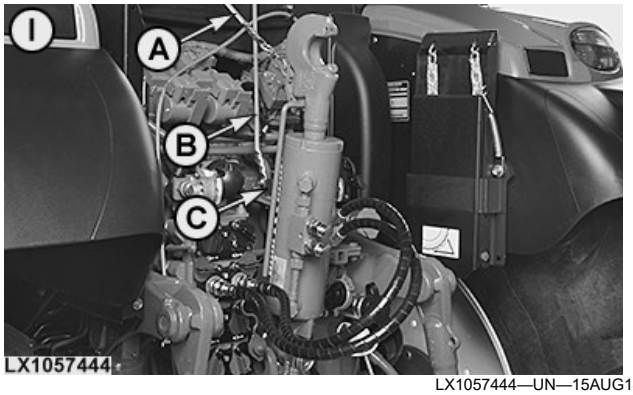
EasyGuide™ Center Link (If Equipped)

EasyGuide™ Center Link is a system that enables the user to engage and disengage the hydraulic center link from the cab and from the ground.

CAUTION: The center link is heavy and can cause injury or damage other components if it falls.

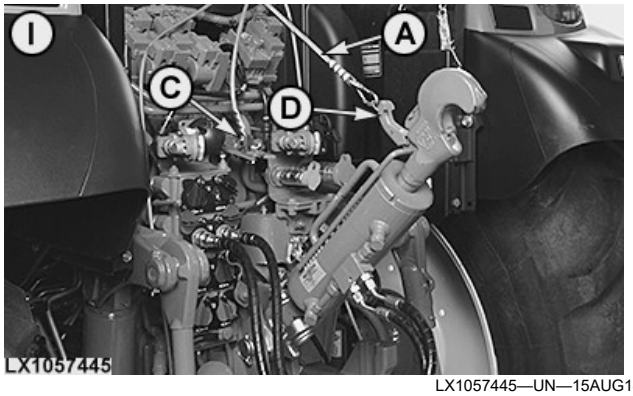
IMPORTANT: Make sure that the hydraulic center link is always retracted completely after the work has been completed, and that it is latched in at the locking pawl (C) of the center link bracket.

I - EasyGuide™ Center Link, operation from the cab



LX1057444—UN—15AUG14

I, Actuation from within Cab



LX1057445—UN—15AUG14

I, Actuation from within Cab

A—Cable (center link)
B—Cable (locking pawl)
C—Locking Pawl (bracket)
D—Locking Pawl (center link)

Unfasten center link from the center link bracket.

1. Tighten the center link with the cable (A) and keep it tensioned.
2. Unlock the locking pawl (C) using the cable (B).
3. Correctly position the center link using both hands by means of the cable (A), and let it latch in at the implement.

IMPORTANT: Make sure that the center link has been installed correctly and the locking pawl (D) has latched in.

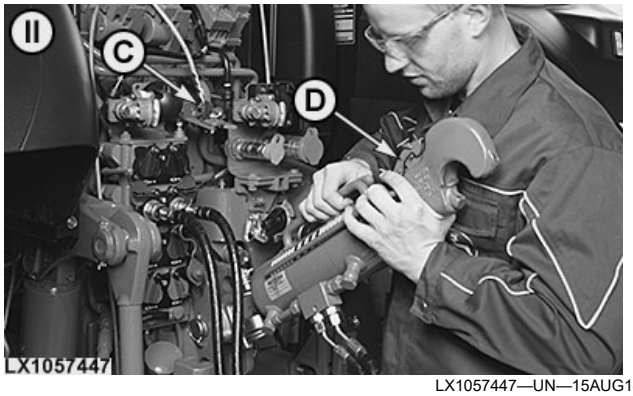
Disconnect center link from implement.

1. Lower the implement.
2. Unlock the locking pawl (D) using both hands using cable (A).
3. Tighten the center link and let it latch into the locking pawl of the center link bracket.

II - EasyGuide™ Center Link, operation from the ground

LX1057446—UN—15AUG14

II - Actuation from Ground



LX1057447—UN—15AUG14

II - Actuation from Ground

C—Locking Pawl (bracket)
D—Locking Pawl (center link)

Unfasten center link from the center link bracket.

1. Press the center link into the center link bracket and unlock the locking pawl (C).
2. Correctly position the center link using both hands, and let it latch in at the implement.

IMPORTANT: Make sure that the center link has been installed correctly and the locking pawl (D) has latched in.

Disconnect center link from implement.

1. Lower the implement.
2. Unlock the locking pawl (D).
3. Using both hands, let center link latch into the locking pawl (C) of the center link bracket.

OULXA64,0005B7A-19-27MAR23

Hydraulic Center Link — Remote Control

These switches are used to operate the hydraulic center link connected to the assigned SCV.

LX314984—UN—15AUG17

An SCV must be assigned to the switch.

• Push upper switch - center link is extended

• Push lower switch - center link is retracted

OULXA64,0005B7B-19-23MAR23

Adjust Lift Links

IMPORTANT: Avoid damage due to insufficient clearances.

When the hitch is raised, the lift link and the draft link may come into contact with the tires or other tractor components.

Check clearances and stops:

- To widen the clearance to the tires, mount the lift links in the front bore of the draft links.
- When draft links are raised, always lock the stabilizer bars (hydraulic or mechanical).

The raising height as well as the operating depth can be increased with the lift links.

Increase raising height ► shorten lift link

Increase operating depth ► extend lift link

NOTE: Short lift link means:

Short raising path ► greatest lifting force

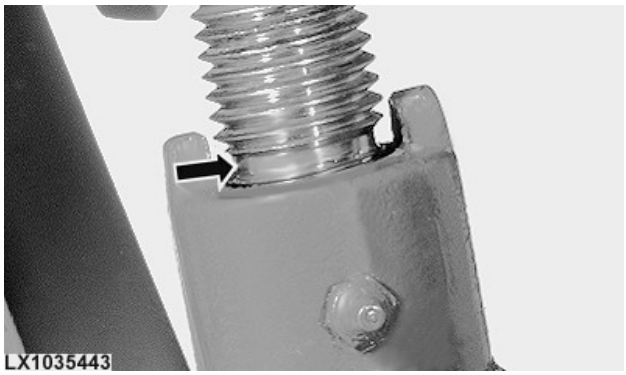
Long lift link means:

Long raising path ► lesser lifting force

IMPORTANT: Avoid damage due to wrong adjustment length.

When setting the lift links, faulty settings and incorrect operation may occur.

Observe the following when setting the lift link:



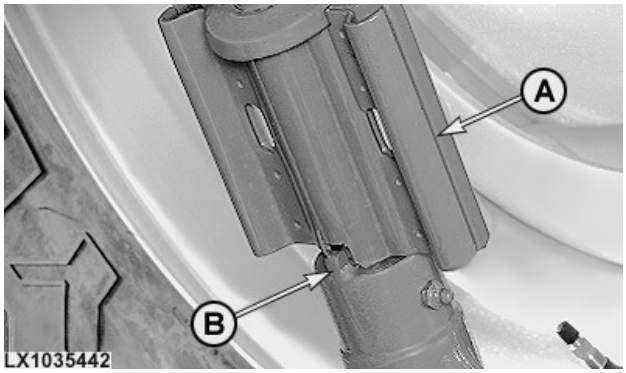
LX1035443—UN—13JAN05

Groove in Thread

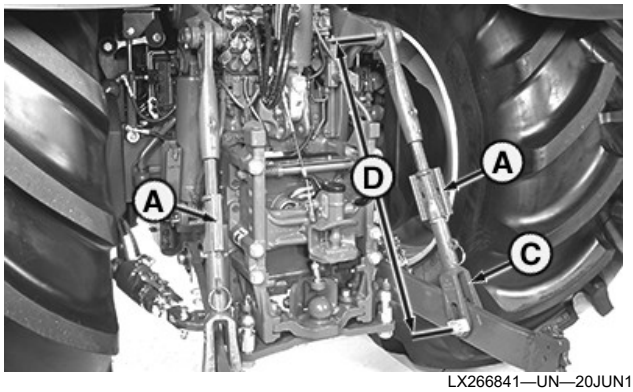
- Specified dimensions not exceeded upwards/ downwards.
- Grooves in the thread indicate the maximum permitted setting.
- The threads must not be unscrewed out of the receiver.

Align Implement

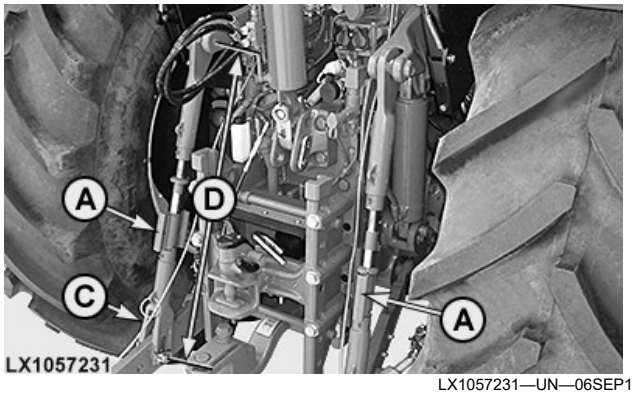
1. Push adjusting handle (A) out of lock (B) and set to the length desired.



LX1035442—UN—13JAN05



LX266841—UN—20JUN16



LX1057231—UN—06SEP13

A—Adjusting Handle
B—Lock
C—Yoke End
D—Length

2. To retain, push adjusting handle (A) down and into latch (B).

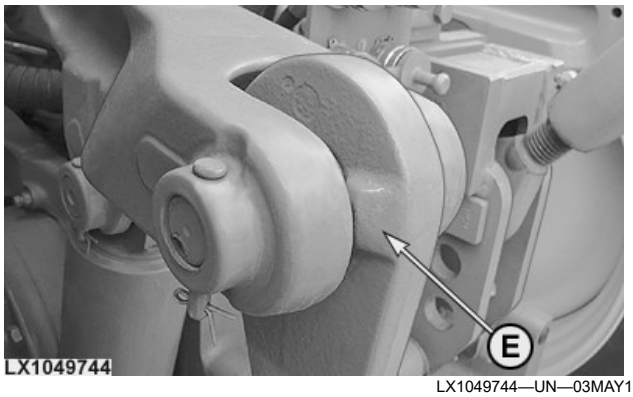
   For lift links without adjusting handle, remove the lift link from the draft link and screw yoke end (C) in or out.

Length (D)

Minimum Length	995 mm (39.2 in)
Maximum Length	1175 mm (46.3 in)

NOTE: The lift link dimensions quoted above are with lift links locked in draft links (no vertical float).

3. When engaging the lift links in the lift arms, make sure that stops (E) are always at the rear as shown.



LX1049744—UN—03MAY10

E—Stops (2 on each lift link)

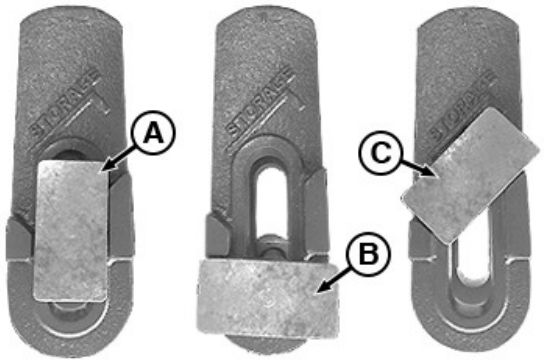
OULXA64,6R,MW67,0005F88-19-26OCT21

Lift Links—Adapt for Different Use Cases

IMPORTANT: Possible material damage due to incorrect setting of the lift links.

Towing implements and trailers in the trailer hitch or drawbar can result in collisions with the rear hitch.

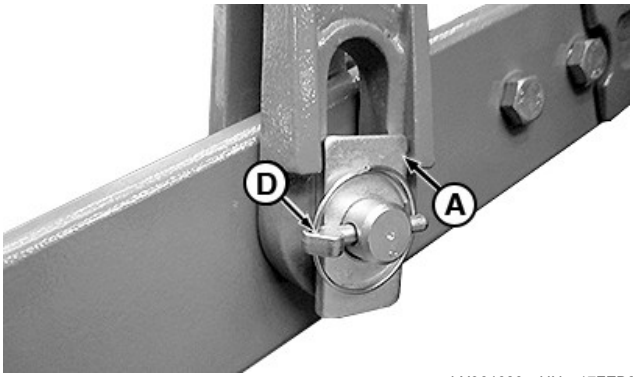
Make sure that the lift links are in the Storage Position (C) before towing equipment in the trailer hitch or drawbar.



LX364625—UN—17FEB20

A—Torsional Free Float Position
B—Transport Position
C—Storage Position (If Equipped)

A - Torsional Free Float Position	• With this setting, the implement can compensate for uneven ground. The draft links can free move in the oblong holes of lift links, allowing the implement to respond with a rolling motion when the ground forces one side to rise.
B - Transport Position	• Use this setting for field applications when the implement doesn't require torsional free float. • Use this setting when transporting implements attached to the rear hitch (three point hitch). The rear hitch control slider must be set to the transport lock position.
C - Storage Position	This position must be set before towing operations are carried out in the trailer hitch or drawbar. 1. Remove any equipment from the rear hitch. 2. Set the lift link pins to the storage position (C). 3. Raise the rear hitch and set the rear hitch control slider to the transport lock position. 4. As last step adjust the lift links to the shortest length.

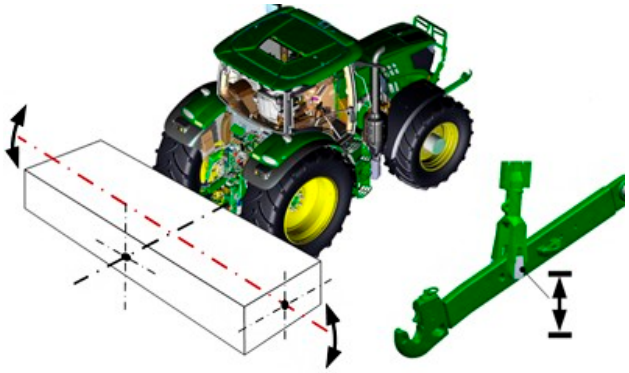


LX364623—UN—17FEB20

Torsional Free Float Position

A—Torsional Free Float Position
D—Quick-Lock Pin

Torsional Free Float Position: The draft links can free move in the oblong holes of lift links, allowing the implement to respond with a rolling motion when the ground forces one side to rise.



LX590945—UN—30OCT23

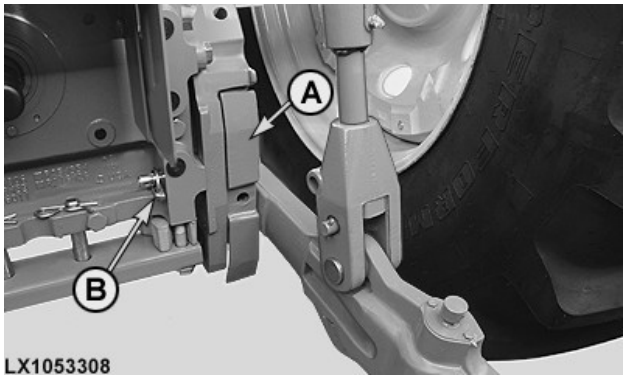
Torsional Free Float Position

LX25458,ALL,0000A1D-19-06NOV23

Sway Blocks, Category III/IIIN (if Equipped)

IMPORTANT: The draft links must NOT come into contact with the tires at any point in their operating range (from lowest position to highest).

The sway blocks (A) limit the side sway of the draft link during work and transport.

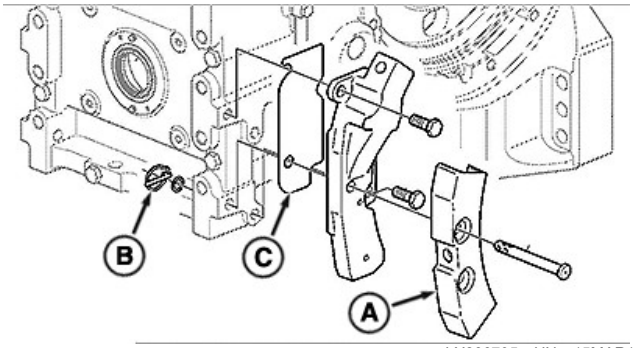


LX1053308—UN—20SEP11

Sway Blocks, Installed

LX1037173—UN—29SEP05

Sway Blocks, Removed



LX266795—UN—15MAR16

A—Sway Block
B—Quick-Lock Pin
C—Shim

Sway blocks need to be fitted when working with implements that follow exactly the line of the tractor.

NOTE: If the side sway is too large in spite of installed sway blocks, additional shims (C) can be installed between the housing and the bracket of the sway blocks. Shims can be obtained from your authorized dealer.

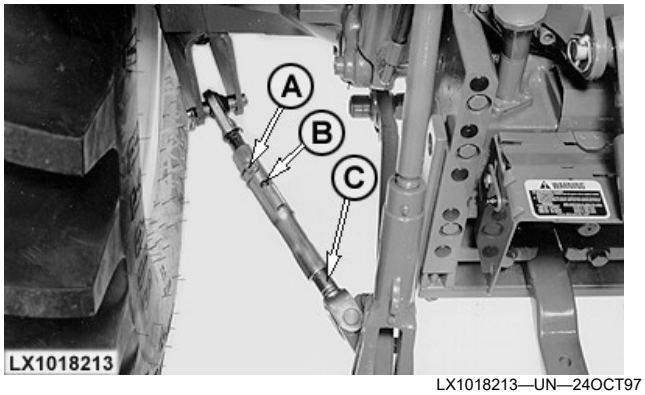
If the implement (plow, disk harrow, etc.) should have side sway in the working position, remove quick-lock pin (B) and take off the sway blocks.

In this case, the draft links have side sway in working position; in transport position they are locked.

LX25458,CAT3,0000A1F-19-17SEP20

Stabilizer Bar (If Equipped)

The stabilizer bar can be adjusted for any category by using pin (A) and/or the threaded rod (B), as well as the other pin positions (C).



LX1018213—UN—24OCT97

In the thread of the threaded rod, the categories are marked with grooves.

If the pin (A) is not needed (side sway of draft links), store the pin in the transport bracket (see arrow).

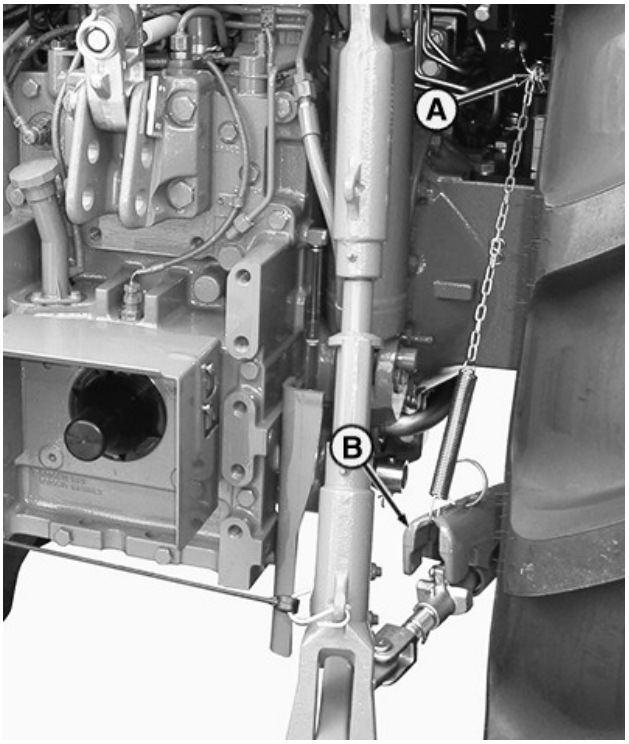
LX1018214—UN—24OCT97

LX25458,ALL,0000A20-19-09OCT20

Stabilizing System (If Equipped)

IMPORTANT: To prevent malfunctions, always attach the loose end of the chain at position (A).

The stabilizing system is operated via chain (A) and flap cover (B). If flap cover (B) is raised, the draft links have lateral play, otherwise they are locked.



LX314983—UN—15AUG17

Short Chain (A):

Draft links are locked in raised position (rigid setting); in lowered position they have lateral play.

Long Chain (A):

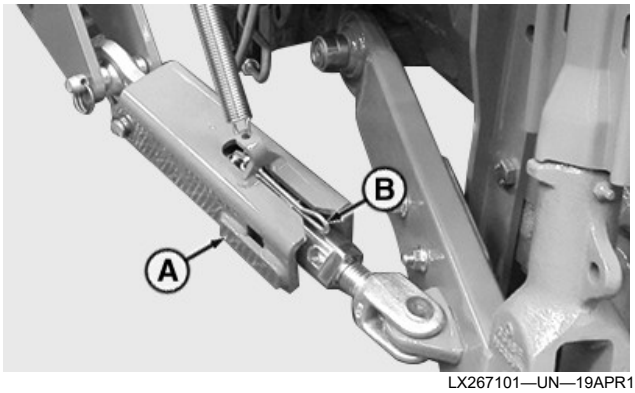
Draft links are locked in all positions.

IMPORTANT: Do NOT let the draft links or lift links come into contact with the tires or other tractor components. When draft links are raised (even if no implement is attached), the hydraulic or mechanical stabilizer bars must be locked.

OULXA64,6R,0005F31-19-19OCT21

Draft Links—Adjust Spreading Dimension

1. Drive tractor to the center of the implement.
2. Lift flap (A) and lever (B).

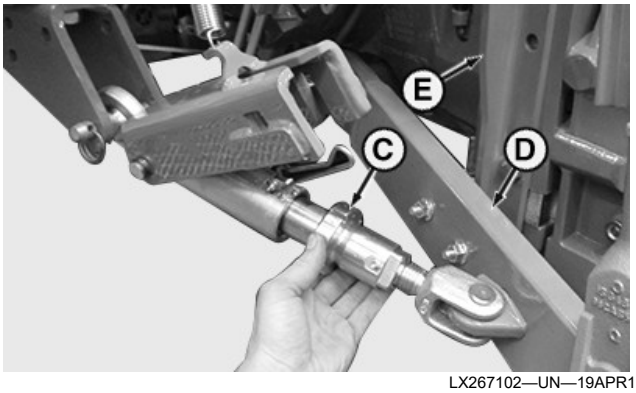


LX267101—UN—19APR17

A—Flap
B—Lever

Flap (A) does not necessarily need to be lifted for the setting.

3. Use spindle (C) to set the spreading dimension of the draft links correspondingly to the implement.



LX267102—UN—19APR17

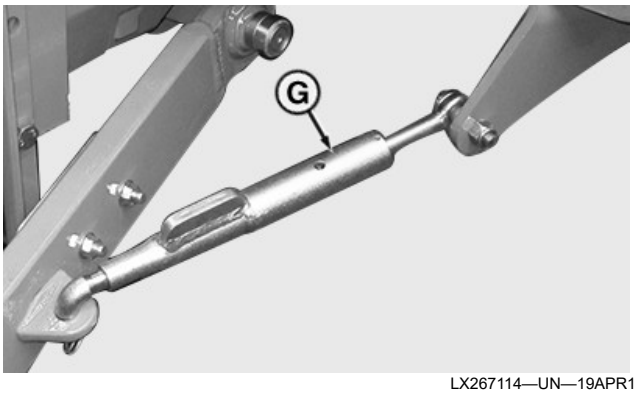
C—Spindle
D—Draft Link
E—Sway Block

IMPORTANT: The spreading dimension must be large enough to prevent the draft links (D) from getting caught on sway blocks (E). If not, mechanical damage may occur.

Spreading Dimension Measured between Center of Balls	
Category II/IIIN	870 mm (34.5 in)
Category III (not available for all models)	1010 mm (39.8 in)

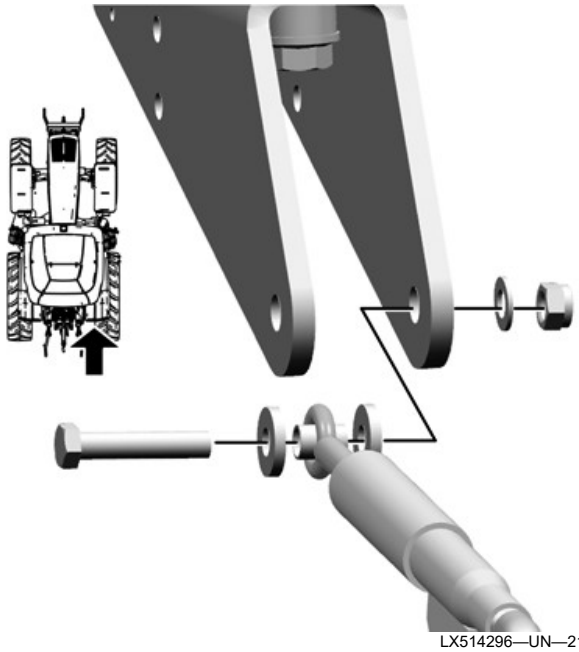
The realizable dimension depends on the configuration of the tractor. Check the availability for your tractor model. Find the hitch specifications in section 500A of this manual.

4. To secure, position lever (B) in the groove of the spindle (C).
5. Lower flap (A).
6. Adjust spacer (G).



LX267114—UN—19APR17

G—Spacer



LX514296—UN—21SEP22

Optional Available

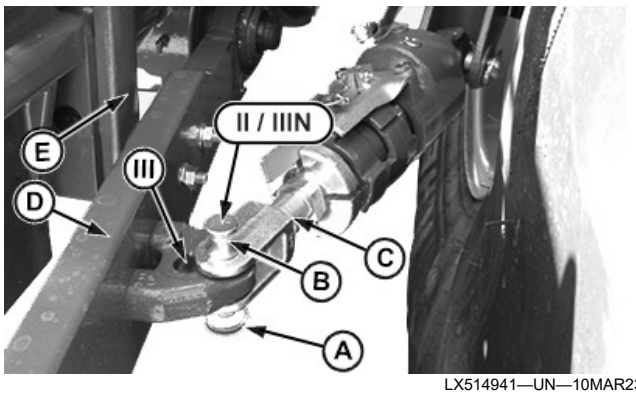
IMPORTANT: If telescopic draft links are equipped and conversion from category IIIN to category III is being performed, the position of the wear plates must be changed from inside to outside. See Telescopic Draft Links - Convert Category III and IIIN (If Equipped) on the following pages.

LX25458,ALL,0000A22-19-21SEP23

Adjust Draft Links for Category II/IIIN or III (If Equipped)

IMPORTANT: The spreading dimension must be large enough to prevent the draft links (D) from getting caught on sway blocks (E). If not, mechanical damage may occur.

IMPORTANT: Always adjust and fasten draft links on the same holes for category II/IIIN or III.



LX514941—UN—10MAR23

Example: Set Category II/IIIN or III

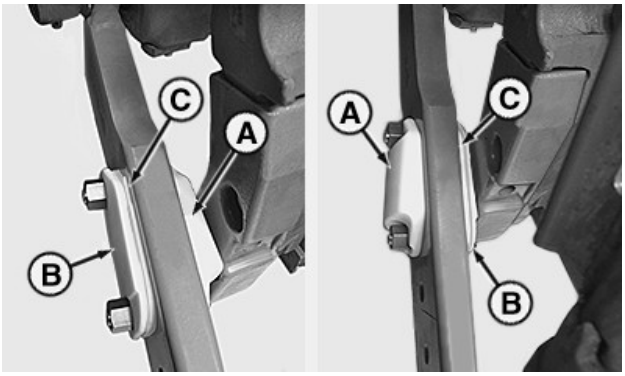
A—Snap Ring
B—Pin
C—Stabilizer Bar
D—Draft Link
E—Sway Block

1. Take off snap ring (A).
2. Remove pin (B).
3. Align stabilizer bar (C) to the desired spreading dimension (category II/IIIN or III).
4. Position pin (B) and attach snap ring (A).

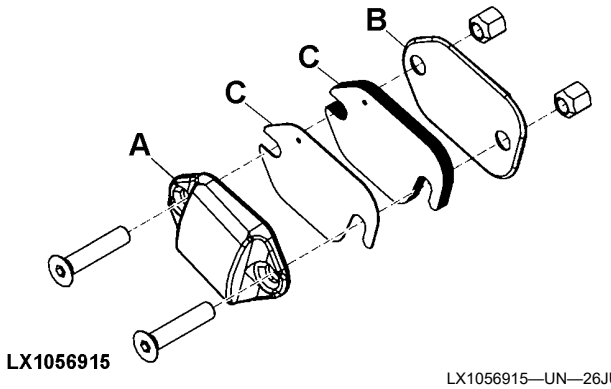
LX25458,ALL,0000A23-19-15MAR23

Telescopic Draft Links—Convert Category III and IIIN (If Equipped)

1. For some row/tread widths, a changeover from Category III to Category IIIN is necessary.



LX267103—UN—03MAY17



LX1056915—UN—26JUL13

A—Wear Plate for Category III
B—Wear Plate for Category IIIN
C—Shims

Telescopic draft links can be adjusted for Categories III or IIIN. Use Category III whenever possible, especially for heavy loads.

2. Remove wear plates (A) and (B) and install them as shown for the desired category.
3. Adjust the draft links to the required spreading dimension and use shims as appropriate. See Draft Links—Adjust Spreading Dimension in this Section.

NOTE: When the Deluxe quick-coupler is used in Category IIIN, the spreading dimension must be set to 900 mm (35.4 in).

4. Always install screws and nuts as shown and tighten them to 250 N·m (185 lb·ft).

NOTE: Nuts must always be installed with the chamfer nearest to the wear plate.

LX25458,6CYL,0000A24-19-19JUN23

Quick Hitch—Set Category III and IIIN

IMPORTANT: When the quick hitch is converted from Category III to Category IIIN, different wear plates and shims have to be installed, depending on the tractor model. See Telescopic Draft Links, Convert Category III and IIIN (If Equipped) in this Section.

IMPORTANT: To prevent damage to the device, the spreading dimension of the telescopic draft link has to be adjusted to the quick hitch. See Draft Links—Adjust Spreading Dimension in this Section.

NOTE: When the Deluxe quick hitch is used in Category 3N, the spreading dimension must be set to 900 mm (35.4 in).

NOTE: The conversion from Category III to Category IIIN is described below.

1. For some row/tread widths, a changeover from Category III to Category IIIN is necessary.

   The quick hitch can be adjusted to Category III or IIIN implements. Use Category 3 whenever possible, especially for heavy loads.

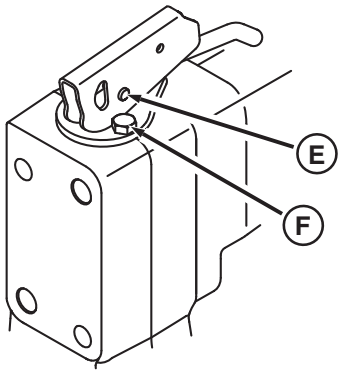
LX515765—UN—22NOV23

A—Retaining Screws
B—Cap Screws
C—Side Frame, Right
D—Side Frame, Left

2. Support the quick hitch at the center to secure it against accidents. Remove pin retaining screws (A)

and pins from draft link. Remove side member cap screws (B).

3. Switch around the side frames of the quick hitch - the left frame (C) to the right and the right frame (D) to the left. Tighten cap screws (B) to 345 N·m (255 lb·ft).
4. Disconnect latch levers by removing C-clip and pin (E).



RXA0085782—UN—10JAN06

Quick-Coupler

E—C-Clip and Pin
F—Cap Screw

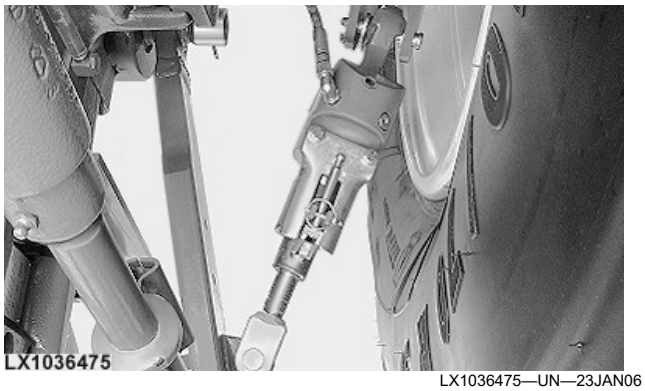
5. Remove the cap screw (F) from the plate and rotate it until the tongue-shaped Section points inward.
6. Install cap screws and tighten securely.
7. Reconnect levers.

OULXA64,MT,0005B7F-19-30NOV23

Hydraulic Stabilizer Bars (If Equipped)

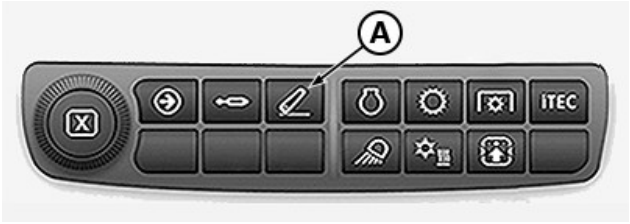
IMPORTANT: Do NOT let the draft links or lift links come into contact with the tires or other tractor components. When draft links are raised (even if no implement is attached), the stabilizer bars, whether hydraulic or mechanical, must be locked.

These bars operate automatically.



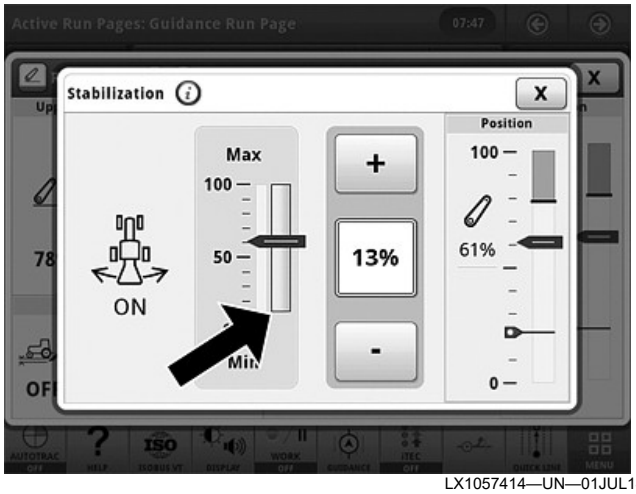
LX1036475—UN—23JAN06

Press button (A).



LX373116—UN—26MAY21

On the screen, set the height from which the stabilizer bars are to be locked.



LX1057414—UN—01JUL14

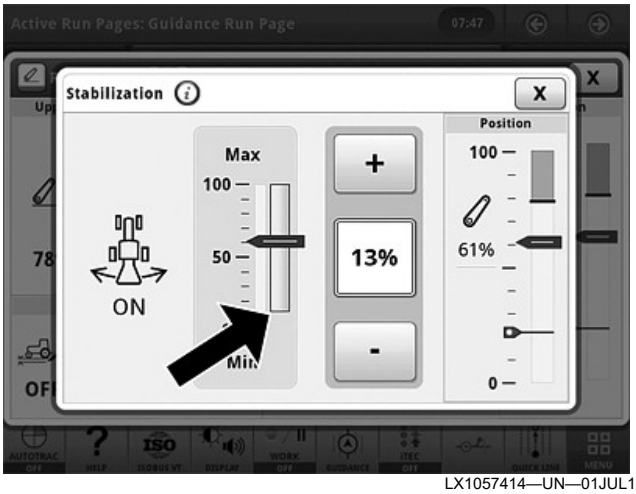
The stabilizer bars can be locked at any desired height.

OULXA64,6R,MW67,0005F89-19-26OCT21

Adjust the Spreading Dimension on Hydraulic Stabilizer Bars

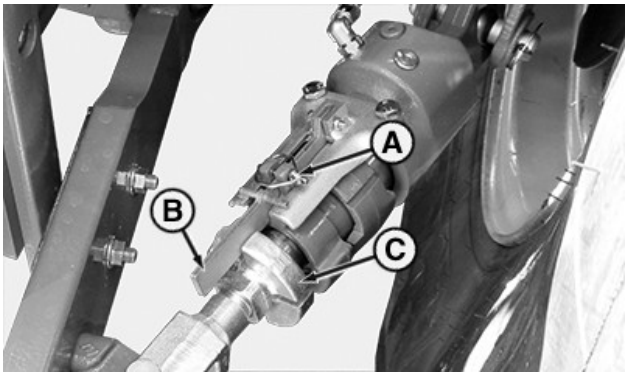
CAUTION: Adjustment and test must be performed on a level road! If performed at an incline, there is a danger of accidents! Depending on the incline, the implement could swing to the left or to the right, when changing from the float position to the no-float position and vice versa. For this reason, do NOT permit bystanders to come into range of travel of the implement.

1. Start the engine.
2. On the screen, set the mark to **"0"** with the +/- buttons (this locks the draft links over the entire lift range).



LX1057414—UN—01JUL14

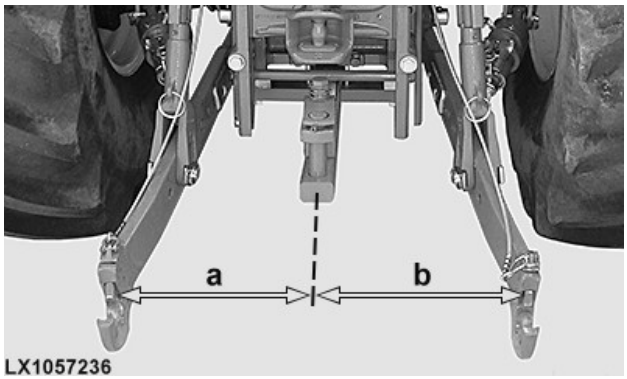
3. Measure the distance between the two attaching points on the implement.
4. Remove locking pin (A) and lift retaining lever (B).



LX315052—UN—28NOV17

A—Locking Pin
B—Retaining Lever
C—Spindle Section

5. Set the spreading dimension of the draft links to the measured dimension by turning the spindle (C). Make sure that the distances (a) and (b) are identical.



LX1057236—UN—06SEP13

6. Attach implement to three-point hitch.
7. Check the setting and re-adjust, if necessary.
   - There must be neither side sway nor preload.
   - Distances (a) and (b) must be identical.
   - The spindles must not be unscrewed beyond the third and last groove (C).
8. Position retaining lever (B) in the groove of the spindle (C) and install locking pin (A).
9. Set the desired locking height on the screen.
10. Check setting by repeatedly raising and lowering the hitch.

OULXA64,0005B81-19-17MAR21

Trailer Hitches

Trailer Hitches—Foreword

The trailer hitches as listed in this Operator's Manual can be fitted.

In some regions, not all trailer hitches are available.

The current edition of the sales brochure is authoritative.

IMPORTANT: Possible material damage due to incorrect setting of the lift links.

Towing implements and trailers in the trailer hitch or drawbar can result in collisions with the rear hitch.

Make sure that the lift links are in the storage position before towing equipment in the trailer hitch or the draw bar.

See section 60E, Lift Links - Adapt for Different Use Cases.

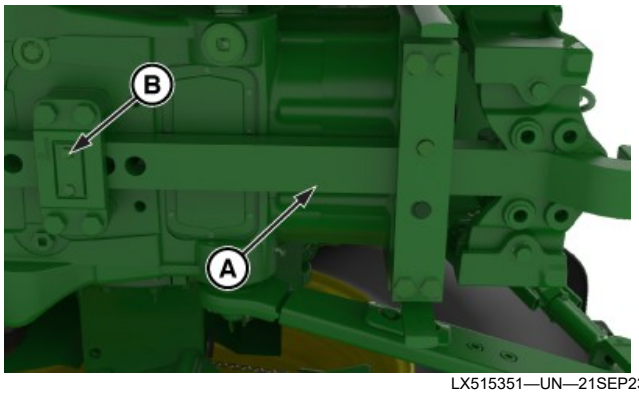
60F01,LX25458,0000A25-19-27OCT23

CAT III Drawbar

IMPORTANT: Towing on public roads with the drawbar set to one side is not permitted!

The drawbar is used to pull drawn equipment of all types, particularly PTO-driven implements. Positioning the drawbar increases rear axle load and slightly reduces front axle load.

Besides having a variable swinging range, the drawbar can also be adjusted lengthwise. Maximum permissible static vertical loads and towed loads are stated in Loads and Weights in section 500A.



LX515351—UN—21SEP23

CAT III Drawbar

A—Drawbar
B—Cap Screws (2 used), 70 N·m (52 lb·ft)

Drawbar (A) can be set to the following lengths:

CAT III	350 mm	400 mm	500 mm
	13.8 in	15.7 in	19.7 in

These lengths determine the distance from the end of the PTO shaft to the attachment point of the drawbar.

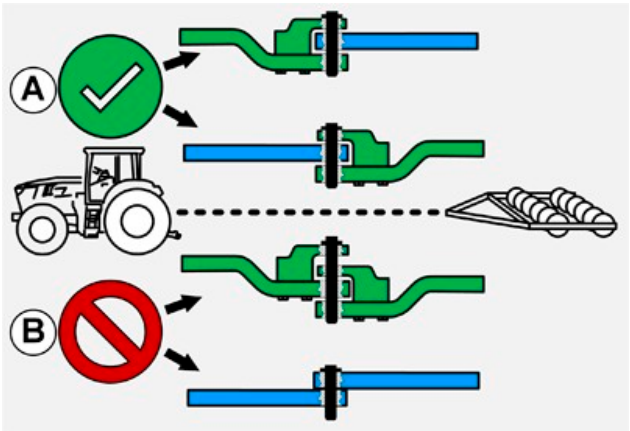
To adjust drawbar length, take out cap screws (B) and pull out the pin. Shift drawbar (A) and align the holes so that they line up with each other. Then insert the pin, screw in cap screws (B), and tighten to the prescribed torque.

NOTE: Drawbar components that are subject to wear can be checked in the course of maintenance work. See section 220D. Replace, if necessary.

60F03,OULXA64,0005B60-19-28SEP23

Proper Use of Drawbar

IMPORTANT: Comply with the national traffic regulations when using the drawbar. Use suitable, approved hitch pins only. Combine drawbars as shown only.



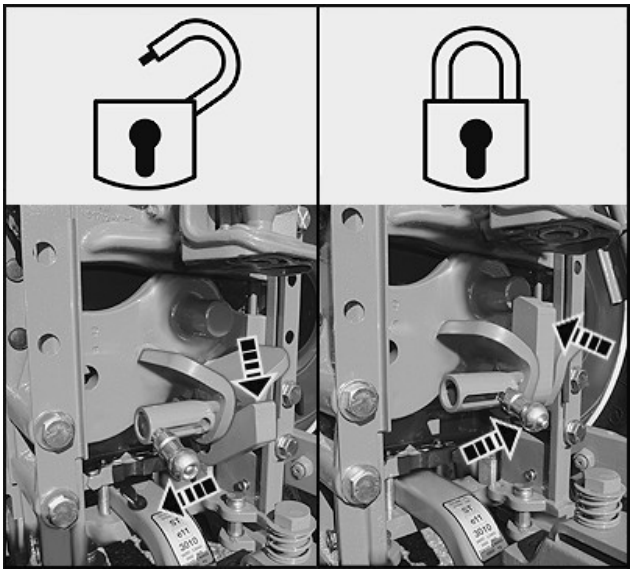
LX514944—UN—06MAR23

A—Allowed
B—Not Allowed

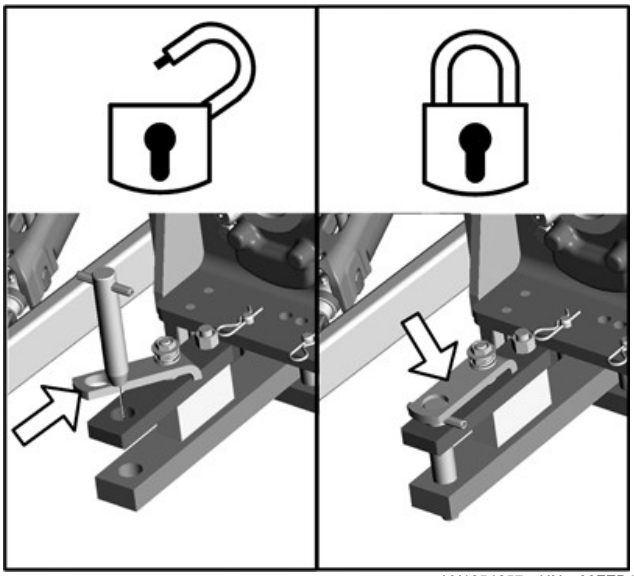
60F04,LX25458,ALL,0000A27-19-27SEP23

Lock the Hitch Pins

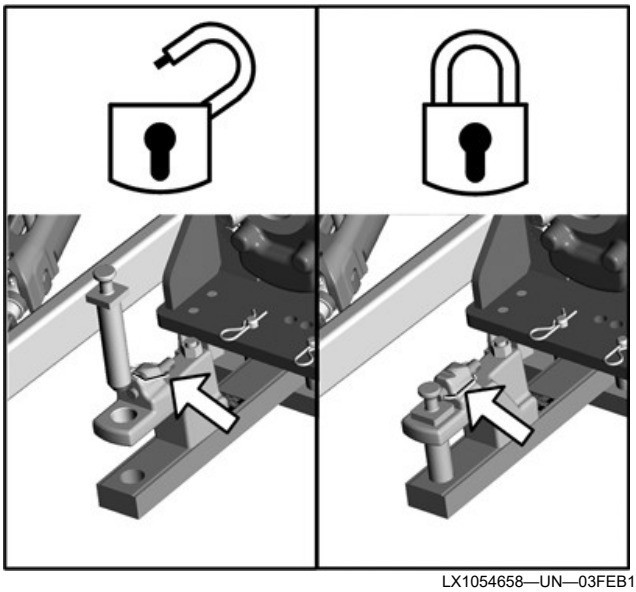
CAUTION: Once the implement is attached, it is essential to make sure that hitch pin is locked. If the pin is not locked, it may be lost while driving, which could cause serious accidents.



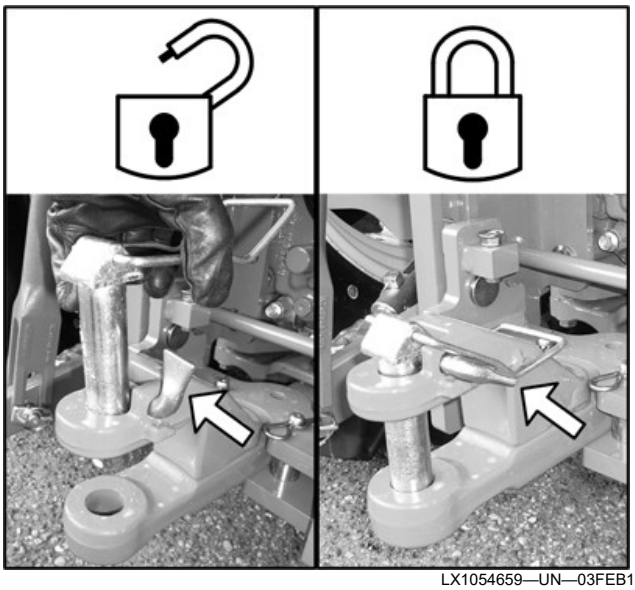
LX1056734—UN—25JUL12



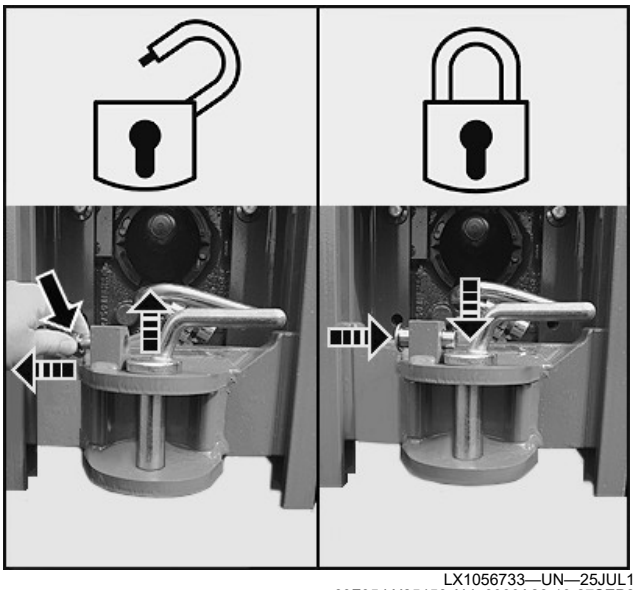
LX1054657—UN—03FEB12



LX1054658—UN—03FEB12



LX1054659—UN—03FEB12

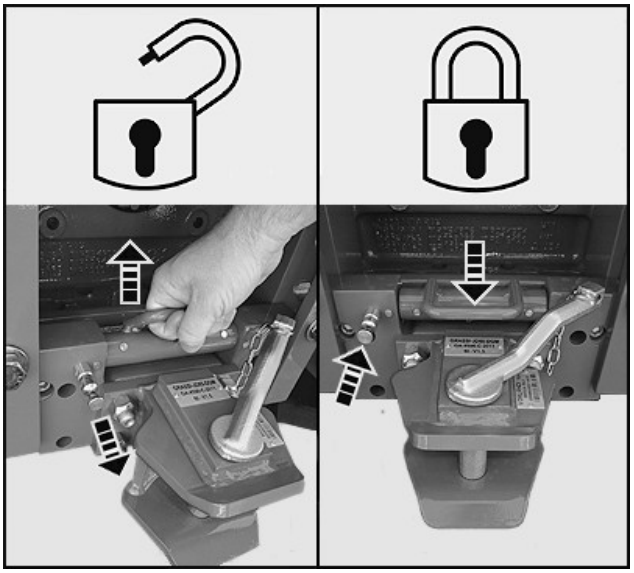


LX1056733—UN—25JUL12

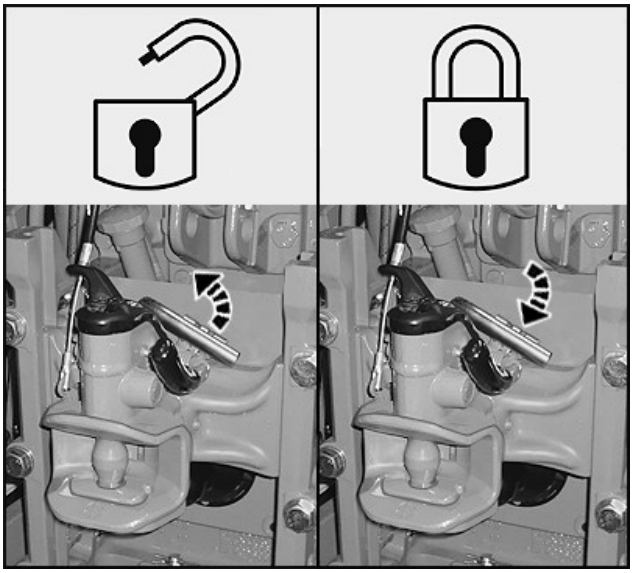
60F05,LX25458,ALL,0000A28-19-27SEP23

Lock the Height-Adjustable Trailer Hitch

CAUTION: Make sure that the height-adjustable trailer hitch is locked before attaching the implement. If the trailer hitch is not locked, serious accidents may result when attaching the implement or driving.



LX1056735—UN—25JUL12



LX1056736—UN—26JUL12
60F06,LX25458,ALL,0000A29-19-27SEP23

Latch for Telescopic Draft Links

LX211141—UN—19AUG14
Draft Links Locked, Draft Links Unlocked

CAUTION: Once the implement is attached, it is essential to make sure that the telescopic draft links are locked in the working/transport position. If the telescopic draft links are not locked, they may slip out of the working/ transport position while driving, which could cause serious accidents.

60F07,LX25458,ALL,0000A2A-19-27SEP23

Hitch Jaw

CAUTION: The methods of hitching shown here may be used for maneuvering and towing on firm ground surfaces only. Before the tractor is towed by the hitch jaws, always remove any trailers or mounted implements.

Never use a tow rope; always use an approved towbar.

Hitch jaws are integrated into the front end of the tractor to allow the tractor to be maneuvered and towed on metaled road surfaces.

The hitch jaws are located on the following components:

- Basic weight (A)

LX515358—UN—21SEP23
Basic Weight

- Additional weights (B)

LX515359—UN—21SEP23
Front Weights

• Pickup weight (C)

LX515360—UN—23NOV23

Pickup Weight

• Front hitch (D)

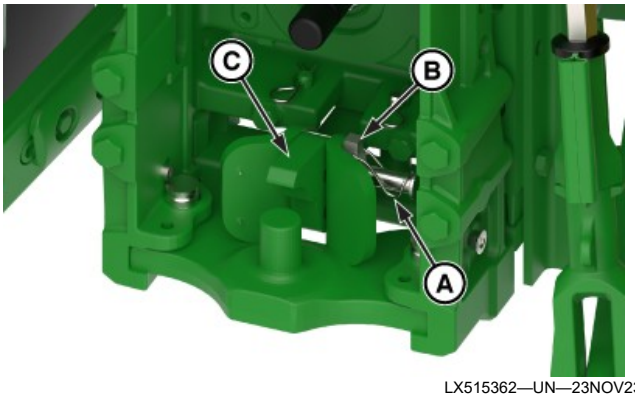
LX515361—UN—21SEP23

Front Hitch

60F08,OULXA64,CAB,000562D-19-27SEP23

Trailer Hitch with Piton-Fix or Ball-Type (Rigid)

Trailer Hitch with Piton-Fix



LX515362—UN—23NOV23

A—Spring
B—Pin
C—Bracket

1. To attach a device, fold spring (A) upwards.
2. Slide pin (B) to the right.
3. Bracket (C) is pushed up by a spring.
4. Attach the device and press down bracket (C).
5. Slide pin (B) completely to the left.
6. Move spring (A) back down to its locked position (as shown in the illustration).

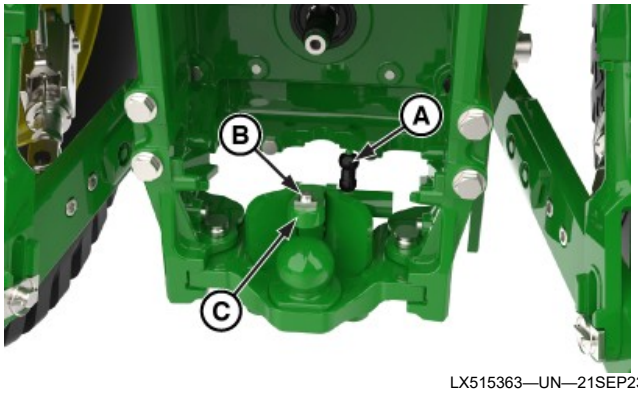
Ball-Type Hitch

IMPORTANT: For trailer hitch with attached arms for forced steering, observe the following:

• Remove trailer hitch before attaching implements.

• Remove draft links before attaching trailers with forced steering.

1. To attach an implement, pull the locking pin (A) up and slide it to the right.



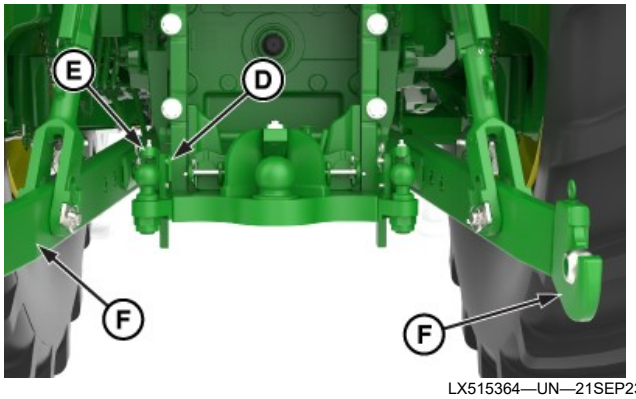
LX515363—UN—21SEP23

A—Locking Pin
B—Set Screw
C—Bracket

2. Move bracket (C) upwards and attach implement.
3. Press bracket (C) downwards and push locking pin (A) all the way to the left and engage it.

   Locking pin (A) only locks properly when the pin is pushed all the way to the left.

   If necessary, use an 8 mm (0.3 in) hex socket wrench to adjust set screw (B) on the hold-down bar to make space for the eyelet of the trailed implement. Then tighten the lock nut to 300 N·m (220 lb·ft) using a 30 mm (1.2 in) wrench.
4. To attach the forced steering, proceed as follows:



LX515364—UN—21SEP23

D—Locking Pin
E—Bracket
F—Draft Link

IMPORTANT: Before hitching trailers with forced steering, it is essential to remove the draft links (F).

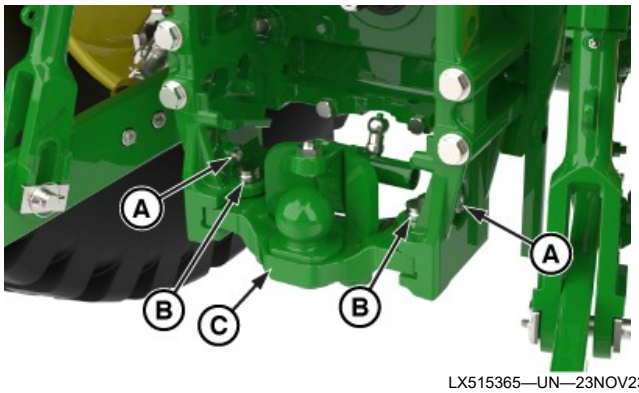
a. Pull locking pin (D).

b. Raise bracket (E) and engage the forced steering system linkage.

c. Bring bracket (E) and then the locking pin to their initial positions.

NOTE: Trailer hitch components that are subject to wear can be checked during regular service work. See section 220D. Replace them if necessary.

Replace Piton-Fix or Ball-Type Hitch by Drawbar



LX515365—UN—23NOV23

Ball-Type Hitch Shown

A—Locking Pin
B—Retaining Pin
C—Trailer Hitch

1. Pull the locking pin (A) outwards.
2. Remove the retaining pin (B) and pull out the trailer hitch (C) to the rear.
3. Position and secure drawbar. See drawbar in this section.

60F09,LX25458,ALL,0000A2C-19-29SEP23

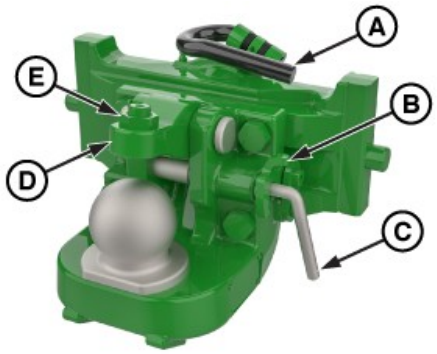
Height-Adjustable Ball-Type Hitch (Version 1)

CAUTION: Before attaching the implement, it is essential to make sure that the height-adjustable trailer hitch is locked. If the trailer hitch is not locked, serious accidents may result when attaching the implement or driving.

IMPORTANT: For ball-type hitch with attached arms for forced steering, observe the following:

- **Before attaching implements, the trailer hitch needs to be removed.**
- **Before hitching trailers with forced steering, it is essential to remove the draft links (F).**

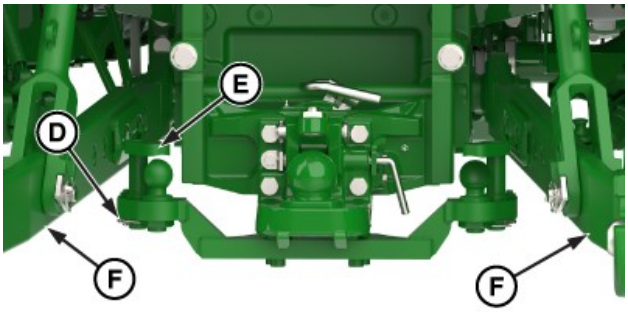
NOTE: For static vertical loads depending on mounting positions and travel speed, see Loads and Weights in Section 500A.



LX515366—UN—17NOV23

A—Lever
B—Lock
C—Locking Pin
D—Bracket
E—Set Screw

1. Position trailer hitch at the desired height with lever (A).
2. To attach a device, fold lock (B) upwards.
3. Slide locking pin (C) to the right.
4. Move bracket (D) upwards and attach implement.
5. Press bracket (D) downwards and push locking pin (C) completely to the left.
6. Secure locking pin (C) with lock (B).
7. If necessary, use an 8 mm (0.3 in) hex socket wrench to adjust set screw (E) on the retainer to make space for the eyelet of the trailed implement. Then tighten the lock nut to 300 N·m (220 lb·ft) using a 30 mm (1.2 in) wrench.
8. To attach the forced steering, proceed as follows:



LX515367—UN—24NOV23

D—Retaining Pin
E—Bracket
F—Draft Link

IMPORTANT: Before hitching trailers with forced steering, it is essential to remove the draft links (F).

a. Pull retaining pin (D) upwards and slide it to the right.

b. Raise bracket (E) and engage the forced steering system linkage.

c. Press bracket (E) downwards and push retaining pin (D) completely to the left and engage it.

NOTE: Trailer hitch components that are subject to wear can be checked during regular service work. See section 220D. Replace them if necessary.

60F10,LX25458,ALL,0000A2D-19-28SEP23

Height-Adjustable Ball-Type Hitch (Version 2)

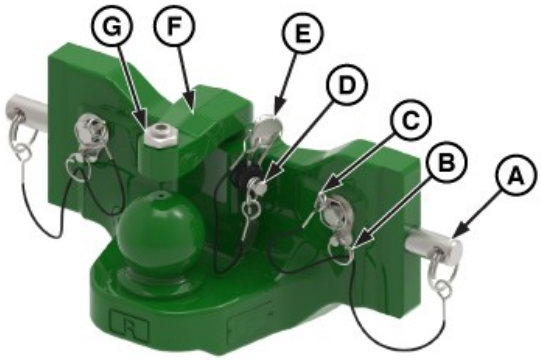
CAUTION: Before attaching the implement, it is essential to make sure that the height-adjustable trailer hitch is locked. If the trailer hitch is not locked, serious accidents may result when attaching the implement or driving.

IMPORTANT: For ball-type hitch with attached arms for forced steering, observe the following:

• Before attaching implements, the trailer hitch needs to be removed.

• Before hitching trailers with forced steering, it is essential to remove the draft links (F).

NOTE: For static vertical loads depending on mounting positions and travel speed, see Loads and Weights in section 500A.



LX515368—UN—24NOV23

A—Locking Pin
B—Retaining Pin
C—Quick-Lock Pin
D—Retaining Pin
E—Locking Pin
F—Bracket
G—Set Screw

1. Position trailer hitch at the desired height.

CAUTION: Avoid physical injury.

The trailer hitch is heavy and improper handling can lead to bruising.

   a. Remove quick-lock pins (C) on both sides.

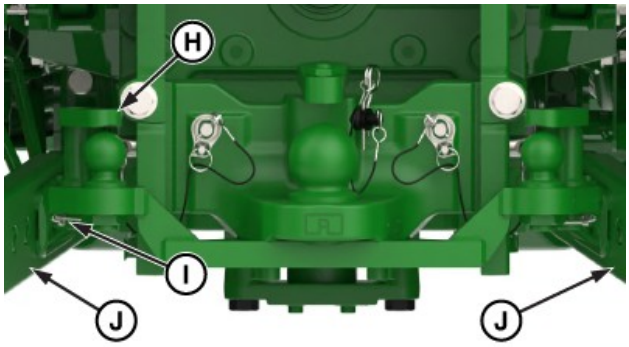
   b. Pull out the retaining pins (B) on both sides.

   c. Pull out locking pins (A) on both sides and adjust the height of the trailer hitch.

   d. Push the locking pins (A) all the way in on both sides and secure with locking pins (B).

   e. Install quick-lock pins (C) on both sides.

2. To attach an implement, remove the locking pin (E) and pull the locking pin (D) to the right.
3. Move bracket (F) upwards and attach implement.
4. Press bracket (F) downwards and push retaining pin (D) completely to the left and engage it.
5. Install the locking pin (E).
6. If necessary, use an 8 mm (0.3 in) hex socket wrench to adjust set screw (G) on the retainer to make space for the eyelet of the trailed implement. Then tighten the lock nut to 300 N·m (220 lb·ft) using a 30 mm (1.2 in) wrench.
7. To attach the forced steering, proceed as follows:



LX515369—UN—24NOV23

H—Bracket
I—Quick-Lock Pin
J—Draft Link

IMPORTANT: Before hitching trailers with forced steering, it is essential to remove the draft links (J).

a. Remove quick-lock pin (I) to remove barcket (H).

b. Attach the forced steering system linkage.

c. Install the bracket (H) and install the quick release pin (I).

NOTE: Trailer hitch components that are subject to wear can be checked during regular service work. See section 220D. Replace them if necessary.

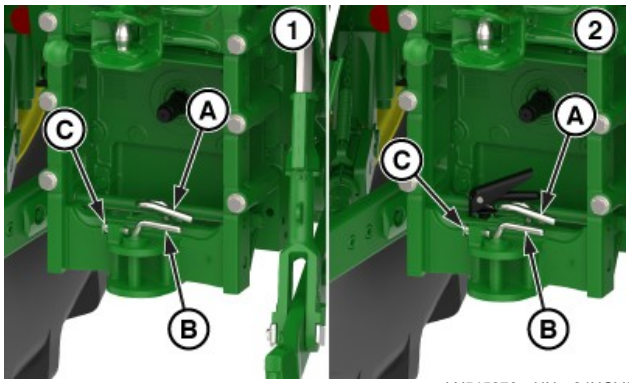
60F11,LX25458,0000A2E-19-24NOV23

Height-Adjustable Trailer Hitch

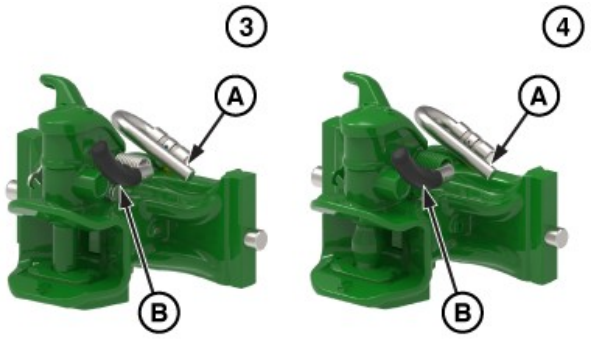
IMPORTANT: Use only trailers with a towing eye that matches the hitch pin diameter.

It is not permitted to use trailers with rotating towing eyes on rotating trailer hitches.

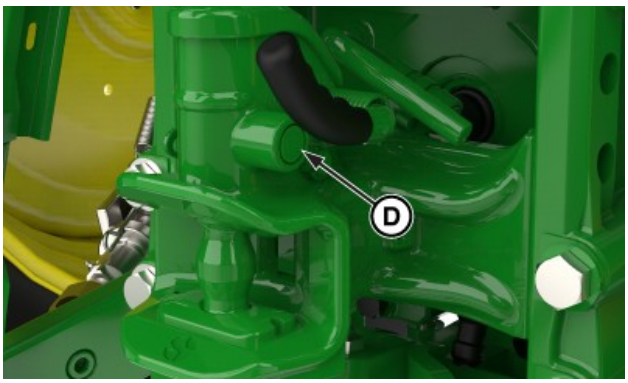
The tractor can be equipped with one of four different trailer hitch versions (1—4), which are operated in different ways.



LX515370—UN—24NOV23



LX515371—UN—23NOV23



LX515372—UN—24NOV23

A—Height Adjustment Lever
B—Control Lever
C—Locking Pin
D—Indicator Pin

All trailer hitches can be adjusted in height with lever (A).

The trailer hitches can be opened and closed using lever (B).

Control levers (1-2) are locked when the locking pin (C) is engaged.

Trailer hitches (3-4) also close by inserting the eyelet of the trailed implement.

Trailer hitches (3-4) can also be operated from the operator's seat by means of a remote control.

Trailer hitches (3-4) are locked when the indicator pin (D) is flush with the housing.

Maximum permissible static vertical loads and towed loads are stated in section 500A.

NOTE: Trailer hitch components that are subject to wear can be checked during regular service work. See section 220D. Replace them if necessary.

60F12,LX25458,ALL,0000A2F-19-30NOV23

Extendable Ball-Type Hitch (Not Available for All Models)

CAUTION: Before attaching the implement, be sure to properly secure the trailer hitch's length adjustment. If the trailer hitch's length adjustment is not properly secured, serious accidents may occur during the attaching or while driving.

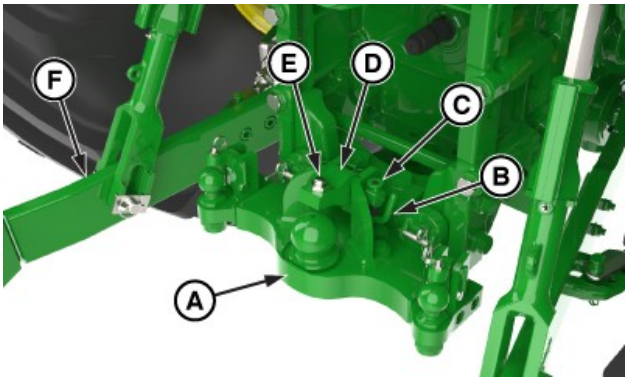
For ball-type hitch with attached arms for forced steering, observe the following:

• Before attaching implements, the trailer hitch needs to be removed.

• Before hitching trailers with forced steering, it is essential to remove the draft links (F).

NOTE: For static vertical loads depending on mounting positions and travel speed, see Loads and Weights in section 500A.

Hitch the Device



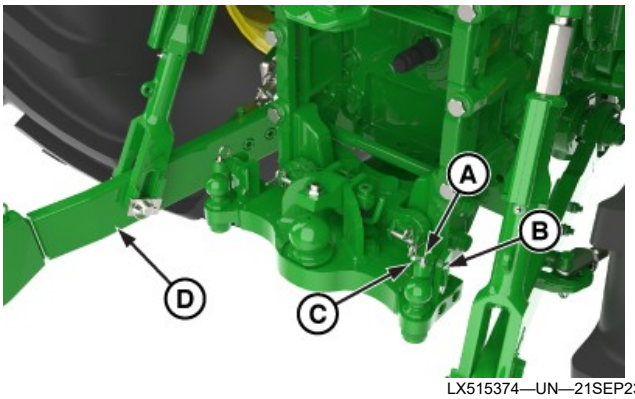
LX515373—UN—21SEP23

A—Trailer Hitch
B—Locking Pin
C—Clip
D—Bracket
E—Set Screw
F—Draft Link

1. Remove clip (C) and push locking pin (B) outwards.
2. Move bracket (D) upwards and attach implement.
3. Press bracket (D) downwards and push locking pin (B) back to its original position.
4. Secure locking pin (B) with clip (C).
5. If necessary, use an 8 mm (0.3 in) hex socket wrench to adjust set screw (E) on the compressor rod to make space for the eyelet of the trailed implement. Then tighten the lock nut to 300 N·m (220 lb·ft) using a 30 mm (1.2 in) wrench.

NOTE: Trailer hitch components that are subject to wear can be checked during regular service work. See section 220D. Replace if necessary.

Attach the Forced Steering Linkage



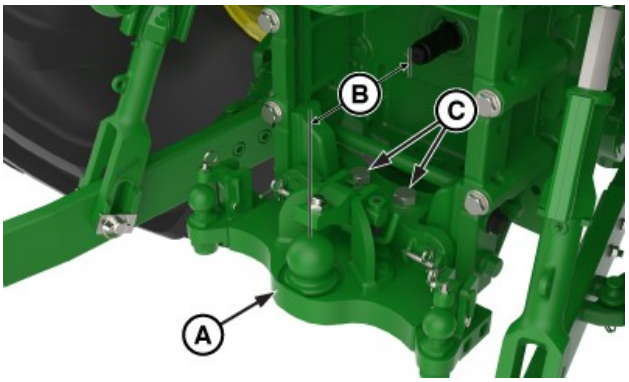
LX515374—UN—21SEP23

A—Clip
B—Locking Pin
C—Bracket
D—Draft Link

IMPORTANT: Before attaching trailers with forced steering, draft links (D) need to be removed.

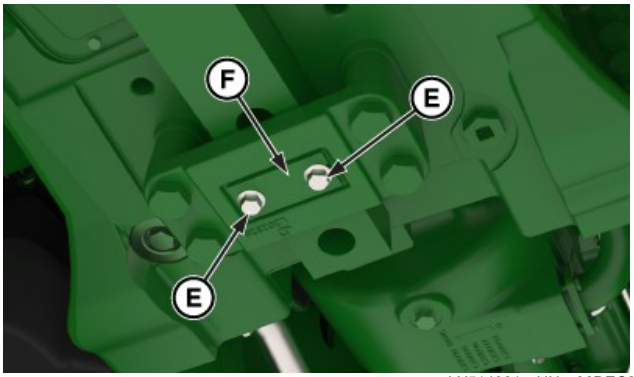
1. Remove clip (A) and push locking pin (B) outwards.
2. Raise bracket (C) and engage the forced steering system linkage.
3. Press bracket (C) downwards and push locking pin (B) back to its original position.
4. Secure locking pin (B) with clip (A).

Adjust the Distance Between the PTO End and Ball Center of the Trailer Hitch



LX515375—UN—07NOV23

Trailer Hitch with Arms for Forced Steering Shown



LX514961—UN—06DEC23

A—Trailer Hitch
B—Distance
C—Screws (2 pieces), 1000 N·m (740 lb·ft)
E—Screws (2 pieces), 70 N·m (52 lb·ft)
F—Retaining Plate

Distance (B), PTO shaft end to ball center	250 mm (9.8 in)	350 mm (13.8 in)

1. Brace the trailer hitch (A) with a jack to prevent accidents.
2. Remove screws (C).
3. Remove pins and screws (E).
4. Remove retaining plate (F) and the pin underneath.
5. Adjust trailer hitch (A) to desired distance.
6. Arrange pin and retaining plate (F).
7. Position screws (E) and tighten to specified torque.
8. Position screws (C) and tighten to specified torque.

60F13,OULXA64,6R,0005D63-19-05DEC23

Remote Control for Trailer Hitch (If Equipped)

Trailer hitch can be opened from the operator's seat using lever (A).

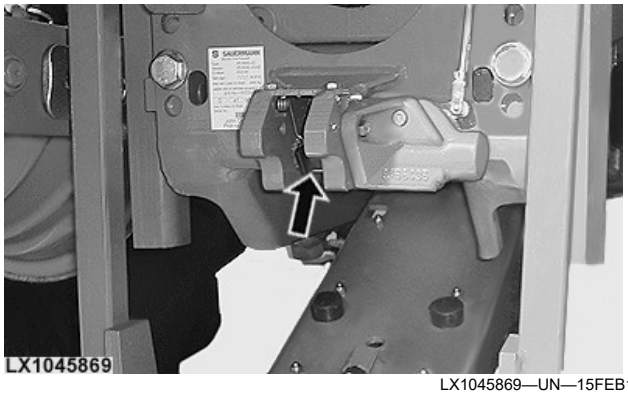
LX266842—UN—15JUN16

OULXA64,MW67,0005B5D-19-17MAR21

Hydraulic Pickup Hitch (Mechanically Actuated)

CAUTION: Before driving away, make sure the trailer hitch is fully raised and locked in both horizontal and vertical positions.

With the hitch lowered, NEVER reach into the receiver opening (see arrow). Risk of injury!



LX1045869—UN—15FEB11

Never put your hand in the opening.

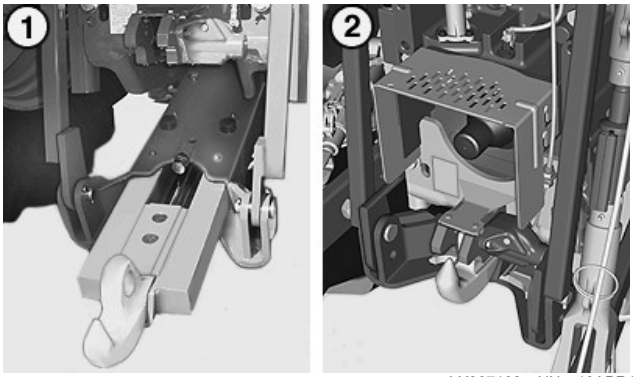
IMPORTANT: If the release lever is hard to operate or locking the hitch hook is not performed automatically (point 2 or 6), then have the setting of the lift links or the hook of the trailer hitch checked by an authorized dealer.

NOTE: Hydraulic pickup hitch components that are subject to wear can be checked during regular service work. See Section 220D. Replace if necessary.

This trailer hitch can be operated using the hitch and one selective control valve.

LX266842—UN—15JUN16

A—Release Lever



LX267108—UN—10APR17

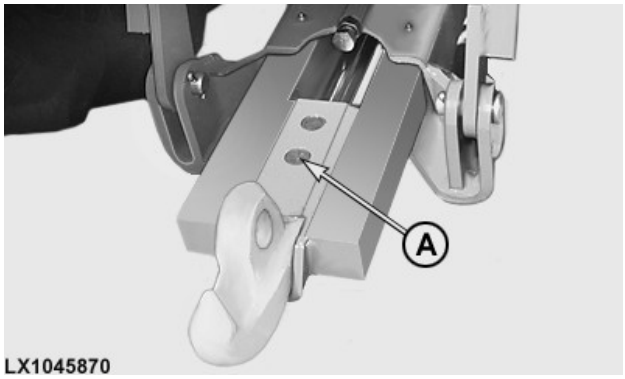
Trailer Hitch in Position for Attaching Trailer, Storage Position

1—Trailer Hitch in Position for Attaching Trailer
2—Trailer Hitch in Storage Position

1. Raise draft links to maximum height, and use the SCV to fully retract the hitch hook.
2. Pull release lever (A) and lower the draft links. Hold the release lever until the hitch hook has moved from the storage position (lever remains in open position).
3. Extend the hitch hook fully by actuating the selective control valve.
4. Lower draft links/hitch hook to desired height.
5. Raise the draft link so that the hitch hook engages in the towing eye of the implement, then fully raise the trailer hitch.
6. Retract the hitch hook fully by means of selective control valve until it is **fully locked**. The release lever (A) returns to its home position.
7. Lower the draft link.
8. Check that the hitch is locked correctly. If this is the case, it will **not lower** when the draft links are lowered and **not extend** when the selective control valve is operated.

Maximum permissible static vertical loads and towed loads are stated in Section 500A.

The hook of the trailer hitch can be replaced by a drawbar without the use of tools. To do so, lift out pin (A).



LX1045870—UN—15FEB11

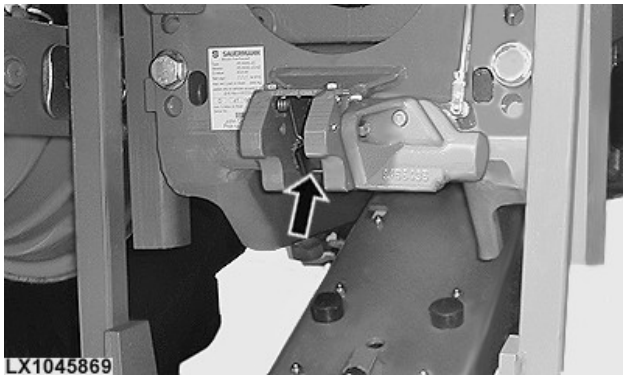
While not needed, the suspension device can be stored in a holder on the side frame (optional accessory).

OULXA64,MW67,0005B5E-19-17MAR21

Hydraulic Pickup Hitch (Electrically Actuated)

CAUTION: Before driving away, make sure the trailer hitch is fully raised and locked in both horizontal and vertical positions.

With the hitch lowered, NEVER reach into the receiver opening (see arrow). Risk of injury!



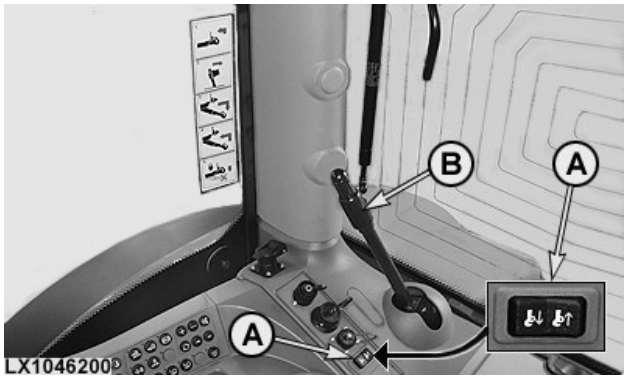
LX1045869—UN—15FEB11

NEVER put your hand in the opening!

IMPORTANT: If the release lever is hard to operate or locking the hitch hook is not performed automatically (point 2 or 6), then have the setting of the lift links or the hook of the trailer hitch checked by an authorized dealer.

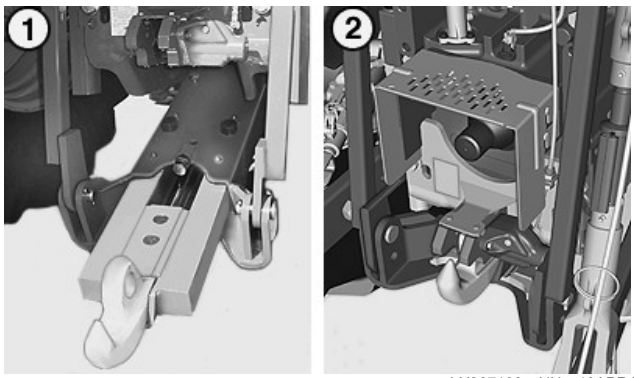
NOTE: Hydraulic pickup hitch components that are subject to wear can be checked during regular service work. See Section 220D. Replace them if necessary.

This trailer hitch can be operated via the rear hitch and switch (B).



LX1046200—UN—14JUN11

A—Switch
B—Release Lever



LX267108—UN—10APR17

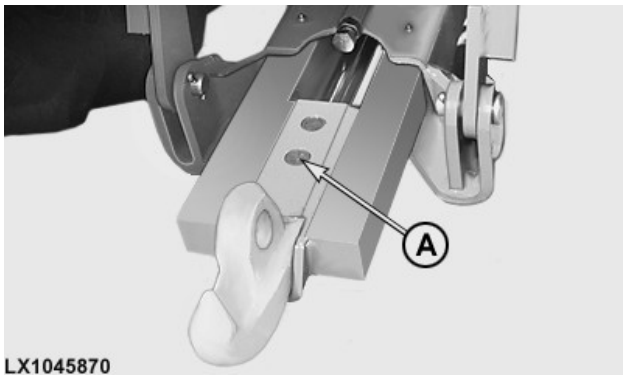
Hitch in Position for Attaching Trailer, Storage Position

1—Hitch in Position for Attaching Trailer
2—Hitch in Storage Position

1. Raise the draft links to maximum height and use switch (A) to retract the hitch hook fully (press the top part of the switch).
2. Pull release lever (B) and hold it until the hitch hook has moved from the storage position (lever remains in open position).
3. Use switch (A) to extend the hitch hook fully (press the bottom part of the switch).
4. Lower draft links/hitch hook to desired height.
5. Raise the draft link so that the hitch hook engages in the towing eye of the implement, then fully raise the trailer hitch.
6. Retract the hitch hook fully by means of switch (A) until it is **fully locked**. Lever (B) will return to its home position.
7. Lower the draft link.
8. Check that the hitch is locked correctly. If this is the case, it will **not lower** when the draft links are lowered and **not extend** when the switch is operated.

Maximum permissible static vertical loads and towed loads are stated in Section 500A.

The hook of the trailer hitch can be replaced by a drawbar without the use of tools. To do so, lift out pin (A).

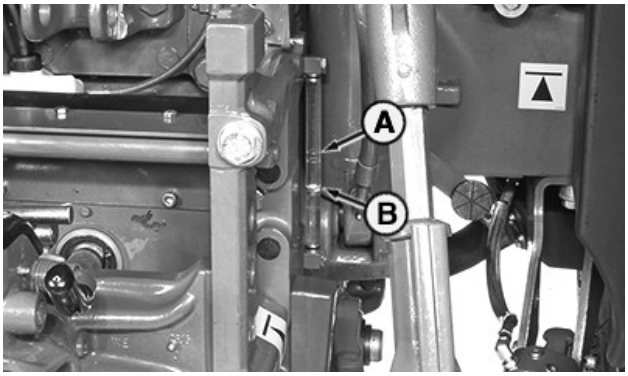


LX1045870—UN—15FEB11

While not needed, the suspension device can be stored in a holder on the side frame (optional accessory).

OULXA64,MW67,0005B5F-19-17MAR21

Selective Control Valves (SCVs)—Maximum Permissible Oil Withdrawal



LX266948—UN—25AUG16

A—Max. Mark
B—Min. Mark

To operate large hydraulic cylinders such as those used on tipping trailers, oil may be drawn from the transmission case through the connecting lines.

IMPORTANT: For maximum oil withdrawal to take place, the following conditions must be met:

- **Transmission oil at maximum level (A) with engine off**
- **Tractor inclined by no more than 3° in any direction**
- **Hydraulic oil at operating temperature**
- **Vehicle speed is less than 3 km/h (1.9 mph)**

Maximum permissible oil withdrawal with additional oil reservoir, optional	80 L (21.1 U.S. gal.)

During maximum oil withdrawal, the tractor must not be inclined in any direction by more than 3°. If the tractor is inclined by more than 3°, only a correspondingly lower quantity of oil may be withdrawn.

NOTE: Never perform heavy jobs such as towing, operating a PTO or driving fast when withdrawal results in the transmission oil level dropping below the minimum mark.

When topping up, use only recommended transmission and hydraulic oil. See Transmission and Hydraulic Oil in section 200E.

OULXA64,6R,MW67,0005F8A-19-04DEC23

Using Large-Volume Hydraulic Cylinders

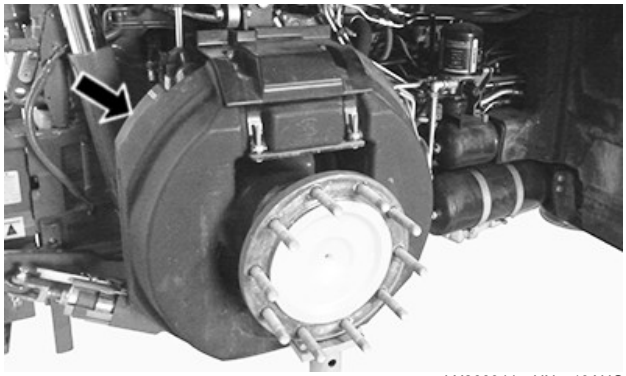
The operation of large-volume hydraulic cylinders or telescopic cylinders requires special attention from the user. Instructions, e.g. when operating a trailer with hydraulic tipping function.

- When tipping a trailer maintain an engine speed of 1800-2100 rpm.
- Before tipping a trailer, check whether the maximum permissible oil withdrawal corresponds to the oil capacity required to fill the hydraulic cylinder. Compare the relevant information given in the trailer manual with the maximum permissible oil withdrawal. See Selective Control Valves – Maximum Permissible Oil Withdrawal in section 70 and Oil Withdrawal in section 500A.

IMPORTANT: If the required amount of oil exceeds the maximum permissible oil withdrawal, or/and the oil is withdrawn too quickly, this can lead to cavitation. Cavitation can be recognized by an unusually loud noise and causes mechanical damage. Pay attention to suddenly occurring loud noises, when operating large-volume hydraulic cylinders, such as telescopic cylinders. Immediately stop the operation of the hydraulic cylinder if cavitation is suspected. A change in the engine speed does not lead to an improvement and should therefore be avoided.

OULXBER,00030BD-19-29AUG23

Additional Oil Reservoir, Option



LX266944—UN—19AUG16

The tractor is equipped with an additional oil reservoir.

The maximum amount of oil that may be withdrawn is listed in the table.

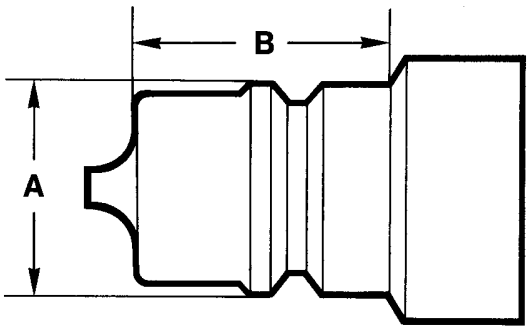
Maximum permissible oil withdrawal	80 L (21.1 U.S. gal.)

The additional oil may be used with large tipping trailers and in other applications which require a larger amount of oil.

NOTE: An additional oil reservoir brings advantages compared with overfilling of the transmission. See Oil Withdrawal in Section 500A.

OULXA64,6R,MW67,0005F8B-19-04DEC23

Fittings of Selective Control Valves (SCVs)



LX 006613

LX006613—UN—15AUG94

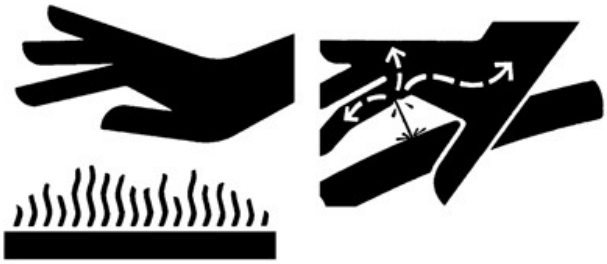
Use only fittings that are ISO-standard compliant.

Dimension (A) must be between 23.66 and 23.74 mm (0.931 and 0.934 in).

Dimension (B) must be at least 24 mm (0.945 in).

OULXA64,6R,0005B53-19-17MAR21

Connect Hydraulic Hoses to SCVs



LX266990—UN—10OCT16

CAUTION: Escaping high-pressure fluid can penetrate the skin causing serious injury. Avoid the hazard by relieving pressure before disconnecting the system lines.

If an accident occurs, consult a doctor immediately. Any fluid that penetrates the skin must be surgically removed within a few hours or gangrene can result.

CAUTION: Avoid personal injury. Before implements are attached and hydraulic hoses are connected, and to avoid unintentional implement movement, observe the following:

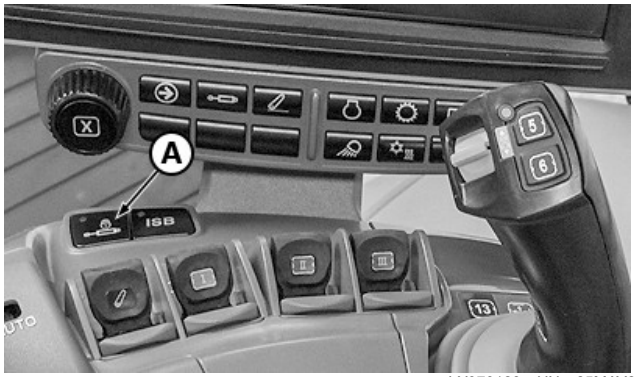
- **Shut off the engine.**
- **Set selective control valve controls to neutral position and lock them.**

IMPORTANT: Hydraulic hoses can fail due to physical damage, kinks, age, and exposure. Check hoses regularly.

Dirt, dust, or other foreign material can damage hydraulic system. Thoroughly clean hydraulic hoses and SCVs before connecting an implement to the tractor.

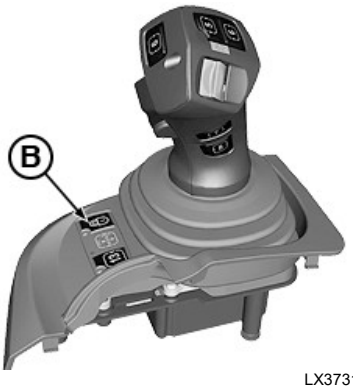
IMPORTANT: Steam cleaning or using a high-pressure washer in the area around the SCV connections and electronics may damage equipment. In the case of high-pressure washers with a pressure of more than 6900 kPa (69 bar) (1000 psi), a min. distance of 200 mm (8 in) to the connections must be maintained.

1. **Engage the park lock and switch off the engine.**
2. Lock out SCV controls or activate transport lock:
   - Move the SCV control levers into the neutral position and press lock button (A).



LX373128—UN—25MAY21

   - For electrically-operated joystick:



LX373130—UN—25MAY21

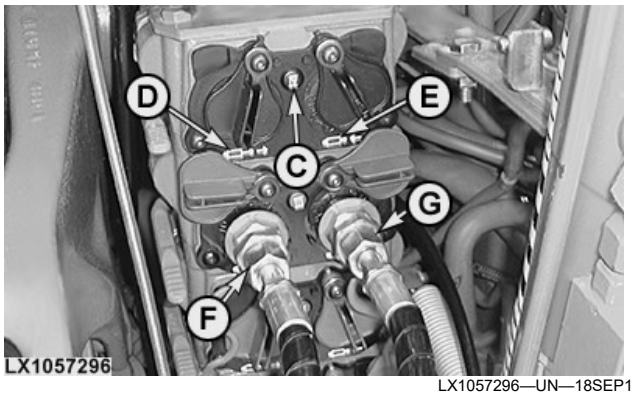
Move the joystick into neutral position and press the lock button (B).

IMPORTANT: Be sure to correctly connect hydraulic hoses to couplers. If hose connections are reversed, machine will not respond to system controls as expected.

Assignment of SCVs at Rear
Extend = Left Port
Retract = Right Port

NOTE: The SCV connections are identified by numbers I to V (C).

3. Clean dust caps. Turn dust covers up to expose connections.



LX1057296—UN—18SEP13

C—Identification Number
D—Extend Icon
E—Retract Icon
F—Hydraulic Hose for Extend
G—Hydraulic Hose for Retract

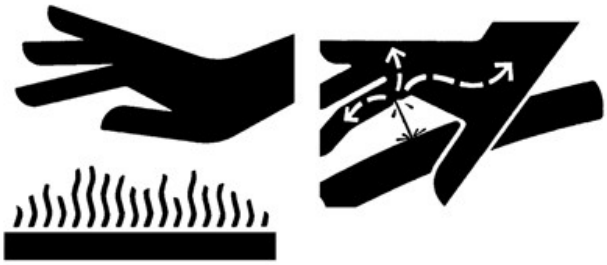
4. Check if symbols on receptacle identification plate (D) or (E), indicating cylinder movement, match cylinder travel direction.
5. If a single-acting cylinder is connected to an SCV, plug hose into extension side (F). When connecting double-acting cylinders, extension side is left side and retraction side is right side (G).
6. Push hose(s) firmly into connection(s).

NOTE: SCVs are color-coded for easier identification. Hose identification kits are available from your authorized dealer.

SCV Coding	
Selective Control Valve	**Color**
I	Green
II	Blue
III	Brown
IV	Black
V	Violet

OULXA64,6R,MW67,0005F8D-19-27OCT21

Disconnect Hydraulic Hoses from SCVs



LX266990—UN—10OCT16

CAUTION: Risk of injury due to unintended movements of hydraulic components.

When working on pressurized hydraulic components, there is a high risk that:

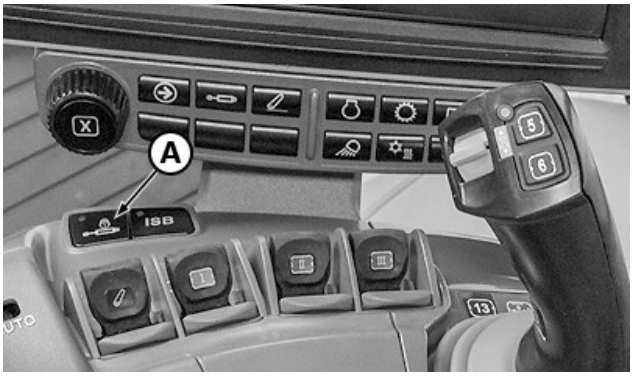
- **Pressurized oil escapes.**
- **Unintentional movements of the implement are triggered.**

To avoid this danger, proceed as follows before disconnecting the hydraulic hoses:

1. **Lower the implement to ground.**
2. **Depressurize hoses and lines.**
3. **Set control valves to neutral position and lock them.**

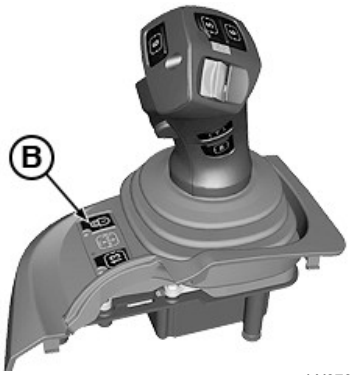
1. Lower implement to ground.
2. **Engage the park lock and switch off the engine.**
3. With the ignition on*, bring the SCV several times into the Extend and Retract positions.

   ** Only necessary with electrically-operated SCV and electrically-operated joystick.*
4. Lock out SCV controls or activate transport lock:
   - Move the SCV control levers into the neutral position and press lock button (A).



LX373128—UN—25MAY21
Lock Button on CommandARM™

   - For electrically-operated joystick:



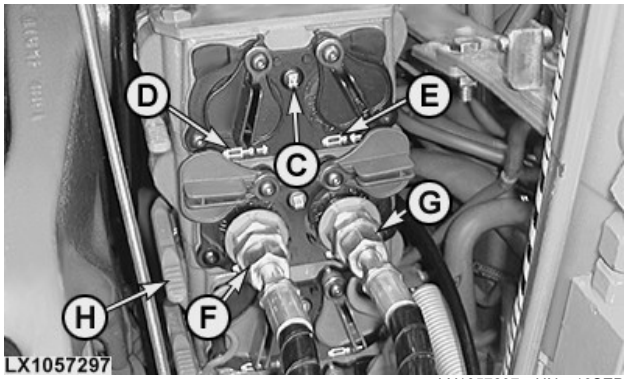
LX373130—UN—25MAY21

Electrical Joystick on CommandARM™

Move the joystick into neutral position and press the lock button (B).

IMPORTANT: Forcing or jerking SCV hoses when disconnecting can damage hose ends and SCV couplers. If hoses cannot be removed easily, relieve pressure in hydraulic system by putting the SCV in float position for a few seconds with engine running. Push lever (H) down to take off the hoses.

5. Before disconnecting the lines, press the lever (H) down slightly. This relieves any pressure that might have built up due to trapped oil.



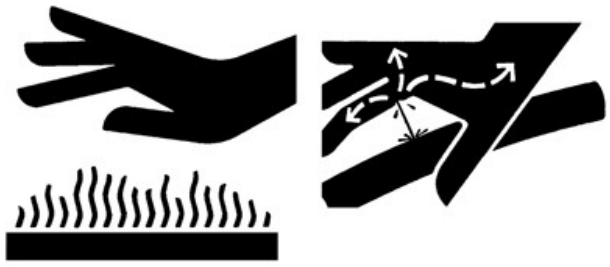
LX1057297—UN—18SEP13

C—Identification Number
D—Extend Icon
E—Retract Icon
F—Hydraulic Hose for Extend
G—Hydraulic Hose for Retract
H—Lever

6. Pull hoses in a **straight line** out of connections.
7. Turn dust covers down to cover connections.

OULXA64,6R,MW67,0005F8E-19-27OCT21

Connect or Disconnect Hydraulic Hoses to or from SCVs at Front Hitch (If Equipped)



LX266990—UN—10OCT16

CAUTION: Escaping high-pressure fluid can penetrate the skin causing serious injury. Avoid the hazard by relieving pressure before disconnecting the system lines.

If an accident occurs, consult a doctor immediately. Any fluid that penetrates the skin must be surgically removed within a few hours or gangrene can result.

CAUTION: Avoid personal injury. Before implements are attached and hydraulic hoses are connected, and to avoid unintentional implement movement, observe the following:

- **Shut off the engine.**
- **Set selective control valve controls to neutral position and lock them.**

IMPORTANT: Hydraulic hoses can fail due to physical damage, kinks, age, and exposure. Check hoses regularly.

Any dirt, dust, or other foreign material can damage hydraulic system. Thoroughly clean hydraulic hoses and SCVs before connecting an implement to the tractor.

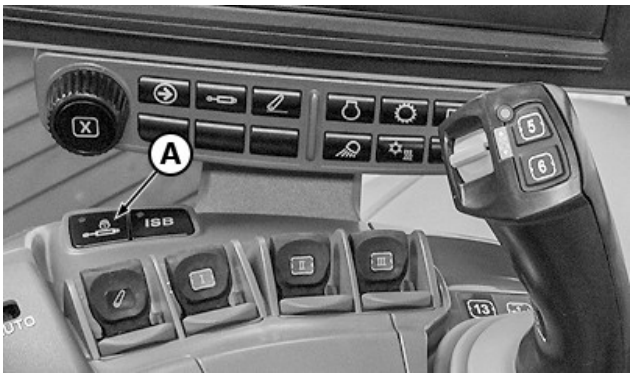
IMPORTANT: Steam cleaning or using a high-pressure washer in the area around the SCV connections and electronics may damage equipment. In the case of high-pressure washers with a pressure of more than 6895 kPa (69 bar) (1000 psi), a min. distance of 200 mm (8 in) to the connections has to be maintained.

NOTE: Hydraulic connections at front of tractor and/or under the right access step (if equipped) are operated by the joystick.

Connect Hydraulic Hoses

1. Engage the park lock and shut off the engine.
2. Lock out SCV controls or activate transport lock:

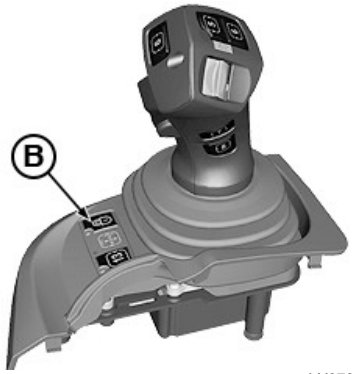
- Move the SCV control levers into the neutral position and press lock button (A).



LX373128—UN—25MAY21

Lock Button on CommandARM™

- For electrically-operated joystick:

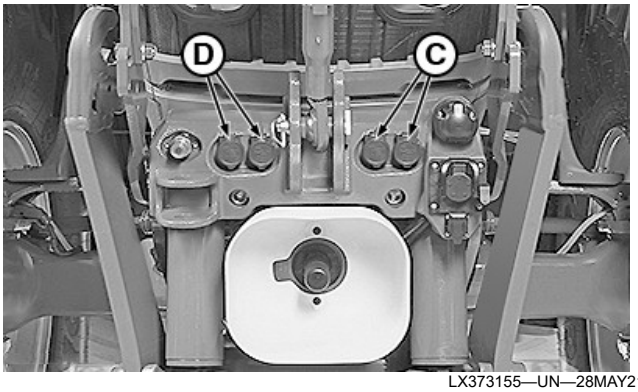


LX373130—UN—25MAY21

Electrical Joystick on CommandARM™

Move the joystick into neutral position and press the lock button (B).

3. Clean dust caps/plugs (C) or (D).



LX373155—UN—28MAY21

Front Hitch Connections

C—SCV XIV, on Front Hitch
D—SCV XV, on Front Hitch (optional)

IMPORTANT: Be sure to connect hydraulic hoses of implements to couplers correctly. If hose connections are reversed, machine will not respond to system controls as expected.

Assignment of Couplers on Front Hitch
Extend = Left port
Retract = Right port

4. Pull off caps/plugs to expose connections.
5. Push hoses firmly into connections.

Disconnecting Hydraulic Hoses

CAUTION: Avoid personal injury. Before implements are detached and hydraulic hoses are disconnected, and to avoid unintentional implement movement, observe the following:

• Lower implements to the ground.

• Set selective control valve controls to neutral position and lock them.

1. Engage park lock.
2. Lower implement to ground.
3. Move SCVs to float position for a few seconds while ignition is on or engine is running.
4. Lock out SCV controls:
   - Move the joystick to neutral position and press lock button (B).
   - Bring the SCV control lever into the neutral position and press lock button (A).

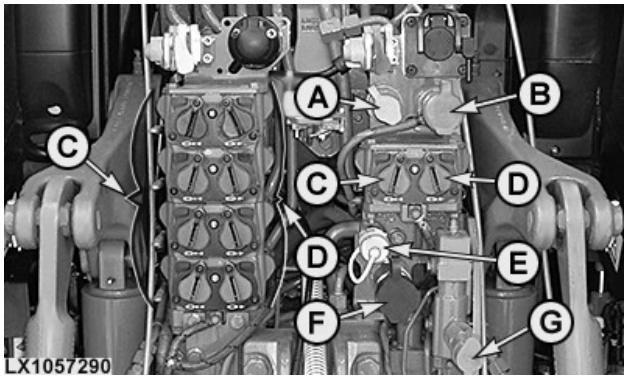
IMPORTANT: Forcing or jerking SCV hoses when disconnecting can damage hose ends and SCV couplers. If hoses cannot be removed easily, relieve pressure in hydraulic system by putting the SCV in float position for a few seconds with engine running.

5. Pull hoses in a **straight line** out of connections.
6. Turn dust covers down to cover connections.

OULXA64,6R,MW67,0005F8F-19-27OCT21

Hydraulic Connections for Implements and Hydraulic Motors

IMPORTANT: With implements equipped with a load sensing hydraulic system, it is necessary to use the corresponding connections of the booster valve (Power Beyond).



LX1057290—UN—16SEP13

A—LS Connection, Power Beyond (Pilot Oil)
B—P Port, Power Beyond
C—SCV Couplers for Extend (I–V)
D—SCV Couplers for Retract (I–V)
E—R Port, Power Beyond Pressure-Free (leak oil)
F—R Port, Power Beyond Pressure-Free (great amounts of oil)
G—Coupler for Hydraulic Trailer Brake

Connect/Operate Hydraulic Motors

Select the smallest hydraulic motor recommended for this function. This practice will reduce power loss and heating of hydraulic oil, especially if other functions force pump to operate at high-pressure.

Operate Hydraulic Motor

- Ensure all in-line control valves are wide open.
- Ensure in-line orifices are removed.
- Close bleed screws (if equipped).

Hydraulic connections on tractors without additional return port or Power Beyond valve:

- Connect pressure line to SCV retract coupler (D).
- Connect return line to SCV extend coupler (C).
- Use special return hose tip to prevent checking of return line and back flow if inadvertently reversed.

Hydraulic connections on tractors with pressure-free return port:

- Connect pressure line to SCV retract coupler (D).
- Connect return line to return coupler (F).
- Special return hose tip is not required, but can be used.

Activate hydraulic motor by moving lever forward to click position for retract. Adjust motor speed with SCV flow control. This will ensure pump only operates at pressure required.

Shut off hydraulic motor by moving lever to float. This protects hydraulic motor from potential seal damage due to overpressure if returning to SCV, or cavitation if using hydraulic motor return ports.

Hydraulic connections on tractors with Power Beyond valve:

Connection via the Power Beyond valve requires a separate flow control valve:

- Connect hydraulic motor pressure line to pressure port (B).
- Connect return line of hydraulic motor to return port (F).
- Connect LS pilot line to port (A).

Power Beyond functions through the Power Beyond valve require a pilot signal to regulate pump pressure, therefore an LS pilot oil line is used. Certain equipment may require modification. Special hydraulic couplings can be obtained from your authorized dealer.

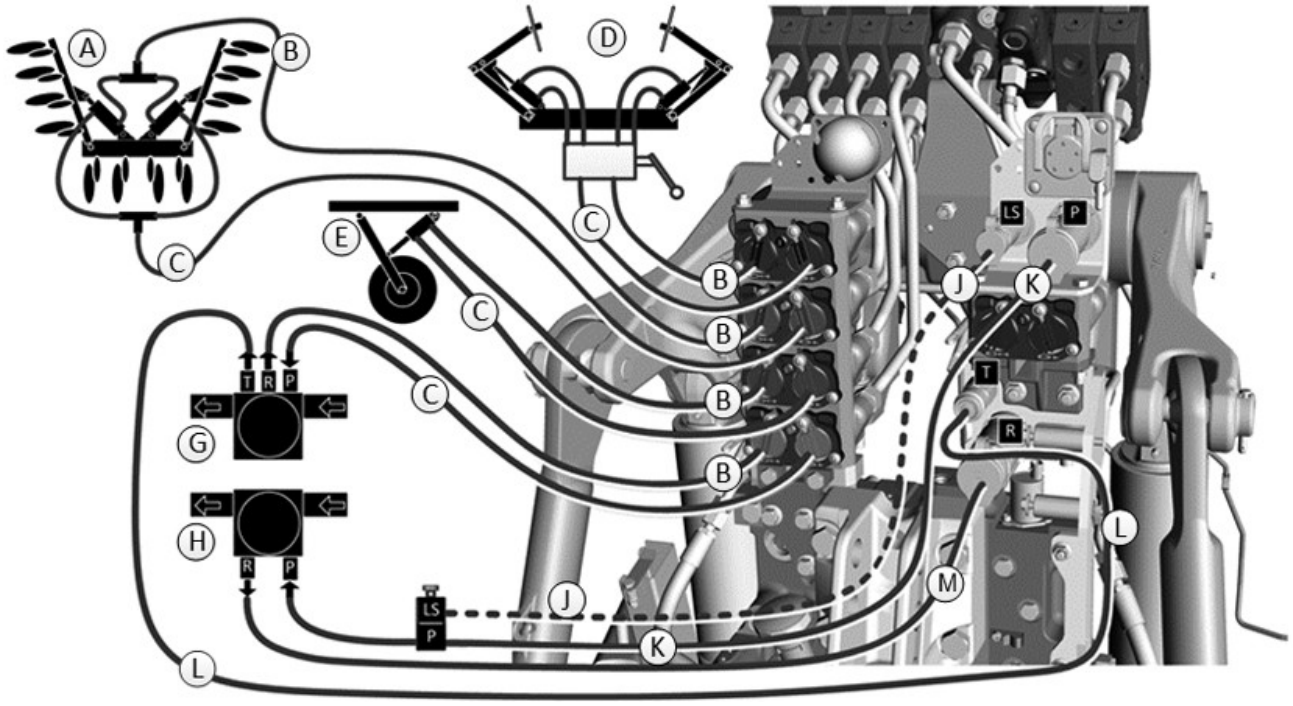
Hydraulic connections on hydraulic motors with case drain:

Some hydraulic motors have a separate case drain line for internal leakage. Connect this case drain line to return port (E) to route the oil into the sump.

OULXA64,6R,0005B57-19-17MAR21

Connect Implements to SCVs

Sample Illustration



LX514787—UN—22SEP21

A - Folding mechanism for example (double-acting cylinder connected in parallel)

B - SCV port for extend

C - SCV port for retract

D - With track markers for example, two double-acting cylinders are actuated separately by means of a commutation valve.

E - Actuate depth gauge wheel via double-acting cylinder for example.

G - Drain port of a hydraulic motor used to empty the motor case

H - Hydraulic motor (e.g. for pump) without leak-off port

J - Hose for LS pilot oil, connected to Power Beyond valve

K - Hose for pressure oil, connected to Power Beyond valve

L - Hose for draining the hydraulic motor case (leak-off oil returned, in order to empty the case of the hydraulic motor)

M - Return port for large oil quantity

The illustration shows typical applications and describes how implements have to be connected to the hydraulic system of the tractor. Also comply with the Operator's Manual of the implements.

Implements with folding mechanisms (A) are usually equipped with double-acting cylinders. These are connected to the SCV as for the functions retract (right SCV side) and extend (left SCV side). In the example shown, the two folding mechanisms are actuated simultaneously because the pressure lines of the cylinder are connected to each other by T-fittings.

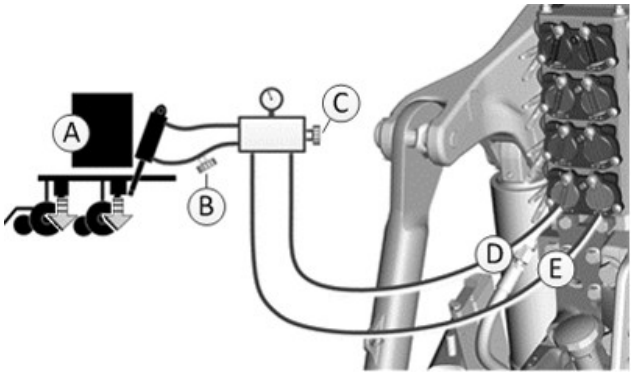
It is possible to control two applications with just one SCV if a commutation valve is used, as shown in example (D). The commutation valve enables similar functions to be controlled successively, but independently of each other.

Connect applications with double-acting cylinders (e.g. on lowering depth gauge wheels [E]) to the SCV as for the functions retract (right SCV side) and extend (left SCV side).

If a hydraulic motor has a drain port (G), it is very important to connect it to return port (L). This ensures that oil pressure does not build up inside the hydraulic motor case, which could cause damage. Example (G) shows a hydraulic motor connected through an SCV. Adjust SCV to continuous flow.

A hydraulic motor (H) on implements with independent hydraulic system must be connected as shown. The hydraulic motor return line and the connections of control valve have to be connected to ports (J, K, and M) of the Power Beyond valve.

IMPORTANT: If a hydraulic motor with pressure and return lines is connected to an SCV, an additional check valve has to be used at the return port. This prevents damage due to incorrect operation of the SCV. Always switch off the hydraulic motor with the SCV in its float position. This allows the hydraulic motor to coast down gradually. Switching off with the SCV in neutral position halts the rotational movement abruptly and may cause damage to the hydraulic motor or the implement.



LX205076—UN—16SEP13

A—Seed Drill
B—Transport Lock Valve
C—Pressure Control Valve
D—Extend Port
E—Retract Port

On implements with active, hydraulic down-pressure systems (e.g. the 750A Universal Drill from John Deere), the SCV must be moved to its retract home position and set to maximum flow rate. As the hydraulic pump operates at maximum power in this situation, severe heating of the hydraulic oil is likely if hydraulic motors are connected at the same time.

NOTE: If an active down-pressure system is used, avoid the simultaneous operation of hydraulic motors as much as possible.

OULXA64,6R,0005B58-19-22SEP21

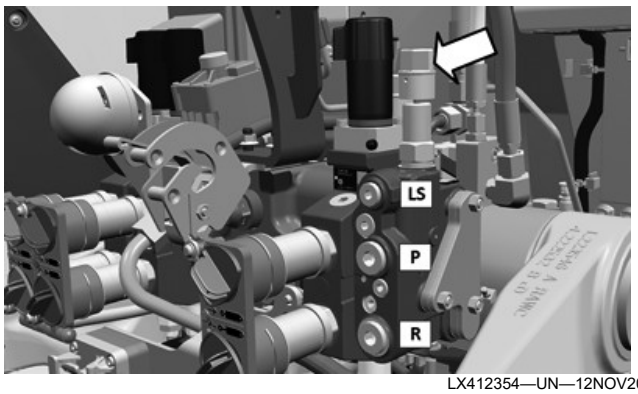
Adjustable Power Beyond Valve

The Power Beyond valve is used to connect independent control valves of implements to the hydraulic system of the tractor. Read the Operator's Manual of the implement to be connected.

NOTE: Only implements with closed center hydraulic system are fully compatible. Several functions will fail, if an open center system is connected.

Load sense pressure (LS) drop, caused by the flow resistance of the implement oil lines and valves, can lead to malfunctions or a poor response time. The adjustable Power Beyond valve allows an enhancement of the hydraulic functionality by boosting the incoming LS signal.

Turn the knob (see arrow) clockwise to the **+** direction to boost the incoming LS signal if it is too low. Turn the knob counterclockwise to the **—** direction to reduce the boost effect.



LX412354—UN—12NOV20

Power Beyond Valve

LS—Load-Sense Port (M14 x 1.5 thread)
P—Pressure Port (M22 x 1.5 thread)
R—Return Port (M22 x 1.5 thread)

IMPORTANT: Economic operation is ensured, if the LS pressure is set as high as necessary but as low as possible. If the Power Beyond LS pressure is set too high, the fuel consumption will unnecessarily increase.

- Adjusting range: 4—24 ±3 bar (400—2400 ± 300 kPa; 58—348 ±44 psi)
- Permissible flow rate through the LS port: 2—4.5 L/min (0.5—1.2 US gpm)
- Required flow rate at the control valves of implements: 3.7 L/min (1.0 US gpm)

OULXBER,00030B9-19-13NOV20

Electrical SCV Control Levers (CommandARM™)

⚠ CAUTION: All selective control valves (SCVs) can also be operated through the joystick, provided they are assigned to the joystick. Before using, press button (see arrow) to find out what the current assignment is. Misuse may result in fatal accidents. See Electrical Joystick in Section 70D.

⚠ CAUTION: To avoid personal injury, ensure that hoses are not reversed. If hoses are reversed, cylinder extends when it should retract.

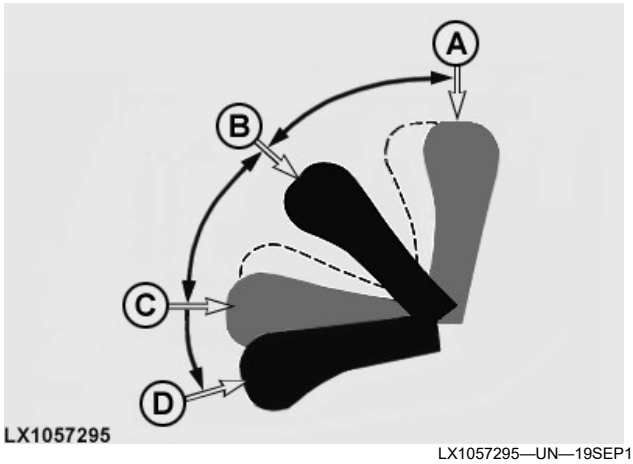
IMPORTANT: When driving on streets, or when the SCV lever is not required in neutral position, activate the lock button (6).

NOTE: Moving the SCV lever to its click position activates the selected function in relation to the valve's preset flow rate and flow time. The SCV levers do not remain in the extend and retract click positions unless they are physically held there by the operator.

NOTE: Float can be used to allow hydraulic motors to coast when shutting down implement.

LX1057281—UN—23JAN14

Button for Requesting Current Status of Assignment



LX1057295—UN—19SEP13

1—Control Lever, SCV I
2—Control Lever, SCV II
3—Control Lever, SCV III
4—Control Lever, SCV IV
5—Control Lever, SCV V
6—Lock Button, CommandARM™ Control Elements (SCVs)
A—Extend (click position)
B—Neutral Position
C—Retract (click position)
D—Float Position (detent)

The SCV levers can be moved to 4 final positions:

A — Extend (click position)
If the lever is moved to the extend click position and released, the lever returns to neutral and the hydraulic cylinder extends in accordance with its preselected flow rate and preset flow time.

A/B — Position between neutral and extend click positions
If the lever is moved between neutral and the extend click position, the cylinder extends slowly. The further the lever is moved towards the click position, the faster the hydraulic cylinder extends. If the lever is released, the lever returns to neutral and the hydraulic cylinder is held in position.

B — Neutral position (between retract and extend)
In neutral position, the hydraulic cylinder is held in position.

Lever returns to center position (neutral) when released, unless it is detented in float position (D).

B/C — Position between neutral and retract click position
If the lever is moved between neutral position and the retract click position, the cylinder retracts slowly. The further the lever is moved towards the click position, the faster the hydraulic cylinder retracts. If the lever is released, the lever returns to neutral and the hydraulic cylinder is held in position.

C — Retract (click position)
If the lever is moved to the retract click position and released, the lever returns to neutral and the hydraulic cylinder retracts in accordance with its preselected flow rate and preset flow time.

D — Float position (detent position)
If the lever is moved beyond the retract click position and detented in the float position, the piston of the hydraulic cylinder can move freely and the attached implement can follow the ground contour.

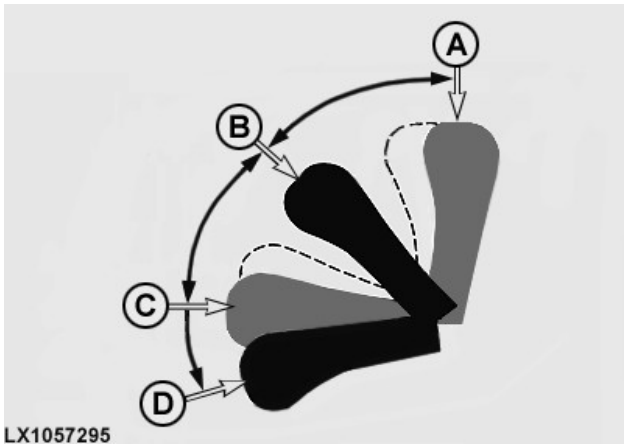
NOTE: If the lever is released in a click position, the lever returns automatically to neutral.

NOTE: If additional external valves are used, move the control lever to neutral when shutting off each hydraulic function.

NOTE: To release hydraulic pressure in the implement, move the lever to float position (D) while engine is running.

OULXA64,6R,0005B4E-19-18AUG23

Electrical SCV Control Levers—Neutral Position



LX1057295—UN—19SEP13

A—Extend (click position)
B—Neutral Position
C—Retract (click position)
D—Float Position (detent)

Neutral position (B) allows flow to continue until flow time expires. If no flow time is commanded, then both extend and retract valves turn off.

NOTE: SCV lever should be in neutral position at tractor startup.

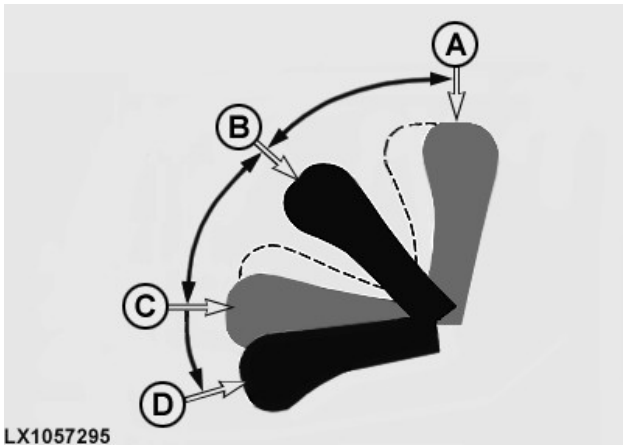
Levers in extend or retract positions return automatically to neutral position when released. Float position remains detented.

Any position other than neutral or float is ignored until lever is cycled to neutral after engine startup.

OULXA64,6R,0005B4F-19-18AUG23

Electrical SCV Control Levers—Extend and Extend Click Position

Extend



LX1057295—UN—19SEP13

A—Extend (click position)
B—Neutral Position
C—Retract (click position)
D—Float Position (detent)

If the lever is moved between neutral (B) and extend click position (A), the cylinder extends slowly. The further the lever is moved towards click position (A), the faster the hydraulic cylinder extends. If the lever is released, the lever returns to neutral and the hydraulic cylinder is held in position.

NOTE: Flow time setting is ignored in extend position.

Extend click position

Move lever to extend click position (A) and release it; the lever returns to neutral and the hydraulic cylinder extends in accordance with its preset detent time and preselected flow rate.

The flow rate setting at the SCV page remains in force.

Flow time of the flow rate starts when the lever is moved to the click position. Flow time should be adjusted so cylinder is fully extended when time elapses.

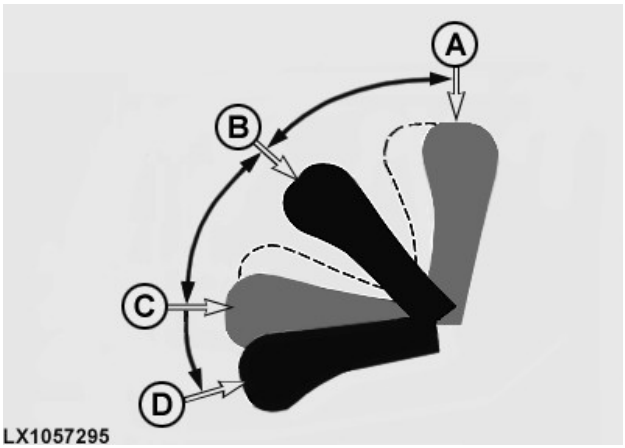
NOTE: If lever is not returned from the click position to neutral in less than 0.8 seconds, the settings associated with the click position are canceled.

The settings associated with the click position can be canceled by moving the lever out of neutral.

OULXA64,6R,0005B50-19-18AUG23

Electrical SCV Control Levers—Retract and Retract Click Position

Retract



LX1057295—UN—19SEP13

A—Extend (click position)
B—Neutral Position
C—Retract (click position)
D—Float Position (detent)

If the lever is moved between neutral (B) and retract click position (C), the cylinder retracts slowly. The further the lever is moved towards click position (C), the faster the hydraulic cylinder retracts. If the lever is released, the lever returns to neutral and the hydraulic cylinder is held in position.

NOTE: Flow time setting is ignored in retract position.

Retract click position

Move lever to retract click position (C) and release it; the lever returns to neutral and the hydraulic cylinder retracts in accordance with its preset flow time and preselected flow rate.

The flow rate setting at the SCV page remains in force.

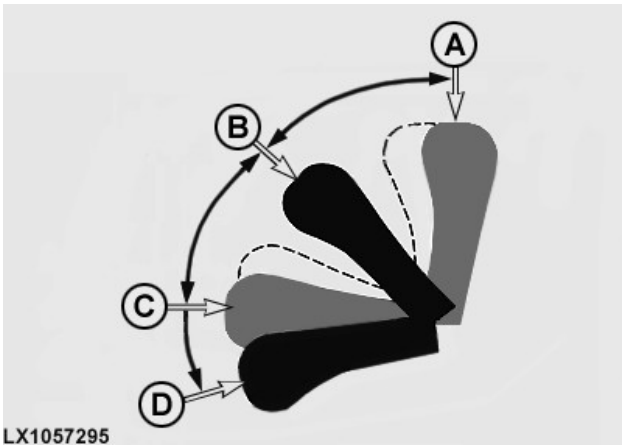
Flow time of the flow rate starts when the lever is moved to the click position. Flow time should be adjusted so cylinder will be fully retracted when time has elapsed.

NOTE: If lever is not returned from the click position to neutral in less than 0.8 seconds, the settings associated with the click position are canceled.

The settings associated with the click position can be canceled by moving the lever out of neutral.

OULXA64,6R,0005B51-19-18AUG23

Electrical SCV Control Levers—Float Position (Detent)



LX1057295—UN—19SEP13

A—Extend (click position)
B—Neutral Position
C—Retract (click position)
D—Float Position (detent)

Move the lever beyond the retract click position (C) and detent it in the float position. The piston of the hydraulic cylinder can move freely in float position and the attached implement can follow the ground contour.

To deactivate the function, move the lever manually back to neutral.

NOTE: Time setting is ignored in float position.

If, before shutting off the engine, the lever is moved to float position (D) and the lever is still in float position (D) at the subsequent startup, the float function remains deactivated until the lever is returned to neutral (B). A lock icon appears on the CommandCenter™ while this applies.

Move the lever back and forward in both directions after it was used in the float position. This ensures that the hydraulic cylinder is filled with oil.

OULXA64,6R,0005B52-19-18AUG23

Selective Control Valves (SCVs)—- Settings

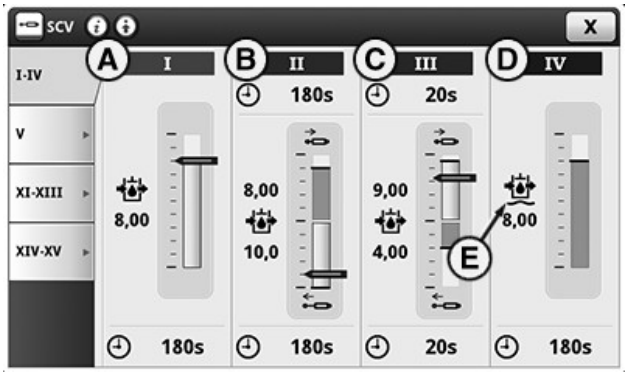
Electrical SCV Main Page

CAUTION: To avoid sudden movements and possible accidents, never operate front loaders in combination with iTEC™.

Press SCV button.

LX373141—UN—26MAY21

Each SCV can be operated in two different modes:



LX314861—UN—08MAY17

SCV Page

A—SCV I, Standard Mode, Extend/Retract
B—SCV II, Independent Mode, Extend
C—SCV III, Independent Mode, Retract
D—SCV IV, in Float Position
E—Float Symbol

- Standard mode, represented for SCV I (A).
- Independent mode, represented for SCV II (B) and III (C).

If the control lever of an SCV is locked into float position, symbol (E) for float position is displayed as for SCV IV (D).

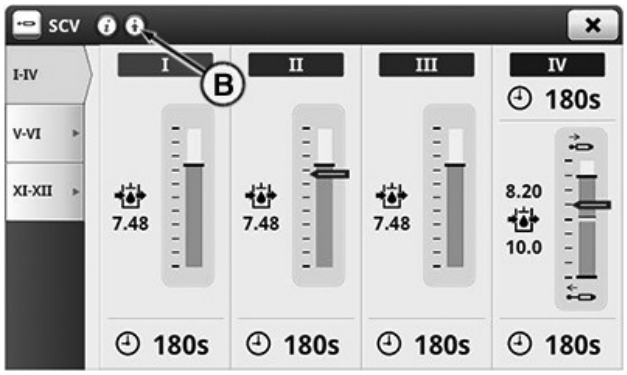
OULXA64,6R,MW67,0005F90-19-30AUG23

Electrical SCV—Activate/Deactivate Independent Mode

1. Press SCV button.

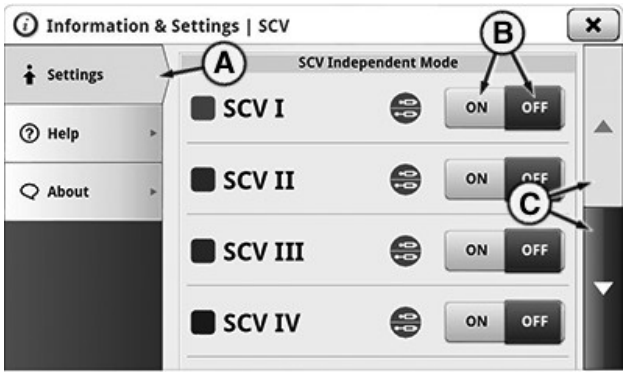
LX373141—UN—26MAY21

2. Select Advanced Settings icon (B).



LX314893—UN—22MAY17

3. Select Settings tab (A).



LX315113—UN—11APR18

A—Settings Tab
B—Buttons, Independent Mode ON/OFF
C—Scroll Bar

4. Use scroll bar (C) to select the desired SCV.
5. Use ON/OFF buttons (B) to enable or disable the SCV-independent mode.

NOTE: If no independent mode is activated for one or more SCVs, the standard mode is activated for these SCVs.

OULXA64,6R,MW67,0005F91-19-30AUG23

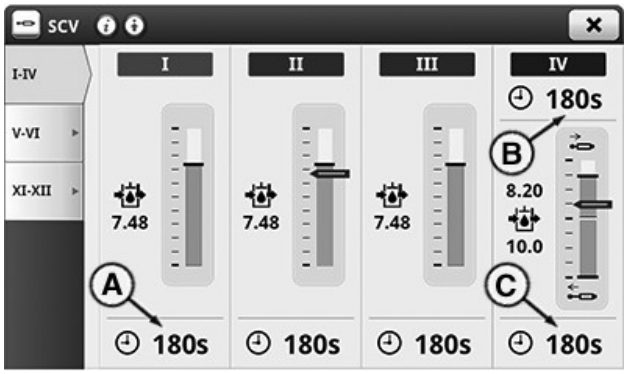
Electrical SCV—Set Flow Time

NOTE: Moving the SCV lever to its click position activates the selected function in relation to the valve's preset flow rate and flow time.

1. Press SCV button.

LX373141—UN—26MAY21

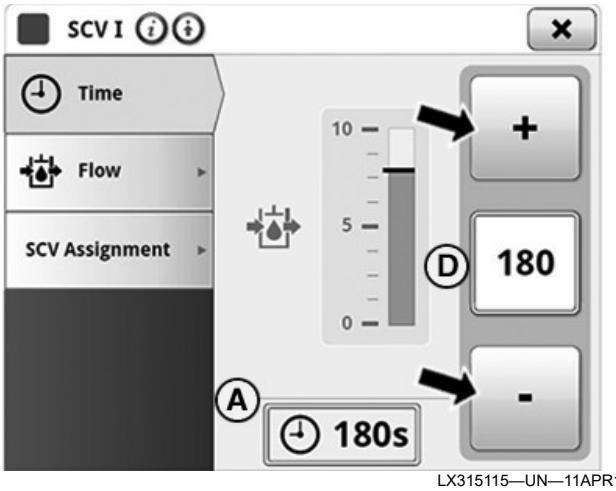
2. Select the desired flow time of an SCV.



LX315118—UN—11APR18

A—Flow Time, Retraction/Extension, Standard Mode
B—Flow Time, Retraction, Independent Mode
C—Flow Time, Extension, Independent Mode

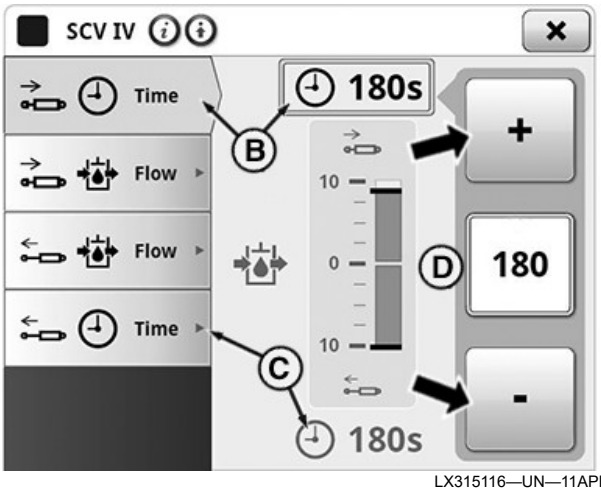
3. Use the +/– buttons to set the desired flow time.



LX315115—UN—11APR18

Standard Mode

A—Flow Time, Retraction/Extension, Standard Mode
D—Input Box, Flow Time



LX315116—UN—11APR18

Independent Mode

B—Flow Time, Retraction, Independent Mode
C—Flow Time, Extension, Independent Mode
D—Input Box, Flow Time

NOTE: The flow time is displayed as follows:

- *from 0 to 10 seconds in increments of 1 second*
- *from 10 to 20 seconds in increments of 2 seconds*
- *above that as 25, 30, 40, 50, 60, 90, 120, and 180 seconds*
- *or “C” for “Continuous”*

OULXA64,6R,MW67,0005F92-19-30AUG23

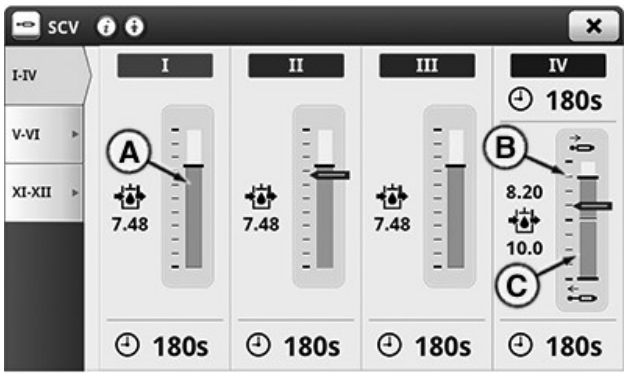
Electrical SCV—Set Flow Rate

NOTE: Moving the SCV lever to its click position activates the selected function in relation to the valve's preset flow rate and flow time.

1. Press SCV button.

LX373141—UN—26MAY21

2. Select the desired flow rate of an SCV.

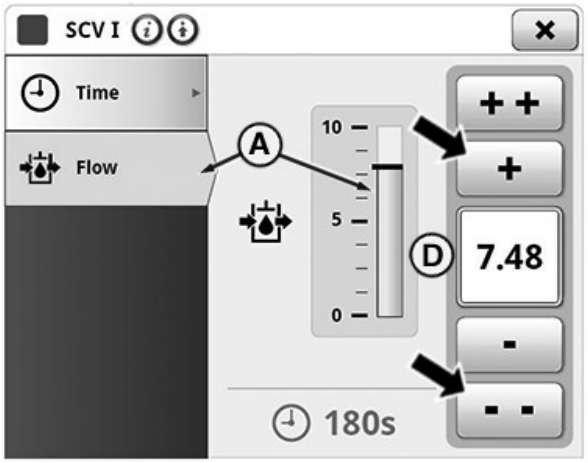


LX315119—UN—11APR18

A—Flow Rate, Retraction/Extension, Standard Mode
B—Flow Rate, Retraction, Independent Mode
C—Flow Rate, Extension, Independent Mode

NOTE: At input box (D), the flow rate is displayed in increments of 0.041 ranging from 0.04 to 10.

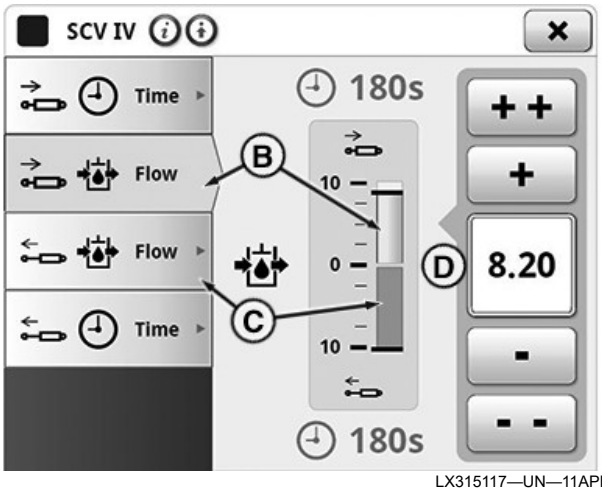
3. Use the +/– buttons to set the desired flow rate.



LX315112—UN—11APR18

Standard Mode

A—Flow Rate, Retraction/Extension, Standard Mode
D—Input Box, Flow Rate



LX315117—UN—11APR18

Independent Mode

B—Flow Rate, Retraction, Independent Mode
C—Flow Rate, Extension, Independent Mode
D—Input Box, Flow Rate

IMPORTANT: When using Series 450 SCVs:

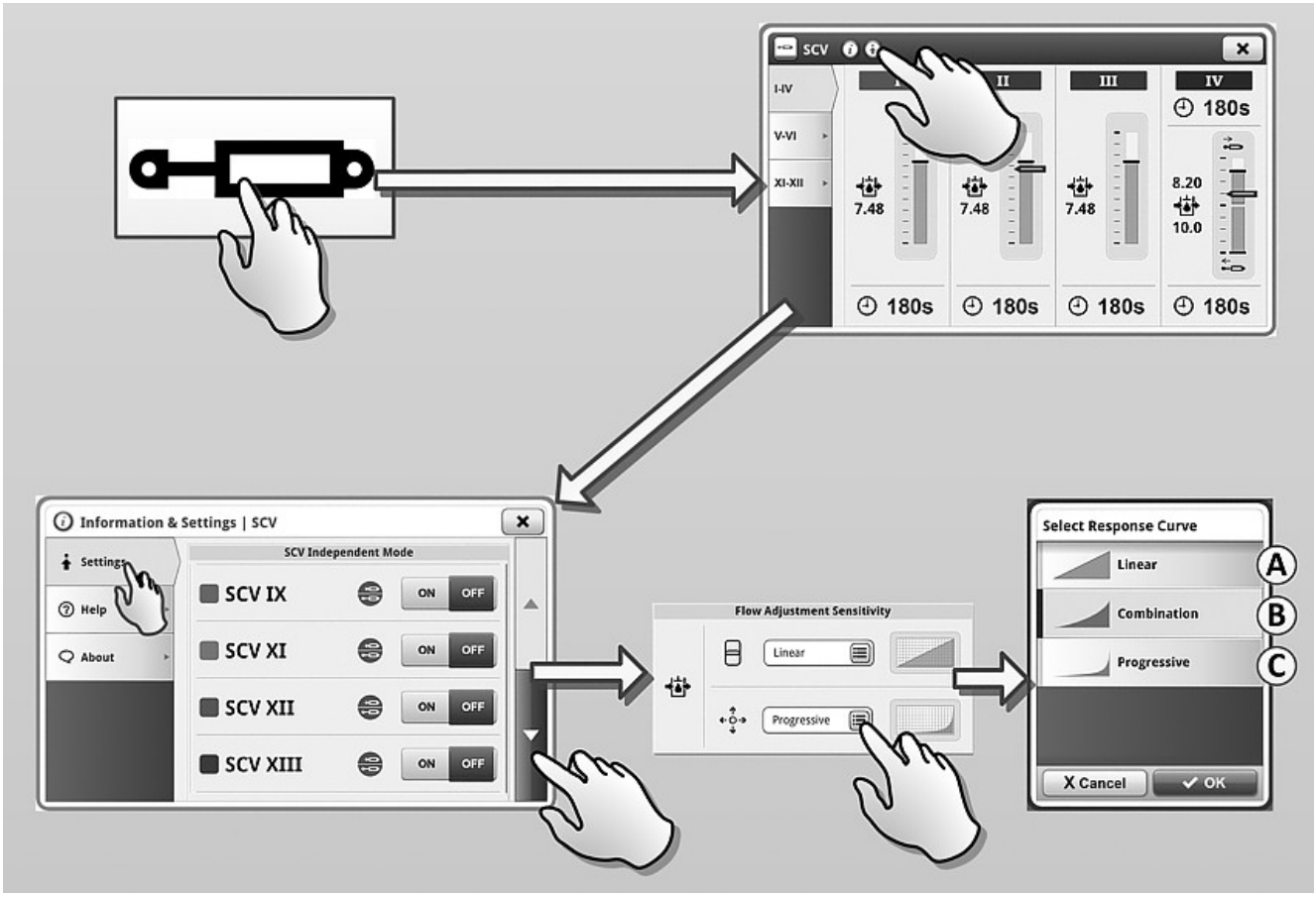
Flow Rate on a Series 450 SCV at Rated Speed								
Set-ting	Hydraulic Pump							
	35 cm³		45 cm³		60 cm³		85 cm³	
	L/min	gpm	L/min	gpm	L/min	gpm	L/min	gpm
0.1	—	—	—	—	—	—	—	—
1.0	1.2	0.31	1.6	0.44	1.7	0.46	1.7	0.46
2.0	3.7	1.0	5.3	1.4	5.5	1.5	5.5	1.5
3.0	8.2	2.2	11.7	3.1	12.4	3.3	12.4	3.3
4.0	12.4	3.3	17.6	4.7	18.5	4.9	18.5	4.9
5.0	17.0	4.5	24.2	6.4	25.5	6.7	25.5	6.7
6.0	24.8	6.6	35.3	9.4	37.2	9.9	37.2	9.9
7.0	37.6	10.0	53.6	14.2	56.5	15.0	56.5	15.0
8.0	49.3	13.1	70.3	18.6	74.0	19.6	74.0	19.6
9.0	64.9	17.2	92.5	24.5	97.4	25.8	97.4	25.8
10.0	80.0	21.2	114.0	30.2	120.0	31.8	120.0	31.8
In order to determine the required flow rate of all consumers, it is necessary to determine and add all the flow rates of the SCVs and the other consumers.								

NOTE: The values given are approximate and may deviate. Deviations may depend on the following factors:

- *Oil temperature*
- *Engine speed*
- *Number of consumers*
- *Efficiency of consumers*
- *Additional consumers, e.g. hitch or front loader*

OULXA64,6R,MW67,0005F93-19-30AUG23

Electrical SCV—Set Responsiveness



LX1057413—UN—26JUN14

The characteristic of the reactions of the SCVs to commands from the controls can be changed by altering the flow rate of the SCVs. This has an effect on the responsiveness of the SCVs.

Navigate to Settings as shown in the graphic.

Select desired characteristic:

A—Linear means that the flow rate of the SCV corresponds to the distance traveled by the control lever/joystick.

B—Combination means that initially the flow rate of the SCV is less than that traveled by the control lever/joystick (giving a sensitive start to the movement).

C—Progressive means that initially the flow rate of the SCV is much less than that traveled by the control lever/joystick (giving an even more sensitive start to the movement).

Confirm setting with the OK button.

OULXA64,0005B4A-19-25AUG23

Electrical SCV—Activate/Deactivate Loader Mode

CAUTION: Always activate the loader mode before working with the front loader. If this is not done, unwanted functions may be triggered accidentally.

Also see the following in section 70D:

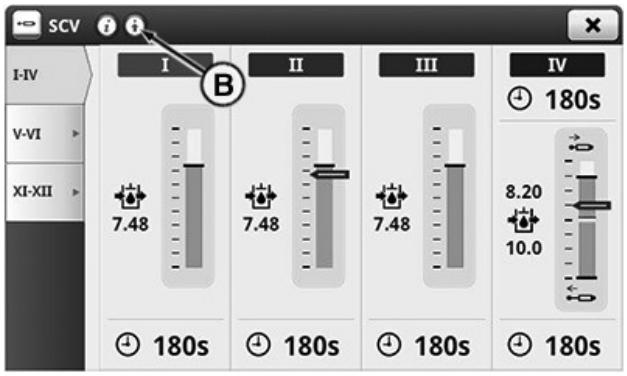
- **Electrical Joystick, Controls**
- **Electrical Joystick, Layout and Functions**

NOTE: The set flow times of the SCVs are ignored in loader mode.

1. Press SCV button.

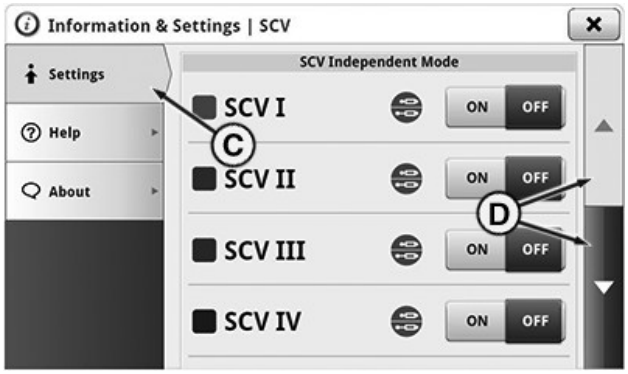
LX373141—UN—26MAY21

2. Select **Advanced Settings** icon (B).



LX314893—UN—22MAY17

3. Select **Settings** tab (C).



LX314892—UN—22MAY17

4. Select the loader mode with the arrow keys (D).
5. Activate or deactivate loader mode.

LX314891—UN—22MAY17

OULXA64,6R,MW67,0005F94-19-30AUG23

Operator Presence Sensor (For North America, Australia, and New Zealand Only)

An audible alarm sounds when the operator leaves the operator's seat and the transmission and SCV control are switched as follows:

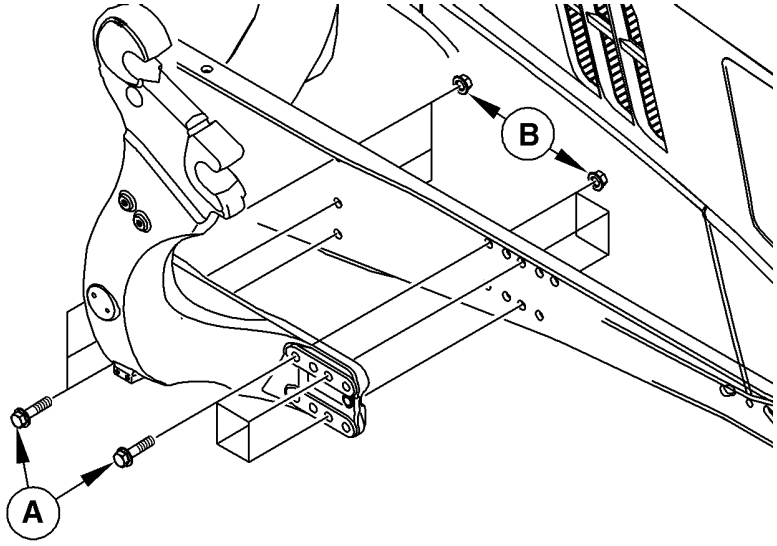
1. Transmission in park or neutral position
2. SCV control in **Continuous** or **Timed Detent** mode

After five seconds, the audible alarm turns off.

NOTE: SCV does not disengage when operator leaves seat.

LX25458,6M,0000A40-19-27MAR23

Front Loader Mounting Frames for Loaders 640R/643R, 660R/663R, and 680R/683R



CC244319

CC244319—UN—04JUN15

Hardware used on John Deere Front Loader Mounting Frames					
Item	**Designation**	**Standard**	**Dimensions**	**Identification/Grade**	**Coating**
(A)	Cap Screw with Flange	JDS121	M20 x 2.5 x 80	10.9	Zinc
(B)	Hex Nut with Flange	ISO4161	M20 x 2.5	10	Zinc

IMPORTANT: A front loader checked and approved by John Deere is available for purchase.

When installing the John Deere front loader mounting frames, use only suitable attaching elements as shown in the illustration above.

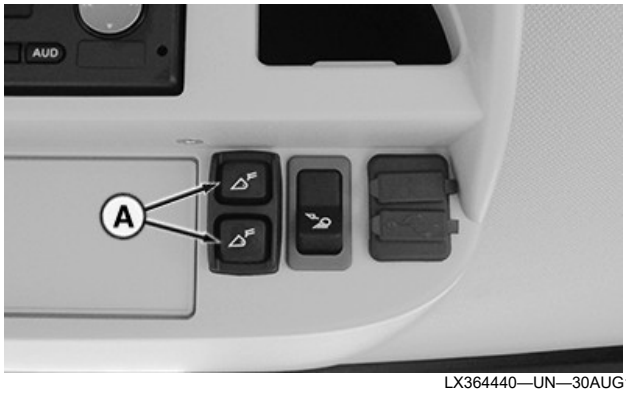
Check torques of attaching screws at regular intervals. Comply with Operator's Manual and Installation Instructions for servicing the front loader.

Item	Measurement	Specification
Cap Screw with Flange	Torque	620 N·m (457 lb·ft)

LX25458,ALL,0000A42-19-09OCT20

Front Loader—Hydraulic Quick Release (If Equipped)

Press the buttons (A) for locking and unlocking when changing the front loader's implement.



LX364440—UN—30AUG19

NOTE: Refer to the Operator's Manual of the front loader for more information.

OULXA64,0005B45-19-19JUN23

Front Loader—Influence of Engine Speed on Lifting Function

The lifting function of the front loader is improved by increasing the engine speed. Set the desired minimum engine speed with the hand throttle.

LX25458,0000A43-19-19JUN23

Electrical Joystick—Controls

CAUTION: Danger of fatal accidents.

Operating errors can trigger unforeseen movements of implements and the front loader.

- **Always work carefully and concentrated.**
- **Press button (F) to display an overview of how the buttons are currently assigned.**
- **Avoid a simultaneous use of front loader and iTEC™.**
- **Note the status of the diverter valves.**
- **Activate the loader mode before working with the front loader. See Electronic Selective Control Valves (SCVs), Activate/ Deactivate Loader Mode in Section 70C.**
- **When driving on the road and when controls are not in use, always activate the transport lock. This applies for example for the joystick, controls of the hitch and the SCVs[1].**

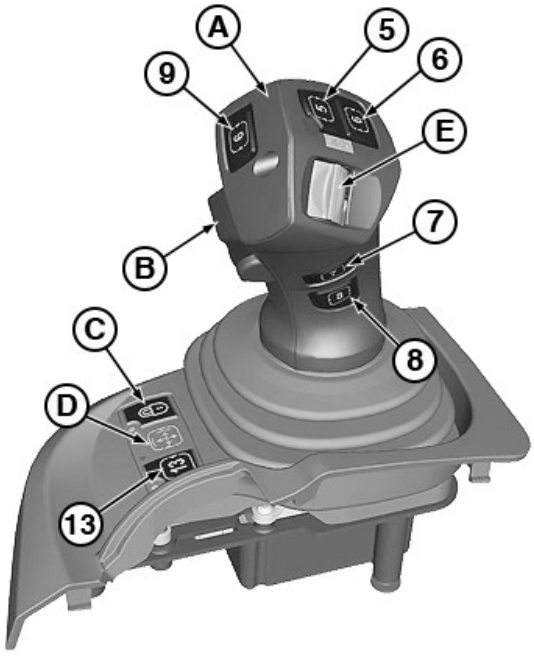
LX373133—UN—26MAY21

F—Button for Controls Setup

After the joystick is unlocked with button (C), the following functions are activated:

- Buttons (5) to (9)
- Rocker switch (B)
- Axes of movement

[1] *Selective Control Valves*



LX373059—UN—28APR21

5—Gearshift Button, Changing Up (default assignment)
6—Gearshift Button, Changing Down (default assignment)
7—Button for Diverter Valve 1 (default assignment)[2]
8—Button for Diverter Valve 2 (default assignment) [2 3]
9—Not Used (default assignment)
13—Button for Activating Loader Suspension System (default assignment)
A—Joystick
B—Raise/Lower Rocker Switch
C—Lock Button, Joystick ON/OFF
D—Indicator Light, Joystick Enabled
E—Rocker Switch for Change Direction of Travel

Joystick (A) permits two SCVs[4] to be operated at the same time. By means of rocker switch (B), an additional SCV can be operated. If the rocker switch is moved past the perceptible point of resistance (click position) and then released, the connected hydraulic cylinder is retracted or extended.

On front loaders with Return-to-Position (RTP) the button (8) is used to toggle the set point range. See also RTP - Front Loader with Return-to-Position Function in Section 70E.

To edit functions of buttons, see Controls Setup, Assignment of Functions in Section 30C.

For SCV settings, see Section 70C:

- *Selective Control Valves, Electronic – Set Flow Time*
- *Selective Control Valves, Electronic – Set Flow Rate*
- *Selective Control Valves, Electronic – Set Responsiveness*

[2] *On front loader with Return-to-Position (RTP), this button is used to toggle the set point range.*
[3] *Not on CommandARM™ with electrical joystick on European tractors.*
[4] *Selective Control Valve*

Depending on equipment, the joystick may be operated in different operating modes. The operating modes are enabled and disabled using the CommandCenter™. The enabled mode can only be operated if the joystick has been unlocked at button (C).

Variable functions can be assigned to the lever directions fore/aft and left/right and to the rocker switch (B) on the joystick. Press button (F) to view current button assignment.

The changing-up and changing-down functions are assigned to the gearshift buttons (5) and (7). This only applies for the following transmissions:

- AutoQuad™ PLUS transmission
- DirectDrive transmission

NOTE: When the engine is switched off, the Loader Suspension System is deactivated. If necessary, activate the Loader Suspension System after restarting the engine.

For further information on layout, functions, lock functions, and operating modes of the joystick, see the following pages.

OULXA64,6R,MW67,0005F95-19-28AUG23

Electrical Joystick—Layout and Functions

CAUTION: Always activate the loader mode before working with the front loader. If this is not done, unwanted functions may be triggered accidentally. See Selective Control Valves, Electronic - Activate/Deactivate Loader Mode in Section 70C:

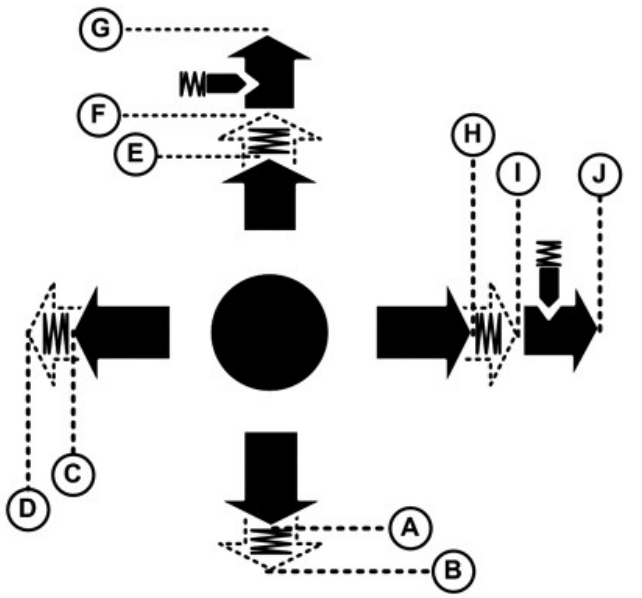
IMPORTANT: The Return-to-Position function can be stopped by moving the joystick briefly in the opposite direction. Example: Stop the boom while it is moving downward = Move the joystick to the rear (A).

IMPORTANT: Variable functions can be assigned to the lever directions fore/aft and left/right and to the rocker switch on the joystick. This assignment can be viewed only on the Controls Setup page.

NOTE: At oil temperatures below 20 °C (68 °F), the front loader reacts sluggishly. Automated functions can be affected by this.

For SCV settings, see Section 70C:

- *Selective Control Valves, Electronic — Set Flow Time*
- *Selective Control Valves, Electronic —Set Flow Rate*
- *Selective Control Valves, Electronic — Set Responsiveness*



LX341506—UN—31JUL18

A Pull joystick rearward until the functions of the implement are performed at the desired speed. Do not move the lever beyond the point of resistance.

B Pull the joystick back until it is **beyond** the perceptible point of resistance (click point) and then release it.
• With SCV control:
The hydraulic cylinder of the connected implement is extended in accordance with the preset flow time and flow rate.
• In loader mode:
Flow time setting is ignored in loader mode.
• On loaders with RTP:
Return-to-position is activated.

C Move joystick to the left until the functions of the implement are performed at the desired speed. Do not move the lever beyond the point of resistance.

D Move the joystick to the left until it is **beyond** the perceptible point of resistance (click point) and then release it.
• With SCV control:
The hydraulic cylinder of the connected implement is extended in accordance with the preset flow time and flow rate.
• In loader mode:
Flow time setting is ignored in loader mode.
In loader mode, if the joystick is moved to the left twice in brief succession beyond the point of resistance (click position) and held there, the bucket shake function is activated. This function stops when the lever leaves its click position.
• On loaders with RTP:
Return-to-position is activated.
The bucket shake function is activated in the same way as in loader mode.

E Push joystick forward until the functions of the implement are performed at the desired speed. Do not move the lever beyond the point of resistance.

F Push the joystick forward until it is **beyond** the perceptible point of resistance (click point) and then release it.
• With SCV control:
The hydraulic cylinder of the connected implement is retracted in accordance with the preset flow time and flow rate.
• In loader mode:
Flow time setting is ignored in loader mode.
• On loaders with RTP:
Return-to-position is activated.

G Push the joystick all the way forward and engage in detent to activate the float position. The lever remains in the detent until it is pulled back by hand.

H Move joystick to the right until the functions of the implement are performed at the desired speed. Do not move the lever beyond the point of resistance.

I Move the joystick to the right until it is **beyond** the perceptible point of resistance (click point) and then release it.
• With SCV control:
The hydraulic cylinder of the connected implement is retracted in accordance with the preset flow time and flow rate.
• In loader mode:
Flow time setting is ignored in loader mode.
In loader mode, if the joystick is moved to the right twice in brief succession beyond the point of resistance (click position) and held there, the bucket shake function is activated. This function stops when the lever leaves its click position.
It is recommended to engage the bucked shake function by moving the joystick to the left, see (D).
• On loaders with RTP:
Return-to-position is activated.
The bucket shake function is activated in the same way as in loader mode.

J Move the joystick all the way to the right and engage it to activate the float position. The lever remains in the detent until it is pulled back by hand.

Defaults

LX373149—UN—28MAY21

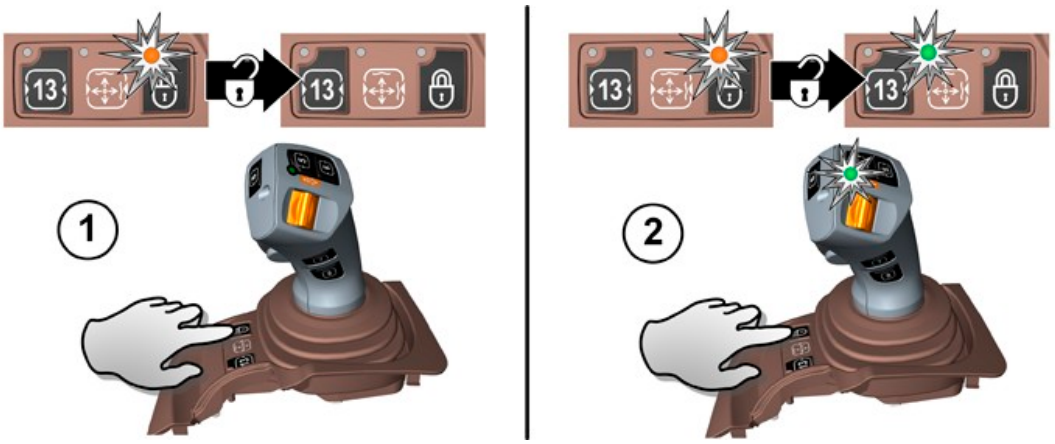
Factory Setup

Buttons and axes of movement on the Electrical Joystick can be assigned different functions. The list below shows the default settings as intended ex factory.

Electrical Joystick	Factory setting
Movement fore/aft	Control valve XI (raise/lower boom)
Movement to right and left	Control valve XII (roll back and dump bucket)
Rocker switch	Control valve XIII (raise/lower)
[5]	Gear increment No function assigned if AutoPowr™ transmission is equipped.
[6]	Downshift No function assigned if AutoPowr™ transmission is equipped.
[7]	Front loader, diverter 1, if equipped
[8]	Front loader, diverter 2, if equipped
[9]	Not used
[13]	Loader suspension system

OULXA64,6R,0005D35-19-19JUN23

Electrical Joystick—Idendify Software Version



LX514933—UN—20JAN23

Software Version up to MY23.5 / Software Version from MY23.5

At the time of testing, no ISOBUS function may be assigned to the axes.

Press the transport lock button to change from locked to unlocked and observe the LED behavior.

- Version 1 (up to MY23.5) = orange lock LED goes out and no other LED lights up.
- Version 2 (from MY23.5) = orange LED goes out and green axis enable LED lights up.

oulxa64,6R,ALL,1674206780753-19-19JUN23

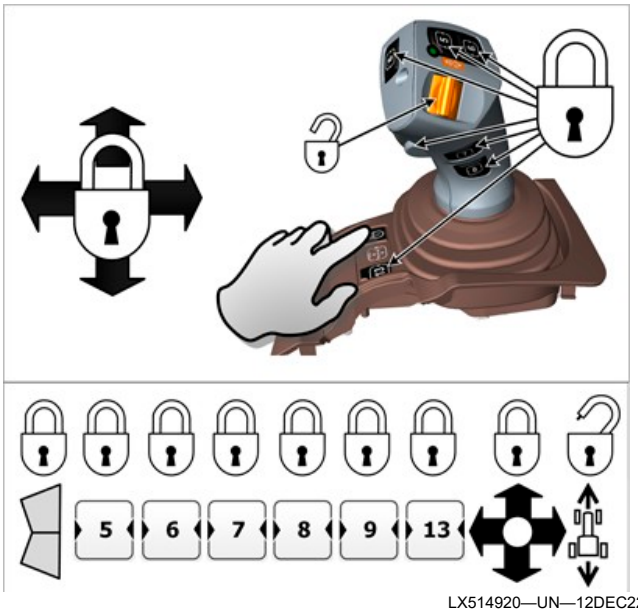
Electrical Joystick (Only with Software until MY23.5)—Lock Function (Transport Lock)

CAUTION: Serious accidents with life-threatening injuries.

Unintended operations of the joystick lead to dangerous reactions of the loader or the front implement.

When the joystick is not in use, always lock the joystick by pressing the transport lock button. The LED of the transport lock button must be ON.

Lock the Joystick:



LX514920—UN—12DEC22

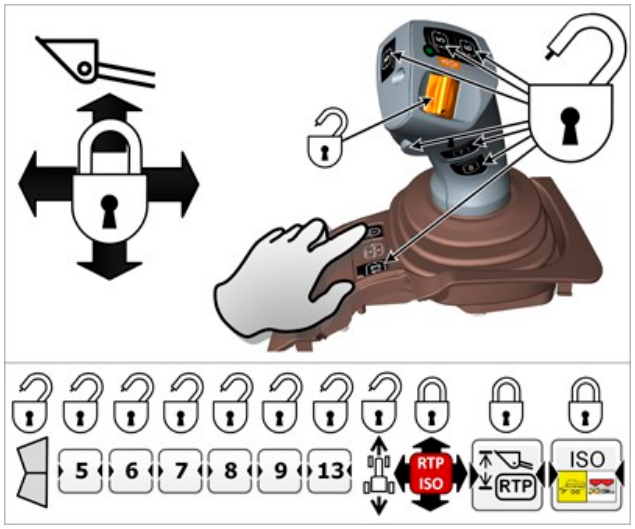
Transport Lock Activated

LX515742—UN—07NOV23

LED for Transport Lock Activated ON

- Press the transport lock button to lock the joystick. The locked status is indicated by the orange LED of the lock button.
- All functions assigned to the joystick axises are disabled.
- All joystick buttons are disabled.
- The toggle switch is disabled.
- The forward/reverse switch is enabled.

Unlock the Joystick:



LX514930—UN—20JAN23

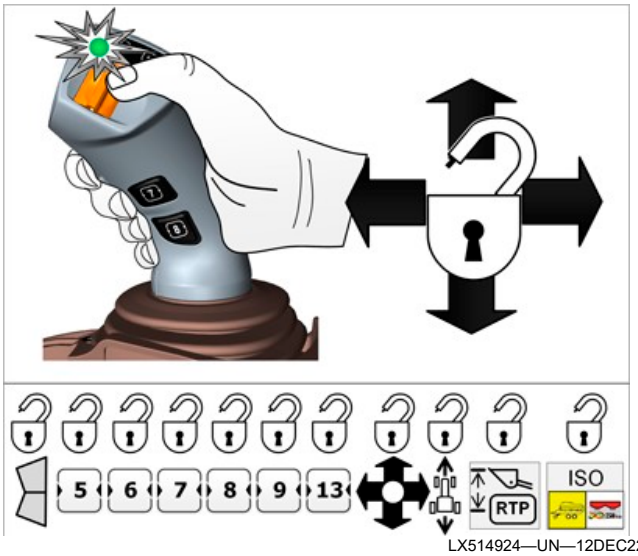
Transport Lock OFF

LX590953—UN—07NOV23

All LEDs OFF

- Press the transport lock button to unlock the joystick. The orange LED of the lock button goes out. The green LED on the joystick and the green LED on the axis enable indicator illuminate to indicate unlocked status.
- All functions, assigned to the joystick axes remain disabled until the operator's hand is detected.
- All joystick buttons are enabled except for buttons with RTP or ISOBUS functions.
- The toggle switch is enabled.
- The forward/reverse switch is enabled.

Hand Detection:



LX514924—UN—12DEC22

Hand Detected

LX590954—UN—07NOV23

Hand Detected, LED ON

- All joystick functions are enabled when the joystick was unlocked and the system has detected the operator's hand. The green LEDs light up.

NOTE: System or sensor failures generate an error message. When a message is displayed, the joystick functions are disabled. In this case see Electrical Joystick—Hand-Presence Detection System, Error Message in this Section.

The joystick remains locked each time the tractor is restarted.

In cold weather, there are brief periods when the loader does not operate. If temperature of the hydraulic oil drops below 0°C (32°F), the stepper motors of the telescopic arm/bucket/grab valves operate more slowly. At temperatures below -25°C (-13°F), they stop working altogether. Operate several front loader functions to warm up the system.

OULXA64,6R,All,0005D36-19-09NOV23

Electrical Joystick with CommandARM™ (Only with Software from MY23.5)—Lock Function (Transport Lock)

CAUTION: Danger of accidents resulting in severe injury and property damage.

Significant danger of injury from unintentionally triggering functions when operating the joystick.

• When the joystick is not in use, lock the joystick with the lock button.

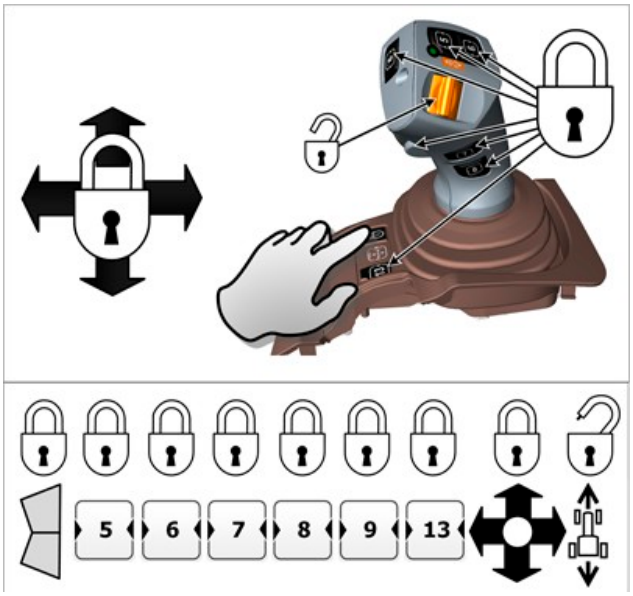
• To prevent incorrect operation, operators must familiarize themselves with the settings of the controls before operating the machine.

• If changes are made to the settings of the controls, inform all operators of the machine.

• Do not switch operators without familiarizing the new operator with the machine (on-the-fly changeover).

• New operators must familiarize themselves with the current settings of the controls. Access controls setup (see arrow).

Lock the Joystick:



LX514920—UN—12DEC22

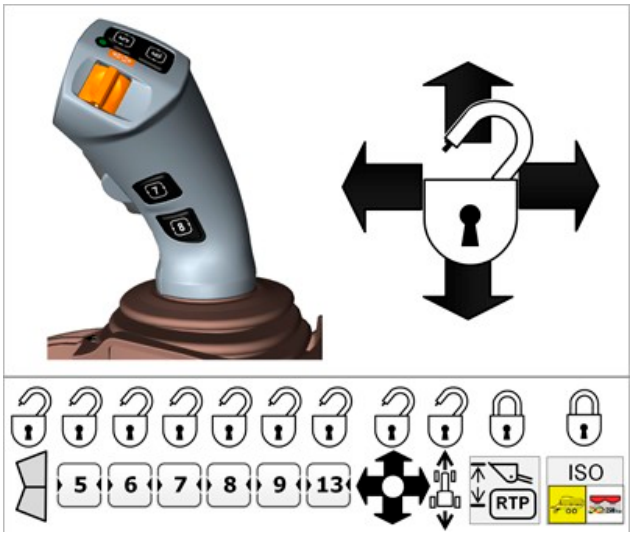
Transport Lock Activated

LX515742—UN—07NOV23

LED for Transport Lock Activated ON

- Press the transport lock button to lock the joystick. The locked status is indicated by the orange LED of the lock button.
- All functions assigned to the joystick axises are disabled.
- All joystick buttons are disabled.
- The toggle switch is disabled.
- The forward/reverse switch is enabled.

Unlock the Joystick:



LX514922—UN—12DEC22

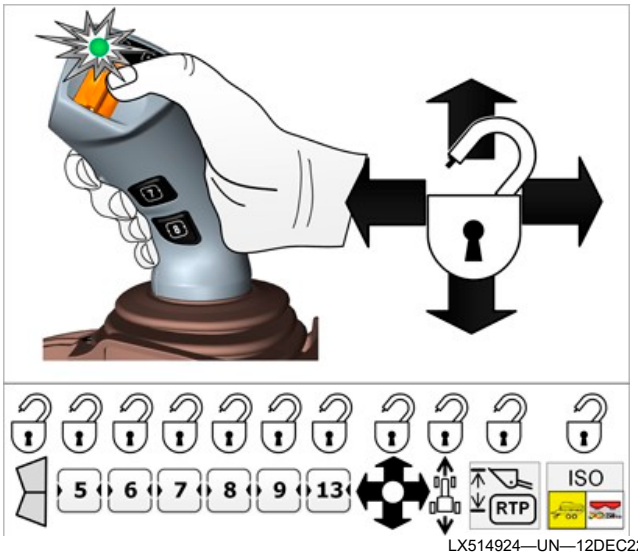
LED for Enabled Joystick ON

LX590953—UN—07NOV23

LED for Enabled Joystick ON

- Press the transport lock button to unlock the joystick. The orange LED of the lock button goes out. The green LED on the joystick and the green LED on the axis enable indicator illuminate to indicate unlocked status.
- The base functions (e.g. loader), assigned to the joystick axes are enabled.
- **RTP** - When RTP is assigned to a joystick axis, that axis remains disabled while the basic functions assigned to axes are enabled (see Hand Detection).
- **ISOBUS** - All joystick axes remain disabled if any axis has an ISOBUS function assigned (see Hand Detection).
- All joystick buttons are enabled except for buttons with RTP or ISOBUS functions.
- The toggle switch is enabled.
- The forward/reverse switch is enabled.

Hand Detection:



LX514924—UN—12DEC22

Hand Detection Activated and LED for Enabled Joystick ON

LX590953—UN—07NOV23

LED for Enabled Joystick ON

- All joystick functions are enabled when the joystick was unlocked and the system has detected the operator operator's hand. Both green LEDs remain on.

NOTE: System or sensor failures generate an error message. When a message is displayed, the RTP and ISOBU functions are disabled. In this case see Electrical Joystick—Hand-Presence Detection System, Error Message in this Section.

The joystick remains locked each time the tractor is restarted.

In cold weather, there are brief periods when the loader does not operate. If temperature of the hydraulic oil drops below 0°C (32°F), the stepper motors of the telescopic arm/bucket/grab valves operate more slowly. At temperatures below -25°C (-13°F), they stop working altogether. Operate several front loader functions to warm up the system.

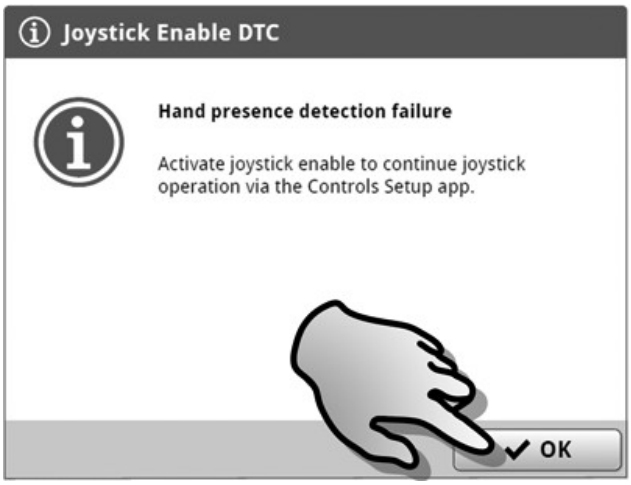
oulxa64,6R,All,1670587137844-19-09NOV23

Electrical Joystick—Hand Presence Detection System, Error Message

A system or sensor failure generates an error message. When this message is displayed, the system locks the function of the joystick axes.

NOTE: The operator can overrun the lock mode by temporary defining button [9] as joystick enabling button. To enable the function of the joystick axes, it is then necessary to press and hold button [9] while operating the joystick.

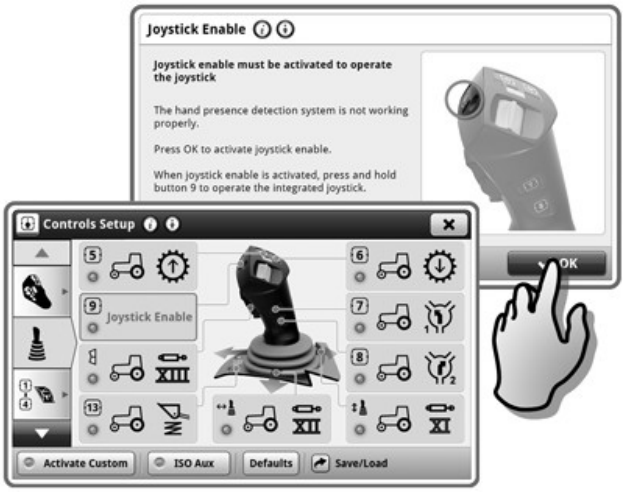
Push [OK] to display the next page.



LX514068—UN—27AUG21

Error Message

Push [OK] to activate the "Joystick Enable" mode. The controls setup page is displayed with the button [9] frame highlighted. "Joystick Enable" is displayed, regardless of the function that was previously programmed for button [9].



LX514069—UN—27AUG21

From now on, it is necessary to press and hold button [9] to enable the function of the joystick axes. This is a temporary setting to allow continuing with the current work.

LX514070—UN—27AUG21

NOTE: Restart the tractor and check if the problem still exists. Let your authorized dealer inspect the hand presence detection system.

OULXBER,000311C-19-19JUN23

Electrical Joystick—Setup of Controls

CAUTION: Danger of accidents resulting in severe injury and property damage.

Significant danger of injury from unintentionally triggering functions when operating the joystick.

• When the joystick is not in use, lock the joystick with the lock button.

• To prevent incorrect operation, operators must familiarize themselves with the settings of the controls before operating the machine.

• If changes are made to the settings of the controls, inform all operators of the machine.

• Do not switch operators without familiarizing the new operator with the machine (on-the-fly changeover).

• New operators must familiarize themselves with the current settings of the controls. Access controls setup (see arrow).

1. Select button for **Controls Setup**. Also see Controls Setup, Assignment of Functions in Section 30C.

LX373145—UN—26MAY21

Access Controls Setup Page

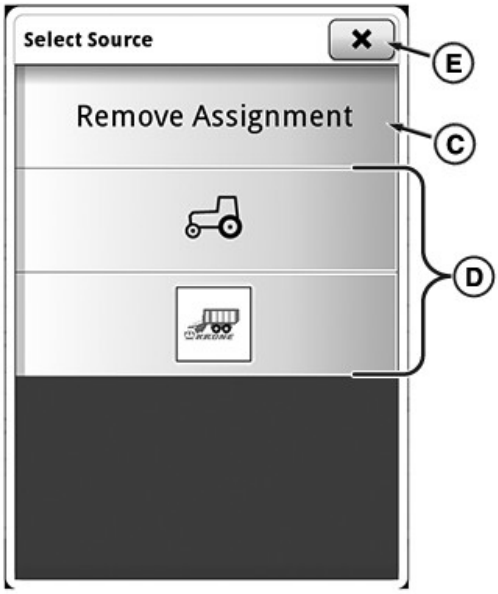
2. Select joystick (A).

LX373137—UN—28MAY21

NOTE: The Controls Setup page appears on the display showing how the buttons, functions, and movement axes are currently assigned.

For default factory settings, see Electrical Joystick —Layout and Functions in this Section.

3. Select the desired control or axis of movement (B) for which a function assignment is to be made, changed, or deleted.
4. Select desired group (D) (e.g. tractor functions).



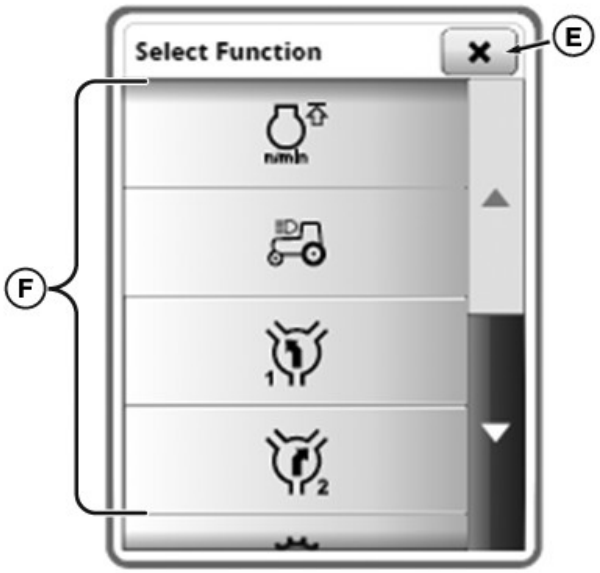
RXA0156214—UN—16DEC16

Select button (C) to delete assignment.

Select button (E) to cancel the procedure.

NOTE: Only the groups and functions that are currently available appear on the display.

5. Select desired function (F).



RXA0156215—UN—16DEC16

Select button (E) to cancel the procedure.

6. Unlock joystick with lock button (G).

LX373153—UN—28MAY21

The controls of the joystick are automatically activated with the default settings. See Electrical Joystick—Layout and Functions in this Section.

7. Activate custom settings (H).

RXA0156241—UN—16DEC16

OULXA64,6R,0005D37-19-19JUN23

Electrical Joystick—Assign an SCV to a Motion Axis of the Joystick

CAUTION: Danger of accidents resulting in severe injury and property damage.

Significant danger of injury from unintentionally triggering functions when operating the joystick.

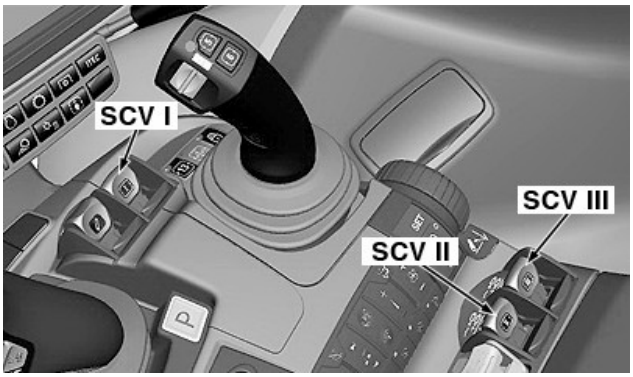
• When the joystick is not in use, lock the joystick with the lock button.

• To prevent incorrect operation, operators must familiarize themselves with the settings of the controls before operating the machine.

• If changes are made to the settings of the controls, inform all operators of the machine.

• Do not switch operators without familiarizing the new operator with the machine (on-the-fly changeover).

• New operators must familiarize themselves with the current settings of the controls. Access controls setup (see arrow).



LX373154—UN—28MAY21

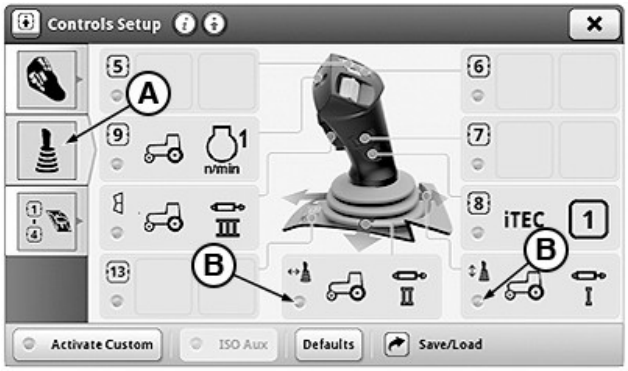
CommandARM™ Shown with CommandPRO™ Joystick without SCV IV

1. Select button for **Controls Setup**. Also see Controls Setup, Assignment of Functions in Section 30C.

LX373145—UN—26MAY21

Access Controls Setup Page

2. Select joystick (A).



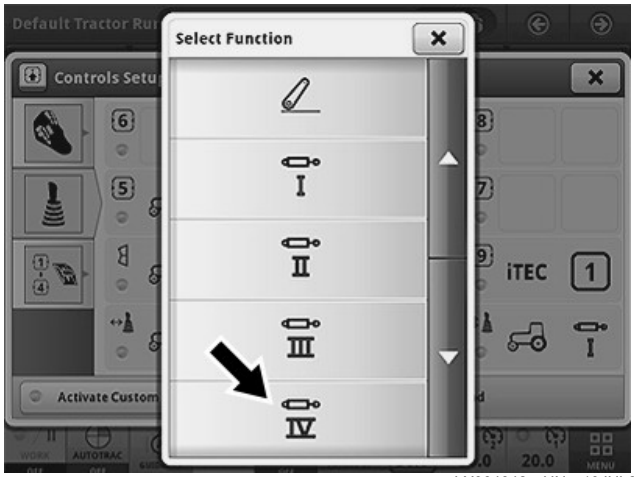
LX373156—UN—29MAY21

Controls Setup Page

NOTE: The Controls Setup page appears on the display showing how the buttons, functions, and movement axes are currently assigned.

For default factory settings, see Electrical Joystick —Layout and Functions in this Section.

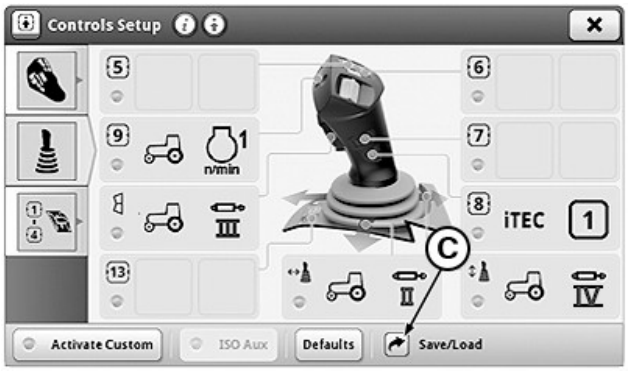
3. Select the desired motion axis (B).
4. Navigate to SCV IV and select.



LX364642—UN—10JUL20

NOTE: Only the groups and functions that are currently available appear on the display.

5. Select button (C).

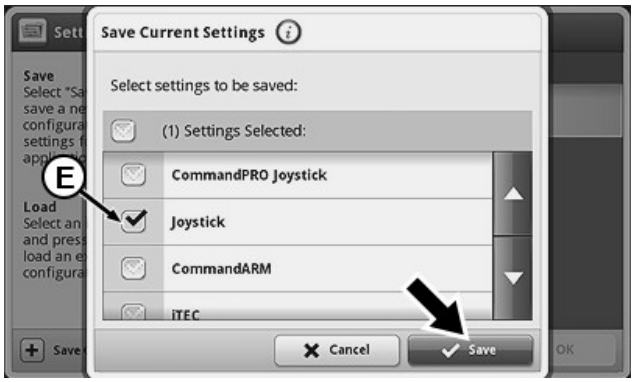


LX373157—UN—29MAY21

6. Select button (D).

LX364644—UN—10JUL20

7. Select and save joystick (E).

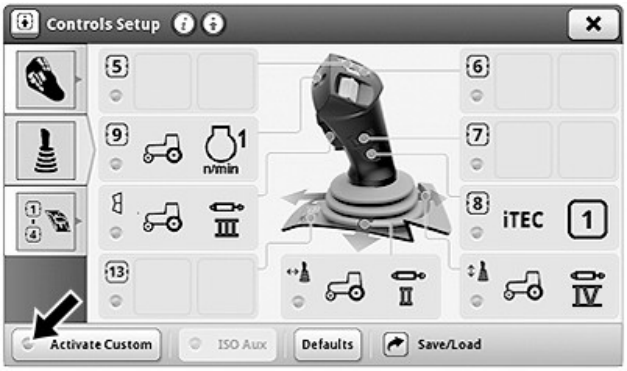


LX364645—UN—10JUL20

8. Enter selection name (F) and save with OK.

LX364647—UN—10JUL20

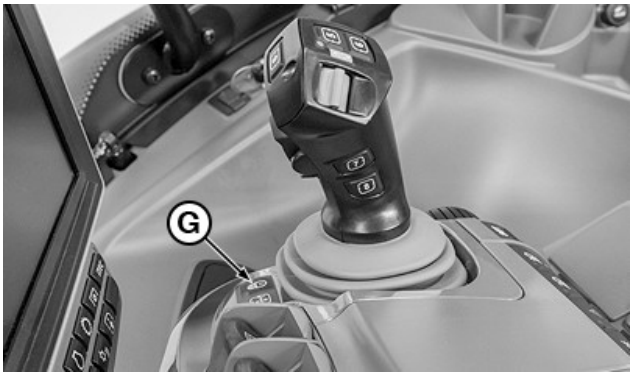
9. Use the button to activate or deactivate the custom settings. When the custom settings are active, the indicator on the button lights up.



LX373158—UN—29MAY21

When the joystick is unlocked, the indicator of the assigned controls and motion axes light up.

10. Unlock joystick with lock button (G).



LX373153—UN—28MAY21

The controls of the joystick are automatically activated at their default settings.

OULXA64,6R,0005D38-19-19JUN23

Front Loader RTP—Return-to-Position Function

RTP—Front Loader with Return-to-Position Function

Description

The return-to-position function is an automatic function for the front loader. This enables two ranges of set points to be established, each with upper and lower set points, to which the boom and bucket can move automatically. Briefly moving the joystick in the desired direction (beyond the point of perceptible resistance) initiates the automatic movement of the boom or bucket to the relevant set point.

In addition, a frequently used angle for the bucket may be stored as a zero position. This position is then displayed on the return-to-position page as 0°. Any change in bucket position is displayed in degrees (e.g. +20° or -35°) relative to the stored 0° value. To bring the bucket back to the zero position, the joystick must be moved until "0°" appears on the CommandCenter™ again. The automatic return-to-position function is active only at travel speeds up to 16 km/h (9.9 mph) maximum.

NOTE: If the front loader is replaced with a front loader with the return-to-position function, then functional errors can be expected. To ensure the fault-free function, an adjustment or calibration of the components becomes necessary after attaching a different front loader. Contact a dealer authorized by John Deere for this.

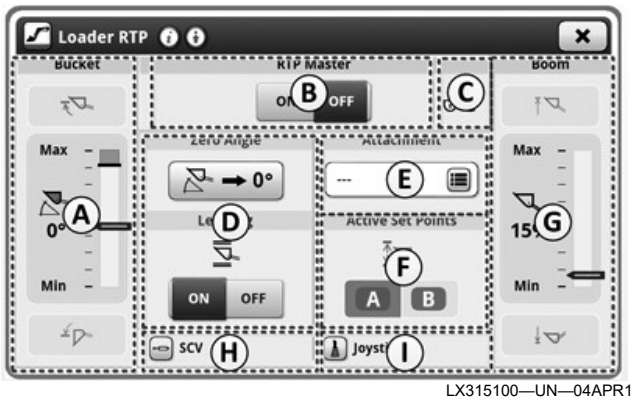
OULXA64,0005B34-19-10JUN21

RTP—Access the Return-to-Position Page

1. Access the CommandCenter™ Menu.

LX211111—UN—14MAY14

2. Select Settings tab.
3. Press front loader icon.



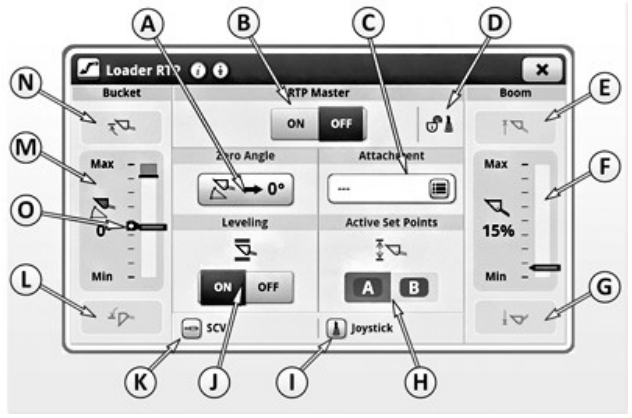
LX315100—UN—04APR18

Various Sections of the Page

A—Status and Setting of Set Points for Bucket Angle
B—Return-to-Position Toggle Switch
C—Lock Status of joystick
D—Set the Zero Point
D—Toggle Switch for Electronic Self-Leveling
E—Selection Range for Saved Implements
F—Toggle Switch for Selecting the Set Point Ranges (A or B)
G—Status and Setting of Set Points for Boom Position
H—Change to SCV Main Page
I—Change to Joystick Setup

OULXA64,0005B35-19-10JUN21

RTP—Return-to-Position Page (Functions)



LX514009—UN—01JUL21

A Softkey for saving the current bucket position as 0° position (neutral position allowing a frequently used position to be found easily).

B Softkeys for switching Return-to-Position function on and off (ON when the left softkey is grayed out).

C Display and drop-down box for selecting an implement. Various implements (and applications) can be saved here. The following settings can be saved for each implement: The set points in both ranges; flow settings of SCVs XI and XII, the characteristics of the joystick and the 0° position of the bucket.

D Display - Lock status of joystick (locked or unlocked)

E Define the top set point to which the boom should return automatically. Move the boom to the desired height and press softkey (E) to define this position as the top set point.

F Display showing the movement range of the boom and the current position (more details can be found below).

G Define the bottom set point to which the boom should return

automatically. Move the boom to the desired height and press softkey (G) to define this position as the bottom set point.

H Softkeys for toggling between the two set point ranges A and B. Two separate ranges of set points can be used for each implement. A range consists of one top and one bottom set point each for boom and bucket. On the display, different colors of the set points indicate which range is currently selected (A = blue and B = green). Toggling between A and B can also be achieved using button 8 on the joystick.

I Softkey for changing to joystick Setup (see text on electrical joystick in this Section).

J Softkeys for switching electronic self-leveling on and off. If return-to-position (B) is switched on, electronic self-leveling can be deactivated only if the front loader has mechanical self-leveling.

K Change to SCV settings (see text on Selective Control Valves in this Section).

L Define the bottom set point to which the bucket should return automatically. Move the bucket to the desired angle and press softkey (L) to define this position as the bottom set point.

M Display showing the angle of the bucket and the current position (more details can be found below).

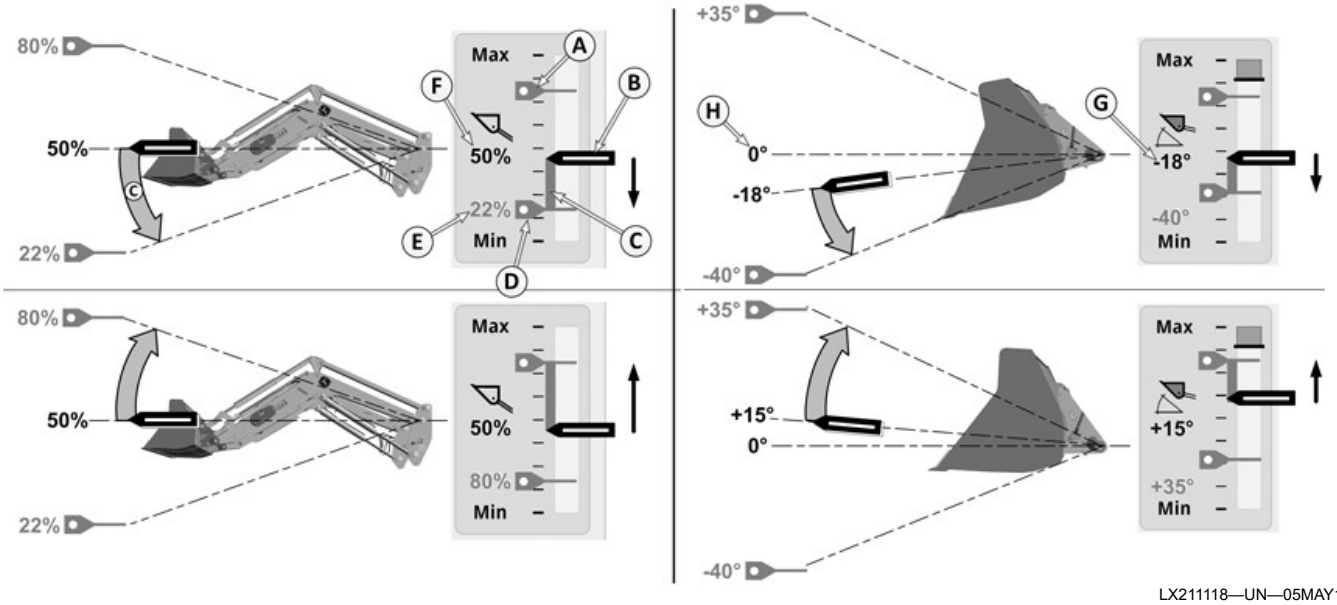
N Define the top set point to which the bucket should return automatically. Move the bucket to the desired angle and press softkey (N) to define this position as the top set point.

O This line indicates the highest point that can be reached when electronic self-leveling is active.

NOTE: If a front loader without mechanical self-leveling is installed, electronic self-leveling is activated automatically when the tractor is started. If automatic return-to-position is activated, the softkeys for switching electronic self-leveling on and off are grayed out and cannot be used.

If a front loader with mechanical self-leveling is installed, the previous electronic self-leveling setting (on or off) remains activated when the engine is started.

Display during front loader operation



LX211118—UN—05MAY14

A—Top set point, variable position to which the front loader can move automatically.

B—Position indicator showing current position.

C—A colored bar graph appears when the boom or bucket is in motion. This represents the distance that has to be traveled.

D—Bottom set point, variable position to which the front loader can move automatically.

E—This percentage corresponds to the set point to which the boom is currently moving.

F—This percentage corresponds to the current boom position in relation to maximum possible range of movement (all the way up = 100%).

G—Unlike with the boom, the bucket is represented on the display by the current angle. The displayed angle is measured from the stored zero position, see (H). A plus sign means that the current angle is above the zero position. A negative sign means that the current angle is below the zero position.

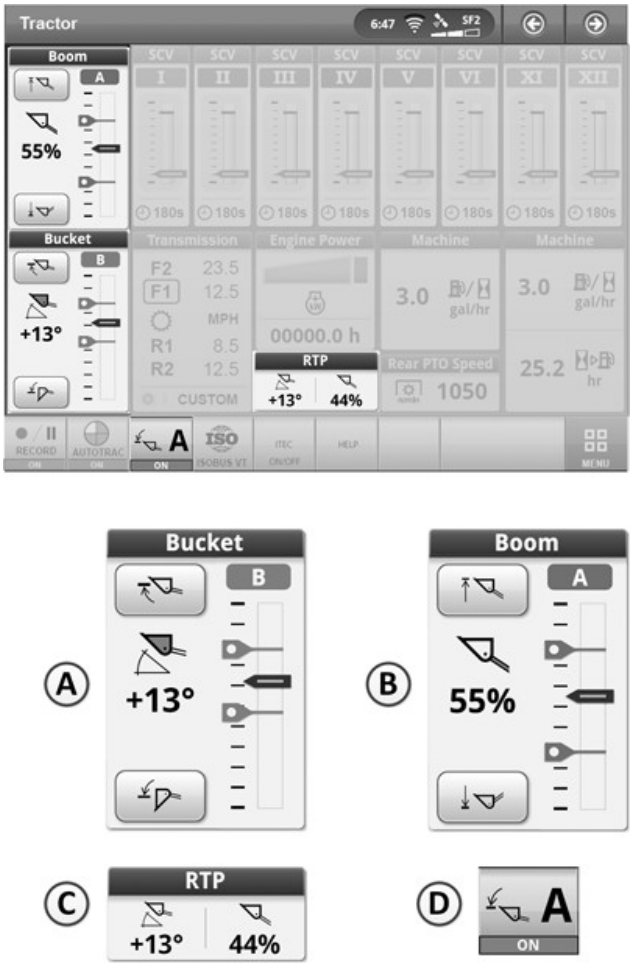
H—Zero position (0°), an adjustable position allowing a frequently used angle to be found easily. The bucket must be controlled manually.

OULXA64,0005B36-19-01JUL21

RTP—Shortcut Keys and Run Page

Shortcut keys and run pages are set up by means of the Layout Manager. See Section 30D.

Various modules are available for individual configuration of the run page.



LX211130—UN—13MAY14

The Layout shown here is only an example.

Modules and their functions:

A—Offers quick access to the bucket set points and graphically displays current position.

B—Offers quick access to the boom set points and graphically displays current position.

C—Offers quick access to the return-to-position page and indicates the value for current position of the boom and bucket.

D—Permits RTP function (automatic return-to-position) to be switched on and off. The letter on the display stands for the set point range that is currently active (A or B).

OULXA64,0005B37-19-03SEP21

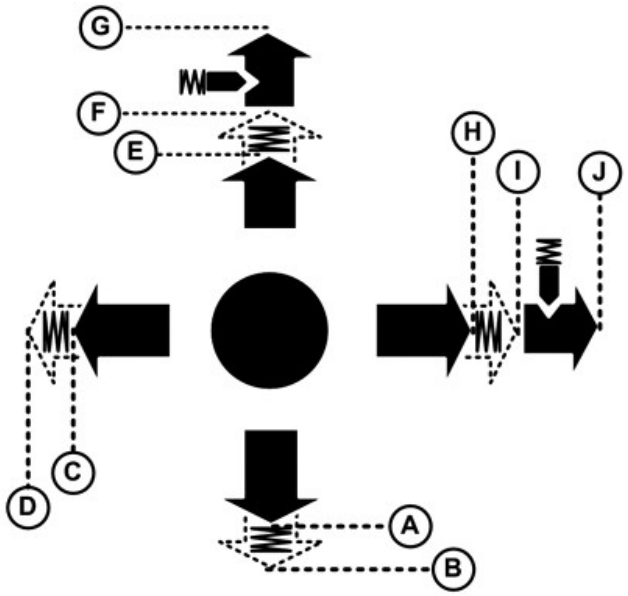
RTP—Functions of the Joystick

IMPORTANT: The return-to-position function can be stopped by moving the joystick briefly in the opposite direction. Example: Stop the boom while it is moving downward = Move the joystick to the rear (A).

NOTE: At oil temperatures below 20°C (68°F), the front loader reacts sluggishly. Automated functions can be affected by this.

For SCV settings, see Section 70C:

- *Electronic Selective Control Valves (SCVs), Set Flow Time*
- *Electronic Selective Control Valves (SCVs), Set Flow Rate*
- *Electronic Selective Control Valves (SCVs), Set Responsiveness*



LX341506—UN—31JUL18

A Set top boom position manually. Pull the joystick back until the boom is raised to the desired height. Do not move the joystick beyond the point of resistance.

B Pull the joystick back until it is **beyond** the point of perceptible resistance. This initiates the return-to-position function for the top position. The boom stops automatically at the top set point. While the boom is moving towards the set point, the lever may be moved back to its neutral position. The operator's hand must remain on the lever until the procedure has been completed (not for all markets).

C Set top bucket's position manually. Move the joystick to the left until the bucket reaches the desired position. Do not move the lever beyond the point of resistance.

D Pull the joystick to the left until it is **beyond** the point of perceptible resistance. This initiates the return-to-position function for the top position. The bucket stops automatically at the top set point.
While the bucket is moving towards the set point, the lever may be moved back to its neutral position. The operator's hand must remain on the lever until the procedure has been completed (not for all markets).
Bucket shake function: Move the joystick to the left twice in brief succession beyond the point of resistance and hold it there. This activates the bucket shake function.

E Set bottom boom's position manually. Push the joystick forward until the boom is lowered to the desired height. Do not move the lever beyond the point of resistance.

F Push the joystick forward until it is **beyond** the point of perceptible resistance. This initiates the return-to-position function for the bottom position. The boom stops automatically at the bottom set point.
While the boom is moving towards the set point, the lever may be moved back to its neutral position. The operator's hand must remain on the lever until the procedure has been completed (not for all markets).

G Push the joystick all the way forward and engage in detent to activate the boom float position. The lever remains in the detent until it is pulled back by hand.

H Set bottom bucket's position manually. Press the joystick to the right until the bucket has been lowered to the desired height. Do not move the lever beyond the point of resistance.

I Move the joystick to the right until it is **beyond** the point of perceptible resistance. This initiates the return-to-position function for the bottom position. The bucket stops automatically at the bottom set point.
While the bucket is moving towards the set point, the lever may be moved back to its neutral position. The operator's hand must remain on the lever until the procedure has been completed (not for all markets).
Bucket shake function: Move the joystick to the right twice in brief succession beyond the point of resistance and hold it there. This activates the bucket shake function. This function stops when the lever leaves its click position.
It is recommended to engage the bucked shake function by moving the joystick to the left, see (D).

J Move joystick all the way to the right and engage in detent to activate the bucket float position. The lever remains in the detent until it is pulled back by hand.

LX373165—UN—29MAY21

8 Button No. 8 is used to toggle between Range A and Range B and back again.

OULXA64,0005B38-19-30MAR23

RTP—Enable Use of the Function

To be able to use the RTP function, the selective control valves XI and XII must be assigned to a single operating element, e.g. the electric joystick. Depending on the region, the RTP function can only be assigned to controls with hand detection.

Below, RTP with assignment of SCV XI and SCV XII to the electric joystick is described.

See also Section 30C, Controls with Variable Functions and the instructions for setting up controls.

OULXA64,0005B39-19-10JUN21

RTP—Prepare the Joystick

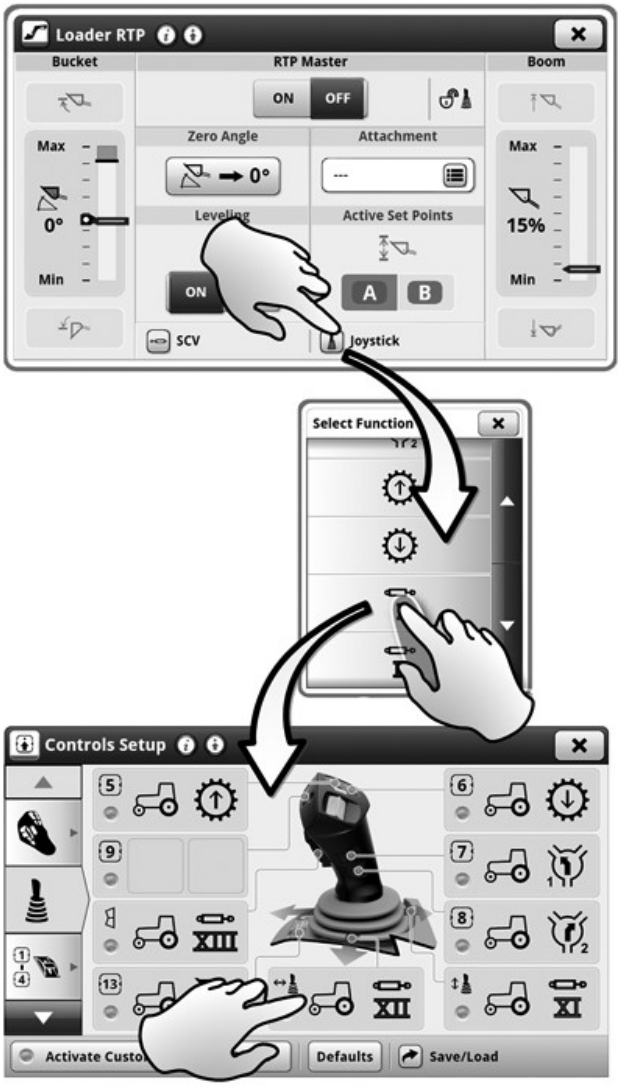
Assign Axes of Movement

IMPORTANT: This is an example of how the two axes of movement on the joystick can be assigned to control a front loader. Other settings can be made; they are outlined in Electrical Joystick.

NOTE: These functions can be assigned to other controls as well. See the relevant controls setup pages.

Recommended Settings for Axes of Movement on Joystick

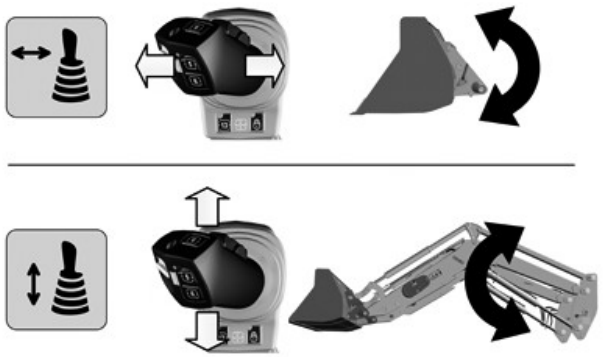
Joystick:	Function:	Selective Control Valve:
Forward	Boom downward	SCV XI
Rearward	Boom upward	SCV XI
To right	Bucket down	SCV XII
To left	Bucket up	SCV XII



LX373159—UN—19AUG21

Assign a Function to an Axis of Movement

When assigning a function, pay attention to the meaning of the icons (see illustration).

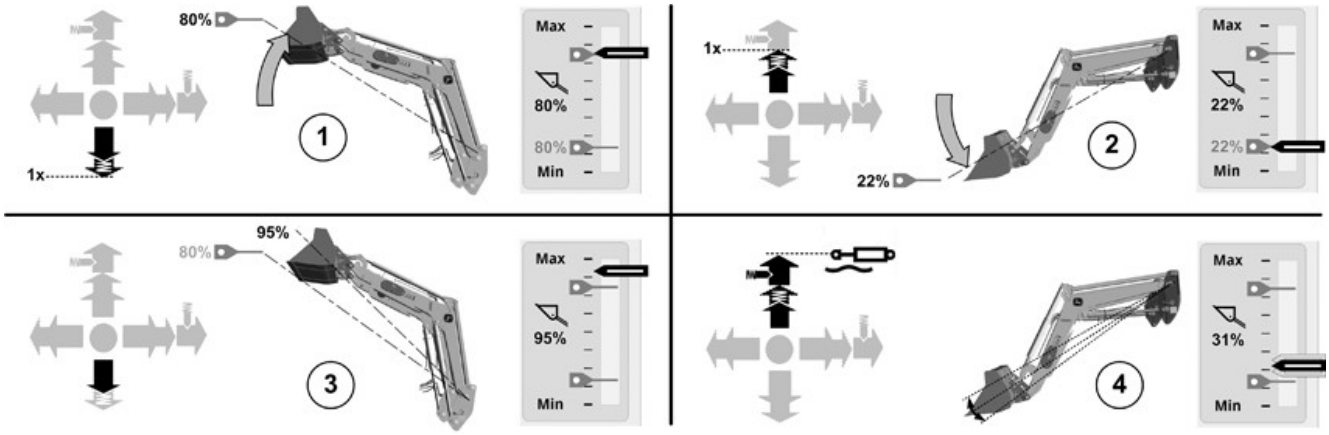


LX373160—UN—27AUG21

Meaning of Icons

OULXA64,0005B3A-19-03SEP21

RTP—Operate the Boom



LX211120—UN—19MAY14

1. Return-to-position, top position - Move lever back beyond the point of resistance.
2. Return-to-position, bottom position - Move lever forward beyond the point of resistance.
3. Raise boom above top set point - Pull lever back without passing the point of resistance.
4. Float position - Engage lever in forward detent.

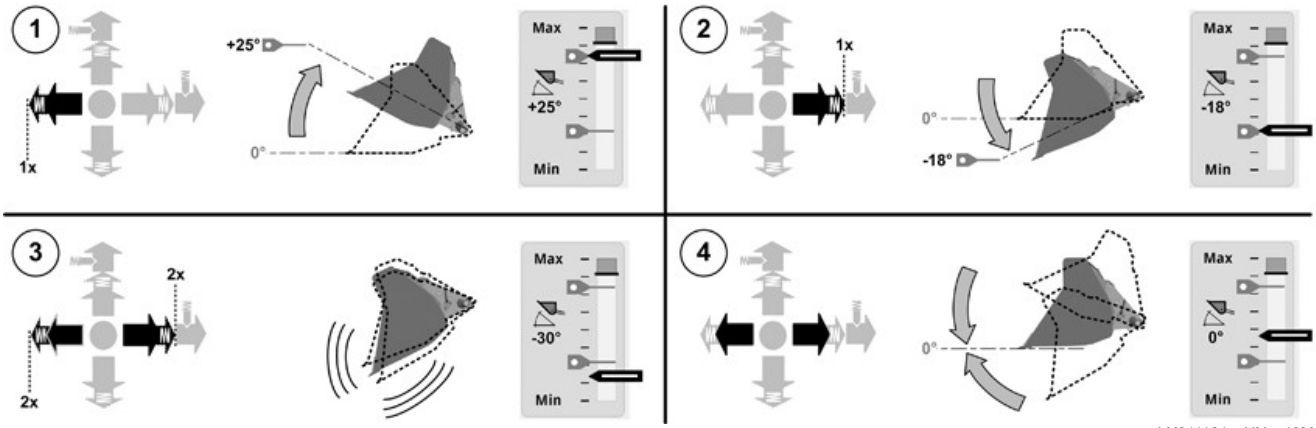
To stop a movement: Move lever briefly in opposite direction, and release.

NOTE: Automatic return-to-position in the downward direction can be initiated only if the starting point is above the bottom set point. Automatic return-to-position in the upward direction can be initiated only if the starting point is below the top set point.

The operator must keep his hand on the joystick while the front loader is in operation (European version only).

OULXA64,0005B3B-19-10JUN21

RTP—Operate the Bucket



LX211121—UN—19MAY14

1. Return-to-position, top position - Move lever to the left beyond the point of resistance.
2. Return-to-position, bottom position - Move lever to the right beyond the point of resistance.
3. Additional "shake" function - Move the lever to the right or left twice in brief succession beyond the point of resistance and hold it there.
4. Move bucket to zero position - Move the lever to right or left (without passing the point of resistance) until 0° appears on the display.

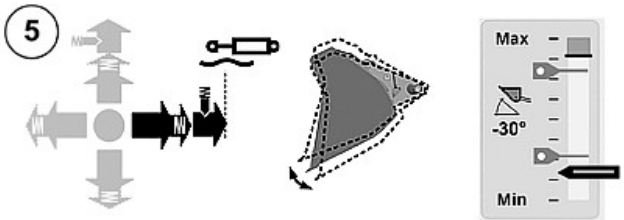
*NOTE: The bucket must always be moved manually until **0°** appears on the display.*

To stop a movement: Move lever briefly in opposite direction, and release.

NOTE: Automatic return-to-position in the downward direction can be initiated only if the starting point is above the bottom set point. Automatic return-to-position in the upward direction can be initiated only if the starting point is below the top set point.

The operator must keep his hand on the joystick while the front loader is in operation (European version only).

5. Float position - Engage lever in right detent.



LX211129—UN—19MAY14

Float Position

OULXA64,0005B3C-19-10JUN21

RTP—Select and Save an Implement

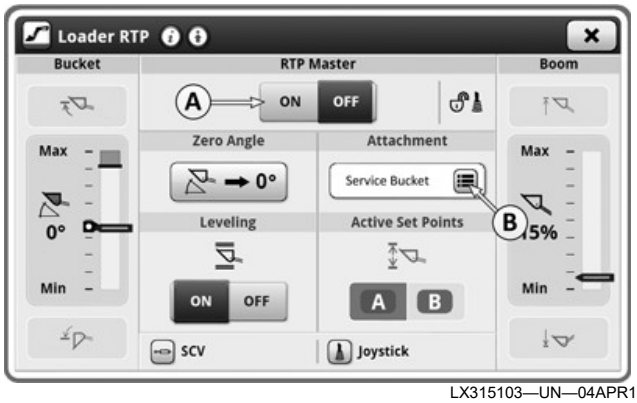
Front loaders may be equipped for a variety of different applications. These include implements such as round-bale spikes, pallet forks, manure forks, grapple buckets, and many more. These can be re-arranged in the implement drop-down box so that custom settings can be saved for the next application. Settings that are saved are:

- Set points of the two ranges
- Flow settings of SCVs XI and XII

- Characteristics of the joystick
- 0° position of bucket

Enter a new implement:

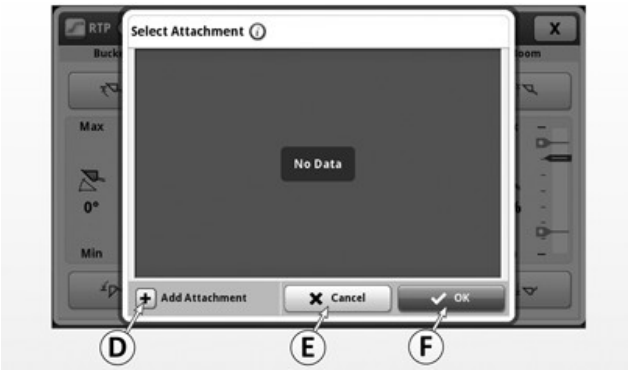
1. Open the Return-to-Position page and press softkey (A) to engage the return-to-position function.



LX315103—UN—04APR18

NOTE: At tractor start-up, the return-to-position function is always switched off.

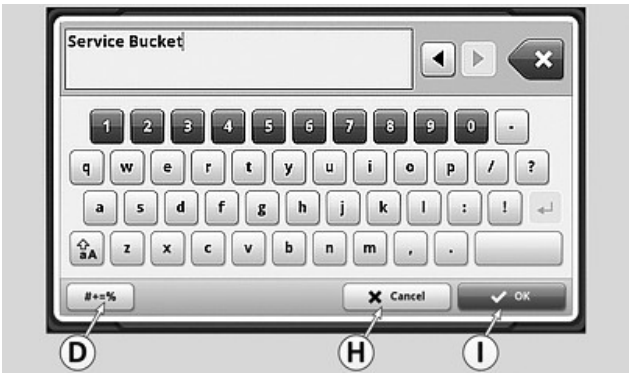
2. Open drop-down box (B) to key in an implement.
3. Press softkey (D) to add a new implement. A new box opens for entering the name of the implement.



LX211123—UN—06MAY14

D—Add Implement
E—Cancel Procedure
F—Confirm Selection

4. Use the keyboard to type in a name that must not have more than 14 characters.



LX211124—UN—06MAY14

- To select special characters, press softkey (D).
- The procedure can be aborted using softkey (H).

NOTE: Up to 10 implements can be stored.

5. Once the name has been typed in, confirm it with softkey (I).
6. Once an implement has been saved successfully, it can be accessed using the drop-down box for implements (see Select an Existing Implement).

Select an existing implement:

1. Open the Return-to-Position page and press softkey (A) to engage the return-to-position function.

LX315104—UN—04APR18

A—Switching Return-To-Position On and Off
B—Window for Displaying the Active Implement and Opening the Drop-Down Box
C—Select Set Point Range A or B for the Active Implement

2. Press (B) to make the drop-down box with the list of implements appear on the display.
3. All implements that have been entered appear on the display one above the other.

LX211126—UN—06MAY14

J—Confirm Selection
K—Cancel Procedure
L—Add Implement

Select desired implement by pressing it (then the name of the implement is highlighted). Use softkey (J) to confirm the selection.

4. Press softkey (M) to edit the selection. Press softkey (N) to delete the selection.
5. Press softkey (K) to cancel the procedure.
6. Press softkey (L) to add a new implement.
7. After an implement has been selected, it appears on the Return-To-Position page at (B).

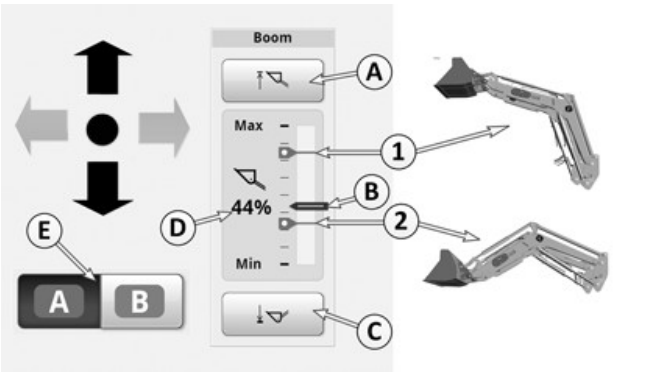
   Now the set points that have already been determined for this implement may be used. See RTP—Set the Return-to-Position Function to edit the set points.

NOTE: If set points are changed, the new settings are automatically assigned to the currently selected implement.

OULXA64,0005B3D-19-10JUN21

RTP—Set the Return-to-Position Function

Set set points for the rocker



LX211116—UN—19MAY14

A—Setting the Top Set Point
B—Position Indication
C—Setting the Bottom Set Point
D—Percentage Indicator
E—Softkey for Toggling Between Two Ranges of Set Points

1—Top Set Point Mark
2—Bottom Set Point Mark

1. Use softkey (E) to select one of the two set point ranges, A or B.

NOTE: Two separate ranges of set points may be edited for each implement. A range consists of one top and one bottom set point each for boom and bucket. On the display, different colors of the set points indicate which range is currently selected (A = blue and B = green).

2. **Specifying the top set point:** Push the joystick forward or pull it back until the boom reaches its desired height. Press softkey (A) to save the top position. The top set point is indicated by mark (1).
3. **Specifying the bottom set point:** Push the joystick forward or pull it back until the boom reaches its desired height. Press softkey (C) to save the bottom position. The bottom set point is indicated by mark (2).

IMPORTANT: For 4-cylinder tractors with front loader 640R/643R: If stops are mounted on the piston rod of the rocker, the lowest reachable percent point "0" cannot be reached. Refer also to the Operator's Manual of the front loader.

4. Value (D) always shows the percentage height of the rocker in relation to the maximum travel.

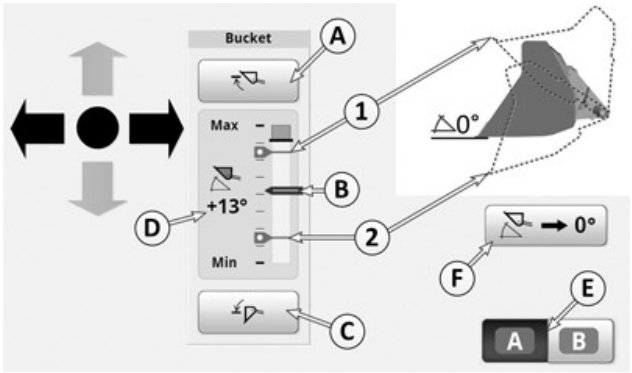
   Boom at top endpoint = 100%

   Rocker at bottom stop = 0%

5. Position indicator (B) always moves to show the current height of the rocker.

NOTE: The top set point always has to be above the bottom set point. The bottom set point must always be below the top set point

Set set points for the bucket



LX211117—UN—19MAY14

A—Setting the Top Set Point
B—Position Indication
C—Setting the Bottom Set Point
D—Bucket Angle Indicator
E—Softkey for Marking Zero Point

F—Softkey for Toggling Between Two Ranges of Set Points
1—Top Set Point Mark
2—Bottom Set Point Mark

1. Use softkey (E) to select one of the two set point ranges, A or B.

NOTE: Two separate ranges of set points may be edited for each implement. A range consists of one top and one bottom set point each for boom and bucket. On the display, different colors of the set points indicate which range is currently selected (A = blue and B = green).

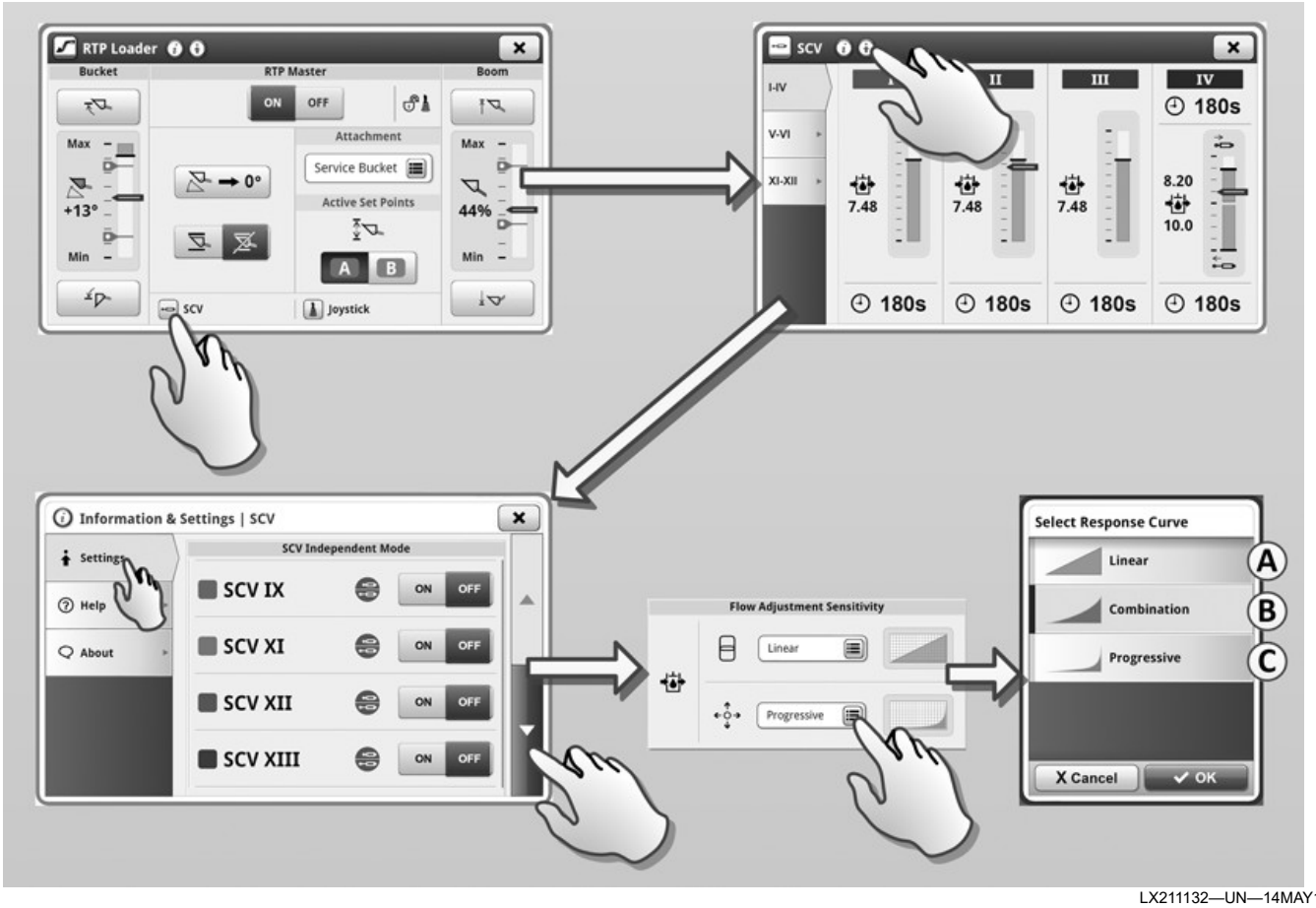
2. **Determine set point for bucket angle upward:** Move the joystick right or left until the bucket reaches the desired angle. Press softkey (A) to save the top position. The top set point is indicated by mark (1).
3. **Determine set point for bucket angle downward:** Move the joystick right or left until the bucket reaches the desired angle. Press softkey (C) to save the bottom position. The bottom set point is indicated by mark (2).
4. Softkey (F) is used to mark any desired zero point within the bucket's range of movement. This permits a frequently required bucket position to be found again. Movement towards this point must be made manually.

   Reset to 0: Move the bucket to any desired position and press softkey (F) to change the angle on the display to 0°.
5. **Angle indicator (D):** Always indicates the current bucket angle in relation to a freely selectable zero point (0°). If the bucket moves **above** this point, values appear with a positive sign (+). If the bucket moves **below** this point, values appear with a negative sign (—).

NOTE: The top set point always has to be above the bottom set point. The bottom set point must always be below the top set point

OULXA64,0005B3E-19-28MAR23

RTP—Set the Responsiveness



LX211132—UN—14MAY14

The reactions of the boom and bucket movements to

commands from the joystick can be changed by altering the SCV throughflow (SCVs XI and XII) and by altering the characteristics of the joystick. This affects how the front loader responds if a return-to-position function is equipped.

Navigate to Settings as shown in the graphic.

Select desired characteristic:

A—Linear = Speed remains constant until final position is reached (abrupt stop).
B—Combination = Speed drops off just before final position is reached.
C—Progressive = Speed drops off gradually as final position is reached (very gentle stop).
Confirm setting with the OK button.

NOTE: See also text concerning selective control valves and joystick in Section 70C.

OULXA64,0005B3F-19-10JUN21

Front Loader Functions RTP—ESL and LTH

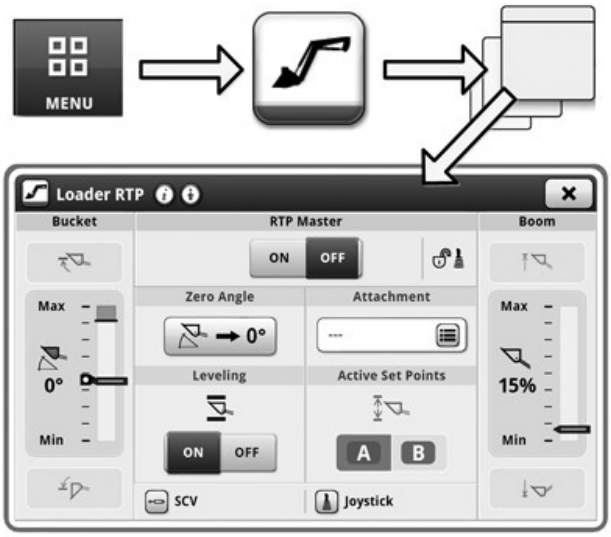
Front Loader Functions—Automatic Tool Alignment

NOTE: At oil temperatures <20°C (68°F), the front loader reacts sluggishly. Automated functions can be affected by this.

RTP Return-to-Position: Automatically bring loader boom and loader tool to a preselected position. Descriptions are found in Section RTP — Front Loader with Return-to-Position Function.

ESL Electronic Self-Leveling: Function of the loader tool.

LTH Leveling to Horizon: Function that automatically keeps the loader tool in a horizontal position during changing driving conditions.



LX299261—UN—27FEB18

Switch On ESL or LTH

OULXA64,0005B31-19-17MAR21

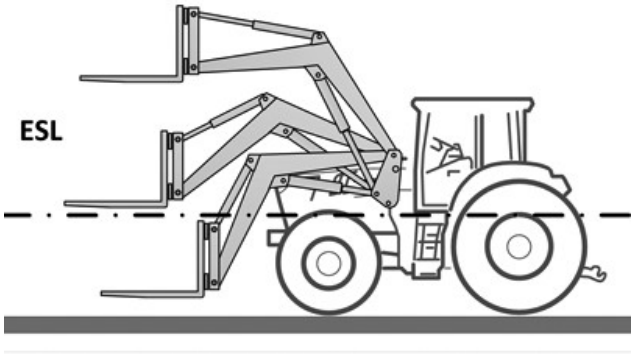
ESL—Electronic Self-Leveling

Operating modes are preselected in the advanced settings. There you can choose between ESL and LTH. Switching on and off takes place via the "Loader RTP" page or via a run page module. See Front Loader Functions, Automatic Tool Alignment.

LX299271—UN—18DEC17

Preselect ESL

When lifting or lowering the loader boom, the angle of the loader tool to the tractor always remains the same.



LX299270—UN—14DEC17

Electronic Self-Leveling

Since the front loader tool always maintains the same angle to the tractor, it can lead to the spillage of cargo when driving over uneven terrain. To avoid this, select the LTH operating mode (leveling to horizon).

LX299269—UN—14DEC17

Behavior of ESL Over Bumps

OULXA64,0005B32-19-17MAR21

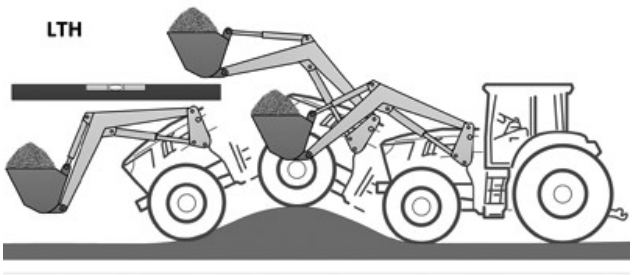
LTH—Leveling to Horizon

Operating modes are preselected in the advanced settings. There you can choose between ESL and LTH. Switching on and off takes place via the "Loader RTP" page or via run page modules. See Front Loader Functions, Automatic Tool Alignment.

LX299266—UN—18DEC17

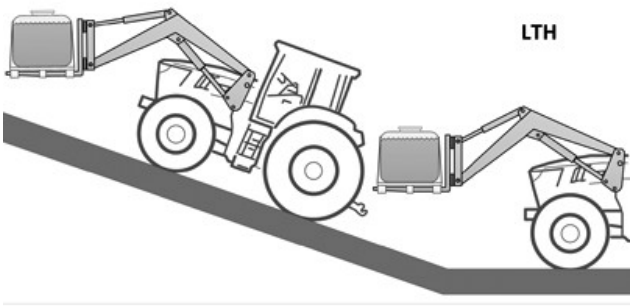
Preselect LTH

Regardless of the driving situation (uphill or downhill), the loader tool is aligned parallel to the horizon at the set angle.



LX299267—UN—14DEC17

LTH, Application Example



LX299268—UN—14DEC17

LTH, Application Example

NOTE: LTH is automatically disabled:

– At speeds below 0,5 km/h (0.3 mph).

– When the electric joystick lock is activated.

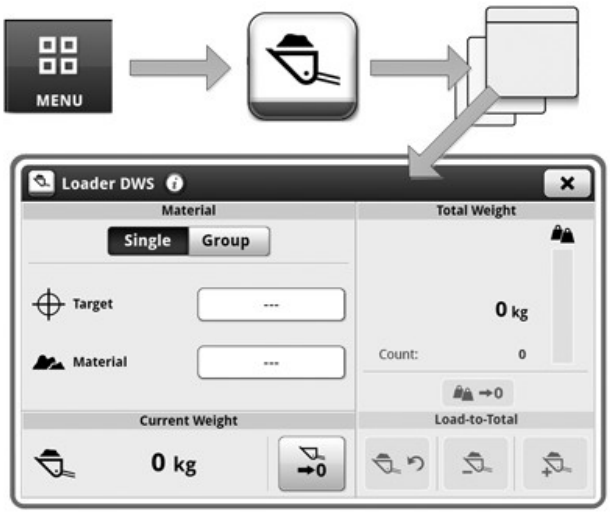
– When another lock button of controls of the SCVs XI and XII is activated.

– If an error has been detected in the system.

OULXA64,0005B33-19-17MAR21

Front Loader Function—Dynamic Weighing System DWS

DWS = Dynamic Weighing System. System for recording weights and quantities. Basic functions of the dynamic weighing system can be used without further preparations. Advanced features are available after materials have been specified.



LX299262—UN—18DEC17

Access DWS

DWS—Basic functions:

- Measure the weight of the load and add up the weights of the individual fills.
- Count the loading cycles.
- Define a target weight and load it until the target weight is reached.

DWS—Advanced functions:

- Define and save materials.
- Define and save material groups (e.g. feed mixes).
- Define unit loads and bulk material, which determines whether the number of units or the weight in kg should be displayed larger.
- Define the number of units per loading process. This means how many units, e.g. straw bales, are picked up simultaneously by the loader.

In order to ensure accurate measurement of weights, pay attention to the following:

- *Oil temperature above +20°C (+68°F).*
- *Move all hydraulic cylinders of the front loader several times over the entire stroke before weighing.*

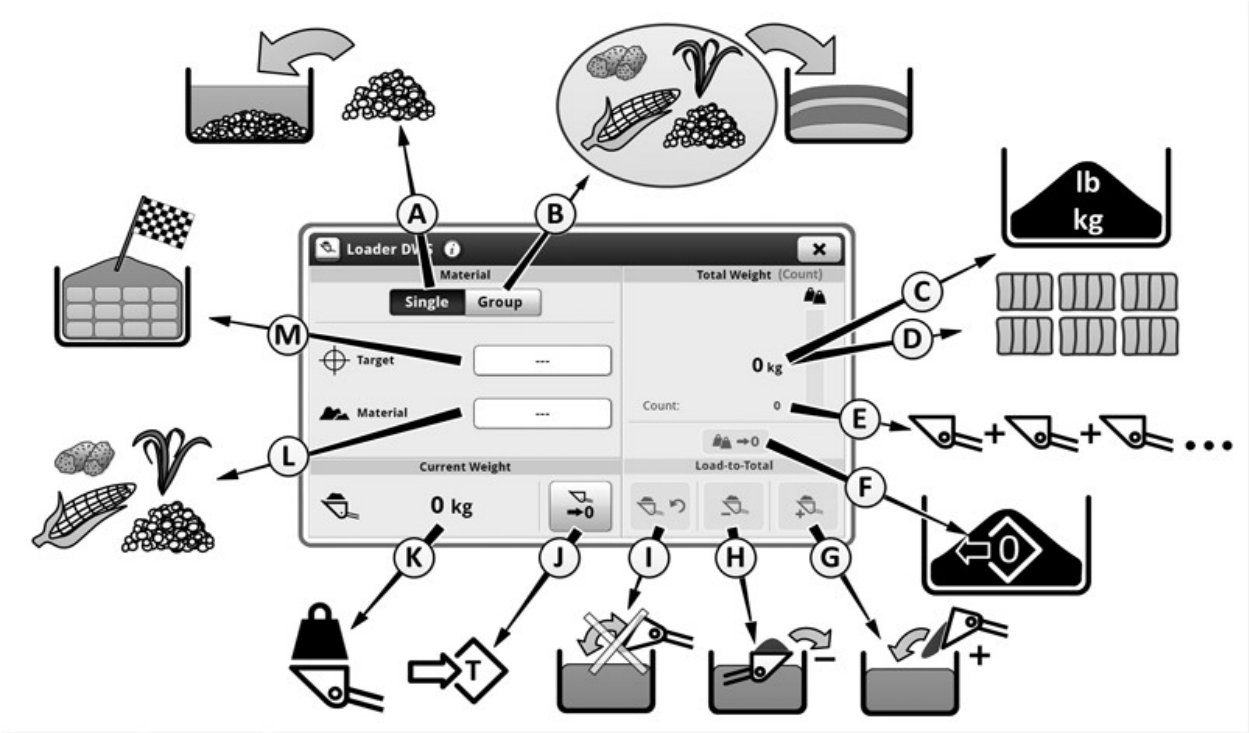
The system monitors the operational readiness and informs the driver if the weighing system is not yet ready.

IMPORTANT: The weight cannot be recorded when the hydraulic cylinders of the loader are at one of the end stops. Weighing is only possible if the bucket or boom is NOT fully raised. To get a weight result, move the bucket or boom until it no longer touches the end stop.

OULXA64,0005D67-19-01JUL21

DWS—User Interface

Functions of the page Loader DWS



LX299272—UN—16JAN18

User Interface Loader DWS

A—Load Single Material
B—Load Material Group
C—Already Loaded Total Weight (with bulk material)
D—Already Laded Quantity (for unit loads)
E—Number of Lading Cycles performed
F—Reset Total Weight to Zero
G—Add Current Weight or Quantity to Total weight*
H—Subtract Current Weight or Quantity from the Total Weight
I—Undo Last Action
J—Zeroize the Tare Weight of the Empty Loader Tool (bucket, grapple, or other)
K—Current Weight in the Loader Tool (bucket, grapple, or others)
L—Materials or Material Groups
M—Target Weight or Target Quantity

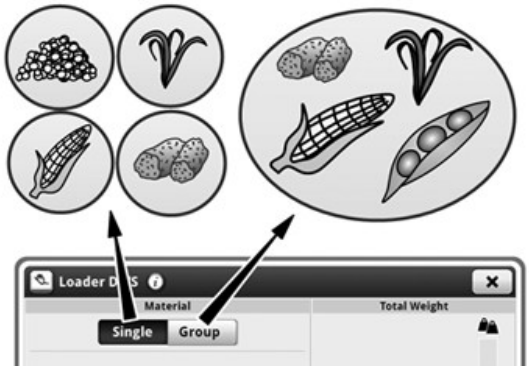
* The function (G) can be assigned to a reconfigurable button of the electric multi-function lever.

OULXA64,0005D68-19-31MAY21

DWS—Single Material and Material Groups

On the Loader DWS page, a distinction is first made as to whether a single material or a material group should be used.

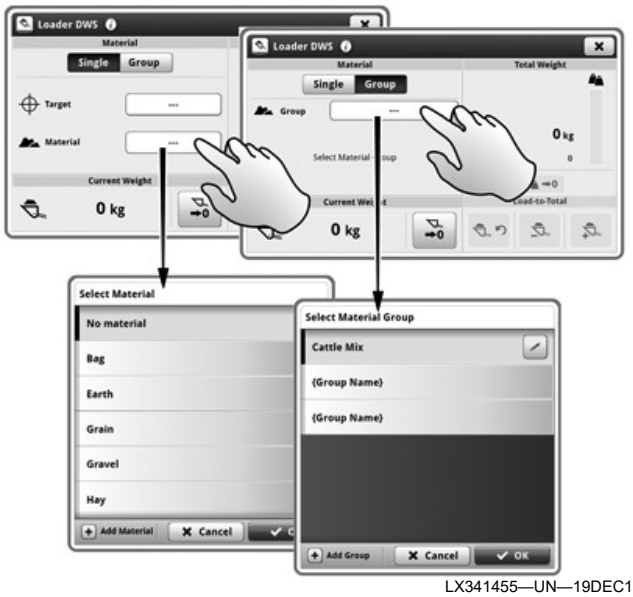
1. Open Loader DWS page.
2. Select type of material:
   - Load single material, e.g. pellets (bulk material) or straw bales (unit loads)
   - Assemble material group (mixture of different bulk materials, for example for feed mixtures)



LX299273—UN—21DEC17
OULXA64,0005D69-19-31MAY21

DWS—Select Type of Material

1. Open Loader DWS page.
2. Choose single material or material group.



LX341455—UN—19DEC17

3. Open selection box for Material or Material Group.
4. Then the list of all existing materials or material groups is displayed.
5. Make your selection and confirm with OK.
6. The properties of existing entries can be edited. To edit the properties, press the pencil icon. See also DWS—Create and Save Single Materials and DWS —Create and Save Material Group.

LX341476—UN—17JAN18

Change Properties

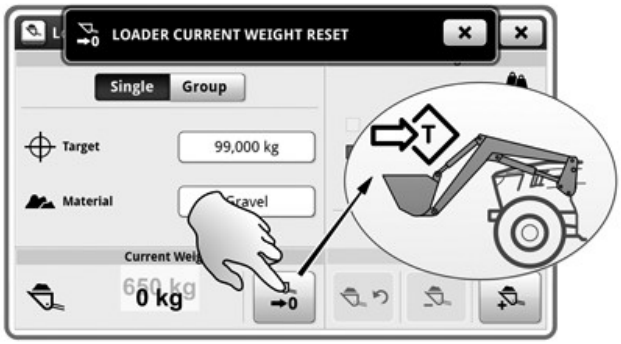
OULXA64,0005D6A-19-31MAY21

DWS—Set Tare Weight to Zero

IMPORTANT: After each tool change, set the tare weight to zero.

1. Open Loader DWS page.
2. Lift the front loader without load from the ground and press the button for "Tare".
3. The currently shown weight (dead weight) is set to zero.

   User information is displayed that confirms the process.



LX341459—UN—21DEC17

Tare

4. During loading, always make sure that zero is displayed when the loader tool is empty.

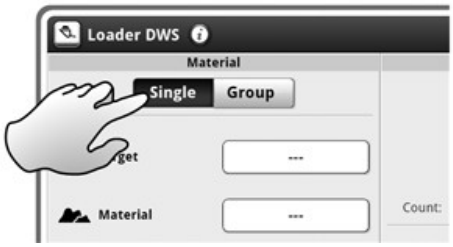
IMPORTANT: A wrong tare weight leads to inaccuracies when measuring weights. If a weight is shown in the display even though the loader tool is empty, it needs to be reset to zero (tare). The indication of a weight could indicate that wet, sticky material for example is stuck in the bucket.

OULXA64,0005D6B-19-23SEP21

DWS—Load without Target Weight Input

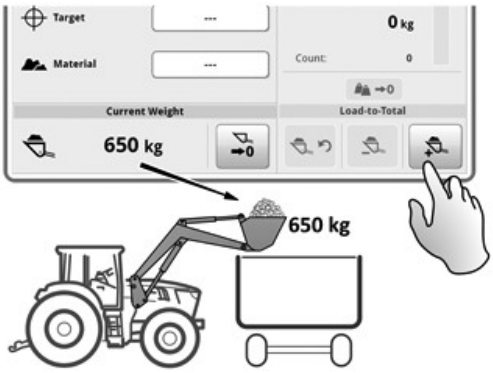
Without having made adjustments, weights or quantities can be measured and added. This function can be used for both bulk and unit materials.

1. Open Loader DWS page.
2. Select Single material.



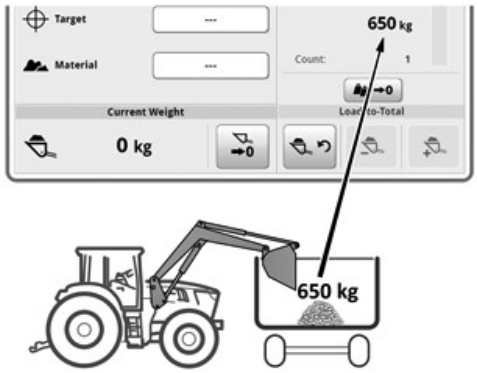
LX341464—UN—22DEC17

3. Lift the front loader off the ground and set the dead weight to zero (tare).
4. Pick up material and apply the current weight by pressing the "Add weight" button.



LX341460—UN—22DEC17

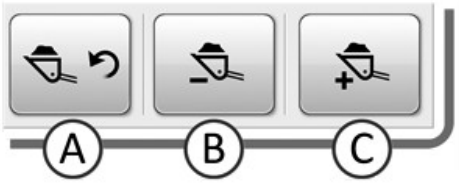
5. After reading in the weight, the value is transferred to the status display and the current weight of the loader is reset to zero. By repeating the process, all subsequent weights of the fills are added to the existing weight.



LX341461—UN—22DEC17

NOTE: If necessary, the current weight of the material in the loader can be deducted from the total weight already reached. For example, if a trailer has been overloaded and therefore part of the cargo has to be removed. To do this, press the corresponding key.

6. Functions of buttons::



LX341473—UN—09JAN18

A—Undo Last Action
B—Subtract the Weight of the Current Fill (or number of units)
C—Add the Weight of the Current Fill (or number of units)

7. The displayed total weight is reset to zero with the button shown. Afterwards a new loading process can be started.

LX341463—UN—22DEC17

Set Status Indicator to Zero

OULXA64,0005D6C-19-31MAY21

DWS—Joystick, Assign Function of Button

To make work easier, the adding of weight can be done using one of the upper buttons on the multi-function lever. In the example, shown by button 6.

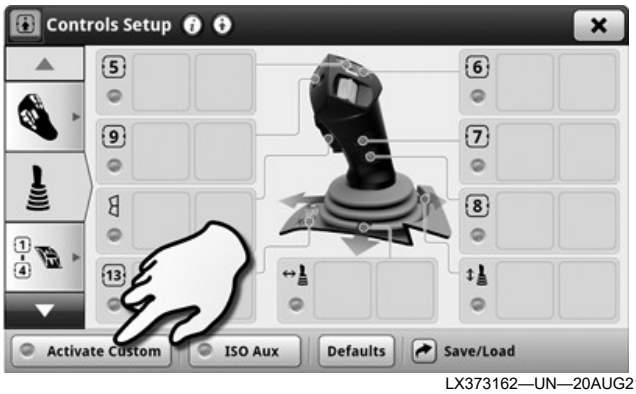
1. **Assign function (example):**

   Press the Menu button and then the Control Settings button.

LX373161—UN—19AUG21

Example Button 6

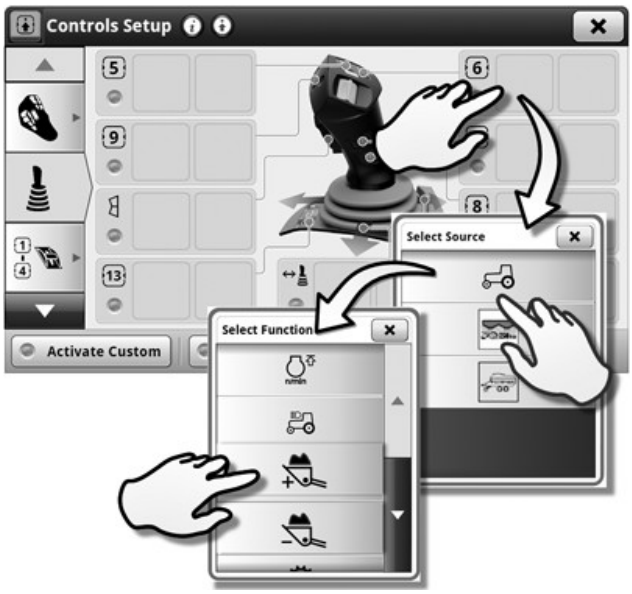
2. Press the user settings button.



LX373162—UN—20AUG21

Example Button 6

3. Press selection box for button 6, select tractor function, and assign function.



LX373163—UN—20AUG21

Example Button 6

4. The display confirms the assignment of the function to button 6 of the multi-function lever.

LX373164—UN—20AUG21

Also see Controls Setup, Assignment of Functions in Section 30C.

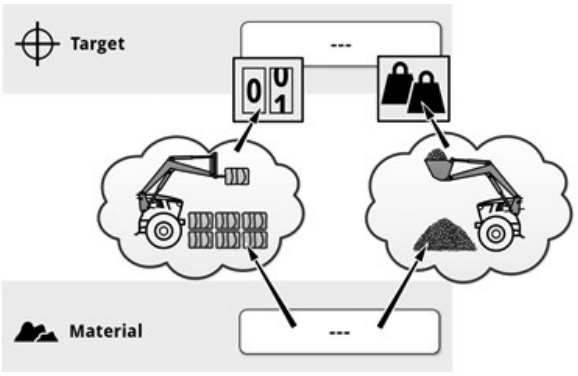
OULXA64,0005D6D-19-02SEP21

DWS—Load with Specification of Target Weight or Number of Units

The loading can be carried out selectively until reaching a predetermined total weight or a predetermined number of units. This function can be used for both bulk and unit materials. The type of material determines whether the display shows a weight or a number of units.

NOTE: Only one target weight can be selected for a "Single material." The total weight of a material group results from the sum of all target weights of the single materials contained.

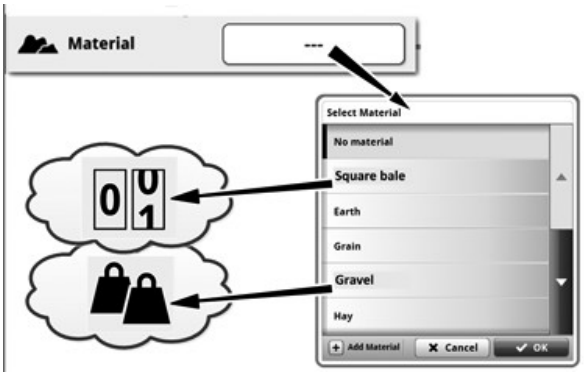
1. Open Loader DWS page and select "Single material."
2. Enter the target weight or number of units for the planned loading process. The material selection decides whether number of units or weight is displayed. Therefore, preferably, first select a material. See also DWS—Create and Save Single Materials.
   - Display of weight when loading bulk material (e.g. corn or sand).
   - Display of number of units when loading unit materials (e.g. bales of straw).



LX341458—UN—17JAN18

Target Weight or Number of Unit Entry

3. Select custom material to specify if the target of the load is a weight or a number of units.



LX341472—UN—09JAN18

NOTE: If unit material (for example bales of straw) is selected, note: Always load as many bales of straw at the same time as the load was predefined for this unit material. Otherwise, the total sum of the count is incorrect.

4. Open input box for target weight and enter the desired target weight. If the selected material is unit material, a number of units are entered. Confirm with OK.

LX341467—UN—09JAN18

5. The value for the target weight or the number of units is shown in the display (a weight is shown in the example).

LX341468—UN—09JAN18

6. Lift the front loader without load off the ground and set the dead load to zero (tare).
7. Start loading and press the Add button before dumping or stacking the current load. The add function can be assigned to one of the top buttons of the multi-function lever. See DWS—Joystick, Assign Function of Button.

LX341474—UN—17JAN18

Add Weight or Number of Units

NOTE: After pressing the Add button, a beep is heard and the button is deactivated (grayed out) for about 5 seconds. This prevents multiple measurements during the same loading cycle.

8. The status display informs about the currently loaded weight and the value that is still missing for reaching the target weight. The right bar indicates in green color the progress of the loading.

LX341486—UN—11JAN18

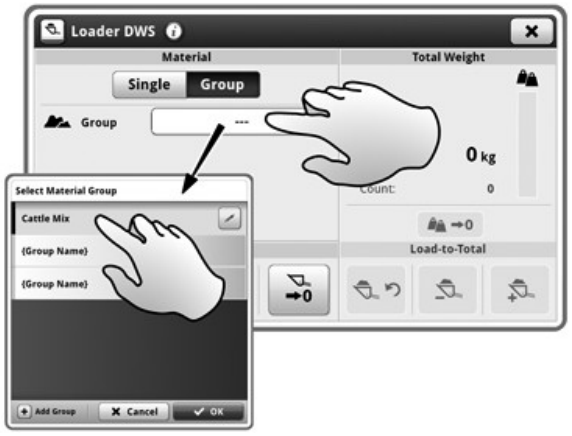
Status Indicator

OULXA64,0005D6E-19-23SEP21

DWS—Load a Material Group

The prerequisite is that material groups have been saved. See DWS—Create and Save Material Groups. Materials of a group can be loaded in any order. The loading of a material can be interrupted and completed at a later date.

1. Open Loader DWS page.
2. Select material group.
3. Open selection box for material group and select desired material group.

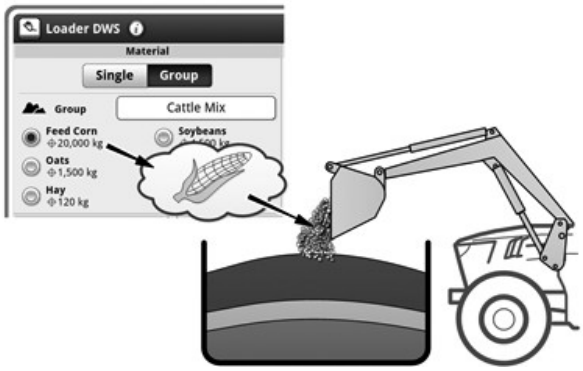


LX341482—UN—11JAN18

4. The material group is displayed on the basis of a material list and can consist of a maximum of six materials.

LX341481—UN—11JAN18

5. Activate the material to be loaded (e.g. feed corn) and start loading process. The listed materials can be loaded in any order.



LX341483—UN—11JAN18

NOTE: The loading of a material can be interrupted and completed at a later date. In the meantime, another material of the group can be loaded. To do this, activate another material in the display.

6. The status indicator informs about the currently loaded weight and the value missing until the target weight is reached. The right bar indicates in green color the progress of the loading of the material.

LX341486—UN—11JAN18

LX341484—UN—11JAN18

Display as Long as Target Weight is Not Reached

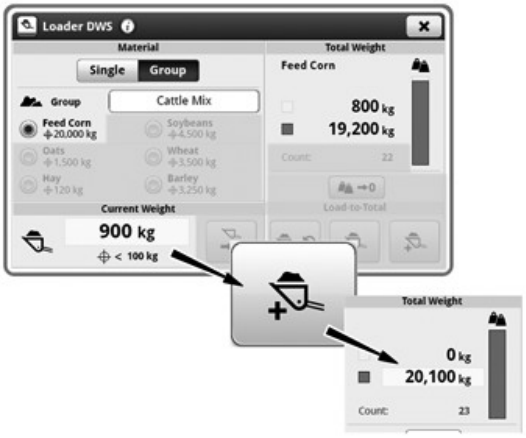
LX341485—UN—11JAN18

Display Once Target Weight is Reached

7. Repeat step (5) for all materials in the material group.

Last load: The DWS application will alert the driver if adding the current load would exceed the desired target weight.

Example for adjacent figure:

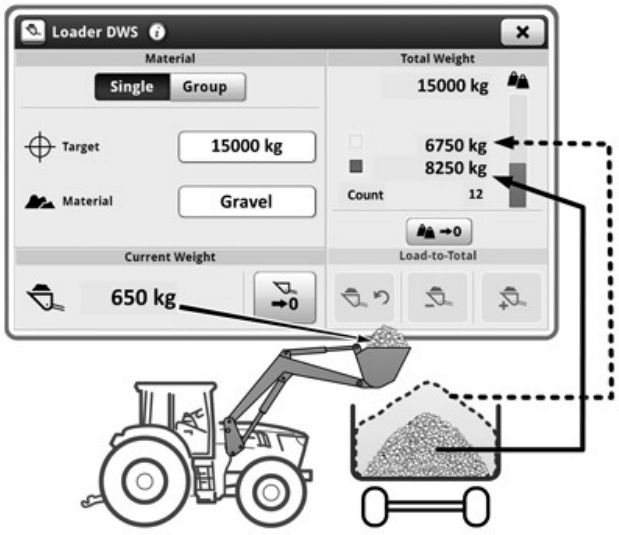


LX341488—UN—11JAN18

- Target weight: 20000 kg
- Already loaded: 19200 kg
- Remainder until target weight: 800 kg
- Currently 900 kg in the bucket
- Note at the bottom left of the display **Target < 100 kg** means: Adding the current 900 kg would exceed the target weight by 100 kg

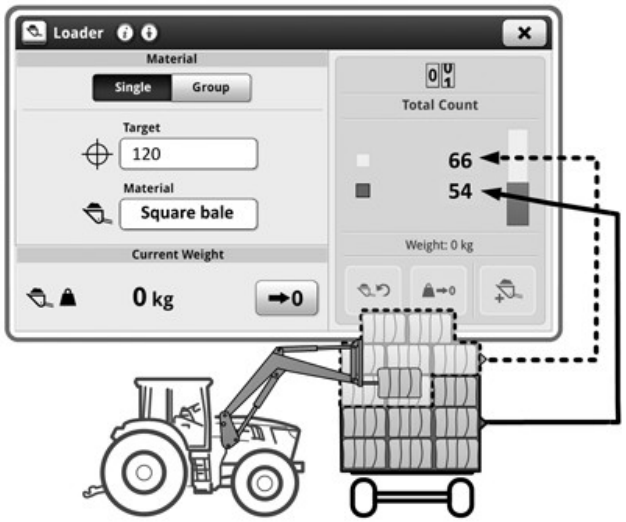
OULXA64,0005D6F-19-31MAY21

DWS—Display During Loading



LX341470—UN—09JAN18

Bulk Material Loading



LX341471—UN—09JAN18

Unit Material Loading

NOTE: If unit material (for example bales of straw) is selected, note: Always load as many units of material as you have predefined for this material during the loading process.

LX341462—UN—17JAN18

Undo Last Action

LX341474—UN—17JAN18

Add Weight or Number of Units

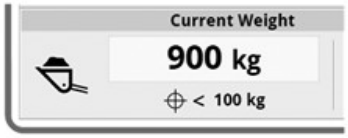
LX341475—UN—17JAN18

Deduct the Residual Weight of the Load from the Initial Weight of the Load

LX341463—UN—22DEC17

Reset Total Weight to Zero

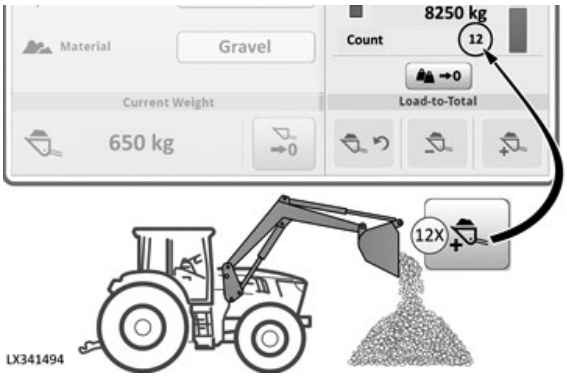
The current weight in the loader tool is shown at the bottom left. When loading a material group, the surplus to the target weight is always displayed below the current weight for the last fill. In the example, there is 100 kg too much in the bucket. Adding the 900 kg causes the target weight to be exceeded by 100 kg. See DWS—Load a Material Group.



LX341487—UN—11JAN18

Current Weight in the Loader Tool

Measure and display number of load cycles: Each time you press the Add button, the system adds a load cycle.



LX341494—UN—18JAN18

Number of Loading Cycles

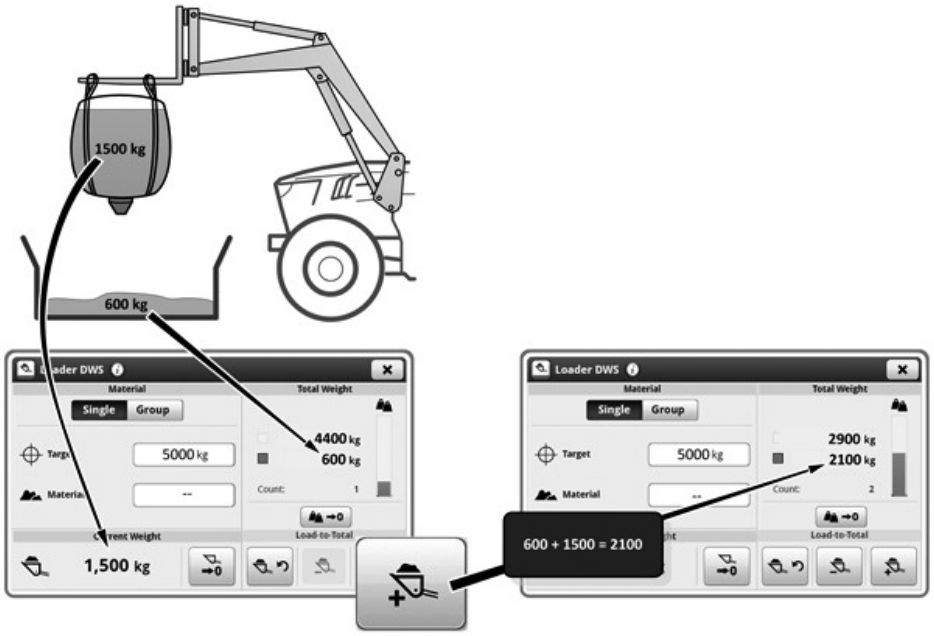
NOTE: After pressing the Add button, a beep is heard and the button is deactivated (grayed out) for about 5 seconds. This prevents multiple measurements during the same loading cycle.

OULXA64,0005D70-19-23SEP21

DWS—Load a Subset

The following example shows how to load a subset. This situation occurs when feed additive has to be filled for example from a large container.

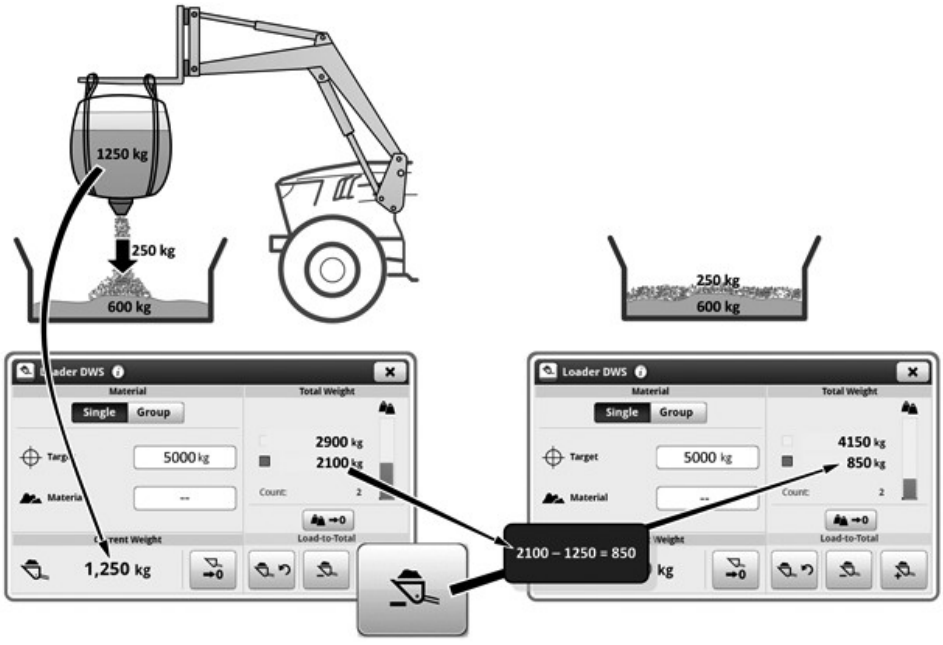
1. Take up container, and record the weight of the container completely for the total weight.



LX341489—UN—12JAN18

2. Fill desired quantity. Monitor the display of the current weight and dose the material accordingly.

   Once the container has been filled, subtract the current weight of the container from the total weight. Thus only the actually added weight is added to the total weight and saved.

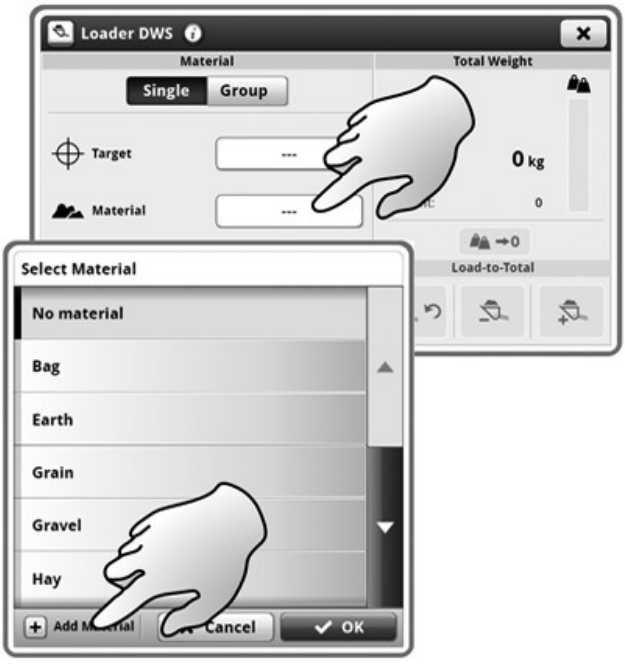


LX341490—UN—12JAN18

OULXA64,0005D71-19-23SEP21

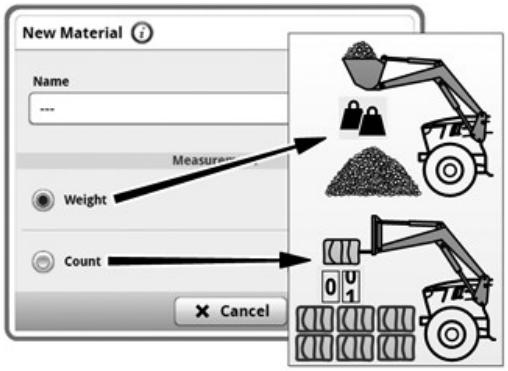
DWS—Create and Save Single Materials

1. Open Loader DWS page.
2. Select Single material.
3. Open selection box for Material.



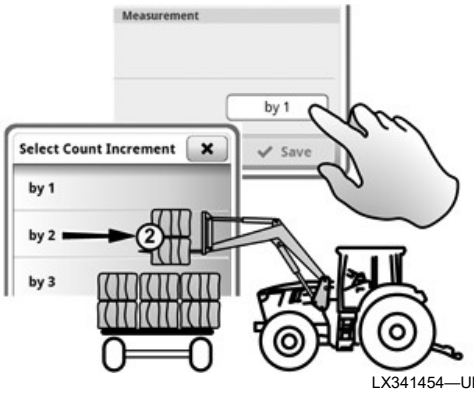
LX341453—UN—20DEC17

4. Press button for new entry.



LX341451—UN—21DEC17

5. Enter the name for the material in the input box.
6. Choose whether the new material is weighed or counted (in bulk or per unit).
7. When selecting "count" (unit material), indicate the number of units per loading process.



LX341454—UN—18JAN18

8. Save entry.
9. To edit the entry, press the pencil icon.

LX341476—UN—17JAN18

Edit Properties

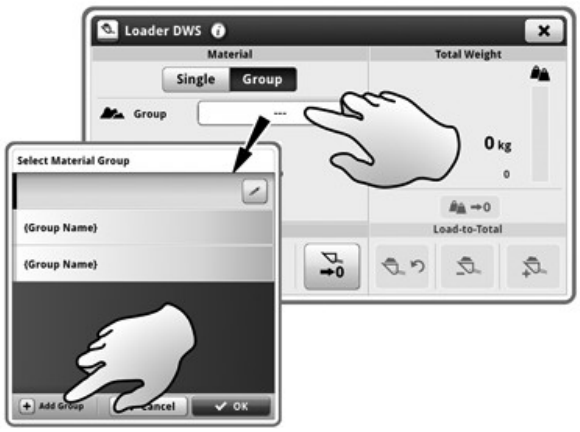
OULXA64,0005D72-19-23SEP21

DWS—Create and Save Material Group

Material groups may be feed mixtures for example that are made from a mixture of ingredients (materials).

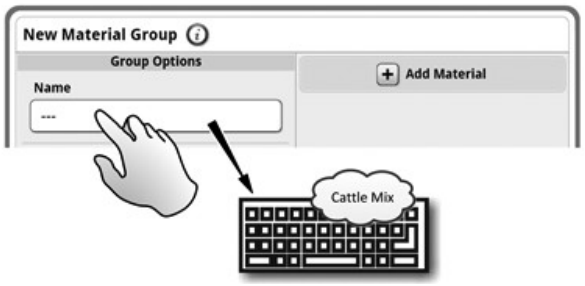
Up to six different materials can be combined in the desired mixing ratio in a group. During loading, weights and quantities of the individual materials are monitored one after the other. See DWS—Load a Material Group.

1. Open Loader DWS page.
2. Select material group.
3. Open selection box for material group.



LX341452—UN—11JAN18

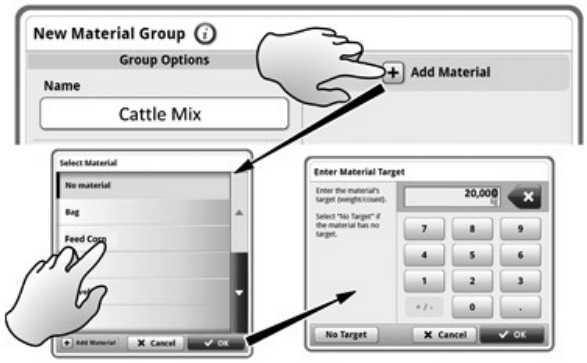
4. Press the + button for new group.
5. Enter a name for the new material group.



LX341477—UN—11JAN18

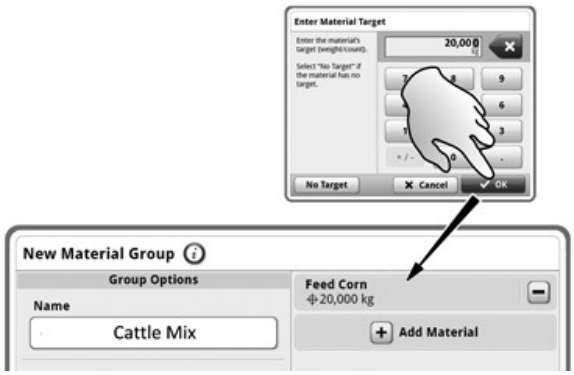
Enter Name (example)

6. Press the + button, select a material (e.g. feed corn) from the list, and confirm with OK. Enter a target weight or quantity for the material according to the required value. Confirm with OK.



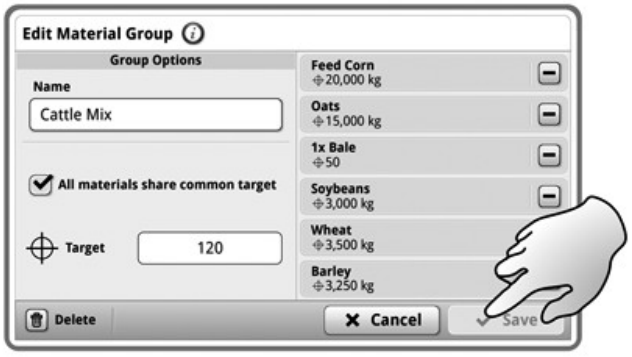
LX341478—UN—11JAN18

The material (for example, feed corn) is displayed in the overview of the new material group.



LX341479—UN—11JAN18

7. Repeat steps (5) and (6) to add more materials to the material group.
8. Remove materials from the list with the minus key -.
9. Hook the check-box, if the material group shares a common target weight. Define the common target weight in the entry box.
10. Finally, save the material group.



LX514076—UN—03SEP21

11. Display on the Loader DWS page: The composition of a material group is displayed on the basis of a list of the materials contained. Six materials can be displayed at most.

LX341481—UN—11JAN18

12. See also DWS—Load a Material Group.

OULXA64,0005D73-19-03SEP21

DWS—Overview of Measurements

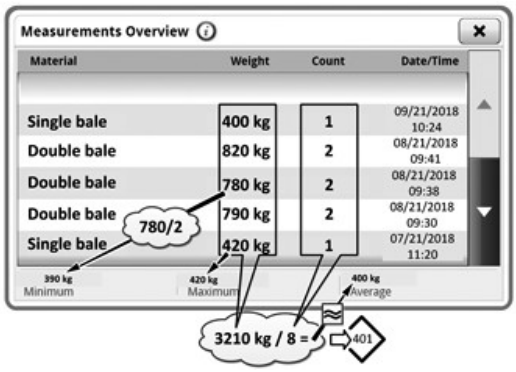
The DWS system adds and saves weights and counts of the last loading cycles since the last reset of the memory.

An overview is only displayed if data is available.

1. Open Loader DWS page.
2. Open the dialog with the overview by tapping in the area shown.

LX341491—UN—18JAN18

3. An overview is shown listing the last loads (since the last reset).
   - The bottom left shows the smallest individual weight of the material.
   - At the bottom middle, the largest individual weight of the material is displayed.
   - At the bottom right, the system calculates an average weight for the material. *The value in the display is rounded, but the memory will always process the precise value.*



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4. The entries in the overview are deleted on the DWS Loader page with the button shown.

LX341463—UN—22DEC17

Delete Entries in Overview

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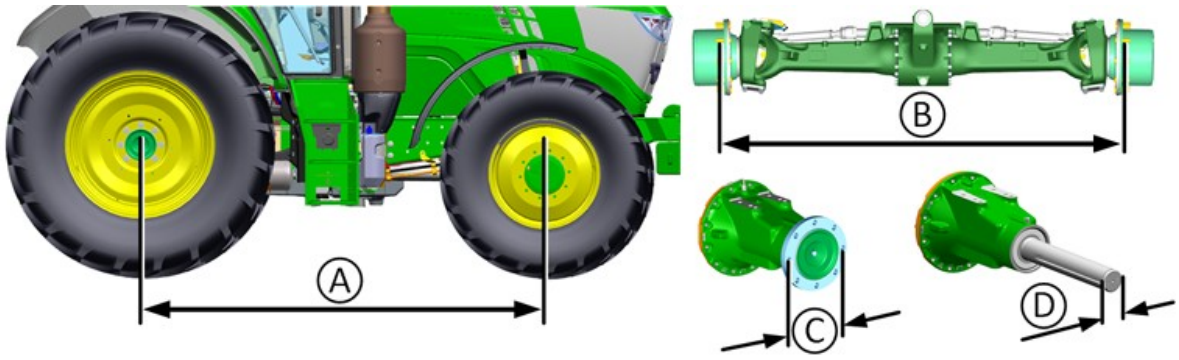
Tractor Models and Corresponding Axles—Overview, Tractors 6R 110 to 6R 250 (MY22-) with Cab



LX521931—UN—08APR22

A—Wheelbase
B—Flange-to-Flange Width
C—Flanged Axle, Bolt Circle Diameter
D—Rack-and-Pinion Axle, Shaft Diameter

Tractor			Front Axle	Rear Axle			
Model	Engine	A—Wheelbase (WB)	B—Flange-to-Flange Width	C—Flanged Axle, Bolt Circle Diameter		D—Rack-and-Pinion Axle, Shaft Diameter	
6R 110	4-Cyl.	2580 mm (101.6 in)	1680 mm (66.1 in)	203 mm (8.0 in)	275 mm (10.8 in)	79 mm (3.1 in)	86 mm, (3.4 in)
6R 120	4-Cyl.	2580 mm (101.6 in)	1680 mm (66.1 in)	203 mm (8.0 in)	275 mm (10.8 in)	79 mm (3.1 in)	86 mm, (3.4 in)
6R 130	4-Cyl.	2580 mm (101.6 in)	1680 mm (66.1 in)	203 mm (8.0 in)	275 mm (10.8 in)	79 mm (3.1 in)	86 mm, (3.4 in)
6R 140	4-Cyl.	2580 mm (101.6 in)	1680 mm (66.1 in)	203 mm (8.0 in)	275 mm (10.8 in)	79 mm (3.1 in)	86 mm, (3.4 in)
6R 150	4-Cyl.	2580 mm (101.6 in)	1680 mm (66.1 in)	—	275 mm (10.8 in)	—	86 mm, (3.4 in)
6R 145	6-Cyl.	2765 mm (108.8 in)	1940 mm (76.4 in)	—	275 mm (10.8 in)	—	92 mm (3.6 in)
6R 155	6-Cyl.	2765 mm (108.8 in)	1940 mm (76.4 in)	—	275 mm (10.8 in)	—-	92 mm (3.6 in)
6R 165	6-Cyl.	2765 mm (108.8 in)	1940 mm (76.4 in)	—	275 mm (10.8 in)	—-	92 mm (3.6 in)
6R 185	6-Cyl.	2765 mm (108.8 in)	1940 mm (76.4 in)	—	275 mm (10.8 in)	—-	92 mm (3.6 in)
6R 175	6-Cyl.	2800 mm (110.2 in)	1940 mm (76.4 in)	—	335 mm (13.2 in)	—	100 mm 3.9 in)
6R 195	6-Cyl.	2800 mm (110.2 in)	1940 mm (76.4 in)	—	335 mm (13.2 in)	—	100 mm 3.9 in)
6R 215	6-Cyl.	2800 mm (110.2 in)	1940 mm (76.4 in)	—	335 mm (13.2 in)	—	100 mm 3.9 in)
6R 230	6-Cyl.	2900 mm (114.2 in)	1940 mm (76.4 in)	—	335 mm (13.2 in)	—	100 mm 3.9 in)
6R 250	6-Cyl.	2900 mm (114.2 in)	1940 mm (76.4 in)	—	335 mm (13.2 in)	—	100 mm 3.9 in)

OULXA64,000623F-19-02JUN22

Tires and Wheels—Foreword

The wheels, tires, and their gauges as listed in these operating instructions can be fitted.

In some regions, not all tires are available.

The current edition of the sales brochure is authoritative.

LX25458,ALL,0000A46-19-31MAY21

General Wheel, Tire, and Tread Guidelines

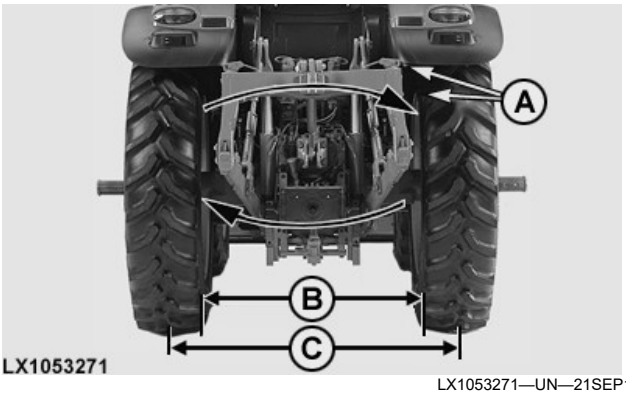
CAUTION: Avoid personal injury and insufficient tractor stability. Never operate the tractor with single tires having tread width less than 1524 mm (60 in).

IMPORTANT: Do not exceed 2800 mm (110 in) between single tires for pulling heavy loads.

IMPORTANT: Do NOT let tires come into contact with draft links or lift links. The gap between lift links and tires can be increased by installing the lift links in the front holes of the draft links.

When draft links are raised (even if no implement is attached), the stabilizer bars, whether hydraulic or mechanical, must be locked.

If there is still contact with the draft links or lift links despite all these measures, tread width must be increased.



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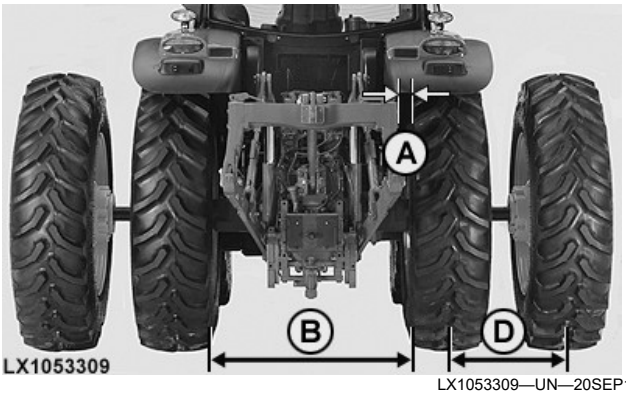

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A—Clearance between Inner Wheel and Fender
B—Clearance between Inside of Drive Wheels
C—Minimum Clearance between Tire Centerlines
D—Minimum Clearance between Centerlines of Dual Tires

Wheels can be installed on the other side of the axle to obtain a wider setting range by changing the rim positions. If the tires are moved to the other side of the tractor, make sure that the tire rolling direction is correct.

IMPORTANT: Tires must have at least 25 mm (1 in) clearance (A) to the fenders. If snow chains are installed on the tires, the minimum distance from the tires to the fenders (side wall to fender and running surface to fender) must be 100 mm (3.94 in).

Clearance (B) between tires must be at least 1070 mm (42 in), with tires at equal distances from tractor centerline.

Minimum tread settings are specified to provide sufficient clearance to fuel tank and fenders.

A minimum clearance (C) of 1524 mm (60 in) between tire centerlines must be maintained.

Check for adequate clearance between implement and rear tires.

Do NOT mix radial and bias-ply tires on the same axle.

Dual tires mounted at the same axle shall not exceed the inflation pressure of the inner mounted tire.

On tractors with cast wheels, the dual wheel with a steel disc has to be mounted on the outer position. See also Use of Dual Wheels (Easy-to-Attach) in this Section/ Group.

Over-inflating radial tires reduces machine performance. Using the correct inflation pressures will result in optimum tractive performance.

Minimum Dual Wheel Spacing (D) per "Tire and Rim Association".
Tread is measured between center of tires.

Tire Width	Spacing (D)
480 mm (18.4 in)	626 mm (24.6 in)
520 mm (20.8 in)	670 mm (26.4 in)
620 mm (24.5 in)	801 mm (31.5 in)
650 mm (25.5 in)	825 mm (32.5 in)
710 mm (28.0 in)	910 mm (35.8 in)

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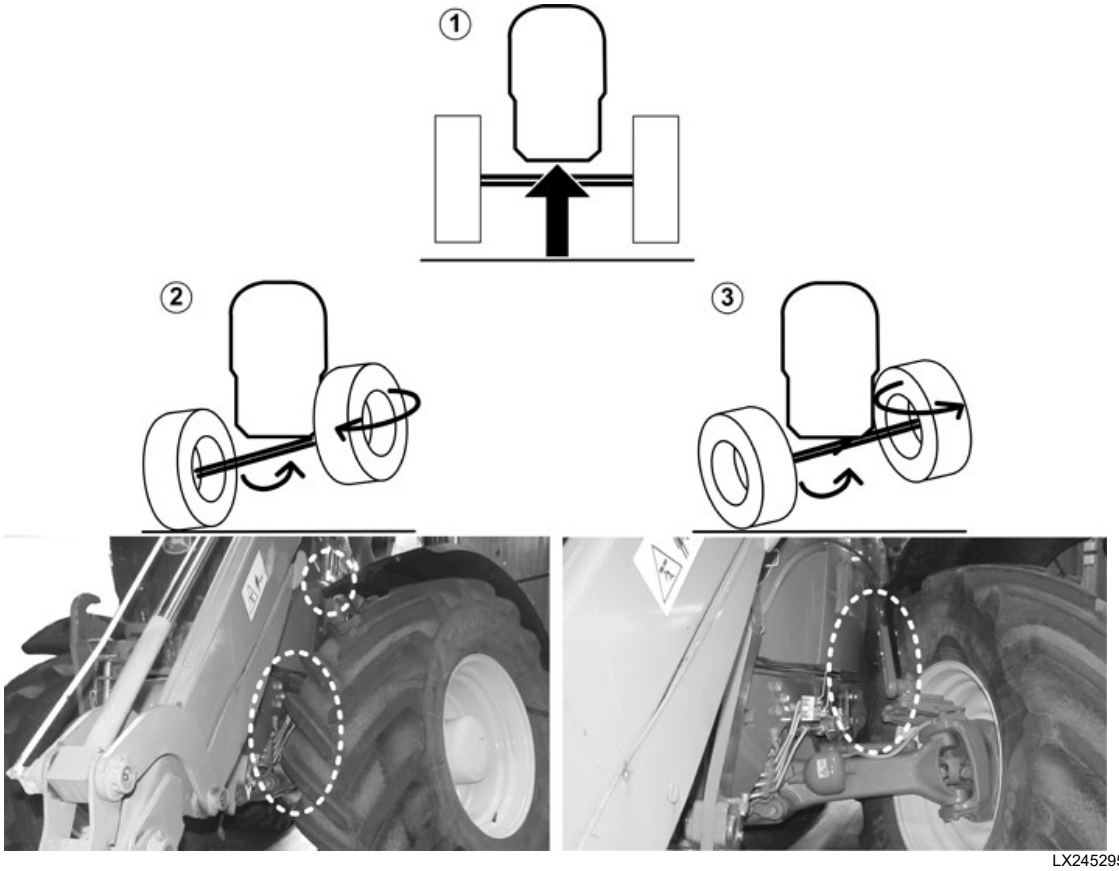
Prevent Front Wheel or Fender Contact with Tractor Components



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IMPORTANT: After modifications were made to wheels, tread width, steering stop, etc., it needs to be checked whether wheels or fenders come in contact with tractor components. The same applies when retrofitting additional equipment in the area of the tractor front part.

Perform the following test carefully. Contact may cause damage.

CAUTION: Do not start the engine during the test. Carry out the steering without motor assist.

1. Jack up front of the tractor so that the axle can be swiveled back and forth to stop.
2. Swivel the axle all the way to the left and turn the steering to the right as far as it will go. Check the clearance of wheel and fender to tractor components.
3. Turn the steering wheel all the way to the left. Check the clearance of wheel and fender to tractor components.
4. Swing axle to the right and repeat the process.

IMPORTANT: To avoid contact, adjust the steering stops so that sufficient clearance is maintained. See Notes on Adjusting the Steering Stop and Adjust the Pivoting Fenders and Steering Stop for the relevant front axle in:

- **The relevant Operator's Manual, Section 80B.**
- **The relevant Supplement for Tire Information, Group 40.**

Do not set steering stops too close, as the clearances may decrease under load.

It must be ensured that the steering stops can be screwed in to a depth of at least 10 mm (0.4 in).

NOTE: If operating conditions permit, broaden the tread width to avoid contacts with tractor components.

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Change to a Different Tire Size

IMPORTANT: Conversion to a different tire size is only permitted if this is approved for the tractor.

The size ratio of the front wheels to the rear wheels is precisely determined in order to produce a positive front wheel lead of between 1.5 and 4%. Otherwise the tires become deformed or suffer undue wear. Contact your authorized dealer to ensure that the correct gear ratio is used.

In some cases, changing to a new tire combination requires extensive changes of the tractor configuration.

Examples:

- Change the gear pair for the front-wheel drive axle output. Let your authorized John Deere dealer check the repair manual for informations about *Front-Wheel Drive - Change Transmission Ratio*.
- Let your authorized John Deere dealer check if it becomes necessary to exchange the steering valve.
- Change the tire size in the software of the control units.
- Replace the oil sight glass accordingly to the new tire combination.

Be sure to take all the information in the following list into account and follow the recommendations in the right column.

Symptom	Problem	Solution
The indicated speed is lower or higher than the actual speed.	Parameters to determine the wheel speed do not fit to the new tires.	An adjustment of the top speed becomes essential. Have to correct parameters by a dealer authorized by John Deere.
The emergency steering characteristics may get worse.	A change to different tires on the front wheels may cause increased steering forces. This has an effect in particular on the steering characteristics without motor support.	A dealer authorized by John Deere needs to check whether a different steering valve is required for using the new front tires. If a non-suitable steering valve is used, the operating license becomes void.
Error messages when using a radar.	The calibration of the radar does not comply with the tire size.	New calibration by a dealer authorized by John Deere.
Increased wear of tires and front-wheel drive clutch.	The value for the front wheel lead may get worse.	A dealer authorized by John Deere needs to check the tire combination. Retrofitting to an adequate transmission ratio may be necessary.
Strains in the drive train may occur.	The transmission ratio between rear and front axle does not fit.	A dealer authorized by John Deere needs to check the tire combination. Retrofitting to an adequate transmission ratio may be necessary.

Symptom	Problem	Solution
Tires may come into contact with tractor components.	Modifications to tread width or tire size make a readjustment of the steering stop and fenders necessary.	A dealer authorized by John Deere has to carry out the adjustment of steering stop and fenders.
The load capacity of the front tires may get worse.	If tires with a smaller load index are used, the load capacity decreases.	Accustomed tasks may possibly be carried out no longer.
The oil sight glass shows a wrong oil level.	If you change to a different tire size, the height ratio of rear to front axle may change. This has an effect on the oil level.	A dealer authorized by John Deere needs to check whether an exchange of the oil sight glass becomes necessary.
The automatic switch-off[1] of the front-wheel drive does not function.	The maximum possible shutoff angle for the automatic engagement and disengagement of the front-wheel drive depends on the tire type, tread width, and steering stop and can be less than the angle that can be selected on the display.	Set the shutoff angle for the automatic engagement and disengagement. See Engage Front-Wheel Drive in Section 50A of the relevant Operator's Manual.

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Changing the Tire Combination

IMPORTANT: The size ratio of the front wheels to the rear wheels is precisely determined in order to produce a positive front wheel lead of between 1.5 and 4%. Otherwise the tires become deformed or suffer undue wear. Contact your dealer to ensure that the correct gear ratio is used.

In some cases, changing to a new tire combination require extensive changes of the tractor configuration.

Examples:

- Change the gear pair for the front-wheel drive axle output. Let your authorized John Deere dealer check the repair manual for informations about *Front-Wheel Drive - Change Transmission Ratio*.
- Let your authorized John Deere dealer check if it becomes necessary to exchange the steering valve.
- Change the tire size in the software of the control units.
- Replace the oil sight glass accordingly to the new tire combination.

NOTE: The description of the calculation and the procedure for converting the gear ratio can be found in the Technical Manual, Section 80A, Group 15.

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Use of Dual Wheels (Easy-to-Attach)

IMPORTANT: Do not install dual wheels on the front axle.

Dual wheels may be used on the rear axles of tractors for the purpose of flotation or soil compaction reduction only.

They are only recommended for use in the field and should be removed prior to driving on public roads.

IMPORTANT: If dual wheels are used, wheel disk reinforcements need to be installed. If no wheels with wheel disk reinforcements are available, wheel disk reinforcements may be ordered as additional equipment for some tractors. More information can be obtained from a dealer authorized by John Deere (does not apply to rack-and-pinion axles if one hub is used per wheel).

When using dual wheels, the maximum permissible trailer load may be limited. See Specifications in Section 500A of the relevant Operator's Manual.

NOTE: Retighten the wheel nuts regularly to the specified torque. See Section 220C of the relevant Operator's Manual.

Advantages of dual wheels:

- In unfavorable load-bearing capacity of the soil, dual wheels improve the ground engagement, driving stability, and handling.
- Dual wheels reduce the ground pressure and, as a result, the respective soil compaction.

[1] *If equipped*

Disadvantages of dual wheels:

- The increased traction can overload the transmission and rear axle components. Pay attention to permissible trailer loads and ask authorized dealers for assistance in clarifying questions regarding the use of dual wheels.
- A tractor with dual wheels is harder to maneuver. Turning on hard, firm ground results in high tire wear.
- Although dual wheels reduce the load on each individual tire, the tire pressure recommended by the tire manufacturer must nevertheless be maintained.
- For installing wheels, refer to Change Wheels Safely in this Section.

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Service Tires Safely

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Explosive separation of a tire and rim parts can cause serious injury or death.

Do not attempt to mount a tire unless you have the proper equipment and experience to perform the job.

Always maintain the correct tire pressure. Do not inflate the tires above the recommended pressure. Never weld or heat a wheel and tire assembly. The heat can cause an increase in air pressure resulting in a tire explosion. Welding can structurally weaken or deform the wheel.

When inflating tires, use a clip-on chuck and extension hose long enough to allow you to stand to one side and NOT in front of or over the tire assembly. Use a safety cage if available.

Check wheels for low pressure, cuts, bubbles, damaged rims, or missing lug bolts and nuts.

Wheels and tires are heavy. When handling wheels and tires use a safe lifting device or get an assistant to help lift, install, or remove.

DX,WW,RIMS-19-28FEB17

Change Wheels Safely

CAUTION: Do not operate the tractor until the wheel change has been completed.

For rear wheels with wheel weights, the removal and installation must be carried out by a dealer authorized by John Deere.

When changing wheels, make sure that no-one is standing in the danger zone.

When removing a wheel, make sure that the tractor is supported safely.

When storing removed wheels, make sure that they cannot fall.

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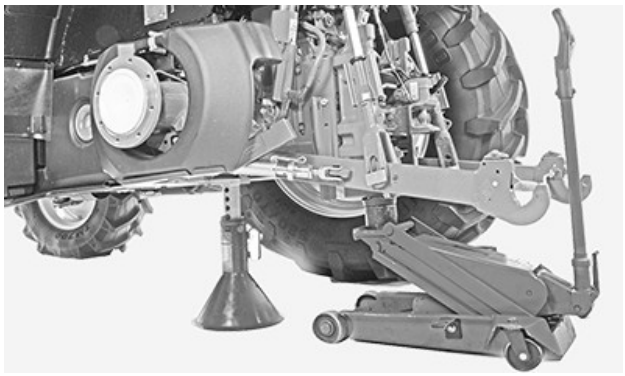
KJD10581 - Wheel Dolly



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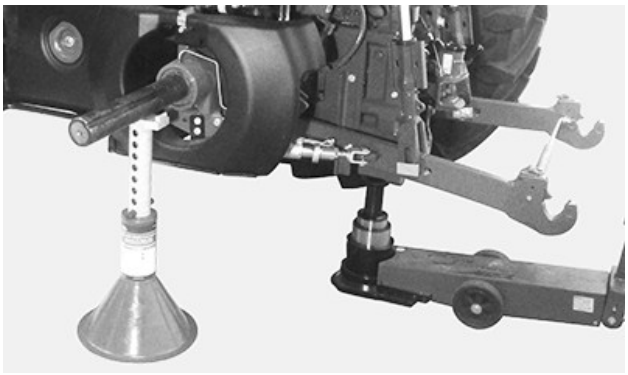
Example: JT02043 or JT02044



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Example: JT02043 or JT02044

JT02043—Support Stand, 482 to 736 mm (19 to 29 in)
JT02044—Support Stand, 863 to 1117 mm (34 to 44 in)

Due to the big size and the heavy weight of tractor wheels, pay attention to the following points when changing wheels:

- Before changing wheels, place tractor on firm, level ground.
- Engage park lock and prevent the tractor from rolling away by putting down chock blocks.
- Remove the key switch to prevent unauthorized operation.
- When removing rear wheels, prevent front axle oscillation by using wedges.
- Only jack up the tractor at the recommended lifting points, see Jack Up the Tractor - Lifting Points in:
  - Section 210 of the relevant Operator's Manual.
  - The relevant Supplement for Tire Information, Group 20.
- Use a stable jack with sufficient lifting force. See Loads and Weights in Section 500A of the relevant Operator's Manual.
- Stop jacking up the tractor when the wheel is completely off the ground.
- Use a suitable wheel dolly, especially when removing a rear wheel. It is available from a dealer authorized by John Deere under the special tool number KJD10581.
- For dual wheels: Special tools may be required and the manufacturer's instructions for installing the dual wheels must be followed.
- Secure the tractor with suitable support stands. Within the scope of the European Union, only hoists with CE certification are permitted. Outside the scope of the EU, the special tools shown can be used. See also Jack Up the Tractor - Lifting Points and Authorized and Approved Lifting Tools in:
  - Section 210 of the relevant Operator's Manual.
  - The relevant Supplement for Tire Information, Group 20.
- When installing a wheel, observe the screw torques, see Tighten Wheel Bolts in Section 220C of the relevant Operator's Manual.

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Wheel Exchange with Wheel Weights

CAUTION: Have the mounting of rear wheels with wheel weights performed by a dealer authorized by John Deere. Improper handling may result in personal injury.

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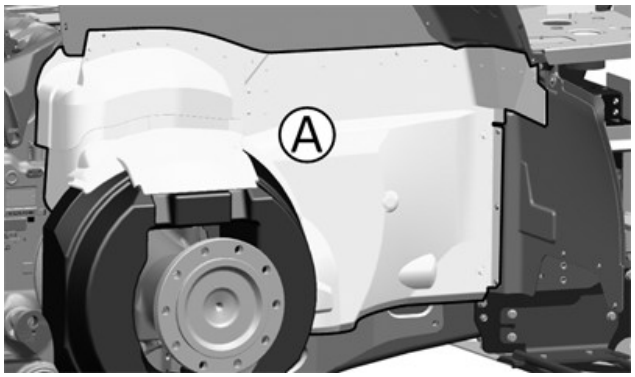
38-Inch Rear Wheel Rims in Conjunction with the Mudguard for Cab Suspension



LX514082—UN—04NOV21
Mudguard (right-hand side shown)

IMPORTANT: Contact of rims or tires with tractor components lead to damages.

The use of the mudguard (A) in conjunction with 38-inch rear wheel rims requires minimum tread width of 1900 mm (75 in). Tires with a width of 800 mm or wider may not be used.

Check the body-to-tire clearance after changing the tread width settings and/or after installing additional equipment.

OULXBER,0003137-19-02DEC21

Tire Combinations—Front-Wheel Drive Axle Tractors 6R 110 to 6R 250 (MY22-) with Cab

IMPORTANT: If the tire combination or tire manufacturer is changed, the transmission ratio must be ascertained. See Changing the Tire Combination in this section.

NOTE: Find all specific tire information, for example the SRI and load index, in the official tables of the tire manufacturer.

For the tire combinations applicable in your country, contact your authorized dealer.

Tire Combinations—Front-Wheel Drive Axle Tractors 6R 110 to 6R 250 (MY22-) with Cab								
Rear Wheel		**Front Wheel**		**Model**				
Size	**SRI**	**Size**	**SRI**	**6R 110 6R 120**	**6R 130 6R 140 6R 150**	**6R 145 6R 155 6R 165 6R 185**	**6R 175 6R 195 6R 215**	**6R 230 6R 250**
520/85R46 -R2	1000	480/70R34 -R2	775	—	—	—	X	X
380/90R54	1000	380/80R38	750	—	—	—	X	X
480/80R50	975	420/85R34	750	—	—	—	X	X
		380/80R38	750	—	—	—	X	X
		480/70R34	750	—	—	—	X	X
520/85R46	975	420/85R34	750	—	—	—	X	X
		480/70R34	750	—	—	—	X	X
		460/85R30	725	—	—	—	X	X
		18.4R30	725	—	—	—	X	X
650/75R42	975	600/70R30	750	—	—	—	—	X
		600/65R30	725	—	—	—	X	X
		600/70R28	725	—	—	—	X	X
650/85R38	975	480/70R34	750	—	—	—	X	X
		600/70R30	750	—	—	—	—	X
		600/65R30	725	—	—	—	X	X
		600/70R28	725	—	—	—	X	X
VF 650/85R38	975	VF 600/70R30	750	—	—	—	—	X
		VF 600/70R28	725	—	—	—	X	X
710/70R42	975	480/70R34	750	—	—	—	X	X
		600/70R30	750	—	—	—	—	X
		600/65R30	725	—	—	—	X	X
		600/70R28	725	—	—	—	X	X
VF 710/70R42	975	VF 600/70R30	750	—	—	—	—	X
		VF 600/70R28	725	—	—	—	X	X
800/70R38	975	600/70R30	750	—	—	—	—	X
		600/70R28	725	—	—	—	X	X
		600/65R30	725	—	—	—	X	X
320/90R54	950	320/90R42	800	—	—	X	—	—
		320/85R38	725	—	—	X	X	X
380/90R50	950	320/85R38	725	—	—	X	X	X
		380/85R34	725	—	—	X	X	X
480/80R46 -R2 18.4R46 -R2	950	420/90R30 -R2 16.9R30 -R2	725	—	—	—	X	X
270/95R54	925	270/95R38	725	—	—	X	—	—
300/95R52	925	270/95R38	725	—	—	X	—	—
480/80R46 -R1	925	380/85R34 -R1	725	—	—	X	X	X
		420/90R30	725	—	—	X	X	X
		420/85R30	700	—	—	—	X	—
		540/65R30	700	—	—	—	X	X
520/85R42	925	380/85R34 -R1	725	—	—	X	X	X
		420/90R30	725	—	—	X	X	X
		420/85R30 16.9R30	700	—	—	X	X	X
		480/70R30	700	—	—	X	X	X
620/70R42	925	480/70R30	700	—	—	X	X	X
		540/65R30	700	—	—	X	X	X
		600/65R28	700	—	—	X	X	X
650/65R42	925	540/65R30	700	—	—	X	X	X
		600/65R28	700	—	—	X	X	X

Tire Combinations—Front-Wheel Drive Axle Tractors 6R 110 to 6R 250 (MY22-) with Cab								
Rear Wheel		**Front Wheel**		**Model**				
Size	**SRI**	**Size**	**SRI**	**6R 110 6R 120**	**6R 130 6R 140 6R 150**	**6R 145 6R 155 6R 165 6R 185**	**6R 175 6R 195 6R 215**	**6R 230 6R 250**
650/65R42 -R4	925	540/65R30 -R4	700	—	—	X	X	X
VF 650/65R42	925	VF 540/65R30	700	—	—	X	X	X
		VF 600/65R28	700	—	—	X	X	X
650/75R38	925	600/65R28	700	—	—	X	X	X
710/70R38	925	480/70R30	700	—	—	X	X	X
		600/65R28	700	—	—	X	X	X
VF 710/70R38	925	VF 600/65R28	700	—	—	X	X	X
VF 710/60R42	925	VF 600/60R30	700	—	—	X	X	—
320/90R50	900	320/85R34 -R1	675	—	—	X	—	—
340/90R48	900	340/85R38	750	X	X	—	—	—
380/90R46	900	320/85R34 -R1	675	X	X	X	—	—
		380/85R30	675	X	X	X	—	—
		340/85R28	625	X	X	—	—	—
420/80R46 -R1	900	380/85R30	675	—	—	X	—	—
		420/85R28	675	—	—	X	—	—
580/70R42	900	480/70R30	700	—	—	X	—	—
13.6-46 -R2	875	13.6-38 -R2	775	X	X	—	—	—
14.9R46 380/85R46	875	320/85R34	675	—	—	X	—	—
		380/85R30	675	—	—	X	—	—
460/85R42 480/80R42	875	320/85R34 -R1	675	—	—	X	—	—
		380/85R30	675	—	—	X	—	—
		420/85R28	675	—	—	X	—	—
520/85R38 20.8R38	875	380/85R30	675	—	—	X	—	—
		420/85R30 16.9R30	700	—	—	X	—	—
		420/85R28 16.9R28	675	—	—	X	—	—
		480/70R28	675	—	—	X	—	—
		420/70R28	650	—	—	X	—	—
540/80R38 -R4	875	440/80R28 -R4	675	—	—	X	—	—
580/70R38	875	480/70R30	700	—	—	X	—	—
		480/70R28	675	—	X	X	—	—
		540/65R28	675	—	X	X	—	—
650/65R38	875	540/65R30	700	—	—	X	—	—
		540/65R28	675	—	X	X	—	—
		420/85R28	675	—	—	X	—	—
VF 650/65R38	875	VF 540/65R30	700	—	—	X	—	—
		VF 540/65R28	675	—	—	X	—	—
VF 710/60R38	875	VF 600/60R28	675	—	—	X	—	—
270/95R48	850	270/80R36	650	X	X	X	—	—
300/95R46	850	270/95R32	650	X	X	X	—	—
460/85R38 18.4R38	825	380/85R28 14.9R28	650	X	X	X	—	—
		420/70R28	650	X	X	X	—	—
		340/85R28 13.6R28	625	X	X	X	—	—
		420/85R24 16.9R24	625	X	X	X	—	—
		380/85R24 14.9R24	600	X	X	—	—	—

Tire Combinations—Front-Wheel Drive Axle Tractors 6R 110 to 6R 250 (MY22-) with Cab								
Rear Wheel		**Front Wheel**		**Model**				
Size	**SRI**	**Size**	**SRI**	**6R 110 6R 120**	**6R 130 6R 140 6R 150**	**6R 145 6R 155 6R 165 6R 185**	**6R 175 6R 195 6R 215**	**6R 230 6R 250**
480/80R38	825	380/85R28	650	—	—	X	—	—
480/80R38 -R4	825	400/80R28 -R4	650	X	X	X	—	—
		440/80R24 -R4	625	X	X	X	—	—
520/70R38	825	420/70R28	650	X	X	X	—	—
		380/70R28	625	X	X	X	—	—
		480/70R24	625	X	X	X	—	—
		420/70R24	600	X	X	—	—	—
600/65R38	825	480/65R28	650	X	X	X	—	—
		540/65R24	625	X	X	X	—	—
		480/70R24	625	—	X	—	—	—
VF 600/65R38	825	VF 480/65R28	650	X	X	X	—	—
VF 650/60R38	825	VF 520/60R28	650	X	X	X	—	—
230/95R48	800	230/95R32	600	X	X	—	—	—
320/90R42	800	320/85R28	600	X	X	—	—	—
420/85R38 16.9R38	800	340/85R28 13.6R28	625	X	X	—	—	—
		320/85R28 12.4R28	600	X	X	—	—	—
		380/85R24 14.9R24	600	X	X	—	—	—
480/70R38	800	380/70R28	625	X	X	—	—	—
		420/70R24	600	X	X	—	—	—
540/65R38	800	480/65R24	600	X	X	—	—	—
460/85R34 18.4R34	775	380/85R24 14.9R24	600	X	X	—	—	—
		340/85R24 13.6R24	575	X	X	—	—	—
480/80R34 -R4	775	400/80R24 -R4	600	X	X	—	—	—
520/70R34	775	420/70R24	600	X	X	—	—	—
340/85R38 13.6R38	750	280/85R28 11.2R28	575	X	X	—	—	—
		340/85R24 13.6R24	575	X	X	—	—	—
380/80R38	750	320/85R28 12.4R28	600	X	X	—	—	—
		340/85R24	575	X	X	—	—	—
420/85R34 16.9R34	750	340/85R24 13.6R24	575	X	X	—	—	—
480/70R34	750	380/70R24	575	X	X	—	—	—
540/65R34	750	440/65R24	575	X	X	—	—	—
460/85R30 18.4R30	725	340/85R24 13.6R24	575	X	X	—	—	—
		320/85R24 12.4R24	550	X	X	—	—	—
480/80R30 -R4	725	420/65R24 -R4	550	X	X	—	—	—
420/85R30 16.9R30	700	320/85R24 12.4R24	550	X	X	—	—	—

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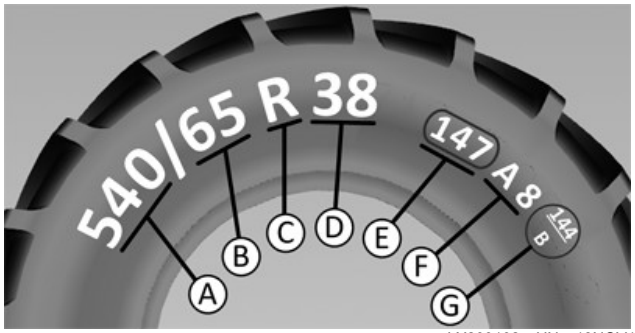
Tire Labeling—Ascertain the Load Capacity of Tires

CAUTION: Load capacity of tires and permissible axle loads must not be exceeded under any circumstances.

Tire load capacities stated in the Operator's Manual apply for a travel speed of 40 km/h (25 mph).



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Example of Manufacturers' Information on Tire Sidewall

Tire load capacity at a specific travel speed:
Specifications of the tire load capacity (E) at maximum permissible travel speed (F) can be found on the sidewall of the tire.

If the tire manufacturer has approved the same tire for another travel speed, additional information (G) is provided. In this case, note especially that tire load capacity may change in relation to the maximum permissible travel speed.

A	Tire Width	Width in millimeters.
B	Tire	Ratio of tire height to tire width.
C	Type	R = radial, — = cross-ply (example: 18.4-38)
D	Rim Diameter	Diameter in inches.
E	Tire Load Index (LI)	Maximum permissible load capacity per tire, in relation to speed index (F).
F	Speed Index	Maximum permissible travel speed at which (E) applies.
G	Tire Load Index (LI) / Speed Index	Tire load capacity at an alternative permitted travel speed.

Contact your tire dealership or directly to the tire manufacturer for more information on tires and tables concerning load index and travel speed.

Speed Index	**A6**	**A8**	**B**	**C**	**D**
km/h	30	40	50	60	65
mph	19	25	31	37	40

Example: Tire 540/65R38 147A8 (144/B)

- Tire Load Index (LI) . . . ***147*** ⇛ 3075 kg (6780 lb) load capacity per tire
- Speed Index . . . ***A8*** ⇛ 40 km/h (25 mph)

+

- Tire Load Index (LI) . . . ***144*** ⇛ 2800 kg (6175 lb) load capacity per tire
- Speed Index . . . ***B*** ⇛ 50 km/h (31 mph)

Permissible deviation in load capacity in relation to speed index, in percent:

Speed Index	**Permissible Travel Speed**		**Permissible deviation in load capacity of tires at:**		
	km/h	**mph**	**30 km/h (19 mph)**	**40 km/h (25 mph)**	**50 km/h (31 mph)**
A6	30	19	± 0%	- 10%	—
A8	40	25	+ 7%	± 0%	- 9%
D	65	40	+ 15%	+ 9.5%	+ 5%

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Tire Load Index

IMPORTANT: Load capacity of tires and permissible axle loads must not be exceeded under any circumstances. See Load and Weights, as well as Maximum Permissible Axle and Tire Load Capacity in Section 500A.

Tire industry uses a term “load index” to define a load rating of a tire. Load index indicates maximum amount of weight that can be supported by each tire at manufacturer’s rated inflation pressure is shown in this chart.

Load capacity per tire is reduced to 88% on tractors with duals.

Load Index	Maximum Load per Tire[a]		Load Index	Maximum Load per Tire[a]		Load Index	Maximum Load per Tire[a]	
	Single kg (lb)	Duals kg (lb)		Single kg (lb)	Duals kg (lb)		Single kg (lb)	Duals kg (lb)
100	800 (1764)	704 (1552)	130	1900 (4189)	1672 (3686)	160	4500 (9921)	3960 (8730)
101	825 (1819)	726 (1601)	131	1950 (4299)	1716 (3783)	161	4625 (10196)	4070 (8973)
102	850 (1874)	748 (1649)	132	2000 (4409)	1760 (3880)	162	4750 (10472)	4180 (9215)
103	875 (1929)	770 (1698)	133	2060 (4542)	1813 (3997)	163	4875 (10748)	4290 (9458)
104	900 (1984)	792 (1746)	134	2120 (4674)	1866 (4113)	164	5000 (11023)	4400 (9700)
105	925 (2039)	814 (1795)	135	2180 (4806)	1918 (4229)	165	5150 (11354)	4532 (9991)
106	950 (2094)	836 (1843)	136	2240 (4938)	1971 (4346)	166	5300 (11684)	4664 (10282)
107	975 (2150)	853 (1892)	137	2300 (5071)	2024 (4462)	167	5450 (12015)	4796 (10573)
108	1000 (2205)	880 (1940)	138	2360 (5203)	2077 (4579)	168	5600 (12346)	4928 (10864)
109	1030 (2271)	906 (1998)	139	2430 (5357)	2138 (4714)	169	5800 (12787)	5104 (11252)
110	1060 (2337)	933 (2056)	140	2500 (5512)	2200 (4850)	170	6000 (13228)	5280 (11640)
111	1090 (2403)	959 (2155)	141	2575 (5677)	2266 (4996)	171	6150 (13558)	5412 (11931)
112	1120 (2469)	986 (2173)	142	2650 (5842)	2332 (5141)	172	6300 (13889)	5544 (12222)
113	1150 (2535)	1012 (2231)	143	2725 (6008)	2398 (5287)	173	6500 (14330)	5720 (12610)
114	1180 (2601)	1038 (2289)	144	2800 (6173)	2464 (5432)	174	6700 (14771)	5896 (12998)
115	1215 (2679)	1069 (2357)	145	2900 (6393)	2552 (5626)	175	6900 (15212)	6072 (13386)
116	1250 (2756)	1100 (2425)	146	3000 (6614)	2640 (5820)	176	7100 (15653)	6248 (13774)
117	1285 (2833)	1131 (2493)	147	3075 (6779)	2706 (5966)	177	7300 (16094)	6424 (14162)
118	1320 (2910)	1162 (2561)	148	3150 (6945)	2772 (6111)	178	7500 (16535)	6600 (14550)
119	1360 (2998)	1197 (2638)	149	3250 (7165)	2860 (6305)	179	7750 (17086)	6820 (15036)
120	1400 (3086)	1232 (2716)	150	3350 (7385)	2948 (6499)	180	8000 (17637)	
121	1450 (3197)	1276 (2813)	151	3450 (7606)	3036 (6693)	181	8250 (18188)	
122	1500 (3307)	1320 (2910)	152	3550 (7826)	3124 (6887)	182	8500 (18739)	
123	1550 (3417)	1364 (3007)	153	3650 (8047)	3212 (7081)	183	8750 (19290)	
124	1600 (3527)	1408 (3104)	154	3750 (8267)	3300 (7275)	184	9000 (19841)	
125	1650 (3638)	1452 (3201)	155	3875 (8543)	3410 (7518)	185	9250 (20393)	
126	1700 (3748)	1496 (3298)	156	4000 (8818)	3520 (7760)	186	9500 (20944)	
127	1750 (3858)	1540 (3395)	157	4125 (9094)	3630 (8003)	187	9750 (21495)	
128	1800 (3968)	1584 (3492)	158	4250 (9370)	3740 (8245)	188	10000 (22046)	
129	1850 (4079)	1628 (3589)	159	4375 (9645)	3850 (8488)	189	10300 (22707)	
						190	10600 (23369)	

[a] *At maximum rated pressure.*

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Tire Pressures

Long life and good performance of the tires depend on proper tire inflation. Inadequately inflated tires lead to premature wear, over-inflated tires reduce traction and increase the wheel slip.

Since correct tire pressures depend not only on working conditions and load but also on tractor model, tire size and manufacturer, we recommend that you approach an authorized dealer or the tire manufacturer for advice.

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Tire Inflation Pressure Guidelines

Check tire inflation pressure while tires are cool, using

an accurate dial or stick-type gauge having 10 kPa (0.1 bar) (1 psi) graduations.

NOTE: If tires contain liquid ballast, use a special air-water gauge. Measure with valve stem at bottom.

Correctly inflated radial tires show a deflection of the sidewall. This is normal and will not harm tire.

Inflation pressures less than 83 kPa (0.8 bar) (12 psi) should be monitored frequently because of increased risk of low-pressure air leaks.

NOTE: Tires run as singles in high traction conditions sometimes experience bead slip. Increasing inflation pressure will help, but will reduce traction.

Maximum tire pressure is specified on tire sidewall.

Determine Correct Tire Pressure

Integral implements transfer significant weight to the rear axle. Always include this weight when determining correct inflation pressures. Weigh the tractor as described below in order to determine the correct tire pressure:

Rear-Mounted Implement - The front axle must be weighed with implement lowered. The rear axle must be weighed with the implement raised.

Front-Mounted Implement - The front axle must be weighed with the implement raised. The rear axle must be weighed with the implement lowered.

Front- and Rear-Mounted Implement - Weigh the tractor with both front and rear implements raised.

Set tire inflation pressures according to the weight measured. *Ballasting and tire inflation pressure may need to be adjusted when operating conditions change.* Use the following tire inflation charts. For tires not found in charts, refer to manufacturer's recommended inflation pressures.

Managing Tire Inflation Pressures

Tractors operating with a loader should increase front tire pressures 30 kPa (0.3 bar) (4 psi) above values listed to compensate for weight transfer.

Tractors operating on steep side slopes or furrow plowing should increase rear tire pressures 30 kPa (0.3 bar) (4 psi) above the values listed for base pressures 80 kPa (0.8 bar) (12 psi) and above to compensate for lateral weight transfer. For base pressures below 80 kPa (0.8 bar) (12 psi), pressure should be increased by 30%.

Reduce pressures to correct pressure for towed implement operation.

Tractors with heavy hitch-mounted implements, requiring additional front cast weights to maintain steering stability, also require increased front and rear tire inflation pressure to carry increased weight.

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Special Requirements for Very High Flexion (VF) Front Tires When Driving on Road

VF*-Tire Models:

- Bridgestone VT-Tractor
- Trelleborg TM1060
- Continental VF TractorMaster
- Michelin AxioBib 2 and XeoBib

**Very High Flexion*

CAUTION: Risk of personal injury and property damage due to loss of control of the tractor.

In the event of failure of the hydraulic steering assistance, a legally defined force required to turn the steering wheel must not be exceeded. This applies when driving on roads and requires for tires (see table) to keep a specific inflation pressure. This tire inflation pressure specification must be applied regardless of any recommendations made by the tire manufacturer.

IMPORTANT: Find the maximum permissible axle loads in section 500A.

NOTE: The table contains tire sizes that are not available for all models. Only consider the tire sizes that are currently installed on the front wheels of the vehicle.

Front Tires Inflation Pressures for Bridgestone VT-TRACTOR

Tire Size	Load Index	Inflation Pressure	Travel Speeds up to:	Tractor Models
		bar (psi)	km/h (mph)	
VF 480/65R28	148D/145E	1.6 (23)	50 (31)	6R 110, 6R 120, 6R 130, 6R 140, 6R 150
VF 480/65R28	148D/145E	1.8 (26)	50 (31)	6R 145, 6R 155, 6R 165, 6R 185
VF 540/65R28	154D/151E	1.6 (23)	50 (31)	
VF 540/65R30	155D/152E	1.5 (22)	50 (31)	
VF 540/65R30	155D/152E	1.6 (23)	50 (31)	6R 175, 6R 195, 6R 215
VF 540/65R30	155D/152E	1.8 (26)	50 (31)	6R 230, 6R 250

VF 600/65R28	159D/156E	1.6 (23)	50 (31)	6R 145, 6R 155, 6R 165, 6R 185, 6R 175, 6R 195, 6R 215, 6R 230, 6R 250
VF 600/70R28	164D/160E	1.6 (23)	50 (31)	6R 175, 6R 195, 6R 215, 6R 230, 6R 250
VF 600/70R30	165D/161E	1.6 (23)	50 (31)	6R 230, 6R 250

Front Tires Inflation Pressures for Trelleborg VF-Tires TM1060

Tire Size	Load Index	Inflation Pressure	Travel Speeds up to:	Tractor Models
		bar (psi)	km/h (mph)	
VF 520/60R28	149D	1.6 (23)	50 (31)	6R 110, 6R 120, 6R 130, 6R 140, 6R 150
VF 520/60R28	149D	1.4 (20)	50 (31)	6R 145, 6R 155, 6R 165, 6R 185
VF 600/60R28	157D	1.4 (20)	50 (31)	
VF 600/60R30	158D	1.4 (20)	50 (31)	
VF 600/60R30	158D	1.6 (23)	50 (31)	6R 175, 6R 195, 6R 215
VF 600/60R30	158D	1.6 (23)	50 (31)	6R 230, 6R 250

Front Tires Inflation Pressures for Continental VF-Tires VF TractorMaster

Tire Size	Load Index	Inflation Pressure	Travel Speeds up to:	Tractor Models
		bar (psi)	km/h (mph)	
VF 600/60R30	162D	1.4 (20)	50 (31)	6R 145, 6R 155, 6R 165, 6R 185
VF 600/60R30	162D	1.6 (23)	50 (31)	6R 175, 6R 195, 6R 215
VF 600/60R30	162D	1.6 (23)	50 (31)	6R 230, 6R 250
VF 600/70R30	168D	1.6 (23)	50 (31)	6R 230, 6R 250

Front Tires Inflation Pressures for Michelin XeoBib

Tire Size	Load Index	Inflation Pressure	Travel Speeds up to:	Tractor Models
		bar (psi)	km/h (mph)	
VF 600/60R28	146D	1.4 (20)	50 (31)	6R 145, 6R 155, 6R 165, 6R 185

Front Tires Inflation Pressures for Michelin AxioBib 2

Tire Size	Load Index	Inflation Pressure	Travel Speeds up to:	Tractor Models
		bar (psi)	km/h (mph)	
VF 540/65R30	155D/152E	1.5 (22)	50 (31)	6R 145, 6R 155, 6R 165, 6R 185
VF 540/65R30	155D/152E	1.6 (23)	50 (31)	6R 175, 6R 195, 6R 215
VF 540/65R30	155D/152E	1.8 (26)	50 (31)	6R 230, 6R 250
VF 600/60R30	162D	1.4 (20)	50 (31)	6R 145, 6R 155, 6R 165, 6R 185
VF 600/60R30	162D	1.6 (23)	50 (31)	6R 175, 6R 195, 6R 215
VF 600/70R30	168D	1.6 (23)	50 (31)	6R 230, 6R 250

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Select Tire Inflation Pressure

Tire inflation pressure plays a vital role in determining vehicle behavior, tractive force, and fuel consumption.

Since the correct tire pressure is dependent on many different factors, it is not possible to make a general recommendation.

When selecting inflation pressure, take the following into account:

- Tire manufacturer
- Tire size
- Axle load of machine
- Ballast on machine
- Whether tire is used on a front or rear wheel
- Nature of the work to be done
- Soil conditions
- Expected travel speed

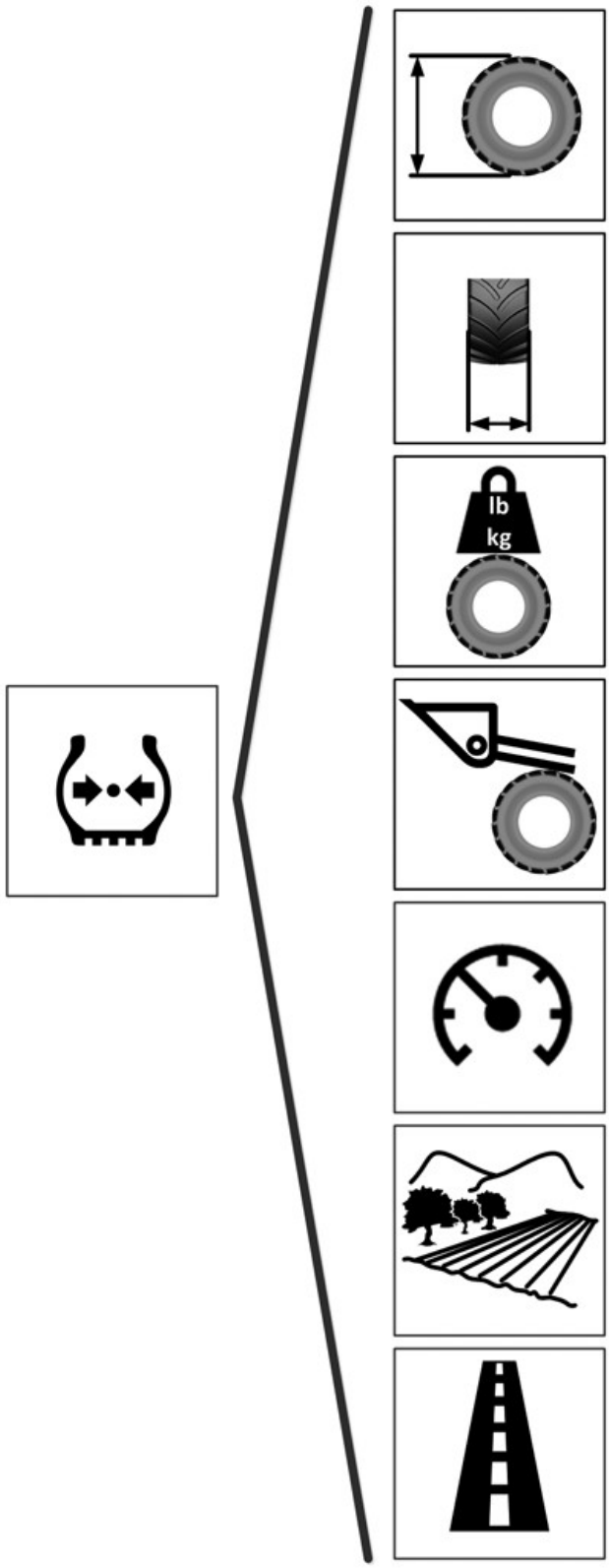
IMPORTANT: Any tire inflation quoted in this Operator's Manual is binding.

Tires must never be inflated to a pressure higher than the maximum value stated on the tire sidewall.

If no other pressure value is available:

To ascertain the pressure for specific applications, refer to the inflation pressure tables provided by the tire manufacturers. Many tire manufacturers provide apps on their Internet portals which allow the recommended tire pressure to be calculated.

Particular attention must be paid to inflation pressures for row-crop tires, special tires, and tires with liquid ballast. If in doubt, obtain the correct inflation pressure from the tire manufacturer.



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Front Wheels, Tires, and Tread Widths

Tires and Wheels—Foreword

The wheels, tires, and their gauges as listed in these operating instructions can be fitted.

In some regions, not all tires are available.

The current edition of the sales brochure is authoritative.

LX25458,ALL,0000A46-19-31MAY21

Front Tires with Front-Wheel Drive

Tire width:

If it is intended to install wider tires than were mounted when delivered, the technical requirements need to be checked first. You may need to adjust the guidance system. Always ask the authorized dealer before installation.

Tire wear notice:

If the right and left tires wear down at different rates, the axle geometry needs to be checked. See an authorized dealer and describe the problem. If no other reason for the uneven wear is found, the dealer checks and corrects the required settings.

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Front-Wheel Drive Axle—Toe-In Check and Adjustment

The ballast of the tractor can influence the set toe-in. If a front ballast larger than 1150 kg (2535 lb) is used permanently, the toe-in has to be checked, and readjusted if necessary.

Correct toe-in adjustment has a positive effect on driving characteristics and tire wear.

IMPORTANT: If the tractor is driven continuously with high ballast weight, it is necessary to check the toe-in before start-up. When doing so, the toe-in has to be determined with total ballast.

NOTE: Prescribed adjustment lies between -1.5 mm and +1.5 mm (-0.06 in and +0.06 in). It is recommended to contact an authorized dealer to have toe-in checked and adjusted.

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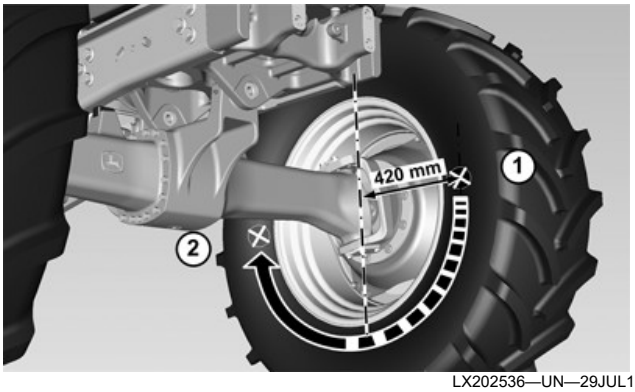
Front-Wheel Drive Axle—Check Toe-In (Conventional Method)

1. Make sure that wheels are in the straight forward position by driving tractor in a straight line for approx. 15 m (50 ft).

CAUTION: Keep the engine switched off while making the measurements, and secure the tractor so that it cannot roll away.

2. Starting from the center of the wheel, measure 420 mm (16.5 in) and make two X marks (1) and (2) on the inside of both wheels. The two marks must be at axle height (half the wheel diameter).



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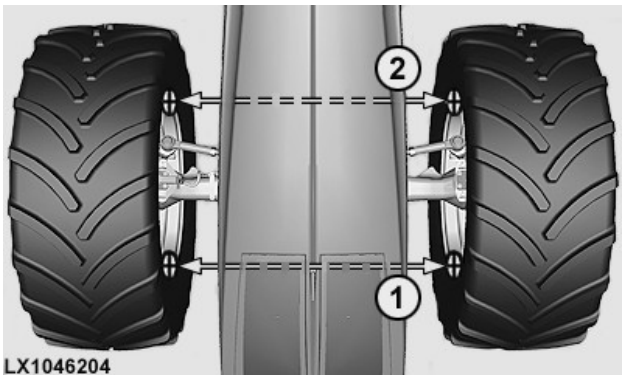
3. Measure distance (1) at the front from the right to left wheel and make a note of the measurement.



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4. Roll the tractor forward by half the circumference of the front wheel, bringing the (X) mark to the rear (2).
5. At the rear, measure distance (2) and make a note of the measurement.

Dimension at the front (1) must correspond to dimension at the rear (2). A deviation of ± 1.5 mm (0.06 in) is permissible.

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Front-Wheel Drive Axle—Check Toe-In Using a Laser Wheel-Measuring Tool

LX1054620—UN—25OCT11

Test with Laser Wheel-Measuring Tool

CAUTION: Comply with General Instructions on Safety and Repair, see section 05A and 80 of the relevant Operator's Manual.

Check Toe-In Using a Laser Wheel-Measuring Tool

IMPORTANT: It is preferable to use a laser wheel-measuring tool to check and adjust toe-in. A laser wheel-measuring tool can be used only on a tractor that is in an operational condition. The example outlined below involves a standard, commercially available tool.

General Safety and Repair Information

1. Ballast the tractor so that it is in an operational condition.
2. Park the tractor on level and firm ground and take precautions to prevent the tractor from rolling away.
3. Align the wheels precisely straight ahead and shut off the engine.
4. Read the Operator's Manual of the laser wheel-measuring tool.
5. Install tool kits (A) and (B) on the tractor.
6. Direct the laser beam to scale (C) and adjust the tie rod so that the beam is as close as possible to 0. Details are provided in the Operator's Manual of the tool kit.

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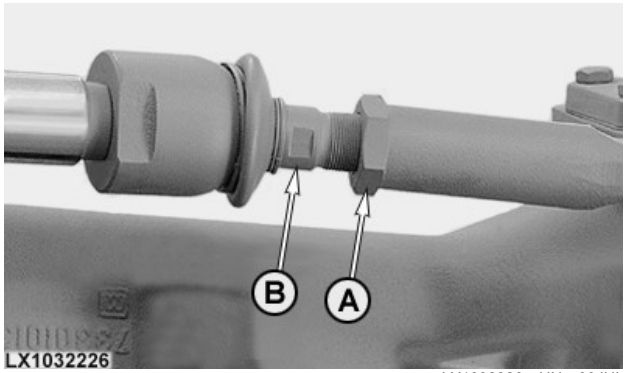
Front-Wheel Drive Axle—Adjust Toe-In

1. Align front wheels for traveling straight ahead, shut off the engine, move the transmission to park position, and remove the key switch.

IMPORTANT: It is necessary to generate the toe-in settings by adjusting both tie rods in an equal measure.

2. Unfasten lock nut (A).



LX1032226—UN—03JUL03

NOTE: A toe-in of ± 1.5 mm (0.06 in) is permissible. See Check Toe-In in this section.

3. Turn rod (B) to obtain desired toe-in or toe-out.

Specification	
Maximum Toe-in or Toe-out—Distance	1.5 mm 0.06 in

4. Tighten lock nut (A) to specified torque.

Specification	
Lock Nut—Torque	345 N·m 255 lb·ft

LX25458,ALL,0000A64-19-07SEP23

Instructions for Front-Wheel Tread Adjustment with Rims for 2, 8, and 16 Positions

CAUTION: Serious accidents with life-threatening injuries.

Contact of the wheel with tractor components leads to personal injury and property damage.

When setting the track widths or changing the wheel configuration, make sure that a minimum distance of 25 mm (1 in) mm to tractor components is guaranteed. If this minimum distance cannot be maintained, a larger track width must be set or a suitable wheel configuration must be used.

IMPORTANT: Observe the following after a tread adjustment:

• Tighten all wheel bolts and wheel nuts to the specified torque. Check the torque on the wheel nuts and wheel bolts after 4 and 8 hours of operation and also frequently during the next 100 hours of operation.

• Check wheels for free movement and adjust fenders for the new tread width. Turn the steering to full lock in both directions and oscillate the axle to the stops.

• Adjust the steering stops to prevent the wheels from coming into contact with tractor components. See also Prevent Front-Wheel or Fender Contact with Tractor Components in section 80.

• Set the shutoff angle for the automatic engagement and disengagement of the front-wheel drive[1]. See Engage Front-Wheel Drive in section 50A.

IMPORTANT: The distance between the side wall of the tire and tractor components should not be less than 25 mm (1 in).

The distance between the running surface (edge) of the tire and tractor components must not be less than 25 mm (1 in).

If snow chains are installed on the tires, the minimum distance from the tires to the tractor components (side wall to fender and running surface to tractor components) must be 100 mm (4 in).

IMPORTANT: For hub widening, use the torques of the wheels.

NOTE: For front loader work, set one of the following tread widths:

- *For front wheels with an 8-bolt circle, use a tread width between 1750—1850 mm (68.9—72.8 in).*
- *For front wheels with an 10-bolt circle, use a tread width between 1750—1950 mm (68.9—76.8 in).*

The recommended tread widths for front loader work are listed in the table of the Steering Stop and Fender—Settings see the relevant Supplement for Tire Information, Group 40.

For further information on the front axle type, see Three-Piece Front Axle (Version 2)—Identify Axle Type in section 80B.

Front Wheels with Rims for 2 Positions

The tread width can be changed by mounting the complete tires on the other tractor side. In doing so, maintain the rolling direction of the tires.

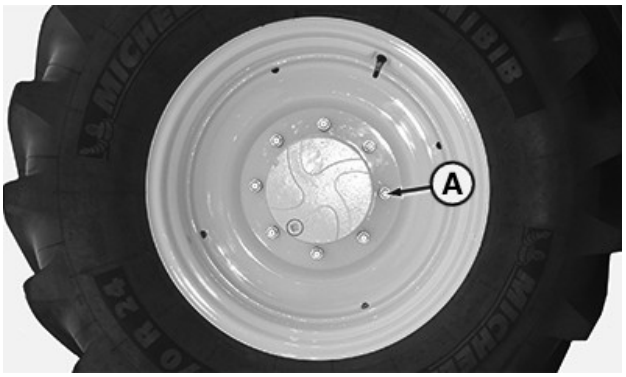
Front Wheels with Rims for 8 and 16 Positions

Wheel tread can be adjusted by repositioning or reversing the wheel rims.

In addition, the complete wheel can be installed on the other side of the tractor. In doing so, maintain the rolling direction of the tires.

NOTE: Before adjusting tread width, pay attention to the position of the wheel dish relative to the rim of the front wheel. See illustrations accompanying the tread width tables in Group 30 of the relevant Supplement for Tire Information.

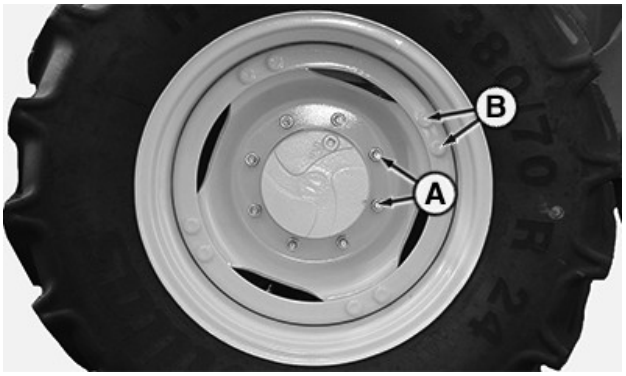
Tighten Front-Wheel Bolts, on Vehicles with Front-Wheel Drive Axles—Front Wheel with 8-Bolt Circle



LX315085—UN—17JAN18

Front Wheel with 8-Bolt Circle and Round Wheel Dish

A—300 N·m (220 lb·ft)

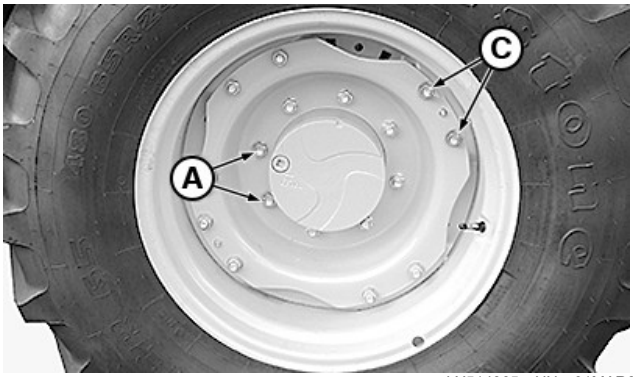


LX315087—UN—16JAN18

Front Wheel with 8-Bolt Circle and Square Wheel Dish

A—300 N·m (220 lb·ft)
B—210 N·m (155 lb·ft)

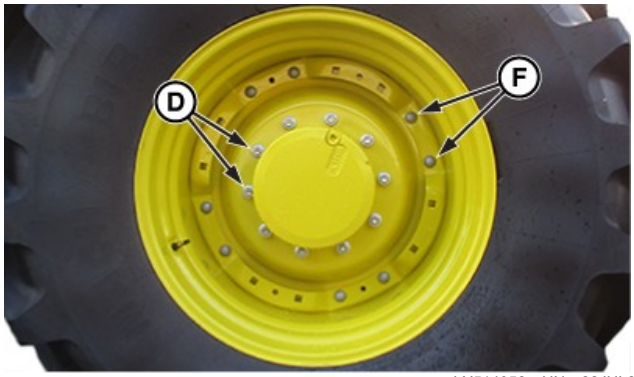
[1] *If equipped*



LX514865—UN—31MAR22

Front Wheel with 8-Bolt Circle and Waffle Rim

A—300 N·m (220 lb·ft)
C—Gold Bolt—280 N·m (205 lb·ft)
C—Gray-Blue Bolt—265 N·m (195 lb·ft)



LX514952—UN—22JUL23

Front Wheel with 10-Bolt Circle and Waffle Rim

D—480 N·m (355 lb·ft)
F—Gold Bolt—280 N·m (205 lb·ft)
F—Gray-Blue Bolt—265 N·m (195 lb·ft)

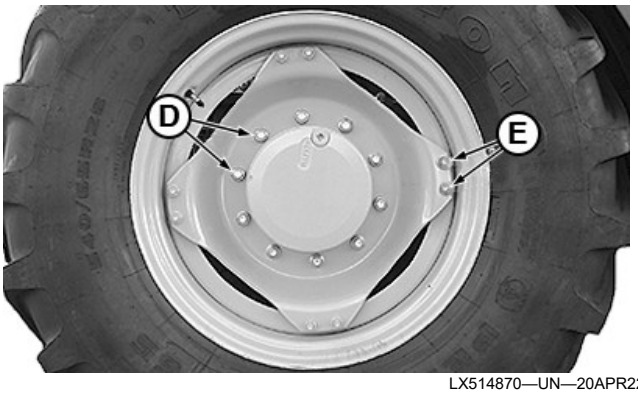
OULXA64,ALL,00057EF-19-07SEP23

Tighten Front-Wheel Bolts, on Vehicles with Front-Wheel Drive Axles—Front Wheel with 10-Bolt Circle

LX514869—UN—20APR22

Front Wheel with 10-Bolt Circle and Round Wheel Dish

D—480 N·m (355 lb·ft)



LX514870—UN—20APR22

Front Wheel with 10-Bolt Circle and Square Wheel Dish

D—480 N·m (355 lb·ft)
E—210 N·m (155 lb·ft)

Three-Piece Front Axle (Version 2)—Tread Widths for Front Wheels with Rims for 2 Positions (6R 230 and 6R 250)

IMPORTANT: Comply with instructions on front-wheel tread adjustment with rims for 2 positions.

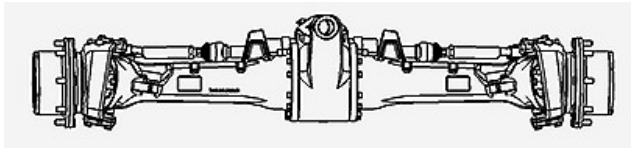
IMPORTANT: The following tables apply only for wheels that have standard rims. Non-standard rims may be pressed in to different depths. In consequence, the values shown in the tables will NOT be valid.

IMPORTANT: After setting the tread, the fender and the steering stop need to be adjusted. Afterwards oscillate the front axle with fully turned steering. If the wheels or fenders contact tractor components, correct the steering stop.

See:

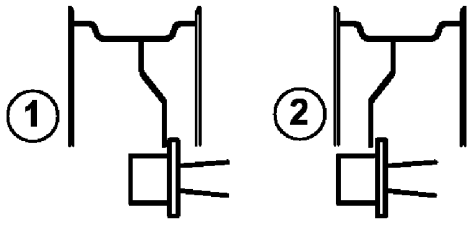
1. **Three-Piece Front Axle (Version 2)—Adjust the Fixed Fenders and Steering Stop in Section 80B.**
2. **Prevent Front Wheel or Fender Contact with Tractor Components in Section 80.**

NOTE: In certain countries, overall vehicle width for driving on public roads must not exceed 2.55 m (100 in).



LX1057503—UN—13MAY15

Three-Piece Front Axle



LX1053400—UN—07MAR12

Three-Piece Front Axle (Version 2)—Tread Widths for Front Wheels with Rims for 2 Positions (6R 230 and 6R 250)									
Tires:		Tread Width on Delivery	Arrangement of Rim and Wheel Dish		Tires:		Tread Width on Delivery	Arrangement of Rim and Wheel Dish	
			1	2				1	2
16.9R30	cm	187	204	187	600/65R30	cm	201*	201*	184
	in	73.5	80.2	73.5		in	79.1*	79.1*	72.5
16.9R30 -R2	cm	187	204	187	600/65R30	cm	184	201*	184
	in	73.5	80.2	73.5		in	72.5	79.0*	72.5
18.4R30	cm	187	204	187	600/70R28	cm	184	201*	184
	in	73.5	80.2	73.5		in	72.5	79.1*	72.5
420/85R30	cm	184	201	184	600/70R28	cm	201*	201*	184
	in	72.6	79.2	72.6		in	79.1*	79.1*	72.5
420/90R30	cm	184	201	184	600/70R28	cm	182	202*	182
	in	72.5	79.1	72.5		in	71.8	79.7*	71.8
420/90R30 -R2	cm	184	201	184	600/70R30	cm	184	201*	184
	in	72.5	79.1	72.5		in	72.5	79.1*	72.5
460/85R30	cm	184	201	184	600/70R30	cm	201*	201*	184
	in	72.5	79.1	72.5		in	79.1*	79.1*	72.5
480/70R30	cm	184	201*	184	600/70R30	cm	184	201*	184
	in	72.6	79.2*	72.6		in	72.5	79.0*	72.5
540/65R30	cm	184	201*	184	IF 600/70R30	cm	184	201*	184
	in	72.6	79.2*	72.6		in	72.5	79.1*	72.5
540/65R30	cm	201*	201*	184	VF 540/65R30	cm	184	201*	184
	in	79.2*	79.2*	72.6		in	72.6	79.2*	72.6
540/65R30	cm	184	201*	184	VF 540/65R30	cm	201*	201*	184
	in	72.6	79.1*	72.6		in	79.2*	79.2*	72.6
540/65R30 -R4	cm	184	201*	184	VF 540/65R30	cm	184	201*	184
	in	72.6	79.2*	72.6		in	72.6	79.1*	72.6

Three-Piece Front Axle (Version 2)—Tread Widths for Front Wheels with Rims for 2 Positions (6R 230 and 6R 250)									
Tires:		Tread Width on Delivery	Arrangement of Rim and Wheel Dish		Tires:		Tread Width on Delivery	Arrangement of Rim and Wheel Dish	
			1	2				1	2
540/65R30 -R4	cm	201*	201*	184	VF 600/65R28	cm	184	201*	184
	in	79.2*	79.2*	72.6		in	72.6	79.2*	72.6
540/65R30 -R4	cm	184	201*	184	VF 600/65R28	cm	201*	201*	184
	in	72.6	79.1*	72.6		in	79.2*	79.2*	72.6
600/65R28	cm	184	201*	184	VF 600/70R28	cm	184	201*	184
	in	72.6	79.2*	72.6		in	72.5	79.1*	72.5
600/65R28	cm	201*	201*	184	VF 600/70R28	cm	201*	201*	184
	in	79.2*	79.2*	72.6		in	79.1*	79.1*	72.5
600/65R28	cm	183	203*	183	VF 600/70R30	cm	184	201*	184
	in	71.9	79.8*	71.9		in	72.5	79.1*	72.5
600/65R30	cm	184	201*	184					
	in	72.5	79.1*	72.5					

* Total vehicle width greater than 2.55/2.75 m (100/108 in). The regional road traffic licensing regulations or other applicable regulations must be observed.
** Tread Width and adjustment of the steering stop is possible only with steering stop AL225331. See also Three-Piece Front Axle (Version 2)—Adjust the Pivoting Fenders and Steering Stop for the relevant front axle.

OULXA64,6R,MW67,000602E-19-13DEC21

Three-Piece Front Axle (Version 2)—Tread Widths for Front Wheels with Rims for 8 Positions (6R 230 and 6R 250)

IMPORTANT: Comply with instructions on front-wheel tread adjustment with rims for 8 positions.

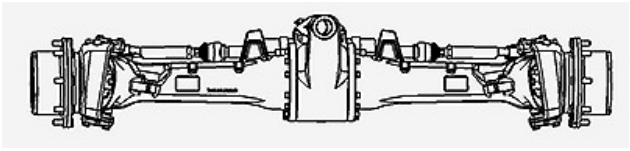
IMPORTANT: The following tables apply only for wheels that have standard rims. Non-standard rims may be pressed in to different depths. In consequence, the values shown in the tables will NOT be valid.

IMPORTANT: After setting the tread, the fender and the steering stop need to be adjusted. Afterwards oscillate the front axle with fully turned steering. If the wheels or fenders contact tractor components, correct the steering stop.

See:

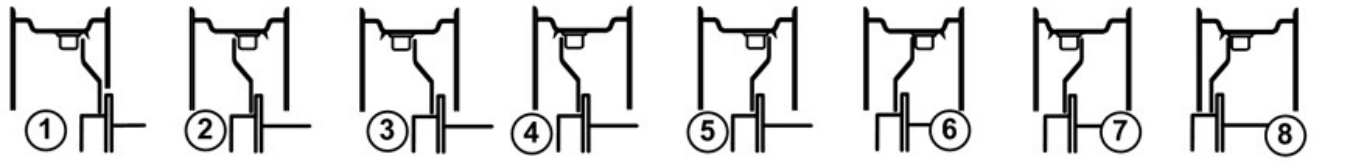
1. **Three-Piece Front Axle (Version 2)—Overview of Axle Category and Axle Type in Section 80B.**
2. **Three-Piece Front Axle (Version 2)—Adjust the Fixed Fenders and Steering Stop in Section 80B.**
3. **Prevent Front Wheel or Fender Contact with Tractor Components in Section 80.**

NOTE: In certain countries, overall vehicle width for driving on public roads must not exceed 2.55 m (100 in).



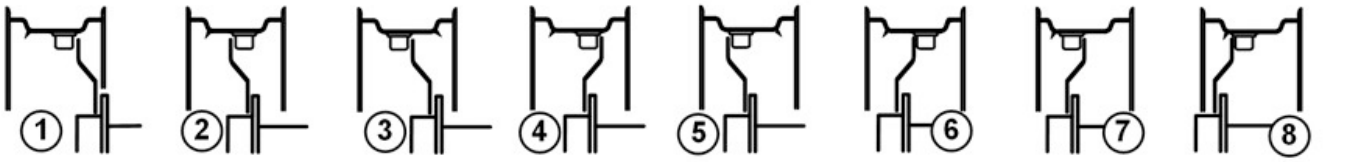
LX1057503—UN—13MAY15

Three-Piece Front Axle



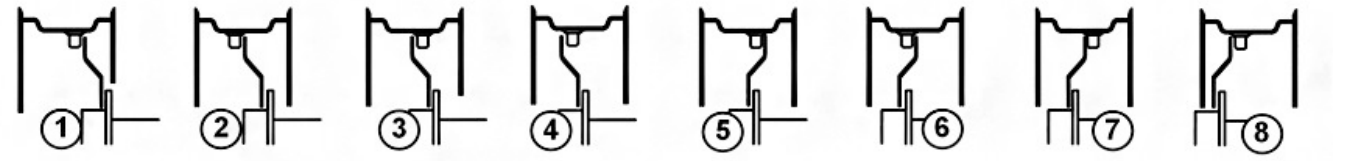
LX315046—UN—16NOV17

Arrangement only used for: RE163752, RE163753, RE167620, RE179980, AL217204, AL217816, and AL217817



LX514954—UN—10AUG23

Arrangement only used for: AL209685, AL209686, AL209687, AL209688, AL209689, and AL226162



LX590878—UN—05OCT23

Arrangement only used for: AL212849

Three-Piece Front Axle (Version 2)—Tread Widths for Front Wheels with Rims for 8 Positions (6R 230 and 6R 250)										
Tires:		Tread Width on Delivery	Arrangement of Rim and Wheel Dish							
			1	2	3	4	5	6	7	8
16.9R30	cm	190	231*	220*	210*	200	190	180	170	159
	in	74.7	90.8*	86.8*	82.8*	78.7	74.7	70.8	66.8	62.8
16.9R30	cm	187	227*	216*	214*	203	187	176	174	163
	in	73.5	89.3*	85.2*	84.1*	80.0	73.5	69.4	68.3	64.3
16.9R30 -R2	cm	190	231*	220*	210*	200	190	180	170	159
	in	74.7	90.8*	86.8*	82.8*	78.7	74.7	70.8	66.8	62.8
16.9R30 -R2	cm	187	227*	216*	214*	203	187	176	174	163
	in	73.5	89.3*	85.2*	84.1*	80.0	73.5	69.4	68.3	64.3
18.4R30	cm	190	231*	220*	210*	200	190	180	170	159**
	in	74.7	90.8*	86.8*	82.8*	78.7	74.7	70.8	66.8	62.8**
18.4R30	cm	187	227*	216*	214*	203	187	176	174	163**
	in	73.5	89.3*	85.2*	84.1*	80.0	73.5	69.4	68.3	64.3**
380/80R38	cm	177	229*	218*	208	197	188	177	168	157
	in	69.8	90.0*	85.7*	82.0	77.7	74.0	69.8	66.0	61.7
380/85R34	cm	187	228*	218*	208	197	187	177	167	157
	in	73.7	89.8*	85.7*	81.7	77.7	73.7	69.8	65.7	61.7
380/85R34 -R1	cm	187	228*	218*	208	197	187	177	167	157
	in	73.7	89.8*	85.7*	81.7	77.7	73.7	69.8	65.7	61.7

Three-Piece Front Axle (Version 2)—Tread Widths for Front Wheels with Rims for 8 Positions (6R 230 and 6R 250)										
Tires:		Tread Width on Delivery	Arrangement of Rim and Wheel Dish							
			1	2	3	4	5	6	7	8
420/85R30	cm	187	228*	218*	208*	198	187	177	167	157
	in	73.8	89.8*	85.8*	81.8*	77.8	73.8	69.8	65.8	61.8
420/85R30	cm	184	224*	214*	211*	201	184	174	171	161
	in	72.6	88.3*	84.3*	83.1*	79.1	72.6	68.5	67.4	63.3
420/85R34	cm	188	229*	218*	208*	197	188	177	168	157**
	in	73.9	90.0*	85.7*	82.0*	77.7	73.9	69.7	66.0	61.7**
420/90R30	cm	187	228*	218*	208*	197	187	177	167	157**
	in	73.7	89.8*	85.7*	81.7*	77.7	73.7	69.8	65.7	61.7**
420/90R30	cm	184	224*	214*	211*	201	184	174	171	161
	in	72.5	88.3*	84.2*	83.1*	79.0	72.5	68.4	67.3	63.2
420/90R30 -R2	cm	187	228*	218*	208*	197	187	177	167	157**
	in	73.7	89.8*	85.7*	81.7*	77.7	73.7	69.8	65.7	61.7**
420/90R30 -R2	cm	184	224*	214*	211*	201	184	174	171	161
	in	72.5	88.3*	84.2*	83.1*	79.0	72.5	68.4	67.3	63.2
460/85R30	cm	187	228*	218*	208*	197	187	177	167	157**
	in	73.7	89.8*	85.7*	81.7*	77.7	73.7	69.8	65.7	61.7**
460/85R30	cm	184	224*	214*	211*	201	184	174	171	161**
	in	72.5	88.3*	84.2*	83.1*	79.0	72.5	68.4	67.3	63.2**
480/70R30	cm	187	228*	218*	208*	198	187	177	167	157**
	in	73.8	89.8*	85.8*	81.8*	77.8	73.8	69.8	65.8	61.8**
480/70R30	cm	184	224*	214*	211*	201*	184	174	171	161
	in	72.6	88.3*	84.3*	83.1*	79.1*	72.6	68.5	67.4	63.3
480/70R34	cm	188	229*	218*	208*	197	188	177	168	157**
	in	73.9	90.0*	85.7*	82.0*	77.7	73.9	69.7	66.0	61.7**
480/70R34 -R2	cm	188	228*	218*	208*	197	188	177	167**	157**
	in	73.9	89.9*	85.7*	81.9*	77.6	73.9	69.6	65.9**	61.7**
540/65R30	cm	184	224*	214*	211*	201*	184	174	171	161**
	in	72.6	88.3*	84.3*	83.1*	79.1*	72.6	68.5	67.4	63.3**
540/65R30	cm	201*	224*	214*	211*	201*	184	174	171	161**
	in	79.1*	88.3*	84.3*	83.1*	79.1*	72.6	68.5	67.4	63.3**
540/65R30 -R4	cm	184	224*	214*	211*	201*	184	174	171	161**
	in	72.6	88.3*	84.3*	83.1*	79.1*	72.6	68.5	67.4	63.3**
540/65R30 -R4	cm	201*	224*	214*	211*	201*	184	174	171	161**
	in	79.1*	88.3*	84.3*	83.1*	79.1*	72.6	68.5	67.4	63.3**
600/65R28	cm	191	223*	213*	202*	193*	191	183	172	162**
	in	75.1	87.7*	83.7*	79.7*	75.9*	75.1	71.9	67.9	63.9**

Three-Piece Front Axle (Version 2)—Tread Widths for Front Wheels with Rims for 8 Positions (6R 230 and 6R 250)										
Tires:		Tread Width on Delivery	Arrangement of Rim and Wheel Dish							
			1	2	3	4	5	6	7	8
600/65R28	cm	184	224*	214*	211*	201*	184	174	171	161**
	in	72.6	88.3*	84.3*	83.1*	79.1*	72.6	68.5	67.4	63.3**
600/65R28	cm	201*	224*	214*	211*	201*	184	174	171	161**
	in	79.1*	88.3*	84.3*	83.1*	79.1*	72.6	68.5	67.4	63.3**
600/65R30	cm	184	224*	214*	211*	201*	184	174	171**	161**
	in	72.5	88.3*	84.2*	83.1*	79.0*	72.5	68.4	67.3**	63.2**
600/65R30	cm	201*	224*	214*	211*	201*	184	174	171**	161**
	in	79.0*	88.3*	84.2*	83.1*	79.0*	72.5	68.4	67.3**	63.2**
600/70R28	cm	191	223*	212*	202*	193*	191*	182	172**	162**
	in	75.0	87.6*	83.6*	79.6*	75.8*	75.0*	71.8	67.8**	63.9**
600/70R28	cm	184	224*	214*	211*	201*	184	174**	171**	161**
	in	72.5	88.3*	84.2*	83.1*	79.0*	72.5	68.4**	67.3**	63.2**
600/70R28	cm	201*	224*	214*	211*	201*	184	174**	171**	161**
	in	79.0*	88.3*	84.2*	83.1*	79.0*	72.5	68.4**	67.3**	63.2**
600/70R30	cm	184	224*	214*	211*	201*	184	174**	171**	161**
	in	72.5	88.3*	84.2*	83.1*	79.0*	72.5	68.4**	67.3**	63.2**
600/70R30	cm	201*	224*	214*	211*	201*	184	174**	171**	161**
	in	79.0*	88.3*	84.2*	83.1*	79.0*	72.5	68.4**	67.3**	63.2**
VF 540/65R30	cm	184	224*	214*	211*	201*	184	174	171	161**
	in	72.6	88.3*	84.3*	83.1*	79.1*	72.6	68.5	67.4	63.3**
VF 540/65R30	cm	201*	224*	214*	211*	201*	184	174	171	161**
	in	79.1*	88.3*	84.3*	83.1*	79.1*	72.6	68.5	67.4	63.3**

* Total vehicle width greater than 2.55/2.75 m (100/108 in). The regional road traffic licensing regulations or other applicable regulations must be observed.
** Tread Width and adjustment of the steering stop is possible only with steering stop AL225331. See also Three-Piece Front Axle (Version 2)—Adjust the Pivoting Fenders and Steering Stop for the relevant front axle.

OULXA64,6R,MW67,000602C-19-09NOV23

Three-Piece Front Axle (Version 2)—Tread Widths for Front Wheels with Rims for 16 Positions (6R 230 and 6R 250)

IMPORTANT: Comply with instructions on front-wheel tread adjustment with rims for 16 positions.

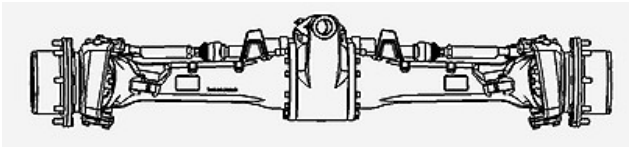
IMPORTANT: The following tables apply only for wheels that have standard rims. Non-standard rims may be pressed in to different depths. In consequence, the values shown in the tables will NOT be valid.

IMPORTANT: After setting the tread, the fender and the steering stop need to be adjusted. Afterwards oscillate the front axle with fully turned steering. If the wheels or fenders contact tractor components, correct the steering stop.

See in this section:

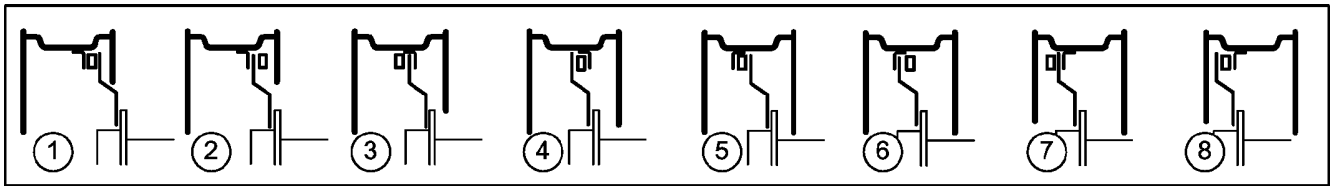
1. **Three-Piece Front Axle (Version 2)—Overview of Axle Category and Axle Type**
2. **Three-Piece Front Axle (Version 2)—Adjust the Fixed Fenders and Steering Stop**
3. **Preventing Front Wheel or Fender Contact with Tractor Components**

NOTE: In certain countries, overall vehicle width for driving on public roads must not exceed 2.55 m (100 in).



LX1057503—UN—13MAY15

Three-Piece Front Axle



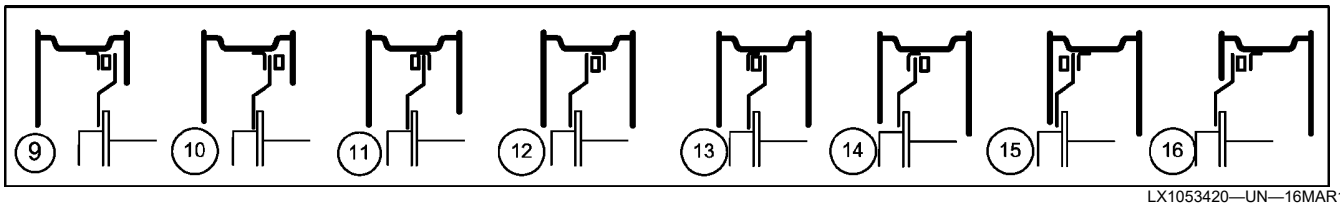
LX1053419—UN—16MAR12

Tread Widths for Front Wheels with Rims for 16 Positions / Positions 1 to 8

Three-Piece Front Axle (Version 2)—Tread Widths for Front Wheels with Rims for 16 Positions (6R 230 and 6R 250)										
Tires:		Tread Widths on Delivery	Arrangement of Rim and Wheel Dish							
			1	2	3	4	5	6	7	8
320/85R38	cm	185	228*	225*	221*	218*	208	205	201	198
	in	72.7	89.8*	88.7*	87.0*	85.8*	81.8	80.7	79.0	77.8
320/85R38	cm	185	228*	225*	221*	218*	208	205	200	197
	in	72.8	89.8*	88.6*	86.9*	85.7*	81.7	80.6	78.9	77.7
320/85R38	cm	181	228*	225*	221*	218*	207	204	200	197
	in	71.2	89.7*	88.5*	86.9*	85.7*	81.7	80.5	78.9	77.7
380/85R34	cm	188	228*	225*	221*	218*	207	204	200	197
	in	73.9	89.7*	88.5*	86.9*	85.7*	81.7	80.5	78.9	77.7
380/85R34 -R1	cm	188	228*	225*	221*	218*	207	204	200	197
	in	73.9	89.7*	88.5*	86.9*	85.7*	81.7	80.5	78.9	77.7
540/65R30	cm	185	228*	225*	221*	218*	205*	201*	198*	188
	in	72.8	89.8*	88.6*	87.0*	85.8*	80.6*	79.0*	77.8*	74.0
540/65R30 -R4	cm	185	228*	225*	221*	218*	205*	201*	198*	188
	in	72.8	89.8*	88.6*	87.0*	85.8*	80.6*	79.0*	77.8*	74.0
600/65R28	cm	187	228*	225*	221*	218*	208*	205*	201*	198*

Three-Piece Front Axle (Version 2)—Tread Widths for Front Wheels with Rims for 16 Positions (6R 230 and 6R 250)										
Tires:		Tread Widths on Delivery	Arrangement of Rim and Wheel Dish							
			1	2	3	4	5	6	7	8
	in	73.8	89.8*	88.6*	87.0*	85.8*	81.7*	80.6*	79.0*	77.8*
600/65R28	cm	181	231*	228*	224*	221*	202*	198*	195*	191
	in	71.3	90.9*	89.7*	88.1*	86.9*	79.4*	77.9*	76.7*	75.1
600/65R30	cm	185	228*	225*	221*	218*	204*	200*	197*	188
	in	72.7	89.7*	88.5*	86.9*	85.7*	80.5*	78.9*	77.7*	73.9
600/70R28	cm	187	228*	225*	221*	218*	207*	204*	200*	197*
	in	73.7	89.7*	88.5*	86.9*	85.7*	81.7*	80.5*	78.9*	77.7*
600/70R28	cm	181	231*	228*	224*	221*	202*	198*	195*	191*
	in	71.3	90.8*	89.6*	88.0*	86.9*	79.4*	77.8*	76.6*	75.0*
600/70R30	cm	185	228*	225*	221*	218*	204*	200*	197*	188*
	in	72.7	89.7*	88.5*	86.9*	85.7*	80.5*	78.9*	77.7*	73.9*
VF 540/65R30	cm	185	228*	225*	221*	218*	205*	201*	198*	188
	in	72.8	89.8*	88.6*	87.0*	85.8*	80.6*	79.0*	77.8*	74.0

* Total vehicle width greater than 2.55/2.75 m (100/108 in). The regional road traffic licensing regulations or other applicable regulations must be observed.
** Tread Width and adjustment of the steering stop is possible only with steering stop AL225331. See also Three-Piece Front Axle (Version 2)—Adjust the Pivoting Fenders and Steering Stop for the relevant front axle.



LX1053420—UN—16MAR12

Tread Widths for Front Wheels with Rims for 16 Positions / Positions 9 to 16

Three-Piece Front Axle (Version 2)—Tread Widths for Front Wheels with Rims for 16 Positions (6R 230 and 6R 250)										
Tires:		Tread Widths on Delivery	Arrangement of Rim and Wheel Dish							
			9	10	11	12	13	14	15	16
320/85R38	cm	185	188	185	180	177	167	164	160	157
	in	72.7	73.9	72.7	70.9	69.8	65.8	64.6	63.0	61.8
320/85R38	cm	185	188	185	181	178	168	165	160	157
	in	72.8	74.0	72.8	71.2	70.0	66.0	64.8	63.1	62.0
320/85R38	cm	181	188	185	181	178	167	164	160	157
	in	71.2	73.9	72.8	71.2	70.0	65.9	64.7	63.1	62.0
380/85R34	cm	188	188	185	181	178	167	164	160	157
	in	73.9	73.9	72.8	71.2	70.0	65.9	64.7	63.1	62.0
380/85R34 -R1	cm	188	188	185	181	178	167	164	160	157

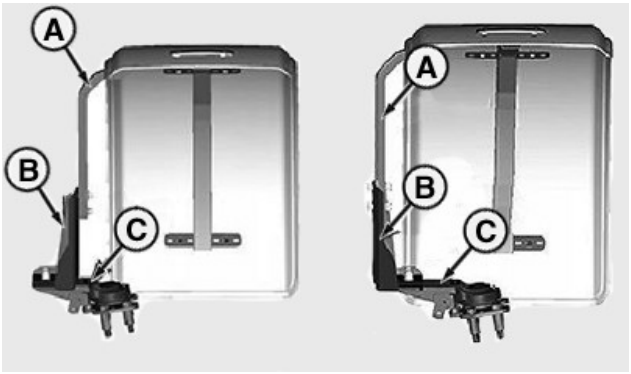
Three-Piece Front Axle (Version 2)—Tread Widths for Front Wheels with Rims for 16 Positions (6R 230 and 6R 250)										
Tires:		Tread Widths on Delivery	Arrangement of Rim and Wheel Dish							
			9	10	11	12	13	14	15	16
	in	73.9	73.9	72.8	71.2	70.0	65.9	64.7	63.1	62.0
540/65R30	cm	185	185	181	178	176	168	165**	161**	158**
	in	72.8	72.8	71.3	70.1	69.1	66.0	64.8**	63.2**	62.0**
540/65R30 -R4	cm	185	185	181	178	176	168	165**	161**	158**
	in	72.8	72.8	71.3	70.1	69.1	66.0	64.8**	63.2**	62.0**
600/65R28	cm	187	188	185	181	178	168**	165**	161**	158**
	in	73.8	74.0	72.8	71.3	70.1	66.0**	64.8**	63.2**	62.0**
600/65R28	cm	181	188	184	181	178	165**	162**	158**	155**
	in	71.3	73.9	72.4	71.2	70.2	64.9**	63.7**	62.1**	60.9**
600/65R30	cm	185	185	181	178	175	167**	164**	160**	157**
	in	72.7	72.8	71.2	70.0	69.1	65.9**	64.7**	63.1**	62.0**
600/70R28	cm	187	188	185	181	178	167**	164**	160**	157**
	in	73.7	73.9	72.8	71.2	70.0	65.9**	64.7**	63.1**	62.0**
600/70R28	cm	181	188	184	181	178	165**	162**	158**	155**
	in	71.3	73.9	72.3	71.1	70.2	64.8**	63.6**	62.0**	60.9**
600/70R30	cm	185	185	181	178**	175**	167**	164**	160**	157**
	in	72.7	72.8	71.2	70.0**	69.1**	65.9**	64.7**	63.1**	62.0**
VF 540/65R30	cm	185	185	181	178	176	168	165**	161**	158**
	in	72.8	72.8	71.3	70.1	69.1	66.0	64.8**	63.2**	62.0**

* Total vehicle width greater than 2.55/2.75 m (100/108 in). The regional road traffic licensing regulations or other applicable regulations must be observed.

** Tread Width and adjustment of the steering stop is possible only with steering stop AL225331. See also Three-Piece Front Axle (Version 2)—Adjust the Pivoting Fenders and Steering Stop for the relevant front axle.

OULXA64,6R,MW67,000602D-19-13DEC21

Adjust Fenders



LX267134—UN—28APR17

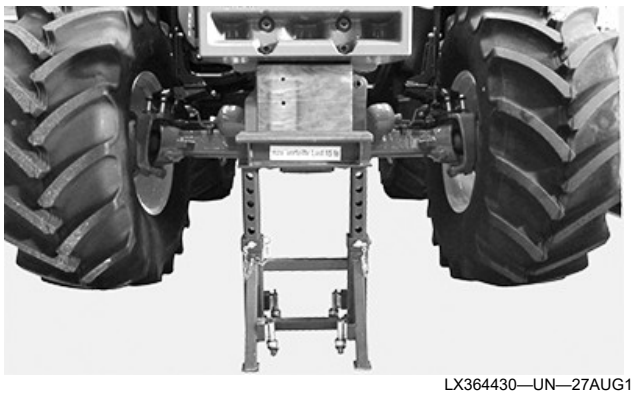
OUT/IN Position

A—Fender Base Support
B—Console
C—Base Plate

The fenders may be adjusted individually. Several adjusting positions are possible. Tilt, width and height of the fenders can be adjusted depending on tire size.

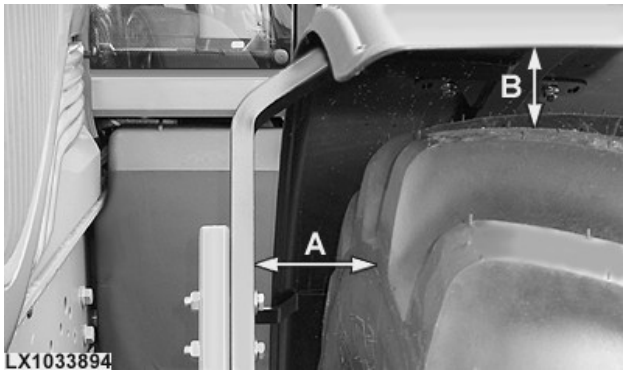
To adjust the fenders, perform the following steps:

1. Raise front of tractor so that the front-wheel drive axle can pivot freely.



LX364430—UN—27AUG19

2. Turn steering wheel fully in both directions and pivot the axle in both directions to the stops to determine the most suitable fender mounting position.
3. Adjust fender position so that the minimum clearances (see illustration) are met. There should not be any contact with the tractor frame.



LX1033894—UN—11MAR04

A = 25 mm (1 in)

B = 25 mm (1 in)

IMPORTANT: If snow chains are installed on the tires, the minimum distance from the tires to the fenders (side wall to fender and running surface to fender) must be 100 mm (3.9 in).

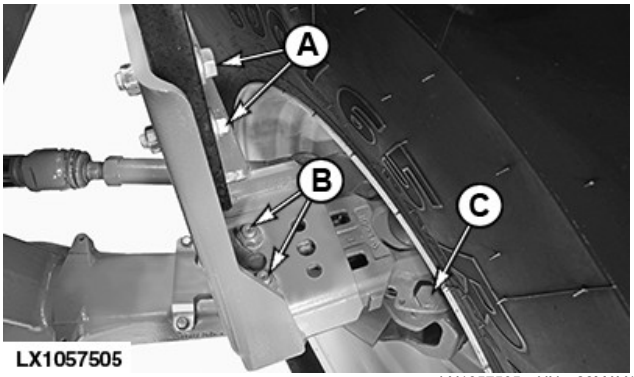
4. Adjust fender stop to prevent it from being seized at the edges with steering wheel fully turned and axle pivoting. Make sure that the stop contacts the tractor frame before reaching the fender.
5. Also adjust the steering stop to make sure that the wheel or the fender does not come into contact with tractor components (e.g. the tank).

LX364429—UN—22AUG19

IMPORTANT: Also refer to the following in this :

- **Notes on Adjusting the Fenders**
- **Notes on Adjusting the Steering Stop of the corresponding front axle model.**

6. **Tighten the screws to the following torque values:**



LX1057505—UN—26MAY15

Console Shown in IN Position

Screws	Torque values
(A) - Fender base support to console	90 N·m (65 lb·ft)
(B) - Console to base plate	160 N·m (120 lb·ft)
(C) - Base plate to knuckle housing	170 N·m (125 lb·ft)

LX25458,ALL,0000A72-19-02JUN22

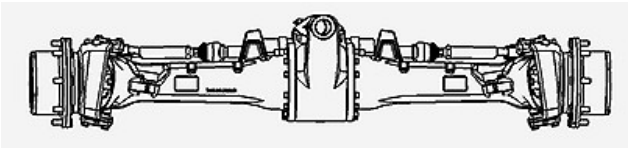
Three-Piece Front Axle (Version 2)—Identify Axle Type

The product identification number plate is located on the axle housing.

The axle type is stated on the product identification number plate.

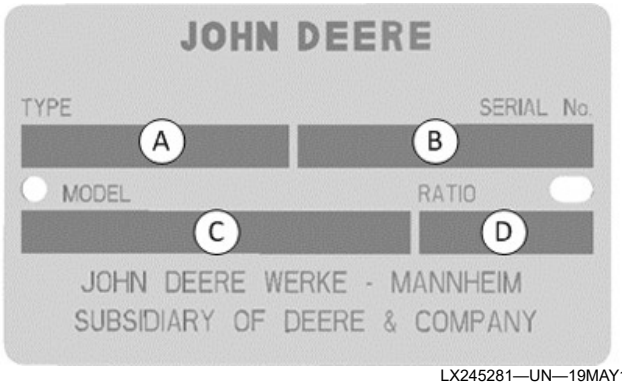
Depending on version, transmission ratio, and tractor model, the following axles may be installed.

Before working on the axle, check what type it is so that you can determine what category it belongs to.



LX1057503—UN—13MAY15

Three-Piece Front Axle

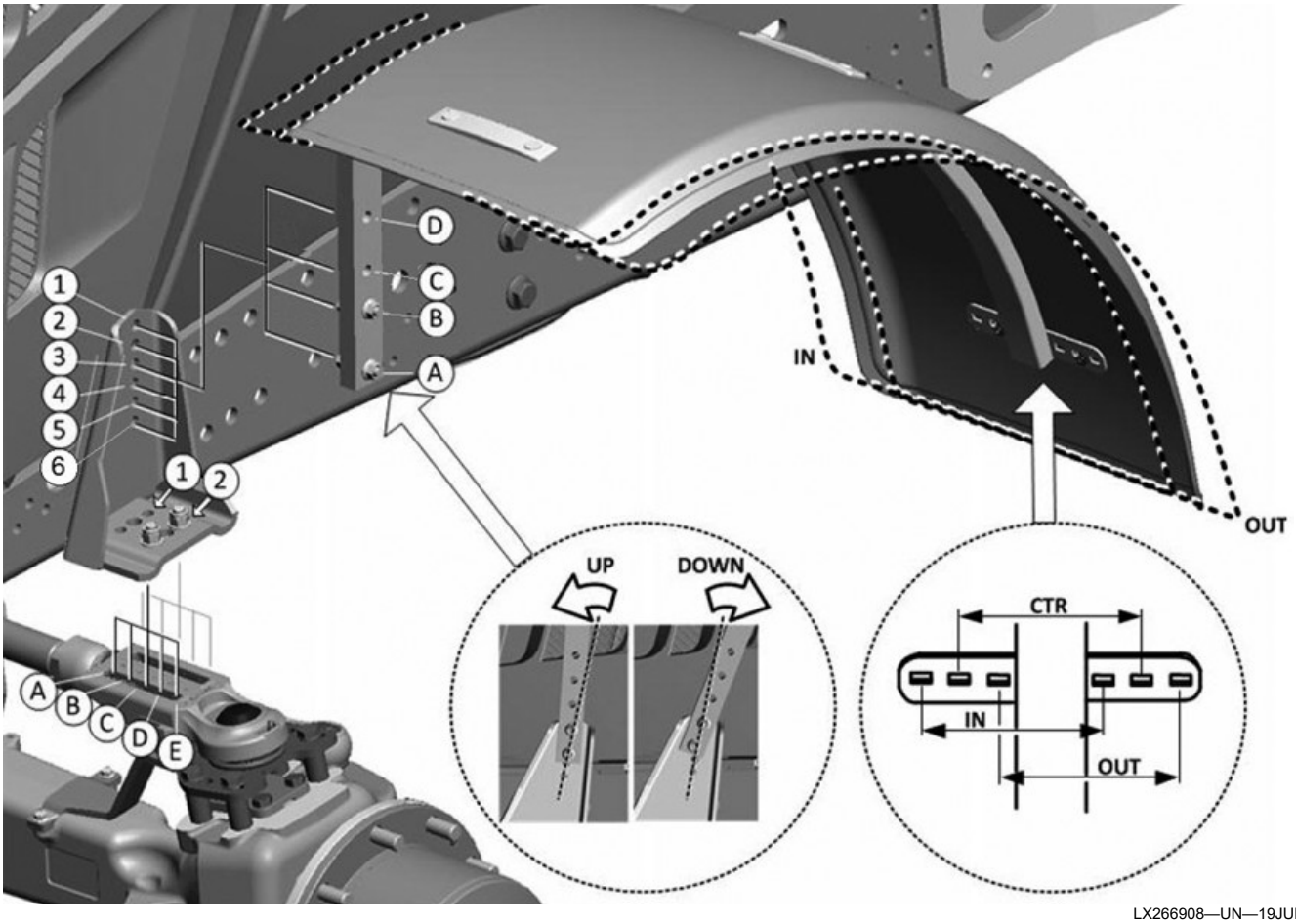


LX245281—UN—19MAY15

A—Axle Type/Design
B—Axle Serial Number
C—Spare Part Number
D—MFWD Ratio

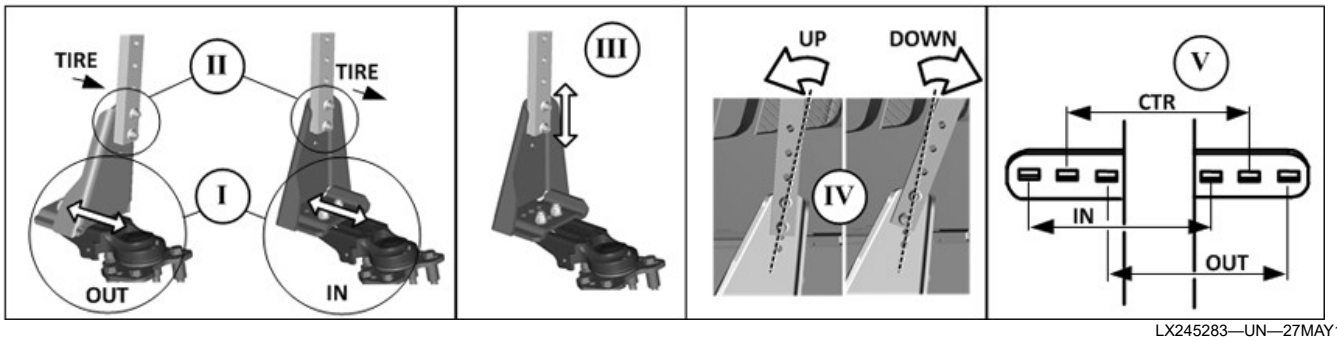
LX25458,ALL,0000A73-19-01JUN22

Notes on Adjusting the Fenders



LX266908—UN—19JUL16

IN Position Shown



LX245283—UN—27MAY15

Installed Position of Fenders

Installed Position of Fenders	
I	Console on Outside of Base Plate - (OUT) Console on Inside of Base Plate - (IN)
II	Fender Base Support to Console - to Wheel (TIRE)
III	Height Adjustment, Fender Base Support to Console
IV	Tilt, Fender Base Support to Console - (UP/DOWN) **IMPORTANT: The fender base support must always point to the rear.**

Installed Position of Fenders	
V	Fender on Fender Base Support - Inside/Center/Outside (IN/CTR/OUT)

IMPORTANT: The setting values are provided in the tables for Adjust the Fender and Steering Stop. See corresponding front axle model on the following pages.

IMPORTANT: Additional setting options are not available.

Adjust the fenders according to the drawing and to the specified tire sizes and tread widths as well as the steering stops required for this.

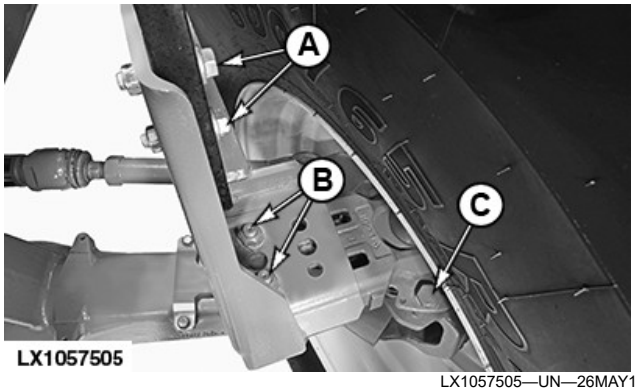
Move the fenders to the recommended position. This will prevent damage to the fenders caused by them coming into contact with the wheel or the engine hood.

IMPORTANT: The positions listed below are merely recommendations. Depending on tire size, fender size, and the position of the steering stops, it may be necessary to move the fenders to positions different from those listed below.

IMPORTANT: Settings listed are approximate, due to variations in tire size.

The fenders are set correctly if a sufficient clearance can be ensured between the tires and frame and tractor components when steering is fully turned and the axle is oscillated to its full extent. See also Prevent Front Wheel or Fender Contact with Tractor Components in 80.

After adjusting the fenders, tighten the attaching screws to the following torques:



LX1057505—UN—26MAY15

Console Shown in IN Position

Screws	Torque values
(A) - Fender base support to console	90 N·m (65 lb·ft)
(B) - Console to base plate	160 N·m (120 lb·ft)
(C) - Base plate to knuckle housing	170 N·m (125 lb·ft)

LX25458,ALL,0000A74-19-02JUN22

Three-Piece Front Axle (Version 2)—Notes on Adjusting the Steering Stop (750 and 755)

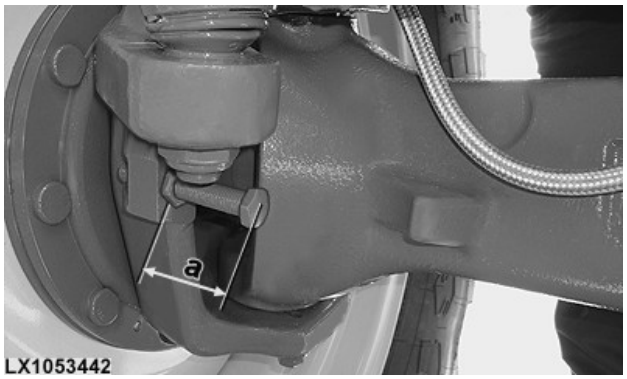
IMPORTANT: Settings listed are approximate, due to variations in tire size.

IMPORTANT: Steering stop kit AL225331 for the three-piece front axle (version 2) can be used for setting the steering stop for narrower tread widths.

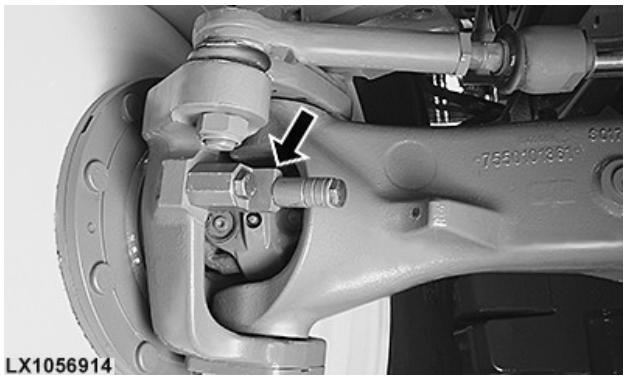
IMPORTANT: The required setting values of the steering stops can be found in one of the following tables:

- ***Three-Piece Front Axle (Version 2)—Adjust the Fixed Fenders and Steering Stop (750) or (755)***
- ***Three-Piece Front Axle (Version 2)—Adjust the Pivoting Fenders and Steering Stop (750) or (755)***

See relevant Supplement for Tire Information in Group 40.



LX1053442—UN—23MAY12



LX1056914—UN—27JUN13

Steering Stop Kit AL225331 for Narrower Tread Widths

1. Adjust fenders (if equipped) and tread widths before setting steering stop positions.
2. The correct position of the steering stops for the tire size and tread width are listed in the table Three-Piece Front Axle (Version 2)—Adjust the Fenders and Steering Stop of the relevant front axle.
3. Measure the length of screw (a) as shown. This will bring the steering stops to their correct position. It must be ensured that the steering stops can be screwed in to a depth of at least 10 mm (0.4 in).

   If the length of the steering stops is not sufficient, a

stop extension can be used. Contact an authorized dealer for this.

IMPORTANT: Keep the following in mind when adjusting the steering stops:

Length of the Stop Screw (M16)	Up to 80 mm (3.1 in)	From 85 mm (3.3 in) and larger
Steering Stop Kit	Without	With AL225331
Height of nut (M16)	H = 13 mm (0.51 in)	—
Torque Specifications	120 ± 10 N·m (89 ± 7 lb·ft)	—

4. Tighten the retaining nuts of the steering stops to the specified torque.
5. Turn wheel fully to the right. Impact the knuckle housing against the steering stop five times. Repeat for left side.
6. Tighten the steering stop retaining nuts to the specified torque once again.
7. Turn steering wheel fully to the left and then fully to the right to check clearance.

IMPORTANT: After every setting, observe the following:

• Set the shutoff angle for the automatic engagement and disengagement of the front-wheel drive. See Engage Front-Wheel Drive in Section 50A of the relevant Operator's Manual.

• Check whether the required clearances are maintained. See Prevent Front Wheel or Fender Contact with Tractor Components in Group 20 of the relevant supplement or Section 80 of the relevant Operator's Manual.

LX25458,ALL,0000A76-19-02JUN22

Three-Piece Front Axle (Version 2) — Adjust the Fixed Fenders and Steering Stop (755)

IMPORTANT: Observe the following points in this section:

• "Notes on Adjusting the Fenders"

• "Three-Piece Front Axle (Version 2) — Overview of Axle Category and Axle Type"

• "Three-Piece Front Axle (Version 2) — Notes on Adjusting the Steering Stop"

• Refer to the "Tire Combinations" for the front wheels authorized for the tractor. See Section 80.

IMPORTANT: It must be ensured that the steering stops can be screwed in to a depth of at least 10 mm (0.4 in.).

• Adjust the steering stops to prevent the wheels from coming into contact with tractor components. See "Prevent Front Wheel or Fender Contact with Tractor Components" in Section 80.

• Set the shut-off angle for the automatic engagement and disengagement of the front-wheel drive. See "Engage Front-Wheel Drive" in Section 50A.

IMPORTANT: For setting values for steering stop with two asterisks (**), the tread width and adjustment of the steering stop is possible only with steering stop kit AL225331.

NOTE: For front loader work, select a tread width between 175 - 205 cm (68.9 - 80.7 in.). The recommended tread widths are listed in the table and marked by an asterisk (*).

Three-Piece Front Axle (Version 2) — Adjust the Fixed Fenders and Steering Stop (755)

Tire Size	SRI	Tread width		Steering stop: without front loader		Steering stop: with front loader		Fixed fenders: Installation positions I	II	III	IV	V	Width	Length	type
		[cm]	[in.]	[mm]	[in.]	[mm]	[in.]						[mm]	[mm]	
380/80R38	750	177*	69.8	85	3.35	95**	3.74	D-1-IN	A4-C1	TIRE	UP	CTR	420	1440	LARGE
380/85R34	725	157	61.8	85	3.35	85	3.35	B-2-IN	B4-D1	TIRE	UP	CTR	420	1440	LARGE
		167	65.8	75	2.95	85	3.35	D-2-IN							
		177	69.8	65	2.56	80	3.15	D-1-IN							
		187*	73.7	50	1.97	65	2.56	B-1-OUT							
		198	77.8	35	1.38	50	1.97	D-1-OUT							
		208	81.8	25	0.98	40	1.57	D-2-OUT							
		218	85.8	25	0.98	40	1.57	E-2-OUT							
		228	89.8	25	0.98	40	1.57	E-2-OUT							
420/85R30	700	184*	72.6	70	2.76	85	3.35	E-1-IN	B4-D1	TIRE	UP	OUT	480	1440	LARGE
		201	79.2	50	1.97	65	2.56	D-1-OUT							
420/85R30	700	161	63.3	100**	3.94**	95**	3.74**	B-2-IN	B4-D1	TIRE	UP	OUT	480	1440	LARGE
		171	67.4	85	3.35	95**	3.74	D-2-IN							

Three-Piece Front Axle (Version 2) — Adjust the Fixed Fenders and Steering Stop (755)															
Tire Size	SRI	Tread width		Steering stop without front loader		Steering stop with front loader		Fixed fenders Installation positions					Width	Length	type
		[cm]	[in.]	[mm]	[in.]	[mm]	[in.]	I	II	III	IV	V	[mm]	[mm]	
		174	68.5	80	3.15	95**	3.74	E-2-IN							
		184*	72.6	70	2.76	85	3.35	E-1-IN							
		201	79.1	50	1.97	65	2.56	D-1-OUT							
		211	83.1	45	1.77	60	2.36	D-2-OUT							
		214	84.3	45	1.77	60	2.36	D-2-OUT							
		224	88.3	40	1.57	55	2.17	E-2-OUT							
420/85R34	750	157	61.7	105**	4.13**	95**	3.74**	A-2-IN	A4-C1	TIRE	UP	OUT	480	1440	LARGE
		168	66.0	90	3.54	95**	3.74	D-2-IN							
		177	69.7	85	3.35	95**	3.74	E-2-IN							
		188*	73.9	70	2.76	85	3.35	A-1-OUT							
		197	77.7	60	2.36	75	2.95	C-1-OUT							
		187	73.7	70	2.76	85	3.35	A-1-OUT							
		208	82.0	50	1.97	65	2.56	E-1-OUT							
		218	85.7	40	1.57	55	2.17	E-2-OUT							
		229	90.0	40	1.57	55	2.17	E-2-OUT							
420/90R30	725	157	61.8	90	3.54	95**	3.74	A-2-IN	A5-C2	TIRE	UP	OUT	480	1440	LARGE
		167	65.8	80	3.15	95**	3.74	C-2-IN							
		177	69.8	70	2.76	85	3.35	E-2-IN							
		184	72.6	65	2.56	80	3.15	E-1-IN							
		187*	73.7	55	2.17	70	2.76	A-1-OUT							
		198	77.8	45	1.77	60	2.36	C-1-OUT							
		208	81.8	35	1.38	50	1.97	E-1-OUT							
		218	85.8	25	0.98	40	1.57	E-2-OUT							
		228	89.8	25	0.98	40	1.57	E-2-OUT							
420/90R30 -R2	725	184*	72.6	65	2.56	80	3.15	E-1-IN	A4-C1	TIRE	UP	CTR	420	1440	LARGE
		201	79.2	40	1.57	55	2.17	D-1-OUT							
420/90R30 -R2	725	161	63.3	90	3.54	95**	3.74	B-2-IN	A4-C1	TIRE	UP	CTR	420	1440	LARGE
		171	67.4	80	3.15	95**	3.74	D-2-IN							
		174	68.5	70	2.76	85	3.35	E-2-IN							
		184*	72.6	65	2.56	80	3.15	E-1-IN							
		201	79.0	50	1.97	65	2.56	C-1-OUT							
		211	83.1	30	1.18	45	1.77	D-2-OUT							
		214	84.2	30	1.18	45	1.77	D-2-OUT							
		224	88.3	25	0.98	40	1.57	E-2-OUT							
420/90R30 -R2	725	157	61.8	95**	3.74**	95**	3.74**	A-2-IN	A4-C1	TIRE	UP	CTR	420	1440	LARGE
		167	65.8	85	3.35	95**	3.74	C-2-IN							
		177	69.8	70	2.76	85	3.35	E-2-IN							
		187*	73.7	60	2.36	75	2.95	A-1-OUT							
		198	77.8	50	1.97	65	2.56	C-1-OUT							
		208	81.8	35	1.38	50	1.97	E-1-OUT							
		218	85.8	25	0.98	40	1.57	E-2-OUT							
		228	89.8	25	0.98	40	1.57	E-2-OUT							
460/85R30	725	184*	72.6	75	2.95	90	3.54	D-1-IN	A5-C2	TIRE	UP	OUT	480	1440	LARGE
		201	79.2	55	2.17	70	2.76	C-1-OUT							
460/85R30	725	161	63.3	100**	3.94**	95**	3.74**	B-2-IN	A5-C2	TIRE	UP	OUT	480	1440	LARGE
		171	67.4	90	3.54	95**	3.74	D-2-IN							
		174	68.5	90	3.54	95**	3.74	D-2-IN							
		184*	72.6	75	2.95	90	3.54	D-1-IN							
		201	79.0	55	2.17	70	2.76	C-1-OUT							

Three-Piece Front Axle (Version 2) — Adjust the Fixed Fenders and Steering Stop (755)															
Tire Size	SRI	Tread width		Steering stop without front loader		Steering stop with front loader		Fixed fenders Installation positions					Width	Length	type
		[cm]	[in.]	[mm]	[in.]	[mm]	[in.]	I	II	III	IV	V	[mm]	[mm]	
		211	83.1	45	1.77	60	2.36	E-1-OUT							
		214	84.2	45	1.77	60	2.36	D-2-OUT							
		224	88.3	40	1.57	55	2.17	E-2-OUT							
480/70R30	700	184*	72.6	75	2.95	90	3.54	D-1-IN	B4-D1	TIRE	UP	OUT	480	1440	LARGE
		201	79.2	55	2.17	70	2.76	C-1-OUT							
480/70R30	700	161	63.3	105**	4.13**	95**	3.74**	A-2-IN	B4-D1	TIRE	UP	OUT	480	1440	LARGE
		171	67.4	90	3.54	95**	3.74	C-2-IN							
		174	68.5	85	3.35	95**	3.74	D-2-IN							
		184*	72.6	75	2.95	90	3.54	D-1-IN							
		201	79.1	60	2.36	75	2.95	B-1-OUT							
		211	83.1	45	1.77	60	2.36	E-1-OUT							
		214	84.3	45	1.77	60	2.36	E-1-OUT							
		224	88.3	40	1.57	55	2.17	E-2-OUT							
480/70R34	750	157	61.7	—***	—***	—***	—***	—***	A4-C1	TIRE	UP	OUT	480	1440	LARGE
		168	66.0	100**	3.94**	95**	3.74**	B-2-IN							
		177	69.7	90	3.54	95**	3.74	D-2-IN							
		188*	73.9	80	3.15	95**	3.74	D-1-IN							
		187	73.7	80	3.15	95**	3.74	D-1-IN							
		197	77.7	65	2.56	80	3.15	B-1-OUT							
		208	82.0	55	2.17	70	2.76	D-1-OUT							
		218	85.7	45	1.77	60	2.36	D-2-OUT							
		229	90.0	40	1.57	55	2.17	E-2-OUT							
480/70R34 -R2	775	187	73.7	80	3.15	95**	3.74	D-1-IN	A4-C1	TIRE	UP	OUT	540	1540	LARGE
540/65R30	700	184*	72.6	80	3.15	95**	3.74	D-2-IN	B5-D2	TIRE	UP	CTR	540	1540	LARGE
		201	79.2	65	2.56	80	3.15	A-1-OUT							
540/65R30	700	161	63.3	—***	—***	—***	—***	—***	B5-D2	TIRE	UP	CTR	540	1540	LARGE
		171	67.4	95**	3.74**	95**	3.74**	B-2-IN							
		174	68.5	95**	3.74**	95**	3.74**	B-2-IN							
		184*	72.6	80	3.15	95**	3.74	D-2-IN							
		201	79.1	65	2.56	80	3.15	A-1-OUT							
		211	83.1	50	1.97	65	2.56	C-1-OUT							
		214	84.3	45	1.77	60	2.36	D-1-OUT							
		224	88.3	40	1.57	55	2.17	D-2-OUT							
540/65R30 -R4	700	184*	72.6	80	3.15	95**	3.74	D-2-IN	B5-D2	TIRE	UP	CTR	540	1540	LARGE
		201	79.2	65	2.56	80	3.15	A-1-OUT							
540/65R30 -R4	700	161	63.3	—***	—***	—***	—***	—***	B5-D2	TIRE	UP	CTR	540	1540	LARGE
		171	67.4	95**	3.74**	95**	3.74**	B-2-IN							
		174	68.5	95**	3.74**	95**	3.74**	B-2-IN							
		184*	72.6	80	3.15	95**	3.74	D-2-IN							
		201	79.1	65	2.56	80	3.15	A-1-OUT							
		211	83.1	50	1.97	65	2.56	C-1-OUT							
		214	84.3	45	1.77	60	2.36	D-1-OUT							
		224	88.3	40	1.57	55	2.17	D-2-OUT							

* Tread width setting on delivery. Recommended tread width for front loader operation.

** Tread width and adjustment of the steering stop is possible only with steering stop kit AL225331.

*** No adjustment of steering stops and/or attachment of fenders possible.

Three-Piece Front Axle (Version 2) — Adjust the Fixed Fenders and Steering Stop (755)															
Tire Size	SRI	Tread width		Steering stop without front loader		Steering stop with front loader		Fixed fenders Installation positions					Fixed fenders Width	Fixed fenders Length	Fixed fenders type
		[cm]	[in.]	[mm]	[in.]	[mm]	[in.]	I	II	III	IV	V	[mm]	[mm]	
600/65R28	700	184*	72.6	90	3.54	95**	3.74	C-2-IN	B4-D1	TIRE	UP	OUT	620	1560	LARGE
		201*	79.2	70	2.76	85	3.35	E-1-IN							
600/65R28	700	161	63.3	—***	—***	—***	—***	—***	B4-D1	TIRE	UP	OUT	620	1560	LARGE
		171	67.4	105*-*	4.13**	95**	3.74**	A-2-IN							
		174	68.5	105*-*	4.13**	95**	3.74**	A-2-IN							
		184	72.6	90	3.54	95**	3.74	C-2-IN							
		201*	79.1	70	2.76	85	3.35	E-1-IN							
		211	83.1	65	2.56	80	3.15	B-1-OUT							
		214	84.3	55	2.17	70	2.76	C-1-OUT							
		224	88.3	45	1.77	60	2.36	E-1-OUT							
600/65R30	725	184*	72.6	95**	3.74**	95**	3.74**	C-2-IN	B4-D1	TIRE	UP	OUT	620	1895	LONG
		201*	79.2	75	2.95	90	3.54	E-1-IN							
600/65R30	725	161	63.3	—***	—***	—***	—***	—***	B4-D1	TIRE	UP	OUT	620	1895	LONG
		171	67.4	—***	—***	—***	—***	A-2-IN							
		174	68.5	—***	—***	—***	—***	A-2-IN							
		184	72.6	95**	3.74**	95**	3.74**	C-2-IN							
		201*	79.0	75	2.95	90	3.54	E-1-IN							
		211	83.1	70	2.76	85	3.35	B-1-OUT							
		214	84.2	65	2.56	80	3.15	C-1-OUT							
		224	88.3	50	1.97	65	2.56	E-1-OUT							
600/70R28	725	184*	72.6	95**	3.74**	95**	3.74**	C-2-IN	B4-D1	TIRE	UP	OUT	620	1895	LONG
		201*	79.2	75	2.95	90	3.54	E-1-IN							
600/70R28	725	161	63.3	—***	—***	—***	—***	—***	B4-D1	TIRE	UP	OUT	620	1895	LONG
		171	67.4	—***	—***	—***	—***	A-2-IN							
		183	71.9	95**	3.74**	95**	3.74**	C-2-IN							
		174	68.5	—***	—***	—***	—***	A-2-IN							
		184	72.6	95**	3.74**	95**	3.74**	C-2-IN							
		201*	79.0	75	2.95	90	3.54	E-1-IN							
		211	83.1	70	2.76	85	3.35	B-1-OUT							
		214	84.2	65	2.56	80	3.15	C-1-OUT							
		224	88.3	50	1.97	65	2.56	E-1-OUT							
600/70R30	750	184*	72.5	90	3.54	95**	3.74**	B-1-IN	A6-C3	TIRE	UP	OUT	620	1895	LONG
		201*	79.1	75	2.95	90	3.54	E-1-IN							
600/70R30	750	161	63.2	—***	—***	—***	—***	—***	A5-C2	TIRE	UP	OUT	620	1895	LONG
		171	67.3	—***	—***	—***	—***	A-2-IN							
		174	68.4	—***	—***	—***	—***	A-2-IN							
		184	72.5	90	3.54	95**	3.74**	B-1-IN							
		201*	79.0	75	2.95	90	3.54	E-1-IN							
		211	83.1	70	2.76	85	3.35	B-1-OUT							
		214	84.2	65	2.56	80	3.15	C-1-OUT							
		224	88.3	55	2.17	70	2.76	E-1-OUT							
VF 540/ 65R30	700	184*	72.6	80	3.15	95**	3.74	D-2-IN	B5-D2	TIRE	UP	CTR	540	1540	LARGE
		201	79.2	65	2.56	80	3.15	A-1-OUT							
VF 540/ 65R30	700	161	63.3	—***	—***	—***	—***	—***	B5-D2	TIRE	UP	CTR	540	1540	LARGE
		171	67.4	95**	3.74**	95**	3.74**	B-2-IN							
		174	68.5	95**	3.74**	95**	3.74**	B-2-IN							
		184*	72.6	80	3.15	95**	3.74	D-2-IN							

Three-Piece Front Axle (Version 2) — Adjust the Fixed Fenders and Steering Stop (755)															
Tire Size	SRI	Tread width		Steering stop without front loader		Steering stop with front loader		Fixed fenders Installation positions					Fixed fenders Width	Fixed fenders Length	Fixed fenders type
		[cm]	[in.]	[mm]	[in.]	[mm]	[in.]	I	II	III	IV	V	[mm]	[mm]	
		201	79.1	65	2.56	80	3.15	A-1-OUT							
		211	83.1	50	1.97	65	2.56	C-1-OUT							
		214	84.3	45	1.77	60	2.36	D-1-OUT							
		224	88.3	40	1.57	55	2.17	D-2-OUT							
VF 600/ 60R30	700	184*	72.6	85	3.35	95**	3.74	D-2-IN	B4-D1	TIRE	UP	OUT	620	1560	LARGE
		201	79.2	70	2.76	85	3.35	E-1-IN							
VF 600/ 65R28	700	184*	72.6	90	3.54	95**	3.74	C-2-IN	B4-D1	TIRE	UP	OUT	620	1560	LARGE
		201	79.2	70	2.76	85	3.35	E-1-IN							
VF 600/ 70R28	725	184*	72.6	95**	3.74**	95**	3.74**	C-2-IN	B4-D1	TIRE	UP	OUT	620	1895	LONG
		201	79.2	75	2.95	90	3.54	E-1-IN							
VF 600/ 70R30	750	184*	72.5	90	3.54	95**	3.74**	B-1-IN	A6-C3	TIRE	UP	OUT	620	1895	LONG
		201*	79.1	75	2.95	90	3.54	E-1-IN							
VF 600/ 70R30	750	161	63.2	—***	—***	—***	—***	—***	A5-C2	TIRE	UP	OUT	620	1895	LONG
		171	67.3	—***	—***	—***	—***	A-2-IN							
		174	68.4	—***	—***	—***	—***	A-2-IN							
		184	72.5	90	3.54	95**	3.74**	B-1-IN							
		201*	79.0	75	2.95	90**	3.54	E-1-IN							
		211	83.1	70	2.76	85**	3.35	B-1-OUT							
		214	84.2	65	2.56	80**	3.15	C-1-OUT							
		224	88.3	55	2.17	70**	2.76	E-1-OUT							

* Tread width setting on delivery. Recommended tread width for front loader operation.

** Tread width and adjustment of the steering stop is possible only with steering stop kit AL225331.

*** No adjustment of steering stops and/or attachment of fenders possible.

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Three-Piece Front Axle (Version 2)—Adjust the Pivoting Fenders and Steering Stop (755)

IMPORTANT: Observe the following points in this section:

- **Notes on Adjusting the Fenders**
- **Three-Piece Front Axle (Version 2) — Overview of Axle Category and Axle Type**
- **Three-Piece Front Axle (Version 2) — Notes on Adjusting the Steering Stop**
- **Refer to the Tire Combinations for the front wheels authorized for the tractor. See Section 80.**

IMPORTANT: It must be ensured that the steering stops can be screwed in to a depth of at least 10 mm (0.4 in.).

- **Adjust the steering stops to prevent the wheels from coming into contact with tractor components. See "Prevent Front Wheel or Fender Contact with Tractor Components" in Section 80.**
- **Set the shut-off angle for the automatic engagement and disengagement of the front-wheel drive. See Engage Front-Wheel Drive in Section 50A.**

IMPORTANT: For setting values for steering stop with two asterisks (**), the tread width and adjustment of the steering stop is possible only with steering stop kit AL225331.

NOTE: For front loader work, select a tread width between 175 - 205 cm (68.9 - 80.7 in.). The recommended tread widths are listed in the table and marked by an asterisk (*).

Three-Piece Front Axle (Version 2) — Adjust the Pivoting Fenders and Steering Stop - 755															
Tire Size	SRI	Tread width		Steering stop without front loader		Steering stop with front loader		Fixed fenders Installation positions					Width	Length	type
		[cm]	[in.]	[mm]	[in.]	[mm]	[in.]	I	II	III	IV	V	[mm]	[mm]	
380/80R38	750	177*	69.8	55	2.17	75	2.95	D-1-IN	A4-C1	TIRE	UP	CTR	420	1440	LARGE
380/85R34	725	157	61.8	65	2.56	80	3.15	B-2-IN	B4-D1	TIRE	UP	CTR	420	1440	LARGE
		167	65.8	50	1.97	65	2.56	D-2-IN							
		177	69.8	30	1.18	45	1.77	D-1-IN							
		187*	73.7	30	1.18	45	1.77	B-1-OUT							
		198	77.8	20	0.79	35	1.38	D-1-OUT							
		208	81.8	20	0.79	35	1.38	D-2-OUT							
		218	85.8	20	0.79	35	1.38	E-2-OUT							
		228	89.8	20	0.79	35	1.38	E-2-OUT							
420/85R30	700	184*	72.6	55	2.17	70	2.76	E-1-IN	B4-D1	TIRE	UP	OUT	480	1440	LARGE
		201	79.2	20	0.79	35	1.38	D-1-OUT							
420/85R30	700	161	63.3	70	2.76	85	3.35	B-2-IN	B4-D1	TIRE	UP	OUT	480	1440	LARGE
		171	67.4	55	2.17	70	2.76	D-2-IN							
		174	68.5	50	1.97	65	2.56	E-2-IN							
		184*	72.6	35	1.38	50	1.97	E-1-IN							
		201	79.1	20	0.79	35	1.38	D-1-OUT							
		211	83.1	20	0.79	35	1.38	D-2-OUT							
		214	84.3	20	0.79	35	1.38	D-2-OUT							
		224	88.3	20	0.79	35	1.38	E-2-OUT							
420/85R34	750	157	61.7	85	3.35	95**	3.74**	A-2-IN	A4-C1	TIRE	UP	OUT	480	1440	LARGE
		168	66.0	70	2.76	85	3.35	D-2-IN							
		177	69.7	60	2.36	75	2.95	E-2-IN							
		188*	73.9	45	1.77	60	2.36	A-1-OUT							
		197	77.7	35	1.38	50	1.97	C-1-OUT							
		187	73.7	45	1.77	60	2.36	A-1-OUT							
		208	82.0	20	0.79	35	1.38	E-1-OUT							
		218	85.7	20	0.79	35	1.38	E-2-OUT							
		229	90.0	20	0.79	35	1.38	E-2-OUT							
420/90R30	725	157	61.8	70	2.76	85	3.35	A-2-IN	A5-C2	TIRE	UP	OUT	480	1440	LARGE
		167	65.8	55	2.17	70	2.76	C-2-IN							
		177	69.8	35	1.38	50	1.97	E-2-IN							
		184	72.6	25	0.98	40	1.57	E-1-IN							
		187*	73.7	25	0.98	40	1.57	A-1-OUT							
		198	77.8	20	0.79	35	1.38	C-1-OUT							
		208	81.8	20	0.79	35	1.38	E-1-OUT							
		218	85.8	20	0.79	35	1.38	E-2-OUT							
		228	89.8	20	0.79	35	1.38	E-2-OUT							
420/90R30 -R2	725	184*	72.6	25	0.98	40	1.57	E-1-IN	A4-C1	TIRE	UP	CTR	420	1440	LARGE
		201	79.2	20	0.79	35	1.38	D-1-OUT							
420/90R30 -R2	725	161	63.3	65	2.56	80	3.15	B-2-IN	A4-C1	TIRE	UP	CTR	420	1440	LARGE
		171	67.4	45	1.77	60	2.36	D-2-IN							
		174	68.5	40	1.57	55	2.17	E-2-IN							
		184*	72.6	25	0.98	40	1.57	E-1-IN							
		201	79.0	20	0.79	35	1.38	C-1-OUT							
		211	83.1	20	0.79	35	1.38	D-2-OUT							
		214	84.2	20	0.79	35	1.38	D-2-OUT							
		224	88.3	20	0.79	35	1.38	E-2-OUT							
420/90R30 -R2	725	157	61.8	70	2.76	85	3.35	A-2-IN	A4-C1	TIRE	UP	CTR	420	1440	LARGE
		167	65.8	50	1.97	65	2.56	C-2-IN							

Three-Piece Front Axle (Version 2) — Adjust the Pivoting Fenders and Steering Stop - 755															
Tire Size	SRI	Tread width		Steering stop without front loader		Steering stop with front loader		Fixed fenders Installation positions					Fixed fenders Width	Fixed fenders Lengt-h	Fixed fenders type
		[cm]	[in.]	[mm]	[in.]	[mm]	[in.]	I	II	III	IV	V	[mm]	[mm]	
		177	69.8	35	1.38	50	1.97	E-2-IN							
		187*	73.7	25	0.98	40	1.57	A-1-OUT							
		198	77.8	20	0.79	35	1.38	C-1-OUT							
		208	81.8	20	0.79	35	1.38	E-1-OUT							
		218	85.8	20	0.79	35	1.38	E-2-OUT							
		228	89.8	20	0.79	35	1.38	E-2-OUT							
460/85R30	725	184*	72.6	55	2.17	70	2.76	D-1-IN	A5-C2	TIRE	UP	OUT	480	1440	LARGE
		201	79.2	30	1.18	45	1.77	C-1-OUT							
		161	63.3	80	3.15	95**	3.74**	B-2-IN							
		171	67.4	70	2.76	85	3.35	D-2-IN							
		174	68.5	65	2.56	80	3.15	D-2-IN							
460/85R30	725	184*	72.6	50	1.97	65	2.56	D-1-IN	A5-C2	TIRE	UP	OUT	480	1440	LARGE
		201	79.0	30	1.18	45	1.77	C-1-OUT							
		211	83.1	20	0.79	35	1.38	E-1-OUT							
		214	84.2	20	0.79	35	1.38	D-2-OUT							
		224	88.3	20	0.79	35	1.38	E-2-OUT							
480/70R30	700	184*	72.6	55	2.17	70	2.76	D-1-IN	B4-D1	TIRE	UP	OUT	480	1440	LARGE
		201	79.2	20	0.79	35	1.38	C-1-OUT							
		161	63.3	75	2.95	90	3.54	A-2-IN							
		171	67.4	55	2.17	70	2.76	C-2-IN							
		174	68.5	50	1.97	65	2.56	D-2-IN							
480/70R30	700	184*	72.6	35	1.38	50	1.97	D-1-IN	B4-D1	TIRE	UP	OUT	480	1440	LARGE
		201	79.1	20	0.79	35	1.38	B-1-OUT							
		211	83.1	20	0.79	35	1.38	E-1-OUT							
		214	84.3	20	0.79	35	1.38	E-1-OUT							
		224	88.3	20	0.79	35	1.38	E-2-OUT							
		157	61.7	—***	—***	—***	—***	—***							
		168	66.0	80	3.15	95**	3.74**	B-2-IN							
		177	69.7	70	2.76	85	3.35	D-2-IN							
		188*	73.9	50	1.97	65	2.56	D-1-IN							
480/70R34	750	187	73.7	50	1.97	65	2.56	D-1-IN	A4-C1	TIRE	UP	OUT	480	1440	LARGE
		197	77.7	40	1.57	55	2.17	B-1-OUT							
		208	82.0	30	1.18	45	1.77	D-1-OUT							
		218	85.7	20	0.79	35	1.38	D-2-OUT							
		229	90.0	20	0.79	35	1.38	E-2-OUT							
480/70R34 -R2	775	187	73.7	50	1.97	65	2.56	D-1-IN	A4-C1	TIRE	UP	OUT	540	1540	LARGE
540/65R30	700	184*	72.6	55	2.17	70	2.76	D-2-IN	B5-D2	TIRE	UP	CTR	540	1540	LARGE
		201	79.2	20	0.79	35	1.38	A-1-OUT							
		161	63.3	—***	—***	—***	—***	—***							
		171	67.4	70	2.76	85	3.35	B-2-IN							
		174	68.5	65	2.56	80	3.15	B-2-IN							
540/65R30	700	184*	72.6	45	1.77	60	2.36	D-2-IN	B5-D2	TIRE	UP	CTR	540	1540	LARGE
		201	79.1	20	0.79	35	1.38	A-1-OUT							
		211	83.1	20	0.79	35	1.38	C-1-OUT							
		214	84.3	20	0.79	35	1.38	D-1-OUT							
		224	88.3	20	0.79	35	1.38	D-2-OUT							
540/65R30 -R4	700	184*	72.6	55	2.17	70	2.76	D-2-IN	B5-D2	TIRE	UP	CTR	540	1540	LARGE
		201	79.2	20	0.79	35	1.38	A-1-OUT							

Three-Piece Front Axle (Version 2) — Adjust the Pivoting Fenders and Steering Stop - 755

Tire Size	SRI	Tread width		Steering stop without front loader		Steering stop with front loader		Fixed fenders Installation positions					Fixed fenders Width	Fixed fenders Length	Fixed fenders type
		[cm]	[in.]	[mm]	[in.]	[mm]	[in.]	I	II	III	IV	V	[mm]	[mm]	
540/65R30 -R4	700	161	63.3	—***	—***	—***	—***	—***	B5-D2	TIRE	UP	CTR	540	1540	LARGE
		171	67.4	70	2.76	85	3.35	B-2-IN							
		174	68.5	65	2.56	80	3.15	B-2-IN							
		184*	72.6	45	1.77	60	2.36	D-2-IN							
		201	79.1	20	0.79	35	1.38	A-1-OUT							
		211	83.1	20	0.79	35	1.38	C-1-OUT							
		214	84.3	20	0.79	35	1.38	D-1-OUT							
		224	88.3	20	0.79	35	1.38	D-2-OUT							

* Tread width setting on delivery. Recommended tread width for front loader operation.
** Tread width and adjustment of the steering stop is possible only with steering stop kit AL225331.
*** No adjustment of steering stops and/or attachment of fenders possible.

Three-Piece Front Axle (Version 2) — Adjust the Pivoting Fenders and Steering Stop - 755

Tire Size	SRI	Tread width		Steering stop without front loader		Steering stop with front loader		Fixed fenders Installation positions					Fixed fenders Width	Fixed fenders Length	Fixed fenders type
		[cm]	[in.]	[mm]	[in.]	[mm]	[in.]	I	II	III	IV	V	[mm]	[mm]	
600/65R28	700	184*	72.6	60	2.36	75	2.95	C-2-IN	B4-D1	TIRE	UP	OUT	620	1560	LARGE
		201*	79.2	35	1.38	50	1.97	E-1-IN							
600/65R28	700	161	63.3	—***	—***	—***	—***	—***	B4-D1	TIRE	UP	OUT	620	1560	LARGE
		171	67.4	80	3.15	95**	3.74**	A-2-IN							
		174	68.5	75	2.95	90	3.54	A-2-IN							
		184	72.6	60	2.36	75	2.95	C-2-IN							
		201*	79.1	35	1.38	50	1.97	E-1-IN							
		211	83.1	20	0.79	35	1.38	B-1-OUT							
		214	84.3	20	0.79	35	1.38	C-1-OUT							
		224	88.3	20	0.79	35	1.38	E-1-OUT							
600/65R30	725	184*	72.6	90	3.54	95**	3.74**	C-2-IN	B4-D1	TIRE	UP	OUT	620	1895	LONG
		201*	79.2	45	1.77	60	2.36	E-1-IN							
600/65R30	725	161	63.3	—***	—***	—***	—***	—***	B4-D1	TIRE	UP	OUT	620	1895	LONG
		171	67.4	—***	—***	—***	—***	A-2-IN							
		174	68.5	—***	—***	—***	—***	A-2-IN							
		184	72.6	70	2.76	85	3.35	C-2-IN							
		201*	79.0	45	1.77	60	2.36	E-1-IN							
		211	83.1	30	1.18	45	1.77	B-1-OUT							
		214	84.2	30	1.18	45	1.77	C-1-OUT							
		224	88.3	20	0.79	35	1.38	E-1-OUT							
600/70R28	725	184*	72.6	90	3.54	95**	3.74**	C-2-IN	B4-D1	TIRE	UP	OUT	620	1895	LONG
		201*	79.2	45	1.77	60	2.36	E-1-IN							
600/70R28	725	161	63.3	—***	—***	—***	—***	—***	B4-D1	TIRE	UP	OUT	620	1895	LONG
		171	67.4	—***	—***	—***	—***	A-2-IN							
		183	71.9	90	3.54	95**	3.74**	C-2-IN							
		174	68.5	—***	—***	—***	—***	A-2-IN							
		184	72.6	70	2.76	85	3.35	C-2-IN							
		201*	79.0	45	1.77	60	2.36	E-1-IN							
		211	83.1	35	1.38	50	1.97	B-1-OUT							

Three-Piece Front Axle (Version 2) — Adjust the Pivoting Fenders and Steering Stop - 755															
Tire Size	SRI	Tread width		Steering stop without front loader		Steering stop with front loader		Fixed fenders Installation positions					Width	Length	type
		[cm]	[in.]	[mm]	[in.]	[mm]	[in.]	I	II	III	IV	V	[mm]	[mm]	
		214	84.2	30	1.18	45	1.77	C-1-OUT							
		224	88.3	20	0.79	35	1.38	E-1-OUT							
600/70R30	750	184*	72.5	75	2.95	90	3.54	A-1-IN	A6-C3	TIRE	UP	OUT	620	1895	LONG
		201*	79.1	50	1.97	65	2.56	E-1-IN							
600/70R30	750	161	63.2	—***	—***	—***	—***	—***	A5-C2	TIRE	UP	OUT	620	1895	LONG
		171	67.3	—***	—***	—***	—***	A-2-IN							
		174	68.4	—***	—***	—***	—***	A-2-IN							
		184	72.5	75	2.95	90	3.54	B-1-IN							
		201*	79.0	50	1.97	65	2.56	E-1-IN							
		211	83.1	40	1.57	55	2.17	B-1-OUT							
		214	84.2	35	1.38	50	1.97	C-1-OUT							
		224	88.3	20	0.79	35	1.38	E-1-OUT							
VF 540/ 65R30	700	184*	72.6	55	2.17	70	2.76	D-2-IN	B5-D2	TIRE	UP	CTR	540	1540	LARGE
		201	79.2	20	0.79	35	1.38	A-1-OUT							
VF 540/ 65R30	700	161	63.3	—***	—***	—***	—***	—***	B5-D2	TIRE	UP	CTR	540	1540	LARGE
		171	67.4	70	2.76	85	3.35	B-2-IN							
		174	68.5	65	2.56	80	3.15	B-2-IN							
		184*	72.6	45	1.77	60	2.36	D-2-IN							
		201	79.1	20	0.79	35	1.38	A-1-OUT							
		211	83.1	20	0.79	35	1.38	C-1-OUT							
		214	84.3	20	0.79	35	1.38	D-1-OUT							
		224	88.3	20	0.79	35	1.38	D-2-OUT							
VF 600/ 60R30	700	184*	72.6	60	2.36	75	2.95	D-2-IN	B4-D1	TIRE	UP	OUT	620	1560	LARGE
		201	79.2	35	1.38	50	1.97	E-1-IN							
VF 600/ 65R28	700	184*	72.6	60	2.36	75	2.95	C-2-IN	B4-D1	TIRE	UP	OUT	620	1560	LARGE
		201	79.2	35	1.38	50	1.97	E-1-IN							
VF 600/ 70R28	725	184*	72.6	90	3.54	95**	3.74**	C-2-IN	B4-D1	TIRE	UP	OUT	620	1895	LONG
		201	79.2	45	1.77	60	2.36	E-1-IN							
VF 600/ 70R30	750	184*	72.5	75	2.95	90	3.54	A-1-IN	A6-C3	TIRE	UP	OUT	620	1895	LONG
		201*	79.1	50	1.97	65	2.56	E-1-IN							
VF 600/ 70R30	750	161	63.2	—***	—***	—***	—***	—***	A5-C2	TIRE	UP	OUT	620	1895	LONG
		171	67.3	—***	—***	—***	—***	A-2-IN							
		174	68.4	—***	—***	—***	—***	A-2-IN							
		184	72.5	75	2.95	90	3.54	B-1-IN							
		201*	79.0	50	1.97	65	2.56	E-1-IN							
		211	83.1	40	1.57	55	2.17	B-1-OUT							
		214	84.2	35	1.38	50	1.97	C-1-OUT							
		224	88.3	20	0.79	35	1.38	E-1-OUT							

* Tread width setting on delivery. Recommended tread width for front loader operation.

** Tread width and adjustment of the steering stop is possible only with steering stop kit AL225331.

*** No adjustment of steering stops and/or attachment of fenders possible.

OULXA64,0005F98-19-01APR22

Rear Wheels, Tires, and Tread Widths

Tires and Wheels—Foreword

The wheels, tires, and their gauges as listed in these operating instructions can be fitted.

In some regions, not all tires are available.

The current edition of the sales brochure is authoritative.

LX25458,ALL,0000A46-19-31MAY21

Instructions for Rear Wheel Tread Adjustment with Rims for 2, 8, and 16 Positions (Flanged Axle)

CAUTION: Serious accidents with life-threatening injuries.

Contact of the wheel with tractor components leads to personal injury and property damage.

When setting the track widths or changing the wheel configuration, make sure that a minimum distance of 25 mm (1 in) mm to tractor components is guaranteed. If this minimum distance cannot be maintained, a larger track width must be set or a suitable wheel configuration must be used.

IMPORTANT: Observe the following after a tread adjustment:

• Tighten all wheel bolts and wheel nuts to the specified torque. Check the torque on the wheel nuts and wheel bolts after 4 and 8 hours of operation and also frequently during the next 100 hours of operation.

• Check that wheels can move freely.

• Do not let tires come into contact with draft links or lift links. If there is contact, note the following:

1. **Increase the distance from the lift link to the tire by mounting the lift links in the front hole of the draft link.**
2. **The stabilizer bars (hydraulic or mechanical) have to be locked when lifting the draft links even if no implement is attached.**
3. **If there is still contact with the draft links or lift links despite all these measures, then the tread width needs to be increased.**

IMPORTANT: The distance between the side wall of the tire and tractor components should not be less than 25 mm (1 in).

The distance between the running surface (edge) of the tire and tractor components must not be less than 25 mm (1 in).

If snow chains are installed on the tires, the minimum distance from the tires to the tractor components (side wall to fender and running surface to tractor components) must be 100 mm (4 in).

IMPORTANT: For hub extension, use the torques of the wheels.

NOTE: In certain countries, overall vehicle width for driving on public roads must not exceed 2.55 m (100 in).

Rear Wheels with Rims for 2 Positions

The tread width can be changed by mounting the complete tires on the other tractor side. In doing so, maintain the rolling direction of the tires.

Rear Wheels with Rims for 8 and 16 Positions

Wheel tread can be adjusted by repositioning or reversing the wheel rims.

In addition, the complete wheel can be installed on the other side of the tractor. In doing so, maintain the rolling direction of the tires.

IMPORTANT: The following tables apply only for wheels that have standard rims. Non-standard rims may be pressed in to different depths. In consequence, the values shown in the tables will NOT be valid.

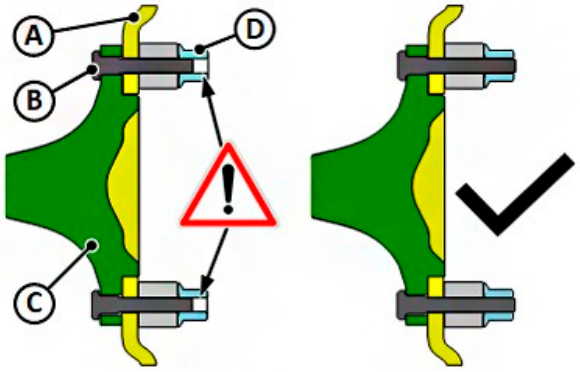
NOTE: Before adjusting tread width, pay attention to the position of the wheel dish relative to the rim of the rear wheel. See illustrations accompanying the tread width tables in Group 30 of the relevant Supplement for Tire Information.

NOTE: In certain countries, overall vehicle width for driving on public roads must not exceed 2,55 m (100 in.).

CAUTION: Danger to life and high property damage.

Missing, loose or too short screws and wheel bolts can lead to the loss of the wheel.

When attaching a wheel, it is important to ensure that all screws are tightened and that the screws used provides sufficient screw in depth.



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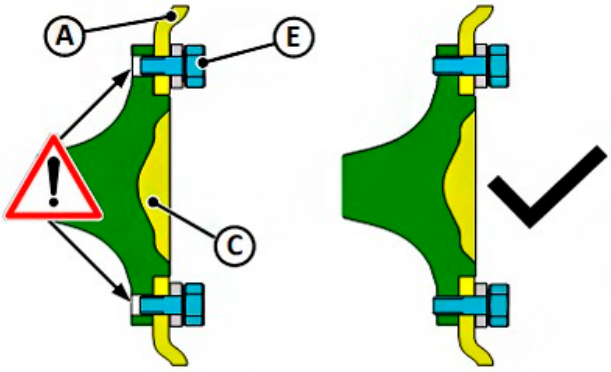
Example: Example: Flange Axle Shown, Version with Nuts



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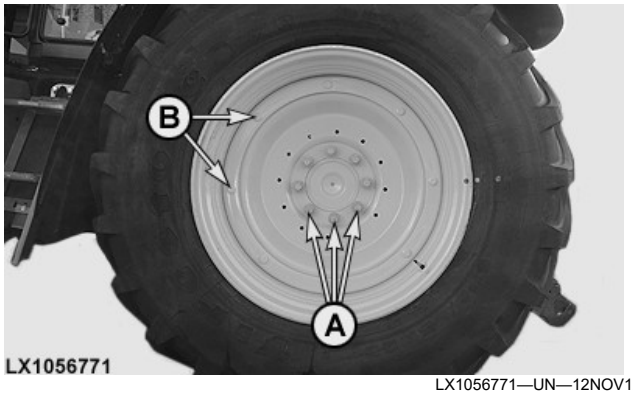
Example: Example: Flange Axle Shown, Version with Screws

A—Rim
B—Bolt
C—Hub (Flange)
D—Nut
E—Screw

When changing wheels, make sure that fasteners are used according to the requirements of the wheel set being used. Screws, nuts, washers, bushings, and reinforcement rings must match the axle rim combination used. If in doubt, ask your authorized dealer. According to the spare parts catalog, only original parts should be used.

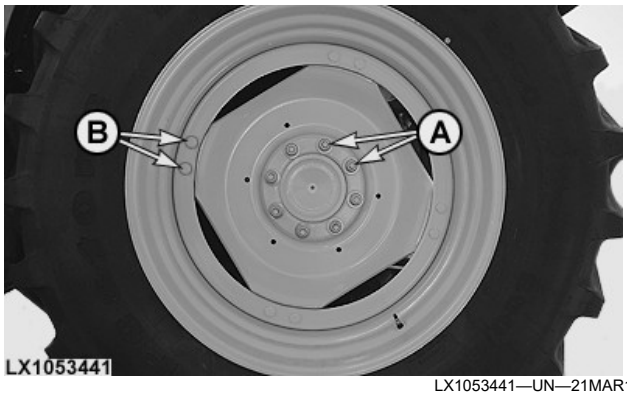
Tighten Rear-Wheel Bolts—Flanged Rear Axles (Rear Wheel with 8-Bolt Circle)



LX1056771—UN—12NOV12

Rear Wheel with 8-Bolt Circle and Round Wheel Dish

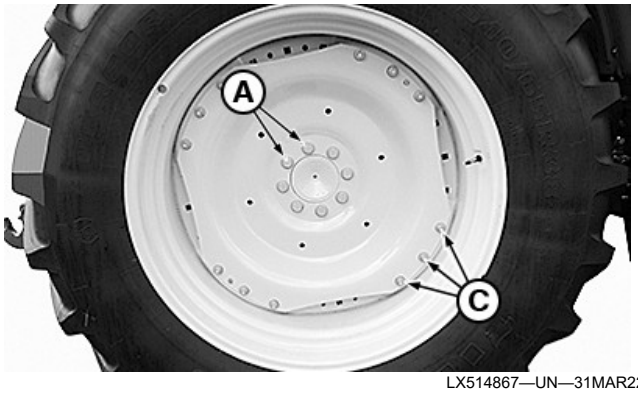
A—500 N·m (370 lb·ft)



LX1053441—UN—21MAR12

Rear Wheel with 8-Hole Circle and Square Wheel Dish

A—500 N·m (370 lb·ft)
B—210 N·m (155 lb·ft)

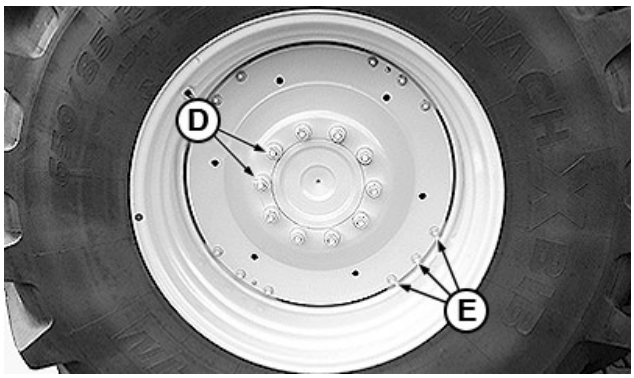


LX514867—UN—31MAR22

Rear Wheel with 8-Bolt Circle and Waffle Rim

A—500 N·m (370 lb·ft)
C—Gold Bolt—280 N·m (205 lb·ft)
C—Gray-Blue Bolt—265 N·m (195 lb·ft)

Tighten Rear-Wheel Bolts, on Vehicles with Flanged Rear Axles—Rear Wheel with 10-Bolt Circle



LX514868—UN—31MAR22

Rear Wheel with 10-Bolt Circle and Waffle Rim

D—600 N·m (445 lb·ft)
E—Gold Bolt—280 N·m (205 lb·ft)
E—Gray-Blue Bolt—265 N·m (195 lb·ft)

OULXA64,ALL,0005665-19-19JAN24

Tread Widths for Rear Wheels with Rims for 2 Positions—Flanged Axles (6R 230 and 6R 250)

IMPORTANT: Potential risk of damage when using 38-inch rims on tractors with mudguard for the cab suspension. Refer to 38-Inch Rear Wheels in Conjunction with the Mudguard for the Cab Suspension in section 80.

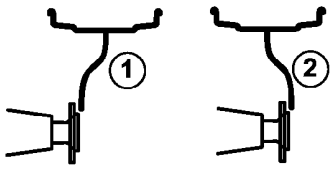
IMPORTANT: Comply with instructions on rear-wheel tread adjustment with rims for 2 positions.

IMPORTANT: For region 2 only, tread width is limited to 2.25 m (88.6 in).

For tread widths up to 2.25 m (88.6 in)., the maximum permissible rear axle load is 11400 kg (25130 lb).

For tread widths from 2.25 m (88.6 in) or twin tires, the maximum permitted rear axle load is 10270 kg (22640 lb).

NOTE: In certain countries, overall vehicle width for driving on public roads must not exceed 2.55 m (100 in).



LX1053403—UN—12MAR12

Tread Widths for Rear Wheels with Rims for 2 Positions—Flanged Axles (6R 230 and 6R 250)

Tires:		Tread Width on Delivery	Rear Wheel Tread Widths Arrangement of Rim and Wheel Dish		Tires:		Tread Width on Delivery	Rear Wheel Tread Widths Arrangement of Rim and Wheel Dish	
			1	2				1	2
520/85R42	cm	194	194	187	650/85R38	cm	200*	200*	181
	in	76.5	76.5	73.5		in	78.8*	78.8*	71.3
520/85R46	cm	194	194	187	710/70R38	cm	181	200*	181
	in	76.5	76.5	73.6		in	71.3	78.8*	71.3
520/85R46 -R2	cm	194	194	187	710/70R38	cm	200*	200*	181
	in	76.5	76.5	73.6		in	78.8*	78.8*	71.3
580/70R42	cm	194	194	187	710/70R42	cm	181	200*	181
	in	76.5	76.5	73.5		in	71.3	78.8*	71.3
620/70R42	cm	181	200*	181	710/70R42	cm	200*	200*	181
	in	71.3	78.8*	71.3		in	78.8*	78.8*	71.3
650/65R42	cm	181	200*	181	800/70R38	cm	191*	191*	188*
	in	71.3	78.8*	71.3		in	75.3*	75.3*	74.1*
650/65R42 -R4	cm	181	200*	181	IF 710/70R42	cm	181	200*	181
	in	71.3	78.8*	71.3		in	71.3	78.8*	71.3
650/75R38	cm	181	200*	181	IF 710/70R42	cm	200*	200*	181
	in	71.3	78.8*	71.3		in	78.8*	78.8*	71.3
650/75R38	cm	200*	200*	181	VF 650/65R42	cm	181	200*	181
	in	78.8*	78.8*	71.3		in	71.3	78.8*	71.3
650/75R42	cm	181	200*	181	VF 710/70R42	cm	181	200*	181
	in	71.3	78.8*	71.3		in	71.3	78.8*	71.3

Tread Widths for Rear Wheels with Rims for 2 Positions—Flanged Axles (6R 230 and 6R 250)									
Tires:		Tread Width on Delivery	Rear Wheel Tread Widths Arrangement of Rim and Wheel Dish		Tires:		Tread Width on Delivery	Rear Wheel Tread Widths Arrangement of Rim and Wheel Dish	
			1	2				1	2
650/75R42	cm	200*	200*	181	VF 710/70R42	cm	200*	200*	181
	in	78.8*	78.8*	71.3		in	78.8*	78.8*	71.3
650/85R38	cm	181	200*	181					
	in	71.3	78.8*	71.3					
* Total vehicle width greater than 2.55/2.75 m (100/108 in). The regional road traffic licensing regulations or other applicable regulations must be observed.									

OULXA64,MW67,0006027-19-14DEC21

Tread Widths for Rear Wheels with Rims for 2 Positions (Heavy-Duty Type)—Flanged Axles (6R 230 and 6R 250)

IMPORTANT: Potential risk of damage when using 38-inch rims on tractors with mudguard for the cab suspension. Refer to 38-Inch Rear Wheels in Conjunction with the Mudguard for the Cab Suspension in section 80.

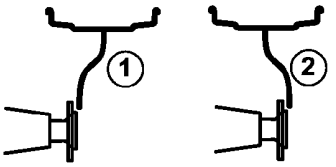
IMPORTANT: Comply with instructions on rear-wheel tread adjustment with rims for 2 positions.

IMPORTANT: For region 2 only, tread width is limited to 2.25 m (88.6 in).

For tread widths up to 2.25 m (88.6 in)., the maximum permissible rear axle load is 11400 kg (25130 lb).

For tread widths from 2.25 m (88.6 in) or twin tires, the maximum permitted rear axle load is 10270 kg (22640 lb).

NOTE: In certain countries, overall vehicle width for driving on public roads must not exceed 2.55 m (100 in).



LX1053403—UN—12MAR12

Tread Widths for Rear Wheels with Rims for 2 Positions (Heavy-Duty Type)—Flanged Axles (6R 230 and 6R 250)									
Tires:		Tread Width on Delivery	Rear Wheel Tread Widths Arrangement of Rim and Wheel Dish		Tires:		Tread Width on Delivery	Rear Wheel Tread Widths Arrangement of Rim and Wheel Dish	
			1	2				1	2
620/70R42	cm	181	206*	181	710/70R38	cm	181	206*	181
	in	71.3	81.0*	71.3		in	71.3	81.0*	71.3
650/65R42	cm	181	206*	181	710/70R42	cm	181	206*	181
	in	71.3	81.0*	71.3		in	71.3	81.0*	71.3
650/65R42 -R4	cm	181	206*	181	800/70R38	cm	191*	191*	—
	in	71.3	81.0*	71.3		in	75.3*	75.3*	
650/75R38	cm	181	206*	181	IF 710/70R42	cm	181	206*	181
	in	71.3	81.0*	71.3		in	71.3	81.0*	71.3
650/75R42	cm	181	206*	181	VF 650/65R42	cm	181	206*	181

Tread Widths for Rear Wheels with Rims for 2 Positions (Heavy-Duty Type)—Flanged Axles (6R 230 and 6R 250)									
Tires:		Tread Width on Delivery	Rear Wheel Tread Widths Arrangement of Rim and Wheel Dish		Tires:		Tread Width on Delivery	Rear Wheel Tread Widths Arrangement of Rim and Wheel Dish	
			1	2				1	2
	in	71.3	81.0*	71.3		in	71.3	81.0*	71.3
650/85R38	cm	181	206*	181	VF 710/70R42	cm	181	206*	181
	in	71.3	81.0*	71.3		in	71.3	81.0*	71.3

— Installation in this position is not allowed.
* Total vehicle width greater than 2.55/2.75 m (100/108 in). The regional road traffic licensing regulations or other applicable regulations must be observed.

OULXA64,MW67,0006028-19-14DEC21

Tread Widths for Rear Wheels with Rims for 8 Positions—Flanged Axles, Bolt Circle Diameter 335 mm (6R 230 and 6R 250)

IMPORTANT: Potential risk of damage when using 38-inch rims on tractors with mudguard for the cab suspension. Refer to 38-Inch Rear Wheels in Conjunction with the Mudguard for the Cab Suspension in section 80.

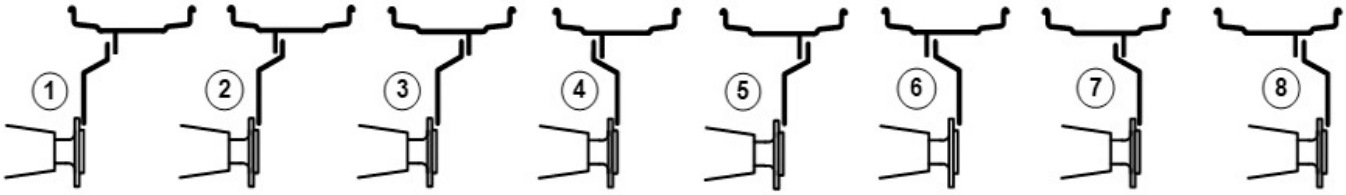
IMPORTANT: Comply with instructions on rear-wheel tread adjustment with rims for 8 positions.

IMPORTANT: For region 2 only, tread width is limited to 2.25 m (88.6 in).

For tread widths up to 2.25 m (88.6 in)., the maximum permissible rear axle load is 11400 kg (25130 lb).

For tread widths from 2.25 m (88.6 in) or twin tires, the maximum permitted rear axle load is 10270 kg (22640 lb).

NOTE: In certain countries, overall vehicle width for driving on public roads must not exceed 2.55 m (100 in).



LX590876—UN—19SEP23

Tread Widths for Rear Wheels with Rims for 8 Positions—Flanged Axles (6R 230 and 6R 250)										
Tires:		Tread Width on Delivery	Arrangement of Rim and Wheel Dish							
			1	2	3	4	5	6	7	8
18.4R46 -R2	cm	194	219*	213*	194	193	188	187	168	162
	in	76.5	86.2*	83.9*	76.5	76.0	74.2	73.6	66.3	63.9
480/80R46 -R1	cm	194	219*	213*	194	193	188	187	168	162
	in	76.5	86.2*	83.9*	76.5	76.0	74.2	73.6	66.3	63.9
480/80R46 -R2	cm	194	219*	213*	194	193	188	187	168	162
	in	76.5	86.2*	83.9*	76.5	76.0	74.2	73.6	66.3	63.9
520/85R42	cm	195	221*	209*	198	195	187	183	172	—
	in	76.7	86.9*	82.4*	78.0	76.7	73.5	72.2	67.7	
520/85R46	cm	194	219*	213*	194	193	188	187	168	162

Tread Widths for Rear Wheels with Rims for 8 Positions—Flanged Axles (6R 230 and 6R 250)										
Tires:		Tread Width on Delivery	Arrangement of Rim and Wheel Dish							
			1	2	3	4	5	6	7	8
	in	76.5	86.2*	83.9*	76.5	76.0	74.2	73.6	66.3	63.9
520/85R46 -R2	cm	194	219*	213*	194	193	188	187	168	—
	in	76.5	86.2*	83.9*	76.5	76.0	74.2	73.6	66.3	
580/70R42	cm	195	221*	209*	198*	195	187	183	172	—
	in	76.7	86.9*	82.4*	78.0*	76.7	73.5	72.2	67.7	
620/70R42	cm	181	219*	207*	200*	193*	189	181	174	—
	in	71.3	86.1*	81.6*	78.8*	75.8*	74.3	71.3	68.6	
650/65R42	cm	181	219*	207*	200*	193*	189*	181	—	—
	in	71.3	86.1*	81.6*	78.8*	75.8*	74.3*	71.3		
650/65R42 -R4	cm	181	219*	207*	200*	193*	189*	181	—	—
	in	71.3	86.1*	81.6*	78.8*	75.8*	74.3*	71.3		
650/75R38	cm	181	219*	207*	200*	193*	189*	181	—	—
	in	71.3	86.1*	81.6*	78.8*	75.8*	74.3*	71.3		
650/75R38	cm	200*	219*	207*	200*	193*	189*	181	—	—
	in	78.8*	86.1*	81.6*	78.8*	75.8*	74.3*	71.3		
650/75R42	cm	181	219*	207*	200*	193*	189*	181	—	—
	in	71.3	86.1*	81.6*	78.8*	75.8*	74.3*	71.3		
650/85R38	cm	181	219*	207*	200*	193*	189*	181	—	—
	in	71.3	86.3*	81.6*	78.8*	76.1*	74.5*	71.3		
650/85R38	cm	181	219*	207*	200*	193*	189*	181	—	—
	in	71.3	86.1*	81.6*	78.8*	75.8*	74.3*	71.3		
650/85R38	cm	200*	219*	207*	200*	193*	189*	181	—	—
	in	78.8*	86.1*	81.6*	78.8*	75.8*	74.3*	71.3		
710/70R38	cm	181	219*	207*	200*	193*	189*	181	—	—
	in	71.3	86.1*	81.6*	78.8*	75.8*	74.3*	71.3		
710/70R38	cm	200*	219*	207*	200*	193*	189*	181	—	—
	in	78.8*	86.1*	81.6*	78.8*	75.8*	74.3*	71.3		
710/70R42	cm	181	219*	207*	200*	193*	189*	181	—	—
	in	71.3	86.1*	81.6*	78.8*	75.8*	74.3*	71.3		
IF 710/70R42	cm	181	219*	207*	200*	193*	189*	181	—	—
	in	71.3	86.1*	81.6*	78.8*	75.8*	74.3*	71.3		
VF 650/65R42	cm	181	219*	207*	200*	193*	189*	181	—	—
	in	71.3	86.1*	81.6*	78.8*	75.8*	74.3*	71.3		
VF 710/70R42	cm	181	219*	207*	200*	193*	189*	181	—	—
	in	71.3	86.1*	81.6*	78.8*	75.8*	74.3*	71.3		

Tread Widths for Rear Wheels with Rims for 8 Positions—Flanged Axles (6R 230 and 6R 250)										
Tires:		Tread Width on Delivery	Arrangement of Rim and Wheel Dish							
			1	2	3	4	5	6	7	8
— Installation in this position is not allowed. * Total vehicle width greater than 2.55/2.75 m (100/108 in). The regional road traffic licensing regulations or other applicable regulations must be observed.										

OULXA64,MW67,0006029-19-19SEP23

Tread Widths for Rear Wheels with Rims for 16 Positions—Flanged Axles (6R 230 and 6R 250)

IMPORTANT: Potential risk of damage when using 38-inch rims on tractors with mudguard for the cab suspension. Refer to 38-Inch Rear Wheels in Conjunction with the Mudguard for the Cab Suspension in section 80.

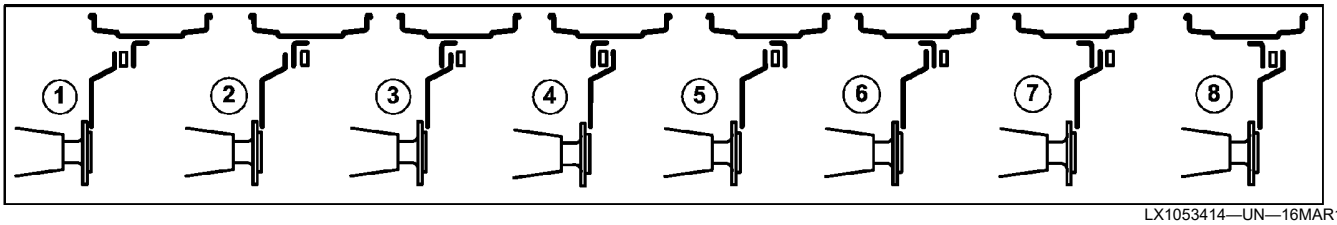
IMPORTANT: Comply with instructions on rear-wheel tread adjustment with rims for 16 positions.

IMPORTANT: For region 2 only, tread width is limited to 2.25 m (88.6 in).

For tread widths up to 2.25 m (88.6 in)., the maximum permissible rear axle load is 11400 kg (25130 lb).

For tread widths from 2.25 m (88.6 in) or twin tires, the maximum permitted rear axle load is 10270 kg (22640 lb).

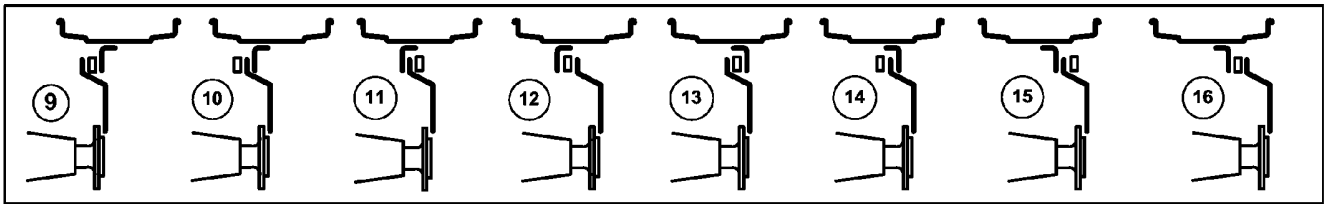
NOTE: In certain countries, overall vehicle width for driving on public roads must not exceed 2.55 m (100 in).



LX1053414—UN—16MAR12

Tread Widths for Rear Wheels with Rims for 16 Positions / Positions 1 to 8

Tread Widths for Rear Wheels with Rims for 16 Positions—Flanged Axles (6R 230 and 6R 250)										
Tires:		Tread width on Delivery	Arrangement of Rim and Wheel Dish							
			1	2	3	4	5	6	7	8
800/70R38	cm	191*	231*	228*	223*	220*	202*	199*	194*	191*
	in	75.1*	90.8*	89.6*	87.6*	86.5*	79.4*	78.3*	76.3*	75.1*
— Installation in this position is not allowed. * Total vehicle width greater than 2.55/2.75 m (100/108 in). The regional road traffic licensing regulations or other applicable regulations must be observed.										



LX1053415—UN—16MAR12

Tread Widths for Rear Wheels with Rims for 16 Positions / Positions 9 to 16

Tread Widths for Rear Wheels with Rims for 16 Positions—Flanged Axles (6R 230 and 6R 250)										
Tires:		Tread Width on Delivery	Arrangement of Rim and Wheel Dish							
			9	10	11	12	13	14	15	16
800/70R38	cm	191*	191*	—	—	—	—	—	—	—
	in	75.1*	75.0*							

— Installation in this position is not allowed.
* Total vehicle width greater than 2.55/2.75 m (100/108 in). The regional road traffic licensing regulations or other applicable regulations must be observed.

OULXA64,MW67,000602A-19-13DEC21

Steel Adjustable Wheels in Combination with Adjustable Rear Axles

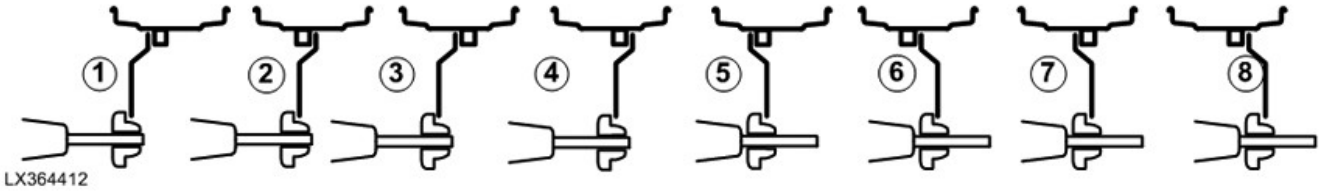
CAUTION: Risk of personal injury and property damage due to loss of control of the tractor.

The overuse of wheels leads to damage and as a result to dangerous driving situations.

Avoid overstressing and use only permissible wheel mounting.

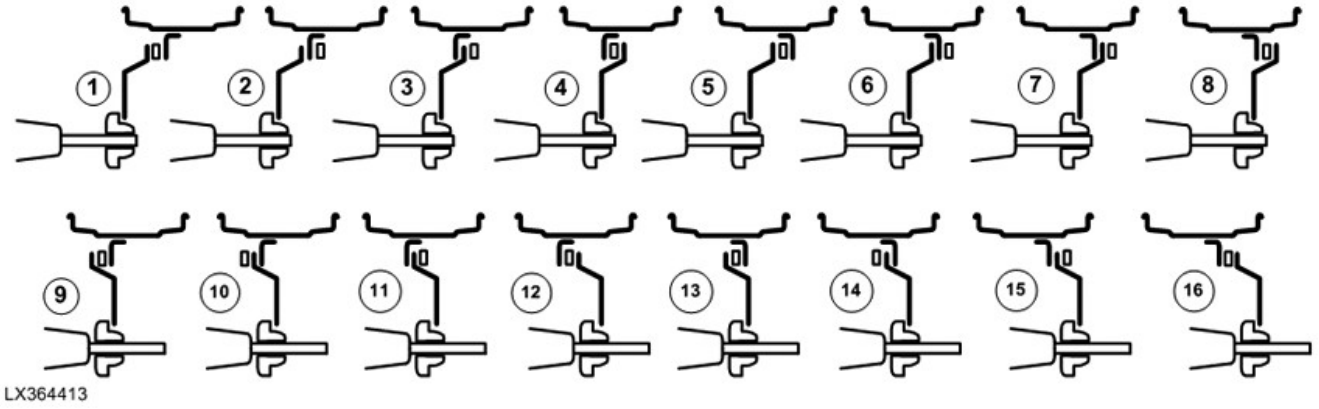
When using a steel adjustable wheel on an adjustable rear axle, mount the Rim and Wheel Dish as shown.

Use only the wheels and hub positions shown. Deviating wheel mounting is not permitted.



LX364412—UN—02JUL19

Steel adjustable wheels for 8 positions. For wheel positions 5 to 8, the position of the wheel hub must be observed.



LX364413—UN—02JUL19

Steel adjustable wheels for 16 positions. For wheel positions 9 to 16, the position of the wheel hub must be observed.

OULXA64,ALL,00053EC-19-22FEB22

Notes on Rear Wheels—Rack-and-Pinion Axles, Hub Diameter 100 mm with Double-Tapered Clamping Sleeves

CAUTION: Serious accidents with life-threatening injuries.

Contact of the wheel with tractor components leads to personal injury and property damage.

When setting the track widths or changing the wheel configuration, make sure that a minimum distance of 25 mm (1 in) mm to tractor components is guaranteed. If this minimum distance cannot be maintained, a larger track width must be set or a suitable wheel configuration must be used.

CAUTION: Danger of injury from improperly tightened or missing wheel bolts or wheel nuts!

Improperly tightened wheel bolts and wheel nuts can become loose and be lost while the vehicle is driving. There is a risk of fatal personal injuries and high property damage due to loss of control over the vehicle.

• Use only wheel bolts and wheel nuts that belong to the wheel.

• Never use different wheel bolts and wheel nuts.

• Never operate machine with loose wheel bolts and wheel nuts.

• Tighten all wheel bolts and wheel nuts only to the specified torque.

• Before starting to drive, check that all wheel bolts and wheel nuts are equipped and firmly seated.

IMPORTANT: The distance between the side wall of the tire and the fender should not be less than 25 mm (1 in).

The distance between the running surface (edge) of the tire and the fender must not be less than 25 mm (1 in).

If snow chains are installed on the tires, the minimum distance from the tires to the fenders (side wall to fender and running surface to fender) must be 100 mm (3.94 in).

IMPORTANT: Potential risk of damage when using 38-inch rims on tractors with mudguard for the cab suspension. Refer to 38-Inch Rear Wheels in Conjunction with the Mudguard for the Cab Suspension in Section 80.

IMPORTANT: After adjusting tread, check that the wheels can turn freely.

Do NOT let tires come into contact with draft links or lift links. The gap between lift links and tires can be increased by installing the lift links in the front holes of the draft links.

When draft links are raised (even if no implement is attached), the hydraulic or mechanical stabilizer bars must be locked.

If there is still contact with the draft links or lift links despite all these measures, tread width must be increased.

Retighten bolts to the specified torque after 3 operating hours and 10 operating hours.

IMPORTANT: For region 2 only, tread width is limited to 2.25 m (88.6 in).

For tread widths up to 2.25 m (88.6 in)., the maximum permissible rear axle load is 11400 kg (25130 lb).

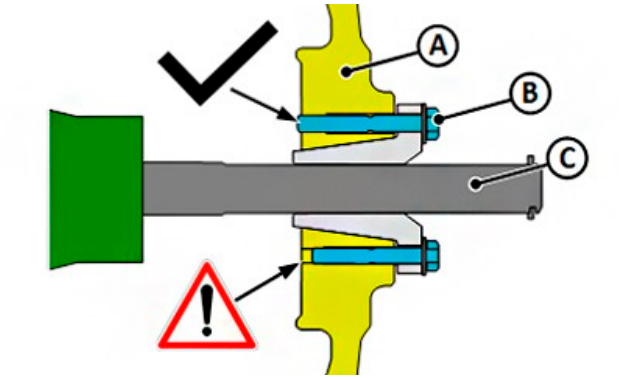
For tread widths from 2.25 m (88.6 in) or twin tires, the maximum permitted rear axle load is 10270 kg (22640 lb).

NOTE: In certain countries, overall vehicle width for driving on public roads must not exceed 2.55 m (100 in).

CAUTION: Danger to life and high property damage.

Missing, loose or too short screws and wheel bolts can lead to the loss of the wheel.

When attaching a wheel, it is important to ensure that all screws are tightened and that the screws used provides sufficient screw in depth.



LX601413—UN—18JAN24

Example: One Version of Rack-and-Pinion Axle Shown

A—Cust Dish
B—Screw
C—Rack-and-Pinion Axle

When changing wheels, make sure that fasteners are used according to the requirements of the wheel set being used. Screws, nuts, washers, bushings, and reinforcement rings must match the axle rim combination used. If in doubt, ask your authorized dealer. According to the spare parts catalog, only original parts should be used.

Refer to the following:

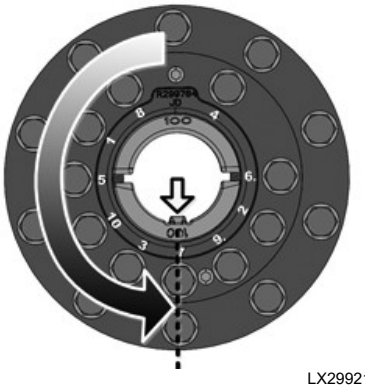
- Tighten Rear Wheel Bolts—Rack-and-Pinion Axles, Hub Diameter 100 mm with Double Tapered Clamping Sleeves, see section 220C.

OULXA64,MW67,000602B-19-19JAN24

Rack-and-Pinion Axles, Hub Diameter 100 mm with Double-Tapered Clamping Sleeves —Adjust Tread Widths for Steel and Cast Rear Wheels (6R 175 to 6R 250)

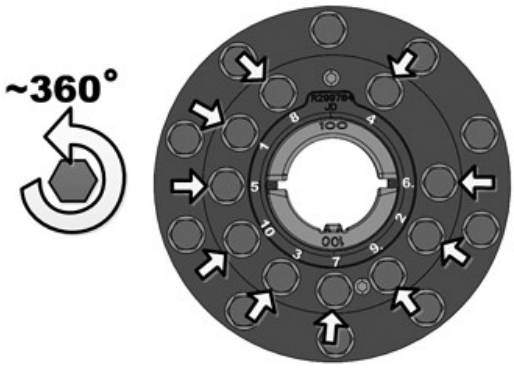
CAUTION: Risk of injury from falling tractor. If the rear axle is on jack stands, the front wheels pull the tractor from the support stands if the engine is started and a gear is engaged. Always remove the ignition key and engage park lock. Do not permit any persons to be in the operator's cab for the duration of the assembly work.

1. Park the tractor on firm, level ground.
2. Engage park lock and remove the ignition key.
3. Chock the front wheels.
4. Raise the rear of the tractor only so far until the rear wheels no longer have contact with the ground. Secure the tractor with jack stands.
5. Rotate the wheel by hand until the groove of the axle (see arrow) points downwards. Clean axle and wheel hub and remove corrosion.



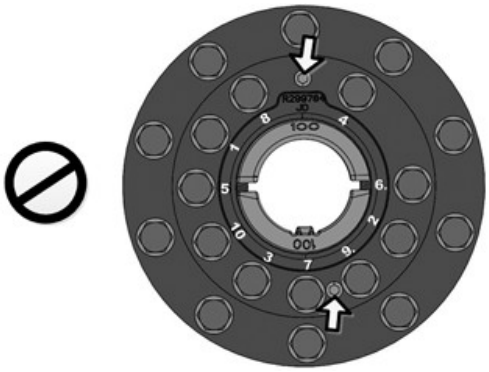
LX299210—UN—18MAY17

6. Unfasten bolts of the wheel hub until they can be turned by hand – about one rotation.



LX299211—UN—19MAY17

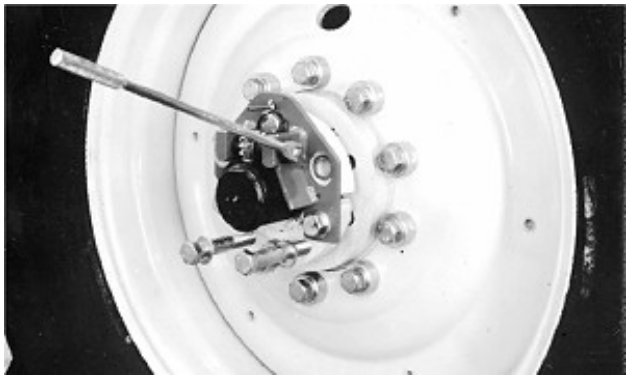
7. The bolts pointed at are **not** jack screws for unfastening the wheel hub. Do not tighten or unfasten these bolts.



LX299212—UN—19MAY17

NOTE: If the wheel hub is difficult to break loose, strike end of axle with a heavy aluminum hammer and use penetrating oil.

8. **Remove all grease from axle and wheel hub before moving.** To move the wheel hub onto the rear axle, mount adjusting tool JDG667A*. Move wheel to desired position. Observe tread width limitations or the permissible tread widths.



RW21374—UN—28JUL92

Adjusting Tool JDG667A (Steel Rear Wheel Shown)

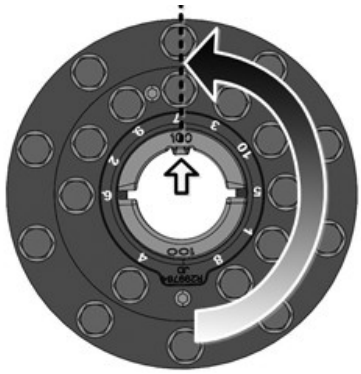
* available from your John Deere dealer

9. Disassemble adjusting tool.

CAUTION: Risk of injury from loss of vehicle control. Insufficient tightening of a wheel or the wheel hub leads to an uncontrollable driving situation. Bolts have to be tightened according to specification. Never operate tractor with loose or missing screws. The torque needs to be checked regularly. Refer to appropriate entry with the service intervals.

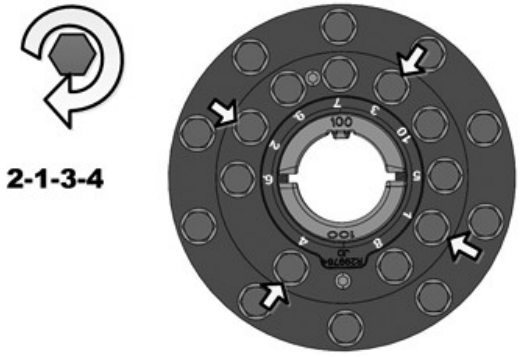
IMPORTANT: Clean all parts and remove corrosion. The alignment of the wheel hub 90° to the rear axle is important for the wheel's true running and ensures an optimal attachment.

10. **Attaching the wheel hub on the rear axle:** Rotate the wheel by hand until the groove of the axle (see arrow) points upwards. Take care that the wheel is not pushed on the rear axle.



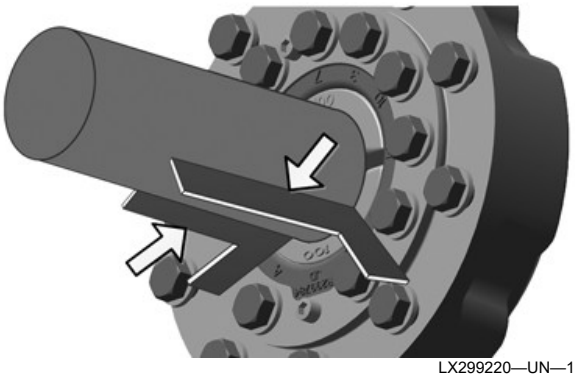
LX299213—UN—19MAY17

11. Observe the numbering of the bolt. Insert only bolts **2 and 3** at first. After that, insert bolts in the sequence **2-1-3-4**. Use a 90° angle (see arrows) to check the orientation of the wheel hub to the axle. The orientation is important for the wheel's true running and ensures an optimal attachment. Place the angle against the axle from two directions that are offset to each other by about 90°.



LX299214—UN—18MAY17

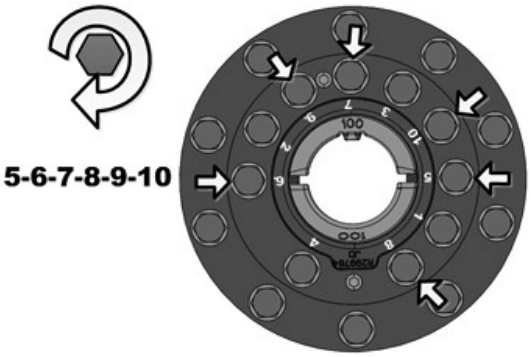
Insert bolts 2 and 3; then 2-1-3-4



LX299220—UN—19MAY17

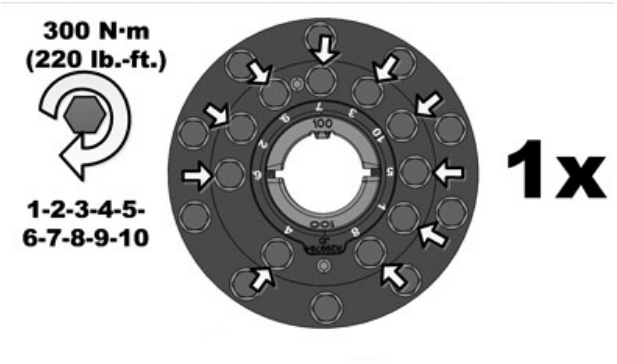
Place angle and check orientation

12. Insert bolts in the sequence **5-6-7-8-9-10**. Check the 90° orientation of the wheel hub to the axle once more.



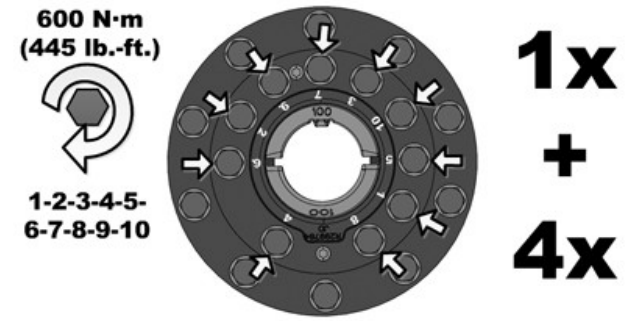
LX299215—UN—18MAY17

13. Tighten all bolts in the sequence **1-2-3-4-5-6-7-8-9-10** with 300 N·m (220 lb-ft).



LX299216—UN—18MAY17

14. Tighten all bolts in the sequence **1-2-3-4-5-6-7-8-9-10** with 600 N·m (445 lb-ft).



LX299217—UN—22MAY17

15. Beginning with bolt (1), tighten all bolt with 600 N·m (445 lb-ft) four times after each other in clockwise direction.
16. Drive tractor at least 100 meters (100 yd) and then check the torque of the bolts once more.

IMPORTANT: After 3 operating hours and 10 operating hours, retighten all screws daily during the first week of operation and then every 250 operating hours thereafter.

OULXA64,MW67,0005F9A-19-06SEP23

Tread Widths for Rear Wheels with Rims for 2 Positions—Rack-and-Pinion Axles (6R 230 and 6R 250)

IMPORTANT: Potential risk of damage when using 38-inch rims on tractors with mudguard for the cab suspension. Refer to 38-Inch Rear Wheels in Conjunction with the Mudguard for the Cab Suspension in Section 80.

IMPORTANT: Comply with tread adjustment instructions, and tighten wheel bolts. See Notes on Rear Wheels at Rack-and-Pinion Axles in this Section.

IMPORTANT: After adjusting tread, check that the wheels can turn freely.

Do NOT let tires come into contact with draft links or lift links. The gap between lift links and tires can be increased by installing the lift links in the front holes of the draft links.

When draft links are raised (even if no implement is attached), the hydraulic or mechanical stabilizer bars must be locked.

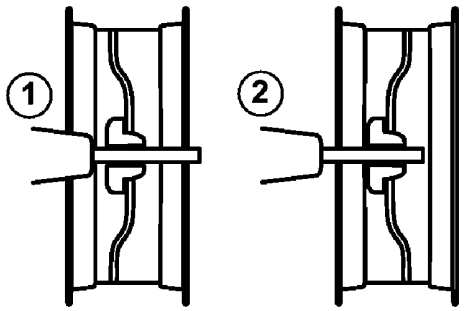
If there is still contact with the draft links or lift links despite all these measures, tread width must be increased.

IMPORTANT: For region 2 only, tread width is limited to 2.25 m (88.6 in).

For tread widths up to 2.25 m (88.6 in)., the maximum permissible rear axle load is 11400 kg (25130 lb).

For tread widths from 2.25 m (88.6 in) or twin tires, the maximum permitted rear axle load is 10270 kg (22640 lb).

NOTE: In certain countries, overall vehicle width for driving on public roads must not exceed 2.55 m (100 in).



LX1056800—UN—29OCT12

Tread Widths on Rear Wheels—Rack-and-Pinion Axle

Tread Widths for Rear Wheels with Rims for 2 Positions—Rack-and-Pinion Axles (6R 230 and 6R 250)					
		Rear Wheels with Cast Wheel Arrangement of Rim and Wheel Dish			
Tires:		Minimum (1)	Short Rack-and-Pinion Axles (100.4 in) Maximum (2)	Medium Rack-and-Pinion Axles (110.5 in) Maximum (2)	Long Rack-and-Pinion Axles (118.5 in) Maximum (2)
18.4R46 -R2	cm	159	230*	256*	276*
	in	62.4	90.7*	100.9*	108.8*
320/90R54	cm	150	230*	256*	276*
	in	59.1	90.7*	100.9*	108.8*
380/90R50	cm	150	230*	256*	276*
	in	59.1	90.7*	100.9*	108.8*
480/80R46 -R1	cm	160	230*	256*	276*
	in	62.9	90.7*	100.9*	108.8*
480/80R46 -R2	cm	160	230*	256*	276*
	in	62.9	90.7*	100.9*	108.8*
520/85R42	cm	162	230*	256*	276*
	in	63.9	90.7*	100.9*	108.8*
520/85R46	cm	162	230*	256*	276*
	in	63.9	90.7*	100.9*	108.8*
520/85R46 -R2	cm	164	230*	256*	276*
	in	64.4	90.7*	100.9*	108.8*
580/70R42	cm	166	230*	256*	276*
	in	65.2	90.7*	100.9*	108.8*

Tread Widths for Rear Wheels with Rims for 2 Positions—Rack-and-Pinion Axles (6R 230 and 6R 250)					
		Rear Wheels with Cast Wheel Arrangement of Rim and Wheel Dish			
Tires:		Minimum (1)	Short Rack-and-Pinion Axles (100.4 in) Maximum (2)	Medium Rack-and-Pinion Axles (110.5 in) Maximum (2)	Long Rack-and-Pinion Axles (118.5 in) Maximum (2)
620/70R42	cm	174	230*	256*	276*
	in	68.3	90.7*	100.9*	108.8*
650/65R42	cm	176	230*	256*	276*
	in	69.2	90.7*	100.9*	108.8*
650/65R42 -R4	cm	176	230*	256*	276*
	in	69.2	90.7*	100.9*	108.8*
650/75R38	cm	176	216*	242*	262*
	in	69.2	85.0*	95.2*	103.1*
650/85R38	cm	176	230*	256*	276*
	in	69.2	90.7*	100.9*	108.8*
650/85R38	cm	176	216*	242*	262*
	in	69.2	85.0*	95.2*	103.1*
710/70R38	cm	180	216*	242*	262*
	in	70.7	85.0*	95.2*	103.1*
VF 650/65R42	cm	176	230*	256*	276*
	in	69.4	90.7*	100.9*	108.8*
* Total vehicle width greater than 2.55/2.75 m (100/108 in). The regional road traffic licensing regulations or other applicable regulations must be observed.					

Tread Widths for Rear Wheels with Rims for 2 Positions—Rack-and-Pinion Axles (6R 230 and 6R 250)					
		Rear Wheels with Steel Wheel for 2 Positions on Cast Hub Arrangement of Rim and Wheel Dish			
Tires:		Minimum (1)	Short Rack-and-Pinion Axles (100.4 in) Maximum (2)	Medium Rack-and-Pinion Axles (110.5 in) Maximum (2)	Long Rack-and-Pinion Axles (118.5 in) Maximum (2)
520/85R42	cm	187	254*	280*	300*
	in	73.5	100.1*	110.2*	118.2*
520/85R46	cm	187	254*	280*	300*
	in	73.6	100.1*	110.2*	118.2*
520/85R46 -R2	cm	187	254*	280*	300*
	in	73.6	100.1*	110.2*	118.2*
580/70R42	cm	187	254*	280*	300*
	in	73.5	100.1*	110.2*	118.2*
620/70R42	cm	181	260*	286*	306*
	in	71.3	102.4*	112.5*	120.5*

Tread Widths for Rear Wheels with Rims for 2 Positions—Rack-and-Pinion Axles (6R 230 and 6R 250)					
		Rear Wheels with Steel Wheel for 2 Positions on Cast Hub Arrangement of Rim and Wheel Dish			
			Short Rack-and-Pinion Axles (100.4 in)	Medium Rack-and-Pinion Axles (110.5 in)	Long Rack-and-Pinion Axles (118.5 in)
Tires:		**Minimum (1)**	**Maximum (2)**	**Maximum (2)**	**Maximum (2)**
650/65R42	cm	181	260*	286*	306*
	in	71.3	102.4*	112.5*	120.5*
650/65R42 -R4	cm	181	260*	286*	306*
	in	71.3	102.4*	112.5*	120.5*
650/75R38	cm	181	260*	286*	306*
	in	71.3	102.4*	112.5*	120.5*
650/75R42	cm	181	260*	286*	306*
	in	71.3	102.4*	112.5*	120.5*
650/85R38	cm	181	260*	286*	306*
	in	71.3	102.4*	112.5*	120.5*
650/85R38	cm	181	260*	286*	306*
	in	71.3	102.4*	112.5*	120.5*
710/70R38	cm	181	260*	286*	306*
	in	71.3	102.4*	112.5*	120.5*
710/70R42	cm	181	260*	286*	306*
	in	71.3	102.4*	112.5*	120.5*
800/70R38	cm	188*	251*	277*	297*
	in	74.1*	98.8*	109.0*	116.9*
IF 710/70R42	cm	181	260*	286*	306*
	in	71.3	102.4*	112.5*	120.5*
VF 650/65R42	cm	181	260*	286*	306*
	in	71.3	102.4*	112.5*	120.5*
VF 710/70R42	cm	181	260*	286*	306*
	in	71.3	102.4*	112.5*	120.5*
* Total vehicle width greater than 2.55/2.75 m (100/108 in). The regional road traffic licensing regulations or other applicable regulations must be observed.					

OULXA64,MW67,0006025-19-12JAN22

Tread Widths for Rear Wheels with Rims for 2 Positions (Heavy-Duty Type)—Rack-and-Pinion Axles (6R 230 and 6R 250)

IMPORTANT: Potential risk of damage when using 38-inch rims on tractors with mudguard for the cab suspension. Refer to 38-Inch Rear Wheels in Conjunction with the Mudguard for the Cab Suspension in Section 80.

IMPORTANT: Comply with tread adjustment instructions, and tighten wheel bolts. See Notes on Rear Wheels at Rack-and-Pinion Axles in this Section.

IMPORTANT: After adjusting tread, check that the wheels can turn freely.

Do NOT let tires come into contact with draft links or lift links. The gap between lift links and tires can be increased by installing the lift links in the front holes of the draft links.

When draft links are raised (even if no implement is attached), the hydraulic or mechanical stabilizer bars must be locked.

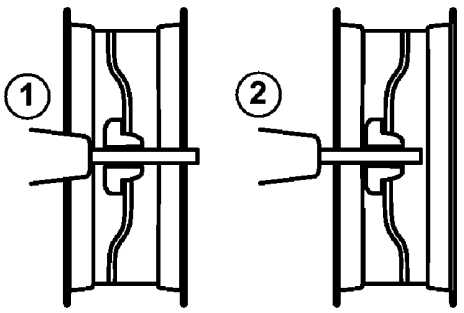
If there is still contact with the draft links or lift links despite all these measures, tread width must be increased.

IMPORTANT: For region 2 only, tread width is limited to 2.25 m (88.6 in).

For tread widths up to 2.25 m (88.6 in)., the maximum permissible rear axle load is 11400 kg (25130 lb).

For tread widths from 2.25 m (88.6 in) or twin tires, the maximum permitted rear axle load is 10270 kg (22640 lb).

NOTE: In certain countries, overall vehicle width for driving on public roads must not exceed 2.55 m (100 in).



LX1056800—UN—29OCT12

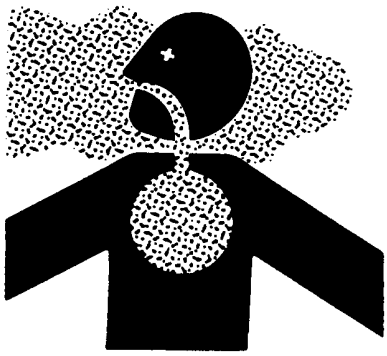
Tread Widths on Rear Wheels—Rack-and-Pinion Axle

Tread Widths for Rear Wheels with Rims for 2 Positions (Heavy-Duty Type)—Rack-and-Pinion Axles (6R 230 and 6R 250)					
		Arrangement of Rim and Wheel Dish			
Tires:		Minimum (1)	Short Rack-and-Pinion Axles (100.4 in) Maximum (2)	Medium Rack-and-Pinion Axles (110.5 in) Maximum (2)	Long Rack-and-Pinion Axles (118.5 in) Maximum (2)
620/70R42	cm	181	266*	291*	312*
	in	71.3	104.6*	114.7*	122.7*
650/65R42	cm	181	266*	291*	312*
	in	71.3	104.6*	114.7*	122.7*
650/65R42 -R4	cm	181	266*	291*	312*
	in	71.3	104.6*	114.7*	122.7*
650/75R38	cm	181	266*	291*	312*
	in	71.3	104.6*	114.7*	122.7*
650/75R42	cm	181	266*	291*	312*
	in	71.3	104.6*	114.7*	122.7*
650/85R38	cm	181	266*	291*	312*
	in	71.3	104.6*	114.7*	122.7*
710/70R38	cm	181	266*	291*	312*
	in	71.3	104.6*	114.7*	122.7*

Tread Widths for Rear Wheels with Rims for 2 Positions (Heavy-Duty Type)—Rack-and-Pinion Axles (6R 230 and 6R 250)					
		Arrangement of Rim and Wheel Dish			
Tires:		Minimum (1)	Short Rack-and-Pinion Axles (100.4 in) Maximum (2)	Medium Rack-and-Pinion Axles (110.5 in) Maximum (2)	Long Rack-and-Pinion Axles (118.5 in) Maximum (2)
710/70R42	cm	181	266*	291*	312*
	in	71.3	104.6*	114.7*	122.7*
800/70R38	cm	188*	251*	277*	297*
	in	73.9*	98.8*	109.0*	116.9*
IF 710/70R42	cm	181	266*	291*	312*
	in	71.3	104.6*	114.7*	122.7*
VF 650/65R42	cm	181	266*	291*	312*
	in	71.3	104.6*	114.7*	122.7*
VF 710/70R42	cm	181	266*	291*	312*
	in	71.3	104.6*	114.7*	122.7*
* Total vehicle width greater than 2.55/2.75 m (100/108 in). The regional road traffic licensing regulations or other applicable regulations must be observed.					

OULXA64,MW67,0006026-19-13DEC21

Avoid Contact with Agricultural Chemicals



TS220—UN—15APR13

TS272—UN—23AUG88

CAUTION: This enclosed cab does not protect against inhaling vapor, aerosol or dust.

1. When operating in an environment where pesticides are present, wear a long-sleeved shirt, long-legged pants, shoes, and socks.
2. If pesticide use instructions require respiratory protection, wear an appropriate respirator inside the cab.
3. Wear personal protective equipment as required by the pesticide use instructions when leaving the enclosed cab:
   - into a treated area
   - to work with contaminated application equipment such as nozzles which must be cleaned, changed or redirected
   - to become involved with mixing and loading activities
4. Before re-entering the cab, remove protective equipment and store either outside the cab in a closed box or some other type of sealable container or inside the cab in a pesticide resistant container, such as a plastic bag.
5. Clean your shoes or boots to remove soil or other contaminated particles prior to entering the cab.

DX,CABS1-19-25MAR09

Clean Vehicle of Hazardous Pesticides

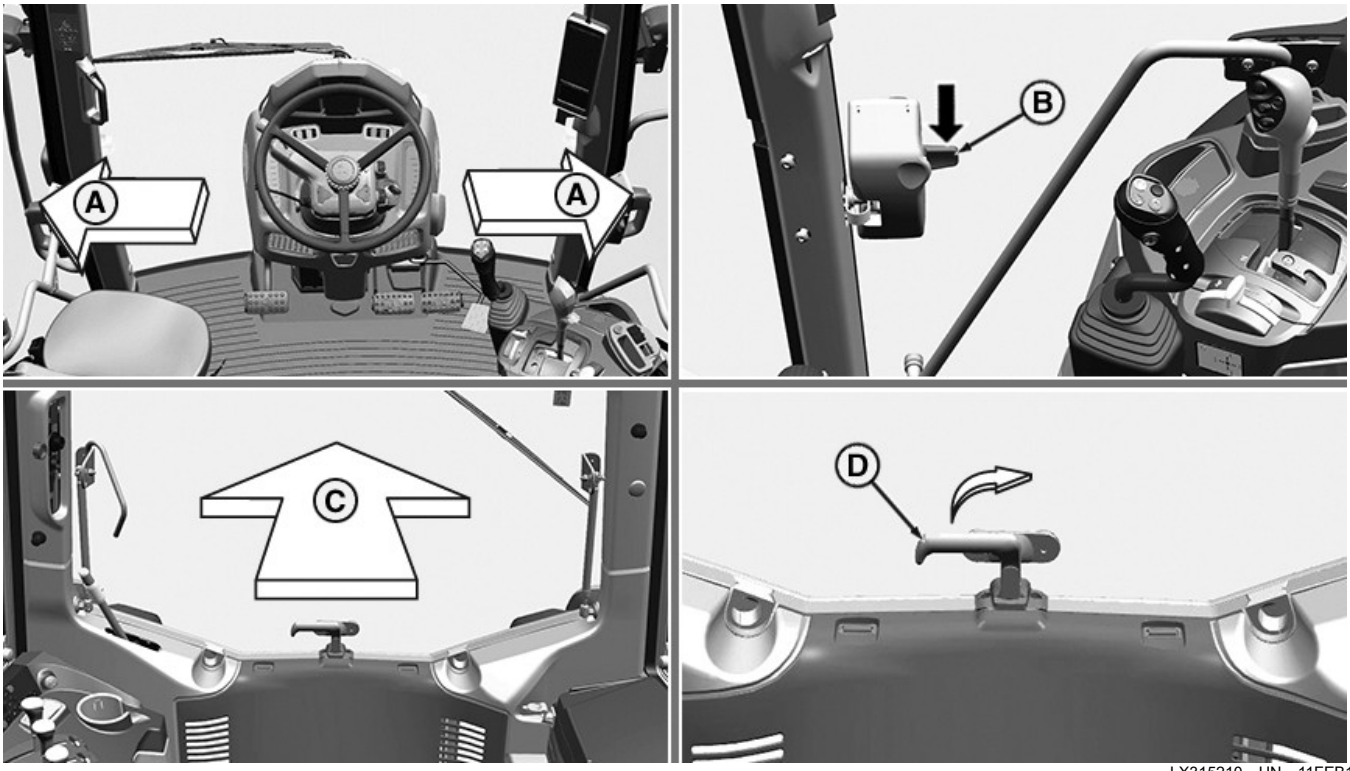
CAUTION: During application of hazardous pesticides, pesticide residue can build up on the inside or outside of the vehicle. Clean vehicle according to use instructions of hazardous pesticides.

When exposed to hazardous pesticides, clean exterior and interior of vehicle daily to keep free of the accumulation of visible dirt and contamination.

1. Sweep or vacuum the floor of cab.
2. Clean headliners and inside cowlings of cab.
3. Wash entire exterior of vehicle.
4. Dispose of any wash water with hazardous concentrations of active or non-active ingredients according to published regulations or directives.

DX,CABS2-19-24JUL01

Emergency Exits



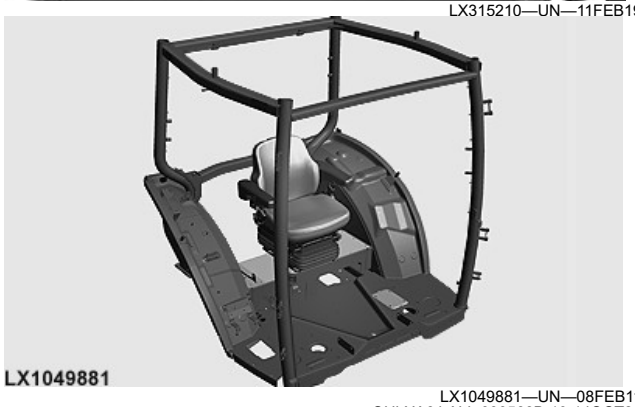
LX315210—UN—11FEB19

In an emergency, it is possible to exit the cab through the two doors (A). To do this, pull lever (B) to release the door and then push it open.

In an emergency, it is also possible to exit the cab through the opening of the rear window (C). Turn lever (D) to the right to release the window and then push it open.

If the cab is not equipped with a right door, either break the glass by using an emergency hammer (if equipped) or open it by pulling out the cotter pin.

OULXA64,SP,000568A-19-23SEP20



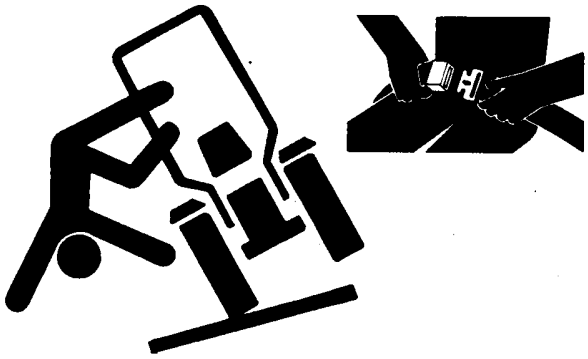
LX1049881—UN—08FEB11
OULXA64,ALL,000568B-19-14OCT20

Roll-Over Protective Structure

CAUTION: The operator's cab is equipped with an integrated roll-over protective structure. It is not permitted to make any changes to this construction. Disregarding this instruction will affect the rigidity of the ROPS.

If the tractor tilts over or in the event of collisions, the roll-over protective structure is subjected to very high stress. For safety reasons, the roll-over protective structure always has to be replaced if it is damaged.

Use Seat Belt



TS205—UN—23AUG88

CAUTION: Danger of injury by being thrown out during a collision or due to tipping over!

There is a serious risk of injury due to collision, crushing, or being thrown out during a collision or when tipping over.

When driving tractors, always wear the seat belt (A).

The instructional seat is intended exclusively for training operators or diagnosing machine problems.

LX266984—UN—18OCT16

Tractor Shown with Passenger Seat

A—Seat Belt

- Hold the latch and pull the seat belt across the body.
- Insert the latch into the belt buckle.
- Listen for a click.
- Tug on the seat belt latch to make sure that the belt is securely fastened.
- Snug the seat belt across the hips.

Inspect seat belts and mounting hardware once a year. See section 220D.

OULXA64,6R,NA,0005EEE-19-04OCT21

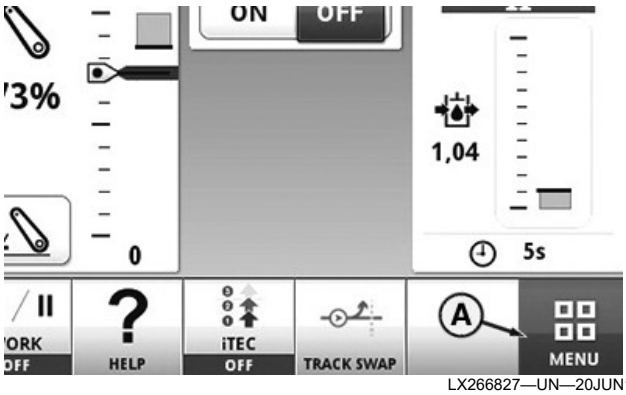
Tractors with Cab Suspension

When the reverse drive lever is moved from position **N** to position **R** or **F** while the engine is running, the level control of the cab suspension system becomes active. Cab moves to the middle position and stays there.

Level control is active as of speed of 0.5 km/h (0.3 mph) and reacts to the driving situation.

Select operating mode of the cab suspension

1. Press button (A) to access the CommandCenter™ menu.



LX266827—UN—20JUN16

CommandCenter™-Menu

2. Press button (B) to access Suspension Systems page.

LX1057490—UN—05DEC14

Button for Suspension Systems Page

3. On the Suspension Systems page, three different operating modes can be selected using buttons (C), (D), or (E).

LX1057087—UN—17JUL13

Cab Suspension Button

NOTE: Cab suspension must not collide against the mechanical end stops. If this happens, activate a stiffer operating mode.

The active mode is displayed on a dark background.

AUTO (C), Soft	AUTO (D), Medium	MAX (E), Hard
Setting of basic dampening 0%.	Setting of basic dampening 50%.	Setting of basic dampening 100%.
The **AUTO Soft** mode provides the best comfort for transport journey.	The **AUTO Medium** mode provides a compromise between “AUTO Soft” and “MAX”.	The **MAX** mode is recommended for example for front loader operation.
The suspension of the cab is generous. The maximum travel of the suspension is exploited. Level control reacts very sensitively.	The cab suspension is set to medium hardness.	This setting prevents unpleasant tilting movements when the tractor has strong front-to-back, lateral, or lifting movements. There is less comfort as compared to the two Auto settings.
		As travel speed increases above 20 km/h (12.5 mph), the **AUTO Medium** mode is activated automatically. When speed drops below 15 km/h (9.5 mph) afterwards, the **MAX** setting is reactivated.

OULXA64,0005F9B-19-27OCT21

Seat Adjustment and Functions (6R Series)

CAUTION: Avoid any danger of injury resulting from confined spaces! The following can represent a crush hazard when the seat is being adjusted:

- **Objects placed in the cab.**
- **Additional equipment in the cab.**
- **Little clearance to adjacent components.**

Only adjust the seat when the tractor is standing still. Set the seat to a position where no accidental contact occurs with the control elements and other components.

When driving the tractor, always align and latch the operator's seat in direction of travel.

Controls:

NOTE: The illustrations show all possible controls. Depending on the equipment, not all controls are available.

LX514313—UN—08MAY23

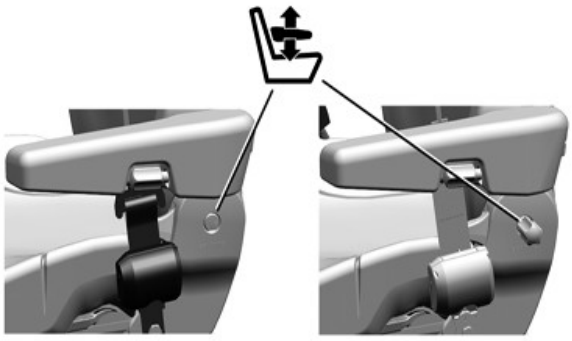
Premium Seat (MSG97AL)

LX514314—UN—08MAY23

Ultimate Seat (MSG97EL-DDS)

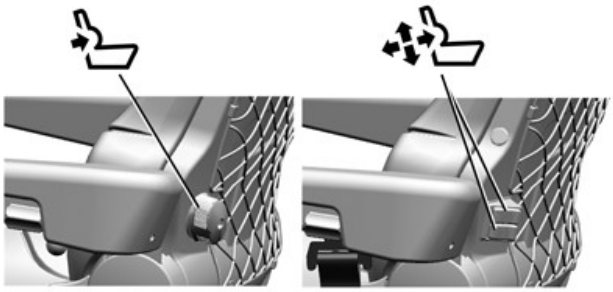
LX514315—UN—08MAY23

Standard Seat (MSG95G)



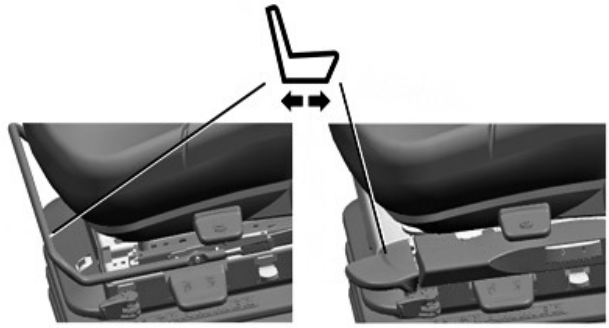
LX514266—UN—10AUG22

Possible Variants



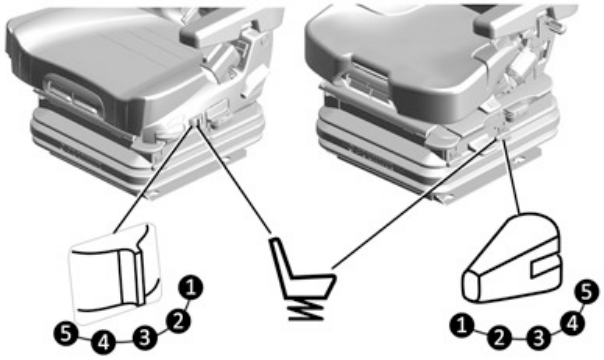
LX514285—UN—10AUG22

Possible Variants



LX514284—UN—10AUG22

Possible Variants



LX514310—UN—05MAY23

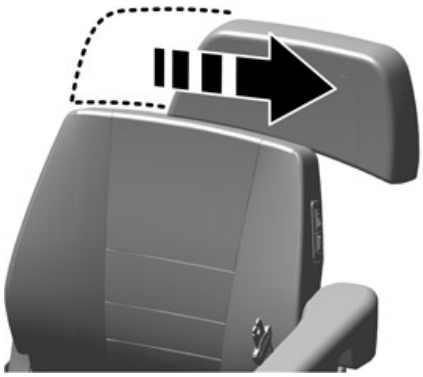
Possible Variants

Controls—Dual Motion Seat (MSG97EL DDS 741)

The functions are essentially the same as for the seat MSG97EL. The deviations are explained below.

LX514312—UN—08MAY23

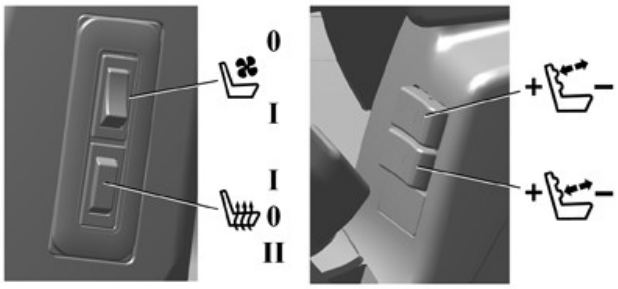
Dual Motion Seat (MSG97EL DDS 741)



LX514290—UN—24AUG22

Backrest Extension

Dual Motion Seat: In order to have an unobstructed view to the rear, it is possible to move the backrest extension to the left (seen in the direction of travel).



LX514291—UN—25AUG22

Lumbar Support and Seat Heater

Dual Motion Seat: There are two lumbar supports that can be adjusted independently by rocker switches. The heated seats are controlled by a three-way rocker switch (level one, off, and level two).

Seat Adjustment and Functions:

LX514263—UN—20MAY22

Adjust Seat Cushion:
Pull lever upwards and set desired seat depth.
Release lever to lock the seat in position.

LX514264—UN—20MAY22

Adjust Seat Tilt:
Pull lever upwards and set desired seat inclination.
Release lever to lock the seat in position.

LX514265—UN—20MAY22

Fore/Aft Adjustment:
Pull lever upwards and set desired seat position.
Release lever to lock the seat in position.

LX514252—UN—20MAY22

Fore/aft Suspension:
Lever forward—no fore/aft suspension.
Lever backward—fore/aft suspension active.

LX514311—UN—05MAY23

Vertical Seat Dampening:
Turn the lever in the desired position (1, 2, 3, 4, 5) to adjust the vertical seat dampening (position 1 = soft and 5 = hard). The recommended setting for an average rider weight is position 3.

LX514255—UN—20MAY22

Height Adjustment:
After the weight adjustment is made, the seat can be adjusted to any height.
1. Sit in the seat and turn the key switch on (IGN).
2. Pull or push the lever fully to move the seat up or down to the desired height. *NOTE: When the upper or lower limit is reached, an automatic height adjustment takes place. This ensures the functionality of the dampening.*

LX514254—UN—20MAY22

Weight Adjustment:
In order to avoid compressor damage during height adjustment, the compressor must be operated for 1 minute at the maximum.
MSG95G
1. Sit in the seat and turn the key switch on (IGN).
2. Slightly pull and hold the lever upward until the air pressure is adjusted to the driver's weight. Release the lever when the green mark appears on the indicator scale. Adjustment range = 50 to 130 kg (110 to 285 lb)
MSG97AL
1. Sit in the seat and turn the key switch on (IGN).
2. Slightly pull the lever upward and release to start the automatically weight adjustment. Do not move until the air compressor has set the appropriate air pressure. Adjustment range = 50 to 130 kg (110 to 285 lb)
MSG97EL and MSG97EL Dual Motion
1. Sit in the seat and turn the key switch on (IGN).
2. The weight adjustment starts automatically. Do not move until the air compressor has set automatically the appropriate air pressure. Adjustment range = 50 to 130 kg (110 to 285 lb)

LX514267—UN—05AUG22

Active Ventilation:
MSG95G and MSG97AL— function not available.
MSG97EL—the active ventilation and the seat heater share a three-way rocker switch. *NOTE: The seat heater and the ventilation cannot be switched on at the same time. In the middle switch position, both functions are off.*
MSG97EL Dual Motion—the active ventilation is switched on and off with a rocker switch.

LX514261—UN—
20MAY22

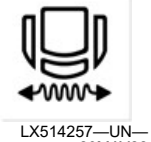
Seat Heater:
MSG95G and MSG97AL—the seat heater is switched on and off with a toggle switch.
MSG97EL—the active ventilation and the seat heater share a three-way rocker switch. *NOTE: The seat heater and the ventilation cannot be switched on at the same time. In the middle switch position, both functions are off.*
MSG97EL Dual Motion—the seat heater is controlled by a three-way rocker switch (level one, off, and level two).

LX514281—UN—
05AUG22

Backrest Extension:
The backrest extension can be individually adjusted for height by pulling it upwards over the various increments up the end stop. To remove the backrest extension, pull it upwards over the end stop.
MSG97EL Dual Motion—in order to have an unobstructed view to the rear, it is possible to move the backrest extension to the left.

LX514256—UN—
20MAY22

Adjust Swivel:
The seat can be turned to the right and possibly to the left, depending on the model.
Lift lever and turn the seat to the desired detent position. Press the lever down so that seat snaps into place automatically at the next detent position.
IMPORTANT: Use the swivel to the left only for entering and exiting.*NOTE: If equipped with the joystick on the armrest, turn the operator's seat to the left only up to the first detent position. Avoid collisions with the steering wheel.*


LX514257—UN—
20MAY22

Adjust Lateral Suspension:
MSG95G and MSG97AL—move lever forward to activate lateral suspension. Move lever backward to deactivate lateral suspension.
MSG97EL and Dual Motion Seat —move lever upward to activate lateral suspension. Move lever downward to deactivate lateral suspension.

LX514258—UN—
20MAY22

Adjust Tilt of Backrest:
Pull lever upwards and hold. Tilt the backrest to the desired position and let the lever latch back in audibly.

LX514259—UN—
20MAY22

Adjust Height of Armrests:
Version 1: Remove plastic cap on both sides and loosen adjusting screws. Arrange armrests to the desired position.
Tighten the adjusting screws and attach the plastic cap.
Version 2: Turn knob to loosen the clamping. Arrange the armrests in the desired position and turn the knob to clamp the armrest.

LX514262—UN—
20MAY22

Adjust Tilt of Armrests:
Turn the knob to adjust the tilting angle. To lower the armrest downwards by 30°, press the knob into the armrest.

LX514260—UN—
20MAY22

Adjust Lumbar Support on Backrest:
With the electrical version, use the two rocker switches to adjust the position and intensity of the lumbar support.

LX514268—UN—
05AUG22

Adjust Lumbar Support on Backrest:
With the mechanical version, turn the adjusting knob to adjust the lumbar support intensity.

LX514287—UN—
24AUG22

LX514288—UN—
24AUG22

Adjust Lumbar Supports on Backrest (MSG97EL Dual Motion Seat only):
The Dual Motion seat offers upper and lower lumbar supports that can be independently adjusted using the two rocker switches. Pressing the plus and minus icons on the switches adjusts the intensity of the lumbar supports.

LX514292—UN—25AUG22

Backrest Extension (MSG97EL Dual Motion Seat only):
In order to have an unobstructed view to the rear, it is possible to move the backrest extension to the left.

oulxber,1660039993777-19-19JUN23

CommandARM™—Adjust Height

CAUTION: Danger of injury resulting from confined spaces!

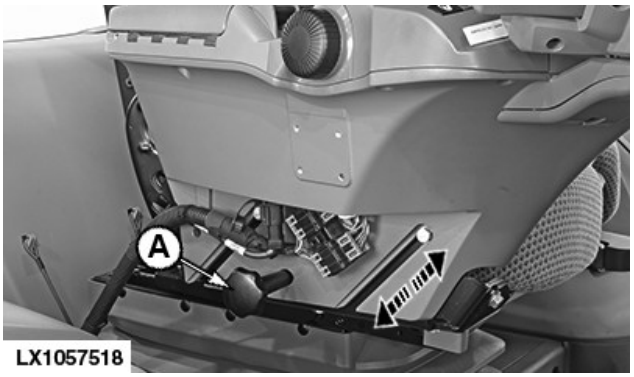
The following can represent a crush hazard when the seat is being adjusted:

- **Objects placed in the cab**
- **Additional equipment in the cab**
- **Little clearance to adjacent components**

Only adjust the seat when the tractor is standing still.

Set the seat to a position where no accidental contact occurs with the control elements and other components.

1. Loosen knob (A).



LX1057518—UN—28AUG15

2. Adjust the CommandARM™ to the desired position.
3. Tighten knob (A).

OULXA64,ALL,0005681-19-23SEP20

Instructional Seat for Training Purposes

CAUTION: Danger of injury by being thrown out during a collision or due to tipping over!

There is a serious risk of injury due to collision, crushing, or being thrown out during a collision or when tipping over.

When driving, always wear the seat belt.

The instructional seat is the only means for transporting an instructor, that was approved by John Deere.

LX1045573—UN—17AUG10

Backrest of passenger seat tilts forward to be used as a writing surface.

LX1045574—UN—17AUG10

The flip-up seat tilts up, allowing easier entrance and egress.

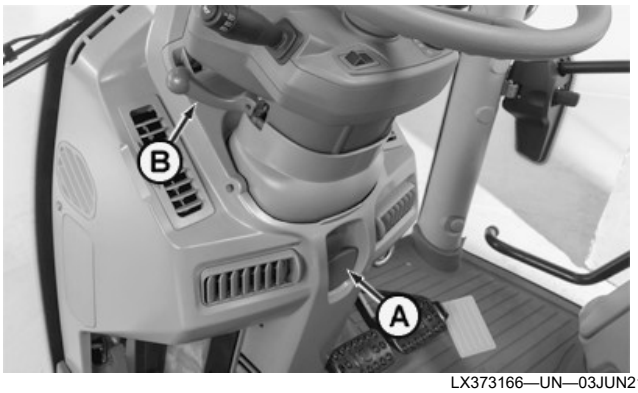
LX1045572—UN—17AUG10

OULXA64,6R,NA,0005EED-19-04OCT21

Adjust the Steering Wheel

CAUTION: Danger of injury if steering wheel settings are adjusted while the tractor is moving!

Adjust the steering wheel only when the tractor is stationary.



LX373166—UN—03JUN21

A—Lever for Steering Wheel Tilt
B—Lever for Steering Wheel Height

Adjust steering wheel tilt

1. Operate lever (A).
2. Adjust tilt.
3. Release lever and check whether the steering column is locked.

   When the lever (A) is operated, the steering column automatically moves into vertical position to simplify getting in and out.

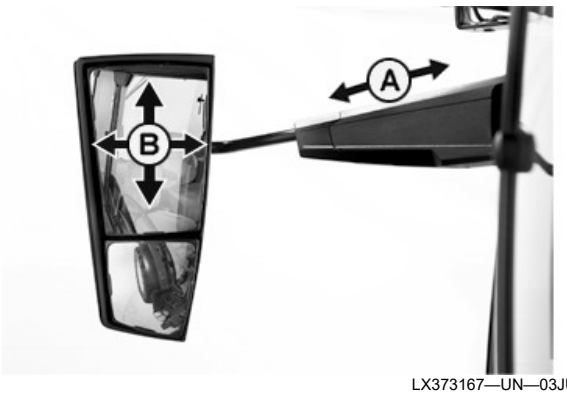
Adjust steering wheel height

1. Unlatch lever (B).
2. Adjust height.
3. Latch lever completely.

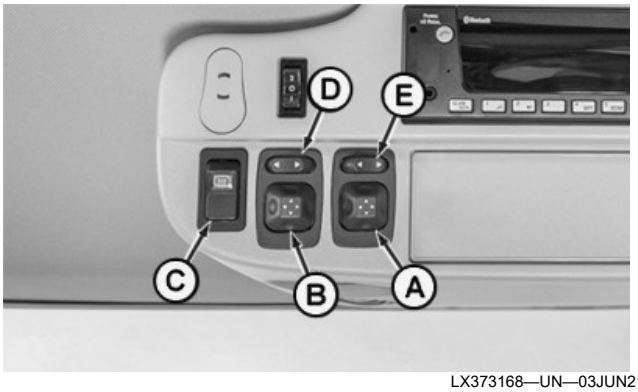
OULXA64,6R,0005D76-19-31MAY21

Mirrors

Electrically Adjustable Outside Mirrors

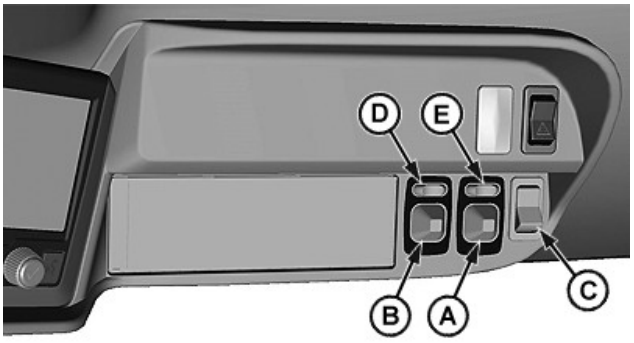


LX373167—UN—03JUN21



LX373168—UN—03JUN21

Verion A: Outside Mirror Switches



LX514889—UN—30SEP22

Verion B: Outside Mirror Switches

A—Mirror Arm Adjuster
B—Mirror Adjuster
C—Mirror Heater Switch
D—Mirror Adjuster, Left/Right
E—Mirror Arm Adjuster, Left/Right

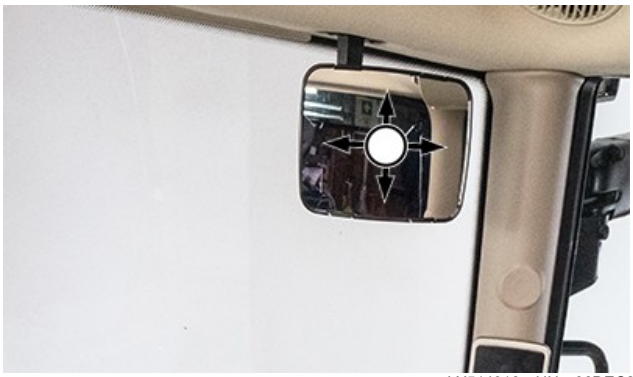
Switch	Switch Position	Action
(D and E)	►	Select right mirror.
(D and E)	◄	Select left mirror.
(B)	▼	Tilt mirror down.
(B)	▲	Tilt mirror up.
(B)	►	Rotate mirror to the right.
(B)	◄	Rotate mirror to the left.
(A)	►	Extend mirror.
(A)	◄	Retract mirror.
(C)	▼	Mirror heater ON
(C)	▲	Mirror heater OFF

NOTE: The mirror heater is switched off with switch (C) or by switching off the ignition. Heater remains off when the engine is switched on again at the ignition key.

Clean mirror surfaces with a soft cloth.

OULXA64,0005D77-19-12JAN23

Adjust Interior Mirror



LX514916—UN—06DEC22

1. Adjust mirror to the desired position.
2. Clean mirror surfaces with a soft cloth.

oulxa64,6R,All,1669975866369-19-12JAN23

Access Steps

Access Steps and Handrails

LX514803—UN—28OCT21

Right Side of Tractor

LX514802—UN—28OCT21

Left Side of Tractor

Use access steps (B) to enter and leave. Always hold on to handrail (A). Other means of entry and egress are not permitted.

- When entering and leaving, always hold on to the handrail. Do not touch components of the exhaust system, as there is a risk of burning.
- Before entering or leaving, clear away any snow, ice or mud.

OULXA64,6R,MW67,0005F9C-19-29OCT21

Remove and Install Right Access Step

Remove fasteners (A) and push up bushings (B).

LX287720—UN—30JUN16

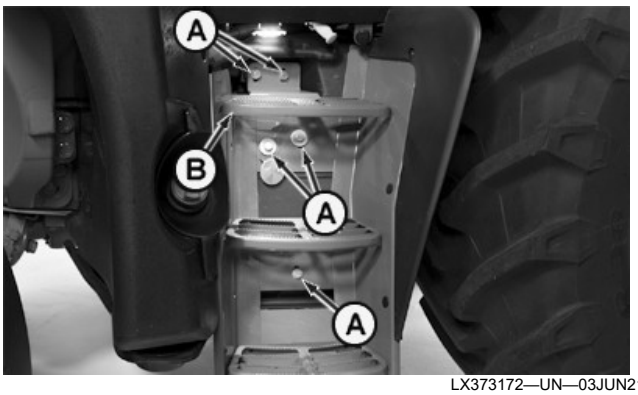
Fold up the access step (C) and remove it.

LX288855—UN—27JUL16

For installation, follow removal procedure in reverse order.

OULXA64,6R,MW67,0005F9D-19-27OCT21

Remove and Install Left Access Step



LX373172—UN—03JUN21

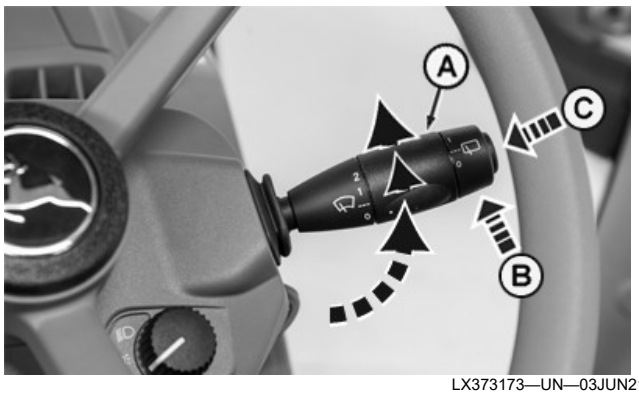
1. Remove screws (A).
2. Remove access step (B).
3. For installation, follow removal procedure in reverse order while observing the following specifications:
   - Position access step (B) and tighten the screws (A) to the specified torque.
   - Tighten screws (A) to the specified torque.

Specification

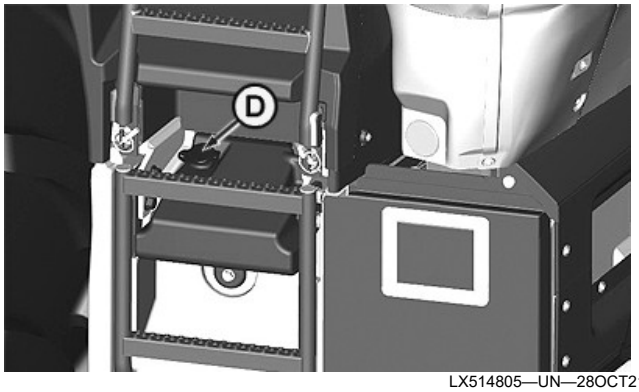
Access Step on Fuel Tank,
Attaching Screws—Torque. . . . . 100 N·m (74 lb·ft)

OULXA64,6R,MWtoMR,0005D7C-19-01JUN21

Wiper and Washer System



LX373173—UN—03JUN21



LX514805—UN—28OCT21

A—Windshield Wiper Rotary Switch
B—Shift Lever for Rear Window Wiper
C—Switch for Windshield Washer
D—Windshield Washer Reservoir

A — Windshield Wiper

Windshield wiper rotary switch (A) has four positions:

0	OFF
---	Intermittent Wipe Setting
1	Slow Wipe
2	Fast Wipe

NOTE: To change the wiper blade, set to the service position.

1. Turn key switch ON.
2. Move wiper switch to the intermittent position (2).
3. Turn key switch OFF within 5 seconds.
4. The Wiper completes the current cycle.
5. The wiper then automatically goes to the Service Position.
6. Replace the wiper blade.
7. Turn key switch ON and the wiper return to the park position.

NOTE: The wiping field is reduced at higher wiping speeds.

B — Rear Window Wiper

IMPORTANT: Never open the rear window fully without first checking that the rear wiper has reached its home position.

Rear window wiper and washer system only operate if the rear window is closed.

Rear window wiper shift lever (B) has three positions:

0	OFF (shift lever rearward)
---	Intermittent Wipe Setting (shift lever in center position)
1	Run Continuous (shift lever forward)

If the rear window wiper is switched off while in motion, it remains in its current position. The rear window wiper moves back to its initial parked position (home position) automatically, when the ignition is switched off or the rear window is opened.

C — Windshield Washer

The windshield washer is operated using switch (C).

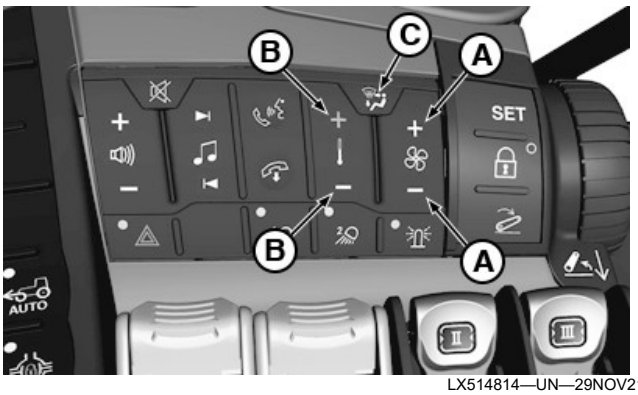
The rear window washer system is operated by pulling lever (B) toward the steering wheel.

Add antifreeze solution to water in reservoir tank (D) if temperature is liable to drop below freezing point.

The windshield and rear window washer systems both have an automatic wipe/wash function. When the washer is switched on, the wiper operates in conjunction with the washer pump and then it wipes up to three times more. After a 5-second delay, the wiper comes on once more.

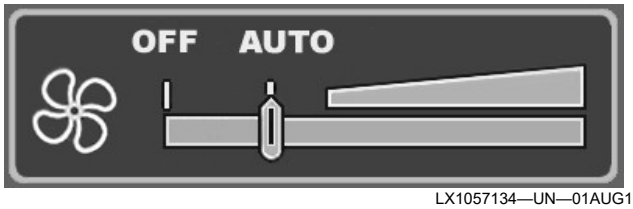
OULXA64,6R,MW67,0005F9E-19-25JAN23

Heating and Ventilation



LX514814—UN—29NOV21

Heating and Ventilation Controls on CommandARM™

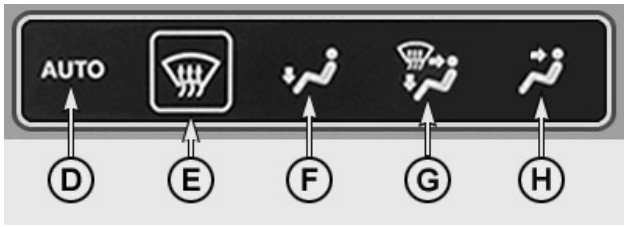


LX1057134—UN—01AUG13

A — Blower Control Indicator

LX1057135—UN—01AUG13

B — Temperature Setting Indicator



LX1057136—UN—01AUG13

C — Air Flow Distribution Indicator

Each time buttons (A to C) are pressed, the relevant display panel is shown in the CommandCenter™.

(A) — Blower speed

Use the +/– buttons (A) to set the desired blower speed. *In Auto mode, blower speed is adjusted automatically to meet the respective requirements.*

(B) — Temperature control

Use the +/– buttons (B) to set the desired temperature.

(C) — Air flow distribution

Press button (C) several times and select the air circulation mode. Also refer to "Air Flow Distribution - Description" in this section.

(D) — Automatic air flow distribution

(E) — De-icing and removing humidity from windshield

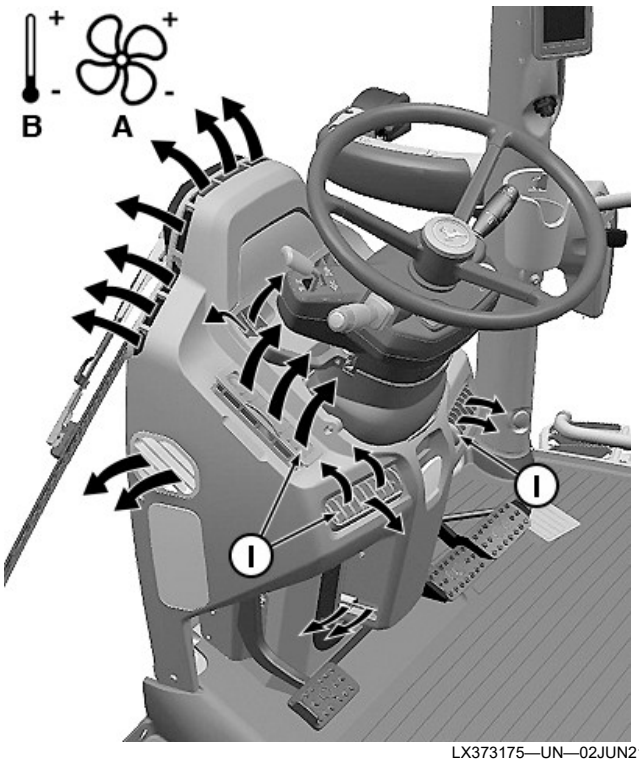
(F) — Air flow directed to the footwell

(G) — Air flow distributed evenly throughout the operator's cab

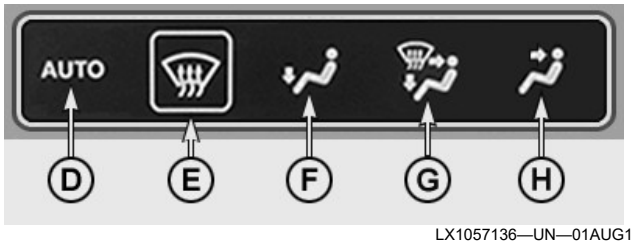
(H) — Air flow directed to the operator

OULXA64,6R,MW67,0005F9F-19-25NOV21

Air Flow Distribution, Description



LX373175—UN—02JUN21



LX1057136—UN—01AUG13

Air Flow Distribution Indicator

(A) — Blower speed

Use the +/– buttons (A) to set the desired blower speed.

(B) — Temperature control

Use the +/– buttons (B) to set the desired temperature.

(D) — Automatic air flow distribution

Select air flow distribution mode (D) and set the desired blower speed (A) and temperature (B). Air distribution is adjusted automatically to meet the requirements.

(E) — De-icing and removing humidity from windshield

Select air flow distribution mode (E), then set temperature (B) to maximum heating effect and blower speed (A) to maximum speed.

(F) — Air flow directed to the footwell

Select air flow distribution mode (F) and set the desired blower speed (A) and temperature (B).

(G) — Air flow distributed evenly throughout the operator's cab

Select air flow distribution mode (G) and set desired blower speed (A) and temperature (B).

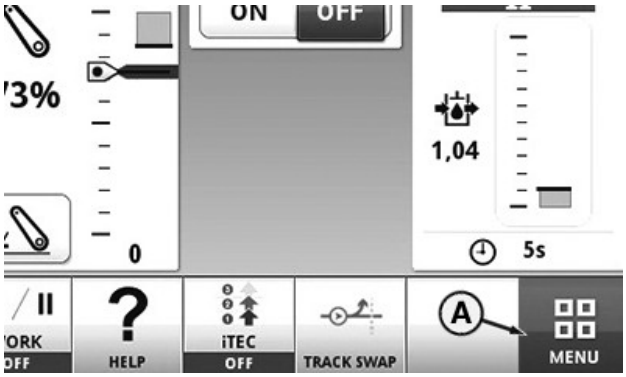
(H) — Air flow directed to the operator

Select air flow distribution mode (H) and set desired blower speed (A) and temperature (B). The direction and force of the air flow can be further adjusted at louvers (I).

OULXA64,6R,0005D7F-19-01JUN21

Heater/Ventilation/Air-Conditioning System and Rear Window Heater

(A) — Access the CommandCenter™ menu



LX266827—UN—20JUN16

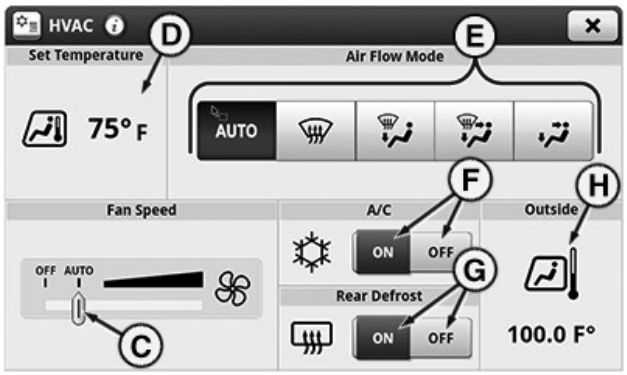
Access the CommandCenter™ Menu

(B) — Access the page for HVAC and rear window heater

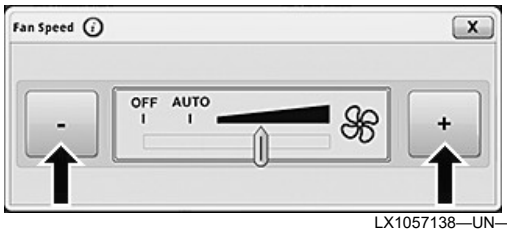
LX1057488—UN—05DEC14

CommandCenter™ Menu

The following functions can be set on the page:

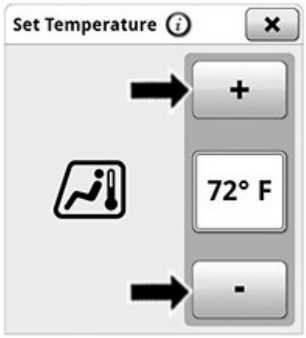


LX315011—UN—24AUG17



LX1057138—UN—05AUG13

Blower Speed



LX315012—UN—24AUG17

(C) — Blower speed

1. Press button (C) to access the Context menu.
2. Use the +/– buttons to set the desired blower speed.
3. Close the Context menu.

   In Auto mode, blower speed is adjusted automatically to meet the respective requirements.

(D) — Temperature control

1. Press button (D) to access the Context menu.
2. Use the +/– buttons to set the desired temperature.
3. Close the Context menu.

(E) — Air flow distribution

Select the desired mode for air circulation. Also refer to Air Flow Distribution, Description in this section.

(F) — Air-conditioning system

Press button (C) to switch the air-conditioning system on or off.

To operate the air-conditioning system:

1. Adjust the blower speed (C).
2. Switch on air-conditioning system (F).
3. Set desired temperature (D).
4. Set the air flow distribution (E) and louvers to the desired position.

IMPORTANT: To maintain consistently high performance, turn on the air-conditioning system for two or three minutes every month, regardless of weather conditions or season (with engine at low idle). Temperature control should be set for maximum cooling (approx. 16° C [29°F]).

At ambient temperatures below 4°C (39°F), the cab should first be heated (using the heating system) so that the temperature inside the cab is as high as possible.

NOTE: A/C system functions only when the blower is running.

In winter, the air-conditioning system can be operated in conjunction with the heater to remove moisture from the cab air.

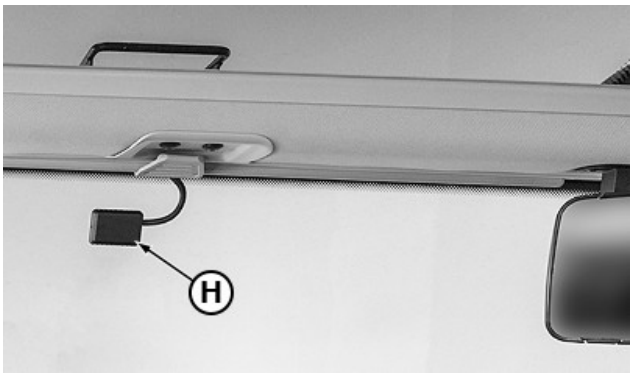
(G) — Rear window heater

Press button (G) to switch the rear window heater on or off.

NOTE: Operate the rear window heater only with the engine running. It is turned off automatically after 10 minutes and each time the tractor engine is shut off (ignition off). When intending to use the rear window heater again, it needs to be turned on again.

(H) — Outside air temperature display

(I) — Defog sensor



LX514832—UN—20JAN22

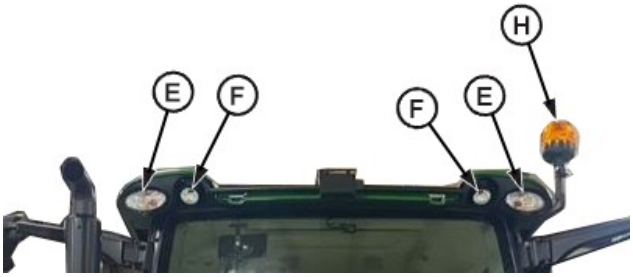
IMPORTANT: Do not expose defog sensor (I) to large quantities of water (e.g. wash water).

OULXA64,6R,0005D80-19-16JAN23

Overview of the Lights

LX514820—UN—13JAN22

Lights, Front (Tractor without Panoramic Roof)



LX514928—UN—13DEC22

Lights, Front (Tractor with Panoramic Roof)

LX514823—UN—13JAN22

Marker Light

A—Headlights (Low Beam)
B—Headlights (High Beam
C—Worklight[1]
D—Additional Headlight[1] (Low and High Beam) or Worklight[1]
E—Amber Turn-Signal and Warning Lights
F—Worklights[1]
G—Worklights[1]
H—Beacon Light[1]
J—Marker Light on Both Sides[1]

[1] If equipped

IMPORTANT: Switch on hazard warning lights when driving on the road.

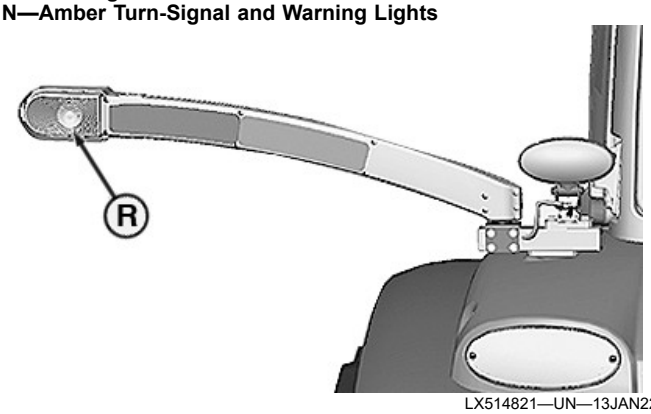
If the right turn signal is activated, the right turn signal flashes and the left turn signal lights up permanently.

If the left turn signal is activated, the left turn signal flashes and the right turn signal lights up permanently.

NOTE: H9 bulbs must NOT be used in front corner worklights (C).

LX514818—UN—22DEC21

K—Red Tail Lights/Brake Lights and Amber Turn-Signal Lights
L—Worklights[2]
M—Worklights[2]
N—Amber Turn-Signal and Warning Lights
O—Worklights[2]
P—License Plate Light[2]
Q—Seven-Pin Trailer Socket for Lights



LX514821—UN—13JAN22

Extremity Light

R—Extremity Light on Both Sides[2] (Hazard Warning Light)

IMPORTANT: Unfold both warning signs (if equipped) on roads.

The regional road traffic licensing regulations or other applicable regulations must be observed.

IMPORTANT: Switch on hazard warning lights when driving on the road.

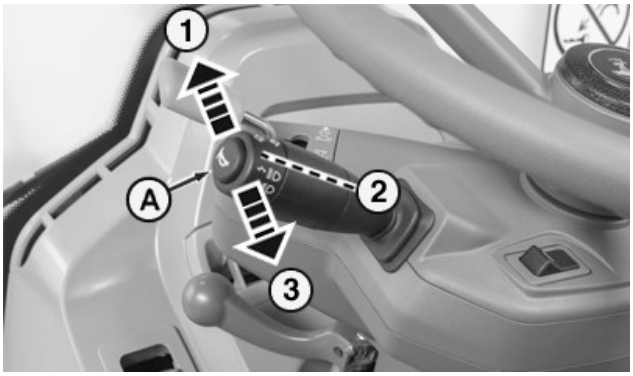
When the right turn-signal light is activated, the right turn-signal lights on the roof and on the fender flash. The left turn-signal light on the roof shines continuously and the left turn-signal light on the fender remains off.

[2] *If equipped*

When the left turn-signal light is activated, the left turn-signal lights on the roof and on the fender flash. The right turn-signal light on the roof shines continuously and the right turn-signal light on the fender remains off.

OULXA64,MW67,NA,0005FF8-19-15DEC22

Shift Lever for Turn Signal and Horn with Detent Position



LX373176—UN—08JUN21

A—Shift Lever for Turn Signal and Horn
1—Right Turn Signal
2—Horn (press button in shift lever)
3—Left Turn Signal

Turn signal without automatic return

Move shift lever (A) in the desired direction beyond the first point of resistance and let it engage. This activates the turn signals. To switch the turn signals off, move switch (A) back to its neutral position (2).

Turn signal with automatic return

Move shift lever (A) in desired direction until perceptible resistance is felt and release it immediately (<1 second). This activates the turn signals and shuts them off automatically after some time.

The flashing time depends on how many trailers are pulled by the tractor.

Tractor with:	Flashing time for:
0 trailers	50 meters (164 ft)
1 trailer	70 meters (229 ft)
2 trailers	90 meters (295 ft)

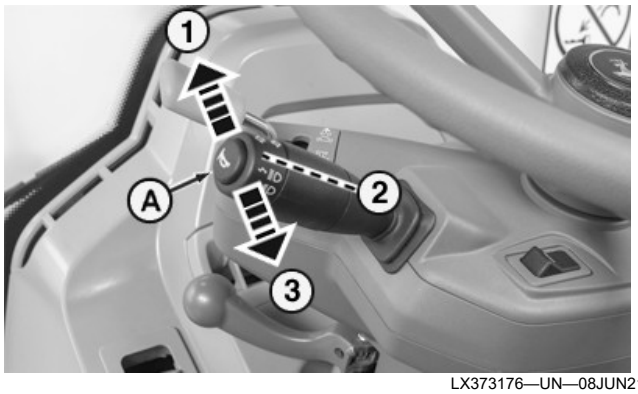
If the shift lever is again moved in the same direction (<1 second), the flashing stops.

If the shift lever is moved in opposite direction and released immediately (<1 second), automatic turn-signal return for the other direction is activated.

NOTE: An increased flash frequency indicates a defective bulb of the turn signal. Replace defective bulb immediately. See 220B.

OULXA64,6R,0005D82-19-07JUN21

Shift Lever for Turn Signal and Horn without Detent Position



LX373176—UN—08JUN21

A—Shift Lever for Turn Signal and Horn
1—Right Turn Signal
2—Horn (press button in shift lever)
3—Left Turn Signal

Flashing with automatic shutoff

Move the shift lever (A) in the desired direction to the kiss pressure and release immediately (<1 second). This activates the turn signal and switches it off again after the turn (front wheels back to straight ahead).

The flashing time depends on how many trailers are pulled by the tractor.

Tractor with:	Flashing time after turning
0 trailers	0 meters (0 ft)
1 or 2 trailers	12 meters (39 ft)

If the shift lever is pressed again in the same direction or in the opposite direction (<1 second), the turn signal is switched off.

If the direction is changed slightly, the turn signal will not be switched off. The turn signal needs to be switched off by pressing again.

NOTE: After a flashing time of one minute, the turn signal switches off automatically.

An increased flash frequency indicates a defective bulb of the turn signal. Replace defective bulb immediately. See 220B.

Flashing with manual shutoff

Move the shift lever (A) in the desired direction to the kiss pressure and hold (<1 second).

This activates the turn signal as long as the shift lever is

held in this position. After releasing the switch lever, the turn signal is switched off.

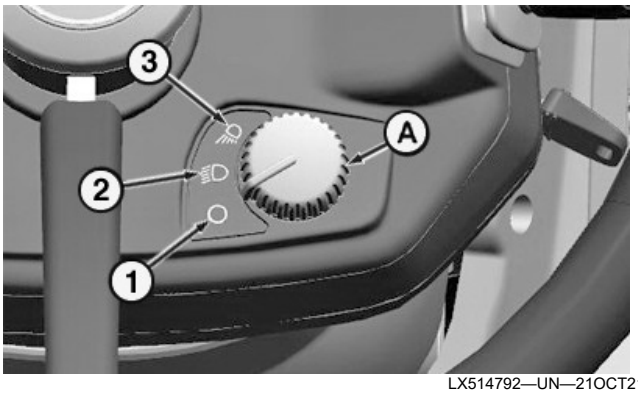
OULXA64,6R,0005D83-19-09SEP21

Light Switch (Low/High-Beam Headlights/ Worklights)

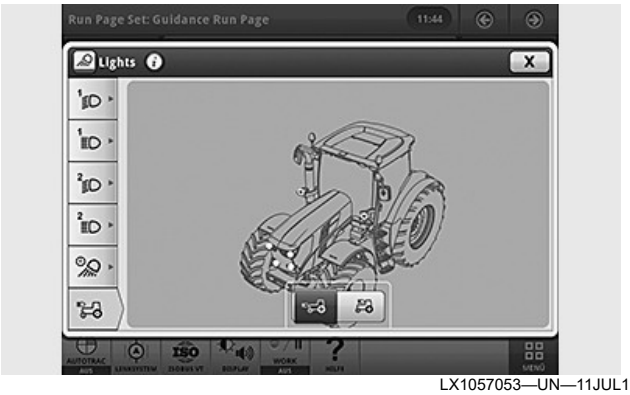
CAUTION: It is not permitted to use worklights (light switch at position 3) on public roads.

IMPORTANT: If the engine is switched off, the light and high-beam headlight remain on and do not automatically switch off. If the engine is going to be in standstill for an extended period, switch off the light and high-beam headlights in advance.

A — Light switch, positions:



LX514792—UN—21OCT21



LX1057053—UN—11JUL13

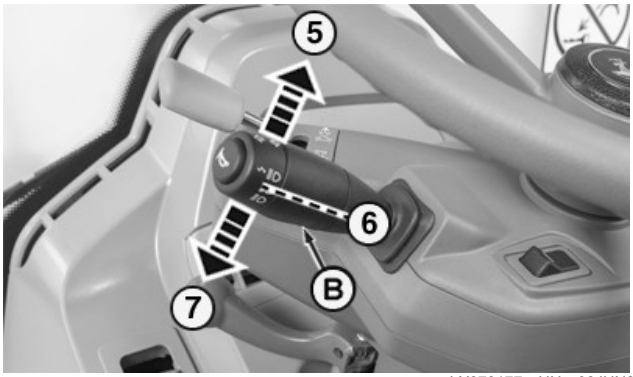
Light Page for Switch Position 2 Shown

1 — Lights switched off

2 — Headlights switched on (public roads)

3 — Worklights switched on (combination defined by user)

B — Shift lever for low-/high-beam headlights, positions:



LX373177—UN—08JUN21

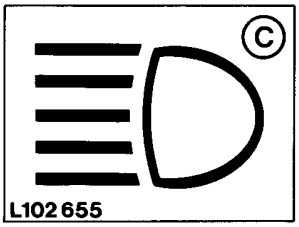
Low/High-Beam Headlight Shift Lever

5 — Headlight flasher, pull shift lever toward steering wheel

6 — Low-beam, shift lever in center position

7 — High-beam headlights, press shift lever away from steering wheel and engage it

C — Indicator light is lit when high-beam headlights are on.



L102655—UN—15AUG94

NOTE: When the ignition is turned off, the lights are switched off automatically after approx. 5 minutes. At two minutes and one minute before this time is up, the lights flash 5 times. Lighting can be activated multiple times until the battery enters its energy-saving mode.

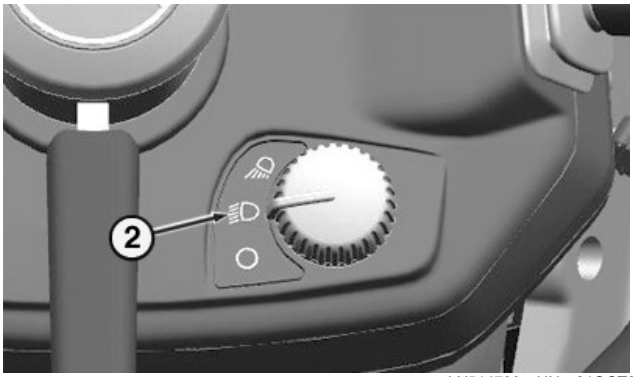
Each time the door is opened while the lights are on and the ignition is off, an acoustic alarm sounds for 5 seconds to remind the operator that the lights are still on.

OULXA64,6R,NA,0005F29-19-25OCT21

Select Headlights

NOTE: Additional headlights (low/high-beam headlights) may be attached to the cab frame.

1. Light switch in position (2).



LX514793—UN—21OCT21

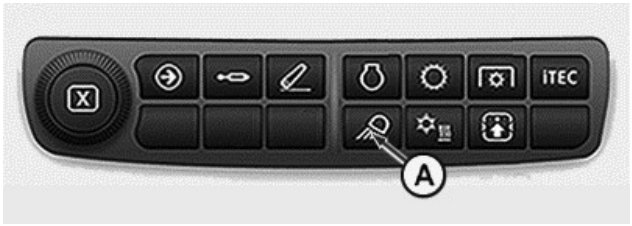
Headlights On (Public Roads)

2—Headlights On

The headlights selected last are switched on.

NOTE: When switching on the headlight, the Lights page in CommandCenter™ is displayed for about 10 seconds. Changes can be done directly. If no changes are made, the display will return to the monitoring screen after approximately 10 seconds.

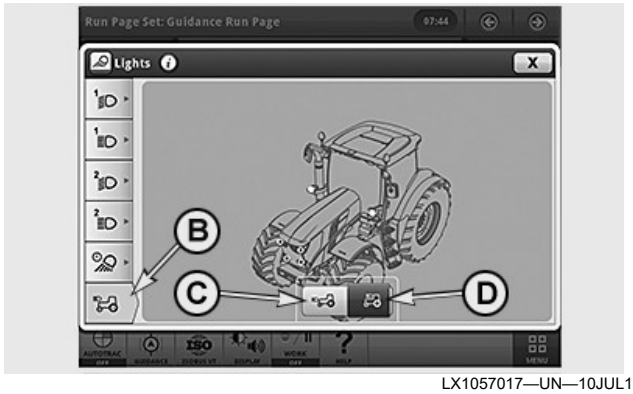
2. Press button (A).



LX373182—UN—09JUN21

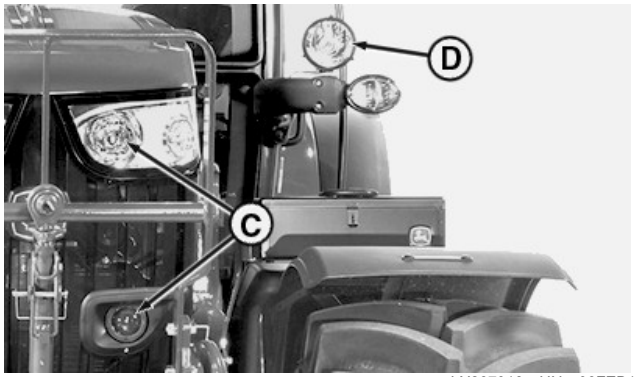
A—Light Button

3. Press button (B).



LX1057017—UN—10JUL13

Light Page in CommandCenter™



LX267018—UN—08FEB17

B—Select Page for Headlights
C—Headlights, Low/High-Beam Headlights (Hood)
D—Additional Headlight, Low/High-Beam Headlights (on Cab Frame, Optional)

4. Press button (C) or (D).

The selection is saved and remains activated even after the lights are switched off or the tractor is shut down.

After the page is closed, the monitoring screen will appear again.

NOTE: When the additional headlights are activated, the indicator light does not come on.

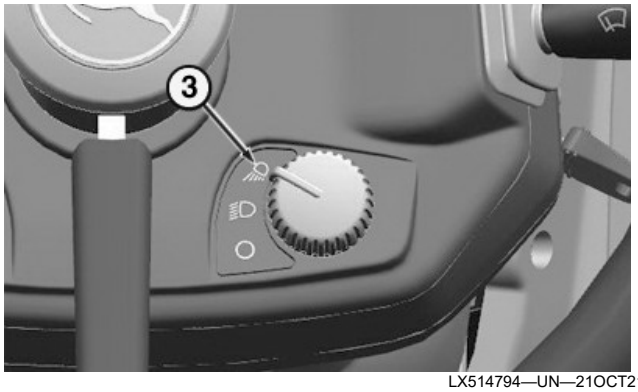
OULXA64,MW67,NA,0005FF5-19-14APR23

Select Worklights

CAUTION: It is not permitted to use worklights (light switch at position 3) on public roads.

Switch Worklights On and Off

1. Turn light switch in position (3).

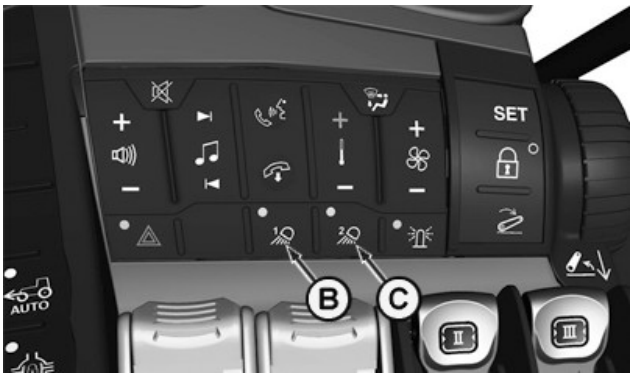


LX514794—UN—21OCT21

Worklight on

- The worklights are switched on with the user settings used last.
- The corresponding indicator light of the button (B) or (C) will light up.

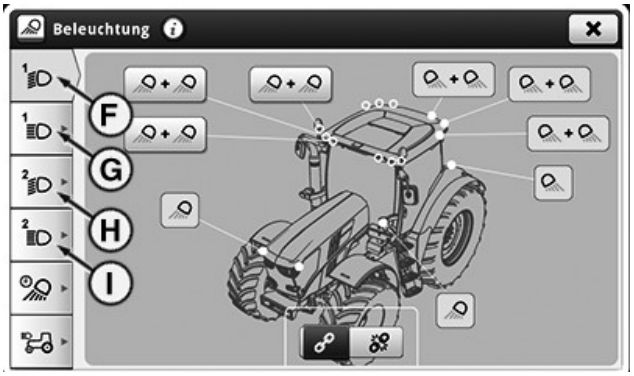
2. Press button (B) or (C).



LX373184—UN—08JUN21

B—Worklights, User Setting 1
C—Worklights, User Setting 2

3. Four different light user settings (F) to (I) can be activated.



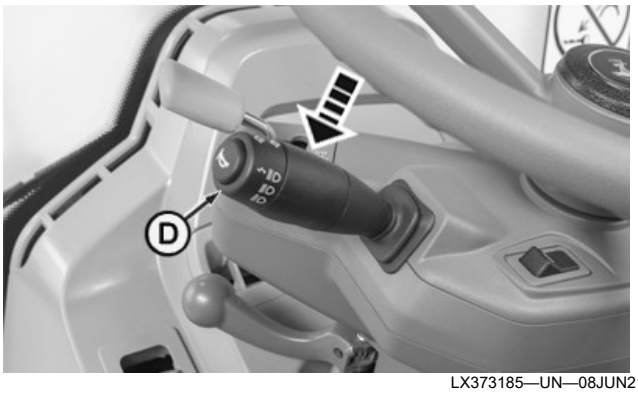
LX266970—UN—01SEP16

User Setting 1 Low-Beam Headlights Shown

F - I—User settings

To activate a user setting, select the following button/shift lever combinations:

User Setting	Button/Shift lever combinations
F	B
G	B + D
H	C
I	C + D



LX373185—UN—08JUN21

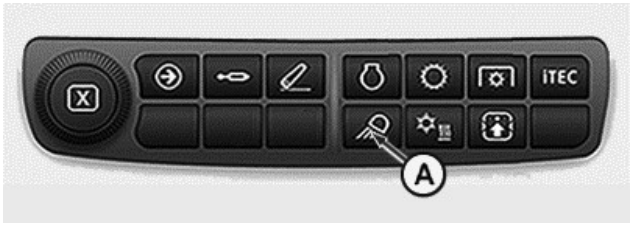
Worklights/High Beam

D—Shift Lever for Low/High-Beam Headlight

Change worklight user settings

NOTE: The user settings can be changed when the worklights are either switched on or off.

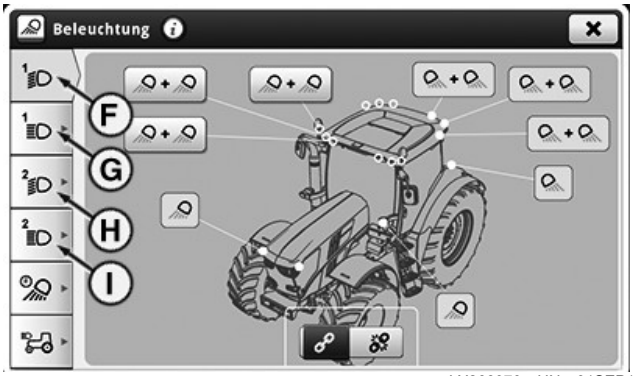
1. Press button (A).



LX373182—UN—09JUN21

A—Light Button

2. Select one of the user settings (F to I) to change.



LX266970—UN—01SEP16

Low Beam Headlight Combination 1 Shown

LX1057062—UN—12DEC13

3. Select the desired lights in the change page. Only lights that are installed are shown.
4. The settings are saved by changing or closing the page.

NOTE: If no worklight is selected, the factory settings are used when the worklights are turned on.

To activate a user setting, see Switch Worklights On and Off in this Section.

OULXA64,MW67,NA,0005FF6-19-14APR23

Worklights of ISOBUS Implement

CAUTION: It is not permitted to use worklights (light switch in position 3) on public roads.

NOTE: On tractors with ISOBUS, control of the lights of the implement can be supported via the ISOBUS socket. Refer to the Operator's Manual of the relevant ISOBUS implement.

Four user settings can be saved for the function of the lights of ISOBUS implements. User settings can group worklights that should light up at the same time.

User settings are set up via diagnostic addresses TEC 000031 to TEC 000034. See "Access Diagnostic Addresses," Section 300B.

The user setting needs to be entered as a seven-digit code. The code can consist of zeros and ones. Each position of the code represents one light or a group of lights.

"0" means OFF.

"1" means ON.

Create a code for a user setting:

Replace each of the seven positions respectively by a "0" or a "1". It depends on whether the light should be switched on or off.

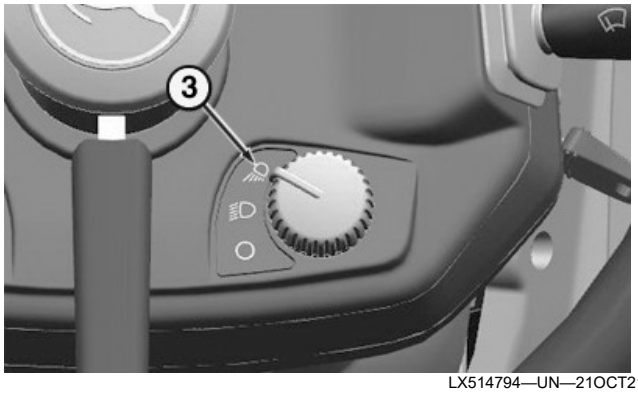
Sample code:

_ _ _ _ _ _ 1	Additional Implement Worklights, Option 2
_ _ _ _ _ 0 _	Additional Implement Worklights, Option 1
_ _ _ _ 0 _ _	Implement Worklight, Front Right
_ _ _ 1 _ _ _	Implement Worklight, Front Left
_ _ 0 _ _ _ _	Implement Worklight, Right Side
_ 1 _ _ _ _ _	Implement Worklight, Left Side
1 _ _ _ _ _ _	Implement Worklights, Rear

By using the entry values from bottom to top, the code 1 1 0 1 0 0 1 is created.

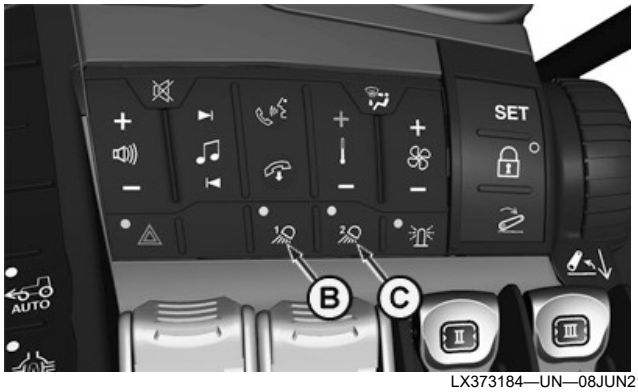
Make a note of the code and enter it in the corresponding diagnostic address.

To activate one of the four user-defined lighting variants, select the corresponding switch combination:



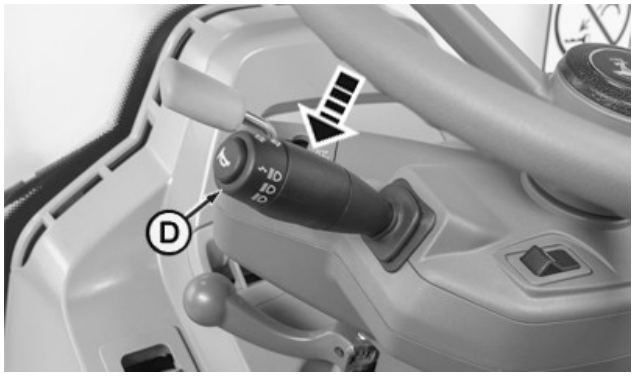
LX514794—UN—21OCT21

Worklight on



LX373184—UN—08JUN21

B—Worklights, User Setting 1
C—Worklights, User Setting 2



LX373185—UN—08JUN21

Worklights/High Beam

D—Shift Lever for Low/High-Beam Headlight

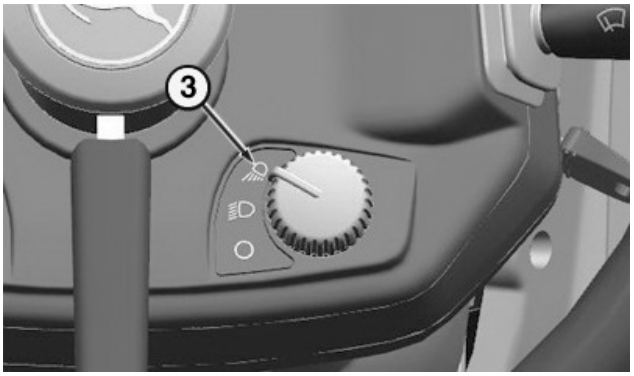
	Switch Positions			
Lighting option	I	II	III	IV
Diagnostic address	TEC 000031	TEC 000032	TEC 000033	TEC 000034
Key switch position	On	On	On	On
Position of Light Switch	(3)	(3)	(3)	(3)
Position of high/low-beam headlight shift lever (D)	Low beam	High beam	Low beam	High beam
Select Worklight, User Setting 1 or 2	(B)	(B)	(C)	(C)

OULXA64,MW67,NA,0005FF7-19-14APR23

Worklights on Front Loader (If Equipped)

CAUTION: It is not permitted to use worklights (light switch in position A) on public roads.

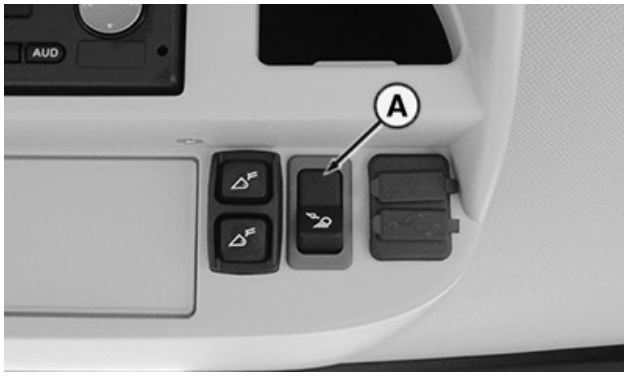
1. Turn light switch in position (3).



LX514794—UN—21OCT21

Worklight on

2. Switch the front loader worklights on or off with switch (A).



LX364442—UN—30AUG19

Example: Worklight Switch for Front Loader

OULXA64,6R,NA,0005F2D-19-29SEP22

Select Egress Light

Activate the egress light function

By means of the egress light function, the driver can select how long a selection of lights should remain on after the the lighting and the tractor is switched off.

Automatic switching on of the egress light:

1. Light switch in position "0."
2. Key switch in "STOP" position.

No automatic switching on of the egress light:

- If no lights were switched on during the last 5 minutes before the end of the drive.

Switching off the egress light manually:

- By briefly turning the light switch or ignition on and off.

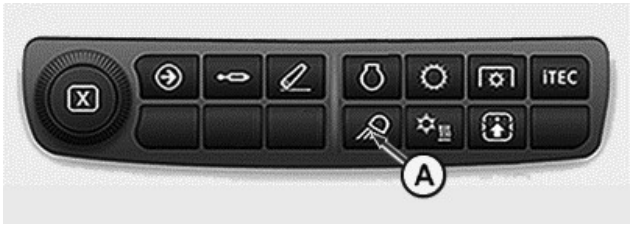
To avoid irritations by blinding other drivers on the road, the following applies:

1. The egress light switches only the low-beam headlights ON if the low-beam was on for 10 seconds before the ignition is turned off.
2. The egress light switches only the low-beam headlights and/or the worklight ON if a worklight was on for 10 seconds before the ignition is turned off.

Egress light - Select lights and adjust duration of lighting

Any lights switched on at the time of configuration play no role in determining how the egress light is configured.

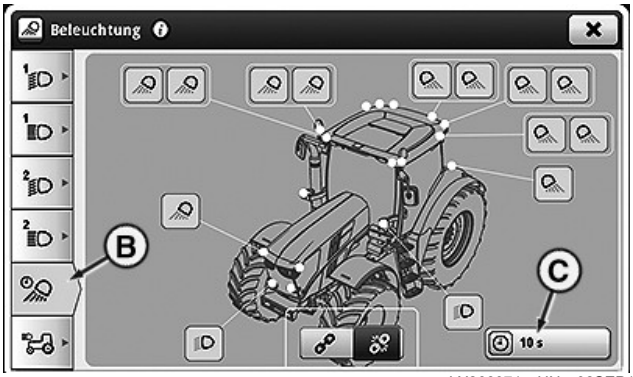
1. Press button (A).



LX373182—UN—09JUN21

A—Light Button

2. Select egress light (B). The existing lights are shown in the window.

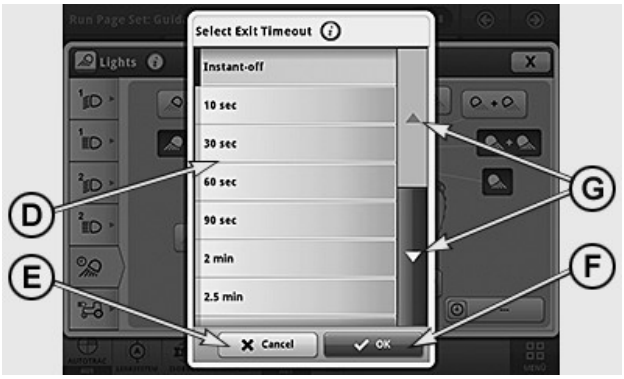


LX266971—UN—02SEP16

Egress Light Page

B—Call Up Egress Light
C—Set Lighting Duration

3. Select lights for the egress light (selected lights are shown with a dark background).
4. Press button (C) to access the page for timing the lighting duration.
5. Values ranging from 0 (OFF) to 300 seconds can be set for the lighting duration. Select the desired lighting duration (D) and confirm with button (F).



LX1057061—UN—11JUL13

Set Duration of Lighting

D—Lighting Duration Selection List
E—Cancel
F—Done
G—Scroll Bar

OULXA64,6R,MW67,0005FA6-19-14APR23

Switch On the Hazard Warning Lights

The hazard lights must be switched on whenever the tractor becomes a hazard for other vehicles.

Switch on hazard warning lights by pressing button (A).

LX373187—UN—08JUN21

After being switched on, the indicator lights in the button and the turn indicator in the instrument panel start flashing.

OULXA64,6R,MW67,0005FA7-19-28MAR23

Beacon Light (Optional)

The beacon light must be used as recommended by local laws (e.g. when driving extremely slowly and when tractor width is excessive).

Press button (A) to switch beacon light on or off.

LX373189—UN—08JUN21

With the beacon light switched on, the indicator light on button (A) comes on.

OULXA64,6R,MW67,0005FA8-19-28MAR23

Access-Step Light

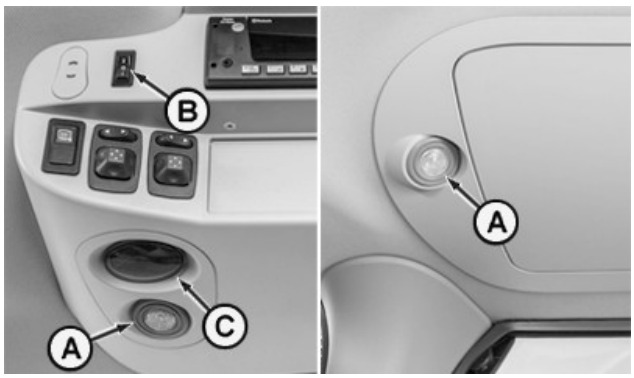
The access-step light (A) only lights up when the tractor is standing still and when the cab door is open.

LX267003—UN—02DEC16

OULXA64,6R,0005D8C-19-02JUN21

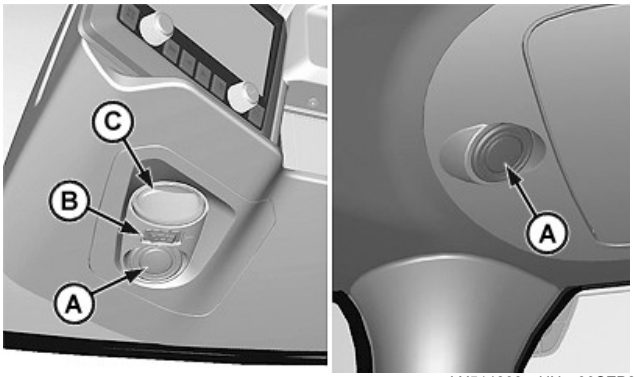
Dome Lights

NOTE: When the ignition is turned off, the lights are switched off automatically after approx. 5 minutes.



LX373190—UN—08JUN21

Version A: Right/Left Dome Lights



LX514890—UN—30SEP22

Version B: Right/Left Dome Lights

A—Light
B—Switch
C—Light

Switch position switch (B)	Light (A)
0	OFF
1	IN
2	ON when a door is opened.

Light (C) illuminates the transmission shift levers when the parking lights or headlights are on.

OULXA64,6R,0005D8D-19-29SEP22

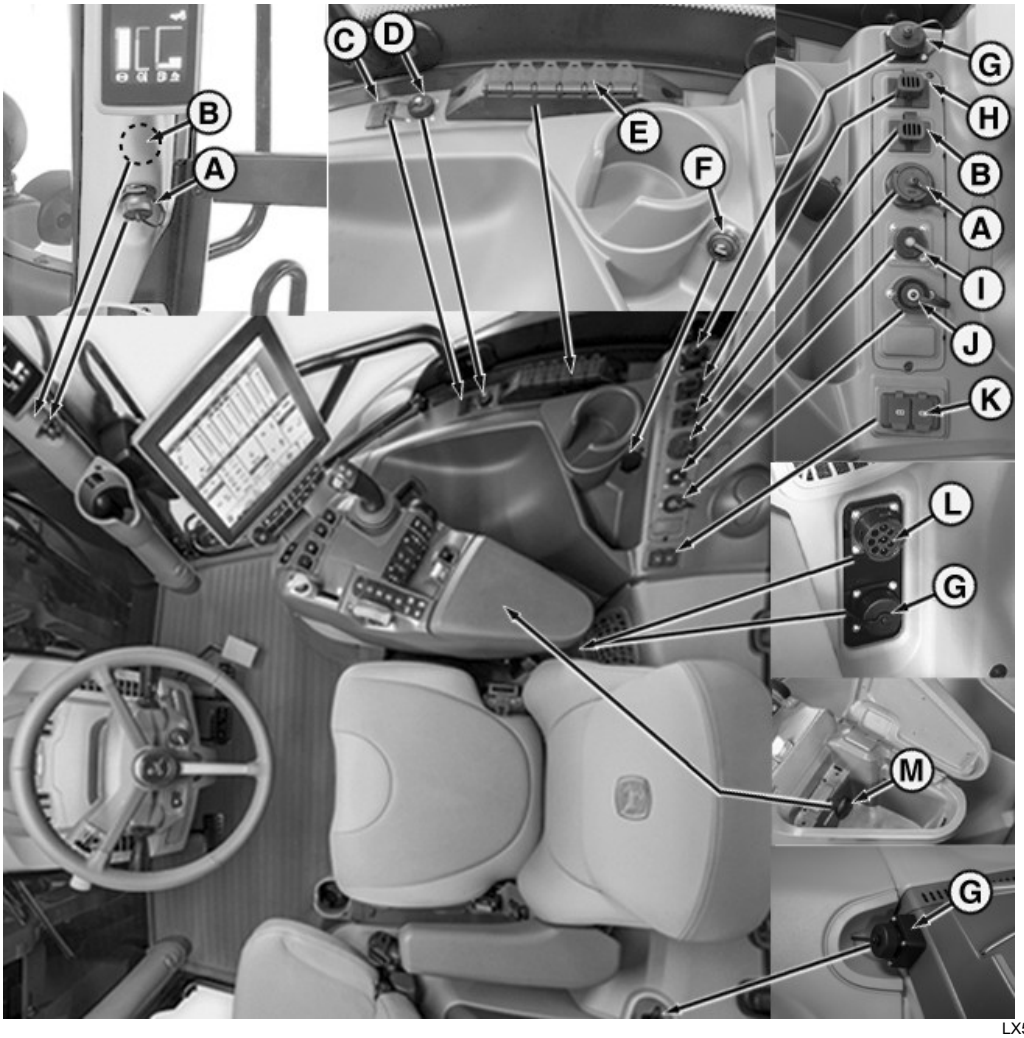
Seven-Terminal Trailer Socket

See Power Outlet Sockets 90H.

LX25458,ALL,0000AAA-19-05JUN20

Power Outlet Sockets

Sockets—Overview, Cab with CommandARM™



LX514882—UN—20SEP22

Cab Shown with CommandARM™ with Optional Equipment

(A) — Socket for GreenStar™ Display

(B) — Ethernet Socket for Universal Display

(C) — USB Service Connection for CommandCenter™

(D) — Video Camera Socket

(E) — 3-Terminal Power Outlet Socket Strip (12 Volt), (SAE)

(F) — 12-Volt Socket / Cigarette Lighter

(G) — 3-Terminal Power Outlet Socket (12 Volt), (SAE)

(H) — Socket for 2nd Monitor

(I) — ISOBUS Socket in the Cab

(J) — Signal Socket According to ISO Standard 11786

(K) — USB-A or USB-C Charging Sockets

(L) — Service Socket (CAN Bus)

(M) — 12-Volt Socket (max. 120 Watt)

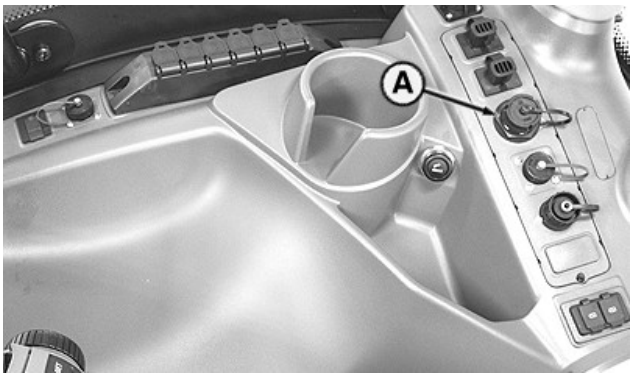
IMPORTANT: See the following pages for further information.

OULXA64,6R,NA,0005F26-19-28AUG23

Socket for GreenStar™ Display

A GreenStar™ display can be attached to the sockets (A).

LX514845—UN—03FEB22



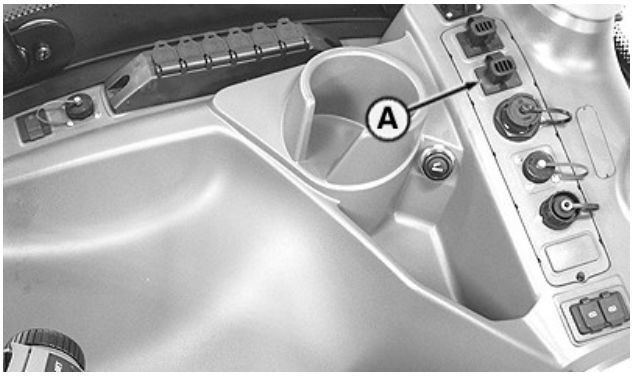
LX514836—UN—25JAN22

Terminal . . .	U	R	V
Fuse protection . .	10 A	10 A	Ground
Power at 12 volts	120 W	120 W	—
Active	Ignition ON	Permanent positive	—

OULXA64,6R,MW67,0005FA9-19-27OCT21

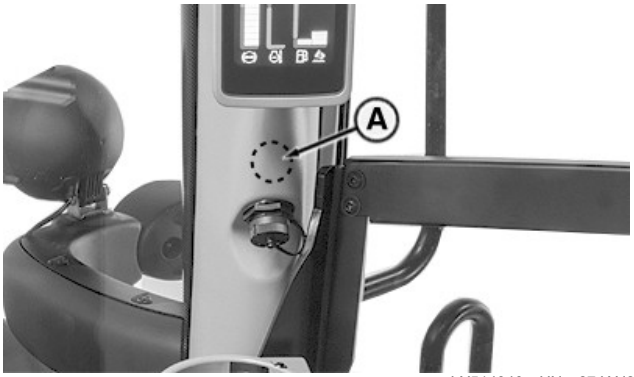
Ethernet Socket for Universal Display

A Universal display can be attached to the socket (A).



LX514837—UN—25JAN22

Optionally, an additional Ethernet connector (A) for connecting another universal display can be located behind the trim panel of the right A-post.



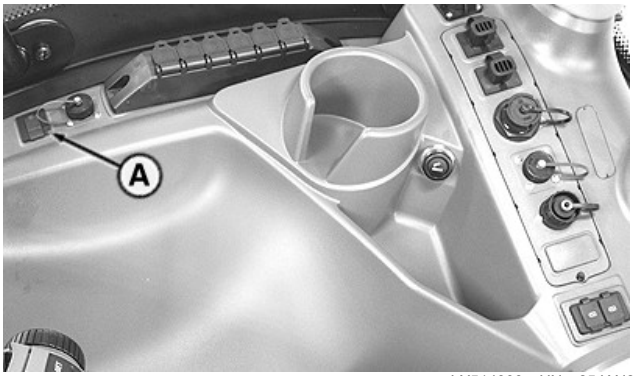
LX514846—UN—27JAN22

A-Post, Right

OULXA64,6R,MW67,0005FAA-19-27OCT21

USB Service Connection for CommandCenter™

The CommandCenter™ can be updated via the USB service connection (A).



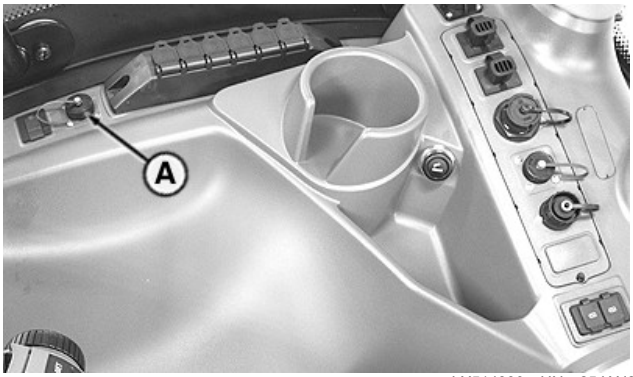
LX514838—UN—25JAN22

IMPORTANT: This USB port is suitable only for service and diagnostic purposes. Do not connect any other equipment.

OULXA64,6R,MW67,0005FAB-19-27OCT21

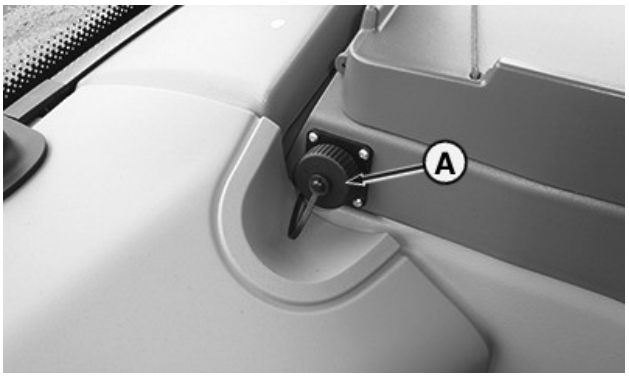
Socket for Video Camera

(A) — Video Camera Socket



LX514839—UN—25JAN22

OULXA64,6R,MW67,0005FAC-19-27OCT21



LX314919—UN—22JUN17

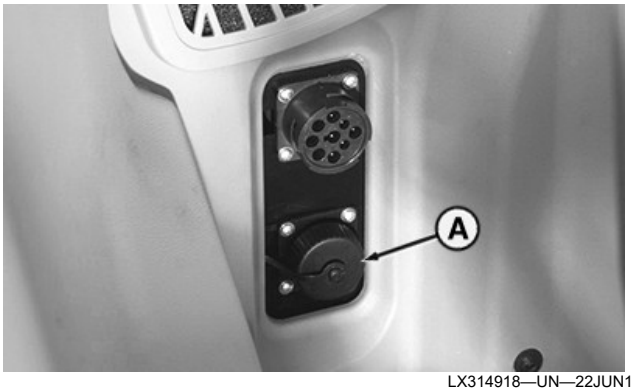
Side Console, Left

3-Terminal Power Outlet Socket and Power Outlet Socket Strip (12 V), (SAE)

IMPORTANT: When electrical consumers with high current draw are operated and multi-outlet power strips are used, the maximum permitted current load of the supply circuit must not be exceeded. Remember, total load comprises the sum of all the current consumers connected to the on-board circuit at any one time. This also applies if the consumers are connected to the on-board circuit at different on-board power outlet sockets (A) and (B).

LX1056975—UN—18NOV14

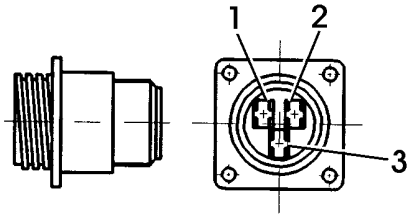
Sockets Shown on Side Console with CommandARM™



LX314918—UN—22JUN17

Cab Back Panel

(A) — 3-Terminal Power Outlet Socket (12 V, SAE)



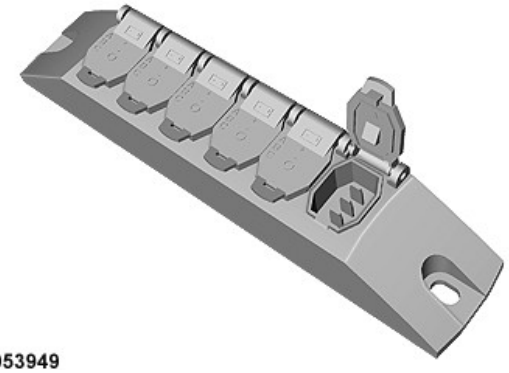
LX1017966

LX1017966—UN—12JAN98

3-Terminal Power Outlet Socket (12 V, SAE)

Terminal . . .	1	2	3
Fuse protection . .	30 A *max. continuous load 25 A*	30 A *max. continuous load 25 A*	Ground
Power at 12 volts	*max. 300 W*	*max. 300 W*	—
Active	Ignition ON	Permanent positive	—

(B) — 3-Terminal Power Outlet Socket Strip (12 V, SAE)



LX1053949—UN—15JUL11

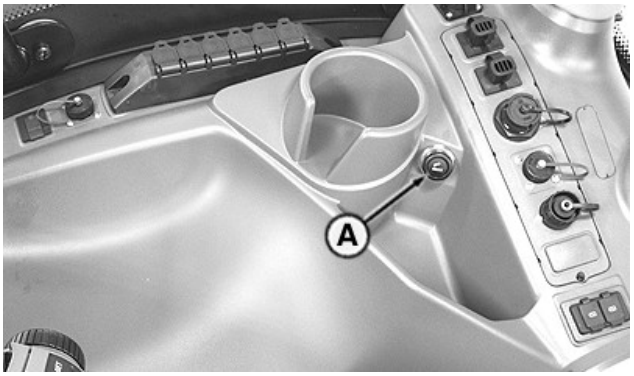
3-Terminal Power Outlet Socket Strip (12 V, SAE)

Terminal . . .	A	B	C
Fuse protection . .	30 A *max. continuous load 25 A*	Ground	30 A *max. continuous load 25 A*
Power at 12 volts	*max. 300 W*	—	*max. 300 W*
Active	Permanent positive	—	Ignition ON

OULXA64,6R,NA,0005F27-19-28MAR23

12-V Power Outlet Socket/Cigarette Lighter

The cigarette lighter (B) can be used as a 12-volt socket.



LX514841—UN—25JAN22

A—12-Volt Socket
B—Cigarette Lighter

Terminal	1	2
Fuse protection	10 A	Ground
Power at 12 volts	120 W	—
Active	Ignition ON	—

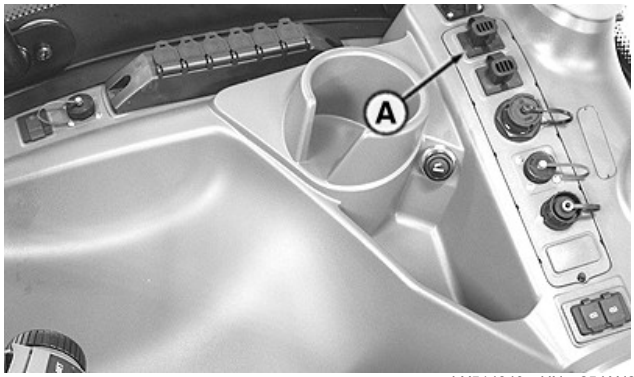
A 12-volt socket (A) may be installed instead of a cigarette lighter.

Maximum load = 120 W

OULXA64,6R,MW67,0005FAE-19-27OCT21

Socket for 2nd Monitor

(A) — Socket for 2nd Monitor

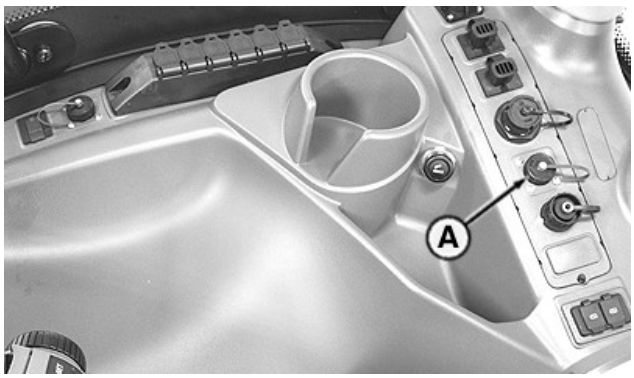


LX514840—UN—25JAN22

OULXA64,6R,MW67,0005FAD-19-27OCT21

ISOBUS Socket in Cab

(A) — Socket in Acc. with ISO Standard 11783



LX514842—UN—25JAN22

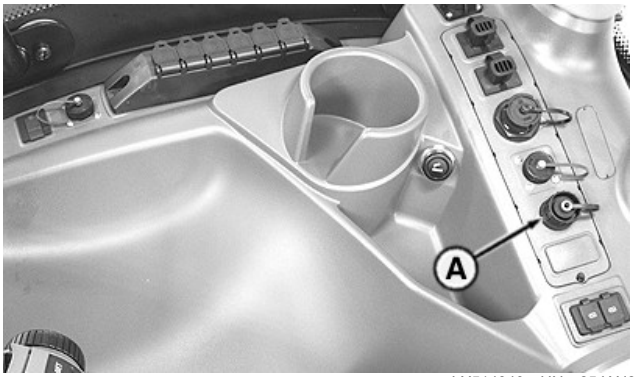
Terminal	7	9
Fuse protection	15 A	Ground
Power at 12 volts	180 W	—
Active	Ignition ON	—

For connecting multi-function lever or monitor of ISOBUS implements.

OULXA64,6R,MW67,0005FAF-19-27OCT21

Signal Socket According to ISO Standard 11786

The 7-terminal signal socket (A) is protected by a 10-amp fuse.



LX514843—UN—25JAN22

Terminal	Wire color	Description
1	Red	GPS ground speed
2	Brown	Wheel speed
3	Orange	Rear PTO speed
4	Yellow	Implement switch*
5	—	—
6	Red	Power supply at ignition ON 10 A, 120 watts at 12 volts
7	Black	Ground

*or hitch status (implement in working position or not). Query configurable.

NOTE: The dealer can use address CLC 057 (switched output for signal socket [terminal 4] to configure where the information for terminal 4 is sourced. From the implement switch or the rear hitch.

By default, the implement switch is configured here.

OULXA64,6R,MW67,0005FB0-19-26JAN22

USB-A Charging Sockets

IMPORTANT: If the engine is switched off, the USB charging sockets will continue to be supplied with power and will not switch off automatically. Disconnect the connectors at the charging sockets before an extended engine standstill.

IMPORTANT: This USB port is only suitable for charging, for example, a smartphone. Do not connect any other equipment.

LX514943—UN—09MAR23

USB-A Charging Sockets

A—USB-A Charging Sockets

When ignition is ON, each charging socket is active and provides 12 W.

The LED on the charging socket lights up when the connector is connected.

OULXA64,6R,0005D9B-19-15JAN24

USB-C Charging Sockets

IMPORTANT: If the engine is switched off, the USB charging sockets will continue to be supplied with power and will not switch off automatically. Disconnect the connectors at the charging sockets before an extended engine standstill.

IMPORTANT: This USB port is only suitable for charging, for example, a smartphone. Do not connect any other equipment.

LX514942—UN—08MAR23

Example: USB-C Charging Sockets

A — **USB-C** Charging Socket 18 W
B — **USB-C** Charging Socket 20-36 W
Active when Ignition ON

The LED on the charging socket lights up when the connector is connected.

oulxa64,6R,1678698195748-19-15JAN24

12-V Socket on CommandARM™

(A) — 12-V Socket

LX514808—UN—28OCT21

Terminal	1	2
Fuse protection	10 A	Ground
Power at 12 volts	120 W	—
Active	Ignition ON	—

Maximum rating = 120 W

OULXA64,0005FB1-19-29MAR23

Diagnostic Connector (CAN Bus)

This socket is suitable **only** for service and diagnostic purposes. Do not connect any other equipment.

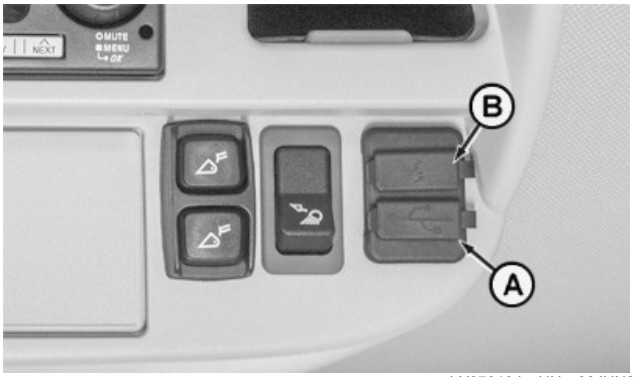
LX314920—UN—22JUN17

Terminal	A	B
Fuse protection	Ground	10 A
Power at 12 volts	—	120 W
Active	—	Permanent positive

OULXA64,6R,NA,0005F24-19-14OCT21

Radio A—Auxiliary and USB Inputs

IMPORTANT: This USB port is only suitable for the transmission of audio data. Do not connect any other equipment.



LX373194—UN—08JUN21

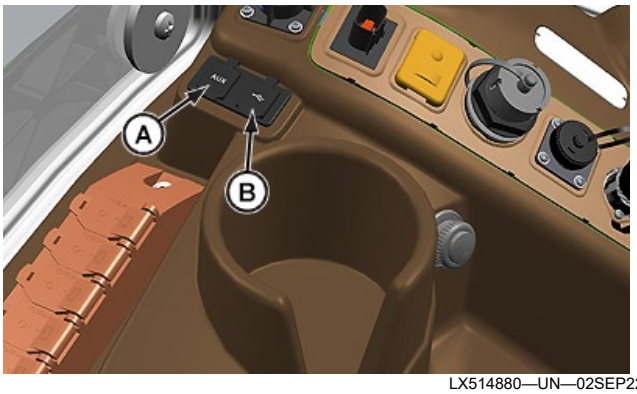
A—USB Input Connection for USB Devices
B—Auxiliary Input Connection for Auxiliary Devices

For more information, see Operator's Manual of relevant radio.

OULXA64,6R,0005D9F-19-15JAN24

Touchscreen Radio—Auxiliary and USB Inputs

IMPORTANT: This USB port is only suitable for the transmission of audio data. Do not connect any other equipment.



LX514880—UN—02SEP22

Auxiliary and USB Inputs

A—Auxiliary Input Connection for Auxiliary Devices
B—USB Input Connection for USB Devices

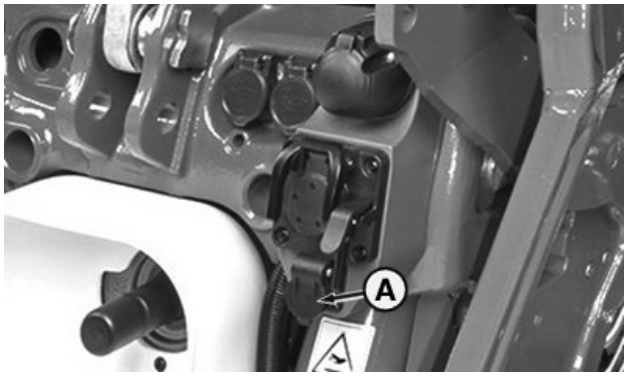
For more information, see Operator's Manual of relevant radio.

oulxa64,6R,MW67,1661847419338-19-15JAN24

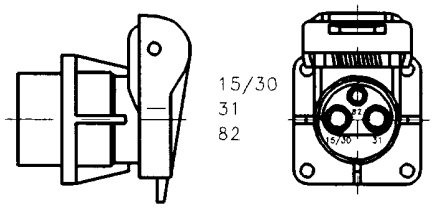
3-Terminal Power Outlet Socket (12 V, ECE), Front Hitch

IMPORTANT: When electrical consumers with high current draw are operated and multi-outlet power strips are used, the maximum permitted current load of the supply circuit must not be exceeded. It should be noted that the total load results from the sum of all electricity consumers connected to the on-board circuit. This also applies for the consumers that are connected to the on-board circuit at different sockets.

A — 3-Terminal Power Outlet Socket (12 V, ECE)



LX364230—UN—28JAN19



LX1017965

LX1017965—UN—10OCT97

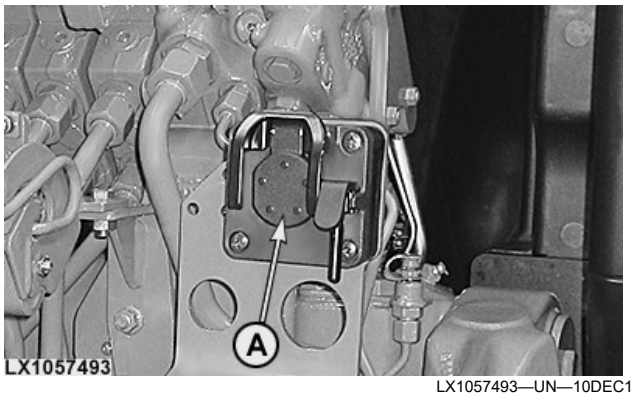
3-Terminal Power Outlet Socket (12 V, ECE)

Terminal . . .	15/30	31	82
Fuse protection . .	30 A *MAX* *Continuous load 25 A*	Ground	10 A *MAX* *Continuous load 5 A*
Power at 12 volts	*MAX 300 W*	—	*MAX 60 W*
Active	Permanent positive	—	Ignition ON

OULXA64,SP,EU,000569F-19-26AUG22

ISOBUS Socket (ISB), Rear Hitch

IMPORTANT: When operating electrical consumers with high current draw, the maximum permitted current load of the supply circuit must not be exceeded. Remember, total load comprises the sum of all the current consumers connected to the on-board circuit at any one time. This also applies if the consumers are connected to the on-board circuit at different sockets.



LX1057493—UN—10DEC14

Terminal . . .	1	2	3	4
Fuse protection . .	Ground	Ground	60 A	30 A
Power at 12 volts	—	—	720 W	360 W
Active	—	—	Ignition ON	Ignition ON

Implements meeting ISO Standard 11783 may be connected to this socket (A).

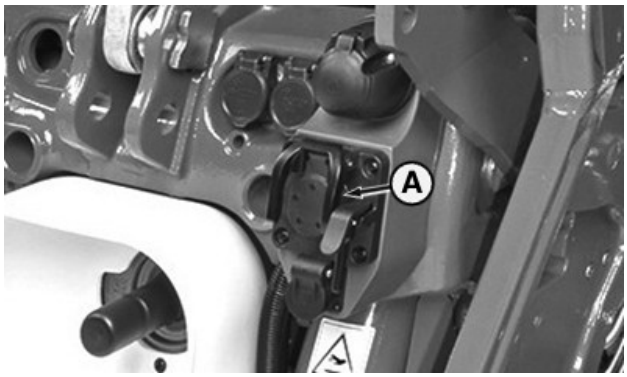
Read the Operator's Manual provided by the implement manufacturer and observe all safety instructions in the manual and on the implement prior to use.

NOTE: The road lights and worklights of an ISOBUS implement can be controlled via the ISOBUS socket. For more information, see Worklights of ISOBUS Implement in Section 90G and the relevant Operator's Manual of the ISOBUS implement.

OULXA64,6R,0005DA0-19-28MAR23

ISOBUS Socket (ISB), Front Hitch (Not Available for All Models)

IMPORTANT: When operating electrical consumers with high current draw, the maximum permitted current load of the supply circuit must not be exceeded. It should be noted that the total load results from the sum of all electricity consumers connected to the on-board circuit. This also applies for the consumers that are connected to the on-board circuit at different sockets.



LX364231—UN—28JAN19

Pin	1	2	3	4
Protected	Gnd	Gnd	60 A	30 A
Power at 12 V	—	—	720 W	360 W
Active	—	—	Ignition ON	Ignition ON

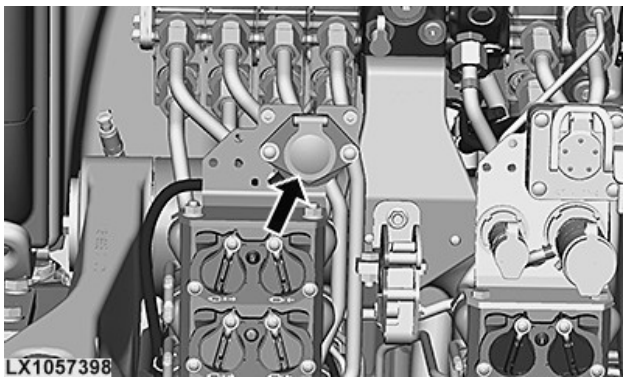
Implements that meet ISO Standard 11783 may be connected to socket (A).

Read the Operator's Manual provided by the implement manufacturer and observe all safety instructions in the manual and on the implement prior to use.

NOTE: The head lights and worklights of an ISOBUS implement can be controlled via the ISOBUS socket. For more information, see Worklights of ISOBUS Implement in section 90G and the Operator's Manual of the ISOBUS implement.

OULXA64,SP,EU,00056A3-19-28MAR23

Seven-Terminal Trailer Socket, Rear Hitch



LX1057398—UN—05FEB14

Terminal	1	7
Fuse protection . .	Ground	30 A
Power at 12 volts .	—	360 W
Active	—	Ignition ON

The trailer lights are controlled via the trailer socket.

If the rear lights of the tractor are covered by an implement, connect additional lighting for implements at the trailer socket.

Connect and disconnect the connector only when the ignition is off.

NOTE: Suitable connectors can be obtained from your authorized dealer.

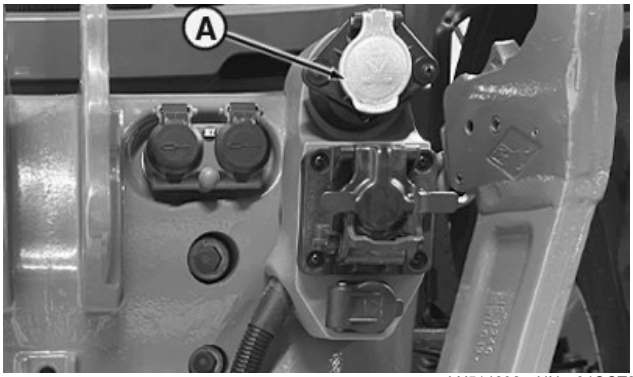
NOTE: The headlights and worklights of an ISOBUS implement can be controlled via the ISOBUS socket. For more information, see Worklights of the ISOBUS Implement in section 90G and the Operator's Manual of the ISOBUS implement.

OULXA64,6R,NA,0005F2E-19-28MAR23

Seven-Terminal Trailer Socket, Front Hitch

NOTE: Illustration shows tractor with additional equipment.

The trailer lights are controlled via trailer socket (A).



LX514892—UN—04OCT22

Terminal	1	7
Fused	Ground	30 W
Power at 12 volts	—	360 W
Active	—	Ignition ON

The socket is used to connect lights, turn-signal lights, flashers and electrical devices installed on the implement. Always use auxiliary light on towed implement when tractor signals and other lights are obscured.

NOTE: Suitable connectors can be obtained from a dealer authorized by John Deere.

oulxa64,6R,NA,664536723254-19-30SEP22

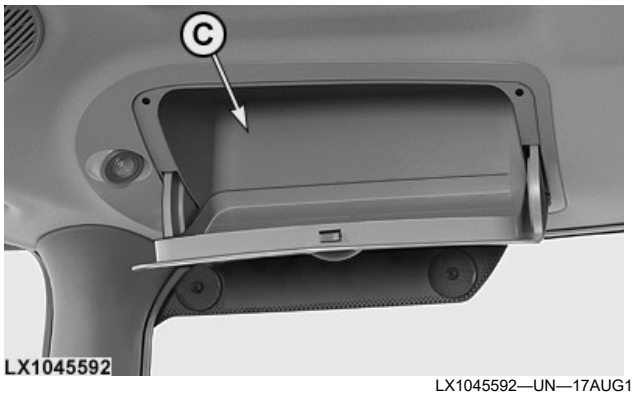
Storage Tray

A cooling compartment can be integrated in storage tray (A). Switch the cooling compartment on and off with switch (B).

LX1045575—UN—17AUG10

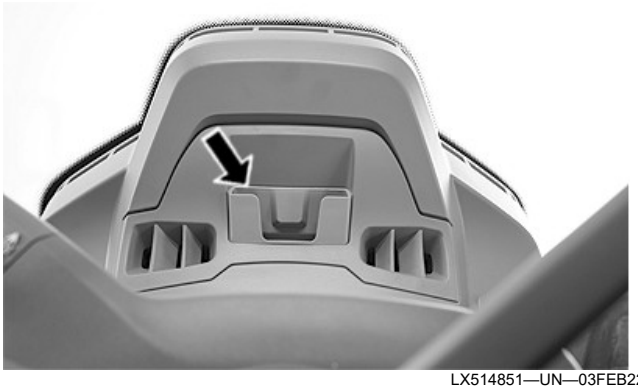
Storage Trays with Cooling Compartment, Left Console

Storage compartment (C) in the left back of the roof provides place for retaining the first aid kit.



LX1045592—UN—17AUG10

Storage Tray in Left Rear of Roof



LX514851—UN—03FEB22

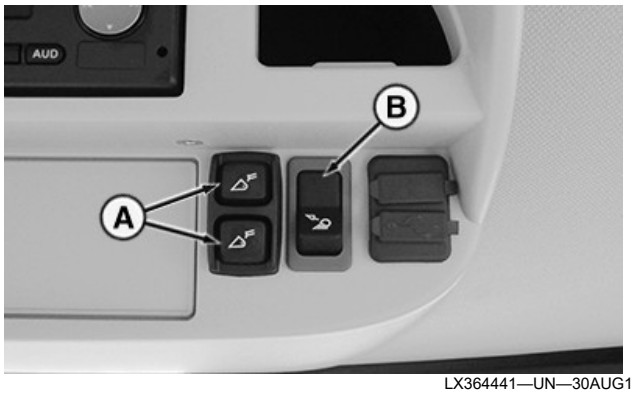
Bracket for Smartphone on Windshield

OULXA64,6R,0005DA1-19-09MAR23

Controls for Hydraulic Quick Release and Worklights on Front Loader (If Equipped)

CAUTION: It is not permitted to use worklights on public roads.

To unlock an implement, press the buttons (A) on the front loader simultaneously.



LX364441—UN—30AUG19

Example: Controls for Hydraulic Quick Release and Worklights on Front Loader

A—Buttons for Rapid Hydraulic Disengagement
B—Worklight Switch

NOTE: Refer to the Operator's Manual of the front loader for more information.

With switch (B), switch the front loader worklights on and off (the light switch has to be in the “Worklights” position. Also see “Lights - Worklights on Front Loader (if equipped)” in Section 90G.

OULXA64,6R,0005DA2-19-27MAR23

Smartphone Holder

The holder (A) can be positioned as shown.

LX514939—UN—10MAR23

Horizontal Position/Vertical Position

Adjust the holder to have a clear view of the surroundings.

Insert the smartphone in the holder. The height adjusts automatically.

LX514940—UN—08MAR23

Possible Phones Sizes:	mm	in
Height Range:	139.7—177.8	5.5— 7.0
Max Width:	88.9	3.5
Max Depth:	15.7	0.62

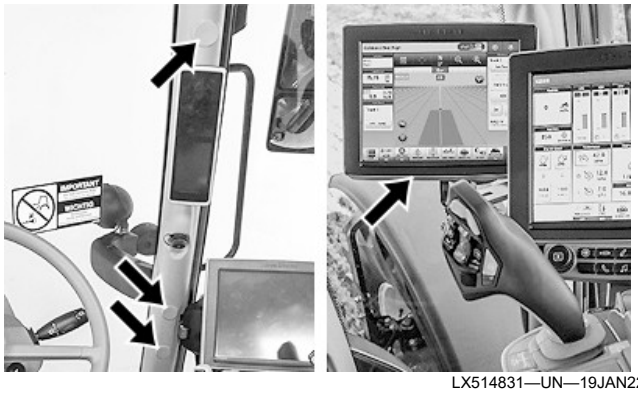
oulxa64,1677682473977-19-14JUN23

Install Additional Monitors

Attaching monitors and control instruments

Monitors and controls can be attached in the cab at various attaching points:

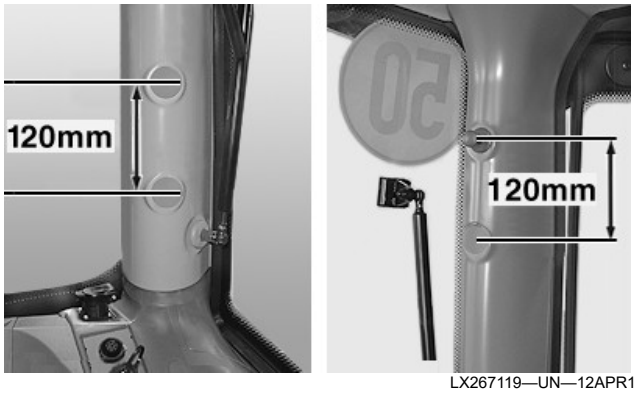
- At the front right beam.



LX514831—UN—19JAN22

Additional Monitor Shown for CommandCenter™

- At the rear beams.



LX267119—UN—12APR17

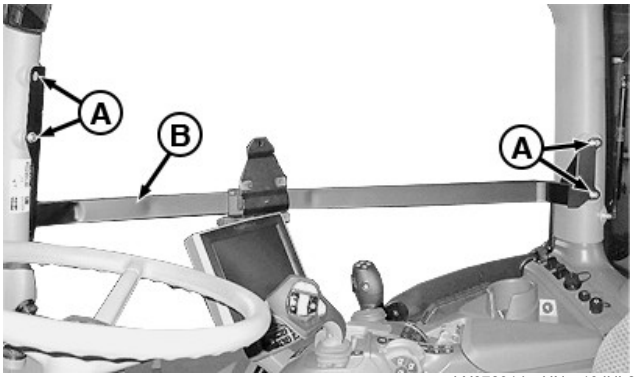
NOTE: Hole spacing of the attaching points: 120 mm (4.72 in.) - thread M10.

OULXA64,0005DFB-19-18JAN22

Mounting Rail for Additional Control Instruments or Monitors (If Equipped)

IMPORTANT: Before putting the monitor or control instrument into operation, note the following:

- **Read the Operator's Manual of the manufacturer.**
- **Observe all safety instructions contained in the manual or attached to the device.**



LX372914—UN—10JUL20

Additional control instruments or additional monitors can be attached to the mounting rail.

NOTE: The hole spacing of mounting points (A) is 120 mm (4.72 in.) - thread M10.

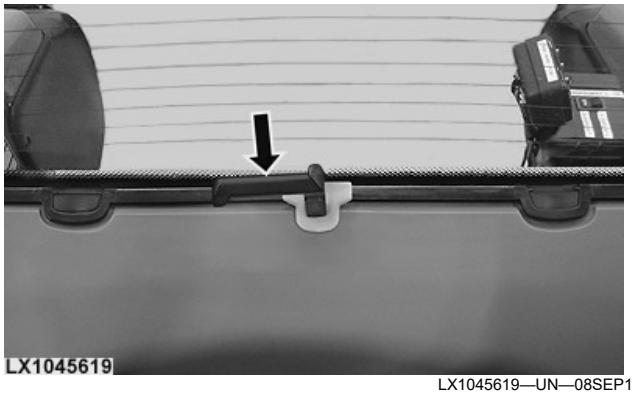
OULXA64,6R,0005DA5-19-27MAR23

Open Rear Window

IMPORTANT: Never open the rear window fully without first checking that the rear wiper has reached its home position.

Rear window wiper and washer system only operate if the rear window is closed.

Rotate lever to the right and press open the rear window.



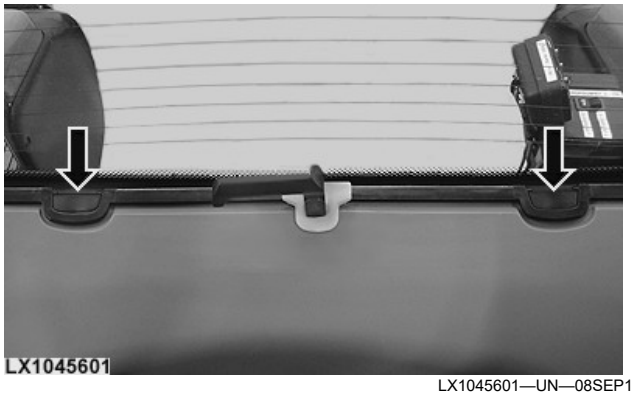
LX1045619—UN—08SEP10

Rear Window

OULXA64,6R,0005DA6-19-07JUN21

Rear Window - Cable Guides

There are two cable ducts at the rear window (see arrows).



LX1045601—UN—08SEP10

1. Open the rear window.
2. Remove rubber plugs and separate them at the provided cuts.
3. Place the cables.
4. Insert the rubber plugs together with the cables and close the rear window.

OULXA64,6R,0005DA7-19-07JUN21

Roof Hatch (If Equipped)

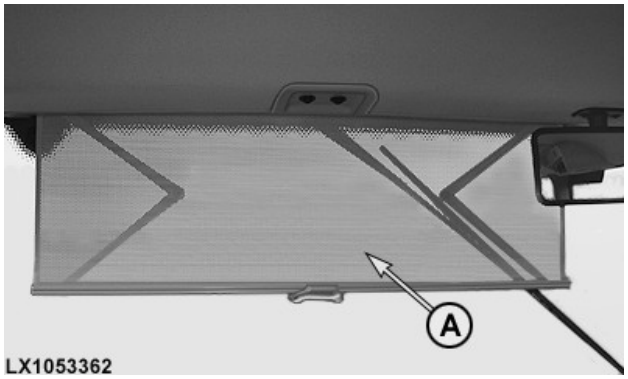
Open and close roof hatch with handle (A).

LX266854—UN—20JUL16

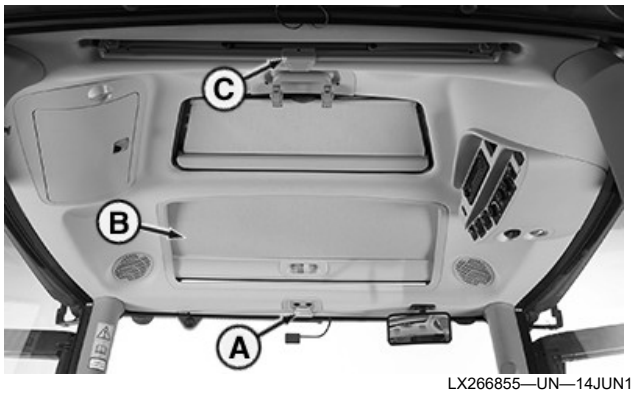
OULXA64,6R,0005DA8-19-07JUN21

Pull-Down Sunshade

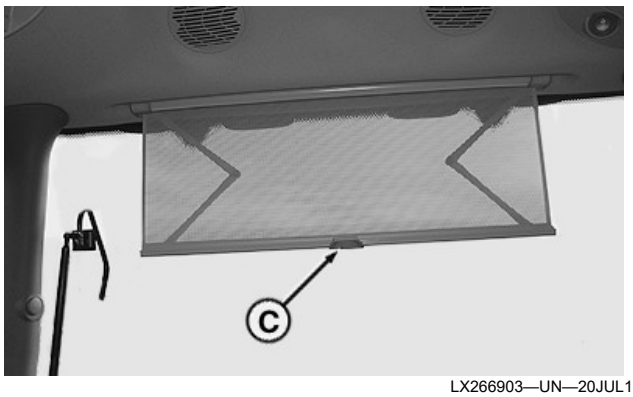
Pull-down sunshades can be used to shut out direct sunlight, if desired.



LX1053362—UN—25JAN12



LX266855—UN—14JUN16



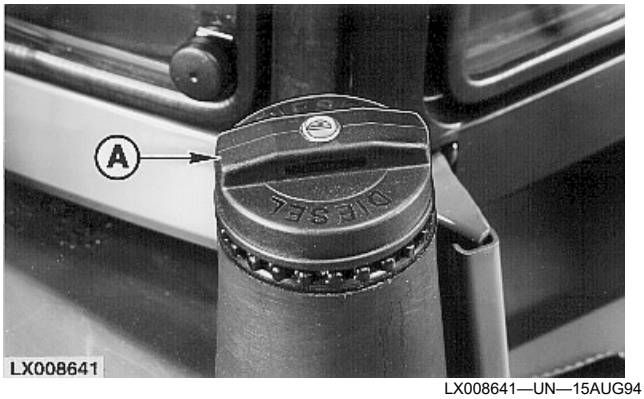
LX266903—UN—20JUL16

A—Pull-Down Sunshade (Windshield)
B—Pull-Down Sunshade (Panorama Roof)
C—Pull-Down Sunshade (Rear Window)

OULXA64,6R,0005DA9-19-07JUN21

Lockable Tank Filler Cap

The tractor may be equipped with a lockable tank filler cap (A).



LX008641—UN—15AUG94

OULXA64,ALL,00056AE-19-24SEP20

Lockable Toolbox

IMPORTANT: To prevent damage the tank, do not transport sharp or heavy objects in the toolbox. Secure objects against slipping.

LX514955—UN—11SEP23

The tractor is equipped with a lockable tollbox.

oulxa64,MW67,1693989763266-19-22SEP23

Ballasting Information and Guidelines for Tractors with Single Tires

Basic Ballasting Definitions

Ballast is mass added to a tractor chassis and/or wheels to:

• Increase **total weight** and/or

• Influence weight distribution between front axle and rear axle (static balance). Static means that front and rear axle loads are determined when tractor is parked.

The static weight distribution between front and rear axles is sometimes called **weight split**. It is expressed as percentages of total tractor static weight supported by the front axle and by the rear axle. For example, if the front axle supports 40% of the total static tractor weight, the tractor has a 40/60 weight split. The percentage of front axle weight is always stated first in this form.

A tractor **properly ballasted** for a given type of implement (towed, integral, or semi-integral) has both the correct **total weight** and **static balance** for that type of implement.

Major Considerations

The **amount** of ballast required and especially the **locations** of ballast weights depend very much on type of implement being used and operating speed.

Ballasting is required to:

1. Ensure that front axle carries sufficient weight for steerability and stability with field draft loads as well as transport in the field and on the road.

2. Provide sufficient traction to efficiently pull high draft loads.

3. Provide proper fore/aft balance to minimize occurrence of "power hop" (uncontrolled, rhythmical bouncing under high load) in tractors with front-wheel drive engaged.

4. Ensure that rear axle carries sufficient weight for traction, braking, and stability when a loader or other front implement is attached to front of tractor.

When changing from one implement to another, it may be necessary to reconfigure ballast on the tractor.

LX25458,ALL,0000AAF-19-24SEP20

General Guidelines for Tractor Weight Based on Engine Horsepower (according to UN ECE R120, using PS as Unit of Measurement)

The total tractor weight needed to efficiently deliver power through the wheels to the ground for field draft applications depends on travel speed and soil conditions. As a basic guideline, the table shows the recommended weight per engine horsepower (PS)[1] for several draft speed range and speed thresholds for heavy pull.

		Heavy	Medium	Light
Travel Speed	km/h	≤ 7.2	7.2 - 8.7	≥ 8.7
	mph	≤ 4.5	4.5 - 5.4	≥ 5.4
Vehicle weight per horsepower (PS)[a] (UN ECE R120)	kg	56	50	46
	lb	125	110	100

Indicated Travel Speed

[a]Conversion factor: 1 PS (metric system) corresponds to 0.7355 kW

Wheel slip should normally be in the range of 8 – 12% for optimum efficiency of power delivery at these field speeds. Wheel slip may briefly rise above this range when the tractor encounters a higher draft area in the field, but it should not remain there continuously.

NOTE: Radar is recommended to continually monitor wheel slip. Checking wheel slip manually is possible but will not show slip continuously.

IMPORTANT: To extend drivetrain life, the tractor should never be operated with continuous full-power loads at speeds below 6.6 km/h (4.1 mph) with front-wheel drive engaged, and below 7.0 km/h (4.3 mph) for tractors without front-wheel drive. Some tractor models which are optimized for special applications can have different speed thresholds (see table for more specific values). Travel speed may drop below that level in hard-pull situations, but it must recover to higher levels during normal operation. This applies to tractors with all types of transmission. For tractors equipped with IVT™/ AutoPowr™ transmissions operating in automatic mode, the engine will not labor in high draft situations, but minimum travel speed guidelines must still be followed.

The speed thresholds provided by the table can be used as an additional means to optimize the tractor weight for the application. The tractor is ballasted properly if wheel slip is increased and the engine cannot be stalled at speeds below these thresholds and under heavy-pull conditions.

[1] Conversion factor: 1 PS (metric system) corresponds to 0.7355 kW

		Tractors with front-wheel drive axle	Tractors without front-wheel drive axle
Vehicle weight per horsepower (PS)[a] (UN ECE R120)	kg	56	56
	lb	125	125
Lower speed threshold for heavy pull	km/h	6.6	7.0
	mph	4.1	4.3

Lower travel speed thresholds for heavy pull depending on vehicle type

[a]Conversion factor: 1 PS (metric system) corresponds to 0.7355 kW

LX25458,ALL,0000AB0-19-20FEB23

Selection of Weights

CAUTION: When choosing the front and rear weights, make sure that the permissible axle weights as well as the permissible total weight including the implement is not exceeded.

Comply with local regulations regarding installation and maximum permissible number of weights. In order to maintain steerability, at least 20% of unladen mass must be on the front axle. Unladen mass is the mass of the tractor without special equipment, implements, trailer or ballast, but with hydraulic oil and lubricants, a full fuel tank, and an operator weighing 75 kg.

CAUTION: Use suitable lifting tackle/hoists when handling weights.

IMPORTANT: If the tractor is driven continuously with high ballast weight, it is necessary to check the toe-in before start-up.

Safety and performance of your tractor depend on correct ballasting of front axle (front weights) and rear axle (wheel weights, filling tires with liquid ballast, pickup weight).

LX25458,ALL,0000AB1-19-24SEP20

Load on Rear Wheels

When dimensioning the load on the rear wheels, make sure that around 10-15% slip remains when work is performed with the tractor. This is the range within which the maximum traction is achieved.

However, the load on the rear wheels should only be large enough that, at 7 km/h (4.3 mph), the engine is working at full capacity at rated speed. If overload is possible, or if it is possible to stall the engine below 7 km/h (4.3 mph), the load on the rear wheels is too high.

Too little ballast leads to:

- Excessive slippage and the resulting reduced traction
- Increased tire wear
- High fuel usage

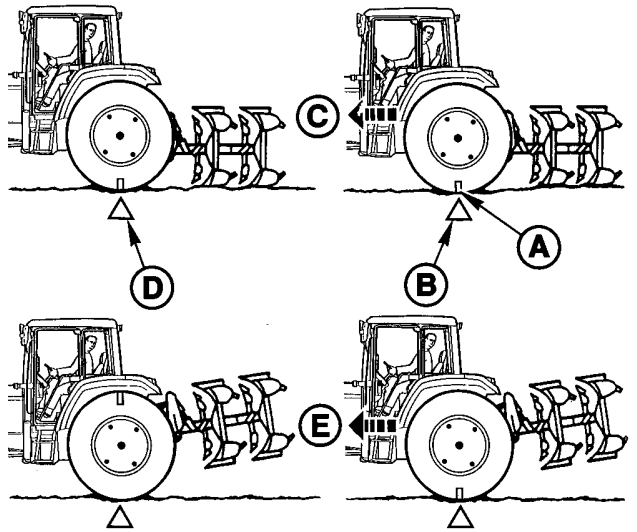
Too much ballast leads to:

- Increased roll resistance and the resulting reduced traction
- Load on tires and transmission too high
- Soil compaction
- High fuel usage

NOTE: It is not permissible to use more than 3 rear wheel weights per wheel. Additionally, the legal stipulations regarding the maximum permissible tractor width have to be observed.

LX25458,ALL,0000AB2-19-24SEP20

Measure Rear Wheel Slip



LX000402—UN—15AUG94

1. Mark tire (A).
2. Mark starting point on the ground (B).
3. With the implement lowered, drive until the rear wheel has completed 10 revolutions (C).
4. Place a marker on the ground at point (D).
5. Drive the distance between the ground markings again with implement raised and count the revolutions of the rear wheels (E).

The number of revolutions gives the following percentage of wheel slip:

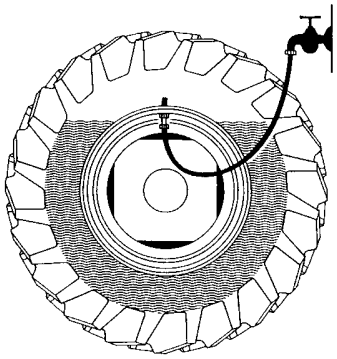
- 10.0 revolutions = 0% wheel slip
- 9.5 revolutions = 5% wheel slip
- 9.0 revolutions = 10% wheel slip

- 8.5 revolutions = 15% wheel slip
- 8.0 revolutions = 20% wheel slip
- 7.5 revolutions = 25% wheel slip
- 7.0 revolutions = 30% wheel slip

NOTE: On tractors with GPS or radar sensor, the slip indicator in the display can be used, if equipped. The calibration of the radar sensor needs to be observed.

LX25458,ALL,0000AB3-19-24SEP20

Fill Tires with Water



LX009450

LX009450—UN—03JAN95

To fill the tire, jack up the wheel and turn the tube valve to the top. Instead of the valve insert, screw the water valve onto the valve stem. While the water is flowing in, air escapes through the opening at the side of the water valve. Stop the filling when water flows out of this opening. Depending on the size of the tire, this takes 15 to 30 minutes. Subsequently replace the water valve with the valve insert and pump up the tires to the normal air pressure. The possible fill capacity of the tire depends on the tire size and manufacturer. If necessary, ask an authorized dealer or the tire manufacturer.

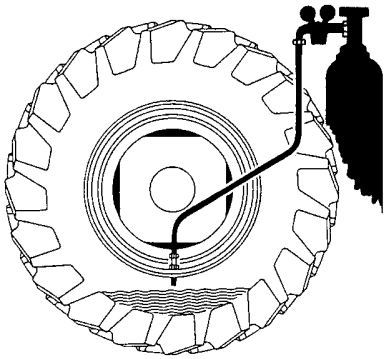
If there is risk of frost, add antifreeze solution. The tire manufacturers recommend a solution consisting of water and calcium chloride.

The antifreeze solution can be drawn in from a container placed higher up, by means of suction. A faster option is using a pump (rinse the pump with clear water afterwards). To make 100 l (26.4 US gal) of antifreeze solution that is effective down to -25°C (-13°F), dissolve 34 kg (75 lb) calcium chloride in 86 l (22.7 US gal) water. This solution adds 120 kg (269 lb) of weight. Add the calcium chloride to the water, not vice versa. This antifreeze solution must not be used for the radiator.

NOTE: On tractors with 50 km/h (31 mph) transmissions, it is not recommended to fill tires with liquid ballast.

LX25458,ALL,0000AB4-19-24SEP20

Drain Tires



LX009451

LX009451—UN—03JAN95

Jack up the wheel. After the valve insert has been removed, let the water drain out.

To press the rest of the water out of the tire, use the filling valve with hose extension and pump air into the tire. The air pressure pushes remaining water out of the tire.

LX25458,ALL,0000AB5-19-24SEP20

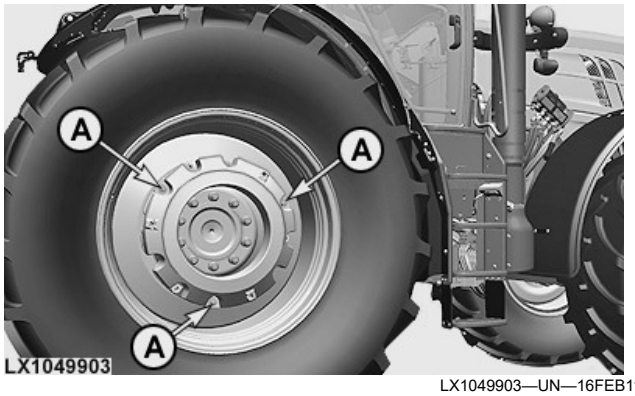
Change Wheel Weights Safely (Type A)

CAUTION: Have the mounting of wheel weights performed by an authorized dealer. Improper handling may result in personal injury.

IMPORTANT: Retighten mounting screws of the wheel weight after 3 hours of operation and then again after 10 hours of operation.

Thereafter, check mounting screws at the same interval as the wheel bolts.

Mounting screws (A), wheel weight to wheel dish.



LX1049903—UN—16FEB11

Wheel Weight with a Diameter of 655 mm (25.8 in)

A—Mounting Screws

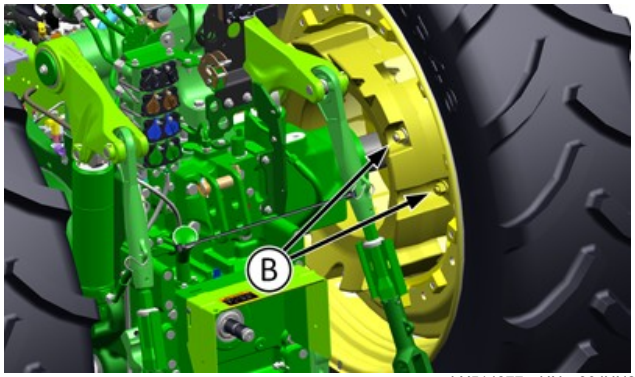
Hardware Torque, Wheel Weight to Wheel Dish	
Mounting Screws, M16	310 N·m (230 lb·ft)
Mounting Screws, M20	610 N·m (450 lb·ft)

Only for 6R 175 and 6R 195 to 6R 250 Tractors, Inner Wheel Weight on Cast Rear Wheel with Rack-and-Pinion Axle

IMPORTANT: If inner wheel weights are installed, a minimum tread width of 2.1 m (82.7 in) must be observed.

Smaller track widths are possible as long as the minimum distance of 25 mm (1 in) between inner wheel weights and tractor components is observed. These clearances are to be checked by the dealer when setting the track widths.

Mounting screws (B), wheel weight to cast dish.



LX514877—UN—30JUN22

Inner Wheel Weight to Cast Dish

B—Mounting Screws, M20

Hardware Torque, Wheel Weight to Cast Dish	
Mounting Screws, M20	610 N·m (450 lb·ft)

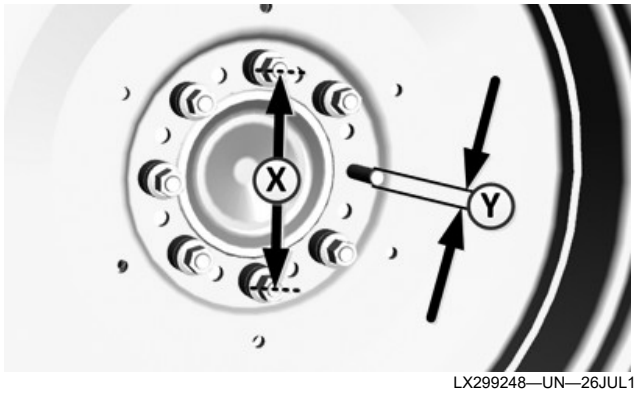
OULXA64,000598A-19-01JUL22

Change Wheel Weights Safely (Type B)

CAUTION: Have the mounting of wheel weights performed by an authorized dealer. Improper handling may result in personal injury.

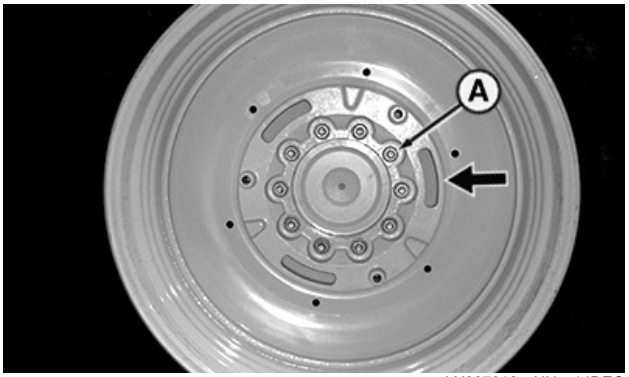
IMPORTANT: Hardware torques depend on the bolt circle diameter (X) and thread size (Y).

Find torques in the table.



LX299248—UN—26JUL17

Mounting screws (A), basic weight to wheel



LX267012—UN—14DEC16

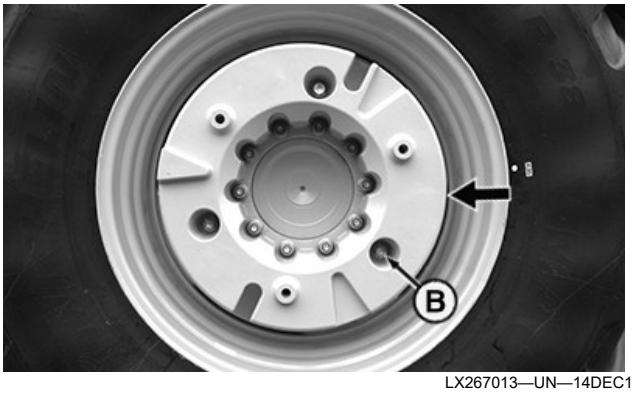
Basic Weight Shown with a Diameter (∅) of 335 mm

Hardware Torque, Basic Weight to Wheel	
∅ 335 mm, M22 x 1.5	600 N·m (445 lb·ft)
∅ 275 mm, M20 x 1.5	500 N·m (370 lb·ft)
∅ 203 mm, M20 x 1.5	500 N·m (370 lb·ft)

IMPORTANT: Retighten mounting screws (A) of the basic weight after 3 hours of operation and then again after 10 hours of operation.

Thereafter, check mounting screws (A) at the same interval as the wheel bolts.

Mounting screws (B), wheel weight to basic weight or to wheel weight



LX267013—UN—14DEC16

Wheel Weight Shown with a Diameter (∅) of 335 mm

Hardware Torque, Wheel Weight	
∅ 335 mm, M20 x 1.5	500 N·m (370 lb·ft)
∅ 275 mm, M20 x 1.5	500 N·m (370 lb·ft)
∅ 203 mm, M20 x 1.5	500 N·m (370 lb·ft)

IMPORTANT: Check the mounting screws for each wheel weight once after 100 operating hours.

LX25458,ALL,0000AB6-19-12FEB21

Weight in Three-Point Hitch

NOTE: When driving, raise the three-point hitch to get as much ground clearance as possible.

CAUTION: When the tractor is parked, always lower the pickup weight to the ground.

IMPORTANT: Always make sure the tractor is balanced/ballasted properly.

IMPORTANT: Never use the hitch jaw in the front of the pickup weight for towing loads.

LX25458,ALL,0000AB7-19-24SEP20

Attach Pickup Weight to the Front Hitch

CAUTION: Do not attempt to raise the pickup weight unless it is already connected to the center link.

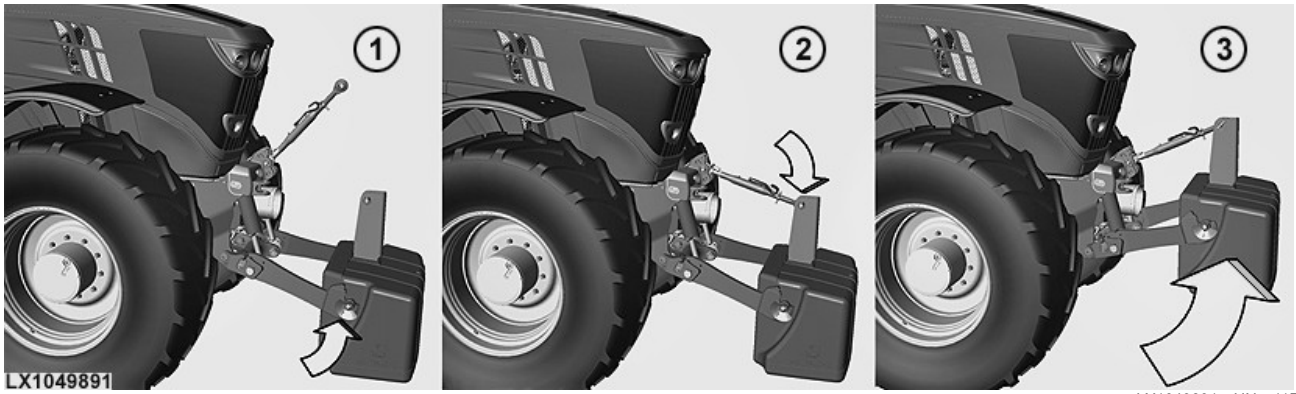
CAUTION: Do not use front-end ballast unless the rear of the tractor has an appropriate counterweight.

CAUTION: If no implement is installed on the rear end, install the pickup weight on the rear hitch before driving to the field.

CAUTION: Incorrect ballasting has a negative effect on handling characteristics.

IMPORTANT: Comply with permissible axle loads and tire and wheel rim bearing capacities.

To prevent the pickup weight from swinging dangerously when it is raised, follow the installation procedure outlined below.

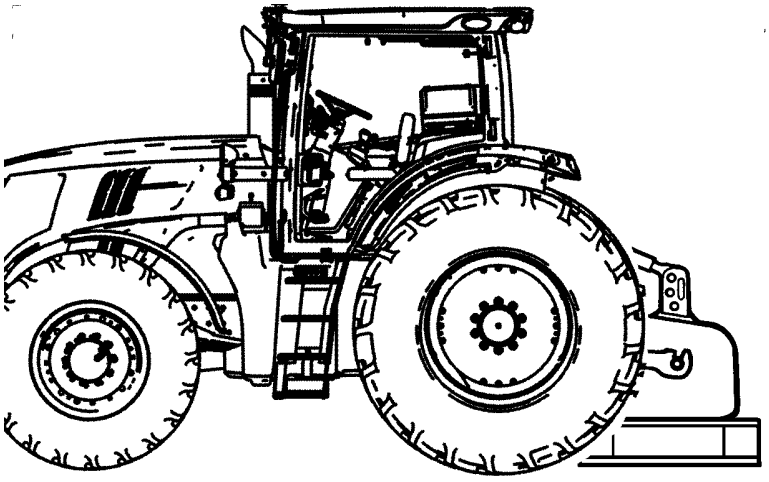


LX1049891—UN—11FEB11

1. Engage the pickup weight in the draft links but do NOT raise the weight at this stage.
2. Adjust the center link and engage it in the pickup weight.
3. Raise the pickup weight as high as it will go.
4. For removing the pickup weight, reverse the attaching procedure.

OULXA64,ALL,00056AF-19-24SEP20

Attach the Pickup Weight to the Rear Hitch



LX1046222—UN—13JUL11

CAUTION: Do not attempt to raise the pickup weight unless it is already connected to the center link.

CAUTION: Make sure that the hooks on the draft links are closed properly.

CAUTION: Install all retaining pins.

CAUTION: Steering may be adversely affected unless there is sufficient weight at the front end of the tractor (e.g. a front loader).

IMPORTANT: Comply with permissible rear axle loads and tire and wheel rim bearing capacities.

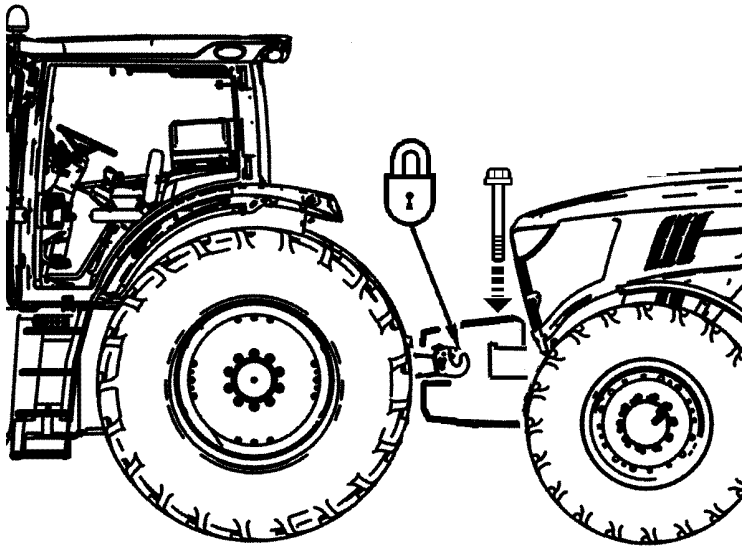
1. Remove adjusting spring rod and eyelet screws.
2. Put the drawbar to its shortest position and swing it to the side.
3. Remove height-adjustable trailer hitch.
4. Install the center link bracket on the pickup weight.
5. Reverse toward the pickup weight and proceed in the same manner as for an implement.

NOTE: On tractors with extra-large tires, it may be necessary to adjust the lift links to their maximum length.

LX25458,ALL,0000AB8-19-24SEP20

Attach Pickup Weight to the Basic Weight

Position Pickup Weight with Another Tractor



LX1046223—UN—13JUL11

CAUTION: Make sure that no-one is standing in the danger zone.

CAUTION: On the tractor that is to receive the pickup weight, engage the park lock.

CAUTION: Select depth control for the hitch of the support tractor.

CAUTION: Make sure that the hooks on the draft links are engaged.

IMPORTANT: Front-end installation is authorized only for tractors with front-wheel drive!

IMPORTANT: Comply with permissible axle loads and tire and wheel rim bearing capacities. See Operator's Manual and manufacturer's notes.

IMPORTANT: Do not use center link during attaching process.

NOTE: Once pickup weight has been attached, it is no longer possible to use the conventional, additional front weights. The one exception to this is the 180 kg (400 lb) weight pack.

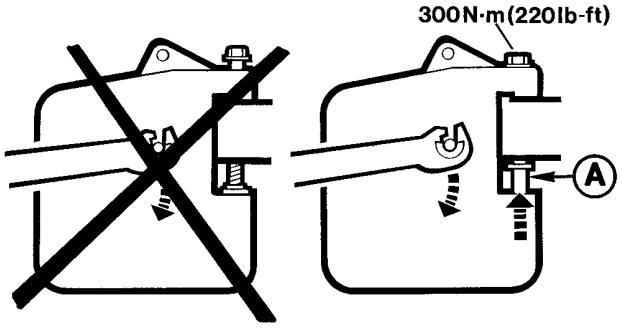
1. Suspend the pickup weight from the draft links of any suitable tractor.

IMPORTANT: Do not use center link during attaching process.

2. Back up the tractor in front of the tractor to which the pickup weight is to be attached.
3. Lower the pickup weight onto the basic weight and let it snap into place audibly.

CAUTION: Keep the pickup weight suspended until the retaining screw has been screwed in fully and is seated tightly. Make sure that the retaining nut (A) is against the basic weight.

4. Position retaining screw and tighten to 300 N·m (220 lb·ft).

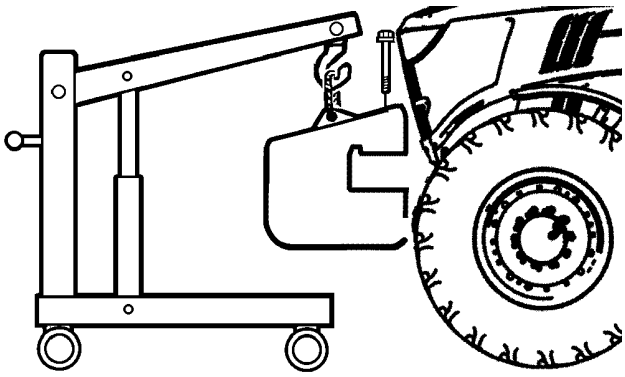


LX013465

LX013465—UN—03APR96

5. Place retaining nut (A) completely against the basic weight.
6. Disengage draft links of the tractor performing the attaching and screw in the weight receiving pin as far as it will go.

Attach Pickup Weight with a Crane or Suitable Hoist



LX1046224—UN—13JUL11

CAUTION: When using commercially available lifting equipment, make sure that its bearing capacity is sufficient.

CAUTION: Use approved lifting equipment only.

1. Suspend the weight by the cast eyelet.
2. Lower the pickup weight onto the basic weight and let it snap into place audibly.

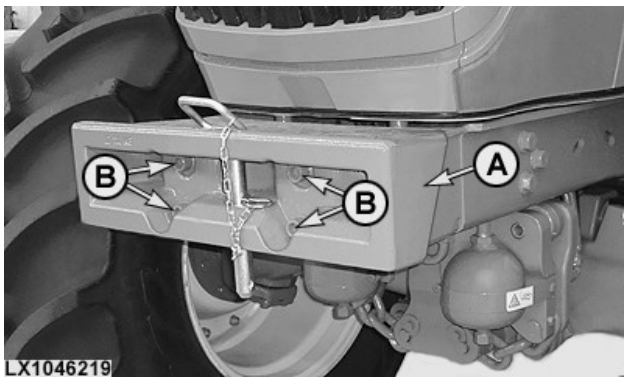
CAUTION: Keep the pickup weight suspended until the retaining screw has been screwed in fully and is seated tightly. Make sure that the retaining nut is against the basic weight.

3. Install retaining screw and tighten to 300 N·m (220 lb·ft).
4. Place retaining nut completely against the basic weight.
5. Detach hoist.

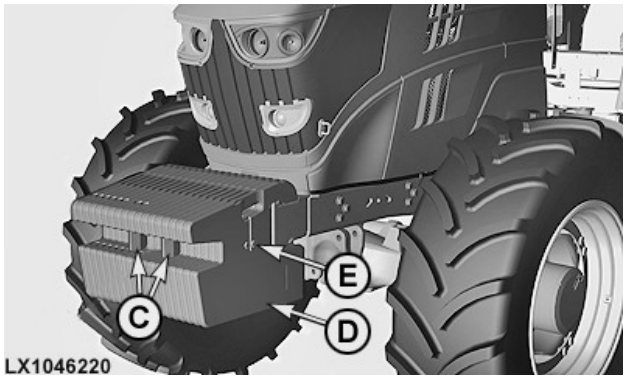
LX25458,ALL,0000AB9-19-24SEP20

Install Front Weights

One basic weight (A) and up to 18 additional weights (D) may be installed. The basic weight is the carrier for the front weights.



LX1046219—UN—22JUN11



LX1046220—UN—22JUN11

A—Basic Weight
B—Attaching Screw
C—Jaw
D—Additional Weight
E—Screw

IMPORTANT: Tighten the attaching screws (B) of the basic weight (A) with 600 N·m (440 lb·ft) and the screws (E) of the additional weights (D) with 230 N·m (170 lb·ft).

Up to 18 additional weights (D) may be installed on the tractor.

Different front weights are shipped and installed in the EU and North America.

Remove the front shield from the main frame before installing a basic weight.

Region	Weight per additional weight	Weight with 18 additional weights
EU, part no.: L38451	50 kg (110 lb)	900 kg (1980 lb)
North America, part no.: R127764 .	43 kg (95 lb)	774 kg (1710 lb)

Per 10 kg (22 lb) weight increase, the load on the front axle increases by 12 kg (26.5 lb).

IMPORTANT: When installing six or more additional weights, they have to be installed to form a jaw (C).

The jaw hitch should be used for shunting and towing on hard-surfaced roads only.

LX25458,ALL,0000ABA-19-03FEB22

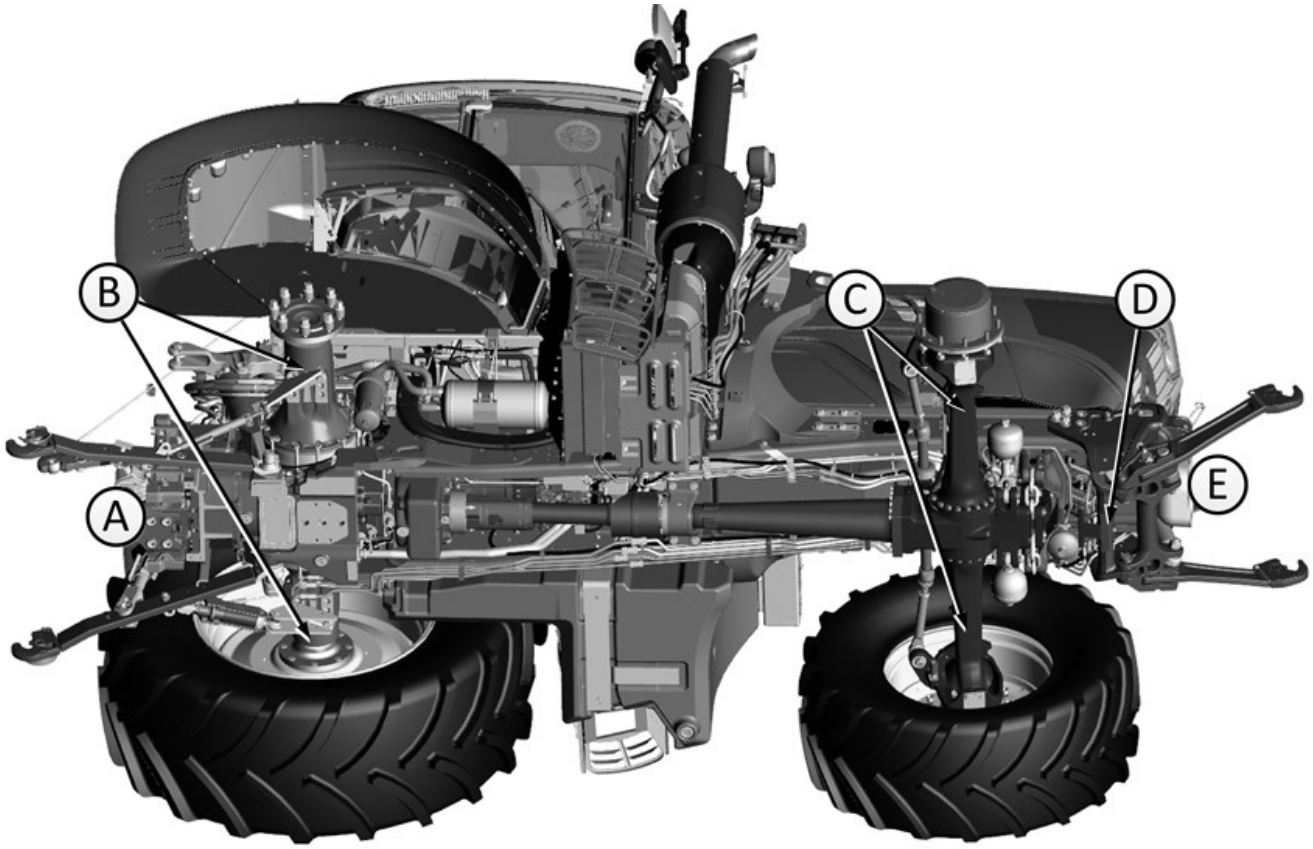
Transporting Tractor

A non-moving tractor is best transported on a flatbed carrier.

Before transporting the tractor on a low-loader truck or flatbed rail waggon, make sure that the hood is secured over the tractor engine and that doors, roof hatch (if equipped), and windows are properly closed.

LX25458,ALL,0000ABB-19-25SEP20

Lashing the Tractor on a Transport Trailers



LX299237—UN—19JUL17

A—Suspension Devices Located at the Rear
B—Rear Axles
C—Axle Knees of Front-Wheel Drive Axle
D—Rear Cross-Member of Front Hitch
E—Suspension Devices Located at the Front

LXL220473—UN—26FEB21

Tie-Down Label (If Equipped)

CAUTION: Danger to life from lost cargo.

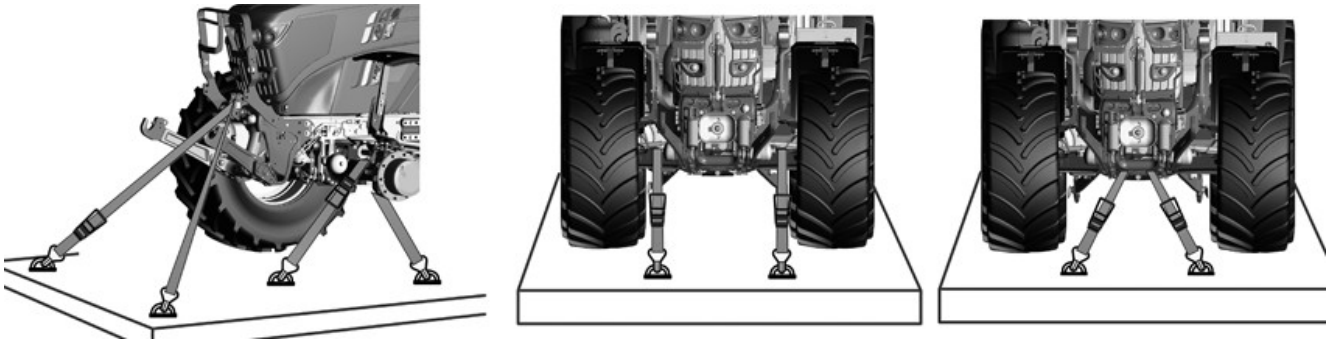
Inadequately secured cargo presents a high risk of the cargo or tractor detaching itself during driving, and falling off the transport trailer.

The tractor has a sufficient number of fixture points where suitable devices such as lashing straps or tensioning chains can be attached. In addition, use lockable chock blocks. Loose wedges might get lost and are therefore not permissible. Always observe legal requirements for securing cargo.

Select the size of lashing straps and tensioning chains in relation to tractor weight.

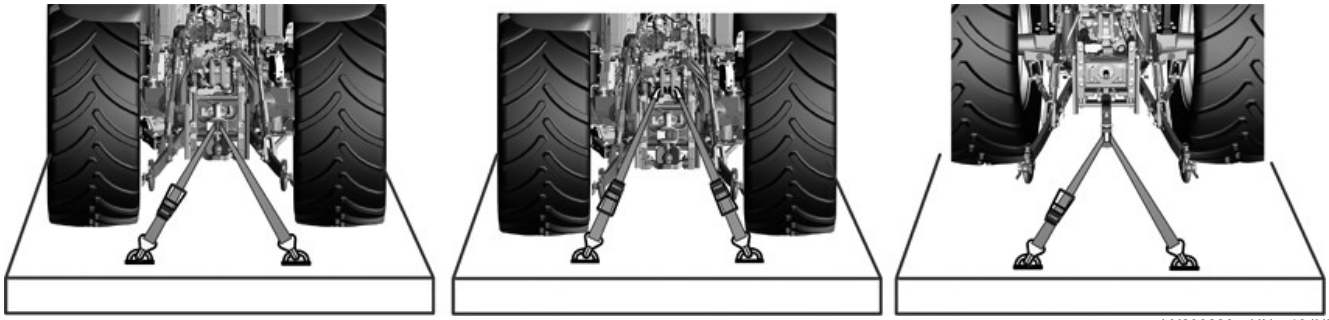
IMPORTANT: Avoid damage to the tractor. During lashing, make sure to use edge protectors or protective cuffs. Do not tie lashing straps or tensioning chains across lines, hoses, cables, and other sensitive components.

Front Side: Examples of various points for lashing the tractor. In addition, available towing devices at the basic weight and additional weights can be used.



LX299238—UN—19JUL17

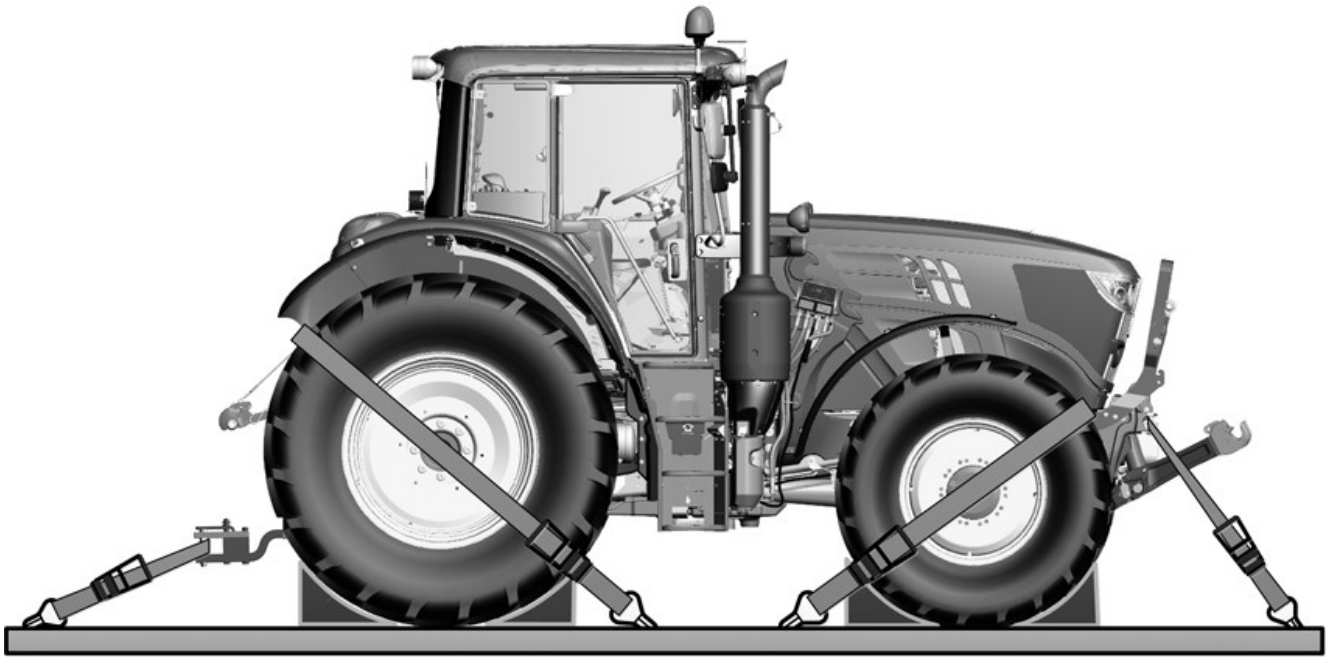
Rear Side: Examples of various points for lashing the tractor.



LX299239—UN—19JUL17

Example of a tractor lashed across the wheels.

Additional cargo securing in front and rear, and use of chock blocks.

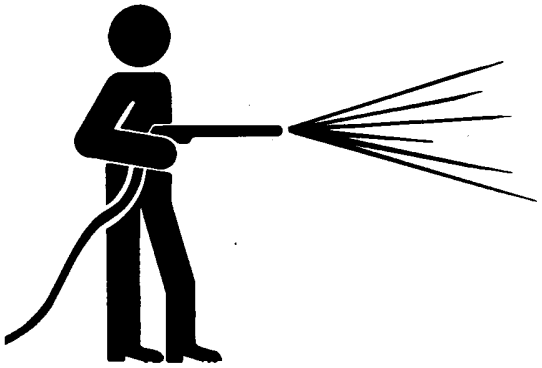


LX299240—UN—19JUL17

Example: Tractor lashed to trailer.

LX25458,MCTOMW5,0000ABC-19-26FEB21

Wash Machine After Unloading



T6642EJ—UN—18OCT88

IMPORTANT: Reduce corrosion from road salt and sea salt. Promptly wash equipment delivered by truck during winter months or delivered by cargo ship.

Avoid malfunction or damage to machine components. Do not direct high-pressure spray at electronic or electrical components and connectors, bearings, hydraulic seals, fuel injection pumps, or other sensitive components. Reduce water pressure to wash sensitive components.

Avoid water penetration behind seals and similar components. Do not direct spray on these components at an angle less than 45°.

Avoid discoloration of machine paint. Do not use strong soaps, chemical detergents, or cleaning agents that contain acids, caustics, or abrasives. Do not allow cleaning agents to dry on machine. Promptly rinse machine after washing with a cleaning agent.

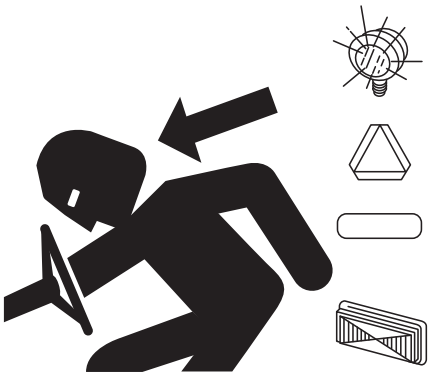
Use a top-to-bottom wash sequence. Wash behind panels and in hidden areas where salt can accumulate during transport.

If a cleaning agent is used, the agent must be the correct concentration. Do not allow cleaning agent to dry on machine, promptly rinse from top to bottom. Your John Deere dealer has cleaners which are compatible with your equipment and which are recommended to remove protective shipping coatings.

Incorrect detergent, excessive concentration, a delay in rinsing, or incomplete rinsing can discolor paint after delivery.

DX,WASH-19-14MAR14

Driving on Public Roads



RXA0086597—UN—09FEB06

CAUTION: Avoid personal injury or death from losing control of tractor. When driving tractor on roads:

- **Wear seat belts.**
- **Service brake: Couple both brake pedals together.**
- **Use speed control pedal instead of throttle lever.**
- **Reduce speed when driving on icy, wet, or graveled surfaces.**
- **Ballast tractor correctly.**
- **Prevent when from locking and kidding on tractors equipped with AutoPowr™/IVT™ transmission.**
- **Avoid holes, ditches, sharp turns, hillsides and obstructions which may cause tractor to roll over.**
- **Always pay attention to the traffic coming from behind, especially in corners, and use the turn signal.**
- **Always operate flashing lights when traveling on a highway or public road, except where prohibited by law.**
- **Before driving on public roads, make sure that tires and fenders are free of mud.**

Check headlights, flashing warning lights and tail lights before operating tractor on roads. Adjust rear view mirrors and clean windows.

Lights—Use headlights and turn signals day and night. Comply with the legal stipulations for device lighting and identification. Make sure that the lighting and identification is visible and in good condition. Make sure that damaged or missing lights and markings are repaired or replaced immediately. Safety lights for implements can be obtained from your authorized dealer.

Brakes — Tap brake pedals to make sure that the differential lock is NOT engaged. **Couple brake pedals together before driving on a road.** Avoid hard application of brakes.

Front-wheel drive—Disengage front-wheel drive when transporting tractor. When driving on roads, engage Brake Assist position of front-wheel drive switch to provide four-wheel braking.

Selective control valves — Lock the control levers of the selective control valves physically or with the lock button, so that the control levers cannot be activated if they are accidentally touched.

Joystick — Lock the joystick or block it with the lock button, so that it cannot be activated if it is accidentally touched.

Front or rear hitch—Position or lock hitch in transport position to eliminate possibility of lowering an implement during transport by inadvertently bumping the raise/lower lever. See Section 60D and 60E.

LX25458,ALL,0000ABE-19-27MAR23

Towing Loads and Transporting with Ballast

CAUTION: Avoid possible injury due to losing control of tractor while towing a load. Stopping distance increases with speed and weight of towed load, and on slopes.

Tractor wheels may lock and skid on slippery downhill slopes on tractors equipped with IVT transmission. See Operating on Hillsides in Slippery Conditions in section 50J or 50K.

Never transport at speeds exceeding the implement's maximum transport speed. Before transporting a towed implement, determine from signs on implement or information provided in implement's operator manual the maximum transport speed. This tractor is capable of operating at transport speeds that exceed the maximum allowable transport speed for most towed implements. Determine the front weight required from implement code in implement Operator's Manual. Failure to adhere to the implement's maximum permitted transport speed or to have the correct additional weight can result in:

- **Loss of control of the tractor/implement combination**
- **Reduced or no braking ability**
- **Implement tire failure**
- **Damage to implement frame or components**

Follow guidelines for towing equipment with and without brakes. See Transport Towed Equipment at Safe Speeds in Section 05.

The tractor has to be heavy enough and powerful enough and have sufficient braking capacity for towing the pulled load. Add additional weights to tractor or lighten implement load.

Drive slowly enough to maintain safe control. Be alert for skids. Shift to a lower gear for hillsides, rough ground, and sharp turns, especially when transporting heavy equipment.

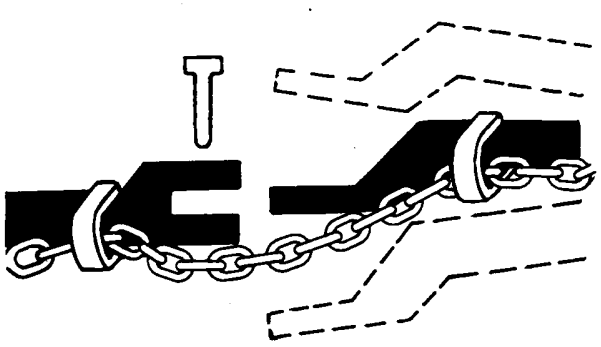
Never operate with transmission in neutral position or with clutch disengaged.

LX25458,TOW1,NA,EX,0000ABF-19-28MAR23

Use Safety Chain

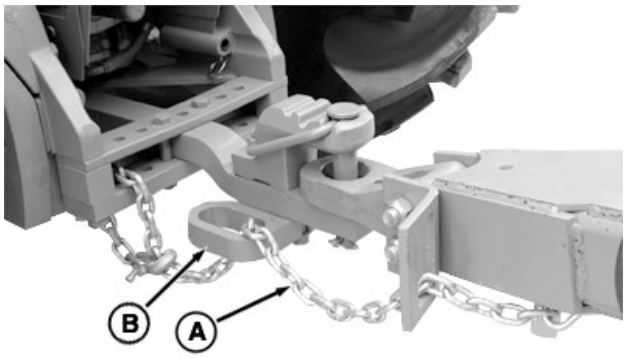
CAUTION: Avoid possible accident and personal injury by using a safety chain on drawn equipment. Use a safety chain with a strength rating equal to or greater than the gross weight of equipment. Provide only enough slack in chain to permit turning.

Attach safety chain (A) to drawbar support of the tractor or other specified anchor locations.



TS217—UN—23AUG88

Use Safety Chain Correctly



RXA0082663—UN—28JUL05

Correct Safety Chain Connection

A—Safety Chain
B—Intermediate Support

IMPORTANT: DO NOT use safety chain for towing or possible damage to tractor, implement, and drawbar may result. Safety chain is provided for transport only.

Do not use intermediate support (B) as an attaching point, load may break free. As shown, intermediate support is used to keep safety chain from dragging.

Attach trailer brakes (if equipped) and check operation.

IMPORTANT: SLOW DOWN when transporting heavy implements.

Drive slowly enough to maintain safe control. Shift to lower gear for hillsides, rough ground, and sharp turns, especially when transporting heavy equipment.

On icy or graveled grades, be alert for skids which could result in loss of steering control.

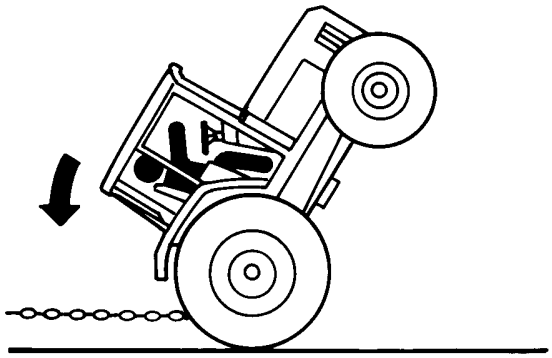
Never coast down hill.

Use caution when operating tractor at transport speeds. Reduce speed if towing heavy loads. Heavy towed or rear mounted implements may start swaying in

transport. Consult implement Operator's Manual for specified transport speeds.

LX25458,0000AC0-19-28MAR23

Freeing a Mired Machine



TS1645—UN—15SEP95

TS263—UN—23AUG88

Attempting to free a mired machine can involve safety hazards such as the mired tractor tipping rearward, the towing tractor overturning, and the tow chain or tow bar (a cable is not recommended) failing and recoiling from its stretched condition.

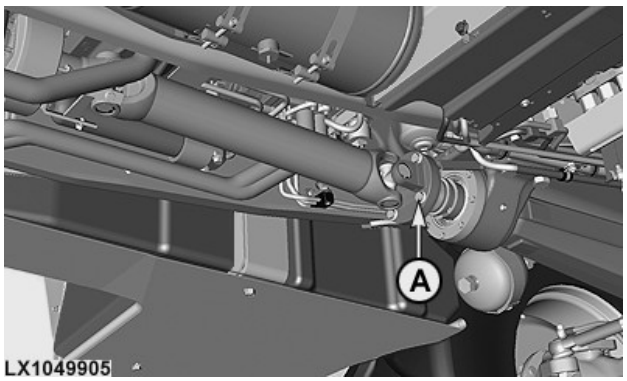
Back your tractor out if it gets mired down in mud. Unhitch any towed implements. Dig mud from behind the rear wheels. Place boards behind the wheels to provide a solid base and try to back out slowly. If necessary, dig mud from the front of all wheels and drive slowly ahead.

If necessary to tow with another unit, use a tow bar or a long chain (a cable is not recommended). Inspect the chain for flaws. Make sure all parts of towing devices are of adequate size and strong enough to handle the load.

Always hitch to the drawbar of the towing unit. Do not hitch to the front pushbar attachment point. Before moving, clear the area of people. Apply power smoothly to take up the slack: a sudden pull could snap any towing device causing it to whip or recoil dangerously.

DX,MIRED-19-07JUL99

Towing the Tractor



LX1049905—UN—17FEB11

CAUTION: Never tow the tractor faster than 10 km/h (6 mph).

When the engine is not running, more force is required to turn the steering wheel and pedal travel is longer (no hydraulic assistance).

Shift both range and reverse drive lever to neutral position.

Make sure that the transmission oil level is between the marks on the sight glass. If the tractor is to be towed with the front wheels raised, observe the following points:

- Never raise the wheels more than 30 cm (12 in).
- For every 15 cm (6 in) that the front wheels are raised, add 4 liters (1 US gal) of transmission and hydraulic oil to the transmission.
- When towing is completed, drain the excess oil.

IMPORTANT: If the engine is capable of running, switch off front-wheel drive.

If the engine is not capable of running, disconnect universal-jointed driveshaft by taking out screws (A). This prevents excessive wear on the tires.

IMPORTANT: The jaw hitch at the front weights may be used for towing on hard-surfaced roads only.

LX25458,SP,0000AC2-19-29AUG23

AutoPowr™/IVT™—Towing the Tractor

If the tractor needs to be towed and park lock cannot be released, follow the instructions in Section 110:

1. Towing the tractor.
2. Release the Park Lock Manually.

OULXA64,6R,0005BCD-19-01AUG23

CommandPRO™ Joystick—Towing the Tractor

If the tractor needs to be towed and park lock cannot be released, follow the instructions in Section 110:

1. Towing the Tractor
2. Release the Park Lock Manually

OULXA64,6R,0005BB7-19-10AUG23

Release the Park Lock Manually

CAUTION: If the engine is not running or if there is a fault in the transmission oil circuit, the park lock must be released manually.

• Before the park lock is released, ignition must be switched on and come-home mode activated.

• In the event of engine failure, the steering and brake systems are assisted hydraulically only while battery voltage remains sufficient and there are no faults in the hydraulic system.

• Park lock can be re-engaged only when the tractor is at a standstill.

• Comply with instructions on CommandCenter™.

CAUTION: The reverse drive lever must be in the park (P) position on the side in order to manually release the park lock.

CAUTION: As long as the park lock is working normally, i.e. can be operated by means of the reverse drive lever, the tractor must never be operated (not even for short test drives) with a manually released park lock.

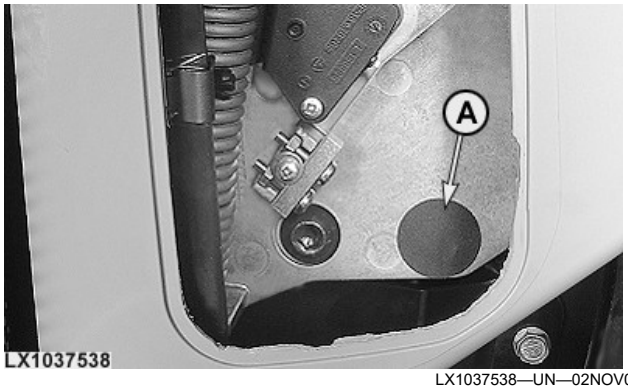
CAUTION: The tractor can roll away when park lock is disengaged. Secure the tractor so that it cannot roll either forwards or backwards.

CAUTION: After the towing has been completed, the Bowden cable of the manual park lock release must be disconnected.

1. Remove cover (A).

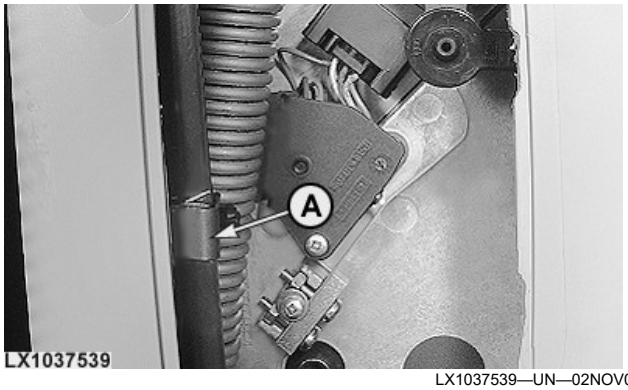
LX1037537—UN—02NOV05

2. Remove adhesive foil (A).



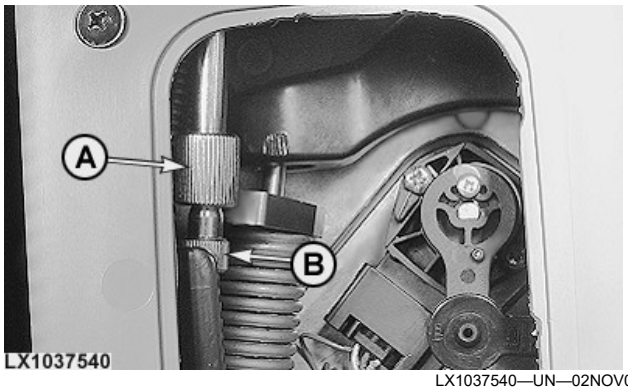
LX1037538—UN—02NOV05

3. Disconnect the Bowden cable from clamp (A).



LX1037539—UN—02NOV05

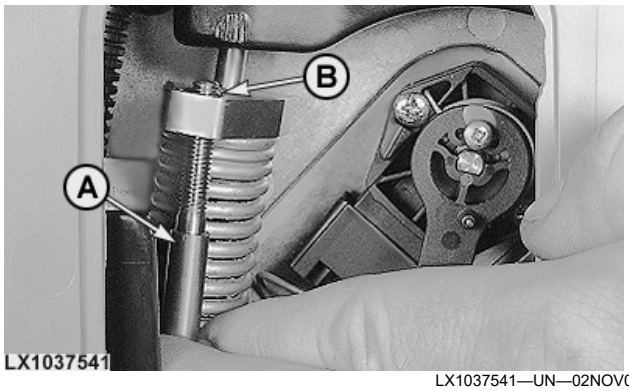
4. Unscrew threaded pin (A) and knurled nut (B).



LX1037540—UN—02NOV05

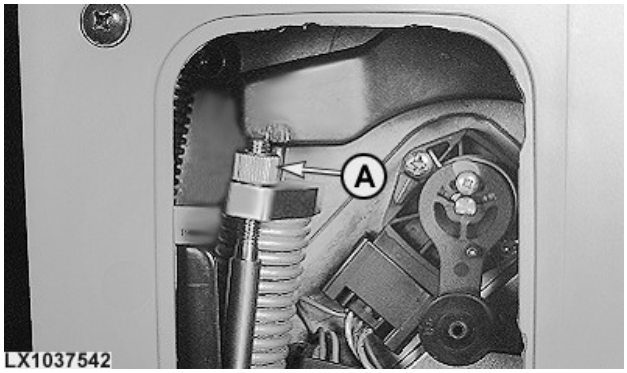
5. Slightly depress the clutch pedal.

6. Thread the Bowden cable (A) through the eyelet (B) on the clutch pedal or adapter.



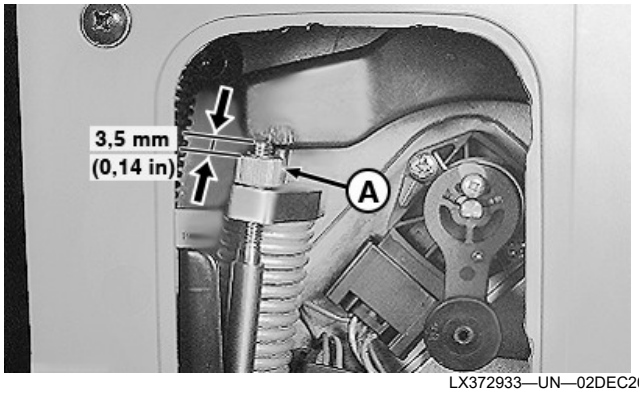
LX1037541—UN—02NOV05

7. As shown, rotate the knurled nut (A) as far as possible in the thread.



LX1037542—UN—02NOV05

8. Depress and release the clutch pedal as far as possible.
9. Adjust the knurled nut (A) as shown.



LX372933—UN—02DEC20

IMPORTANT: The Bowden cable must be tight, with no slack, to ensure complete release of the park lock.

10. Press down the clutch pedal all the way.

IMPORTANT: If the clutch pedal cannot be depressed to the stop and the threaded pin cannot be adjusted further, unscrew the knurled nut until the clutch pedal can be depressed against its stop.

11. Turn set screw (A) into the threaded bore in order to secure the clutch in this position and maintain the park lock in the released position.

LX1037543—UN—02NOV05

OULXA64,0005814-19-13JAN23

Oil Filters

Filtration of oils is critically important for proper operation and lubrication. John Deere brand oil filters have been designed and produced specifically for John Deere applications.

John Deere filters adhere to engineering specifications for quality of the filter media, filter efficiency rating, strength of the bond between the filter media and the element end cap, fatigue life of the canister (if applicable), and pressure capability of the filter seal. Non-John Deere branded oil filters might not meet these key John Deere specifications.

Always change oil filters regularly as specified in this manual.

DX,FILT1-19-11APR11

Fuel Filters

The importance of fuel filtration cannot be overemphasized with modern fuel systems. The combination of increasingly restrictive emission regulations and more efficient engines requires fuel system to operate at much higher pressures. Higher pressures can only be achieved using fuel injection components with very close tolerances. These close manufacturing tolerances have significantly reduced capacities for debris and water.

John Deere brand fuel filters have been designed and produced specifically for John Deere engines.

To protect the engine from debris and water, always change engine fuel filters as specified in this manual.

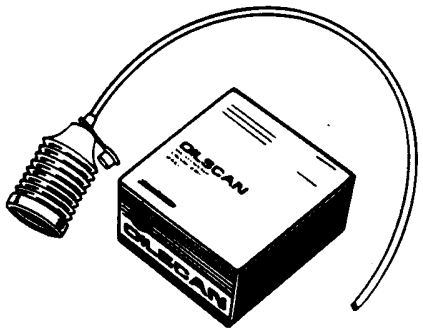
DX,FILT2-19-14APR11

Storing Fuel

If there is a very slow turnover of fuel in the fuel tank or supply tank, it may be necessary to add a fuel conditioner to prevent water condensation. Contact your John Deere dealer for proper service or maintenance recommendations.

DX,FUEL-19-03MAR93

Oilscan™ and CoolScan™



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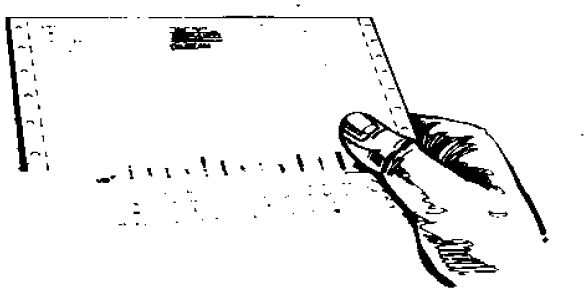


T6829AB—UN—26AUG11

Oilscan™ and CoolScan™ are John Deere sampling programs to help you monitor machine performance and identify potential problems before they cause serious damage.

Oil and coolant samples should be taken from each system before its recommended change interval.

Check with your John Deere dealer for the availability of Oilscan™ and CoolScan™ kits.

DX,OILSCAN-19-13SEP11

Oilscan is a trademark of Deere & Company
CoolScan is a trademark of Deere & Company

Diesel Fuel

Consult your local fuel distributor for properties of the diesel fuel available in your area.

In general, diesel fuels are blended to satisfy the low temperature requirements of the geographical area in which they are marketed.

Diesel fuels specified to EN 590 or ASTM D975 are recommended. Renewable diesel fuel produced by hydrotreating animal fats and vegetable oils is basically identical to petroleum diesel fuel. Renewable diesel that meets EN 590, ASTM D975, or EN 15940 is acceptable for use at all percentage mixture levels.

Required Fuel Properties

In all cases, the fuel shall meet the following properties:

Cetane number of 40 minimum. Cetane number greater than 47 is preferred, especially for temperatures below –20 °C (–4 °F) or elevations above 1675 m (5500 ft.).

Cloud Point should be below the expected lowest ambient temperature or **Cold Filter Plugging Point** (CFPP) should be a maximum 10°C (18°F) below the fuel cloud point.

Fuel lubricity should pass a maximum scar diameter of 0.52 mm as measured by ASTM D6079 or ISO 12156-1. A maximum scar diameter of 0.45 mm is preferred.

Diesel fuel quality and sulfur content must comply with all existing emissions regulations for the area in which the engine operates. DO NOT use diesel fuel with sulfur content greater than 10 000 mg/kg (10 000 ppm).

Materials such as copper, lead, zinc, tin, brass and bronze should be avoided in fuel handling, distribution and storage equipment as these metals can catalyze fuel oxidation reactions which can lead to fuel system deposits and plugged fuel filters.

E-Diesel fuel

DO NOT use E-Diesel (Diesel fuel and ethanol blend). Use of E-Diesel fuel in any John Deere machine may void the machine warranty.

CAUTION: Avoid severe injury or death due to the fire and explosion risk from using E-Diesel fuel.

Sulfur Content for Interim Tier 4, Final Tier 4, Stage III B, Stage IV, and Stage V Engines Above 560 kW

- Use ONLY diesel fuel with a maximum of 500 mg/kg (500 ppm) sulfur content.

Sulfur Content for Interim Tier 4, Final Tier 4, Stage III B, Stage IV Engines, and Stage V Engines

- Use ONLY ultra low sulfur diesel (ULSD) fuel with a maximum of 15 mg/kg (15 ppm) sulfur content.

Sulfur Content for Tier 3 and Stage III A Engines

- Use of diesel fuel with sulfur content less than 1000 mg/kg (1000 ppm) is RECOMMENDED.
- Use of diesel fuel with sulfur content 1000—2000 mg/kg (1000—2000 ppm) REDUCES the oil and filter change interval.
- BEFORE using diesel fuel with sulfur content greater than 2000 mg/kg (2000 ppm), contact your John Deere dealer.

Sulfur Content for Tier 2 and Stage II Engines

- Use of diesel fuel with sulfur content less than 2000 mg/kg (2000 ppm) is RECOMMENDED.
- Use of diesel fuel with sulfur content 2000—5000 mg/kg (2000—5000 ppm) REDUCES the oil and filter change interval.[1]
- BEFORE using diesel fuel with sulfur content greater than 5000 mg/kg (5000 ppm), contact your John Deere dealer.

Sulfur Content for Other Engines

- Use of diesel fuel with sulfur content less than 5000 mg/kg (5000 ppm) is RECOMMENDED.
- Use of diesel fuel with sulfur content greater than 5000 mg/kg (5000 ppm) REDUCES the oil and filter change interval.

IMPORTANT: Do not mix used diesel engine oil or any other type of lubricating oil with diesel fuel.

Improper fuel additive usage may cause damage on fuel injection equipment of diesel engines.

DX,FUEL1-19-01NOV22

Handling and Storing Diesel Fuel

CAUTION: Reduce the risk of fire. Handle fuel carefully. DO NOT fill the fuel tank when engine is running. DO NOT smoke while you fill the fuel tank or service the fuel system.

Fill the fuel tank at the end of each day's operation to prevent water condensation and freezing during cold weather.

Keep all storage tanks as full as practical to minimize condensation.

Ensure that all fuel tank caps and covers are installed properly to prevent moisture from entering. Monitor water content of the fuel regularly.

[1] *See DX,ENOIL12,OEM, DX,ENOIL12,T2,STD, or DX,ENOIL12,T2,EXT for more information on Engine Oil and Filter Service Intervals.*

When using biodiesel fuel, the fuel filter may require more frequent replacement due to premature plugging.

Check engine oil level daily prior to starting engine. A rising oil level may indicate fuel dilution of the engine oil.

IMPORTANT: The fuel tank is vented through the filler cap. If a new filler cap is required, always replace it with an original vented cap.

When fuel is stored for an extended period or if there is a slow turnover of fuel, add a fuel conditioner to stabilize the fuel. Keeping the free water drained and treating the bulk fuel storage tank quarterly with a maintenance dose of a biocide will prevent microbial growth. Contact your fuel supplier or John Deere dealer for recommendations.

DX,FUEL4-19-13JAN18

Lubricity of Diesel Fuel

Most diesel fuels manufactured in the United States, Canada, and the European Union have adequate lubricity to ensure proper operation and durability of fuel injection system components. However, diesel fuels manufactured in some areas of the world may lack the necessary lubricity.

IMPORTANT: Make sure the diesel fuel used in your machine demonstrates good lubricity characteristics.

Fuel lubricity should pass a maximum scar diameter of 0.52 mm as measured by ASTM D6079 or ISO 12156-1. A maximum scar diameter of 0.45 mm is preferred.

If fuel of low or unknown lubricity is used, add John Deere Fuel-Protect Diesel Fuel Conditioner (or equivalent) at the specified concentration.

Lubricity of BioDiesel Fuel

Fuel lubricity can improve significantly with BioDiesel blends up to B20 (20% BioDiesel). Further increase in lubricity is limited for BioDiesel blends greater than B20.

DX,FUEL5-19-07FEB14

Testing Diesel Fuel

A fuel analysis program can help to monitor the quality of diesel fuel. The fuel analysis can provide critical data such as calculated cetane index, fuel type, sulfur content, water content, appearance, suitability for cold weather operations, bacteria, cloud point, acid number, particulate contamination, and whether the fuel meets ASTM D975 or equivalent specification.

Contact your John Deere dealer for more information on diesel fuel analysis.

DX,FUEL6-19-13JAN18

Biodiesel Fuel

Biodiesel fuel is comprised of monoalkyl esters of long chain fatty acids derived from vegetable oils or animal fats. Biodiesel blends are biodiesel mixed with petroleum diesel fuel on a volume basis.

Before using fuel containing biodiesel, review the Biodiesel Use Requirements and Recommendations in this Operator's Manual.

Environmental laws and regulations can encourage or prohibit the use of biofuels. Operators should consult with appropriate governmental authorities prior to using biofuels.

John Deere Stage V Engines Operating in the European Union

Where the engine is to be operated within the Union on diesel or non-road gas-oil, a fuel with a FAME content not greater than 8% volume/volume (B8) shall be used.

John Deere Engines with Exhaust Filter Except Stage V Engines Operating in the European Union

Biodiesel blends up to B20 can be used ONLY if the biodiesel (100% biodiesel or B100) meets ASTM D6751, EN 14214, or equivalent specification. Expect a 2% reduction in power and a 3% reduction in fuel economy when using B20.

Biodiesel concentrations above B20 can harm the engine's emission control systems and should not be used. Risks include, but are not limited to, more frequent stationary regeneration, soot accumulation, and increased intervals for ash removal.

John Deere Fuel conditioners or equivalent, which contain detergent and dispersant additives, are required when using biodiesel blends from B10 to B20, and are recommended when using lower biodiesel blends.

John Deere Engines Without Exhaust Filter

Biodiesel blends up to B20 can be used ONLY if the biodiesel (100% biodiesel or B100) meets ASTM D6751, EN 14214, or equivalent specification. Expect a 2% reduction in power and a 3% reduction in fuel economy when using B20.

These John Deere engines can operate on biodiesel blends above B20 (up to 100% biodiesel). Operate at levels above B20 ONLY if the biodiesel is permitted by law and meets the EN 14214 specification (primarily available in Europe). Engines operating on biodiesel blends above B20 might not fully comply with or be permitted by all applicable emissions regulations. Expect up to a 12% reduction in power and an 18% reduction in fuel economy when using 100% biodiesel.

John Deere fuel conditioners or equivalent, which contain detergent and dispersant additives, are required when using biodiesel blends from B10 to B100, and are recommended when using lower biodiesel blends.

Biodiesel Use Requirements and Recommendations

The petroleum diesel portion of all biodiesel blends must meet the requirements of ASTM D975 (US) or EN 590 (EU) commercial standard.

Biodiesel users in the U.S. are strongly encouraged to purchase biodiesel blends from a BQ-9000 Certified Marketer and sourced from a BQ-9000 Accredited Producer (as certified by the National biodiesel Board). Certified Marketers and Accredited Producers can be found at the following website: http://www.bq9000.org.

Biodiesel contains residual ash. Ash levels exceeding the maximums allowed in either ASTM D6751 or EN14214 can result in more rapid ash loading and require more frequent cleaning of the Exhaust Filter (if present).

The fuel filter can require more frequent replacement when using biodiesel fuel, particularly if switching from diesel. Check engine oil level daily prior to starting engine. A rising oil level can indicate fuel dilution of the engine oil. Biodiesel blends up to B20 must be used within 90 days of the date of biodiesel manufacture. Biodiesel blends above B20 must be used within 45 days from the date of biodiesel manufacture.

When using biodiesel blends up to B20, the following must be considered:

- Cold-weather flow degradation
- Stability and storage issues (moisture absorption, microbial growth)
- Possible filter restriction and plugging (usually a problem when first switching to biodiesel on used engines)
- Possible fuel leakage through seals and hoses (primarily an issue with older engines)
- Possible reduction of service life of engine components

Request a certificate of analysis from your fuel distributor to ensure that the fuel is compliant with the specifications provided in this Operator's Manual.

Consult your John Deere dealer for John Deere fuel products to improve storage and performance with biodiesel fuels.

The following must also be considered if using biodiesel blends above B20:

- Possible coking or blocked injector nozzles, resulting in power loss and engine misfire if John Deere fuel additives and conditioners or equivalent containing detergent/dispersants are not used
- Possible crankcase oil dilution (requiring more frequent oil changes)
- Possible lacquering or seizure of internal components
- Possible formation of sludge and sediments
- Possible thermal oxidation of fuel at elevated temperatures
- Possible compatibility issues with other materials (including copper, lead, zinc, tin, brass, and bronze) used in fuel handling, distribution, and storage equipment
- Possible reduction in water separator efficiency
- Possible damage to paint if exposed to biodiesel
- Possible corrosion of fuel injection equipment
- Possible elastomeric seal and gasket material degradation (primarily an issue with older engines)
- Possible high acid levels within fuel system
- Because biodiesel blends above B20 contain more ash, using blends above B20 can result in more rapid ash loading and require more frequent cleaning of the Exhaust Filter (if present)

IMPORTANT: Raw pressed vegetable oils are NOT acceptable for use as fuel in any concentration in John Deere engines. Their use could cause engine failure.

DX,FUEL7-19-13JAN18

Minimizing the Effect of Cold Weather on Diesel Engines

John Deere diesel engines are designed to operate effectively in cold weather.

However, for effective starting and cold-weather operation, a little extra care is necessary. The following information outlines steps that can minimize the effect that cold weather may have on starting and operation of your engine. See your John Deere dealer for additional information and local availability of cold-weather aids.

Use Winter Grade Fuel

When temperatures fall below 0°C (32°F), winter grade fuel (No. 1-D in North America) is best suited for cold-weather operation. Winter grade fuel has a lower cloud point and a lower pour point.

Cloud point is the temperature at which wax begins to form in the fuel. This wax causes fuel filters to plug. **Pour point** is the lowest temperature at which movement of the fuel is observed.

NOTE: On average, winter grade diesel fuel has a lower Btu (heat content) rating. Using winter grade fuel may reduce power and fuel efficiency, but should not cause any other engine performance effects. Check the grade of fuel being used before troubleshooting for low-power complaints in cold-weather operation.

Air Intake Heater

An air intake heater is an available option for some engines to aid cold weather starting.

Ether

An ether port on the intake is available to aid cold weather starting.

CAUTION: Ether is highly flammable. Do not use ether when starting an engine equipped with glow plugs or an air intake heater.

Coolant Heater

An engine block heater (coolant heater) is an available option to aid cold weather starting.

Seasonal Viscosity Oil and Proper Coolant Concentration

Use seasonal grade viscosity engine oil based on the expected air temperature range between oil changes and a proper concentration of low silicate antifreeze as recommended. (See DIESEL ENGINE OIL and ENGINE COOLANT requirements in this section.)

Diesel Fuel Cold Flow Additive

Use John Deere Fuel-Protect Diesel Fuel Conditioner (winter formula), which contains anti-gel chemistry, or equivalent fuel conditioner to treat non-winter grade fuel (No. 2-D in North America) during the cold-weather season. This generally extends operability to about 10° C (18°F) below the fuel cloud point. For operability at even lower temperatures, use winter grade fuel.

IMPORTANT: Treat fuel when outside temperature drops below 0°C (32°F). For best results, use with untreated fuel. Follow all recommended instructions on label.

Biodiesel

When operating with biodiesel blends, wax formation can occur at warmer temperatures. Begin using John Deere Fuel-Protect Diesel Fuel Conditioner (winter formula) or equivalent at 5°C (41°F) to treat biodiesel fuels during the cold-weather season. Use B5 or lower blends at temperatures below 0°C (32°F). Use only winter grade petroleum diesel fuel at temperatures below -10°C (14°F).

Winterfronts

Use of fabric, cardboard, or solid winterfronts is not recommended with any John Deere engine. Their use can result in excessive engine coolant, oil, and charge air temperatures. This can lead to reduced engine life, loss of power and poor fuel economy. Winterfronts may also put abnormal stress on fan and fan drive components potentially causing premature failures.

If winterfronts are used, they should never totally close off the grill frontal area. Approximately 25% area in the center of the grill should remain open at all times. At no time should the air blockage device be applied directly to the radiator core.

Radiator Shutters

If equipped with a thermostatically controlled radiator shutter system, this system should be regulated in such a way that the shutters are completely open by the time the coolant reaches 93°C (200°F) to prevent excessive intake manifold temperatures. Manually controlled systems are not recommended.

If air-to-air aftercooling is used, the shutters must be completely open by the time the intake manifold air temperature reaches the maximum allowable temperature out of the charge air cooler.

For more information, see your John Deere dealer.

DX,FUEL10-19-13JAN18

Supplemental Diesel Fuel Additives

Diesel fuel can be the source of performance or other operational problems for many reasons. Some causes include poor lubricity, contaminants, low cetane number, and a variety of properties that cause fuel system deposits. These and others are referenced in other sections of this Operator's Manual.

To optimize engine performance and reliability, closely follow recommendations on fuel quality, storage, and handling, which are found elsewhere in this Operator's Manual.

To further aid in maintaining performance and reliability of the engine's fuel system, John Deere has developed a family of fuel additive products for most global markets. The primary products include Fuel-Protect Diesel Fuel Conditioner (full feature conditioner in winter and summer formulas) and Fuel-Protect Keep Clean (fuel injector deposit removal and prevention). Availability of these and other products varies by market. See your local John Deere dealer for availability and additional information about fuel additives that might be right for your needs.

DX,FUEL13-19-07FEB14

Diesel Exhaust Fluid

Diesel Exhaust Fluid (DEF) — Use in Selective Catalytic Reduction (SCR) Equipped Engines

In order to maintain the emissions performance of the engine, it is essential to use and refill DEF in accordance with the specification.

Diesel exhaust fluid (DEF) is a high purity liquid that is injected into the exhaust system of engines equipped with selective catalytic reduction (SCR) systems. Maintaining the purity of DEF is important to avoid malfunctions in the SCR system. Engines requiring DEF shall use a product that meets the requirements for aqueous urea solution 32 (AUS 32) according to ISO 22241-1.

The use of John Deere Diesel Exhaust Fluid is recommended. John Deere Diesel Exhaust Fluid is available at your John Deere dealer in a variety of package sizes to suit your operational needs.

If John Deere Diesel Exhaust Fluid is not available, use DEF that is certified by the American Petroleum Institute (API) Diesel Exhaust Fluid Certification Program or by the AdBlue™ Diesel Exhaust Fluid Certification Program. Look for the API certification symbol or the AdBlue™ name on the container.

RG30211—UN—08MAR18

In some cases, DEF is referred to by one or more of these names:

- Urea
- Aqueous Urea Solution 32
- AUS 32
- AdBlue™
- NOx Reduction Agent
- Catalyst Solution

DX,DEF-19-13JAN18

AdBlue is a trademark of VDA, the German Association of the Automotive Industry.

Refilling Diesel Exhaust Fluid (DEF) Tank

TS1731—UN—23AUG13

CAUTION: Avoid contact with eyes. In case of contact, immediately flush eyes with large amounts of water for a minimum of 15 minutes. Reference the Materials Safety Data Sheet (MSDS) for additional information.

Do not ingest DEF. In the event DEF is ingested, contact a physician immediately. Reference the Materials Safety Data Sheet (MSDS) for additional information.

IMPORTANT: Use only distilled water to rinse components that are used to deliver DEF. Tap water can contaminate DEF. If distilled water is not available, rinse with clean tap water, then thoroughly rinse with ample amounts of DEF.

If DEF is spilled or contacts any surface other than the storage tank, immediately clean the surface with clear water. DEF is corrosive to painted and unpainted metallic surfaces and can distort some plastic and rubber components.

If DEF is filled into engine fuel tank or other fluid compartment, do not operate engine until system is properly purged of DEF. Contact your John Deere dealer immediately to determine how to clean and purge the system.

Reasonable care should be taken when refilling the DEF tank. Ensure that the DEF tank cap area is free of debris before removing the cap. Seal containers of DEF between use to prevent contamination and evaporation.

Avoid splashing DEF and do not allow DEF to come into contact with skin, eyes, or mouth.

DEF is not harmful to handle, but DEF can be corrosive to materials such as steel, iron, zinc, nickel, copper, aluminum, and magnesium. Use suitable containers to transport and store DEF. Containers made of polyethylene, polypropylene, or stainless steel are recommended.

Avoid prolonged contact with skin. In case of accidental contact, wash skin immediately with soap and water.

Keep anything used to store or dispense DEF clean of dirt and dust. Wash and rinse containers or funnels thoroughly with distilled water to remove contaminants.

If an unapproved fluid, such as diesel fuel or coolant is added to the DEF tank, contact your John Deere dealer immediately to determine how to clean and purge the system.

If water has been added to the DEF tank, a tank cleaning is necessary. See Cleaning DEF Tank in this manual. After refilling the tank, check the DEF concentration. See Testing Diesel Exhaust Fluid (DEF).

The operator must maintain appropriate DEF levels at all times. Check the DEF level daily and refill the tank as needed. The filling port is identified by a blue colored cap embossed with the following DEF symbol.

DX,DEF,REFILL-19-15JUL20

Storing Diesel Exhaust Fluid (DEF)

CAUTION: Avoid contact with eyes. In case of contact, immediately flush eyes with large amounts of water for a minimum of 15 minutes. Reference the Materials Safety Data Sheet (MSDS) for additional information.

Do not ingest DEF. In the event DEF is ingested, contact a physician immediately. Reference the Materials Safety Data Sheet (MSDS) for additional information.

IMPORTANT: It is unlawful to tamper with or remove any component of the aftertreatment system. Do not use DEF that does not meet the required specifications or operate the engine with no DEF.

Never attempt to create DEF by mixing agricultural grade urea with water. Agricultural grade urea does not meet the necessary specifications and can damage the aftertreatment system.

Do not add any chemicals or additives to DEF in an effort to prevent freezing. Any chemicals or additives added to DEF can damage the aftertreatment system.

Never add water or any other fluid in place of, or in addition to DEF. Operating with a modified DEF or using an unapproved DEF can damage the aftertreatment system.

Storage information provided below is for reference and is to be used as a guideline only.

It is preferred to store DEF out of extreme ambient temperatures. DEF freezes at –11°C (12°F). Exposure to temperatures greater than 30°C (86°F) can degrade DEF over time. Do not store DEF in direct sunlight.

Dedicated DEF storage containers must be sealed between uses to prevent evaporation and contamination. Containers made of polyethylene, polypropylene, or stainless steel are recommended to transport and store DEF.

Ideal conditions for storage of DEF are:

- Store at temperatures between –5°C and 30°C (23°F and 86°F)
- Store in dedicated containers sealed to avoid contamination and evaporation

Under these conditions, DEF is expected to remain useable for a minimum of 18 months. Storing DEF at higher temperatures can reduce its useful life by approximately 6 months for every 5°C (9°F) temperature above 30°C (86°F).

If unsure how long or under what conditions DEF has been stored, test DEF. See Testing Diesel Exhaust Fluid (DEF).

Long-term storage in the DEF tank (over 12 months) is not recommended. If long-term storage is necessary, test DEF prior to operating engine. See Testing Diesel Exhaust Fluid (DEF).

It is recommended to purchase DEF in quantities that will be consumed within 12 months.

DX,DEF,STORE-19-15JUL20

Testing Diesel Exhaust Fluid (DEF)

IMPORTANT: Using DEF with the correct concentration is critical to engine and aftertreatment system performance. Extended storage and other conditions can adversely alter the DEF concentration.

If DEF quality is questionable, draw a sample out of the DEF tank or storage tank into a clear container. DEF must be crystal clear with a light ammonia smell. If DEF appears cloudy, has a colored tint, or has a profound ammonia smell, it is likely not within specification. DEF in this condition should not be used. Drain tank, flush with distilled water and refill with new or good DEF. After refilling the tank, check the DEF concentration.

If the DEF passes the visual and smell test, check the DEF concentration with a handheld refractometer calibrated to measure DEF.

DEF concentration should be checked when the engine has been stored for extended periods, or if there is suspicion the engine or packaged DEF fluid has been contaminated with water.

Two approved tools are available through your John Deere dealer:

- JDG11594 Digital DEF Refractometer—A digital tool providing an easy to read concentration measurement
- JDG11684 DEF Refractometer—Low-cost alternative tool providing an analog reading

Follow instructions included with either tool to obtain the measurement.

The correct DEF concentration is 31.8—33.2% urea. If the DEF concentration is not within specification, drain the DEF tank, flush with distilled water and fill with new or good DEF. If packaged DEF is not within specification, dispose of DEF packages and replace with new or good DEF.

DX,DEF,TEST-19-13JUN13

Disposal of Diesel Exhaust Fluid (DEF)

Although there is little issue with minor spillage of DEF on the ground, large amounts of DEF should be contained. If large spills occur, contact local environmental authorities for assistance with clean-up.

If a substantial quantity of DEF is not within specification, contact the DEF supplier for assistance with disposal. Do not dump substantial quantities of DEF onto the ground or send DEF to wastewater treatment facilities.

DX,DEF,DISPOSE-19-13JUN13

Engine Oil—Final Tier 4 Engines Only

Diesel Engine Break-In OiL

New engines are filled at the factory with John Deere Break-In Plus™ Engine Oil. During the break-in period, add John Deere Break-In Plus™ Engine Oil, as needed to maintain the specified oil level.

Operate the engine under various conditions, particularly heavy loads with minimal idling, to help break-in engine components properly.

During the initial operation of a new or rebuilt engine, change the oil and filter between a minimum of 100 hours and a maximum of 500 hours.

After engine overhaul, fill the engine with John Deere Break-In Plus™ Engine Oil.

If John Deere Break-In Plus™ Engine Oil is not available, use an SAE 10W-30 viscosity grade diesel engine oil meeting one of the following:

- API Service Category CK-4
- API Service Category CJ-4
- ACEA Oil Sequence E9
- ACEA Oil Sequence E6

If one of these oils is used during the initial operation of a new or rebuilt engine, change the oil and filter between a minimum of 100 hours and a maximum of 250 hours.

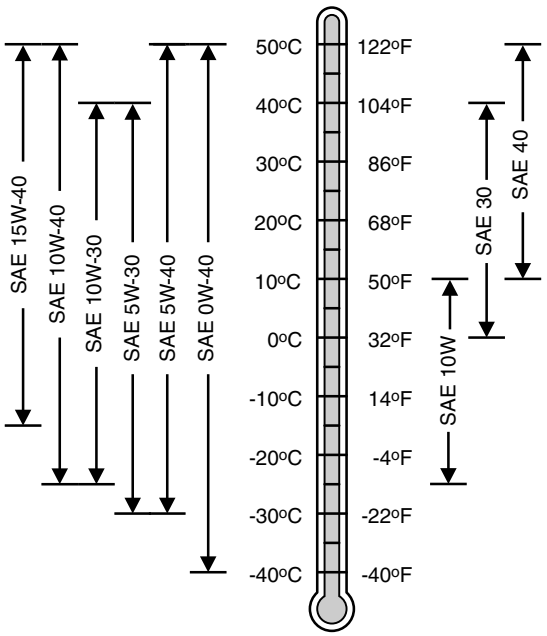
IMPORTANT: Do not use any other engine oils during the initial break-in of a new or rebuilt engine.

John Deere Break-In Plus™ Engine Oil can be used for all John Deere diesel engines at all emission certification levels.

After the break-in period, use John Deere Plus™ II or other diesel engine oil as recommended in this manual.

oulxa64,ALL,LX,ENOIL,BREAKIN-19-13FEB23

Diesel Engine Oil — Interim Tier 4, Final Tier 4, Stage IIIB, Stage IV, and Stage V



TS1743—UN—25APR19

Oil Viscosities for Air Temperature Ranges

Failure to follow applicable oil standards and drain intervals can result in severe engine damage that might not be covered under warranty. Warranties, including the emissions warranty, are not conditioned on the use of John Deere oils, parts, or service.

Use oil viscosity based on the expected air temperature range during the period between oil changes.

John Deere Plus-50™ II is the recommended engine oil.

Extended service intervals may apply when John Deere Plus-50™ II engine oil is used. Refer to the engine oil drain interval table and consult your John Deere dealer for more information.

If John Deere Plus-50™ II engine oil is not available, engine oil meeting one or more of the following may be used:

- API Service Category CK-4
- API Service Category CJ-4
- ACEA Oil Sequence E9
- ACEA Oil Sequence E6

DO NOT use engine oil containing more than 1.0% sulfated ash, 0.12% phosphorus, or 0.4% sulfur.

Multi-viscosity diesel engine oils are preferred.

Diesel fuel quality and fuel sulfur content must comply with all existing emissions regulations for the area in which the engine operates.

Plus-50 is a trademark of Deere & Company

IMPORTANT: Use only ultra low sulfur diesel (ULSD) fuel with a maximum sulfur content of 15 mg/kg (15 ppm).

DX,ENOIL14-19-23APR19

Engine Oil and Filter Service Intervals

Failure to follow applicable oil standards and drain intervals can result in severe engine damage that might not be covered under warranty. Warranties, including the emissions warranty, are not conditioned on the use of John Deere oils, parts, or service.

Recommended oil and filter service intervals are based on a combination of oil pan capacity, type of engine oil and filter used, and sulfur content of the diesel fuel. Actual service intervals also depend on operation and maintenance practices.

Approved Oil Types see Diesel Engine Break-In Oil and Diesel Engine Oil in this section**.**

Use oil analysis to evaluate the condition of the oil and to aid in selection of the proper oil and filter service interval. Contact your John Deere dealer or other qualified service provider for more information on engine oil analysis.

Change the oil and oil filter at least once every 12 months even if the hours of operation are fewer than the otherwise recommended service interval.

Diesel fuel sulfur content affects engine oil and filter service intervals. Higher fuel sulfur levels reduce oil and filter service intervals.

For regular service intervals with the relevant diesel fuel sulfur content, refer to **Service Intervals for Engine Oil and Engine Oil Filter** in sections 210A—210D.

Engine operation at high altitude decreases oil change intervals. See Diesel Engine Oil Service Interval for Operation at High Altitude for additional information.

IMPORTANT: To avoid engine damage, see Factors that Shorten the Engine Oil and Filter Maintenance Intervals. Refer to Service Intervals for Engine Oil and Engine Oil Filter in sections 210A—210D.

oulxa64,ALL,LX,ENOIL-19-13FEB23

Diesel Engine Oil Service Interval for Operation at High Altitude

To avoid excessive oil degradation and potential engine damage, reduce oil and filter service intervals to 50% of the original recommended values when operating engines at altitudes above **1675 m (5500 ft)**.

Oil analysis may allow longer service intervals.

Use only approved oil types.

Example of Original Hours	Corresponding High Altitude Hours
125	60
150	75
175	85
200	100
250	125
275	135
300	150
350	175
375	185
400	200
500	250

DX,ENOIL,SERV,HIALT-19-11NOV14

Engine Coolant

Diesel Engine Coolant (engine with wet sleeve cylinder liners)

Failure to follow applicable coolant standards and drain intervals can result in severe engine damage that may not be covered under warranty. Warranties, including the emissions warranty, are not conditioned on the use of John Deere coolants, parts, or service.

Preferred Coolants

The following pre-mix engine coolants are preferred:

- **John Deere COOL-GARD™II**
- **John Deere COOL-GARD II PG**

COOL-GARD II pre-mix coolant is available in several concentrations with different freeze protection limits as shown in the following table.

COOL-GARD II Pre-Mix	Freeze Protection Limit
COOL-GARD II 20/80	-9°C (16°F)
COOL-GARD II 30/70	-16°C (3°F)
COOL-GARD II 50/50	-37°C (-34°F)
COOL-GARD II 55/45	-45°C (-49°F)
COOL-GARD II PG 60/40	-49°C (-56°F)
COOL-GARD II 60/40	-52°C (-62°F)

Not all COOL-GARD II pre-mix products are available in all countries.

Use COOL-GARD II PG when a non-toxic coolant formulation is required.

Additional Recommended Coolants

The following engine coolant is also recommended:

- John Deere COOL-GARD II Concentrate in a 40—60% mixture of concentrate with quality water.

IMPORTANT: When mixing coolant concentrate with water, do not use less than 40% or greater than 60% concentration of coolant. Less than 40% gives inadequate additives for corrosion protection. Greater than 60% can result in coolant gelation and cooling system problems.

Other Coolants

Other ethylene glycol or propylene glycol base coolants may be used if they meet the following specification:

- Pre-mix coolant meeting ASTM D6210 requirements
- Is formulated with a 2-ethylhexanoic acid (2-EHA) free additive package
- Coolant concentrate meeting ASTM D6210 requirements in a 40—60% mixture of concentrate with quality water

COOL-GARD is a trademark of Deere & Company

If coolant meeting one of these specifications is unavailable, use a coolant concentrate or pre-mix coolant that has a minimum of the following chemical and physical properties:

- Provides cylinder liner cavitation protection according to either the John Deere Cavitation Test Method or a fleet study run at or above 60% load capacity
- Is formulated with a nitrite-free additive package
- Is formulated with a 2-ethylhexanoic acid (2-EHA) free additive package
- Protects the cooling system metals (cast iron, aluminum alloys, and copper alloys such as brass) from corrosion

Water Quality

Water quality is important to the performance of the cooling system. Deionized or demineralized water is recommended for mixing with ethylene glycol and propylene glycol base engine coolant concentrate.

Coolant Drain Intervals

Drain and flush the cooling system and refill with fresh coolant at the indicated interval, which varies with the coolant used.

When COOL-GARD II or COOL-GARD II PG is used, the drain interval is 6 years or 6000 hours of operation.

If a coolant other than COOL-GARD II or COOL-GARD II PG is used, reduce the drain interval to 2 years or 2000 hours of operation.[1]

IMPORTANT: Do not use cooling system sealing additives or antifreeze that contains sealing additives.

Do not mix ethylene glycol and propylene glycol base coolants.

Do not use coolants that contain nitrites.

DX,COOL3-19-25AUG20

Operating in Warm Temperature Climates

John Deere engines are designed to operate using recommended engine coolants.

Always use a recommended engine coolant, even when operating in geographical areas where freeze protection is not required.

IMPORTANT: Water may be used as coolant *in emergency situations only.*

[1] Coolant analysis may extend the service interval of other "Coolants" to a maximum not to exceed the interval of Cool-Gard II coolants. Coolant analysis means taking a series of coolant samples at 1000 hour increments beyond the normal service interval until either the data indicate the end of useful coolant life or the maximum service interval of Cool-Gard II is reached.

Foaming, hot surface aluminum and iron corrosion, scaling, and cavitation occur when water is used as the coolant, even when coolant conditioners are added.

Drain cooling system and refill with recommended engine coolant as soon as possible.

DX,COOL6-19-17FEB20

Water Quality for Mixing with Coolant Concentrate

Engine coolants are a combination of three chemical components: ethylene glycol (EG) or propylene glycol (PG) antifreeze, inhibiting coolant additives, and quality water.

Water quality is important to the performance of the cooling system. Deionized or demineralized water is recommended for mixing with ethylene glycol and propylene glycol base engine coolant concentrate.

All water used in the cooling system should meet the following minimum specifications for quality:

Chlorides	<40 mg/L
Sulfates	<100 mg/L
Total solids	<340 mg/L
Total dissolved l hardness	<170 mg/L
pH	5.5—9.0

IMPORTANT: Do not use bottled drinking water because it often contains higher concentrations of total dissolved solids.

Freeze Protection

The relative concentrations of glycol and water in the engine coolant determine its freeze protection limit.

Ethylene Glycol	Freeze Protection Limit
40%	-24°C (-12°F)
50%	-37°C (-34°F)
60%	-52°C (-62°F)
Propylene Glycol	**Freeze Protection Limit**
40%	-21°C (-6°F)
50%	-33°C (-27°F)
60%	-49°C (-56°F)

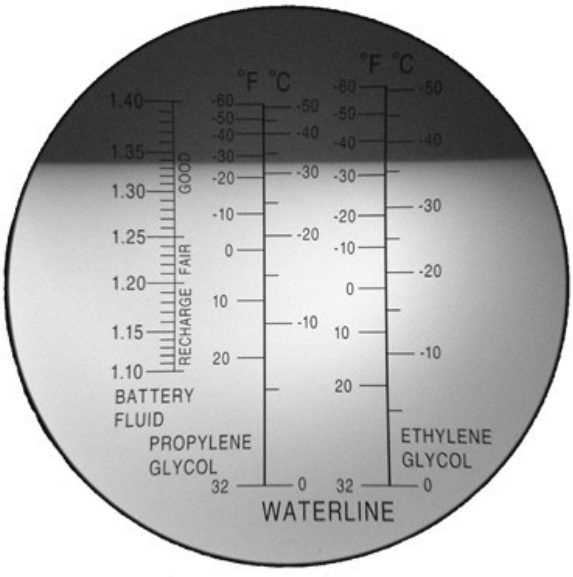
DO NOT use a coolant-water mixture greater than 60% ethylene glycol or 60% propylene glycol.

DX,COOL19-19-13JAN18

Testing Coolant Freeze Point

TS1732—UN—04SEP13

SERVICEGARD™ Part Number 75240



TS1733—UN—04SEP13

Image with a Drop of 50/50 Coolant Placed on the Refractometer Window

The use of a handheld coolant refractometer is the quickest, easiest, and most accurate method to determine coolant freeze point. This method is more accurate than a test strip or a float-type hydrometer which can produce poor results.

A coolant refractometer is available through your John Deere dealer under the SERVICEGARD™ tool program. Part number 75240 provides an economical solution to accurate freeze point determination in the field.

To use this tool:

1. Allow cooling system to cool to ambient temperatures.
2. Open radiator cap to expose coolant.

SERVICEGARD is a trademark of Deere & Company

3. With the included dropper, collect a small coolant sample.
4. Open the lid of the refractometer, place one drop of coolant on the window and close the lid.
5. Look through the eyepiece and focus as necessary.
6. Record the listed freeze point for the type of coolant (ethylene glycol coolant or propylene glycol) being tested.

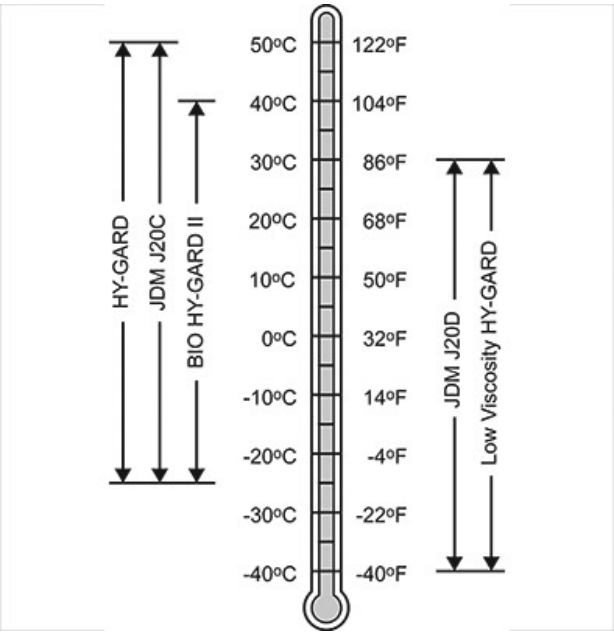
DX,COOL,TEST-19-13JUN13

Other Lubricants

Transmission and Hydraulic Oil

The oil specifed below is used for:

- Hydraulic system
- All transmissions
- Fornt PTO



RG30204—UN—08MAR18

Oils for Air Temperature Ranges

Use oil viscosity based on the expected air temperature range during the period between oil changes.

The following oils are preferred:

- John Deere Hy-Gard™
- John Deere Low Viscosity Hy-Gard™

Other oils may be used if they meet one of the following:

- John Deere Standard JDM J20C
- John Deere Standard JDM J20D

Use John Deere Bio Hy-Gard™ II oil when a biodegradable fluid is required.[1]

IMPORTANT: Valid for tractors with IVT™:

Only John Deere Hy-Gard™ or John Deere BIO Hy-Gard™ II may be used.

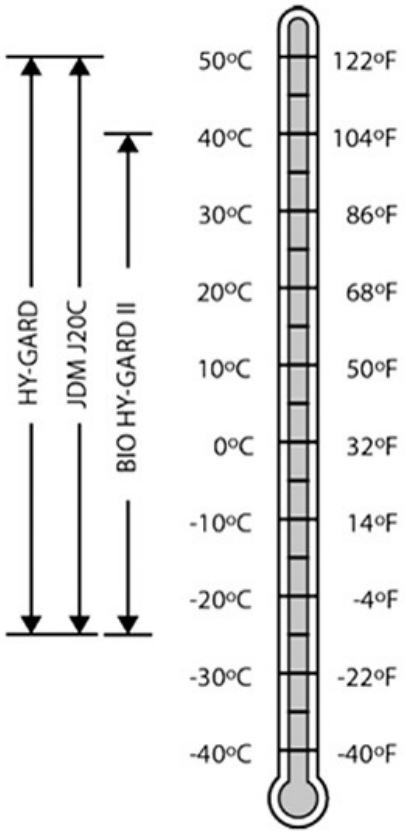
Hy-Gard is a trademark of Deere & Company
Bio Hy-Gard is a trademark of Deere & Company

[1] *Bio Hy-Gard II meets or exceeds the minimum biodegradability of 80% within 21 days according to CEC-L-33-T-82 test method. Bio Hy-Gard II should not be mixed with mineral oils, because this reduces the biodegradability and makes proper oil recycling impossible.*

Do NOT use Hy-Gard Low Viscosity. Do NOT use oils that meet John Deere specification JDM J20D.

LX25458,0000ADB,DX,ANTI-19-20JUL23

Oil for Front-Wheel Drive Axle



LX315180—UN—20JUN18

Oils for Air Temperature Ranges

Use oil viscosity based on expected air temperature range during the period between oil changes.

Overview of the suitablity of oils		
Type of oil	Axles without disk brake	Axles with disk brake
John Deere Hy-Gard™	YES	YES
John Deere Low Viscosity Hy-Gard™	NO	NO
Bio Hy-Gard™ II oil	YES	NO
Other oils according to specifications:		
John Deere Standard JDM J20C	YES	YES
John Deere Standard JDM J20D	NO	NO

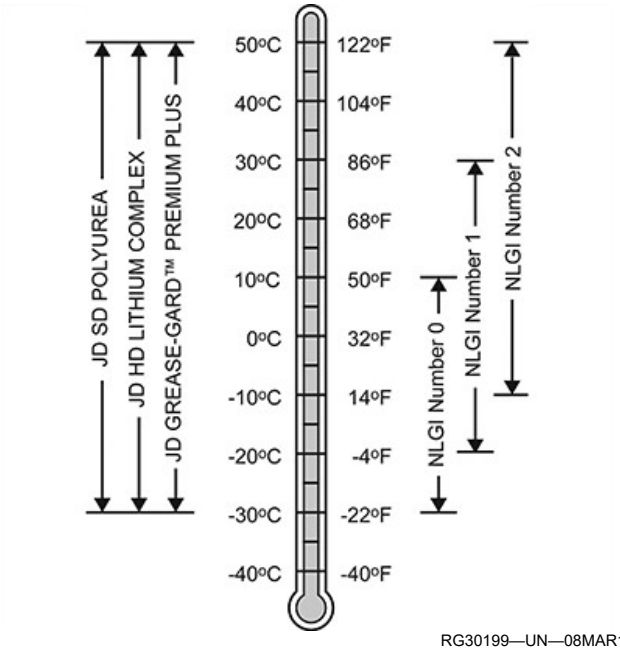
Hy-Gard is a trademark of Deere & Company
Bio Hy-Gard is a trademark of Deere & Company

IMPORTANT: Use of improper oils lead to malfunctions and to damage.

LX25458,0000ADC,LX,OILFA-19-09OCT20

Multipurpose Extreme Pressure (EP) Grease

IMPORTANT: For automated lubrication systems different ambient air temperatures need to be considered.



RG30199—UN—08MAR18

Greases for Air Temperature Ranges

Use grease based on NLGI consistency numbers and the expected air temperature range during the service interval.

John Deere SD Polyurea Grease is preferred.

The following greases are also recommended:

- John Deere HD Lithium Complex Grease
- John Deere Grease-Gard™ Premium Plus

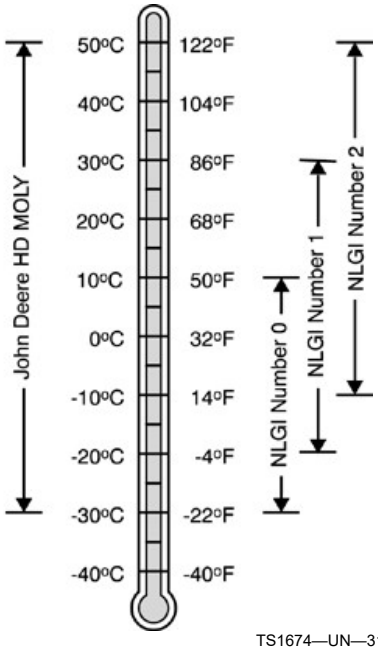
Other greases may be used if they meet the following:

- NLGI Performance Classification GC-LB
- ISO-L-X-BDHB 2 or DIN KP 2 N-10 Lithium Complex, Non-Synthetic Base Oil (100 to 220 mm2/s @ 40°C)

IMPORTANT: Some types of thickeners, base oils, and additives used in greases are not compatible with others. Mixing greases should be avoided. Consult your grease supplier before mixing different types of grease.

DX,GREA1-19-13JAN18

Grease



TS1674—UN—31OCT03

Use grease based on NLGI consistency numbers and the expected air temperature range during the service interval.

John Deere HD MOLY GREASE preferred.

Other greases may be used if they meet the following:

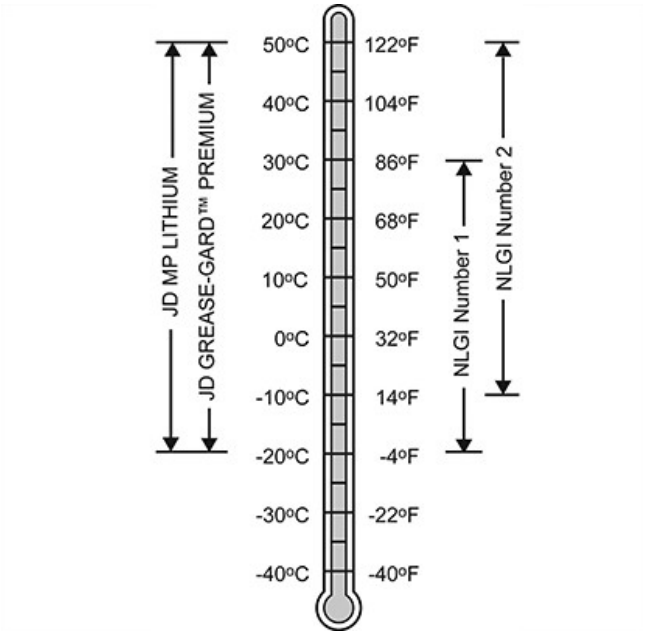
- NLGI Performance Classification GC-LB with 3% to 5% molybdenum disulfide

IMPORTANT: Some types of grease thickeners are not compatible with others. Consult your grease supplier before mixing different types of grease

DX,GREA4-19-07NOV03

Grease-Gard is a trademark of Deere & Company

Multipurpose Grease



RG30200—UN—08MAR18

Greases for Air Temperature Ranges

IMPORTANT: For automated lubrication systems different ambient air temperatures need to be considered.

Use grease based on NLGI consistency numbers and the expected air temperature range during the service interval.

The following greases are preferred:

- **John Deere MP Lithium Grease**
- **John Deere Grease-Gard™ Premium**

The following greases are also recommended:

- John Deere HD Lithium Complex Grease
- John Deere Grease-Gard™ Premium Plus
- John Deere SD Polyurea Grease

Other greases may be used if they meet the following:

- NLGI Performance Classification GC-LB
- ISO-L-X-BCEB 2 or DIN K 2 K-10 Lithium, Non Synthetic Base Oil (100 to 220 mm²/s @40°C)

IMPORTANT: Some types of thickeners, base oils and additives used in greases are not compatible with others. Mixing greases should be avoided. Consult your grease supplier before mixing different types of grease.

DX,GREA5-19-13JAN18

Grease-Gard is a trademark of Deere & Company

Mixing of Lubricants

In general, avoid mixing different brands or types of oil. Oil manufacturers blend additives in their oils to meet certain specifications and performance requirements.

Mixing different oils can interfere with the proper functioning of these additives and degrade lubricant performance.

Consult your John Deere dealer to obtain specific information and recommendations.

DX,LUBMIX-19-18MAR96

Lubricant Storage

Your equipment can operate at top efficiency only when clean lubricants are used.

Use clean containers to handle all lubricants.

Store lubricants and containers in an area protected from dust, moisture, and other contamination. Store containers on their side to avoid water and dirt accumulation.

Make certain that all containers are properly marked to identify their contents.

Properly dispose of all old containers and any residual lubricant they may contain.

DX,LUBST-19-11APR11

Alternative and Synthetic Lubricants

Conditions in certain geographical areas may require lubricant recommendations different from those printed in this manual.

Some John Deere brand coolants and lubricants may not be available in your location.

Consult your John Deere dealer to obtain information and recommendations.

Synthetic lubricants may be used if they meet the performance requirements as shown in this manual.

The temperature limits and service intervals shown in this manual apply to John Deere branded fluids or fluids that have been tested and/or approved for use in John Deere equipment.

Re-refined base stock products may be used if the finished lubricant meets the performance requirements.

DX,ALTER-19-13JAN18

Required Emission-Related Information

Service Provider

A repair shop or person of the owner's choosing may maintain, replace, or repair emission control devices and systems with original or equivalent replacement parts. However, warranty, recall, and all other services paid for by John Deere must be performed at an authorized John Deere service center.

DX,EMISSIONS,REQINFO-19-08DEC23

Safe Maintenance and Cleaning

TS249—UN—23AUG88

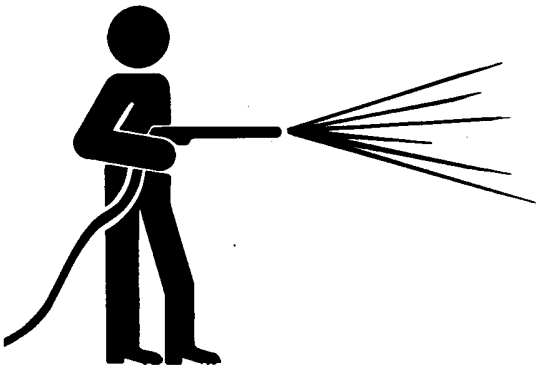
CAUTION: To perform service jobs at inaccessible locations, it is essential to use scaffolding, platforms, or safety ladders.

Special care has to be taken when performing cleaning and maintenance work in inaccessible areas, e.g. when adjusting the roof lights, maintenance work on the cooling system, when adjusting the right-hand outer mirror on tractors without a right-hand door, and many other similar tasks.

CAUTION: It is NOT permitted to perform these jobs by climbing on tractor components that are not intended for that purpose. There is a particularly acute danger of falling if the tractor components are wet, dirty, or iced over.

210,02,ALL,LX25458,0000AE4-19-20DEC23

Using High-Pressure Washers



T6642EJ—UN—18OCT88

IMPORTANT: High-pressure washers are a very effective means of cleaning the tractor. To avoid damage to the tractor, do not go closer than 1 m (39 in) and spray at an angle between 45 and 90° when cleaning sealing surfaces, seals and decals. Maximum pressure must not exceed 12000 kPa (120 bar) (1740 psi).

Do not, under any circumstances, spray or wash components (e.g. the engine) with cold water when hot. Do not use rotary nozzles or water at temperatures over 50°C (122°F), and do not aim at seals. Keep the water jet moving at all times. Cooling units, bearings, and electronic/electrical equipment must not be cleaned with high-pressure washers. Follow the instructions in the Operator's Manual of high-pressure washer and attached equipment.

210,03,ALL,LX25458,0000AE5-19-20DEC23

Observe Service Intervals

IMPORTANT: Recommended service intervals apply to average conditions. Service MORE OFTEN if machine is operated under adverse conditions.

During the break-in period, the following service work has to be performed:

- Service Daily or Every 10 Operating Hours - See in Section 210A, 210B, or 210C.
- Within the first 4, 8, and 100 operating hours, check

the torque of all wheel bolts and wheel nuts repeatedly. In Section 220C, see:

- Tighten Wheel Bolts
- Tighten Wheel Weights

- Service after 100 Operating Hours - See Section 210A, 210B, or 210C.

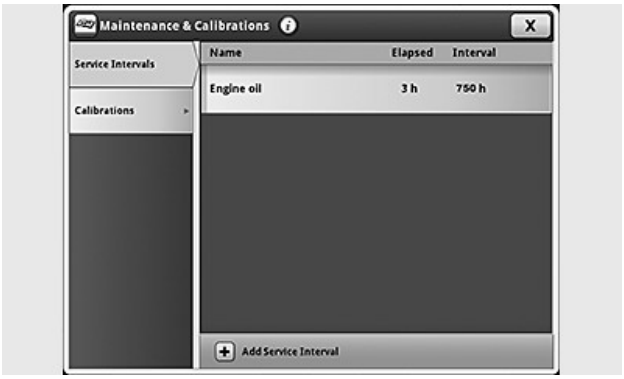
IMPORTANT: During the break-in period of a rebuilt engine and when using John Deere Break-In Plus™ engine oil (break-in oil), carry out the first oil and filter change after the first 100 operating hours.

Use an engine oil that complies with the specification, for example, John Deere Plus-50™ II. Refer to the appropriate specifications in Section 200C.

Perform all services at the hourly intervals indicated in Section 210A, 210B, or 210C, and document them.

210,04,ALL,LX25458,0000AE6-19-20DEC23

Maintenance Intervals



LX1057428—UN—31JUL14

CAUTION: Do not service the tractor while the engine is running.

The intervals in which lubrication and maintenance must be carried out depend on the actual elapsed hours of operation as indicated on the hour meter. The hour meter operates whenever the engine is running and shows the accumulated hours of engine operation.

When maintenance is due, an acoustic signal comes on as the engine starts (for five consecutive engine starts). This reminds the operator that service work is due.

The following service intervals are possible, depending on the engine type and exhaust system:

Engine type and exhaust system	Service Intervals
4-cylinder engines with:	Every
• Final Tier 4	500 hours
• Tier 3	500 hours
6-cylinder engines with:	Every
• Final Tier 4	750 hours
• Tier 3	750 hours

Always check to make sure that the hour meter is serviceable.

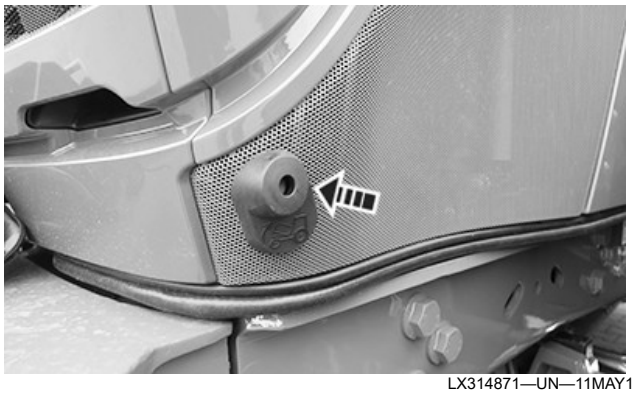
The lubrication and periodic service intervals are for normal working conditions. These intervals should be shortened when operating under adverse conditions.

IMPORTANT: After servicing, cleaning, or repairing your machine, reinstall any safety guards or shields before operating the tractor again.

210,05,6R,OULXA64,0005A9C-19-21DEC23

Raise the Hood

Unlatch and Raise the Hood (Version 1)



LX314871—UN—11MAY17

Use a suitable object (e.g. a screwdriver) to push in the latch and fold the hood upwards.

Unlatch and Raise the Hood (Version 2)

LX364067—UN—29OCT18

Press in the latch and fold the hood upwards.

Unlatch and Fold Down Hood Guard (If Equipped)

LX267123—UN—12APR17

NOTE: If the tractor is equipped with a hood protector (front loader), the hood protector has to be folded down before the hood can be opened.

210,07,SP3,6R,OULXA64,6R,0005A9E-19-20DEC23

Open Service Door for Dipstick

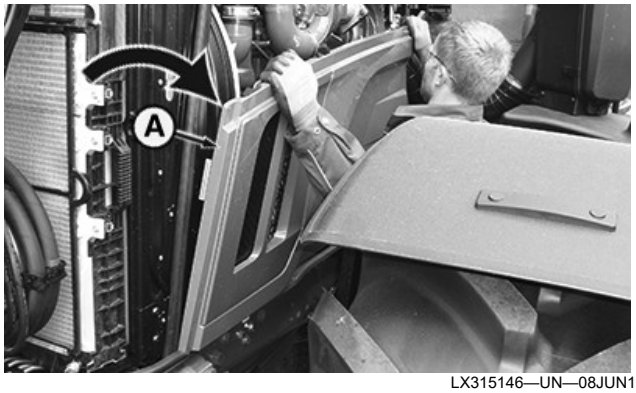
Open service door (A) with a suitable object and fold open.

LX315145—UN—08JUN18

210,08,6R,MT,OULXA64,0005FB2-19-21DEC23

Open Service Doors

Fold down service door (A) slightly and lift it away upwards.

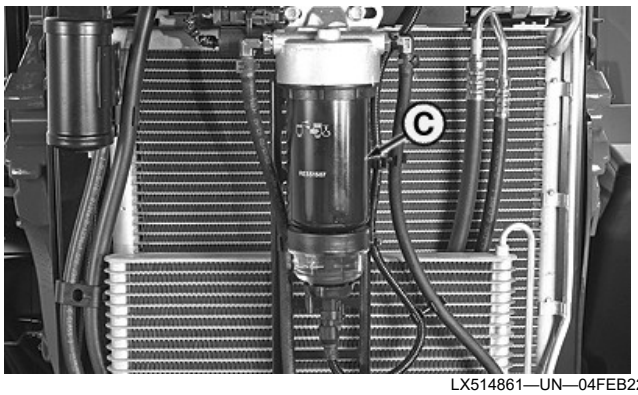


LX315146—UN—08JUN18

210,09,6R,MT,OULXA64,0005FB3-19-21DEC23

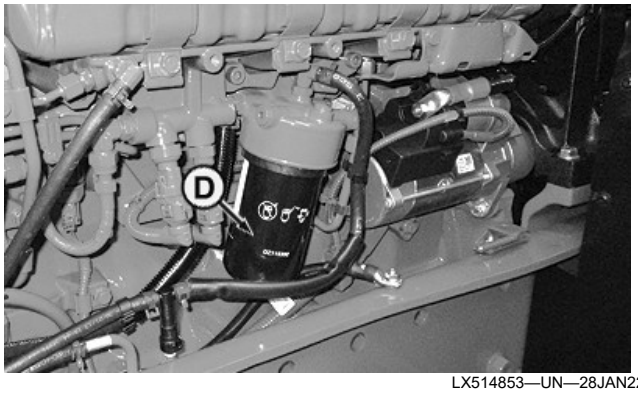
Bleed Air from Fuel System (6-Cylinder Engines)

CAUTION: High-pressure fluid remaining in the fuel lines can cause serious injury. Do not disconnect or attempt to repair fuel lines, sensors or any other components between injection pump and nozzles.



LX514861—UN—04FEB22

Primary Fuel Filter (sample representation)



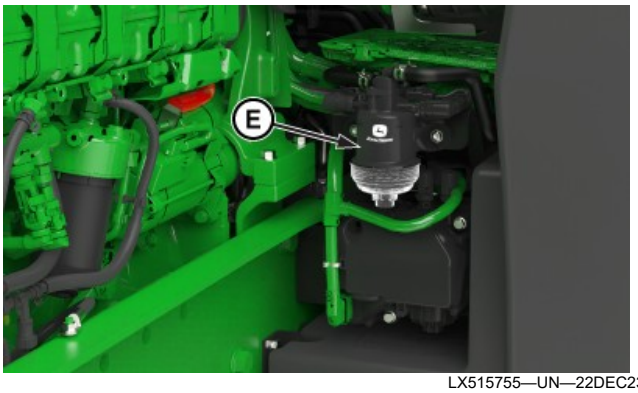
LX514853—UN—28JAN22

Secondary Fuel Filter

The fuel system must be vented if the fuel tank has been emptied or the fuel filters (C), (D), and (if equipped) (E) have been replaced.

LX514957—UN—20DEC23

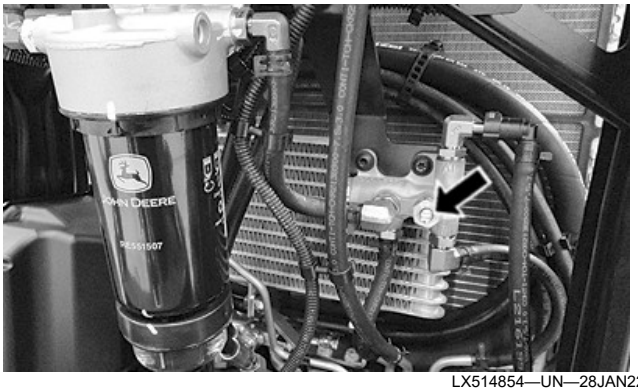
Example: Additional Fuel Filter



LX515755—UN—22DEC23

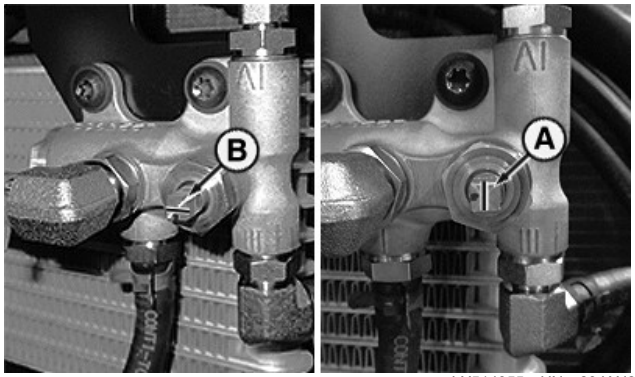
Example: Additional Fuel Filter

IMPORTANT: For tractors equipped with the valve shown, proceed as follows to ventilate the air:



LX514854—UN—28JAN22

Valve (sample representation)



LX514855—UN—28JAN22

A—Valve Position, Ready for Maintenance
B—Valve Position, Ready for Operation

1. Set valve position (A).
2. Turn the key switch to the right to the first switching position and let the fuel transfer pump run for about 120 seconds.
3. Set valve position (B).
4. Turn the key switch to the right to the first switching position and let the fuel transfer pump run for about 120 seconds.
5. Repeat this process if necessary.
6. Set valve position (B) for tractor operation.
7. Start and run engine at high idle for 2 minutes.
8. Turn the key switch to the right to the first switching position and let the fuel transfer pump run for about 120 seconds. Repeat this process if necessary.

210,11,6CYL,6R,MMtoMT,OULXA64,0005A9D-19-21DEC23

Compressed-Air Coupler (If Equipped)

CAUTION: Avoid tripping hazard resulting in serious personal injury.

Obstacles in the area of the access step lead to tripping and thus to falling off the machine.

Remove all obstacles before getting on or off. These include in particular compressed-air hose, electrical lines of coolant heater, and ground fault circuit interrupter (GFCI).

CAUTION: Before carrying out maintenance and repair work, switch off the engine and secure it against unauthorized restart. Park the tractor on a firm, level surface and engage the park lock. When servicing implements, observe the safety instructions in the Operator's Manual of the respective implement. See additional safety instructions in Section 05.

LX364407—UN—25JUN19

The compressed-air coupler supplies external compressed-air tools or applications with compressed-air from the air brake system.

Connect compressed-air hose and route it as shown.

IMPORTANT: Observe the following before starting the journey and/or after use:

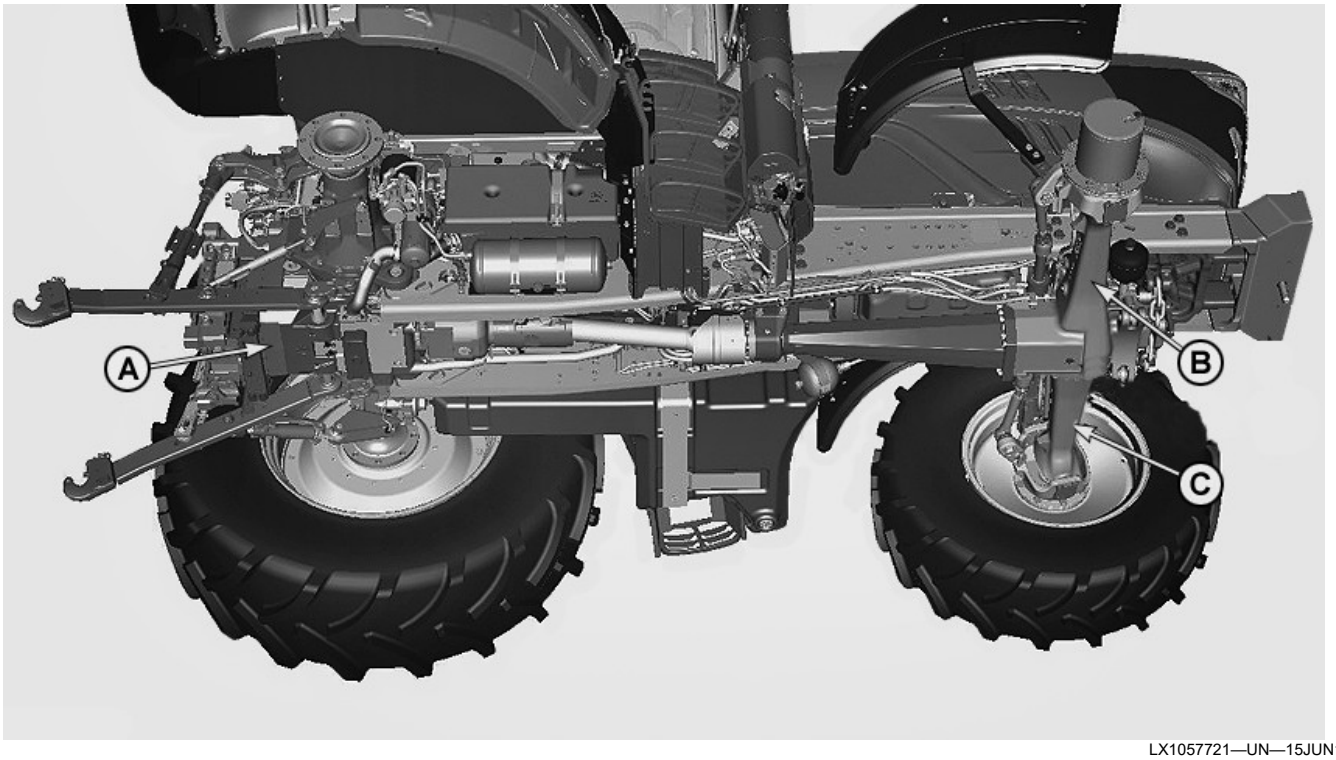
1. **Disconnect the compressed-air hose from the connection.**
2. **Remove compressed-air hose, including tools, from the tractor.**

210,15,6R,OULXA64,6R,0005AA0-19-21DEC23

Jack Up the Tractor, Lifting Points

Lifting Points - Summary

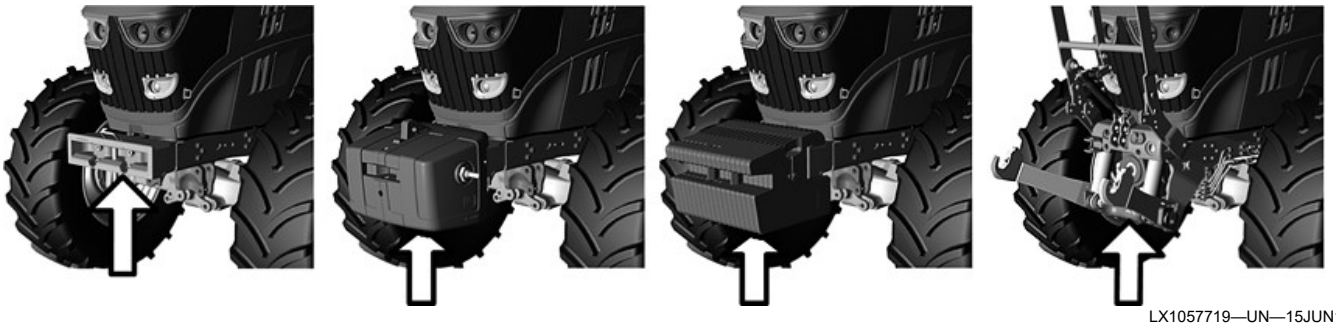
The illustrations show the recommended lifting points for jacking up the tractor. Use a stable jack with sufficient lifting force. See Loads and Weights in Section 500A of the relevant Operator's Manual.



LX1057721—UN—15JUN12

A—Raise Rear of Tractor, e.g. to Remove Rear Wheels
B—Raise Right End of Axle, e.g. to Remove Right Front Wheel
C—Raise Left End of Axle, e.g. to Remove Left Front Wheel

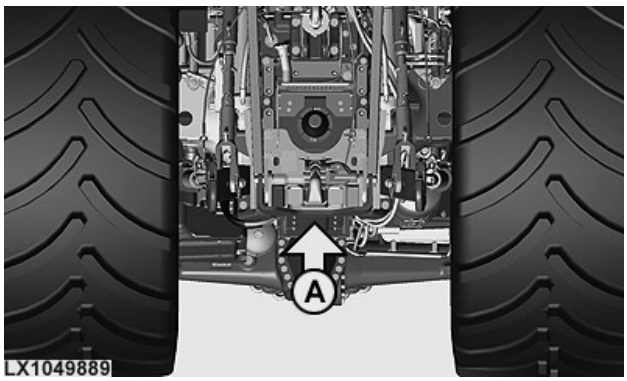
Lifting Points, Front Center of Tractor



LX1057719—UN—15JUN12

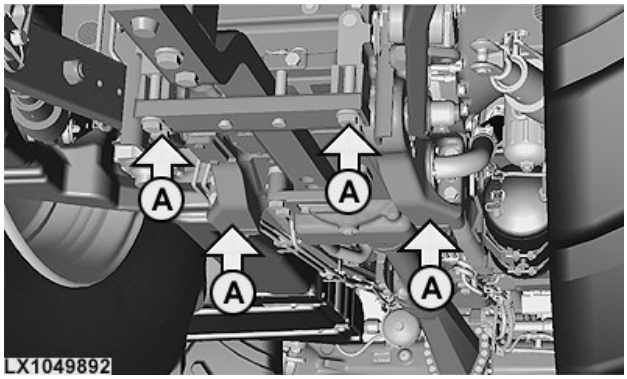
Raise Front Center of Tractor (Depending on How Tractor is Equipped)

Lifting Points on Rear



LX1049889—UN—11FEB11

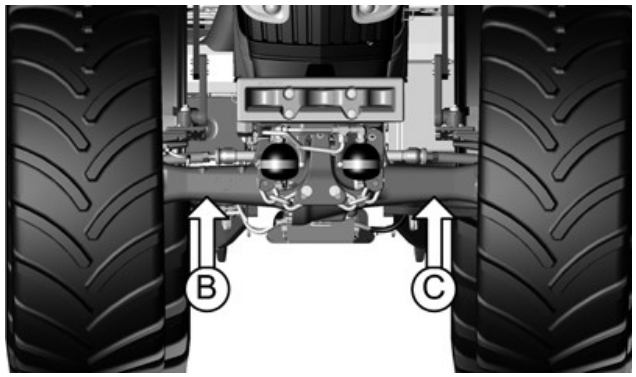
With Pickup Hitch



LX1049892—UN—11FEB11

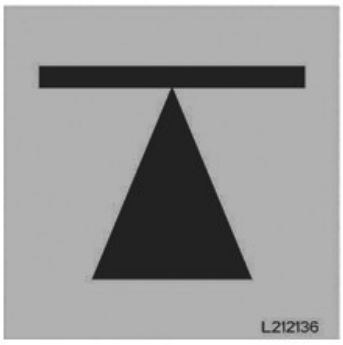
Without Pickup Hitch

Lifting Points at the Front Axle



LX1057720—UN—15JUN12

Raise Axle to Change Front Wheel



RXA0127282—UN—23JUL12

Lifting Points Label (If Equipped)

B—Raise Right End of Axle to Remove Right Front Wheel
C—Raise Left End of Axle to Remove Left Front Wheel

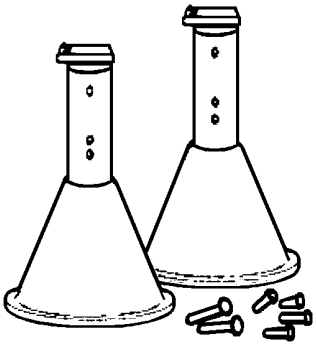
Authorized and Approved Lifting Tools

CAUTION: Use only authorized, approved hoists.

Jack up tractor on firm, level ground only.

Before doing any further work on tractor, first secure it using suitable support stands. Within the scope of the European Union, only hoists with CE certification are permitted.

NOTE: Obtain appropriate support stands from a car workshop supplier. Outside the scope of the EU, the support stands shown (without CE certification) are available through the John Deere distribution channel.



JT07211

JT07211—UN—14DEC06

Example: JT02043 or JT02044

LX515430—UN—12JUN23

Example: JT02043 or JT02044

LX515431—UN—12JUN23

Example: JT02043 or JT02044

JT02043—Support Stand, 482 to 736 mm (19 to 29 in)
JT02044—Support Stand, 863 to 1117 mm (34 to 44 in)

210,16,SP,6R,OULXA64,00056B5-19-20DEC23

General Instructions Regarding the Condition of the Tractor

IMPORTANT: Certain service jobs may be performed only by an authorized John Deere dealer. These service jobs require technical experience and special equipment.

Carry out a thorough visual inspection of the tractor at regular intervals, at the latest at every service interval. Make sure of the following:

- Safety devices and guards are in place and are properly installed.
- All warning decals and instruction panels are in place and are legible.
- Tires are in good condition.
- All lines and hoses are in good condition.
- Electrical cables and ground connections are in good condition.
- Areas subject to heat are free of combustible material.
- Tractor has no leaks.

NOTE: Service which does not have to be performed at regular hourly intervals is listed in Service (As Required, Annually, Every 2 and 3 Years).

Periodic service included therein (annually, every 2 years and every 3 years) is dealt with in Section 210B of the service record booklet.

210,17,ALL,LX25458,0000AEB-19-20DEC23

Inspect/Replace Hydraulic Hoses

Check hydraulic hoses regularly – at least once a year – for leaks, kinks, cuts, tears, rubbing, bulges, corrosion, exposed fabric, and other signs of wear and damage.

Replace worn or damaged hoses immediately.

Replacement hoses can be obtained from your authorized dealer.

210,18,ALL,LX25458,0000AEC-19-20DEC23

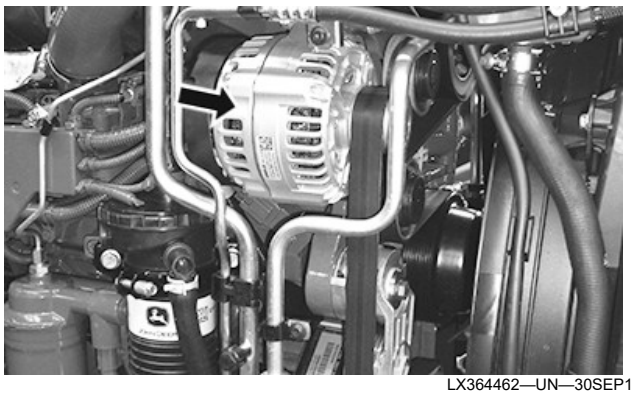
Important Instructions Regarding Alternator

IMPORTANT: The cable of an auxiliary battery or battery charger must be connected only to the poles provided for this purpose.

With battery disconnected, insulate the positive battery cable (+) properly to protect the alternator from damage.

See also Engine Start with an Auxiliary Battery in Section 20.

NOTE: The alternator is equipped with overvoltage protection.



LX364462—UN—30SEP19

With the engine running, do not short-circuit or ground the alternator even momentarily.

Connect battery and charger with the correct polarity. If (+) and (—) are improperly connected, the rectifier diodes will be destroyed immediately.

Before carrying out repairs on electrical system,

disconnect battery ground strap (—). Prior to such tasks, always disconnect the negative terminal (—) of the battery.

210,19,SP3,6R,OULXA64,00056B6-19-21DEC23

Note on Wheels and Tires

IMPORTANT: After changing tires or changing wheels from one side to the other, tighten all wheel bolts and wheel nuts to the specified torque. Check the torque on the wheel nuts and wheel bolts after 4 and 8 hours of operation and also frequently during the next 100 hours of operation. See Section 220C.

After changes to the following components,

- Wheels/tires
- Tread widths
- Fenders
- Steering stop

It is essential to make sure that wheels and fenders do not come into contact with tractor components when steering. See Prevent Front Wheel or Fender Contact with Tractor Components in Section 80.

210,20,ALL,LX25458,0000AEE-19-20DEC23

Notes on, Before Initial Start-Up and Daily Service

IMPORTANT: Prior to initial start-up or during daily servicing, perform the following service:

• Service - Daily or Every 10 Hours, see Section 210B.

NOTE: Before initial start-up and after the tractor has spent long periods out of service, the following jobs must also be performed:

- *Drain water and residues from the fuel tank.*
- *Remove trash and other foreign bodies from underneath the engine hood and cab.*

210,21,ALL,0LX25458,000AEF-19-20DEC23

Service Checks (If Equipped)

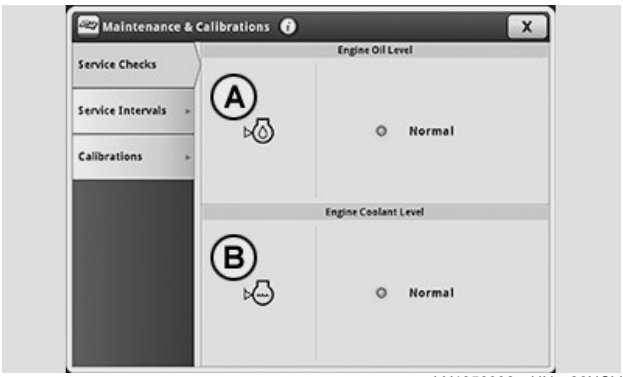
Service Checks provide a fill-level check for the engine oil and the engine coolant that can be carried out before the first start of the engine. To carry out Service Checks, call up the run page for **Maintenance & Calibration**.

1. Select **Menu**.

RXA0147925—UN—13APR15

Menu → Machine Settings Tab → Maintenance & Calibrations Icon

2. Select **Machine Settings** tab.
3. Select icon for **Maintenance & Calibrations**.
4. Select **Service Checks** tab.



LX1056998—UN—26NOV14

Display Green: Normal Level

Following test points are available:

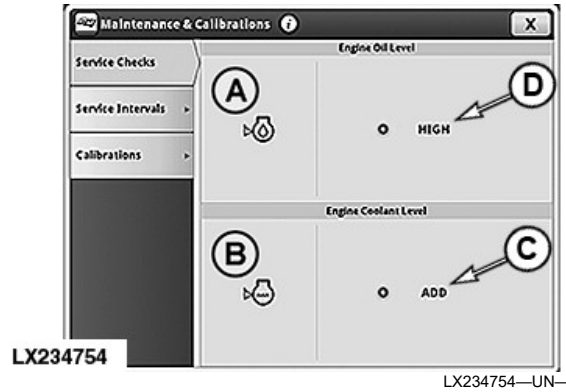
A — Engine Oil Level

B — Engine Coolant Level

IMPORTANT: The fill level indicator functions properly only when the following is observed:

1. **Tractor stands on level ground and is in horizontal position.**
2. **The engine has been shut down for at least 40 minutes. The waiting time depends on the temperature and is displayed in the CommandCenter™.**

A light indicates the status of a respective machine test point.



LX234754—UN—26OCT15

Display Red: Level Too High or Too Low

- Green light ► Normal level
- Red light ► High level or low level

IMPORTANT: • The message “Fill level too low” (C) means that the oil level is nearing the MIN marking of the oil dipstick.

• The message “Fill level too high” (D) means that a high oil level is being measured, which may even be higher than the MAX marking.

Both messages (C) and (D) may make it necessary to adjust the oil level. Check by measuring the oil level with the oil dipstick and adjust the oil level if necessary.

If no measurement is possible, it may be due to one of the following causes:

- Engine ON.
- Engine has not been shut down long enough and the liquids have not settled completely yet. Wait at least 40 minutes, depending on the temperature.

NOTE: Possible causes will be displayed on the CommandCenter™.

Add a status indicator to the main Service Checks page:

1. Select **Menu**.

RXA0126688—UN—07JUN12

Menu → Applications Tab → Layout Manager Icon

2. Select **Machine Settings** tab.
3. Select **Layout Manager** icon.
4. Select and add status indicator.

LX1057479—UN—26NOV14

Status Indicator on the Shortcut Bar

- Status indicator (A) is lit green ► Normal level
- Status indicator is lit red ► One or both fill levels are too high or too low
- Status indicator is not lit ► Checking fill levels not possible

IMPORTANT: If the status indicator of the service check is lit red or not lit at all, call up the Service Checks page and observe the information in the CommandCenter™.

210,22,6R,OULXA64,0005AA2-19-21DEC23

Instructions for Starting up the Air-Conditioning System

IMPORTANT: Avoid damage caused by long standstill times.

Prior to initial operation, the air conditioner compressor has to be connected.

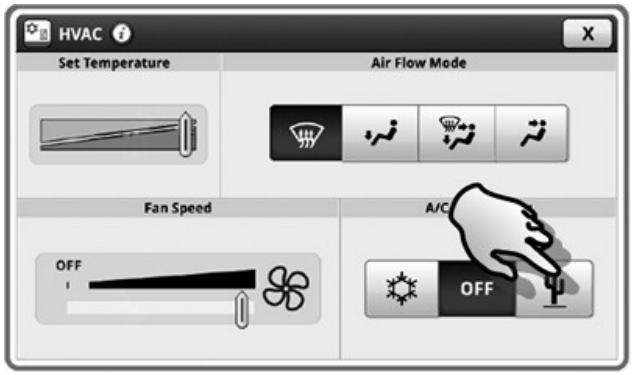
Prior to initial operation and after long standstill periods, the start-up instructions have to be followed.

Start-Up Instructions:

1. Start engine and run at the low idle setting.
2. Turn on the blower for 10 minutes and set the heater to maximum heat output.

   At ATC, in AUTO mode, set the highest temperature. Make sure that the blower is on. In event of doubt, manually regulate the blower setting at ATC.
3. Switch on air-conditioning system and let it run at maximum cooling power for 10 minutes. Set blower to highest level.

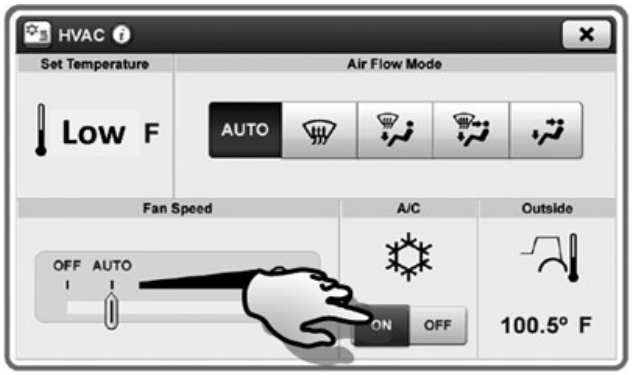
   On ETC, press the button with the cactus icon.



LX299227—UN—01JUN17

ETC

At ATC, in AUTO mode, set the lowest temperature. Make sure that the blower is on. In event of doubt, manually regulate the blower setting at ATC.



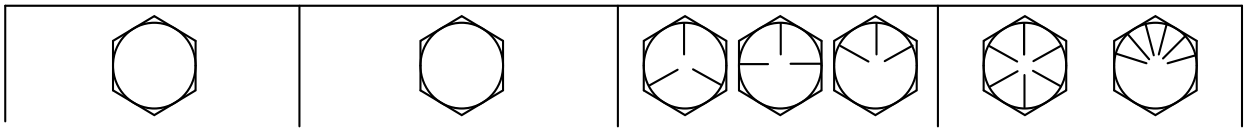
LX299226—UN—01JUN17

ATC

4. Afterwards, the procedure is complete and the engine can be shut off.

210,24,6R,OULXA64,0005AA3-19-21DEC23

Unified Inch Bolt and Screw Torque Values



TS1671—UN—01MAY03

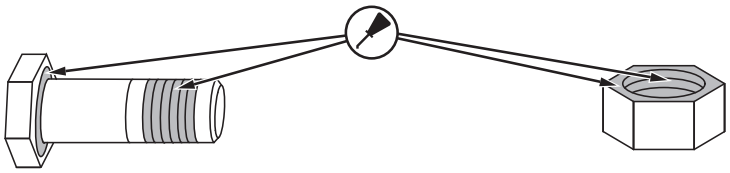
Bolt or Screw Size	SAE Grade 1[a]				SAE Grade 2[b]				SAE Grade 5, 5.1 or 5.2				SAE Grade 8 or 8.2			
	Hex Head[c]		Flange Head[d]		Hex Head[c]		Flange Head[d]		Hex Head[c]		Flange Head[d]		Hex Head[c]		Flange Head[d]	
	N·m	lb·in	N·m	lb·in	N·m	lb·in	N·m	lb·in	N·m	lb·in	N·m	lb·in	N·m	lb·in	N·m	lb·in
1/4	3.1	27.3	3.2	28.4	5.1	45.5	5.3	47.3	7.9	70.2	8.3	73.1	11.2	99.2	11.6	103
													N·m	lb·ft	N·m	lb·ft
5/16	6.1	54.1	6.5	57.7	10.2	90.2	10.9	96.2	15.7	139	16.8	149	22.2	16.4	23.7	17.5
									N·m	lb·ft	N·m	lb·ft				
3/8	10.5	93.6	11.5	102	17.6	156	19.2	170	27.3	20.1	29.7	21.9	38.5	28.4	41.9	30.9
					N·m	lb·ft	N·m	lb·ft								
7/16	16.7	148	18.4	163	27.8	20.5	30.6	22.6	43	31.7	47.3	34.9	60.6	44.7	66.8	49.3
	N·m	lb·ft	N·m	lb·ft												
1/2	25.9	19.1	28.2	20.8	43.1	31.8	47	34.7	66.6	49.1	72.8	53.7	94	69.3	103	75.8
9/16	36.7	27.1	40.5	29.9	61.1	45.1	67.5	49.8	94.6	69.8	104	77	134	98.5	148	109
5/8	51	37.6	55.9	41.2	85	62.7	93.1	68.7	131	96.9	144	106	186	137	203	150
3/4	89.5	66	98	72.3	149	110	164	121	230	170	252	186	325	240	357	263
7/8	144	106	157	116	144	106	157	116	370	273	405	299	522	385	572	422
1	216	159	236	174	216	159	236	174	556	410	609	449	785	579	860	634
1-1/8	305	225	335	247	305	225	335	247	685	505	751	554	1110	819	1218	898
1-1/4	427	315	469	346	427	315	469	346	957	706	1051	775	1552	1145	1703	1256
1-3/8	564	416	618	456	564	416	618	456	1264	932	1386	1022	2050	1512	2248	1658
1-1/2	743	548	815	601	743	548	815	601	1665	1228	1826	1347	2699	1991	2962	2185

The nominal torque values listed are for general use only with the assumed wrenching accuracy of 20%, such as a manual torque wrench.
DO NOT use these values if a different torque value or tightening procedure is given for a specific application.
For lock nuts, for stainless steel fasteners, or for nuts on U-bolts, see the tightening instructions for the specific application.

Replace fasteners with the same or higher property class. If higher property class fasteners are used, tighten these to the strength of the original.

- Make sure that fastener threads are clean.
- Apply a thin coat of Hy-Gard™ or equivalent oil under the head and on the threads of the fastener, as shown in the following image.
- Be conservative with the amount of oil to reduce the potential for hydraulic lockup in blind holes due to excessive oil.
- Properly start thread engagement.

Bolt or Screw Size	SAE Grade 1[a]		SAE Grade 2[b]		SAE Grade 5, 5.1 or 5.2		SAE Grade 8 or 8.2	
	Hex Head[c]	Flange Head[d]	Hex Head[c]	Flange Head[d]	Hex Head[c]	Flange Head[d]	Hex Head[c]	Flange Head[d]

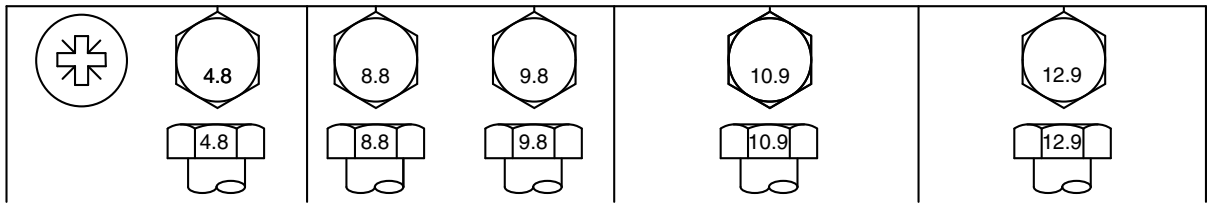


TS1741—UN—22MAY18

[a]*Grade 1 applies for hex cap screws over 6 in (152 mm) long, and for all other types of bolts and screws of any length.*
[b]*Grade 2 applies for hex cap screws (not hex bolts) up to 6 in (152 mm) long.*
[c]*Hex head column values are valid for ISO 4014 and ISO 4017 hex head, ISO 4162 hex socket head, and ISO 4032 hex nuts.*
[d]*Hex flange column values are valid for ASME B18.2.3.9M, ISO 4161, or EN 1665 hex flange products.*

DX,TORQ1-19-09MAY22

Metric Bolt and Screw Torque Values



TS1742—UN—31MAY18

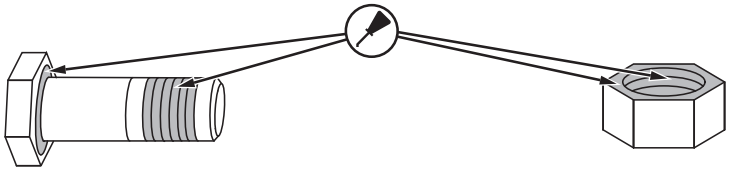
Bolt or Screw Size	Class 4.8				Class 8.8 or 9.8				Class 10.9				Class 12.9			
	Hex Head[a]		Flange Head[b]		Hex Head[a]		Flange Head[b]		Hex Head[a]		Flange Head[b]		Hex Head[a]		Flange Head[b]	
	N·m	lb·in	N·m	lb·in	N·m	lb·in	N·m	lb·in	N·m	lb·in	N·m	lb·in	N·m	lb·in	N·m	lb·in
M6	3.6	31.9	3.9	34.5	6.7	59.3	7.3	64.6	9.8	86.7	10.8	95.6	11.5	102	12.6	112
									N·m	lb·ft	N·m	lb·ft	N·m	lb·ft	N·m	lb·ft
M8	8.6	76.1	9.4	83.2	16.2	143	17.6	156	23.8	17.6	25.9	19.1	27.8	20.5	30.3	22.3
			N·m	lb·ft	N·m	lb·ft	N·m	lb·ft								
M10	16.9	150	18.4	13.6	31.9	23.5	34.7	25.6	46.8	34.5	51	37.6	55	40.6	60	44.3
	N·m	lb·ft														
M12	—	—	—	—	55	40.6	61	45	81	59.7	89	65.6	95	70.1	105	77.4
M14	—	—	—	—	87	64.2	96	70.8	128	94.4	141	104	150	111	165	122
M16	—	—	—	—	135	99.6	149	110	198	146	219	162	232	171	257	190
M18	—	—	—	—	193	142	214	158	275	203	304	224	322	245	356	263
M20	—	—	—	—	272	201	301	222	387	285	428	316	453	334	501	370
M22	—	—	—	—	365	263	405	299	520	384	576	425	608	448	674	497
M24	—	—	—	—	468	345	518	382	666	491	738	544	780	575	864	637
M27	—	—	—	—	683	504	758	559	973	718	1080	797	1139	840	1263	932
M30	—	—	—	—	932	687	1029	759	1327	979	1466	1081	1553	1145	1715	1265
M33	—	—	—	—	1258	928	1398	1031	1788	1319	1986	1465	2092	1543	2324	1714
M36	—	—	—	—	1617	1193	1789	1319	2303	1699	2548	1879	2695	1988	2982	2199

The nominal torque values listed are for general use only with the assumed wrenching accuracy of 20%, such as a manual torque wrench.
DO NOT use these values if a different torque value or tightening procedure is given for a specific application.
For lock nuts, for stainless steel fasteners, or for nuts on U-bolts, see the tightening instructions for the specific application.

Replace fasteners with the same or higher property class. If higher property class fasteners are used, tighten these to the strength of the original.

- Make sure that fastener threads are clean.
- Apply a thin coat of Hy-Gard™ or equivalent oil under the head and on the threads of the fastener, as shown in the following image.

Bolt or Screw Size	Class 4.8		Class 8.8 or 9.8		Class 10.9		Class 12.9	
	Hex Head[a]	Flange Head[b]	Hex Head[a]	Flange Head[b]	Hex Head[a]	Flange Head[b]	Hex Head[a]	Flange Head[b]
• Be conservative with the amount of oil to reduce the potential for hydraulic lockup in blind holes due to excessive oil. • Properly start thread engagement.								



TS1741—UN—22MAY18

[a]*Hex head column values are valid for ISO 4014 and ISO 4017 hex head, ISO 4162 hex socket head, and ISO 4032 hex nuts.*
[b]*Hex flange column values are valid for ASME B18.2.3.9M, ISO 4161, or EN 1665 hex flange products.*

DX,TORQ2-19-09MAY22

GENERAL INFORMATION

- The technical information in this Operator's Manual corresponds to the current information at the time of going to press.
- Country and model-specific deviations are possible. Consider that your tractor is not equipped with all the options described here.
- Depending on the country, not all models mentioned may be available.
- Contact an authorized dealer if you have any questions about optional equipment and the relevant specifications.

OULXA64,0005EA5-19-16SEP21

Notes

This Operator's Manual contains service schedules for your tractor. To obtain the best performance, economy and service life from your tractor, ensure that all service is carried out in accordance with the specifications in this Operator's Manual and be recorded in this manual. It is recommended that an authorized dealer carries out the service work and then stamps the appropriate page in this manual.

Keeping an accurate account of all service performed on your tractor will help you to obtain the best price should you decide to sell it. A prospective buyer can see from these records that your tractor has been serviced on a regular basis. This booklet also serves as an added means of security since the entire history of the tractor can be easily traced.

All John Deere oils, grease, and service products have been optimally designed to provide your tractor with maximum protection and performance. For this reason, we recommend using only genuine John Deere service products and replacement parts.

To protect your rights under the warranty, ensure all scheduled services are carried out and then recorded. If your tractor is covered by an extended warranty (John Deere PowerGard™), it is important to keep these records for the duration of the warranty period.

LX25458,ALL,0000AF4-19-12OCT20

Service Daily or Every 10 Operating Hours

CLEAN:

- ☐ Engine air cleaner—Clean the dust unloading valve.
- ☐ Clean radiator, viscous fan, condenser, and engine environment..
- ☐ Service fuel filter and drain water separator.

ELECTRICAL SYSTEM:

- ☐ Check lights.

CHECK:

- ☐ Engine oil level
- ☐ Coolant level
- ☐ Transmission and hydraulic system—Oil level
- ☐ Check leak-off oil container (if equipped).
- ☐ Check brakes
- ☐ Air brake system—Check compressed-air tank for condensed water.[1]

LUBRICATE: Grease fittings (if equipped), when operating the tractor in extremely wet and muddy conditions.

- ☐ Front hitch—Cylinder and three-point hitch
- ☐ Front-wheel drive axle—Pivot bearing
- ☐ Front-wheel drive axle—All universal joints including universal-jointed shaft
- ☐ Front axle suspension—Hydraulic cylinder
- ☐ Universal-jointed shaft between engine and transmission
- ☐ Universal-jointed shaft between engine and front PTO
- ☐ Cab suspension—Lubricating points
- ☐ All trailer hitches
- ☐ Three-point hitch—Lift links and rockshaft
- ☐ Draft link bearings

[1] If condensed water drains out, replace receiver-drier cartridge, otherwise do this every 1500 hours or every 2 years at the latest.

OULXA64,6R,750H,MW67,0005FD3-19-05SEP23

Service (As Required, Annually, Every 2 and 3 Years)—Only on Tractors with Final Tier 4 Engines (6-Cylinder)

Service Procedure	As required	Annually	Every 2 years	Every 3 years
Replace fuse and relay	•			
Clean cab air filter (change cab air filter every 1500 operating hours or 2 years)	•			
Clean radiator, viscous fan, condenser, and engine environment	•			
Cooling system—Have viscous fan checked by an authorized dealer	•			
Vent fuel system	•			
Grease lubricating points (after washing with a pressure washing system)	•			
Windshield—Grease hinges (not with glued windshields)	•			
Rear PTO—Lubricate PTO stub shaft support (reversible PTO stub shaft)	•			
Change transmission oil filter (whenever the yellow Caution light flashes and corresponding information appears in the CommandCenter™, or every 750 hours)	•			
Change hydraulic oil filter (whenever the yellow Caution light flashes and corresponding information appears in the CommandCenter™, or every 750 hours)	•			
Trailer hitches—Check all components for wear; check that all components function properly	•			
Front and rear wheels—After every wheel change and after adjusting the tread width, check the torques of the bolts listed below. Check after 4 and 8 operating hours and frequently during the next 100 hours of operation (see Maintenance—Every 750 Hours). • Wheel disk on axle • Wheel disk on rim • Wheel weights	•			
Wheels—Dual wheel attachment, check torques of attaching screws (see manufacturer's specifications)	•			
After a longer standstill period, observe the instructions for starting up the air-conditioning system (see Service—General Information).	•			
Have diesel particulate filter (DPF) replaced by an authorized dealer (when indicator light for exhaust filter and warning light at the display are lit)	•			
Fuel tank vent (if equipped)—Check the filter for encrustations when operating in a particularly dusty environment (at least every 3000 hours).	•			
DEF tank—Clean screen on filler neck	•			
DEF tank ven—Check the filter for incrustations if operating in a particularly dusty environment (every 3000 hours at the latest).	•			
Have the DEF system serviced by an authorized dealer (or every 4500 hours) • Clean the DEF tank • Change the filter of the DEF dosing unit	•			•
Front loaders: Check DWS and, if there is insufficient weighing accuracy, have the system calibrated by an authorized dealer.	•			
Front loader mounting frame—Check torques of attaching screws (see Operator's Manual and installation instructions of the front loader)	•	•	•	•
Inspect seat belt for damage and ensure proper working order (or every 750 hours, whichever occurs first)		•	•	•
Inspect hydraulic hoses		•	•	•
Engine—Check drive belt for wear (or every 750 hours, whichever occurs first). In the event of signs of wear, see an authorized dealer.		•	•	•
Change engine oil (or every 750 hours, whichever occurs first)		•	•	•
Cab—Change the activated carbon filter, if equipped. See Section 220E.		•	•	•
Engine air cleaner—Change the primary filter (whenever the yellow Caution light flashes and corresponding information appears, or every 1500 hours)			•	
Engine air cleaner—Change the secondary element (at every fourth change of the primary filter or every 4500 hours)				•
Replace cab air filter (always when the primary filter of the engine air cleaner is replaced or every 1500 hours)			•	
Cab—Replace recirculation air filter (always when the primary filter of the engine air cleaner is replaced or every 1500 hours)			•	
Air brake system—Change the receiver-drier cartridge (an earlier change may be necessary if condensed water drains out when checking compressed-air tank, or every 1500 hours)			•	

OULXA64,6R,750H,EU,0005AA5-19-04SEP23

Periodic Service—Only on Tractors with Final Tier 4 Engines (6-Cylinder)

When the following number of operating hours has been reached, the service intervals specified in the table apply.

NOTE: When performing service work, always check for any damage (e.g. on hydraulic lines, wiring harnesses, etc.) and repair as necessary.

Operating hours	The service intervals include the following intervals	Operating hours	The service intervals include the following intervals
10	10	5250	10 + 750
100	10 + 100	6000	10 + 750 + 1500 + 3000 + 6000
750	10 + 750	6750	10 + 750
1500	10 + 750 + 1500	7500	10 + 750 + 1500
2250	10 + 750	8250	10 + 750
3000	10 + 750 + 1500 + 3000	9000	10 + 750 + 1500 + 3000 + 4500
3750	10 + 750	9750	10 + 750
4500	10 + 750 + 1500 + 4500	10000	10 + 10000

LX25458,FT4,750STD,0000B1F-19-28AUG23

Service Intervals for Engine Oil and Engine Oil Filter

IMPORTANT: Change the oil and oil filter at least once every 12 months even if the hours of operation are fewer than the otherwise recommended service interval.

After each engine oil and filter change, the date, operating hours and time of the next oil and filter change service must be documented.

To do this, use the check form *Engine Oil and Filter Change, see this section*.

Note that there are factors that shorten oil service intervals. See table at the end.

DO NOT use diesel fuel with a higher sulfur content than specified in the tables.

Conditions for Engine Oil and Filter Service Intervals — Tier 2 Engines Only									
Engine and Emission Standard	**6M Model Over-view**	**6R Model Over-view**	**Engine Typ**	**13-Digit Engine S/N**	**Oil Pan Size (L/KW)**	**(JDS-135G) When diesel fuel sulfur content is:**	**Engine Oil and Oil Filter used:**	**Initial Engine Oil Change Service (Break-In Oil)**	**Regular Interval Hours**
4 Cyl. Tier 2, Stage II Engines	6110M 6125M	—	4045HL289	CD4045-**G**xxxxxx	0.17—0.20	2000 mg/kg (2000 ppm)	John Deere Plus-50™ II and JD approved filter	Between 100 and 500 hours*	500
4 Cyl. Tier 2, Stage II Engines	6110M 6125M	—	4045HL289	CD4045-**G**xxxxxx	0.17—0.20	2000—5000 mg/kg (2000—5000 ppm)	John Deere Plus-50™ II and JD approved filter	Between 100 and 500 hours*	400
6 Cyl. Tier 2, Stage II Engines	6140M 6155M 6175M 6195M	—	6068HL289	CD6068-**G**xxxxxx	0.15—0.21	2000 mg/kg (2000 ppm)	John Deere Plus-50™ II and JD approved filter	Between 100 and 500 hours*	500
6 Cyl. Tier 2, Stage II Engines	6140M 6155M 6175M 6195M	—	6068HL289	CD6068-**G**xxxxxx	0.15—0.21	2000—5000 mg/kg (2000—5000 ppm)	John Deere Plus-50™ II and JD approved filter	Between 100 and 500 hours*	400
* After the first 100 hours, at the latest after the first 500 hours.									

Conditions for Engine Oil and Filter Service Intervals — Tier 3 Engines Only									
Engine and Emission Standard	**6M Model Over-view**	**6R Model Ove3r-view**	**Engine Type**	**13-Digit Engine S/N**	**Oil Pan Size (L/KW)**	**(JDS-135G) When diesel fuel sulfur content is:**	**Engine Oil and Oil Filter used:**	**Initial Engine Oil Change Service (Break-In Oil)**	**Regular Interval Hours**
4 Cyl. Tier3, Stage III PSN Engines	6130M 6140M	6R 110 6R 130	4045HL536	CD4045-**L**xxxxxx	0.16 - 0.20	<50 mg/kg (50 ppm)	John Deere Plus-50™ II and JD approved filter	Between 100 and 500 hours*	500
4 Cyl. Tier 3, Stage III PSN Engines	6130M 6140M	6R 110 6R 130	4045HL536	CD4045-**L**xxxxxx	0.16—0.20	50—500 mg/kg (50—500 ppm)	John Deere Plus-50™ II and JD approved filter	Between 100 and 500 hours*	500
6 Cyl. Tier 3, Stage III PVN Engines	6155M 6155MH 6175M 6195M	6R 145 6R 155 6R 175 6R 195 6R 215	6068HL535 6068HL538	CD6068-**L**xxxxxx	0.14—0.22	<50 mg/kg (50 ppm)	John Deere Plus-50™ II and JD approved filter	Between 100 and 500 hours*	750
6 Cyl. Tier3, Stage III PVN Engines	6155M 6155MH 6175M 6195M	6R 145 6R 155 6R 175 6R 195 6R 215	6068HL535 6068HL538	CD6068-**L**xxxxxx	0.14—0.22	50—500 mg/kg (50—500 ppm)	John Deere Plus-50™ II and JD approved filter	Between 100 and 500 hours*	500
6 Cyl. Tier 3, Stage III PTE Engines	6210M	—	6068HL290	CD6068-**L**xxxxxx	0.14	<1000 mg/kg (1000 ppm)	John Deere Plus-50™ II and JD approved filter	Between 100 and 500 hours*	500
6 Cyl. Tier 3, Stage III PTE Engines	6210M	—	6068HL290	CD6068-**L**xxxxxx	0.14	1000—2000 mg/kg (1000—2000 ppm)	John Deere Plus-50™ II and JD approved filter	Between 100 and 500 hours*	400
6 Cyl. Tier 3, Stage III PSN Engines	—	6R 230	6068HL530	CD6068-**L**xxxxxx	0.14—0.22	<50 mg/kg (50 ppm)	John Deere Plus-50™ II and JD approved filter	Between 100 and 500 hours*	750
6 Cyl. Tier3, Stage III PSN Engines	—	6R 230	6068HL530	CD6068-**L**xxxxxx	0.14—0.22	50—500 mg/kg (50—500 ppm)	John Deere Plus-50™ II and JD approved filter	Between 100 and 500 hours*	500
6 Cyl. Tier 3, Stage III PSN Engines	—	6R 250	6068HL530	CD6068-**L**xxxxxx	0.13	<50 mg/kg (50 ppm)	John Deere Plus-50™ II and JD approved filter	Between 100 and 500 hours*	750
6 Cyl. Tier 3, Stage III PSN Engines	—	6R 250	6068HL530	CD6068-**L**xxxxxx	0.13	50—500 mg/kg (50—500 ppm)	John Deere Plus-50™ II and JD approved filter	Between 100 and 500 hours*	500
* After the first 100 hours, at the latest after the first 500 hours.									

Conditions for Engine Oil and Filter Service Intervals — Final Tier 4, Stage IV, and Stage V Engines Only									
Engine and Emission Standard	**6M Model Over-view**	**6R Model Over-view**	**Engine Type**	**13-Digit Engine S/N**	**Oil Pan Size (L/KW)**	**(JDS-135G) When diesel fuel sulfur content is:**	**Engine Oil and Oil Filter used:**	**Initial Engine Oil Change Service (Break-In Oil)**	**Regular Interval Hours**
4 Cyl. Final Tier 4, Stage IV, and Stage V Engines, when ultra low sulfur diesel (ULSD) is used.	6130M 6140M 6145M	6R 110 6R 120 6R 130 6R 140 6R 150	4045HL555 4045HL556 4045HL557	CD4045-**U**xxxxxx	0.15—0.20	Max. 15 mg/kg (15 ppm)	John Deere Plus-50™ II and JD approved filter	Between 100 and 500 hours*	500
6 Cyl. Final Tier 4, Stage IV, and Stage	6155M 6155MH	6R 145 6R 155	6068HL550 6068HL555	CD6068-**U**xxxxxx	0.13—0.22	Max. 15 mg/kg (15 ppm)	John Deere Plus-50™ II	Between	750

Conditions for Engine Oil and Filter Service Intervals — Final Tier 4, Stage IV, and Stage V Engines Only									
Engine and Emission Standard	**6M Model Over-view**	**6R Model Over-view**	**Engine Type**	**13-Digit Engine S/N**	**Oil Pan Size (L/KW)**	**(JDS-135G) When diesel fuel sulfur content is:**	**Engine Oil and Oil Filter used:**	**Initial Engine Oil Change Service (Break-In Oil)**	**Regular Interval Hours**
V Engines, when ultra low sulfur diesel (ULSD) is used.	6175M 6195M	6R 165 6R 175 6R 185 6R 195 6R 215 6R 230 6R 250	6068HL557 6068HL558				and JD approved filter	100 and 500 hours*	
6 Cyl. Final Tier 4, Stage IV, and Stage V Engines, when ultra low sulfur diesel (ULSD) is used.	6155M 6155MH 6175M 6195M	6R 145 6R 155 6R 165 6R 175 6R 185 6R 195 6R 215 6R 230 6R 250	6068HL550 6068HL555 6068HL557 6068HL558	CD6068-**U**xxxxxx	0.13—0.22	Above 15 mg/kg (15 ppm)	John Deere Plus-50™ II and JD approved filter	Between 100 and 500 hours*	500
* After the first 100 hours, at the latest after the first 500 hours.									

Factors that Shorten the Engine Oil and Filter Maintenance Intervals	Shorten the Regular Interval by...
When other Oil than Plus 50 is used	50%
When Operating Engines at Altitudes above 1675 m (5500 ft)	50%
When using Biodiesel Blends greater than B20 (fuel with more than 20% Bio Diesel)	50%
Example: If the regular interval is 750h and the tractor is operated at high altitude above 1675m, than the oil and filter change interval is reduced to 375 hours (750 hours minus 50%).	

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Engine Oil and Filter Change

Service Parts used: ☐ Plus-50™ II and JD approved Filter ☐ Other Oil and/or other Filter	**Service Parts used:** ☐ Plus-50™ II and JD approved Filter ☐ Other Oil and/or other Filter	**Service Parts used:** ☐ Plus-50™ II and JD approved Filter ☐ Other Oil and/or other Filter
Hours of operation:	Hours of operation:	Hours of operation: . . . . .
Date:.	Date:.	Date:. . . . .
Next engine oil and filter change:	**Next engine oil and filter change:**	**Next engine oil and filter change:**
Hours of operation:	Hours of operation:	Hours of operation: . . . . .
Or date:	Or date:	Or date: . . . . .
Signed:	Signed:	Signed: . . . . .
Dealer's stamp:	Dealer's stamp:	Dealer's stamp:
Refer to Service Intervals for Engine Oil and Engine Oil Filter in this section.		

Service Parts used: ☐ Plus-50™ II and JD approved Filter ☐ Other Oil and/or other Filter	**Service Parts used:** ☐ Plus-50™ II and JD approved Filter ☐ Other Oil and/or other Filter	**Service Parts used:** ☐ Plus-50™ II and JD approved Filter ☐ Other Oil and/or other Filter
Hours of operation:	Hours of operation:	Hours of operation: . . . . .
Date:.	Date:.	Date:. . . . .
Next engine oil and filter change:	**Next engine oil and filter change:**	**Next engine oil and filter change:**
Hours of operation:	Hours of operation:	Hours of operation: . . . . .
Or date:	Or date:	Or date: . . . . .
Signed:	Signed:	Signed: . . . . .
Dealer's stamp:	Dealer's stamp:	Dealer's stamp:
Refer to Service Intervals for Engine Oil and Engine Oil Filter in this section.		

LX25458,ALL,0000AF9-19-14FEB23

Engine Oil and Filter Change

Service Parts used: ☐ Plus-50™ II and JD approved Filter ☐ Other Oil and/or other Filter	**Service Parts used:** ☐ Plus-50™ II and JD approved Filter ☐ Other Oil and/or other Filter	**Service Parts used:** ☐ Plus-50™ II and JD approved Filter ☐ Other Oil and/or other Filter
Hours of operation:	Hours of operation:	Hours of operation: . . . . .
Date:.	Date:.	Date:. . . . .
Next engine oil and filter change:	**Next engine oil and filter change:**	**Next engine oil and filter change:**
Hours of operation:	Hours of operation:	Hours of operation: . . . . .
Or date:	Or date:	Or date: . . . . .
Signed:	Signed:	Signed: . . . . .
Dealer's stamp:	Dealer's stamp:	Dealer's stamp:
Refer to Service Intervals for Engine Oil and Engine Oil Filter in this section.		

Service Parts used: ☐ Plus-50™ II and JD approved Filter ☐ Other Oil and/or other Filter	**Service Parts used:** ☐ Plus-50™ II and JD approved Filter ☐ Other Oil and/or other Filter	**Service Parts used:** ☐ Plus-50™ II and JD approved Filter ☐ Other Oil and/or other Filter
Hours of operation:	Hours of operation:	Hours of operation: . . . . .
Date:.	Date:.	Date:. . . . .
Next engine oil and filter change:	**Next engine oil and filter change:**	**Next engine oil and filter change:**
Hours of operation:	Hours of operation:	Hours of operation: . . . . .
Or date:	Or date:	Or date: . . . . .
Signed:	Signed:	Signed: . . . . .
Dealer's stamp:	Dealer's stamp:	Dealer's stamp:
Refer to Service Intervals for Engine Oil and Engine Oil Filter in this section.		

LX25458,ALL,0000AF9-19-14FEB23

Engine Oil and Filter Change

Service Parts used: ☐ Plus-50™ II and JD approved Filter ☐ Other Oil and/or other Filter	**Service Parts used:** ☐ Plus-50™ II and JD approved Filter ☐ Other Oil and/or other Filter	**Service Parts used:** ☐ Plus-50™ II and JD approved Filter ☐ Other Oil and/or other Filter
Hours of operation:	Hours of operation:	Hours of operation: . . . . .
Date:.	Date:.	Date:. . . . .
Next engine oil and filter change:	**Next engine oil and filter change:**	**Next engine oil and filter change:**
Hours of operation:	Hours of operation:	Hours of operation: . . . . .
Or date:	Or date:	Or date: . . . . .
Signed:	Signed:	Signed: . . . . .
Dealer's stamp:	Dealer's stamp:	Dealer's stamp:

Refer to Service Intervals for Engine Oil and Engine Oil Filter in this section.

Service Parts used: ☐ Plus-50™ II and JD approved Filter ☐ Other Oil and/or other Filter	**Service Parts used:** ☐ Plus-50™ II and JD approved Filter ☐ Other Oil and/or other Filter	**Service Parts used:** ☐ Plus-50™ II and JD approved Filter ☐ Other Oil and/or other Filter
Hours of operation:	Hours of operation:	Hours of operation: . . . . .
Date:.	Date:.	Date:. . . . .
Next engine oil and filter change:	**Next engine oil and filter change:**	**Next engine oil and filter change:**
Hours of operation:	Hours of operation:	Hours of operation: . . . . .
Or date:	Or date:	Or date: . . . . .
Signed:	Signed:	Signed: . . . . .
Dealer's stamp:	Dealer's stamp:	Dealer's stamp:

Refer to Service Intervals for Engine Oil and Engine Oil Filter in this section.

LX25458,ALL,0000AF9-19-14FEB23

Engine Oil and Filter Change

Service Parts used: ☐ Plus-50™ II and JD approved Filter ☐ Other Oil and/or other Filter	**Service Parts used:** ☐ Plus-50™ II and JD approved Filter ☐ Other Oil and/or other Filter	**Service Parts used:** ☐ Plus-50™ II and JD approved Filter ☐ Other Oil and/or other Filter
Hours of operation:	Hours of operation:	Hours of operation: . . . . .
Date:.	Date:.	Date:. . . . .
Next engine oil and filter change:	**Next engine oil and filter change:**	**Next engine oil and filter change:**
Hours of operation:	Hours of operation:	Hours of operation: . . . . .
Or date:	Or date:	Or date: . . . . .
Signed:	Signed:	Signed: . . . . .
Dealer's stamp:	Dealer's stamp:	Dealer's stamp:
Refer to Service Intervals for Engine Oil and Engine Oil Filter in this section.		

Service Parts used: ☐ Plus-50™ II and JD approved Filter ☐ Other Oil and/or other Filter	**Service Parts used:** ☐ Plus-50™ II and JD approved Filter ☐ Other Oil and/or other Filter	**Service Parts used:** ☐ Plus-50™ II and JD approved Filter ☐ Other Oil and/or other Filter
Hours of operation:	Hours of operation:	Hours of operation: . . . . .
Date:.	Date:.	Date:. . . . .
Next engine oil and filter change:	**Next engine oil and filter change:**	**Next engine oil and filter change:**
Hours of operation:	Hours of operation:	Hours of operation: . . . . .
Or date:	Or date:	Or date: . . . . .
Signed:	Signed:	Signed: . . . . .
Dealer's stamp:	Dealer's stamp:	Dealer's stamp:
Refer to Service Intervals for Engine Oil and Engine Oil Filter in this section.		

LX25458,ALL,0000AF9-19-14FEB23

Service the Engine Air Cleaner and Cab Air Filters

• Change the engine air filter if the relevant information is displayed on the corner post display or every 2 years or every 1500 operating hours, whichever comes first. The same change interval applies to the cab air filters.
• For activated carbon filters, see additional maintenance of the activated carbon filter.
• Replace the secondary filter every 4500 operating hours or together with each fourth primary filter change or after 3 years, whichever comes first.

Replaced filters: ☐ Primary filter and cab air filter ☐ Activated carbon filter ☐ Secondary filter At operating hours: . . . . . . Date:. . . . . . **Next service:** At operating hours: . . . . . . Or date: . . . . . . Signed: . . . . . . Dealer's Stamp:	**Replaced filters:** ☐ Primary filter and cab air filter ☐ Activated carbon filter ☐ Secondary filter At operating hours: . . . . . . Date:. . . . . . **Next service:** At operating hours: . . . . . . Or date: . . . . . . Signed: . . . . . . Dealer's Stamp:	**Replaced filters:** ☐ Primary filter and cab air filter ☐ Activated carbon filter ☐ Secondary filter At operating hours: . . . . . . Date:. . . . . . **Next service:** At operating hours: . . . . . . Or date: . . . . . . Signed: . . . . . . Dealer's Stamp:
Replaced filters: ☐ Primary filter and cab air filter ☐ Activated carbon filter ☐ Secondary filter At operating hours: . . . . . . Date:. . . . . . **Next service:** At operating hours: . . . . . . Or date: . . . . . . Signed: . . . . . . Dealer's Stamp:	**Replaced filters:** ☐ Primary filter and cab air filter ☐ Activated carbon filter ☐ Secondary filter At operating hours: . . . . . . Date:. . . . . . **Next service:** At operating hours: . . . . . . Or date: . . . . . . Signed: . . . . . . Dealer's Stamp:	**Replaced filters:** ☐ Primary filter and cab air filter ☐ Activated carbon filter ☐ Secondary filter At operating hours: . . . . . . Date:. . . . . . **Next service:** At operating hours: . . . . . . Or date: . . . . . . Signed: . . . . . . Dealer's Stamp:

NOTE: Difficult operating conditions (such as extremely dusty environments) may shorten this service interval. See Service / As Required in this Operator's Manual.

OULXA64,SP,00056CD-19-23MAY23

Service the Engine Air Cleaner and Cab Air Filters

• Change the engine air filter if the relevant information is displayed on the corner post display or every 2 years or every 1500 operating hours, whichever comes first. The same change interval applies to the cab air filters.
• For activated carbon filters, see additional maintenance of the activated carbon filter.
• Replace the secondary filter every 4500 operating hours or together with each fourth primary filter change or after 3 years, whichever comes first.

Replaced filters: ☐ Primary filter and cab air filter ☐ Activated carbon filter ☐ Secondary filter At operating hours: . . . . . . Date:. . . . . . **Next service:** At operating hours: . . . . . . Or date: . . . . . . Signed: . . . . . . Dealer's Stamp:	**Replaced filters:** ☐ Primary filter and cab air filter ☐ Activated carbon filter ☐ Secondary filter At operating hours: . . . . . . Date:. . . . . . **Next service:** At operating hours: . . . . . . Or date: . . . . . . Signed: . . . . . . Dealer's Stamp:	**Replaced filters:** ☐ Primary filter and cab air filter ☐ Activated carbon filter ☐ Secondary filter At operating hours: . . . . . . Date:. . . . . . **Next service:** At operating hours: . . . . . . Or date: . . . . . . Signed: . . . . . . Dealer's Stamp:
Replaced filters: ☐ Primary filter and cab air filter ☐ Activated carbon filter ☐ Secondary filter At operating hours: . . . . . . Date:. . . . . . **Next service:** At operating hours: . . . . . . Or date: . . . . . . Signed: . . . . . . Dealer's Stamp:	**Replaced filters:** ☐ Primary filter and cab air filter ☐ Activated carbon filter ☐ Secondary filter At operating hours: . . . . . . Date:. . . . . . **Next service:** At operating hours: . . . . . . Or date: . . . . . . Signed: . . . . . . Dealer's Stamp:	**Replaced filters:** ☐ Primary filter and cab air filter ☐ Activated carbon filter ☐ Secondary filter At operating hours: . . . . . . Date:. . . . . . **Next service:** At operating hours: . . . . . . Or date: . . . . . . Signed: . . . . . . Dealer's Stamp:

NOTE: Difficult operating conditions (such as extremely dusty environments) may shorten this service interval. See Service / As Required in this Operator's Manual.

OULXA64,SP,00056CD-19-23MAY23

Service the Cooling System

Replace coolant and check thermostat.

- After 6 years or every 6000 hours of operation (whichever comes first) when Cool-Gard™ II is used.
- After 2 years or every 2000 hours of operation (whichever comes first) when another coolant is used.

Filled with: ☐ Cool-Gard™ II ☐ Another Coolant At operating hours: . . . . . . Date:. . . . . . **Next refill:** At operating hours: . . . . . . Or date: . . . . . . Signed: . . . . . . Dealer's Stamp:	**Filled with:** ☐ Cool-Gard™ II ☐ Another Coolant At operating hours: . . . . . . Date:. . . . . . **Next refill:** At operating hours: . . . . . . Or date: . . . . . . Signed: . . . . . . Dealer's Stamp:	**Filled with:** ☐ Cool-Gard™ II ☐ Another Coolant At operating hours: . . . . . . Date:. . . . . . **Next refill:** At operating hours: . . . . . . Or date: . . . . . . Signed: . . . . . . Dealer's Stamp:
Filled with: ☐ Cool-Gard™ II ☐ Another Coolant At operating hours: . . . . . . Date:. . . . . . **Next refill:** At operating hours: . . . . . . Or date: . . . . . . Signed: . . . . . . Dealer's Stamp:	**Filled with:** ☐ Cool-Gard™ II ☐ Another Coolant At operating hours: . . . . . . Date:. . . . . . **Next refill:** At operating hours: . . . . . . Or date: . . . . . . Signed: . . . . . . Dealer's Stamp:	**Filled with:** ☐ Cool-Gard™ II ☐ Another Coolant At operating hours: . . . . . . Date:. . . . . . **Next refill:** At operating hours: . . . . . . Or date: . . . . . . Signed: . . . . . . Dealer's Stamp:

LX25458,ALL,0000AFF-19-24FEB22

Service the Cooling System

Replace coolant and check thermostat.

- After 6 years or every 6000 hours of operation (whichever comes first) when Cool-Gard™ II is used.
- After 2 years or every 2000 hours of operation (whichever comes first) when another coolant is used.

Filled with: ☐ Cool-Gard™ II ☐ Another Coolant At operating hours: . . . . . . Date:. . . . . . **Next refill:** At operating hours: . . . . . . Or date: . . . . . . Signed: . . . . . . Dealer's Stamp:	**Filled with:** ☐ Cool-Gard™ II ☐ Another Coolant At operating hours: . . . . . . Date:. . . . . . **Next refill:** At operating hours: . . . . . . Or date: . . . . . . Signed: . . . . . . Dealer's Stamp:	**Filled with:** ☐ Cool-Gard™ II ☐ Another Coolant At operating hours: . . . . . . Date:. . . . . . **Next refill:** At operating hours: . . . . . . Or date: . . . . . . Signed: . . . . . . Dealer's Stamp:
Filled with: ☐ Cool-Gard™ II ☐ Another Coolant At operating hours: . . . . . . Date:. . . . . . **Next refill:** At operating hours: . . . . . . Or date: . . . . . . Signed: . . . . . . Dealer's Stamp:	**Filled with:** ☐ Cool-Gard™ II ☐ Another Coolant At operating hours: . . . . . . Date:. . . . . . **Next refill:** At operating hours: . . . . . . Or date: . . . . . . Signed: . . . . . . Dealer's Stamp:	**Filled with:** ☐ Cool-Gard™ II ☐ Another Coolant At operating hours: . . . . . . Date:. . . . . . **Next refill:** At operating hours: . . . . . . Or date: . . . . . . Signed: . . . . . . Dealer's Stamp:

LX25458,ALL,0000AFF-19-24FEB22

Service the DEF System

Perform DEF system maintenance as needed, or at least every 4500 hours of operation or every 36 months, whichever comes first. **The following components of the system need to be serviced or replaced:**		• Clean DEF tank • Change DEF dosing unit filter • Change in-line DEF filter
Work done:	**Work done:**	**Work done:**
At operating hours:	At operating hours:	At operating hours: . . . . .
Date:.	Date:.	Date:. . . . .
Next service:	**Next service:**	**Next service:**
At operating hours:	At operating hours:	At operating hours: . . . . .
Or date:	Or date:	Or date: . . . . .
Signed:	Signed:	Signed: . . . . .
Dealer's Stamp:	Dealer's Stamp:	Dealer's Stamp:

Perform DEF system maintenance as needed, or at least every 4500 hours of operation or every 36 months, whichever comes first. **The following components of the system need to be serviced or replaced:**		• Clean DEF tank • Change DEF dosing unit filter • Change in-line DEF filter
Work done:	**Work done:**	**Work done:**
At operating hours:	At operating hours:	At operating hours: . . . . .
Date:.	Date:.	Date:. . . . .
Next service:	**Next service:**	**Next service:**
At operating hours:	At operating hours:	At operating hours: . . . . .
Or date:	Or date:	Or date: . . . . .
Signed:	Signed:	Signed: . . . . .
Dealer's Stamp:	Dealer's Stamp:	Dealer's Stamp:

LX25458,FROM,MY19,0000B01-19-05JUN20

Service the DEF System

Perform DEF system maintenance as needed, or at least every 4500 hours of operation or every 36 months, whichever comes first. **The following components of the system need to be serviced or replaced:**		• Clean DEF tank • Change DEF dosing unit filter • Change in-line DEF filter
Work done:	**Work done:**	**Work done:**
At operating hours:	At operating hours:	At operating hours: . . . . .
Date:.	Date:.	Date:. . . . .
Next service:	**Next service:**	**Next service:**
At operating hours:	At operating hours:	At operating hours: . . . . .
Or date:	Or date:	Or date: . . . . .
Signed:	Signed:	Signed: . . . . .
Dealer's Stamp:	Dealer's Stamp:	Dealer's Stamp:

Perform DEF system maintenance as needed, or at least every 4500 hours of operation or every 36 months, whichever comes first. **The following components of the system need to be serviced or replaced:**		• Clean DEF tank • Change DEF dosing unit filter • Change in-line DEF filter
Work done:	**Work done:**	**Work done:**
At operating hours:	At operating hours:	At operating hours: . . . . .
Date:.	Date:.	Date:. . . . .
Next service:	**Next service:**	**Next service:**
At operating hours:	At operating hours:	At operating hours: . . . . .
Or date:	Or date:	Or date: . . . . .
Signed:	Signed:	Signed: . . . . .
Dealer's Stamp:	Dealer's Stamp:	Dealer's Stamp:

LX25458,FROM,MY19,0000B01-19-05JUN20

Yearly

• Inspect seat belt for damage and ensure proper working order.
• Change engine oil. Check engine drive belt for wear.
• Inspect hydraulic hoses for damage.
• Tighten the screws on the front loader bracket.
• Change activated carbon filter (if equipped). See Service the Engine Air Cleaner and Cab Air Filters in this section.

Inspection completed: Date:. . . . . . Signature: . . . . . . Dealer's Stamp:	**Inspection completed:** Date:. . . . . . Signature: . . . . . . Dealer's Stamp:	**Inspection completed:** Date:. . . . . . Signature: . . . . . . Dealer's Stamp:
Inspection completed: Date:. . . . . . Signature: . . . . . . Dealer's Stamp:	**Inspection completed:** Date:. . . . . . Signature: . . . . . . Dealer's Stamp:	**Inspection completed:** Date:. . . . . . Signature: . . . . . . Dealer's Stamp:
Inspection completed: Date:. . . . . . Signature: . . . . . . Dealer's Stamp:	**Inspection completed:** Date:. . . . . . Signature: . . . . . . Dealer's Stamp:	**Inspection completed:** Date:. . . . . . Signature: . . . . . . Dealer's Stamp:
Inspection completed: Date:. . . . . . Signature: . . . . . . Dealer's Stamp:	**Inspection completed:** Date:. . . . . . Signature: . . . . . . Dealer's Stamp:	**Inspection completed:** Date:. . . . . . Signature: . . . . . . Dealer's Stamp:

Yearly

• Inspect seat belt for damage and ensure proper working order. • Change engine oil. Check engine drive belt for wear. • Inspect hydraulic hoses for damage. • Tighten the screws on the front loader bracket. • Change activated carbon filter (if equipped). See Service the Engine Air Cleaner and Cab Air Filters in this section.

Inspection completed: Date:. . . . . . Signature: . . . . . . Dealer's Stamp:	**Inspection completed:** Date:. . . . . . Signature: . . . . . . Dealer's Stamp:	**Inspection completed:** Date:. . . . . . Signature: . . . . . . Dealer's Stamp:
Inspection completed: Date:. . . . . . Signature: . . . . . . Dealer's Stamp:	**Inspection completed:** Date:. . . . . . Signature: . . . . . . Dealer's Stamp:	**Inspection completed:** Date:. . . . . . Signature: . . . . . . Dealer's Stamp:
Inspection completed: Date:. . . . . . Signature: . . . . . . Dealer's Stamp:	**Inspection completed:** Date:. . . . . . Signature: . . . . . . Dealer's Stamp:	**Inspection completed:** Date:. . . . . . Signature: . . . . . . Dealer's Stamp:
Inspection completed: Date:. . . . . . Signature: . . . . . . Dealer's Stamp:	**Inspection completed:** Date:. . . . . . Signature: . . . . . . Dealer's Stamp:	**Inspection completed:** Date:. . . . . . Signature: . . . . . . Dealer's Stamp:

Service after 100 Operating Hours

CLEAN:

- ☐ Engine air cleaner—Clean the dust unloading valve.
- ☐ Clean radiator, viscous fan, condenser, and engine environment.
- ☐ Service fuel filter and drain water separator.

ELECTRICAL SYSTEM:

- ☐ Access the diagnostic trouble codes, and rectify fault, then delete the diagnostic trouble codes.
- ☐ Check lights.

CHECK SCREW TORQUES:

- ☐ Drawbar
- ☐ Trailer hitch, guide rails
- ☐ Trailer hitch
- ☐ Pickup hitch
- ☐ Front hitch mounting frame
- ☐ Front loader mounting frame

CHECK:

- ☐ Coolant level
- ☐ Air intake hoses—Check for leaks.
- ☐ Transmission and hydraulic system—Oil level
- ☐ Check leak-off oil container (if equipped).
- ☐ Check brakes.
- ☐ Air brake system—Check compressed-air tank for condensed water.[1]

CHANGE:

- ☐ Engine oil and engine oil filter[2]
- ☐ Electrical Hydraulic Pump—Oil
- ☐ Hydraulic oil filter
- ☐ Transmission oil filter
- ☐ Front-wheel drive axle—Axle housing, oil
- ☐ Front-wheel drive axle—Final drives with brake, oil

LUBRICATE: Grease fittings (if equipped)

- ☐ Front hitch—Cylinder and three-point hitch
- ☐ Front-wheel drive axle—Pivot bearing
- ☐ Front-wheel drive axle—All universal joints including universal-jointed shaft
- ☐ Front axle suspension—Hydraulic cylinder
- ☐ Universal-jointed shaft between engine and transmission
- ☐ Universal-jointed shaft between engine and front PTO
- ☐ Cab suspension—Lubricating points
- ☐ All trailer hitches
- ☐ Three-point hitch—Lift links and rockshaft
- ☐ Draft link bearings

[1] If condensed water drains out, replace receiver-drier cartridge, otherwise do this every 1500 hours or every 2 years at the latest.
[2] See Engine Oil and Filter Change and Service Intervals for Engine Oil and Engine Oil Filter

Hours: Comments: . . . . . Dealer's Stamp:

Date: . . . . . .

Work carried out by: . . . . . .

. . . . . .

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Service after 750 Operating Hours

CLEAN:

- ☐ Engine air cleaner—Clean the dust unloading valve.
- ☐ Clean radiator, viscous fan, condenser, and engine environment.
- ☐ Service fuel tank and drain water separator.

ELECTRICAL SYSTEM:

- ☐ Access the diagnostic trouble codes, and rectify fault, then delete the diagnostic trouble codes.
- ☐ Check the movement inhibitor.
- ☐ PTO actuation—Check safety device.
- ☐ Fuse box—Visually inspect and clean
- ☐ Check lights.
- ☐ Check settings of headlights.
- ☐ Check that all accessible ground cables are secure.

CHECK SCREW TORQUES:

- ☐ Wheels—Front and rear wheels
- ☐ Wheels—Wheel disk on rim
- ☐ Wheels—Wheel weights
- ☐ Wheels—Dual wheel attachment
- ☐ Drawbar
- ☐ Trailer hitch, guide rails
- ☐ Trailer hitch
- ☐ Pickup hitch
- ☐ Front hitch mounting frame
- ☐ Front loader mounting frame

CHECK:

- ☐ Engine—Check drive belt for wear (rubbing).
- ☐ Coolant level
- ☐ Air intake hoses—Check for leaks.
- ☐ Front-wheel drive axle—Axle housing, oil level
- ☐ Transmission and hydraulic system—Oil level
- ☐ Check leak-off oil container (if equipped).
- ☐ Cab—Check all rubber seals of the doors and windows as well as the cable feedthroughs for proper seating, wear, and brittleness.
- ☐ Cab—Check function of all closing mechanisms of the doors and windows.
- ☐ Inspect seat belt for damage and ensure proper working order.
- ☐ Brake system—Bleed and check.
- ☐ Service brake—Operational check
- ☐ Secondary brake—Operational check
- ☐ Air brake system—Check compressed-air tank for condensed water.[1]
- ☐ Air brake system—Check the time needed for filling.
- ☐ Air brake system—Check function of secondary brake and park position (park lock).
- ☐ Air brake system—Visual inspection and operational check of couplers.
- ☐ Park lock—Operational check
- ☐ All trailer hitches

CHANGE:

- ☐ Fuel filter
- ☐ Engine oil and engine oil filter[2]
- ☐ Engine—Filter on crankcase vent (oil separator)
- ☐ Electrical Hydraulic Pump—Oil
- ☐ Hydraulic oil filter
- ☐ Transmission oil filter
- ☐ Front PTO—Oil filter
- ☐ Front-wheel drive axle—Final drives with brake, oil
- ☐ Cab—Activated carbon filter (if equipped)[3]
- ☐ Cab suspension—Fill pressure accumulator

LUBRICATE: Grease fittings (if equipped)

- ☐ Front hitch—Cylinder and three-point hitch
- ☐ Front-wheel drive axle—Pivot bearing
- ☐ Front-wheel drive axle—All universal joints including universal-jointed shaft
- ☐ Front axle suspension—Hydraulic cylinder
- ☐ Universal-jointed shaft between engine and transmission
- ☐ Universal-jointed shaft between engine and front PTO
- ☐ Cab suspension—Lubricating points
- ☐ All trailer hitches
- ☐ Three-point hitch—Lift links and rockshaft
- ☐ Draft link bearings
- ☐ Rear PTO—PTO stub shaft support (reversible PTO stub shaft)

[1] If condensed water drains out, replace receiver-drier cartridge, otherwise do this every 1500 hours or every 2 years at the latest.
[2] See Engine Oil and Filter Change and Service Intervals for Engine Oil and Engine Oil Filter
[3] See Service the Engine Air Cleaner and Cab Air Filters

Hours: Comments: . . . . . Dealer's Stamp:

Date: . . . . . .

Work carried out by: . . . . . .

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Service after 1500 Operating Hours

CLEAN:

- ☐ Engine air cleaner—Clean the dust unloading valve.
- ☐ Clean radiator, viscous fan, condenser, and engine environment.
- ☐ Service fuel tank and drain water separator.

ELECTRICAL SYSTEM:

- ☐ Access the diagnostic trouble codes, and rectify fault, then delete the diagnostic trouble codes.
- ☐ Check the movement inhibitor.
- ☐ PTO actuation—Check safety device.
- ☐ Fuse box—Visually inspect and clean
- ☐ Check lights.
- ☐ Check settings of headlights.
- ☐ Check that all accessible ground cables are secure.

CHECK SCREW TORQUES:

- ☐ Wheels—Front and rear wheels
- ☐ Wheels—Wheel disk on rim
- ☐ Wheels—Wheel weights
- ☐ Wheels—Dual wheel attachment
- ☐ Drawbar
- ☐ Trailer hitch, guide rails
- ☐ Trailer hitch
- ☐ Pickup hitch
- ☐ Front hitch—Mounting frame
- ☐ Front loader mounting frame

CHECK:

- ☐ Engine—Check drive belt for wear (rubbing).
- ☐ Coolant level
- ☐ Air intake hoses—Check for leaks.
- ☐ Front-axle suspension—Accumulator check
- ☐ Check leak-off oil container (if equipped).
- ☐ Cab—Check all rubber seals of the doors and windows as well as the cable feedthroughs for proper seating, wear, and brittleness.
- ☐ Cab—Check function of all closing mechanisms of the doors and windows.
- ☐ Inspect seat belt for damage and ensure proper working order.
- ☐ Brake system—Bleed and check.
- ☐ Service brake—Operational check
- ☐ Secondary brake—Operational check
- ☐ Air brake system—Check compressed-air tank for condensed water.
- ☐ Air brake system—Check the time needed for filling.
- ☐ Air brake system—Check function of secondary brake and park position (park lock).
- ☐ Air brake system—Visual inspection and operational check of couplers.
- ☐ Park lock—Operational check
- ☐ All trailer hitches

CHANGE:

- ☐ Fuel filter
- ☐ Engine oil and engine oil filter[2]
- ☐ Engine—Filter on crankcase vent (oil separator)
- ☐ Engine air cleaner—Primary filter[3]
- ☐ Electrical Hydraulic Pump—Oil
- ☐ Hydraulic oil filter
- ☐ Transmission oil filter
- ☐ Transmission and hydraulic system—Replace oil and clean intake screens.
- ☐ Front PTO—Oil filter
- ☐ Front PTO—Oil
- ☐ Front-wheel drive axle—Axle housing, oil
- ☐ Front-wheel drive axle—Final drives with brake, oil
- ☐ Cab—Activated carbon filter (if equipped)[3]
- ☐ Cab air filter[3]
- ☐ Cab—Recirculation air filters[3]
- ☐ Cab suspension—Fill pressure accumulator
- ☐ Air brake system—Change receiver-drier cartridge.

LUBRICATE: Grease fittings (if equipped)

- ☐ Front hitch—Cylinder and three-point hitch
- ☐ Front-wheel drive axle—Pivot bearing
- ☐ Front-wheel drive axle—All universal joints including universal-jointed shaft
- ☐ Front axle suspension—Hydraulic cylinder
- ☐ Universal-jointed shaft between engine and transmission
- ☐ Universal-jointed shaft between engine and front PTO
- ☐ Cab suspension—Lubricating points
- ☐ All trailer hitches
- ☐ Three-point hitch—Lift links and rockshaft
- ☐ Draft link bearings
- ☐ Rear PTO—PTO stub shaft support (reversible PTO stub shaft)

[2] See Engine Oil and Filter Change and Service Intervals for Engine Oil and Engine Oil Filter
[3] See Service the Engine Air Cleaner and Cab Air Filters

Hours: Comments: . . . . . Dealer's Stamp:

Date: . . . . . .

Work carried out by: . . . . . .

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OULXA64,6R,750H,MW67,0005FC6-19-05SEP23

Service after 2250 Operating Hours

CLEAN:

- ☐ Engine air cleaner—Clean the dust unloading valve.
- ☐ Clean radiator, viscous fan, condenser, and engine environment.
- ☐ Service fuel tank and drain water separator.

ELECTRICAL SYSTEM:

- ☐ Access the diagnostic trouble codes, and rectify fault, then delete the diagnostic trouble codes.
- ☐ Check the movement inhibitor.
- ☐ PTO actuation—Check safety device.
- ☐ Fuse box—Visually inspect and clean
- ☐ Check lights.
- ☐ Check settings of headlights.
- ☐ Check that all accessible ground cables are secure.

CHECK SCREW TORQUES:

- ☐ Wheels—Front and rear wheels
- ☐ Wheels—Wheel disk on rim
- ☐ Wheels—Wheel weights
- ☐ Wheels—Dual wheel attachment
- ☐ Drawbar
- ☐ Trailer hitch, guide rails
- ☐ Trailer hitch
- ☐ Pickup hitch
- ☐ Front hitch mounting frame
- ☐ Front loader mounting frame

CHECK:

- ☐ Engine—Check drive belt for wear (rubbing).
- ☐ Coolant level
- ☐ Air intake hoses—Check for leaks.
- ☐ Front-wheel drive axle—Axle housing, oil level
- ☐ Transmission and hydraulic system—Oil level
- ☐ Check leak-off oil container (if equipped).
- ☐ Cab—Check all rubber seals of the doors and windows as well as the cable feedthroughs for proper seating, wear, and brittleness.
- ☐ Cab—Check function of all closing mechanisms of the doors and windows.
- ☐ Inspect seat belt for damage and ensure proper working order.
- ☐ Brake system—Bleed and check.
- ☐ Service brake—Operational check
- ☐ Secondary brake—Operational check
- ☐ Air brake system—Check compressed-air tank for condensed water.[1]
- ☐ Air brake system—Check the time needed for filling.
- ☐ Air brake system—Check function of secondary brake and park position (park lock).
- ☐ Air brake system—Visual inspection and operational check of couplers.
- ☐ Park lock—Operational check
- ☐ All trailer hitches

CHANGE:

- ☐ Fuel filter
- ☐ Engine oil and engine oil filter[2]
- ☐ Engine—Filter on crankcase vent (oil separator)
- ☐ Electrical Hydraulic Pump—Oil
- ☐ Hydraulic oil filter
- ☐ Transmission oil filter
- ☐ Front PTO—Oil filter
- ☐ Front-wheel drive axle—Final drives with brake, oil
- ☐ Cab—Activated carbon filter (if equipped)[3]
- ☐ Cab suspension—Fill pressure accumulator

LUBRICATE: Grease fittings (if equipped)

- ☐ Front hitch—Cylinder and three-point hitch
- ☐ Front-wheel drive axle—Pivot bearing
- ☐ Front-wheel drive axle—All universal joints including universal-jointed shaft
- ☐ Front axle suspension—Hydraulic cylinder
- ☐ Cab suspension—Lubricating points
- ☐ All trailer hitches
- ☐ Three-point hitch—Lift links and rockshaft
- ☐ Draft link bearings
- ☐ Rear PTO—PTO stub shaft support (reversible PTO stub shaft)

☐ Universal-jointed shaft between engine and transmission

☐ Universal-jointed shaft between engine and front PTO

[1] If condensed water drains out, replace receiver-drier cartridge, otherwise do this every 1500 hours or every 2 years at the latest.
[2] See Engine Oil and Filter Change and Service Intervals for Engine Oil and Engine Oil Filter
[3] See Service the Engine Air Cleaner and Cab Air Filters

Hours: Comments: . . . . . Dealer's Stamp:

Date: . . . . . .

Work carried out by: . . . . . .

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OULXA64,6R,750H,MW67,0005FC7-19-05SEP23

Service after 3000 Operating Hours

CLEAN:

☐ Engine air cleaner—Clean the dust unloading valve.

☐ Clean radiator, viscous fan, condenser, and engine environment.

☐ Service fuel tank and drain water separator.

☐ Fuel tank vent—Check filter (if equipped).

☐ DEF tank vent—Check filter.

ELECTRICAL SYSTEM:

☐ Access the diagnostic trouble codes, and rectify fault. Then delete the diagnostic trouble codes.

☐ Check the movement inhibitor.

☐ PTO actuation—Check safety device.

☐ Fuse box—Visually inspect and clean

☐ Check lights.

☐ Check settings of headlights.

☐ Check that all accessible ground cables are secure.

CHECK SCREW TORQUES:

☐ Wheels—Front and rear wheels

☐ Wheels—Wheel disk on rim

☐ Wheels—Wheel weights

☐ Wheels—Dual wheel attachment

☐ Drawbar

☐ Trailer hitch, guide rails

☐ Trailer hitch

☐ Pickup hitch

☐ Front hitch—Mounting frame

☐ Front loader mounting frame

CHECK:

☐ Engine—Check drive belt for wear (rubbing).

☐ Engine—Adjust valve tappets.

☐ Coolant level

☐ Air intake hoses—Check for leaks.

☐ Front-axle suspension—Accumulator check

☐ Check leak-off oil container (if equipped).

☐ Cab—Check all rubber seals of the doors and windows as well as the cable feedthroughs for proper seating, wear, and brittleness.

☐ Cab—Check function of all closing mechanisms of the doors and windows.

☐ Inspect seat belt for damage and ensure proper working order.

☐ Brake system—Bleed and check.

☐ Service brake—Operational check

☐ Secondary brake—Operational check

☐ Air brake system—Check compressed-air tank for condensed water.

☐ Air brake system—Check the time needed for filling.

☐ Air brake system—Check function of secondary brake and park position (park lock).

☐ Air brake system—Visual inspection and operational check of couplers.

☐ Park lock—Operational check

☐ All trailer hitches

CHANGE:

☐ Fuel filter

☐ Engine oil and engine oil filter[2]

☐ Engine—Filter on crankcase vent (oil separator)

☐ Engine air cleaner—Primary filter[3]

☐ Front PTO—Oil filter

☐ Front PTO—Oil

☐ Front-wheel drive axle—Axle housing, oil

☐ Front-wheel drive axle—Final drives with brake, oil

- ☐ Electrical Hydraulic Pump—Oil
- ☐ Hydraulic oil filter
- ☐ Transmission oil filter
- ☐ Transmission and hydraulic system—Replace oil and clean intake screens.
- ☐ Cab—Activated carbon filter (if equipped)[3]
- ☐ Cab air filter[3]
- ☐ Cab—Recirculation air filters[3]
- ☐ Cab suspension—Fill pressure accumulator
- ☐ Air brake system—Change receiver-drier cartridge.

LUBRICATE: Grease fittings (if equipped)

- ☐ Front hitch—Cylinder and three-point hitch
- ☐ Front-wheel drive axle—Pivot bearing
- ☐ Front-wheel drive axle—All universal joints including universal-jointed shaft
- ☐ Front axle suspension—Hydraulic cylinder
- ☐ Universal-jointed shaft between engine and transmission
- ☐ Universal-jointed shaft between engine and front PTO
- ☐ Cab suspension—Lubricating points
- ☐ All trailer hitches
- ☐ Three-point hitch—Lift links and rockshaft
- ☐ Draft link bearings
- ☐ Rear PTO—PTO stub shaft support (reversible PTO stub shaft)

[2] See Engine Oil and Filter Change and Service Intervals for Engine Oil and Engine Oil Filter
[3] See Service the Engine Air Cleaner and Cab Air Filters

Hours: Comments: . . . . . Dealer's Stamp:

Date: . . . . . .

Work carried out by: . . . . . .

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OULXA64,6R,750H,MW67,0005FC8-19-05SEP23

Service after 3750 Operating Hours

CLEAN:

- ☐ Engine air cleaner—Clean the dust unloading valve.
- ☐ Clean radiator, viscous fan, condenser, and engine environment.
- ☐ Service fuel tank and drain water separator.

ELECTRICAL SYSTEM:

- ☐ Access the diagnostic trouble codes, and rectify fault, then delete the diagnostic trouble codes.
- ☐ Check the movement inhibitor.
- ☐ PTO actuation—Check safety device.
- ☐ Fuse box—Visually inspect and clean
- ☐ Check lights.
- ☐ Check settings of headlights.
- ☐ Check that all accessible ground cables are secure.

CHECK SCREW TORQUES:

- ☐ Wheels—Front and rear wheels
- ☐ Wheels—Wheel disk on rim
- ☐ Wheels—Wheel weights
- ☐ Wheels—Dual wheel attachment
- ☐ Drawbar
- ☐ Trailer hitch, guide rails
- ☐ Trailer hitch
- ☐ Pickup hitch
- ☐ Front hitch mounting frame
- ☐ Front loader mounting frame

CHECK:

- ☐ Engine—Check drive belt for wear (rubbing).
- ☐ Coolant level
- ☐ Air intake hoses—Check for leaks.
- ☐ Front-wheel drive axle—Axle housing, oil level
- ☐ Transmission and hydraulic system—Oil level
- ☐ Check leak-off oil container (if equipped).
- ☐ Brake system—Bleed and check.
- ☐ Service brake—Operational check
- ☐ Secondary brake—Operational check
- ☐ Air brake system—Check compressed-air tank for condensed water.[1]
- ☐ Air brake system—Check the time needed for filling.
- ☐ Air brake system—Check function of secondary brake and park position (park lock).

- ☐ Cab—Check all rubber seals of the doors and windows as well as the cable feedthroughs for proper seating, wear, and brittleness.
- ☐ Cab—Check function of all closing mechanisms of the doors and windows.
- ☐ Inspect seat belt for damage and ensure proper working order.
- ☐ Air brake system—Visual inspection and operational check of couplers.
- ☐ Park lock—Operational check
- ☐ All trailer hitches

CHANGE:

- ☐ Fuel filter
- ☐ Engine oil and engine oil filter[2]
- ☐ Engine—Filter on crankcase vent (oil separator)
- ☐ Electrical Hydraulic Pump—Oil
- ☐ Hydraulic oil filter
- ☐ Transmission oil filter
- ☐ Front PTO—Oil filter
- ☐ Front-wheel drive axle—Final drives with brake, oil
- ☐ Cab—Activated carbon filter (if equipped)[3]
- ☐ Cab suspension—Fill pressure accumulator

LUBRICATE: Grease fittings (if equipped)

- ☐ Front hitch—Cylinder and three-point hitch
- ☐ Front-wheel drive axle—Pivot bearing
- ☐ Front-wheel drive axle—All universal joints including universal-jointed shaft
- ☐ Front axle suspension—Hydraulic cylinder
- ☐ Universal-jointed shaft between engine and transmission
- ☐ Universal-jointed shaft between engine and front PTO
- ☐ Cab suspension—Lubricating points
- ☐ All trailer hitches
- ☐ Three-point hitch—Lift links and rockshaft
- ☐ Draft link bearings
- ☐ Rear PTO—PTO stub shaft support (reversible PTO stub shaft)

[1] If condensed water drains out, replace receiver-drier cartridge, otherwise do this every 1500 hours or every 2 years at the latest.
[2] See Engine Oil and Filter Change and Service Intervals for Engine Oil and Engine Oil Filter
[3] See Service the Engine Air Cleaner and Cab Air Filters

Hours: Comments: . . . . . Dealer's Stamp:

Date: . . . . . .

Work carried out by: . . . . . .

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OULXA64,6R,750H,MW67,0005FC9-19-05SEP23

Service after 4500 Operating Hours

CLEAN:

- ☐ Engine air cleaner—Clean the dust unloading valve.
- ☐ Clean radiator, viscous fan, condenser, and engine environment.
- ☐ Service fuel tank and drain water separator.
- ☐ Clean DEF tank[4]

ELECTRICAL SYSTEM:

- ☐ Access the diagnostic trouble codes, and rectify fault. Then delete the diagnostic trouble codes.
- ☐ Check the movement inhibitor.
- ☐ PTO actuation—Check safety device.
- ☐ Fuse box—Visually inspect and clean
- ☐ Check lights.
- ☐ Check settings of headlights.
- ☐ Check that all accessible ground cables are secure.

CHECK SCREW TORQUES:

- ☐ Wheels—Front and rear wheels
- ☐ Wheels—Wheel disk on rim
- ☐ Wheels— Wheel weights
- ☐ Wheels—Dual wheel attachment
- ☐ Drawbar
- ☐ Trailer hitch, guide rails
- ☐ Trailer Hitch
- ☐ Pickup hitch
- ☐ Front hitch—Mounting frame
- ☐ Front loader mounting frame

CHECK:

- ☐ Engine—Check drive belt for wear (rubbing).
- ☐ Coolant level
- ☐ Air intake hoses—Check for leaks.
- ☐ Front-axle suspension—Accumulator check
- ☐ Check leak-off oil container (if equipped).
- ☐ Cab—Check all rubber seals of the doors and windows as well as the cable feedthroughs for proper seating, wear, and brittleness.
- ☐ Cab—Check function of all closing mechanisms of the doors and windows.
- ☐ Inspect seat belt for damage and ensure proper working order.
- ☐ Brake system—Bleed and check.
- ☐ Service brake - Operational check
- ☐ Secondary brake—Operational check
- ☐ Air brake system—Check compressed-air tank for condensed water.
- ☐ Air brake system—Check the time needed for filling.
- ☐ Air brake system—Check function of secondary brake and park position (park lock).
- ☐ Air brake system—Visual inspection and operational check of couplers.
- ☐ Park lock—Operational check
- ☐ All trailer hitches

CHANGE:

- ☐ Fuel filter
- ☐ Filter of the DEF dosing unit[4]
- ☐ In-line DEF filter [4]
- ☐ Engine oil and engine oil filter[2]
- ☐ Engine—Filter on crankcase vent (oil separator)
- ☐ Engine air cleaner—Primary filter[3]
- ☐ Engine air cleaner—Secondary filter[3]
- ☐ Electrical Hydraulic Pump—Oil
- ☐ Hydraulic oil filter
- ☐ Transmission oil filter
- ☐ Transmission and hydraulic system—Replace oil and clean intake screens.
- ☐ Front PTO—Oil filter
- ☐ Front PTO—Oil
- ☐ Front-wheel drive axle—Axle housing, oil
- ☐ Front-wheel drive axle—Final drives with brake, oil
- ☐ Cab—Activated carbon filter (if equipped)[3]
- ☐ Cab air filter[3]
- ☐ Cab—Recirculation air filters[3]
- ☐ Cab suspension—Fill pressure accumulator
- ☐ Air brake system—Change receiver-drier cartridge.

LUBRICATE: Grease fittings (if equipped)

- ☐ Front hitch—Cylinder and three-point hitch
- ☐ Front-wheel drive axle—Pivot bearing
- ☐ Front-wheel drive axle—All universal joints including universal-jointed shaft
- ☐ Front axle suspension—Hydraulic cylinder
- ☐ Universal-jointed shaft between engine and transmission
- ☐ Universal-jointed shaft between engine and front PTO
- ☐ Cab suspension—Lubricating points
- ☐ All trailer hitches
- ☐ Three-point hitch—Lift links and rockshaft
- ☐ Draft link bearings
- ☐ Rear PTO—PTO stub shaft support (reversible PTO stub shaft)

[2] See Engine Oil and Filter Change and Service Intervals for Engine Oil and Engine Oil Filter
[3] See Service the Engine Air Cleaner and Cab Air Filters
[4] See Service the DEF System

Hours: Comments: . . . . . Dealer's Stamp:

Date: . . . . . .

Work carried out by: . . . . . .

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OULXA64,6R,750H,MW67,0005FCA-19-05SEP23

Service after 5250 Operating Hours

CLEAN:

- ☐ Engine air cleaner—Clean the dust unloading valve.
- ☐ Clean radiator, viscous fan, condenser, and engine environment.
- ☐ Service fuel tank and drain water separator.

ELECTRICAL SYSTEM:

- ☐ Access the diagnostic trouble codes, and rectify fault, then delete the diagnostic trouble codes.
- ☐ Check the movement inhibitor.
- ☐ PTO actuation—Check safety device.
- ☐ Fuse box—Visually inspect and clean
- ☐ Check lights.
- ☐ Check settings of headlights.
- ☐ Check that all accessible ground cables are secure.

CHECK SCREW TORQUES:

- ☐ Wheels—Front and rear wheels
- ☐ Wheels—Wheel disk on rim
- ☐ Wheels—Wheel weights
- ☐ Wheels—Dual wheel attachment
- ☐ Drawbar
- ☐ Trailer hitch, guide rails
- ☐ Trailer hitch
- ☐ Pickup hitch
- ☐ Front hitch mounting frame
- ☐ Front loader mounting frame

CHECK:

- ☐ Engine—Check drive belt for wear (rubbing).
- ☐ Coolant level
- ☐ Air intake hoses—Check for leaks.
- ☐ Front-wheel drive axle—Axle housing, oil level
- ☐ Transmission and hydraulic system—Oil level
- ☐ Check leak-off oil container (if equipped).
- ☐ Cab—Check all rubber seals of the doors and windows as well as the cable feedthroughs for proper seating, wear, and brittleness.
- ☐ Cab—Check function of all closing mechanisms of the doors and windows.
- ☐ Inspect seat belt for damage and ensure proper working order.
- ☐ Brake system—Bleed and check.
- ☐ Service brake—Operational check
- ☐ Secondary brake—Operational check
- ☐ Air brake system—Check compressed-air tank for condensed water.[1]
- ☐ Air brake system—Check the time needed for filling.
- ☐ Air brake system—Check function of secondary brake and park position (park lock).
- ☐ Air brake system—Visual inspection and operational check of couplers.
- ☐ Park lock—Operational check
- ☐ All trailer hitches

CHANGE:

- ☐ Fuel filter
- ☐ Engine oil and engine oil filter[2]
- ☐ Engine—Filter on crankcase vent (oil separator)
- ☐ Electrical Hydraulic Pump—Oil
- ☐ Hydraulic oil filter
- ☐ Transmission oil filter
- ☐ Front PTO—Oil filter
- ☐ Front-wheel drive axle—Final drives with brake, oil
- ☐ Cab—Activated carbon filter (if equipped)[3]
- ☐ Cab suspension—Fill pressure accumulator

LUBRICATE: Grease fittings (if equipped)

- ☐ Front hitch—Cylinder and three-point hitch
- ☐ Front-wheel drive axle—Pivot bearing
- ☐ Front-wheel drive axle—All universal joints including universal-jointed shaft
- ☐ Front axle suspension—Hydraulic cylinder
- ☐ Universal-jointed shaft between engine and transmission
- ☐ Universal-jointed shaft between engine and front PTO
- ☐ Cab suspension—Lubricating points
- ☐ All trailer hitches
- ☐ Three-point hitch—Lift links and rockshaft
- ☐ Draft link bearings
- ☐ Rear PTO—PTO stub shaft support (reversible PTO stub shaft)

[1] If condensed water drains out, replace receiver-drier cartridge, otherwise do this every 1500 hours or every 2 years at the latest.
[2] See Engine Oil and Filter Change and Service Intervals for Engine Oil and Engine Oil Filter
[3] See Service the Engine Air Cleaner and Cab Air Filters

Hours: Comments: . . . . . Dealer's Stamp:

Date: . . . . . .

Work carried out by:

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OULXA64,6R,750H,MW67,0005FCB-19-05SEP23

Service after 6000 Operating Hours

CLEAN:

- ☐ Engine air cleaner—Clean the dust unloading valve.
- ☐ Clean radiator, viscous fan, condenser, and engine environment.
- ☐ Service fuel tank and drain water separator.
- ☐ Fuel tank vent—Check filter (if equipped).
- ☐ DEF tank vent—Check filter.

ELECTRICAL SYSTEM:

- ☐ Access the diagnostic trouble codes, and rectify fault. Then delete the diagnostic trouble codes.
- ☐ Check the movement inhibitor.
- ☐ PTO actuation—Check safety device.
- ☐ Fuse box—Visually inspect and clean
- ☐ Check lights.
- ☐ Check settings of headlights.
- ☐ Check that all accessible ground cables are secure.

CHECK SCREW TORQUES:

- ☐ Wheels—Front and rear wheels
- ☐ Wheels—Wheel disk on rim
- ☐ Wheels—Wheel weights
- ☐ Wheels—Dual wheel attachment
- ☐ Drawbar
- ☐ Trailer hitch, guide rails
- ☐ Trailer Hitch
- ☐ Pickup hitch
- ☐ Front hitch—Mounting frame
- ☐ Front loader mounting frame

CHECK:

- ☐ Engine—Check drive belt for wear (rubbing).
- ☐ Engine—Adjust valve tappets.
- ☐ Air intake hoses—Check for leaks.
- ☐ Front-axle suspension—Accumulator check
- ☐ Check leak-off oil container (if equipped).
- ☐ Cab—Check all rubber seals of the doors and windows as well as the cable feedthroughs for proper seating, wear, and brittleness.
- ☐ Cab—Check function of all closing mechanisms of the doors and windows.
- ☐ Cab—Dust pre-filter
- ☐ Inspect seat belt for damage and ensure proper working order.
- ☐ Brake system—Bleed and check.
- ☐ Service brake—Operational check
- ☐ Secondary brake—Operational check
- ☐ Air brake system—Check compressed-air tank for condensed water.
- ☐ Air brake system—Check the time needed for filling.
- ☐ Air brake system—Check function of secondary brake and park position (park lock).
- ☐ Air brake system—Visual inspection and operational check of couplers.
- ☐ Park lock—Operational check
- ☐ All trailer hitches

CHANGE:

- ☐ Coolant[5]
- ☐ Fuel filter
- ☐ Engine oil and engine oil filter[2]
- ☐ Engine—Filter on crankcase vent (oil separator)[2]
- ☐ Engine air cleaner—Primary filter[3]
- ☐ Electrical Hydraulic Pump—Oil
- ☐ Hydraulic oil filter
- ☐ Transmission oil filter
- ☐ Transmission and hydraulic system—Replace oil and clean intake screens.
- ☐ Front PTO—Oil filter
- ☐ Front PTO—Oil
- ☐ Front-wheel drive axle— Axle housing, oil
- ☐ Front-wheel drive axle—Final drives with brake, oil
- ☐ Cab—Activated carbon filter (if equipped)[3]
- ☐ Cab air filter[3]
- ☐ Cab—Recirculation air filters[3]
- ☐ Cab suspension—Fill pressure accumulator
- ☐ Air brake system—Change receiver-drier cartridge.

LUBRICATE: Grease fittings (if equipped)

- ☐ Front hitch—Cylinder and three-point hitch
- ☐ Front-wheel drive axle—Pivot bearing
- ☐ Front-wheel drive axle—All universal joints including universal-jointed shaft
- ☐ Front axle suspension—Hydraulic cylinder
- ☐ Cab suspension—Lubricating points
- ☐ All trailer hitches
- ☐ Three-point hitch—Lift links and rockshaft
- ☐ Draft link bearings

- ☐ Universal-jointed shaft between engine and transmission
- ☐ Universal-jointed shaft between engine and front PTO
- ☐ Rear PTO—PTO stub shaft support (reversible PTO stub shaft)

[2] See Engine Oil and Filter Change and Service Intervals for Engine Oil and Engine Oil Filter
[3] See Service the Engine Air Cleaner and Cab Air Filters
[5] See Servicing the Cooling System

Hours: Comments: . . . . . Dealer's Stamp:

Date: . . . . . .

Work carried out by: . . . . . .

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OULXA64,6R,750H,MW67,0005FCC-19-05SEP23

Service after 6750 Operating Hours

CLEAN:

- ☐ Engine air cleaner—Clean the dust unloading valve.
- ☐ Clean radiator, viscous fan, condenser, and engine environment.
- ☐ Service fuel tank and drain water separator.

ELECTRICAL SYSTEM:

- ☐ Access the diagnostic trouble codes, and rectify fault, then delete the diagnostic trouble codes.
- ☐ Check the movement inhibitor.
- ☐ PTO actuation—Check safety device.
- ☐ Fuse box—Visually inspect and clean
- ☐ Check lights.
- ☐ Check settings of headlights.
- ☐ Check that all accessible ground cables are secure.

CHECK SCREW TORQUES:

- ☐ Wheels—Front and rear wheels
- ☐ Wheels—Wheel disk on rim
- ☐ Wheels—Wheel weights
- ☐ Wheels—Dual wheel attachment
- ☐ Drawbar
- ☐ Trailer hitch, guide rails
- ☐ Trailer hitch
- ☐ Pickup hitch
- ☐ Front hitch mounting frame
- ☐ Front loader mounting frame

CHECK:

- ☐ Engine—Check drive belt for wear (rubbing).
- ☐ Coolant level
- ☐ Air intake hoses—Check for leaks.
- ☐ Front-wheel drive axle—Axle housing, oil level
- ☐ Transmission and hydraulic system—Oil level
- ☐ Check leak-off oil container (if equipped).
- ☐ Cab—Check all rubber seals of the doors and windows as well as the cable feedthroughs for proper seating, wear, and brittleness.
- ☐ Cab—Check function of all closing mechanisms of the doors and windows.
- ☐ Inspect seat belt for damage and ensure proper working order.
- ☐ Brake system—Bleed and check.
- ☐ Service brake—Operational check
- ☐ Secondary brake—Operational check
- ☐ Air brake system—Check compressed-air tank for condensed water.[1]
- ☐ Air brake system—Check the time needed for filling.
- ☐ Air brake system—Check function of secondary brake and park position (park lock).
- ☐ Air brake system—Visual inspection and operational check of couplers.
- ☐ Park lock—Operational check
- ☐ All trailer hitches

CHANGE:

- ☐ Fuel filter
- ☐ Engine oil and engine oil filter[2]
- ☐ Engine—Filter on crankcase vent (oil separator)
- ☐ Electrical Hydraulic Pump—Oil
- ☐ Hydraulic oil filter
- ☐ Front PTO—Oil filter
- ☐ Front-wheel drive axle—Final drives with brake, oil
- ☐ Cab—Activated carbon filter (if equipped)[3]
- ☐ Cab suspension—Fill pressure accumulator

☐ Transmission oil filter

LUBRICATE: Grease fittings (if equipped)

☐ Front hitch—Cylinder and three-point hitch
☐ Front-wheel drive axle—Pivot bearing
☐ Front-wheel drive axle—All universal joints including universal-jointed shaft
☐ Front axle suspension—Hydraulic cylinder
☐ Universal-jointed shaft between engine and transmission
☐ Universal-jointed shaft between engine and front PTO
☐ Cab suspension—Lubricating points
☐ All trailer hitches
☐ Three-point hitch—Lift links and rockshaft
☐ Draft link bearings
☐ Rear PTO—PTO stub shaft support (reversible PTO stub shaft)

[1] If condensed water drains out, replace receiver-drier cartridge, otherwise do this every 1500 hours or every 2 years at the latest.
[2] See Engine Oil and Filter Change and Service Intervals for Engine Oil and Engine Oil Filter
[3] See Service the Engine Air Cleaner and Cab Air Filters

Hours: Comments: . . . . . Dealer's Stamp:

Date: . . . . . .

Work carried out by: . . . . . .

. . . . . .

OULXA64,6R,750H,MW67,0005FCD-19-05SEP23

Service after 7500 Operating Hours

CLEAN:

☐ Engine air cleaner—Clean the dust unloading valve.
☐ Clean radiator, viscous fan, condenser, and engine environment.
☐ Service fuel tank and drain water separator.

ELECTRICAL SYSTEM:

☐ Access the diagnostic trouble codes, and rectify fault, then delete the diagnostic trouble codes.
☐ Check the movement inhibitor.
☐ PTO actuation—Check safety device.
☐ Fuse box—Visually inspect and clean
☐ Check lights.
☐ Check settings of headlights.
☐ Check that all accessible ground cables are secure.

CHECK SCREW TORQUES:

☐ Wheels—Front and rear wheels
☐ Wheels—Wheel disk on rim
☐ Wheels—Wheel weights
☐ Wheels—Dual wheel attachment
☐ Drawbar
☐ Trailer hitch, guide rails
☐ Trailer hitch
☐ Pickup hitch
☐ Front hitch—Mounting frame
☐ Front loader mounting frame

CHECK:

☐ Engine—Check drive belt for wear (rubbing).
☐ Coolant level
☐ Air intake hoses—Check for leaks.
☐ Front-axle suspension—Accumulator check
☐ Check leak-off oil container (if equipped).
☐ Cab—Check all rubber seals of the doors and windows as well as the cable feedthroughs for proper seating, wear, and brittleness.
☐ Cab—Check function of all closing mechanisms of the doors and windows.
☐ Inspect seat belt for damage and ensure proper working order.
☐ Brake system—Bleed and check.
☐ Service brake—Operational check
☐ Secondary brake—Operational check
☐ Air brake system—Check compressed-air tank for condensed water.
☐ Air brake system—Check the time needed for filling.
☐ Air brake system—Check function of secondary brake and park position (park lock).
☐ Air brake system—Visual inspection and operational check of couplers.
☐ Park lock—Operational check

☐ All trailer hitches

CHANGE:

☐ Fuel filter
☐ Engine oil and engine oil filter[2]
☐ Engine—Filter on crankcase vent (oil separator)
☐ Engine air cleaner—Primary filter[3]
☐ Electrical Hydraulic Pump—Oil
☐ Hydraulic oil filter
☐ Transmission oil filter
☐ Transmission and hydraulic system—Replace oil and clean intake screens.
☐ Front PTO—Oil filter
☐ Front PTO—Oil
☐ Front-wheel drive axle—Axle housing, oil
☐ Front-wheel drive axle—Final drives with brake, oil
☐ Cab—Activated carbon filter (if equipped)[3]
☐ Cab air filter[3]
☐ Cab—Recirculation air filters[3]
☐ Cab suspension—Fill pressure accumulator
☐ Air brake system—Change receiver-drier cartridge.

LUBRICATE: Grease fittings (if equipped)

☐ Front hitch—Cylinder and three-point hitch
☐ Front-wheel drive axle—Pivot bearing
☐ Front-wheel drive axle—All universal joints including universal-jointed shaft
☐ Front axle suspension—Hydraulic cylinder
☐ Universal-jointed shaft between engine and transmission
☐ Universal-jointed shaft between engine and front PTO
☐ Cab suspension—Lubricating points
☐ All trailer hitches
☐ Three-point hitch—Lift links and rockshaft
☐ Draft link bearings
☐ Rear PTO—PTO stub shaft support (reversible PTO stub shaft)

[2] See Engine Oil and Filter Change and Service Intervals for Engine Oil and Engine Oil Filter
[3] See Service the Engine Air Cleaner and Cab Air Filters

Hours: Comments: . . . . . Dealer's Stamp:

Date: . . . . . .

Work carried out by: . . . . . .

. . . . . .

OULXA64,6R,750H,MW67,0005FCE-19-05SEP23

Service after 8250 Operating Hours

CLEAN:

☐ Engine air cleaner—Clean the dust unloading valve.
☐ Clean radiator, viscous fan, condenser, and engine environment.
☐ Service fuel tank and drain water separator.

ELECTRICAL SYSTEM:

☐ Access the diagnostic trouble codes, and rectify fault, then delete the diagnostic trouble codes.
☐ Check the movement inhibitor.
☐ PTO actuation—Check safety device.
☐ Fuse box—Visually inspect and clean
☐ Check lights.
☐ Check settings of headlights.
☐ Check that all accessible ground cables are secure.

CHECK SCREW TORQUES:

☐ Wheels—Front and rear wheels
☐ Wheels—Wheel disk on rim
☐ Wheels—Wheel weights
☐ Wheels—Dual wheel attachment
☐ Drawbar
☐ Trailer hitch, guide rails
☐ Trailer hitch
☐ Pickup hitch
☐ Front hitch mounting frame
☐ Front loader mounting frame

CHECK:

- ☐ Engine—Check drive belt for wear (rubbing).
- ☐ Coolant level
- ☐ Air intake hoses—Check for leaks.
- ☐ Front-wheel drive axle—Axle housing, oil level
- ☐ Transmission and hydraulic system—Oil level
- ☐ Check leak-off oil container (if equipped).
- ☐ Cab—Check all rubber seals of the doors and windows as well as the cable feedthroughs for proper seating, wear, and brittleness.
- ☐ Cab—Check function of all closing mechanisms of the doors and windows.
- ☐ Inspect seat belt for damage and ensure proper working order.
- ☐ Brake system—Bleed and check.
- ☐ Service brake—Operational check
- ☐ Secondary brake—Operational check
- ☐ Air brake system—Check compressed-air tank for condensed water.[1]
- ☐ Air brake system—Check the time needed for filling.
- ☐ Air brake system—Check function of secondary brake and park position (park lock).
- ☐ Air brake system—Visual inspection and operational check of couplers.
- ☐ Park lock—Operational check
- ☐ All trailer hitches

CHANGE:

- ☐ Fuel filter
- ☐ Engine oil and engine oil filter[2]
- ☐ Engine—Filter on crankcase vent (oil separator)
- ☐ Electrical Hydraulic Pump—Oil
- ☐ Hydraulic oil filter
- ☐ Transmission oil filter
- ☐ Front PTO—Oil filter
- ☐ Front-wheel drive axle—Final drives with brake, oil
- ☐ Cab—Activated carbon filter (if equipped)[3]
- ☐ Cab suspension—Fill pressure accumulator

LUBRICATE: Grease fittings (if equipped)

- ☐ Front hitch—Cylinder and three-point hitch
- ☐ Front-wheel drive axle—Pivot bearing
- ☐ Front-wheel drive axle—All universal joints including universal-jointed shaft
- ☐ Front axle suspension—Hydraulic cylinder
- ☐ Universal-jointed shaft between engine and transmission
- ☐ Universal-jointed shaft between engine and front PTO
- ☐ Cab suspension—Lubricating points
- ☐ All trailer hitches
- ☐ Three-point hitch—Lift links and rockshaft
- ☐ Draft link bearings
- ☐ Rear PTO—PTO stub shaft support (reversible PTO stub shaft)

[1] If condensed water drains out, replace receiver-drier cartridge, otherwise do this every 1500 hours or every 2 years at the latest.
[2] See Engine Oil and Filter Change and Service Intervals for Engine Oil and Engine Oil Filter
[3] See Service the Engine Air Cleaner and Cab Air Filters

Hours: Comments: . . . . . Dealer's Stamp:

Date: . . . . . .

Work carried out by: . . . . . .

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OULXA64,6R,750H,MW67,0005FCF-19-05SEP23

Service after 9000 Operating Hours

CLEAN:

- ☐ Engine air cleaner—Clean the dust unloading valve.
- ☐ Clean radiator, viscous fan, condenser, and engine environment.
- ☐ Service fuel tank and drain water separator.
- ☐ Fuel tank vent—Check filter (if equipped).
- ☐ DEF tank vent—Check filter.
- ☐ Clean DEF tank[4]

ELECTRICAL SYSTEM:

- ☐ Access the diagnostic trouble codes, and rectify fault. Then delete the diagnostic trouble codes.
- ☐ Check the movement inhibitor.
- ☐ PTO actuation—Check safety device.
- ☐ Fuse box—Visually inspect and clean
- ☐ Check lights.
- ☐ Check settings of headlights.
- ☐ Check that all accessible ground cables are secure.

CHECK SCREW TORQUES:

- ☐ Wheels—Front and rear wheels
- ☐ Wheels—Wheel disk on rim
- ☐ Wheels—Wheel weights
- ☐ Wheels—Dual wheel attachment
- ☐ Drawbar
- ☐ Trailer hitch, guide rails
- ☐ Trailer Hitch
- ☐ Pickup hitch
- ☐ Front hitch—Mounting frame
- ☐ Front loader mounting frame

CHECK:

- ☐ Engine—Check drive belt for wear (rubbing).
- ☐ Engine—Adjust valve tappets.
- ☐ Coolant level
- ☐ Air intake hoses—Check for leaks.
- ☐ Front-axle suspension—Accumulator check
- ☐ Check leak-off oil container (if equipped).
- ☐ Cab—Check all rubber seals of the doors and windows as well as the cable feedthroughs for proper seating, wear, and brittleness.
- ☐ Cab—Check function of all closing mechanisms of the doors and windows.
- ☐ Inspect seat belt for damage and ensure proper working order.
- ☐ Brake system—Bleed and check.
- ☐ Service brake—Operational check
- ☐ Secondary brake—Operational check
- ☐ Air brake system—Check compressed-air tank for condensed water.
- ☐ Air brake system—Check the time needed for filling.
- ☐ Air brake system—Check function of secondary brake and park position (park lock).
- ☐ Air brake system—Visual inspection and operational check of couplers.
- ☐ Park lock—Operational check
- ☐ All trailer hitches

CHANGE:

- ☐ Fuel filter
- ☐ Filter of the DEF dosing unit[4]
- ☐ In-line DEF filter [4]
- ☐ Engine oil and engine oil filter[2]
- ☐ Engine—Filter on crankcase vent (oil separator)
- ☐ Engine air cleaner—Primary filter[3]
- ☐ Engine air cleaner—Secondary filter[3]
- ☐ Electrical Hydraulic Pump—Oil
- ☐ Hydraulic oil filter
- ☐ Transmission oil filter
- ☐ Transmission and hydraulic system—Replace oil and clean intake screens.
- ☐ Front PTO—Oil filter
- ☐ Front PT—Oil
- ☐ Front-wheel drive axle—Axle housing, oil
- ☐ Front-wheel drive axle—Final drives with brake, oil
- ☐ Cab—Activated carbon filter (if equipped)[3]
- ☐ Cab air filter[3]
- ☐ Cab—Recirculation air filters[3]
- ☐ Cab suspension—Fill pressure accumulator
- ☐ Air brake system—Change receiver-drier cartridge.

LUBRICATE: Grease fittings (if equipped)

- ☐ Front hitch—Cylinder and three-point hitch
- ☐ Front-wheel drive axle—Pivot bearing
- ☐ Front-wheel drive axle—All universal joints including universal-jointed shaft
- ☐ Front axle suspension—Hydraulic cylinder
- ☐ Universal-jointed shaft between engine and transmission
- ☐ Universal-jointed shaft between engine and front PTO
- ☐ Cab suspension—Lubricating points
- ☐ All trailer hitches
- ☐ Three-point hitch—Lift links and rockshaft
- ☐ Draft link bearings
- ☐ Rear PTO—PTO stub shaft support (reversible PTO stub shaft)

[2] See Engine Oil and Filter Change and Service Intervals for Engine Oil and Engine Oil Filter
[3] See Service the Engine Air Cleaner and Cab Air Filters
[4] See Service the DEF System

Hours: Comments: . . . . . Dealer's Stamp:

Date: . . . . . .

Work carried out by: . . . . . .

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OULXA64,6R,750H,MW67,0005FD0-19-05SEP23

Service after 9750 Operating Hours

CLEAN:

- ☐ Engine air cleaner—Clean the dust unloading valve.
- ☐ Clean radiator, viscous fan, condenser, and engine environment.
- ☐ Service fuel tank and drain water separator.

ELECTRICAL SYSTEM:

- ☐ Access the diagnostic trouble codes, and rectify fault, then delete the diagnostic trouble codes.
- ☐ Check the movement inhibitor.
- ☐ PTO actuation—Check safety device.
- ☐ Fuse box—Visually inspect and clean
- ☐ Check lights.
- ☐ Check settings of headlights.
- ☐ Check that all accessible ground cables are secure.

CHECK SCREW TORQUES:

- ☐ Wheels—Front and rear wheels
- ☐ Wheels—Wheel disk on rim
- ☐ Wheels—Wheel weights
- ☐ Wheels—Dual wheel attachment
- ☐ Drawbar
- ☐ Trailer hitch, guide rails
- ☐ Trailer hitch
- ☐ Pickup hitch
- ☐ Front hitch mounting frame
- ☐ Front loader mounting frame

CHECK:

- ☐ Engine—Check drive belt for wear (rubbing).
- ☐ Coolant level
- ☐ Air intake hoses—Check for leaks.
- ☐ Front-wheel drive axle—Axle housing, oil level
- ☐ Transmission and hydraulic system—Oil level
- ☐ Check leak-off oil container (if equipped).
- ☐ Cab—Check all rubber seals of the doors and windows as well as the cable feedthroughs for proper seating, wear, and brittleness.
- ☐ Cab—Check function of all closing mechanisms of the doors and windows.
- ☐ Inspect seat belt for damage and ensure proper working order.
- ☐ Brake system—Bleed and check.
- ☐ Service brake—Operational check
- ☐ Secondary brake—Operational check
- ☐ Air brake system—Check compressed-air tank for condensed water.[1]
- ☐ Air brake system—Check the time needed for filling.
- ☐ Air brake system—Check function of secondary brake and park position (park lock).
- ☐ Air brake system—Visual inspection and operational check of couplers.
- ☐ Park lock—Operational check
- ☐ All trailer hitches

CHANGE:

- ☐ Fuel filter
- ☐ Engine oil and engine oil filter[2]
- ☐ Engine—Filter on crankcase vent (oil separator)
- ☐ Electrical Hydraulic Pump—Oil
- ☐ Hydraulic oil filter
- ☐ Transmission oil filter
- ☐ Front PTO—Oil filter
- ☐ Front-wheel drive axle—Final drives with brake, oil
- ☐ Cab—Activated carbon filter (if equipped)[3]
- ☐ Cab suspension—Fill pressure accumulator

LUBRICATE: Grease fittings (if equipped)

- ☐ Front hitch—Cylinder and three-point hitch
- ☐ Front-wheel drive axle—Pivot bearing
- ☐ Front-wheel drive axle—All universal joints including universal-jointed shaft
- ☐ Front axle suspension—Hydraulic cylinder
- ☐ Universal-jointed shaft between engine and transmission
- ☐ Universal-jointed shaft between engine and front PTO
- ☐ Cab suspension—Lubricating points
- ☐ All trailer hitches
- ☐ Three-point hitch—Lift links and rockshaft
- ☐ Draft link bearings
- ☐ Rear PTO—PTO stub shaft support (reversible PTO stub shaft)

[1] If condensed water drains out, replace receiver-drier cartridge, otherwise do this every 1500 hours or every 2 years at the latest.
[2] See Engine Oil and Filter Change and Service Intervals for Engine Oil and Engine Oil Filter
[3] See Service the Engine Air Cleaner and Cab Air Filters

Hours: Comments: . . . . . Dealer's Stamp:

Date: . . . . . .

Work carried out by:

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OULXA64,6R,750H,MW67,0005FD1-19-05SEP23

Service after 10000 Operating Hours

CLEAN:

- ☐ Engine air cleaner—Clean the dust unloading valve.
- ☐ Clean radiator, viscous fan, condenser, and engine environment.
- ☐ Check fuel filter.

ELECTRICAL SYSTEM:

- ☐ Access the diagnostic trouble codes, and rectify fault. Then delete the diagnostic trouble codes.
- ☐ Check lights.

Check:

- ☐ Engine oil level
- ☐ Coolant level
- ☐ Transmission and hydraulic system—Oil level
- ☐ Check leak-off oil container (if equipped).
- ☐ Check brakes
- ☐ Air brake system—Check compressed-air tank for condensed water.[1]

CHANGE:

- ☐ Engine torsion damper (6-cylinder engines only)
- ☐ Front-axle suspension—Pressure accumulators
- ☐ Cab suspension—Pressure accumulators

LUBRICATE: Grease fittings (if equipped)

- ☐ Front hitch—Cylinder and three-point hitch
- ☐ Front-wheel drive axle—Pivot bearing
- ☐ Front-wheel drive axle—All universal joints including universal-jointed shaft
- ☐ Front axle suspension—Hydraulic cylinder
- ☐ Universal-jointed shaft between engine and transmission
- ☐ Universal-jointed shaft between engine and front PTO
- ☐ Cab suspension—Lubricating points
- ☐ All trailer hitches
- ☐ Three-point hitch—Lift links and rockshaft
- ☐ Draft link bearings

[1] If condensed water drains out, replace receiver-drier cartridge, otherwise do this every 1500 hours or every 2 years at the latest.

Hours: Comments: . . . . . Dealer's Stamp:

Date: . . . . . .

Work carried out by: . . . . . .

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OULXA64,6R,750H,MW67,0005FD2-19-05SEP23

Information about Further Services

IMPORTANT: The following pages are for the documentation of all further services. Perform service work as described in this Operator's Manual. Refer to this Section to find a list with the jobs involved at each service interval.

The following table illustrates which service interval should be applied when a certain number of operating hours has been reached.

EXAMPLE: A machine with **18 000** hours on the hour meter needs to be serviced.

To do this, find out which service is applicable.

The table clearly shows that after **18 000** operating hours, the same servicing as after **4500** and **6000** hours of operation must be performed.

Hours of operation:	Service to be performed:	Hours of operation:	Service to be performed:
100	100	10500	1500
750	750	11250	750
1500	1500	12000	6000
2250	750	12750	750
3000	3000	13500	4500
3750	750	14250	750
4500	4500	15000	3000
5250	750	15750	750
6000	6000	16500	1500
6750	750	17250	750
7500	1500	18000	4500 + 6000
8250	750	18750	750
9000	3000 + 4500	19500	1500
9750	750	20250	750

Example showing how to fill out a record of further services:

The performed service corresponds to a ...**4500 + 6000**... hour service.	Hours of operation displayed:.....**18000**
Comments:	Date:.....xxx
xxx	Signature:.....xxx
xxx	Stamp:
xxx	

OULXA64,750STD,0005422-19-20SEP22

Record for Further Services

The service performed corresponds to a ..... hour service.	Hours of operation displayed: . . . . .
Comments:	Date:. . . . .
	Signature: . . . . .
. . . . .	Stamp:
. . . . .	
. . . . .	

The service performed corresponds to a ..... hour service. Comments:	Hours of operation displayed: . . . . . . Date:. . . . . . Signature: . . . . . . Stamp:

The service performed corresponds to a ..... hour service. Comments:	Hours of operation displayed: . . . . . . Date:. . . . . . Signature: . . . . . . Stamp:

The service performed corresponds to a ..... hour service. Comments:	Hours of operation displayed: . . . . . . Date:. . . . . . Signature: . . . . . . Stamp:

The service performed corresponds to a ..... hour service. Comments:	Hours of operation displayed: . . . . . . Date:. . . . . . Signature: . . . . . . Stamp:

The service performed corresponds to a ..... hour service. Comments:	Hours of operation displayed: . . . . . . Date:. . . . . . Signature: . . . . . . Stamp:

The service performed corresponds to a ..... hour service. Comments:	Hours of operation displayed: . . . . . . Date:. . . . . . Signature: . . . . . . Stamp:

The service performed corresponds to a ..... hour service. Comments:	Hours of operation displayed: . . . . . . Date:. . . . . . Signature: . . . . . . Stamp:

The service performed corresponds to a ..... hour service. Comments:	Hours of operation displayed: . . . . . . Date:. . . . . . Signature: . . . . . . Stamp:

The service performed corresponds to a ..... hour service. Comments:	Hours of operation displayed: . . . . . . Date:. . . . . . Signature: . . . . . . Stamp:

The service performed corresponds to a ..... hour service. Comments:	Hours of operation displayed: . . . . . . Date:. . . . . . Signature: . . . . . . Stamp:

The service performed corresponds to a ..... hour service. Comments:	Hours of operation displayed: . . . . . . Date:. . . . . . Signature: . . . . . . Stamp:

The service performed corresponds to a ..... hour service. Comments:	Hours of operation displayed: . . . . . . Date:. . . . . . Signature: . . . . . . Stamp:

The service performed corresponds to a ..... hour service. Comments:	Hours of operation displayed: . . . . . . Date:. . . . . . Signature: . . . . . . Stamp:

The service performed corresponds to a ..... hour service. Comments:	Hours of operation displayed: . . . . . . Date:. . . . . . Signature: . . . . . . Stamp:

The service performed corresponds to a ..... hour service. Comments:	Hours of operation displayed: . . . . . . Date:. . . . . . Signature: . . . . . . Stamp:

The service performed corresponds to a ..... hour service. Comments:	Hours of operation displayed: . . . . . . Date:. . . . . . Signature: . . . . . . Stamp:

The service performed corresponds to a ..... hour service. Comments:	Hours of operation displayed: . . . . . . Date:. . . . . . Signature: . . . . . . Stamp:

The service performed corresponds to a ..... hour service. Comments:	Hours of operation displayed: . . . . . . Date:. . . . . . Signature: . . . . . . Stamp:

The service performed corresponds to a ..... hour service. Comments:	Hours of operation displayed: . . . . . . Date:. . . . . . Signature: . . . . . . Stamp:

LX25458,ALL,0000B1A-19-29SEP20

Clean CommandCenter™ Screen

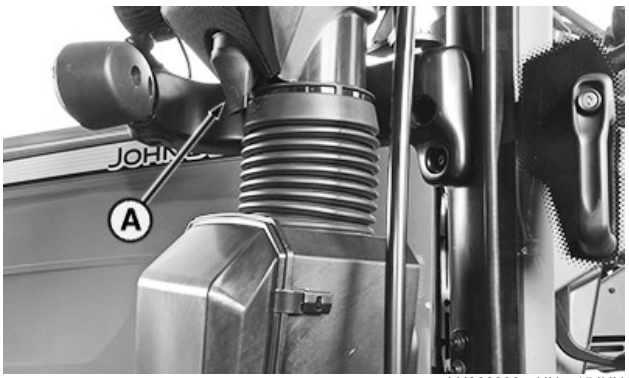
IMPORTANT: Always clean the screen with power to the device off. Cleaning the screen while operating could result in unintended button selections.

To clean the display, power down and wipe screen with a soft cloth sprayed with a non-ammonia based cleaner, such as John Deere glass or multipurpose cleaner.

OULXA64,0005A19-19-26JAN21

Clean Dust Unloading Valve

IMPORTANT: Do not run the engine when the dust-unloading valve is removed!



LX266899—UN—15JUN16

Remove deposits by squeezing the valve.

During harvesting, grass and chaff may affect the performance of the valve. Remove the valve and clean it. Replace any damaged valve.

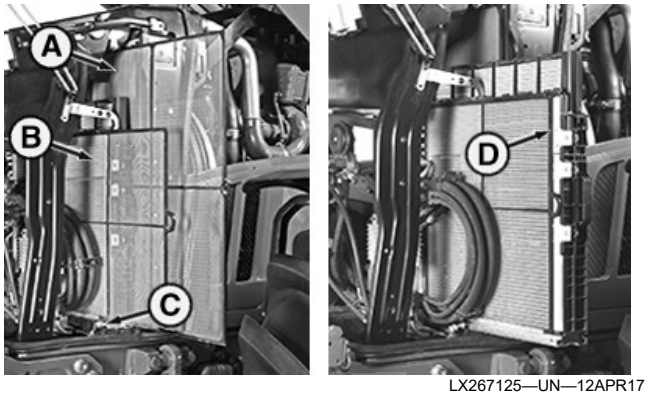
OULXA64,6R,MW67,0005FD5-19-27OCT21

Clean Radiator, Viscous Fan, Condenser, and Engine Environment

For engine operation and cooling performance, the cleanliness of the components in the cooling system is important.

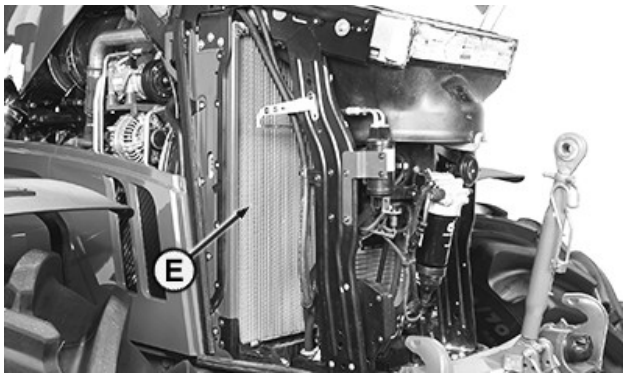
Remove dirt from the engine environment, cooling fins, and protective screen.

1. Pull protective screens (A) and (B) (if equipped) to the side and remove dirt.



LX267125—UN—12APR17

Protective Screen/Combined Cooler

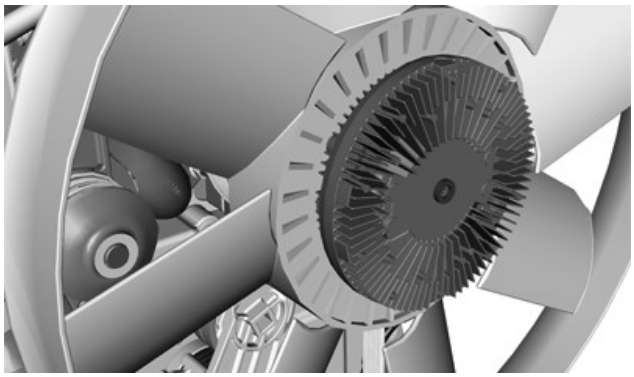


LX266864—UN—14JUN16

Radiator

A—Protective Screen
B—Protective Screen
C—Retaining Stud
D—Combined Cooler
E—Engine Radiator

2. Unfasten retaining stud (C) and pull combined cooler (D) to the side.
3. Remove dirt from engine radiator (E) and combined cooler (D). When re-installing the combined cooler, make sure that it is positioned centrally in relation to the radiator and engages in the guide rails properly.
4. Re-install and engage retaining stud (C).
5. Re-install screens of combined cooler and radiator.
6. Clean the cooling fins of the viscous fan.



LX341507—UN—31JUL18

Clean Cooling Fins of Viscous Fan

OULXA64,6R,MW67,0005FD6-19-27OCT21

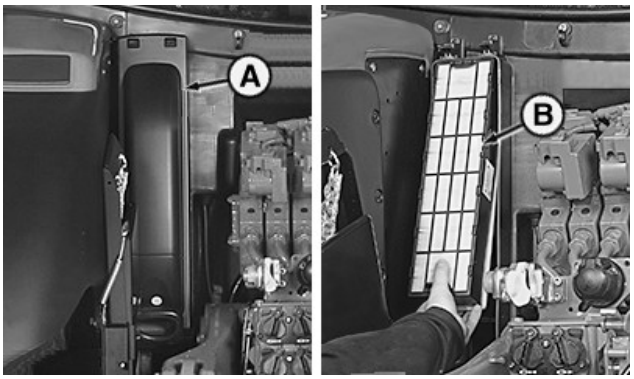
Clean Cab Air Filters

CAUTION: It is not permitted to clean the air filter if the cab has been retrofitted with activated carbon filters. Activated carbon filters have to be replaced with new ones.

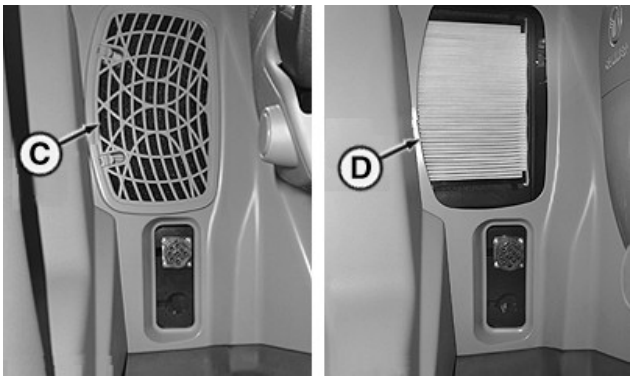
IMPORTANT: Change cab air filters every 1500 hours or 2 years.

NOTE: If the cab has been retrofitted with activated carbon filters, a service interval of 750 operating hours or once every year at the latest applies.

1. Remove covers (A) and (C) and take out the filters.



LX267126—UN—12APR17



LX267127—UN—12APR17

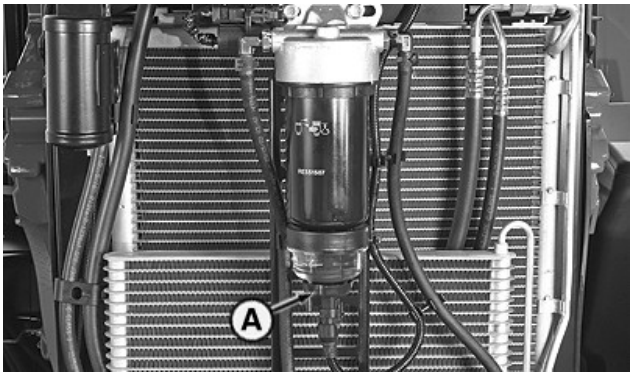
2. If required, remove cab air filter (B) and the two recirculation air filters (D) and tap them.
3. Clean air filter housing and air passages of dust.
4. For installation, follow removal procedure in reverse order.

   Before closing the cover, make sure that the fresh air filter element is correctly installed in its groove.

OULXA64,0005A1C-19-26JAN21

Check the Fuel Filter (6-Cylinder Engines)

If water or sediment deposits have settled in filter, proceed as follows:

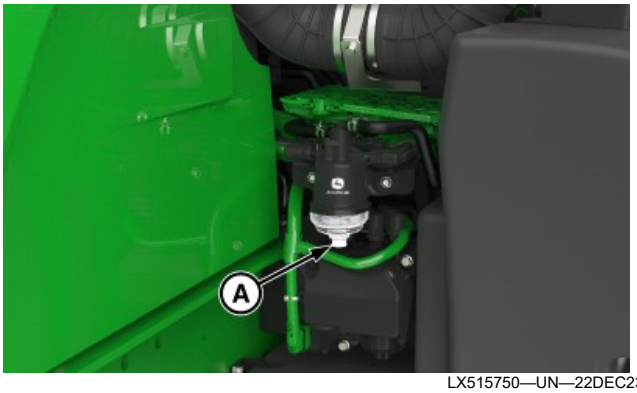


LX514862—UN—04FEB22

Example: Primary Fuel Filter

LX515754—UN—20DEC23

Example: Aditional Fuel Filter (if equipped)



LX515750—UN—22DEC23

Example: Aditional Fuel Filter (if equipped)

A—Drain Screw

Depending on the version, the filter is mounted in a different position.

1. Open drain screws (A) by 3/4 of a turn and drain water into a suitable container.
2. Retighten the screw as soon as water and sediment deposits have drained out.
3. Turn key in key switch to the right to the first switch

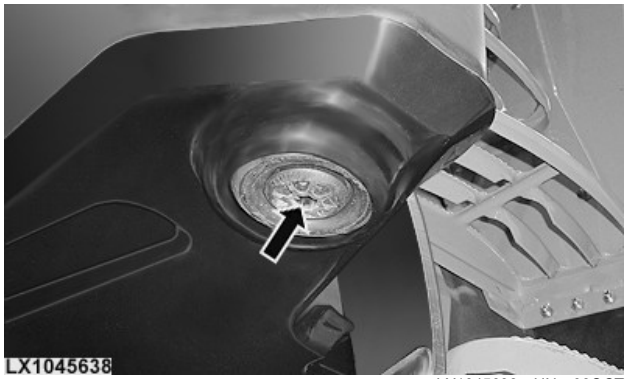
position so that the fuel transfer pump is operating. Keep the pump running for approx. 120 seconds.

If water was present in the fuel filter, then drain water separator of the fuel tank. Refer to Service Fuel Tank in this section.

220A,06,6CYL,6R,OULXA64,00056EA-19-22DEC23

Service Fuel Tank

Use a 1/2 inch square-section key to slacken off the drain screw by one turn. Drain water and sludge. Reinsert drain screw and tighten by hand.



LX1045638—UN—08OCT10

220A,07,ALL,25458,0000B43-19-22DEC23

Check Filter of Fuel Tank Vent (Only for Tank Caps with Bayonet Lock and a Short Shaft)

NOTE: When operating in a very dusty environment, check the tank vent filter occasionally for encrustation.

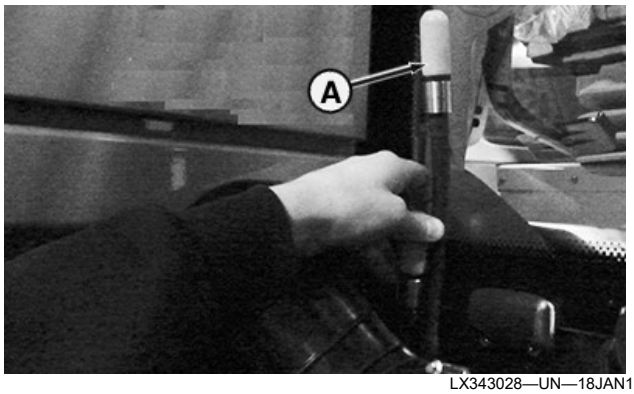
NOTE: Check filter only on tractors with the fuel cap shown.

LX514951—UN—26JUN23

1. Unfasten filter (A) from bracket and move it out to the side.

LX315168—UN—25MAY18

2. Check filter (A) for encrustations. If necessary, unscrew and replace filter.



LX343028—UN—18JAN18

NOTE: Screw in new filter finger-tight.

3. For installation, reverse the removal procedure.

OULXA64,6R,0005A9B-19-26JUN23

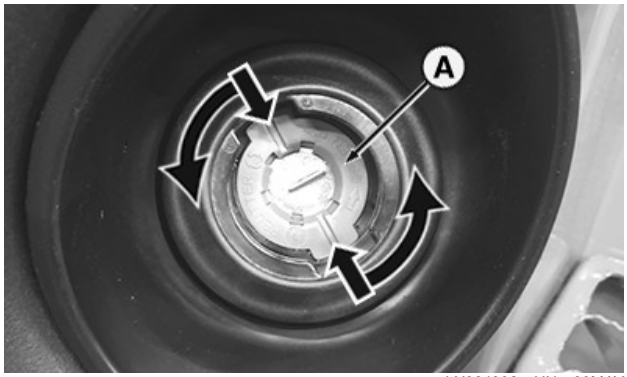
Clean Screen on Filler Neck of DEF Tank

CAUTION: Avoid contact with eyes. If there is contact, immediately flush eyes with large amounts of water for at least 15 minutes. Reference the Materials Safety Data Sheet (MSDS) for additional information.

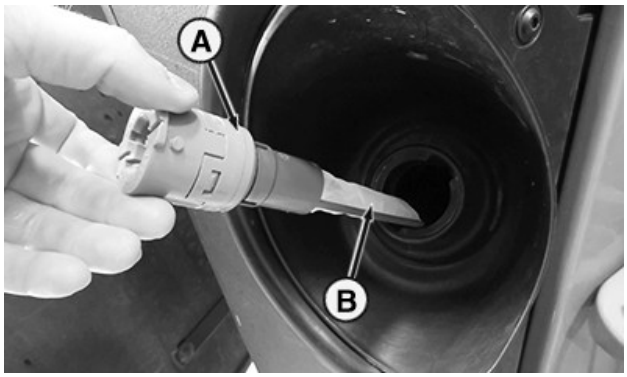
IMPORTANT: If DEF is spilled or contacts any surface other than the storage tank, immediately clean the surface with clear water. DEF is corrosive to painted and unpainted metallic surfaces and can distort some plastic and rubber components.

Spilled DEF, if left to dry or if only wiped away with a cloth, leaves a white residue. Improperly cleaned DEF spill may interfere with diagnosis of selective catalytic reduction (SCR) system leakage problems.

1. Remove the cap of the DEF tank.
2. Turn filler neck (A) counterclockwise with a suitable tool and remove.



LX364392—UN—09MAY19



LX360365—UN—04APR19

Sample Illustration

A—Filler Neck
B—Screen

3. Clean screen (B) with distilled water or DEF and check for damage. Replace damaged parts.
4. For installation, reverse the removal procedure.

220A,09,ALL,LX25458,0000B44-19-22DEC23

Check Filter of DEF Tank Vent

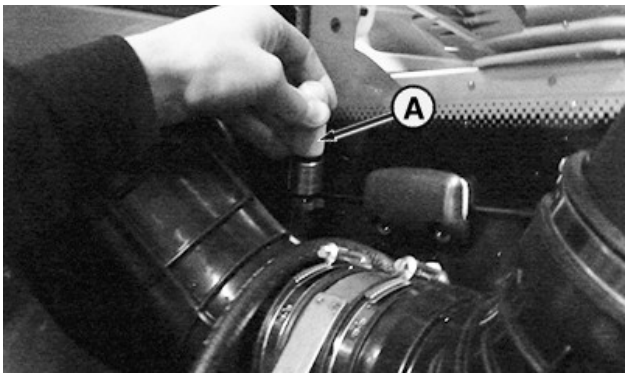
CAUTION: Avoid contact with eyes. In case of contact, immediately flush eyes with large amounts of water for a minimum of 15 minutes. Further information can be found in the safety data sheet.

IMPORTANT: When DEF comes into contact with any materials, immediately clean with water.

NOTE: When operating in a very dusty environment, check the tank vent filter occasionally for encrustation.

1. Unfasten filter (A) from bracket and move it out to the side.

LX343025—UN—18JAN18



LX343026—UN—18JAN18

2. Check filter (A) for encrustations. If necessary, unscrew and replace filter.

NOTE: Screw in new filter finger-tight.

3. Reverse for installation.

OULXA64,6R,MW67,0005FD8-19-14APR23

Cleaning Diesel Exhaust Fluid (DEF) Tank

CAUTION: Avoid contact with eyes. In case of contact, immediately flush eyes with large amounts of water for a minimum of 15 minutes. Reference the Materials Safety Data Sheet (MSDS) for additional information.

IMPORTANT: If DEF is spilled or contacts any surface other than the storage tank, immediately clean the surface with clear water. DEF is corrosive to painted and unpainted metallic surfaces and can distort some plastic and rubber components.

Spilled DEF, if left to dry or if only wiped away with a cloth, leaves a white residue. Improperly cleaned DEF spill can interfere with diagnosis of Selective Catalytic Reduction (SCR) system leakage problems.

If foreign material or fluid has been added to the DEF tank, drain the DEF tank, flush, and fill with new DEF.

If DEF quality is in question, pull a sample out of the

DEF tank and place into a clear container. DEF should be crystal clear with a light ammonia smell. If DEF appears cloudy, has a colored tint, or has a profound ammonia smell, it is likely not within specification. DEF in this condition should not be used.

1. Remove drain plug (if equipped), and drain or siphon bad DEF from DEF tank.

NOTE: Cleaning can take place with DEF tank installed or removed.

2. Clean DEF tank with new DEF.

   DEF must pass visual, smell, and concentration checks before running the engine. See Diesel Exhaust Fluid (DEF) – For Use In Selective Catalytic Reduction (SCR) Equipped Engines in the Fuels, Lubricants, and Coolants Section for more information.

3. Drain or siphon DEF tank.

NOTE: Repeat steps 2—3 until DEF tank has been cleaned.

4. **Early version:** Change DEF dosing unit filter and DEF tank header suction screen.

   Later version: Change DEF dosing unit filter and DEF inline filter.

5. If removed, install DEF tank drain plug.
6. If removed, install DEF tank.
7. Fill DEF tank with new DEF.
8. Check DEF concentration with DEF refractometer, such as JDG11594 or JDG11684. The correct DEF concentration is 31.8% — 33.2%. See your authorized dealer for more information.
9. If DEF is not within specification, does not appear clear, or does not have a slight ammonia smell, contact your authorized dealer.

DX,DEF,CLEANTANK-19-18SEP19

Disconnect the Electrical Circuit of Battery

CAUTION: Danger of injury, danger of explosion! Observe the safety precautions, "Handling Batteries Safely" in section 05.

CAUTION:

DISCONNECT THE ELECTRICAL CIRCUIT: Disconnect ground cable at the negative terminal (—). Protect the connection points and the battery posts from being touched, e.g. by insulating them with suitable insulating tape.

BEFORE REMOVING THE BATTERY: Disconnect all battery terminals. Always disconnect the negative terminal (—) first and then the positive terminals (+). When reconnecting the battery start with the positive terminal (+) and then connect the negative terminal (—) last. The wrong order could cause serious damage to the electrical system and in the worst case an explosion.

IMPORTANT: It is recommended to remove the battery if the vehicle will not be used for more than 30 days. Clean the battery and store it in a cool, dry place and keep it fully charged. If a battery trickle charger is used, read the manufacturer's operating instructions to check whether the device is suitable for this.

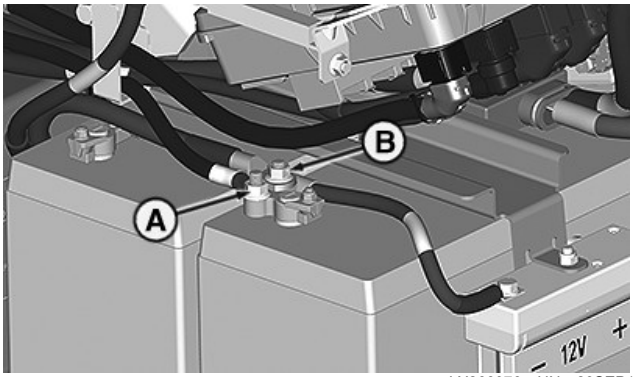
IMPORTANT: Wait at least 4 minutes after switching off the engine before disconnecting the electrical circuit. The DEF system needs this time to flush the leads. To ensure trouble-free operation of the DEF system, it is important to not interrupt this procedure by disconnecting the electrical circuit.

Disconnect electrical circuit:

1. Remove right access step (C). See Access to the Battery in this section.

LX288855—UN—27JUL16

2. Disconnect ground cable (B) and protect the connection points or the battery posts from being touched accidentally.



LX266976—UN—23SEP16

Fender is Removed For Clarity Of Viewing

IMPORTANT: When disconnecting the ground cable, make sure it is in the correct order. Reconnecting the ground cables is done in reverse order.

3. Disconnect ground cable (A) and protect the connection points or the battery posts from being touched accidentally.

OULXA64,MW67,0005EAB-19-06JUL23

Access to the Battery

NOTE: The battery is located behind the right access step.

Remove fasteners (A) and push up bushings (B).

LX287720—UN—30JUN16

Remove access step (C).

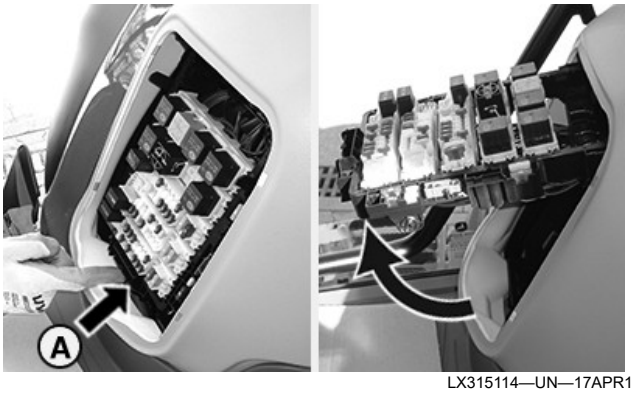
LX288855—UN—27JUL16

OULXA64,MW67,0005EAC-19-21SEP21

Access to Fuses

The fuse and relay box of the **L**oad **C**enter **S**econdary (LCS) circuit is located in the footwell of the right console.

Remove cover of fuse and relay box (LCS).

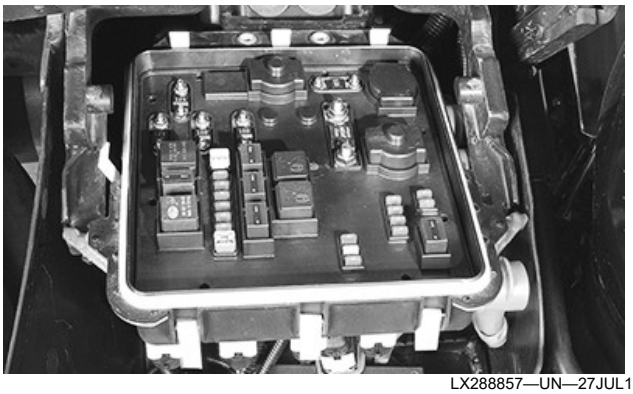


LX315114—UN—17APR18

Fuse Box in Footwell (LCS)

Release detent (A) and fold fuse box upwards.

The fuses and relays of the **P**ower **L**ink **B**ox (PLB) are located behind the right access step.

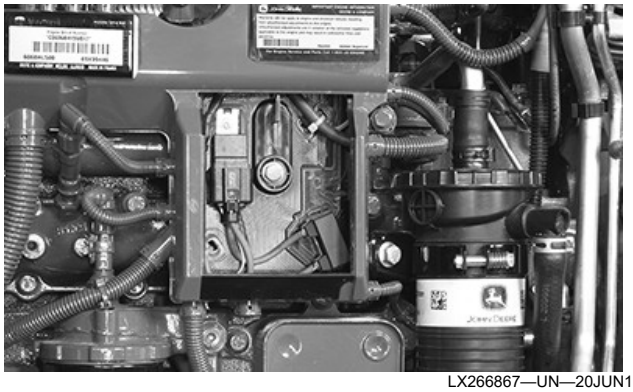


LX288857—UN—27JUL16

Fuse and Relay Box (PLB)

For access, refer also to Access to the Battery in this section.

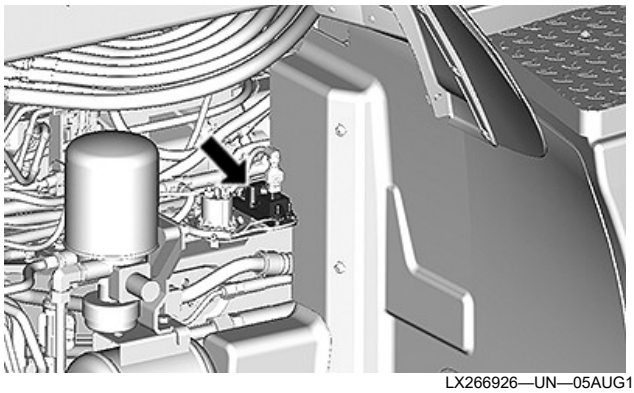
The fuse and relay of the electrical starting aid are located on the right side of the engine.



LX266867—UN—20JUN16

Fuse and Relay of Electrical Starting Aid

The fuses and relays for the trailer brake system are located on the main frame behind the right rear wheel.



LX266926—UN—05AUG16

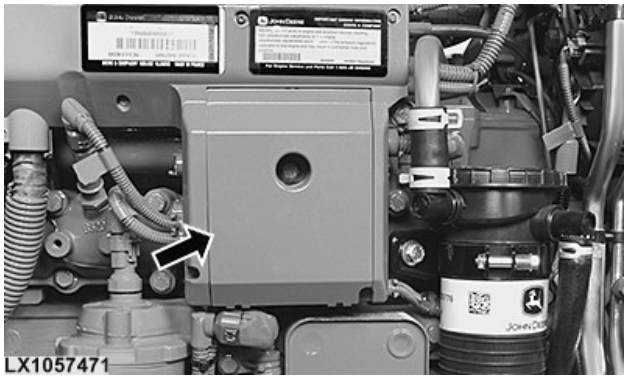
Fuses and Relays for the Trailer Brake System

OULXA64,MW67,0005EAD-19-18APR23

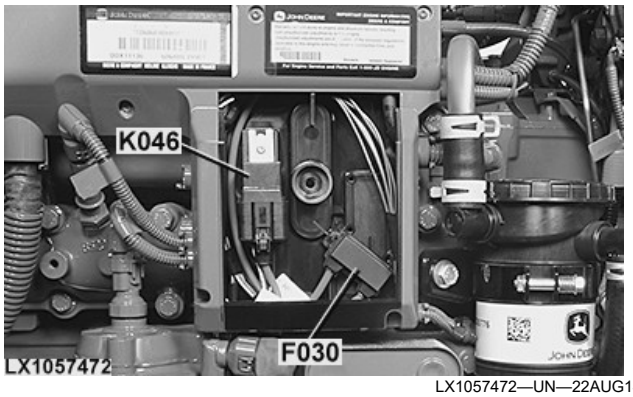
Fuse and Relay of Electrical Starting Aid

IMPORTANT: To prevent damage to the electrical system, never use a fuse with a rating higher than the one stated in the table.

IMPORTANT: Some fuse positions are vacant when the tractor is delivered; these must be left vacant until the appropriate options are retro-fitted.



LX1057471—UN—22AUG14



LX1057472—UN—22AUG14

Fuse (F030) and relay (K046) are located under a cover on the right side of the engine.

Open engine hood and remove the cover.

Check the 70-amp fuse (F030) and the 70-amp relay (K046), and replace if necessary.

Install cover and close hood.

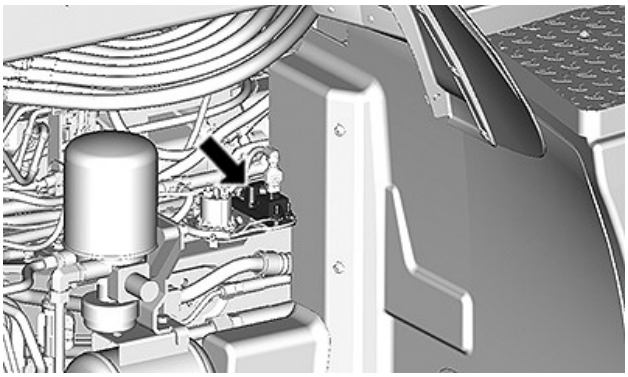
OULXA64,6R,00059FE-19-27AUG21

Fuses and Relays for Trailer Brake System

General Information

IMPORTANT: To prevent damage to the electrical system, never use a fuse with a rating higher than the one stated in the table.

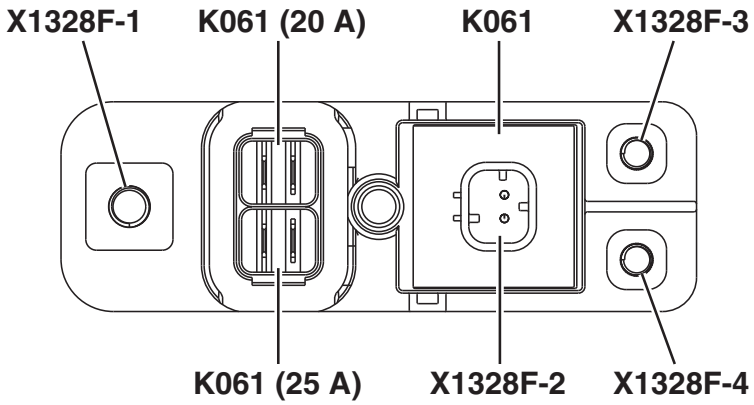
The fuse and relay of the trailer brake system is on the right side of the main frame.



LX266926—UN—05AUG16

Fuses and Relays for Trailer Brake System

Summary of Fuses and Relays for Trailer Brake System



LX288870

LX288870—UN—23AUG16

K061 - Fuses				K061 -Relay		
Fuse no.	**Rating (amps)**	**Consumer**		**Relay no.**	**Rating (amps)**	**Consumer**
K061	20 A	Trailer Brake System		K061		Relay for the **Trailer Brake System**
K061	25 A	Trailer Brake System				

OULXA64,MW67,0005EAF-19-11APR23

Fuse and Relay Box (PLB)

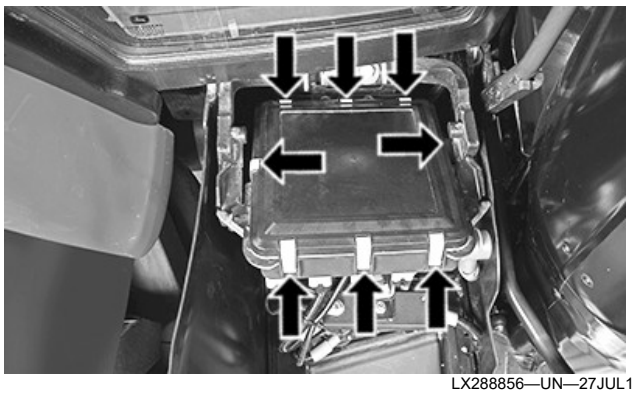
General Information

IMPORTANT: To prevent damage to the electrical system, never use a fuse with a rating higher than specified on the arrangement diagram.

IMPORTANT: Some fuse/relay positions are vacant when the tractor is delivered; these must be left vacant until the appropriate option is retrofitted.

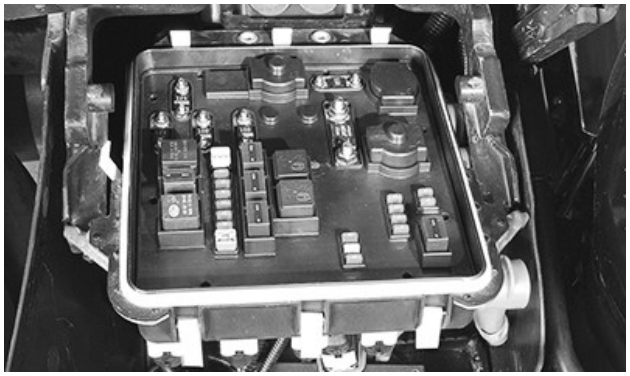
NOTE: Depending on how the tractor is equipped, it may not have all the fuses and relays shown.

The fuses and relays of the **P**ower **L**ink **B**ox (PLB) is located behind the right access step.



LX288856—UN—27JUL16

PLB - Cover of Fuse and Relay Box

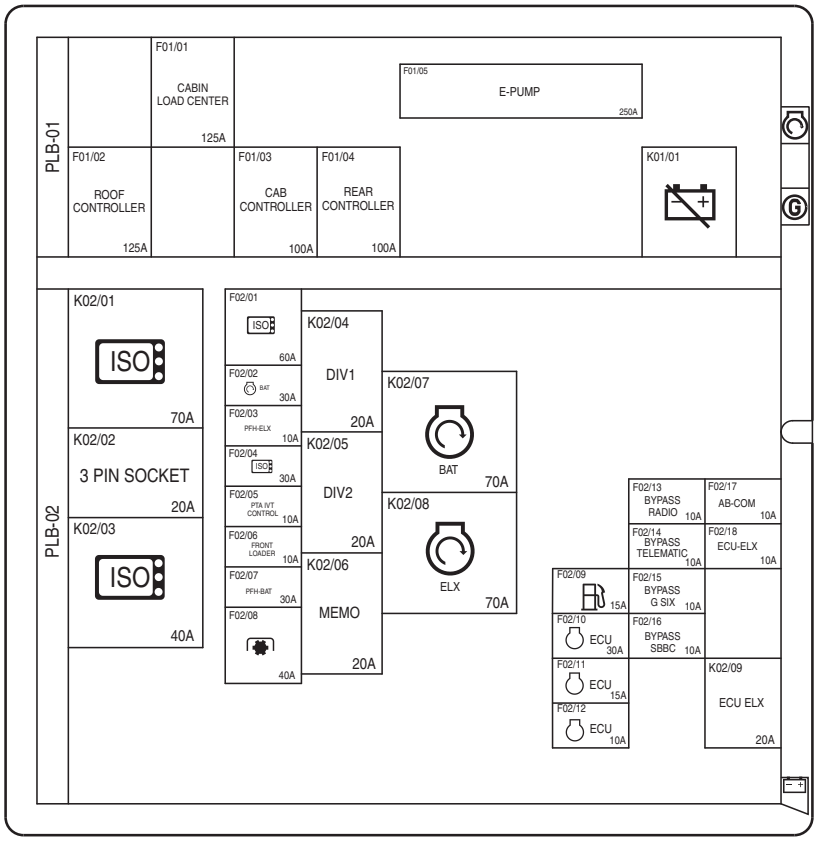


LX288857—UN—27JUL16

PLB - Fuse and Relay Box

1. To access the fuses and relays, remove the right access step. See Access to the Battery in this section.
2. Open clips at cover.
3. Remove fuse and relay box cover (PLB).

Overview of the Fuse and Relay Box (PLB)



LX500984—UN—02FEB21

Summary of Fuse and Relay Box (PLB)

Fuses and Relays (PLB)

Slot	Rating (Ampere)	Consumer	Slot	Rating (Ampere)	Consumer
F01/ 01_PLB	125 A	Power Supply of Fuse and Relay Box (LCS)	F02/ 01_PLB	60 A	Implement Sockets (Power Supply to Components)
F01/ 02_PLB	125 A	Power Supply of Roof Control Unit	F02/ 02_PLB	30 A	Starter Motor (Solenoid Switch) (ELX)
F01/ 03_PLB	100 A	Power Supply of Cab Control Unit	F02/ 03_PLB	10 A	3-Terminal Power Outlet Socket (Front Hitch)
F01/ 04_PLB	100 A	Power Supply of Rear Chassis Control Unit, Power Supply of Trailer Brake System	F02/ 04_PLB	30 A	Implement Sockets (Power Supply to Implement Control Units)
F01/ 05_PLB	250 A	Power Supply of Backup Hydraulic Pump	F02/ 05_PLB	10 A	AutoPowr™/IVT™ Control Unit (BAT)
K01/ 01_PLB		Battery Cut-Off Relay	F02/ 06_PLB	10 A	Diverter Valve Relay 1 and 2 (Front Loader)
K02/ 01_PLB	70 A	Relay for Implement Sockets (Power Supply to Components)	F02/ 07_PLB	30 A	3-Terminal Power Outlet Socket (Front Hitch) (BAT)
K02/ 02_PLB	20 A/40 A	Relay for 3-Terminal Power Outlet Socket (Front Hitch) and Front Loader Control Unit	F02/ 08_PLB	40 A	Solenoids for Rear PTO Speeds for Power-Assisted PTO Shifting (PAPTOS)
K02/ 03_PLB	20 A/40 A	Relay for Implement Sockets (Power Supply to Implement Control Units)	F02/ 09_PLB	——	Not Used
K02/ 04_PLB	20 A/40 A	Relay for Diverter Valve 1 (Front Loader)	F02/ 10_PLB	30 A	Engine Control Unit
K02/ 05_PLB	20 A/40 A	Relay for Diverter Valve 2 (Front Loader)	F02/ 11_PLB	15 A	Engine Control Unit

Slot	Rating (Ampere)	Consumer	Slot	Rating (Ampere)	Consumer
K02/ 06_PLB	20 A/40 A	Front Loader Suspension Valve	F02/ 12_PLB	15 A	Engine Control Unit
K02/ 07_PLB	70 A	Starter Relay 1 (ST)	F02/ 13_PLB	10 A	Radio (BAT)
K02/ 08_PLB	70 A	Starter Relay 2 (ELX)	F02/ 14_PLB	10 A	GreenStar™, JDLink™ (MTG) (BAT)
K02/ 09_PLB	20 A/40 A	Relay for ECU-ELX	F02/ 15_PLB	10 A	Processor 4200/4600 (BAT)
			F02/ 16_PLB	10 A	AutoTrac™ Control Unit (BAT)
			F02/ 17_PLB	10 A	AutoTrac™ Control Unit (AB-COM)
			F02/ 18_PLB	10 A	Engine Control Unit (AB-COM)

OULXA64,MW67,0005EB0-19-11APR23

Fuses and Relays (LCS) (AutoPowr™/IVT™ Transmission)

General Information

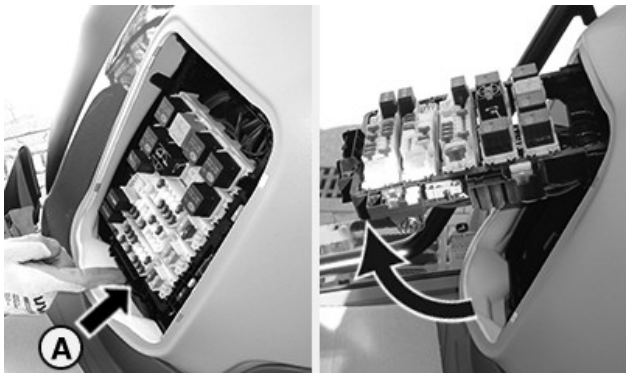
IMPORTANT: To prevent damage to the electrical system, never use a fuse with a rating higher than the one stated in the table.

IMPORTANT: Some fuse/relay positions are vacant when the tractor is delivered; these must be left vacant until the appropriate option is retrofitted.

NOTE: Depending on how the tractor is equipped, it may not have all the fuses and relays shown.

The fuse and relay box of the **L**oad **C**enter **S**econdary (LCS) circuit is located in the footwell of the right console.

Remove cover of fuse and relay box (LCS).



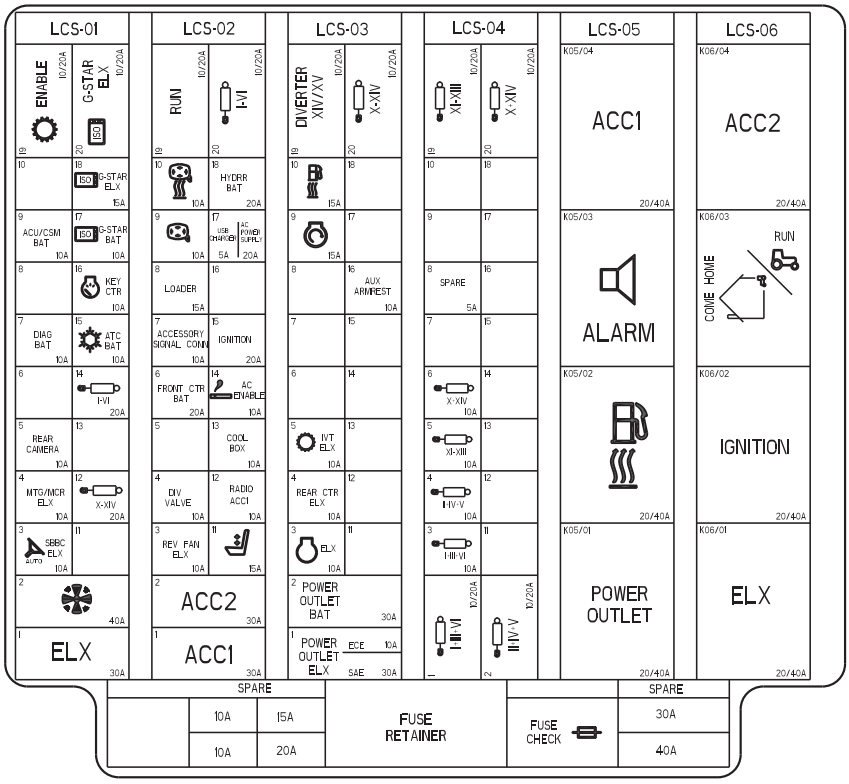
LX315114—UN—17APR18

Fuse Box in Footwell (LCS)

Release detent (A) and fold fuse box upwards.

Overview of the Fuse and Relay Box (LCS)

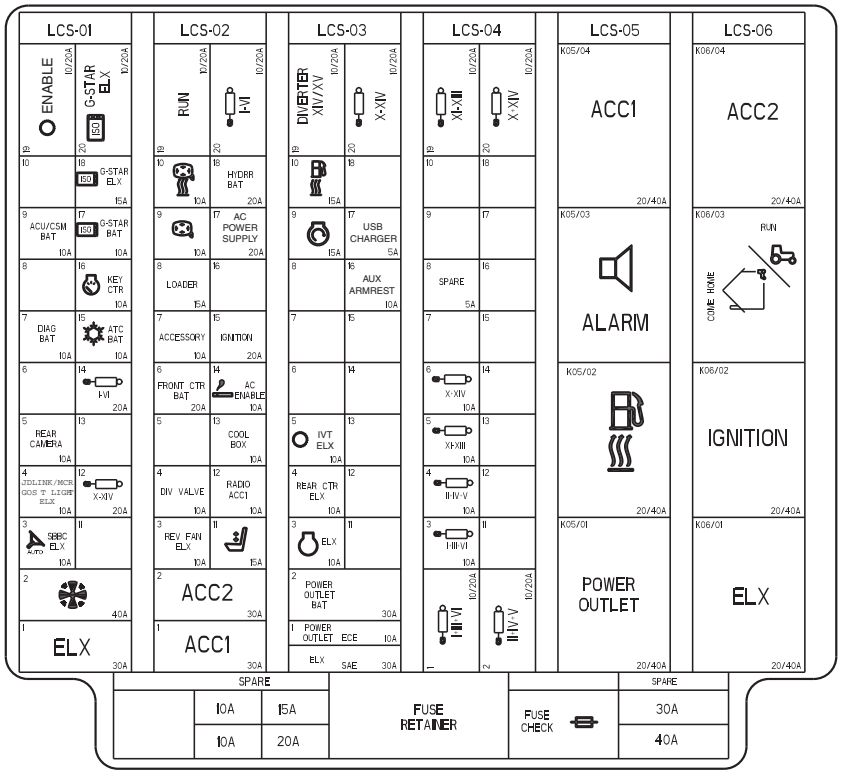
LCS, until MY23.5 - Summary of Fuses, Relays and Diodes



LX418756—UN—01FEB21

LCS, until MY23.5 *- AutoPowr™/IVT™ Transmission*

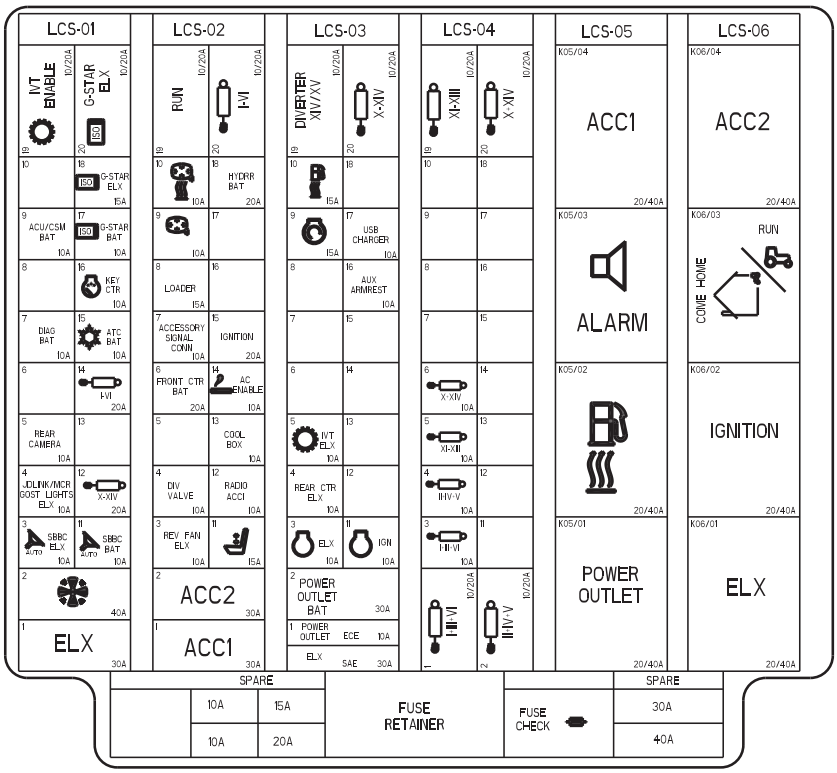
LCS, from MY23.5 - Summary of Fuses, Relays and Diodes



LX554100—UN—17NOV22

LCS, from MY23.5 - AutoPowr™/IVT™ Transmission

LCS, from MY24 - Summary of Fuses, Relays and Diodes



LX577349—UN—25MAY23

LCS, from MY24 - AutoPowr™/IVT™ Transmission

LCS-01 and LCS-02 - Fuses and Relays (LCS) with AutoPowr™/IVT™ Transmission

LCS-01 - Fuses and Relays (LCS) with AutoPowr™/IVT™ Transmission			LCS-02 - Fuses and Relays (LCS) with AutoPowr™/IVT™ Transmission		
Slot	**Rating (Ampere)**	**Consumer**	**Slot**	**Rating (Ampere)**	**Consumer**
F01/ 01_LCS	30 A	Power Supply to Electronics (ELX)	F02/ 01_LCS	30 A	Power Supply for Accessories (ACC1)
F01/ 02_LCS	40 A	Circulation Blower Motor	F02/ 02_LCS	30 A	Power Supply for Accessories (ACC2)
F01/ 03_LCS	10 A	AutoTrac™ Control Unit (ELX) (A132)	F02/ 03_LCS	10 A	Reversible Fan (ELX)
F01/ 04_LCS	10 A	JDLink™ (MTG) (ELX) (A155-1), John Deere Machine Sync (MCR) (ELX) (A160), Trailering Lights (GOST Lights) (If Equipped)	F02/ 04_LCS	10 A	Diverter Valve (E-SCVXIV/XV)
F01/ 05_LCS	10 A	Video Cameras	F02/ 05_LCS	——	Not Used
F01/ 06_LCS	——	Not Used	F02/ 06_LCS	20 A	Power Supply of Front Chassis Control Unit (A154) (Front PTO and Suspended Front Axle)
F01/ 07_LCS	10 A	Service Connector (CAN Bus)	F02/ 07_LCS	10 A	X037F-3 - Connector for Accessories (Lead 0372), Signal Socket, Front Loader Worklights
F01/ 08_LCS	——	Not Used	F02/ 08_LCS	15 A	X037F-1 - Connector for Accessories (Lead 0362), Front Loader, Electrohydraulic Pick-Up Hitch (E-PUH)
F01/ 09_LCS	10 A	CommandARM™ Control Unit (BAT) (A012)	F02/ 09_LCS	10 A	Electrical Outside Mirrors (Adjustment)

LCS-01 - Fuses and Relays (LCS) with AutoPowr™/IVT™ Transmission			LCS-02 - Fuses and Relays (LCS) with AutoPowr™/IVT™ Transmission		
Slot	**Rating (Ampere)**	**Consumer**	**Slot**	**Rating (Ampere)**	**Consumer**
F01/ 10_LCS	——	Not Used	F02/ 10_LCS	10 A	Electrical Outside Mirrors (Heating)
F01/ 11_LCS	——	Not Used	F02/ 11_LCS	15 A	Operator Seat
F01/ 12_LCS	20 A	Fuse for E-SCV Units (E-SCV X - XIV)	F02/ 12_LCS	10 A	Radio **SAE/CAN**: 10 A (ELX) **ECE**: 10 A (BAT)
F01/ 13_LCS	——	Not Used	F02/ 13_LCS	10 A	Refrigerator
F01/ 14_LCS	20 A	Fuse for E-SCV Units (E-SCV I - VI)	F02/ 14_LCS	10 A	Cigarette Lighter AC/DC Converter 230 V/115 V (ACC1)
F01/ 15_LCS	10 A	Temperature Control Unit (BAT) (A058)	F02/ 15_LCS	20 A	Power Supply of Switched Plus (IGN)
F01/ 16_LCS	10 A	Corner Post Display (A122) Immobilizer Control Unit (BAT) (A133)	F02/ 16_LCS	——	Not Used
F01/ 17_LCS	10 A	GreenStar™ (AMS) (BAT)	F02/ 17_LCS	**USB**: 5 A **AC/DC**: 20 A ——	USB Charger (5 A) (BAT), until MY23.5 Power Supply of AC/DC Converter (20 A), until MY24 Not Used, from MY24
F01/ 18_LCS	15 A	GreenStar™ (AMS) (ELX)	F02/ 18_LCS	20 A	Power Supply of Hydraulic Control Unit (A022) (Front Hitch, Front Loader, E-SCV) (BAT)
K01/ 19_LCS	10 A/20 A	Relay for AutoPowr™/IVT™ Transmission Enable	K02/ 19_LCS	10 A/20 A	Relay for Ignition (ST)
K01/ 20_LCS	10 A/20 A	Relay for GreenStar™ (AMS) (ELX)	K02/ 20_LCS	10 A/20 A	Relay for E-SCV Units (E-SCV I - VI)

LCS-03 and LCS-04- Fuses and Relays (LCS) with AutoPowr™/IVT™ Transmission

LCS-03 - Fuses and Relays (LCS) with AutoPowr™/IVT™ Transmission			LCS-04 - Fuses and Relays (LCS) with AutoPowr™/IVT™ Transmission		
Slot	**Rating (Ampere)**	**Consumer**	**Slot**	**Rating (Ampere)**	**Consumer**
F03/ 01_LCS	**SAE**: 30 A **ECE**: 10 A	Power Outlet (ELX): **SAE**: 3-Terminal Power Outlet Socket, Auxiliary Power Outlet Socket Strip, 7-Terminal Power Outlet Socket (30A) **ECE**: -3-Terminal Power Outlet Socket, Auxiliary Power Outlet Socket Strip (10A)	K04/ 01_LCS	10 A/20 A	Relay for E-SCV Units (E-SCV I, III, VI)
F03/ 02_LCS	30 A	Power Outlet (BAT): 3-Terminal Power Outlet Socket, Auxiliary Power Outlet Socket Strip (30A)	K04/ 02_LCS	10 A/20 A	Relay for E-SCV Units (E-SCV II, IV, V)
F03/ 03_LCS	10 A	Engine Control Unit (A021) Immobilizer Control Unit (ELX) (A133)	F04/ 03_LCS	10 A	Power Supply for E-SCV Units (E-SCV I, III, VI)
F03/ 04_LCS	10 A	Rear Chassis Control Unit (ELX) (A123)	F04/ 04_LCS	10 A	Power Supply forE-SCV Units (E-SCV II, IV, V)
F03/ 05_LCS	10 A	AutoPowr™/IVT™ Control Unit (ELX) (A013)	F04/ 05_LCS	10 A	Power Supply for E-SCV Units (E-SCV XI, XII, XIII)
F03/ 06_LCS	——	Not Used	F04/ 06_LCS	10 A	Power Supply for E-SCV Units (E-SCV X, XIV)
F03/ 07_LCS	——	Not Used	F04/ 07_LCS	——	Not Used
F03/ 08_LCS	——	Not Used	F04/ 08_LCS	5 A ——	Spare, until MY24 Not Used, from MY24
F03/ 09_LCS	15 A	Key Switch	F04/ 09_LCS	——	Not Used
F03/ 10_LCS	15 A	Fuel Preheater	F04/ 10_LCS	——	Not Used

LCS-03 - Fuses and Relays (LCS) with AutoPowr™/IVT™ Transmission			LCS-04 - Fuses and Relays (LCS) with AutoPowr™/IVT™ Transmission		
Slot	**Rating (Ampere)**	**Consumer**	**Slot**	**Rating (Ampere)**	**Consumer**
F03/ 11_LCS	——	Not Used	F04/ 11_LCS	——	Not Used
F03/ 12_LCS	——	Not Used	F04/ 12_LCS	——	Not Used
F03/ 13_LCS	——	Not Used	F04/ 13_LCS	——	Not Used
F03/ 14_LCS	——	Not Used	F04/ 14_LCS	——	Not Used
F03/ 15_LCS	——	Not Used	F04/ 15_LCS	——	Not Used
F03/ 16_LCS	10 A	Power Outlet in CommandARM™ (ACC1)	F04/ 16_LCS	——	Not Used
F03/ 17_LCS	—— **USB**: 5 A **USB**: 10A	Not Used, until MY23.5 USB Charger (5 A) (BAT), from MY23.5 USB Charger (10 A) (BAT), from MY24	F04/ 17_LCS	——	Not Used
F03/ 18_LCS	——	Not Used	F04/ 18_LCS	——	Not Used
K03/ 19_LCS	20 A/40 A	Relay for Diverter Valve (E-SCV XIV/XV)	K04/ 19_LCS	10 A/20 A	Relay for E-SCV Units (E-SCV XI, XII, XIII)
K03/ 20_LCS	10 A/20 A	Relay for E-SCV Units (E-SCV X - XIV)	K04/ 20_LCS	10 A/20 A	Relay for E-SCV Units (E-SCV X, XIV)

LCS-05 and LCS-06 - Relays with AutoPowr™/IVT™ Transmission

LCS-04 - Relays (LCS) with AutoPowr™/IVT™ Transmission			LCS-06 - Relays (LCS) with AutoPowr™/IVT™ Transmission		
Slot	**Rating (Ampere)**	**Consumer**	**Slot**	**Rating (Ampere)**	**Consumer**
K05/ 01_LCS	20 A/40 A	Relay for Convenience Power Outlet: Convenience Power Outlet Sockets, Auxiliary Power Outlet Socket Strip, 7-Terminal Power Outlet Socket (SAE only)	K06/ 01_LCS	20 A/40 A	Relay for Power Supply to Electronics (ELX)
K05/ 02_LCS	20 A/40 A	Relay for Fuel Preheater	K06/ 02_LCS	20 A/40 A	Relay for Power Supply of Switched Plus (IGN)
K05/ 03_LCS	20 A/40 A	Acoustic Alarm (Beeper)	K06/ 03_LCS		Come Home Connector
K05/ 04_LCS	20 A/40 A	Relay for Power Supply to Accessories (ACC1)	K06/ 04_LCS	20 A/40 A	Relay for Power Supply to Accessories (ACC2)

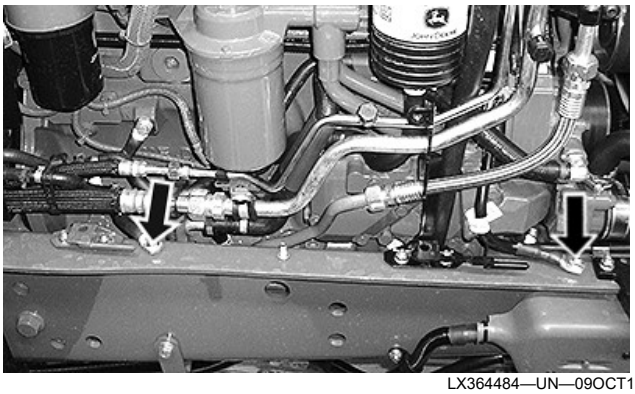
OULXA64,MW67,0005E3A-19-25MAY23

Check Engine Ground Connection

Check all ground cables for signs of wear or damage.

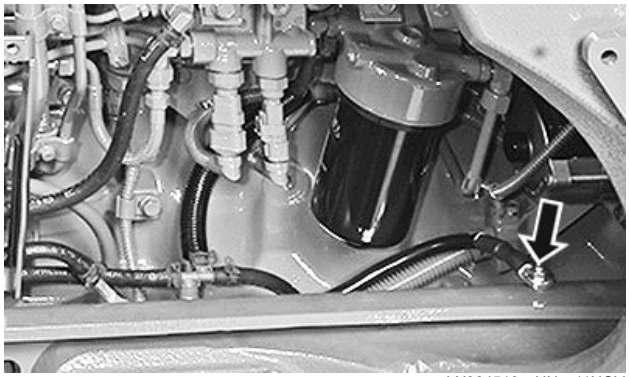
Check if the attaching screws are tight.

Replace the ground cable if it is damaged.



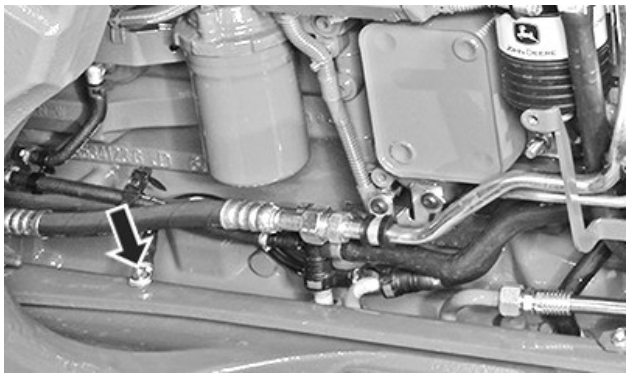
LX364484—UN—09OCT19

Ground Connector on 4-Cylinder Engine/Exemplary Illustration



LX364513—UN—11NOV19

Ground Connector on 6-Cylinder Engine/Exemplary Illustration



LX364514—UN—11NOV19

Ground Connector on 6-Cylinder Engine/Exemplary Illustration

OULXA64,SP3,00056F6-19-28JUL22

Starter Motor

If the starter motor does not rotate when the starter switch is activated, carry out a thorough check of the starter system. Check battery for sufficient charge level. Check whether a cable is broken or worn through and that no cable connections are loose or oxidized.

If the starter motor still does not rotate after rectifying these possible causes for malfunction, then it needs to be checked and repaired by your authorized dealer.

LX25458,ALL,0000B51-19-28MAR23

Check Safety Device of PTO Actuation

IMPORTANT: Perform check of safety device separately for front and rear PTOs.

1. Engage park lock.
2. Start the engine and let it run.
3. Engage the PTO and check whether the PTO stub shaft is turning.

NOTE: When checking the rear PTO, select/engage a PTO speed.

4. Shut off the engine without disengaging the PTO.
5. Start the engine once again and let it run. The PTO must not start to turn.
6. If the power take-off starts up, the safety device needs to be repaired by your authorized dealer.

LX25458,ALL,0000B52-19-14JUN22

Check the Movement Inhibitor (AutoPowr™/IVT™ Transmission)

1. Move reverse drive lever to FORWARD or REVERSE, and hold it in that position.

LX514784—UN—06SEP21

Reverse Drive Lever

2. Start the engine and wait 6-7 seconds. The N display must light up.
3. Press and slowly engage the clutch. The tractor must NOT start to move. If it does, contact an authorized John Deere dealer immediately.

OULXA64,6R,0005A06-19-01SEP21

Check the Movement Inhibitor (AutoPowr™/IVT™ Transmission with CommandPro™ Joystick)

1. Move reverse drive lever to FORWARD or REVERSE, and hold it in that position.

LX514784—UN—06SEP21

Reverse Drive Lever

2. Start the engine and wait 6-7 seconds. The N display must light up.
3. Press clutch and speed control pedal. With speed control pedal depressed, slowly release the clutch. The tractor must NOT start to move. If it does, contact an authorized John Deere dealer immediately.

OULXA64,6R,0005A07-19-01SEP21

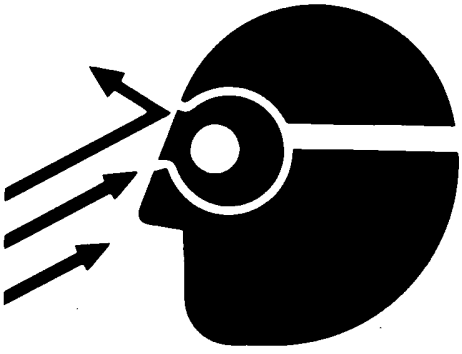
Light Test

Check that the lights are operating correctly, especially before driving on public roads.

Comply with all legal regulations.

LX25458,ALL,0000B54-19-01OCT20

Handling Halogen Bulbs Safely



TS266—UN—23AUG88

H39474—UN—30JUN00

A—Halogen Bulb

CAUTION: Halogen bulb (A) contains gas under pressure. Handling the halogen bulb improperly could cause it to shatter into flying fragments. To avoid possible injury:

- **Switch off the light and allow the halogen bulb to cool down before exchanging it. Leave switch off until the halogen bulb has been exchanged.**
- **Wear safety goggles and gloves.**
- **Hold the halogen bulb only by its base. Keep the halogen bulb away from oil. Wear gloves to prevent contact with the glass.**
- **Do not let the halogen bulb fall and make sure that it does not get scratched. Keep moisture away.**
- **Do not use bulbs that fell down or have scratches on the glass (danger of splintering).**
- **Place a used halogen bulb in the carton of the new halogen bulb and dispose of it properly. Keep out of reach of children.**

LX25458,ALL,0000B55-19-05JUN20

Safe Maintenance and Cleaning

TS249—UN—23AUG88

CAUTION: To perform service jobs at inaccessible locations, it is essential to use scaffolding, platforms, or safety ladders.

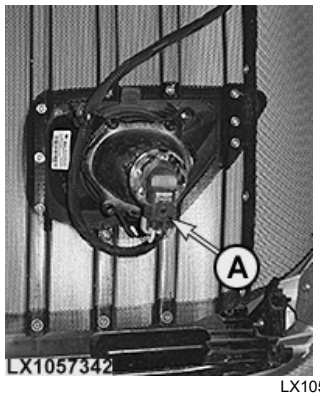
Special care has to be taken when performing cleaning and maintenance work in inaccessible areas, e.g. when adjusting the roof lights, maintenance work on the cooling system, when adjusting the right-hand outer mirror on tractors without a right-hand door, and many other similar tasks.

CAUTION: It is NOT permitted to perform these jobs by climbing on tractor components that are not intended for that purpose. There is a particularly acute danger of falling if the tractor components are wet, dirty, or iced over.

LX25458,0000B56-19-05JUN20

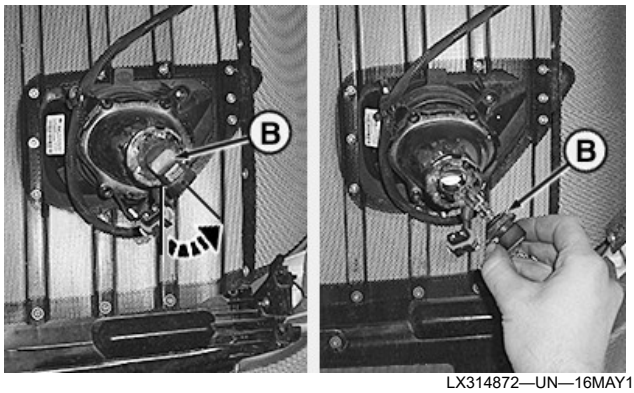
Replace Bulb of Low-Beam Headlight on Headlight in the Engine Hood

1. Switch off lighting and let bulbs cool down.
2. Open engine hood and disconnect connector (A).



LX1057342—UN—13NOV13

3. Rotate bulbs (B) counterclockwise and remove them.



LX314872—UN—16MAY17

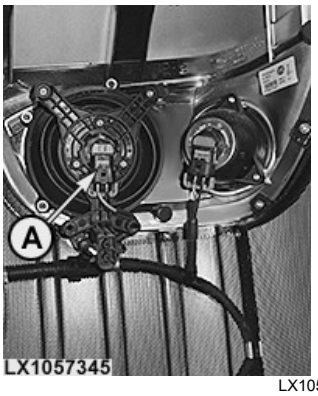
4. Using a clean cloth, position the new bulb and turn it clockwise.
5. Attach connector (A) and close engine hood.

NOTE: In the case of LED lights, replace the entire LED light.

OULXA64,0005A0E-19-14JUN22

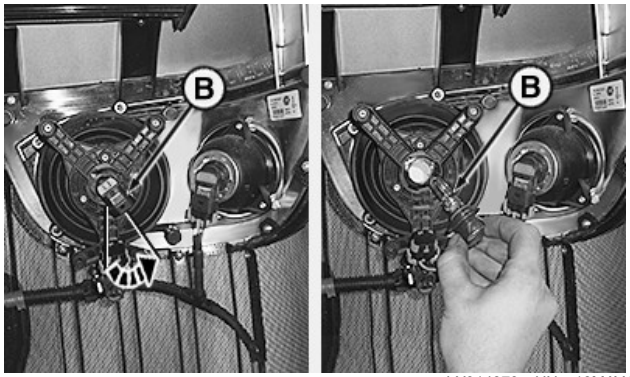
Replace Bulb of High-Beam Headlight on Headlight in the Engine Hood

1. Switch off lighting and let bulbs cool down.
2. Open engine hood and disconnect connector (A).



LX1057345—UN—13NOV13

3. Rotate bulbs (B) counterclockwise and remove them.



LX314873—UN—16MAY17

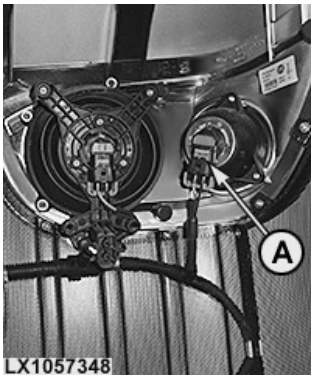
4. Using a clean cloth, position the new bulb and turn it clockwise.
5. Attach connector (A) and close engine hood.

NOTE: In the case of LED lights, replace the entire LED light.

OULXA64,0005A0F-19-14JUN22

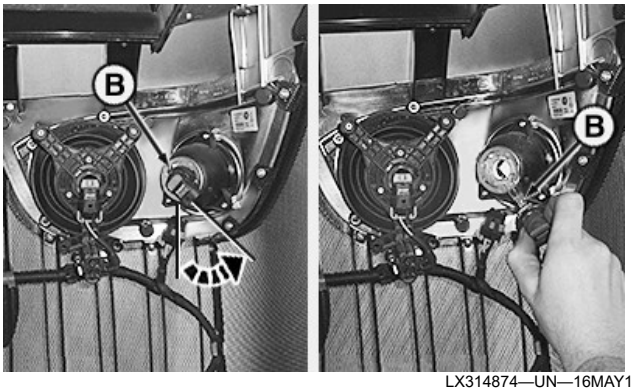
Replace Bulb of Worklight in the Engine Hood

1. Switch off lighting and let bulbs cool down.
2. Open engine hood and disconnect connector (A).



LX1057348—UN—13NOV13

3. Rotate bulbs (B) counterclockwise and remove them.



LX314874—UN—16MAY17

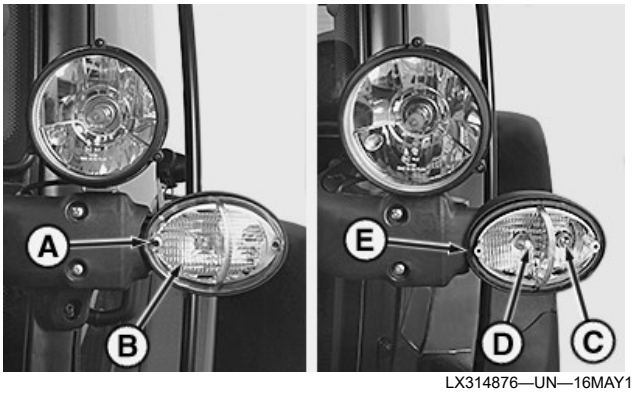
4. Using a clean cloth, position the new bulb and turn it clockwise.
5. Attach connector (A) and close engine hood.

NOTE: In the case of LED lights, replace the entire LED light.

OULXA64,0005A10-19-14JUN22

Replace Bulb of Turn Signal and Clearance Lights on Cab Frame

1. Switch off lighting and let bulbs cool down.
2. Remove screws (A); remove headlight lens (B).



LX314876—UN—16MAY17

3. **Change bulb (C) of the turn signal light**:
   a. To remove the bulb (C), press it in and turn it counterclockwise.
   b. Using a clean cloth, position the new bulb and install it by pressing it in and turning it clockwise.
4. **Change bulb (D) of clearance light:**
   a. To remove the bulb (D), press it in and turn it counterclockwise.
   b. Using a clean cloth, position the new bulb and install it by pressing it in and turning it clockwise.

NOTE: Ensure seal (E) is seated correctly.

5. Position the headlight lens (B) and tighten the screws (A).

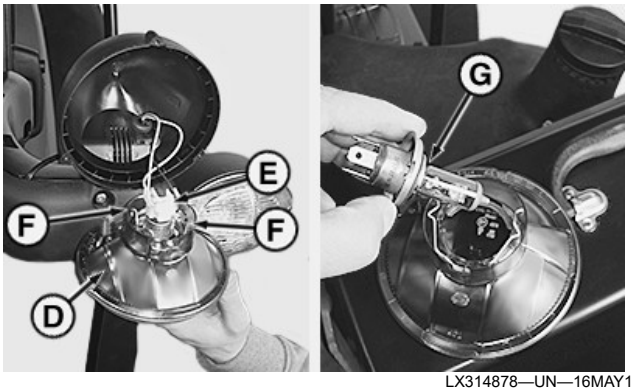
OULXA64,0005A12-19-14JUN22

Replace Bulb of Headlights on Cab Frame

1. Switch off lighting and let bulbs cool down.
2. Remove screws (A) and take out mounting frame (B).

LX314877—UN—16MAY17

3. Remove seal (C) and separate light (D) from housing.
4. Disconnect connector (E) and release clamp (F).



LX314878—UN—16MAY17

5. Remove bulb (G).
6. Position new bulb with a clean cloth and fixate with the clamps (F).

7. Install connector (E) and position the light (D) in the housing.
8. Install seal (C) and make sure it is seated correctly.
9. Position mounting frame (B) and tighten screws (A).

NOTE: On LED lights, replace the LED light module, or, if necessary, the entire light.

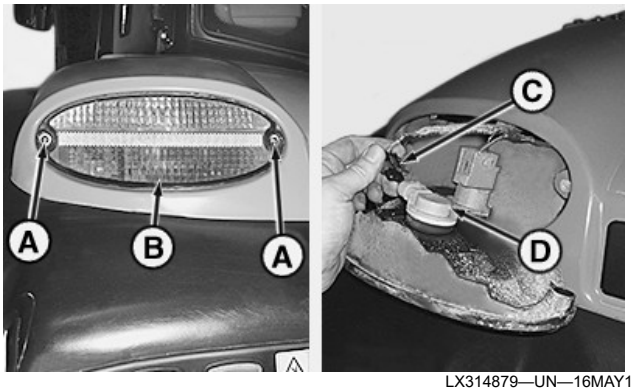
LX364382—UN—16APR19

LED Light

OULXA64,0005A13-19-14JUN22

Replace Bulb of Tail Brake Light/Turn Signal on Fender

1. Switch off lighting and let bulbs cool down.
2. Remove screws (A) and dismantle tail brake light/ turn signal (B).

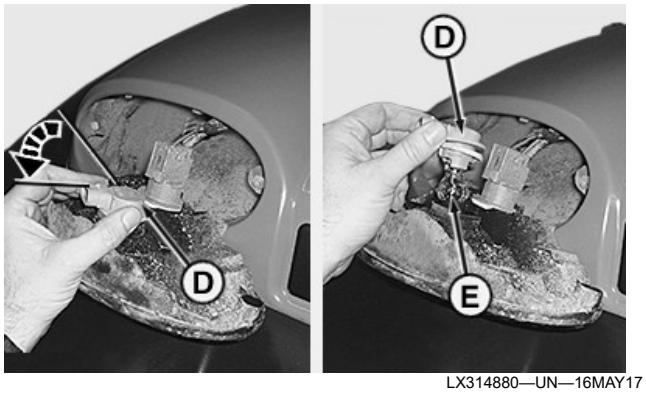


LX314879—UN—16MAY17

Turn-Signal Light

A—Bolts
B—Tail/Brake Light/Turn Signal
C—Turn Signal Connector
D—Fixture, Turn Signal

3. **Change bulb of turn signal:**
   a. Disconnect connectors (C).
   b. Turn the socket (D) counterclockwise and remove it.



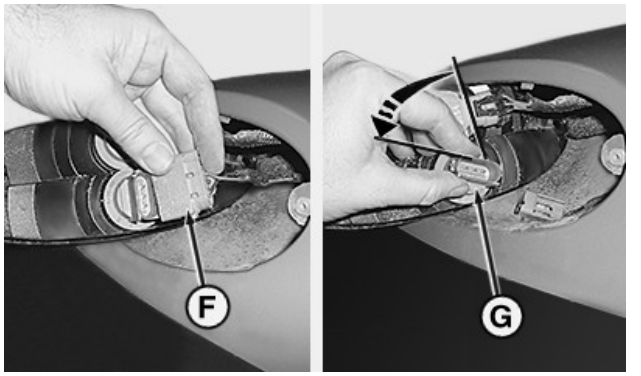
LX314880—UN—16MAY17

Turn-Signal Light

D—Fixture, Turn Signal
E—Lamp, Turn Signal

   c. Press in the bulb (E) and turn it counterclockwise to remove it from the socket.
   d. Using a clean cloth, position the new bulb in the socket and install it by pressing it in and turning it clockwise.
   e. Position socket (D) in the housing and turn clockwise.
   f. Connect connector (C).

4. **Change the bulb of the tail and brake light:**



LX314881—UN—16MAY17

Tail Light/Brake Light

F—Connector of Tail Light and Brake Light
G—Socket of Tail Light and Brake Light

   a. Disconnect connector (F).
   b. Turn the socket (G) counterclockwise and remove it.
   c. Press in the bulb (H) and turn it counterclockwise to remove it from the socket.

LX1057377—UN—14NOV13

Tail Light/Brake Light

G—Socket of Tail Light and Brake Light
H—Lamp of Tail Light and Brake Light

d. Using a clean cloth, position the new bulb in the socket and install it by pressing it in and turning it clockwise.

e. Position socket (G) in the housing and turn clockwise.

5. Position tail brake light/turn signal (B) and tighten screws (A).

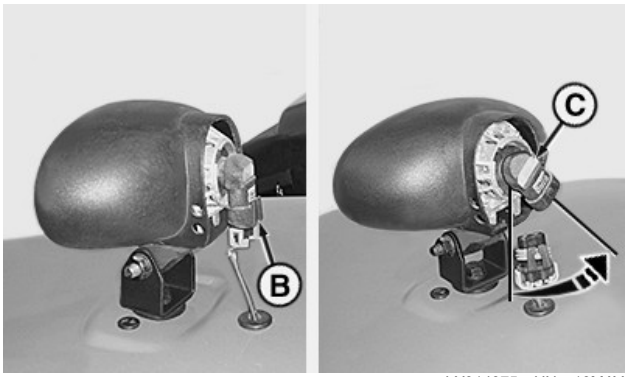
OULXA64,0005A14-19-14JUN22

Replace Bulb of Worklights on Cab Frame, Cab Roof, or Rear Fender

1. Switch off lighting and let bulbs cool down.
2. Take off cover (A).

LX1057351—UN—13NOV13

3. Disconnect connector (B).



LX314875—UN—16MAY17

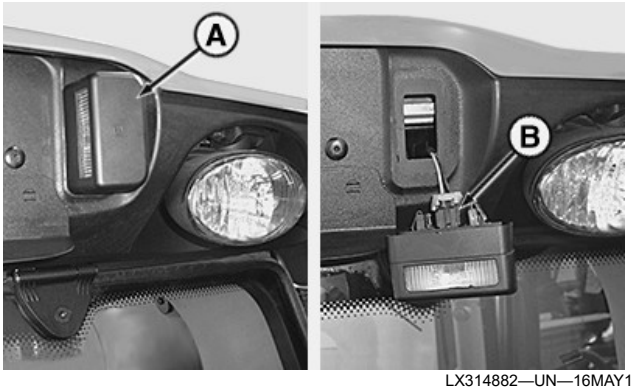
4. Rotate bulbs (C) counterclockwise and remove them.
5. Using a clean cloth, position the new bulb and turn it clockwise.
6. Attach connector (B) and install cover (A).

NOTE: In the case of LED lights, replace the entire LED light.

OULXA64,0005A11-19-14JUN22

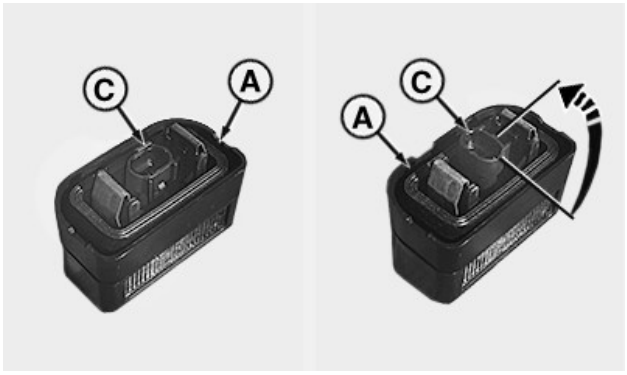
Replace Bulb of License Plate Light

1. Switch off lighting and let bulbs cool down.
2. Disconnect license plate light (A) from the cab and connector (B).



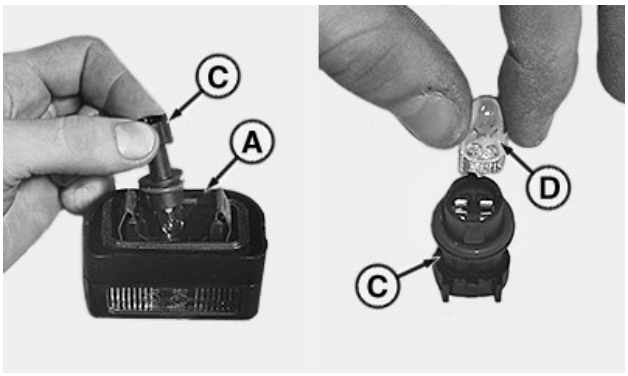
LX314882—UN—16MAY17

3. Turn the socket (C) 90° counterclockwise and remove it.



LX314883—UN—16MAY17

4. Remove bulb (D).



LX314884—UN—16MAY17

5. Using a clean cloth, position a new bulb in the socket (C).
6. Position the socket (C) in the license plate light (A) and rotate clockwise.
7. Attach connector (B) and install license plate light (A) on the roof.

OULXA64,0005A15-19-14JUN22

Replace Bulb of Beacon Light

TS249—UN—23AUG88

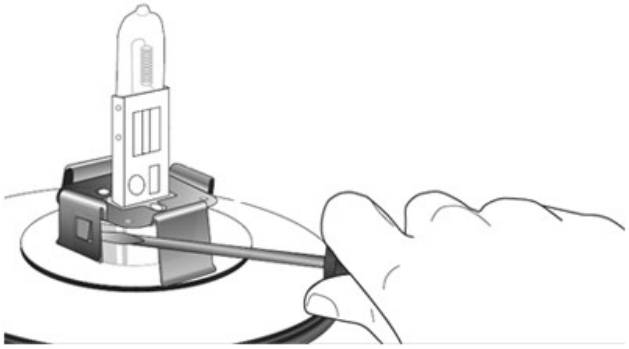
CAUTION: To perform service jobs at inaccessible locations, it is essential to use scaffolding, platforms or safety ladders.

It is NOT permitted to perform these jobs by climbing on tractor components that are not intended for that purpose. There is a particularly acute danger of falling if the tractor components are wet, dirty or iced over.

1. **Removal:** Open the light.

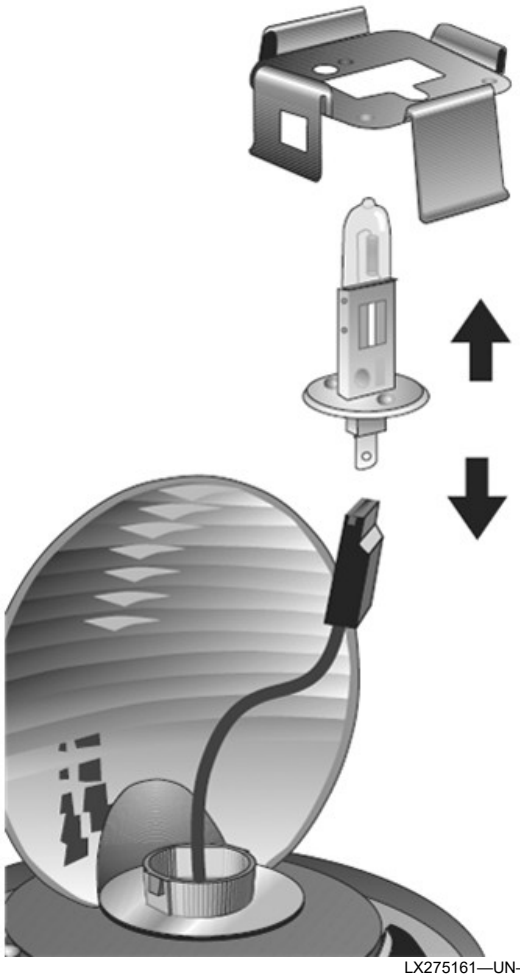
LX275159—UN—03MAR16

2. Disengage the retaining clamp.



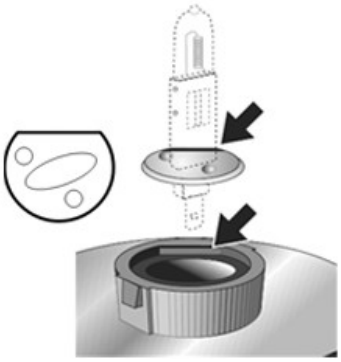
LX275160—UN—03MAR16

3. Remove the bulb.



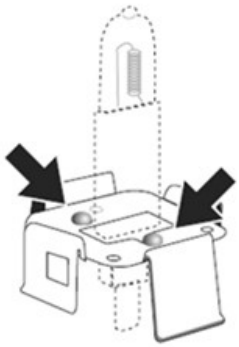
LX275161—UN—03MAR16

4. **INSTALLATION:** Connect the new bulb to the cable and insert the base of the bulb into the socket. Care must be taken to ensure that contours of the base and socket are aligned.



LX275162—UN—03MAR16

Bulb: H1 - 12V, 55W (8GH 002 089-131)



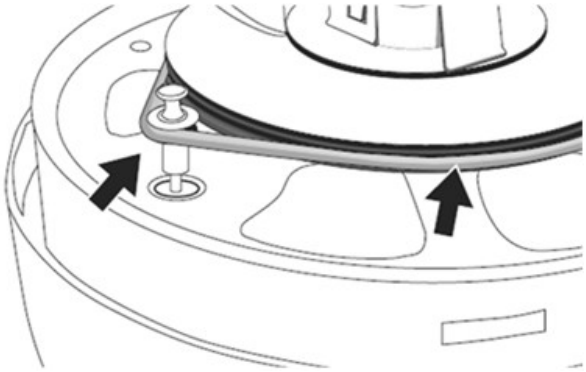
LX275163—UN—03MAR16

5. Put on the retaining clip and align it so that the pins on the base fit into the recesses in the retaining clip.
6. Press the retaining clip down onto the socket until it engages.

LX275164—UN—03MAR16

Then close the beacon light.

NOTE: If the drive belt has slipped off, it must be re-installed as shown.



LX275165—UN—03MAR16

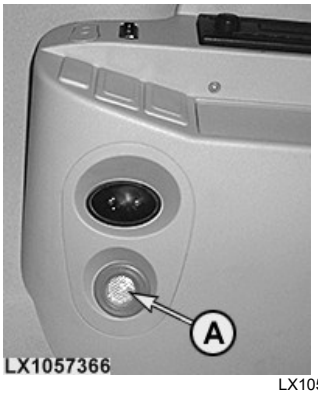
IMPORTANT: Check that the drive belt is installed correctly. The prescribed speed of rotation can only be achieved if the drive belt is installed as shown. The arrangement shown is valid if supply voltage is 12V.

IMPORTANT: Do NOT lubricate the moving parts of the beacon light.

OULXA64,0005A16-19-14APR23

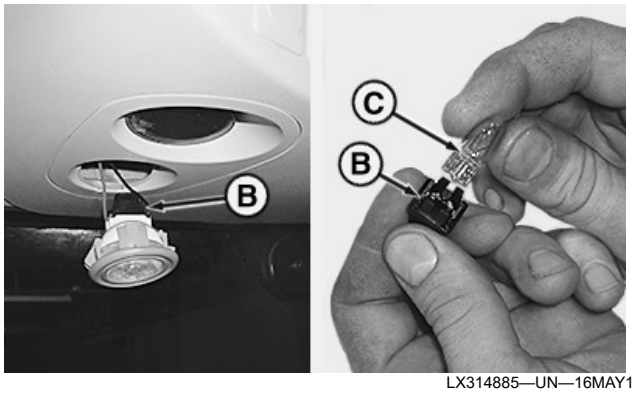
Replace Bulb of Cab Lighting

1. Switch off lighting and let bulbs cool down.
2. Remove cab lighting (A) from the cab roof.



LX1057366—UN—14NOV13

3. Remove socket (B).



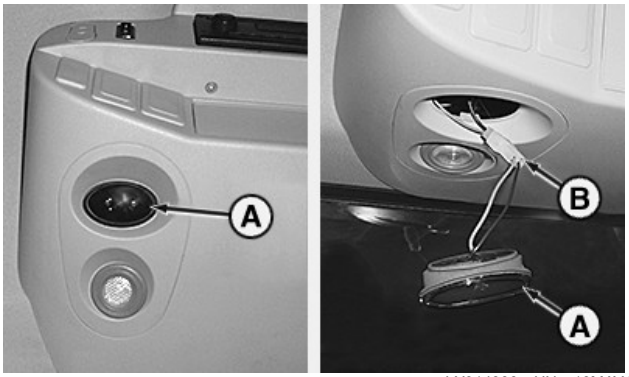
LX314885—UN—16MAY17

4. Remove bulb (C).
5. Using a clean cloth, position a new bulb in the socket (B).
6. Position socket (B) in the cab lighting (A).
7. Position the cab lighting in the cab roof.

OULXA64,0005A17-19-14APR23

Replace Bulb of Lighting of the Transmission Shift Unit

1. Switch off lighting and let bulbs cool down.
2. Remove lighting of the transmission shift unit (A) from the cab roof.



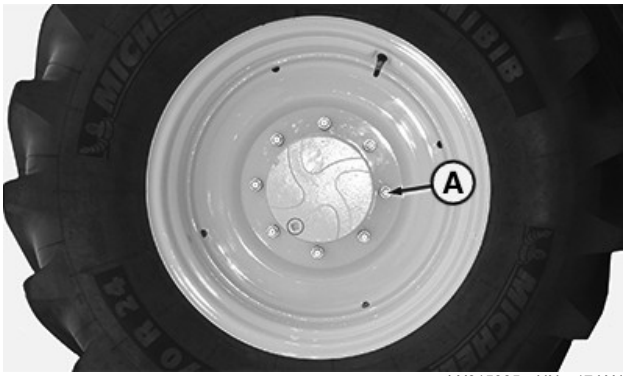
LX314886—UN—16MAY17

3. Disconnect connector (B) and remove lighting of the transmission shift unit (A).
4. Connect new lighting of the the transmission shift unit (A) at connector (B).
5. Position the lighting of the transmission shift unit (A) in the cab roof.

OULXA64,0005A18-19-14JUN22

Tighten Front Wheel Bolts—Front-Wheel Drive Axles

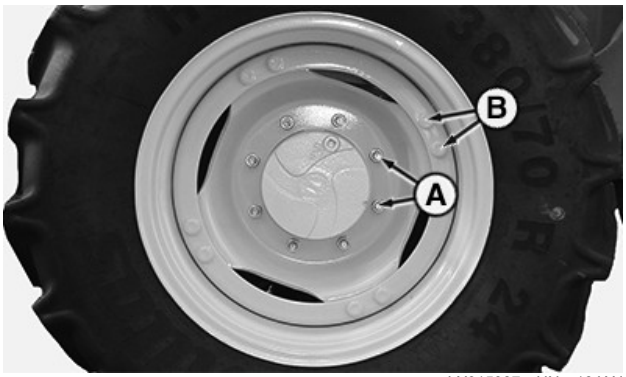
Tighten Wheel Bolts, on Vehicles with Front-Wheel Drive Axles—Front Wheel with 8-Bolt Circle



LX315085—UN—17JAN18

Front Wheel with 8-Bolt Circle and Round Wheel Dish

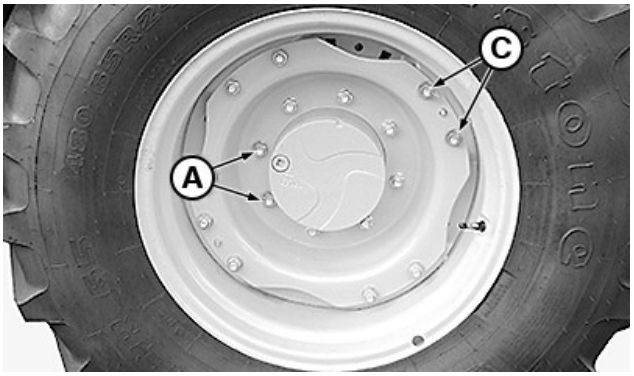
A—300 N·m (220 lb·ft)



LX315087—UN—16JAN18

Front Wheel with 8-Hole Circle and Square Wheel Dish

A—300 N·m (220 lb·ft)
B—210 N·m (155 lb·ft)

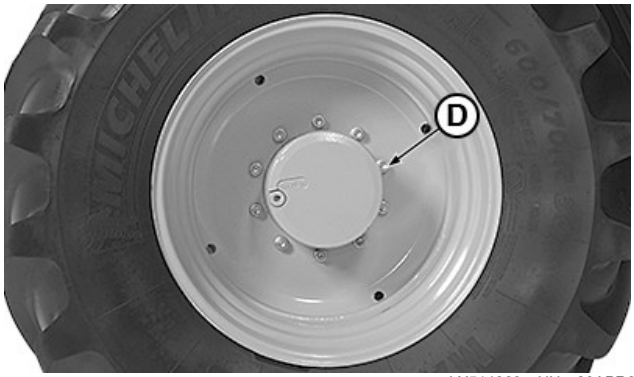


LX514865—UN—31MAR22

Front Wheel with 8-Bolt Circle and Waffle Rim

A—300 N·m (220 lb·ft)
B—Gold Bolt—280 N·m (205 lb·ft)
C—Gray-Blue Bolt—265 N·m (195 lb·ft)

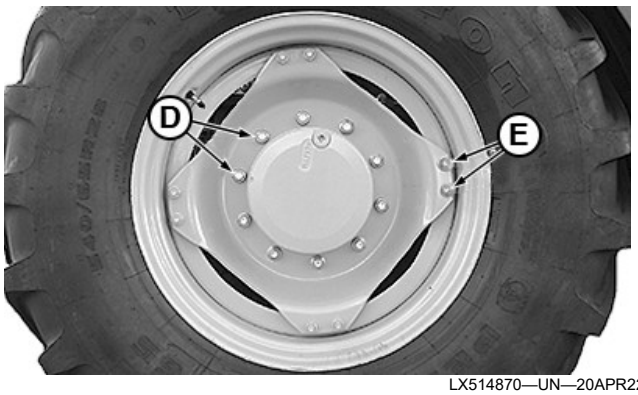
Tighten Wheel Bolts, on Vehicles with Front-Wheel Drive Axles—Front Wheel with 10-Bolt Circle



LX514869—UN—20APR22

Front Wheel with 10-Bolt Circle and Round Wheel Dish

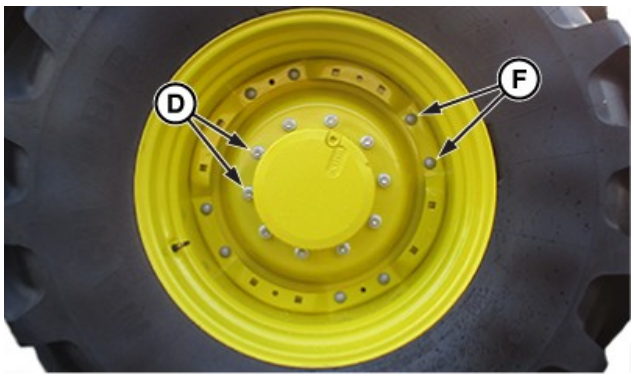
D—480 N·m (355 lb·ft)



LX514870—UN—20APR22

Front Wheel with 10-Bolt Circle and Square Wheel Dish

D—480 N·m (355 lb·ft)
E—210 N·m (155 lb·ft)



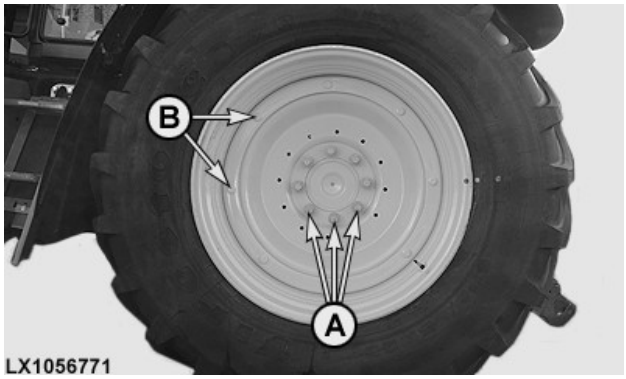
LX514952—UN—22JUL23

Front Wheel with 10-Bolt Circle and Waffle Rim

D—480 N·m (355 lb·ft)
F—Gold Bolt—280 N·m (205 lb·ft)
F—Gray-Blue Bolt—265 N·m (195 lb·ft)

LX25458,ALL,0000B62-19-07SEP23

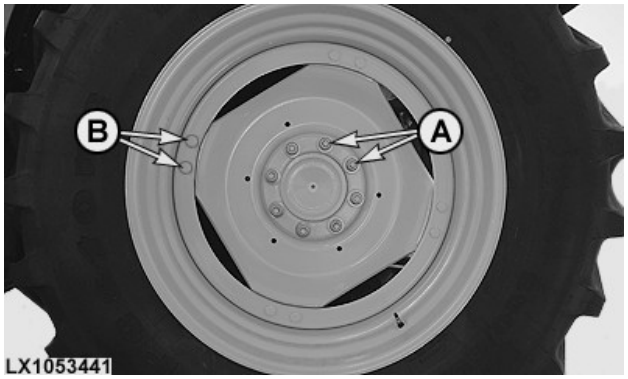
Tighten Rear Wheel Bolts—Flanged Axles



LX1056771—UN—12NOV12

Rear Wheel with 8-Hole Circle and Round Wheel Dish

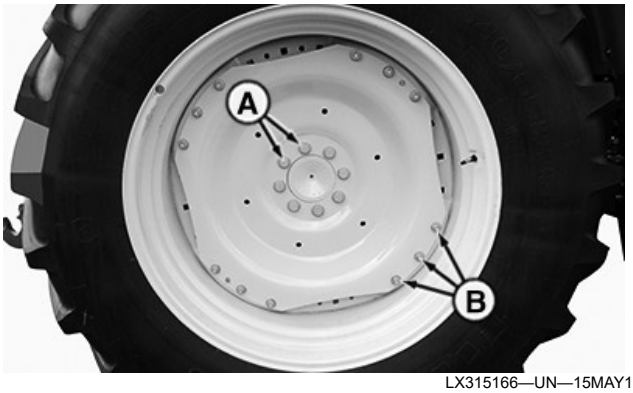
A—500 N·m (370 lb·ft)
B—210 N·m (155 lb·ft)



LX1053441—UN—21MAR12

Rear Wheel with 8-Hole Circle and Square Wheel Dish

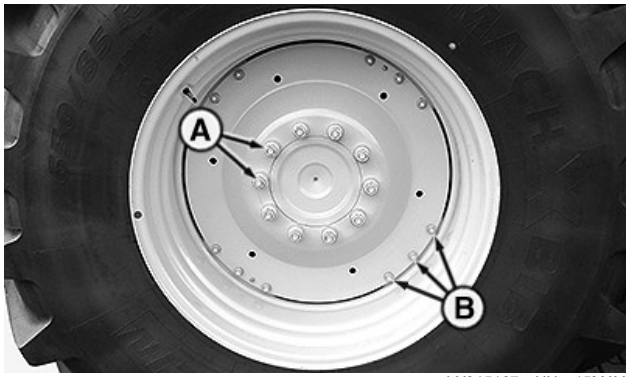
A—500 N·m (370 lb·ft)
B—210 N·m (155 lb·ft)



LX315166—UN—15MAY18

Rear Wheel with 8-Bolt Circle and Waffle Rim

A—500 N·m (370 lb·ft)
B—Gold Bolt—280 N·m (205 lb·ft)
B—Gray-Blue Bolt—265 N·m (195 lb·ft)



LX315167—UN—15MAY18

Rear Wheel with 10-Hole Circle and Waffle Rim

A—600 N·m (445 lb·ft)
B—Gold Bolt—280 N·m (205 lb·ft)
B—Gray-Blue Bolt—265 N·m (195 lb·ft)

LX25458,ALL,0000B64-19-07SEP23

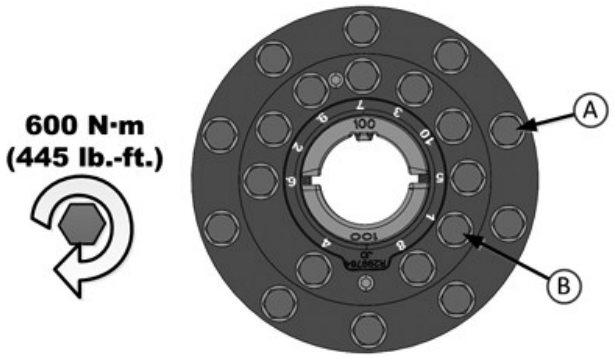
Tighten Rear-Wheel Bolts—Rack-and-Pinion Axles, Hub Diameter 100 mm with Double Tapered Clamping Sleeves (6R 175 to 6R 250)

CAUTION: Risk of injury from loss of vehicle control. Insufficient tightening of a wheel or the wheel hub leads to an uncontrollable driving situation. Bolts have to be tightened according to specification. Never operate tractor with loose or missing screws. The torque needs to be checked regularly. Refer to appropriate entry with the service intervals.

CAUTION: Observe the following in Section 80C after a tread adjustment:

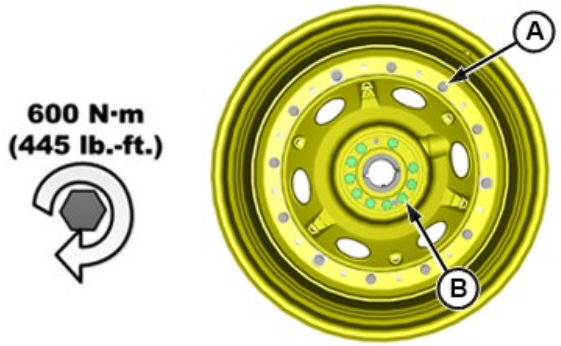
- **Notes on Rear Wheels—Rack-and-Pinion Axles, Hub Diameter 100 mm with Double Tapered Clamping Sleeves**
- **Rack-and-Pinion Axles, Hub Diameter 100 mm with Double Tapered Clamping Sleeves—Adjust Tread Widths for Steel and Cast Rear Wheels (6R 175 to 6R 250)**

1. Tighten all wheel bolts (A) cross-wise.



LX299218—UN—19MAY17

Wheel Bolts and Bolts of the Cust Hub with Steel Wheel



LX514950—UN—15MAY23

Wheel Bolts and Bolts of the Cust Wheel

A—Wheel Bolt (Rim on Wheel Hub Flange)
B—Bolts of the Wheel Hub (Wheel Hub on Rear Axle)

2. Tighten all bolts (B) of the wheel hub, **beginning with number 1**, in clockwise direction.

IMPORTANT: After every change of tread width, retighten all screws after 3 operating hours and 10 operating hours, daily during the first week of operation and then every 250 operating hours thereafter.

Follow the procedure of the tread adjustment! See Rack-and-Pinion Axles, Hub Diameter 100 mm with Double Tapered Clamping Sleeves—Adjust Tread Widths for Steel and Cast Rear Wheels (6R 175 to 6R 250) in Section 80C.

Item	Measurement	Specification
Wheel Bolts and Bolts of the Wheel Hub	Torque	600 N·m (445 lb·ft)

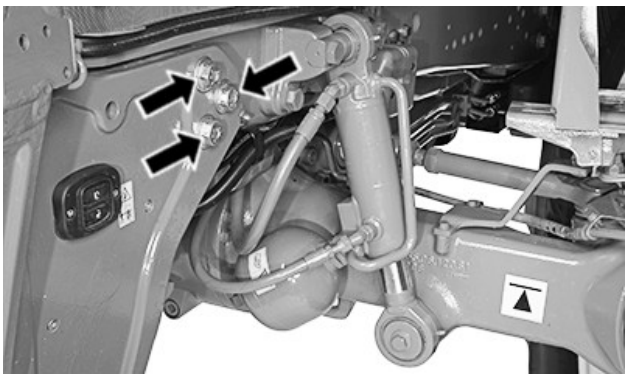
OULXA64,6R,MW67,0005FDC-19-10MAY23

Tighten Screws of Wheel Weights

See Change Wheel Weights Safely in Section 100.

LX25458,ALL,0000B67-19-13OCT20

Check Hardware Torque of Front Hitch -



LX266870—UN—14JUN16

Check whether the attaching screws shown on both sides comply with the specifications.

- Hardware torque, front hitch to main frame, 550 N·m (405 lb·ft)

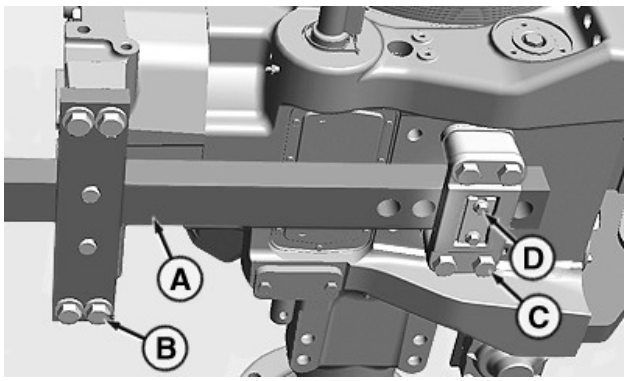
OULXA64,6R,MW67,0005FDD-19-27OCT21

Front Loader Mounting Frame (Maintenance)

IMPORTANT: Check torques of attaching screws at regular intervals. Comply with Operator's Manual and Installation Instructions for maintaining the front loader.

LX25458,ALL,0000B68-19-13OCT20

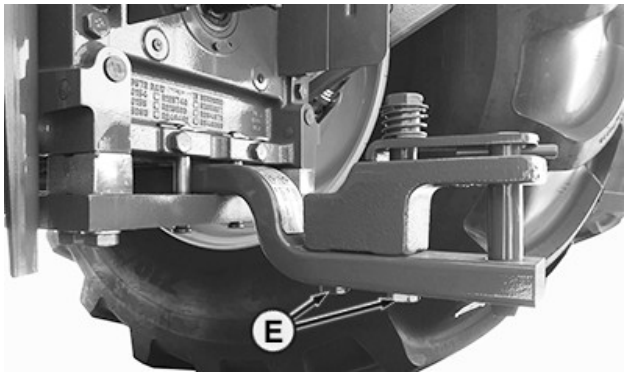
Tighten Screws of CAT III Drawbar



LX364409—UN—26JUN19

CAT III Drawbar

A—Drawbar
B—Screws (4 used), 490 N·m (360 lb·ft)
C—Screws (4 used), 610 N·m (450 lb·ft)
D—Screws (2 used), 70 N·m (52 lb·ft)



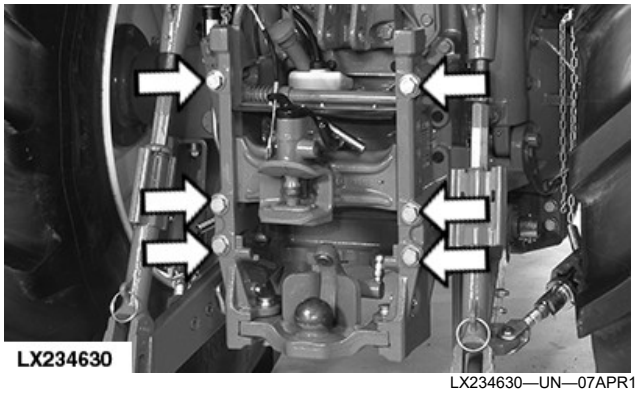
LX364405—UN—26JUN19

CAT III Drawbar

E—Screws (2 used), 610 N·m (450 lb·ft)

OULXA64,00059F6-19-09JUN21

Tighten Screws of Trailer Hitch, Guide Rails



LX234630—UN—07APR15

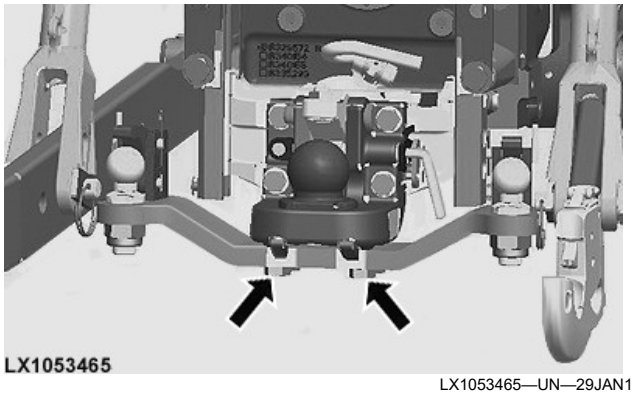
Guide Rails to PTO Housing Attaching Screws	Hardware torque
Gray/gray-blue	475 N·m (350 lb·ft)

NOTE: The torque of 475 N·m (350 lb·ft) applies to factory-fitted trailer hitches only.

Please refer to the relevant installation instructions for the tightening torque of retrofitted trailer hitches.

LX25458,ALL,0000B6A-19-21APR23

Tighten Screws of Ball-Type Hitch with Attached Arms for Forced Steering



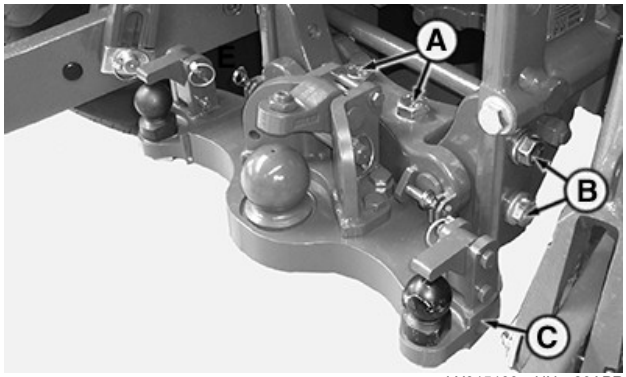
LX1053465—UN—29JAN13

Check the hardware torques of the attaching screws.

- Hardware Torque, Forced Steering Arm to Trailer Hitch—490 N·m (360 lb·ft)

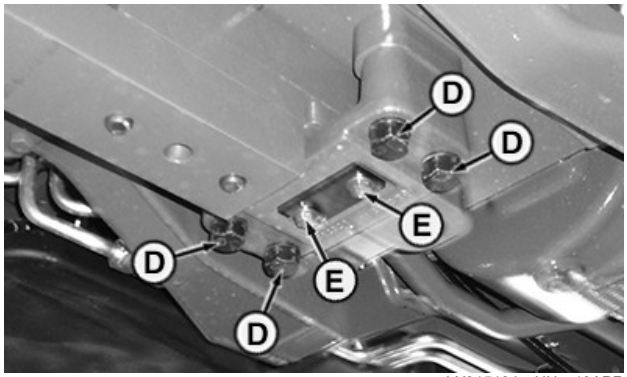
LX25458,ALL,0000B6B-19-07SEP23

Tighten Screws of Extendable Ball-Type Hitch (Not Available for All Models)



LX315133—UN—20APR18

A—Screws (2 used), 1000 N·m (740 lb·ft)
B—Screws (4 used), 550 N·m (405 lb·ft)
C—Screws (2 used), 360 N·m (265 lb·ft) (if equipped)

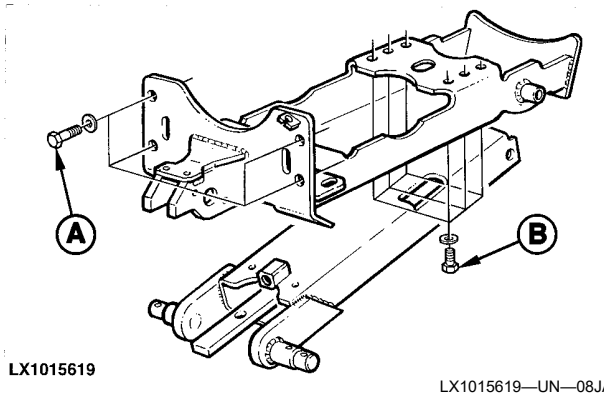


LX315134—UN—19APR18

D—Screws (4 used), 550 N·m (405 lb·ft)
E—Screws (2 used), 70 N·m (52 lb·ft)

OULXA64,00059F9-19-03JUN22

Tighten Screws of Pickup Hitch



LX1015619—UN—08JAN97

Check the hardware torques of the attaching screws (A) and (B).

Attaching Screws (A)

M20 . . . . . 500 N·m (370 lb·ft)

Attaching Screws (B)

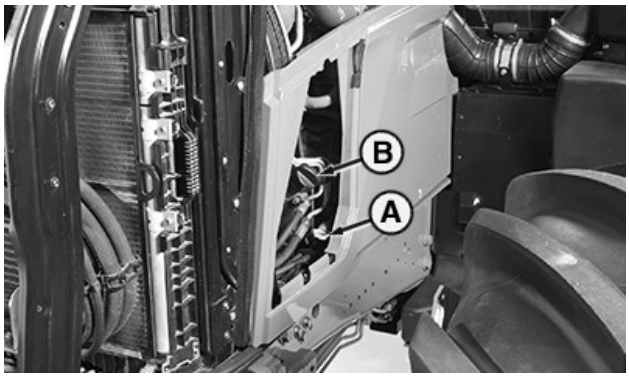
M16 . . . . . 310 N·m (230 lb·ft)

M20 . . . . . 500 N·m (370 lb·ft)

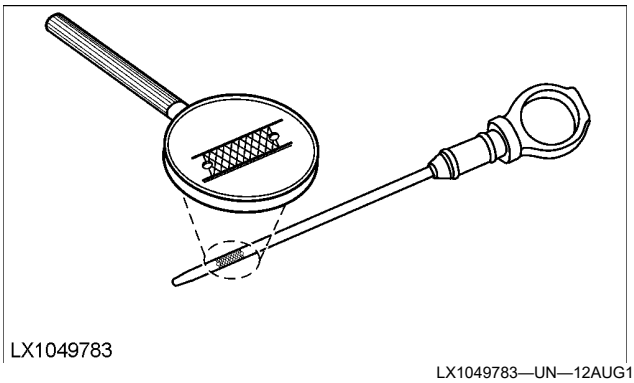
OULXA64,ALL,EU,0005702-19-13OCT20

Check Engine Oil Level

Check with oil dipstick:



LX266857—UN—15JUN16



LX1049783—UN—12AUG10

A—Oil Dipstick
B—Oil Filler Neck

1. Preconditions for checking engine oil level:
   - Tractor parked on level surface
   - Park lock ON
   - Engine OFF

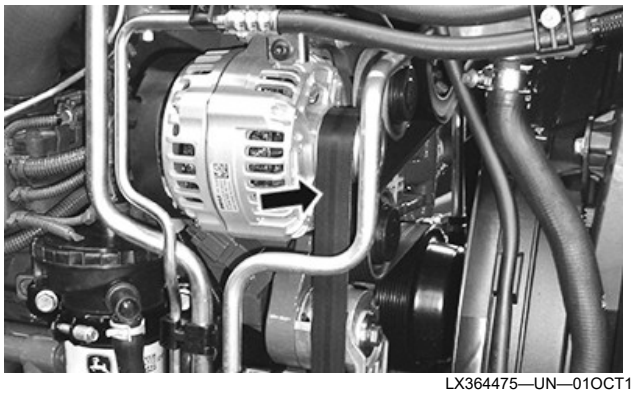
2 ways to check the engine oil level:	
Cold engine oil	**Warm engine oil**
Check when the oil is cold, and the engine has been off for a long time (e.g. in the morning before starting the engine).	If the engine has warmed up, shut the engine off and wait approx. 40 minutes (oil at a temperature of approx. 40°C, 104°F).

2. Use oil dipstick (A) to check the level of the engine oil.
3. Remove the dipstick, wipe it clean, insert it as far as it will go, and pull it out again.
4. The oil level must be within the hatched area on the dipstick. Oil level must be corrected if the oil is above the top edge or below the bottom edge.

   Do not start the engine if oil level is below lower mark on dipstick.
5. If necessary, refill with oil of correct viscosity. See Section 200C.

OULXA64,6R,MW67,0005FDE-19-27OCT21

Check Engine Drive Belt for Wear



LX364475—UN—01OCT19

If the drive belt shows signs of wear, see an authorized dealer.

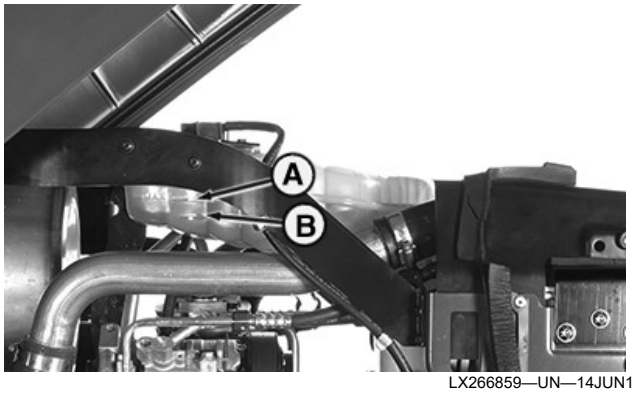
OULXA64,SP3,0005703-19-01OCT20

Check Viscous Fan of Cooling System

Have the viscous fan checked by an authorized dealer.

LX25458,ALL,0000B6F-19-01OCT20

Check Coolant Level



LX266859—UN—14JUN16

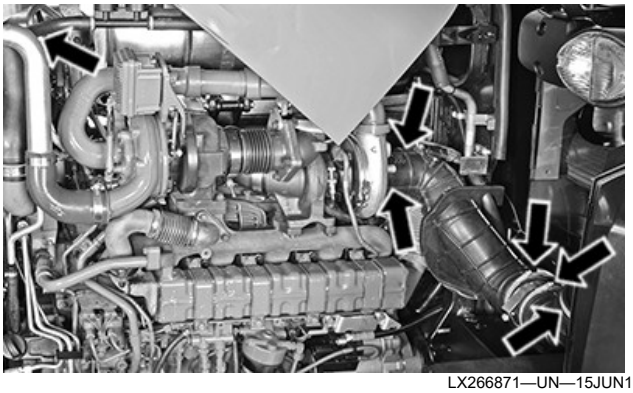
Coolant level must be close to the maximum mark (A).

It must under no circumstances fall below the minimum mark (B).

Top up if necessary. See Change Coolant in Section 220E.

OULXA64,6R,MW67,0005FE0-19-27OCT21

Check Air Intake Hoses



LX266871—UN—15JUN16

The hoses vary depending on engine type.

Check the hoses and tighten hose clamps if necessary.

Leaking or damaged hoses are the cause of dirt entering the engine.

OULXA64,6R,MW67,0005FE1-19-27OCT21

Check Oil Level of Axle Housing on Front-Wheel Drive Axle (750 and 755)

TS281—UN—15APR13

CAUTION: Danger of injury from hot components or hot, pressurized oil.

Touching hot surfaces can cause injury.

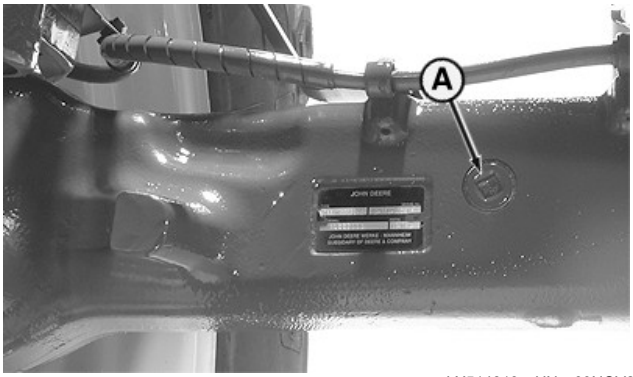
Avoid contact with hot surfaces or hot oil.

Check oil level when oil is warm (approx. 40°C, 103°F).

Unscrew the level screw plug slowly.

NOTE: The position of the level screw plug varies depending on axle type.

1. Remove oil level screw plug (A) and put a new O-ring on it. Oil must be level with drain screw hole.



LX514813—UN—09NOV21

2. If necessary, top up with oil at this point.

Oil to be used	Hy-Gard™ Transmission and Hydraulic Oil. See also section 200E.

Hy-Gard is a trademark of Deere & Company

3. Tighten oil level screw plug to 90 N·m (66 lb·ft). Always use a transmission oil listed in Section 200E.

NOTE: Replace oil in the axle housing after the first 100 and after the first 1500 hours of operation. Then change after every 1500 hours of operation or once every 2 years, whichever occurs first.

LX25458,ALL,0000B75-19-30AUG23

Check Accumulator of Front Axle Suspension

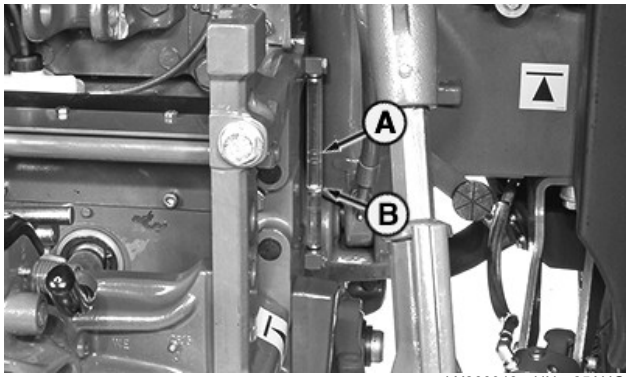
Front axle suspension - Have pressure accumulator checked by an authorized dealer

OULXA64,ALL,00570D-19-12OCT20

Check Oil Level of Transmission and Hydraulic System

IMPORTANT: Check oil level when oil is cold. If possible, check the oil level in the morning after the tractor has been standing overnight.

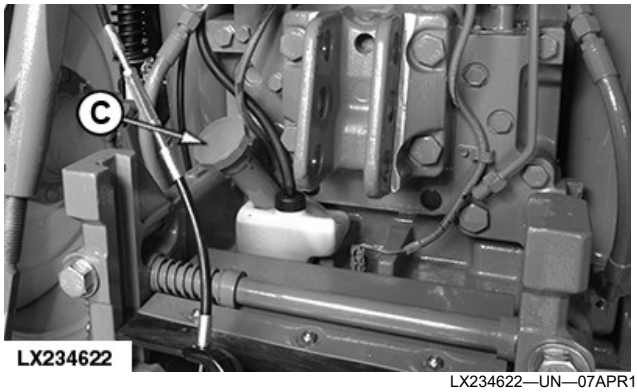
1. Park tractor so that it is level.
2. Engage park lock.
3. Lower draft links, front loader, front implements, and other implements that draw oil from the transmission.
4. Oil level should be between marks (A) and (B) on the sight glass.



LX266948—UN—25AUG16

A—Maximum Mark
B—Minimum Mark

5. If necessary, refill with oil of correct viscosity at filler neck (C). See Section 200E.

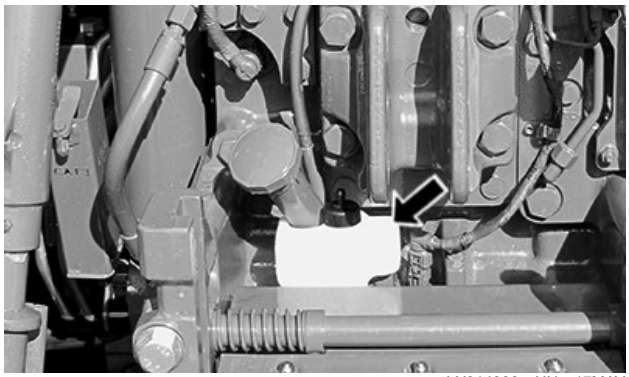


LX234622—UN—07APR15

C—Filler Neck

OULXA64,6R,MW67,0005FE3-19-30AUG23

Check Leak-Off Oil Container (If Equipped)



LX314888—UN—17MAY17

Check the leak-off oil container, and empty it if necessary. Dispose of the oil in the container as waste oil.

OULXA64,00059DE-19-26JAN21

Inspect Hydraulic Hoses

IMPORTANT: Check hydraulic hoses regularly – at least once a year – for leaks, kinks, cuts, tears, rubbing, bulges, corrosion, exposed fabric, and other signs of wear and damage.

Replace worn or damaged hoses immediately.

Replacement hoses can be obtained from your authorized dealer.

LX25458,0000B7A-19-05JUN20

Check Closing Mechanisms and Rubber Seals of the Doors, Windows, and Roof Hatches of Cab

Check all rubber seals of the doors, windows, and roof hatches as well as the cable feedthroughs for proper seating, wear, and brittleness. Replace defective rubber seals.

Check all closing mechanisms of the doors, windows, and roof hatches.

OULXA64,ALL,000570C-19-01OCT20

Check Dust Prefilter of Cab

Have dust prefilter checked by an authorized dealer.

OULXA64,00059E1-19-26JAN21

Inspect Seat Belt

Replace entire seat belt if mounting hardware, buckle, belt, or retractor show signs of damage.

Inspect seat belt and mounting hardware at least once a year. Look for loose mounting hardware or damage to the belt such as cuts, fraying unusually heavy wear, discoloration, or glazing. Replace only with replacement parts approved for your machine. Contact an authorized dealer immediately therefore if the belt needs to be replaced.

LX25458,ALL,0000B7B-19-01OCT20

Check Brakes

CAUTION: Engage park lock.

Press the brake pedals before starting the engine. It must not be possible to press the pedals all the way to the stops, not even if great force is used. Wait at least 30 seconds before repeating the check.

IMPORTANT: If the pedals can be pressed all the way to the stops, there is a fault and it is essential to contact an authorized dealer.

LX25458,ALL,0000B7C-19-01OCT20

Bleed and Check the Brake System

Have brake system bled and checked by an authorized dealer.

LX25458,ALL,0000B7D-19-01OCT20

Check for Condensed Water on Air Brake System

CAUTION: Wear protective goggles when draining water.

If condensation (water) is found during the daily check of the compressed-air tank, the air-dryer cartridge must be replaced immediately.

Replace the air-dryer cartridge every 1500 hours or every 2 years at the latest. See Section 220E.

CAUTION: The compressed-air tank may be equipped with a connection for inflating tires.

The full pressure of the air tank (800 kPa, 8 bar, 116 psi) is present at the tire inflation connection. Do NOT over-inflate the tires!

LX266883—UN—05AUG16

To drain water from the compressed air tank, push or pull valve pin (A) to the side. Do not use your hands to do this, use a suitable tool.

OULXA64,6R,MW67,0005FE4-19-27OCT21

Check the Manually Operated Hitch for Wear

CAUTION: Parts that have reached or exceeded their wear limit need to be replaced with new parts.

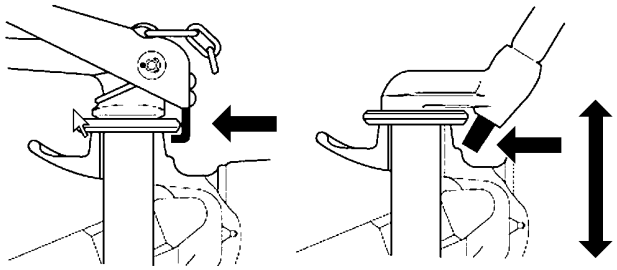
Check diameter (a) of the hitch pin.

LX1031437—UN—24SEP03

Specification

Pin, Link—Wear Limit or Diameter. . . . . minimum 29.0 mm (minimum 1.14 in)

Check permissible vertical play of the hitch pin.



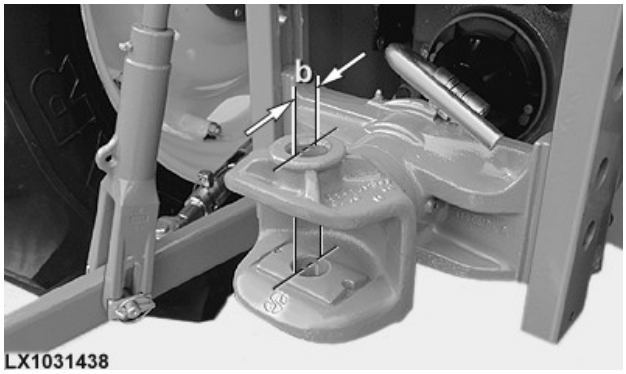
LX1047989

LX1047989—UN—23SEP09

Specification

Pin, Link—Play. . . . . maximum 6 mm (maximm 0.24 in)

Check diameter (b) of the receiver hole.

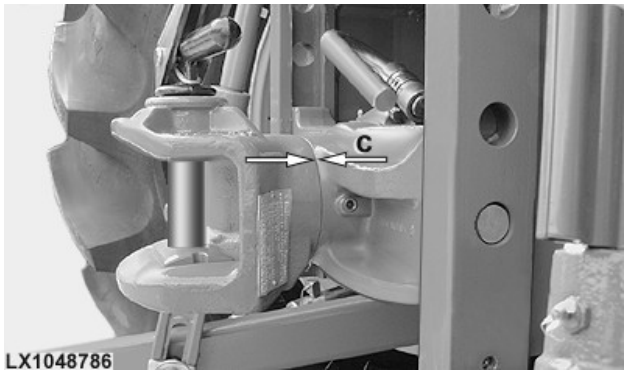


LX1031438—UN—24SEP03

Specification

Top and Bottom Receiver Holes (Measured in Direction of Travel)—Wear Limit or Diameter . . . . . maximum 35.0 mm (oval) [maximum 1.38 in (oval)]

Determine play (c) between hitch and support.



LX1048786—UN—09DEC09

Specification

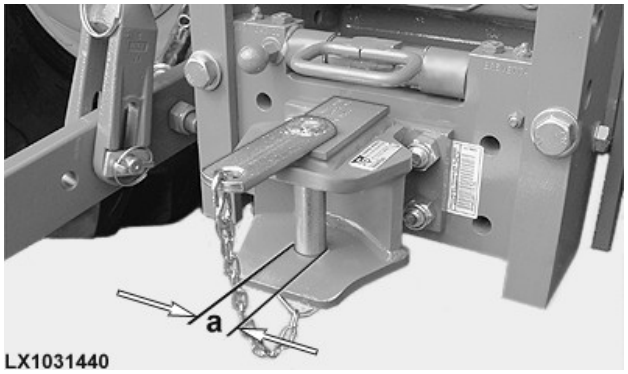
Trailer Hitch and
Receiver—Play. . . . . maximum 3.0 mm (maximum 0.12 in)

LX25458,ALL,0000B7E-19-01OCT20

Check CUNA Trailer Hitch (Manually Operated) for Wear

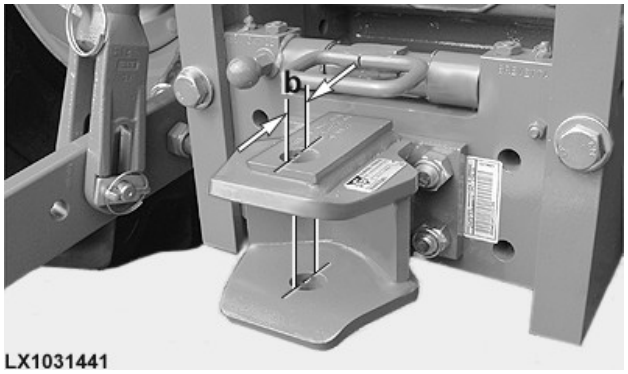
CAUTION: Parts that have reached or exceeded their wear limit need to be replaced with new parts.

Check diameter (a) of the hitch pin.



LX1031440—UN—23SEP03

Check diameter (b) of the receiver hole.



LX1031441—UN—23SEP03

Specifications for Hitch Pins Type C with a Nominal Diameter of 28.0 mm (1.10 in)

Specification

Hitch Pin—Wear Limit or
Minimum Diameter. . . . . 26.5 mm (1.04 in)

Specification

Top and Bottom Receiver Holes
(Measured in Direction of
Travel)—Wear Limit or
Maximum Permissible Diameter. . . . . 31.0 mm (oval) [1.22 in (oval)]

Specifications for Hitch Pins Type D2 with a Nominal Diameter of 43.0 mm (1.69 in)

Specification

Hitch Pin—Wear Limit or
Minimum Diameter. . . . . 41.0 mm (1.61 in)

Specification

Top and Bottom Receiver Holes
(Measured in Direction of
Travel)—Wear Limit or
Maximum Permissible Diameter. . . . . 46.0 mm (oval) [1.81 in (oval)]

Specifications for Hitch Pins Type D3 with a Nominal Diameter of 51 mm (2.01 in)

Specification

Hitch Pin—Wear Limit or
Minimum Diameter. . . . . 49.0 mm (1.93 in)

Specification

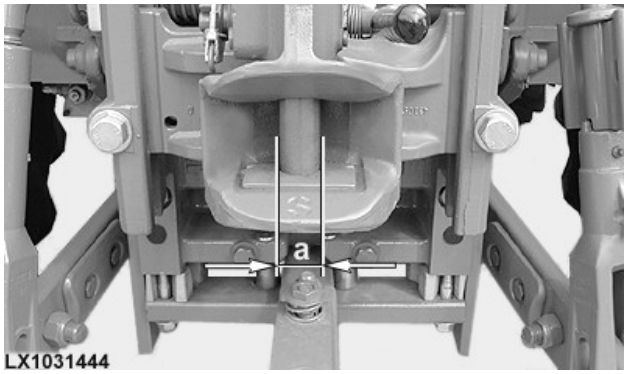
Top and Bottom Receiver Holes
(Measured in Direction of
Travel)—Wear Limit or
Maximum Permissible Diameter. . . . . 54.0 mm (oval) [2.13 in (oval)]

LX25458,ALL,0000B7F-19-12OCT20

Check Trailer Hitch (Remotely Operated) for Wear

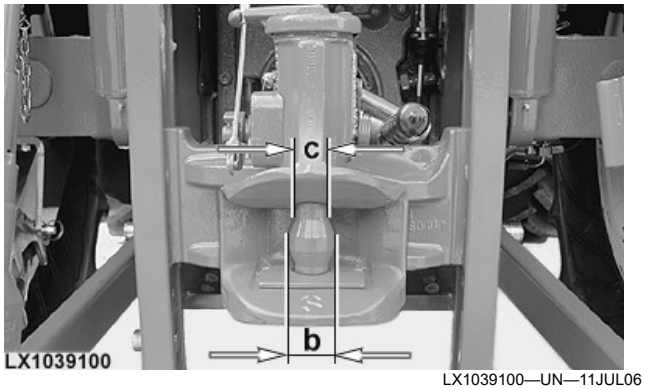
CAUTION: Parts that have reached or exceeded their wear limit need to be replaced with new parts.

Check diameters (a, b, and c) of the hitch pin.



LX1031444—UN—23SEP03

Straight-Sided Hitch Pin



LX1039100—UN—11JUL06

Ball-Shaped Hitch Pin

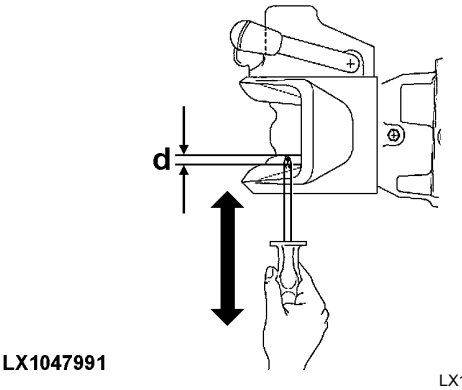
Specification

Ball-Shaped Hitch Pin—Wear Limit or Diameter (a). . . . . minimum 29 mm (minimum 1.14 in)

Ball-Shaped Hitch Pin—Wear Limit or Diameter (b). . . . . minimum 36.5 mm (minimum 1.44 in)

Ball-Shaped Hitch Pin—Wear Limit or Diameter (c). . . . . minimum 27 mm (minimum 1.06 in)

Check hitch pin vertical play (d).

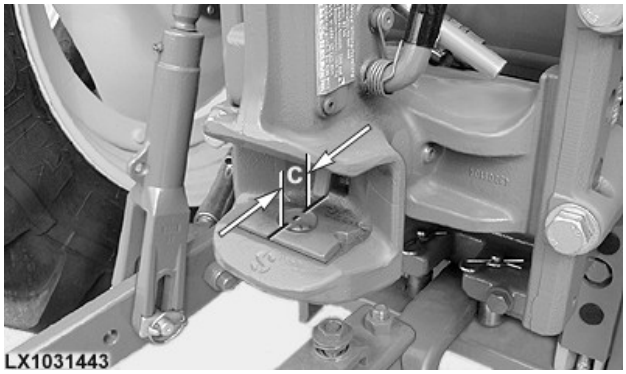


LX1047991—UN—23SEP09

Specification

Pin, Link—Play. . . . . maximum 2.5 mm (maximum 0.1 in)

Check diameter (c) of the receiver hole.

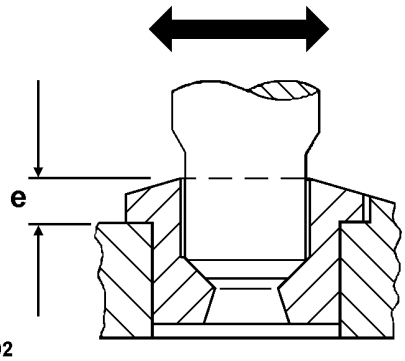


LX1031443—UN—23SEP03

Specification

Bottom Receiver Hole (In Direction of Travel)—Wear Limit or Diameter. . . . . maximum 34.0 mm (oval) [maximum 1.33 in (oval)]

Check thickness (e) of wear plate.



LX1047992—UN—23SEP09

Specification

Wear Plate—Material Thickness. . . . . minimum 6 mm (minimum 0.24 in)

Check play in the bottom pin guide.

Specification

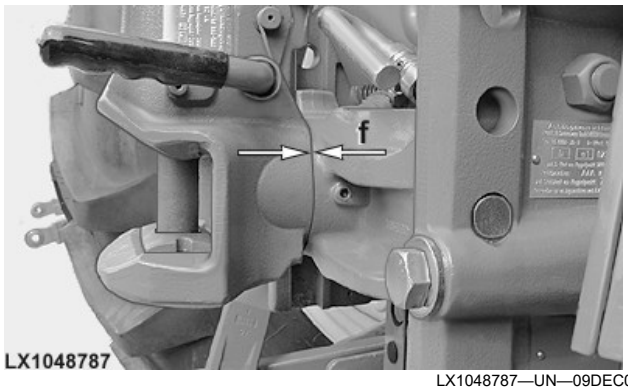
Pin in the Bottom Pin Guide—Play. . . . . maximum 2.5 mm (maximum 0.1 in)

Check wear of hitch pin or hole.

Specification

Hitch Pin and Hole—Wear. . . . . maximum 1.5 mm (maximum 0.06 in)

Determine play (f) between trailer hitch and receiver.



LX1048787—UN—09DEC09

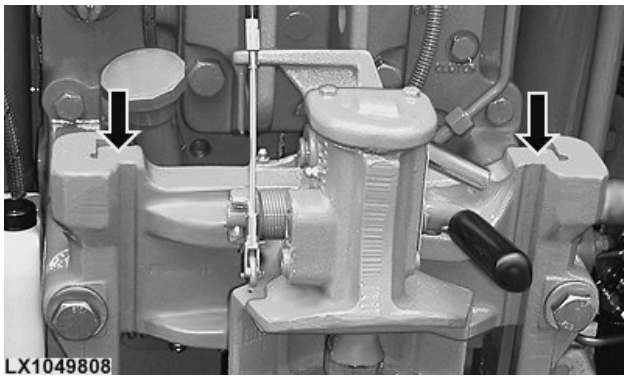
Specification

Trailer Hitch and
Receiver—Play. . . . . maximum 3.0 mm (maximum 0.12 in)

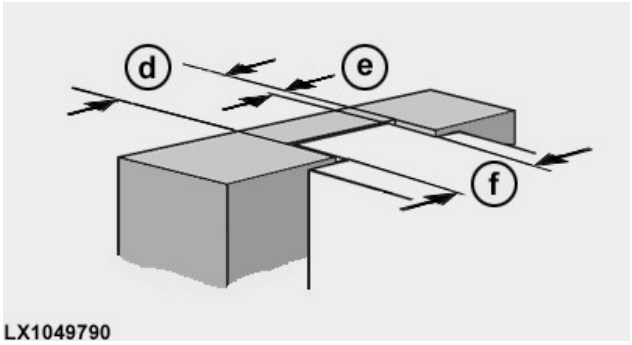
LX25458,ALL,0000B80-19-12OCT20

Trailer Hitch, Check the Guide Rails

Determine play and wear at components (d), (e), and (f). To do this, lock the hitch jaw in all possible positions, and then measure play.



LX1049808—UN—07SEP10



LX1049790—UN—20AUG10

d—Width of Guide Rail
e—Play at Guide Rails
f—Thickness of Slide

Specification

Guide Components in Pull-and-
Push Direction (e)—Play. . . . . maximum 2.4 mm (maximum 0.09 in)

Guide Rails, Groove (d) in
Trailer Mounting—Wear. . . . . maximum 1.2 mm (maximum 0.05 in)

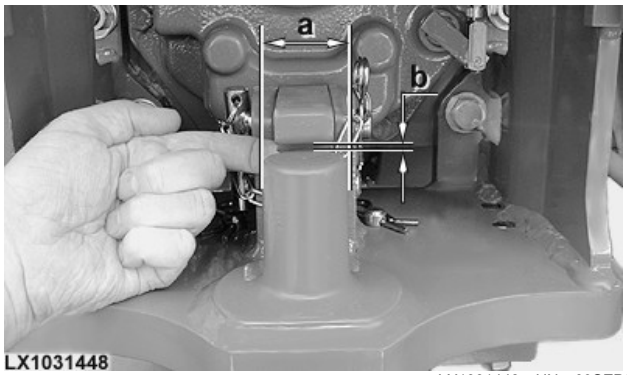
Guide Rails, Guide (f) of the
Carriage—Wear. . . . . maximum 0.8 mm (maximum 0.03 in)

LX25458,ALL,0000B81-19-01OCT20

Check Piton-Fix Trailer Hitch for Wear

CAUTION: Parts that have reached or exceeded their wear limit need to be replaced with new parts.

Check gap (b) at catch.



LX1031448—UN—09SEP03

Specification

Gap at Catch—Maximum
Permissible Clearance. . . . . 10.0 mm (0.39 in)

Check diameter (a) of the pin.

Specification

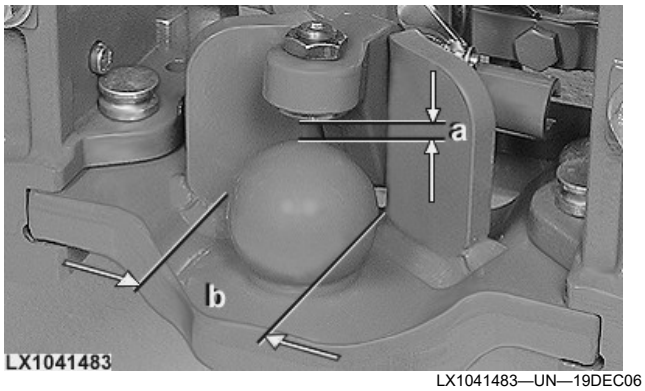
Pins—Wear Limit or Minimum
Diameter. . . . . 41.5 mm (1.63 in)

LX25458,ALL,0000B82-19-12OCT20

Check Ball-Type Hitch for Wear

CAUTION: Parts that have reached or exceeded their wear limit need to be replaced with new parts.

Check gap (b) at catch.



LX1041483—UN—19DEC06

Specification

Gap at Catch—Maximum
Permissible Clearance. . . . . 4.0 mm (0.16 in)

Check diameter (b) of the ball.

Specification

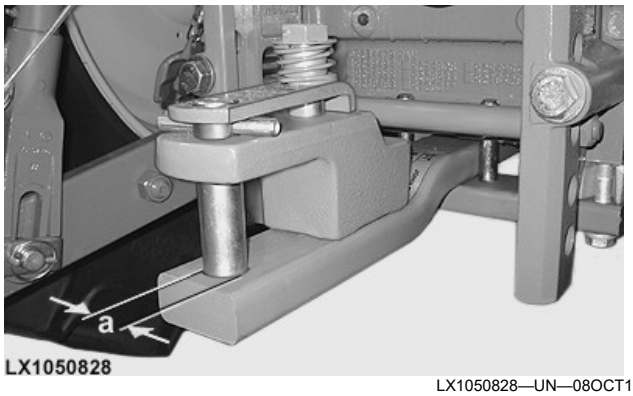
Ball diameter—Wear Limit or
Minimum Diameter. . . . . 78.0 mm (3.07 in)

LX25458,ALL,0000B83-19-12OCT20

Check Drawbar for Wear

CAUTION: Parts that have reached or exceeded their wear limit need to be replaced with new parts.

Check diameter (a) of the pin.



LX1050828—UN—08OCT10

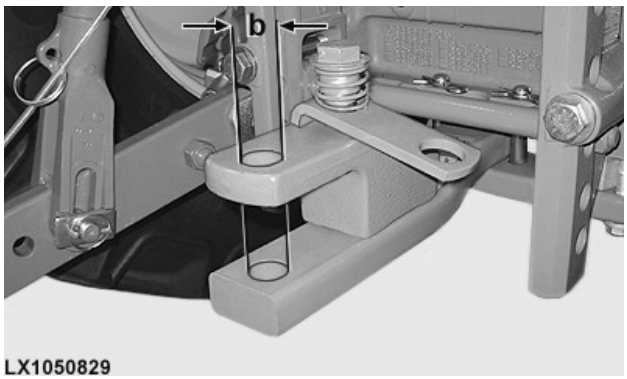
Specifications for Cat. 2 hitch pins with a nominal diameter of 31.5 mm (1.24 in):

Specification	
Drawbar, Pin—Wear Limit or Minimum Diameter	29.5 mm (1.16 in)

Specifications for Cat. 3 hitch pins with a nominal diameter of 40.0 mm (1.57 in):

Specification	
Drawbar, Pin—Wear Limit or Minimum Diameter	37.5 mm (1.48 in)

Check diameter (b) of the pin receiver hole.



LX1050829—UN—08OCT10

Specifications for Cat. 2 receiver hole with a nominal diameter of 33.0 mm (1.30 in):

Specification	
Top and Bottom Receiver Holes (Measured in Direction of Travel)—Wear Limit or Maximum Permissible Diameter	35.0 mm (oval) [1.38 in (oval)]

Specifications for Cat. 3 receiver hole with a nominal diameter of 41.0 mm (1.61 in):

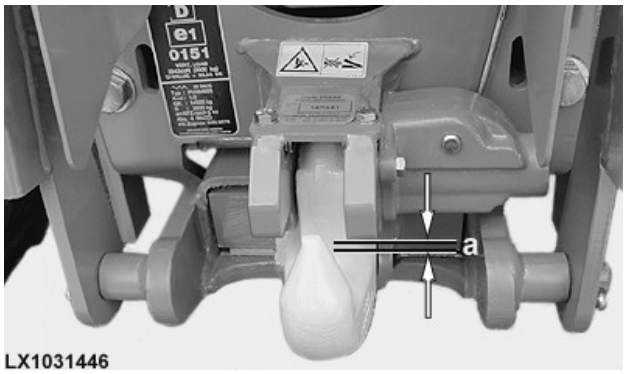
Specification	
Top and Bottom Receiver Holes (Measured in Direction of Travel)—Wear Limit or Maximum Permissible Diameter	43.0 mm (oval) [1.69 in (oval)]

LX25458,ALL,EU,0000B84-19-12OCT20

Check Tow Hook on Pickup Hitch for Wear

CAUTION: Parts that have reached or exceeded their wear limit need to be replaced with new parts.

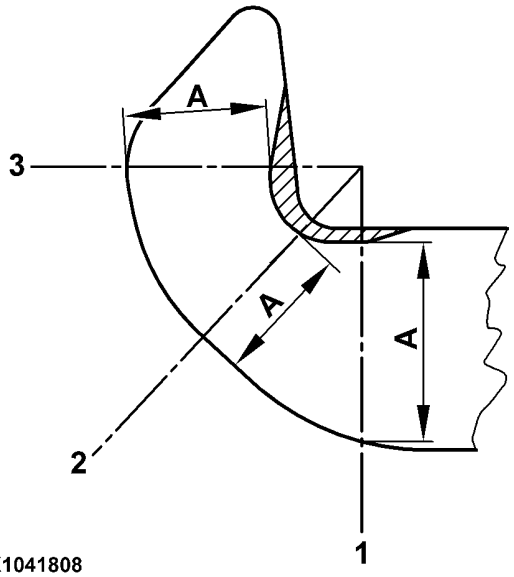
Check gap (a) at catch.



LX1031446—UN—24SEP03

Specification	
Gap at Catch—Maximum Permissible Clearance	10.0 mm (0.39 in)

Read the D-value (unit of measurement = kN) from pickup hitch type plate.



LX1041808—UN—27NOV06

If the D-value indicated that on the type plate is 65 or less, observe the following wear tolerances (A).

Specification	
Tow Hook, Thickness of Hook (D Less than or Equal to 65)—Minimum Value (A), Diameter 1	43.5 mm (1.71 in)
Minimum Value (A), Diameter 2	42.0 mm (1.65 in)
Minimum Value (A), Diameter 3	40.5 mm (1.59 in)

If the D-value indicated that on the type plate is greater than 65, observe the following wear tolerances (A).

Specification	
Tow hook, thickness of hook (D greater than 65)—Minimum Value (A), Diameter 1	45.0 mm (1.77 in)
Minimum Value (A), Diameter 2	43.5 mm (1.71 in)
Minimum Value (A), Diameter 3	42.0 mm (1.65 in)

OULXA64,ALL,EU,000570B-19-27NOV20

Check Front Loader Dynamic Weighing System (DWS)

Check the weighing accuracy at regular intervals. Changing the friction coefficients of front loader components may result in inaccurate weighings. If necessary, a calibration needs to be carried out for correction.

1. Park the tractor on a level surface and engage the park lock.

CAUTION: Danger to life due to being crushed.

When the front loader is moved up and down, persons in the danger zone may be injured or killed.

Secure the danger zone and make sure that no-one is standing in the danger zone.

2. Heat the oil to at least 30°C (86°F) and then raise and lower the front loader several times across the entire range.
3. Raise front loader about 20 cm from the ground.
4. Press the tare key.
5. If available, arrange four suitcase weights of 50 kg each or similar ballast of known weight in the bucket (or on the pallet fork, etc.).

   If there is no suitable ballast of known weight, fill several water tanks for example and weigh. Afterwards, ballast the loader with them and add the individual weights of the containers used.
6. At low engine speed, lift the front loader **slowly**.

Watch the weight display thereby in the CommandCenter™.

Compare the read weight with the actual weight in the loader tool. In case of too great of a deviation or deterioration over time, it is recommended to have it calibrated by an authorized dealer (FLC 044 - Friction Resistance, Calibration).

OULXA64,6R,MXtoMR,00059EE-19-28MAR23

Replace Bulbs

See Service—Check Hardware Torques in section 220B.

LX25458,ALL,0000B85-19-29AUG23

Replace Engine Oil Filter

TS281—UN—15APR13

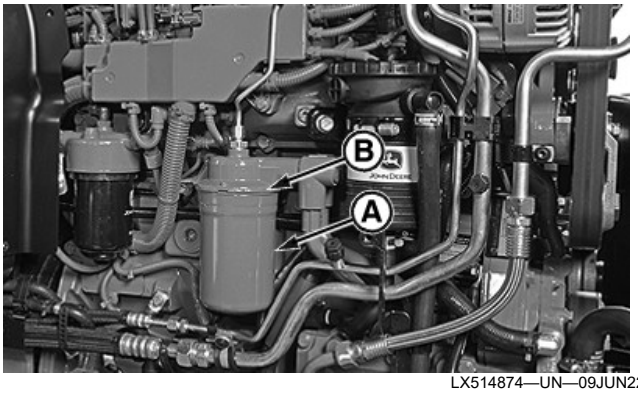
CAUTION: Danger of injury from hot components or hot oil.

Touching hot surfaces, accessories, or hoses and leads can cause injury.

Avoid contact with hot surfaces or hot oil.

Change the oil filter while the oil is warm (approx. 40°C; 103°F).

1. Unscrew oil filter (A).



LX514874—UN—09JUN22

Sample Illustration

2. Clean mounting surface (B).
3. If necessary, replace the dust seal on the mounting surface with a new one. Make sure that the lugs on the dust seal engage in the recesses in the mounting surface of the filter element.
4. Apply a thin film of oil to seal rings (C) of the new filter.

LX1029276—UN—08JUL02

5. Screw in the new filter and finger-tighten!
6. After topping up the engine oil, run the engine and check base of filter for leaks.
7. Stop engine and check the oil level. See Check Engine Oil Level in Section 220D.

NOTE: Always replace the engine oil filter whenever the engine oil is exchanged.

LX25458,OOS,SP,0000B86-19-08JUN22

Change Engine Oil (6-Cylinder Engines)

TS281—UN—15APR13

CAUTION: Danger of injury from hot components or hot oil.

Touching hot surfaces, accessories, or hoses and leads can cause injury.

Avoid contact with hot surfaces or hot oil.

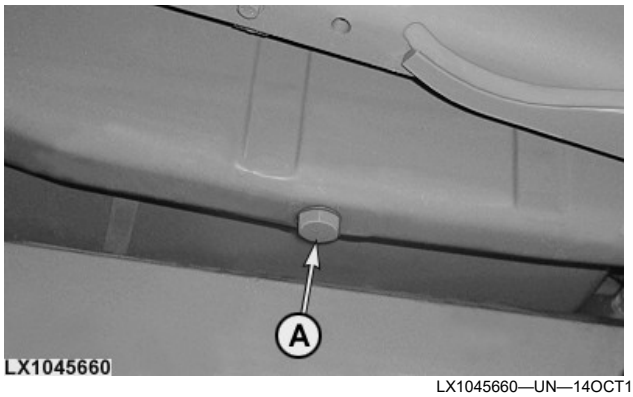
Perform oil change while the oil is warm (approx. 40°C; 103°F).

IMPORTANT: Use oil with a viscosity suitable for the relevant season.

NOTE: Initial engine oil change (Brake-In Plus™ Oil), replace engine oil between a minimum of 100 hours and a maximum of 500 hours of operation.

Regular engine oil change (Plus 50 II Oil), after every 750 operating hours but at least once every year. Refer to ***Service Intervals for Engine Oil and Engine Oil Filter*** *in section 210A—210D.*

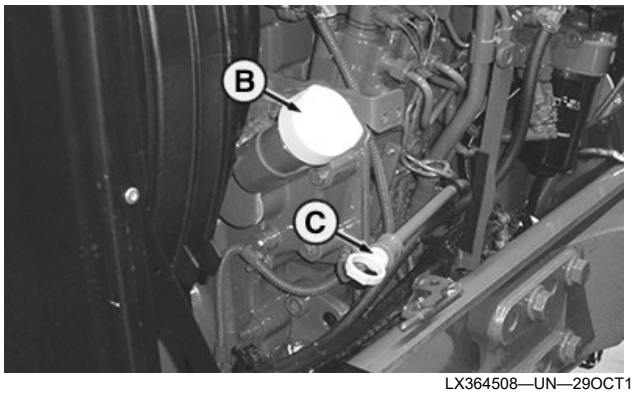
1. Perform oil change while the engine oil is warm (approx. 40°C; 103°F). Shut down the engine.
2. Place a suitable container underneath to trap the oil, and remove drain screw (A).



LX1045660—UN—14OCT10

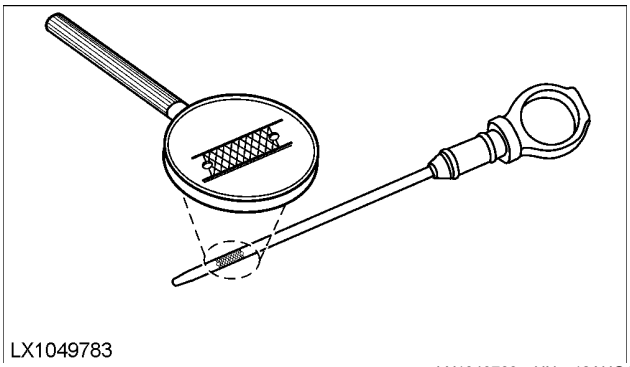
Oil Drain Screw on 6-Cyl. Engines

3. Replace the filter while the oil is draining.
4. Reinstall oil drain screw and tighten to 50 N·m (37 lb·ft). Use a new sealing washer.
5. Fill crankcase with fresh oil of proper viscosity at filler neck (B). See section 200C.



LX364508—UN—29OCT19

Oil Filler Neck, Sample Illustration



LX1049783—UN—12AUG10

B—Oil Filler Neck
C—Oil Dipstick

Specification

Quantity for Filling—Quantity. . . . . about 23.5 L (about 6.2 US gal)

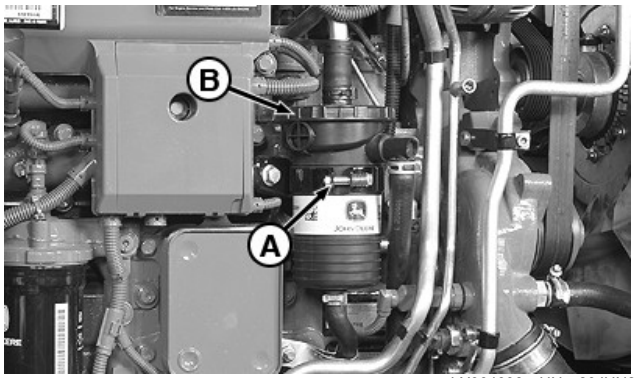
6. Use dipstick (C) to Check the oil Level. Oil level must be in the upper part of the hatched area on the dipstick. Fill to the proper level, if necessary.
7. Run engine for a short time and check for leaks at the filter base and oil drain screw.
8. Shut off engine and remove key switch.
9. Check oil level once again. It should be up to the top mark on the dipstick.

NOTE: Also see Check Engine Oil Level in section 220.

LX25458,OOS,SP3,000B88-19-30AUG23

Replace Filter of Oil Separator in Crankcase Vent (If Equipped)

1. Unfasten clamp (A).



LX364638—UN—23JUN20

Sample Illustration

2. Open cover (B) and remove the filter.
3. Clean the housing and install new filter.
4. Install the cover and tighten it.
5. Position housing and tighten the clamp (A).

OULXA64,6CYL,0005714-19-02OCT20

Replace Engine Torsion Damper (6-Cylinder Engines Only)

To replace the engine torsion damper, see an authorized dealer.

OULXA64,0005A6C-19-02FEB21

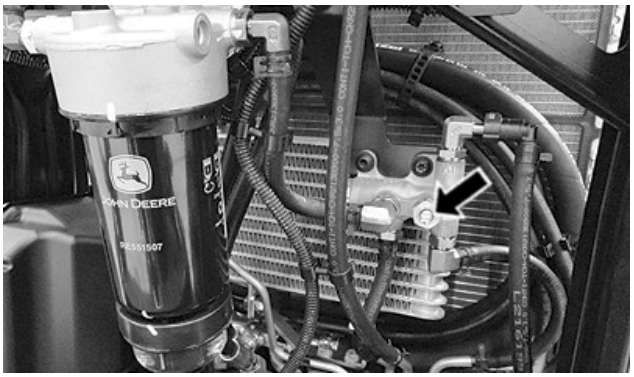
Replace Fuel Filters (6-Cylinder Engines)

CAUTION: Shut off engine and remove key switch.

IMPORTANT:

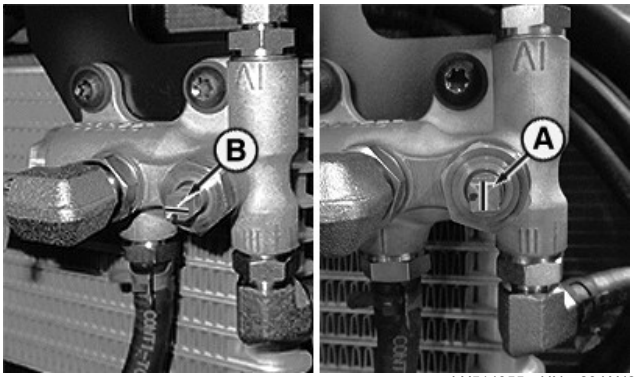
- **Always replace both filters.**
- **Dispose of drained fuel and used filters in accordance with local laws and ordinances.**
- **DO NOT prime fuel filter with fuel.**

IMPORTANT: On tractors with the valve shown, set valve position (A) before changing the filters.



LX514854—UN—28JAN22

Valve (sample representation)

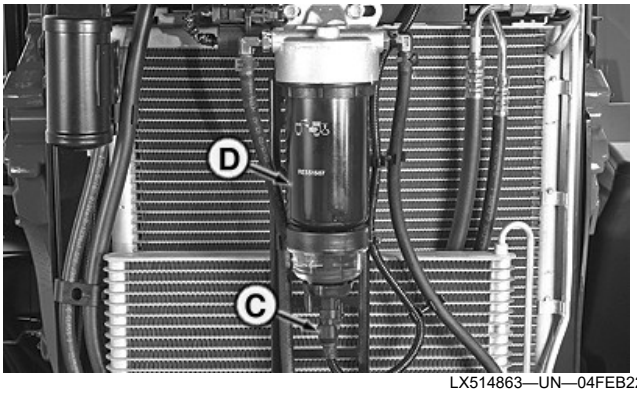


LX514855—UN—28JAN22

A—Valve Position When Changing the Filter (ready for maintenance)
B—Valve Position After Changing the Filter (ready for operation)

After changing the filter, set valve position (B).

1. Replace primary fuel filter.



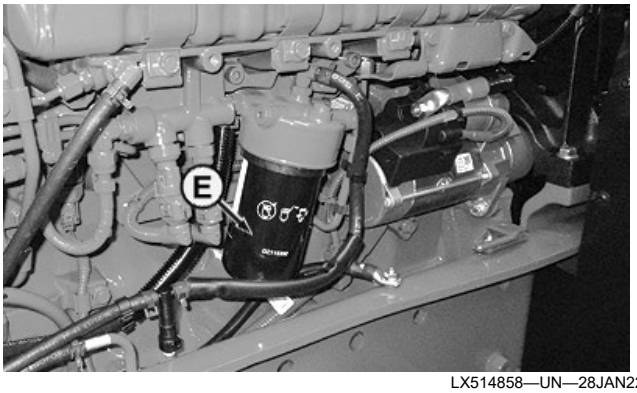
LX514863—UN—04FEB22

Primary Fuel Filter (sample representation)

C—Connector
D—Primary Fuel Filter

a. Clean exterior of filter and surrounding area.
b. Disconnect connector (C) from the water sensor.
c. Open the drain valve and drain fuel into a suitable container.
d. Loosen and remove filter (D).
e. Remove the water separator from the filter.
f. Clean the sealing ring of the water separator and lubricate with fuel.
g. Attach the water separator to the new filter.
h. Lubricate the sealing ring of the new filter with fuel.
i. Install new filter on the base. Tighten another 3/4 turn after seal contacts the mounting surface.
j. Reconnect connector (C).

2. Replace secondary fuel filter.



LX514858—UN—28JAN22

Secondary Fuel Filter

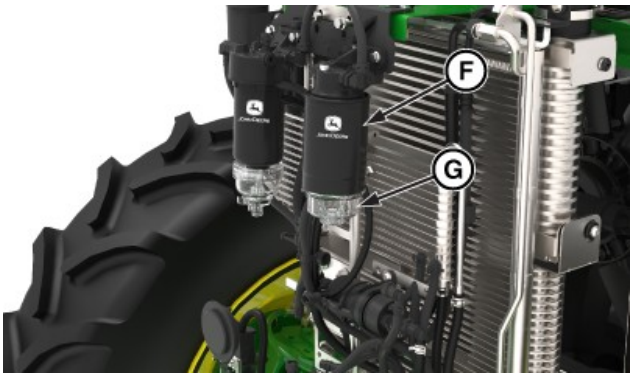
E—Secondary Fuel Filter

a. Clean exterior of filter and surrounding area.
b. Loosen and remove filter (E). *Catch draining fuel with a suitable container.*

c. Lubricate the sealing ring of the new filter with fuel.

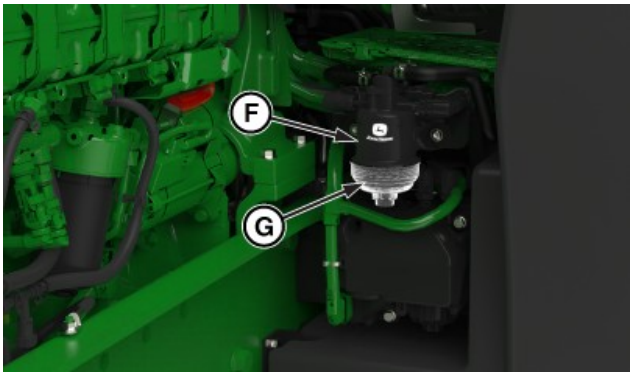
d. Position new filter (E) and tighten.

3. Replace adiditional fuel filter (if equipped).



LX515745—UN—20DEC23

Example: Aditional Fuel Filter (if equipped)



LX515756—UN—20DEC23

Example: Aditional Fuel Filter (if equipped)

F—Additional Fuel Filter
G—Water Separator

a. Clean exterior of filter and surrounding area.

b. Open the drain valve and drain fuel into a suitable container.

c. Loosen and remove filter (F).

d. Remove the water separator (G) from the filter.

e. Clean the sealing ring of the water separator and lubricate with fuel.

f. Attach the water separator to the new filter.

g. Lubricate the sealing ring of the new filter with fuel.

h. Install new filter on the base. Tighten another 3/4 turn after seal contacts the mounting surface.

4. Put the fuel system into operation.

a. Turn the key in the key switch to the right to the first switching position and let the fuel transfer pump run for about 120 seconds. Repeat as necessary.

b. Start and run engine at high idle for at least 2 minutes.

OULXA64,6R,6CYL,0005A90-19-22DEC23

Replace Engine Air Cleaner

IMPORTANT: Never run the engine without the primary air cleaner element!

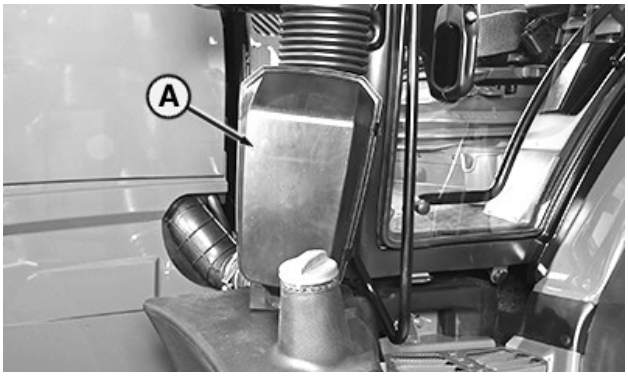
IMPORTANT: Every time the engine primary air cleaner is changed, the cab air filters need to be changed as well.

NOTE: If a message appears on the CommandCenter™ indicating that the engine air cleaner is restricted, the primary filter element must be changed that very same day.

After the first message appears, the tractor can still be operated long enough to complete the day's work. However, from the next message onwards, tractor operation is restricted for safety reasons. A filter change is then unavoidable.

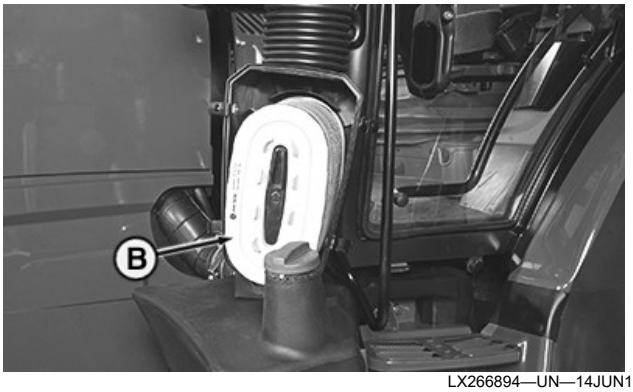
The secondary filter must be changed no later than at every fourth change of the primary filter, or every 4500 hours or 2 years. See "Service the Engine Air Cleaner and Cab Air Filters" in Section 210B.

1. Open the clips and remove cover (A).



LX266893—UN—14JUN16

2. Remove filter (B).



LX266894—UN—14JUN16

3. Install new filter Make sure to install it in correct position.
4. Position the cover and close the clips.

OULXA64,6R,MW67,0005FE9-19-09JUN22

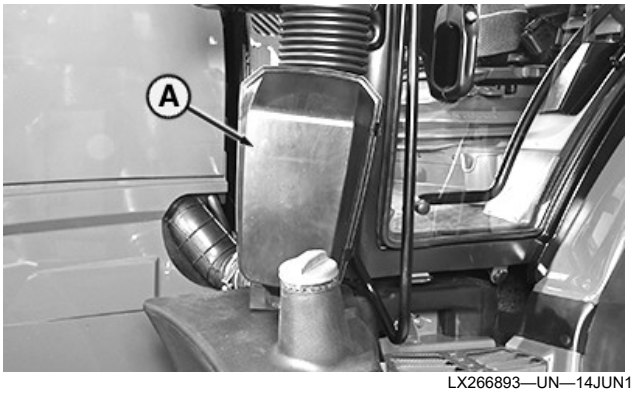
Replace Secondary Element Engine Air Cleaner

IMPORTANT: Never run the engine without the primary and/or secondary air cleaner element!

IMPORTANT: Do not attempt to clean secondary element; only ever replace it with a new one.

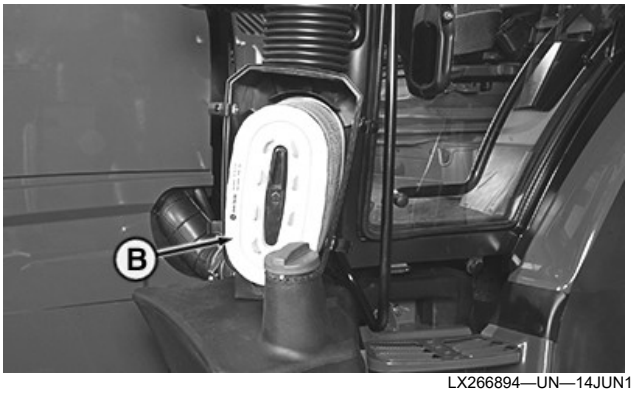
NOTE: The secondary filter must be changed no later than at every fourth change of the primary filter, or every 4500 hours or 2 years. See "Service the Engine Air Cleaner and Cab Air Filters" in Section 210B.

1. Open the clips and remove cover (A).



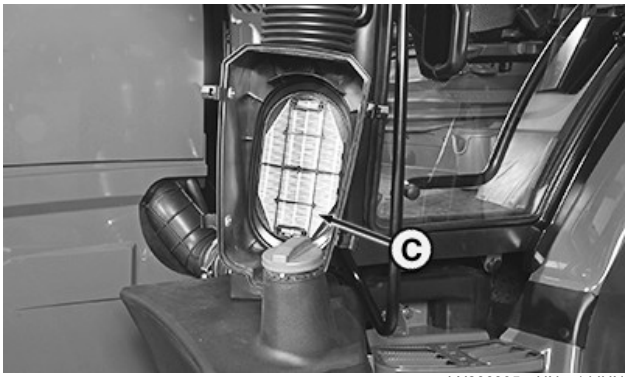
LX266893—UN—14JUN16

2. Remove primary filter element (B).



LX266894—UN—14JUN16

3. Replace secondary element (C). Make sure to install it in correct position.



LX266895—UN—14JUN16

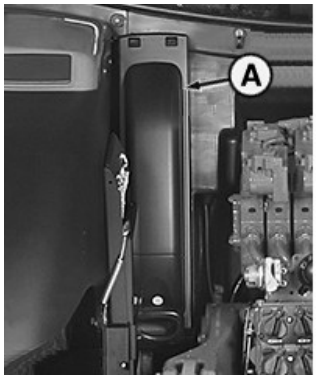
4. Install primary filter.
5. Position the cover and close the clips.

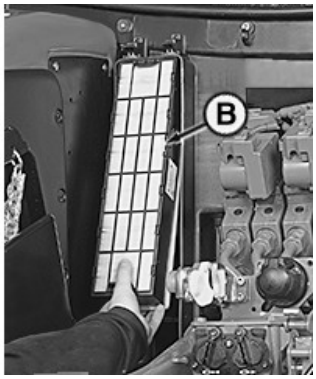
OULXA64,6R,MW67,0005FEA-19-09JUN22

Replace Cab Air Filters and Recirculation Air Filters

IMPORTANT: Change cab air filters every 1500 hours or 2 years. See Service the Engine Air Cleaner and Cab Air Filters in Section 210B.

1. Remove covers (A) and (C) and take out the filters.





LX267126—UN—12APR17

LX267127—UN—12APR17

2. If required, remove cab air filter (B) and the two recirculation air filters (D) and tap them.
3. Clean air filter housing and air passages of dust.

4. For installation, follow removal procedure in reverse order.
5. Before closing the cover, make sure that the fresh air filter element is correctly installed in its groove.

OULXA64,6R,All,0005A8E-19-17MAY23

Replace Activated Carbon Filter of Cab Air Filter (If Equipped)

CAUTION: It is not permitted to clean the air filter if the cab has been retrofitted with activated carbon filters. Activated carbon filters have to be replaced with new ones.

IMPORTANT: Change activated carbon filters every 750 operating hours or once every year at the latest.

See Change Cab Air Filters in this Group.

OULXA64,750h,0005A8D-19-17MAY23

Cab Suspension—Fill Pressure Accumulator

Have pressure accumulator of cab suspension filled by an authorized dealer.

OULXA64,6R,0005EF7-19-05OCT21

Change Coolant

TS281—UN—15APR13

CAUTION: Danger of injury from hot, pressurized coolant.

Touching hot surfaces of the cooling system, accessories, or hoses and leads can cause injury.

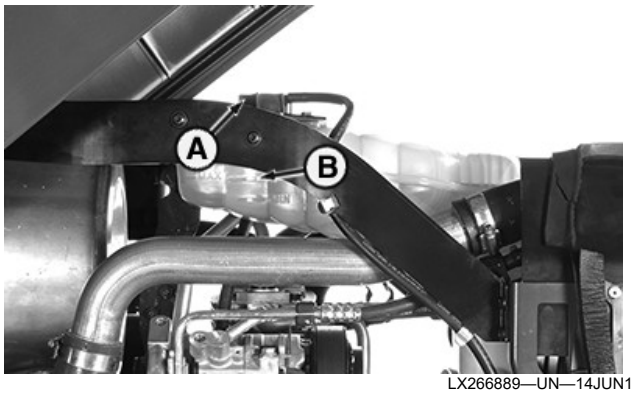
Avoid contact with hot surfaces or hot coolant.

Do not open cap (A) of expansion tank before coolant temperature is below boiling point. First unfasten the cap to relieve pressure, then remove cap completely.

NOTE: Comply with service interval instructions regarding engine coolant.

The FIRST service interval is 6 years or 6000 hours of operation, provided the cooling system has been improved exclusively with John Deere Cool-Gard™ II and Premix and the coolant has been tested at the specified intervals. After initial service, the SCHEDULED interval (2 years or 2000 hours of operation) can be extended up to 6 years or 6000 hours of operation depending on coolant used and if coolant is tested at specified intervals. Comply with the recommended engine coolant service intervals in Diesel Engine Coolant in Section 200D of this manual.

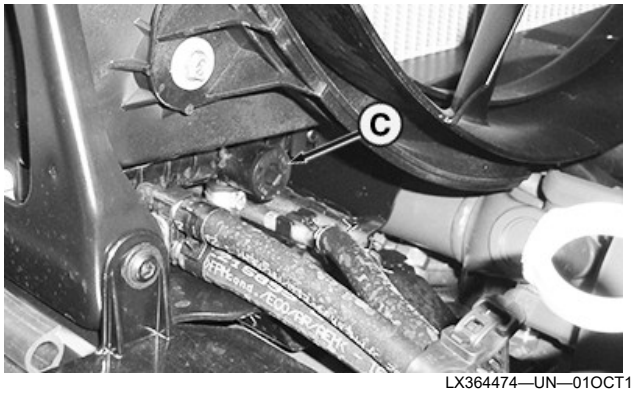
1. Turn the heater control in the cab as far as it goes to the right.
2. First unfasten cap (A) and then take it off.



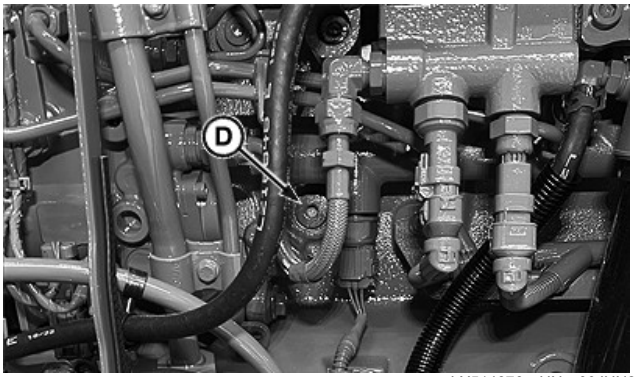
LX266889—UN—14JUN16

A—Expansion Tank Cap
B—MAX Marking of the Expansion Tank

3. Place a container under the drain to collect the coolant as it emerges. Open drain plug (C).



LX364474—UN—01OCT19



LX514876—UN—09JUN22

Drain Screw, Engine (6-Cylinder Engines Only)

C—Drain Plug, Radiator
D—Drain Screw, Engine

4. Open drain plug (C) and remove drain screw (D).
5. After coolant has drained out, close drain plug (C) and tighten it to the specified torque.

Specification

Coolant - Drain Plug—Torque. . . . . 4—5 N·m (3—3.7 lb·ft)

6. Put a new O-ring on the drain screw (D).
7. Screw in the drain screw (D) and tighten it to the specified torque.

Specification

Coolant - Drain Screw to Engine—Torque. . . . . 45 N·m (33 lb·ft)

IMPORTANT: Never pour cold water or coolant into the hot engine. Always use warm water or wait until engine has coole

8. Fill the system up to the MAX mark (B) with clean water, and close cap (A).

⚠ CAUTION: Before starting the engine, always close the hood.

9. Run the engine until it reaches operating temperature. Shut off engine and drain system.
10. Close drain plug again and fill the system with clear water.
11. Again run engine until it has reached operating temperature. Shut off engine and drain system again.
12. Close the drain plug (C) and fill the system up to the MAX mark (B) with the prescribed coolant (see Section 200D).
13. Start the engine and run it for 5 minutes.
14. Shut off the engine and add coolant up to the MAX mark (B).
15. Start the engine and bring it up to operating temperature.
16. Shut off the engine and add coolant up to the MAX mark (B).
17. Put cap (A) back on and close it.
18. For efficient cooling, the radiator screen must be kept clean. Remove any dirt or oil and carefully straighten any bent fins.

OULXA64,6R,MW67,0005FEB-19-09JUN22

Change Diesel Exhaust Fluid (DEF) Dosing Unit Filter

⚠ CAUTION: Avoid contact with eyes. In case of contact, immediately flush eyes with large amounts of water for a minimum of 15 minutes. Reference the Materials Safety Data Sheet (MSDS) for additional information.

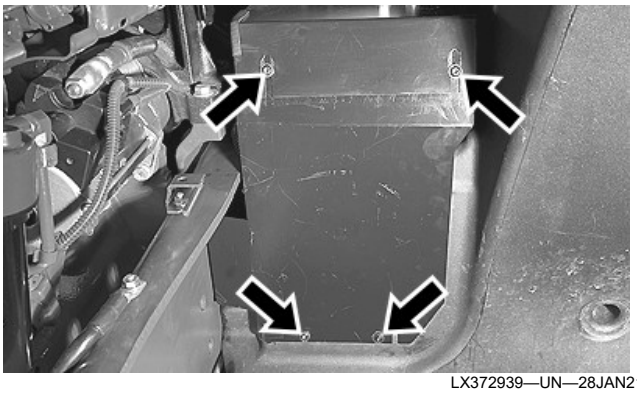
IMPORTANT: If DEF is spilled or contacts any surface other than the storage tank, immediately clean the surface with clear water. DEF is corrosive to painted and unpainted metallic surfaces and can distort some plastic and rubber components.

Spilled DEF, if left to dry or if only wiped away with a cloth, leaves a white residue. Improperly cleaned DEF spill can interfere with diagnosis of Selective Catalytic Reduction (SCR) system leakage problems.

NOTE: See your John Deere equipment technical manual or OEM manufacturer's technical manual for DEF dosing unit filter location.

IMPORTANT: Avoid system and filter damage. Ensure that DEF system is not frozen before changing filter. If system is frozen, operate engine until system has thawed completely.

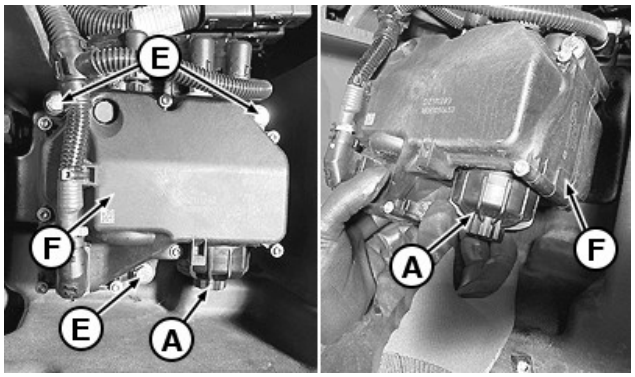
1. Remove screws and cover.



LX372939—UN—28JAN21

Remove Cover

2. Unscrew the DEF dosing unit filter cover (A).

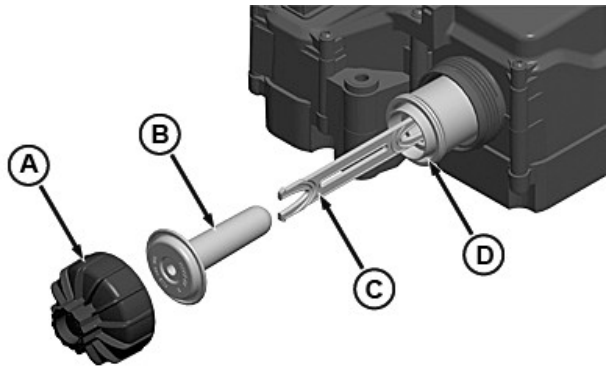


LX372936—UN—28JAN21

Tilt the Housing Carefully

A—DEF Dosing Unit Filter Cover
E—Screws
F—DEF Dosing Unit Housing

3. Remove screws (E).
4. As shown, carefully tilt the housing (F) without bending or damaging the lines.
5. Remove DEF dosing unit filter cover (A).



RG22534—UN—21MAR13

DEF Dosing Unit Filter

A—DEF Dosing Unit Filter Cover
B—DEF Dosing Unit Filter Equalizing Element
C—DEF Dosing Unit Filter Tool (supplied with new filter)
D—DEF Dosing Unit Filter

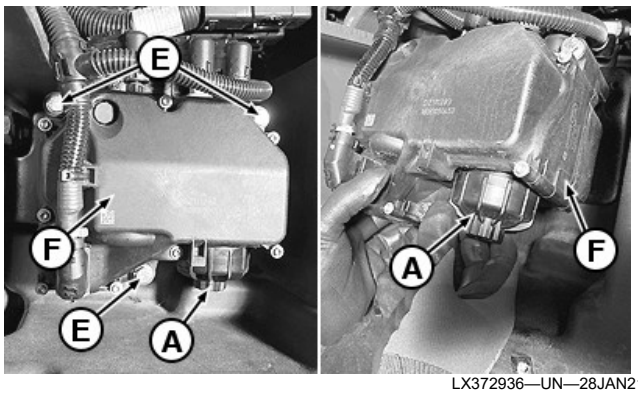
6. Remove and discard DEF dosing unit filter equalizing element (B).

NOTE: DEF dosing unit filter tool (C) is supplied with replacement filter.

7. Insert “Black” end of DEF dosing unit filter tool (C) into DEF dosing unit filter (D) until CLICK is felt or heard indicating DEF dosing unit filter tool is fully engaged.

NOTE: A tool such as a screwdriver can be inserted into DEF dosing unit filter tool slot to assist removal.

8. Pull DEF dosing unit filter tool and DEF dosing unit filter from DEF dosing unit. Discard DEF dosing unit filter and DEF dosing unit filter tool.
9. Clean DEF dosing unit threads and mating surfaces with distilled water.
10. Lubricate DEF filter O-rings with clean DEF. Carefully insert DEF dosing unit filter into DEF dosing unit.
11. Install new DEF dosing unit filter equalizing element into DEF dosing unit filter.
12. Arrange DEF dosing unit filter cover (A) and screw in about two treads.



LX372936—UN—28JAN21

Carefully Arrange the Housing

A—DEF Dosing Unit Filter Cover
E—Screws
F—DEF Dosing Unit Housing

13. Carefully Arrange the housing (F) without bending or damaging the lines.
14. Arrange screws (E) and tighten to specification.

    • Only for 6090M—6120M tractors without holder and with a wheelbase of 2400 mm (94.5 in).

Specification

DEF Dosing Unit Housing to Fuel Tank—Torque. . . . . 17 N·m (150 lb·in)

    • Only for tractors with a holder. NOT for 6090M—6120M tractors with a wheelbase of 2400 mm (94.5 in).

Specification

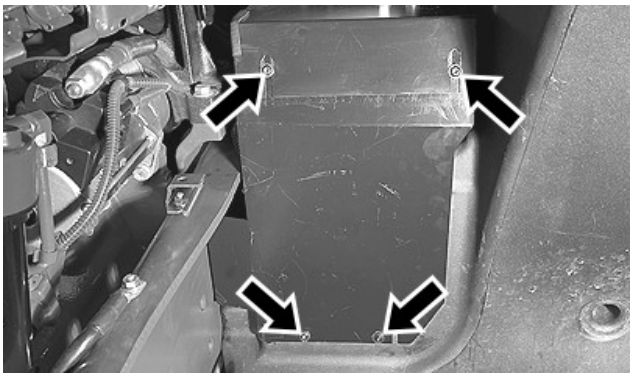
DEF Dosing Unit Housing to Holder—Torque. . . . . 25 N·m (221 lb·in)

15. Tighten DEF dosing unit filter cover (A) to specification.

Specification

DEF Dosing Unit Filter Cover—Torque. . . . . 23 N·m (204 lb·in)

16. Arrange the cover and tighten screws to specification.



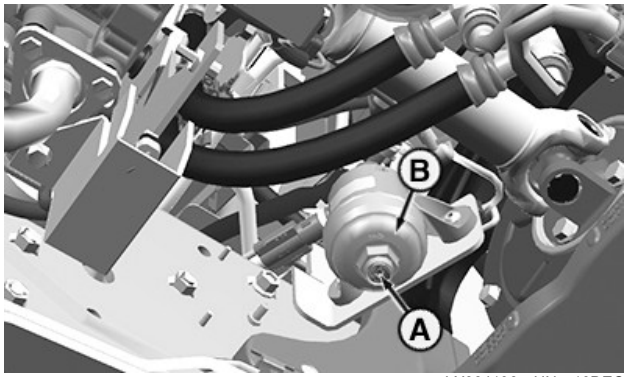
LX372939—UN—28JAN21

Arrange the Cover

Specification	
Cover of DEF Dosing Unit—Torque	25 N·m (221 lb·in)

OULXA64,19,DX,DEF,CHANGE,FILT-19-28MAR23

Installation Position of In-Line DEF Filter



LX364196—UN—10DEC18

Universal-Jointed Shaft Not Shown for Better Illustration/ Exemplary Illustration

A—Drain Screw
B—Housing

For changing the filter, see Change In-Line DEF Filter on the following pages.

LX25458,FROM,MY19,0000B90-19-02OCT20

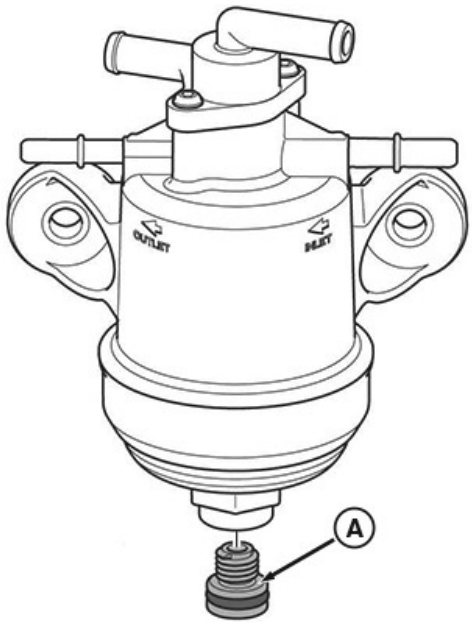
Change Diesel Exhaust Fluid (DEF) In-Line Filter

CAUTION: Avoid possible personal injury. In case of DEF contact, immediately flush eyes with large amounts of water for a minimum of 15 minutes. Reference the Materials Safety Data Sheet (MSDS) for additional information. Do not ingest DEF. In the event DEF is ingested, contact a physician immediately. Reference the Materials Safety Data Sheet (MSDS) for additional information.

IMPORTANT: Avoid corrosion of vehicle parts or surfaces. If DEF is spilled or contacts any surface other than the storage tank, immediately clean the surface with clear water. DEF is corrosive to painted and unpainted metallic surfaces and can distort some plastic and rubber components. Spilled DEF, if left to dry or if only wiped away with a cloth, will leave a white residue. Improperly cleaned DEF spill may interfere with diagnosis of Selective Catalytic Reduction (SCR) system leakage problems.

NOTE: See your John Deere equipment technical manual or OEM manufacturer's technical manual for in-line DEF filter location.

IMPORTANT: Avoid system and filter damage. Ensure that DEF system is not frozen before changing filter. If system is frozen, operate engine until system has thawed completely.



RG30728—UN—08AUG18

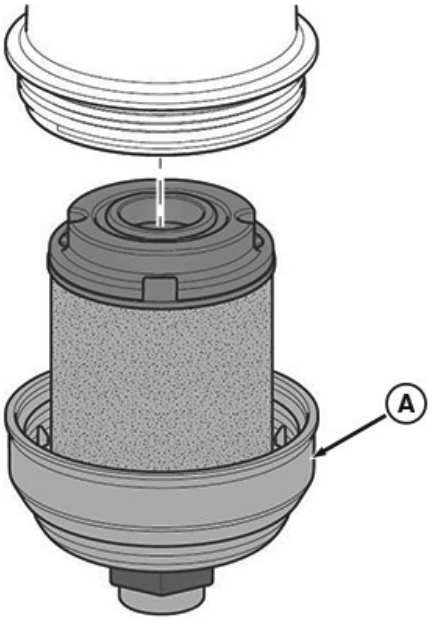
DEF Fluid Removal

A—Drain Plug with O-Ring

1. Remove drain plug with O-ring (A) and discard.

NOTE: Container must be DEF compatible and hold at least 300 mL (0.32 qt).

2. Drain DEF into a proper container.



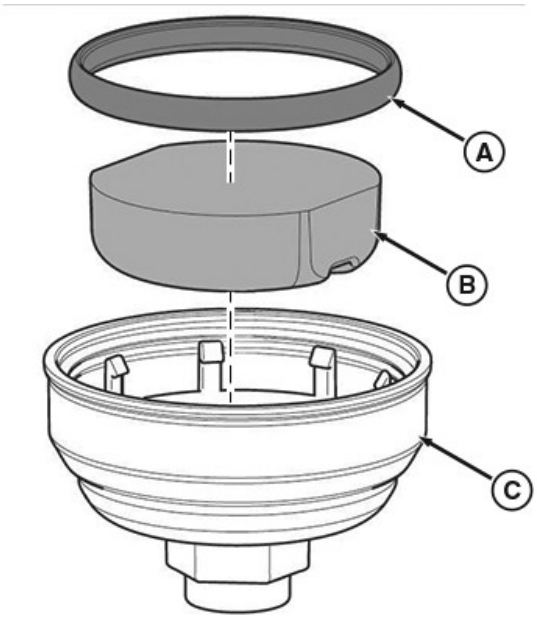
RG30727—UN—08AUG18

Filter Removal

A—Filter Housing

3. Rotate filter housing (A) counterclockwise and pull down.
4. Remove and discard filter from housing (A).

NOTE: If necessary, tap filter to loosen from filter housing (A).



RG30726—UN—08AUG18

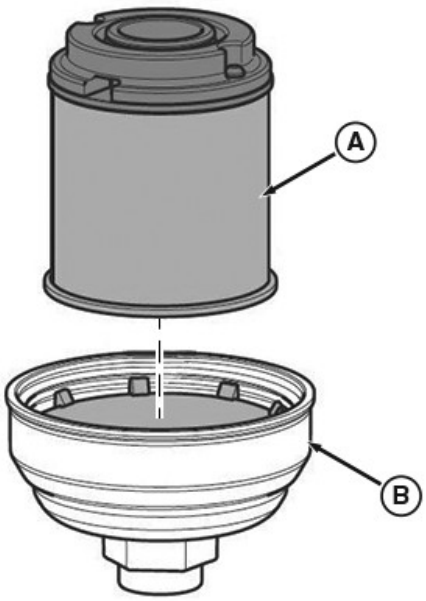
Filter Housing Components

A—O-Ring
B—Foam Compensation Element
C—Filter Housing

5. Remove and discard O-ring (A) and foam compensation element (B).

NOTE: Filter housing should be cleaned with clean DEF before installing new components to remove any sediment debris or contamination.

6. Install new O-ring (A) and foam compensation element (B) into filter housing (C).

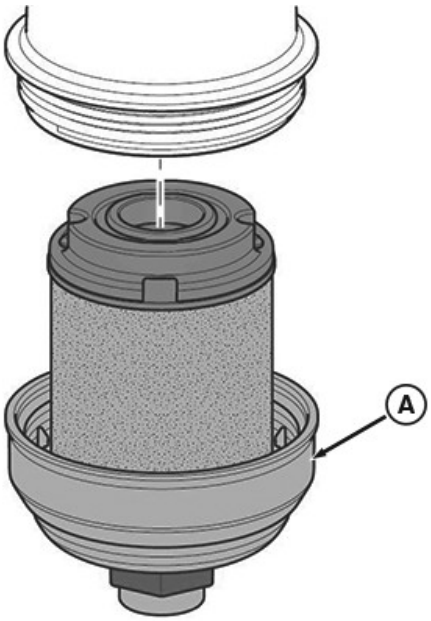


RG30725—UN—08AUG18

Filter Housing and Components Installation

A—Filter
B—Filter Housing

7. Install new filter (A) into filter housing (B).



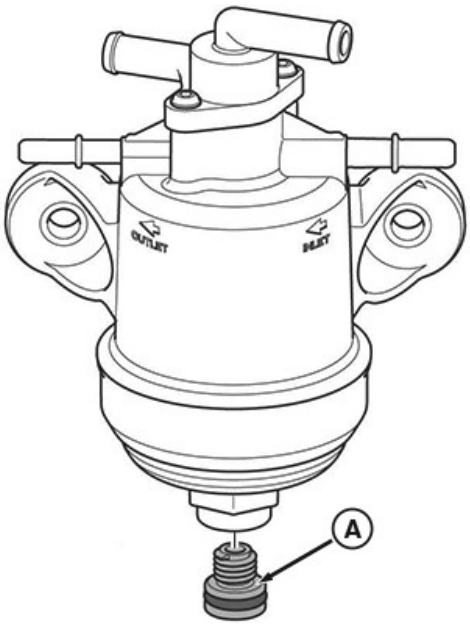
RG30727—UN—08AUG18
In-Line DEF Filter Housing Installation

A—Filter Housing

8. Install filter housing (A) with O-ring, foam compensation element, and filter element.
9. Rotate filter housing (A) clockwise and tighten to specification.

Specification

In-Line DEF Filter Housing—Torque. . . . . 25 N·m (221 lb·in)



RG30728—UN—08AUG18
In-Line DEF Filter Drain Plug

A—Drain Plug with O-Ring

10. Install new drain plug with O-ring (A). Tighten to specification.

Specification

In-Line DEF Filter Drain Plug—Torque. . . . . 4 N·m (35 lb·in)

DX,DEF,CHANGE,INLINE,FILT-19-15APR20

Replace Diesel Particulate Filter (DPF)

When the exhaust filter indicator and the warning indicator light up on the display, the diesel particulate filter (DPF) must be changed within the next 250 hours.

To replace the diesel particulate filter, see an authorized dealer.

LX25458,ALL,0000B92-19-05JUN20

Front-Wheel Drive Axle—Instructions on Changing Oil (Axle Housing and Final Drives)

Replace oil in the axle housing and final drives of the front-wheel drive axle without brakes after the first 100 and after the first 1500 hours of operation. Then change oil after every 1500 hours of operation or once every 2 years, whichever occurs first. Use a transmission oil listed in the Section 200E.

NOTE: In the case of final drives with a brake, change the oil after the first 100 operating hours. Thereafter, the following service interval applies:

- *On tractors with aftertreatment (Final Tier 4):*
  - *After the first 750 hours.*
  - *Thereafter every 750 operating hours or after every year at the latest.*
- *On tractors with aftertreatment (Tier 2 or Tier 3):*
  - *After the first 500 hours.*
  - *Thereafter every 500 operating hours or after every year at the latest.*

Always exchange oil only promptly after a prolonged period of operation.

OULXA64,750h,F4,T2,000571A-19-22SEP21

Front-Wheel Drive Axle (750 and 755)—Change Oil of Final Drives with Brake

TS281—UN—15APR13

CAUTION: Danger of injury from hot components or hot, pressurized oil.

Touching hot surfaces can cause injury.

Avoid contact with hot surfaces or hot oil.

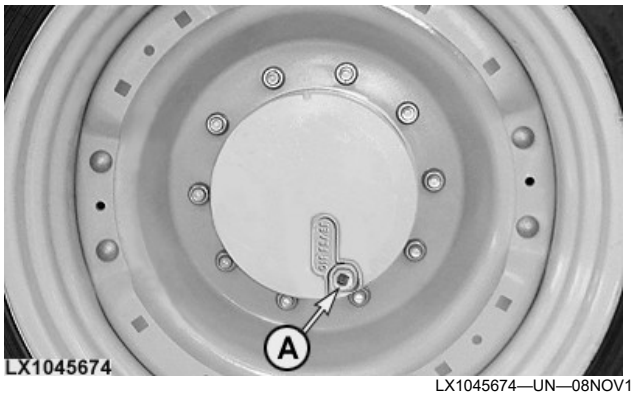
Perform oil change while the oil is warm (approx. 40°C; 103°F).

Slowly unscrew the drain/level screw plug.

NOTE: In the case of final drives with a brake, change the oil after the first 100 operating hours. Thereafter, the following service interval applies:

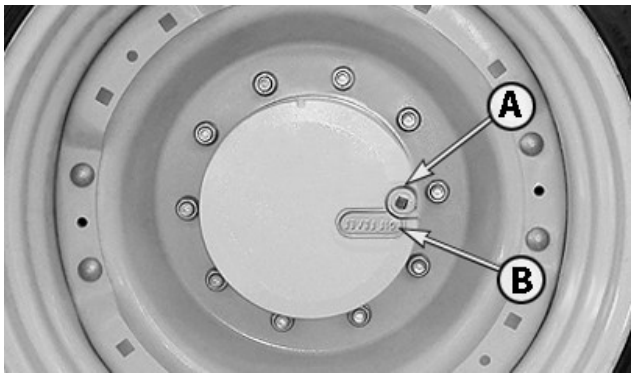
- *On tractors with aftertreatment (Final Tier 4/ Stage IV)*
  - *After the first 750 hours.*
  - *Thereafter every 750 operating hours or after every year at the latest.*
- *On tractors with aftertreatment (Tier 2/Stage II)*
  - *After the first 500 hours.*
  - *Thereafter every 500 operating hours or after every year at the latest.*

1. Turn wheel so that drain screw (A) is at the bottom. Remove screw, and drain the oil.



LX1045674—UN—08NOV10

2. Turn the wheel through 90° so that the line marked **OIL LEVEL** (B) is horizontal, and fill with fresh oil at the drain screw hole. Oil must be level with the drain screw hole.



LX1057419—UN—01JUL14

3. Put a new O-ring on the drain screw.
4. Screw in the drain screw and tighten it to 90 N·m (66 lb·ft).

Oil to be used	Hy-Gard™ Transmission and Hydraulic Oil. See also Section 200E.
Capacity	See Capacity of the relevant tractor in Section 500A.

Hy-Gard is a trademark of Deere & Company

OULXA64,6CYL,005713-19-29AUG23

Front-Wheel Drive Axle (750 and 755)—Change Oil of Axle Housing

TS281—UN—15APR13

CAUTION: Danger of injury from hot components or hot, pressurized oil.

Touching hot surfaces can cause injury.

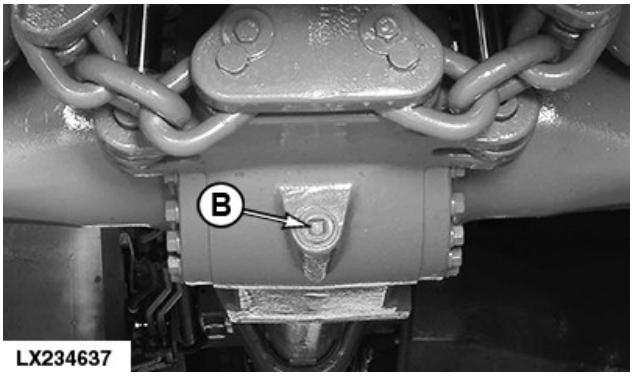
Avoid contact with hot surfaces or hot oil.

Perform oil change while the oil is warm (approx. 40°C; 103°F).

Unscrew the level screw plug slowly.

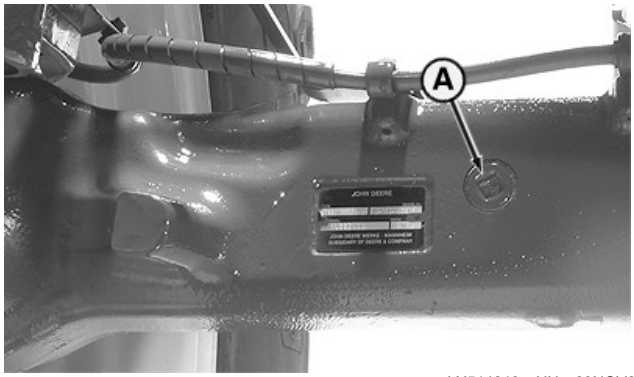
NOTE: Replace oil in the axle housing after the first 100 and after the first 1500 hours of operation. Then change oil after every 1500 hours of operation or once every 2 years, whichever occurs first.

1. Remove drain screw (B) and drain the oil.



LX234637—UN—07APR15

2. Put a new O-ring on the drain screw.
3. Reinstall oil drain screw and tighten to 90 N·m (66 lb·ft).
4. Remove filler screw (A) and put a new O-ring on it. Fill with fresh oil. The oil level must be up to the filler hole. Install filler screw.



LX514813—UN—09NOV21

NOTE: Location of screws varies depending on the axle type.

Oil to be used	Hy-Gard™ Transmission and Hydraulic Oil. See also section 200E.
Capacity	See Capacity of the relevant tractor in section 500A.

Hy-Gard is a trademark of Deere & Company

LX25458,6CYL,0000B97-19-29AUG23

Electrical Hydraulic Pump Oil Change

TS281—UN—15APR13

CAUTION: Danger of injury from hot hydraulic system components or hot oil.

Touching hot surfaces of the hydraulic system, accessories, or hoses and leads can cause personal injuries.

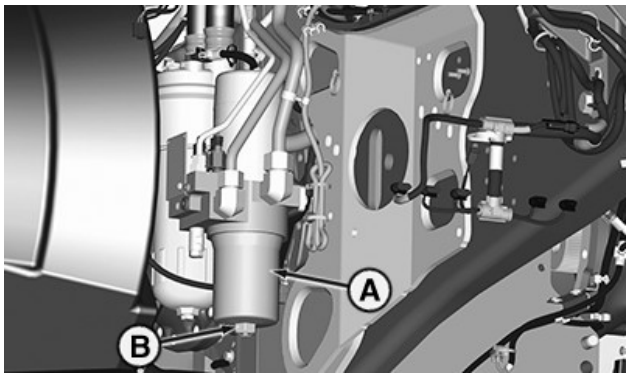
Avoid contact with hot surfaces or hot oil.

Perform oil change while the oil is warm (approx. 40 °C; 103 °F).

IMPORTANT: Whenever the transmission and hydraulic oil filters are exchanged, carry out the oil change of the electrical hydraulic pump.

NOTE: Replace oil after the first 100, after the first 750 hours, and then every 750 operating hours.

1. Shut off engine and withdraw ignition key.
2. Engage park lock.
3. Remove drain screw (B) and drain oil into a suitable container.



LX315010—UN—25AUG17

4. Screw out housing (A) and clean it.
5. Put a new seal on drain screw (B) and tighten with 25 N·m (18 lb-ft).
6. Apply grease to the thread of the housing.
7. Install new seal rings in the housing.
8. Fill housing with fresh transmission and hydraulic oil and screw in.

Capacity	0.7 L, see “Capacity” in Section 500A.

9. Tighten housing to 30 N·m (22 lb-ft).

OULXA64,6R,MW67,0005FD4-19-31AUG23

Replace Transmission and Hydraulic Oil Filters,

TS281—UN—15APR13

CAUTION: Danger of injury from hot hydraulic system components or hot oil.

Touching hot surfaces of the hydraulic system, accessories, or hoses and leads can cause personal injuries.

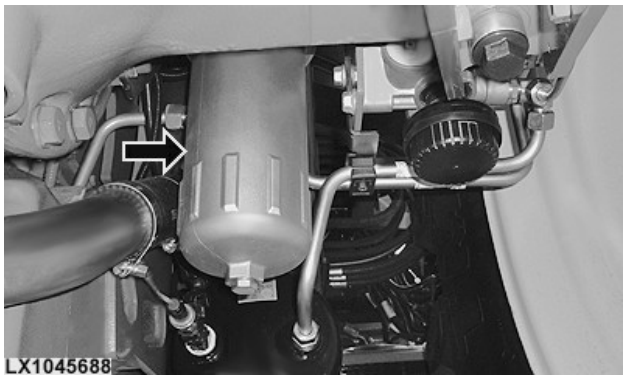
Avoid contact with hot surfaces or hot oil.

Change the oil filter while the oil is warm approx. 40°C; 103°F) .

IMPORTANT: Always replace both filters at the same time.

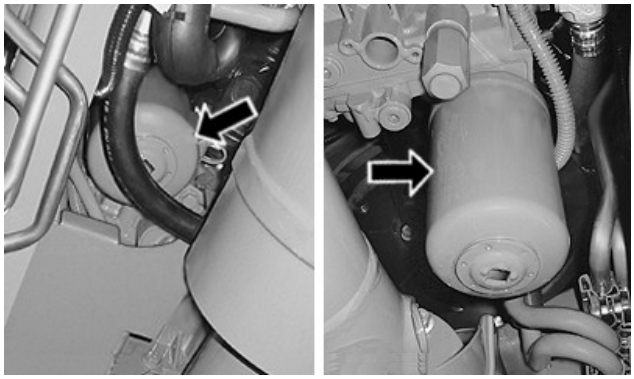
NOTE: Replace transmission and hydraulic oil filter after the first 100, after the first 750 hours, and then every 750 hours of operation.

1. Unscrew filter elements.



LX1045688—UN—26NOV10

Hydraulic Oil Filter



LX267131—UN—12APR17

Transmission Oil Filter on Tractors without/with IVT Transmission

2. Coat seal rings of new filters with grease and screw in the filters.

   Use only genuine John Deere filters.
3. Run the engine briefly and operate several hydraulic functions. Shut off engine.
4. Wait for 10 to 15 minutes, then check oil level. It should be between the marks on the sight-glass. If not, correct oil level.

OULXA64,00059CC-19-30AUG23

Change Transmission and Hydraulic Oil and Clean Intake Screens (AutoPowr™/ IVT™ Transmission)

TS281—UN—15APR13

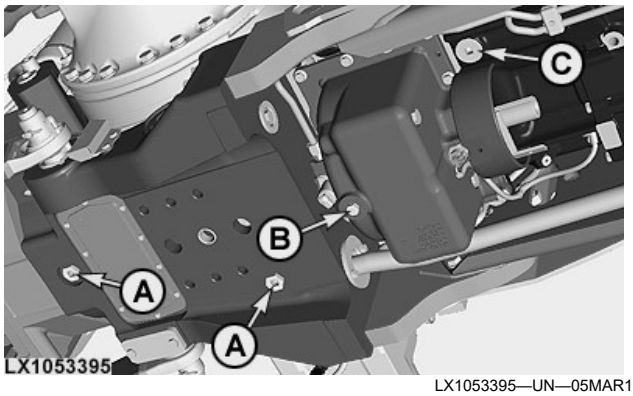
CAUTION: Danger of injury from hot hydraulic system components or hot oil.

Touching hot surfaces of the hydraulic system, accessories, or hoses and leads can cause personal injuries.

Avoid contact with hot surfaces or hot oil.

Perform oil change while the oil is warm (approx. 40°C; 103°F).

Drain transmission and hydraulic oil



LX1053395—UN—05MAR12

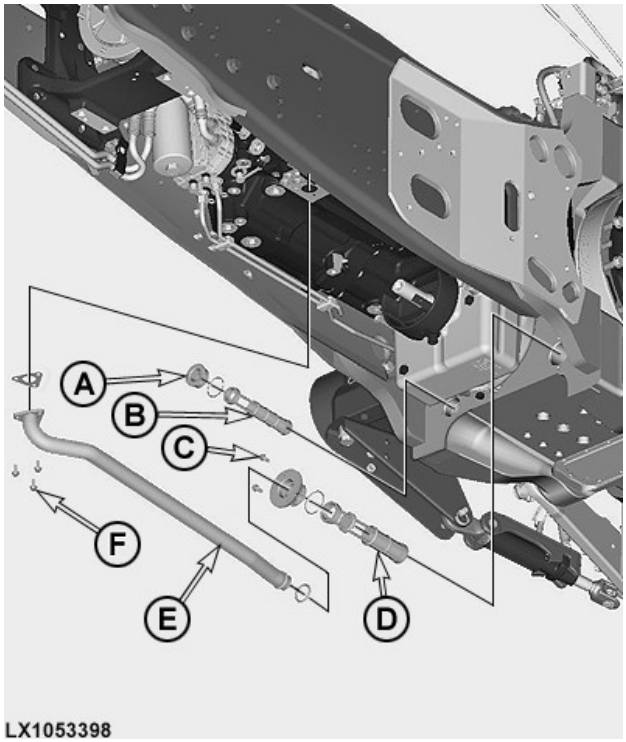
A—Drain Screw in Differential Housing (50 N·m; 37 lb·ft)
B—Drain Screw of the Front-Wheel Drive Clutch (50 N·m; 37 lb·ft)
C—Drain Screw on the Transmission (50 N·m; 37 lb·ft)

1. Start the engine and operate several hydraulic functions to warm up the oil.
2. Park tractor so that it is level. Lower draft links, front loader, front implements, and other implements that draw oil from the transmission.
3. Shut off engine and withdraw key switch.
4. Engage park lock.
5. Take out drain screws (A), (B), and (C) and trap the oil in a suitable container. For capacities, see section 500A.

NOTE: If equipped, remove the drawbar.

6. After draining the oil, put new seal rings on drain screws (A), (B), and (C) and tighten them.

Clean intake screen and change transmission and hydraulic oil



LX1053398—UN—05MAR12

Intake Screens on Tractors with IVT™

A—Drain Screw (50 N·m; 37 lb·ft)
B—Intake Screen
C—2 Screws (37 N·m; 27 lb·ft)
D—Intake Screen
E—Intake Line
F—3 Screws (18 N·m; 13 lb·ft)

1. Take out screws (F) and remove intake line (E).
2. Remove screws (C) and drain screw (A).
3. Remove intake screens (B) and (D) and clean them with fuel.
4. Clean locations of intake screens.
5. Reinstall all parts as shown and tighten screws to specified torque.

IMPORTANT: Before installing, replace all seals and coat them with oil.

6. Check drain screw (A) for proper fit and tighten to 50 N·m (37 lb·ft) to seal properly.
7. Add new transmission and hydraulic oil to the transmission case. For capacities, see section 500A.

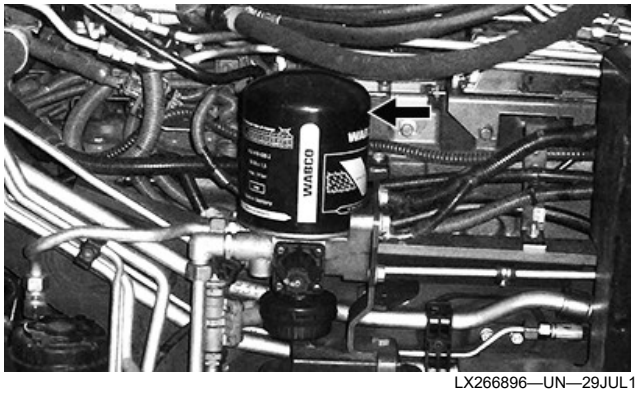
Check the oil level

Run the engine briefly and operate several hydraulic functions. Shut off engine.

Wait for 10 to 15 minutes, then check oil level. It should be between the minimum and maximum mark on the sight-glass. If not, correct oil level.

OULXA64,6R,0005A8B-19-30AUG23

Replace Air-Drier Cartridge of Air Brake System



LX266896—UN—29JUL16

CAUTION: Before doing this job, it is essential to relieve the pressure in the compressed-air system.

CAUTION: It may be necessary to change the air-drier cartridge sooner. If condensation (water) is found during the daily check of the compressed-air tank, the air-drier cartridge must be replaced immediately.

Replace the air-drier cartridge every 1500 hours or every 2 years.

Unscrew the air-drier cartridge and remove the O-ring.

Put on a new O-ring and tighten the new air-drier cartridge.

OULXA64,6R,MW67,0005FEC-19-09JUN22

Replace Oil Filter of Front PTO (If Equipped)

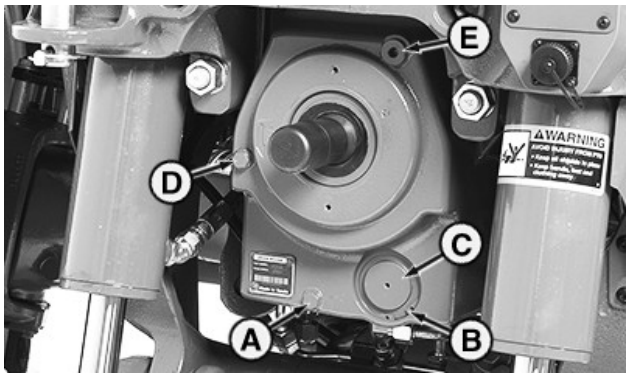
TS281—UN—15APR13

CAUTION: Danger of injury from hot components or hot oil.

Touching hot surfaces, accessories, or hoses and leads can cause injury.

Avoid contact with hot surfaces or hot oil.

Change the oil filter while the oil is warm (approx. 40°C; 103°F).



LX364309—UN—21FEB19

A—Drain Screw, 20 N·m (15 lb·ft)
B—Snap Ring
C—Cover
D—Screw, 20 N·m (15 lb·ft)
E—Screw, 40 N·m (30 lb·ft).

1. Take out drain screw (A) and drain the oil into a suitable container.

NOTE: If oil smells burnt or has a very dark appearance, it needs to be changed. If chips or similar things are noticed during a filter change, the PTO clutch needs to be repaired by your authorized dealer.

2. Remove screws (D) and (E).
3. Remove snap ring (B) and cover (C).
4. Replace the oil filter.
5. Put a new seal ring on cover (C) and make sure that it is seated correctly.
6. Install cover (C) and snap ring (B).
7. Remembering to include a new seal, install the oil drain screw and tighten to 20 N·m (15 lb·ft).
8. Fill clean transmission and hydraulic oil through the screw hole (E) into the PTO housing until oil comes out of the screw hole (D).
9. Remembering to include a new seal, install screw (D) and tighten to 20 N·m (15 lb·ft).
10. Remembering to include a new seal, install screw (E) and tighten to 40 N·m (30 lb·ft).

OULXA64,SP,0005711-19-29AUG23

Change Oil of Front PTO (If Equipped)

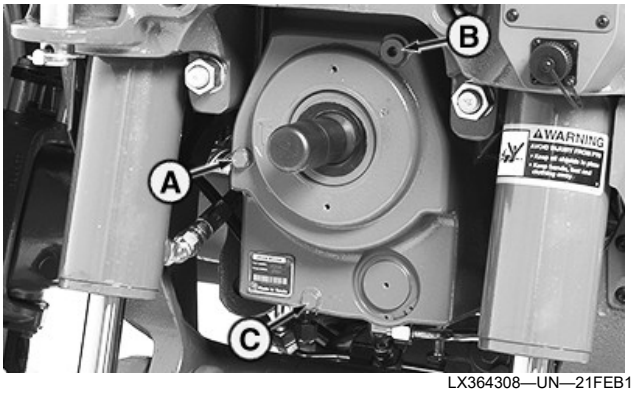
TS281—UN—15APR13

CAUTION: Danger of injury from hot components or hot oil.

Touching hot surfaces, accessories, or hoses and leads can cause injury.

Avoid contact with hot surfaces or hot oil.

Perform oil change while the oil is warm (approx. 40°C, 103°F).



LX364308—UN—21FEB19

A—Screw, 20 N·m (15 lb·ft)
B—Screw, 40 N·m (30 lb·ft).
C—Drain Screw, 20 N·m (15 lb·ft)

1. Take out drain screw (C) and drain the oil into a suitable container.

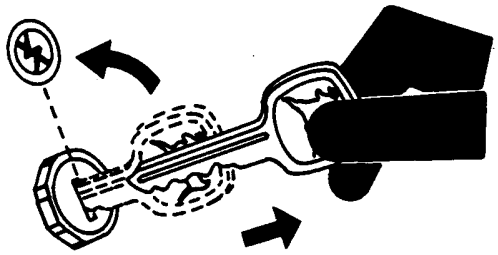
NOTE: If chips or similar things are noticed, the PTO clutch needs to be repaired by your authorized dealer.

At every oil change, also change the oil filter.

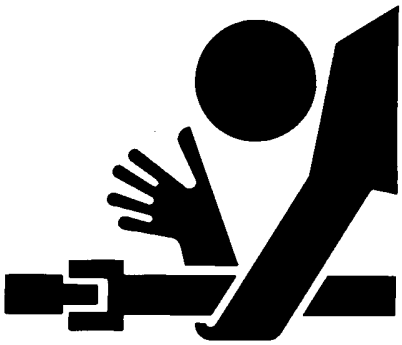
2. Take out screws (A) and (B).
3. Remembering to include a new seal, install drain screw (C) and tighten to 20 N·m (15 lb·ft).
4. Add approx. 2.6 L (0.69 US gal) of fresh transmission and hydraulic oil to the PTO housing at the hole for screw (B) until oil emerges from hole (A). See section 200E.
5. Remembering to include a new seal, install screw (A) and tighten to 20 N·m (15 lb·ft).
6. Remembering to include a new seal, install screw (B) and tighten to 40 N·m (30 lb·ft).

OULXA64,SP,0005712-19-12DEC23

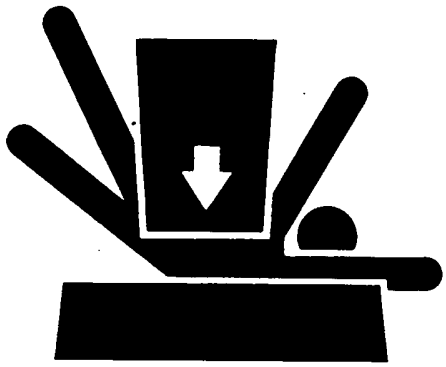
General Information for Lubrication



TS230—UN—24MAY89
Observe Parking the Machine Safely



TS276—UN—23AUG88
Service the Universal-Jointed Shafts only when Engine OFF and Park Lock Actuated



TS229—UN—23AUG88
Supporting the Machine Properly

CAUTION: Stop the engine before lubricating, lower front and rear hitch completely, and apply park lock. If equipped, lower front loader completely.

Make grease fitting of the front universal-jointed shafts accessible:

1. **Turn steer to full stop.**
2. **Stop the engine and engage the park lock.**
3. **Raise axle knee with a jack until the wheel can rotate freely.**
4. **Rotate the wheel until the grease fitting can be reached by the grease gun.**

Stay clear of the danger area underneath the wheel.

IMPORTANT: All the lubrication points displayed below need to be lubricated during a regular service.

There may be deviations due to the variety of equipment. Ignore the illustration in case the displayed component is not available.

Some components are available in different configurations. In case several parts are shown, just observe the relevant version.

Lubrication procedure: When using a conventional grease gun, press in an amount of greases until old grease, dirt, or water comes out of the lubrication point. Remove excessive grease and dispose of properly according to local regulations. One exception is the rear axle bearings. They are lubricated with no more than 6-8 strokes of the conventional grease gun.

Special conditions: There is an anti-wrap guard over each universal joint on the universal-jointed shaft. Remove the anti-wrap guard if it does not feature an access opening to the grease fitting.

Recommended grease: See Grease in section 200E.

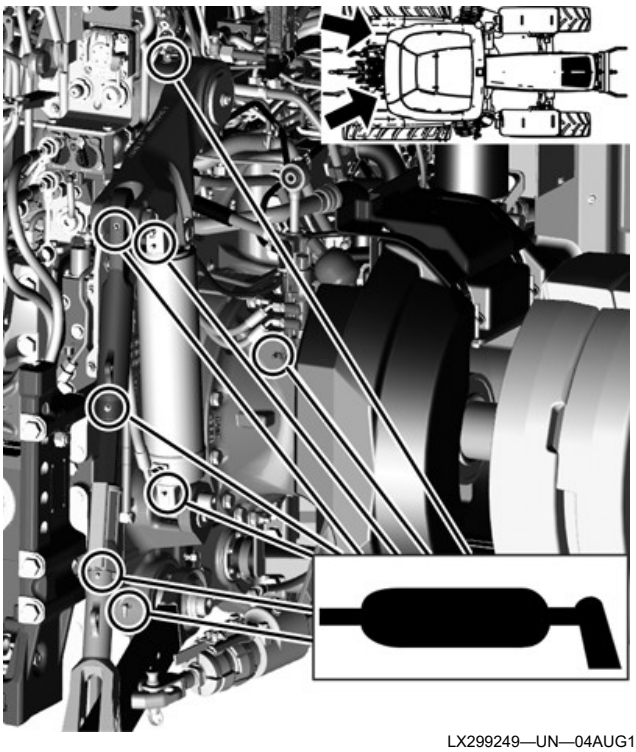
LX25458,ALL,0000B9B-19-13OCT20

Unscheduled Lubrication

If the tractor is operating in particularly wet and muddy conditions, or has been washed with a pressure washing system, lubricate all the lubrication points on the tractor.

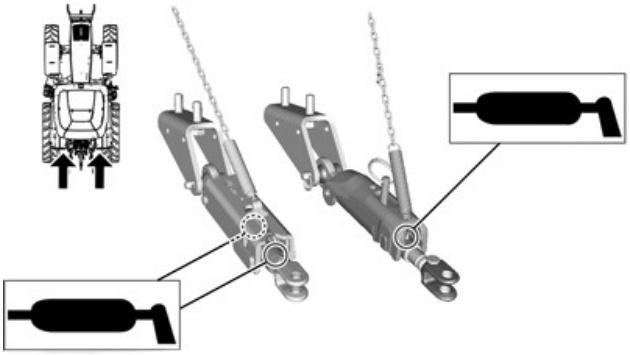
LX25458,ALL,0000B9C-19-05JUN20

Lubricate Tractor - Lubrication Points



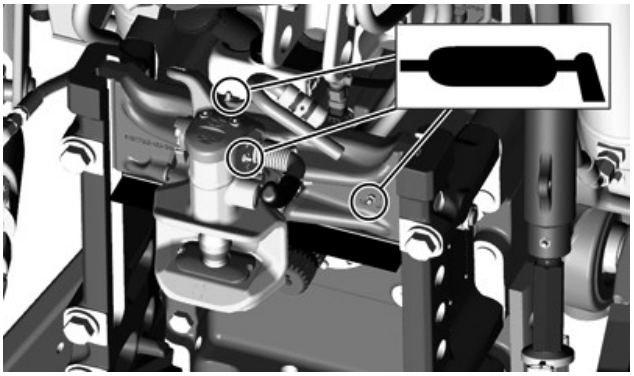
LX299249—UN—04AUG17

Rear Hitch, Rockshaft Block, Lift Link, Draft Link Bearings, and Cab Suspension



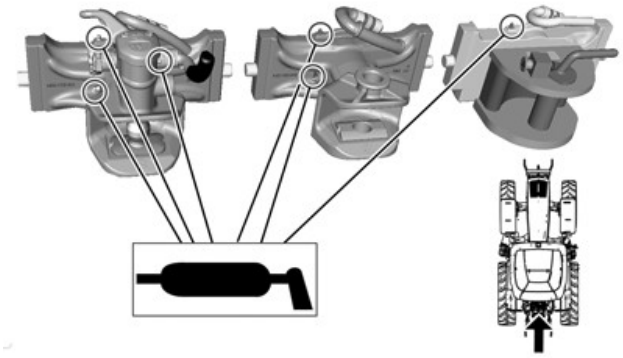
LX272560—UN—05FEB16

Rear Hitch, Stabilizer (2 versions)



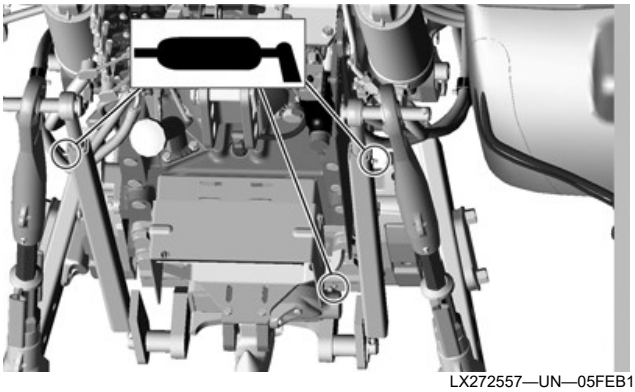
LX299250—UN—04AUG17

Trailer Hitch (if equipped)



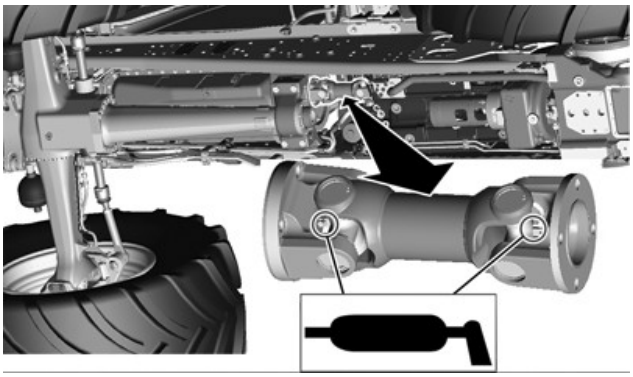
LX272559—UN—05FEB16

Trailer Hitch (several versions)



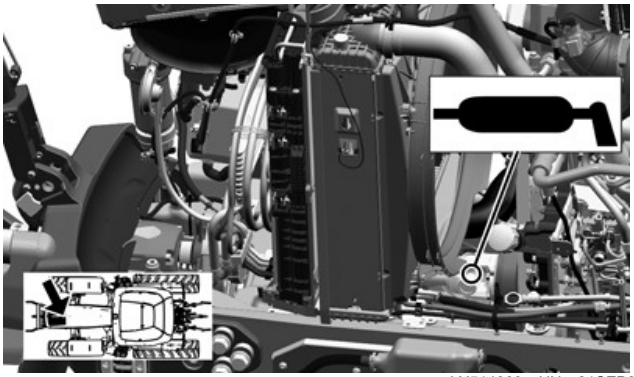
LX272557—UN—05FEB16

Tractor Rear, only for Pick-Up Hitch



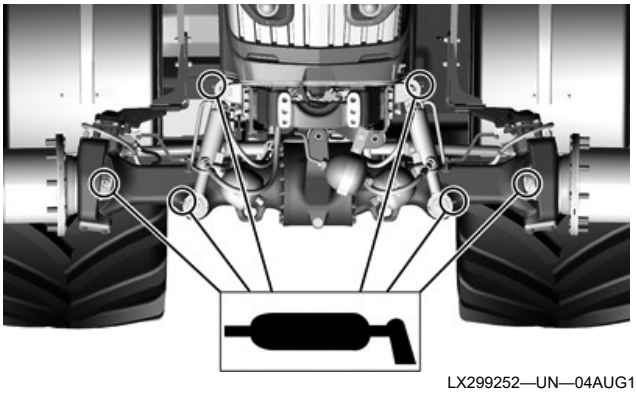
LX272558—UN—05FEB16

Universal-Jointed Shaft Between Engine and Transmission (if equipped with grease fittings)



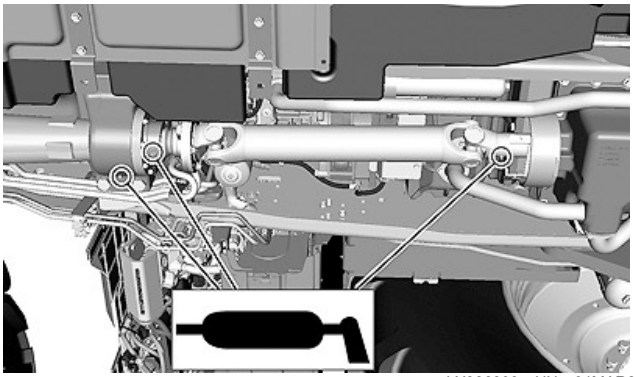
LX514883—UN—21SEP22

Universal-Jointed Shaft Between Engine and Front PTO (if equipped with grease fittings)



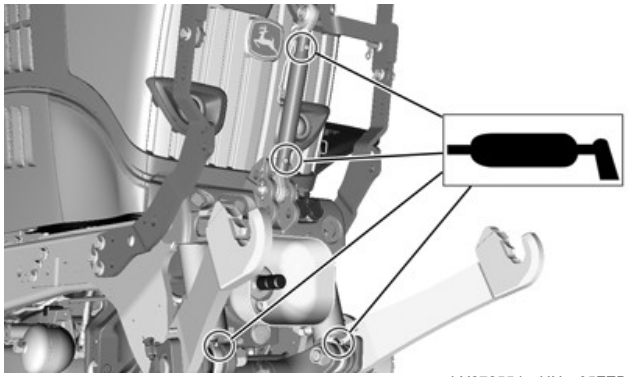
LX299252—UN—04AUG17

Front-Wheel Drive Axle with Suspension, Universal Joints and Hydraulic Cylinders (if equipped with grease fittings)



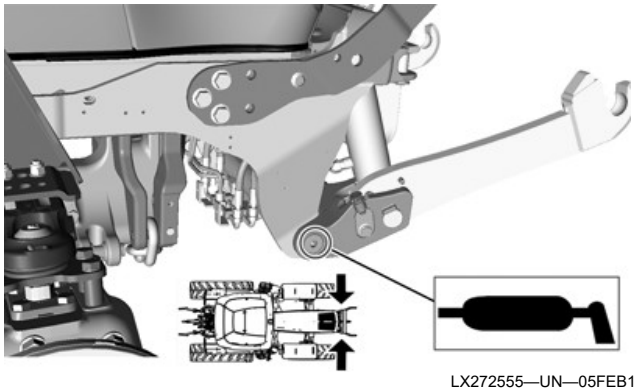
LX386890—UN—04MAR20

Front-Wheel Drive Axle with Suspension, Universal-Jointed Shaft (if equipped with grease fittings)



LX272554—UN—05FEB16

Front Hitch



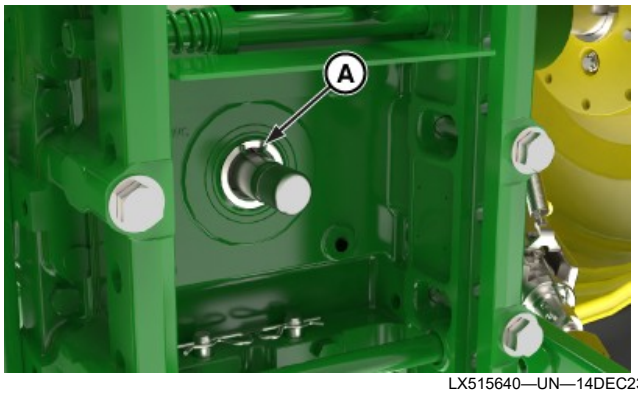
LX272555—UN—05FEB16

Front Hitch

OULXA64,6R,MW67,0005FED-19-16SEP22

Lubricate Rear PTO Stub Shaft Support

CAUTION: Engage park lock and shut off engine. Remove the ignition key to prevent unauthorized operation.



LX515640—UN—14DEC23

1. Remove impurities from PTO stub shaft.
2. Use pliers to compress snap ring (A), and remove the PTO stub shaft together with the snap ring.
3. Lubricate the PTO stub shaft support using John Deere HD Moly Grease.
4. Place snap ring (A) in the groove of PTO stub shaft

and compress it with pliers, then install the stub shaft in the PTO housing.

5. Make sure snap ring (A) is seated correctly.

LX25458,ALL,0000B9E-19-23NOV23

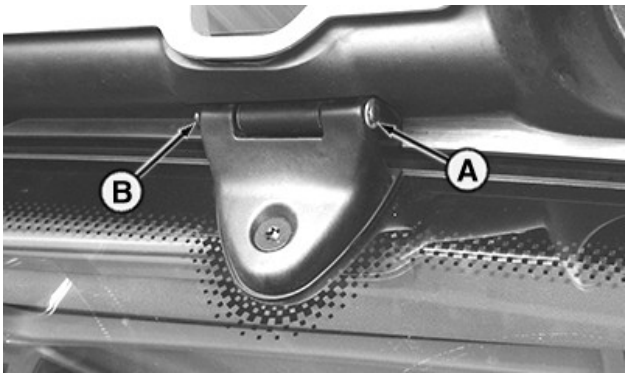
Grease Hinges of Windshield (Not with Glued Windshields)

IMPORTANT: Danger of glass breakage!

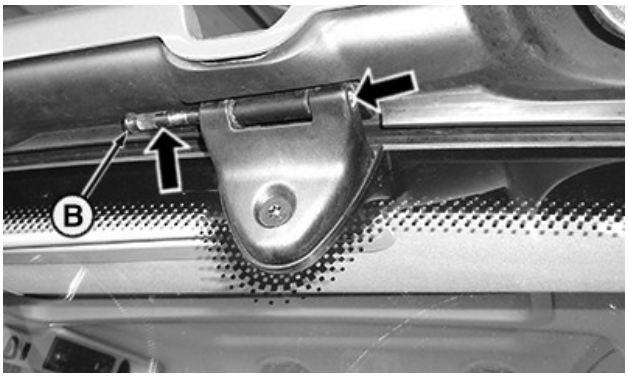
If the bolts are removed at the same time or handled carelessly, glass breakage may occur.

Always remove and grease bolts one after the other.

1. Remove clip (A).



LX315147—UN—30APR18



LX315148—UN—30APR18

2. Do not remove the bolt (B) completely from the hinge.
3. Grease bolt and hinge.
4. Return bolt (B) to its original position and attach the clip (A).

OULXA64,6R,0005EA6-19-16SEP21

Troubleshooting

Transmission

Symptom	Problem	Solution
Transmission oil too hot	Low oil supply	Correct the oil level.
	Excessive oil consumption	Remove oil if necessary.
	Air passages of oil cooler clogged	Clean oil cooler.
	Clogged transmission and hydraulic oil filter	Replace filter.
Transmission oil pressure low	Low oil supply	Correct the oil level.
	Clogged transmission and hydraulic oil filter	Replace filter.
Transmission shifts slowly and tractor steering sluggish	Cold oil	Use cold-weather starting aids and coolant heaters.
Transmission in too fast or too slow gear at start	No failure	Start-up gear can be changed using the instrument unit.
		If the failure continues, see your authorized dealer.
Travel speeds[1] over 40 km/h (25 mph) cannot be achieved	Brake pedals not coupled together	Lock the brake pedals together.

OULXA64,BB,0005A69-19-30AUG23

Hydraulic System

Symptom	Problem	Solution
Hydraulic system fails to function	Not enough oil in the system	Correct the oil level.
	Open electrical circuit	Check fuses.
Filter plugged/by-passed warning is active	Plugged filter	Replace filter.
Hydraulic oil overheats	Cooling system overloaded	Dirty oil cooler. Coolant level low.
	Selective control valve accidentally locked in operating position	Move selective control valve to neutral position.
Hitch fails to follow lever or knob position	Fault in sensor circuit for the lever position or the hitch	Contact your authorized dealer.
Hitch fails to lift under load	Excessive load on hitch	Reduce load.
Hitch lifts slowly	Raise rate too slow	Adjust raise rate, see Section 60D or 60E.

[1] On 50 km/h (31 mph) tractors

Symptom	Problem	Solution
Hitch rate-of-drop too slow	Rate-of-drop not adjusted properly	Adjust rate-of-drop.
Insufficient sensitivity to load control	System regulator in depth control or mixed control position	Move system regulator to load control position.
Excessive sensitivity when attaching implements	System regulator in load control position	Place system regulator in depth control position.
Selective control valves not functioning	Hoses not connected properly	Attach hoses correctly.
Hydraulic cylinder operates too fast or too slow	Rate of flow adjusted wrong.	With mechanical SCVs, adjust the flow control valve. With electronic SCVs, adjust the flow rate at the CommandCenter™.

LX25458,ALL,0000BA2-19-17AUG23

Selective Control Valves

Symptom	Problem	Solution
Hydraulic cylinder does not lift load	Missing flow	Move SCV control levers.
	Excessive load	Reduce load.
	Hoses not correctly connected	Attach hoses correctly.
	Wrong hydraulic cylinder size	Use correct cylinder size
	SCV lock button active	Deactivate SCV lock button.
	Incorrect or damaged hose connections	Replace hose connections.
Hydraulic cylinder extends too fast or too slow	Incorrect flow rate	Adjust flow rate.
Hydraulic cylinder works the wrong way around	Incorrect hose connections	Reverse hose connections.
Hoses cannot be connected	Incorrect hose connectors	Replace connectors with ISO Standard connectors.
Detent time of the SCV does not hold correctly or releases too early	Detent time set incorrectly	Set detent time correctly.
	Control lever of SCV is not released in the neutral position	Release SCV valve lever from detent position to neutral position in less than 0.8 seconds.
Control lever of the SCV is not released	Control lever is detented in the float position	Do not press the lever down into the float position (detent position).
	Lever mechanism failed	Contact your authorized dealer.

Symptom	Problem	Solution
Implement does not operate or does not operate correctly	Incorrect hose connections	See Operator's Manual of the implement. Contact your authorized dealer.

LX25458,ALL,0000BA3-19-16OCT20

Engine

Symptom	Problem	Solution
Engine hard to start or will not start	No fuel in the tank	Fill tank.
	Presence of air in the fuel system	Bleed air from fuel system.
	Fuel pump does not work	Turn key switch on and listen for pumping noise to make sure fuel pump is working.
	Weather too cold	Use cold-weather starting aid.
	Fuel filter contaminated	Replace filter(s).
	Engine oil too viscous	Use oil of correct viscosity.
	Faulty glow plugs	Have it checked by your authorized dealer.
Engine knocks	Insufficient oil in engine	Add oil.
Engine overheating	Insufficient coolant level	Fill radiator to prescribed level. Check cooling system for leaks.
	Loose or defective fan belt	Inspect and replace belt if needed.
	Viscous fan dirty	Clean the bimetallic spring with compressed air.
	Viscous fan defective	Have the viscous fan checked by an authorized dealer.
	Cooling system contaminated	Drain, flush, and refill cooling system.
	Oil cooler or protective grille contaminated	Clean oil cooler and grille.
	Defective thermostat	Remove and check thermostat.
Low engine oil pressure	Engine oil level too low	Add oil.
Excessive oil consumption	Oil of too low viscosity	Refill oil with correct viscosity.
	Leaking	Check oil lines and gaskets.

Symptom	Problem	Solution
High fuel consumption	Improper fuel	Use proper fuel.
	Incorrect valve clearance	Have it checked by your authorized dealer.
	Injectors dirty or damaged	Have it checked by your authorized dealer.
	Injection time incorrectly set	Have it checked by your authorized dealer.
	Clogged or dirty air cleaner	Clean the air cleaner.
Engine emits black or gray exhaust smoke	Improper fuel	Use proper fuel.
	Clogged air cleaner	Clean the air cleane.r
	Injectors dirty or damaged	Have it checked by your authorized dealer.
Engine emits white smoke	Improper fuel	Use proper fuel.
	Engine too cold	Run engine until normal operating temperature is reached.
	Defective thermostat	Replace thermostat.
	Injection time incorrectly set	Have it checked by your authorized dealer.
	Faulty glow plugs	Have it checked by your authorized dealer.

LX25458,ALL,0000BA4-19-05JUN20

Electrical System

Symptom	Problem	Solution
Battery will not charge	Cable connections loose or oxidized	Clean or tighten.
	Alternator fault	See an authorized dealer.
	Sulfated battery	Check specific gravity and electrolyte level of battery.
	Loose or defective V-belt	Adjust belt tension or replace belt.
Starter motor inoperative	Cable connections loose or oxidized	Clean or tighten.
	Weak battery	Check and recharge battery.
	Blown fuse	Replace fuse.

Symptom	Problem	Solution
	Defect in starter motor	See an authorized dealer.
Starter motor starts slowly	Weak battery	Check and recharge battery.
	Cable connections loose or oxidized	Clean or tighten.
	Defect in starter motor	See an authorized dealer.

LX25458,ALL,0000BA5-19-05JUN20

Operator's Cab

Symptom	Problem	Solution
Blower not keeping dust out of cab	Defective seal around filter element	Check seal condition.
		Check filter for correct installation.
	Defective filter	Replace filter.
	Excessive air leakage	Seal air leaks.
	Blower air flow too low	See Blower Air Flow Too Low.
Blower air flow too low	Clogged filter or air intake screen	Check and/or replace.
	Heater core or evaporator core clogged	Clean.
Heater will not shut off	Heater hoses connected incorrectly	Contact your authorized dealer.
	Bowden cable/water valve not adjusted properly	Contact your authorized dealer.
Air conditioner not cooling	Voltage too low	Contact your authorized dealer.
	Insufficient refrigerant	Contact your authorized dealer.
	Drive belt slippage	Check belt tension.
	Compressor switch not turned ON	Turn compressor switch ON.
Intermittent cooling	Air supply restricted in front corners	Clean radiator, oil cooler, and air conditioner condenser.
Seat suspension not working	Fuses blown	Replace fuses.
Radio not working	Blown fuse	Replace fuse.
Tractor bouncing and jumping	Power hop/wheel hop	Check load distribution.
		Check ballasts.

Symptom	Problem	Solution
		Check tire pressure.
		Select correct ballast.
	Loose wheel hardware	Tighten all hardware to correct torque.

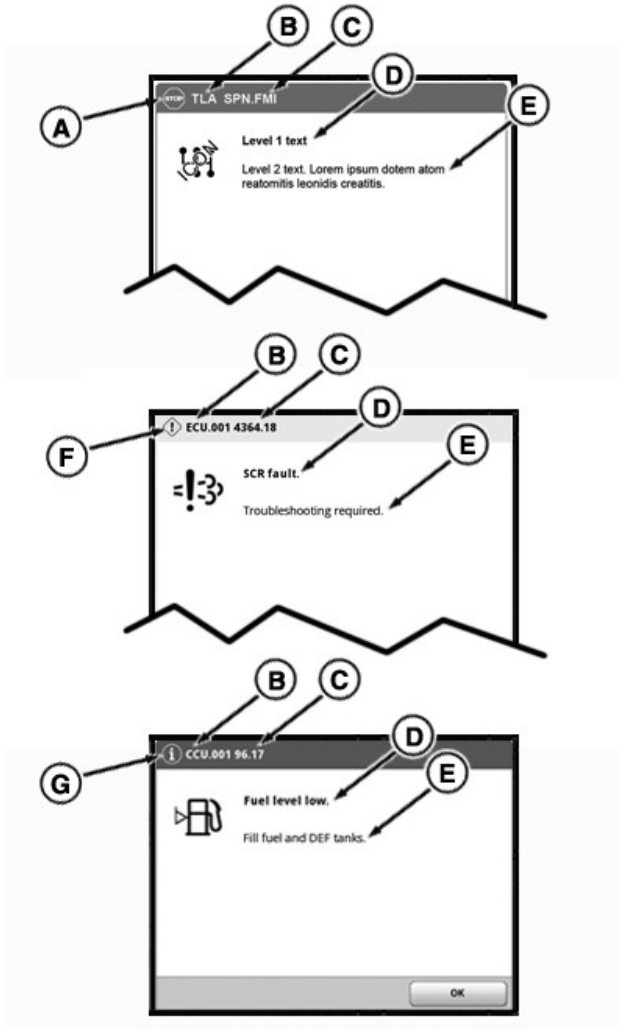
OULXA64,ALL,000571D-19-05OCT20

Premium Radio

Symptom	Problem	Solution
“NO CD” displayed	CD does not play	Load CD in the player
“NO PLAYABLE DISC” displayed	No playable files on media	Change media
“NO MUSIC FILES” displayed	No playable files on media	Include music files to media
“Front AUX UNPLUGGED” displayed	No front aux cable connected, iPod connected	Connect front aux cable
“iPod NOT SUPPORTED” displayed	iPod connected not supported	Disconnect iPod
“USB NOT SUPPORTED” displayed	Connected USB medium not supported	Disconnect USB
Poor sound quality, skipping, difficulty in finding tracks, and/or difficulty in loading or ejecting	CD-R may be affected by a CD-R’s quality, the method of recording, the quality of the music that has been recorded, or the way the CD-R has been handled.	Play CD you know is good to see if error corrects itself. If error occurs repeatedly or cannot be corrected, contact your authorized dealer. If radio displays an error message, write it down and provide it to authorized dealer when reporting problem.

OULXA64,BB,0005A6A-19-28JAN21

STOP, Service Alert, and Information Indicators



RXA0133357—UN—26JUL13

Diagnostic Trouble Codes

A—STOP Indicator
B—Control Unit
C—Diagnostic Trouble Code
D—System
E—Solution
F—Service Alert Indicator
G—Information Indicator

NOTE: All STOP, service, and information indicators are accompanied by an informative message, a diagnostic trouble code, and/or an error description at the CommandCenter™.

Display (A) for STOP: The light flashes and an uninterrupted alarm signal sounds. A serious malfunction has occurred, requiring immediate attention or the tractor will be damaged. Control unit (B), diagnostic trouble code (C), system (D), and solution (E) are displayed at the CommandCenter™. If the control unit detects a malfunction or a status "out of the permissible range", a diagnostic trouble code consisting of the control unit and a number appears. The numbers to the left of the decimal point show the malfunction and the numbers to the right of the decimal point show the status.

IMPORTANT: Only for AutoPowr™ and DirectDrive: Engine will shut off automatically if STOP signal is received when operator is out of the seat for longer than 3 seconds and the transmission control is in park position. CommandCenter™ display can be reset by switching the ignition switch off and back on again.

If situation allows to stop operations immediately, reduce engine speed to idle, then shut off engine and turn ignition on to observe CommandCenter™ display for problem identification and solution. The saved codes might have to be called up; see the section on using diagnostics, saved codes, and CAN statistics. Correct problem before restarting the engine.

Use the solution displayed at the CommandCenter™ or visit an authorized dealer if the problem cannot be solved.

When either a service alert or information is displayed, switch the transmission to the park position and shut off the engine.

Service Alert Indicator (F): The light flashes and the alarm signal sounds five times, indicating a performance problem or malfunction that has to be eliminated as soon as possible. Continued operations can cause a Service Alert to escalate into a STOP indicator. If appropriate corrective action is not taken soon (serviced, repaired, operated in a different manner), a significant reduction in performance and/or machine damage will occur.

Information Indicator (G): Light comes on continuously and alarm sounds for 2 seconds, indicating a fault condition. Tractor operations can be continued without damage; but performance of some functions may be impaired.

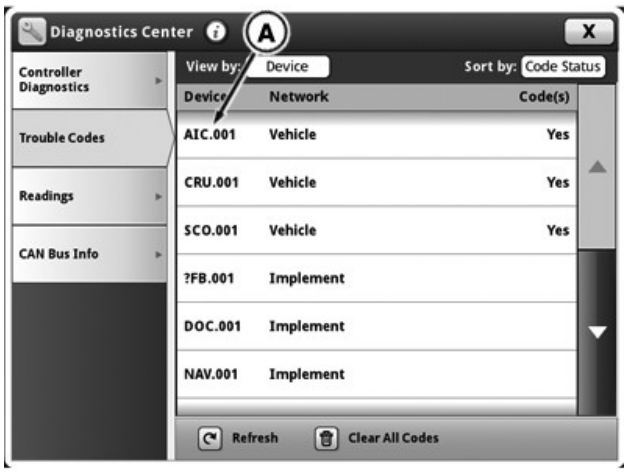
Operating in a different manner may correct and clear the "out-of-range" condition. When the Service Alert or Information Indicator is displayed, it might - in some cases - be possible to "acknowledge" and delete it with the button for confirming the CommandARM™ controls. If condition still exists, diagnostic trouble code may reappear later.

OULXA64,BB,00059B2-19-26JAN21

Access Diagnostic Trouble Codes

RXA0133360—UN—26JUL13

Menu Button → System → Diagnostics Icon → Diagnostic Trouble Codes



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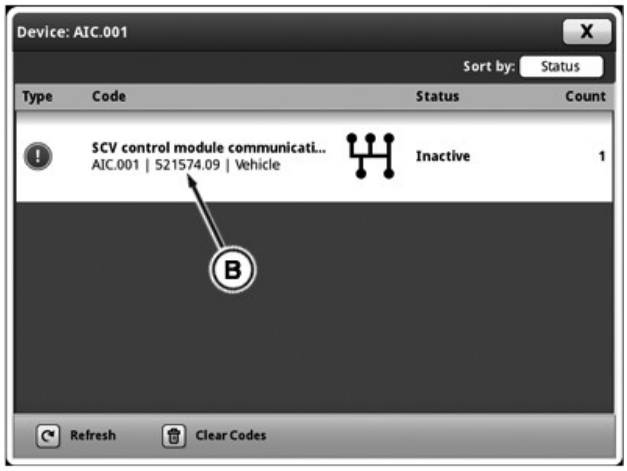


RXA0133361—UN—26JUL13

NOTE: If, after the remedy measures have been completed and the power supply has been restored, or after the solution has been accepted in the CommandCenter™, the diagnostic trouble code reappears, contact an authorized dealer.

1. Press the menu button.
2. Select System and confirm.
3. Press the Diagnostics Center icons.
4. Select the Trouble Codes tab.
5. Select desired control unit (A).
6. Select diagnostic trouble code (B) to call up the code.

OULXA64,BB,00059B3-19-10JUN21

Access Diagnostic Addresses

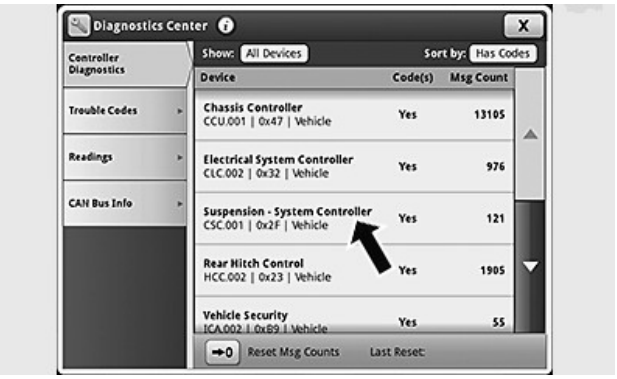
NOTE: If diagnostic trouble codes or messages are displayed in the CommandCenter™, press the button for closing until all diagnostic trouble codes and messages hidden.

1. Press the menu button.

LX364198—UN—13DEC18

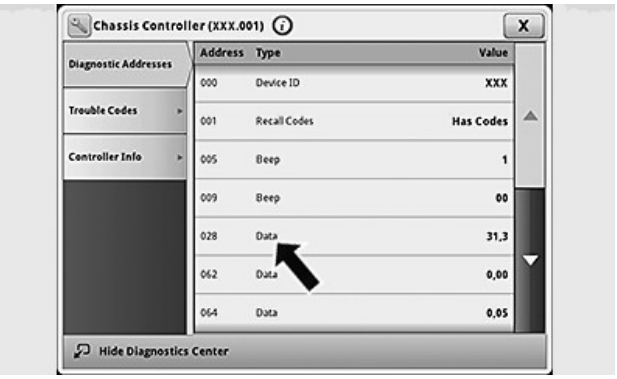
Menu button → System → Diagnostics Icon

2. Select System tab.
3. Select icons for the Diagnostics Center.
4. Select the desired control software.



LX204619—UN—22NOV13

5. Select address.



LX204620—UN—22NOV13

6. Enter value and press OK to save.

LX207738—UN—22NOV13

OULXA64,BB,00059B4-19-27JAN21

Storage

Shutting Down for an Extended Period

The following storage preparations are good for long term tractor storage up to one year. When this time is up, run the engine until it reaches operating temperature and operate some hydraulic functions. Afterwards retreat tractor for an extended storage period.

IMPORTANT: Any time your tractor will not be used for over six months, the following recommendations for storing it and removing it from storage will help to minimize corrosion and deterioration. Remove the battery if the shutdown is more than 30 days.

Change engine oil and filter. Change transmission oil and filter. Used oil will not give adequate protection.

Clean the air cleaner.

It is not necessary to drain and flush the cooling system if the engine will only be stored for a few months. However, for extended storage periods of a year or longer, it is recommended that the cooling system be drained, flushed, and refilled. Refill with appropriate coolant.

Top up fuel tank.

If desired, the alternator/fan belt can also be removed.

Battery: It is recommended to remove the battery if the vehicle will not be used for more than 30 days. Clean the battery and store it in a cool, dry place and keep it fully charged. If a battery trickle charger is used, read the manufacturer's operating instructions to check whether the device is suitable for this.

Clean the exterior of the tractor with salt-free water and touch up any scratched or chipped painted surfaces with a good quality paint.

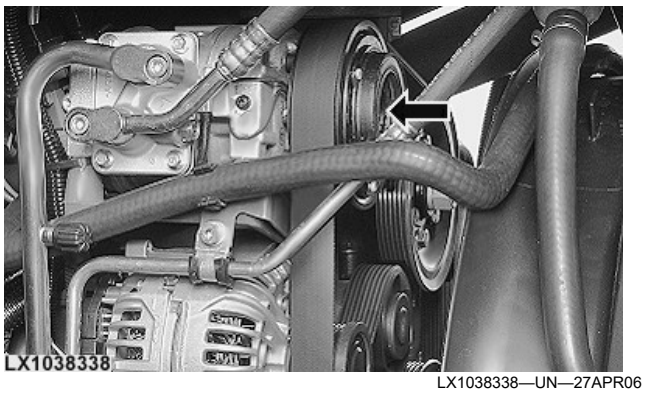
Apply a layer of grease or corrosion protection agent to all unpainted machined metal surfaces that are exposed to the weather.

Seal all openings such as the vent tube and exhaust outlet.

Store the machine in a dry, protected place. If the tractor must be stored outside, cover it with a waterproof canvas or other suitable protective material and use a strong waterproof tape.

Block up the machine so that tires do not touch the ground. Protect tires from heat and sunlight.

Tractors with Air-Conditioning System



LX1038338—UN—27APR06

If tractor is equipped with an air-conditioning system, manually turn the inner part of the pulley through several revolutions once a month.

LX25458,ALL,0000BA9-19-06JUL23

Remove from Storage

Remove all protective coverings. Check tire pressure and remove blocks.

Install battery and connect cables. Negative terminals are grounded!

Check transmission and hydraulic oil level. See that fuel tank is filled. Check level of coolant in the radiator. Check oil level in the engine crankcase. Carry out 500-hour check.

Check whether dirt or other foreign bodies have collected under the hood or cab. If so, remove them.

CAUTION: Never operate the engine in a closed building. Danger of poisoning!

LX25458,0000BAA-19-05JUN20

Specifications

GENERAL INFORMATION

- The technical information in this Operator's Manual corresponds to the current information at the time of going to press.
- Country and model-specific deviations are possible. Consider that your tractor is not equipped with all the options described here.
- Depending on the country, not all models mentioned may be available.
- Contact an authorized dealer if you have any questions about optional equipment and the relevant specifications.

OULXA64,0005EA5-19-16SEP21

Note on Specifications

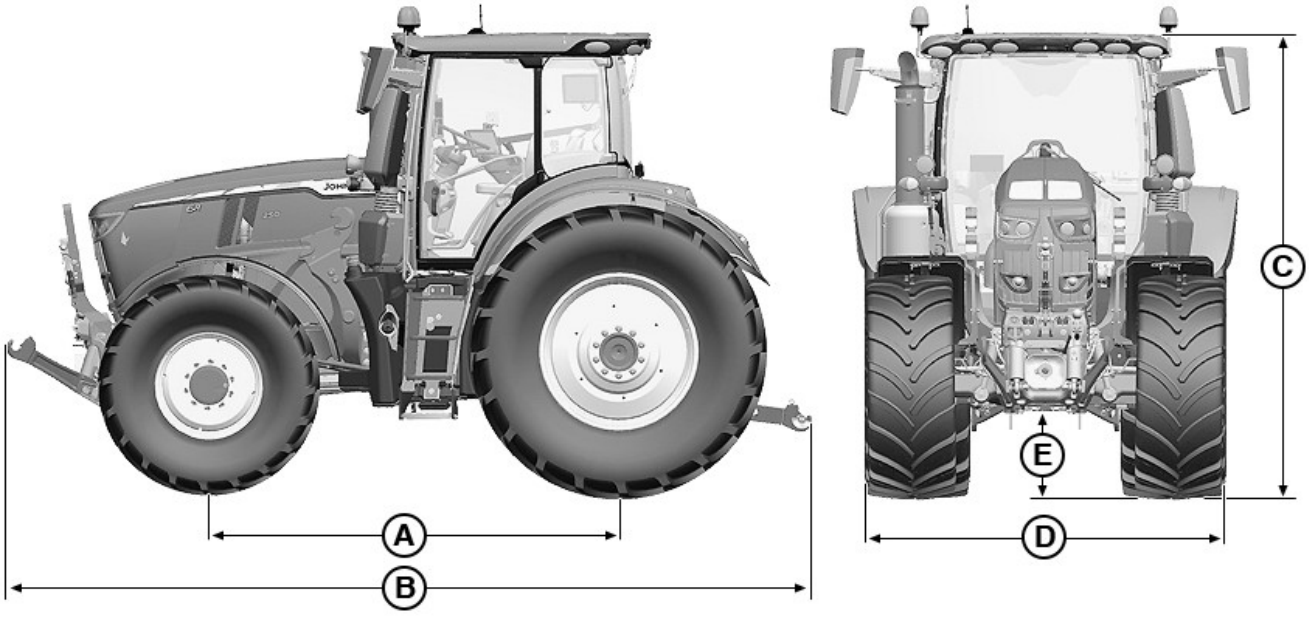
IMPORTANT: Depending on the regional peculiarities and individual vehicle configuration, the specifications are only applicable if the corresponding equipment is available.

The configuration can be found in the order information of the vehicle.

Subsequent additions and conversions must also be taken into account.

LX25458,ALL,0000BAB-19-07OCT20

Dimensions (6R 230 and 6R 250)



LX514827—UN—14JAN22

	Cab with/without suspension	
	mm	in
A - Wheelbase	2900	114.2
B - Length		
• Basic weight 110 kg to rear hitch, draft link in horizontal position (hook, CAT III)	5187	204.2
• Front weight 1150 kg to rear hitch, draft link in horizontal position (hook, CAT III)	5602	220.6
• Draft link of front hitch folded-up to rear hitch, draft link in horizontal position (hook, CAT III)	5238	206.2
• Draft link of front hitch in horizontal position to rear hitch, draft link in horizontal position (hook, CAT III)	5826	229.4
C - Height		
- Maximum total height from ground to cab roof[ab], with rear tires with an SRI of:		
• SRI 925	3200	126.0
• SRI 975	3250	128.0
• SRI 1025	3300	129.9
D - Width		

• Front axle - flange to flange	1940	76.4
• Rear axle		
- Flanged axle, bolt circle diameter 335 mm, flange to flange	1892	74.5
- Rack-and-pinion axle, face to face, hub diameter 100 mm, short version	2550	100.4
- Rack-and-pinion axle, face to face, hub diameter 100 mm, long version	3010	118.5
• Maximum width for road travel	2550	100.4
E - Maximum ground clearance		
- At front hitch at front-wheel drive axle, with front tires with an SRI of:		
• SRI 700	520	20.5
• SRI 725	545	21.5
• SRI 750	570	22.4
• SRI 775	595	23.4
- At front-wheel drive axle, with front tires with an SRI of:		
• SRI 700	538	21.2
• SRI 725	563	22.2
• SRI 750	588	23.1
• SRI 775	613	24.1
• SRI 675		
- On Differential housing with drawbar mount, rear tires with an SRI of:		
• SRI 925	430	16.9
• SRI 975	480	18.9
• SRI 1025	530	20.9
- On differential housing with pickup hitch, rear tire with an SRI of:		
• SRI 925	385	15.2
• SRI 975	435	17.1
• SRI 1025	485	19.1

[a] *Without beacon light*
[b] *Without antenna*

IMPORTANT: Ground clearance and height of the tractor depend on the tire manufacturer, tire pressure, ballast, trailer hitches, implements attached, etc.

Before driving through gates, tunnels, bridges, etc., the height of the tractor must be checked.

OULXA64,000608B-19-17JAN22

Engine (6R 230 and 6R 250)

		6R 230	6R 250
Engine type			
- Final Tier 4/Stage V		6068HL550	6068HL550
Type		Two-Stage Turbocharger, Air-to-Air Charge Air Cooling and Cooled Exhaust Gas Recirculation	
Engine power according to UN EC E-R120			
- Approved rated engine power at 2100 rpm	kW	169	184
	PS[a]	230	250
	hp[b]	227	247
- Approved rated engine power at 2100 rpm with Intelligent Power Management (power boost)	kW	199	213
	PS[a]	270	290
	hp[b]	266	286
- Approved maximum engine power at 1900 rpm	kW	186	202
	PS[a]	253	275
	hp[b]	250	271
- Approved maximum engine power at 1900 rpm with Intelligent Power Management (power boost)	kW	206	222
	PS[a]	281	301
	hp[b]	277	297
Maximum torque at 1600 rpm			
- Standard	N·m	1077	1171
	lb·ft	794	863
- Intelligent Power Management (power boost)	N·m	1129	1212
	lb·ft	833	894
Number of cylinders		6	6
Displacement	Liter	6.8	6.8
	cm^3	6788	6788
	in^3	418	418
Low idle	rpm	850	
High idle	rpm	2250	
Rated engine speed	rpm	2100	
Constant power range	rpm	1500 - 2100	
- Rear PTO, 1000/540/540E rpm			
• 1000	rpm	1950	
• 540	rpm	1950	
• 540E	rpm	1721	
- Rear PTO, 1000/1000E/540E rpm			
• 1000	rpm	2012	
• 1000E	rpm	1659	
• 540E	rpm	1618	
- Front PTO, 1000 rpm	rpm	1965	

[a] *Conversion factor: 1 kW corresponds to 1.35962 PS (metric system)*
[b] *Conversion factor: 1 kW corresponds to 1.34102 hp (U.S.A.)*

OULXA64,6R,MW67,0005E9E-19-14NOV22

PTO Power Output (6R 230 and 6R 250)

NOTE: Some tractor models and/or options listed in this section are not available in all regions/markets

Maximum rear PTO output		6R 230	6R 250
Rear PTO		1000/540/540E	
At engine rated speed (John Deere measurement according to OECD Code 2 with 1000 PTO)			
- Standard	kW	137	150
	PS[a]	186	204
	hp[b]	184	201
- Intelligent Power Management (power boost)	kW	164	177
	PS[a]	223	241
	hp[b]	220	237
At PTO standard speed (John Deere measurement according to OECD Code 2 with 1000 PTO)			
- Standard	kW	156	171
	PS[a]	212	232
	hp[b]	209	229
- Intelligent Power Management (power boost)	kW	166	180
	PS[a]	226	245
	hp[b]	223	241
Maximum front PTO power is limited to	kW	115	115
	PS[a]	156	156
	hp[b]	154	154

[a]Conversion factor: 1 kW corresponds to 1.35962 PS (metric system)
[b]Conversion factor: 1 kW corresponds to 1.34102 hp (U.S.A.)

NOTE: The specified rear PTO power has been measured on tractors with the following transmission option and additional equipment:
- AutoPowr™/IVT™ transmission
- 85 cm³ hydraulic pump, PFC system
- Without air brake system
- Without front PTO
- Without rear PTO with 1000E option
- Air-conditioning system off

Rear PTO power may vary depending on the various transmission options and additional equipment.

OULXA64,6R,MW67,0005EA3-19-09DEC21

Transmission (6R 230 and 6R 250)

AutoPowr™ transmission	Infinitely variable mechanical/hydraulic transmission
Change of direction of travel	Electro-hydraulic, under load, without operating the clutch

	km/h	mph
Speed bands	0.03 - 40*	0.02 - 25*
Speed bands	0.03 - 50	0.02 - 31

* For Japan only: Maximum speed limited to 35 km/h (21.8 mph)

OULXA64,6R,MW67,0005E79-19-09DEC21

Hitch (6R 230 and 6R 250)

Rear hitch, Category	**CAT III and IIIN**	
Rear hitch, lifting forces according to OECD	mm	in
Lift cylinder, diameter	90	3.54
	kg	lb
Maximum lifting force* directly at the coupling points	10400	22925
Sustained lifting force* directly at coupling points	7400	16315
Sustained lifting force*, 610 mm behind the coupling points	7000	15430

IMPORTANT: In all applications, pay attention to axle load capacity and tire load capacity.

*The value for sustained lifting force indicates the maximum weight that can be raised over the distance of the lift. The value for maximum lifting force can only be achieved across a small portion of the lift distance and so cannot be regarded as a reference for unlimited usable lifting force. Due to tolerances and individual conditions, the lifting force values can deviate by 5%.

Front hitch, Category	**CAT IIIN**	
Front hitch, lifting forces according to OECD	kg	lb
Maximum lifting force at coupling points	5900	13010
Sustained lifting force at coupling points	4400	9700

IMPORTANT: In all applications, pay attention to axle load capacity and tire load capacity.

OULXA64,6R,MW67,0005E80-19-16AUG22

Hydraulic System (6R 230 and 6R 250)

NOTE: Some options are not available in every region/ market.

PFC system - closed system with low standby pressure and load-sensing control	cm^3	in^3	
Axial Piston Pump	85	6.19	
Delivery Rate per Minute at Rated Speed	L	US gal	
- 85 cm^3 pump (until MY23.5)	160	42.3	
- 85 cm^3 pump (from MY23.5)	195	51.5	
System Pressure:	kPa	bar	psi
- minimum (standby)	4100	41	590
- maximum	20500	205	2970
Steering		hydrostatic	
Selective Control Valves (SCVs)			
- Series		450 (el.)	

OULXA64,6R,MW67,0005E8A-19-01DEC22

Capacities (6R 230 and 6R 250)

NOTE: Some options are not available in every region/ market.

Capacities According to Tractor Equipment	L	US gal
Fuel Tank		
- Option	410	108.3
- Option	470	124.2
DEF Tank	25	6.6
Cooling System (engine cooling and cab heating)	34	9.0
Engine Crankcase	24	6.2
Transmission and hydraulic System, Oil Change		
- AutoPowr™ Transmission	80	21.1
- Extra with Electrical Hydraulic Pump	0.7	0.19
- Extra with Front-Wheel Drive	3.0	0.8
- Extra with Additional Oil Reservoir, Optional	43	11.4
Front PTO	2.6	0.7
Front-Wheel Drive Axle		
- Three-Piece Front Axle, Type	M60HD	
- Axle Housing (suspended axle)	10	2.6
- Final Drive per Side (with brake)	2.5	0.7
Air-Conditioning System	g	lb
R-134a Refrigerant	1225-1275	2.70-2.81

IMPORTANT: Always observe the fill level indicator when changing the oil.

OULXA64,6R,MW67,0005E8E-19-04DEC23

Oil Withdrawa (6R 230 and 6R 250)l

Operating condition	Level at oil sight glass	Without additional oil reservoir, optional		With additional oil reservoir	
Maximum oil withdrawal when driving at an inclined angle:		L	US gal	L	US gal
- up to 3° at speeds below 3 km/h (1.8 mph)	MAX	32.0	8.5	80	21.1
- up to 18° at speeds below 8 km/h (5 mph)	MAX	10.0	2.6	10.0	2.6
Maximum oil withdrawal, tractor parked in horizontal position:	MAX	32.0	8.5	80	21.1
Maximum overfilling of transmission above MAX mark*:		15.0	4.0	Not allowed	
Maximum oil withdrawal, tractor parked in horizontal position with an overfilling** of:	MAX + 15 liters + (4.0 US gal)	47.0	12.4	Not allowed	

* On tractors with overfilled transmission, travel speed must not exceed 40 km/h (24.9 mph).
** Do not overfill the transmission when the tractor is operated in a strongly inclined position.

OULXA64,6R,MW67,0005E89-19-04DEC23

Operating the Tractor in an Inclined Position

Engine and transmission oil levels must be at least midway between MIN and MAX. Overfilling the transmission is not allowed when operating under these conditions.

Maximum incline:	Speed:	Hydraulic pump delivery:
Driving uphill (30°)	Up to 8 km/h (5 mph)	60 L/min (15.8 gal/min)
Driving downhill (30°)	Up to 8 km/h (5 mph)	60 L/min (15.8 gal/min)
30° lateral tilt (right or left)	Up to 8 km/h (5 mph)	10 L/min (2.6 gal/min)

CAUTION: This does not specify driving conditions that ensure safe operation, but inclined positions in which the tractor remains operational.

The maximum permissible inclined position depends on ballasting, tread width, and tires used. Adverse conditions reduce the maximum permissible inclined position and may cause tractor rollover.

NOTE: See an authorized dealer for additional information.

OULXA64,6R,0005E90-19-07SEP21

IMPORTANT: If the required amount of oil exceeds the maximum permissible oil withdrawal, or/and the oil is withdrawn too quickly, this can lead to cavitation. Cavitation can be recognized by an unusually loud noise and causes mechanical damage. Pay attention to suddenly occurring loud noises, when operating large-volume hydraulic cylinders, such as telescopic cylinders. Immediately stop the operation of the hydraulic cylinder if cavitation is suspected. A change in the engine speed does not lead to an improvement and should therefore be avoided.

OULXBER,00030BD-19-29AUG23

Using Large-Volume Hydraulic Cylinders

The operation of large-volume hydraulic cylinders or telescopic cylinders requires special attention from the user. Instructions, e.g. when operating a trailer with hydraulic tipping function.

- When tipping a trailer maintain an engine speed of 1800-2100 rpm.
- Before tipping a trailer, check whether the maximum permissible oil withdrawal corresponds to the oil capacity required to fill the hydraulic cylinder. Compare the relevant information given in the trailer manual with the maximum permissible oil withdrawal. See Selective Control Valves – Maximum Permissible Oil Withdrawal in section 70 and Oil Withdrawal in section 500A.

Loads and Weights, Part 1 (6R 230 and 6R 250)

NOTE: Some options are not available in every region/ market.

Tractor Weights*:	**kg**	**lb**
Total Weight	9650	21270
Front Axle Load	3860	8510
Rear axle load	5790	12760

* Details apply to a tractor equipped as follows:

- 600/70R30 front tires
- 710/70R42 rear tires
- AutoPowr™/IVT™ transmission
- Flanged rear axle
- Suspended Front-wheel drive axle
- Front fenders
- Cab, not suspended
- Passenger seat
- Air-conditioning system
- Premium front hitch
- Rear hitch CAT III and IIIN
- Mechanical center link
- 3-in-1 hitch
- 38 mm hitch
- 1000/540/540E rear PTO
- 85 cm³ hydraulic pump
- 4 SCV and power beyond
- Dual-line air brake system
- DEF level, full
- Fuel level, full
- With operator (75 kg)

Note: Different equipment, transmission versions, and tire sizes affect the weight details.

Maximum Permissible Front Axle Load (with front-wheel drive axle)	kg	lb
- Normal operation up to 40 km/h (25 mph)	6900	15210
- With front loader, up to maximum 10 km/h (6 mph)**	8300	18300
Maximum Permissible Rear Axle Load		
• For tread widths up to 2.25 m	11400	25130
• For tread widths from 2.25 m or twin tires	10270	22640
Maximum Permissible Total Weight (with front-wheel drive axle)		
• For tread widths up to 2.25 m	15000	33070
• Reduction: With rear tire 520/85R46 or 380/90R54 (US and US territories only) (ASABE S648)	14200	31310
• For tread widths from 2.25 m or twin tires	13450	29650
Maximum permissible total weight including ballast for draft applications		
• For tread widths up to 2.25 m	14000	30860
• For tread widths from 2.25 m or twin tires	12000	26460

Note: For heavy pulling work, the tractor's weight, including ballast 12000 kg (26460 lb), must NOT be exceeded.

Maximum Permissible static vertical load		
- Drawbar category	CAT III	
- On the drawbar, standard duty (road travel) at ≤ 40 km/h (25 mph)	kg	lb
• 250 mm (9.8 in) extended	3000*	6600*
- On drawbar, standard duty (field use)		
• 250 mm (9.8 in) extended	3000	6600
• 350 mm (13.8 in) extended	2000	4400
• 400 mm (15.7 in) extended	180	4000
- On the extendable ball-type hitch	4000	8800
- Hydraulic pickup hitch		
• On tow hook	3000	6600
• On ball	3000	6600
• On CAT II drawbar at 400 mm (15.7 in)	800	1800

* At travel speeds greater than 40 km/h (25 mph), the maximum permissible static vertical load is limited to 2700 kg (5950 lb).
** For front loader work, select a tread width between 1750 - 1950 mm (68.9 - 76.8 in).

For maximum permissible static vertical loads when using different trailer hitches, see Loads and Weights, Part 2 - from MY19.

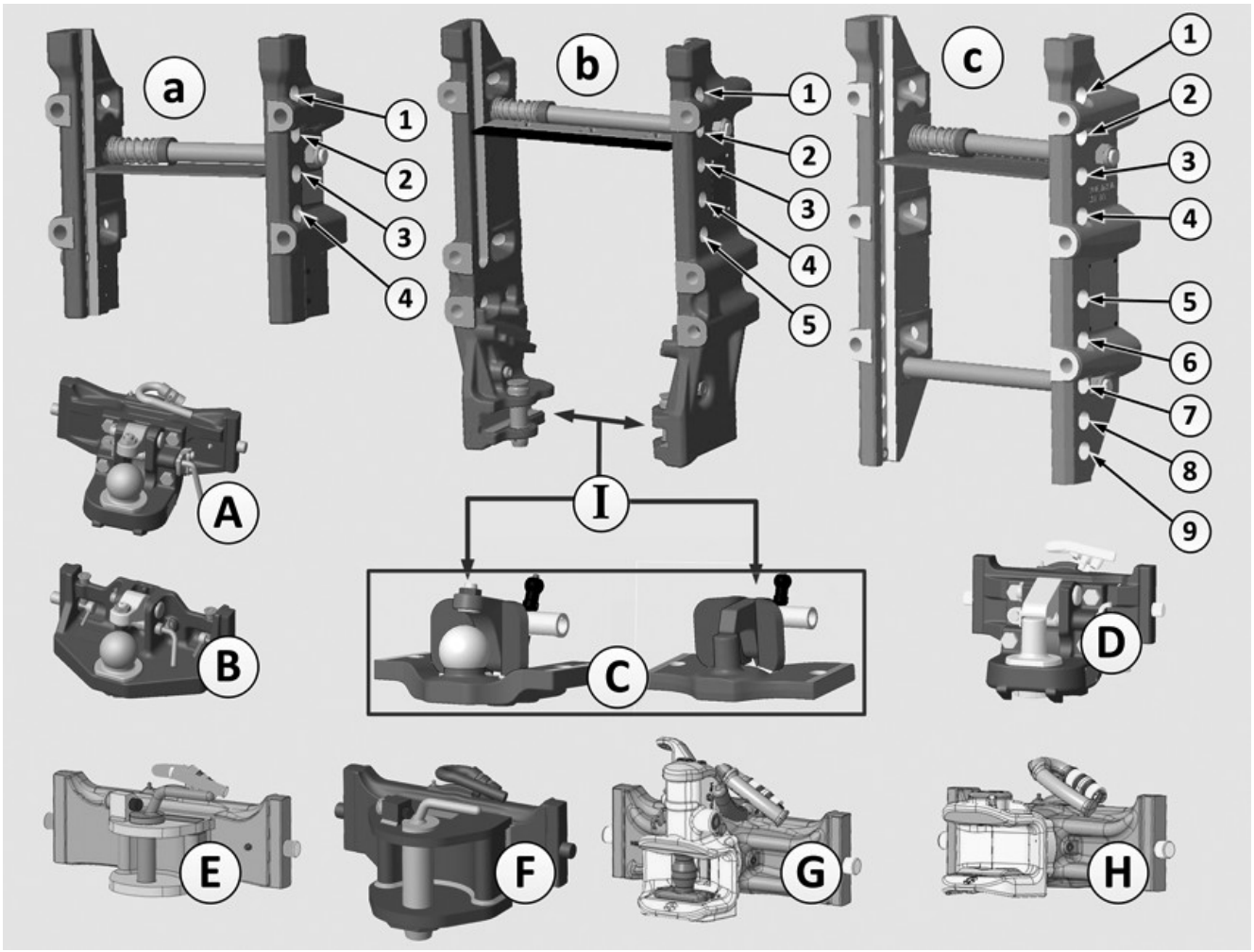
NOTE: The static vertical loads specified on the trailer hitches must not be exceeded.

Observe permissible tire load capacities, axle loads, and the permissible total weight. Traffic regulations in certain countries may restrict the loads to figures lower than those quoted.

See also Maximum Permissible Axle- and Tire Load Capacity in this Section.

OULXA64,6R,MW67,0005E94-19-26JUL23

Loads and Weights, Part 2 - from MY19



LX315193—UN—22AUG18

Key			
a	Rail, 4 Positions	E	CUNA Type C
b	Rail, 5 Positions (3 in 1)	F*	CUNA Type D2
c	Rail, 9 Positions	F**	CUNA Type D3
A	Height Adjustable, Ball Type 1	G	Automatic Trailer Hitch
B[3]	Height Adjustable, Ball Type 2	H	Manual Trailer Hitch
C	Not Adjustable, Ball or Piton Fix	1 to 9	Positions
D	Height Adjustable Piton Fix	[3]	Only available for 6R 175R, 6R 195, 6R 215, 6R 230, and 6R 250

NOTE: The static vertical loads specified on the trailer hitches must not be exceeded.

Observe permissible tire load capacities, axle loads, and the permissible total weight. Traffic regulations in certain countries may restrict the loads to figures lower than those quoted.

Combina-tions	Maximum permissible static vertical loads when using different trailer hitches - from MY19																	
	1		2		3		4		5		6		7		8		9	
	(kg)	(lb)	(kg)	(lb)	(kg)	(lb)	(kg)	(lb)	(kg)	(lb)	(kg)	(lb)	(kg)	(lb)	(kg)	(lb)	(kg)	(lb)
Aa	2000	4400	2000	4400	2000	4400	2000	4400										
Ab	3000	6610	3000	6610	3000	6610	3000	6610	3000	6610								
Ac	3000	6610	3000	6610	3000	6610	3000	6610	3000	6610	3000	6610	3000	6610	3000	6610	3000	6610
Ba[3]	2000	4400	2000	4400	2000	4400	2000	4400										
Bb[3]	4000	8815	4000	8815	4000	8815	4000	8815	4000	8815								
Bc[3]	4000	8815	4000	8815	4000	8815	4000	8815	4000	8815	4000	8815	4000	8815	4000	8815	4000	8815
Da	2000	4400	2000	4400	2000	4400	2000	4400										
Db	3000	6610	3000	6610	3000	6610	3000	6610	3000	6610								
Dc	3000	6610	3000	6610	3000	6610	3000	6610	3000	6610	3000	6610	3000	6610	3000	6610	3000	6610
Ea	1500	3300	1500	3300	1500	3300	1500	3300										
Eb	1500	3300	1500	3300	1500	3300	1500	3300	1500	3300								
Ec	1500	3300	1500	3300	1500	3300	1500	3300	1500	3300	1500	3300	1500	3300	1500	3300	1500	3300
Fa*	2000	4400	2000	4400	2000	4400	2000	4400										
Fb*	2000	4400	2000	4400	2000	4400	2000	4400	2000	4400								
Fc*	2000	4400	2000	4400	2000	4400	2000	4400	2000	4400	2000	4400	2000	4400	2000	4400	2000	4400
Fa**	2000	4400	2000	4400	2000	4400	2000	4400										
Fb**	2500	5510	2500	5510	2500	5510	2500	5510	2500	5510								
Fc**	2500	5510	2500	5510	2500	5510	2500	5510	2500	5510	2500	5510	2500	5510	2500	5510	2500	5510
Ga	2000	4400	2000	4400	2000	4400	2000	4400										
Gb	2500	5510	2500	5510	2500	5510	2500	5510	2500	5510								
Gc	2500	5510	2500	5510	2500	5510	2500	5510	2500	5510	2500	5510	2500	5510	2500	5510	2500	5510
Ha	2000	4400	2000	4400	2000	4400	2000	4400										
Hb	2500	5510	2500	5510	2500	5510	2500	5510	2500	5510								
Hc	2500	5510	2500	5510	2500	5510	2500	5510	2500	5510	2500	5510	2500	5510	2500	5510	2500	5510
C Ball I	4000	8815																
C Piton Fix I	3000	6610																

LX25458,ALL,0000BC7-19-15DEC21

Maximum Permissible Axle- and Tire Load Capacity

CAUTION: Risk of personal injury and property damage due to loss of control of the tractor.

When overloaded, essential components of the vehicle will fail with the result of serious accidents.

Load capacity of tires and permissible axle loads must not be exceeded under any circumstances.

Determining the Permissible Load Values:

- Find the maximum permissible axle loads in relevant tables of section 500A.
- Find the maximum permissible tire loads and inflation pressures in the official tables of the respective tire manufacturer.

Further Information:

- To determine the current axle loads, place the vehicle with one axle after the other on vehicle scale. The front- and rear implement must be fully raised during the weighing process.
- The maximum permissible tire load capacity depends on the travel speed of the vehicle.

- The maximum permissible tire load capacity depends on the correct inflation pressure.
- Tire inflation pressures specified in this manual must be observed. These have priority over other information.
- Regional regulations can restrict the permissible values.
- Refer to Tire Labeling— Ascertain the Load Capacity of Tires in section 80.
- In any doubt, we recommend that you approach an authorized dealer or the tire manufacturer for advice.

OULXBER,0003155-19-15NOV22

Electrical System (6R 230 and 6R 250)

Battery	12 V, 2x 95 Ah
Alternator According to Tractor Equipment with Overvoltage Protection	250 A at 13.5 to 15.5 V*
Starter Motor	12 V, 3.8 kW (5.2 hp)
Ground Connection	Negative

*Generator voltage, depending on temperature

OULXA64,6R,MW67,0005E8D-19-09DEC21

Vibration

All operator‘s seats approved by John Deere are component type-approved in accordance with 78/764/EEC or (EU) 1322/2014 Annex XIV, being allocated an average of the vibration acceleration actually measured at the seat (a_{wS}), equivalent to ≤ 1.25 m/s^2.

This value must NOT be used to calculate vibration stress as per 2002/44/EC! Local John Deere dealers can provide assistance in assessing vibration stress.

Measures to reduce vibration may include:

- Appropriate style of driving, e.g. not too fast
- Suspended front axle
- Suspended cab
- Correctly adjusted operator‘s seat
- Correct tire pressure

DX,VIBRATION,EU-19-28FEB17

Identification of Air-Conditioning Systems

CAUTION: The air-conditioning system contains fluorinated greenhouse gases. This is necessary for the air-conditioning system to function.

Designation:	R-134a; 1,1,1.2-Tetrafluorethan
Chemical composition:	CH_2FCF_3
Amounts contained in models R:	1.25 kg (2.76 lb)
Equivalent design amount to CO_2e:	1.79 t (3950 lb)
Global Warming Potential (GWP):	1430*

* The greenhouse effect is 1430 times of the same amount of carbon dioxide in regards to a time frame of 100 years.

All tractors have a decal affixed to them with the corresponding specifications. It is located on the right, top side of the air-conditioning condenser.

6R Tractor Models

WB 2580	WB 2765	WB 2800	WB 2900
6R 110	6R 145	6R 175	6R 230
6R 120	6R 155	6R 195	6R 250
6R 130	6R 165	6R 215	
6R 140	6R 185		
6R 150			

OULXA64,6R,0005A61-19-28OCT21

Safety Note Regarding the Subsequent Installation of Electrical and Electronic Appliances and/or Components

The machine is equipped with electronic components whose function may be influenced by electromagnetic radiation from other appliances. Such influences may be hazardous. Therefore, observe the following safety instructions:

No tampering with the tractor's on-board electrical system is permitted. Subsequent installation of electrical/electronic appliances in the machine must make use of the sockets and connectors provided for this purpose. In every case, the user must verify

whether the installation affects the electronics or other components. This applies particularly to:

- Implement control units/monitors
- Performance monitors
- Audio/video systems, communication systems

In particular, subsequently installed electrical/electronic components must comply with the relevant edition of EMC Directive 2004/108/EC, and be CE marked.

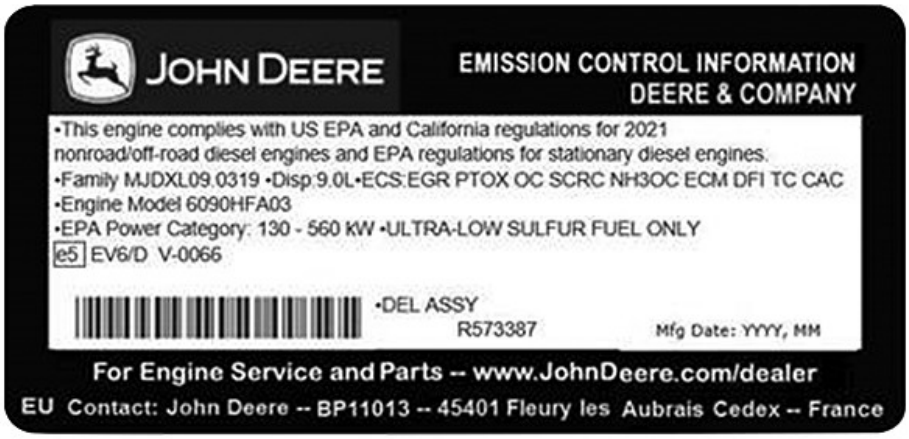
If mobile communication systems (e.g. radio communication, telephone) are to be installed subsequently, the following extra requirements must be met:

- Only devices with an approval complying with the valid national regulation (i.e. BZT approval in Germany) shall be installed.
- The device shall be installed securely.
- Portable or mobile devices may be operated in the vehicle only if connected to a fixed outside antenna.
- Transmitters shall be installed separately from the vehicle's electronics.
- The antenna must be installed in a professional manner, with a good ground connection between the antenna and the vehicle ground.

Wiring, installation, and maximum permissible current supply must be as stated in the installation instructions of the machine manufacturer.

LX25458,OM,TRAK,EMV-19-07OCT20

Carbon Dioxide Emissions (CO_2)



RG33429—UN—04FEB21

SAMPLE - Engine Emissions Label

To identify the carbon dioxide (CO_2) output, locate the engine emissions label. Find the appropriate family on the emissions label and reference the chart.

NOTE: The first letter of the family number is not utilized for family identification on the chart.

Emissions Label Family	CO_2 Result
_JDXL02.9323	952 g/kW-hr
_JDXL02.9327	784 g/kW-hr
_JDXL04.5337	819 g/kW-hr
_JDXL04.5338	682 g/kW-hr
_JDXL04.5304	1004 g/kW-hr
_JDXN04.5174	792 g/kW-hr
_JDXL06.8324	720 g/kW-hr
_JDXL06.8328	683 g/kW-hr
_JDXL06.8336	701 g/kW-hr
_JDXN06.8175	771 g/kW-hr
_JDXL09.0319	646 g/kW-hr
_JDXL09.0325	695 g/kW-hr
_JDXL09.0329	657 g/kW-hr
_JDXL09.0333	650 g/kW-hr
_JDXL13.5326	684 g/kW-hr
_JDXL13.6320	651 g/kW-hr
_JDXL13.5340	632 g/kW-hr
_JDXL18.0341	683 g/kW-hr
_JDXL18.0342	687 g/kW-hr
F28	870 g/kW-hr
F32	710 g/kW-hr
F33	677 g/kW-hr

This CO_2 measurement results from testing over a fixed test cycle under laboratory conditions a(n) (parent) engine representative of the engine type (engine family) and shall not imply or express any guarantee of the performance of a particular engine.

DX,EMISSIONS,CO2-19-23JUN23

Limited Battery Warranty

NOTE: Applicable in North America only. For complete machine warranty, reference a copy of the John Deere warranty statement. Contact your John Deere dealer to obtain a copy.

To Secure Warranty Service

The purchaser must request warranty service from a John Deere dealer authorized to sell John Deere batteries, and present the battery to the dealer with the top cover plate codes intact.

Replacement

Any new battery which becomes unserviceable (not merely discharged) due to defects in material or workmanship will be eligible for warranty consideration.

This Warranty Does Not Cover

Breakage of the container, cover, or terminals.

Depreciation or damage caused by lack of reasonable and necessary maintenance or by improper maintenance.

Transportation, mailing, or service call charges for warranty service.

Limitation of Implied Warranties and Purchaser's Remedies

To the extent permitted by law, neither John Deere nor any company affiliated with it makes any warranties, representations or promises as to the quality, performance or freedom from defect of the products covered by this warranty. IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, TO THE EXTENT APPLICABLE, SHALL BE LIMITED IN DURATION TO THE APPLICABLE ADJUSTMENT PERIOD SET FORTH HERE. THE PURCHASER'S ONLY REMEDIES IN CONNECTION WITH THE BREACH OR PERFORMANCE OF ANY WARRANTY ON JOHN DEERE BATTERIES ARE THOSE SET FORTH HERE. IN NO EVENT WILL THE DEALER, JOHN DEERE OR ANY COMPANY AFFILIATED WITH JOHN DEERE BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES. (Note: Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages. So these limitations and exclusions may not apply to you.) This warranty gives you specific legal rights, and you may also have some rights which vary from state to state.

No Dealer Warranty

The selling dealer makes no warranty of it's own and the dealer has no authority to make any representation or promise on behalf of John Deere, or to modify the terms or limitations of this warranty in any way.

DX,BATWAR,NA-19-06AUG21

Warranty on Tires

JOHN DEERE

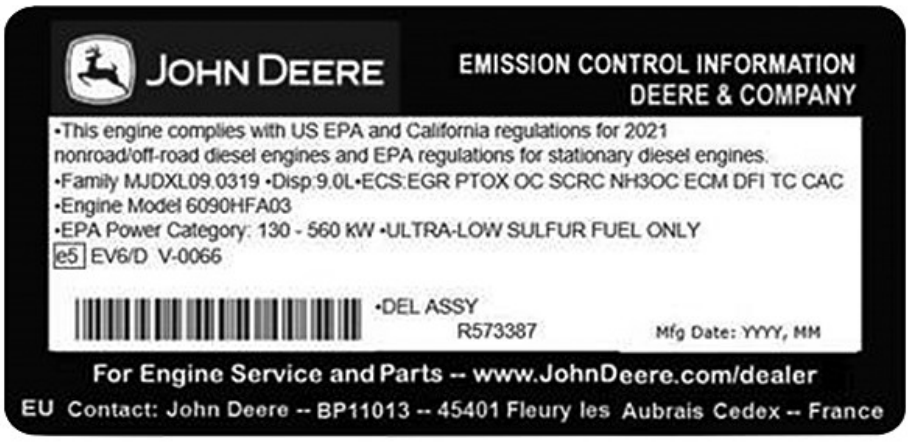
John Deere sources tires from several major brands. The warranty is covered by the tire manufacturers. The warranty and contact information for each brand is available at www.JohnDeere.com/warrantystatements under the Tires section. If you do not have internet access, please contact an authorized John Deere dealer for all available information.

For specific manufacturer service questions, please contact the tire manufacturers.

DS0319 2/2016

LX299255—UN—10OCT17
LX25458,0000BE2-19-05JUN20

Emissions Control System Certification Label



RG33429—UN—04FEB21

Engine Emissions Label

⚠ CAUTION: Statutes providing severe penalties for tampering with emissions controls may apply to the user or dealer.

The emissions warranty applies to those engines marketed by John Deere that have been certified by the United States Environmental Protection Agency (EPA) and/or California Air Resources Board (CARB); and used in the United States and Canada in Non-road equipment. The presence of an emissions label like the one shown signifies that the engine has been certified with the EPA and/or CARB. The EPA and CARB warranties only apply to new engines having the certification label affixed to the engine and sold as stated above in the geographic areas. The presence of an EU number signifies that the engine has been certified with the European Union countries per Regulation (EU) 2016/1628 and supplementing legislation. The EPA and/or CARB emissions warranties do not apply to the EU countries.

The emissions label has applicable US EPA and/or CARB regulatory year. The regulatory year determines which warranty statement is applicable to engine. See “EPA Non-road Emissions Control Warranty Statement—Compression Ignition” and “CARB Non-road Emissions Control Warranty Statement—Compression Ignition”. For additional regulatory year warranty statements, see www.JohnDeere.com or contact the nearest John Deere service dealer for assistance.

Emission Control System(s) Laws

The U.S. EPA and California ARB prohibit the removal or rendering inoperative of any device or element of design installed on or in engines/equipment in compliance with applicable emission regulations prior to or after the sale and delivery of the engines/equipment to the ultimate purchaser.

DX,EMISSIONS,LABEL-19-05FEB21

EPA Non-road Emissions Control Warranty Statement—Compression Ignition

JOHN DEERE

DXLOGOV1—UN—28APR09

U.S. AND CANADA EMISSION CONTROL WARRANTY STATEMENT
YOUR WARRANTY RIGHTS AND OBLIGATIONS

To determine if the John Deere engine qualifies for the additional warranties set forth below, look for the "Emissions Control Information" label located on the engine. If the engine is operated in the United States or Canada and the Emissions Control information label states: "This engine complies with US EPA regulations for nonroad and stationary diesel engines”, or “This engine conforms to US EPA nonroad compression-ignition regulations”, refer to the "U.S. and Canada Emission Control Warranty Statement." If the engine is operated in California, and the label states: "This engine complies with US EPA and CARB regulations for nonroad diesel engines”, or “This engine conforms to US EPA and California nonroad compression-ignition emission regulations”, also refer to the "California Emission Control Warranty Statement.”

Warranties stated on this certificate refer only to emissions-related parts and components of your engine. The complete engine warranty, less emissions-related parts and components, is provided separately. If you have any questions about your warranty rights and responsibilities, you

should contact John Deere at 1-319-292-5400.

JOHN DEERE'S WARRANTY RESPONSIBILITY

John Deere warrants to the ultimate purchaser and each subsequent purchaser that this off-road diesel engine including all parts of its emission-control system was designed, built and equipped so as to conform at the time of the sale with Section 213 of the Clean Air Act and is free from defects in materials and workmanship which would cause the engine to fail to conform with applicable US EPA regulations for a period of five years from the date the engine is placed into service or 3,000 hours of operation, whichever first occurs.

Where a warrantable condition exists, John Deere will repair or replace, as it elects, any part or component with a defect in materials or workmanship that would increase the engine's emissions of any regulated pollutant within the stated warranty period at no cost to you, including expenses related to diagnosing and repairing or replacing emission-related parts. Warranty coverage is subject to the limitations and exclusions set forth herein. Emission- related components include engine parts developed to control emissions related to the following:

Air-Induction System
Fuel System
Ignition System
Exhaust Gas Recirculation Systems
Aftertreatment Devices
Crankcase Ventilation Valves
Sensors
Engine Electronic Control Units

EMISSION WARRANTY EXCLUSIONS

John Deere may deny warranty claims for malfunctions or failures caused by:

- Non-performance of maintenance requirements listed in the Operator's Manual
- The use of the engine/equipment in a manner for which it was not designed
- Abuse, neglect, improper maintenance or unapproved modifications or alterations
- Accidents for which it does not have responsibility or by acts of God

The off-road diesel engine is designed to operate on diesel fuel as specified in the Fuels, Lubricants and Coolants section in the Operators Manual. Use of any other fuel can harm the emissions control system of the engine/equipment and is not approved for use.

To the extent permitted by law John Deere is not liable for damage to other engine components caused by a failure of an emission-related part, unless otherwise covered by standard warranty.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. REMEDIES UNDER THIS WARRANTY ARE LIMITED TO THE PROVISIONS OF MATERIAL AND SERVICES AS SPECIFIED HEREIN. WHERE PERMITTED BY LAW, NEITHER JOHN DEERE NOR ANY AUTHORIZED JOHN DEERE ENGINE DISTRIBUTOR, DEALER, OR REPAIR FACILITY OR ANY COMPANY AFFILIATED WITH JOHN DEERE WILL BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Emission_CI_EPA (18Dec09)

JOHN DEERE

U.S. AND CANADA EMISSION CONTROL WARRANTY STATEMENT
YOUR WARRANTY RIGHTS AND OBLIGATIONS

To determine if the John Deere engine qualifies for the additional warranties set forth below, look for the "Emissions Control Information" label located on the engine. If the engine is operated in the United States or Canada and the Emissions Control information label states: "This engine complies with US EPA regulations for nonroad and stationary diesel engines", or "This engine conforms to US EPA nonroad compression-ignition regulations", refer to the "U.S. and Canada Emission Control Warranty Statement." If the engine is operated in California, and the label states: "This engine complies with US EPA and CARB regulations for nonroad diesel engines", or "This engine conforms to US EPA and California nonroad compression-ignition emission regulations", also refer to the "California Emission Control Warranty Statement."

Warranties stated on this certificate refer only to emissions-related parts and components of your engine. The complete engine warranty, less emissions-related parts and components, is provided separately. If you have any questions about your warranty rights and responsibilities, you should contact John Deere at 1-319-292-5400.

JOHN DEERE'S WARRANTY RESPONSIBILITY

John Deere warrants to the ultimate purchaser and each subsequent purchaser that this off-road diesel engine including all parts of its emission-control system was designed, built and equipped so as to conform at the time of the sale with Section 213 of the Clean Air Act and is free from defects in materials and workmanship which would cause the engine to fail to conform with applicable US EPA regulations for a period of five years from the date the engine is placed into service or 3,000 hours of operation, whichever first occurs.

Where a warrantable condition exists, John Deere will repair or replace, as it elects, any part or component with a defect in materials or workmanship that would increase the engine's emissions of any regulated pollutant within the stated warranty period at no cost to you, including expenses related to diagnosing and repairing or replacing emission-related parts. Warranty coverage is subject to the limitations and exclusions set forth herein. Emission- related components include engine parts developed to control emissions related to the following:

Air-Induction System
Fuel System
Ignition System
Exhaust Gas Recirculation Systems
Aftertreatment Devices
Crankcase Ventilation Valves
Sensors
Engine Electronic Control Units

EMISSION WARRANTY EXCLUSIONS

John Deere may deny warranty claims for malfunctions or failures caused by:

- Non-performance of maintenance requirements listed in the Operator's Manual
- The use of the engine/equipment in a manner for which it was not designed
- Abuse, neglect, improper maintenance or unapproved modifications or alterations
- Accidents for which it does not have responsibility or by acts of God

The off-road diesel engine is designed to operate on diesel fuel as specified in the Fuels, Lubricants and Coolants section in the Operators Manual. Use of any other fuel can harm the emissions control system of the engine/equipment and is not approved for use.

To the extent permitted by law John Deere is not liable for damage to other engine components caused by a failure of an emission-related part, unless otherwise covered by standard warranty.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. REMEDIES UNDER THIS WARRANTY ARE LIMITED TO THE PROVISIONS OF MATERIAL AND SERVICES AS SPECIFIED HEREIN. WHERE PERMITTED BY LAW, NEITHER JOHN DEERE NOR ANY AUTHORIZED JOHN DEERE ENGINE DISTRIBUTOR, DEALER, OR REPAIR FACILITY OR ANY COMPANY AFFILIATED WITH JOHN DEERE WILL BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Emission_CI_EPA (18Dec09)

TS1721—UN—15JUL13
DX,EMISSIONS,EPA-19-12DEC12

CARB Non-road Emissions Control Warranty Statement—Compression Ignition

Emissions Control Warranty Statement 2022 through 2024

JOHN DEERE

DXLOGOV1—UN—28APR09

CALIFORNIA EMISSIONS CONTROL WARRANTY STATEMENT

YOUR WARRANTY RIGHTS AND OBLIGATIONS

To determine if the John Deere engine qualifies for the additional warranties set forth below, look for the “Emission Control Information” label located on the engine. If the engine is operated in the United States or Canada and the engine label states: “This engine complies with US EPA regulations for nonroad and stationary diesel engines”, or “This engine complies with US EPA regulations for stationary emergency diesel engines”, refer to the “U.S. and Canada Emission Control Warranty Statement.” If the engine is operated in California, and the engine label states: “This engine complies with US EPA and California regulations for nonroad/off-road diesel engines” also refer to the “California Emissions Control Warranty Statement.”

Warranties stated on this certificate refer only to emissions-related parts and components of your engine. The complete engine warranty, less emission-related parts and components, is provided separately. If you have any questions about your warranty rights and responsibilities, you should contact John Deere at 1-319-292-5400.

CALIFORNIA EMISSIONS CONTROL WARRANTY STATEMENT:

The California Air Resources Board (CARB) is pleased to explain the emission-control system warranty on 2022 through 2024 off-road diesel engines. In California, new off-road engines must be designed, built and equipped to meet the State’s stringent anti-smog standards. John Deere must warrant the emission control system on your engine for the periods of time listed below provided there has been no abuse, neglect or improper maintenance of your engine.

Your emission control system may include parts such as the fuel injection system and the air induction system. Also included may be hoses, belts, connectors and other emission-related assemblies.

John Deere warrants to the ultimate purchaser and each subsequent purchaser that this off-road diesel engine was designed, built, and equipped so as to conform at the time of sale with all applicable regulations adopted by CARB. John Deere warrants that this engine is free from defects in materials and workmanship which would cause the failure of emissions warrantied parts to be identical in all material respects to the part as described in John Deere's application for certification for a period of five years from the date the engine is delivered to an ultimate purchaser or 3,000 hours of operation, whichever occurs first. This applies to all engines rated at 19 kW and greater. In the absence of a device to measure hours of use, the engine shall be warranted for a period of five years.

EMISSIONS WARRANTY EXCLUSIONS:

John Deere may deny warranty claims for failures caused by the use of an add-on or modified part which has not been exempted by the CARB. A modified part is an aftermarket part intended to replace an original emission-related part which is not functionally identical in all respects and which in any way affects emissions. An add-on part is any aftermarket part which is not a modified part or a replacement part.

In no event will John Deere, any authorized engine distributor, dealer, or repair facility, or any company affiliated with John Deere be liable for incidental or consequential damage.

JOHN DEERE'S WARRANTY RESPONSIBILITY:

Where a warrantable condition exists, John Deere will repair or replace, as it elects, your off-road diesel engine at no cost to you, including diagnosis, parts or labor. Warranty coverage is subject to the limitations and exclusions set forth herein. The off-road diesel engine is warranted for a period of five years from the date the engine is delivered to an ultimate purchaser or 3,000 hours of operation, whichever occurs first. The following are emissions-related parts:

Air Induction System
- Intake manifold
- Turbocharger
- Charge air cooler

Fuel Metering system
- Fuel injection system

Exhaust Gas Recirculation
- EGR valve

Catalyst or Thermal Reactor Systems
- Catalytic converter
- Exhaust manifold

Emission control labels

Particulate Controls
- Any device used to capture particulate emissions
- Any device used in the regeneration of the capturing system
- Enclosures and manifolding
- Smoke Puff Limiters

Positive Crankcase Ventilation (PCV) System
- PCV valve
- Oil filler cap

Advanced Oxides of Nitrogen (NOx) Controls
- NOx absorbers and catalysts

SCR systems and urea containers/dispensing systems

Miscellaneous Items used in Above Systems
- Electronic control units, sensors, actuators, wiring harnesses, hoses, connectors, clamps, fittings, gasket, mounting hardware

Any warranted emissions-related part scheduled for replacement as required maintenance is warranted by John Deere for the period of time prior to the first scheduled replacement point for the part. Any warranted emissions-related part not scheduled for replacement as required maintenance or scheduled only for regular inspection is warranted by John Deere for the stated warranty period.

OWNER'S WARRANTY RESPONSIBILITIES:

As the off-road diesel engine owner you are responsible for the performance of the required maintenance listed in your Operator’s Manual. John Deere recommends that the owner retain all receipts covering maintenance on the off-road diesel engine, but John Deere cannot deny warranty solely for the lack of receipts or for the owner’s failure to ensure the performance of all scheduled maintenance. However, as the off-road diesel engine owner, you should be aware that John Deere may deny you warranty coverage if your off-road diesel engine or a part has failed due to abuse, neglect, improper maintenance or unapproved modifications.

The off-road diesel engine is designed to operate on diesel fuel as specified in the Fuels, Lubricants and Coolants section in the Operators Manual. Use of any other fuel may result in the engine no longer operating in compliance with applicable emissions requirements.

The owner is responsible for initiating the warranty process, and should present the machine to the nearest authorized John Deere dealer as soon as a problem is suspected. The warranty repairs should be completed by the authorized John Deere dealer as quickly as possible.

Emissions regulations require the customer to bring the unit to an authorized servicing dealer when warranty service is required. As a result, John Deere is NOT liable for travel or mileage on emissions warranty service calls.

Emission_CI_CARB (14Apr20)

Emissions Control Warranty Statement 2022 through 2024

DXLOGOV1 —UN—28APR09

JOHN DEERE

CALIFORNIA EMISSIONS CONTROL WARRANTY STATEMENT
YOUR WARRANTY RIGHTS AND OBLIGATIONS

To determine if the John Deere engine qualifies for the additional warranties set forth below, look for the "Emission Control Information" label located on the engine. If the engine is operated in the United States or Canada and the engine label states: "This engine complies with US EPA regulations for nonroad and stationary diesel engines", or "This engine complies with US EPA regulations for stationary emergency diesel engines", refer to the "U.S. and Canada Emission Control Warranty Statement." If the engine is operated in California, and the engine label states: "This engine complies with US EPA and California regulations for nonroad/off-road diesel engines" also refer to the "California Emissions Control Warranty Statement."

Warranties stated on this certificate refer only to emissions-related parts and components of your engine. The complete engine warranty, less emission-related parts and components, is provided separately. If you have any questions about your warranty rights and responsibilities, you should contact John Deere at 1-319-292-5400.

CALIFORNIA EMISSIONS CONTROL WARRANTY STATEMENT:

The California Air Resources Board (CARB) is pleased to explain the emission-control system warranty on 2022 through 2024 off-road diesel engines. In California, new off-road engines must be designed, built and equipped to meet the State's stringent anti-smog standards. John Deere must warrant the emission control system on your engine for the periods of time listed below provided there has been no abuse, neglect or improper maintenance of your engine.

Your emission control system may include parts such as the fuel injection system and the air induction system. Also included may be hoses, belts, connectors and other emission-related assemblies.

John Deere warrants to the ultimate purchaser and each subsequent purchaser that this off-road diesel engine was designed, built, and equipped so as to conform at the time of sale with all applicable regulations adopted by CARB. John Deere warrants that this engine is free from defects in materials and workmanship which would cause the failure of emissions warrantied parts to be identical in all material respects to the part as described in John Deere's application for certification for a period of five years from the date the engine is delivered to an ultimate purchaser or 3,000 hours of operation, whichever occurs first. This applies to all engines rated at 19 kW and greater. In the absence of a device to measure hours of use, the engine shall be warranted for a period of five years.

EMISSIONS WARRANTY EXCLUSIONS:

John Deere may deny warranty claims for failures caused by the use of an add-on or modified part which has not been exempted by the CARB. A modified part is an aftermarket part intended to replace an original emission-related part which is not functionally identical in all respects and which in any way affects emissions. An add-on part is any aftermarket part which is not a modified part or a replacement part.

In no event will John Deere, any authorized engine distributor, dealer, or repair facility, or any company affiliated with John Deere be liable for incidental or consequential damage.

RG32758—UN—19AUG20

JOHN DEERE'S WARRANTY RESPONSIBILITY:

Where a warrantable condition exists, John Deere will repair or replace, as it elects, your off-road diesel engine at no cost to you, including diagnosis, parts or labor. Warranty coverage is subject to the limitations and exclusions set forth herein. The off-road diesel engine is warranted for a period of five years from the date the engine is delivered to an ultimate purchaser or 3,000 hours of operation, whichever occurs first. The following are emissions-related parts:

Air Induction System

- Intake manifold
- Turbocharger
- Charge air cooler

Fuel Metering system

- Fuel injection system

Exhaust Gas Recirculation

- EGR valve

Catalyst or Thermal Reactor Systems

- Catalytic converter
- Exhaust manifold

Emission control labels

Particulate Controls

- Any device used to capture particulate emissions
- Any device used in the regeneration of the capturing system
- Enclosures and manifolding
- Smoke Puff Limiters

Positive Crankcase Ventilation (PCV) System

- PCV valve
- Oil filler cap

Advanced Oxides of Nitrogen (NOx) Controls

- NOx absorbers and catalysts

SCR systems and urea containers/dispensing systems

Miscellaneous Items used in Above Systems

- Electronic control units, sensors, actuators, wiring harnesses, hoses, connectors, clamps, fittings, gasket, mounting hardware

Any warranted emissions-related part scheduled for replacement as required maintenance is warranted by John Deere for the period of time prior to the first scheduled replacement point for the part. Any warranted emissions-related part not scheduled for replacement as required maintenance or scheduled only for regular inspection is warranted by John Deere for the stated warranty period.

OWNER'S WARRANTY RESPONSIBILITIES:

As the off-road diesel engine owner you are responsible for the performance of the required maintenance listed in your Operator's Manual. John Deere recommends that the owner retain all receipts covering maintenance on the off-road diesel engine, but John Deere cannot deny warranty solely for the lack of receipts or for the owner's failure to ensure the performance of all scheduled maintenance. However, as the off-road diesel engine owner, you should be aware that John Deere may deny you warranty coverage if your off-road diesel engine or a part has failed due to abuse, neglect, improper maintenance or unapproved modifications.

The off-road diesel engine is designed to operate on diesel fuel as specified in the Fuels, Lubricants and Coolants section in the Operators Manual. Use of any other fuel may result in the engine no longer operating in compliance with applicable emissions requirements.

The owner is responsible for initiating the warranty process, and should present the machine to the nearest authorized John Deere dealer as soon as a problem is suspected. The warranty repairs should be completed by the authorized John Deere dealer as quickly as possible.

Emissions regulations require the customer to bring the unit to an authorized servicing dealer when warranty service is required. As a result, John Deere is NOT liable for travel or mileage on emissions warranty service calls.

Emission_CI_CARB (14Apr20)

RG32759—UN—19AUG20

Emissions Control Warranty Statement 2025 through 2027

JOHN DEERE

DXLOGOV1—UN—28APR09

CALIFORNIA EMISSIONS CONTROL WARRANTY STATEMENT
YOUR WARRANTY RIGHTS AND OBLIGATIONS

To determine if the John Deere engine qualifies for the additional warranties set forth below, look for the “Emission Control Information” label located on the engine. If the engine is operated in the United States or Canada and the engine label states: “This engine complies with US EPA regulations for nonroad and stationary diesel engines”, or “This engine complies with US EPA regulations for stationary emergency diesel engines”, refer to the “U.S. and Canada Emission Control Warranty Statement.” If the engine is operated in California, and the engine label states: “This engine complies with US EPA and California regulations for nonroad/off-road diesel engines” also refer to the “California Emissions Control Warranty Statement.”
Warranties stated on this certificate refer only to emissions-related parts and components of your engine. The complete engine warranty, less emission-related parts and components, is provided separately. If you have any questions about your warranty rights and responsibilities, you should contact John Deere at 1-319-292-5400.

CALIFORNIA EMISSIONS CONTROL WARRANTY STATEMENT:
The California Air Resources Board (CARB) is pleased to explain the emission-control system warranty in 2025 through 2027 off-road diesel engines. In California, new off-road engines must be designed, built and equipped to meet the State's stringent anti-smog standards. John Deere must warrant the emission control system on your engine for the periods of time listed below provided there has been no abuse, neglect or improper maintenance of your engine.
Your emission control system may include parts such as the fuel injection system and the air induction system. Also included may be hoses, belts, connectors and other emission-related assemblies.
John Deere warrants to the ultimate purchaser and each subsequent purchaser that this off-road diesel engine was designed, built, and equipped so as to conform at the time of sale with all applicable regulations adopted by CARB and is free from defects in materials and workmanship which would cause the failure of a warranted part to be identical in all material respects to the part as described in John Deere's application for certification for a period of five years from the date the engine is delivered to an ultimate purchaser or 3,000 hours of operation, whichever occurs first for all engines rated at 19 kW and greater. In the absence of a device to measure hours of use, the engine shall be warranted for a period of five years.
EMISSIONS WARRANTY EXCLUSIONS:
John Deere may deny warranty claims for failures caused by the use of an add-on or modified part which has not been exempted by the CARB. A modified part is an aftermarket part intended to replace an original emission-related part which is not functionally identical in all respects and which in any way affects emissions. An add-on part is any aftermarket part which is not a modified part or a replacement part.
In no event will John Deere, any authorized engine distributor, dealer, or repair facility, or any company affiliated with John Deere be liable for incidental or consequential damage.

JOHN DEERE'S WARRANTY RESPONSIBILITY:
Where a warrantable condition exists, John Deere will repair or replace, as it elects, your off-road diesel engine at no cost to you, including diagnosis, parts and labor. Warranty coverage is subject to the limitations and exclusions set forth herein. The off-road diesel engine is warranted for a period of five years from the date the engine is delivered to an ultimate purchaser or 3,000 hours of operation, whichever occurs first. The following are emissions-related parts:

Air Induction System
- Intake manifold
- Turbocharger
- Charge air cooler
  Fuel Metering system
- Fuel injection system
  Exhaust Gas Recirculation
- EGR valve
  Catalyst or Thermal Reactor Systems
- Catalytic converter
- Exhaust manifold

Emission control labels
Particulate Controls
- Any device used to capture particulate emissions
- Any device used in the regeneration of the capturing system
- Enclosures and manifolding
- Smoke Puff Limiters
  Positive Crankcase Ventilation (PCV) System
- PCV valve
- Oil filler cap

Advanced Oxides of Nitrogen (NOx) Controls
- NOx absorbers and catalysts
  SCR systems and urea containers/dispensing systems
  Miscellaneous Items used in Above Systems
- Electronic control units, sensors, actuators, wiring harnesses, hoses, connectors, clamps, fittings, gasket, mounting hardware

Any warranted emissions-related part scheduled for replacement as required maintenance is warranted by John Deere for the period of time prior to the first scheduled replacement point for the part. Any warranted emissions-related part not scheduled for replacement as required maintenance or scheduled only for regular inspection is warranted by John Deere for the stated warranty period.

OWNER'S WARRANTY RESPONSIBILITIES:
As the off-road diesel engine owner you are responsible for the performance of the required maintenance listed in your Operator's Manual. John Deere recommends that the owner retain all receipts covering maintenance on the off-road diesel engine, but John Deere cannot deny warranty solely for the lack of receipts or for the owner's failure to ensure the performance of all scheduled maintenance. However, as the off-road diesel engine owner, you should be aware that John Deere may deny you warranty coverage if your off-road diesel engine or a part has failed due to abuse, neglect, improper maintenance or unapproved modifications.
The off-road diesel engine is designed to operate on diesel fuel as specified in the Fuels, Lubricants and Coolants section in the Operators Manual. Use of any other fuel may result in the engine no longer operating in compliance with applicable emissions requirements.
The owner is responsible for initiating the warranty process, and should present the machine to the nearest authorized John Deere dealer as soon as a problem is suspected. The warranty repairs should be completed by the authorized John Deere dealer as quickly as possible.
Emissions regulations require the customer to bring the unit to an authorized servicing dealer when warranty service is required. As a result, John Deere is NOT liable for travel or mileage on emissions warranty service calls.

CALIFORNIA EMISSIONS CONTROL WARRANTY STATEMENT
YOUR WARRANTY RIGHTS AND OBLIGATIONS

To determine if the John Deere engine qualifies for the additional warranties set forth below, look for the “Emission Control Information” label located on the engine. If the engine is operated in the United States or Canada and the engine label states: “This engine complies with US EPA regulations for nonroad and stationary diesel engines”, or “This engine complies with US EPA regulations for stationary emergency diesel engines”, refer to the “U.S. and Canada Emission Control Warranty Statement.” If the engine is operated in California, and the engine label states: “This engine complies with US EPA and California regulations for nonroad/off-road diesel engines” also refer to the “California Emissions Control Warranty Statement.”

Warranties stated on this certificate refer only to emissions-related parts and components of your engine. The complete engine warranty, less emission-related parts and components, is provided separately. If you have any questions about your warranty rights and responsibilities, you should contact John Deere at 1-319-292-5400.

CALIFORNIA EMISSIONS CONTROL WARRANTY STATEMENT:

The California Air Resources Board (CARB) is pleased to explain the emission-control system warranty in 2025 through 2027 off-road diesel engines. In California, new off-road engines must be designed, built and equipped to meet the State’s stringent anti-smog standards. John Deere must warrant the emission control system on your engine for the periods of time listed below provided there has been no abuse, neglect or improper maintenance of your engine.

Your emission control system may include parts such as the fuel injection system and the air induction system. Also included may be hoses, belts, connectors and other emission-related assemblies.

John Deere warrants to the ultimate purchaser and each subsequent purchaser that this off-road diesel engine was designed, built, and equipped so as to conform at the time of sale with all applicable regulations adopted by CARB and is free from defects in materials and workmanship which would cause the failure of a warranted part to be identical in all material respects to the part as described in John Deere’s application for certification for a period of five years from the date the engine is delivered to an ultimate purchaser or 3,000 hours of operation, whichever occurs first for all engines rated at 19 kW and greater. In the absence of a device to measure hours of use, the engine shall be warranted for a period of five years.

EMISSIONS WARRANTY EXCLUSIONS:

John Deere may deny warranty claims for failures caused by the use of an add-on or modified part which has not been exempted by the CARB. A modified part is an aftermarket part intended to replace an original emission-related part which is not functionally identical in all respects and which in any way affects emissions. An add-on part is any aftermarket part which is not a modified part or a replacement part.

In no event will John Deere, any authorized engine distributor, dealer, or repair facility, or any company affiliated with John Deere be liable for incidental or consequential damage.

RG595770—UN—07DEC23

JOHN DEERE’S WARRANTY RESPONSIBILITY:

Where a warrantable condition exists, John Deere will repair or replace, as it elects, your off-road diesel engine at no cost to you, including diagnosis, parts and labor. Warranty coverage is subject to the limitations and exclusions set forth herein. The off-road diesel engine is warranted for a period of five years from the date the engine is delivered to an ultimate purchaser or 3,000 hours of operation, whichever occurs first. The following are emissions-related parts:

- Air Induction System
  - Intake manifold
  - Turbocharger
  - Charge air cooler
- Fuel Metering System
  - Fuel injection system
- Exhaust Gas Recirculation
  - EGR valve
- Catalyst or Thermal Reactor Systems
  - Catalytic converter
  - Exhaust manifold
- Emission control labels
- Particulate Controls
  - Any device used to capture particulate emissions
  - Any device used in the regeneration of the capturing system
  - Enclosures and manifolding
  - Smoke Puff Limiters
- Positive Crankcase Ventilation (PCV) System
  - PCV valve
  - Oil filler cap
- Advanced Oxides of Nitrogen (NOx Controls)
  - NOx absorbers and catalysts
- SCR systems and urea containers / dispensing systems
- Miscellaneous Items used in Above Systems
  - Electronic control units, sensors, actuators, wiring harnesses, hoses, connectors, clamps, fittings, gasket, mounting hardware

Any warranted emissions-related part scheduled for replacement as required maintenance is warranted by John Deere for the period of time prior to the first scheduled replacement point for the part. Any warranted emissions-related part not scheduled for replacement as required maintenance or scheduled only for regular inspection is warranted by John Deere for the stated warranty period.

OWNER'S WARRANTY RESPONSIBILIT IES:

As the off-road diesel engine owner you are responsible for the performance of the required maintenance listed in your Operator’s Manual. John Deere recommends that the owner retain all receipts covering maintenance on the off-road diesel engine, but John Deere cannot deny warranty solely for the lack of receipts or for the owner’s failure to ensure the performance of all scheduled maintenance. However, as the off-road diesel engine owner, you should be aware that John Deere may deny you warranty coverage if your off-road diesel engine or a part has failed due to abuse, neglect, improper maintenance or unapproved modifications.

The off-road diesel engine is designed to operate on diesel fuel as specified in the Fuels, Lubricants and Coolants section in the Operators Manual. Use of any other fuel may result in the engine no longer operating in compliance with applicable emissions requirements.

The owner is responsible for initiating the warranty process, and should present the machine to the nearest authorized John Deere dealer as soon as a problem is suspected. The warranty repairs should be completed by the authorized John Deere dealer as quickly as possible.

Emissions regulations require the customer to bring the unit to an authorized servicing dealer when warranty service is required. As a result, John Deere is NOT liable for travel or mileage on emissions warranty service calls.

RG595771—UN—07DEC23
DX,EMISSIONS,CARB-19-15DEC23

Serial Numbers

Type Plates

The following illustrations show a few type plates of the tractor. The letters and numbers on the plates are needed when ordering spare parts, for example.

NOTE: The corresponding letters and numbers should be entered into the boxes intended for this purpose.

500B,01,LX25458,ALL,0000BE6-19-30NOV23

Plate for Product Identification and Serial Numbers of Components

LX515819—UN—04OCT23

The plate for product identification and serial numbers of components is located on the left side in the direction of travel (see arrow).

The plate is applied by the dealer. The position of the sticker may change due to regional legislation.

NOTE: For the position of individual serial numbers, refer to the following pages.

Product Identification Number

*																	*

Engine Serial Number

*														*

Transmission Serial Number

*														*

Front-Wheel Drive Serial Number

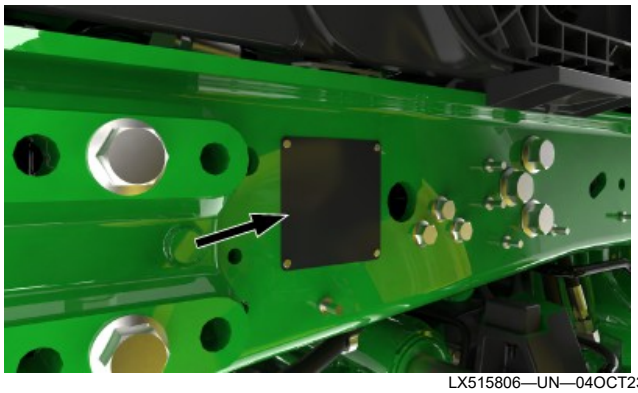
*																	*

Cab Serial Number

*														*

500B,02,OULXA64,MT,0005FEE-19-30NOV23

Plate for Product Identification Number



LX515806—UN—04OCT23

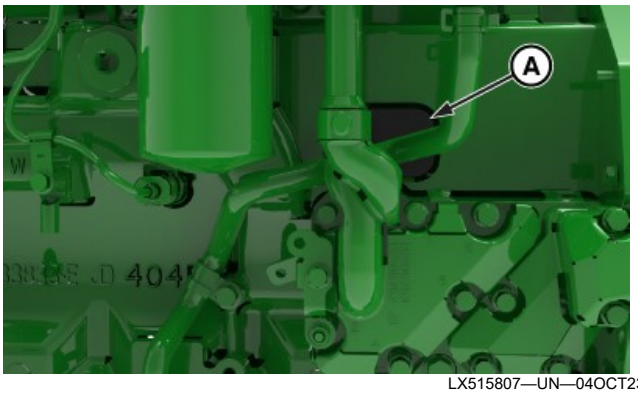
Sample Illustration

The plate bearing the product identification number is located on the right side of the main frame. The tractor is provided with one of two possible product identification numbers. Select the appropriate box.

*																	*

500B,03,LX25458,0000BE8-19-30NOV23

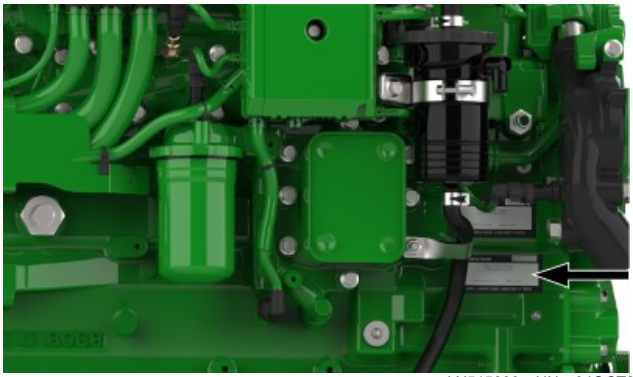
Engine Serial Number



LX515807—UN—04OCT23

LX515808—UN—04OCT23

Copy of Engine Serial Number for 4-Cylinder Engines



LX515809—UN—04OCT23

Copy of Engine Serial Number for 6-Cylinder Engines

A—Engine Serial Number

The engine number is located behind a cover on the right side of the engine. A copy of the engine number is located at the position shown (see arrow). This allows the number to be read without having to do any assembly work.

NOTE: Besides the engine serial number, the plate shows the engine type as well. When ordering spare parts for the engine, please quote all the numbers and letters on this plate.

*													*

Summary of Engine Serial Number Plates

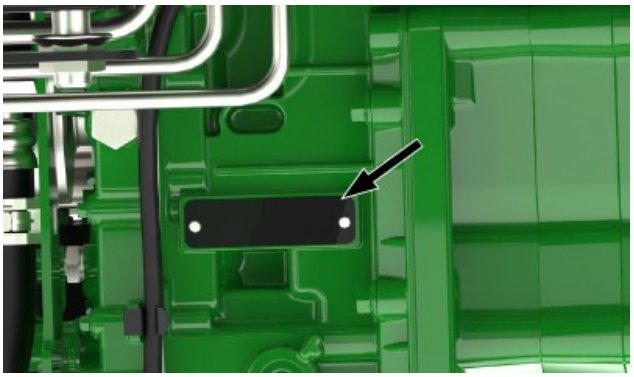
LX565079—UN—14FEB23

Engine Serial Number is Defined by 13 Characters	
First Line	Designates1 — Two letters for engine factory designation
1 — Two letters for engine factory designation	PE: Torreon, Mexico, CD: Saran, France, J0: Rosario, Argentina, UG: Teda, China
2 — One digit for number of cylinders.	4 Cylinder, 6 Cylinder
3 — Three digits for displacement in liters	045: 4.5 Liter, 068: 6.8 Liter
4 — One letter for emission level	• B= Non-Certified • C= Tier1/Stage I emission level • G= Tier 2/Stage II emission level • L= Tier 3/Stage IIIA emission level • R= Interim Tier 4/ Stage IIIB emission level • U or V= Final Tier 4/Stage IV/Stage V emission level
5 — Six digits	123456= Engine build sequence number. Sequence numbers start at 000001
Engine Type is Defined by 9 Alpha-Numerical Characters	
6 — Four digits	Same as items 2 and 3 above
7 — One letter for aspiration type	• A= Turbocharged with air-to-water after-cooler • D= Naturally Aspirated • T= Turbocharged • H= Turbocharged with air-to-air after cooler • S= Turbocharged with air-to-sea water after-cooler
8 — One or two letters for OEM application	F: OEM, FM: Marine, FH: HazLoc, FN: Compressed Natural Gas
8 — One or two letters for John Deere Vehicle application	DW, KV: Construction, RW, LV, L, BM: Tractor, TJ: Forestry, H, Z, CQ : Combine, N: Picker/Sprayer, E: Windrower
9 — Two or three digits for version	485
10 — Two Letter and 5 or 6 digit for engine Part number	DD12345 (Saran Only Engines)

500B,04,OULXA64,ALL,0005722-19-30NOV23

Transmission Serial Number

NOTE: The string of numbers/letters represents the transmission serial number.



LX515810—UN—04OCT23

PowrQuad™, AutoQuad™, and CommandQuad™ Transmission

The transmission serial number is located on the left side of the transmission housing.

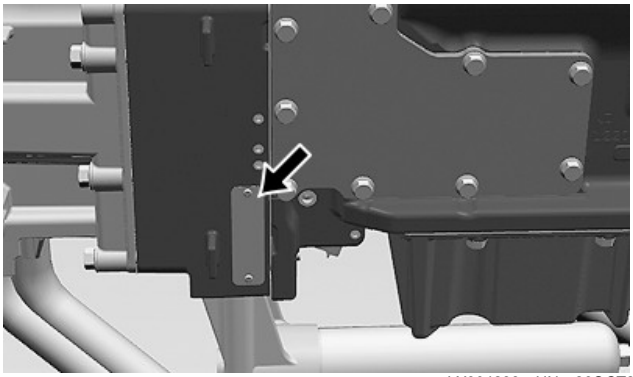
*														*

LX515811—UN—04OCT23

AutoPowr™/IVT™ Transmission

The transmission serial number is located on the top of the transmission housing.

*														*



LX394288—UN—26OCT20

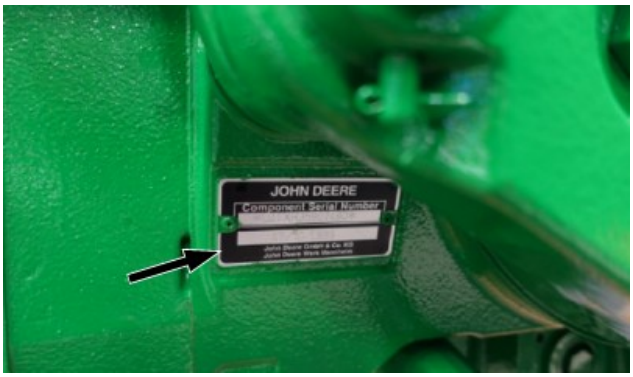
DirectDrive Transmission

The transmission serial number is located on the left side of the transmission housing.

*														*

500B,05,OULXA64,00057E0-19-04DEC23

Differential with Final Drive Serial Number



LX515813—UN—03JAN24

Differential with Final Drive Serial Number (Version A)

LX515814—UN—04OCT23

Differential with Final Drive Serial Number (Version B)

The serial number is located on the right side of the differential housing, above the final drive housing.

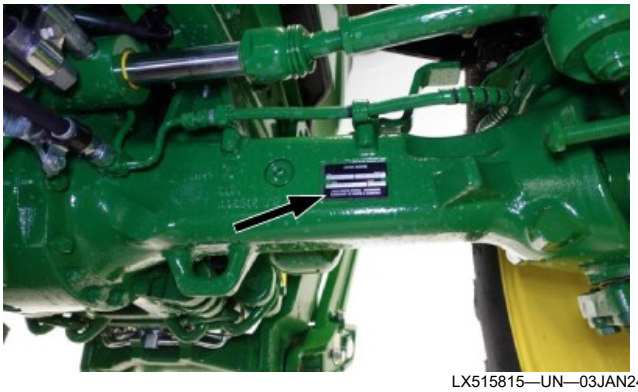
It provides details of the transmission ratio of the front-wheel drive axle (e.g. 1,712) and the transmission ratio of the differential gear pair (e.g. 54/13). This information will be required if a different tire combination is to be used.

NOTE: The string of numbers/letters represents the differential with final drive serial number.

*														*

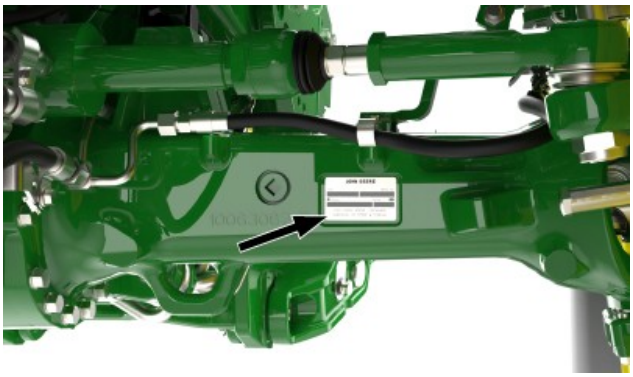
500B,06,OULXA64,ALL,0005723-19-30NOV23

Front-Wheel Drive Serial Number



LX515815—UN—03JAN24

Front-Wheel Drive Axle (730, 733 and 735)



LX515816—UN—04OCT23

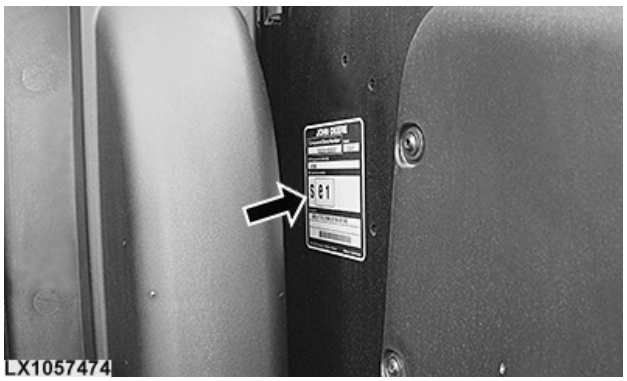
Front-Wheel Drive Axle (750 and 755)

The plate bearing the front-wheel drive number is located on the end of the axle, at the rear. Information provided on it includes the transmission ratio of the front axle. These numbers are required if the tire combination of the front-wheel drive has to be changed.

*																*

500B,07,OULXA64,733TO755,0005724-19-01DEC23

Serial Number of Operator's Cab



LX1057474

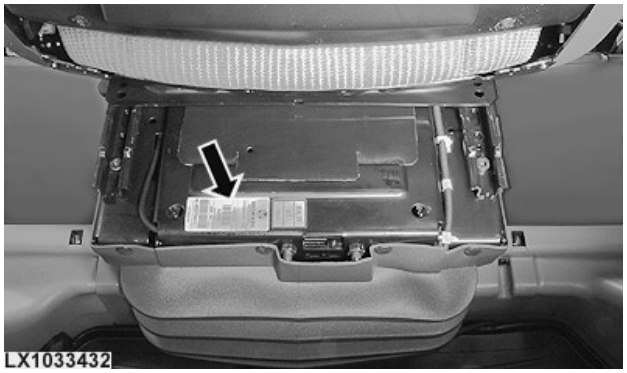
LX1057474—UN—01OCT14

The serial number of the operator's cab is located on the rear, on the right side fender.

*														*

OULXA64,BB,0005A66-19-27JAN21

Serial Number of Operator's Seat



LX1033432

LX1033432—UN—02MAR04

LX1036876

LX1036876—UN—22SEP05

Example Shown

A—Designation
B—Part Number (needed for orders)
C—Date of Manufacture (year - week)

The serial number of the operator's seat is located on the back of the seat.

Explanation of the serial number plate (box C):

The first two digits (XXxx xx) indicate the year of manufacture.

Third and fourth digits (xxXX xx) indicate the week of manufacture.

500B,10,LX25458,0000BED-19-04DEC23

Subassembly Serial Numbers

Fuel injection pump, fuel injection nozzles, alternator, starting motor, steering unit (hydrostatic steering system), air-conditioning system compressor (if equipped), and the hydraulic pump also have serial numbers. These numbers help to distinguish between the different types of a subassembly.

500B,11,LX25458,0000BEE-19-30NOV23

Change of Ownership

Record of Changes of Ownership

Machine Data	
Serial Number:	Tractor Model:
Engine Number:	Registration Number:

1st Change of Ownership	
First Owner:	Second Owner:
Address:	Address: . . . .
Delivery Date: Operating Hours upon Purchase: Number of Keys Handed Over (only for immobilizer):	Dealer's Stamp *(only if sold through a dealer)*

2nd Change of Ownership	
Second Owner:	Third Owner:
Address:	Address: . . . .
Delivery Date: Operating Hours upon Purchase: Number of Keys Handed Over (only for immobilizer):	Dealer's Stamp *(only if sold through a dealer)*

3rd Change of Ownership	
Third Owner:	Fourth Owner:
Address:	Address: . . . .
Delivery Date: Operating Hours upon Purchase: Number of Keys Handed Over (only for immobilizer):	Dealer's Stamp *(only if sold through a dealer)*

LX25458,0000BEF-19-05OCT20

Pre-Delivery Inspection

Notes on Pre-Delivery Inspection

IMPORTANT: Depending on the regional peculiarities and individual vehicle configuration, the tasks are only applicable if the corresponding equipment is available.

The configuration can be found in the order information of the vehicle.

Subsequent additions and conversions must also be taken into account.

LX25458,0000BF0-19-05JUN20

Service Procedure

The following inspection, adjustment, and service work were performed prior to the delivery of the machine.

1. Fill levels of the following systems were checked and refilled if necessary:
   - ☐ 1.1 Engine oil*
   - ☐ 1.2 Transmission and hydraulic oil*
   - ☐ 1.3 Front-wheel drive axle, oil*
   - ☐ 1.4 Front PTO, oil (if equipped)*
   - ☐ 1.5 Coolant

2. Screws and nuts of the following components have been tightened to the specified torque:
   - ☐ 2.1 Wheels and rims
   - ☐ 2.2 Additional weights (if equipped)
   - ☐ 2.3 Front PTO (if equipped)
   - ☐ 2.4 Front hitch (if equipped)
   - ☐ 2.5 Front loader, mounting frame (if equipped)

☐ 3. All grease fittings have been lubricated.

☐ 4. Guards and shields have been checked.

☐ 5. Battery charge checked; battery recharged if necessary.

☐ 6. Operator's cab controls have all been checked (heater, blower, windshield wiper, and windshield washer).

☐ 7. Observe the instructions for starting up the air-conditioning system. See Section 210.

☐ 8. Operator's seat adjustment is working properly and customer has been familiarized with all seat settings.

☐ 9. Seat belts checked.

☐ 10. Headlights have been adjusted**.

☐ 11. Lights are working properly.

☐ 12. Corner post display and indicator lights work flawlessly.

☐ 13. Movement inhibitor is working properly.

☐ 14. Engine shutoff device is working properly.

☐ 15. Transmission shifting mechanism is working properly.

16. PTOs are working properly:
   - ☐ 16.1 Rear PTO
   - ☐ 16.2 Front PTO (if equipped)

17. Hitches are working properly:
   - ☐ 17.1 Rear hitch
   - ☐ 17.2 Front hitch (if equipped)

☐ 18. Selective control valves are working properly.

☐ 19. Trailer hitches are working properly.

☐ 20. Tire pressure has been checked and, if necessary, corrected.

☐ 21. Front axle toe-in has been checked with tractor fully ballasted; adjust, if necessary.

☐ 22. Pivoting fenders have been adjusted.

☐ 23. Steering stops checked and adjusted. Inspection of the clearances when the front-wheel drive axle is pivoted and steering is at the stop. See Prevent Front Wheel or Fender Contact with Tractor Components in Section 80.

☐ 24. Steering system is working properly.

☐ 25. On 6R 230 and 6R 250 with mudguard for cab suspension in conjunction with 38-inch rear wheel rims, tread width is set to 1900 mm (75 in) or wider.

☐ 26. With mechanical joystick, activate loader suspension system.

☐ 27. With electrical joystick, adjustments have been checked or calibration has been performed.

☐ 28. Park lock and park function of trailer air brake valve have been checked.

☐ 29. Service brakes and secondary brake have been checked.

☐ 30. Trailer brake has been checked.

☐ 31. Paint has been checked for good condition.

☐ 32. All warning and information stickers tested.

☐ 33. Diagnostic diagnostic trouble codes have been accessed, causes rectified, and codes deleted.

☐ 34. Display language, units of measurement, and date have been adjusted in the CommandCenter™ according to operator's needs.

☐ 35. Automatic exhaust filter cleaning has been activated at CommandCenter™.

☐ 36. Depending on tractor model, the due date message for service intervals has been set in CommandCenter™. See Periodic Service in Section 210B.

☐ 37. RTP2, RTP3, DWS, and LTH: Perform system calibration. See the Diagnostics Manual, Section 245, Group 10B, Interactive Tests and Calibrations.

☐ 38. Install antenna. On the John Deere radio, check whether receiver is set to country-specific wave band (tuner band).

☐ 39. Attach StarFire™ receiver (if equipped).

40. The SMV emblem is attached (only for North America):
   - ☐ 40.1 Engine cooling system
   - ☐ 40.2 Fuel system
   - ☐ 40.3 Hydraulic system

41. The following systems have been checked and are free of leaks:
   - ☐ 41.1 Engine cooling system
   - ☐ 41.2 Fuel system
   - ☐ 41.3 Hydraulic system

☐ 42. All obligatory and open product improvement programs must be completed prior to delivering the machine to a customer.

☐ 43. A test drive has been performed.

☐ 44. *Execute the Connected Machine Setup Process together with the customer. See CCMS Solution 206001 for details.*

** Top-up with oil only if oil level is at or below MIN mark.*
*** Lights checked for compliance with local regulations and adjusted if necessary (also additional headlights, if equipped).*

Date and signature of dealer/service technician: .....

OULXA64,6R,ALL,00059AC-19-01AUG23

.

LX25458,00009AE-19-05JUN20

Copy for Owner

Serial Number: _____ Vehicle model: _____

Operator's Manual No.: _____ Issue: _____ Registration Number: _____

Engine Number: _____ Delivery Date: _____

Owner's Name: _____ Operating Hours at Delivery: _____

Address: _____ Number of Keys Handed Over (only for immobilizer): _____

_____ Dealer: _____

_____ Dealer's Stamp:

DELIVERY CHECK LIST

At the Dealer

- □ Pre-delivery inspection completed (see PRE-DELIVERY INSPECTION)
- □ All necessary forms and documents present
- □ All decals affixed
- □ All special equipment/implements installed/present
- □ Wheel treads adjusted as specified
- □ On 6R 230 and 6R 250 with mudguard for cab suspension in conjunction with 38-inch rear wheel rims, tread width is set to 1900 mm (75 in) or wider.

At Delivery Area with Customer:

Shown and Explained

- □ All machine warning labels
- □ Location of all serial numbers on machine
- □ Operator’s Manual
- □ Lubrication points on machine and implements
- □ Care and maintenance (cleaning with high-pressure washers)
- □ Tire maintenance and care
- □ Lubrication and service record booklet
- □ Warranty procedure

Operating the Tractor

- □ Operator's seat, all possible seat configurations
- □ Consoles/corner post display
- □ Differential lock
- □ Transmission
- □ Starting and stopping
- □ Steering and steering system
- □ Brakes and brake systems
- □ Speed control
- □ Lights
- □ Wipers
- □ Heater
- □ Air conditioning system
- □ PTOs
- □ Rear hitch, front hitch, and selective control valves
- □ Hydraulic pickup hitch
- □ Three-point hitch adjustment
- □ Fuel system and fuel quality
- □ Checking fluid levels (radiator, engine, transmission)
- □ CommandCenter™
- □ Reconfigurable controls
- □ iTEC™ — Intelligent Total Equipment Control
- □ TIA™ — Tractor-Implement Automation™
- □ Front axle suspension
- □ Cab suspension
- □ Front loader with RTP, DWS and LTH

Signature of dealer/service technician:

Date:

OULXA64,6R,ALL,00059AE-19-27OCT22

.

LX25458,00009AE-19-05JUN20

Copy for Dealer

Serial Number: _____ Vehicle model: _____

Operator's Manual No.: _____ Issue: _____ Registration Number: _____

Engine Number: _____ Delivery Date: _____

Owner's Name: _____ Operating Hours at Delivery: _____

Address: _____ Number of Keys Handed Over (only for immobilizer): _____

_____ Dealer: _____

_____ Dealer's Stamp:

DELIVERY CHECK LIST

At the Dealer

- □ Pre-delivery inspection completed (see PRE-DELIVERY INSPECTION)
- □ All necessary forms and documents present
- □ All decals affixed
- □ All special equipment/implements installed/present
- □ Wheel treads adjusted as specified
- □ On 6R 230 and 6R 250 with mudguard for cab suspension in conjunction with 38-inch rear wheel rims, tread width is set to 1900 mm (75 in) or wider.

At Delivery Area with Customer:

Shown and Explained

- □ All machine warning labels
- □ Location of all serial numbers on machine
- □ Operator’s Manual
- □ Lubrication points on machine and implements
- □ Care and maintenance (cleaning with high-pressure washers)
- □ Tire maintenance and care
- □ Lubrication and service record booklet
- □ Warranty procedure

Operating the Tractor

- □ Operator's seat, all possible seat configurations
- □ Consoles/corner post display
- □ Differential lock
- □ Transmission
- □ Starting and stopping
- □ Steering and steering system
- □ Brakes and brake systems
- □ Speed control
- □ Lights
- □ Wipers
- □ Heater
- □ Air conditioning system
- □ PTOs
- □ Rear hitch, front hitch, and selective control valves
- □ Hydraulic pickup hitch
- □ Three-point hitch adjustment
- □ Fuel system and fuel quality
- □ Checking fluid levels (radiator, engine, transmission)
- □ CommandCenter™
- □ Reconfigurable controls
- □ iTEC™ — Intelligent Total Equipment Control
- □ TIA™ — Tractor-Implement Automation™
- □ Front axle suspension
- □ Cab suspension
- □ Front loader with RTP, DWS and LTH

Owner's Signature:

Date:

.

LX25458,00009AE-19-05JUN20

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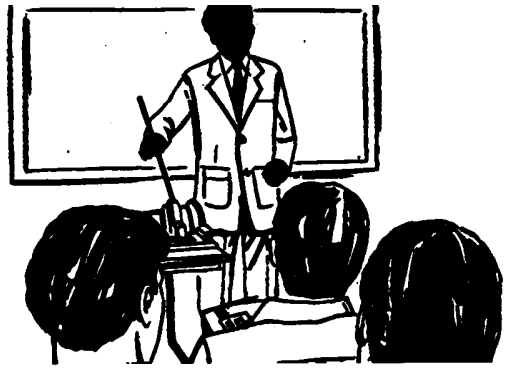

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