



Tractors

AXION

880 860 850 840 830 820 810



# AXION 880-810.





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# The AXION 800 Series. Simply superior.

## Simply productive.

A powerful 6.7L Tier 4F engine with deep torque reserves will power through tough spots in the field and steep grades on the road. Two intelligent transmission choices with an optional 31 mph travel speed make quick work of many different jobs. Standard high-flow, load sensing hydraulics ensure accurate and precise control of seed and chemical applications, and an optional front hitch and PTO are available for greater versatility. The CLAAS AXION 800 Series tractors are simply more productive – more acres per hour, more tons per day, more hours per year.

## Simply efficient.

If you need efficient power throughput for tillage applications, the HEXASHIFT transmission is for you. If your demands call for maximum speed under varied engine loads, our CMATIC CVT transmission is the perfect fuel saving option. Coupled with a multi-speed PTO system and an optional PROACTIV front suspended axle that transfers more power to the ground, the CLAAS AXION 800 Series tractors are simply more efficient – less gallons per acre, less hours per job, less cost per hour.

## Simply comfortable.

With a standard four-point suspended cab, optional ventilated and heated leather seat, PROACTIV front axle, and shock absorbing front- and rear- three point hitches, the AXION 800 Series delivers premium comfort in spades. We understand that long hours – day and night, hot and cold, rain or shine – are mandatory, so our tractors deliver a quiet ride, LED lights that turn nighttime into daytime, curved glass and forward placed B-posts for the best visibility, automatic climate control, and a built in cool-box to keep you comfortable and refreshed. The CLAAS AXION 800 Series tractors are simply more comfortable – less fatigue, more time at work, better ride quality.



AXION HEXASHIFT - Model overview	850	830	810
Rated HP PS, Engine, R-120	245	215	200
Rated PTO HP SAE, OECD-2	220	196	178
PTO HP SAE, OECD-2, at PTO rated speed	235	209	190



AXION CMATIC - Model overview	880	860	840	820
Rated HP PS, Engine, R-120	265/280*	250	230	215
Rated PTO HP SAE, OECD-2	224/240*	223	209	194
PTO HP SAE, OECD-2, at PTO rated speed	245/261*	244	225	209

\*With boost engaged

# The engine. Packaged for performance.

## Strong at heart.

A 6-cylinder, 6.7 liter FPT (Fiat Powertrain Technologies) NEF 6 engine gets to work under the hood. The engine meets the requirements of the T4F emissions standard by incorporating exhaust gas aftertreatment with urea. It uses the latest common rail 4-valve technology, charge-air cooling, and a variable geometry turbo (VGT).

## Constant output.

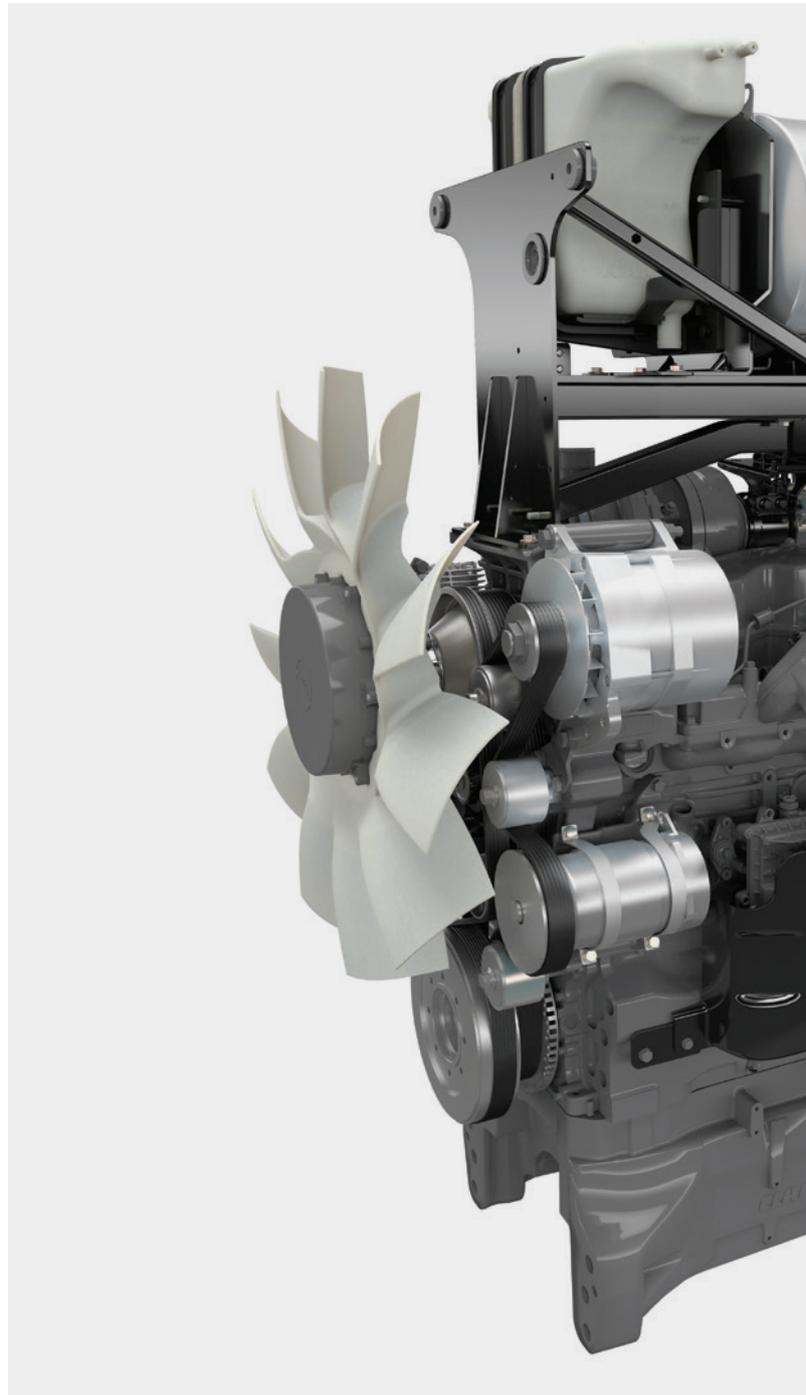
The CLAAS-specific engine performance curve provides full torque in a wide engine speed range, guaranteeing constant output and power delivery when they are needed. This makes it easy to save fuel while working at a low engine speed and maximum torque with the ECO PTO, or to work at rated speed with a full reserve.

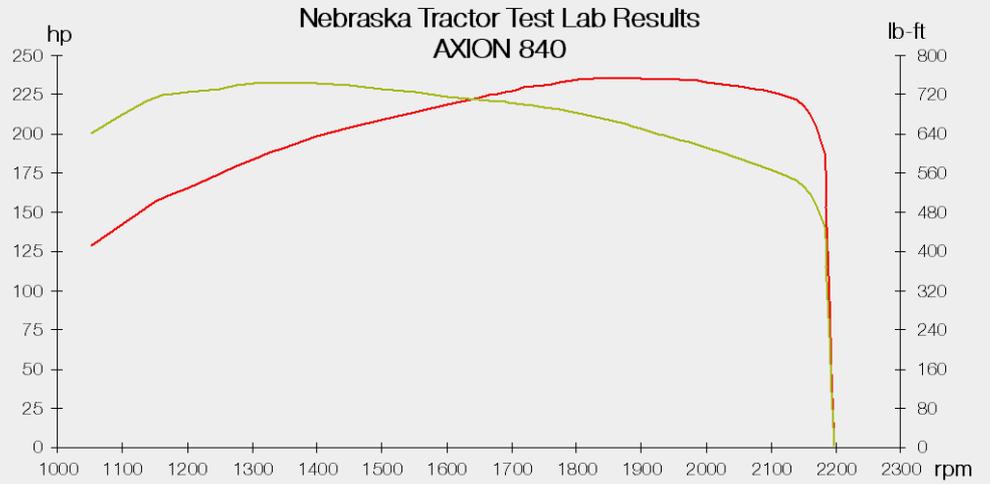
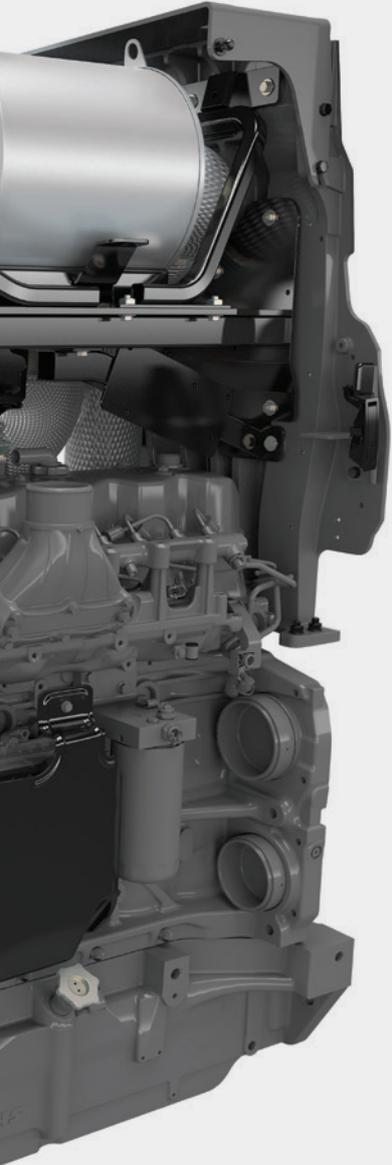
## Variable geometry turbo.

The VGT turbo delivers optimum charge-air pressure at any engine speed. It adjusts to load and engine speed, making 70% of maximum torque available even when idling. Optimized combustion therefore means low fuel consumption and maximum performance.

## AXION 880 CMATIC.

The AXION 880 CMATIC delivers up to 290 hp thanks to the intelligent CLAAS POWER MANAGEMENT (CPM) electronic control system. Additional boost power is available for PTO work above 4.3 mph, for transport operations, and also for the fan drive, significantly increasing the performance and versatility of the AXION 880 CMATIC.





**Visctronic – economical fan control.**

With Visctronic fan control, the fan speed can be precisely aligned with engine temperature and load, directly linked to the engine ECU, ensuring that the engine always runs at the optimum temperature.

The reduced fan speed lowers the noise level and saves valuable fuel with no unnecessary impact on output, which can then be converted into tractive power.

# Exhaust gas aftertreatment. Cleaning up.



## SCR – the urea-based solution.

SCR stands for selective catalytic reduction, a process in which nitrogen oxides are converted into water and pure nitrogen. This is achieved by using a synthetic aqueous solution of urea (DEF), which is carried in an additional tank. Exhaust gas aftertreatment enables the combustion process in the engine to function at the optimum level.

## Fully integrated SCR system.

When designing the AXION 800 Series, all the components required for exhaust gas aftertreatment were considered from the outset. The diesel oxidation catalytic converter (DOC) is positioned under the hood for optimum performance and improved visibility.

## Never lets you down.

The urea tank is heated as standard and is also protected from the cold by the insulating effect of being integrated into the fuel tank. The SCR system lines are also emptied automatically when the engine is switched off to protect against freezing.



120 gal fuel tank with integrated 11 gal urea tank.

# Shuttles.

## Choose your preference.



Standard left-hand shuttle.



Right-hand reverser on the CMOTION handle.



Optional right-hand reverser on the ELECTROPILOT joystick.

### Different shuttles. Different applications.

The shuttle in the AXION tractor is smooth, adaptable, and can be configured to be just where you need it most.

All AXION tractors have a standard left-hand shuttle conveniently placed just beyond the steering wheel for easy access and quick use. This shuttle incorporates a PARK-LOC system that engages the parking brake, as well as forward-neutral-reverse positions.

The engagement aggressiveness can be easily adjusted in CIS+ or CEBIS to provide slow, smooth reaction on slippery surfaces or in tight quarters, or it can be adjusted to provide a faster, more positive shifting behavior for high production work and time-saving shuttle action.

### Make multitasking a breeze.

On CEBIS versions, a right-hand reverser is incorporated into the CMOTION handle so shuttling can be comfortably accomplished without taking your hand off the handle while simultaneously controlling other actions like hitch lifting/lowering, F button controlled functions, and CSM programs.

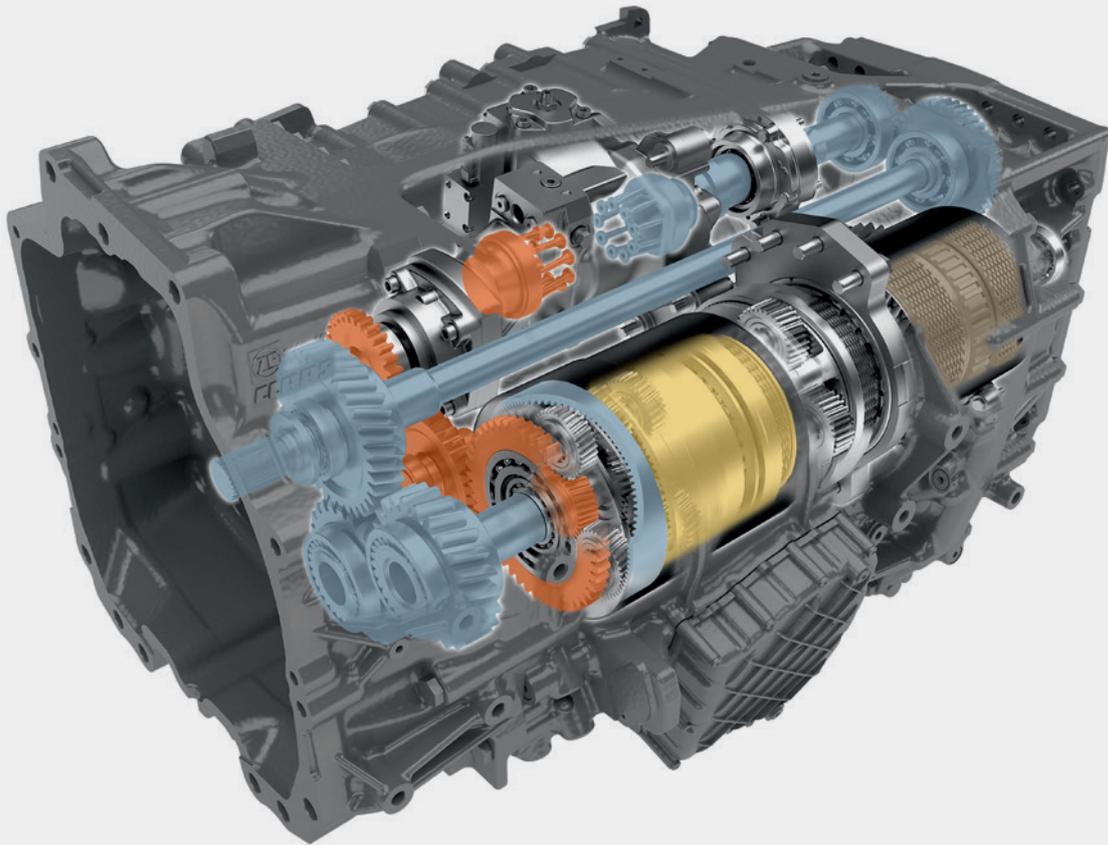
Simply put the left-hand shuttle into the neutral position, press the orange shuttle button with your thumb, then select the direction of travel by moving the CMOTION handle forward or reverse. Simple, efficient, and comfortable.

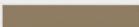
### Perfect for loaders.

On CIS+ or CEBIS versions, an optional right-hand reverser function is located on top of the ELECTROPILOT joystick control. Here, loader work is easy and comfortable because the direction control and all loader controls are in the palm of your hand.

After the left-hand shuttle is placed in the neutral position, simply press the activation button on the front side of the joystick handle and select forward or reverse with the orange buttons on the top of the handle. Ergonomically designed, fatigue reducing options like these are part of why the CLAAS AXION is the premium choice for top producers.

# CMATIC. Continuously variable.



-  Reverser
-  Combined hydraulic and mechanical component
-  Split power to the hydrostatic and mechanical drive units
-  Planetary wheel sets for the four mechanical drive ratios



### Efficient and user-friendly.

CMATIC is the continuously variable transmission technology used in CLAAS tractors. In the AXION 800 Series, a ZF Terramatic transmission provides efficient conversion of engine power. In this split-power, continuously variable transmission, the four mechanical ranges are automatically selected by multi-disc clutches. There is no need to shift between ranges manually.

The high mechanical component in the power transmission provides outstanding efficiency and low fuel consumption in every speed range.

### Superior transmission control.

Powerful acceleration, smooth deceleration, and a fast response to changes in load: CMATIC powertrain management shows its maturity in all conditions and for every task. Stay relaxed and focused throughout the work day so you can concentrate on more important things – CMATIC does the rest for you.

### Exploiting real potential.

The available power of the transmission can be used effectively at speeds from 0.03 to 31 mph. The high level of mechanical power transmission also delivers outstanding driving force in reverse. What's more, every gear ratio can be used at every engine speed, giving AXION 880-810 tractors enormous potential for use all year round.

If your foot is not on the accelerator, the transmission is in powered zero mode and maintains its position without creeping or rolling. This means that the tractor can start up safely and easily at steep field entrances or road junctions, even with a full load.

AXION model	Transmission version	Engine rpm at maximum speed	Minimum speed (mph)	Maximum speed (mph)
880 and 860	50 kph	1,550	0.03	31
	40 kph	1,250	0.03	25
840	50 kph	1,500	0.03	31
	40 kph	1,250	0.03	25
820	50 kph	1,600	0.03	31
	40 kph	1,300	0.03	25

# CMATIC. Optimized settings.



Simple, straightforward operation.

The CMATIC transmission has three operating modes: accelerator pedal, drive lever, and manual mode.

In the first two modes, forward speed can be controlled by the accelerator pedal or drive lever. The engine speed and transmission ratio are adjusted automatically – for optimum efficiency and optimized fuel consumption. In manual mode, the driver chooses the engine speed and transmission ratio. Automatic engine and transmission control is not active.



### Accelerator pedal or drive lever.

You can switch between accelerator pedal and drive lever mode while the tractor is moving by pressing a button on the armrest. The active mode is displayed in the CEBIS or CIS+.

### Engine droop at the push of a button.

The engine droop value can be used for quick and easy regulation of the engine speed under full load. The CEBIS or CIS+ terminal clearly displays the engine speed at which the transmission adjusts.

Two engine droop values can be saved for engine droop in accelerator pedal and drive lever mode. They are retrieved by the quick-access facility using the F buttons. With these values, known as "Eco" and "Power," the droop can be rapidly adjusted to the task in hand, e.g. when moving from the road to the field. The engine droop for the engine speed memory is defined separately.

### Tailor-made speed ranges.

With the CMATIC transmission, three speed ranges can be pre-selected in both directions of travel. The active range is displayed in the CEBIS or CIS+ terminal and can be changed at the touch of a button while the tractor is in motion. The lower the maximum preset value for the range, the more accurately the speed can be controlled.

A cruise control speed can be saved for all the ranges while the tractor is moving by pressing the button on the drive lever. The cruise control speeds can also be pre-set on the CEBIS or CIS+ terminal.

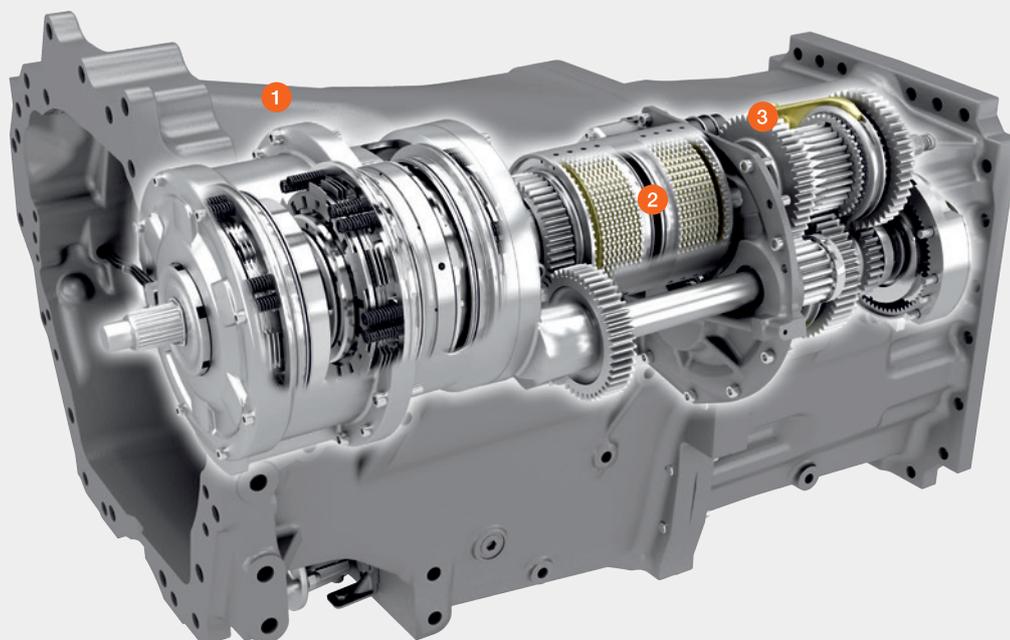


CIS+ operation

- 1 Change range
- 2 Activate cruise control

# HEXASHIFT.

For maximum efficiency.



- 1 HEXASHIFT 6-speed powershift module
- 2 REVERSHIFT electronic clutchless reverser
- 3 Electrohydraulically actuated 4-speed range shift



## The HEXASHIFT powershift transmission from CLAAS.

With HEXASHIFT you can shift effortlessly through all six powershift speeds and the four automatic ranges using your fingertips, or you can shift automatically using the HEXACTIV auto-shift function.

## Clear benefits.

- No need to use the clutch when changing range
- Excellent efficiency in the field and on the road for low fuel consumption
- CLAAS powertrain management for smooth changes in range and powershift operations
- Powershift transmission functions:
  - SMART STOP: stop with the brake pedal without using the clutch
  - HEXACTIV auto-shift function with cruise control
  - Disable cruise control and engine speed memory using the throttle pedal



### Automatic transmission control.

There's no need to move through every gear (as in a conventional powershift transmission) when shifting between ranges – the HEXASHIFT transmission automatically selects the most appropriate gear depending on forward speed and load, regardless of whether you are driving manually or automatically. If you press the clutch in range D, the transmission automatically adjusts the powershift speed when the clutch is re-engaged. This can be very useful, e.g. when approaching a road intersection.

### Intelligent transmission settings.

When using the clutchless reverser, you can even change gear automatically when you want the forward speed to be different from the reverse speed. At the headland, you can also engage a pre-selected gear simply by pressing a button. This means that you are always moving at the same speed on the headland. The aggressiveness of the REVERSHIFT clutchless reverser is also adjustable in nine steps (-4 to +4), providing optimum ride comfort in all situations.

### HEXACTIV start-up and approach gears.

The start-up gear engaged when starting the engine is freely selectable between A1 and D1. The specified start-up gear is engaged every time you start the engine. A separate approach gear can also be selected when operating with the HEXACTIV auto-shift function activated. This gear is automatically engaged as soon as the tractor comes to a standstill.

### SMART STOP and cruise control.

With the SMART STOP function, AXION 800 tractors can be brought to a standstill by pressing the brake, without needing to use the clutch pedal. This lightens the driver's workload considerably, especially during tasks which involve a lot of stopping and starting such as making round bales and front loader work. SMART STOP is easily activated in CEBIS or CIS+. The HEXACTIV auto-shift function can be equipped with a cruise control function. Instead of a fixed engine speed, a target forward speed is specified by pressing a button and the tractor maintains this speed by adjusting the engine speed and gear ratio.



# PTO.

## All choices in one.



### The right speed every time.

The PTO speed is easily pre-selected at the touch of a button. Another button on the armrest activates the PTO.

Automatic PTO engagement/disengagement is activated at a specified linkage height which is continuously adjustable. To save the height, you just move the rear linkage to the required position and give a long press on the automatic PTO button.

The integral freewheel on the rear PTO makes implement hitching simple.

#### Rotational speeds:

- 1,000 rpm at 1,930 engine rpm
- 1,000 rpm ECO at 1,524 engine rpm
- 540 rpm ECO at 1,595 engine rpm

### Standing start.

The 1,000 rpm PTO reaches its full speed precisely in the maximum engine output range. As a result, even heavy PTO-driven implements are no problem for these tractors.

In ECO PTO mode the engine runs at a low, fuel-efficient speed. During light work, the lower engine speed can reduce noise levels and save valuable fuel.

### Easy shaft changes.

Switching PTO shafts is easy and mess-free. Simply loosen the cap screws, remove the stub shaft, place the new stub shaft on the locating pins, and reinstall the cap screws by securing tightly. No oil leakage occurs, and there are no snap rings to get lost or corroded.



PTO engagement for front/rear PTO.



Three different size shafts come standard.



External controls for rear PTO on both fenders.

# Hydraulics. Powerful, adaptable, efficient.



## Pressure-free connections and no mess.

All ten hydraulic couplings at the rear of AXION 880-810 tractors have release levers, so they can be connected and disconnected even under pressure.

Colored markings on the inlet and outlet sides make it easier to attach implements correctly. Oil leakage lines collect the oil from the couplings when attaching and removing connectors.

## Hydraulics that get the job done.

- Load-sensing hydraulic system for all AXION 800 models with 39.5 gpm output
- With CIS+: up to six electronic spool valves can be operated from the armrest – up to four of these with the ELECTROPILOT
- With CEBIS: controls for up to seven electronic spool valves on the armrest – four of which can be operated by ELECTROPILOT. Thanks to free assignment and prioritization of the spool valves, every driver can adapt CEBIS operation according to the task in hand and personal preference. The frequently-used hydraulic functions are positioned side by side for smooth operation.
- With CEBIS and CIS+: spool valve operation can be assigned to the F buttons on the CMOTION, multifunction armrest, or ELECTROPILOT to lighten the workload during combined operating processes

Front and rear linkage.  
Lift any implement.



### Direct adjustment.

The main rear linkage functions are directly accessed via push buttons and dials on the right-hand B-pillar:

- Manual lift and lower for machine attachment
- Vibration damping on/off
- Lock rear linkage
- Activate slip control
- Lifting height limiter
- Lowering speed
- Draft and position control
- Adjustment of wheel slip control

### The rear linkage.

With a maximum lifting capacity of over 21,000 lbs, these tractors can carry the heaviest of implements.

- Wheel slip control via radar speed
- Hydraulic top link
- Excellent view of linkage and drawbar
- Both fenders are fitted with external controls for the rear linkage, PTO, and one of the spool valves (CEBIS only)



### Front linkage and front PTO.

- All models feature an optional front linkage and front PTO:
- Three positions for the front lower links: folded up, fixed working position, and float position in slotted hole
  - Double-acting lift rams as standard
  - Short distance between front axle and mounting points for improved guidance of front attachments
  - 1,000 rpm PTO
  - External control of the front linkage and one double-acting spool valve in the CEBIS version if fitted
  - Maximum lift capacity of over 10,000 lbs

### Precise work.

The optional front linkage position control system for the CEBIS version enables front-mounted implements to work extremely accurately. The working position is adjusted via a rotary knob on the armrest, while the lifting height can be limited and the lifting and lowering speed can be set using CEBIS. The front linkage can be used in single- or double-acting mode.

### Always connected.

- Optional hydraulic and electronic interfaces for many applications are incorporated into the front linkage:
- Up to two double-acting spool valves
  - Free-flow return line
  - 7-pin socket
  - ISOBUS socket



Position and load control are easy to set and adjust.



When a front linkage is installed, two hydraulic valves and one free-flow return line are available the front. Ideal for front-mounted equipment.

The cab.  
A clear view.



The right equipment for all operations.

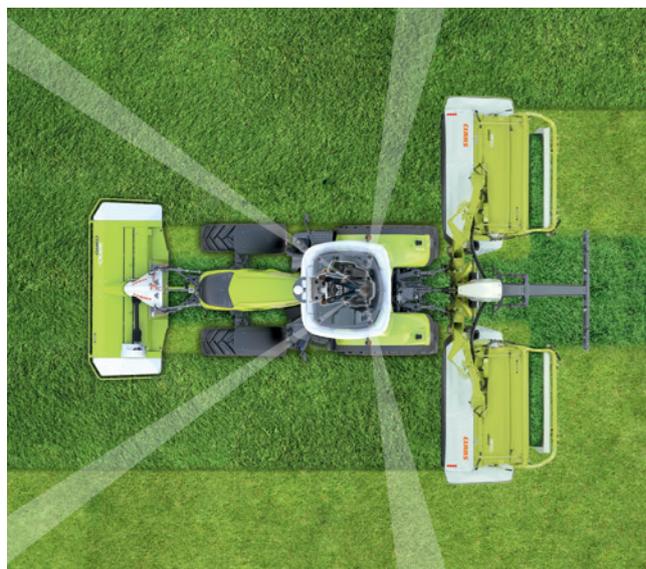
Spacious and quiet, with large windows and full suspension: the cab on the AXION tractor guarantees maximum comfort throughout long working days.

- CEBIS version with touch display operation and the innovative CMOTION multifunction control lever
- CIS+ version with color display, multifunction armrest and DRIVESTICK

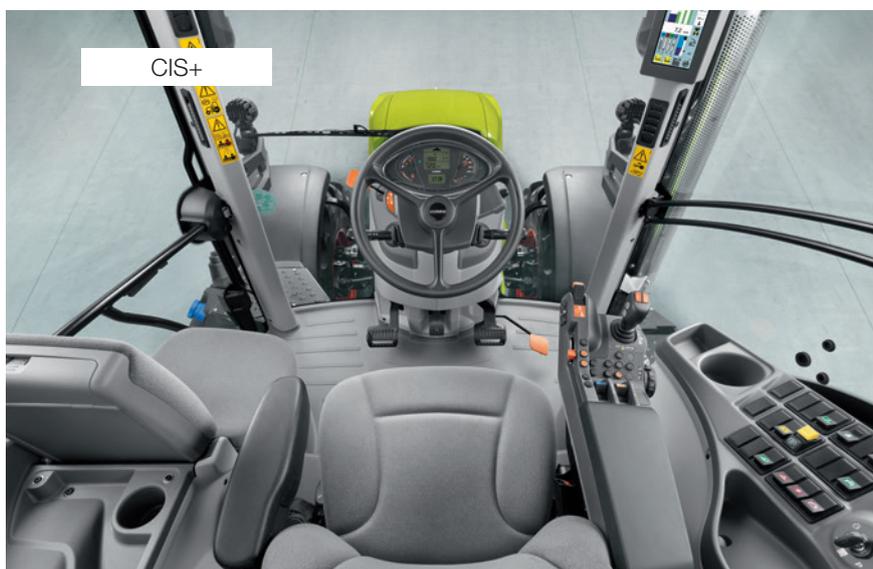
4-pillar concept.

The CLAAS 4-pillar cab offers some distinct advantages:

- Clear view of the full working width of attached implements
- Large-volume cab creates an extremely spacious working environment
- Continuous windscreen



The cleverly positioned rear cab pillars and convex rear window give the driver an excellent view of the implement and hitch area.



CIS+

### CIS+. Simply more.

CIS+ offers impressive ease of use and an intuitive design. Despite its pleasing simplicity, it has all the necessary functionality and the automatic functions needed for effective, effortless operation. CIS+ is also available with a continuously variable CMATIC or HEXASHIFT powershift transmission. The 7" CIS color display built into the A-pillar combines display and setting options for the transmission, electronic spool valves, F buttons, and CSM headland management.



CEBIS

### CEBIS. Simply everything.

With the CMATIC or HEXASHIFT transmission, the CEBIS version features electronic spool valves and the superb CEBIS terminal with a 12" touch display. As well as enhanced automatic functions such as CSM headland management and spool valve prioritization, it also offers many other functions – CEBIS leaves no stone unturned. All settings can be entered in seconds thanks to touchscreen operation and logical menu navigation.

AXION equipment	CIS+	CEBIS
Multifunction armrest	●	●
CIS 7" color display on the A-post	●	–
CEBIS 12" color display with touch on the armrest	–	●
DRIVESTICK	●	–
CMOTION multifunction control lever	–	●
Number of F buttons	4	10
Maximum number of rear remotes	4	5
CSM (CLAAS Sequence Management)	●	●
CSM extended functionality (Save/Edit)	–	●
Shuttle function on CMOTION	–	●
Shuttle function on ELECTROPILOT	○	○
Position control of front 3-point hitch	–	●

● Standard ○ Optional – Not Available

# CEBIS. Simply everything.



## An armrest that sets new standards.

All the main controls are integrated into the right-hand armrest:

- 1 CMOTION multifunction control lever
- 2 Control panel for drive mode, range changing, and two engine speed memories with fine adjustment
- 3 CEBIS terminal with 12" touch display
- 4 ELECTROPILOT with two double-acting spool valves and two F buttons
- 5 CEBIS control panel
- 6 Working depth adjustment for front and rear linkage
- 7 Front and rear PTO activation
- 8 Hand throttle
- 9 Transmission in neutral
- 10 Electronic spool valves

- 11 Four-wheel drive, differential lock, automatic PTO engagement/disengagement, front axle suspension
- 12 Main switch: battery, electronic spool valves, CSM, steering system

The height and position of the armrest can easily be adjusted to the driver's requirements.

Functions that are used less frequently, such as PTO speed preselection and the main switches, are located to the right of the driver's seat. When the driver's seat is rotated, the electronic linkage control system can be operated comfortably with an excellent view of the attached implement. Fine adjustment of the settings can then take place while work is in progress. Two additional buttons enable you to raise and lower the rear linkage manually for easier implement attachment.



### At the push of a button.

The free assignment option for the ten function buttons on the CMOTION means that there is no longer any need to reposition your hands while you work. All implement-specific ISOBUS functions are easily controlled using the CMOTION:

- ISOBUS functions
- Event counter on/off
- Spool valves

Rear linkage functions on the CMOTION:

- Lower to preset working position
- Raise to the preset lift height position
- Manual activation: lift and lower at two speeds (slow/fast)
- Quick implement entry

### CMOTION multifunction control lever.

The CMOTION is a CLAAS concept which makes using the main functions of the AXION tractor easier and more efficient. Functions are controlled using your thumb and forefingers, allowing your hand to stay in one place for the majority of time and preventing fatigue.

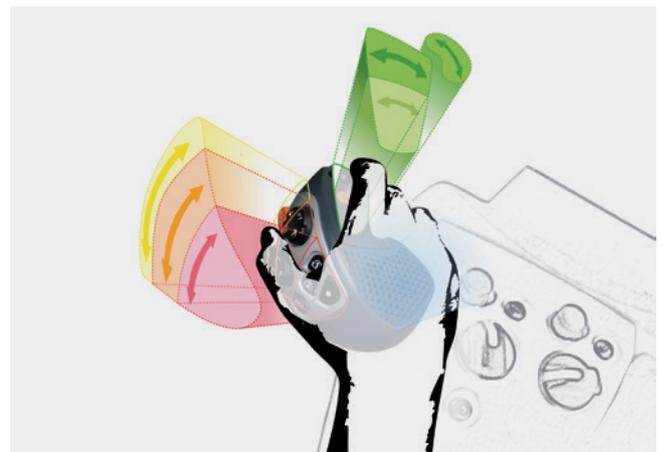


### Clear layout and fast operation.

The 12" CEBIS screen uses self-explanatory symbols and color coding to give a clear picture of the settings and operating statuses. Thanks to the CEBIS menu structure and touch-sensitive screen, all settings can be entered in just a few steps.

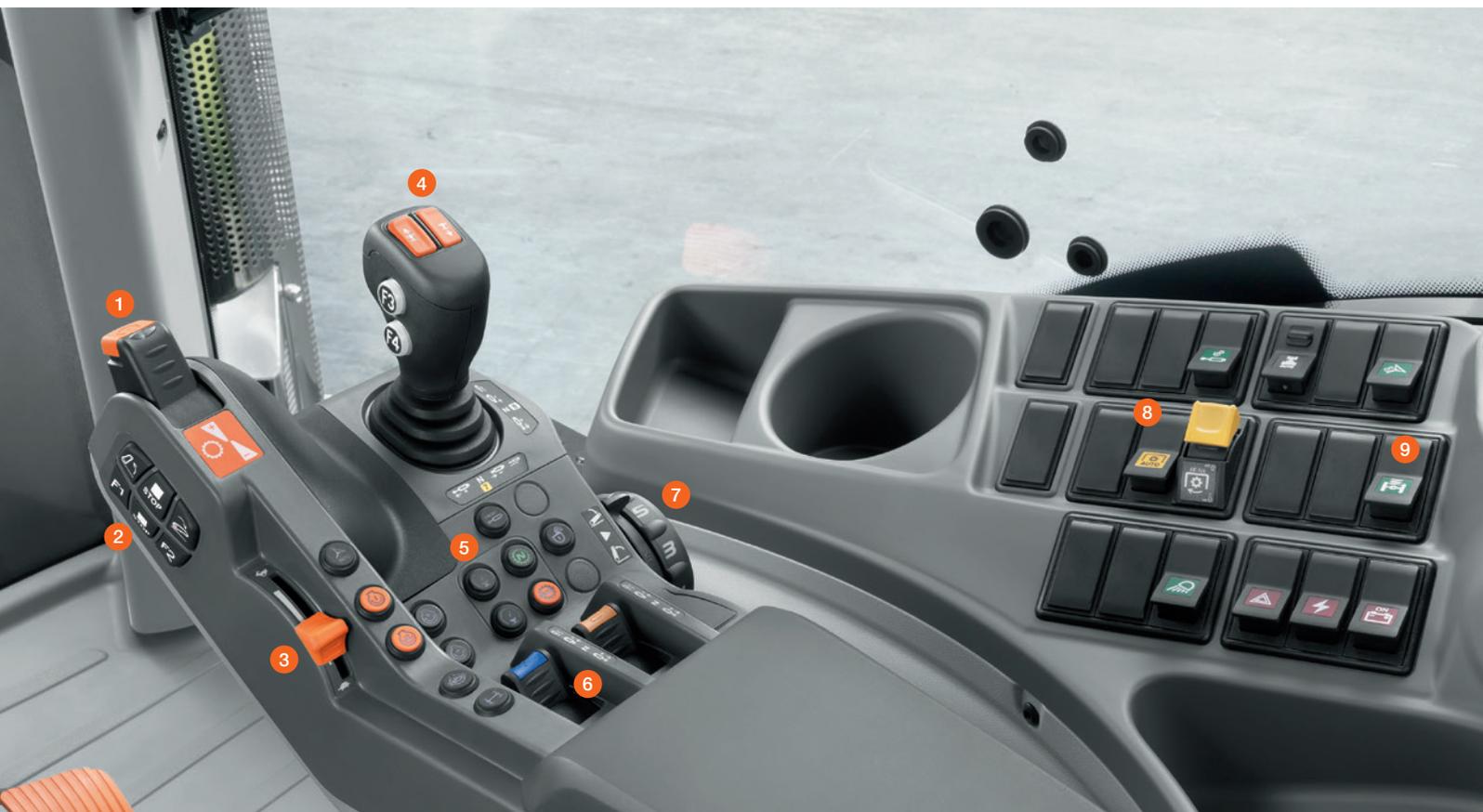
A particularly attractive feature is the DIRECT ACCESS function with the machine silhouette. One touch is all it takes to go straight to the right menu window.

As well as screen-based operation with the CEBIS, there is a set of buttons in the armrest. Full CEBIS operation is available using the rotary/push switch and ESC button if uneven ground reduces the accuracy of fingertip operation. The DIRECT ACCESS button takes you straight to the settings for the last used tractor function.



# CIS+.

## Simply more.



### Everything at hand.

The height and position of the armrest can easily be adjusted to the driver's requirements.

- 1 DRIVESTICK to operate the CMATIC or HEXASHIFT transmission
- 2 Controls for rear linkage and two F buttons, e.g. to activate CSM headland management
- 3 Hand throttle, two engine speed memories, GPS PILOT, four-wheel drive, and differential lock

- 4 ELECTROPILOT four-way control lever with two F buttons and optional right-hand reverser
- 5 Control panel for transmission and hydraulic function activation
- 6 Electronic spool valves
- 7 Set working depth of rear linkage
- 8 Activate front and rear PTO plus automatic engagement/disengagement of rear PTO
- 9 Activate front axle suspension



### The perfectly ergonomic armrest.

The multifunction armrest has been designed for optimum ergonomics and is the linchpin to relaxed and effective working. It's the result of extensive analysis of the operating processes in the cab: frequently required functions are located on the multifunction armrest, while those required less frequently are located on the right-hand side console.



## An instinct for excellence – CMATIC operation.

The unique DRIVESTICK, with handrest on the side, handles intuitively and gives full control of the HEXASHIFT or CMATIC transmission.

Unlike conventional drive levers, the DRIVESTICK comes with proportional control of a CMATIC transmission. This means that the further it is pushed or pulled when in drive lever mode, the faster the transmission accelerates or brakes the tractor.

This functionality is not needed so often in accelerator pedal mode as the driver controls the speed with the foot pedal. However, it is still very useful, for example, to manually increase or reduce the engine braking effect.

When the DRIVESTICK is used in conjunction with the CMATIC transmission, it also has a cruise control button. Just press the button briefly to activate cruise control, or press and hold to save the current speed. If cruise control is active, the speed can be changed simply by moving the DRIVESTICK forwards or backwards.

## CEBIS does it, so does CIS+.

- Set or activate individual flow and time control for individual spool valves
- Continuously variable PTO engagement/disengagement settings based on rear linkage height
- Record and run four CSM headland management sequences
- ISOBUS implements can be operated using the F buttons on the tractor

# Comfort and ergonomics. For optimum working conditions.



## First-class comfort.

Many features of the working environment make the AXION the ideal choice for long working days. A large number of storage options mean that the driver can always find space for a mobile phone or documents. Under the trainer seat there is a cooler compartment which has room for two water bottles and snacks. Perfect for your lunch break.

## LED lights for perfect illumination.

If you're still working when it goes dark, the work lights will light up the entire area around the machine, so you can see exactly what you're doing. For even more demanding situations, up to 20 LED work lights and four LED road lights can illuminate the entire surroundings of the AXION tractor almost as brightly as daylight.



As well as the large standard mirror, a wide-angle mirror for improved road safety is supplied as standard.



Connections to the power supply and ISOBUS for additional terminals are located below the right-hand console.



The driver and trainer seat are available with modern, non-slip fabric or elegant, easy-care leather upholstery.



### A pleasant working environment.

All AXION models are fitted as standard with auto climate control. The components of the air conditioning system are built into the double insulated cab floor, giving optimum air flow distribution in the cab and significantly reducing the noise level from the ventilation system. As no components are built into the roof, the driver has additional headroom and a greater feeling of space. A fully automatic climate control system is available in addition to manual control.



### Clear and logical layout.

When you press the small pedal underneath the steering column, the entire steering column folds out of the way, allowing plenty of room to enter and leave the cab. The column can be returned to the optimum position when you start work. A lever on the steering column also enables you to adjust the height of the steering wheel.

The instrument panel is always perfectly visible because it is mounted on the steering column and moves with it.



### Illuminated interior.

By day and night, all the controls are illuminated when the headlights are switched on, and the symbols on all the switches are backlit so that they can be operated safely at all times. The brightness of the CEBIS monitor automatically adjusts to the lighting conditions, preventing glare within the cab. A dark color scheme can also be selected in the CEBIS. This gives a softer contrast, especially when working in the dark, and reduces eye fatigue.

# Suspension.

## Protects both driver and machine.



### Full 4-way suspension.

Four suspension points mean that the cab is fully isolated from the chassis, preventing impacts and vibration from reaching the driver. Longitudinal and lateral struts join the suspension points and keep the cab stable when turning corners or braking. The entire suspension system is completely maintenance-free.



### Premium comfort.

The standard seat is cloth-covered, air-suspended, and pivoting for every-day comfort. With options to include heat and semi-active air suspension, all day operation is no problem. For the absolute premium in comfort and luxury, choose the leather-wrapped seat for easy care and long wear life.



### PROACTIV front axle suspension – complete comfort automatically.

The suspension adjusts to tractor loading and automatically remains in the central position. Changes in load due to braking and turning maneuvers are also compensated. Parallelogram axle suspension and 3.5 inches of spring travel guarantee a smooth ride.



### Vibration damping.

Heavy implements mounted on the front and rear create a load on the tractor as well as the driver. The front and rear linkage are both equipped with vibration damping to compensate for peak loads during transport operations and when the attached implement is raised at the headland.



Switch to activate front axle suspension.

# Our electronics expertise. Acting today to be ready for tomorrow.

## Field and implement management with CEBIS.

Up to 20 jobs can be set up and stored in CEBIS in order to produce documentation for the work done.

Also with CEBIS, details of up to 20 implements can be recorded. All the preset values are permanently assigned to the specific implement.

- Settings for transmission and hydraulic spool valves
- Four CSM sequences
- Area calculation – mode and activation
- Working width of attached implement

This saves on unnecessary adjustment tasks when changing implement or driver. Just attach the implement, load the implement in CEBIS, and start work. Tablet-type operation makes creating new implements quick and easy.

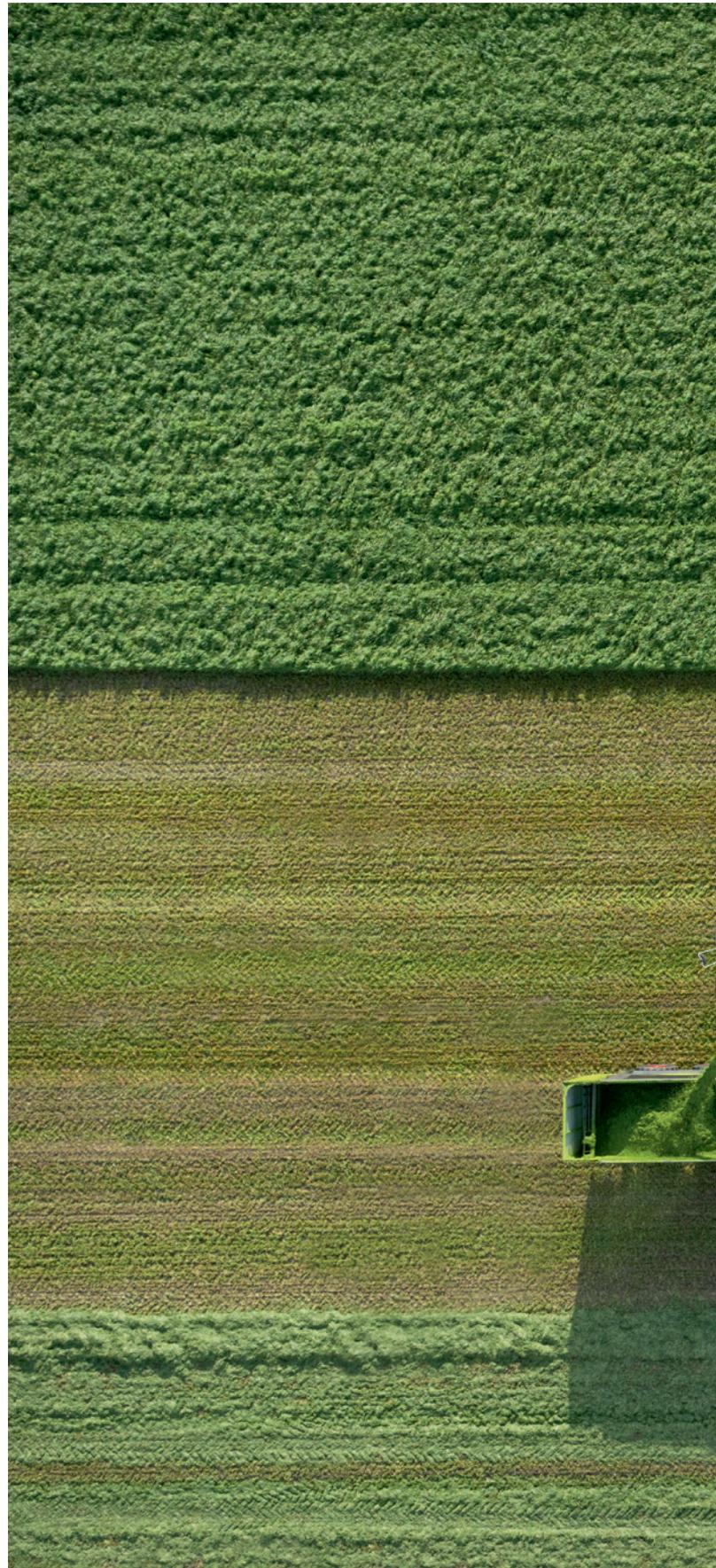
## Open Steering and Data Interface.

The Open Steering and Data Interface allows CLAAS machines to work with third-party displays and steering systems and allows third-party data collection devices access to CLAAS machine data. Please see your dealer for a list of compatible equipment.

## CLAAS TELEMATICS.

- Improve work processes: operating time analysis
- Optimize settings: remote monitoring
- Simplify documentation: data collection
- Faster servicing: remote diagnostics

TELEMATICS allows you to call up any information about your machine at any time from any location. The data collected is sent to the TELEMATICS web server at regular intervals via the mobile phone network. This enables you or an authorized service partner to access and evaluate the relevant information via the internet.





# Maintenance. Fast and straightforward.



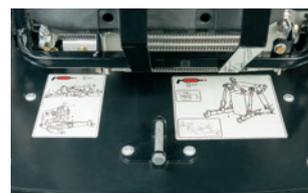
The front axle lubrication points are located in front of the radiator assembly for optimum accessibility.



The battery is conveniently positioned above the right-hand access ladder.

Maintenance Overview	
Next maintenance in 10 hours	3 h
Next maintenance in 50 hours	43 h
Next maintenance in 100 hours	93 h
Next maintenance in 600 hours	593 h
Next maintenance in 1200 hours	1193 h

Integrated maintenance counter.



A lubrication chart under the hood simplifies maintenance.



### Good access saves time and money.

Daily maintenance work should be as straightforward as possible – because we know from experience that nobody enjoys doing things that are complicated or inconvenient.

- The hood opens at the press of a button, providing access to all the engine maintenance points
- The engine oil can be checked and topped off on the left-hand side of the tractor when the hood is closed
- All daily maintenance tasks can be carried out without tools
- The front axle lubrication points are located in front of the radiator assembly for optimum accessibility
- The fuel prefilter is conveniently located by the left-hand cab access ladder
- Large drawer in the left-hand access ladder with space for a standard toolbox

The long oil-change intervals (engine 600 h, transmission and hydraulics 1,200 h) save time and money. As a result, less valuable working time is lost during the season and the tractor is where it should be – at work.



### Fresh air for full power.

The large intake panels in the hood provide plenty of fresh air for cooling and for the engine air filter. Low flow rates at the intake panels help them to stay clean and permeable at all times.

The radiator assemblies are supported by a robust frame and gas-filled shock absorbers open the radiator panels to two positions for thorough cleaning. Cleaning can therefore be carried out safely and conveniently as required.

The air filter is accessibly located in the cool zone in front of the radiator panels so it can be removed without hindrance. Coarse dirt particles are extracted in the filter housing, further extending the cleaning interval.

# CL 500 loaders. Uniquely CLAAS.



## A perfect match.

The CLAAS CL 500 loader is perfectly matched to the AXION 800 Series tractor. From the solid plate loader arms and buttressed bucket cylinder cap threads to the greaseless pin systems only found in construction and industrial grade loaders, the CL 500 is durable and productive, and maximizes the versatility of your investment.

## Tried and tested.

With more than 12,500 pile to pile cycles, 30 hours over a bump track, at least 50,000 lift cycle tests, rigorous drop and catch cycles, and various impact tests recorded, this tractor and loader combination is proven to be capacity matched.

## Attachments to fit your needs.

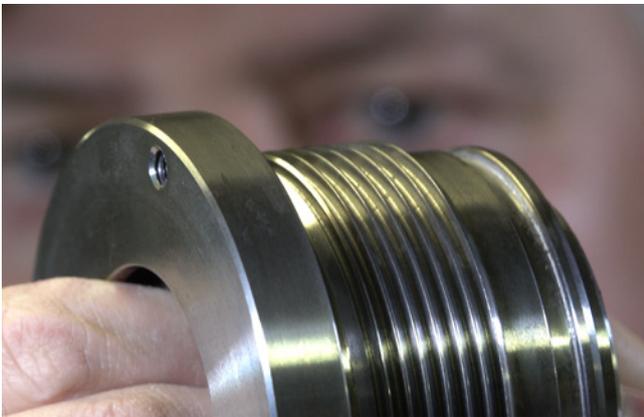
Various attachments are available for the CL 500 loader:

- 96- to 108- in wide buckets in standard and high-capacity volumes
- Standard performance and high-performance GrabTec grapples
- Square and round bale movers
- Rigid and pivoting snow blades
- Pallet forks



### Better strength, better visibility.

The industrial-strength solid plate frame for the loader lift arms offers high resistance to metal fatigue by better handling shocks and abrasions. Additionally, the sleek loader arm is matched to the slope of the hood, which gives the operator extremely good visibility over the top of the loader and around the hood.



### Built in-house.

Designed to take the high shock loads of heavy agriculture use, the in-house built cylinders feature buttressed threads for stronger connections and better handling of high-pressure spikes.

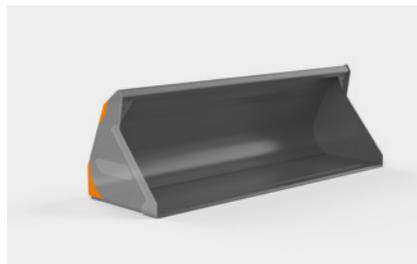


### Zero maintenance.

No grease zerks means no need for daily greasing. A greaseless pin bushing system, with a Teflon-lined composite fiberglass bushing, chrome pin, and dustseal, is used at all of the loader joints.



The bucket has a curved back so clay materials and manure compost release easily.



The bucket is designed with pockets in the back that give the necessary lateral strength across the length of the bucket.



The ISO quick attach is made with an oversized rod, which is machined down to increase the strength and durability.

# Whatever it takes. CLAAS Service & Parts.



## Your needs matter.

You can always rely on CLAAS Service & Parts. We'll be there whenever you need us, around the clock if necessary, to provide the perfect solution for your machine and your business.

## Reliability can be planned.

With our service products, you can increase your machine reliability, minimize your risk of breakdowns and budget with confidence. CLAAS MAXI CARE offers planned reliability for your machine.

## On Your Farm Parts.

CLAAS On Your Farm Parts allows you to customize a selection of parts on your farm in order to get you back up and running in minimal time. Buy now – pay after the harvest – it's that simple. Ask your participating dealer for details.

## Always up to date.

CLAAS dealer service teams are trained by CLAAS and equipped with the all-important special tools and diagnostic systems to meet all your expectations with regard to expertise and reliability.

## Problem solving by remote diagnostics: CLAAS TELEMATICS

CLAAS TELEMATICS on your machine brings two important advantages: fast assistance from CLAAS service technicians plus economic benefits for your work thanks to wireless networking. We can solve your problems on the spot – even when you can't see us.



## ORIGINAL parts and accessories.

Specifically matched to your machine: precision-manufactured parts, high-quality consumables and useful accessories. We will supply exactly the right solution from our comprehensive product range to ensure that your machine is 100 percent reliable.

## Worldwide coverage from Columbus, Regina, and Hamm.

The CLAAS of America Parts Logistics Centers in Columbus, Indiana, and Regina, Saskatchewan, provide world-class parts support throughout North America for all CLAAS products. Supported by the worldwide spare parts depot in Hamm, Germany, we provide the CLAAS dealer network with reliable, consistent parts availability and industry-leading responsiveness. Your local CLAAS dealer can supply the right parts solution for your business to maximize machine uptime.



The CLAAS Parts Logistics Center in Columbus, Indiana, stocks more than 40,000 part numbers in a warehouse with more than 185,000 sq ft of storage space.



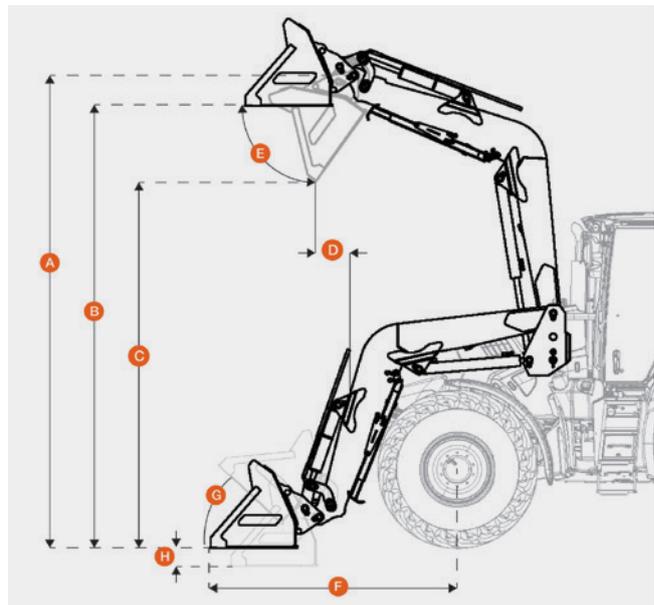
The CLAAS Parts Logistics Center in Regina, Saskatchewan, stocks more than 14,000 part numbers in a warehouse with more than 33,000 sq ft of storage space.

# Specifications.

AXION tractor		880	860	850	840	830	820	810
Engine type and size	L	FPT 6.7						
Rated engine speed	rpm	2,150	2,150	2,150	2,150	2,150	2,150	2,150
Rated engine power	hp	265/280*	250	245	230	215	215	200
Max. engine power	hp	275/290*	270	260	245	230	230	210
Advertised PTO HP SAE, OECD-2, PTO rated speed	hp	245/261*	244	235	225	209	209	190
Transmission		CMATIC	CMATIC	HEXASHIFT	CMATIC	HEXASHIFT	CMATIC	HEXASHIFT
Transmission type		CVT	CVT	PS	CVT	PS	CVT	PS
Engine speed at max. power	rpm	1,800	1,800	1,800	1,800	1,800	1,800	1,800
Engine speed at max. torque	rpm	1,400	1,400	1,400	1,400	1,400	1,400	1,400
Cooling system		Visctronic fan						
Hydraulic pump flow	gpm	40	40	40	40	40	40	40
Max. flow at couplers – 1 spool/2 spool	gpm	29/37	29/37	29/37	29/37	29/37	29/37	29/37
Max. front lift capacity	lbs	10,120	10,120	10,120	10,120	10,120	10,120	10,120
Max. rear lift capacity	lbs	21,450	21,450	21,450	21,450	21,450	21,450	21,450
Cont. rear lift capacity OECD code 2	lbs	17,600	17,600	17,600	17,600	17,400	17,400	17,400
Wheelbase	in	117	117	117	117	117	117	117
Fuel tank capacity	gal	120	120	120	120	120	120	120
DEF tank capacity	gal	11	11	11	11	11	11	11
Base weight	lbs	22,310	22,310	21,813	21,254	21,254	20,440	19,554

● Standard ○ Optional – Not Available

CLAAS CL 500 loader		
(A) Max. lift height	in	175
(B) Max. lift height under level bucket	in	163
(C) Clearance under bucket dumped 45 deg	in	135
(D) Reach at max. lift and 45 deg dump	in	24
(E) Max. dump angle	deg	54
(F) Reach on ground with 35 in deep bucket	in	100
(G) Bucket rollback angle	deg	37
(H) Dig depth	in	6
Max. breakaway lift force with load 31.5 in ahead of pivot pins	lbs	6,517
Max. bucket rollback force with 31.5 in load center	lbs	10,500
Full height lift force with 31.5 in load center	lbs	4,867
Loader lift time	sec	5.4
Bucket dump time	sec	3.7
Bucket curl time	sec	2.9
Loader lower time	sec	3.6
Cylinder lift bore	in	3.5
Cylinder bucket bore	in	3.75



©2019 CLAAS of America Inc. All descriptions and specifications should be considered approximate and may include optional equipment. In certain cases, protective panels have been removed to show detail. To avoid risk of injury, never remove these panels yourself. Please refer to operators manual for instructions. Product and specifications subject to change without notice.

# The AXION tractor: Simply stated.



Kerry Knuth  
Mead, NE, USA

“We can do every job on our farm with this size of tractor, whether it’s big square baling, round baling, or loading – the AXION can handle it all. It’s comfortable, too. Everything in the cab is right where you want it – close to you, handy, convenient.”



Pierre-Luc Benoit  
La Pocatiere, QC, Canada

“We are very pleased with the comfort of the AXION. We like the heated and vented seats, the exceptional visibility from the cab, the position of the controller, and the CMATIC transmission operation with easy programmable modes and cruise control.”



Tate and Carly Mesbergen  
Greeley, CO, USA

“With the AXION, we can really maximize our efficiency. We’re using a lot less fuel and doing a lot more, which helps our bottom line. And it packs a punch – there’s a lot of horsepower in that tractor.”



Sebastien Pelletier  
Saint-Germain-de-Kamouraska, QC, Canada

“The AXION tractor is a huge benefit to my custom manure spreading business. I spend up to 15 hours a day in the tractor, and the transmission is so gentle and so easy to operate, I’m not exhausted at all when I come home at night.”



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