

HP  
175-240

# MF6400 & 7400

Class-leading high-horsepower tractors  
10 models: 175 to 240 hp



VISION INNOVATION LEADERSHIP QUALITY RELIABILITY SUPPORT PRIDE COMMITMENT



MASSEY FERGUSON

# Unrivalled all-round performance

Preferred by both farm managers, for economic reasons and by drivers for simply being a joy to operate, the latest MF 6400 and MF 7400 Series tractors are rapidly becoming the new benchmark in arable farming and contracting.



So choose either MF 6400 Series with Dyna-6, the best semi-powershift transmission around, or MF 7400 Series, with Dyna-VT, Massey Ferguson's unsurpassed CVT transmission, then start to enjoy the benefits of unrivalled overall field efficiency.

## MF 6400 and MF 7400 Series highlights

- Two new models in the MF 7400 Series range: The MF 7497 and MF 7499 showcase bigger engines, higher torque and Dyna-VT transmissions which now include the Dynamic Tractor Management (DTM) system for complete engine and transmission control
- Exceptionally low 70 d(B)A in-cab noise level and automotive standards of comfort and controls reduce fatigue and increase productivity significantly

- Latest generation AGCO SISU POWER engines featuring common rail fuel injection and four-valve cylinder head design give outstanding power and torque delivery, excellent fuel economy and lower emissions (Tier III compliant)
- 50 km/h\* maximum speed is now available on all MF 6400 and MF 7400 models in this power range, reducing journey times and increasing haulage productivity
- Both transmissions feature clutchless operation, with left-hand Power Control
- The most comprehensive, yet simple headland management systems\* reduce operator workload and increase productivity and work quality
- Datatronic III is available with video capability and ISOBUS compatibility

MF 6485-99 and MF 7485-99 models all have new-generation styling, featuring:

- A pivoting bonnet, giving easy access to the engine and cooling systems.
  - A new front axle support casting and 'structural' engine sump that enable fitment of the Massey Ferguson IFLS, fully integrated, factory-installed, front linkage and PTO.
- On MF 6400 models, the advanced Dyna-6 transmission driveline interacts with the engine management system to give even more power and torque for PTO and transport work.
- All Dyna-6 models are available with the 50 km/h 'Eco' transmission, giving high transport speeds with exceptionally low noise levels and reduced fuel consumption.

\*Specifications vary by model and market legislation

The MF 6400 and MF 7400 Model Line-Up

Model	Engine (AGCO SISU POWER)	Capacity	Rated hp <sup>1</sup>	Max. hp <sup>2</sup>	Max. PTO hp <sup>3</sup>
MF 6485	6 cyl. Turbo/intercooled	6.6 litre	160	175	160
MF 6490	6 cyl. Turbo/intercooled	6.6 litre	170	185	170
MF 6495	6 cyl. Turbo/intercooled	6.6 litre	185	198	180
MF 6497	6 cyl. Turbo/intercooled	7.4 litre	200	215	195
MF 6499	6 cyl. Turbo/intercooled	7.4 litre	215	230	205
MF 7485	6 cyl. Turbo/intercooled	6.6 litre	165	180	160
MF 7490	6 cyl. Turbo/intercooled	6.6 litre	175	190	170
MF 7495	6 cyl. Turbo/intercooled	6.6 litre	190	203	180
MF 7497	6 cyl. Turbo/intercooled	7.4 litre	205	225	195
MF 7499	6 cyl. Turbo/intercooled	7.4 litre	220	240	205

<sup>1</sup> ISO TR14396 (EG 97/68), at 2200 rpm.

<sup>2</sup> ISO TR14396 (EG 97/68), at 2000 rpm.

<sup>3</sup> OECD, at PTO shaft.

# MF 6400 and MF 7400

## The driver's choice

Straightforward ergonomic design, plenty of space, excellent visibility and exceptionally low noise levels are the hallmarks of the MF 6400 and MF 7400 cab. Add to that, automotive industry quality materials and instrumentation, plus solid build quality and you have the ideal environment to spend a productive working day.

### Thoughtful design

The layout of the cab is spacious and well planned, with conveniently placed switches, superb instrumentation and controls logically grouped by function. All of the most frequently used controls are mounted in the right-hand armrest, which moves with the seat so everything always falls readily to hand.

### Clarity at a glance

The instruments display information either in digital, analogue or graphic form to present data in the most appropriate way for optimum clarity.

### Quiet power

MF 6400 and MF 7400 tractors are also exceptionally quiet, with sound levels inside the cab of 70 dB(A) under load.

The tone of the sound has also been 'tuned' to further reduce any irritating noise, and levels of vibration are minimised.

The result is that working long, hard hours becomes far less stressful and more productive. It's a driving experience that really has to be tried to be fully appreciated.

### A breath of fresh air

The heating and ventilation system has a large number of adjustable outlets, providing excellent air distribution and accurate temperature control. There is also a choice of either manually adjusted air conditioning or full climate control\*, which will memorise your chosen temperature setting and return to it at start-up... automatically.

### Excellent visibility

A large area of tinted, heat-reflective glass, narrow pillars and side-mounted exhaust all help to ensure excellent all-round visibility. Large telescopic rear view mirrors - heated and electrically adjustable on MF 7400 Series\*, and optional on MF 6400 Series, are a further aid to safe manoeuvring and transport.

The standard lighting gives excellent night-time productivity, with Xenon lights available as an option for even higher dusk and evening productivity.

\* Standard specifications vary by model and market



01



02

01 MF 6400 Cab interior shown with Dyna-6 transmission. Options shown include AutoDrive, SMS and Datatronic III.

02 MF 7400 cab interior (with optional Datatronic III and fingertip spool valves).

# Quiet, comfortable and economical... whatever the task

The standard seat provides exceptional comfort but ride quality can be further enhanced...

## High specification seats

The high specification, swivelling seat is fully adjustable including lumbar support, pneumatic height adjustment, plus height and fore and aft adjustment of the right hand armrest so that the armrest-mounted controls can be perfectly positioned. Options include a 'low-frequency', super de-luxe seat\* with double pneumatic lumbar support, heating and 'active carbon' seat covering for greater comfort in really hot conditions.

## QuadLink suspension

MF's 'QuadLink' suspended front axle\* further enhances ride comfort and control. It has a compact, simple design that automatically maintains a constant suspension height, regardless of axle load. The result is increased stability and a significant improvement in driver comfort, productivity and safety... both on the road and in the field.

## Operator-controlled

Unlike many other systems, QuadLink is operator-controlled so you can choose whether to have the system on or off.

For example, when working in the field with front linkage, where a uniform depth of cultivation must be maintained, it is beneficial to be able to deactivate the system. But when switched on, QuadLink improves comfort, safety and speed, especially in during loader work.

## Dual Stage suspended cab

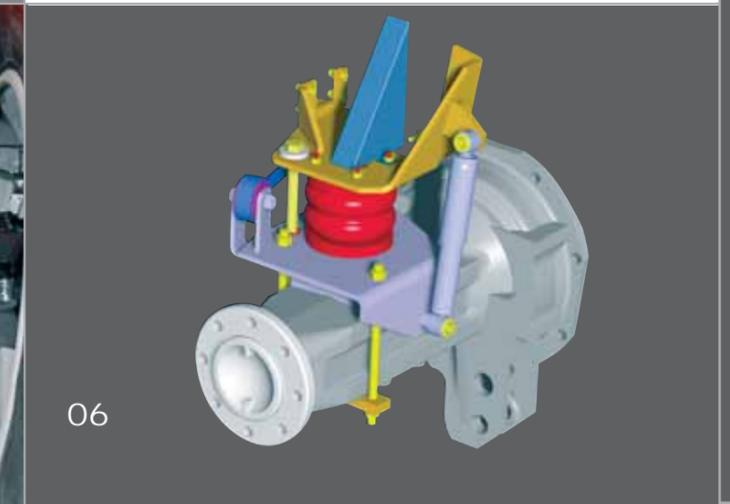
To provide the ultimate in ride comfort, MF's cab suspension system is available on all MF 6400 and MF 7400 Series tractors. The design features 'dual stage' air suspension that can be adjusted at the flick of a switch, between two ride firmness settings

to suit field or road transport conditions. This unique operator-controlled system stabilises cab movement more effectively and ensures a safer, more comfortable ride in all conditions.

## Ride comfort improvement

Compared to a 'standard' tractor, the overall effect of having a high specification seat, QuadLink front axle suspension and cab suspension can be a reduction in vibration by up to 50%<sup>†</sup>. The result is greater comfort when operating for long periods, leading to increased productivity, improved work quality and a more relaxing working day.

\* Standard specifications vary by model and market  
<sup>†</sup> Depending on speed and field or road conditions.



01 The high specification swivelling seat, featuring armrest-mounted controls and Dynamic Damping System (DDS).

02 Lumber adjustment switch on 'super de-luxe' seat.

03 QuadLink and cab suspension switches, giving full operator control.

04 - 05 QuadLink front suspension is integrated into the design of the tractor.

06 'Dual stage' cab suspension system.

# Plenty of power... and more in reserve

All models featured in this brochure are powered by AGCO SISU POWER, Tier III emissions compliant engines, featuring common rail fuel injection and 4-valve cylinder head design. They deliver high power and torque and work in perfect harmony with the highly efficient Dyna-6 and Dyna-VT transmissions to give superb field and transport capabilities, with excellent fuel economy.

## More usable power

All of the engines have significantly more power at 2,000 rpm than at 2,200 rpm (rated engine speed). This 'power bulge' gives incredible lugging ability to pull through difficult conditions or to help haul fully laden trailers on long, steep gradients.

Also, with an increased constant power range of at least 500 rpm, you can maintain work rate at lower engine speed, giving reduced noise and fuel consumption.

## Advanced Electronic Engine Management

The Electronic Engine Management system (EEM) controls not only the very precise common rail fuel injection, but also enables a range of advanced engine control functions, including Power Boost and Engine Speed Control\*.

## Power boost

Due to sophisticated interaction between the engine and transmission management systems, on MF 6400 models when 3rd or 4th gear is selected or when the PTO is engaged, EEM automatically gives a significant power and torque 'boost'.

## Engine speed control

Switches mounted conveniently on the right-hand console enable two engine speeds to be pre-set and memorised.

This enables one engine speed to be set for work and the other for use when turning at the headland.

The ability to return quickly and easily to precise engine speeds will boost productivity, improve work quality and simplify operation in almost all of your daily tasks.

## Improved fuel economy

Electronic engine management constantly monitors a wide range of parameters and makes continual and incredibly fine adjustments to fuel injection. Combined with four-valve cylinder head design and Common Rail fuel injection, this has given significant improvements in both emissions and fuel economy.

Whilst lowering the absolute Specific Fuel Consumption (SFC) figure is important, the graph (right) shows how the latest engines achieve lower fuel consumption over a much wider range of operating conditions.

## Common rail fuel injection

The common rail fuel injection system uses precise electronic control to continuously monitor operating conditions and engine load, and to regulate accordingly the high-pressure fuel injection.

The result is faster response to changes in field conditions and engine load, more power and torque over a wider engine speed range, excellent fuel economy and lower noise and emissions.

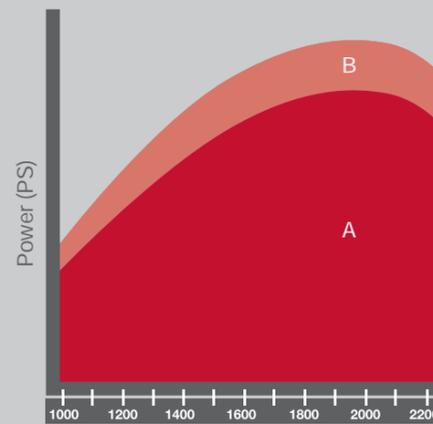
## Four valves per cylinder

The cylinder head design features two inlet valves and two exhaust valves per cylinder enabling the fuel injectors to be centrally positioned in the cylinder head.

This design improves fuel/air mixture and gas flow, giving optimum fuel combustion and reducing emissions and fuel consumption, whilst also improving engine reliability by reducing upper cylinder temperature. The more efficient combustion also improves torque characteristics throughout the whole working range.

\* Standard specifications vary by model and market

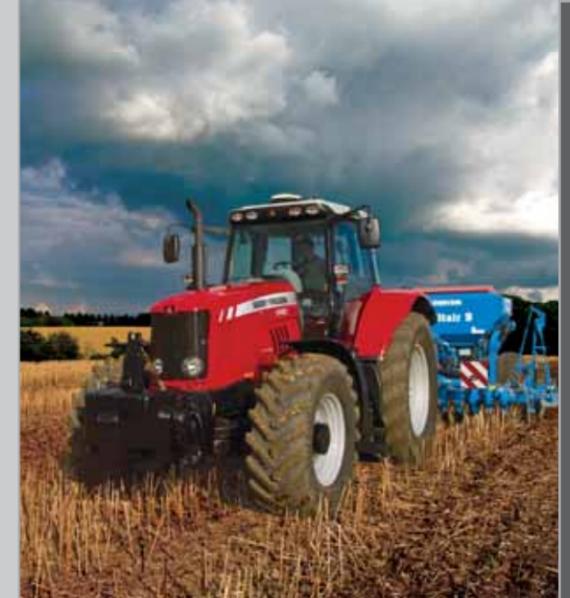
Power: MF 6485 - MF 6499



High power, with power increase as engine speed falls between 2200 and 2000 rpm.

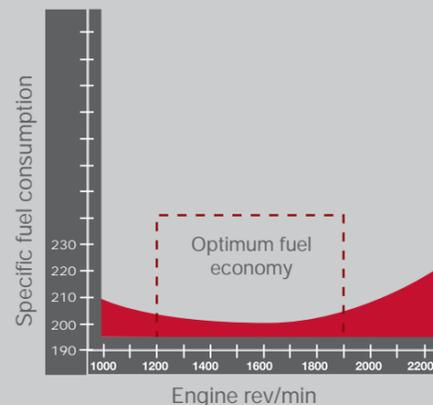
A: Normal power curve.

B: Power Boost, available when PTO is engaged or 3rd or 4th gear are selected.



01 Common rail fuel injection. More power. More torque. Better fuel economy.

Specific Fuel Consumption

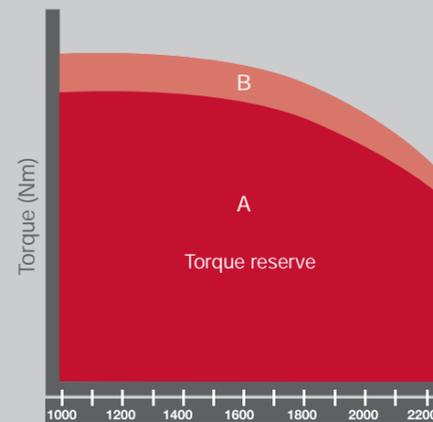


Compared to previous generation engines, MF's electronic engine management system broadens the operating range within which the tractor is operating at optimum fuel efficiency.



'A/B' memorise the engine speed, '+/-' adjust the memorised speeds (A/B)

Torque: MF 6485 - MF 6499



The torque curve shows how 'pulling power' is maintained as engine speed falls and how it increases with boost.

A: Normal torque curve.

B: Extra torque, available when PTO is engaged or 3rd or 4th gear are selected.



01

09

# Dyna-6 : simply the best semi-powershift transmission

With left-hand Power Control and smooth on-the-move clutchless powershift changes, it's simply the best 'semi-powershift' transmission in the field today.

## Simplicity and efficiency

Dyna-6 uses four simple synchromesh gears, each with six Dynashift speeds. This wide spread of speeds within each range means you can change up or down under full load as conditions vary, to optimise output and minimise fuel consumption.

Also, apart from starting the tractor or hitching an implement, there is never any need to use the clutch pedal, so the seat can be swivelled for field work, eliminating the effort of foot pedal operation. And with a choice of either left- or right-hand control, there's real operating flexibility to suit any application or driver preference.

## Left-hand Power Control

The left-hand Power Control lever provides convenient forward/reverse shuttle, powershift changes, range changes\* and fingertip de-clutching, leaving the right hand free to operate front and rear mounted implements.

Shuttle operations are more efficient too, with programmable forward/reverse speeds, to reduce repetitive tasks and speed cycle times.

## Right-hand control

The T-shaped gear lever is mounted in the adjustable armrest, so it's always perfectly placed for easy use. Simply 'pulse' the gear

lever forwards or backwards to change up or down through the six Dynashift ratios.

To change range, simply press the range selection button as you move the lever.

## Dyna-6 AutoDrive (optional)

AutoDrive enables the operator to select the engine speed at which the transmission will automatically upshift and will also downshift automatically according to load.

## The AutoDrive Controller has three main settings:

- **Manual**, gives full manual control with Speedmatching switched off.
- **Speedmatching**, available within both Transport and Field sectors, provides automatic selection of the most appropriate Dynashift ratio after a range change has been made.

Gear changes can then be made either individually or rapidly, from A to F range by holding the gear lever (or Power Control lever) forwards or backwards.

In Transport, sequential changes also include range changes, enabling 24 ratio changes, from 1A to 4F, all at the touch of either the left-hand PowerControl lever or the right-hand gear lever.

• **AutoDrive** (see diagrams on right); in the Field sector, gives fully automatic upshifting and downshifting of Dynashift changes, and in the Transport sector, gives automated Dynashift and range changes.

By adjusting the control, you can pre-select the engine speed at which upshifting takes place, between 1600 and 2200 rpm.

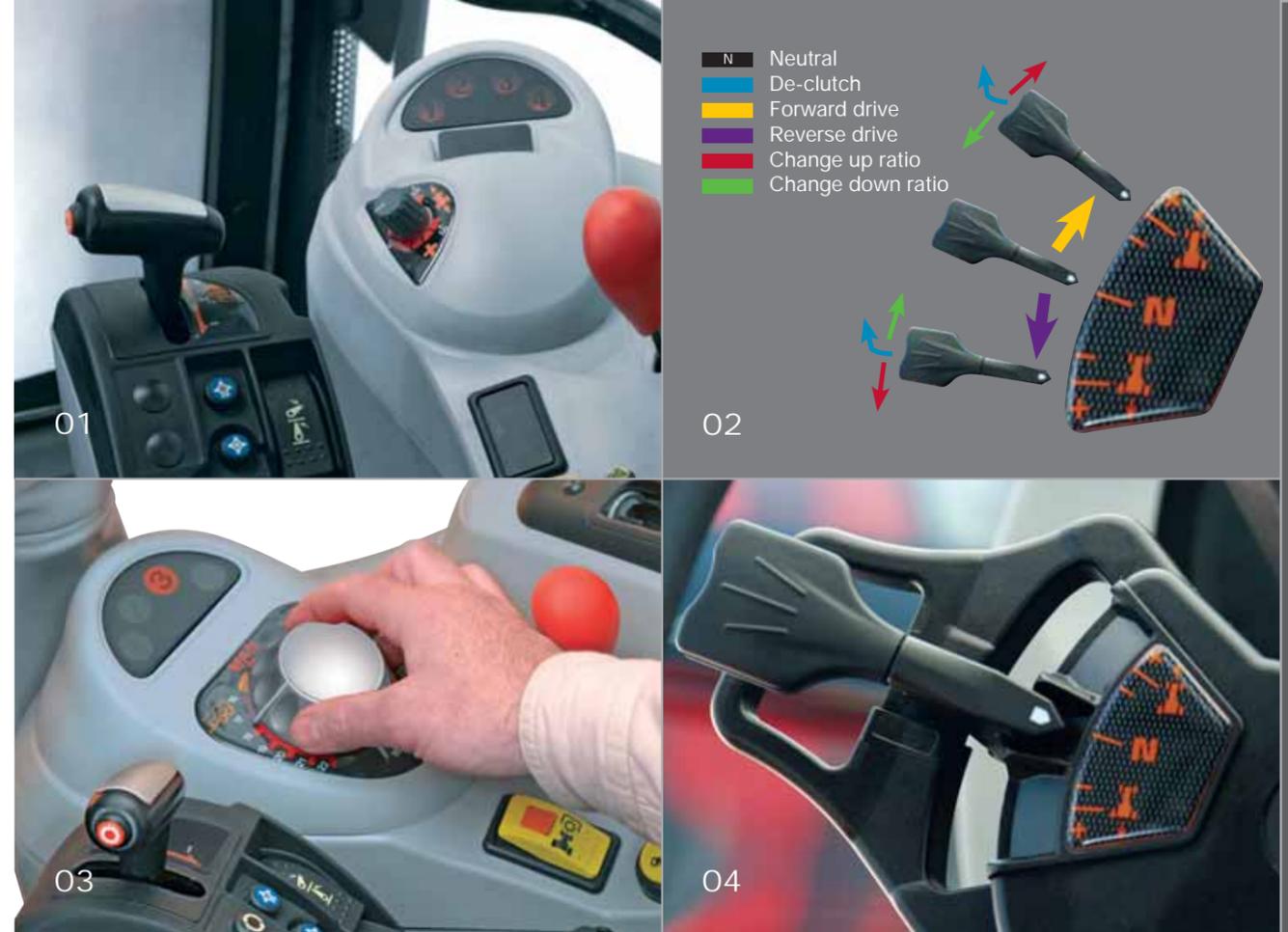
Downshifting takes place when engine speed falls under load by around 20%, maintaining full control and engine braking.

AutoDrive gives you total control of the transmission, with the exact level of automation you require for any application, simply by turning the AutoDrive Controller.

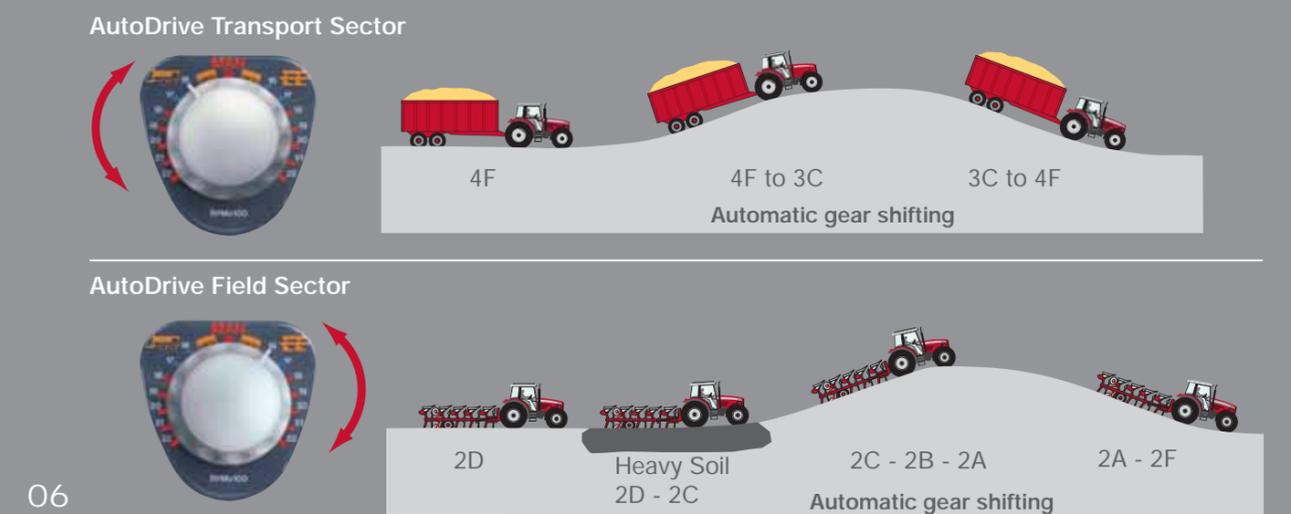
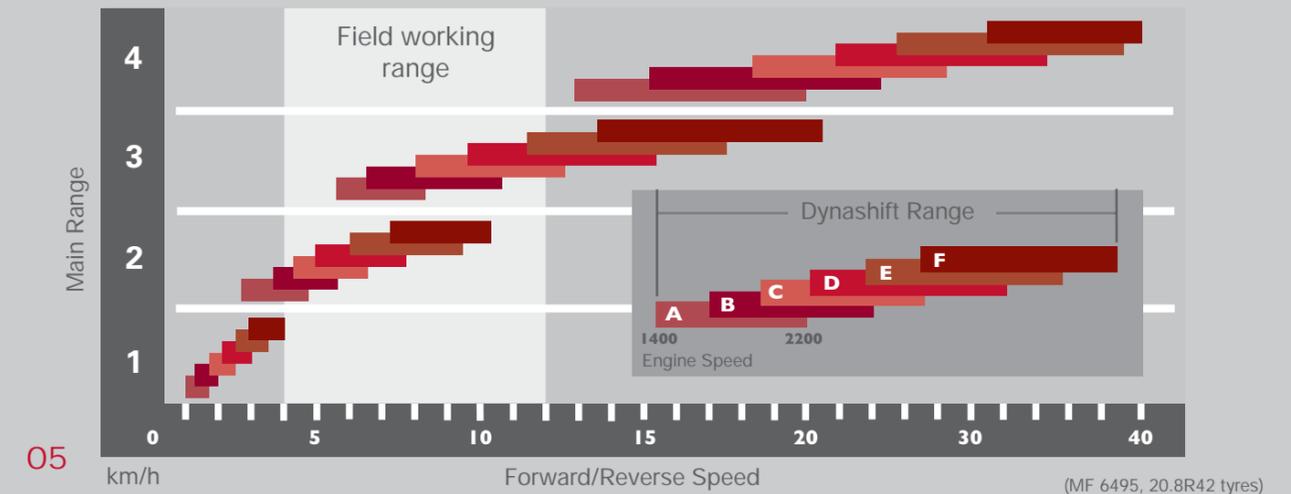
## Creeper speeds

The (optional) creeper gearbox provides a 4.0:1 speed reduction, giving additional 12 forward and 12 reverse creeper gears with speeds down to around 400 metres per hour at rated engine speed.

\* In Autodrive transport mode



01 Dyna-6 'T-handle' gear lever with Speedmatching and forward/reverse shuttle 'Comfort Control'.  
 02 & 04 Power Control provides three functions on the one lever.  
 03 The Autodrive Controller can easily be adjusted to achieve ideal transmission settings.  
 05 Dyna-6 offers 6 Dynashift changes in each range with maximum speed at approx 1900 rpm.  
 06 AutoDrive - Field mode upshifts and downshifts Dyna-6 ratios. AutoDrive - Transport mode upshifts and downshifts both Dyna-6 and range changes.



# Dyna-VT : putting the MF 7400 Series ahead of the crowd

Dyna-VT gives infinitely variable speed control with optimum power, engine speed and fuel efficiency, resulting in significant gains in output and productivity. And with the proven, familiar 'MF family' control layout, operation is straightforward and intuitive.

## Stepless speed control

Dyna-VT has two infinitely variable speed ranges, 0-28 km/h for field applications and 0-50 km/h\* for transport applications.

To start work, simply move the left-hand Power Control lever into 'forward' or 'reverse' direction then push the armrest-mounted Dyna-VT lever. The further you push the lever, the faster you accelerate. No shifting of gears. No jerks. No breaks in traction or power; just infinite speed control from 'supercreep' to high transport speeds!

To slow down, simply pull the lever back. When you've reached your chosen speed, just release the lever.

## Left-hand Power Control

If you prefer left-hand control, the Power Control lever adjusts ground speed in a similar way, and also gives convenient, left-hand control of forward/reverse shuttle.

## Smooth forward/reverse shuttle

Moving the Power Control lever from forward to reverse position gives an incredibly smooth power shuttle, with the added benefit of being able to pre-set the

relationship between forward and reverse speed.

## Pre-set speed control

Travel speed and rate of acceleration can also be pre-set and memorised within each of two ranges 'SV1' and 'SV2'.

The memorised speed acts as a cruise control to maintain a specified speed. It is activated by pressing the SV1 or SV2 button located conveniently in the armrest and can be adjusted, during work, simply by turning the appropriate SV1/SV2 rotary switch on the right-hand console.

## The 'Supervisor'

Supervisor optimises the relationship between engine load and travel speed and, in conjunction with SV1/SV2 speed control, can significantly increase productivity in all conditions.

Supervisor reduces forward speed when load becomes excessive. The Supervisor can be adjusted for different operational conditions, and SV1/SV2 will accelerate the tractor back to the desired forward speed as load decreases.

As this process is happening smoothly, continuously and automatically, maximum output and fuel economy are easily maintained.

## Dynamic Tractor Management (DTM) - Intelligent machine management for optimum fuel efficiency

Dynamic Tractor Management (DTM) is an electronic management system which when activated, automatically controls the engine speed according to the load on the tractor. It maintains the required forward speed whilst at the same time minimising the engine revs in order to keep fuel consumption to a minimum.

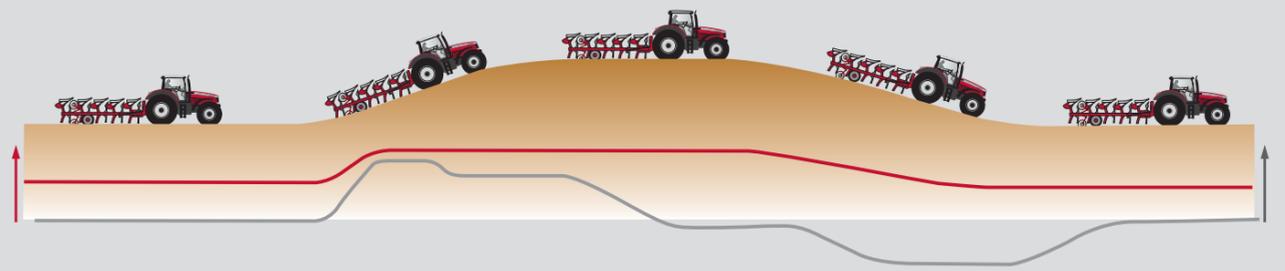
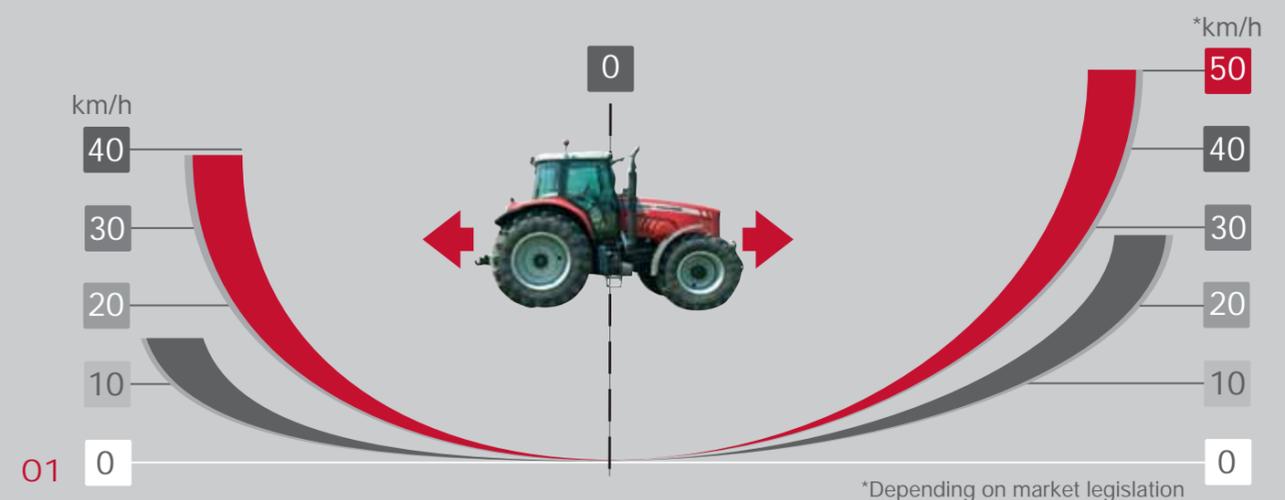
For optimum convenience DTM can be used in either pedal or lever mode.

The combination of Dyna-VT and DTM will ensure maximum productivity whilst minimising fuel consumption and noise level.

\* Depending on market/legislation



1. SV1/SV2 speed memories.
2. 'Pedal' or 'Lever' operating modes.
3. Speed range selection all in one convenient 'pod'.
4. Speed control lever.
5. SV1/SV2 speed activation buttons are conveniently located in the adjustable armrest.
6. DTM button.



# Dyna-VT for versatility and precision

With Dyna-VT there is no compromise. From 'creep' applications as low as 0.03 km/h to high-speed road transport, you set the parameters for power, economy and comfort so that you can easily extract the maximum performance at the lowest operating cost.



Here are just a few examples of how perfectly matched ground speed, engine speed and power requirement can benefit a wide range of applications:



**Low speed and lower power requirement.**  
Harvesting and planting - with precise ground speed control, to reduce engine speed, minimise in-cab noise and maximise fuel economy.



**Maximum speed and high power requirement.**  
Transporting a fully laden trailer from the field at high speed - with maximum engine power available to maintain speed on hills.



**Low speed with a high power requirement.**  
Using a power harrow/seed drill combination - with PTO power and productivity maximised and with the ability to fine-tune travel speed to optimise work quality.



**Maximum speed and low power requirement.**  
Towing an empty trailer to the field - at up to 50 km/h\* with an engine speed of only 1600 rpm, to minimise in-cab noise and reduce fuel consumption.

\* Depending on market/legislation



## Choice of operating modes

In addition to Lever Mode, where the Power Control lever or armrest-mounted Dyna-VT lever are used, Pedal Mode is also available.

## Pedal Mode

Pedal Mode enables the tractor to be controlled by the use of the accelerator pedal or the hand throttle. It is possible to set an engine rev range (minimum 1,400 and maximum 2,260 revs) between which the engine is permitted to

operate. This enables the operator to set the tractor precisely for maximum performance and economy for the prevailing conditions.

**Forager Mode**, is ideal when foraging or baling. This mode maintains pre-set engine speed and maximum power.

So if a large lump of crop is encountered in the swath, just lift off the pedal while the material is

baled or chopped. Ground speed is adjusted but engine speed and power is maintained.

Once the problem has been tackled, simply press the pedal and you're off again at normal working speed.

# More power at the wheels and PTO

The light yet tremendously strong transaxle design and low power losses through the highly efficient transmissions give all MF 6400 and MF 7400 Series tractors an outstanding power-to-weight ratio. And with standard PTO speed coinciding with maximum engine power and significant power boost available when the PTO is engaged\*, there is always plenty of power in reserve.

## More PTO choice

A wide range of fully independent PTO speeds is available, including 540/1000 rpm plus economy PTO systems.

Speed selection is controlled from the driver's seat, plus exchangeable flanged shafts. The flanged PTO shaft is extremely strong and provides a simple, 'oil-less' shaft change.

Control for front (optional) and rear systems is grouped conveniently to the right. Additional fender-mounted engagement and emergency stop buttons also give added convenience and safety.

## Power with economy

540 and 1000 rpm PTO speeds are achieved at or near to 2000 rpm, which is also maximum engine power. With the ability to closely match ground speed at the chosen engine speed, you can always

match PTO speed, forward speed and power for optimum output and fuel economy.

## Economy PTO

For lighter duty work, '540 Eco' (750) PTO speed is at around 1550 engine rpm, further improving fuel economy and helping to reduce in-cab noise levels.

## Automated PTO control

In 'Auto' mode, the PTO can be automatically disengaged when the linkage is raised (or when travelling at speeds above 25 km/h) and re-engaged when the linkage is lowered.

Further reducing the need for operator input, the Transmission Controller monitors and controls PTO engagement depending on load. This gives a smoother 'take-up', giving improved driver comfort and also helping to protect both implement and

tractor from damage due to inappropriate engagement.

## Differential locks and 4-wheel drive

The Transmission Controller also takes care of many of the normally repetitive tasks of 4-wheel drive and differential lock operation.

It ensures that you have 4-wheel drive when you need it; when braking and when the differential lock is engaged, and switches it off when you don't; at over 14 km/h.

The system also engages the differential lock when you need it (after initial manual engagement); when the implement is lowered into work and disengages it when you don't; when the linkage is raised or when using independent brakes and also when travelling at more than 14 km/h.

\*See Page 8 and specifications for details



01 - 02 Convenient PTO speed selection (01, MF 6400-02, MF 7400).

03 Fender-mounted PTO controls for added convenience and safety.

04 PTO engagement and 'Auto' activation switches are well placed and easy to operate.

# MF hydraulics: power with precision

The MF Electronic Linkage Control system still maintains its position as the industry leader in terms of accuracy, responsiveness, ease of use and reliability. And with high-capacity hydraulic systems providing excellent lift capacity and high oil flow for external services, you can be sure that you'll get optimum performance from linkage-mounted and hydraulically-driven equipment.

## Accurate draft control

Massey Ferguson's digital ELC system gives the highest standards of draft and depth control. This optimises weight transfer and traction, giving reduced wheelslip, tyre wear and fuel consumption and increased output.

## Simple ELC panel

With the more frequently-used controls armrest-mounted and a straightforward ELC control panel, accurate operation is easy.

The system also incorporates sensitivity, quick soil engagement and automatic drop speed as standard.

The rear linkage can also be operated from conveniently mounted push buttons on each rear fender.

## Load sensing hydraulics

The Closed Centre Load Sensing (CCLS) system provides high oil flow (up to 150 litre/min) for both linkage and external services, with virtually instantaneous response. And as flow and pressure are automatically regulated according to demand, there's no wasted power - or fuel, used in pumping oil that's not required.

## Auxiliary spool valves

Implement hook-up is easy too, with 'decompression couplers' that enable connection and disconnection under pressure.

With a choice of mechanical or electro-hydraulic spool valves, programmable SMS or fingertip switches, complex equipment can be controlled more easily and effectively than ever.

## Rear axle and linkage

The rear axle and 3-point linkage are highly specified. Twin external lift rams, high visibility pick-up hitch and drawbar, external linkage control on both rear fenders, twin variable float telescopic stabilisers and three spool valves are all standard equipment.

## Active Transport Control (ATC)

When driving across the headland or transporting heavy mounted equipment, implement 'bounce' can occur.

Active Transport Control is integrated into the ELC system as standard. It is a shock-absorbing system that minimises the 'pitching' action - automatically adjusting for different implement

weights. This gives smoother, safer, faster transport and, by reducing shock loads through the lift rams and hydraulic circuits, also minimises the risk of damage to the lift system.

ATC is independent of the transport lock and can be controlled either manually or automatically, linked to the ELC lift/lower switch. It is then activated when the implement is raised and deactivated when the implement is lowered.

## ATC and QuadLink

ATC operates in conjunction with the QuadLink suspended front axle to give exceptional stability when transporting or operating mounted equipment at speed, giving greater comfort, safety and productivity.

## QuadLink features:

- Integration with the chassis design
- Can be easily switched on or off
- Fully adjustable to accommodate weight of front implement attachment



01 Natural layout of controls improves comfort and productivity (Dyna-VI with new Dynamic Tractor Management).

02 Well-specified linkage and hydraulics.

03 Decompression couplers enable easier connection of implement hydraulic services.

04 Integrated Active Transport Control gives faster, safer transport of mounted equipment.

05 Front mounted hydraulic couplers enable easy hydraulic operation of front mounted implements.

# Advanced Field and Headland Management Systems

From the Spool Valve Management System (SMS) to fully programmed implement control via Datatronic III and ISOBUS, MF 6400 and MF 7400 Series tractors have among the most comprehensive Field and Headland Management Systems available today.

Whichever level you choose to meet your business needs, the result is simply a more relaxing, more productive working day.



## Spool Valve

### Management System (SMS)

SMS\* gives easier, more precise, memorised control of the electro-hydraulic, proportional spool valves.

### SMS: accuracy and simplicity

SMS enables external hydraulic oil flow rates to be memorised and controlled via either an armrest-mounted joystick or fingertip toggle switches\*. Each time the same function and flow is required, a single movement of the joystick or fingertip switch is all that is needed.

### The benefits of SMS

Memorised flow rates and one-touch operation greatly simplify field, and especially, headland manoeuvres when operating complex equipment or front and rear combinations.

And, of course, SMS is ideal for faster, more efficient front loader operation.

## Integrated Tractor

### Control System (ITCS)

ITCS (available as an option on all models and standard when Datatronic III is specified) provides an entry level of field and headland management that is ideal if all of the functions of Datatronic III are not required.

### ITCS enables management of:

**Wheelslip control** – to automatically limit wheelslip to an operator-set maximum. This increases traction, reduces tyre wear and protects soil structure.

### Spool Valve Management

– to set the flow and timing of the spool valves controlled by the joystick or fingertip SMS switches.

**Linkage/external services oil flow priority** – to control, as a precise percentage, the split of oil flow to the linkage and spool valves to ensure optimum efficiency for different applications.

**Headland control** – interacts with Engine Speed Control to automatically change between A and B engine speeds as the linkage is raised and lowered.

Engine speed change can be delayed between 0 and 5 seconds from linkage lift/lower switch activation.

### More information with ITCS

ITCS also gives a read-out of both 'trip' and total fuel usage, and displays pre-set engine speeds, forward speed and PTO speed.

### Datatronic III: Information, control and easy operation.

Two versions of Datatronic III are now available; with colour screen, and with colour screen with video capability and ISOBUS connectivity.

\* Options vary by model and market; see 'Specifications'



01

SMS Joystick control provides convenient and precise spool valve operation.



02

Individual fingertip control of 4 spool valves enables accurate control at the touch of a button.



03

Display and adjustment of additional automated functions provides efficient operator and machine control.



04

Convenient touch pad enables quick and easy operation of ITCS.



05

Datatronic III provides comprehensive information and additional automation to improve the quality of work and reduce the operators' workload.



06

Data logging provides a valuable source of tractor and implement recording that can easily be viewed and analysed on a computer to improve profit and increase output.

# More than just a tractor...

...more than just a headland management system – Datatronic's advanced features that help you every step of the way.

## Programmed headland and implement control with Datatronic III

Datatronic III is controlled from a main screen with up to seven main application menus, plus 'Settings' for console set-up.

### Work menu

The work screen displays engine and PTO speed, travel speed and wheelslip information. A wide range of tractor functions can also be displayed and controlled, including spool valves, memory, Dual Control and TIC.

### Headland menu

The Headland menu, quite simply, gives access to the most comprehensive headland management system available today.

It enables straightforward programming of up to 35 operations, activated at the touch of an armrest-mounted button. The sequence can be modified or over-riden at any time.

### Memories menu

Six independent sets of information can be stored, named and displayed. The data can also be transferred, via SD memory card, to the office computer for analysis or from tractor to tractor to speed-up implement setup.

Recorded information includes:

- tractor settings, including gearbox, spool valves or a recorded headland sequence;
- implement width
- information gathered during field operation, including hours and area worked, fuel usage, distance covered... and more.

### Electro-hydraulic spool valves menu

The EHS Valves menu is used to set the operating characteristics of up to four electro-hydraulic spool valves. You can enable or disable 'float' and accurately set ram extension and retraction, flow rates and kickout timing.

### ISOBUS compatibility

ISOBUS, the industry-standard for implement connectivity, means that all of your equipment can be easily set up and operated via the GTA Console.

### Remote camera

The optional remote video camera can be fitted anywhere on the tractor or on any front or rear-mounted implement.

Used in conjunction with clear on-screen view (actual image shown) on the GTA Console when reversing enables faster, safer haulage work or, the operator to view any rear or side-mounted equipment.

### Dual Control menu

The Dual Control menu enables fully programmed command of front and rear Dual Control and Trailed Implement Control, so maximum output and work quality can be achieved with a minimum of operator input.

When using semi-mounted ploughs, Dual Control automates furrow entry and exit, aids setting the plough, improves evenness and control of work and gives the full benefit of wheelslip control.

When front linkage is fitted, front Dual Control gives automated depth and entry and exit points with front and rear linkage-mounted equipment.

### Trailed Implement Control (TIC)

TIC uses wheelslip data to automatically regulate working depth to optimise productivity when using trailed equipment. It is operated via the standard armrest-mounted ELC controls with set-up and monitoring via either ITCS or Datatronic III.

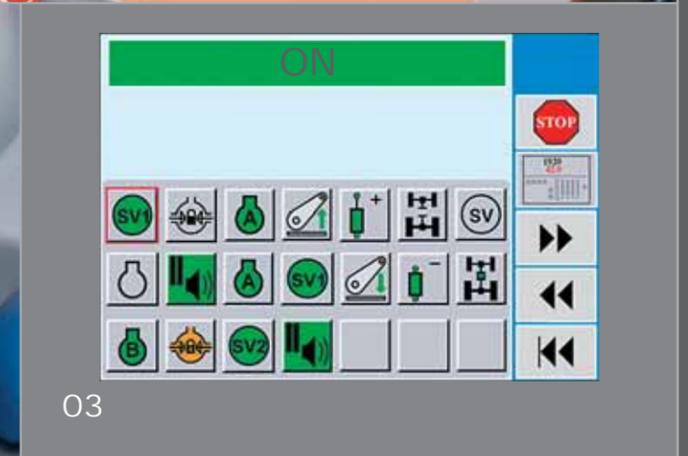
For comprehensive information about Massey Ferguson advanced Field and Headland Management systems, please ask your Dealer for the 'MF Technology' brochure.



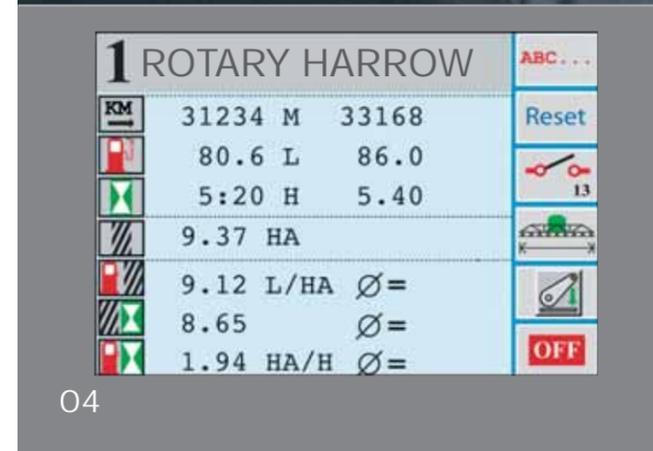
01



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01 Navigation and selection of the functions either using the keys or the encoder.  
 02 - 03 Armrest-mounted button starts or stops the pre-programmed headland sequence.  
 04 A typical Memory screen, showing fuel usage, hours worked, area worked and distance travelled.  
 05 An example of an ISOBUS function, connection.  
 06 ISOBUS implement gives high quality image on the colour/ISOBUS GTA Console.

# Tailored options for higher productivity

## Massey Ferguson Integrated Front Linkage System (IFLS)

A new front axle support casting enables factory-installation of Massey Ferguson Integrated Front Linkage System (IFLS) a neat, fully integrated front linkage and PTO system. Attached to an exceptionally strong structural engine sump, this design means that no additional side rails are necessary when specifying the front linkage. So engine access is further improved and a tighter steering lock is achieved, for faster headland turns and manoeuvring.

The integrated front linkage design also has tremendous strength to cater for heavy, high-productivity front-mounted equipment. The new front linkage also incorporates a towing clevis, electrical connector and up to two spool valve couplers.

## GTA software

Data recorded using the Datatronic III memory function (see page 20) can be displayed on the console, transferred via memory card from tractor to tractor or to the office computer. This award-winning

system can help improve productivity, simplify day-to-day operation and also provide vital 'traceability' data via PC-based GTA software can be used for record keeping, analysis and mapping:

**GTA100 Communicator** (standard) - enables machine use and job data to be managed, viewed and exported to third party farm management programmes.

**GTA200 Record Keeping** (optional) - allows machine performance data to be allocated to a specific job or field to produce a range of reports, also enabling accurate crop traceability.

**GTA300 Mapping** (optional) - enables the user to create maps from data containing GPS-based positioning information gathered while working. This data is recorded with other data, for example forward speed, fuel consumption or yield.

## Auto-Guide™

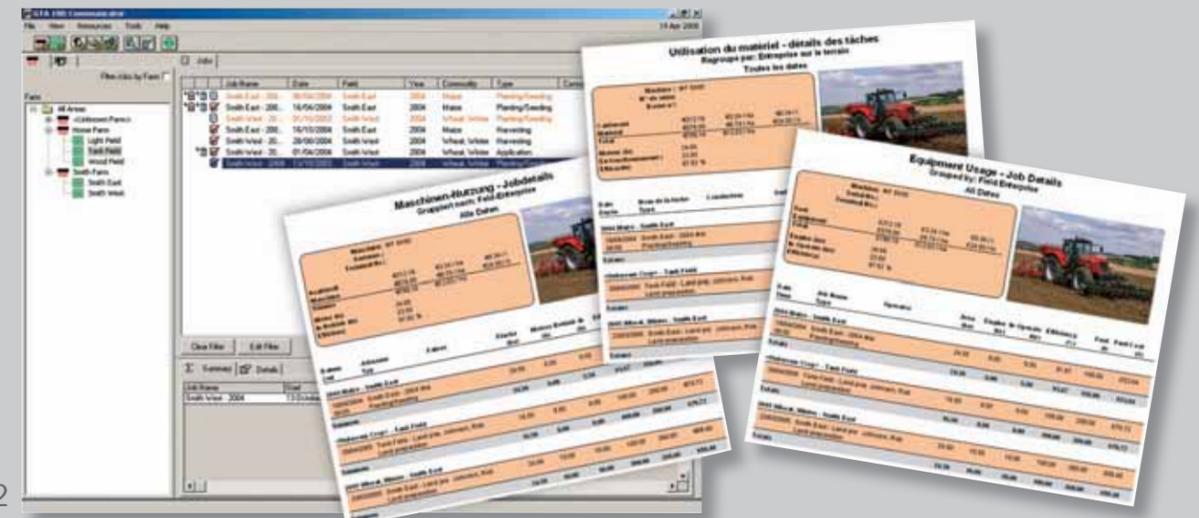
For faster, precision farming, the optional Auto-Guide satellite navigation system\* uses leading GPS technology to guide your tractor and implements at higher rates of speed and accuracy. This is especially valuable for more accurate operation at night, in low visibility or when working in pre-emergent crops.

Auto-Guide steers the tractor, without operator input, to make parallel bouts avoiding overlap or unworked land. This reduces driver fatigue and fuel usage, eliminates unnecessary chemical application and can significantly increase productivity.

\*For more information on Auto-Guide, please refer to the MF Technology brochure.



01



02



03

# A joy to drive, a pleasure to own

## Built-in durability

The MF 6400 and MF 7400 'transaxle' designs are extremely strong yet give low overall weight, with an excellent power-to-weight ratio.

This gives excellent load-carrying capacity and handling characteristics, while the immense rigidity reduces stress on components, reducing maintenance requirements and down-time.

## More style, more practicality

The sleek bonnet on MF 6400 and MF 7400 models is stylish and practical. Rear hinged, the lockable bonnet raises fully, giving completely clear access to the engine, radiator and re-designed cooling package.

The radiators have a greater surface area for improved cooling and also hinge and separate for easy cleaning.

## Simple servicing and routine maintenance

The conveniently placed engine oil dipsticks and fillers are safely positioned on the 'cold' side of the engine, away from the hot exhaust.

And with convenient ground level refuelling, self-adjusting brakes and electronic protection of engine speed, 4WD, differential locks, PTO and transmission, routine tasks are easy and servicing requirements are minimised.



# Individual care packages for individual circumstances

Nothing is ever certain in life; this is especially true if you work within the agricultural sector. So imagine how much easier life would be if you could experience true peace-of-mind where your farm machinery is concerned; no more hidden costs or surprise invoices.

**manager** Service and Repair Contract\* is a complete package aimed at providing total care for your tractor including routine maintenance, repair cover and full AGCO backed warranty. This fully-backed contract will cover critical components such as:

- Engine and transmission
- Hydraulics
- PTO
- Steering
- Electronics
- Cab and controls
- Axles

#### Assurance for the life of the machine

You can be assured of 'preventative' servicing using the latest technology and professionally trained technicians. With years of experience they are on hand to ensure that your machine runs at optimum performance.

All of this will be carried out according to a strict maintenance schedule supplied by Massey Ferguson.

With a **manager** contract and through this 'preventative' servicing, your machine will maintain excellent productivity throughout its long working life. The most important aspect of this package is that you will never incur any unexpected hidden costs.

It is possible to cut the cost of maintaining your machine through 'preventative' servicing and maintenance, thereby reducing long term ownership costs and securing a productive future for your business.

#### Tailored to your needs

**manager** has been designed to cater for your individual needs. Cover is available for up to 5 years or 6,000 hours depending on your requirements. Available at initial point of sale or, for added flexibility, you can choose to take on a **manager** contract any time up to 12 months after machine registration.

Your dealer will prepare the servicing contract and can tailor it to last up to a maximum of 10,000 hours.

By choosing **manager** Service and Repair Contract, not only are you assured of complete peace-of-mind for you and your business but also a higher residual value for your machinery, full dealer history and genuine AGCO Parts inside and out.

**For more information on manager Service and Repair Contracts speak to your Massey Ferguson dealer.**

\* **manager** Service and Repair Contract may not be available or may be market dependent. Please contact your Massey Ferguson dealer to check availability in your area.



# Customer Support

## AGCO Customer Support... providing local service to the global brand

Massey Ferguson is a true global brand with machines operating all over the world, from revolutionary "little grey fergie" tractors to the latest high-tech tractors and combines. Have you ever wondered how we continue to provide industry-leading parts and service support to such a vast array of machines and technologies across the globe?

Behind every Massey Ferguson machine is the powerful aftersales support of AGCO's Customer Support organisation.

Our main aim is to ensure that every machine - old or new - is fully supported locally, offering every Massey Ferguson owner:

- The best service in the industry
- Low cost of ownership
- A reliable and durable machine
- Minimum machine downtime
- A high resale value

**State-of-the-art warehousing and logistics from AGCO Parts**  
Of course, every Massey Ferguson dealer is fully backed-up by the AGCO Customer Support organisation which provides industry-leading parts supply through AGCO Parts' state-of-the-art warehousing and logistics. With outstanding service levels, overnight delivery and inventory covering all Massey Ferguson machines - even those over 10

years old - we only ever supply genuine parts, and we guarantee the right fit, first time.

**The right aftersales solution whatever the age of machine**  
Whatever the age of Massey Ferguson machine, AGCO Customer Support has the right aftersales solution to save time & money, providing appropriate, affordable and reliable servicing and maintenance solutions in every situation.

**Practical local support where you need it**  
AGCO places great emphasis on providing the best service to our Massey Ferguson dealers and this extends beyond the exceptional servicing and maintenance solutions and parts supply:

- Expert training and specialist equipment
- Advanced diagnostic techniques
- Information retrieval technology to communicate the very latest parts and service information
- Highly skilled technical support groups

With aftersales support from AGCO Customer Support, it's not just about supplying a filter or doing an oil change. It's about providing the best solution to our customers' needs, wrapped up with industry-leading parts and service support.



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# Our promise to you

Our mission at Massey Ferguson, since the company was founded, has been to design, engineer and manufacture reliable, trustworthy and innovative tractors. Tractors that people recognise the world over.

## VISION

Our vision for the world of agricultural machinery has always been clear; to produce worthwhile and innovative solutions for professional farmers feeding the world. Always recognisable, the Massey Ferguson brand of products signifies technological advancement, enhanced design, strict testing and quality manufacturing which is consistently trustworthy and hardworking.

## INNOVATION

We've always been one step ahead when it comes to innovation. Our founder, Harry Ferguson is proof of that.

Through continual questioning and analysis of customers' needs, our products are designed, tested and built to enhance productivity, efficiency and convenience, constantly pushing the boundaries of farm machinery.

From the simplest push of a button to technological innovations in engine and transmission efficiency, we strive to make life simpler for the operator.

## LEADERSHIP

Massey Ferguson machinery is the most widely sold agricultural product in the world, making us the leaders in the agricultural arena. We've won awards for our class-leading technology and advancement in design and we're already driving ahead, environmentally and economically.

## QUALITY

It takes certain distinctive attributes to make a quality product. At Massey Ferguson, this distinction starts at the drawing board and doesn't stop. Every stage of manufacturing, from the building and testing process to sourcing the best components, demands excellence. Our products and services meet the most stringent standards allowing us to deliver our promises, confidently.

## RELIABILITY

We don't let a Massey Ferguson machine out of our sight until we are 100% sure it will perform to the high standards you expect. Only after rigorous and painstaking testing both in simulations and in the field, will we allow our products to leave the factory. Whatever you put your tractor through, day after day, season after season, we can guarantee we've already tested those limits and gone beyond them.

## SUPPORT

Agriculture can be a tough business, that's why we make sure that you can get support whenever you need it and at crucial times of the year. Be assured of sustainability from more than 3,200 dealer outlets in over 140 countries and a comprehensive machinery distribution network. You'll be part of a dedicated family of specialists who make it their business to give you genuine, top quality service support.

Equally, we won't let an opportunity slip through your fingers. If you have the commitment but not necessarily the financial resources to compete in today's market-driven climate then AGCO Finance could have the solution. Ask your local dealer for more information.

Financial options are market specific but can include leasing, hire purchase, contract hire and loan facilities.

## PRIDE

Pride means many things to us at Massey Ferguson. It's in everything we do and it shows. It's in our proud heritage, our unique product design and our ongoing support to our customers.

## COMMITMENT

We are deeply committed to delivering the highest of expectations and to build quality, reliable products with innovative features that are backed by the best support packages. Ultimately, we are committed to continuous growth and profitability for all, whilst recognising the needs of both large and small businesses through professionalism and quality.



# Specifications

		MF 6485 <i>Dyna-6</i>	MF 6490 <i>Dyna-6</i>	MF 6495 <i>Dyna-6</i>	MF 6497 <i>Dyna-6</i>	MF 6499 <i>Dyna-6</i>	MF 7485 <i>Dyna-VT</i>	MF 7490 <i>Dyna-VT</i>	MF 7495 <i>Dyna-VT</i>	MF 7497 <i>Dyna-VT</i>	MF 7499 <i>Dyna-VT</i>
<b>Engine power, Nominal</b>											
Rated hp @ 2200 rpm	ISO hp (kW)	160 (118)	170 (125)	185 (136)	200 (147)	215 (158)	165 (121)	175 (129)	190 (140)	205 (151)	220 (162)
Maximum hp @ 2000 rpm	ISO hp (kW)	175 (129)	185 (136)	198 (146)	215 (158)	230 (169)	180 (132)	190 (140)	203 (149)	225 (166)	240 (177)
Maximum torque	Nm	750	796	841	883	928	836	880	904	928	970

## Engine power, in Transport/PTO

Maximum hp @ 2000 rpm	ISO hp (kW)	190 (140)	200 (147)	210 (155)	230 (169)	245 (180)	-	-	-	-	-
Maximum torque	Nm	836	880	904	928	970	-	-	-	-	-

## Max. power available @ PTO shaft

Maximum hp @ 1000 PTO rpm (OECD, accuracy +/- 2%)	OECD hp (kW)	160 (118)	170 (125)	180 (132)	195 (144)	205 (151)	160 (118)	170 (125)	180 (132)	195 (144)	205 (151)
<b>Specific fuel consumption<sup>1</sup></b>	g/kWh	204	201	201	200	200	204	201	201	200	200

## Engine

AGCO SISU POWER	Water cooled, direct injection diesel. Tier III compliant. Common rail electronic fuel injection. 4 valves per cylinder.										
Type		66.CTA	66.CTA	66.CTA	74.CTA	74.CTA	66.CTA	66.CTA	66.CTA	74.CTA	74.CTA
Capacity/ no. of cylinders	litre/no.	6.6/6	6.6/6	6.6/6	7.4/6	7.4/6	6.6/6	6.6/6	6.6/6	7.4/6	7.4/6
Aspiration		Turbo/Intercooled									

## Clutch

Operation and control		Forward and reverse, multi-plate, oil-cooled clutches with hydraulic actuation and electronic control					-	-	-	-	-
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## Transmission

Dyna-6: Speedmatching (Up to 50 km/h max. speed <sup>▲</sup> )	●	Semi-powershift gearbox with 6 Dynashift ratios in each of 4 electro-hydraulically controlled ranges. Power Control and Speedmatching functions.					-	-	-	-	-
Dyna-6: AutoDrive (Up to 50 km/h max. speed <sup>▲</sup> )	○	As 'Speedmatching', plus AutoDrive, giving manual, semi- or fully-automated Dynashift changes					-	-	-	-	-
Creeper Speeds	○	Additional 12F/12R Creeper Speeds					-	-	-	-	-
Dyna-VT											
Field speed range		-	-	-	-	-	Stepless, continuously variable transmission 0.03 – 28 km/h Forward and 0.03 – 16 km/h Reverse 0.03 – 50 km/h <sup>▲</sup> Forward and 0.03 – 38 km/h Reverse				
Road speed range											

## Power Take-Off (Rear)

Operation and control		Independent, electro-hydraulic with rear fender-mounted start/stop control and headland automation. In-cab control lever									
Speed change: Shiftable, flanged shaft (6 and 21 spline)		●	●	●	●	●	●	●	●	●	●

## PTO speed @ engine rev/min

540 rpm (6 spline shaft)	rpm	1900	1900	1900	1900	1900	2060	2060	2060	2060	2060
1000 rpm (21 spline shaft)	rpm	2000	2000	2000	1930	1930	2030	2030	2030	2030	2030
Economy PTO @ engine rpm	rpm	○ /1520	○ /1520	○ /1520	○ /1520	○ /1520	● /1600	● /1600	● /1600	● /1600	● /1600
Shaft diameter		35mm (1 <sup>3</sup> / <sub>8</sub> in)									

## Front Power Take-Off and Linkage

MF IFLS - Integrated Front Linkage System	kg	○	○	○	○	○	○	○	○	○	○
Linkage lift capacity	kg	4000	4000	4000	4000	4000	4000	4000	4000	4000	4000
Operation and control		Independent, electro-hydraulic. 6 or 21 spline, 35mm (1 <sup>3</sup> / <sub>8</sub> in) diameter PTO shaft. 1000 rpm @ 2040 engine rpm									

		MF 6485 <i>Dyna-6</i>	MF 6490 <i>Dyna-6</i>	MF 6495 <i>Dyna-6</i>	MF 6497 <i>Dyna-6</i>	MF 6499 <i>Dyna-6</i>	MF 7485 <i>Dyna-VT</i>	MF 7490 <sup>▲</sup> <i>Dyna-VT</i>	MF 7495 <i>Dyna-VT</i>	MF 7497 <i>Dyna-VT</i>	MF 7499 <i>Dyna-VT</i>
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<b>Linkage and Hydraulics</b>		Electronic control of draft, position, Intermix, height/depth, rate of drop, 'quick soil engagement' and Active Transport Control									
Max oil flow/pressure Closed Centre (load sensing)	litre/min / bar ●/○	110/150/200	110/150/200	110/150/200	110/150/200	110/150/200	110/150/200	110/150/200	110/150/200	110/150/200	110/150/200
Lower links		Quick-attach, hook end with Cat. 2/3 balls and cones									
Maximum lift capacity, at link ends	kg	9100	9100	9100	9100	9100	9300	9300	9300	9300	9300

## Auxiliary spool valves (All Load Sensing. Other specifications are available. Please consult your Dealer)

Spool valves		Large choice of hydraulic combinations with up to 5 spool valves, with 110 or 150 litres flow and mechanical spool valves, or electrical (SMS joystick or fingertips) or combination of both types.					Large choice of hydraulic combinations with up to 4 spool valves, with 110 or 150 litres flow and mechanical spool valves, or electrical (SMS joystick or fingertips) or combination of both types.				
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## Steering

Steering		Hydrostatic, balanced, with tilting telescopic steering column									
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## Brakes

Operation and control		Oil-cooled, single plate discs with hydraulic actuation and power assistance									
Trailer brakes		Hydraulic, pedal-operated									

## 4WD Front axle

Differential lock		Hydralock (full engagement/disengagement), with automated control									
QuadLink suspended axle		○	○	○	○	○	●	●	●	●	●

## Standard Wheels and Tyres (Full range available. Please consult your Dealer)

Front		480/70R28	480/70R28	420/85R30	480/70R30	480/70R30	480/70R28	480/70R28	420/85R30	480/70R30	480/70R30
Rear		580/70R38	580/70R38	520/85R42	620/70R42	620/70R42	580/70R38	580/70R38	520/85R42	620/70R42	620/70R42

## Track adjustments (with standard wheels and tyres)

Front - 4WD/QuadLink	m	1.64-2.13	1.64-2.13	1.64-2.13	1.65-2.13	1.65-2.13	1.64-2.13	1.64-2.13	1.64-2.13	1.65-2.13	1.65-2.13
Rear	m	1.86-2.08	1.86-2.08	1.90-2.11	1.72-2.32	1.72-2.32	1.86-2.08	1.86-2.08	1.90-2.11	1.72-2.32	1.72-2.32

## Weights and dimensions (approximate, with standard wheels and tyres, 4WD model, less fuel)

Minimum, no ballast	kg	6750	6800	7000	7300	7300	6950	7000	7200	7400	7400
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## Dimensions (Less front weights)

Overall length, to lower link ends	m	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Overall height - over cab	m	3.05	3.05	3.05	3.10	3.10	3.05	3.05	3.05	3.10	3.10
Wheelbase	m	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Turning circle, dia, less brakes	m	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3
<b>Fuel tank capacity</b>	litre	380	380	380	380	380	380	380	380	380	380

● = Standard  
○ = Optional  
– = Not applicable/available

▲ = Depending on market/legislation  
⊕ = ISO TR 14396 (EG 97/68 values are comparable to ISO values +/- 0.5%)

<sup>1</sup> = Optimum specific fuel consumption (Manufacturer's test)  
\* = Fender width complying with 50 km/h maximum road speed legislation

Every effort has been made to ensure that the information contained in this publication is as accurate and current as possible. However, inaccuracies, errors or omissions may occur and details of the specifications may be changed at any time without notice. Therefore, all specifications should be confirmed with your Massey Ferguson Dealer or Distributor prior to any purchase.

# MF 6400 and MF 7400 highlights

Here's a quick reminder of some of the advanced features of the MF 6400 and MF 7400 Series tractors that further enhance their place firmly within the high horsepower sector.

- 01 Two new models in the MF 7400 Series line-up make this range the superior choice in the high horsepower sector.
- 02 Highly efficient, powerful diesel engines, built using the latest technology to produce maximum torque, outstanding fuel economy and lower emissions.
- 03 Choose from 10 models in the 175-240 hp category to get precisely the right tractor for your farming business.
- 04 Spacious, exceptionally quiet cab, combines with sector-leading levels of comfort to create a relaxing, stress-free working environment for the operator.
- 05 MF 6400 Series tractors have the renowned Dyna-6 semi-powershift transmission, while the MF 7400s deliver the power via the unbeatable Dyna-VT continuously variable transmission.
- 06 Available with Datatronic III, video capability and ISOBUS compatibility, together with the most comprehensive, yet simple headland management system.
- 07 Smooth, modern styling in line with the new Massey Ferguson 'family' design.
- 08 Transport boost on most models means 50km/h can be achieved when undertaking transport work, reducing journey times and raising operator productivity.
- 09 New front axle support casting and 'structural' engine sump to allow fitting of the fully integrated front linkage and PTO system.

Please also see MF 6400 and MF 7400 medium horsepower brochure for models from 100 to 170 hp.



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