# Controlled power with 'Xtra' strength and performance

MF 8210 (154 hp)

**The 8200 Xtra Series from Massey Ferguson now has even more power, significantly more torque (with up to 40% torque back-up) and more features, designed to ease day-to-day operation, increase productivity and maximise profit.**

### Xtra engine torque

Whilst complying with the most stringent emissions legislation, the latest Perkins and SISU DIESEL engines all retain MF 'Dynatorque' characteristics, to ensure that power and, now, even higher torque are matched perfectly to the job in hand.

### Unique transmissions

The 18 speed **Powershift** gearbox features smooth operation plus **'Power Control'** which, in addition to the armrest mounted Powershift control, provides left hand command of power shuttle, Powershift changes and de-clutching.

The acclaimed **Dynashift Plus** gearbox is available on models up to the new 214 ISO hp 8250 Xtra. Also with Power Control, Dynashift Plus provides a really cost-effective 32/32 speed transmission with no less than 14 speeds in the field working range.

### Speed matching and 'AutoDrive'

The Dynashift Plus gearbox features '**Speed Matching**' as standard and '**AutoDrive**' as an option. Described fully on pages 12 and 13, these systems give semi- or virtually fully-automatic transmission control.

### Headland and field management

The spacious cab has a range of electronic driving aids fitted as standard to ensure easy operation, high quality work and high productivity. With Fieldstar™ now as a factory-fitted option, DATATRONIC II (standard on some models), the 'Spool Valve Management System', 'Trailed Implement Control' and 'Dual Control' combining with sophisticated transmission automation, a comprehensive **'Headland and Field Management System'** can be specified. This gives the ultimate in operating automation, **proven by the MF 8280 Xtra which, in March 2002 beat the previous ploughing world record by 42 ha, achieving 251 ha in 24 hours.**

| Model | Engine | Capacity | [1]Power |
|---|---|---|---|
| MF 8210 | 6 cyl. turbo | 6.0 litre | 154 |
| MF 8220 Xtra | 6 cyl. turbo | 6.0 litre | 166 |
| MF 8240 Xtra | 6 cyl. turbo | 6.6 litre | 190 |
| MF 8250 Xtra | 6 cyl. turbo | 7.4 litre | 214 |
| MF 8260 Xtra | 6 cyl. turbo | 7.4 litre | 231 |
| MF 8270 Xtra | 6 cyl. turbo | 8.4 litre | 261 |
| MF 8280 Xtra | 6 cyl. turbo | 8.4 litre | 288 |

[1] ISO hp (TR14396)

MF 8270 Xtra (261 hp)

MF 8220 Xtra (166 hp)

MF 8250 Xtra (214 hp)

# The MF cab... a highly efficient 'centre of operations'

**An essential element of all tractor operation is the comfort and efficiency of the cab and controls. The MF 8200 Series cab provides excellent visibility and plenty of space, with precise, well-placed controls and clear instrumentation to enable maximum operating efficiency in all conditions.**

### Unhindered access

Access to the spacious cab is really easy from either side of the tractor. With two wide-opening, rear-hinged doors, large self-cleaning steps and a flat, uncluttered floor area. Inside, the new seat is fully adjustable, including lumbar support and a built-in back rest extension. There's also a swivel facility to give the operator a more comfortable view of rear mounted equipment. Neatly folded away to the left of the main seat, a secondary seat is available which can be quickly raised into position to give a passenger a safe, comfortable ride.

### Excellent visibility

5.7m$^2$ surface area of tinted glass, narrow pillars and side-mounted exhaust all help to ensure excellent all-round visibility. The large, telescopic rear view mirrors with a handy rotary knob for simple adjustment, are a further aid to safe manoeuvring and transport.

### Outstanding comfort

Air filtration, tinted glass all round, efficient heating and ventilation - including rear 3/4 and rear window demisting, plus air conditioning as standard all enhance comfort and driver efficiency. And when work schedules get really tight, the excellent internal and external lighting, convenient storage areas, drinks cooler, high quality stereo and exceptionally quiet cab, all help to boost output and performance by keeping the driver fresh and alert.

**Left: The high specification swivelling seat, featuring armrest mounted controls (optional SMS and QuadLink controls shown)**

**A 'super de-luxe' seat is also available (not shown), featuring pneumatic lumbar support, heating and 'active carbon' material, for even greater comfort.**

**Right: Cab gives superb space, comfort and control (Powershift model shown)**

**Right: Spend the longest working days in cool, relaxed comfort**

# Maximum productivity through ergonomic efficiency

**Simplicity is the key to control in the 8200 Series. Clear instruments, large switches and rotary controls, uniquely efficient gear and clutch control; all clearly identified and close at hand, for safe, easy operation.**

**Unique Power Control**

The unique, well placed **'Power Control'** lever takes all the effort out of gear selection. Power shuttle, powershift changes and de-clutching are all finger-tip controlled by a single left hand lever. So the right hand is free to operate linkage and hydraulic controls, for faster headland turns and reduced cycle times.

**Smooth, simple controls**

The steering column is adjustable for angle and reach, so you can get just the right driving position. A new armrest-mounted 'joystick' is available, which controls the new Spool Valve Management System (SMS). There is a large rotary PTO switch, well positioned, ergonomically designed auxiliary hydraulic levers (for models without SMS) and a simple Electronic Linkage Control panel.

The most frequently used controls are mounted in the right armrest, and spool valve, gear levers and the new hand throttle lever are all close at hand.

**Overhead console**

Overhead, the roof hatch can be opened for additional 'natural' ventilation. In the neat roof console, a large analogue clock, stereo and air conditioning controls are conveniently located alongside a handy drinks holder/chiller.

**Speed selection is either via the Power Control lever or the armrest control (Powershift models)**

**Left: Power Control means total control; total simplicity**

**Clear display of all vital data ('Dynashift' console shown)**

### Digital instrumentation

The 'automotive' style dashboard features both conventional analogue and digital read-outs, so different types of information are displayed in the optimum way for fast, easy assimilation of vital data.

### DCC display

The Display Cab Controller (DCC), is standard on Powershift models. Pre-programmed gear selection, travel direction and current gear engaged are clearly displayed on an LCD read-out which also provides diagnostic codes. A 'Field Facts Monitor' is also incorporated, which monitors and displays a range of vital data.

### Automated control

One other significant factor contributes to the ease of operation ... automated control. With the standard **Transmission Control** system 'managing' a number of transmission related functions and **Datatronic II** (optional on some models, described more fully on page 20) providing highly accurate information, plus automatic wheelslip control, efficient operation and high quality work go hand in hand with comfort and safety.

**Right and below: Layout includes convenient armrest mounted controls (Dynashift model shown with optional SMS 'joystick' spool valve control).**

# 'Xtra' power and torque, plus efficient transmissions, for 'real' usable power

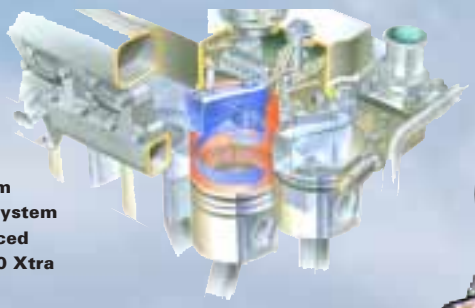
**8200 Xtra series tractors are equipped with the latest 'emission compliant', 6-cylinder turbocharged engines, giving more power and significantly more torque throughout the entire engine speed range. Further enhanced with a unique combination of highly efficient Powershift or Dynashift transmissions, plus advanced electronic and hydraulic systems, the 8200 Xtra can handle bigger, more productive equipment with ease.**

**Dynatorque engines**

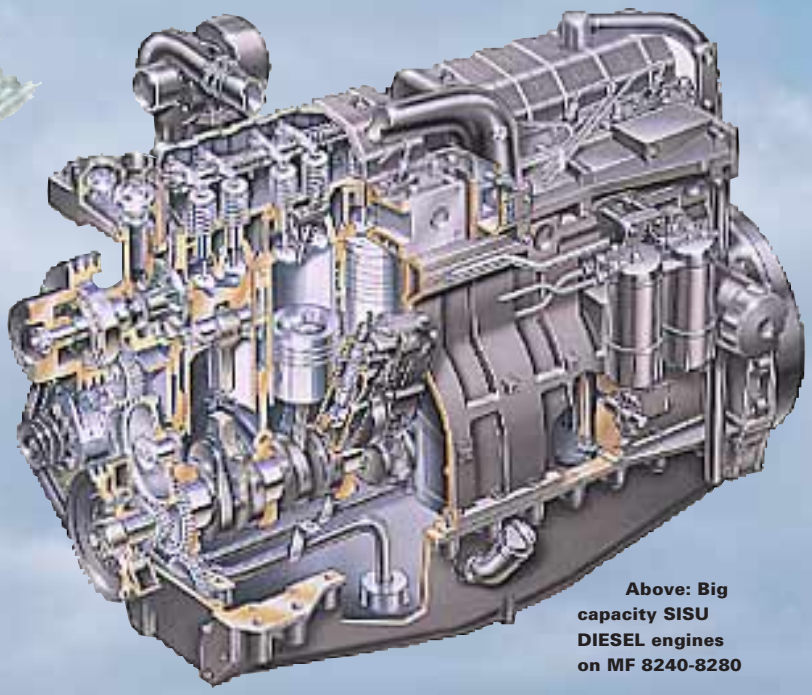
After extensive research of the power and torque requirements of different types of work, Massey Ferguson has developed its range of Dynatorque engines to give precisely the right combination of power and torque for each job and engine speed.

For example, **zone A** (see diagram), between 1800 and 2200 rev/min, covers heavy duty PTO applications. The need here is for high torque and rapid torque rise, to ensure that PTO speed is maintained at all times.

The engines have also been designed to give maximum power at PTO rated speed. This can be as much as 4.5% greater than rated power, ensuring optimum performance with high power PTO equipment. Power is maintained at, or above rated power in this zone, giving a massive 400 revs of 'power-plus performance'. In non-PTO applications, you can reduce engine speed whilst maintaining performance and greatly enhancing fuel efficiency.



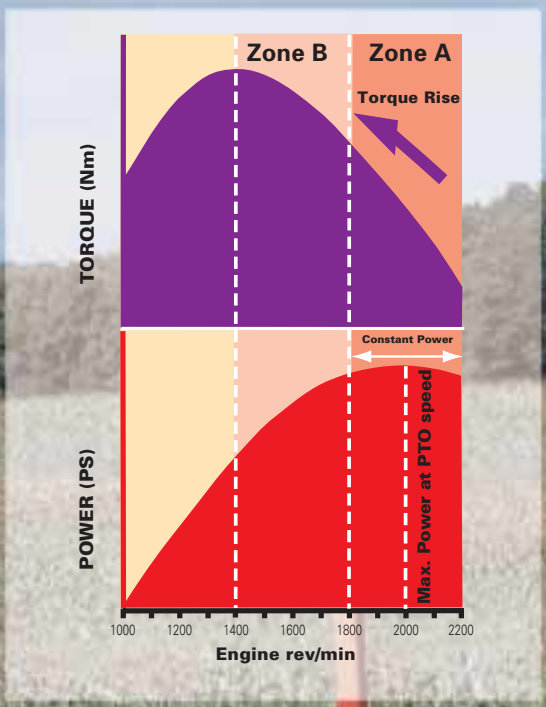
**Right: Fastram combustion system on the advanced MF 8210/8220 Xtra engines**



**Above: Big capacity SISU DIESEL engines on MF 8240-8280**

**Zone B**, from 1400 to 1800 rev/min, covers general farming applications, economy PTO work and transport. Here, the need is for high overall torque, as operating speed is often less important than just 'lugging' ability. Progressive torque rise perfectly complements the MF change-on-the-move transmissions for superb in-field performance. The 'bulged' power curve also means that in economy PTO applications, 85% of rated engine power is still available, giving high performance, reduced in-cab noise and exceptional fuel efficiency. Transport applications are also perfectly catered for by having massive torque at low engine speeds, ensuring easy starting with the heaviest trailers.

**Below: Xtra models now have more power and a big increase in torque - right throughout the engine speed range**



# MF Powershift: smooth, strong, with unique Power Control

**The latest-generation 18 speed Powershift gearbox provides excellent ground speed coverage with smooth, simple operation, plus tremendous strength and durability.**

### Smooth Powershift transmission

The 18 forward, 8 reverse speed (17 forward speeds when limited to 30 km/h) Powershift transmission is electronically controlled for almost imperceptible gear changes and enabling all changes to be made on-the-move under load, without declutching.

### Left or right-hand control

In addition to total control from the armrest mounted Powershift lever, **'Power Control'** uniquely, provides left hand command of both forward/reverse power shuttle, Powershift changes and 'declutching' which, though not required for gear changing, is still useful for momentarily disengaging drive when manoeuvring in tight spaces.

### Wide range of field and transport speeds

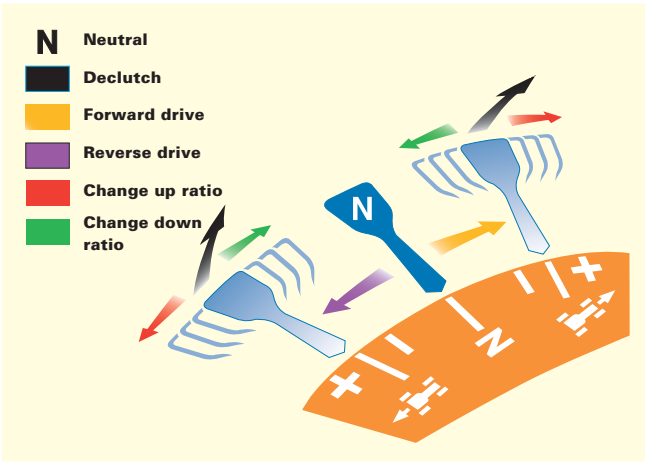
Simplicity of gear selection, is further enhanced by a 13% speed difference between 3rd and 15th gears and a 29% difference between the other ratios, so you can accurately and instantly match ground speed to virtually any application.

### Choice of shift options

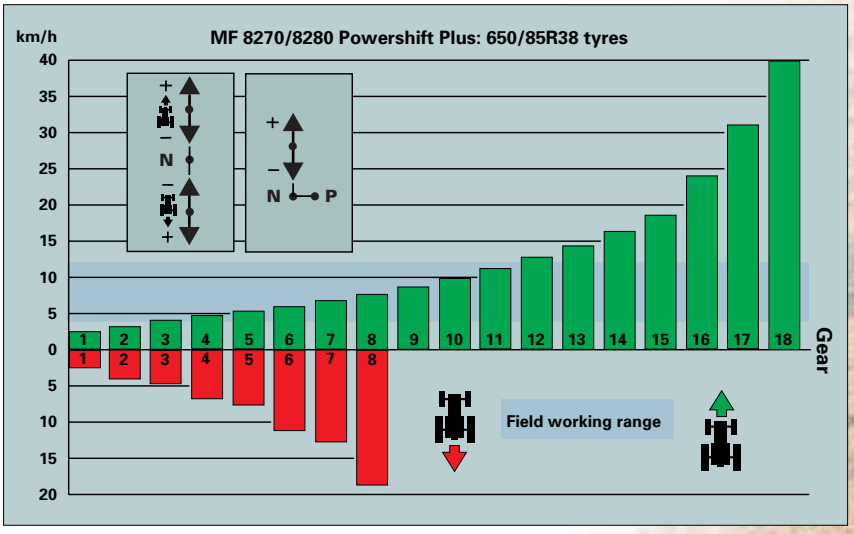
The electronic control system also enables a choice of shift options. These include the ability to preselect travel speed and forward/reverse shuttle speed; automatic speed matching while in transport, whereby when slowing down for a junction or hazard, depressing the clutch will automatically select the best gear for the reduced road speed; 'sequential shifting', and single gear changes – all from either the armrest-mounted lever or Power Control.

### Creeper speed options

Creeper speeds are available as an option, giving speeds as low as 600 metres per hour for specialist applications.




**Left and below: Operating the Multi-function Power Control lever**




**Left: New-generation Powershift transmission has 9 speeds within the 4-12 km/h field working range**

**The Powershift gearbox is massively constructed, rugged and smooth**

**Latest generation Powershift: Massive construction and strength**

Depending on tractor power, two versions of the Powershift gearbox are produced. Similar in design, both are massively contructed (the larger version is over 900 kg in weight) and easily capable of withstanding the heaviest workloads.

**Modulated clutches**

This 'latest-generation' Powershift transmission features exceptionally smooth ratio changes. This is achieved using nine electronically controlled, modulated clutches; three of which are engaged at any time to achieve drive. The fast, smooth changes mean that no momentum is lost in the field as with slower ratio changes. So less power and fuel is absorbed in regaining forward speed.

The design also gives lower power losses than conventional Powershift transmissions as all gears, bearings and clutches have positive pressure lubrication from the transmission's own dedicated pump. This means that the oil level in the gearbox can be lower than conventional designs, so there is less 'drag' on gears and shafts.

# Dynashift Plus: with Power Control and Speed Matching as standard

**Dynashift is uniquely efficient and simple to operate. It provides a smooth, silent 4-speed powershift change in each of eight synchronised gears; so you can always choose a gear with all the powershift flexibility you need to cope with varying conditions.**

And because Dynashift has 'close ratio' steps of only 17%, you can react to any load change, maintaining peak efficiency and improving productivity at all times.

For optimum performance, of the 32 forward speeds, an industry-leading 14 are in the field working range, so whatever the job, the correct speed is always available. Matched forward/reverse speeds mean that shuttle applications are faster and more efficient too.

### Simple gear selection

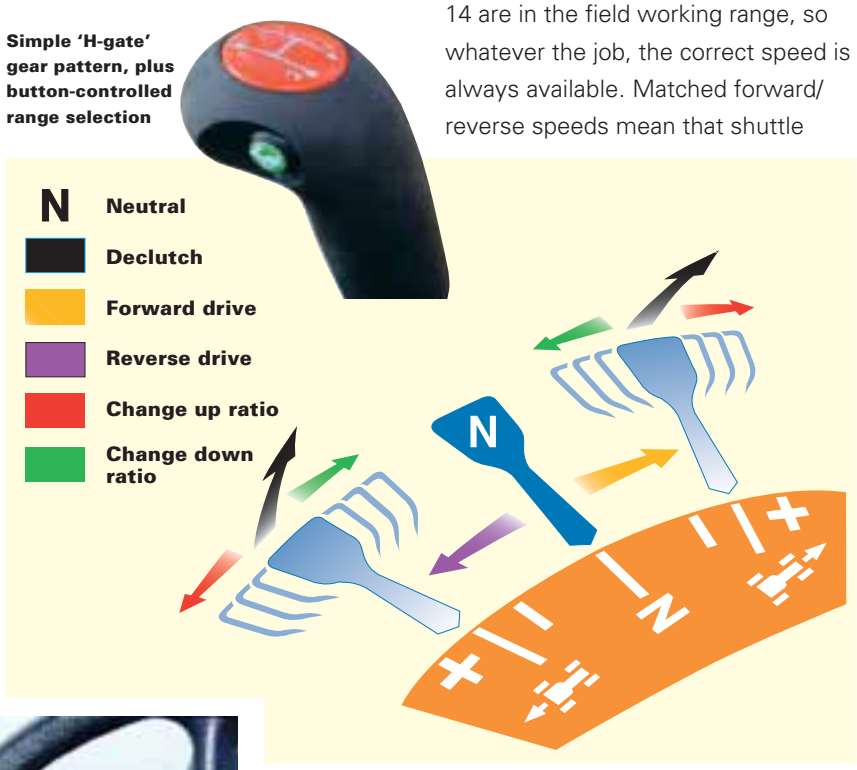
Now with a simple 'H-gate' gear pattern for gear selection, plus a lever mounted button for High/Low range selection, gear changing is quicker and smoother.

### Power Control

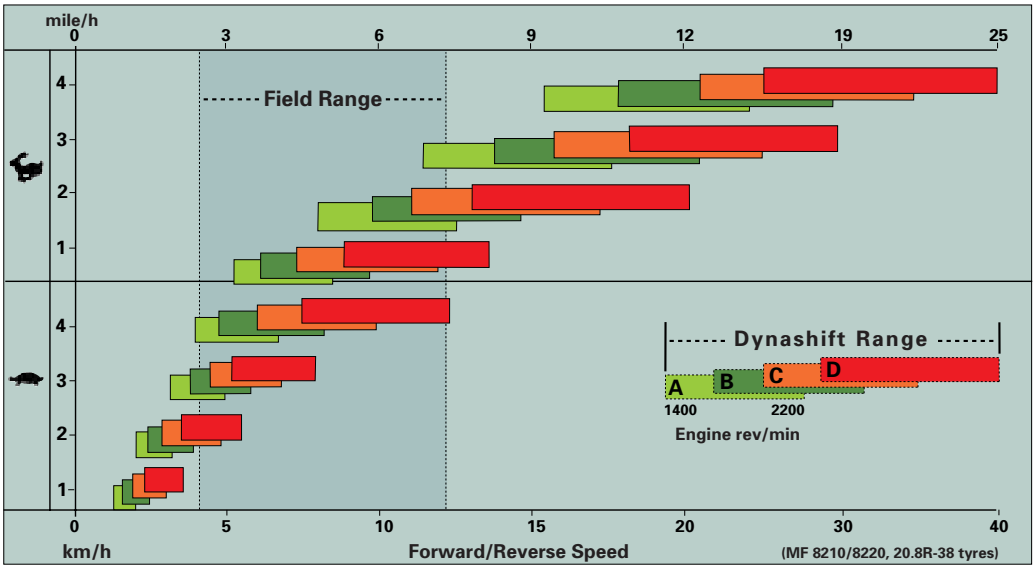
On Dynashift Plus transmissions, unique **Power Control** provides convenient forward/reverse shuttle, powershift changes and finger-tip de-clutching, ... all from a single lever.

The position of the Power Control lever enables the operator to steer and change speed with the left hand, leaving the right hand free to operate other controls. This uniquely efficient layout encourages full use of Dynashift at all times, plus simultaneous command of all other control systems. This convenience results in higher output, greater efficiency and superior work quality.

**Simple 'H-gate' gear pattern, plus button-controlled range selection**




**Above: Multi-function Power Control lever**




**Dynashift speed chart illustrates excellent 'overlap' within each Dynashift ratio**

**Convenient selection of Auto Drive or Speed matching mode**

### Speed Matching

'Speed Matching' automatically selects the correct Dynashift ratio according to forward speed when changing gear or range. For example, if a tractor is pulling a heavy trailer in 3rd gear, High Range in Dynashift ratio 'D', if the operator changes into 4th gear, Speed Matching will **automatically** select either B or C ratio.

### AutoDrive

As an option on Dynashift Plus models, **AutoDrive** provides **automatic** changes between Dynashift ratios in accordance with engine load and speed. The system is switch operated, allowing selection of Speed Matching, Economy Mode or Power Mode.

In Power Mode, Dynashift automatically changes up above 2100 rev/min. In Economy Mode, Dynashift automatically changes up above 1700 rev/min. In both modes, when the operator increases the throttle speed, AutoDrive will perform a 'kick-down' if the load necessitates it.

**In tests, working with AutoDrive gave a 10% increase in area worked within a given time period, with an 11.7% reduction in fuel consumption.**

### Creeper speeds available

For specialist applications a creeper gearbox option is available, providing additional speeds; as low as 500 m/hour at rated engine.

### Safe operation

Dynashift has fully synchronised range and gear changes for smooth, reliable operation. It is also fully protected against inadvertent selection of the wrong range because the Transmission Control system prevents changes from one range to another if the speed of the tractor is too great for the gears to be properly engaged.

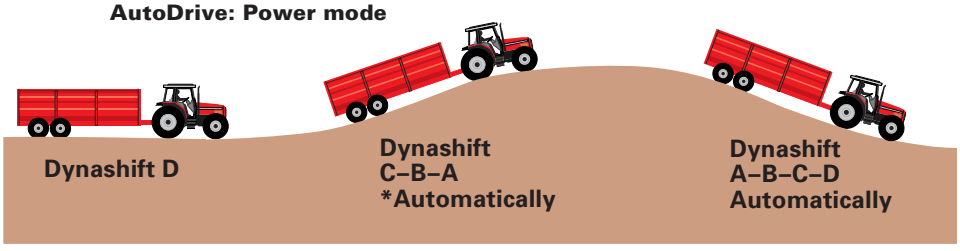
### Rugged construction

For added durability and quiet operation, the Dynashift gearbox incorporates very wide, helical gears and 'dual cone' synchromesh. The design has great strength to cater for the massive torque loads being transmitted.

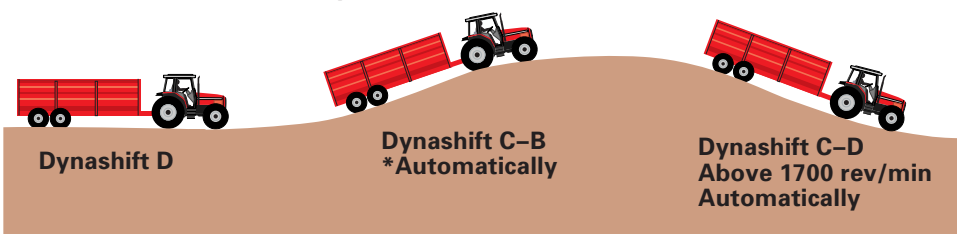
### Oil-cooled clutch

All models have oil-cooled clutches for smooth operation and durability. Two multi-plate clutches, one for forward drive and one for reverse drive, ensure a controlled, modulated transition from forward to reverse drive. A dedicated pump supplies 32 litre/min to whichever clutch is engaged.

**AutoDrive: Power mode**

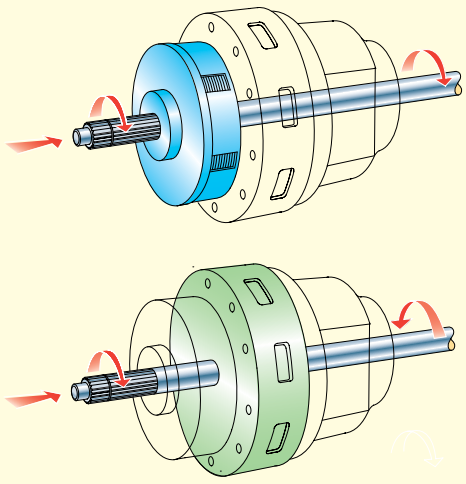



**AutoDrive: Economy mode**




***Depending on load and throttle position**

**Forward drive is transmitted by the forward drive clutch at the front of the gearbox**



**Reverse drive is transmitted by the oil-cooled reverse drive clutch between the forward drive clutch and the Dynashift unit**

# Simple design for maximum PTO power

**The 'flanged' design gives a fast, leak-free PTO shaft change**

**The 8200 Series provides more usable power at the PTO. The simple design means that the PTO is driven directly from the engine flywheel, so it is very strong, with very low power absorption, giving maximum power at the PTO shaft. Standard PTO speed is achieved at 90% of rated engine speed, so there is also lots of power in reserve.**

The PTO is a two-speed, fully independent system providing 540/1000 or 750/1000 rev/min speeds.

**The PTO is actuated by large rotary switches. (Optional) In-cab shiftable PTO lever and QuadLink controls also shown.**

The bolted, flanged shaft design means that any PTO shaft can be used at any speed and shaft exchange is easy and leak-free. PTO speed is 'shiftable', either by an in-cab or external lever, depending on model.

The 'true' 540/1000 rev/min PTO is fitted on MF 8210-8250, providing high power for all PTO driven equipment.

On larger models, from MF 8260, the 750/1000 rev/min system provides 540 PTO speed at much lower engine speed, so light duty implements, which do not require full power, can be driven with reduced fuel consumption and noise.

The MF 8270-8280 can deliver massive power through their high capacity 44 mm drive shafts. PTO performance can be monitored through both the 'Field Facts Monitor' or Datatronic II, giving the operator all the information needed to optimise the performance of these range-topping models.

**Automated control**

The Transmission Control system also monitors and manages PTO clutch engagement depending on load. This gives greater operating safety and protects both implement and tractor from damage due to inappropriate engagement. For added safety, the fender-mounted PTO 'Stop' control disengages PTO drive instantly, for specific applications or in emergency situations.

To ease the operator's workload, the Transmission Controller automatically activates differential locks and 4-wheel drive at appropriate times.

# MF QuadLink front suspension... more productive in the field, faster on the road

QuadLink front axle shown with swivelling fender (MF 8220)

**The unique design of the (optional) Massey Ferguson 'QuadLink' front axle suspension system gives a number of significant benefits over competitive designs.**

### Simple 'QuadLink' design

Unlike some competitive designs, the MF system is simple and compact. It comprises four moving links, a single hydraulic ram, hydraulic accumulators and a control mechanism.

### Electronically controlled

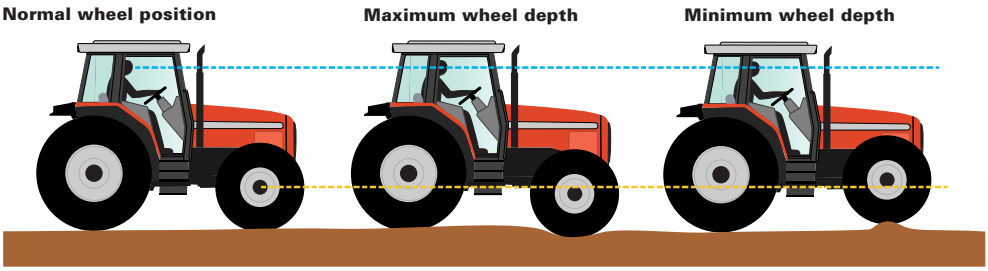
Regardless of front axle load, oscillation or turning angle, the electronic control mechanism **automatically** maintains a constant suspension height. There is no operator input required to operate the system.

### High pivot design

The high pivot point and free axle oscillation means that the excellent turning circle is not compromised when the suspension system is in operation. In fact, turning circle is actually improved - by as much as 8%.

### Operator choice

The MF system is also fully operator controlled. So depending on conditions, **you** can decide when to switch the system on or off, or when it operates fully automatically. For example, when working in the field with front linkage, where a uniform depth of cultivation must be maintained, it is essential that the operator is able to deactivate the system. Or when working in a confined space with a loader or with pallet forks, where height control must be precise, again it is essential to be able to deactivate the system. On some competitive systems this is not possible.




'CAD' drawings showing axle movement: Normal axle compression

Minimum axle compression

Maximum axle compression

# Massive construction for strength, High capacity for output

**The massive 'modular' rear axle is, quite simply, the biggest in the industry. It houses large, pressure lubricated, twin, oil-cooled disc brakes and heavy duty epicyclics with, uniquely, twin epicyclic units on larger models.**

**Power brakes**

Power brakes are standard on all models. By assisting pedal pressure, greater braking force is achieved with a minimum of effort. The brakes provide exceptional stopping power and great durability.

At the touch of a button, simultaneous actuation of the differential locks ensures maximum traction at all times. The differential lock ensures fast, 100% engagement and disengagement of the differential, with no slippage or loss of power.

**Getting more power to the ground**

Setting a new standard in the 230-288 hp range, the huge 650/85R38 tyres, fitted to MF 8270/80 (optional on MF 8260), were specially developed by Massey Ferguson and Kleber. They can withstand higher loads with lower pressures, minimising soil damage and compaction whilst transmitting more power - with less slip and less tyre wear.

**Heavy duty 4WD front axles**

Heavier duty front axles have been designed to take the strain imposed by the larger equipment that the new 8200 Xtra range can handle. All models, including MF 8270 and 8280 Xtra, now feature a 'high pivot' front axle design incorporating Hydra-lock front differentials, for a tighter turning radius and true 4-wheel drive in all conditions.

**To meet the oil flow and pressure demands of large equipment or multiple front/rear combinations, the 8200 Series features a 'closed centre, load sensing' hydraulic system as standard.**

**Automatic regulation**

Sensing lines throughout the system ensure that flow and pressure are automatically regulated according to demand, so there's no wasted power – or fuel – used in pumping oil that's not required.

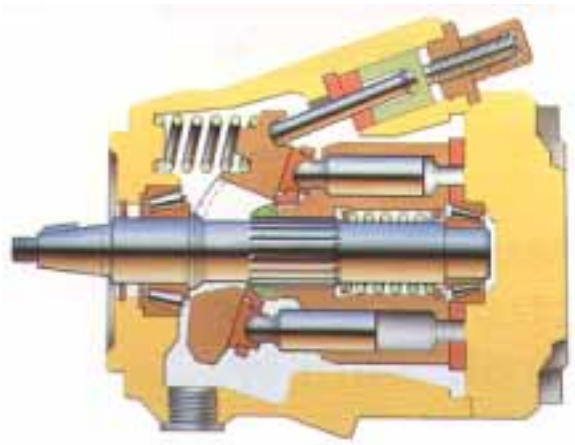
**Instant response**

When there is a need for oil flow, it's there on demand – instantly. With 110 litres per minute (or 150, as an option on Powershift models) at a

**Above: All 8200 models now feature 'high pivot' design and Hydra-lock differental**

**Right: The massive rear axle (MF 8270/8280 shown) features large oil immersed disc brakes and heavy duty inboard dual epicyclic reduction units ensuring strength, safety and durability.**

**Lever-action couplers mean easy connection and disconnection, even when pressurised. Each mechanical spool valve has individual, flow control from the driver's seat.**



**Above: Axial piston pump enables rapid response to flow demands**

pressure of 200 bar being available in less than 1/20th of a second. That's what you call fast response.

### Precise auxiliary flow control

Up to five spool valves can be fitted on 8200 Series tractors (the fifth is a Dealer fit option), each with individual flow control adjustment. This enables the valves to deliver very precise amounts of oil right up to their maximum flow, giving more accurate implement control for better work quality and greater safety.

Models with the optional Spool Valve Management System ('SMS', see pages 22 and 23), have a combination of mechanical and electro-hydraulic valves, on which flow and timing can be precisely controlled either manually or, when fitted, via Datatronic.

**Linkage is built for up to 10 tonne lift capacity (MF 8260-8280). German specification MF 8240 linkage with T.I.C. shown.**

# MF electronic linkage control ... for accuracy, response and simplicity

**For many years, Massey Ferguson's electronically controlled linkage has been the industry leader in terms of design simplicity, responsiveness, accuracy, ease of use and reliability. Now, with improved controls and ergonomics, the 8200 Series is even more satisfying to operate.**

The latest generation, digital electronic linkage control system (or ELC), uses electronic sensors to measure draft forces through the lower links, with an additional sensor on the lift arm cross shaft to register linkage lift height. The sensors send signals to a microprocessor – the system's brain – which compares these signals with others from the driver when he adjusts the settings on the ELC console.

### More accurate draft control

The digital ELC system gives a higher standard of draft control for more accurate depth settings and better ground contour following. The result is more weight transfer and better traction, giving less wheel slip, reduced tyre wear and fuel consumption and greater output.

### Simple ELC panel

With the more frequently used controls armrest mounted and a simplified ELC control panel, accurate operation is easy. And in addition to all the normal linkage control functions, the system also incorporates advanced integrated features. Intermix, maximum lift height, quick soil engagement and automatic drop speed are all standard.

For faster implement attachment the rear linkage can also be operated from conveniently mounted push buttons on each rear fender.

### Standard Active Transport Control

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

**Left: Excellent ergonomics are a feature of the integrated Electronic Linkage Control system.**

**Above:**
**ELC gives almost instantaneous response to draft signals, for precise ground contour following.**

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

Active Transport Control (ATC) is integrated into the ELC system as standard. It is a shock absorbing system which minimises the 'pitching' action – automatically adjusting for different implement weights. This gives smoother, safer, faster transport and also, by reducing the 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 at the touch of a button, or automatically, whereby it is linked to the lift/lower switch of the ELC panel. It is then activated when the implement is raised and deactivated when the implement is lowered.

**ATC and QuadLink**

When ATC is used in conjunction with the optional QuadLink suspended front axle, stability when transporting or operating mounted equipment at speed is improved still further, giving greater comfort, safety and productivity.

# Advanced systems to increase productivity and reduce costs

### Datatronic II

**Datatronic II, gives an added dimension to the fundamental high performance of the MF 8200 Series. To high power and transmission efficiency, it adds information and control.**

Datatronic II has over 20 functions, including cost-analysis and Comparative Mode displays, 4 programmable memories and hard copy print-out capability.

As well as assisting the driver, the information gathered by Datatronic is an invaluable farm management tool, which takes the guesswork out of calculating fertiliser application rates, seeding rates, areas worked and much more. And with four programmable memories, which can be identified as either a different implement, a different driver or, for contractors, work undertaken for different customers, the data is really comprehensive.

**An infra red link gives print-out capability**

### Wheelslip control

In draft work, Datatronic processes data from radar and ELC through the numeric CAN BUS system. This provides a unique wheelslip control feature which increases traction and therefore the tractor's performance with draft controlled implements. Wheelslip control maintains high quality work, whilst increasing output, reducing tyre wear and protecting soil structure.

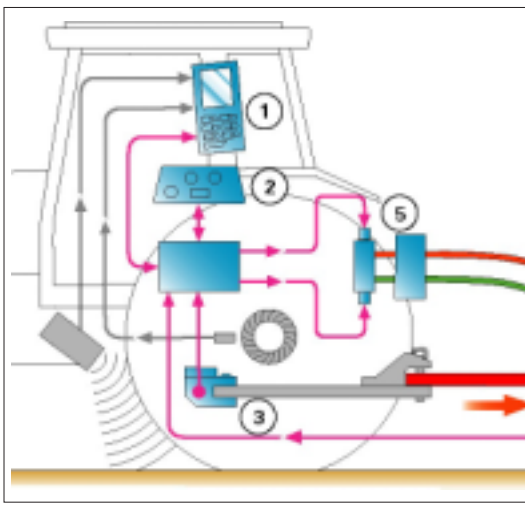
### Dual Control

When using semi-mounted ploughs, Dual Control automates furrow entry and exit, even in irregularly shaped fields. It also aids setting the plough and evenness and control of work. It is controlled and monitored via the standard ELC panel plus two extra functions within Datatronic II. Dual Control automatically moves the plough's furrow/depth wheel in relation to the lower links, so Draft Control keeps the plough parallel to the ground instead of raising only the front furrows. With Dual Control you get simple operation, plus the full benefit of wheelslip control when operating semi-mounted ploughs.


**Datatronic II, with over 20 functions and twin digital displays**

### Trailed Implement Control (T.I.C.)

**T.I.C. builds still further on Massey Ferguson's lead in field efficiency. MF introduced the first and (still) the most accurate Electronic Linkage Control system; then the first fully automatic wheelslip control system; then Datatronic and onto the 'gold medal' winning Dual Control system. Now Trailed Implement Control, winner of the Silver medal at Agritechnica 99, is another 'first'. It is a unique system for optimising productivity when using trailed equipment.**




**Trailed Implement Control - Silver medal winner at Agritechnica 99**

**Dual Control significantly increases output with semi-mounted equipment**

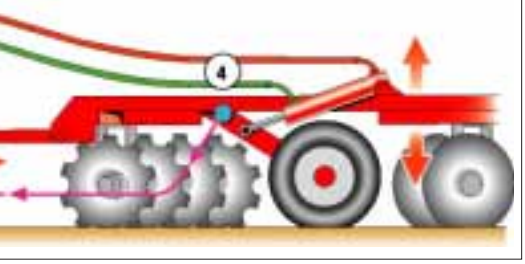
T.I.C. uses draft force and wheelslip data and an implement mounted height sensor, to automatically regulate working depth through an electronically controlled spool valve. Like Dual Control, it is operated via the standard armrest-mounted ELC controls and monitored via extra functions within Datatronic II.

**Output is further increased by wheelslip control, unique to MF, with trailed equipment. The combined result is less operator effort, reduced fuel consumption and increased workrate.**

**Left: Unique T.I.C. can increase output with trailed equipment by up to 15%, or more in some conditions**

**T.I.C. system components**

1. **Datatronic II**
2. **ELC controls and processor**
3. **Drawbar draft force sensor***
4. **Implement height sensor**
5. **Electro-spool**




***Note: When a pickup hitch is fitted, TIC operates through the Datatronic 'wheelslip control' function**

## FIELDSTAR™

**FIELDSTAR™ is Massey Ferguson's precision farming system. Now available as a factory-fitted option, it is designed to help maximise crop gross margins and overall profit.**

The system is intelligent and will automatically recognise which implement is connected to the tractor. Therefore only relevant information to that implement can be accessed, making it very easy for the operator.

Fieldstar is not only a complete tractor and combine harvester monitor and control system, it is also designed as a comprehensive implement control system connected quickly and simply via a single socket.

**The FIELDSTAR™ monitor (optional) fits neatly next to the main console**

The System is designed to perform the functions of, and thus replace, any implement control units. It will work using GPS, with or without a Fieldstar controlled implement.

Inputs can be automatically varied according to pre determined application maps created on the farm computer. With an implement supplied control box, the implement can be manually adjusted according to the tractor position shown on the terminal.

Precision farming investments are reduced as you do not need an implement box, you simply use the Fieldstar terminal.

The system is easy to keep up-to-date with the latest developments as it is programmable. This also enables new implements to be added enabling the Fieldstar terminal to control them.

# The ultimate Field and Headland management System

**By combining a long line of innovative design features with the very latest developments, the MF 8200 Series now boasts the most comprehensive Field and Headland Management System available today.**

Among many important features, **Datatronic**, MF's industry-leading information, control and cost management system, has been continuously developed. As well as data monitoring and the vitally important 'Wheelslip Control', it now operates our new Field Management systems:

– **Rear Dual Control** (Agritechnica gold medal winner for automated control of semi mounted ploughs)
– **Trailed Implement Control (T.I.C.)** (Agritechnica silver medal winner for automated control of trailed equipment), and now:
– The **Spool Valve Management System (SMS)**, for precise control of external oil flow.
– **Front Dual Control**, for simplicity and integration of the control of front and rear mounted equipment.

Combine all of this with **Speed Matching**, **AutoDrive** and other systems, such as MF's superb ELC and Transmission Control (which automates and simplifies PTO, differential lock activation and transmission functions) and the result is a massive boost to productivity and simplicity of operation.

### Spool Valve Management System

Available as an option on all models with 'closed centre load sensing hydraulics', a new armrest-mounted 'joystick' controls the new Spool Valve Management System (SMS). The joystick offers easier, more precise, **memorised** control of two electro-hydraulic, proportional spool valves.

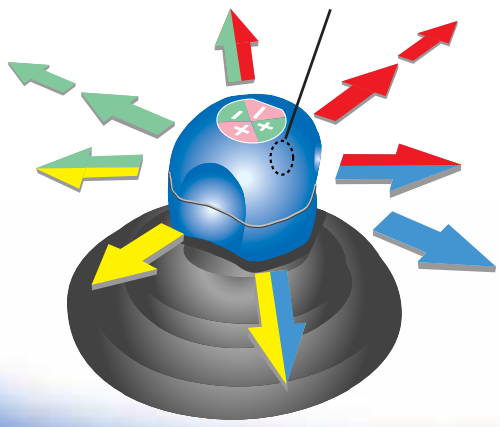
### SMS: accuracy and simplicity

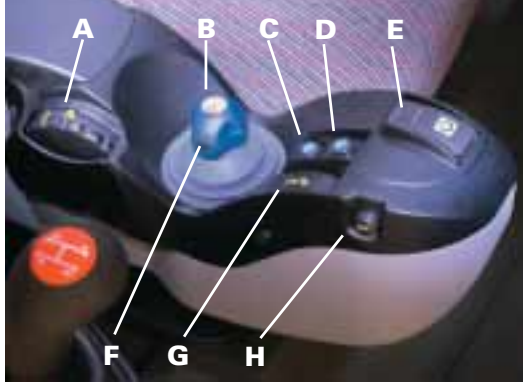
SMS enables external hydraulic oil flow rates to be memorised and controlled via a convenient joystick. Simply move the multi-directional joystick to set the required hydraulic function and flow, then press the memory button. Each subsequent time that the same function and flow is required, a single movement of the joystick is all that is required.

### SMS and DATATRONIC II

On tractors fitted with Datatronic II, SMS can be programmed for even finer adjustment of oil flow, plus precise pre-set flow timing. All flows and timings are simply set via the Datatronic monitor, using a new SMS menu and the rotary control switch, as for any other Datatronic settings.

**The multi-directional SMS joystick controls flow to individual spool valves, split flow to two valves, timing and float functions.**




**A. ELC Draft control switch**
**B. SMS joystick**
**C. SMS memory switch**
**D. SMS On/Off switch**
**E. Speed Matching or AutoDrive switch**
**F. SMS 3rd function switch**
**G. ELC lift/lower switch**
**H. ELC 'Quick drop' switch**

### The benefits of SMS

Once the settings have been input, simply move the joystick in the required direction and allow it to return to its 'neutral' position – then let SMS do the work for you! The combination of memorised flow rates and timing with one-touch operation gives greatly simplified 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 too.

### Dual Control for front linkage

Front Dual Control interacts with Datatronic II and the standard electronic linkage control (ELC) system, to give automated entry and exit points with front and rear linkage-mounted equipment. This new MF feature, combined with SMS, significantly reduces the number of operations that the operator has to perform manually.

Control of both front and rear mounted equipment is by the depth control rotary knob. A flick of the ELC lift/lower switch also raises and lowers the front and rear linkage in the pre-set sequence.

**Left: Flows and timings are simply set via the Datatronic II monitor**

**Right: Timing of front and rear equipment entry and exit can be set via the Datatronic II monitor**

## How the driving aids make life easier...

**The simple diagram, below shows just a few examples of where the various systems operate in some common applications. The symbols indicate which systems operate in each application, to make your daily work easier - and more productive.**

**Key to symbols:**

- **SMS** Spool Valve Management System
- **TIC** Trailed Implement Control
- **Auto** AutoDrive and/or Speed Matching
- **DC** Dual Control
- **ELC** ELC 'Lift/lower' switches
- **DATA** Other Datatronic functions eg. Wheelslip Control

- ✶ Seed Drill/Power Harrow — Auto SMS DC ELC DATA
- ✶ Mower — Auto DC ELC DATA (SMS)
- ✶ Semi-Mounted Plough — Auto SMS DC ELC DATA
- ● Trailed Disc Harrow — Auto SMS TIC ELC DATA

- ✶ Press (single/double acting) — Auto SMS DC ELC DATA
- ✶ Mower — Auto DC ELC DATA (SMS)
- ● Front loader — Auto SMS

✶ = Front/Rear implement combinations

# Tailor your tractor to meet your needs

**A wide choice of options is available, which enable you to vary the specification of the tractor to meet your specific requirements.**

### Front linkage and PTO

Front linkage and PTO were designed into the 8200 Series from the outset, for maximum productivity and quicker return on capital investment. Using front/rear implement combinations can give real time savings - up to 30% when drilling, with consequent savings in fuel, manpower utilisation and reduced soil compaction.

### Hitches

8200 series tractors can be specified with a hitch to suit any application or need. The swinging roller drawbar is ideal for heavy duty trailed implements; high visibility automatic hitches, to ease trailer attachment; height-adjustable trailer hitches for use with heavy twin-axle trailers, and many more, ensure ease of operation and maximum output in any application.

### Added weights and ballast

Quick-attach front weights and belly weights are available. Matching tractor weight or weight distribution depending on the demands of a particular application helps to increase traction and output.

### Work lights

Additional front, rear and footstep-mounted work lights can be specified to improve night working productivity. The spring loaded rotating beacon hinges down to enable access to low buildings etc.

**Below: Additional weight can be added to the tractor in a variety of ways for added ballast**

**Above: Additional front, rear and footstep mounted work lights are available**

**3.5 or 5 tonne front linkage and front PTO are available, for high productivity, single pass operations. External lift/lower buttons can also be specified. (front PTO is not available 0n MF 8260/70/80)**

**Right and below right: A wide range of wheels and tyres are available, including cast centre for added weight and welded rims for extra strength**

### Passenger seat

The passenger seat enables a second occupant to travel in safety and comfort.

### 'Panorama' roof

The Panorama roof provides greatly improved upward visibility from the normal seating position. The roof opens to two positions, the second of which enables it to slide rearwards for added ventilation or, in the event of an emergency, escape.

### Carbon cab air filter (Parts accessory, not illustrated)

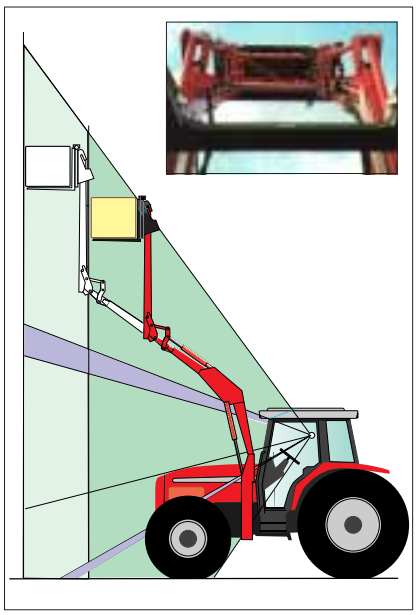
The normal paper element filter can be replaced by a carbon filter, to provide extra protection when spraying toxic chemicals.

**Above: Left side passenger seat**

**Right: Wider fender extensions are available to suit larger tyre sizes**

**Below: Linkage and hydraulic specifications are available to suit all market needs and legislation. (MF 8220, UK specification shown, below)**

**Below: The Panorama roof provides enhanced upward visibility**



# Simple servicing and routine maintenance

**Less wear, resulting from automatic control of tractor functions means fewer adjustments – simplified servicing. And when the tractor needs attention, it's easy as engine side panels and grille are simply removed or hinged so that all components are readily to hand.**

Simplified servicing is a theme that runs right through the 8200 design. On Dynashift Plus models, with Power Control, oil flow, supplied by an independent pump, is directed to whichever clutch is in operation depending on whether drive is forward or reverse. The result is very low operating temperatures, even in loader work and other heavy applications. Clutch life is very long and no adjustments are required. The brakes too are self-adjusting, the battery is low-maintenance and there are no more than ten grease points - all readily accessible.

There is only a single dipstick check for engine oil level, with a sight glass on the rear axle for an easy visual check of transmission oil level. Time between services is longer than ever, with transmission oil and filters only needing to be changed every 1200 hours and engine service intervals extended to 300 hours.

The hydraulic system, filters and valves are all external and the pump is located on a side cover allowing easy access and reduced maintenance time. There's no need for cab removal, as side covers on the transmission housing provide ready access to gear selectors and clutches, should the need arise.

Fuel filling is easy too, with the 'A-post' mounted fuel filler.

**Low maintenance QuadLink**

The design simplicity means that the axle is inherently very reliable. And with no additional grease points, maintenance of the suspended front axle is just as simple as MF's standard design.

**Left and far left: Large removable panels or the hinged, tilting bonnet give unhindered access to engine, battery, cooling systems, and cab filters and air conditioning.**

**Above: Every aspect of the MF 8200 Series was designed from the outset to be simple to service and maintain**

# MF 8200 Xtra Specifications

**Key: ● = Standard equipment ❍ = Optional equipment N/A = Not available/applicable**


**Right: MF 8280 Xtra sets a new world record, ploughing 251 ha in 24 hours**

| | | 8210 | 8220 Xtra | 8240 Xtra | 8250 Xtra | 8260 Xtra | 8270 Xtra | 8280 Xtra |
|---|---|---|---|---|---|---|---|---|
| **Performance** | | | | | | | | |
| Engine power | | | | | | | | |
| @ 2200 rev/min | *ISO hp (kW) | 154 (115) | 166 (124) | 190 (142) | 214 (160) | 231 (172) | 261 (195) | 288 (215) |
| @ 2200 rev/min | **PS (kW) | 145 (107) | 160 (118) | 175 (129) | 200 (147) | 215 (158) | 240 (177) | 265 (195) |
| Max. torque | * Nm | 619 | 666 | 807 | 920 | 985 | 1120 | 1280 |
| @ rev/min | | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 | 1400 |
| * = ISO TR14396 | ** = DIN 70020 | | | | | | | |
| **Engine** | | | | | | | | |
| Water cooled, direct injection diesel | | ● | ● | ● | ● | ● | ● | ● |
| Model | | 1006.60TWG | 1006.60TWG | 620DWBAE | 634DWBAE | 634DWBAE | 645DSBAE | 645DSBAE |
| Aspiration | | Turbo/ wastegate | Turbo/ wastegate/ intercooler | Turbo/ wastegate/ intercooler | Turbo/ wastegate/ intercooler | Turbo/ wastegate/ intercooler | Turbo/ intercooler | Turbo/ intercooler |
| No. cylinders/capacity | no./litre | 6/6 | 6/6 | 6/6.6 | 6/7.4 | 6/7.4 | 6/8.4 | 6/8.4 |
| Bore/stroke | mm | 100/127 | 100/127 | 108/120 | 108/134 | 108/134 | 111/145 | 111/145 |
| Air cleaner, dual dry, with exhaust aspiration | | ● | ● | ● | ● | ● | ● | ● |
| **Clutch** (Dynashift Plus models only) | | | | | | | | |
| 2 Multi-plate, oil cooled clutches with integral gear pump | | ● | ● | ● | ● | N/A | N/A | N/A |
| **Transmission** | | | | | | | | |
| **Dynashift Plus:** 32 forward, 32 reverse speed synchro gearbox, with power shuttle, 4-speed powershift and **Speed Matching AutoDrive**, automatic Dynashift changes | | ● | ● | ● | ● | N/A | N/A | N/A |
| Creeper option giving an additional 16 F/R 'creeper' speeds. 4:1 reduction, giving speeds from 600 m/h | | ❍ | ❍ | ❍ | ❍ | N/A | N/A | N/A |
| **Powershift:** 18 forward, 8 reverse powershift with electronic control of pre-selectable starting, forward/reverse shuttle and auto speed matching. Left hand 'Power Control' of shuttle and powershift changes | | ❍ | ❍ | ❍ | ❍ | ● | ● | ● |
| Creeper option giving an additional 18 F / 8 R 'creeper' speeds. 4:1 reduction, giving speeds from 600 m/h | | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |

**Road speeds.** Note: Reverse speeds are matched to related forward speed. Speeds in km/h.

| **Dynashift** | | **8210/8220** | **8240/8250** |
|---|---|---|---|
| | | 20.8R-38 | 20.8R-42 |
|  | 1 A–B–C–D | 2,6-3,1-3,5-4,2 | 2,6-2,9-3,5-4,2 |
| | 2 A–B–C–D | 3,9-4,5-5,3-6,3 | 3,9-4,5-5,3-6,1 |
| | 3 A–B–C–D | 5,6-6,4-7,7-9,0 | 5,5-6,4-7,6-8,8 |
| | 4 A–B–C–D | 7,6-8,8-10,5-12,2 | 7,4-8,7-10,3-12,1 |
|  | 1 A–B–C–D | 8,4-9,8-11,6-13,7 | 8,4-9,6-11,4-13,3 |
| | 2 A–B–C–D | 12,9-15,0-17,8-20,7 | 12,5-14,8-17,4-20,4 |
| | 3 A–B–C–D | 18,3-21,4-25,3-29,6 | 18,0-21,1-24,9-29,1 |
| | 4 A–B–C–D | 24,9-29,0-34,4-40,2† | 24,5-28,6-33,8-40,0† |

| **Powershift** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** | **16** | **17** | **18†** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20.8R38 tyres (8210/20)† | 2,2 | 2,9 | 3,8 | 4,3 | 5,0 | 5,6 | 6,2 | 7,2 | 8,2 | 9,3 | 10,6 | 12,0 | 13,6 | 15,4 | 17,4 | 22,6 | 29,2 | 37,6 |
| 20.8R42 tyres (8240/50)† | 2,2 | 2,9 | 3,9 | 4,3 | 5,0 | 5,6 | 6,3 | 7,2 | 8,2 | 9,3 | 10,6 | 12,1 | 13,7 | 15,4 | 17,5 | 22,7 | 29,3 | 39,0 |
| 620/70R42 tyres (8260)† | 2,2 | 2,9 | 3,9 | 4,3 | 5,0 | 5,6 | 6,3 | 7,2 | 8,2 | 9,3 | 10,6 | 12,1 | 13,7 | 15,4 | 17,5 | 22,7 | 29,3 | 39,0 |
| 650/85R38 tyres (8270/80)† | 2,4 | 3,1 | 4,0 | 4,5 | 5,1 | 6,0 | 6,6 | 7,6 | 8,7 | 9,8 | 11,1 | 12,7 | 14,3 | 16,3 | 18,5 | 23,8 | 30,7 | 39,3 |

†Top gear is locked out for markets restricted to 30 km/h max speed.

| | 8210 | 8220 Xtra | 8240 Xtra | 8250 Xtra | 8260 Xtra | 8270 Xtra | 8280 Xtra |
|---|---|---|---|---|---|---|---|
| **Power take-off, rear** | | | | | | | |
| Independent, operated by switch, actuated by hydraulic clutch, with electronic control | ● | ● | ● | ● | ● | ● | ● |
| Shaft change; Shiftable/flanged | ● | ● | ● | ● | ● | ● | ● |
| PTO speed @ engine rev/min | | | | | | | |
| 540 rev/min | 2090 | 2090 | 2090 | 2090 | 1440 | 1440 | 1440 |
| 1000 rev/min | 2090 | 2090 | 2090 | 2090 | 2090 | 2090 | 2090 |
| Shaft diameter | | | | | | | |
| 35 mm (1 3/8 in), 6 or 21 splines | ● | ● | ● | ● | ● | ● | ● |
| 44 mm (1 3/4 in), 20 splines | N/A | N/A | N/A | N/A | ❍ | ❍ | ❍ |
| **Front power take-off and linkage** | | | | | | | |
| Front linkage | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| PTO, independent, operated by switch actuated by hydraulic clutch | ❍ | ❍ | ❍ | ❍ | N/A | N/A | N/A |
| Shaft diameter mm | 35 | 35 | 35 | 35 | N/A | N/A | N/A |
| PTO speed @ engine rev/min | | | | | | | |
| 1000 rev/min (6 or 21 spline shaft) | 2040 | 2040 | 2040 | 2040 | N/A | N/A | N/A |
| Front linkage lift capacity | | | | | | | |
| – at linkage frame kg | 3500 | 3500 | 3500 | 3500 | 3500/5000 | 3500/5000 | 3500/5000 |
| **Rear linkage** | | | | | | | |
| Electronic control of draft, position Intermix, height/depth, rate of drop, 'quick soil engagement' and Active Transport Control | ● | ● | ● | ● | ● | ● | ● |
| Dual Control | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| Trailed Implement Control | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| Lower links, Cat. 3 hook end | ● | ● | ● | ● | ● | ● | ● |
| Max lift capacity at link ends, kg links horizontal | 8700 | 8700 | 8700 | 8700 | 10000 | 10000 | 10000 |
| **Hydraulics** | | | | | | | |
| Closed centre load sensing sytem | ● | ● | ● | ● | ● | ● | ● |
| Pump Output litre/min | 110 | 110 | 110 | 110 | 110 | 110 | 110 |
| Optional on Powershift models | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| Max. pressure bar | 200 | 200 | 200 | 200 | 200 | 200 | 200 |
| **Auxiliary hydraulics - control** | | | | | | | |
| Spool valves each with No. individual flow control | 3 | 3 | 3 | 3 | 3 | 4 | 4 |
| Extra spool valve (Dealer fit), with individual flow control | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| **Spool Valve Management System (SMS)** | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| **Steering** | | | | | | | |
| Hydrostatic | ● | ● | ● | ● | ● | ● | ● |
| Tilt/telescopic steering column | ● | ● | ● | ● | ● | ● | ● |
| **4WD front axle** | | | | | | | |
| Max. steering angle degrees | 55 | 55 | 55 | 55 | 55 | 55 | 55 |
| **Hydra-lock** differential | ● | ● | ● | ● | ● | ● | ● |
| **QuadLink** suspended axle | ❍ | ❍ | ❍ | ❍ | N/A | N/A | N/A |
| **Brakes** | | | | | | | |
| Oil-cooled, with hydraulic actuation | ● | ● | ● | ● | ● | ● | ● |
| Parking brake, independant, multi-plate disc on transmission, hand lever operated | ● | ● | ● | ● | ● | ● | ● |
| Trailer brakes; hydraulic, pedal operated | ● | ● | ● | ● | ● | ● | ● |

# MF 8200 Xtra Specifications

**Key: ● = Standard equipment ❍ = Optional equipment N/A = Not available/applicable**

| | | 8210 | 8220 Xtra | 8240 Xtra | 8250 Xtra | 8260 Xtra | 8270 Xtra | 8280 Xtra |
|---|---|---|---|---|---|---|---|---|
| **Wheels and tyres** | | | | | | | | |
| Front | ● | 16.9R28 | 16.9R28 | 16.9R30 | 16.9R30 | 480/70R30 | 600/70R28 | 600/70R28 |
| Rear | ● | 20.8R38 | 20.8R38 | 20.8R42 | 20.8R42 | 620/70R42 | 650/85R38 | 650/85R38 |
| Front | ❍ | 480/70R28 | 480/70R28 | 480/70R30 | 480/70R30 | 600/65R28 | 600/65R28 | 600/65R28 |
| Rear | ❍ | 580/70R38 | 580/70R38 | 620/70R42 | 620/70R42 | 650/75R38 | 650/75R38 | 710/70R38 |
| Front | ❍ | 540/65R28 | 540/65R28 | 540/65R30 | 540/65R30 | 600/70R28 | 600/65R28 | |
| Rear | ❍ | 650/65R38 | 650/65R38 | 650/65R42 | 650/65R42 | 650/85R38 | 710/70R38 | |
| **Track adjustments** | | | | | | | | |
| Front | m | 1.68-2.17 | 1.68-2.17 | 1.69-2.17 | 1.69-2.17 | 1.66-2.20 | 1.66-2.20 | 1.66-2.20 |
| Rear | m | 1.60-2.30 | 1.64-2.33 | 1.66-2.34 | 1.70-2.45 | 1.68-2.38 | 1.68-2.38 | 1.68-2.38 |

**Miscellaneous equipment**
Equipment includes: Linkage stabilisers, drawbar and auto-hitch, external linkage controls, front weight frame, front fenders, swivelling front fenders, fender-mounted rear PTO 'stop' control, 'easy-access' hinged/tilting bonnet. MF 8240-8280 also includes belly weight.
Variable equipment includes: Front linkage, front PTO (MF 8210-8250), creeper speeds 4.0:1 reduction, front weights.

**Cab and controls**
Equipment includes: De-luxe cab - 72dB(A) noise level, with air conditioning, pneumatic seat with integral controls in right side armrest, radio cassette player, rear windscreen wash/wipe, electronic linkage control. Integrated Active Transport Control (ATC). Large telescopic rear view mirrors, passenger seat, 4 front and 2 rear work lights, flashing beacon. Powershift models also include Display Cab Controller dashboard with multi-function field facts monitor. 'Transmission Controller' driving aid, controlling: gearbox, 4-wheel drive, differential locks, brakes, PTO engagement and Park Lock (Powershift models).
Datatronic II (Standard on MF 8260/70/80), control/information system, featuring: adjustable slip control, multi-function display, 4 memories, comparative mode, cost factor and infra-red printer link (printer, optional).
Variable equipment includes: AutoDrive on Dynashift Plus models, super de-luxe heated seat, additional work lamps, hitch viewing mirror, Panorama cab, Fieldstar™ terminal (Factory fitted).

**Weights and dimensions.** With 'standard' wheels and tyres.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Weights** | | | | | | | | |
| Dynashift transmission | | | | | | | | |
| Minimum (no ballast, less fuel) | kg | 6410 | 6545 | 7240 | 7955 | N/A | N/A | N/A |
| Fully ballasted, with fuel | kg | 7920 | 8055 | 8800 | 9515 | N/A | N/A | N/A |
| Powershift transmission | | | | | | | | |
| Minimum (no ballast, less fuel) | kg | 6925 | 7080 | 7740 | 8360 | 8460 | 9210 | 9210 |
| Fully ballasted, with fuel | kg | 8040 | 8195 | 8855 | 9920 | 10145 | 10855 | 10855 |
| **Dimensions** (*Powershift model) | | | | | | | | |
| Length (Incl. front weights) | m | 5.38 | 5.38 | 5.54 | 5.54 (*5.63) | 5.68 | 5.68 | 5.68 |
| Overall height, over cab | m | 2.98 | 2.98 | 3.04 | 3.04 | 3.08 | 3.12 | 3.12 |
| Minimum width | | | | | | | | |
| - not incl. straight axle shaft | m | 2.15 | 2.19 | 2.21 | 2.25 | 2.30 | 2.32 | 2.32 |
| Wheelbase | m | 2.83 | 2.83 | 2.99 | 2.99 (*3.08) | 3.08 | 3.08 | 3.08 |
| Turning circle, less brakes | m | 11.4 | 11.4 | 11.3 | 11.3 | 11.6 | 12.0 | 12.0 |
| **Capacities** | | | | | | | | |
| Fuel tank | litre | 410 | 410 | 410 | 410 | 456 | 456 | 456 |

# The 8200 Series and Three Point Power

**Below:**
**- Advanced quality control**
**- Extensive rig testing**
**- 24 hour parts support**
**- Skilled service support**

**The story of the MF 8200 Series is a powerful story. The seven tractors in the range provide you with superior comfort, superior reliability, superior control and superior choice. They are also supported by the Massey Ferguson Three Point Power proposition.**

**Powerful Engineering**

Research and development: Questioning and analysis of farmers' needs is an on-going process at Massey Ferguson. Only then can all of the advanced design and manufacturing techniques be employed so that the product meets your needs ... precisely.

Testing: Before any component gets the all-clear for production it is subjected to stringent test procedures. Rig and field testing are employed extensively to compress a lifetime's work into hours or days to confirm that computer-predicted performance is achieved where it counts - out in the field.

Manufacturing: Over 9 hectares of modern manufacturing plant, the production facility is situated in the heart of 'grande culture', with over 840 000 units built and exported to over 100 countries world wide.

**Powerful Products**

The new range combines new features and builds on proven strengths giving:
– class-leading output and productivity
– powerful, economical and environmentally kind engines
– the best hydraulic system in the business
– the most comprehensive electronic monitoring control and information systems available
– low power loss transmissions and PTO systems, giving more 'usable' power
– uniquely efficient transmission control

**Powerful Support**

MF 8200 Series tractors are supported in the field by a dedicated package that includes parts, service and finance back-up.

Parts: A network of modern, interlinked parts distribution centres and 'master warehouses' are strategically situated to ensure the fastest, most comprehensive parts support to the MF Dealer network ... and onward to the customer.

Service: MF dealers are committed to a high level of customer service at all times. Our dealers are equipped with special tools and diagnostic equipment, and skilled technicians committed to keeping all of your MF equipment operating at its original level of efficiency and reliability.

**Finance**

Your MF dealer has access to a wide range of purchasing plans that allow payments to be matched to your cash flow, ensuring the fastest possible return on your investment.

# THREE POINT POWER

## Powerful engineering. Powerful products. Powerful support

**Point one** reflects our heritage of innovation and engineering excellence.
**Point two** recognises the demand for superior products with more controllable power.
**Point three** is our solid commitment to support your tractor throughout its lifetime, with personalised finance arrangements, professional service and guaranteed, readily available parts, all delivered by our world-renowned Dealer network.
Three Point Power - making these tractors as revolutionary as our original three point linkage.

MASSEY FERGUSON

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.

Massey Ferguson is a world wide brand of AGCO Corporation.

**www.masseyferguson.com**



A English 0302/12m

12953/0302/80m

WORLD RECORD

# MF 8200 Xtra

## Xtra power, Xtra performance.
## From 154 to 288 hp

MASSEY FERGUSON