# 300 series

62 to 104 DIN hp 2 and 4 Wheel drive tractors

MASSEY FERGUSON

# Massey Ferguson 300 series: quality, design simplicity ... and high output

**The MF 300 series is a range of outstandingly versatile medium horsepower two and four wheel drive tractors. Being ideally suited to meet the needs of arable, dairy or mixed farming operations, it is one of the world's biggest selling tractor ranges in this power category.**

**But being world leader in tractor sales for 30 consecutive years hasn't made Massey Ferguson complacent. So the latest 300 series tractors have been further refined to provide even better durability, output and operator convenience.**

The 12 speed shuttle transmission, with its unique single lever side shift change, has proved so successful that it is now standard across the range. It also has the added benefit of a creeper gear option on both two and four wheel dirve models.

The new HiLine+ and LoProfile+ cabs feature revised instrumentation and controls, ergonomically improved to give outstanding ease of operation. The new right hand side console also houses pre-drilled mounting points and two electrical output sockets, for convenient fitment and power supply for forager, baler and other implement control boxes.

There's a, high quality stereo radio/ cassette, and all-round visibility, which is already among the best in its class, has been improved still further.

Beneath the sheet metalwork, with its smart new livery, there are a number of less obvious changes too. On four wheel drive models, an ingenious design ensures that when the handbrake is applied, 4WD is engaged for added security and safety; foot throttle design is improved as is clutch operation, with a reduction of 50% in pedal pressure required.

There is much more too, so isn't it time to take another look at the class-leading MF 300 series?

**Left: Spacious HiLine+ cab interior**

**Right: MF 390-2 with LoProfile cab**

Left: MF 399/4

Below: MF 362/4
with LoProfile cab


MF 375/4 with
HiLine cab

| Model (All 2- or 4-wheel drive) | LoProfile+ | HiLine+ |
|---|---|---|
| MF 362, 4 Cyl. – 62 DIN hp | ● | |
| MF 365, 4 Cyl. – 62 DIN hp | ● | |
| MF 375, 4 Cyl. – 71 DIN hp | ● | ● |
| MF 390, 4 Cyl. – 80 DIN hp | ● | ● |
| MF 390T, 4 Cyl. – 90 DIN hp | ● | ● |
| MF 398, 4 Cyl. – 93 DIN hp | ● | ● |
| MF 399, 6 Cyl. –104 DIN hp | | ● |

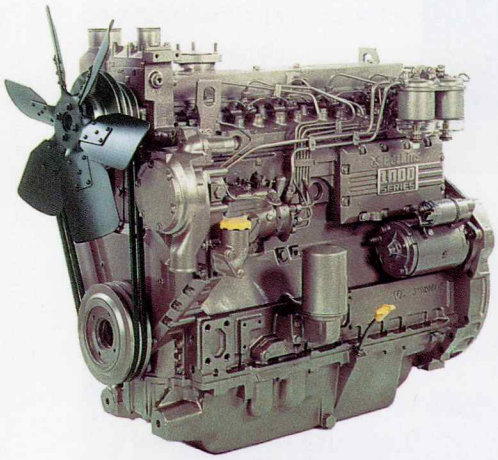
# Plenty of power ... with added torque and economy

**All MF 300 series tractors have Perkins engines which have been specifically designed for agricultural use, with a unique long stroke design which develops high torque at low engine revs.**

**This torque back-up means that in difficult conditions, when engine revs fall as load increases, real 'working power' rises, so you don't have to change down continually to maintain high output. Also, tyres and transmission components last longer, driving is more relaxed and fuel economy is better too.**

### 'Wastegate' turbo

The MF 390T and 398 also have advanced 'wastegate' turbocharged engines. By releasing excess turbo pressure as engine speed increases, optimum boost pressure can be achieved at low engine revs, giving exceptional low speed torque, plus outstanding economy and durability.



**1006 Series engine featuring the Perkins QUADRAM™ combustion system**

### Perkins 1006 engine for the MF 399

The top-of-the-range 399 features the Perkins 1006 series, six litre, six cylinder engine rated at 104 DIN hp.

With this engine, power output is only part of the story. Outstanding performance has been achieved in terms of the 'spread' of power, with high power and torque available throughout the heavy working range between 1800 and 2200 engine rev/min. This performance is further supported by a steep torque rise as engine revs fall under load. So there is always plenty of pulling power in reserve in tough conditions.

### Perkins QUADRAM™ combustion

At the heart of the 1006 engine, is the Perkins QUADRAM™ combustion system. Featuring a unique four-lobed combustion bowl in the crown of the piston, air and fuel mixture is optimised to give more efficient combustion than any conventional direct injection system.

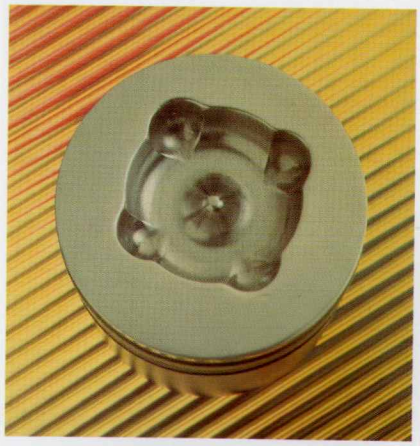
The result is more power and torque (there's 30% torque back-up) from less fuel, resulting in greater productivity. There is also a reduction in noise and exhaust emissions.

### Easy serviceability saves time ... and money

Routine maintenance and periodic servicing are both fast and simple, thanks to the extra care taken in the design of the MF 300 series.

Engine and transmission oil dipsticks are readily accessible. Hinged and removable hood and side panels (see top right) fully reveal the engine, cooling system and fuel tank. The auxiliary hydraulic system has an externally mounted pump and micronic filter and the steering pump is also conveniently externally mounted. All models have a cable operated, cerametallic clutch which is very durable and, due to a new constant running, self aligning thrust bearing, exceptionally light in operation.

The 1006 engine has been designed for extra durability. From the Perkins QUADRAM™ combustion system which reduces mechanical stress, to the use of dry cylinder liners, controlled expansion pistons, replaceable valve guides and so on – it all adds up to a longer life and easy serviceability.



**The 4-lobed piston showing the Perkins QUADRAM™ combustion design**

Below: MF 399 fitted with the Perkins 1000 series engine offers outstanding performance

Hinged hood gives excellent engine access

# Efficient 4-wheel drive and PTO systems

**Power is an important element of tractor performance. But in itself it is no measure of a tractor's worth. Where the MF 300 series scores, is the way in which the power is converted into useful work. By offering a modern transmission with creeper speed option for precise matching of speed to working conditions. By offering a simple but effective 4 wheel drive system for added traction, stability and safety. And by being based on sound design principles, providing good weight distribution, very low centre of gravity and the unsurpassed Ferguson hydraulic control system.**

### High output 4-wheel drive

Whether you need extra grip for tackling slippery or hilly conditions, or simply to increase output in normal conditions, four wheel drive is a proven asset. The MF system provides a 50 $^{0}$ steering angle (depending on tyre size and track width) giving outstanding manoeuvrability - without the front wheels 'leaning' on full lock, so soil and tyre damage is minimal.

On the MF 362, the new 4WD front axle with its excellent 52$^{0}$ steering angle also improves manoeuvrability still further to ease operation in confined spaces.

### On-the-move 4WD engagement and disengagement

All models feature on-the-move 4-wheel drive engagement and disengagement controlled by a rocker switch mounted on the stylish new right hand console.

### Automatic 4-wheel braking

This switch-controlled, electro-hydraulic system also provides automatic engagement of 4-wheel drive when the brakes are applied, or when the parking brake is applied. This gives 4-wheel braking, for added braking efficiency, stability and safety. Due to its fail-safe, 'pressure off' design, if loss of hydraulic pressure occurs, again, 4-wheel drive will automatically be engaged.

### Simple differential lock operation

On 4-wheel drive models, both front and rear differential locks are actuated simultaneously by pressing a rocker switch mounted conveniently to hand on the new right hand console. This convenient, effortless system gives the operator full control and greatly contributes to relaxed operation over long periods.

### Shiftable 'power'/economy PTO systems

The in-cab shiftable PTO system is standard and offers a high degree of flexibility with PTO driven implements. It is available with either 540/540 Economy or 540/1000 speed versions. (Depending on model).

### Economy PTO

With the standard 6-spline shaft fitted, implements requiring 540 rev/min operation can be driven at 1979 engine rev/min for maximum power, or at 1421 engine rev/min. Operation at the reduced engine speed is ideal for low power applications such as spraying, granular fertiliser spreading and so on, with greatly improved economy and comfort.

The 540/1000 rev/min PTO option is required for higher power equipment, and with 1000 PTO rev/min being delivered at 2000 engine rev/min maximum power is achieved with plenty of torque in reserve.

### Simple PTO controls

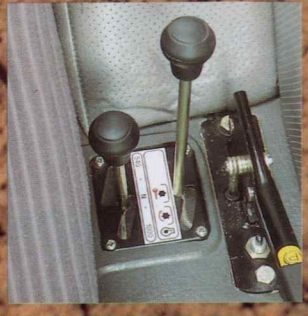
The PTO levers are conveniently situated to the left of the operator's seat and provide speed selection plus engagement and disengagement with a neutral position. With neutral selected, the PTO shaft can be turned freely by hand for easy implement attachment.

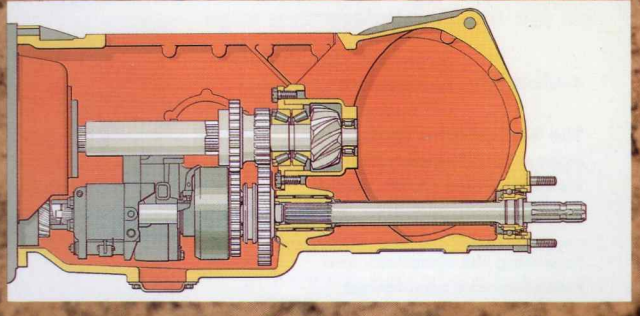
**Right: Ergonomically designed PTO levers provide simple, convenient operation**

**Far right: Simple, efficient shiftable PTO system**

**Far left: 4-wheel drive and differential lock switches**

**Left: Economy PTO is ideal for light duty applications**

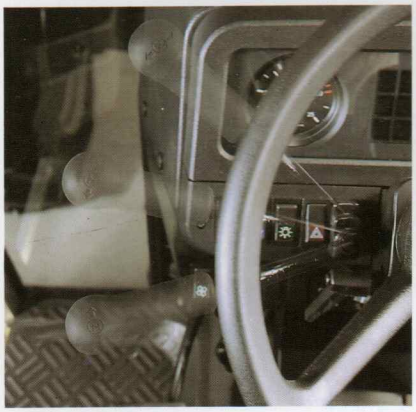





FERGUSON
375


MASSEY FERGUSON
399
HiLine

# Standard 12 speed shuttle gearbox



**Above:**
**The shuttle lever is conveniently placed to the left of the steering column, leaving the right hand free for gear changing and spool valve operation**

**Left:**
**Clearly legible lights on the new instrument console provide a ready check on transmission range selected**

**Below:**
**Handy creeper gear selection is by a simple mechanical lever**

**The 12 speed shuttle gearbox is now standard on all 4 and 6 cylinder 300 series models. It features an excellent range of well spaced gear ratios and a unique single lever, side shift gear change, giving easy operation and optimum output in a wide variety of applications.**

### Unique single lever side shift

The 12 speed shuttle gearbox has a unique single lever side shift gear change. As well as the advantage of unhindered freedom of movement inside the cab, the single lever shift system is simplicity itself to use. In addition to the conventional 'H' gate for selection of the four basic gears, there is a third plane (see diagram, opposite) for range selection. Simply move the gear lever to the right and move forwards to select a higher range and backwards to select a lower range. The range selected is shown on an indicator on the instrument console.

### Synchro shuttle for matched forward/reverse speeds

The 12 speed shuttle gearbox provides an easy, synchronised forward/reverse gearshift in any gear. Simply depress the clutch pedal and move the shuttle lever forwards for forward direction and rearwards for reverse. Loading, buckraking, yard scraping or simply turning on tight headlands – all are faster and more efficient with this high output shuttle facility.

### Creeper gearbox

For fine seed bed preparation, planting and harvesting specialist crops, very low forward speeds are often required. To cater for this type of application, the 12 speed shuttle gearbox is available with a 'creeper' gear option.

2 and 4 wheel drive models can be specified with creeper gears, providing four additional speeds ranging from 320 metre/h at standard PTO speed (depending on model and wheel and tyre specification).

### Easy selection

Selecting the creeper range couldn't be simpler. Select LOW range, using the side shift gear lever, then push the 'creep' engagement lever down. There is no need to worry about inadvertent selection in MEDIUM or HIGH range because the range selector has a safety lock-out device built in. This protects the creeper gears from excessive torque loads, and also avoids duplication of ground speeds.

### Reverse speeds

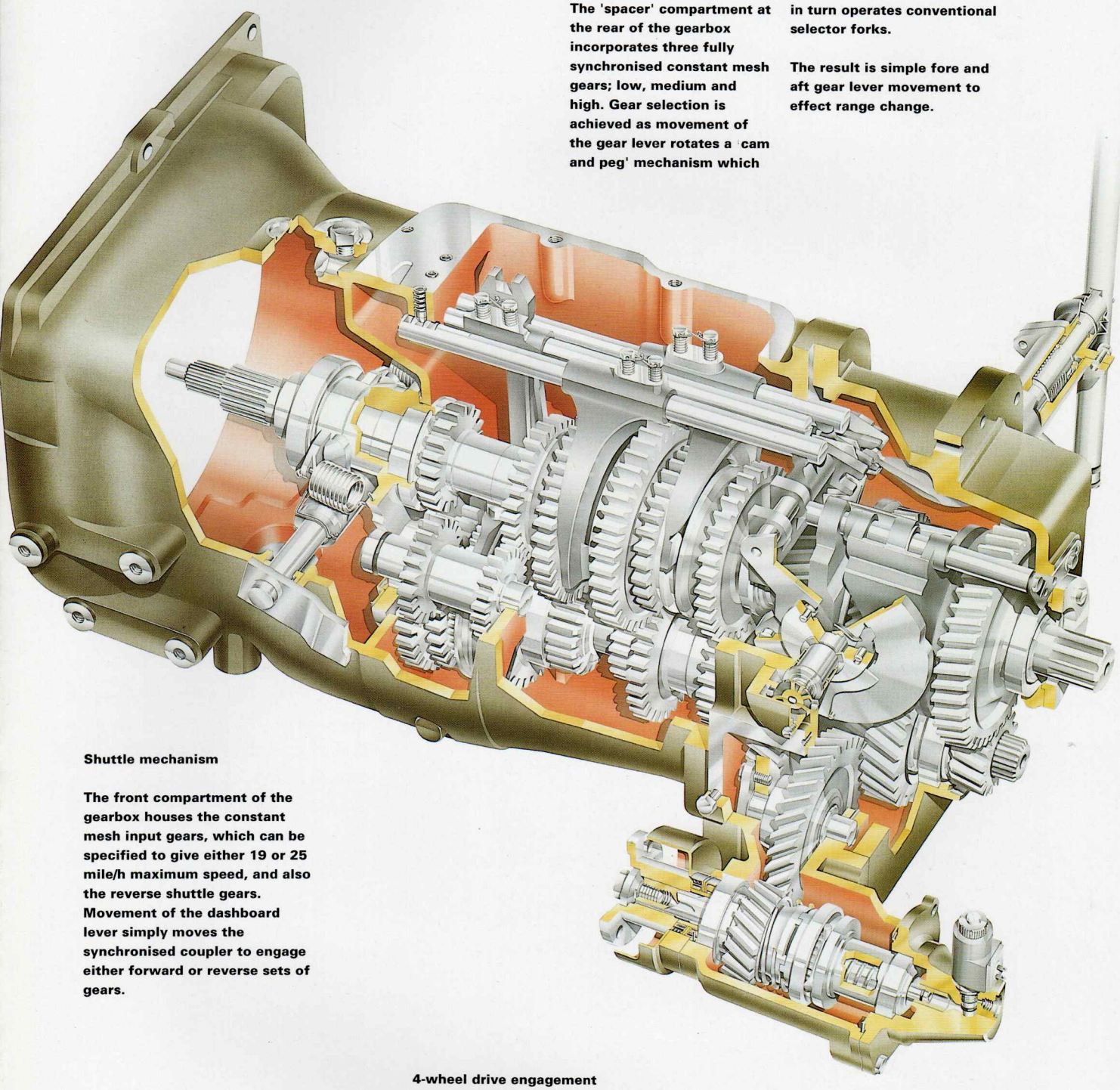
On MF 362 - 390T models, moving the shuttle lever into 'reverse' overrides the creep gears, providing normal reverse speeds. This easy 'fast' reverse speed selection saves time at the headland and means less tiring operation.

# The inside story

Unique single lever, side shift gear change

The 'spacer' compartment at the rear of the gearbox incorporates three fully synchronised constant mesh gears; low, medium and high. Gear selection is achieved as movement of the gear lever rotates a 'cam and peg' mechanism which in turn operates conventional selector forks.

The result is simple fore and aft gear lever movement to effect range change.



**Shuttle mechanism**

The front compartment of the gearbox houses the constant mesh input gears, which can be specified to give either 19 or 25 mile/h maximum speed, and also the reverse shuttle gears. Movement of the dashboard lever simply moves the synchronised coupler to engage either forward or reverse sets of gears.

**4-wheel drive engagement**

The 4-wheel drive engagement system for 12 speed shuttle tractors is also shown on this cut-away illustration.

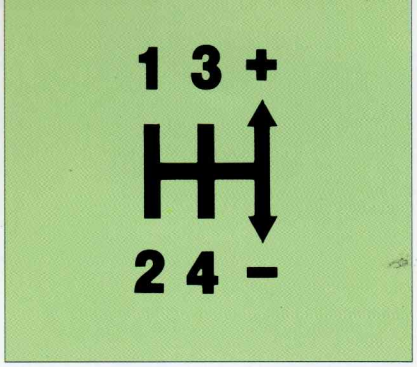
Retaining the simplicity and reliability of a mechanical system, a console-mounted switch provides easy on-the-move engagement and disengagement by electro-hydraulic control of a 'dog clutch'.

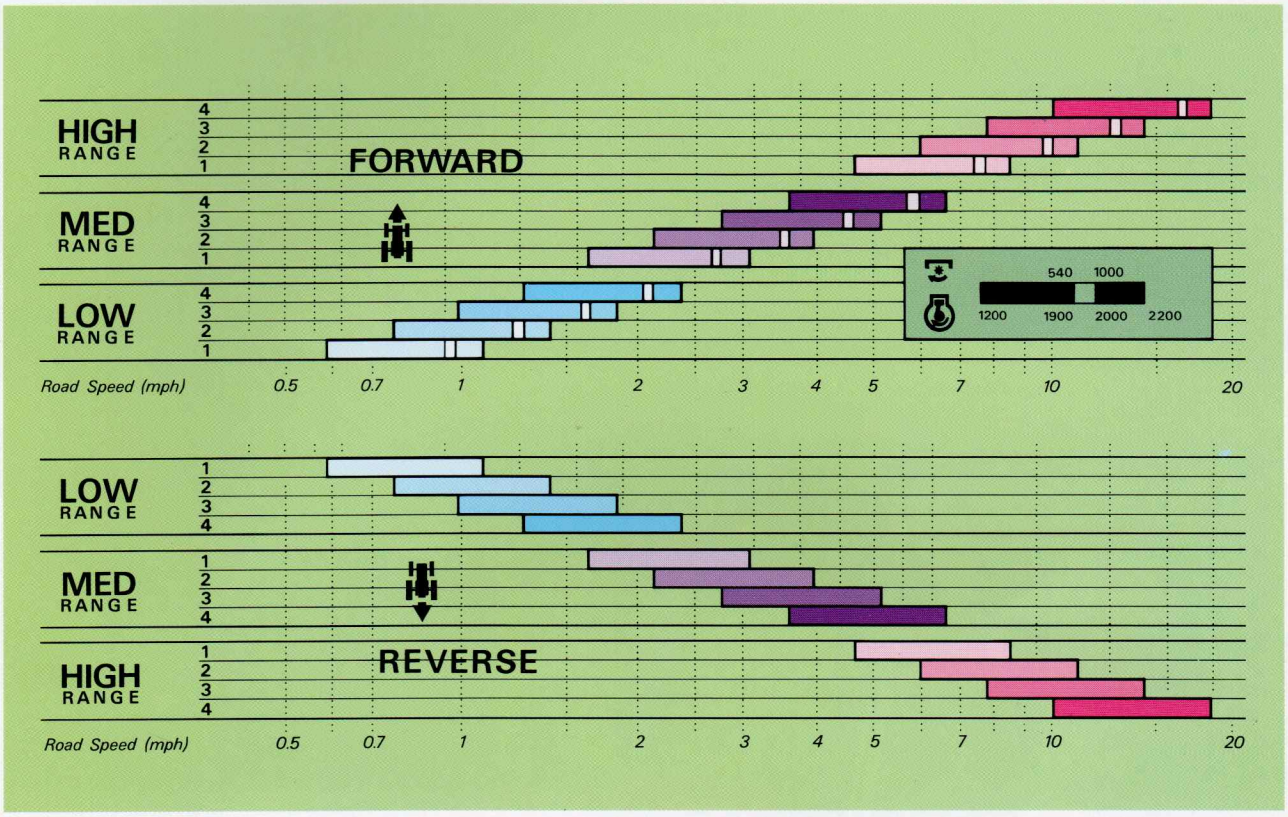
**Typical low, medium and high range applications**


# Single lever gear and range selection

**Simple 'gate' for both gear and range selection.**

**Below: The 12 speed shuttle gearbox offers ideally spaced range of speeds, particularly in the 2 - 7 mile/h field working range**



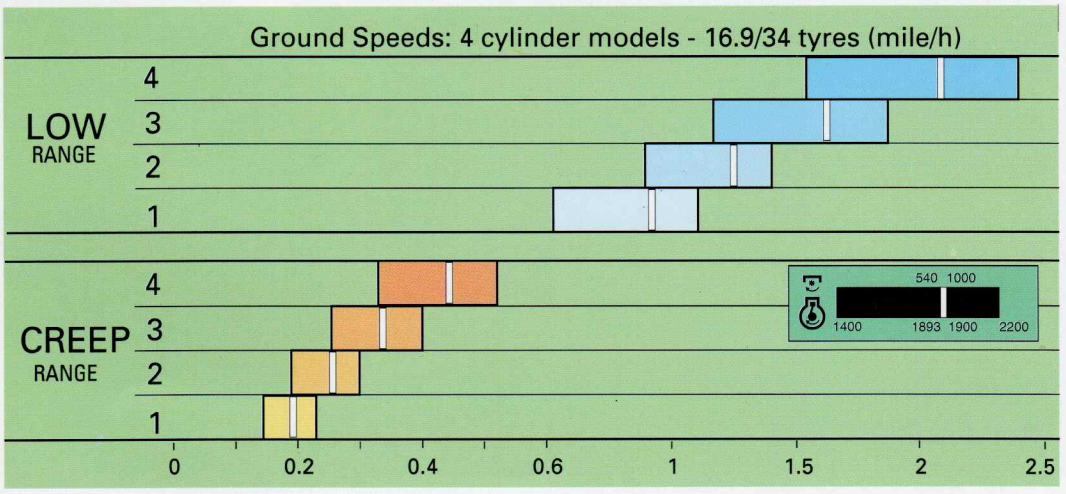




## Range selection

Low range, most commonly used for planting or transplanting operations but also for deep cultivation work, is normally engaged with the tractor stationary. However, the fully synchronised, single lever speed and range change is particularly useful when moving between field and road – medium and high range.

Once in the field, the range (generally medium) is selected as you enter work and maintained throughout an entire operation, so the gear lever is used solely in the 'standard' H-gate.

High range is used almost exclusively for road transport or travelling quickly from one field location to another. The option of 25 mile/h maximum road speed is available (where legally permitted), to further improve output in haulage applications.




**Right: Sample speed chart shows existing 'low' range and ultra-low 'creep' speeds.**

# Ferguson system hydraulics. Powerful, accurate, responsive

**Featuring the best mechanical control system in the world, the MF 300 series linkage and hydraulics have been relied upon by farmers for generations.**

Providing unique hydraulic versatility, MF 300 series tractors use two independent systems to operate the three point linkage and external hydraulics. The heart of the linkage system is the exclusive 'scotch yoke' four piston pump which provides smooth, controllable oil flow to the linkage lift cylinder, with a maximum operating pressure of 3000 lbf/in$^2$ providing excellent lift capacity.

What makes this system different – and so much better than others – is that linkage control is governed by an inlet valve on the suction side of the pump. By controlling oil flow in this low pressure area, by linkages and springs which react immediately to signals from the implement, the response is faster, smoother and more accurate than any other mechanical linkage system.

**Well designed levers and switches ensure precise control over linkage and external hydraulics**

## External hydraulics

The second independent system, auxiliary or external hydraulics, uses an engine-mounted auxiliary pump to provide more than enough oil flow and pressure to cater for modern high-performance equipment. In addition, a simple selector valve enables the auxiliary pump to operate either completely independently of the linkage pump, or to produce a 'combined' flow of up to 63,6 litre/min and a maximum pressure of 3000 lbf/in$^2$ giving, for example, very high tear-out force.

And, via up to three spool valves, you have total flexibility to select and control the oil flow best suited to the job in hand – whether you're ploughing with a hydraulically indexed reversible plough, mucking out with a hydraulically operated front loader or hauling with a big tipping trailer.

## 3-point linkage

The rear linkage is fully specified to ease implement attachment and speed operation. Hook-type lower link ends (standard on MF 398/399), plus external position control enable fast, effortless implement attachment and detachment.

**Left: Responsive hydraulics and versatile linkage offer maximum output and flexibility (MF 399 illustrated).**

**Right: The hitch specification illustrated is not available in the UK.**

**Internal hydraulics provide good lift capacity**

**High oil flow and pressure give excellent performance**


**MF 390/4 Hiline tractor**

# New HiLine+ and LoProfile+ cabs ... refined for added comfort and control

New roof consoles house air conditioning controls, fuses, lights and wipers

**MF's LoProfile+ and HiLine+ cabs have been designed and developed to meet the varied needs of different farming operations. Now, both cabs have been extensively revised to incorporate a wide range of improvements to further ease day-to-day operation, increase output and improve durability.**

### The LoProfile+ cab

The LoProfile+ cab, as its name implies, gives the tractor a lower overall height, making it ideal for use where access into low buildings is important. The lower floor height, two wide-opening doors and the side-mounted gear lever, make it easy to get in and out of the cab – especially appreciated when there's a constant need for climbing in and out to open farm gates, feed livestock or carry out the multitude of jobs performed by a multi-purpose 'chore' tractor.

Low Profile cab is ideal for access to low buildings

### The HiLine+ cab

The HiLine+ cab benefits from extra sound-proofing, a higher specification seat and a raised cab, which provides a clear, virtually flat floor pan.

Air conditioning is also available on HiLine+ models from MF 390 to 399. Two simple switches mounted to the left of the operator in a new roof console give full control over in-cab temperature. Two additional vents provide air recirculation inside the cab to speed cooling on really hot days.

### Forestry cab model

The HiLine+ cab is also available in a version with a 180° swivelling seat and other features designed for forestry and other specialist applications, where rear-facing, stationary operation is required.

Dual level heating and ventilation system lets you keep your feet warm ... while keeping a cool head.

### Excellent ergonomics give improved output

All of the main controls are housed in a stylish new console to the right of the operator's seat. Linkage and spool valve levers and knobs have been ergonomically designed for easy recognition and operation ... there's even a handrest to aid fine tuning of the Ferguson System draft control lever.

On 4 wheel drive models, front and rear differential locks are actuated by a convenient rocker switch. Simply flick the switch, positioned conveniently adjacent to the linkage control levers.

Simplicity is the keynote too with the addition of switch-operated 'on-the-move' 4 wheel drive engagement and disengagement.

### 'Dual level' heating and ventilation system

On all models, the roof-mounted ventilation system which complements the heater, enables the operator to direct warm air to the feet or windscreen, whilst maintaining a refreshing stream of cool, filtered air to the face and upper body.

The high capacity cab air filter is mounted in a separate compartment in front of the roof hatch. The filter rests in a tray, which is easily removed for cleaning, without spilling dust inside the cab.

### Stereo radio/cassette player

A new AM/FM stereo radio/cassette player is factory installed in the overhead console as standard equipment. Superb sound quality ensures day-long listening enjoyment.

### Extra work lights ... extra night-time output

All MF 300 series models have two rear and two front roof-mounted work lights as standard.

**Far right: High specification seat for HiLine+ models**

**Right: Mounting points and power sockets for convenient attachment of implement control boxes**

# 300 series tractors

**Key: ● = standard equipment** **O = variable equipment** **N/A = not available**

| | | 362 | 365 | 375 | 390 | 390T | 398 | 399 |
|---|---|---|---|---|---|---|---|---|
| **Performance** | | | | | | | | |
| Engine power | † DIN PS (kW) | 62 (45,7) | 62 (45,7) | 71 (52,3) | 80 (58,9) | 90 (66,2) | 93 (68,5) | 104 (76,5) |
| | * BS hp (kW) | 68 (50,7) | 68 (50,7) | 78 (58,2) | 86 (64,1) | 97 (72,3) | 100 (74,6) | 111 (83) |
| @ rated speed | rev/min | 2200 | 2200 | 2200 | 2200 | 2200 | 2200 | 2200 |
| Max. torque | † Nm (*lbf ft) | 243 (191) | 243 (191) | 268 (218) | 283 (228) | 341 (251) | 349 (273) | 430 (317) |
| @ engine speed | rev/min | 1400 | 1400 | 1400 | 1600 | 1400 | 1400 | 1200 |
| PTO power @ rated engine speed | # PS (kW) | 56 (41,2) | 56 (41,2) | 64 (47,1) | 73 (53,7) | 83 (61,1) | 86 (63,3) | 95 (69,9) |

† DIN 70020 (PS - Metric units) * BS certified to Au141a 1971 # Manufacturer's estimate

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Engine** | | | | | | | | |
| Perkins, water cooled, direct injection diesel | | ● | ● | ● | ● | ● | ● | ● |
| Model | | A4.236 | A4.236 | A4.236 | A4.248 | AT4.236 | AT4.236 | 1006 |
| Aspiration | | Natural | Natural | Natural | Natural | Turbo | Turbo | Natural |
| Number of cylinders | | 4 | 4 | 4 | 4 | 4 | 4 | 6 |
| Capacity | litre ($in^3$) | 3,86 (236) | 3,86 (236) | 3,86 (236) | 4,07 (248) | 3,86 (236) | 3,86 (236) | 6,0 (365) |
| Dual, dry element air cleaner | | ● | ● | ● | ● | ● | ● | ● |
| **Clutch** | | | | | | | | |
| Diameter | mm (in) | 305 (12) | 305 (12) | 305 (12) | 305 (12) | 330 (13) | 330 (13) | 330 (13) |
| Cerametallic lining | | ● | ● | ● | ● | ● | ● | ● |
| **Transmission** | | | | | | | | |
| 12 forward, 12 rev. synchro. with manual shuttle and side shift | | ● | ● | ● | ● | ● | ● | ● |
| 12 forward, 12 rev. synchro. with manual shuttle and side shift, plus creeper speeds | | O | O | O | O | O | O | O |

**Road Speeds (mile/h) – Note: Reverse speeds are as related forward speeds**

| Gear | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12.4–32 tyres (362) | 0.9 | 1.2 | 1.6 | 2.1 | 2.6 | 3.4 | 4.5 | 5.9 | 7.1 | 9.3 | 12.2 | 15.9 |
| 13.6–38 tyres (365/375/398) | 1.1 | 1.4 | 1.8 | 2.4 | 2.9 | 3.9 | 5.0 | 6.6 | 7.9 | 10.4 | 13.6 | 17.8 |
| 13.6–38 tyres (390/390T) | 1.1 | 1.4 | 1.9 | 2.4 | 3.0 | 4.0 | 5.2 | 6.8 | 8.2 | 10.7 | 14.1 | 18.4 |
| 16.9–38 tyres (398/399) | 1.1 | 1.5 | 1.8 | 2.5 | 3.1 | 4.1 | 5.4 | 7.0 | 8.5 | 11.0 | 14.5 | 19.0 |

**Creeper speeds**

| Gear | Creep | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|
| 12.4–32 tyres (362) | | 0.19 | 0.26 | 0.34 | 0.45 |
| 13.6–38 tyres (365/375/398) | | 0.23 | 0.30 | 0.38 | 0.51 |
| 13.6–38 tyres (390/390T) | | 0.23 | 0.30 | 0.40 | 0.51 |
| 16.9–38 tyres (398/399) | | 0.23 | 0.31 | 0.40 | 0.53 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Power take-off** | | | | | | | | |
| Independent, shiftable, operated by hand lever/s, actuated by hydraulic clutch | | ● | ● | ● | ● | ● | ● | ● |
| – 540/540 rev/min economy | | ● | ● | ● | O | N/A | N/A | N/A |
| – 540/1000 rev/min | | N/A | O | O | ● | ● | ● | ● |
| PTO speed @ engine rev/min | | | | | | | | |
| 540/540 economy rev/min | @ | 1979/1421 | 1979/1421 | 1979/1421 | 1979/1421 | N/A | N/A | N/A |
| 540/1000 rev/min | @ | N/A | 1902/2000 | 1902/2000 | 1902/2000 | 1902/2000 | 1902/2000 | 1902/2000 |
| 35 mm (1.38 in) dia. PTO shaft | | ● | ● | ● | ● | ● | ● | ● |

| | | 362 | 365 | 375 | 390 | 390T | 398 | 399 |
|---|---|---|---|---|---|---|---|---|
| **Linkage and hydraulics** | | | | | | | | |
| Draft, Position and Response control | | ● | ● | ● | ● | ● | ● | ● |
| Linkage pump | | | | | | | | |
| – max. oil flow | litre/min | [22] | 27,6 [22] | 27,6 [22] | 27,6 [22] | 27,6 | 27,6 | 27,6 |
| [540 economy PTO] | Imp. gal/min | [4.84] | 6.07 [4.84] | 6.07 [4.84] | 6.07 [4.84] | 6.07 | 6.07 | 6.07 |
| Max. pressure | bar (lbf/in²) | 207 (3000) | 207 (3000) | 207 (3000) | 207 (3000) | 207 (3000) | 207 (3000) | 207 (3000) |
| Max. lift capacity at link ends, links horizontal | | | | | | | | |
| – less assistor ram/s | kg (lb) | 2145 (4728) | 2145 (4728) | 2586 (5701) | 2586 (5701) | 2586 (5701) | N/A | N/A |
| – with assistor ram/s | kg (lb) | N/A | N/A | 3059 (6744) | 3059 (6744) | 3059 (6744) | 3059 (6744) | 4039 (8904) |
| Lower links, type | | | | | | | | |
| Cat 1/2 interchangeable ball end | | ● | ● | N/A | N/A | N/A | N/A | N/A |
| Cat 2 fixed ball end | | N/A | N/A | ● | ● | ● | N/A | N/A |
| Cat 2 quick-attach hook end | | N/A | N/A | N/A | O | O | ● | ● |
| **Auxiliary hydraulics** | | | | | | | | |
| Engine mounted, dual element gear type pump | | ● | ● | ● | ● | ● | ● | ● |
| Max. oil flow, | l/min | 36 | 36 | 36 | 36 | 36 | 36 | 36 |
| @ 175 bar (2500 lbf/in²) | Imp.gal/min | 7.92 | 7.92 | 7.92 | 7.92 | 7.92 | 7.92 | 7.92 |
| Combined flow | l/min | [58] | 63,6 [58] | 63,6 [58] | 63,6 [58] | 63,6 | 63,6 | 63,6 |
| [540 Economy PTO] | Imp.gal/min | [12.8] | 13.99 [12.8] | 13.99 [12.8] | 13.99 [12.8] | 13.99 | 13.99 | 13.99 |
| Selector valve | | ● | ● | ● | ● | ● | ● | ● |
| 2 spool valves | | ● | ● | ● | ● | ● | ● | ● |
| **Steering** | | | | | | | | |
| Hydrostatic, with tilt steering column | | ● | ● | ● | ● | ● | ● | ● |
| **4WD front axle** | | | | | | | | |
| Parallel drive with on-the-move engagement and disengagement. | | ● | ● | ● | ● | ● | ● | ● |
| Maximum turning angle | | 52° | 50° | 50° | 50° | 50° | 50° | 50° |
| Auto. 4WD engagement with brakes | | ● | ● | ● | ● | ● | ● | ● |
| Differential lock, switch-operated, simultaneously with rear diff. lock | | ● | ● | ● | ● | ● | ● | ● |
| **Brakes** | | | | | | | | |
| Oil cooled, hydraulic actuation | | ● | ● | ● | ● | ● | ● | ● |
| Parking brake, hand lever operated with auto. 4WD engagement (4WD models only) | | ● | ● | ● | ● | ● | ● | ● |
| Hydraulic trailer brakes | | O | O | O | O | O | O | O |
| **Wheels and tyres** * | | | | | | | | |
| Front - 2WD | | 7.50–16 | 7.50–16 | 7.50–16 | 10.00–16 | 10.00–16 | 10.00–16 | 10.00–16 |
| - 4WD | | 11.2 R 20 | 9.5 R 28 | 9.5 R 28 | 13.6 R 24 | 13.6 R 24 | 13.6 R 24 | 13.6 R 28 |
| Rear, radial | | 12.4 R 32 | 13.6 R 36 | 13.6 R 36 | 16.9 R 34 | 16.9 R 34 | 16.9 R 34 | 16.9 R 38 |
| (# 4WD only) | | #14.9 R 28 | | | | | | |
| **Track adjustments** | | | | | | | | |
| Front - 2WD | m | 1,27–1,88 | 1,27–1,88 | 1,27–1,88 | 1,27–1,88 | 1,27–1,88 | 1,37–1,98 | 1,37–1,98 |
| | in | 50–74 | 50–74 | 50–74 | 50–74 | 50–74 | 54–78 | 54–78 |
| - 4WD | m | 1,31–1,83 | 1,38–1,94 | 1,38–1,94 | 1,38–1,94 | 1,38–1,94 | 1,53–2,09 | 1,53–2,09 |
| | in | 52–72 | 54–76 | 54–76 | 54–76 | 54–76 | 60–82 | 60–82 |
| Rear - Pressed wheels | m | 1,43–2,13 | 1,43–2,13 | 1,43–2,13 | 1,43–2,13 | 1,43–2,13 | 1,53–2,23 | 1,53–2,23 |
| | in | 56–84 | 56–84 | 56–84 | 56–84 | 56–84 | 60–88 | 60–88 |

| | | 362 | 365 | 375 | 390 | 390T | 398 | 399 |
|---|---|---|---|---|---|---|---|---|
| **Miscellaneous equipment** | | Standard equipment includes chain stabilisers, drawbar and Auto-Hitch and hitch viewing mirror | | | | | | |
| Cab – LoProfile+ | | Factory-fitted, low-noise safety cab – around 85 dB(A). Equipment includes front windscreen wiper and washer, rear view mirrors, large internal mirror, cab heater plus fresh air system, full lighting set including direction indicators, hazard lights, 7-pin trailer socket and 2 front and 2 rear work lamps. High specification seat. Stereo radio/cassette. | | | | | | |
| – HiLine+ | | As LoProfile+ cab but around 82 dB(A) in-cab noise level, flat cab floor and higher specification seat. | | | | | | |
| **Variable equipment** | | | | | | | | |
| Tyres – 2WD | front | 11.0L–15 | 11.0L–15 | | | 7.50–18 | 7.50–18 | 7.50–18 |
| | rear | 14.9 R 28 | 16.9 R 30 | 16.9 R 30 | 13.6 R 38 | 13.6 R 38 | 13.6 R 38 | 13.6 R 38 |
| – 4WD | front | 13.0/65-18 | 11.2 R 24 | 11.2 R 24 | 11.2 R 28 | 11.2 R 28 | 11.2 R 28 | 11.2 R 28 |
| | rear | 16.9–24 | 16.9 R 30 | 16.9 R 30 | 13.6 R 38 | 13.6 R 38 | 13.6 R 38 | 13.6 R 38 |
| | front | | | | | | 13.6 R 28 | |
| | rear | | | | | | 16.9 R 38 | |
| Miscellaneous | | Hydraulic trailer brakes. Front end weights. Wheel weights. Creeper gearbox, 4.7:1 reduction. Belt pulley. 21 spline PTO shaft (standard on 398/399). 3rd single/double acting spool valve with or without detent/kick-out, float, zero leak or motor spool. Air conditioning (HiLine+ models, 390–399). | | | | | | |
| **Weights and Dimensions** | | Weights and dimensions are with 'standard' wheels and tyres (*) and with full fuel, oil and water | | | | | | |
| **Weight** | | | | | | | | |
| 2WD – front | kg (lb) | 1120 (2469) | 1398 (3082) | 1398 (3082) | 1420 (3130) | 1424 (3139) | 1440 (3175) | 1443 (3181) |
| – rear | kg (lb) | 1630 (3594) | 1723 (3798) | 1723 (3798) | 1765 (3891) | 1765 (3891) | 1769 (3900) | 2196 (4841) |
| – total | kg (lb) | 2750 (6063) | 3121 (6880) | 3121 (6880) | 3185 (7021) | 3189 (7030) | 3209 (7075) | 3639 (8022) |
| 4WD – front | kg (lb) | 1277 (2815) | 1661 (3660) | 1661 (3660) | 1681 (3706) | 1685 (3715) | 1691 (3728) | 1710 (3770) |
| – rear | kg (lb) | 1643 (3621) | 1735 (3824) | 1735 (3824) | 1777 (3918) | 1779 (3922) | 1785 (3935) | 2160 (4762) |
| – total | kg (lb) | 2920 (6436) | 3396 (7485) | 3396 (7485) | 3458 (7623) | 3464 (7637) | 3476 (7663) | 3870 (8532) |
| **Dimensions** | | | | | | | | |
| Overall length, 2WD/*4WD | m (in) | 3,53 (139.1) | 3,76 (148.0) | 3,76 (148.0) | 3,81 (150.0) | 3,81 (150.0) | 3,81 (150.0) | 4,11 (162.0) |
| Wheelbase – 2WD | m (in) | 2,18 (86.0) | 2,28 (89.8) | 2,28 (89.8) | 2,28 (89.8) | 2,28 (89.8) | 2,28 (89.8) | 2,58 (101.6) |
| – 4WD | m (in) | 2,22 (87.3) | 2,35 (92.5) | 2,35 (92.5) | 2,35 (92.5) | 2,35 (92.5) | 2,35 (92.5) | 2,64 (103.9) |
| Width - minimum | mm (in) | 1,64 (64.6) | 1,87 (73.7) | 1,87 (73.7) | 1,87 (73.7) | 1,87 (73.7) | 1,97 (77.7) | 1,97 (77.7) |
| Height, over exhaust/cab | | | | | | | | |
| – LoProfile+ models | m (in) | 2,40 (94.4) | 2,51 (98.8) | 2,51 (98.8) | 2,53 (99.6) | 2,53 (99.6) | 2,54 (100.0) | N/A |
| – Hiline+ models | m (in) | N/A | N/A | 2,63 (103.5) | 2,65 (104.3) | 2,65 (104.3) | 2,65 (104.3) | 2,73 (107.5) |
| Turning Circle | | | | | | | | |
| – 2WD, less brakes | m (in) | 6,90 (272) | 7,50 (295) | 7,50 (295) | 7,50 (295) | 7,50 (295) | 7,60 (299) | 8,43 (332) |
| – 4WD, less brakes | m (in) | 7,90 (311) | 8,52 (335) | 8,52 (335) | 8,52 (335) | 8,52 (335) | 8,52 (335) | 9,41 (371) |
| Ground clearance | | | | | | | | |
| – under drawbar | mm (in) | 294 (11.6) | 364 (14.3) | 364 (14.3) | 394 (15.5) | 394 (15.5) | 394 (15.5) | 433 (17.0) |
| – under gearbox | mm (in) | 409 (16.1) | 479 (18.9) | 479 (18.9) | 506 (20.0) | 506 (20.0) | 506 (20.0) | 548 (21.6) |
| – under 4WD axle | mm (in) | 390 (15.4) | 479 (18.9) | 485 (19.1) | 490 (19.3) | 490 (19.3) | 490 (19.3) | 529 (20.8) |
| * measured to front of weight frame | | | | | | | | |
| **Capacities** | | | | | | | | |
| Fuel tank | | | | | | | | |
| – LoProfile+ models | litre (Imp.gal) | 75 (16.5) | 108 (23.8) | 108 (23.8) | 108 (23.8) | 108 (23.8) | 108 (23.8) | N/A |
| – HiLine+ models | litre (Imp.gal) | N/A | N/A | 126 (27.8) | 126 (27.8) | 126 (27.8) | 126 (27.8) | 126 (27.8) |
| Cooling system | litre (Imp.gal) | 14,4 (3.2) | 15,2 (3.3) | 15,2 (3.3) | 15,2 (3.3) | 15,5 (3.4) | 15,5 (3.4) | 23,0 (5.1) |
| Hydraulic system | litre (Imp.gal) | 47,4 (10.3) | 47,4 (10.3) | 47,4 (10.3) | 47,4 (10.3) | 47,4 (10.3) | 47,4 (10.3) | 47,4 (10.3) |

Specifications are subject to change without notice and may vary from country to country. Please check with your distributor or dealer at the time of placing your order.

# Massey Ferguson's all-round commitment

### Research and development

Understanding farmers's need, by on-going questioning and analysis of their requirements, is a fundamental part of the design process at Massey Ferguson. Only then can sophisticated design techniques such as Computer Aided Design, produce the versatile, efficient tractors required in today's tough farming environment.

### Testing

Before any component or major assembly is given the all-clear for production it is subjected to the most stringent test procedures. Rig testing is used to condense a lifetime's work into a matter of hours or days. Then extensive field testing is conducted to ensure that drawing board or test rig performance can be maintained in day-to-day operation.

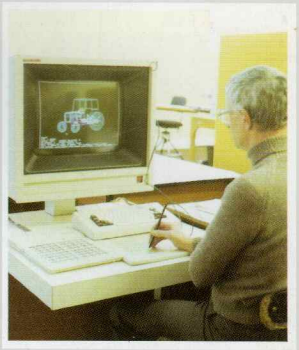
### Quality control

The very latest inspection and manufacturing techniques help to ensure a long, trouble-free working life for your Massey Ferguson tractor.

### Parts and service support

The Massey Ferguson dealer network has been carefully appointed and trained to provide you with a high standard of responsive local service, so when you buy Massey Ferguson, you will truly discover the benefits of MF aftersales support. Massey Ferguson dealers have factory trained mechanics, specialised workshop equipment, and a stock of genuine Massey Ferguson parts.

Your MF dealer can also offer you a range of preventive maintenance programmes at value for money prices, so that regular maintenance through your dealer will ensure minimum downtime, and help keep operating costs under control.



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