

Massey Ferguson

2005





Massey - Ferguson

Where farmers' ideas take root.

A few years ago, we introduced the 2000 range of tractors – high-horsepower, high-quality, high-specification tractors, designed to meet the needs of the farming community worldwide.

The range was an immediate success. Even under the most punishing conditions, it proved that it could perform and keep performing, day in, day out.

However, despite the critical acclaim, we still weren't satisfied. Our engineers and designers went looking for ways to improve an already outstanding product. And where better to start than with you, the farmer?

We asked questions. We listened. And we acted.

The result is the 2005 Series. Now it's even more reliable, even more versatile, of even higher quality, with a host of detail modifications to make your job easier, safer and more economical. The cab came in for a lot of attention. The massive chassis was further strengthened. Performance and output were improved. Manufacturing and testing methods were checked and re-checked to ensure quality and reliability – and with every worker his own Quality Inspector, standards are probably the highest of any tractor manufacturer in the world.

But throughout all the changes, we never lost sight of the most important fact. A tractor is a tool – nothing more, nothing less. If it doesn't work, it's just an expensive waste of time.

The 2005 Series works.



2645

The MF 2645's Perkins 6-cylinder direct injection diesel is naturally aspirated and develops 117 bhp (110 DIN).



2685 2725

The engine fitted to the MF 2685 – also a Perkins 6-cylinder direct injection diesel – is turbo-charged, with a power output of 142 bhp (130 DIN).

Top of the range, the MF 2725 is powered by the Perkins 6-cylinder direct injection diesel with turbo and charge cooling. Power output is a hefty 158 bhp (147 DIN).



Powerhouse



Let's start with the engines. All models are powered by Perkins 6-cylinder direct injection diesels, specifically built for tractor applications - massive power, with maximum torque being produced at very low revs, means less gear changing, minimised wheel slip, reduced tyre wear, improved traction and economy.

The fuel tank has a large filter, and steps give safe access to the big filter. Engine protection is ensured by a large, dust-eliment air cleaner with a high air-intake pipe.



... Power connection

All that engine power is converted to maximum grip at the driving wheels, thanks to advanced driveline design, ideal weight distribution and wheel/tyre equipment. The hydraulically actuated diaphragm clutch is self-adjusting and automatically topped up with hydraulic oil – no routine maintenance, no special clutch fluid.



... Power connection

The advanced synchromesh gearbox is exceptionally strong, and provides 16 forward and 12 reverse speed. This enables precise matching of speed to working conditions for optimum output and fuel economy. The main gear lever selects from 8 ratios, whilst electrical push-button actuation provides instant change-on-the-move Speedshift between high and low ratios.

Four-wheel drive is hydraulically engaged on the move, by a simple push-button control giving added traction, more efficient use of engine power, and extra drawbar pull. The central driveshaft – enclosed to prevent crop-wrapping and damage – gives excellent ground clearance. Heavy duty twin cams give positive steering even with the heaviest front load. There's an



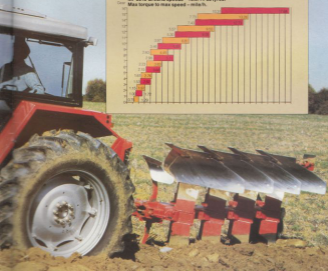
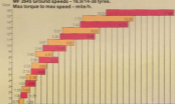


extra-wide front weight frame attachment as an optional extra – you can add even more weight to ensure maximum safety and performance with heavier or large implements.

Drive to the fully independent PTO is hydraulically engaged, so output is increased by engaging and disengaging the PTO on the move. Versatility is ensured with interchangeable shafts operating at 540 or 1000 rev/min – changing shafts is easy with a convenient circlip locking device.

To recap briefly, the performance of the 2005 Series demonstrates our concern for strength, efficiency and convenience. But, more importantly, it reflects our desire for quality (design and build), durability and reliability. Because all those factors mean reduced cost and thus increased profit for you, the farmer.

MF 2045 Ground speeds – 16.9/14–38 t/hrs.
 Max torque to max speed – 1616/9%



... Hydraulic powerlift

Another important feature of the MF 2005 Series is the advanced electronic linkage control (optional).

With this system, you have precise position control, automatic draft control, or an intermix of the two.

Instead of using mechanical linkages to transmit draft and position control changes, electronic sensors automatically measure changes in draft load or hitch position and transmit the proper signals to the hydraulic system. With electronic sensing, implements react faster to changing soil conditions, maintaining traction, saving time and increasing output. It also reduces the friction loss, flexing and wear of components commonly found in mechanical linkage systems, thus eliminating the need for adjustments.

Accurate implement control is straightforward: adjustments of linkage height when using non-soil-engaging implements is simply achieved using Position Control. With soil-engaging implements, draft forces are measured through the lower links. This system gives accurate draft control even with the very large implements that can often transmit uneven draft signals. Output is increased from the better traction resulting from the excellent weight transfer.





Our claim that the 2005 Series is tough is no idle boast. An enormously strong centre housing means added rigidity and durability while large diameter hydraulic lift rams allow the safe handling of the largest and heaviest implements. A strong, swinging drawbar is standard.

The mechanical hydraulic system has been retained as an option for users preferring the traditional control of implements.

Moving to internal hydraulics functions, we've used our wealth of expertise and reputation for being the "best in the business" to ensure that the 2005 Series combines power, precision and durability for maximum output of both tractor and implement.

A dual-element gear pump provides oil for the complete hydraulic system. The low pressure element supplies oil to the Speedshift, differential locks, PTO and 4-wheel drive functions. The high pressure oil circuit gives positive steering, controlled trailer braking, high flow for external services and powerful 3-point linkage.

Oil for external equipment is supplied through two single/double-acting spool valves to quick-attach couplers, so implements can be coupled up quickly and efficiently.



In the driving seat

The first thing you'll notice about the 2005 cab is how easy it is to get in.

There are two large, rear-hinged doors and wide, self-cleaning footsteps give safe access to the cab.

Once inside, you'll see — and feel — the advantages. The seat is adjustable for height, weight and reach, with a high back support and durable cover material. After all, you'll spend a lot of time sitting in it, so it's got to be comfortable.

For convenience, there are forward-opening side windows in both doors, hinged for ease of use. And the forward opening roof hatch is a standard fitting. But of course, you always have full control over the cab environment, thanks to air conditioning. No matter what the weather's doing outside, temperature in the cab can be adjusted as required.

The large, flat windscreen is tinted to reduce glare and eye-strain, while the slim corner pillars, high air cleaner pipe and massive glass area ensure excellent all-round visibility. The big, opening rear screen is supported by gas struts. Slender the pillars may be, but the whole cab is incredibly strong. We know, because we've subjected



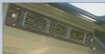
it to rigorous testing for strength and reliability. What's more, noise and vibration are minimised by rubber mounting blocks and thick acoustic insulation.

While we're still on cab fittings, you'll find a useful light with door activated switch. Small point, perhaps, but it is there for your convenience and safety.

Let's move on to the controls. The steering wheel is adjustable, giving a better, more comfortable and less tiring driving position. There's a large, conveniently placed foot throttle pedal, an electric front screen washer and large wiper blades with a heavy duty arm and motor.

All controls fall naturally to hand, especially as we've located the Speedshift push-button on the right-hand side console. Without looking, you can tell immediately whether it's "in" or "out". We've also incorporated push-button electro-hydraulic actuation of the diff lock - it's simple, convenient, effortless and leaves the cab floor clear.

An ergonomically designed cab means a more alert operator, which in turn means greater output. The 2005 Series cab scores on all points.



The tailor-made tractor

All models in the new 2005 Series are designed and built to the same high standards, but once you've selected the horsepower range that best suits your needs and chosen between 2- and 4-wheel drive you still have a wide choice of specifications that enable you to tailor your tractor to your specific needs. A comprehensive range is available:

Creeper gearbox

Both 2- and 4-wheel drive tractors can be specified with a creeper gearbox which gives a 5:1 speed reduction on each of the eight main gears of the standard synchromesh transmission. Thus, you can select speeds as low as 310 m/hr at maximum torque speed – essential for low speed work.

Front weight frame extension and add-on weights

The "quick-attach" front weights have spring loaded catches for rapid deployment. The standard fitting allows up to 10 x 45 kg weights to be fitted, while the special extension frame allows extra weights to be





fitted further forward giving increased stability and traction when using long and heavy implements; six more 45 kg weights can be fitted. Accurate ballasting of the tractor for optimum performance and economy is therefore possible. A further 150 kg weight can be mounted forward and beneath the front axle. Wheel weights can also be fitted to most front and rear wheel specifications.

Hydraulic trailer brakes

A braking kit (supplied as standard) operates progressively with the tractor brakes. Output can therefore be increased by driving faster and more safely.

Front PTO

For certain specialist applications, front PTO is available.

Front mudguards

These are available for the prevention of screen obstruction in wet and muddy conditions, thus increasing visibility and safety.



High quality, high reliability



The MF 2005 Series range has been designed to be exceptionally easy to maintain. Here are some of the ways that this has been achieved:

Easy maintenance

The left footstep slides out to give easy access for checking the batteries.

At the rear of the tractor, another footstep and grab handle allow safe refuelling and easy access to the cab air filter.

The grille is easily removed from the hard nose to give excellent access to engine air cleaner, radiator and windscreen washer.

Engine service points are instantly accessible, with canister type filters for added convenience. A footstep and grab handle permit safe checking of coolant level and pre-screener cleaning.



..... less downtime

Automatic top-ups

The clutch and brake reservoirs are automatically topped up with hydraulic oil, reducing daily maintenance requirements to a minimum.

Fast, efficient service

Great care has been taken to simplify access and serviceability of the hydraulic filter, pump, clutch pack, control box and rams. All are externally accessible.

Massey-Ferguson world-wide support

The MF distribution network is the most comprehensive in the world, with parts back-up second to none.

Parts and Service staff are trained at the MF International Training and Development Centre at Stoneleigh, the largest of its kind in the world.



Specifications

Note: These specifications apply to 4-wheel drive models – 2-wheel drive also available

● Standard equipment

○ Variable equipment

*For comprehensive information see specification sheets

	MF 2645	MF 2655	MF 2725
Performance			
Max power DIN hp (kW) at engine rev/min	110 (80) 2400	130 (96) 2400	147 (108) 2400
Max torque da Nm (lbf ft) at engine rev/min	36.7 (271) 1400	43.5 (320) 1400	49.3 (362) 1400
Max PTO horsepower @ 1300 rev/min	99 hp	113 hp	127 hp
Fully independent 54/1000 PTO	●	●	●
Engine			
Petrol 4-cylinder 5.8 litre (354 in ³) Aspiration	● Natural	● Turbo-charged	● Turbo-charged and charge-cooled
Compression ratio	16:1	15.5:1	15.5:1
Starting aid	Thermostat	Thermostat	Thermostat
Cooling		Water, thermostat controlled	
Air cleaner		Dual dry element with warning light and buzzer	
Transmission			
Dry, single plate, 356 mm (14 in), conaxial, diaphragm clutch	●	●	●
16 forward and 12 reverse synchronesh gearbox. Speedshift and reverse shuttle	●	●	●
Final Drive		Inboard epicyclic	
Differential Lock – front/rear/activation		Push-button electro-hydraulic	
Electrics			
12V negative earth	●	●	●
Battery 2 x 105 Ah	●	●	●
Alternator 95A with integral voltage regulator	●	●	●
Brakes			
Oil-cooled single plate discs, 266 mm (14 in) diameter	●	●	●
Operation	Hydraulically actuated either independently or locked together		
Disc brake on gearbox output shaft	●	●	●
Steering			
Hydrostatic, with equal displacement rams	●	●	●
Adjustable steering column	●	●	●
Rear Linkage			
Draft and position control, intermix	●	●	●
Hook ends	●	●	●
Max lift capacity at link ends kg (lb)	6295 (13894)	7221 (15916)	7221 (15916)
External Hydraulics			
Max output flow/min (imp gal/min)	63.3 (11.7)	63.3 (11.7)	63.3 (11.7)
Pressure, bar (lbf/in ²)	175 (2538)	175 (2538)	175 (2538)
Two single/double acting spoolvalves	●	●	●



	MF 2645	MF 2655	MF 2725
Operator Environment 3-floor fully enclosed cab with tinted glass, hinged opening side windows and 2-speed blower with heater unit Fully adjustable spring suspension seat Front and rear wiper with electric windscreen washer Full air-conditioning Electro-hydraulic push-button activation of cabin lock, 4-wheel drive and Speedshift	● ● ● ● ●	● ● ● ●	● ● ● ●
Accessories/Optional Equipment Electronic linkage control Fully independent front PTO Third double/single acting spool valve Front weights Combination clevis auto-hitch Wheel weights Front fenders Creeper gearbox (3:1 reduction) Radar speed monitor Extra wide weight frame	○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○	○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○	○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○ ○
Capacities Fuel tank, litre (imp gal) Engine sump, litre (imp gal) Cooling system, litre (imp gal) Hydraulic system, litre (imp gal)		213 (47) 13 (4.2) 27 (5.9) 85 (18.7)	
Wheels and Tyres Front Rear	13.6/12-28 16.9/14-28	14.9/13-28 16.4/15-28	16.9/14-28 20.8-28
Dimensions Overall length mm (in) Height above exhaust mm (in) Wheelbase mm (in)	5080 (200) 2282 (112.6) 2730 (107)	5080 (200) 2904 (114.4) 2730 (107)	5080 (200) 2948 (116.1) 2730 (107)
Weight (on above wheels and tyres) Front kg (lb) Rear kg (lb) Total	2090 (4608) 3290 (7325) 5380 (11933)	2090 (4608) 3230 (7122) 5320 (11730)	2140 (4718) 3580 (7941) 5470 (12059)
Ground Clearance Under chassis (minimum) mm (in)	445 (17.4)	457 (18.5)	495 (19.6)
Minimum Turning Radius 4-Wheel drive test-with brakes on (in)		5.70 (224/14.9 (185))	



MF

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Specifications are subject to change without notice and may vary from country to country.
Your Distributor or Dealer will be pleased to advise equipment currently available for your market, but cannot give commitments or make representations on behalf of MF.

