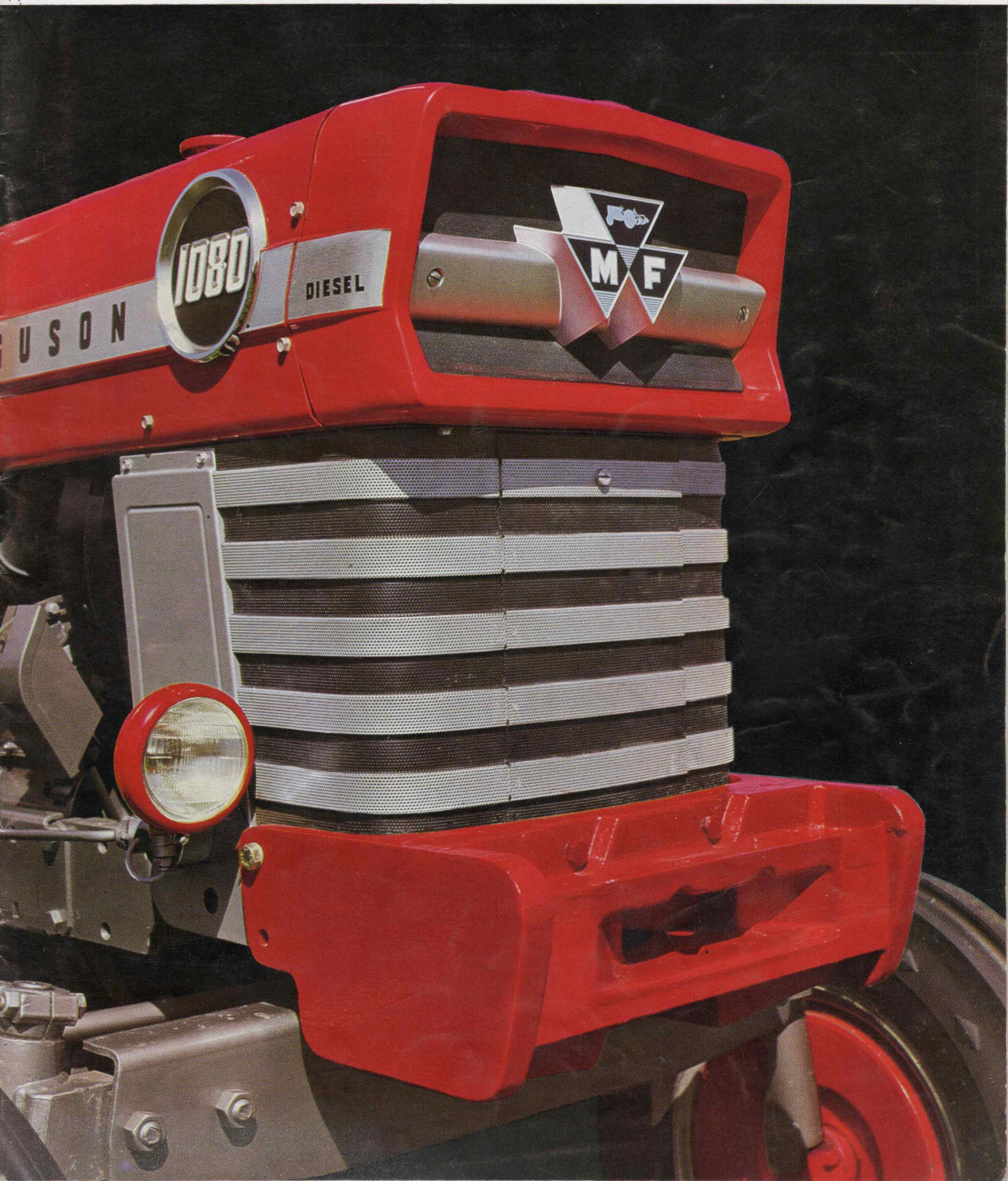
The new 90 h.p. tractor that fills the power gap

MF 1080

$7000 ott.



MF 1080
THE NEW POWER ON THE LAND

There's a new power on the land. It's for men with big fields, big machines, and big plans for the future. It's called the MF 1080.

Rated at 90 h.p., the MF 1080 is neatly positioned between heavy 4WD tractors and less powerful 2WD machines. In fact, the advanced Ferguson System MF 1080 is the latest word in power and performance from Massey-Ferguson.

Big enough to drag the last ounce of effort out of hefty implements like 18" cultivators, 6-furrow 14" ploughs, and big double-chop forage harvesters, for hour after hour.

Compact enough to ensure not an ounce of that power goes wasted. The MF 1080 is an important addition to the MF family of tractors. Take a good look at the details and see how important it could be for your farm and its productivity.

Look at the power points. You'll find nothing flimsy or fancy about this machine. Look at the rear axle and Cat. 2 linkage. There's real robustness for you: a pump that delivers 3000 lb/sq. in. and gives 5400 lb of lift. With all the reliability of advanced Ferguson System hydraulics behind them to take it.

Then there's the new 318 cu. in. diesel. Perkins developed this powerful engine for the tough requirements of the MF 1080. It pushes out 90 h.p., with more than enough lugging power to spare. And you get all the traction you want from the MF 1080 for mounted implements, and with the help of MF's exclusive Pressure Control, for trailed equipment.

This big new tractor from Massey-Ferguson will turn more than a few heads when it appears on the fields. It's not just a hard worker, it's an extremely good looker. The next few pages show you how hard it works, and how good it looks.

Power and Multi-Power

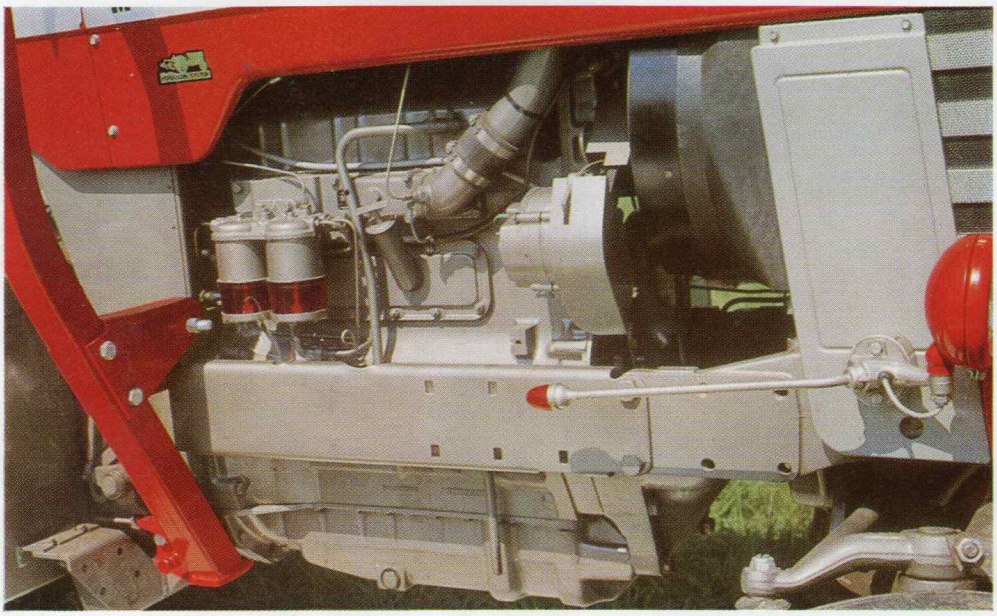
Once you've felt the power of the MF 1080 at full throttle, you'll begin to understand what MF mean by a new concept in reliability. The 4-cylinder, 90 h.p. Perkins diesel pushes out 262 lb/ft of torque, for hour after hour, without a grunt of complaint. Its p.t.o. is fully independent, giving an estimated 83 h.p.

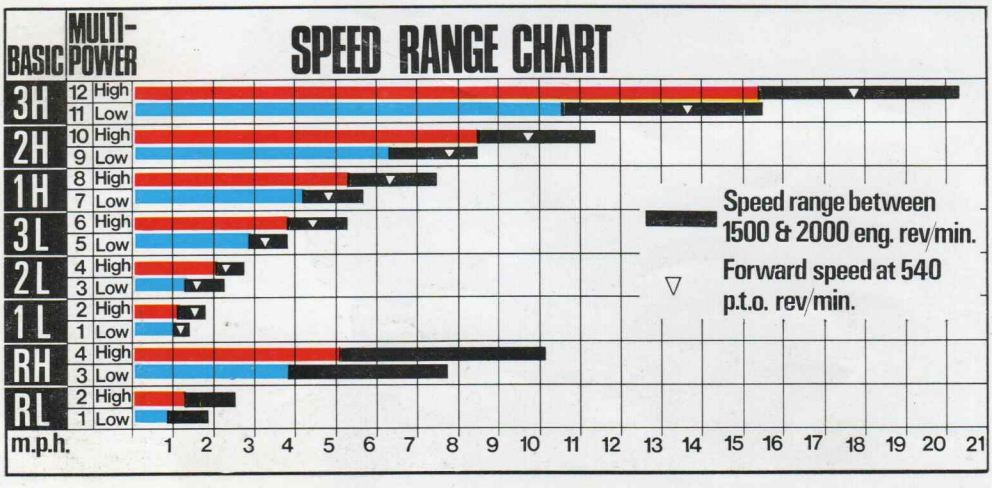
Now you can really work those big implements to their limits. The MF 1080 has all the lugging power, and all the p.t.o. power you need to keep rotary cultivators, and big double-chop forage harvesters, hard at it. Here's one tractor that really earns its keep – and fast.

The MF 1080 is not only a powerful worker, it's also extremely flexible, thanks to Multi-Power. This change-on-the-go gearbox gives you 12 forward and 4 reverse gears, and puts a stop to stopping when the going gets tough.

It works like this. As soon as you hit a heavy patch – ploughing, cultivating, foraging – flick into Low. Speed drops smoothly by 22%, lugging power goes up by 26% – and on you go. Back into High for full speed.

Multi-Power helps keep p.t.o. implements revving correctly and boosts output throughout the farm. Add Multi-Power to MF 1080 power, and you're really farming.





Advanced Ferguson System Hydraulics

The heart of the MF 1080 is the advanced Ferguson System: precise, responsive, and a glance at the quadrant will tell you just how easy it all is.

The controls are neatly set in a console, plumb under your right hand – no fumbling, no hesitation. The yellow segment controls draft, red pre-sets position, black controls pressure for extra traction (more about this later).

To match the MF 1080's powerful engine, you need powerful hydraulics. You get them – 2500 p.s.i. gives enough lifting pressure to raise 5,400 lb of static load.

You won't have to keep a wary eye on the links either, when you turn sharply on headlands. The sturdy Cat. 2 three-point linkage is built really tough to take it all. It's also built to save you sweat and tears. The ends of the lower links telescope to make hitching easy, sliding out to simplify alignment with heavy implements, then locking up tight as you reverse the tractor.

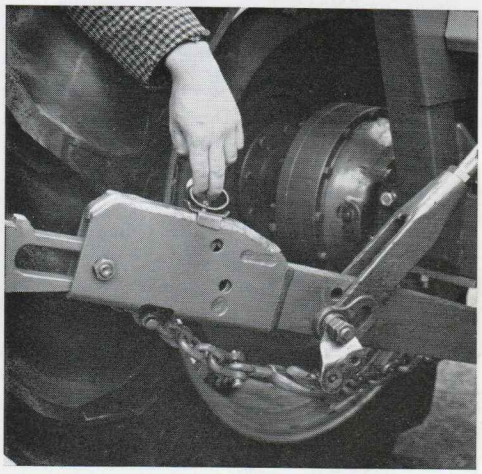
If you're trailing wide, rigid implements using control wheels, the linkage can be adjusted to give flotation by allowing greater articulation between tractor and implement.

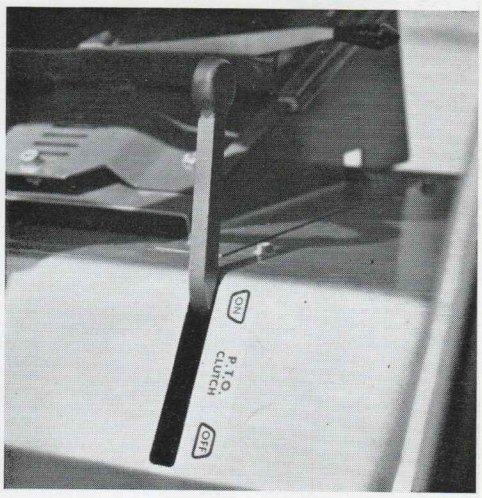
The drawbar is also highly adaptable – you can select seven different swing positions and, by inverting the bar, four extra heights for p.t.o. work.

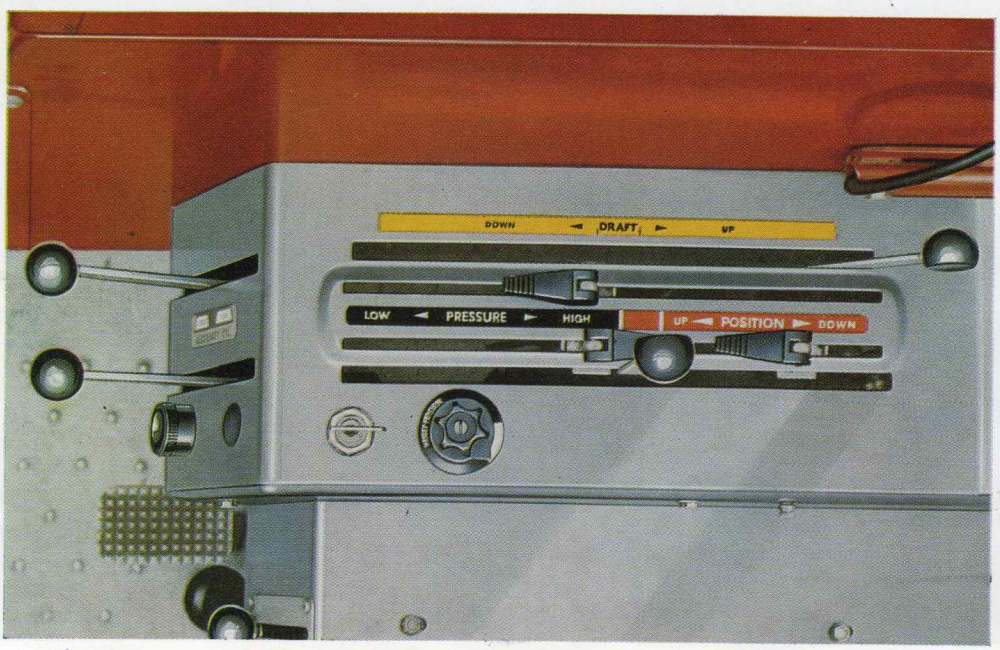
The no-nonsense power take-off is hydraulically driven through a multi-plate clutch. Power take-up is really smooth and is independent of forward travel. What's more, there's a choice of drive speeds – 540 rev/min. standard, 1000 rev/min. optional.

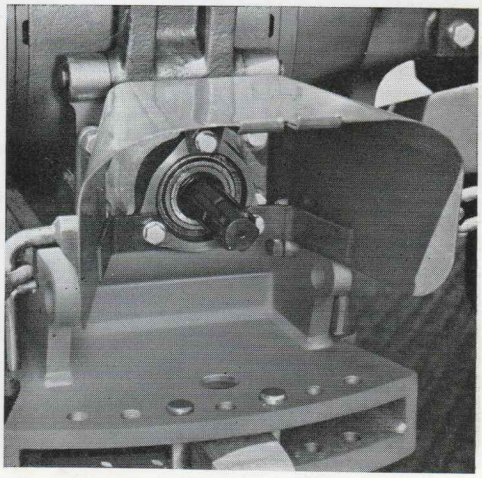
A big machine like the MF 1080 can be expected to do a lot of work with implements using external cylinders. Quick-release hose couplings swiftly link up the MF hydraulics to give you impressive power to control tipping trailers, folding cultivators, or hydraulically-indexed ploughs.

If you have already worked with advanced Ferguson System hydraulics, you'll know how good they are. You'll also know exactly what Pressure Control means in terms of additional work output. If you're new to the Ferguson System, turn the page and see how MF's exclusive Pressure Control increases traction and performance dramatically.









Exclusive MF Pressure Control

Tractors which use the advanced Ferguson System of hydraulics always have one particularly outstanding advantage over others. MF call it Pressure Control. It means that when you're trailing an implement, of any kind, you can control – and increase – the load on the driving wheels.

The effects of this on traction are quite remarkable, and extremely important for big tractors like the MF 1080 which do a lot of trailing work.

All you need to put Pressure Control to work is a special hitch, costing a few pounds. Then, when the going gets slippery or loose tilth threatens to cut your output, Pressure Control cuts the slip.

With Pressure Control you can positively increase your hourly acreages, even in fine conditions, because it helps you move loads other tractors couldn't shift, it gets you up hills faster, and down hills safer.

How does Pressure Control work? It's very simple. The implement – like the big discs or the trailer in the pictures — is hitched on to the drawbars and connected, through the coupler, to the lower links.

When you pull back the Pressure Control lever on the quadrant, the links exert tremendous pressure on the implement, trying to lift it off the ground. Instead, this weight is transferred on to the tractor's rear wheels. That's a lot of extra traction – and a lot of extra work from ploughs, harrows, grain drills, what you will.

Pressure Control will also reduce downhill slip and prevent jack-knifing, almost halve braking distances, and either pull more weight or climb steeper slopes. N.I.A.E. Users Report No. 493 gives all the facts about Pressure Control.

It is essentially a safe system. The chain, which hitches round the drawbar, locks into a special ball socket. Should the tractor rear up, or the hitch pin drop out, the chain slips free, preventing further trouble.

MF owners will tell you there's only one way to be fully convinced about Pressure Control – sit on a tractor and try it. When you feel the wheels bite deep and start pulling you up out of an 'impossible' position, you'll know why. Pressure Control really works – for you. As a standard part of the MF 1080's equipment, it's an unbeatable feature.

Operator comfort and convenience

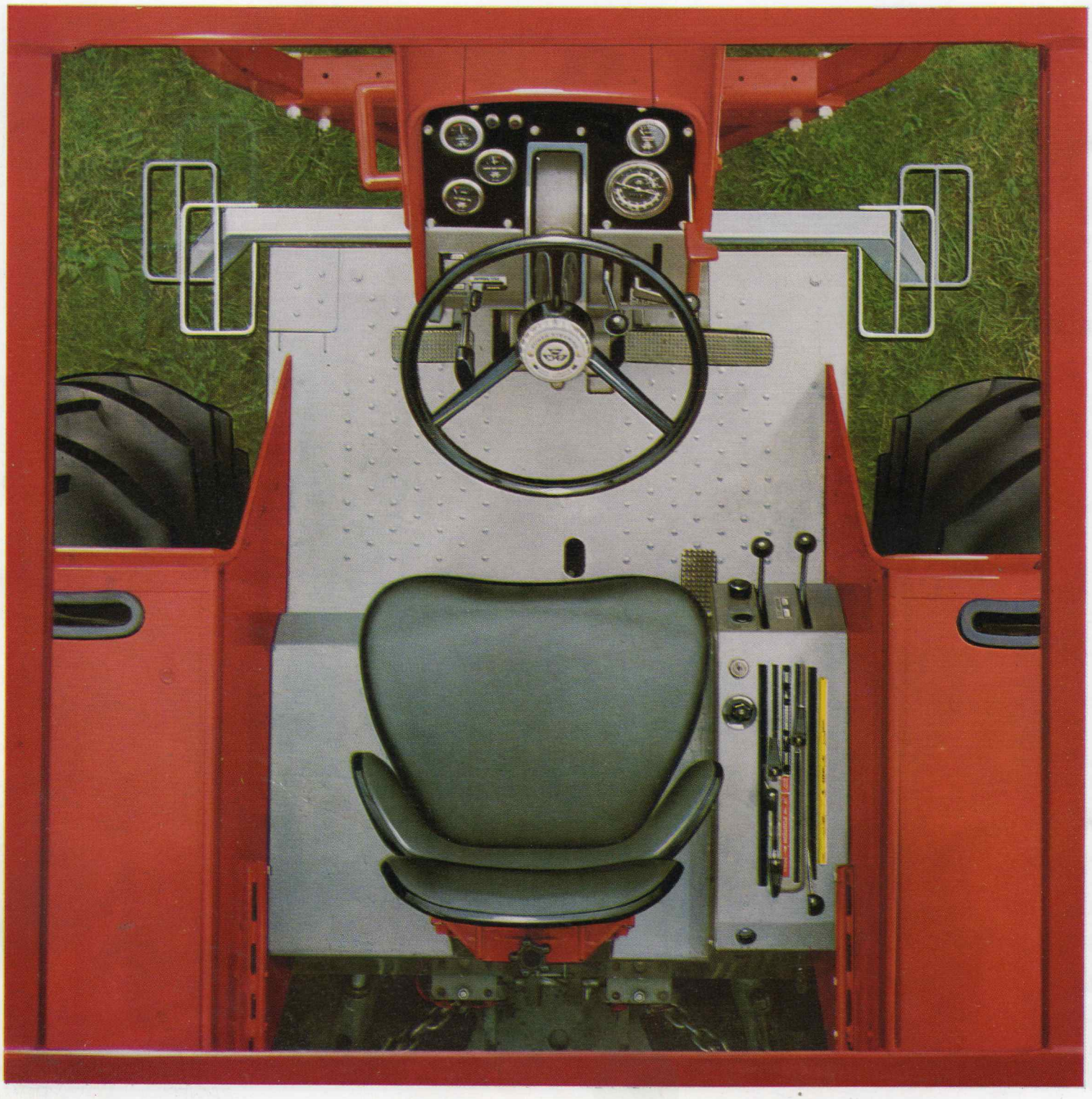
You expect a tractor of the MF 1080's power, size and breeding to do a fair day's work – but is that fair on the operator? Massey-Ferguson makes very sure it is, by designing the platform and controls from basic ergonomic principles, which ensure that all controls are ideally placed and designed with maximum convenience for the driver.

Access to the non-slip platform is clear and easy from both sides. It's spacious enough to let the driver do his job properly and safely – in comfort. He has excellent all round visibility.
All the instruments are neatly grouped on the facia, together with gear levers and Multi-Power switch.

On the console, which lies directly under his right hand, the operator has all the hydraulic controls, light and ignition switches, and even a cigarette lighter.

The seat itself is foam-cushioned, leatherette-covered, and contoured to support the back correctly. It slides on a track for simple fore-and-aft positioning, floats on an oil/air shock absorber, and adjusts to suit the driver's weight.

The steering column also adjusts – for length and angle – to suit every driver and every driving position. All in all, Massey-Ferguson have ensured that the operator enjoys a new standard of comfort and convenience. And that goes a long way to help him get the very best out of his hard day's work.



Standard features

Hydrostatic Power Steering. Essential for a tractor of this size and power. Gives you finger-tip control, reduces fatigue, and increases efficiency.

Saddle fuel tanks. Easily filled through a cap under the tread-plate on the operator's platform, the 35-gallon tanks are straddle-mounted to give extra stability and traction.

Instrument Panel. Five clear gauges, all illuminated, are; ammeter, water temperature, engine oil pressure, fuel and tractormeter (giving engine rev/min., m.p.h. and correct p.t.o. speeds).

Adjustable steering column. Allows every driver to suit his build and style. The column adjusts in seconds to four different angles and extends through a 4″ range.

Air Cleaner Indicator. Mounted behind the '1080' medallion, it warns you when the dry-air filter needs servicing. The dry-air filter is noted for its efficiency, especially at low engine speeds.

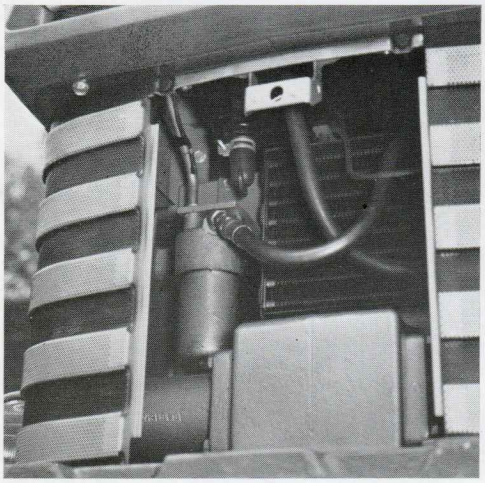
Spring Suspension Seat. Contoured to support the back without hindering the driver's movements, and sprung on an oil/air shock absorber system to suppress the tiring effects of constant jolting and bumping.

Alternator. Keeps the two batteries constantly and strongly charged, even at low speeds, ready to supply power to the electrical equipment. The system is advanced, efficient and long-lived.

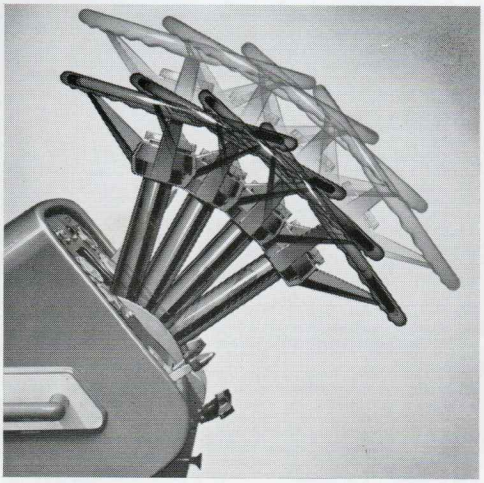
Power Assisted Variable Track wheels. Can be adjusted by engine power for widths from 60″ to 96″ in 4″ stages. Saves time and effort and speeds row crop work.

Lighting. The MF 1080 is fully equipped with field and road lights: dipping headlamps, side lamps, rear lamps, and a plough lamp. All set to work as late as you want.

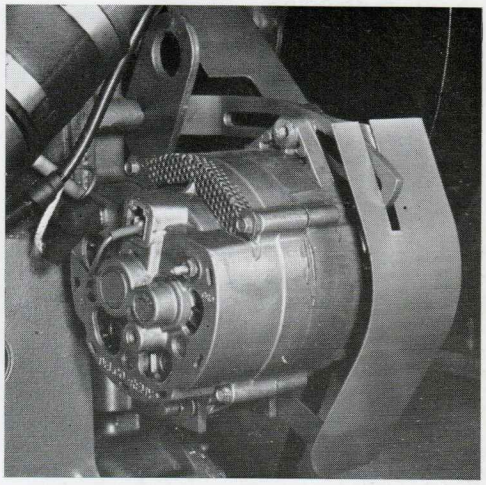
Hydrostatic power steering



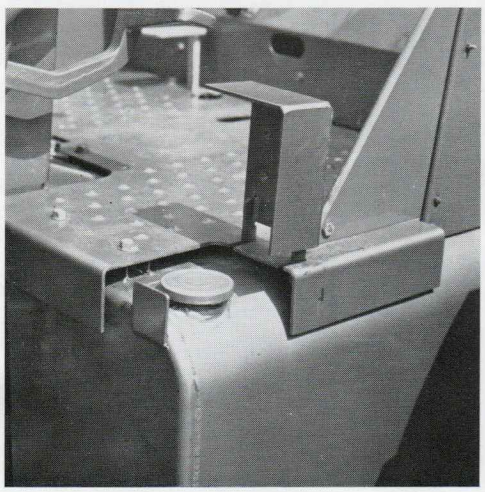
Adjustable steering column



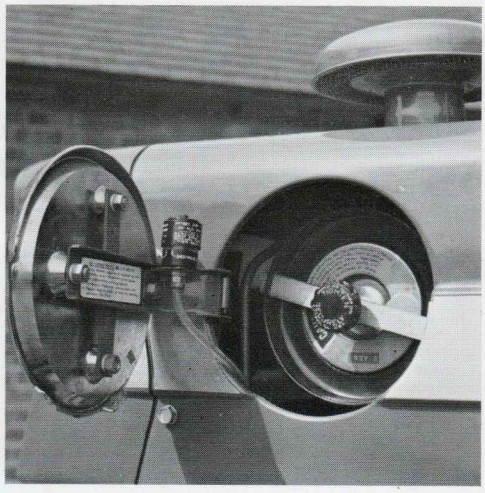
Alternator



Saddle fuel tanks

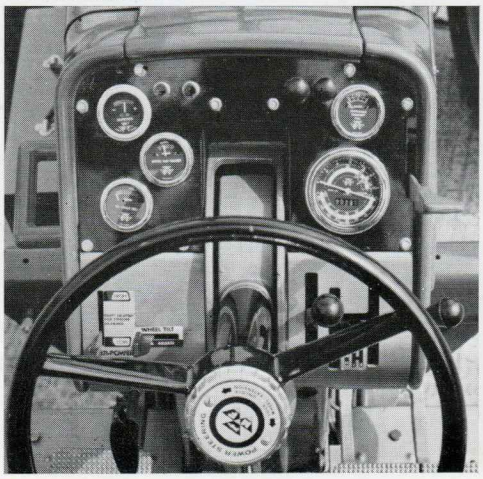


Air cleaner indicator



Power assisted variable track wheels

Full set of instruments



Spring suspension seat

Plough lamp

Comfort and safety

The MF 1080 is no fair-weather machine. It is supplied complete with a spacious safety cab to protect the driver in the worst conditions – and the worst mishaps.

The cab is built around a rugged, square-section steel safety frame, which has been designed as an integral part of the tractor. This Ministry approved frame passed vicious impact tests to comply with British Standard requirements. It leaves the operator a clear forward and rearward view and allows the use of all the normal front and rear mounted implements.

The driver has plenty of choice in the amount of weather protection he gets from the cab. The roof is easily removed, the doors lift off, and the rear window can be rolled up.

Even when the weather turns really rough, he has plenty of room inside the cab to operate the tractor efficiently and safely. Ventilation is good, and an electrically operated windscreen wiper keeps the forward view clear. A rear view mirror is also provided.

It is all very well looking after a driver in wet weather, but it is just as important for him to know that he is operating a machine which will protect him fully if anything goes wrong. The MF 1080's safety cab makes him feel at home – and dry.

Optional extras

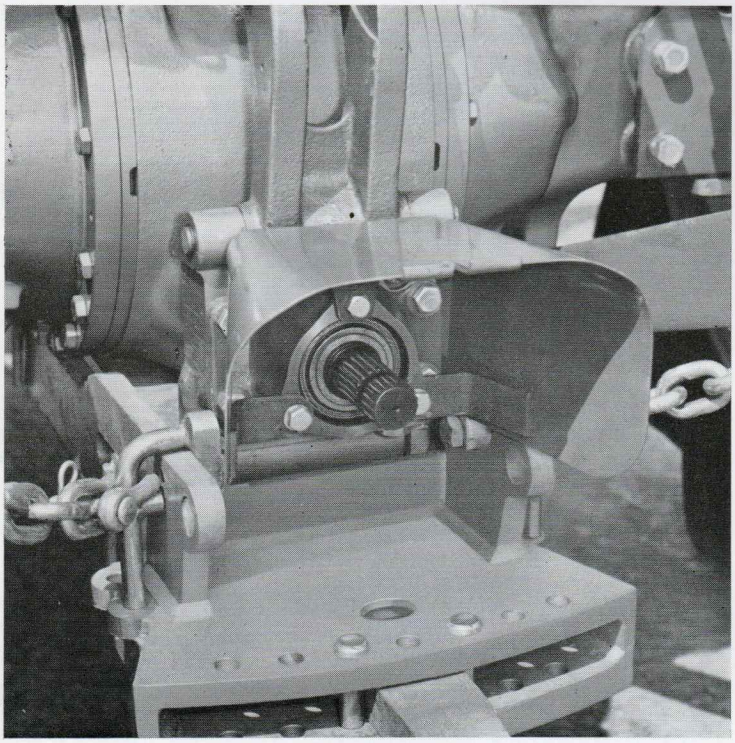
Choice of p.t.o. speeds. A standard 540 rev/min. shaft is fitted, but an optional adaptor shaft is available if the higher, 1000 rev/min. take-off is required. Shafts are quickly and easily interchanged.

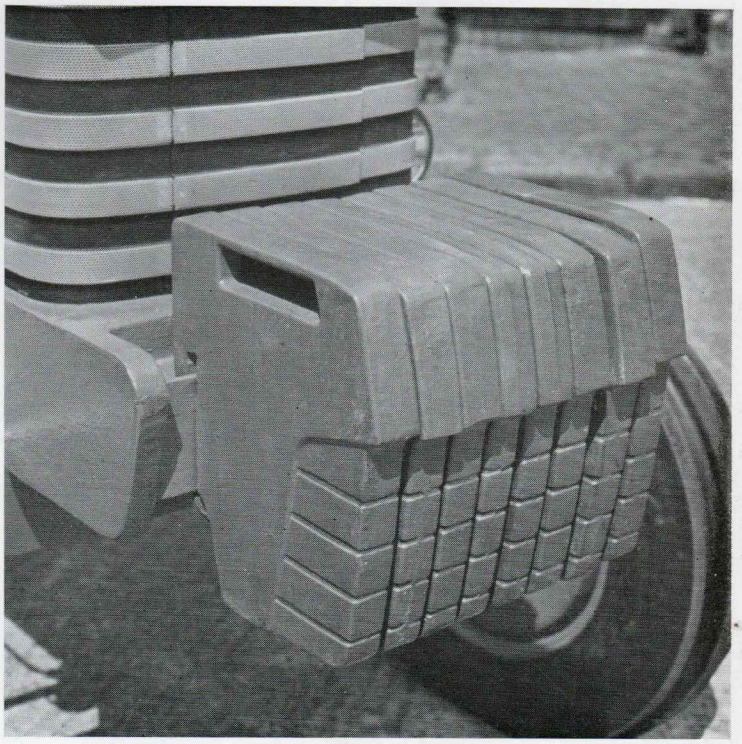
Automatic Hitch. When fitted, the hitch allows the driver to back up to an implement and hitch up, using the hook and the lower links, without leaving the tractor seat. Saves time – and backs.

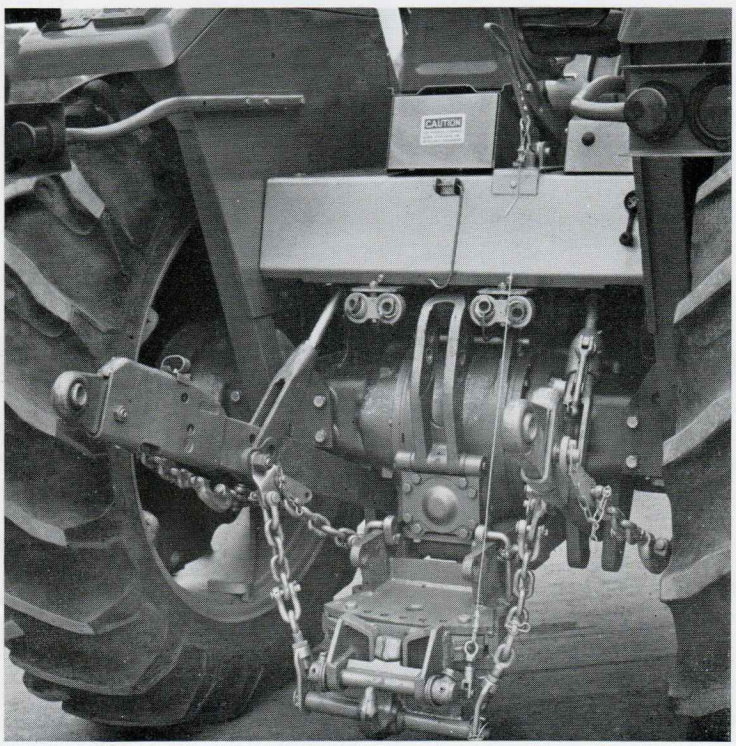
Front weights and weight tray. Front weights in kits of four will help steering control when extra-large rear-mounted implements are used. The 400 lb weight tray is standard.

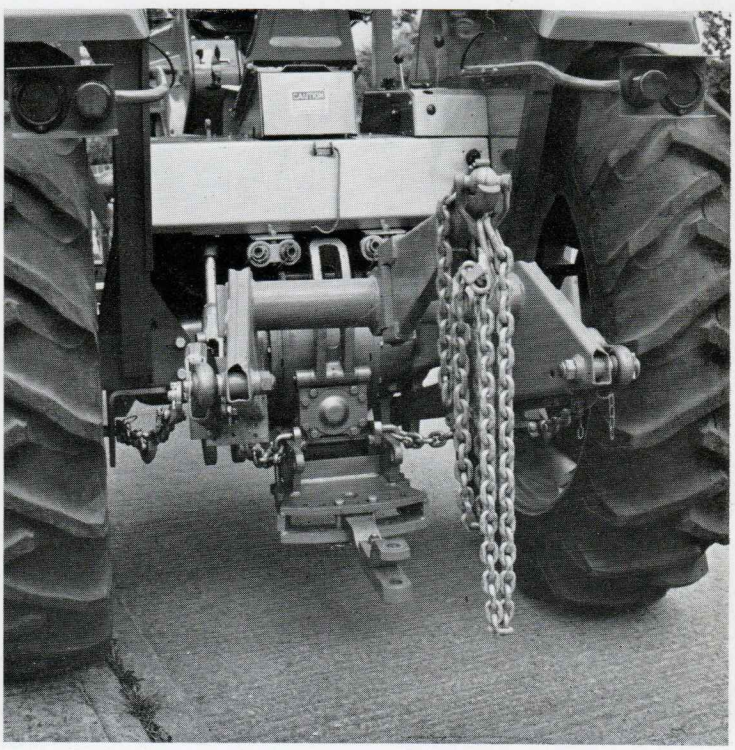
Pressure Control Coupler. Details of the many advantages of Pressure Control are given on pages 6 and 7. The coupler is a vital part of the system and simply fitted.

Bolt-on rear-wheel weights. Each weight adds about 110 lb to the rear wheels for further traction and stability. (Weights not illustrated).









MF 1080 Tractor

Specification

Engine

Perkins A4.318 direct injection diesel engine to Massey-Ferguson specification.

Capacity	318 cu. in. (5·2 litres)
Bore	4·5″ (114 mm).
Stroke	5″ (127 mm).
Compression Ratio	17·5 :1
Max. Brake H.P.	90 at 2000 rev/min.
Max. torque	262 lbs. ft. at 1250 rev/min.

Transmission

Clutch: Heavy duty 12″ (305 mm) single disc.

Multi-Power: Constant mesh helical primary reduction gears with spur change speed gears. The transmission provides 12 forward and 4 reverse speeds. Primary reduction gears controlled by hydraulically actuated clutch. Multi-Power high and low ranges selected on-the-move by lever on instrument panel. Fitted as standard.

Final Drive: Conventional differential with spiral bevel gears and further reduction by three pinion epicyclic in axle housings.

Differential Lock: Foot pedal control, mechanically operated. Disengages automatically, when foot is removed from the pedal, by depressing the clutch, or steering slightly to the right.

Road Speeds: Table below gives travel speeds in m.p.h. (kph) through gears at engine speed of 2000 rev/min. with 16·9/14-38 rear tyres.

		BASIC RANGE		MULTI-POWER	
Gears		m.p.h.	k.p.h.	m.p.h.	k.p.h.
Low	1	1·4	2·24	1·85	2·96
	2	2·12	3·43	2·8	4·48
	3	3·9	6·28	5·12	8·16
High	1	5·6	8·96	7·4	11·84
	2	8·45	13·7	11·2	17·9
	3	15·6	25·12	20·46	32·62
Reverse	1–Low	1·95	3·12	2·53	4·06
Reverse	2–High	7·8	12·45	10·14	16·24

Power Take Off: Factory fitted – 540 rev/min at 1720 engine rev/min. Optional – 1000 rev/min. at 2000 engine rev/min. Spline dia 1⅜″ (34·9 mm). Hydraulic clutch allows smooth, gradual engagement. Max. p.t.o. h.p. 83 (est.). P.t.o. horsepower at 540 rev/min. 75 (est.).

Dimensions: Weights, Capacities

Length	12′ 10″ (3·91 m)
Width (min. track)	6′ 8¼″ (2·04 m)
Height over bonnet	5′ 7⅛″ (1·7 m)
,, ,, safety frame	8′ 9½″ (2·7 m)
Weight incl. safety frame (approx)	8250 lb. (3743 kg)
Weight distribution	
Front wheels	2970 lb. (1347 kg)
Rear wheels	5280 lb. (2387 kg)
Turning Circle with brakes	10′ 9″ (3·26 m)
,, ,, without brakes	12′ 2″ (3·7 m)
Wheelbase	8′ 2″ (2·5 m)
Fuel Tank	35 Imp gals. (158 litres)
Cooling System	3·4 Imp gals. (15·5 litres)
Engine oil with filter	2·2 Imp gals. (9·5 litres)
,, ,, without filter	1·9 Imp gals. (8·5 litres)
Transmission, differential and Hydraulics	7·1 Imp gals. (32 litres)
Power Steering oil Reservoir	5 Imp pints (2·8 litres)

Hydraulics

Functions: Operates 3 point linkage, features – Two way draft control, position control, response control and Pressure Control. Maximum system pressure 2900—3100 lbs/sq. in. (204—218 kg/sq. cm).

Pump: Constant running, scotch yoke, piston type. Maximum delivery 5·8 Imp. gals/min. (26·5 litres) at 2000 eng. rev/min., and 2500 lbs. sq. in. (176 kg/sq. cm). Maximum linkage lift capacity 5400 lb. (2440 kg).

Linkage: Cat. 2 telescopic ball ends. Screw type top link, adjustable from 26½″ (674 mm) to 32½″ (826 mm).

Auxiliary system: Constant running, dual section, gear type auxiliary pump, supplies four quick-release couplings and will operate up to two single or double acting rams. Delivery for external use 6·7 Imp. gals/min. (30 litres) at 2000 rev/min. *Cooler:* located between tractor radiator and grille.

Steering

Hydrostatic power steering. Tilt adjustable through four different angles. Length adjustable by 4″ (102 mm).

Brakes

Dry 8¾″ (222 mm) discs mechanically actuated, incorporating heat sink diaphragm plates. Applied together or independently by pedals. Handle type parking brake lever on facia panel.

Wheels and Tyres

Rear P.A.V.T. Both front and rear have cast centres.
Front wheel centres weigh 200 lb. (91 kg) approx.
Rear wheel centres weigh 550 lb. (250 kg).
Tyre size front 7·50—18 (6 ply) standard. 7·50—16 (6 ply) optional factory fitted, when used with 16·9/14-34 rear tyres.
Tyre sizes rear 16·9/14-38 (8 ply) standard. 16·9/14-34 (8 ply) and 18·4/15-38 (8 ply) optional factory fitted.

Track Adjustment

Rear 60″ to 96″ in 4″ steps
(1·52 m to 2·43 m in 102 mm steps)
Front 56″ to 80″ in 4″ steps
(1·42 m to 2·03 m in 102 mm steps)

Water Ballasting 75%

adds 720 lb. (327 kg) to each 14-38 tyre
864 lb. (392 kg) to each 15-34 tyre
630 lb. (286 kg) to each 14-34 tyre

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