

MASSEY-FERGUSON



OFFERING A MODEL  
TO SUIT EVERY TYPE  
AND SCALE OF  
FARMING ENTERPRISE

# TRACTOR RANGE

130 · 135 · 165 · 175



THE RED GIANTS ARE HERE

## **The Red Giants. . . .**

the most important break-through in tractor design ever. Massey-Ferguson - first with the Ferguson System - now bring you the most flexible range of tractors ever built. The Red Giants match your needs more exactly and more economically than any tractor range has ever done before.

Your Red Giant will give you exactly the features you need. Exactly the power you need. Exactly the economy you'd expect from a tractor whose design has been dictated by farming experience. Many very different farmers will find it surprisingly easy to say "This is the ideal tractor for me".

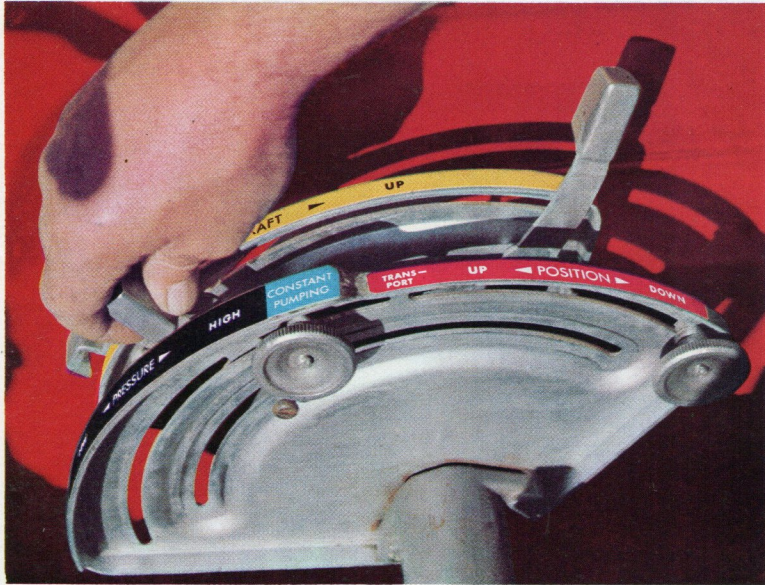
# FOUR TRACTORS — EACH ONE SUPREME IN ITS CLASS

— *an all new range in which each model is . . .*

- Unique in the power/price combination it offers
- The last word in realistic design and practical feature specification
- Engineered to Massey-Ferguson's inflexible standards of quality and high performance
- Attractively styled with full regard to operator comfort, convenience and safety
- Supported by the wide and comprehensive MF range of machines and implements
- Backed by the second-to-none service facilities of the country's leading farm machinery Distributor organisation



# World's most advanced hydraulics



## now with **PRESSURE CONTROL**

*— the new dimension  
in tractor hydraulics*



## The new Ferguson System

### on the 135, 165 and 175 tractors

Pressure Control extends Ferguson System weight transfer benefits to the use of trailed machines and implements. It opens up a whole new field of possibilities with heavy equipment. Now you can hitch up (in seconds) to virtually any pull-behind implement confident of the tractor's ability to keep moving through the toughest going. Even PTO driven machines — balers for example — can be operated with the special hitch transferring weight to the tractor for positive wheel grip. The finger-tip lever on the 'Pressure' quadrant beside the driver pre-determines maximum pressure in the hydraulic system. Set anywhere between LOW (150 p.s.i.) and HIGH (2300 p.s.i.) it effects a constant lift effort by the lower links ranging from a few pounds to 2500 lbs. Weight transfer is unaffected by rise and fall of the linkage when traversing uneven ground. At maximum, Pressure Control will practically double the weight on the rear wheels — at the same time lightening the front of the trailer to reduce rolling resistance . . .

*. . . and Pressure Control gives  
you these other advantages . . .*

### EXTERNAL HYDRAULIC SERVICES

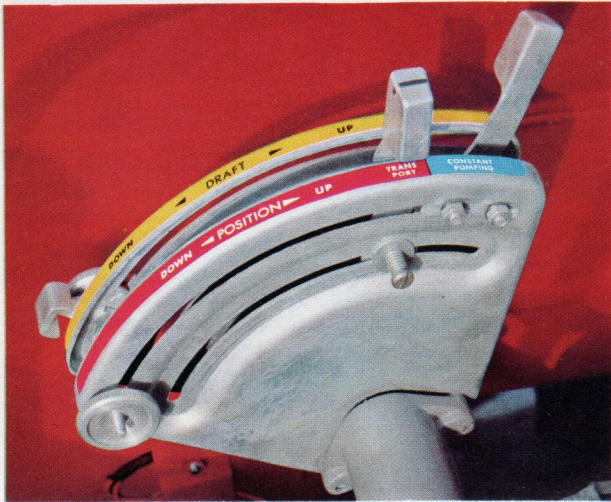
Oil pressure in the system may be limited to any pre-selected maximum. This will protect implement cylinders and hoses designed to operate below normal tractor system pressures. And it means that trailers, for example, can be tipped without need for the operator to remain at the control quadrant. As soon as the trailer's hydraulic ram is fully extended oil pumping ceases — no strain falls upon the tractor relief valve.

### SAFETY

Pressure falls immediately the lower links reach their upward limit of travel. So the tractor cannot rear up dangerously when trailing heavy machines.

- *Pressure Control is a factory fitted optional. The special hitch is provided at no extra cost on Pressure Control tractors*

## SINGLE LEVER CONTROL for normal mounted implements



Hydraulics control layout on these tractors is the simplest yet. For the great majority of jobs you use only the outer (yellow) quadrant lever.

- Illustration shows the basic quadrant on tractors without Pressure Control.

### TWO-WAY DRAFT CONTROL (Outer Lever)

Practically all mounted implements are controlled entirely by the outer lever for lifting, lowering and in work. The two-way draft system automatically maintains constant depth whether implements are long or short, light or heavy, working shallow or deep.

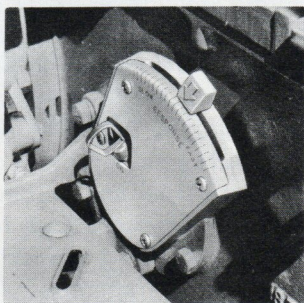
### POSITION CONTROL AND CONSTANT PUMPING (Inner Lever)

Inner Lever is used for hitching up and the few occasions where it is required to operate with the linkage at a fixed height. Lower link height, throughout the range of travel, corresponds to the position of the lever on its quadrant.

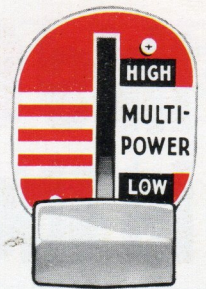
**Constant Pumping**, to supply continuous oil flow to external services, is obtainable by moving the lever to a separate location at the top end of the quadrant. Once 'Constant Pumping' has been selected, oil supply to remote cylinders is again controlled by the outer lever.

### RESPONSE CONTROL

New dash pot system has control quadrant on side of transmission housing below seat. Regulates linkage rate of drop from very slow to fast. Once response setting is made, according to the job in hand, operator again controls implement entirely by the outer lever.



# Only MF Tractors have **MULTI-POWER**



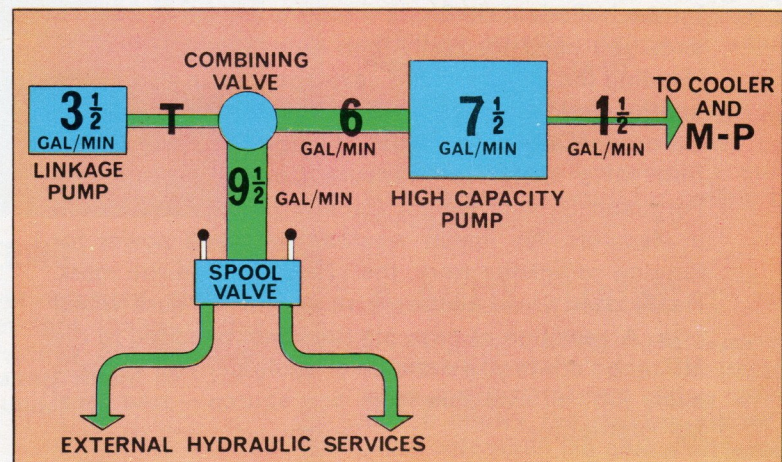
*Which lets you switch gears on the move with 12 forward speeds to match every field requirement*

It's available on the 135, 165 and 175 — the simplest, most practical, most reliable change-on-the-go ever devised. You switch down for more power, switch up for more speed, in any one of the 6 forward, 2 reverse gears of the basic transmission. In easy going you work fast in HIGH. When the going gets tough — uphill or in heavy soil — you just flick the switch to gear down without losing time or traction. Multi-Power makes all the difference to daily output in tillage work, haulage and with PTO machines . . . but now there's even more:

## all MULTI-POWER models give you **EXTRA HIGH CAPACITY for EXTERNAL HYDRAULICS**

Over 9 gallons per minute — that's the amount of oil you can tap off to external services from Multi-Power models. This means really fast operation of equipment with remote hydraulic cylinders — tipping trailers, for example, and implements with slave ram depth control. And it gives you great scope in the use of machines driven by hydraulic motors.

MF engineers have achieved this by means of an auxiliary high capacity pump in addition to the tractor's normal linkage pump. You still get the usual efficient action of the rear linkage which is not affected by the new design. The high capacity pump, which also feeds the Multi-Power clutches, gives a surplus 6 g.p.m. Through a combining valve this can be joined to the 3½ g.p.m. of the linkage pump. By means of spool valves all or part of the total 9½ g.p.m. can be directed to one or more remote systems — with a power output of over 13 h.p. The Combining and Spool valves are optional factory fittings — so you have no trouble in obtaining the right equipment for your tractor.



# this 66h.p. tractor is the new class-leader in performance, value for money and features

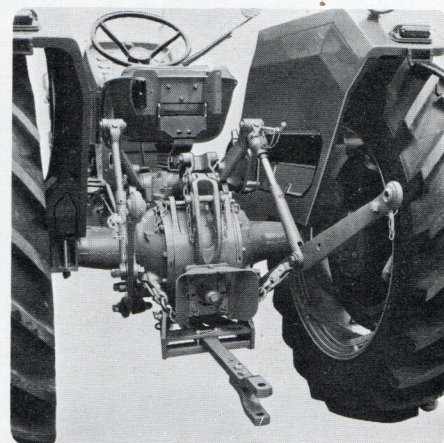


In its power/price class there's no other tractor to compare with the new MF 175. Here, for the first time for such modest outlay, is a tractor with the performance you need for really high output field operation. Heading the many brilliant developments in this model are the world's most advanced hydraulics — based on the original and never-equalled Ferguson System. And now MF's exclusive Pressure Control extends the Ferguson System weight transfer principle to trailed implements. No matter whether you need power for lugging or linkage work, the 175 is right on the mark. Heavy cast wheel centres give weight for sure wheel grip. A selection of new, big implements added to the MF range offers you a choice of equipment for virtually every job; all available from one source — your local MF Distributor.

For the operator there is a high level of comfort, and convenience. A spring seat and fibre-glass cab, designed from the outset to match the tractor, are optional fittings. Power steering and power-adjusted rear wheels are standard — as are many other features such as lights, full instrumentation, differential lock and handbrake. Novel design details simplify daily and periodical servicing. Multi-Power is available of course. The 'flick-change' transmission which speeds up field work and cuts out so much tedious gear-changing... and the Multi-Power model has a special hydraulic pump which gives extra large oil supply for external services. All this goes with a high-powered, high-torque engine and strong, reliable transmission in a tractor that's styled right up to the minute. The best big tractor value now and for many years to come.

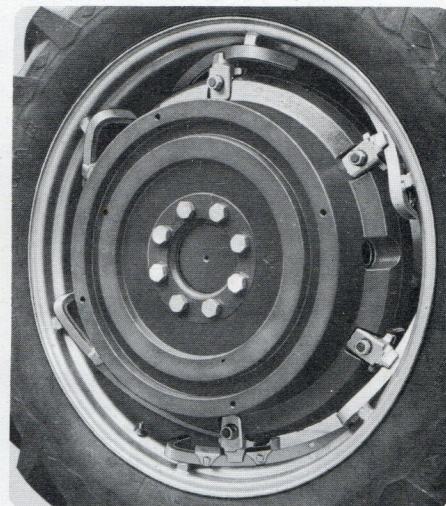
# MF175

## Standard Features



### CAT. 2 LINKAGE AND DRAWBAR

Heavy duty Category 2 links have lift capacity of 3375 lbs. Screw type top link is adjustable for length. Swinging drawbar is adjustable both for length and height.



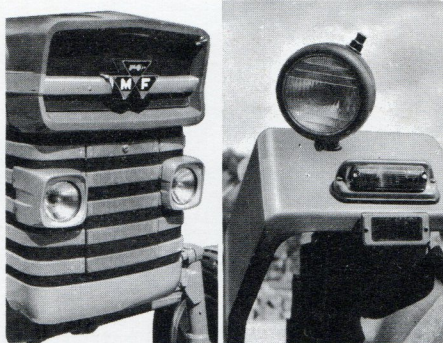
### POWER ADJUSTED WHEELS

Rear track setting is quickly changed without manual effort on these power adjusted wheels. Range of adjustment is from 54" to 90".

Both front and (power adjusted) rear wheels of the 175 have heavy cast centres. This built-in weight ensures stability and tyre grip for pulling big trailed implements.

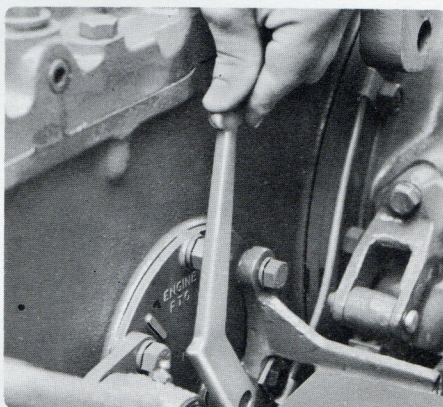
### ● SAFETY STARTING

No danger of starting in gear—another exclusive feature. All MF tractors have the long-proved safety device which allows the electric starter to work only when the gear shift lever is in neutral.



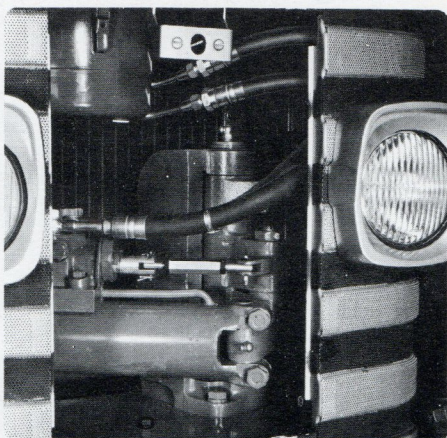
### BUILT-IN LIGHTS

The full array of lights — head, side and tail — are neatly built-in and comply with Road Traffic Regulations. Side and tail lights plus reflectors are snugly fitted in the fenders. There is an adjustable angle plough lamp at the rear.



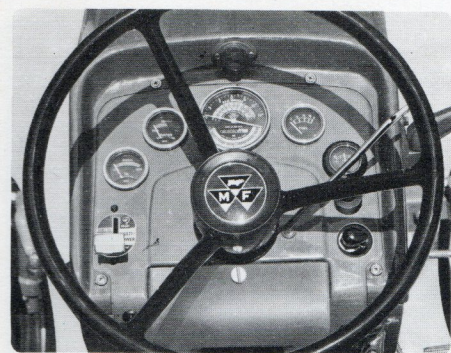
### LIVE PTO—56 h.p. at 540 r.p.m.

PTO drive is proportional to engine or ground speed. Standard 540 r.p.m. occurs at 1684 engine r.p.m., providing excellent 'back-up' torque. Dual clutch gives live PTO and hydraulics.



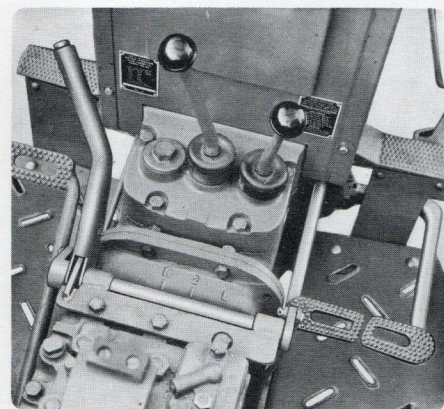
### POWER STEERING

Hydraulic power assisted steering gives you finger-light control of this heavy tractor — rules out any suggestion of steering wheel kick-back over rough ground.



### FULL SET OF INSTRUMENTS

Illuminated panel shows everything you need for efficient control of the tractor. For the first time a fuel gauge is standard. Easy to read tractor-meter indicates low range speeds in lower sector, high range speeds in upper sector of dial; also gives standard PTO and belt speeds. Rear-view mirror, ammeter, water temperature and oil pressure gauges are here, too—even, as optional, a cigarette lighter.



### HANDBRAKE — FOOTBRAKES

Highly effective, large friction area brakes have double discs on each half shaft. Push-button hand lever brakes both wheels for parking. Twin foot pedals can be applied together or independently to assist steering.



### DIFFERENTIAL LOCK

Pedal close to driver's right heel operates differential lock to give 'solid axle' drive when ground surface resists adhesion of either rear wheel. Useful feature of pedal is the hinged end which can be raised to enlarge standing room.

# heavy work or light jobs - this 58 h.p. model pays both ways ...

Here's abundant power for ploughing or rotavating the heaviest land. But here too are the ease of handling and low-cost running you need for the lighter jobs like mowing and planting. Either way the 165 offers you proved Massey-Ferguson reliability — the trouble-free operation that puts greater profit into farming. It offers the finest value in its class with new design features for high output, comfort for the driver, aptitude for the widest variety of tasks.

Massey-Ferguson tractors have never been matched in the precision and efficiency of their Ferguson System hydraulics. And now these hydraulics are still further advanced. The 165 gives you single lever control of draft-operated implements. Plus Pressure Control, the new hydraulic function. Pressure Control brings Ferguson System weight transfer benefits to the use of trailed implements.

Then there's exclusive Multi-Power, the simplest change-on-the-go ever engineered . . . and the Multi-Power model gives you extra large output of oil for external hydraulic services.

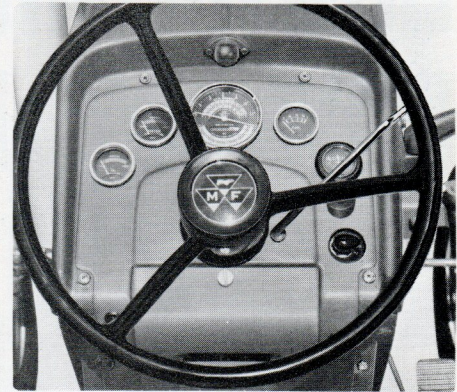
The 165 is styled to set the pace for years ahead — and looks it. Among the many standard fittings are built-in lights, differential lock, handbrake and a really comprehensive set of instruments. Optionals include a cab which is integrally designed, spring suspension seat, power steering and foot throttle. There's a High Clearance model for market-gardeners and row-crop specialists.

So whether your farming is intensive or extensive — whether you farm light or heavy soil, this tractor will pay in every way.



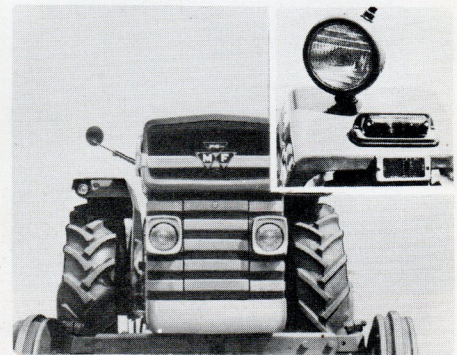
# MF 165

## Standard Features



### FULL SET OF INSTRUMENTS

Illuminated panel. For the first time on any tractor a fuel gauge is standard. Easy-to-read tractorometer gives low range speeds in lower sector, high range speeds in upper sector of dial; also standard PTO and belt speeds. Rear-view mirror, ammeter, water temperature and oil pressure gauges are here too — and, as optional, even a cigarette lighter.

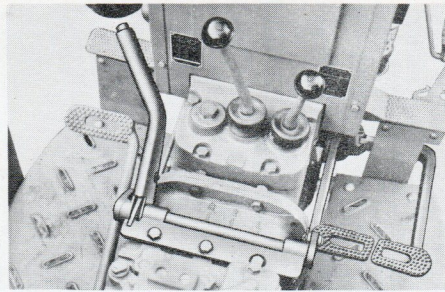


### BUILT-IN LIGHTS

The full array of lights — head, side and tail — are neatly built in and comply with Road Traffic Regulations. Number plate illumination and tail reflectors are provided too. There is an adjustable plough lamp

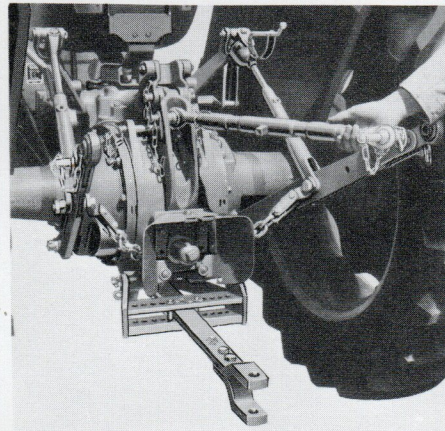
### ● SAFETY STARTING

No danger of starting in gear — another exclusive feature. All MF tractors have the long-proved safety device which allows the electric starter to work only when the gear shift lever is in neutral.



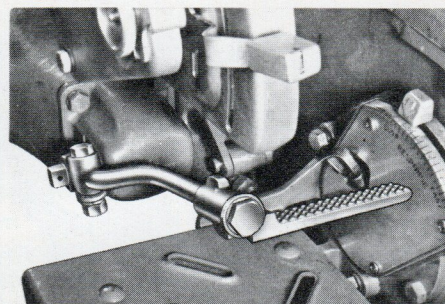
### HANDBRAKE — FOOTBRAKES

Push-button hand lever brakes both wheels for parking. Twin foot pedals can be applied together for normal braking or independently to assist steering.



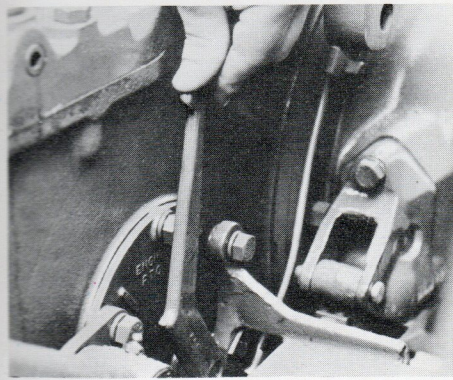
### CAT. 1 & 2 LINKAGE—DRAWBAR

Dual Category 1 and 2 links have lift capacity of 2850 lbs. Screw type top link is adjustable for length. Swinging drawbar is adjustable both for length and height.



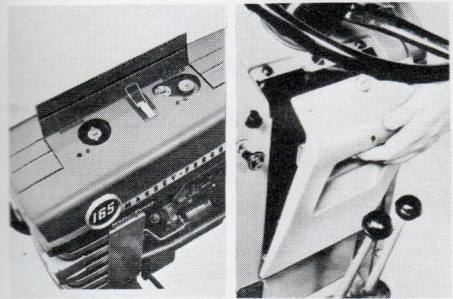
### DIFFERENTIAL LOCK

Pedal close to driver's right heel operates differential lock to give 'solid axle' drive when ground surface resists adhesion of either rear wheel. Useful feature of pedal is the hinged end which can be raised to enlarge standing room.



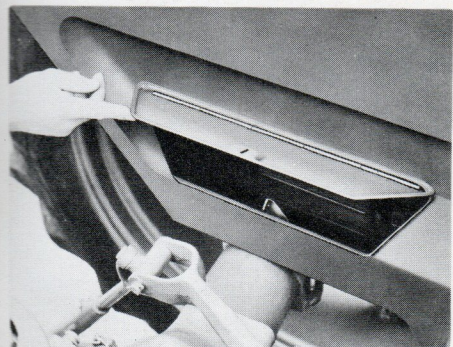
### LIVE PTO—48 h.p. at 540 r.p.m.

PTO drive can be selected proportional to engine speed or ground speed. Standard 540 r.p.m. occurs at 1684 engine r.p.m., providing excellent 'back-up' torque. Dual clutch gives live PTO and hydraulics.



### SERVICE PANELS

Neat, hinged panel gives quick access to fuel and water filling points. Large panel under steering wheel is removable to allow clear space for servicing battery.



### BIG TWIN TOOLBOXES

Tools are always safe and close to hand. Two large toolboxes in either fender can be reached from the seat or the ground. Toolkit supplied covers all basic needs for field adjustments.

# two million tractor know-how has gone into the making of this new 45 h.p. model



The MF 135 . . . . outcome of the world's richest experience in the design and service of Ferguson System tractors. A generation of leadership in light-medium tractor development is behind this latest achievement of MF engineers—finest of its class and best all-round tractor investment you can make. Modern, businesslike styling is in keeping with the 135's outstanding performance; practical, proved Massey-Ferguson design, the foundation for new standards in feature specification. The direct injection diesel is everything a tractor engine should be. Robust, reliable, economical. Sparing with fuel—easy to start from cold in all weathers. Highest power to weight ratio. Vigorous “back-up” torque which increases over a speed range from 2250 maximum right down to 1300 r.p.m. — meaning low speed lugging power to slog through tough going without need for time-wasting gear changes.

And MF are first again with the most effective, most advanced means of putting this power to work. Another forward stride has been made in tractor hydraulics. Now you have single lever control of

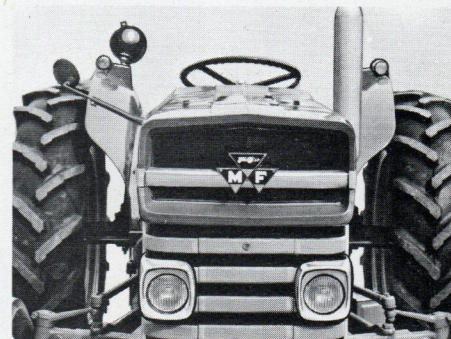
draft operated implements. And exclusive new Pressure Control to bring even trailed implements into the Ferguson System sphere of weight transfer benefits.

Popular, trouble-free Multi-Power is available, of course—but with an important addition; the 135 Multi-Power model has an auxiliary high capacity hydraulic system to provide large volume oil flow for external services.

For the first time you can order a cab that's designed integrally with the tractor. A spring seat is another optional to make the driver's job more comfortable. Close study has been devoted to all aspects of operating to promote output. And among many valuable items of standard equipment are built-in lights, diff. lock, handbrake and the full range of instruments. Yes, this tractor is built to your most exacting requirements. But only a working trial can prove it, so have it demonstrated on your land. Then you'll know why two million others have settled for Ferguson System farming.

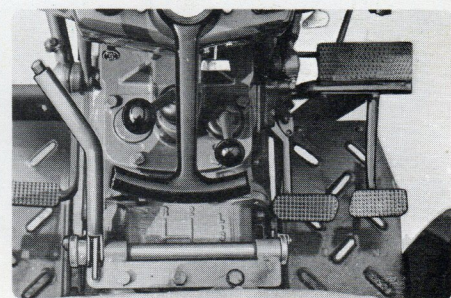
# MF 135

## Standard Features



### BUILT-IN LIGHTS

The full array of lights — head, side and tail — are neatly built in and comply with Road Traffic Regulations. Number plate illumination and tail reflectors are provided, too. There is an adjustable angle plough lamp at the rear.

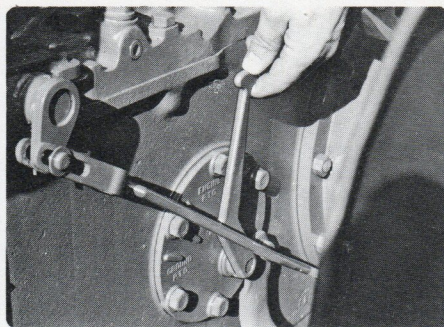


### HANDBRAKE — FOOTBRAKES

Push-button hand lever brakes both wheels for parking. Twin foot pedals can be applied together for normal braking or independently to assist steering.

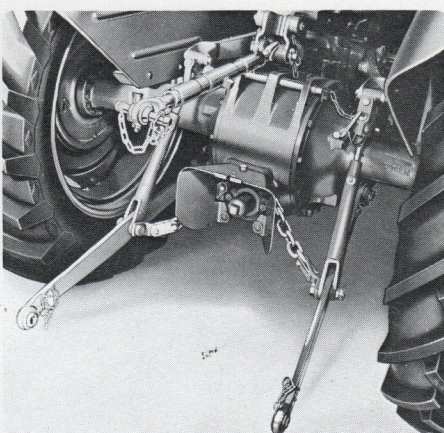
### ● SAFETY STARTING

No danger of starting in gear — another MF exclusive. All MF tractors have the long-proved safety device which allows the electric starter to work only when the gear shift lever is in neutral.



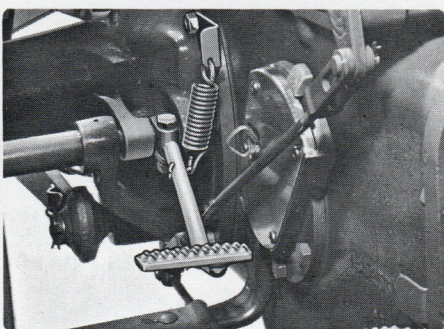
### PTO POWER—34 h.p. at 540 r.p.m.

PTO drive is proportional to engine or ground speed. Standard 540 r.p.m. occurs at 1684 engine r.p.m. providing excellent "back-up" torque. Dual clutch model gives live PTO and hydraulics.



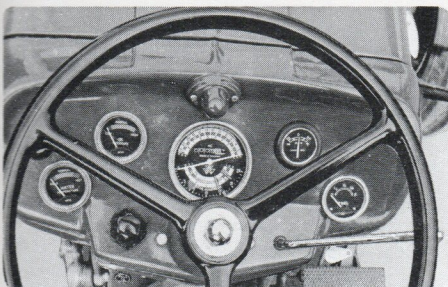
### STRONG CAT. 1 LINKAGE

Extra strong components give complete reliability. Lower links have big lift capacity of 2850 lbs. Screw type top link is adjustable for length. Spring catch on levelling lever maintains chosen setting. Note PTO guard with time-saving single bolt fixing.



### DIFFERENTIAL LOCK

Pedal close to driver's right heel operates differential lock to give "solid axle" drive when ground surface resists adhesion of either rear wheel. Pedal position indicates whether lock is "in" or "out".



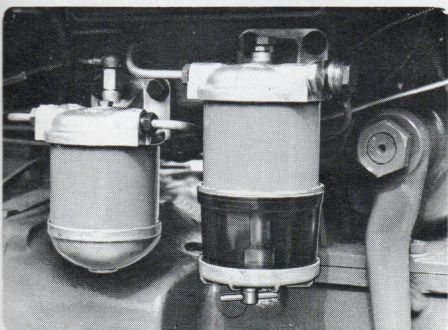
### FULL SET OF INSTRUMENTS

Illuminated panel shows everything you need for efficient control of the tractor. For the first time on any tractor a fuel gauge is standard. Easy-to-read tractormeter gives low range speeds in lower sector, high range speeds in upper sector of dial; also standard PTO and belt speeds. Rear-view mirror, ammeter, water temperature and oil pressure gauges are here, too — even, as optional, a cigarette lighter.



### SERVICE PANELS

Neat, hinged panel gives quick access to fuel and water filling points. Separate panel at rear is specially arranged to facilitate servicing of battery.



### CLEAN FUEL

Primary and secondary filters ensure complete reliability of the fuel injection system. Agglomerator in primary filter traps any water in fuel — water is quickly released through drain cock in base of sediment bowl.

# the thrifty one-thirty -30 h.p. all-purpose tractor for the smaller farm



In developing a light tractor for the British market Massey-Ferguson gave priority to three factors. The new model must efficiently perform every task on holdings where it could be the sole power unit. It was to sell at a realistic price in relation to the working capital of such holdings. And it had to conform to Massey-Ferguson's inflexible standards of quality construction and reliability.

The MF 130 was the result — the lowest priced all-duty tractor on the market. It is equipped for the whole range of seasonal work . . . ploughing, planting, PTO mowing-baling etc., haulage and belt driving of stationary machinery. Dependability in all these and many other jobs has already been exhaustively proved under true field conditions.

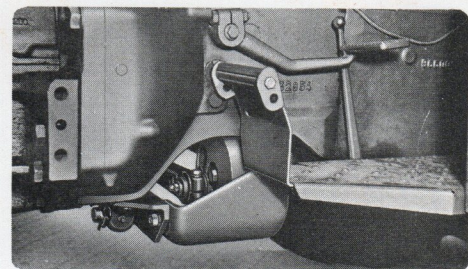
It is available in two principal models — the Economy and the De Luxe. A third, 'Vineyard' type is similar in general specification to the De Luxe. Both models are designed to provide maximum comfort and convenience for the operator. Modern, functional styling makes it

a tractor you can be proud to own. Routine maintenance is straightforward and simplified by quick accessibility of fill-up and service points.

The four cylinder diesel is a fully proved engine noted for exceptional low speed lugging power. Eight forward gears provide speeds from a creep to a canter to suit every requirement; with synchromesh in the top half of the range an invaluable feature for road work. Ferguson System hydraulics, differential lock, central and rear PTO, cushion seat — all these are standard throughout. The De Luxe model also has built-in lights, live and ground speed PTO and m.p.h. tractormeter.

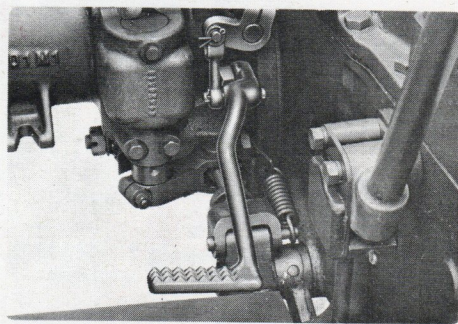
It all adds up to a degree of versatility equal to that of many larger and more costly tractors. It makes the thrifty 130 the natural choice for the single-tractor farm. And it also presents the ideal general utility run-about for bigger farms employing two or more heavier tractors.

## Standard Features



### CENTRAL PTO

This unique feature greatly increases flexibility of the tractor. Central PTO drive to a mid-mounted mower leaves the rear PTO and linkage completely free for other implements.



### DIFFERENTIAL LOCK

Pedal is located conveniently near driver's right foot. Suspends differential action to maintain traction when ground surface resists adhesion of either wheel. Pedal position indicates whether lock is 'in' or 'out'.

### EIGHT SPEED GEARBOX

High and Low ranges provide a total 8 forward and 2 reverse gears. This wide choice offers exactly the right speed for any job—especially to balance ground speed with PTO power. Syncromesh of 3rd, 4th, 7th and 8th gears is a great advantage for transport work. Note also twin brake pedals. Powerful disc brakes can be applied together or independently to assist steering.

### SAFETY STARTING

No danger of starting in gear—an exclusive feature. All MF tractors have the long-proved safety device which allows the electric starter to work only when the gear shift lever is in neutral.

## SIMPLE-TO-USE HYDRAULICS HAVE SINGLE LEVER CONTROL

### DRAFT CONTROL

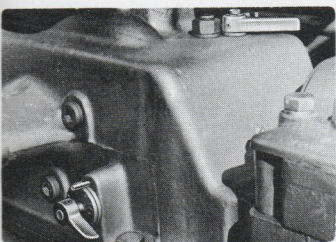
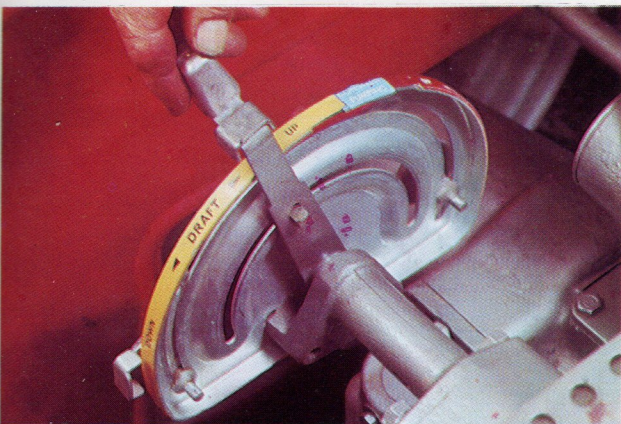
Draft operated implements are controlled by the quadrant lever in the yellow sector . . . for raising and lowering and pre-selection of working depth. Automatic draft control then takes over to keep the implement at constant depth. Response setting is selected according to the job in hand to maintain continuous weight transfer. The implement lowering control regulates the speed of drop—with external hydraulics or linkage implements.

### POSITION CONTROL

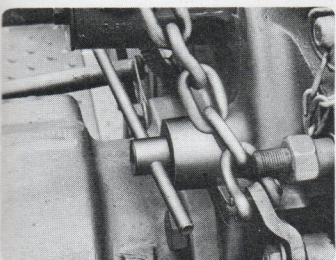
The lever is used in the red sector for tools which work at a fixed height above or below ground surface. Height of the linkage corresponds exactly to the position of the lever on the quadrant. This also makes implement hitching easy.

### CONSTANT PUMPING

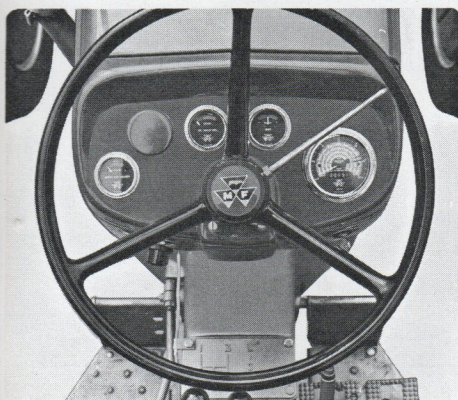
With the lever in the blue section of the quadrant the hydraulic valve is held open to provide continuous oil flow to external services. In this case the Linkage Lock is engaged to keep the lower links raised out of the way.



Response and Implement Lowering Settings



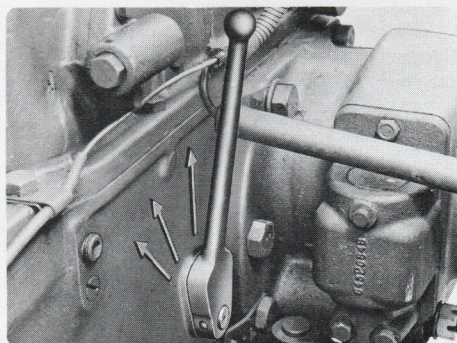
Linkage Lock



### INSTRUMENTS

(De Luxe model illustrated)

Economy model has all the basic equipment including oil pressure gauge and ammeter. Illuminated panel of De Luxe model also has a water temperature gauge and tractor-meter. This indicates engine r.p.m., travel speeds in each gear and records total engine running hours.



### DUAL CLUTCH/LIVE PTO

(De Luxe model)

By means of this simple lever the driver can select PTO drive proportional either to engine speed or ground speed. Dual clutch allows PTO drive to function even when the tractor is stationary. Economy model has single clutch with PTO drive proportional to engine speed.

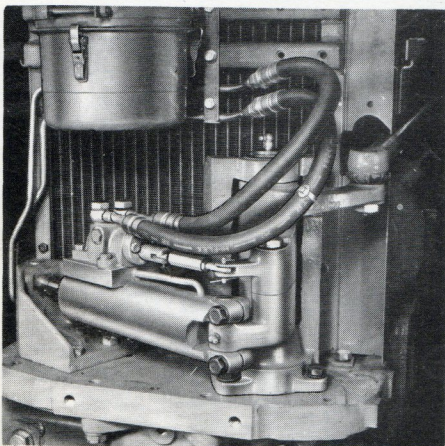
... these **OPTIONALS** are available on the various models for maximum convenience and operator comfort



**ALL-WEATHER CAB  
DESIGNED ALONG  
WITH THE TRACTOR**

(135, 165, 175)

Now you can order a cab made to MF specifications and designed concurrently with the tractor itself. Flat-top fenders are built in to match the tractor. You know right away that it fits exactly, is styled in keeping, shaped to allow the driver maximum vision, operating room, comfort and convenience. Steel framed fibreglass construction is completely rainproof and free from drumming and rattles. Spigot-hinged doors are detachable in seconds for coolness in summer. The top is removable in one piece. Side windows are slide opening. Fittings available include a windscreen wiper and roller blind at the rear with inset window.



**POWER STEERING**

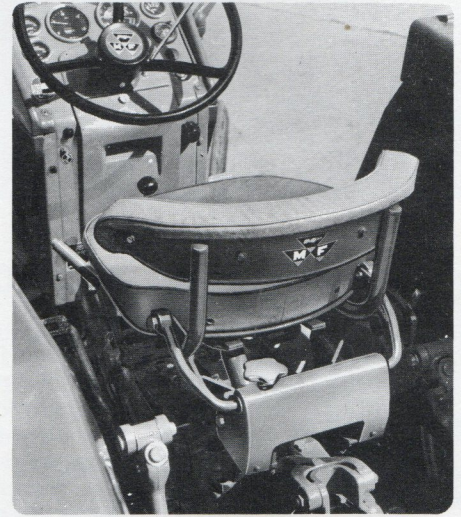
(165)

Hydraulic power assisted steering gives you finger-light control of the tractor and eliminates kick-back over rough ground. Power steering is a great asset—for loader work especially.

**GIGARETTE LIGHTER**

(135, 165, 175)

A worthwhile extra convenience for the operator which will also minimise fire risk. It will quickly pay for itself by avoiding time wasted with matches on windy days.

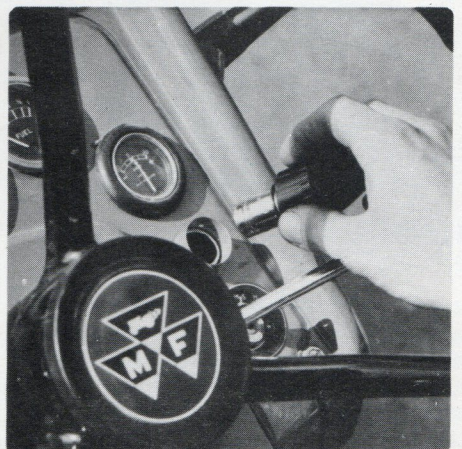
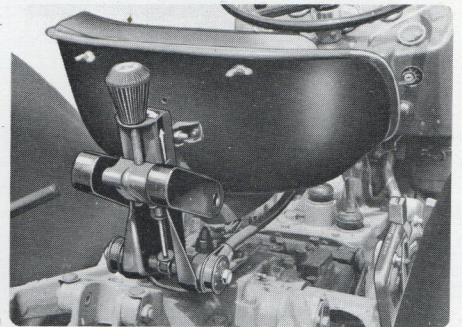


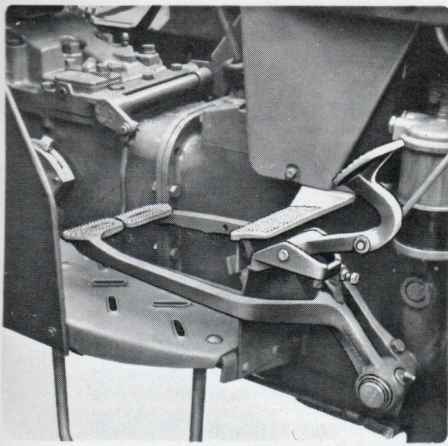
**SPRING SUSPENSION SEAT**

(135, 165, 175)

This seat gives the operator day-long comfort and support to conserve energy for the job that matters. Adjustable spring tension is pre-set to suit the driver's weight and the work in hand. Shocks are absorbed and bumps levelled out to give a really smooth ride.

*(135 seat illustrated below)*

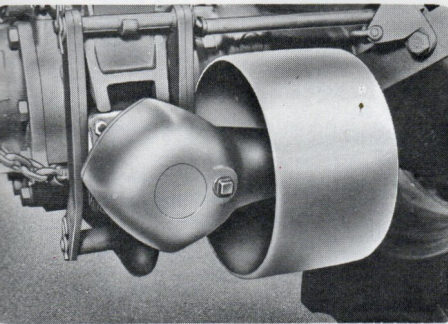




## FOOT THROTTLE

(135, 165, 175)

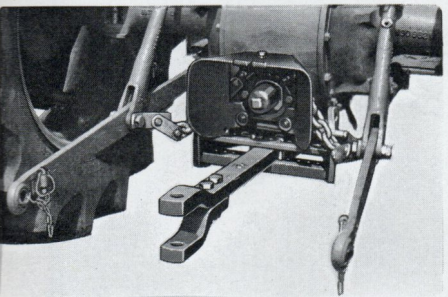
If you have never used one try before you buy — you'll soon be convinced of its value, especially for transport work. Foot pedal over-rides hand throttle; engine speed returns to hand lever setting when pedal is released.



## BELT PULLEY

(All models)

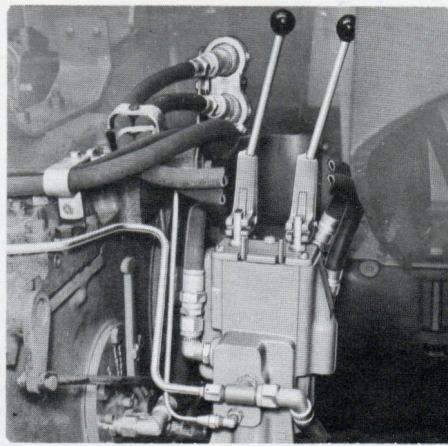
This pulley is driven by the PTO shaft and can be mounted to left or right of centre to give rotation in either direction. Regulation safety guards are supplied with the unit.



## SWINGING DRAWBAR

(135)

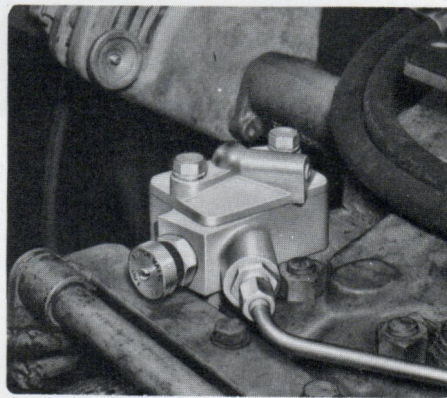
Drawbar is adjustable both for length and height. Provides correct hitching position for PTO driven machines and rigid, simple coupling for trailed implements.



## SPOOL VALVE

(135, 165, 175)

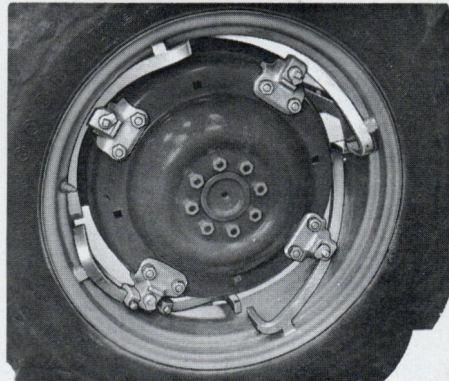
Hydraulic power is supplied to external services through this spool valve mounted on the left hand footrest. Units are available with either one or two spools. Both are quickly adaptable for single or double acting operation.



## COMBINING VALVE

(135, 165, 175)

By means of this valve the output of the linkage hydraulic pump can be coupled with that of the auxiliary high capacity pump (on Multi-Power models). The combined delivery is over 9 galls./minute.



## POWER ADJUSTED WHEELS

(135)

Rear track setting is quickly changed without manual effort on these power adjusted wheels. Track can be adjusted from 48" to 64" initially, then from 60" to 76" by interchanging wheels.



## WEIGHT FRAME/TOW HITCH

(All models)

Front-end ballast is easily adjusted with this attachment. Up to eight 60 lb. weights can be set on the frame — each secured in seconds by one bolt. Recessed towing mouth provides useful front hitch point.

In addition to the Optionals illustrated on this page the following extra equipment and accessories are available:

Automatic hitch (all models)

Plough lamp (130 de luxe)

Front and rear wheel weights (all models)

Stabilisers with brackets (all models)

Dual rear wheels (135, 165)

Various alternative tyre sizes (135, 165, 175)



### ENGINE

A4.236 Four cylinder direct injection diesel made by Perkins to Massey-Ferguson specifications:

Capacity ... ..	236 cu. in.
Bore ... ..	3 $\frac{1}{2}$ "
Stroke ... ..	5"
Compression ratio ... ..	16 : 1
Starting aid ... ..	Thermostart
Injection pump ... ..	Distributor type
Governor... ..	Mechanical
Max. Gross H.P. ... ..	66.4 at 2000 r.p.m.
Max. Torque ... ..	190 lb. ft., at 1200 r.p.m.

### TRANSMISSION

**Clutch** Dual type with 11" primary and 9" secondary driven plates. Self ventilating for cool running.

**Gearbox** Sliding spur type with planetary reduction unit giving 'High' and 'Low' ranges to provide total 6 forward, 2 reverse gears.

**Multi-Power** Doubles basic gear range giving additional 30 per cent faster speeds in each gear and providing 12 forward, 4 reverse gears. Multi-Power HIGH ratios obtained by hydraulic clutch engagement of extra set of constant mesh gears.

**Final Drive** Conventional differential with straddle mounted, three pinion epicyclic reduction units at axle ends.

**Differential Lock** Fitted as Standard.

**Road Speeds** On 12-36 tyres (28" rolling radius).

N.B.—Multi-Power LOW speeds are almost identical to those of the basic range.

Engine r.p.m.	BASIC RANGE		MULTI-POWER HIGH	
	500	2000	500	2000
GEAR	m.p.h.	m.p.h.	m.p.h.	m.p.h.
1	0.33	1.31	0.42	1.69
2	0.49	1.97	0.64	2.56
3	0.91	3.62	1.18	4.71
4	1.32	5.26	1.71	6.84
5	1.97	7.88	2.57	10.27
6	* 3.62	14.46	4.71	18.83
Reverse 1	0.45	1.79	0.58	2.33
Reverse 2	1.79	7.16	2.33	9.33

### Power Take-off

Drive proportional to engine speed or to ground speed.  
 Shaft diameter 1 $\frac{1}{2}$ " 6 splines, annular groove and transverse hole.  
 Ground Speed: Shaft revolves once for 19" travel; clockwise in forward, anti-clockwise in reverse.  
 Engine Speed: Engine PTO reduction 3:12 : 1 gives 540 PTO r.p.m. at 1684 e.r.p.m. and 641 PTO r.p.m. at 2000 e.r.p.m. 56 h.p. at British Standard 540 r.p.m.  
 Belt Speed: 3190 ft. min. at 2000 e.r.p.m.

### STEERING

Power steering fitted as standard. 3 $\frac{1}{2}$  turns from lock to lock. Full mechanical linkage maintains steering when engine is not running.

### BRAKES

7" x 4" double discs on each half shaft. Operated together or independently by twin foot pedals. Hand-brake fitted as standard.

### HYDRAULICS

**Functions** Two-way Draft control, Response control, Position control, Pressure control (optional).

**Linkage** Heavy duty Category 2 three-point linkage. Top link adjustable. Lift capacity 3375 lbs.

**Linkage Pump** Four cylinder piston type, constant running. Single control valve on suction side. Delivery 3.6 g.p.m. at 2000 e.r.p.m. Relief valve setting 2500 p.s.i. Oil supply of up to 1 $\frac{1}{2}$  galls. available from sump for external rams.

**Auxiliary System** (Multi-Power models only) Comprises High Capacity Pump with oil cooler. Supplies oil for external services (including hydraulic motors) through spool valves; one spool or two spool, double acting, convertible to single acting.

High Capacity Pump is located adjacent to linkage pump and driven from PTO Shaft. Requirement for Multi-Power is diverted through priority circuit to cooler, leaving 5.8 g.p.m. available for external services. Relief valve setting 2000 p.s.i. Combining Valve allows High Capacity and Linkage pump outputs to be united to give total 9.4 g.p.m. Hydraulic power available: High Capacity pump only 8.2 h.p., combined pumps 13.2 h.p. Oil Cooler is located between tractor radiator and front grille.

### WHEELS AND TYRES

**Track Adjustment** Rear 54" to 90". Front 48" to 72". (P.A.V.T. rear wheels fitted as standard.)

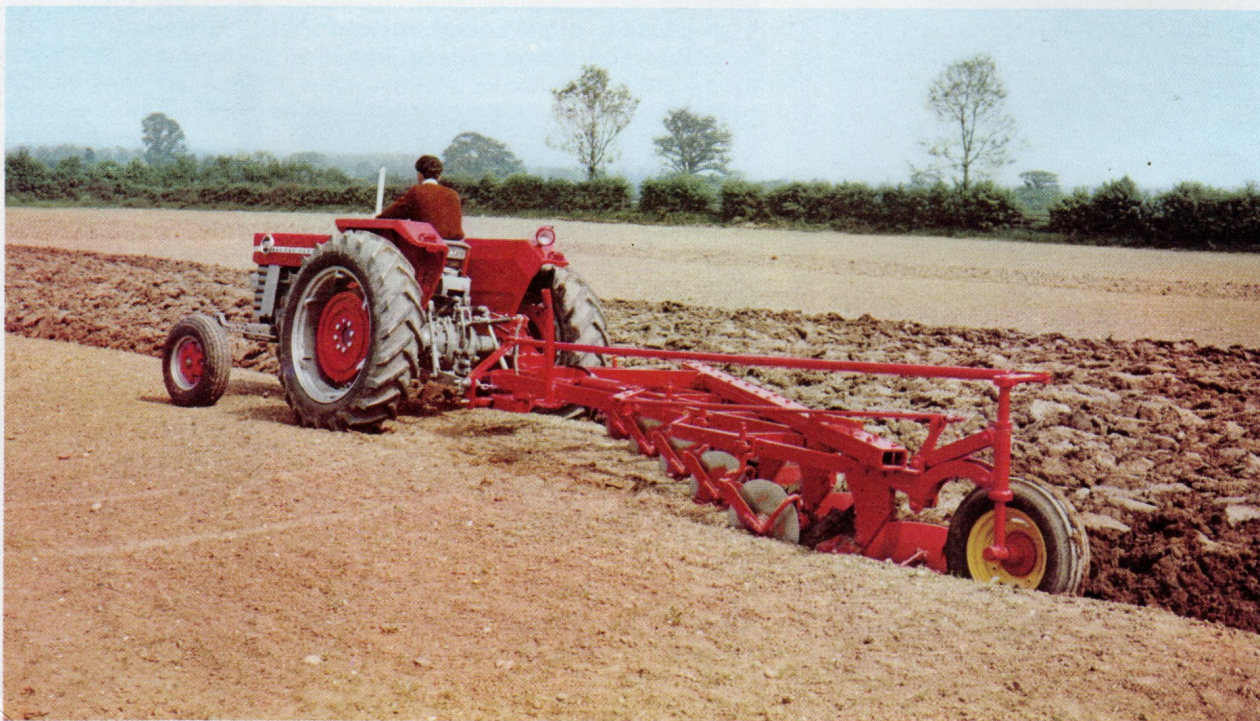
**Tyre Sizes** Rear 12-36 6 ply. Front 6-00-19 6 ply.

### DIMENSIONS, WEIGHTS, CAPACITIES

Length ... ..	139"	Weight (with fuel, oil, water) ... ..	6,500 lbs.
Width (Normal track) ... ..	72"	Weight distribution:	
Height (over steering wheel) ... ..	65"	Front ... ..	2,400 lbs.
Ground clearance ... ..	17 $\frac{1}{2}$ "	Rear ... ..	4,100 lbs.
Wheelbase ... ..	84"	Fuel tank ... ..	18 galls.
Turning circle (without brakes) ... ..	23' 6"	Cooling system... ..	3 galls.
		Engine Sump ... ..	13 pints
		Transmission ... ..	6 $\frac{3}{4}$ galls.

### EQUIPMENT SUMMARY

Basic	Optional/Accessories
Power Steering	Cab
P.A.V.T. rear wheels	Multi-Power/Auxiliary hydraulics
Differential lock	One-spool valve
Lights, plough lamp, reflectors	Two-spool valve
Comprehensive instruments	Combining valve
Hydraulics and Cat. 2 Linkage	Pressure control and hitch
6 forward, 2 reverse speed.	Spring suspension seat
transmission	Foot throttle
Dual clutch Live PTO	Front frame and weights
Ground speed PTO	Tow hitch
Handbrake	Heavy duty belt pulley
Swinging drawbar	Automatic hitch
Cushion seat	Cigarette lighter
Vertical exhaust	Horizontal exhaust
12-36 6 ply Rear tyres	15-30 6 ply Rear tyres on P.A.V.T. wheels with 7-50-16 6 ply Front tyres
6-00-19 6 ply Front tyres	



# Specification

# MF 165

## ENGINE

AD4.203 Four cylinder direct injection diesel made by Perkins to Massey-Ferguson specifications.

Capacity ... ..	203.5 cu. in.
Bore ... ..	3.6"
Stroke ... ..	5"
Compression ratio ... ..	18.5:1
Starting aid ... ..	Thermostart
Injection pump ... ..	Distributor type
Governor ... ..	Mechanical
Max. Gross H.P. ... ..	58.3 at 2000 r.p.m.
Max. Torque ... ..	169 lb./ft. at 1300 r.p.m.

## TRANSMISSION

**Clutch** Dual type with 11" primary and 9" secondary driven plates. Self ventilating for cool running.

**Gearbox** Sliding spur type with planetary reduction unit giving 'High' and 'Low' ranges to provide 6 forward, 2 reverse gears.

**Multi-Power** Doubles basic gear range giving additional, 30 per cent faster speeds in each gear and so providing 12 forward, 4 reverse gears. Multi-Power HIGH ratios obtained by hydraulic clutch engagement of extra set of constant mesh gears.

**Final Drive** Conventional differential with straddle mounted, three pinion epicyclic reduction units at axle ends.

**Differential Lock** Fitted as standard.

**Road Speeds** On 11-32 tyres (25.2" rolling radius):-

N.B.—Multi-Power LOW speeds are almost identical to those of the basic range.

Engine r.p.m.	BASIC RANGE		MULTI-POWER HIGH	
	500	2000	500	2000
GEAR	m.p.h.	m.p.h.	m.p.h.	m.p.h.
1	0.3	1.3	0.4	1.7
2	0.5	2.0	0.7	2.6
3	0.9	3.7	1.2	4.8
4	1.3	5.3	1.7	7.0
5	2.0	8.0	2.6	10.4
6	3.7	14.7	4.8	19.1
Reverse 1	0.5	1.8	0.6	2.4
Reverse 2	1.8	7.3	2.4	9.5

**Power Take-off** Drive proportional to engine speed or to ground speed. Shaft: diameter 1 $\frac{1}{2}$ ", 6 splines, annular groove and transverse hole for various couplings.

**Ground speed:** Shaft revolves once for 19" travel (clockwise in forward, anti-clockwise in reverse).

**Engine speed:** Engine/PTO reduction of 3.12:1 gives 540 PTO r.p.m. at 1684 e.r.p.m. and 641 PTO r.p.m. at 2000 e.r.p.m. Power available: 48 h.p. at 540 r.p.m. Belt Speed: 3190 ft. min. at 2000 e.r.p.m.

## STEERING

3 $\frac{1}{2}$  turns from lock to lock. Power steering optional (full mechanical linkage maintains steering when engine is not running).

## HYDRAULICS

**Functions** Two-way Draft Control, Response Control, Position Control, Pressure Control (optional).

## BRAKES

7" x 4" double disc brakes on each half shaft. Operated together or independently by twin foot pedals. Handbrake fitted as standard.

**Linkage** Cat. 1 and 2, three-point linkage. Top link screw adjustable. Lift capacity 2850 lbs. (at end of lower links in lowest position).

**Linkage Pump** Four cylinder piston type, constant running. Single control valve on suction side. Delivery 3.6 gal./min. at 2000 e.r.p.m. Relief valve setting 2500 p.s.i. Oil supply of up to 1 $\frac{1}{2}$  galls. available from sump for external rams.

**Auxiliary System** (Multi-Power model only) Comprises High Capacity pump in circuit with oil cooler. Supplies oil for external services (including hydraulic motors) through spool valves; one spool or two spool, double acting, convertible to single acting.

High Capacity pump is located adjacent to linkage pump and driven from PTO shaft. Requirement for Multi-Power is diverted through priority circuit to cooler, leaving 5.8 gal./min. available for external services. Relief valve setting 2000 p.s.i. Combining Valve allows High Capacity and Linkage pump outputs to be united to give total 9.4 gal./min. Hydraulic power available: High Capacity pump only 8.2 h.p., combined pumps 13.2 h.p. Oil Cooler is located between tractor radiator and front grille.

## WHEELS AND TYRES

**Track Adjustment** Rear 52" to 88". Front 48" to 72".

6.00-16 4 ply or 6 ply Front with 11-32 4 ply or 6 ply Rear

6.00-19 4 ply or 6 ply Front with 11-36 4 ply or 6 ply Rear.

6.00-16 4 ply or 6 ply Front with 13-28 6 ply Rear

## DIMENSIONS, WEIGHTS, CAPACITIES

Length ... ..	132"	Weight (with fuel, oil, water) ... ..	4400 lbs.
Width (normal track) ...	72"	Weight Distribution:	
Height (over steering wheel)	62"	Front ... ..	1800 lbs.
Ground Clearance (min.)	14"	Rear ... ..	2600 lbs.
Wheelbase ... ..	82"	Fuel Tank ... ..	15 galls.
Turning Circle (without brakes) ... ..	22'	Cooling System ... ..	3 galls.
		Engine Sump ... ..	1 $\frac{1}{2}$ galls.
		Transmission ... ..	7 galls.

## EQUIPMENT SUMMARY

Basic	Optional/Accessories
Lights, plough lamp, reflectors	Cab
Differential lock	Multi-power/Auxiliary hydraulics
Comprehensive instruments, rear mirror	Combining valve
Hydraulics, Cat. 1 and 2 linkage	One or Two-spool valves
6 forward, 2 reverse transmission	Pressure Control and hitch
Dual Clutch/Live PTO	Power steering
Ground Speed PTO	Spring Suspension Seat
Handbrake	Foot throttle
Swinging drawbar	Front frame and weights/Tow hitch
Cushion seat	Heavy duty belt pulley
6.00-16 4 or 6 ply, 11-32 4 or 6 ply tyres	Automatic hitch
	Cigarette lighter
	Dual rear wheels (11-32 and 11-36
	Front and rear wheel weights
	6.00-19 4 or 6 ply, 11-36 4 or 6 ply tyres
	6.00-16 4 or 6 ply, 13-28 6 ply tyres

## HIGH CLEARANCE MODEL

Has special ratio transmission giving road speeds approximately equal to those of the normal model.

Minimum ground clearance: 19".

Tyres: 6.00-16 4 ply front, 11-38 6 ply rear.

Track adjustment: Front 49" to 73", Rear 52" to 88" (in 4" steps).



**General Note:** All data on this page is specific to the MF 135 diesel, dual clutch model. (Petrol engine and single clutch models are also available).

### ENGINE

AD3.152 Three cylinder direct injection diesel made by Perkins to Massey-Ferguson specifications:

Capacity ... ..	152.7 cu. in.
Bore ... ..	3.6"
Stroke ... ..	5"
Compression ratio ... ..	18.5 : 1
Starting aid ... ..	Thermostat
Injection pump ... ..	Distributor type
Governor ... ..	Mechanical
Max. Gross H.P. ... ..	45.5 at 2250 r.p.m.
Max. Torque ... ..	119 lb./ft. at 1300 r.p.m.

### TRANSMISSION

**Clutch** Dual type with 11" primary and 9" secondary driven plates. Self ventilating for cool running.

**Gearbox** Sliding spur type with planetary reduction unit giving 'High' and 'Low' ranges to provide 6 forward, 2 reverse gears.

**Multi-Power** Doubles basic gear range giving additional 30% faster speeds in each gear and so providing 12 forward, 4 reverse gears. Multi-Power HIGH ratios obtained by hydraulic clutch engagement of extra set of constant mesh gears.

**Final Drive** Conventional differential with spiral bevel gears.

**Differential Lock** Fitted as standard.

**Road Speeds** On 11-28 tyres (22.9" rolling radius):—

N.B.—Multi-Power LOW speeds are almost identical to those of the basic range.

Engine r.p.m.	BASIC RANGE		MULTI-POWER HIGH	
	500	2250	500	2250
Gear	m.p.h.	m.p.h.	m.p.h.	m.p.h.
1	0.33	1.50	0.44	1.98
2	0.50	2.24	0.66	2.95
3	0.91	4.11	1.20	5.42
4	1.33	5.97	1.76	7.89
5	1.99	8.96	2.63	11.82
6	3.65	16.40	4.82	21.70
Reverse 1	0.45	2.03	0.60	2.68
Reverse 2	1.80	8.10	2.39	10.74

**Power Take-off** Drive proportional to engine speed or to ground speed. Shaft: diameter 1 $\frac{3}{8}$ ", 6 splines, annular groove and transverse hole for various couplings.

**Ground Speed:** Shaft revolves once for 19" travel (clockwise in forward, anti-clockwise in reverse).

**Engine Speed:** Engine/PTO reduction of 3.12 : 1 gives 540 PTO r.p.m. at 1684 e.r.p.m. and 721 PTO r.p.m. at 2250 e.r.p.m. Power available: 34 h.p. at 540 r.p.m. (British Standard speed).

**Belt Speed:** 3093 ft./min. at 2250 e.r.p.m.

### STEERING

Recirculating ball mechanism. 2 $\frac{1}{2}$  turns from lock to lock.

### BRAKES

14" x 2" drum brakes, two shoes per drum. Operated together or independently by twin foot pedals. Handbrake fitted as standard.

### HYDRAULICS

**Functions** Two-way Draft Control, Response Control, Position Control, Pressure Control (optional).

**Linkage** Cat. 1 three-point linkage standard. Dual Cat. 1 and 2 linkage optional. Top link screw adjustable. Lift capacity 2850 lbs.

**Linkage Pump** Four cylinder piston type, constant running. Single control valve on suction side. Delivery 4 gal./min. at 2250 e.r.p.m. Relief valve setting 2500 p.s.i. Oil supply of up to 1 $\frac{1}{2}$  galls. available from sump for external rams.

**Auxiliary System** (Multi-Power model only) Comprises High Capacity pump with oil cooler. Supplies oil for external services (including hydraulic motors) through spool valves; one spool or two spool, double acting, convertible to single acting.

High capacity pump is located adjacent to linkage pump and driven from PTO shaft. Requirement for Multi-Power is diverted through priority circuit to cooler, leaving 6.6 gal./min. available for external services. Relief valve setting 2000 p.s.i. Combining Valve allows High Capacity and Linkage pump outputs to be united to give total 10.6 gal./min.

Hydraulic power available: High Capacity pump only, 9.3 h.p.; combined pumps 14.9 h.p.

Oil Cooler is located between tractor radiator and front grille.

### WHEELS AND TYRES

**Track Adjustment** Rear 48" to 76". Front 48" to 80".

**Tyre Sizes** 4-00-19 Front with 10-28 Rear.

6-00-16 Front with 10-28 Rear.

6-00-16 Front with 11-28 Rear.

### DIMENSIONS, WEIGHTS, CAPACITIES

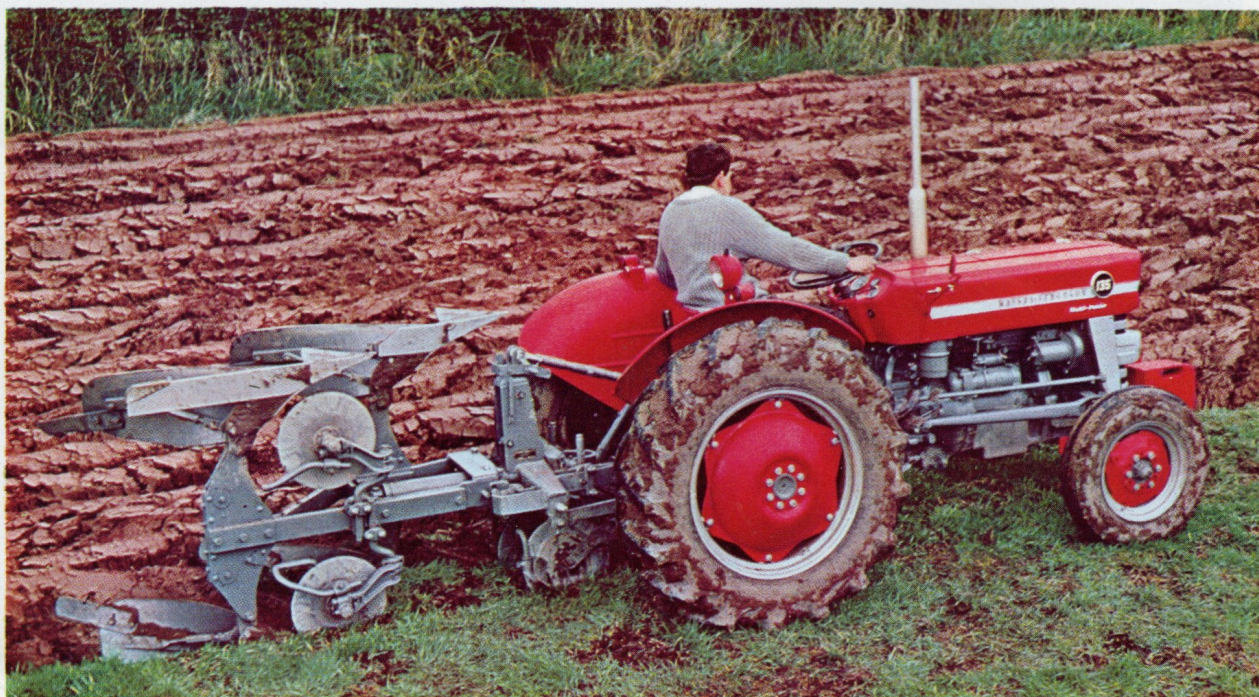
Length ... ..	118"	Weight (with fuel, oil, water) ... ..	3,200 lbs.
Width (normal track) ... ..	64"	Weight Distribution:	
Height (over steering wheel) ... ..	54"	Front ... ..	1,376 lbs.
Ground Clearance (min.) ... ..	12"	Rear ... ..	1,824 lbs.
Wheelbase ... ..	72"	Fuel Tank ... ..	8 $\frac{1}{2}$ galls.
Turning Circle (without brakes) ... ..	19' 3"	Cooling System ... ..	18 pints
		Engine Sump ... ..	11 $\frac{1}{2}$ pints
		Transmission ... ..	6.6 galls.

### EQUIPMENT SUMMARY

**Basic**  
 Lights, plough lamp, reflectors  
 Differential lock  
 Comprehensive instruments, rear mirror  
 Hydraulics and Cat. 1 linkage  
 6 forward, 2 reverse speed transmission  
 Dual clutch/Live PTO  
 Ground speed PTO  
 Handbrake  
 Cushion seat  
 Vertical exhaust  
 4-00-19, 10-28 4 ply tyres  
 or 6-00-16, 10-28 4 ply tyres  
 or 6-00-16, 11-28 4 or 6 ply tyres

### Optional/Accessories

Cab  
 Multi-Power/Auxiliary hydraulics  
 Combining valve  
 One-spool valve  
 Two-spool valve  
 Pressure Control and hitch  
 Spring suspension seat  
 P.A.V.T. rear wheels  
 Foot throttle  
 Front frame and weights/Tow hitch  
 Belt pulley  
 Dual Cat. 1 and 2 linkage  
 Swinging drawbar  
 Automatic hitch  
 Cigarette lighter  
 Dual rear wheels (11-28 tyres)  
 Front and Rear wheel weights  
 6-00-16, 11-28 6 ply tyres



All data is common to both De Luxe and Economy models except where otherwise specified. Brief details of Vineyard model are listed separately.

## ENGINE

A4.107 Four cylinder diesel made by Perkins to Massey-Ferguson specifications:

Capacity	...	...	...	...	107 cu. in.
Bore	...	...	...	...	3 $\frac{1}{8}$ "
Stroke	...	...	...	...	3 $\frac{1}{2}$ "
Compression ratio	...	...	...	...	22.5:1
Starting aid	...	...	...	...	Thermostart
Injection pump	...	...	...	...	Distributor type
Governor	...	...	...	...	Mechanical
Max. Gross H.P.	...	...	...	...	30 at 2250 r.p.m.
Max. Torque	...	...	...	...	75 lb./ft. at 1200 r.p.m.

## TRANSMISSION

**Clutch** De Luxe: Dual type with 11" primary and 9" secondary driven plates. Economy: Single type with 11" driven plate.

**Gearbox** Sliding spur type with planetary reduction unit giving 'High' and 'Low' ranges to provide 8 forward, 2 reverse gears. Syncromesh of 3rd, 4th, 7th and 8th gears.

**Final Drive** Conventional differential with three-pinion epicyclic reduction units at axle ends.

**Differential Lock** Fitted as standard.

## Road Speeds

Engine r.p.m.	500	2250
GEAR	m.p.h.	m.p.h.
1	0.3	1.3
2	0.4	1.7
3	0.6	2.6
4	0.8	3.7
5	1.2	5.3
6	1.6	7.0
7	2.4	10.8
8	3.4	15.6
Reverse 1	0.3	1.4
Reverse 2	1.1	5.0

**Power Take-off** Shaft 1 $\frac{3}{8}$ " diameter, 6 splines, annular groove and transverse hole. De Luxe: Live PTO, drive proportional to engine speed or to ground speed; ground speed gives one revolution for 19" travel (clockwise in forward, anti-clockwise in reverse).

Economy: Drive proportional to engine speed.

Engine/PTO reduction of 3.5:1 gives 540 PTO rev./min. at 1890 e.r.p.m. and 643 PTO rev./min. at 2250 e.r.p.m.

Power available: 24 h.p. at 540 rev./min. (British Standard speed).

## STEERING

3 turns from lock to lock.

## BRAKES

Disc brakes on each half shaft. Operated together or independently by twin foot pedals. Pawl lock on foot pedals for parking.

## HYDRAULICS

**Functions** Two-way draft control, Response control, Position control, Oil supply to external rams.

**Linkage** Cat. 1 three-point linkage. Links can be locked in raised position. Lift capacity 1825 lbs. De Luxe: Screw type adjustable top link. Economy: Two-piece adjustable top link.

**Pump** Gear type; oil filtered at intake and output. Delivery 2 gal./min. at 2250 e.r.p.m. Relief valve setting 2,000 p.s.i.

**External Services** Up to 1 gall. of oil available from sump for external rams. Two oil lines can be fitted for delivery and return.

## WHEELS AND TYRES

**Track Adjustment** Rear 48" to 76". Front 48" to 72".

**Tyre Sizes** De Luxe: 5.50-16 4 ply Front; 10-28 4 ply Rear.

Economy: 4.00-19 4 ply Front; 10-28 4 ply Rear

## DIMENSIONS, WEIGHTS, CAPACITIES

Length	...	...	109"	Weight (with fuel, oil, water)	2,600 lbs
Width (min. track)	...	...	63"	Fuel tank	...
Height (over steering wheel)	...	...	55"	Cooling System	...
Ground Clearance (min.)	...	...	17"	Engine Sump	...
Wheelbase	...	...	72"	Transmission	...
Turning Circle (without brakes)	...	...	12' 7"		...

## EQUIPMENT SUMMARY

Basic	Optional/Accessories
5.50-16, 10-28 tyres (De Luxe)	Automatic hitch
4.00-19, 10-28 tyres (Economy)	Belt pulley
8 forward, 2 reverse transmission, part syncromesh	Front weights and frame/Tow hitch
Road lights etc. (De Luxe)	Fixed drawbar
Differential lock	Linkage drawbar and stays
Dual clutch/Live and ground speed PTO (De Luxe)	Stabilisers with brackets
Single clutch/Engine speed PTO (Economy)	Oil pipes for external hydraulics
Hydraulics/Cat. 1 linkage	Front and rear wheel weights
Telescopic top link (De Luxe)	
M.P.H. Tractormeter (De Luxe)	
Cushion seat	

## VINEYARD MODEL

(Variations from basic)

Overall width (Min. track setting) 37"

Front track: 28" to 50"

Rear track: 28" to 54"

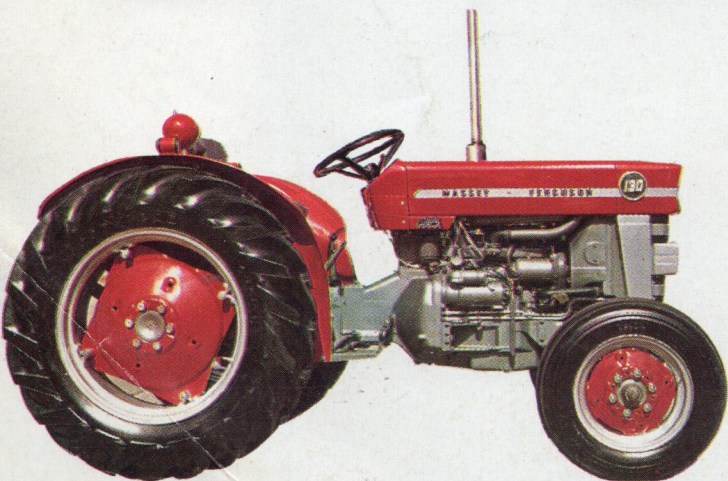
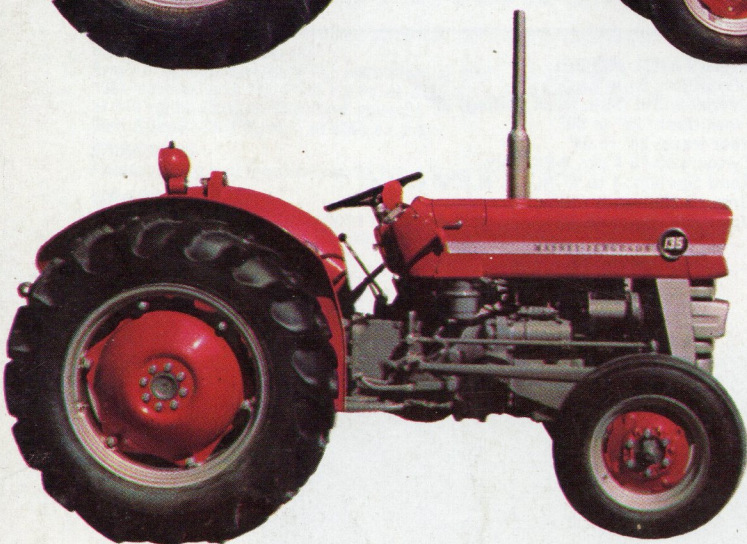
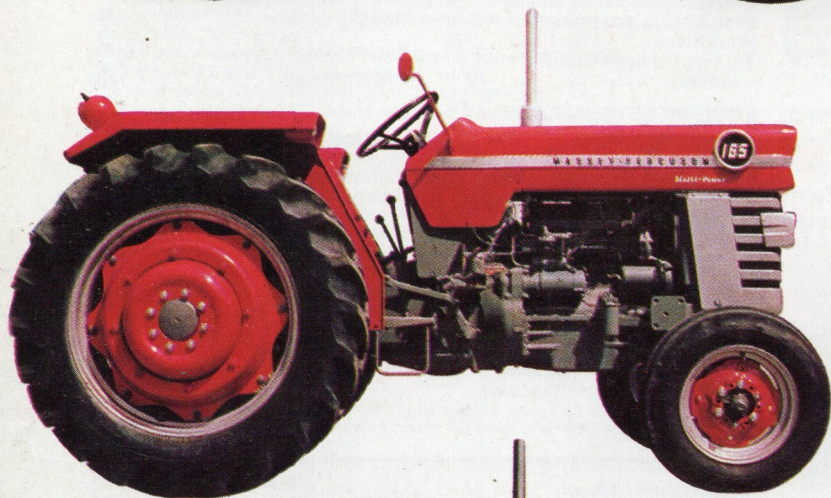
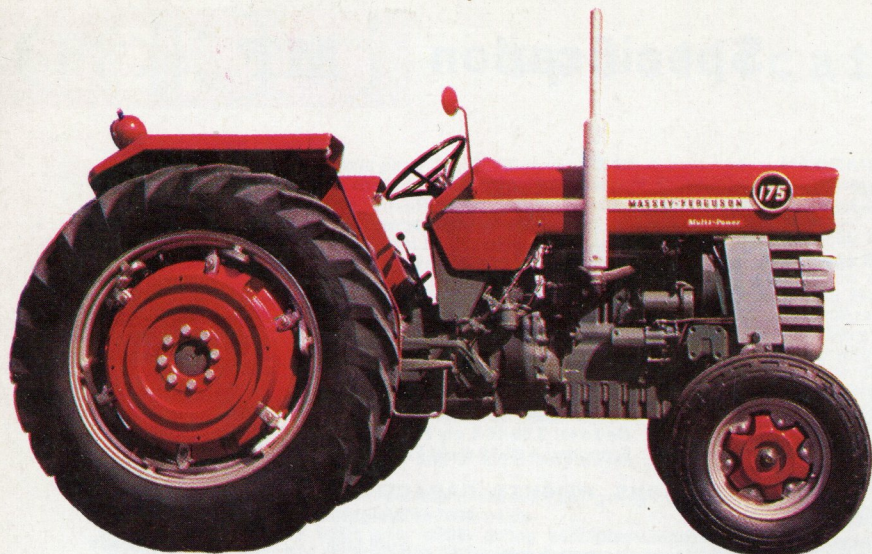
Tyres: 4.00-15 4 ply, 9-24 4 ply

Road Speeds: 1 to 11 m.p.h. at 2250 e.r.p.m. \*

Ground clearance: 13"

Horizontal exhaust fitted.





## PROMPT **MF SERVICE** IS JUST A 'PHONE CALL AWAY

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