



Massey Harris
Massey Ferguson
Operator's Manual
MF282

Operator's Manual

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MH-O-MF282

Make: Massey-Ferguson	Model: 175	Years Made: 1964-1975
HP-PTO: 63.34	HP-Engine:	HP-Drawbar: 53.5
HP-Range: 63	Engine-Make: PERKINS	Engine-Fuel: DIESEL
Engine-Cyl(s)-CID: 4/236	Transmission-STD: MULTIPOWER	Optional:
Fwd/Rev Standard: 12/	Fwd/Rev Optional:	Mfwd-Std/Opt:
Tires-Std Front: 6.50-16	Tires-Std Rear: 16.9-28	Wheelbase-Inch:
Pto Type: LIVE	Pto Speed: 175	CAT I-3pt Hitch: False
CAT II-3pt Hitch: True	CAT III-3pt Hitch: False	Hitch Lift:
Hydraulics-Type: OPEN	Hyd-Cap:	Hyd-Flow:
Hyd Std Outlets:	Cooling Capacity:	Fuel Tank Capacity:
Cab-Stdm A/C; Rops:	Weight: 6125	New Price: 7553

Make: Massey-Ferguson	Model: 180	Years Made: 1964-1975
HP-PTO: 63.68	HP-Engine:	HP-Drawbar: 53.8
HP-Range: 64	Engine-Make: PERKINS	Engine-Fuel: DIESEL
Engine-Cyl(s)-CID: 4/236	Transmission-STD: MULTIPOWER	Optional:
Fwd/Rev Standard: 12/	Fwd/Rev Optional:	Mfwd-Std/Opt:
Tires-Std Front: 7.50-15	Tires-Std Rear: 15.5-38	Wheelbase-Inch:
Pto Type: LIVE	Pto Speed: OPEN	CAT I-3pt Hitch: False
CAT II-3pt Hitch: True	CAT III-3pt Hitch: False	Hitch Lift:
Hydraulics-Type: OPEN	Hyd-Cap:	Hyd-Flow:
Hyd Std Outlets: 1	Cooling Capacity:	Fuel Tank Capacity:
Cab-Stdm A/C; Rops:	Weight: 6755	New Price: 7583

Paint Codes	
Location	MFG Color Name
TRIM	SILVER MIST
BODY	MASSEY FERGUSON RED
ENGINE	FLINT GREY

Make: Massey-Ferguson	Model: 178	Years Made: 1968-1971
HP-PTO: 73.62	HP-Engine: 73	HP-Drawbar:
HP-Range: 73	Engine-Make: PERKINS	Engine-Fuel: DIESEL
Engine-Cyl(s)-CID: 4/248	Transmission-STD: MULTIPOWER	Optional:
Fwd/Rev Standard: 12/	Fwd/Rev Optional:	Mfwd-Std/Opt:
Tires-Std Front: 7.50-16	Tires-Std Rear: 12X36	Wheelbase-Inch: 84
Pto Type: LIVE	Pto Speed: 175	CAT I-3pt Hitch:
CAT II-3pt Hitch:	CAT III-3pt Hitch:	Hitch Lift:
Hydraulics-Type: OPEN	Hyd-Cap:	Hyd-Flow:
Hyd Std Outlets:	Cooling Capacity:	Fuel Tank Capacity: 21.7
Cab-Stdm A/C; Rops:	Weight: 6878	New Price:

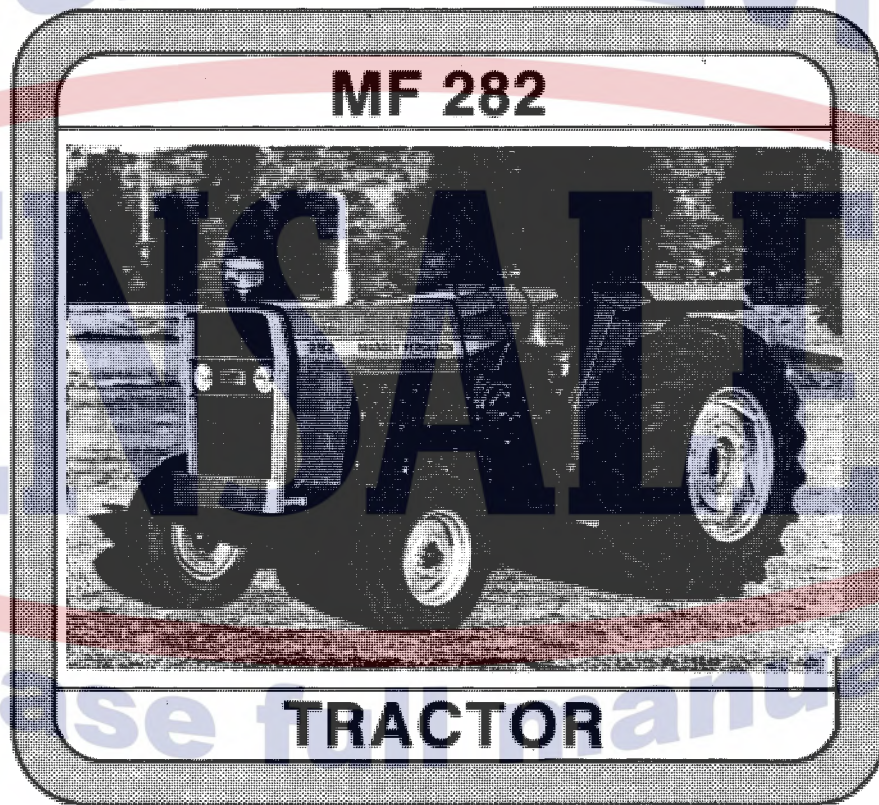
Make: Massey-Ferguson	Model: 282	Years Made: 1982-1983
HP-PTO: 64	HP-Engine: PERKINS	HP-Drawbar: DIESEL
HP-Range: 64	Engine-Make: 4/248	Engine-Fuel: SG-DUAL RANGE
Engine-Cyl(s)-CID:	Transmission-STD: 8/2	Optional:
Fwd/Rev Standard:	Fwd/Rev Optional:	Mfwd-Std/Opt:
Tires-Std Front: 7.50-16	Tires-Std Rear: 14.9-38	Wheelbase-Inch: 84
Pto Type: LIVE	Pto Speed: 540	CAT I-3pt Hitch: False
CAT II-3pt Hitch: True	CAT III-3pt Hitch: False	Hitch Lift:
Hydraulics-Type:	Hyd-Cap:	Hyd-Flow:
Hyd Std Outlets:	Cooling Capacity:	Fuel Tank Capacity:
Cab-Stdm A/C; Rops:	Weight: 5292	New Price: 11073

DASH PANEL MF 175 & MF 180		
Year		Beginning Serial Number
1964	MF 175	644000001
1964	MF 180	645000001
1965	MF 175	645000002
1965	MF 180	644000004
1966	MF 175	6440000214
1966	MF 180	645000047
1967		9A10001
1968		9A39836
1969		9A63158
1970		9A87325
1971		9A107519
1972		9A128141
1973		9A152025
1974		9A182761
1975		9A207681

DASH PANEL MF 282		
Year		Beginning Serial Number
1982		KC24457S
1982		KC25226H
1983		KD25518H
1983		KD26466S

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PRE-DELIVERY INSPECTION

Inspect all items listed in Registration and Inspection Certificate inside rear cover. All information required to carry out inspection is contained in this Manual (refer to Index).



Fig. 19 — Cat. I and Cat. II Linkage

- | | |
|---------------------|--------------------|
| 1. Lift Rod | 3. Category I Hole |
| 2. Category II Hole | 4. Lower Lift Link |



Fig. 21 — Levelling Right Lift Linkage

- | |
|--------------------|
| 1. Levelling Crank |
| 2. Lift Fork |



CAUTION: When attaching or detaching 3-point hitch implements, it is most important inner quadrant control lever be in Position Control. This will ensure precise control over the implement when attaching or detaching it from the 3-point hitch.

3. Firmly lock brakes before dismounting Tractor, Fig. 20.

4. Attach right link to right implement hitch pin in same manner. Use levelling crank, No. 1, Fig. 21, if necessary, to raise or lower right lower link. Secure right lower link to implement hitch pin with linch pin.

The lift rods have both a slot and a hole for attachment of lower links. The slots provide flota-

tion required for wide tool bar implements that have gauge wheels. The holes are used when flotation is not required.

5. Before attaching top link, the implement "A" frame height must be determined. The largest 3-point hitch implements have an "A" frame of 22 inches. When operating this size implement, attach top link in top hole, No. 2, Fig. 22. When using 3-point hitch implements having an "A" frame height of 18 inches or less, attach top link in center hole, No. 3, or lower hole, No. 4.

NOTE: Using a higher than normal hitch point on the control beam, increases the hydraulic system sensitivity, provides more weight for penetration as an implement enters the soil and



Fig. 20 — Brake Pedal Locked in Park

- | | |
|-----------------------------|-----------|
| 1. Parking Brake Latch | 2. Pedals |
| 3. Interlocking Brake Latch | |

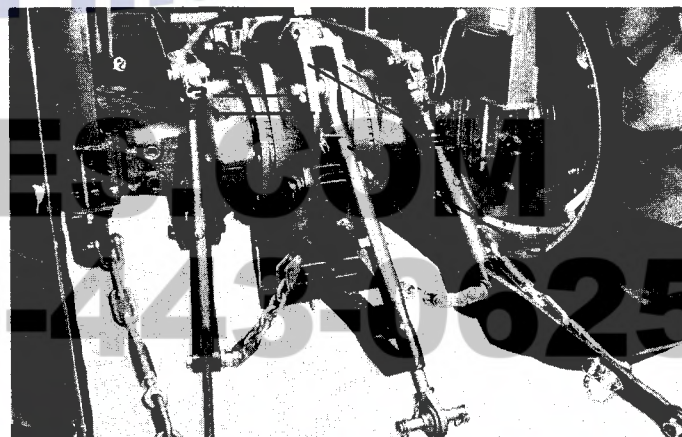


Fig. 22 — Top Link Attaching Point

- | | |
|-----------------|----------------|
| 1. Control Beam | 3. Center Hole |
| 2. Top Hole | 4. Bottom Hole |
| 5. Top Link | |



Fig. 44 — Oil Bath Air Cleaner
 1. Clamp Fasteners 3. Bowl
 2. Filter Element 4. Oil Level

CLUTCH PEDAL FREE TRAVEL ADJUSTMENT

Normal clutch pedal free travel is 3/16" measured between clutch shaft arm, 1, Fig. 45 and transmission housing 4.

Note: It is recommended that before performing this adjustment, check and adjust linkage rod length to measurement (6) shown in Fig. 45.

1. Install a punch in hole in end of clutch release shaft, 2, Fig. 45. Loosen bolt, 3, in release shaft arm.
2. Rotate clutch release shaft clockwise (using punch as a lever) until release bearing touches clutch release fingers (noticeable resistance).
3. Move release shaft arm until there is correct clearance (3/16") between transmission housing and "stop" of release shaft arm.
4. Tighten bolt securely and recheck clearance.

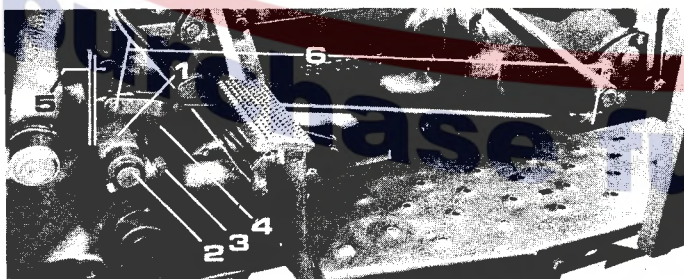


Fig. 45 — Clutch Pedal Adjustment
 1. Arm 4. Transmission Housing
 2. Shaft 5. 3/16" Clearance.
 3. Bolt 6. Rod Length (25 7/16")

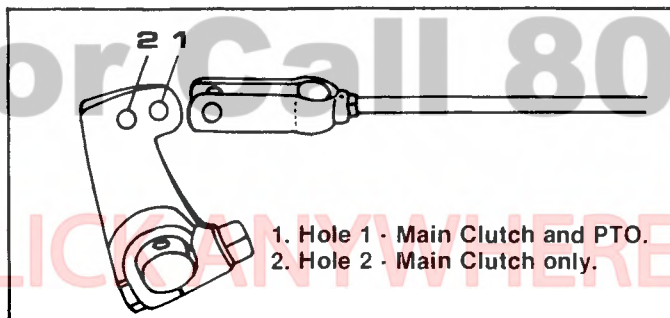


Fig. 46 — Clutch Release Arm

To disengage transmission clutch and PTO clutch pin must be located in hole 1, Fig. 46. For transmission clutch disengagement only - pin must be located in hole 2, Fig. 46. (For further information see page 25).

BRAKE ADJUSTMENTS

Brake adjustments are made on the pedal free travel clearance and not on the brake itself. The free travel clearance should be set 2 1/2 in (63.5 mm) with the brakes cool, as under operating conditions this clearance will be reduced. If the figure is exceeded, the pedal may touch the platform before the brakes are fully applied.

To adjust the brakes:-

1. Jack the rear wheels clear of the ground and disconnect the brake return spring.
2. Turn the self locking nuts, as shown in Fig. 48, clockwise to reduce pedal free travel, anti-clockwise to increase it.
3. Clearance can be checked by pressing the pedal by hand until a firm resistance is felt. One pedal should be set and the other carefully matched to it so that the master brake latch can be engaged freely.

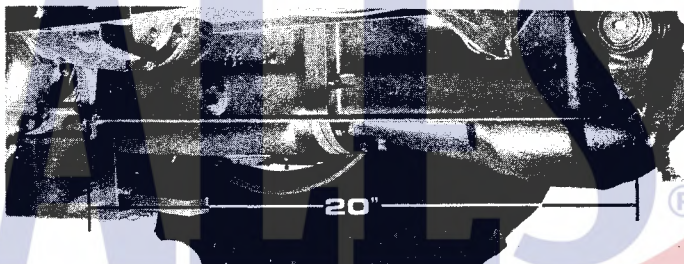


Fig. 47 — Brake Pull Rod



Fig. 48 — Brake Pedal Adjustment
 1. Adjusting Nut 2. PTO Shift Lever



Fig. 49 — Brake Pedal
 1. Left-Hand Brake Pedal 2. Right-Hand Brake Pedal
 3. 2 1/2"

SPECIFICATIONS

ENGINE:

Model	A4.248
Type	Four cylinder, direct injection
Cylinder Bore	3.97 inches
Piston Stroke	5 inches
Total Displacement	248 cu. ins.
Compression Ratio	16:1
Firing Order	1-3-4-2
Valve Clearance (Intake and Exhaust):	
Hot	0.010 inch
Cold	0.012 inch
Idle Speed	650 RPM
Maximum Speed (No Load)	2150 RPM
Maximum Speed (Loaded)	2000 RPM
Governor	Built-in injection pump
Fuel Injection Pump	CAV, DPA distributor type
Fuel Injectors	CAV multi-hole type
Fuel Filtering System	2 Filters, full flow with replaceable elements.

ELECTRICAL SYSTEM:

Starter Switch	Key operated
Starter	M-45G. 12 volt
Alternator	35 amp — continuous output, diode rectified A.C. type with separate solid state regulator

BRAKES:

Type	Independent mechanically actuated wheel brakes with 8-3/4" multiple disc wet brakes
Steering	Power Assisted Steering

HYDRAULIC SYSTEM:

Lift Pump	Constant running, scotch yoke, piston type
Maximum Pressure	3 000 PSI
Delivery	US GAL 4.09 GPM @ 2750 PSI @ 2000 RPM
Delivery	IMP GAL 3.32 GPM @ 2750 PSI @ 2000 RPM
Delivery	Liters 15.1 LPM @ 2750 PSI @ 2000 RPM
Control	Oscillating control valve on inlet side of port

POWER TRAIN:

Clutch:

Tractors with "Live" PTO (8-Speed):	
Type	Dual dry-disc
Primary Clutch:	Coil spring-loaded, 12" dia.
Secondary Clutch:	Belleville spring-loaded, 10" dia.

8-Speed Transmission	Consists of a 4-speed forward and 1-speed reverse "sliding" gear set, compounded by a dual range planetary reduction gear set. Dual range planetary, connected to transmission main shaft, provides eight speeds forward and two reverse
Final Drive	Spiral bevel gear with straddle-mounted pinion in combination with planetary final reduction on each axle