Massey Harris
Massey Ferguson

Operator's Manual

MF4500 & MF6500
Forklifts

Operator's Manual

MH-O-MF4500+

OPERATOR MANUAL

1448 274 M4

MF 4500 AND MF 6500 FORKLIFTS

MF
Massey Ferguson

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4. Stop and tail lights.
5. Directional signals.

Before towing, inspect to be sure Forklift is properly prepared and securely attached to towing vehicle. Check following items:

1. Towbar and safety chains must be securely attached.
2. Emergency "break-away" cable must be attached to towing vehicle.
3. Forks must be secured in towing position.
4. Forklift brakes and lights must be functioning properly.

Place transmission in neutral.

With High Speed Towbar — Not to exceed legal speed limits, however, in any case not to exceed 70 mph and must be equipped with following tires: 14.00 x 24 and 12.00 x 16.5, designed for use at highway speeds.

If Forklift is towed with a high speed towbar and equipped with functionable brakes in good repair, towing vehicle should have a gross weight at least *equal* to total weight of Forklift and accessories.

Slow Speed Towbar (Kit consists of):

1. Towbar and safety chains.-

Speed not to exceed 20 mph under any conditions.

Lubricate six grease fittings on towbar daily or every 10 hours of operation. Check hydraulic brake fluid. Maintain brake fluid at indicator mark level.

If Forklift is to be towed with a low speed towbar, towing vehicle should have a gross weight of at least *twice* the weight of Forklift and accessories.

In either case, towing vehicle should have four wheel brakes in good condition and be equipped with a hitch of adequate strength.

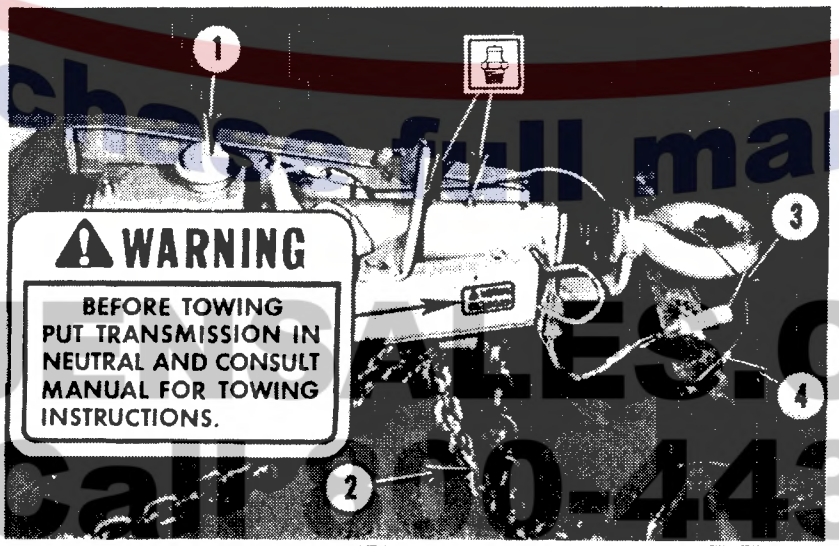

Fig. 18 — Towbar (High Speed)

1. Brake Master Cylinder
2. Safety Chains
3. Light Socket
4. Break-Away Cable

TROUBLE-SHOOTING

DIESEL UNIT

ENGINE CRANKING FAILURE

1. Loose, grounded, shorted or broken wiring. Check connections on all switches.
2. Discharged or weak battery.
3. Inoperative starting motor.

ENGINE CRANKS BUT FAILS TO START — FUEL SYSTEM

1. Lack of fuel in tank. Fill tank and "air bleed" system.
2. Excessive air in fuel system. "Air bleed" entire fuel system.
3. Fuel shut-off control rod in "off" position.
4. Fuel filter "clogged". Replace filter and "air bleed" system.
5. Faulty injector assembly. Have your MF Dealer test and service or replace assembly.
6. Injection pump failure. Have your MF Dealer check pump.
7. Injection pump timing incorrect. Have your MF Dealer correctly time pump.
8. Injection pump idle speed set too low. Adjust injection pump idle speed stop screw.

ENGINE CRANKS BUT FAILS TO START — AIR SYSTEM

1. Air cleaner inlet tube restricted.
2. Plugged or "clogged" air cleaner.

ENGINE OPERATION ROUGH

1. Injection pump incorrectly timed.
2. Faulty injectors.
3. Faulty injection pump.

EXCESSIVE ENGINE EXHAUST SMOKE

1. Clogged air cleaner.
2. Faulty injectors.
3. Burned, worn or sticking valves.
4. Excessive operation at low idle speed.

LOSS OF POWER

1. Clogged air cleaner.
2. Plugged fuel filter.
3. Blown head gasket.
4. Brake dragging.
5. Fuel shut-off rod linkage incorrect.

SPECIFICATIONS

Model	MF 4500	MF 4500	MF 6500
Engine:			
Manufacturer	Perkins	Continental	Perkins
Fuel Type	Diesel	Gasoline	Diesel/Gasoline
No. Cylinders	3	4	4
Bore	3.6"	3.375"	3.875"
Stroke	5"	4.06"	5"
Displacement (cu. ins.)	152.7	145	236
Indle RPM		500-550	
Maximum Governed RPM		2225-2275	
Transmission		Hydraulic or Manual Shuttle	
Brakes		Mechanical actuated wet disc	
Driving Axle		3-pinion planetary differential lock	
Power Steering		Hydrostatic	
Battery		12V, 95 amp (1)	12V, 95 amp (2)
Capacities:			
Engine Crankcase	6-1/2 qts.	6 qts.	8-1/2 qts.
Cooling System	10 qts.	10 qts.	18 qts.
Fuel Tank	18 gals.	18 gals.	18 gals.
Transmission and Differential:			
Hydraulic		10 gals.	10 gals.
Manual		9 gals.	9 gals.
Hydraulic System:			
Pump Make		Hydreco	Hydreco
Pump Capacity		17 gpm	20 gpm
Hydraulic Reservoir		15 gals.	15 gals.
Relief Valve:			
2 Stage Mast		1375 psi	1625 psi
3 Stage Mast		1875 psi	1875 psi
Free Lift		1375 psi	1375 psi
Steering:			
Type		Hydrostatic	Hydrostatic
Pump		Barnes	Parker-Hannifan
Pump Capacity		5 gpm	5 gpm
System Capacity		1-1/2 qts.	2 qts.
Relief Valve		1400 psi	1600 psi