

MASSEY FERGUSON

MF 1700

Series Tractors

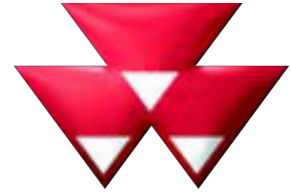
Models: 1736 / 1742 / 1749 / 1754 / 1758 / 1759



SERVICE MANUAL

FROM MASSEY FERGUSON

Workshop Service Manual



MASSEY FERGUSON

1736

1742

1749

1754

1758

1759



**CALIFORNIA
Proposition 65 Warning**

WARNING: Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects, or other reproductive harm.

WARNING: Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm. Wash hands after handling.

1. Introduction

1.1 Introduction	1-3
1.1.1 This manual	1-3
1.1.2 Replacement parts	1-3
1.1.3 Units of measurement	1-3
1.1.4 Serial number plate	1-3
1.1.5 Engine identification	1-4
1.1.6 Chassis number	1-4
1.1.7 Cab tractor major components	1-5
1.1.8 Platform tractor major components	1-6
1.2 Specifications	1-7
1.2.1 Engine specifications	1-7
1.2.2 Electrical specifications	1-8
1.2.3 Power shuttle transmission specifications	1-8
1.2.4 Hydrostatic transmission specifications	1-8
1.2.5 Power take-off specifications	1-9
1.2.6 Front axle specifications	1-9
1.2.7 Rear axle specifications	1-9
1.2.8 Brake specifications	1-10
1.2.9 Hydraulic specifications	1-10
1.2.10 Fuel specifications	1-11
1.2.11 Operating slope angle	1-11
1.2.12 Capacities	1-11
1.2.13 Lubrication specifications	1-11
1.2.14 Wheel bolt torque chart	1-12
1.2.15 Tire inflation pressures	1-12
1.2.16 Maximum load capacity	1-13
1.3 Dimensions	1-15
1.3.1 Cab tractor dimensions	1-15
1.3.2 Platform tractor dimensions	1-16
1.4 Lubrication / fill points	1-19
1.4.1 Lubrication and maintenance chart	1-19
1.4.2 Initial lubrication and maintenance chart	1-21
1.4.3 Lubrication fill and drain locations - 1736/1742	1-22
1.4.4 Lubrication fill and drain locations - 1749/1754/1758/1759	1-22
1.4.5 Grease fittings	1-23
1.4.6 Operation chart	1-23
1.5 General precautions for disassembly and installation	1-25
1.5.1 Precautions for disassembling and installing	1-25
1.5.2 Precautions when installing according to standard parts	1-25
1.6 Tightening torque chart	1-28
1.7 Conversion table	1-30



1.1 Introduction

1.1.1 This manual

This manual covers general safety practices for this system. The operator manual must always be kept with the system when relocated to another machine.

Right-hand and left-hand, as used in this manual, are determined by facing the direction the machine will travel when in use.

The photos, illustrations, and data used in this manual were current at the time of printing, but due to possible in-line production changes, your system can vary slightly in detail. The manufacturer reserves the right to redesign and change the system as necessary without notification.



WARNING:

In some of the illustrations and photos used in this manual, shields or guards may have been removed for clarity. Never operate the machine with any shields or guards removed. If the removal of shields or guards is necessary to make a repair, they must be replaced before operation.

1.1.2 Replacement parts

To receive your parts quickly, have the following information:

- Correct part description and part number
- Model number of the machine
- Serial number of the machine

1.1.3 Units of measurement

Measurements are given in metric units followed by the equivalent in US units. Hardware sizes are given in millimeters for metric hardware and inches for US hardware.

1.1.4 Serial number plate

The serial number plate (1) is located below the operator seat.

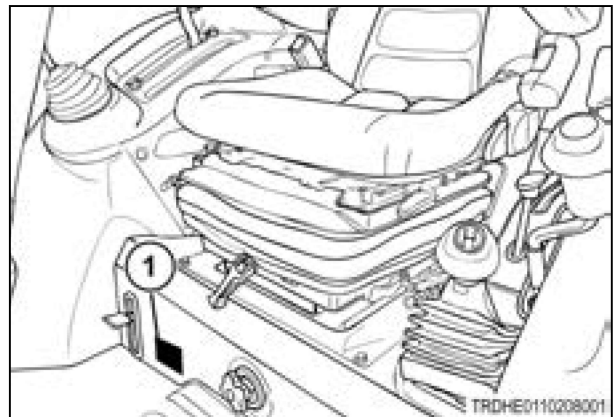


Fig. 1

The serial number plate contains the model number and serial number.

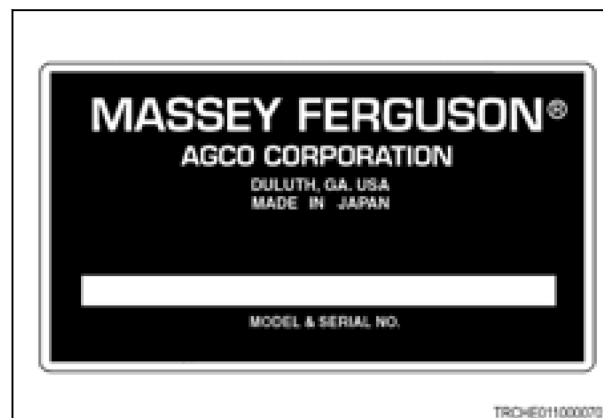


Fig. 2

1.1.5 Engine identification

The engine model number and serial number (1) are located on the right-hand side of the engine.

Engine model number:	
Engine serial number:	

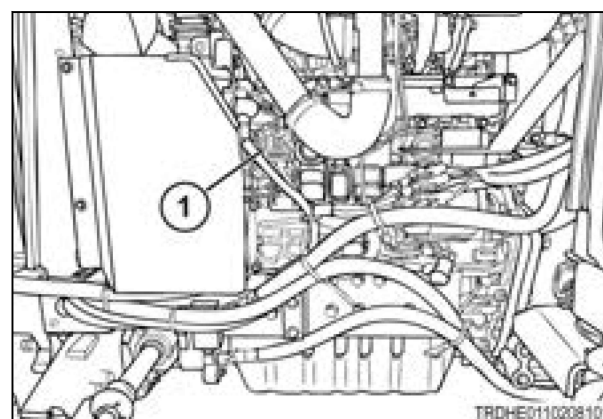


Fig. 3

1.1.6 Chassis number

The chassis number (1) is stamped in right-hand side of front frame.

Chassis number:	
-----------------	--

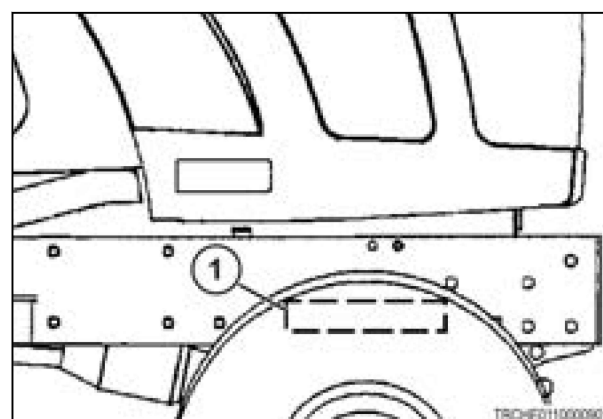


Fig. 4

1.1.7 Cab tractor major components

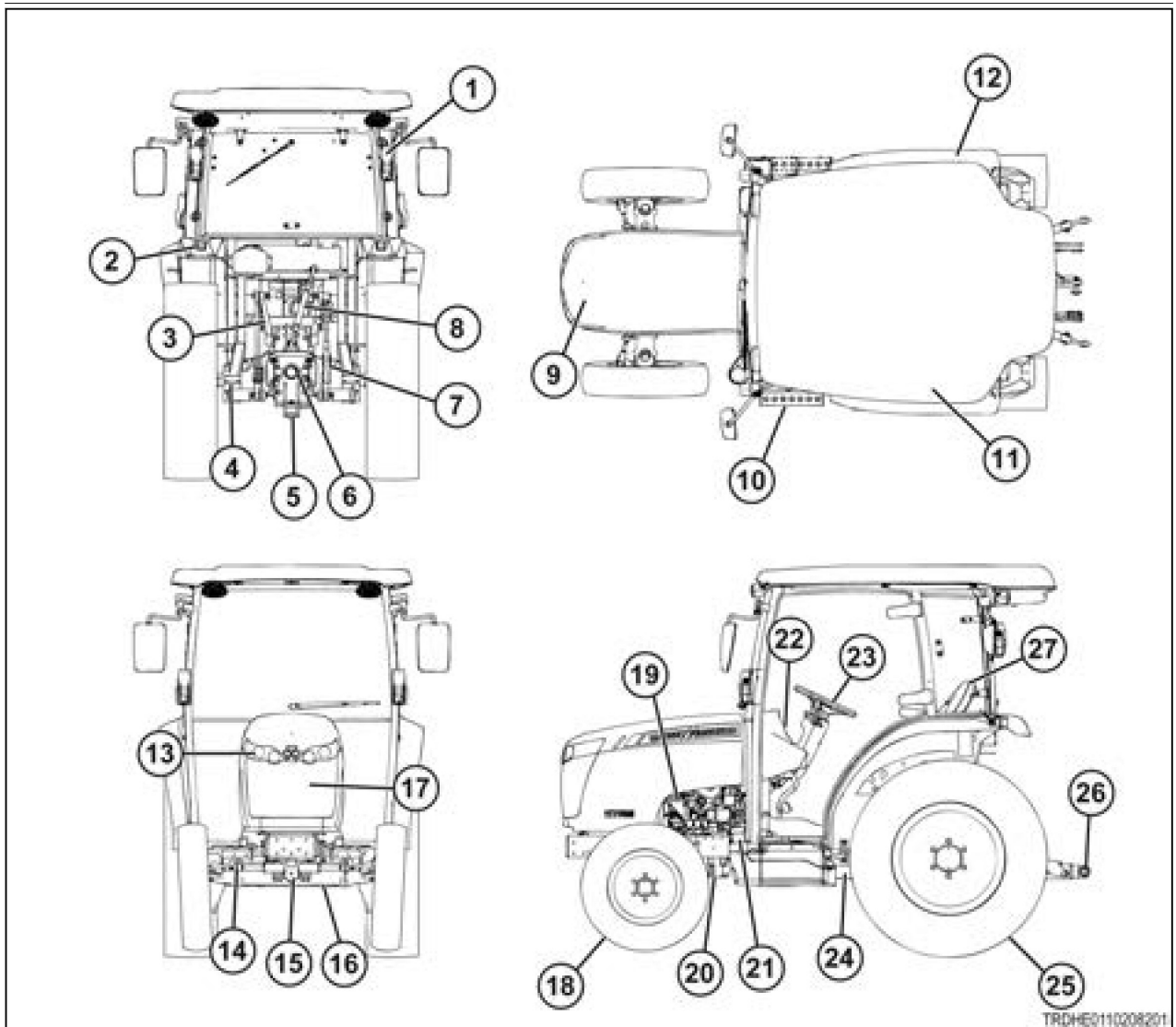


Fig. 5

- | | | | |
|------|------------------------------|------|-------------------------|
| (1) | Turn/warning lamps | (15) | Front axle pivot |
| (2) | Reflector | (16) | Steering cylinder |
| (3) | Lift arm | (17) | Battery |
| (4) | Rear axle | (18) | Front wheel |
| (5) | Drawbar | (19) | Engine |
| (6) | Rear power take-off | (20) | Front wheel drive shaft |
| (7) | Lift rod | (21) | Fuel tank filler |
| (8) | Stabilizer | (22) | Instrument panel |
| (9) | Engine cover and front grill | (23) | Steering wheel |
| (10) | Foot step | (24) | Transmission |
| (11) | Cab | (25) | Rear wheel |
| (12) | Fender | (26) | Lower link |
| (13) | Headlamp | (27) | Operator seat |
| (14) | Front axle | | |

1.2 Specifications

1.2.1 Engine specifications

	1736	1742	1749	1754	1758	1759
Type	Water-cooled, turbocharged diesel engine					
Model	D03CJ			D04CJ		
Make	Mitsubishi Heavy Industries					
Number of cylinders	3			4		
Combustion system	Direct injection system					
Compression ratio	18 : 1					
Injection	Common rail system					
Bore	86 mm (3.39 in)					
Stroke	95 mm (3.74 in)					
Displacement	1.655 L (0.43725 US gal.)			2.207 L (0.58309 US gal.)		
Rated speed	2500 rpm					
Low idle speed	930 to 970 rpm					
High idle speed	2605 to 2645 rpm					
Maximum torque at rpm	124 Nm (91.4 lbf ft) at 1800 rpm	150 Nm (110.6 lbf ft) at 1800 rpm	167 Nm (123.2 lbf ft) at 1800 rpm	191 Nm (140.9 lbf ft) at 1800 rpm	210 Nm (154.9 lbf ft) at 1800 rpm	
Engine horse power (estimated gross)	27.0 kW (36.2 hp) at 2500 rpm	31.0 kW (41.6 hp) at 2500 rpm	36.0 kW (48.3 hp) at 2500 rpm	40.0 kW (53.9 hp) at 2500 rpm	44.0 kW (59.0 hp) at 2500 rpm	
Cab tractor - PTO horsepower (estimate)	19.7 kW (26.4 hp) at 2500 rpm	23.7 kW (31.7 hp) at 2500 rpm	28.2 kW (37.8 hp) at 2500 rpm	30.6 kW (41.1 hp) at 2500 rpm	33.2 kW (44.5 hp) at 2500 rpm	
Platform tractor - PTO horsepower (estimate)	20.5 kW (27.5 HP) at 2500 rpm	24.5 kW (32.8 hp) at 2500 rpm	29.0 kW (39.0 hp) at 2500 rpm	31.5 kW (42.1 hp) at 2500 rpm	33.9 kW (45.6 hp) at 2500 rpm	
Engine cooling	Forced water cooling by centrifugal pump					
Fan	382 mm (15.0 in), 7 blades			430 mm (16.9 in), 8 blades		
Air cleaner	Dual stage, dry element					
Air intake	Engine cover grille					
Cold starting aid	Glow plug					
Firing order	1-3-2			1-3-4-2		
Valve clearance (cold) - intake	0.25 mm (0.010 in)					