

Massey Ferguson®

1660 Compact Tractor

WORKSHOP SERVICE MANUAL 4283388M1

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01 - General Information

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GENERAL

INTRODUCTION

This service manual has been prepared with the latest service information available at the time of publication. Read the service manual carefully before doing any service on the machine. This manual is one of the most important tools available to the service technician.

Right-hand and left-hand, as used in this manual, is 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 production changes, your machine can vary slightly. The Manufacturer reserves the right to redesign and change the machine as necessary without notification.



WARNING: Some pictures in this manual show the machine with shields or guards removed to allow for a better view of the subject of the picture. All shields and guards must be in position before operating the machine.

TO THE DEALERS

This manual was developed to provide the best possible information, technical support and service to the customer. Review the Table of Contents and basic layout to become familiar with locations of pertinent information such as maintenance table, specifications and etc.

REPLACEMENT PARTS

To receive efficient service, always remember to give the dealer the following information:

- Correct part description or part number.
- Model number of your machine.
- Serial number of your machine.

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 U.S. hardware.

TABLE OF CONTENTS

A Table of Contents is in the front of this manual. The Table of Contents shows the divisions. The individual divisions also have a Table of Contents.

PAGE NUMBERS

All page numbers are made of two numbers separated by a dash, such as 01-25. The number before the dash is the division number. The number following the dash is the page number in that division. Page numbers will be at the lower right or left of each page.

General

TRACTOR IDENTIFICATION

Model/Serial Numbers

FIG. 1: The tractor identification plate (1) is located below the operator's seat.

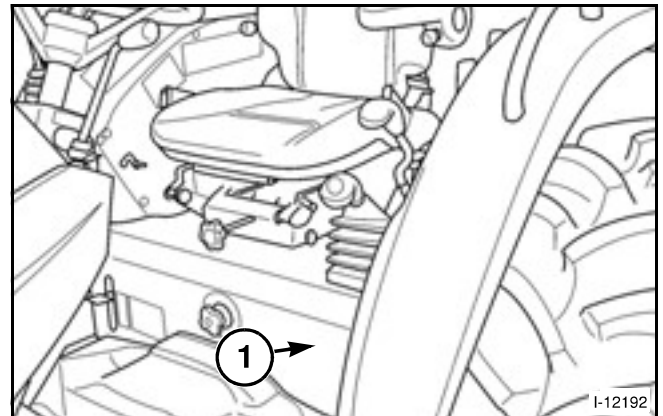


FIG. 1

FIG. 2: Chassis number (1) is stamped in right side of front frame.

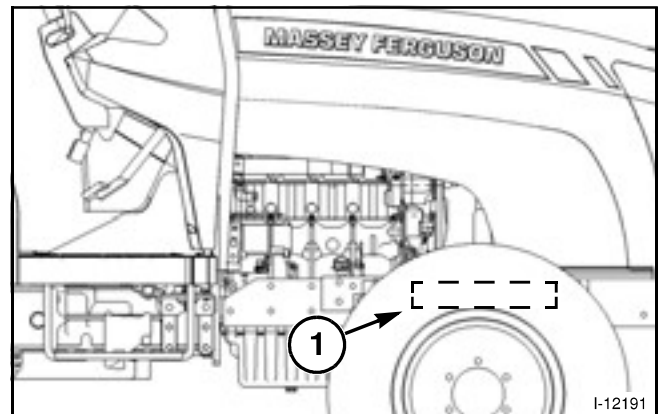


FIG. 2

FIG. 3: Engine model number (1) is cast on right side of engine block, below the injection pump.

Engine serial number (2) is stamped into cylinder block, below engine model number.

Engine Serial Number

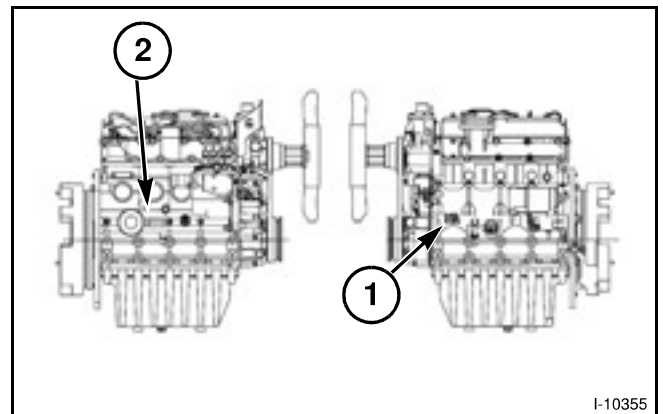


FIG. 3

FIG. 4: The identification plate contains model number and tractor serial number.

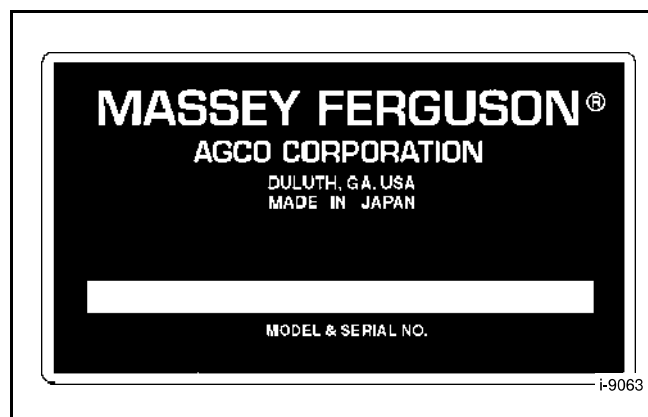


FIG. 4

NOTES

SPECIFICATIONS AND CAPACITIES

ENGINE

Engine Make Iseki Diesel
 Engine Model E4DE
 Type Indirect Injection Overhead Valve
 Aspiration Natural
 Displacement 2955 cc (180.29 cu in)
 Number of Cylinders 4
 Bore 97 mm (3.82 in)
 Stroke 100.0 mm (3.94 in)
 Engine Power (Gross) 60 hp @ 2600 rpm
 PTO Power (Manufacturer's Estimate)
 Power Shuttle 46.3 hp @ 603 PTO rpm
 DynaQPS 44.9 hp @ 603 PTO rpm
 Firing Order 1-3-4-2
 Compression 21.5-1
 Low Idle Speed 975 to 1025 rpm
 High Idle Speed 2760 to 2860 rpm
 Valve Clearance (Cold) - Intake 0.35 mm (0.014 in)
 Air Cleaner Dual stage, dry element
 Engine Cooling Liquid, forced circulation
 Cold Starting Aid Glow plugs (4)

TRANSMISSION

Type
 Primary
 Power Shuttle 4-speed synchronized
 DynaQPS 4-speed synchronized power
 Range 3-speed sliding mesh
 Mechanical Shuttle Electro-Hydraulic control with multi plates wet disc, 95% reverse reduction
 Gear Speeds 12 gears forward, 12 reverse
 Clutch Mulch wet disc
 Front Wheel Drive Ratio (4WD only) 1.6837

Specifications And Capacities

POWER TAKE-OFF (PTO)

Type..... Independent, engine driven
Control..... Electro-hydraulic control
Clutch Hydraulically engaged, multi-plate wet disc
Rear PTO Shaft 35 mm (1.375 in) diameter, six spline
 Output Clockwise rotation
 Engine Speed @ 540 PTO rpm 2328 rpm

HYDRAULIC SYSTEM

Steering System

Type..... Hydrostatic
Pump..... Separate engine-mounted gear pump
Maximum Output 25.6 liter/min (6.8 gal/min)
Pressure..... Relief valve setting 11.797 MPa (1711 psi)

Main Hydraulic System

Pump..... Engine-mounted
Maximum Output 48.6 liter/min (12.8 gal/min)
Pressure..... Relief valve setting 15.695 MPa (2276 psi)

Rear Linkage

Type..... Three-point hitch
Size Category I and II
Control..... Operated by single position control lever
Lift Capacity
 Measured at Ball Ends 1700 kg (3748 lb)
 Measured at 24 Inches..... 1500 kg (3307 lb)

ELECTRICAL SYSTEM

System Voltage..... 12 volt, negative (-) ground
Battery cca @ 18 degrees C (0 degrees F)..... 710 (115D31R)
Charging..... 60 amp alternator with internal regulator/rectifier

CAPACITIES

Engine Crankcase with Filter..... 8.0 litres (8.5 qt)
Transmission 43.0 litres (11.4 gal)
Fuel Tank..... 50.0 litres (13.2 gal)
Cooling system 7.6 litres (8.0 qt)
Front Drive Axle (4WD Only)..... 6.5 litres (6.9 qt)

MAXIMUM LOAD CAPACITY

Weight Distribution (Reference information using 18.4 Ag tire option)

Platform Tractors

Front Axle Weight	780 kg (1720 lb)
Rear Axle Weight.....	1070 kg (2359 lb)
Total Weight	1850 kg (4078 lb)

Cab Tractors

Front Axle Weight

Power Shuttle	855 kg (1885 lb)
DynaQPS.....	865 kg (1907 lb)

Rear Axle Weight

Power Shuttle.....	1155 kg (2546 lb)
DynaQPS.....	1160 kg (2557 lb)

Total Weight

Power Shuttle	2010 kg (4431 lb)
DynaQPS.....	2025 kg (4464 lb)

Maximum Weight Capacities

Front Axle Capacity	2100 kg (4630 lb)
Rear Axle Capacity	2100 kg (4630 lb)
Total Capacity	3800 kg (8378 lb)