

Massey Ferguson®

1635 / 1643
Compact Tractor

WORKSHOP SERVICE MANUAL 4283386M1

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

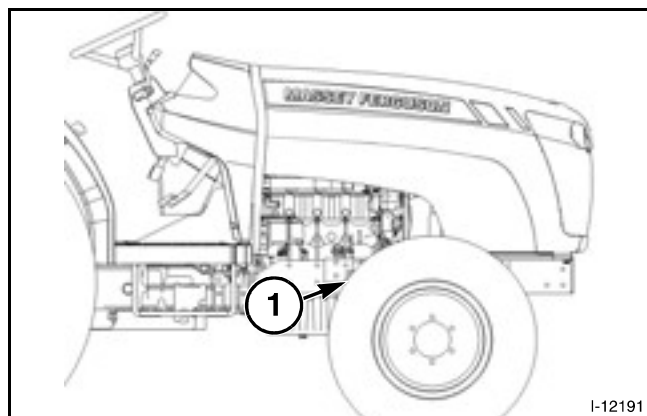


FIG. 1

FIG. 2: 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

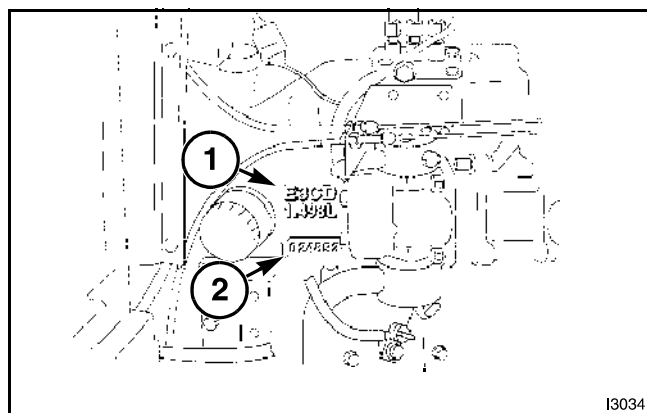


FIG. 2

FIG. 3: The tractor identification plate (1) is located below the operator's seat.

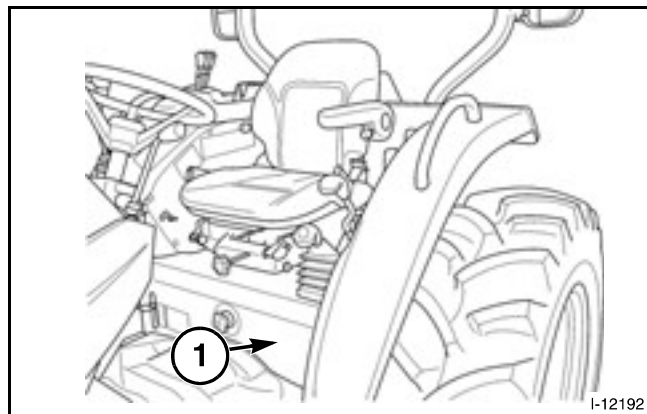


FIG. 3

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



FIG. 4

NOTES

SPECIFICATIONS AND CAPACITIES

1635 SPECIFICATIONS

Platform Tractor

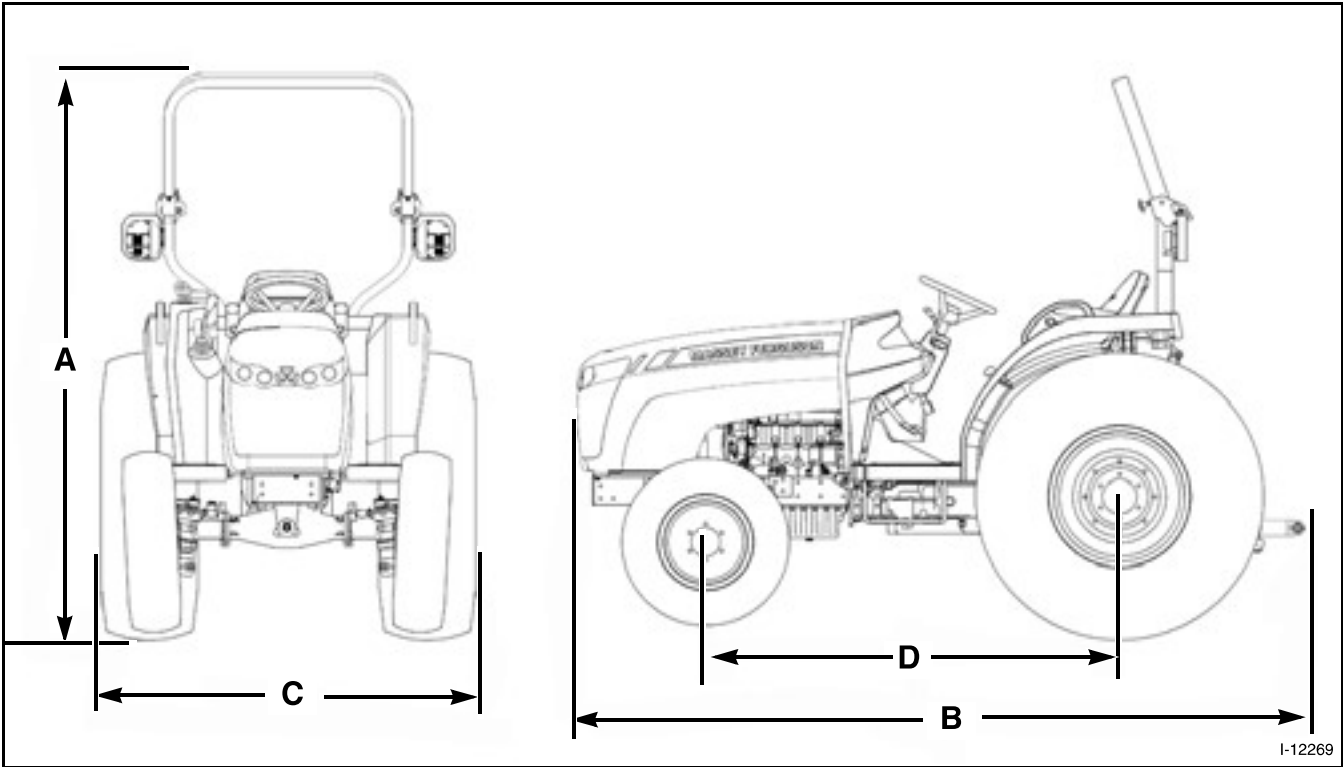


FIG. 5

FIG. 5: Dimensions

Overall Height (1)	2520 mm (99 in)
Overall Length (2)	3100 mm (122 in)
Overall Width (3)	1640 mm (65 in)
Wheelbase (4)	1770 mm (70 in)
Ground Clearance	360 mm (14 in)
Wheel Tread	
Front	1130 mm (44.5 in)
Rear	1190 to 1495 mm (46.85 to 58.86 in)
Turning Radius	
With Brake	2500 mm (98 in)
Without Brake	3100 mm (122 in)
Shipping Weight	
Power Shuttle	1430 kg (3153 lbs)
Hydrostatic	1440 kg (3175 lbs)

Specifications And Capacities

Cab Tractor

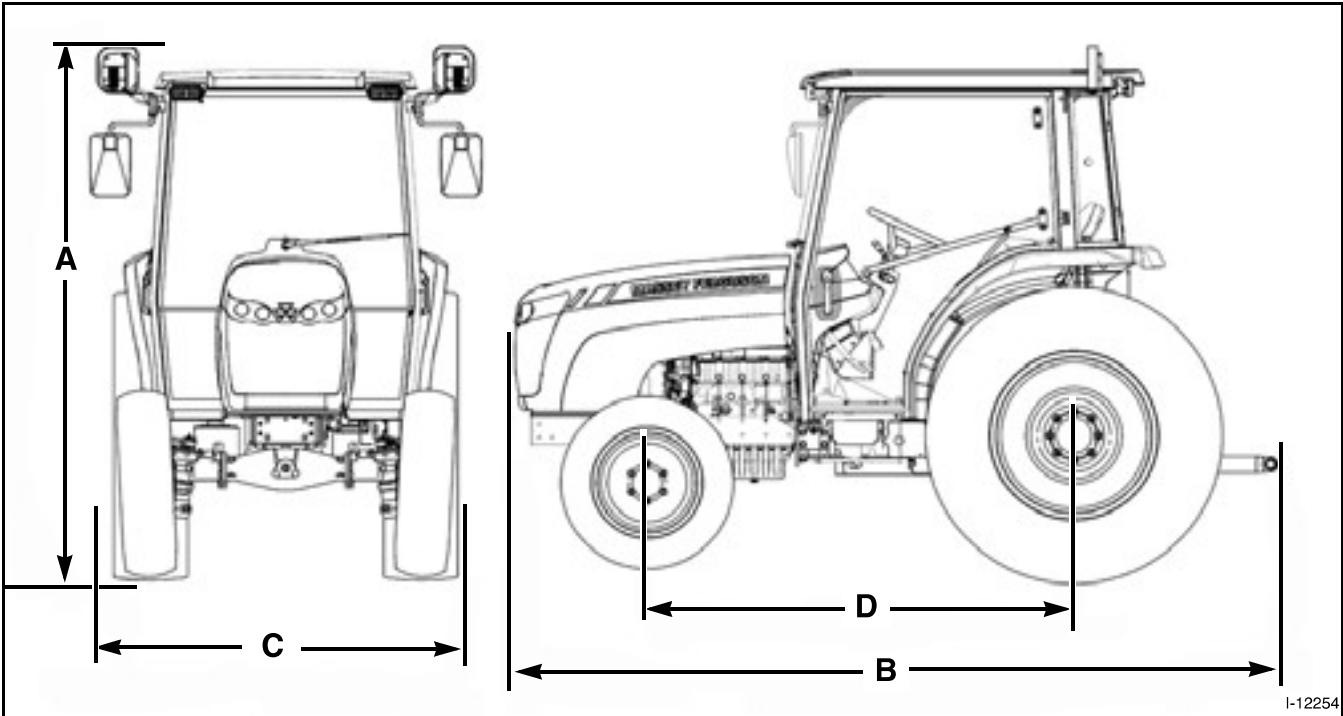


FIG. 6

FIG. 6: Dimensions

Overall Height (1)	2520 mm (99 in)
Overall Length (2)	3100 mm (122 in)
Overall Width (3)	1640 mm (65 in)
Wheelbase (4)	1770 mm (70 in)
Ground Clearance	360 mm (14 in)
Wheel Tread	
Front	1130 mm (44.5 in)
Rear	1190 to 1495 mm (46.85 to 58.86 in)
Turning Radius	
With Brake	2500 mm (98 in)
Without Brake	3100 mm (122 in)
Shipping Weight	
Power Shuttle	1590 kg (3505 lbs)
Hydrostatic	1600 kg (3527 lbs)

Specifications And Capacities

Engine

Engine Make Iseki Diesel
Engine Model E3CG
Type Indirect Injection Overhead Valve
Aspiration Natural
Displacement 100.49 cu in (1647 ml)
Number of Cylinders 3
Bore 87 mm (3.43 in)
Stroke 92.4 mm (3.64 in)
Engine Horsepower (Gross) 26.6 kW (35.7 hp) @ 2600 rpm
PTO Horsepower (Estimate) 21.28 kW (28.5 hp) @ 578 PTO rpm
Firing Order 1-3-2
Compression 21.8
Low Idle Speed 975 to 1025 rpm
High Idle Speed 2810 to 2910 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 (3)

Transmission

Power Shuttle

Primary 4-speed synchronized
Mechanical Shuttle Electro-Hydraulic control with multi plates wet disc, 95% reverse reduction
Range 3-speed sliding mesh
Gear Speeds 12 gears forward, 12 reverse
Clutch Single stage dry with 240 mm (9.4 in) disc
Front Wheel Drive Ratio 1.61184

Hydrostatic

Primary Infinite
Range 3-speed sliding mesh
Gear and Motor Speeds 3 forward, 3 reverse
Clutch None

Specifications And Capacities

Power Take-Off (PTO)

Type.....	Independent, engine driven
Control.....	Electrohydraulic 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.....	2430 rpm
Mid-PTO Shaft (Option)	
Shaft Size.....	25.4 mm (1 in) diameter, 15 spline
Output	Clockwise rotation
Mid-PTO Speed @ engine rpm	1916 @ 2000 rpm

Hydraulic System

Steering System

Type.....	Hydrostatic
Pump.....	Separate engine-mounted gear pump
Maximum Output	
Power Shuttle Transmission	22.7 litre/min (6.0 US gal/min)
Hydrostatic Transmission.....	18.5 litre/min (4.9 US gal/min)
Pressure.....	Relief valve setting 6900 kPa (1000 psi)

Main Hydraulic System

Pump.....	Engine-mounted
Maximum Output	43.8 litre/min (11.6 US gal/min)
Pressure.....	Relief valve setting 15 700 kPa (2276 psi)

Rear Linkage

Type.....	Three-point hitch
Size	Category I
Control.....	Operated by single position control lever
Lift Capacity	
Measured at Ball Ends	1270 kg (2800 lb)
Measured at 24 Inches.....	1150 kg (2535 lb)

Electrical System

System Voltage.....	12 volt, negative (-) ground
Battery cca @ 18 degrees C (0 degrees F).....	630 (80D26R)
Charging	40 amp alternator with internal regulator/rectifier