

Massey Ferguson®

1547 / 1552
Compact Tractor

SERVICE MANUAL 4283094M2

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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.

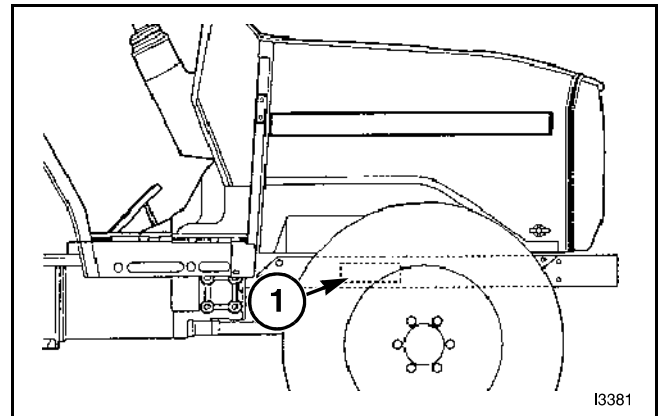


FIG. 1

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

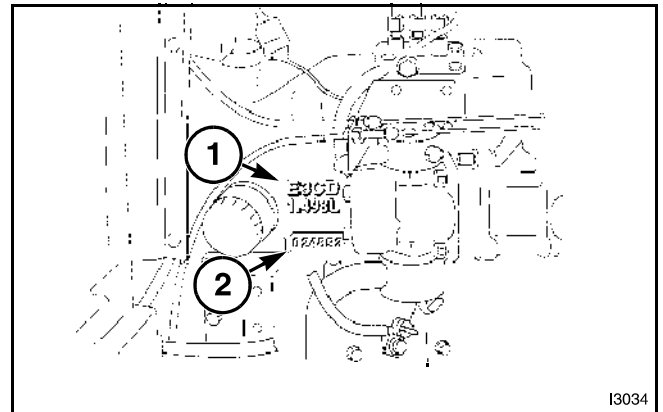


FIG. 2

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

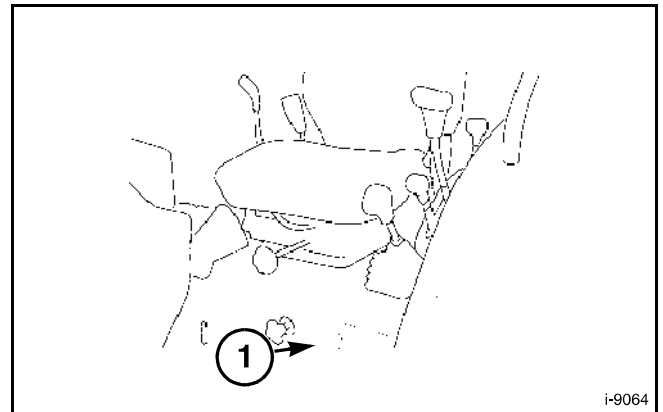


FIG. 3

FIGS. 4–6: The identification plate contains model number and tractor serial number.



FIG. 4



FIG. 5



FIG. 6

NOTES

SPECIFICATIONS AND CAPACITIES

GENERAL DIMENSIONS

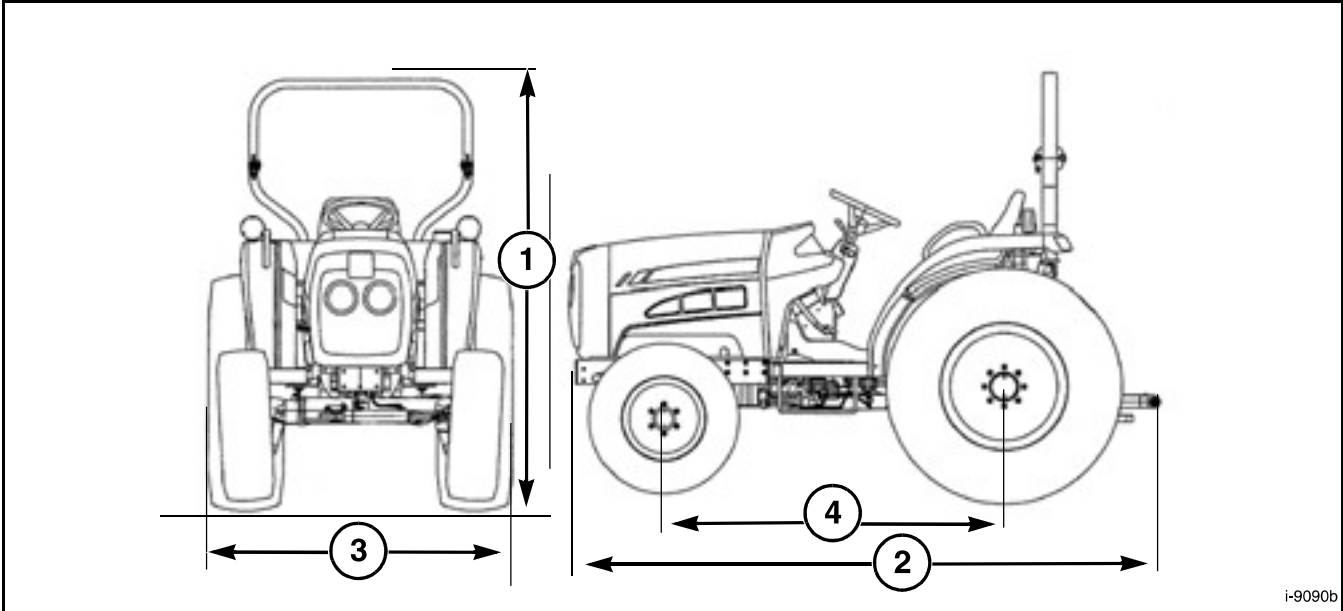


FIG. 7
FIG. 7: Non Cab Tractor Dimensions.

General Dimensions

Overall Height (1) 2305 mm (90.7 in)

Overall Length (2) 3370 mm (132.7 in)

Minimum Width (3)

(Ag Tires) 1680 mm (66.1 in)

(Turf Tires) 1790 mm (70.5 in)

Wheelbase (4)

47 Horsepower 1900 mm (75 in)

52 Horsepower 1930 mm (76 in)

Ground Clearance (Ag Tires) 375 mm (14.8 in)

Front Wheel Tread

2WD 1372 to 1422 mm (54 to 56 in)

47 Horsepower 4WD 1340 mm (53 in)

52 Horsepower 4WD 1340 to 1448 mm (53 to 57 in)

Turning Radius

With Brake 2500 mm (98 in)

Without Brake 3100 mm (122 in)

Weight

47 Horsepower (4wd) 1635 kg (3604 lb)

47 Horsepower (2wd) 1525 kg (3362 lb)

52 Horsepower (4wd) 1665 kg (3670 lb)

52 Horsepower (2wd) 1555 kg (3428 lb)

Specifications And Capacities

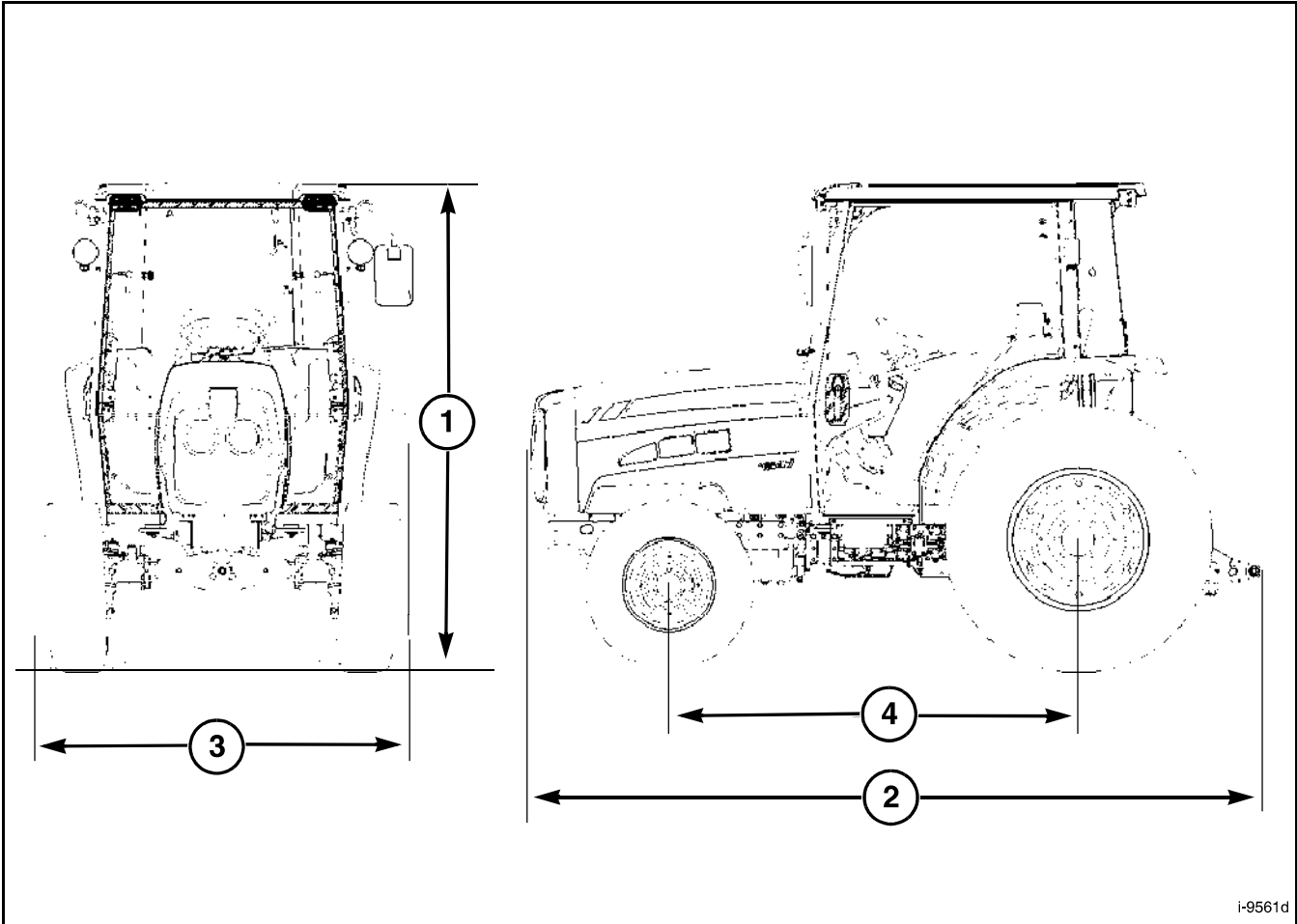


FIG. 8

FIG. 8: Cab Tractor General Dimensions.

Overall Height (1) (Ag Tires) 2305 mm (90.7 in)

Overall Length (2) 3370 mm (132.7 in)

Minimum Width (3)

Ag Tires 1680 mm (66.1 in)

Turf Tires 1790 mm (70 in)

Wheelbase (4)

47 Horsepower 1900 mm (75 in)

52 Horsepower 1930 mm (76 in)

Ground Clearance (Ag Tires) 375 mm (14.8 in)

Weight

47 Horsepower 1795 kg (3957 lb)

52 Horsepower 1823 kg (4023 lb)

Front Wheel Tread 1340 to 1448 mm (53 to 57 in)

Rear Wheel Tread 1190 to 1495 mm (47 to 59 in)

Turning Radius With Brake 2800 mm (110 in)

Engine Oil

Use the appropriate SAE viscosity. Oil must meet or exceed MIL-L-46152 requirements, API Service CC.

Capacity (Crankcase and Filter).....	8.0 liters (8.5 US qt)
25 degrees C (78 degrees F).....	SAE 30W, 10W-30
Below 0 degrees C (32 degrees F).....	SAE 20W, 10W-30
0 to 25 degrees C (32 to 78 degrees F).....	SAE 20W, 10W-30
15W-40 may be used in ambient temperatures above -10 degrees C (14 degrees F).	
Initial Oil and Filter Change	50 hours
Oil and Filter Change, Thereafter.....	Every 100 hours

Engine Coolant

Freezing Protection (Original Factory Fill).....	-34 degrees C (-30 degrees F)
Recommended Coolant	50/50 mixture ethylene glycol and water
System Capacity.....	7.6 liters (8.0 US qt)

Fuel Tank

Capacity	50.0 liters (13.2 US gals)
Fuel Recommended, Above 4° C (39° F).....	No. 2 or No. 2-D
Fuel Recommended, Below 4° C (39° F)	No. 1 or No. 1-D

Transmission & Differential Housing (Including Hydraulic System)

Capacity	38.0 liters (10.0 US gals)
Recommended Lubricant.....	Permatran III or 821XL
Recommended Change Interval.....	First 50 hours, every 300 hours thereafter

Front Axle (4 WD)

Capacity (Common Reservoir).....	8.5 liters (9 US qt)
Recommended Lubricant.....	Permatran III or 821XL
Recommended Change Interval.....	First 50 hours, every 300 hours thereafter

Grease Fittings

Grease Interval (All Fittings).....	Every 50 hours
Recommended Grease	Lithium multi-purpose grease EP2

NOTE: Change intervals stated above are for normal usage. Due to adverse operating conditions, that may be experienced (extremely dusty or muddy), change intervals may need to be more frequent.

Specifications And Capacities

Engine

Make.....	Iseki Diesel
Model	
47 Horsepower	E4CG
52 Horsepower	E4DE
Type.....	Indirect injection, overhead valve
Aspiration	Natural
Displacement	
47 Horsepower	2197 cu cm (134.05 cu in)
52 Horsepower	2955 cu cm (180.29 cu in)
Number of Cylinders.....	4
Bore	
47 Horsepower	87 mm (3.43 in)
52 Horsepower	97 mm (3.82 in)
Stroke	
47 Horsepower	92.4 mm (3.64 in)
52 Horsepower	100 mm (3.94 in)
Engine Horsepower (Gross)	
47 Horsepower @ 2600 rpm.....	35.4 kw (47.5 hp)
52 Horsepower @ 2500 rpm.....	38.9 kw (52.1 hp)
PTO Horsepower (Estimate)	
Power Shuttle / Electronic Transmissions	
47 Horsepower @ 568 PTO rpm	28.3 kw (38 hp)
52 Horsepower @ 568 PTO rpm	30.6 kw (41 hp)
PTO Horsepower (Estimate)	
Hydrostatic Transmission	
47 Horsepower @ 568 PTO rpm	27.2 kw (36.5 hp)
Firing Order.....	1-3-4-2
Compression	
47 Horsepower	21.8:1
52 Horsepower	21.5:1
Low Idle Speed	
47 Horsepower	1010 to 1050 rpm
52 Horsepower	975 to 1025 rpm
Valve Clearance (Cold) - Intake	0.35 mm (.014 in)
Air Cleaner	Dual stage, dry element
Engine Cooling	Liquid, forced circulation
Cold Starting Aid.....	Glow plugs (4)