

Information and Instructions

This individual shop manual is one unit of a series on wheel type tractors. Contained in it are the necessary specifications and the brief but terse procedural data needed by a mechanic when repairing a tractor on which he has had no previous actual experience.

The material is arranged in a systematic order beginning with an index which is followed immediately by a Table of Condensed Service Specifications. These specifications include dimensions, fits, clearances and timing instructions. Next in order of arrangement is the procedures paragraphs.

In the procedures paragraphs, the order of presentation starts with the front axle system and steering and proceeding toward the rear axle. The last paragraphs are devoted to the power take-off and power lift systems. Interspersed where needed are additional tabular specifications pertaining to wear limits, torquing, etc.

HOW TO USE THE INDEX

Suppose you want to know the procedure for R&R (remove and reinstall) of the engine camshaft. Your first step is to look in the index under the main heading of ENGINE until you find the entry "Camshaft." Now read to the right where under the column covering the tractor you are repairing, you will find a number which indicates the beginning paragraph pertaining to the camshaft. To locate this wanted paragraph in the manual, turn the pages until the running index appearing on the top outside corner of each page contains the number you are seeking. In this paragraph you will find the information concerning the removal of the camshaft.

SHOP MANUAL

MASSEY-FERGUSON

MODELS

MF 3505

MF 3525

MF 3545

Tractor model and serial numbers are stamped on a plate attached to right side of instrument console. Engine serial number is stamped on left side of cylinder block next to fuel injection pump. Transmission serial number is stamped on right side of transmission housing next to powershift and four wheel drive solenoids. Rear axle serial number is stamped on upper right rear corner of rear axle center housing. Cab serial number is stamped on a plate mounted on rear shelf area inside the cab and is also stamped on left front cab pillar.

INDEX (By Starting Paragraph)

	Models 3505, 3525, 3545		Models 3505, 3525, 3545
BRAKES		ELECTRICAL SYSTEM	
Adjustment	131	Alternator	84
Brake Discs	134	Starter Motor	86
Fluid and Bleeding	132	ENGINE	
Master Cylinders	133	Assembly, R&R	36
Parking Brake	135	Auxiliary Drive Shaft	45
CAB		Camshaft and Cam Followers	46
Remove and Reinstall	190	Connecting Rods and Bearings	50
COOLING SYSTEM		Crankshaft and Bearings	51
Radiator	80	Crankshaft Oil Seals	52
Thermostat	81	Cylinder Head	37
Water Pump	82	Cylinder Sleeves	49
DIESEL FUEL SYSTEM		Flywheel	54
Filters and Bleeding	58	Oil Pan	55
Fuel Lift Pump	60	Oil Pump	56
Injection Nozzles	61	Pistons, Pins and Rings	48
Injection Pump	70	Rocker Arms	41
DIFFERENTIAL & BEVEL DRIVE GEARS		Timing Gears and Cover	43
Bevel Pinion and Ring Gear	125	Valves and Seats	38
Differential	121	Valve Clearance Adjustment	42
Differential Lock	126, 127	Valve Guides	39
Tractor Split	120	Valve Springs	40
		ENGINE CLUTCH	
		Adjustment	90

INDEX (CONT.)

Models 3505, 3525, 3545	Models 3505, 3525, 3545
ENGINE CLUTCH (Cont.)	HYDRAULIC SYSTEM (Main) (Cont.)
Master Cylinder 91	Lubrication Flow Divider Valve 153
Release Bearing Carrier and Slave Cylinder 93	Oil Cooler Relief Valve 155
Remove and Reinstall 95	Test and Adjust 146
Tractor Split 94	
FRONT SYSTEM (Two Wheel Drive)	POWER TAKE-OFF
Axle Main Member 1	Brake 136
Front Axle Support 2	Clutch 138
Front Wheel Hub and Bearings 3	Control Valve 142
Spindles and Bushings 4	Countershaft and Drive Gears 137
Tie Rod and Toe-in 5	Driven Gears 141
	Output Shaft and Bearings 140
FRONT WHEEL DRIVE	REAR AXLE AND FINAL DRIVE
Axle, R&R 6	Axle and Bearings 130
Axle Shaft and Universal Joint 11	Planetary Assembly 129
Differential and Bevel Drive Gears 12	Remove and Reinstall 128
Differential Lock 15	
Pivot Housing and Kingpins 9, 10	STEERING SYSTEM
Transfer Case and Hydraulic Clutch 16	Flow Priority Valve 23
Wheel Hub, Spindle and Planetary Gears 8	Pressure Test and Adjust 21
	Steering Column 30
HYDRAULIC LIFT SYSTEM	Steering Control Valve 24
Adjustments 172	Steering Cylinders 26, 28
Draft Sensing Shaft 179	
Electronic Lift Controls 170	TRANSMISSION
Lift Cover 176	Gear Selector Cover 97
Lift Cylinders 178	Gear Shift Linkage 96
Testing 158	Main Transmission 113
	Powershift Primary Unit 100
HYDRAULIC SYSTEM (Auxiliary)	Shift Rails and Forks 98
Auxiliary Valves 187, 188	Tractor Split 112
Hydraulic Pump 185	
Relief Valve 184	TURBOCHARGER
Test and Adjust 180	Intercooler 79
	Overhaul 78
HYDRAULIC SYSTEM (Main)	Remove and Reinstall 77
Fluid and Filters 145	Trouble-shooting 75
Hydraulic Pump 151	

DUAL DIMENSIONS

This service manual provides specifications in both U.S. Customary and Metric (SI) systems of measurement. The first specification is given in the measuring system perceived by us to be the preferred system when servicing a particular component, while the second specification (given in parenthesis) is the converted measurement. For instance, a specification of 0.011 inch (0.28 mm) would indicate that we feel the preferred measurement in this instance is the U.S. Customary system of measurement and the Metric equivalent of 0.011 inch is 0.28 mm.