#### **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**

MF230-MF235-MF240-MF245-MF250

Tractor serial number is stamped on a name plate attached to the side of instrument console. Diesel engine serial number is stamped on right side of cylinder block near the fuel lift pump. Gasoline engine serial number is stamped on a plate attached to left side of cylinder block above the distributor.

## **INDEX (By Starting Paragraph)**

BRAKES	ENGINE (Gasoline)	HYDRAULIC SYSTEM Cont.
Disc Type	Assembly, R&R25	Lift Cover
Shoe Type	Camshaft	Main Hydraulic Pump223
	Connecting Rods & Bearings 40	Reservoir & Filter
CLUTCH (Engine)	Cooling System50	System Checks
Adjustment	Crankshaft & Bearings41	Trouble-Shooting 186
Dual Clutch	Cylinder Head26	
Split Torque Clutch	Governor48	POWER TAKE-OFF (Independent)
Tractor Split112	Ignition	Clutch Unit180
	Oil Pump 44	Operation
DIFFERENTIAL	Pistons, Sleeves & Rings38	Output Shaft179
Bevel Drive Gears	Timing Gears35	1
Differential Lock 160		POWER TAKE-OFF (Live)
R&R and Overhaul158	FRONT AXLE1	Ground Speed Gears176
		Output Shaft175
ELECTRICAL SYSTEM	FUEL SYSTEM (Diesel)	•
Alternator & Regulator101	Bleeding	REAR AXLE
Starting Motor 107	Filters	With Planetary Final Drive 167
Wiring Diagrams239	Injector Nozzles89	Without Planetary Final Drive . 165
	Injector Pump97	·
ENGINE (Diesel)	Timing98	STEERING SYSTEM
Assembly, R&R56		Hydrostatic Type 18
Camshaft71	FUEL SYSTEM (Gasoline)	Manual Type
Connecting Rods & Bearings 75	Carburetor	Power Assist Type 6
Cooling System82		· · · · · · · · · · · · · · · · · · ·
Crankshaft & Bearings76	HYDRAULIC SYSTEM	TRANSMISSION
Cylinder Head	Adjustments	Eight Speed
Oil Pump81	Auxiliary Pump232	Manual Shuttle136
Pistons, Sleeves & Rings73	Auxiliary Valve 235	Multi-Power
Timing Gears	General	Six Speed

### **DUAL DIMENSIONS**

This service manual provides specifications in both Metric (SI) and U.S. Customary 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 "0.28 mm (0.011 inch)" would indicate that we feel the preferred measurement is the metric system of measurement and the U.S. Customary equivalent of 0.28 mm is 0.011.