

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. Interpersed 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

INTERNATIONAL HARVESTER

SERIES

234-234 Hydro-244-254

Engine serial number is stamped on injector pump mounting pad on right side of engine. Tractor serial number is stamped on a name plate attached to right side of front frame rail and on right side of transmission housing.

INDEX (BY STARTING PARAGRAPH)

	234, 234 Hydro	244	254
BRAKES			
Pedal Adjustment	105	105	105
R&R and Overhaul	106	106	106
CLUTCH, ENGINE			
Adjustment	61	61	61
Remove and Reinstall	62	62	62
COOLING SYSTEM			
Fan and Belt	53, 54	53, 54	53, 54
Radiator	52	52	52
Thermostat	56	56	56
Water Pump	55	55	55
DIESEL FUEL SYSTEM			
Filter and Bleeding	39, 40	39, 40	39, 40
Injection Pump and Drive	41, 42	41, 42	41, 42
Injection Pump Timing	43	43	43
Nozzles	45, 46, 47	45, 46, 47	45, 46, 47
DIFFERENTIAL	100	100	100
ELECTRICAL SYSTEM			
Alternator and Regulator	57	57	57
Safety Start Switch	59	59	59
Starting Motor	58	58	58
ENGINE			
Cam Followers	20	20	20
Camshaft	25, 26	25, 26	25, 26
Connecting Rods and Bearings	31	31	31
Crankshaft	32	32	32
Crankshaft Oil Seals	33, 34	33, 34	33, 34
Cylinder Head	17	17	17
Engine Removal	16	16	16
Flywheel	35	35	35
Injection Timing	43	43	43
Main Bearings	32	32	32
Oil Pump	36	36	36
Piston and Rings	28, 30	28, 30	28, 30
Piston Pins	28	28	28

INDEX (CONT.)

	234, 234 Hydro	244	254
ENGINE (CONT.)			
Piston Removal	27	27	27
Rocker Arms	21	21	21
Timing Gear Cover	23	23	23
Timing Gears	24	24	24
Valves and Seats	18	18	18
Valve Guides and Springs	19	19	19
Valve Timing	22	22	22
FINAL DRIVE			
Overhaul	103	104	104
Remove and Reinstall	101	102	102
FOUR-WHEEL DRIVE			
Differential	6	6	6
Tie Rods	8	8	8
Wheel Hubs	7	7	7
FRONT SYSTEM (TWO-WHEEL DRIVE)			
Axle Main Member	1	2	2
Steering Knuckles and Hubs	4	5	5
Tie Rods	3	3	3
HYDRAULIC SYSTEM			
Control Valve	112	113	113
Control Valve Fork .....	....	114	114
Drop Speed Control Valve	116	116	116
Flow Divider Valve .....	....	117	117
Hitch Cover	119	120	120
Hitch Raise Control Rod	115	115	115
Pump	121, 122	121, 122	121, 122
PTO			
Live Pto Clutch Cable Adjustment .....	....	107	107
Live Pto Control Valve .....	....	118	118
STEERING GEAR (MANUAL)			
Adjustment	11	11	11
Overhaul	10	10	10
Remove and Reinstall	9	9	9
POWER STEERING GEAR			
Overhaul .....	....	13	13
Remove and Reinstall .....	....	12	12
HYDROSTATIC TRANSMISSION			
Hydraulic Pressure Testing	91	....	....
Linkage Adjustment	90	....	....
Overhaul	89	....	....
Remove and Reinstall	88	....	....
Troubleshooting	92	....	....
RANGE TRANSMISSION			
Overhaul	64	84	84
Remove and Reinstall	63	83	83
SPEED TRANSMISSION			
Overhaul	64	72, 78	72, 78
Remove and Reinstall	63	71, 77	71, 77

This service manual provides specifications in both the Metric (SI) and U.S. Customary systems of measurement. The first specification is given in the measuring system used during manufacture, 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 the equipment was manufactured using the metric system of measurement and the U.S. system equivalent of 0.28 mm is 0.011 inch.