

# 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

# JOHN DEERE

**MODELS 50 - 60 - 70**  
(Gasoline, All-Fuel & LP-Gas)

## IDENTIFICATION

Tractor serial number stamped on plate on right side of main case.

## INDEX (By Starting Paragraph)

	Model 50	Model 60	Model 70		Model 50	Model 60	Model 70
BELT PULLEY .....	120	120	120	FRONT SYSTEM (Tricycle)			
BRAKES .....	150	150	150	Pedestal .....	1	1	1
CARBURETOR (Not LP-Gas) .....	68	68	68	"Roll-O-Matic" .....	4	4	4
CARBURETOR (LP-Gas) .....	87	83, 87	83, 87	Vertical spindle .....	1	1	1
COOLING SYSTEM				FRONT SYSTEM (Axle)			
Fan & shaft .....	107	107	107	Axle pivot pins .....	7	7	7
Radiator .....	105	105	106	Drag links .....	6	6	6
Thermostat .....	109	109	109	Pedestal .....	8	8	8
Water pump .....	111	111	111	Steering knuckles .....	5	5	5
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Remove & reinstall .....	141	143	143	Adjust .....	100	100	100
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Camshaft & bearings .....	45	46	47	"POWR-TROL"			
Connecting rods & bearings .....	53	53	53	Bleeding .....	180	180	180
Crankcase cover .....	61	61	61	Check valves .....	187	187	187
Crankshaft .....	58	58	58	Operating valve .....	190	190	190
Cylinder block .....	54	54	54	Pressure test .....	186	186	186
Cylinder head .....	30	30	31	Pump .....	182	182	182
Flywheel .....	59	59	59	Remote cylinder .....	194	194	194
Ignition timing .....	113	113	113	Rockshaft & cylinder .....	192	192	192
Main bearings .....	55	55	55	Trouble shooting .....	181	181	181
Manifold .....	67	67	67	Valve housing .....	191	191	191
Oil filter .....	63	63	63	PTO (Non-Continuous)			
Oil pressure .....	62	62A	62A	Bevel gears .....	161	161	161
Oil pump .....	65	65	65	Output shaft & seal .....	160	160	160
Pistons & rings .....	51	51	51	PTO (Continuous)			
Piston pins .....	52	52	52	Adjust clutch .....	165	165	165
Piston & rod removal .....	50	50	50	Clutch overhaul .....	167	167	167
Oil seal (left hand) .....	57	57	57	Bevel gears .....	169	169	169
Oil seal (right hand) .....	56	56	56	Oil pump .....	168	168	168
Rocker arms .....	38	38	38	Output shaft & seal .....	167	167	167
Timing gears .....	40	40	40	REAR AXLE .....	147	147	147
Valves & seats .....	32	32	32	STEERING GEAR			
Valve guides & springs .....	36	36	36	Manual .....	9	9	9
Valve rotators .....	35	35	35	Power .....	16	16	16
Valve timing .....	39	39	39	TRANSMISSION			
FINAL DRIVE				Countershaft .....	128	135	140A
Axle shafts .....	147	147	147	Drive shaft .....	127	134	140
Bull gears—R&R .....	147	147	147	Reduction gear cover .....	123	130	136
Bull pinions—R&R .....	142	144	144	Shifters & shafts .....	125	132	138
				Sliding gear shaft .....	126	133	139
				Top cover .....	124	131	137