

Information and Instructions

This shop manual contains several sections each covering a specific group of wheel type tractors. The Tab Index on the preceding page can be used to locate the section pertaining to each group of tractors. Each section contains 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.

Within each section, 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

J. I. CASE

SERIES

770, 870, 970, 1070, 1090, 1170, 1175

IDENTIFICATION

The serial number is stamped on left side of steering support (firewall) and engine serial number on right rear of cylinder block

INDEX (By Starting Paragraph)

	770	870	970	1070	1090	1170	1175
AXLE, FRONT	1	1	1	1	1	1	1
BRAKES							
Master Cylinder (Manual).....	157	157	157	157	.....	.....	157
Master Cylinder (Power).....	162	162	162	162	162	162	162
Brake Unit.....	168	168	168	168	171	171	168, 171
Parking Brake.....	173	173	173	173	175	175	173, 175
CLUTCH							
Engine Clutch	100	100	100	100	100	100	100
Power Take-Off Clutch.....	184	184	184	184	184	184	184
Torque Limiting Clutch	117	117	117	117	117	.....	.....
COOLING SYSTEM							
Radiator	86	86	86	86	86	86	86
Thermostat.....	87	87	87	87	87	87	87
Water Pump.....	88	88	88	88	88	88	88
DIESEL FUEL SYSTEM							
Bleeding	70	70	70	70	70	70	70
Filters and Lines.....	67	67	67	67	67	67	67
Injection Pump	71	71	71	71	71	71	71
Injector Nozzles.....	75	75	75	75	75	75	75
Timing.....	72	72	72	72	72	72	72
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 ENGINE							
Cam Followers	34	34	34	34	34	34	34
Camshaft	40	40	40	40	40	40	40
Connecting Rods & Bearings	47	47	47	47	47	47	47
Crankshaft & Bearings	48	48	48	48	48	48	48
Counter-Balancer	49	49	.....	.....	.....	.....	.....
Cylinder Heads	28	28	28	28	28	28	28
Cylinder Sleeves	44	44	44	44	44	44	44
Flywheel	55	55	55	55	55	55	55
Main Bearings	48	48	48	48	48	48	48
Oil Pan	56	56	56	56	56	56	56
Oil Pump	57	57	58	58	58	58	58
Piston & Rod Removal	42	42	42	42	42	42	42
Piston Pins & Bushings	46	46	46	46	46	46	46
Pistons, Rings & Sleeves	43	43	43	43	43	43	43
Remove & Reinstall	25	25	25	25	25	25	25
Timing Gear Cover	35	35	35	35	35	35	35
Timing Gears	36	36	36	36	36	36	36
Valve Adjustment	29	29	29	29	29	29	29
Valve Guides & Springs	31	31	31	31	31	31	31
Valves & Seats	30	30	30	30	30	30	30
 FINAL DRIVES							
	155	155	155	155	155	151	151
 FRONT SYSTEM							
Axle & Support	2	2	2	2	2	2	2
Dual Wheel Tricycle	1	1	1	1	1	1	1
 GOVERNOR (NON-DIESEL)							
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 HYDRAULIC SYSTEM							
Operation	189	189	189	189	189	189	189
Testing	190	190	190	190	190	190	190
Pump	191	191	191	191	191	191	191
Dual Remote Valve	193	193	193	193	193	193	193
Draft-O-Matic Valve	196	196	196	196	196	196	196
Rockshaft & Linkage	198	198	198	198	198	198	198
Work Cylinders & Couplings	207	207	207	207	207	207	207
 POWER SHIFT CLUTCH							
Adjustment	113	113	113	113	113	.....	.....
Operation	111	111	111	111	111	.....	.....
Overhaul	121	121	121	121	121	.....	.....
Remove & Reinstall	116	116	116	116	116	.....	.....
 POWER TAKE-OFF							
Clutch	184	184	184	184	184	184	184
Housing & Gears	183	183	183	183	183	183	183
 STEERING GEAR							
	5	5	5	5	5	5	5
 TRANSMISSION							
	130	130	130	130	130	130	130

SHOP MANUAL

J I CASE

MODELS

1270—1370—1570

IDENTIFICATION

The serial number is stamped on left side of steering support (firewall) and engine serial number on right rear of cylinder block.

INDEX (By Starting Paragraph)

	Model 1270	Model 1370	Model 1570		Model 1270	Model 1370	Model 1570
AXLE, FRONT	1	1	1	ENGINE CONT.			
BRAKES				Main Bearings	35	35	35
Brake Unit	110	110	110A	Oil Pan	38	38	38
Parking Brake	103	103	103A	Oil Pump	39	39	39
Power Brake Valve	104	104	104	Piston & Rod Removal....	29	29	29
CLUTCH				Piston Pins & Bushings...	33	33	33
Power Take-Off Clutch....	111	111	111	Pistons, Rings & Sleeves..	30	30	30
Torque Limiting Clutch...	85	85	85	Remove & Reinstall	12	12	12
COOLING SYSTEM				Timing Gear Cover	22	22	22
Radiator	63	63	63	Timing Gears	23	23	23
Thermostat	64	64	64	Valve Adjustment	16	16	16
Water Pump	65	65	65	Valve Guides & Springs...	18	18	18
FUEL SYSTEM				Valves & Seats	17	17	17
Bleeding	50	50	50	FINAL DRIVES	99	99	100A
Filters And Lines	47	47	47	FRONT SYSTEM			
Injection Pump	51	51	51	Axle & Support	1	1	1
Injector Nozzles	55	55	55	HYDRAULIC SYSTEM			
Timing	52	52	52	Operation	118	118	118
DIFFERENTIAL	101	101	102A	Testing	119-121	119-121	119-121
DIFFERENTIAL LOCK				Pumps	122-128	122-128	122-128
VALVE	146	146	146	Dual Remote Valve	130	130	130
ELECTRICAL SYSTEM				Draft-O-Matic Valve	135	135	135
Alternator and Regulator				Rockshaft & Linkage	137	137	137
Delco-Remy	72	72	72	Work Cylinders &			
Prestolite	68	68	Couplings	148	148	148
Circuit Description	67	67	67	POWER SHIFT CLUTCH			
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Bearings	34	34	34	Clutch	111	111	111
Crankshaft & Bearings....	35	35	35	Housing & Gears	117	117	117
Cylinder Heads	15	15	15	STEERING GEAR	3	3	3
Cylinder Sleeves	31	31	31	TRANSMISSION	94	94	94
Flywheel	37	37	37	TURBOCHARGER	42	42	42

J I CASE (DAVID BROWN)

MODELS: 885-885N-995-1210-1212-1410-1412

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BELT PULLEY	225	225	225	225
BRAKES, WHEEL	215	215	216	216
CLUTCH:				
Adjustment	143	144	145	145
Remove & Reinstall	146	146	147	148
Overhaul	150	150	152,153	153
COOLING SYSTEM:				
Radiator	128	128	129	129
Thermostat	130	130	130	130
Water Pump	131	131	131	131
DIESEL FUEL SYSTEM:				
Bleeding Fuel System	103	104	105	105
Filters	102	102	102	102
Injection Pump	110	113	115	115
Injector Nozzles	120	120	120	120
Troubleshooting	94	94	94	94
DIFFERENTIAL:				
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Lock	205	205	205	205
Overhaul	204	204	204	204
Remove & Reinstall	200	200	200	200
ELECTRICAL SYSTEM:				
Alternator	132	132	132	132
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ENGINE:				
Assembly, R&R	57	59	61	61
Cam Followers	76	76	76	76
Camshaft	77	78	78	78
Connecting Rod Bearings	82	82	82	82
Crankshaft & Bearings	85	86	86	86
Crankshaft Oil Seals	87	87	87	87
Cylinder Head	63	63	63	63
Cylinders	84	84	84	84
Flywheel, R&R	93	93	93	93
Main Bearings	85	86	86	86
Oil Pan	92	92	92	92
Oil Pump	90	90	90	90
Pistons & Rings	83	83	83	83
Piston & Rod Removal	80	80	80	80
Piston Pins	81	81	81	81
Rocker Arms	65	65	65	65
Timing Gear Cover	71	72	72	72
Timing Gears	73	74	74	74
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Valve, Guides & Seats	68	68	68	68
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Transfer Gearbox	27
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Axle Main Member	7	6,7	7	7
Front Support	8	9	9	9
Pivot Pins	7	6,7	7	7
Steering Spindles	3	3	3	3
Tie Rods & Toe-In	5	5	5	5
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Lift Cylinder Rockshaft	280	280	280	280
Linkage, Overhaul	277	277	277	277
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Relief Pressure	257	257	257	257
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Sensing Unit	281	281	281	281
Three-way Valve	284	284	284	284
Troubleshooting	256	256	256	256
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Bleed System	35	35	34,35	35
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SHOP MANUAL

DAVID BROWN

MODELS:
770 - 780 - 880 (STARTING WITH SERIAL NO. 52101)
990 (STARTING WITH SERIAL NO. 467871)
1200 - 3800 - 4600

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Remove & Reinstall	133	133	134	134	142	133	134
Overhaul	137	137	137	137	143	137	137
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Thermostat	114	114	114	114	114	114	114
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DIESEL FUEL SYSTEM:							
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ELECTRICAL SYSTEM:							
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Camshaft	49	49	49	50	50	49	49
Connecting Rod Bearings	54	54	54	54	54	54	54
Crankshaft & Bearings	59	59	59	60	60	59	59
Crankshaft Oil Seals	61	61	61	61	61	61	61
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Main Bearings	59	59	59	60	60	59	59
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Piston Pins	53	53	53	53	53	53	53
Rocker Arms	36	36	36	36	36	36	36
Tappets	48	48	48	48	48	48	48
Timing Gear Cover	44	44	44	44	43	44	44
Timing Gears	45	45	45	46	46	45	45
Valve Adjustment	37	37	37	38	38	37	37
Valve, Guides & Seats	39	39	39	39	39	39	39
Valve Springs	42	42	42	42	42	42	42
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Axle, Gear, Bearings & Seal	175	175	175	175	175	175	175
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Front Support	8	8	9	9	9	8	9
Pivot Pins	6	6	7	7	7	6	7
Steering Spindles	2	2	2	2	2	2	2
Tie-Rods & Toe-in	4	4	4	4	4	4	4
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Sensing Unit	261	261	218, 261	218, 261	261	261	261
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Power Cylinder	21	21	21	21	21	21	21
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POWER TAKE-OFF:							
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Remove & Reinstall	192	192	192	192	192	192	192
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REAR AXLE:							
Axle Housing Oil Seals	184	184	184	184	184	184	184
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TRANSMISSION:							
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