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
OLIVER

SERIES

1750	1900A
1800A	1900B
1800B	1900C
1800C	1950
1850	1950-T

Also Covers COCKSHUTT SERIES

1750	1900B
1800B	1900C
1800C	1950
1850	1950-T

IDENTIFICATION

Series 1800 and 1900 tractors (series A) begin with serial number 90 525-000 and continue through serial number 124 395-000. 1800 and 1900 series B tractors begin with serial number 124 396-000 and continue through serial number 134 683-000. 1800 and 1900 series C tractors begin with serial number 134 684-000 and continue through serial number 150 420-000. 1850 and 1950 series tractors begin with serial number 150 421-000. 1750 series tractors begin with serial number 180 537-000. 1950-T series tractors begin with serial number 194 080-000.

Tractor serial number plate is located on rear side of instrument panel support. On series A 1800 tractors, engine serial number is stamped on right rear flange of engine. On 1800 series B and C, are 1750 and 1950-T and 1850 non-diesel tractors, engine serial number is stamped along outer edge of timing gear coer mounting flange directly below generator or alternator. On series 1850 diesel tractors, engine serial number is stamped on cylinder block directly below injection pump. On series 1900 and 1950 tractors, engine model and serial numbers are stamped on upper right rear of cylinder block.

BUILT IN THESE VERSIONS

Rowcrop, Wheatland, Ricefield, Industrial and 4-Wheel Drive. Rowcrop tractors are available in either dual wheel tricycle or adjustable front axle versions, while Wheatland, Ricefield, Industrial and 4-Wheel Drive tractors are available with non-adjustable axles only.

INDEX (By Starting Paragraph)

INDEX (By Starting Paragraph)

INDEX (By Starting Paragraph)

SHOP MANUAL

OLIVER & COCKSHUTT

SERIES 1755, 1855, 1955

Also Covers MINNEAPOLIS-MOLINE SERIES G-850, G-940

NOTE: Servicing the Minneapolis-Moline Series G-850 can be accomplished by using the information contained in this manual for Series 1755. To service Minneapolis-Moline Series G-940, use information for Series 1855.

SERIAL NUMBER LOCATION

Tractor serial number plate is located on the rear side of the instrument panel support. Engine serial number is stamped on right flange of engine directly below the alternator.

BUILT IN THESE VERSIONS

Rowcrop Tricycle, Rowcrop Adjustable Front Axle, Rowcrop Utility, Wheatland and Four-Wheel Drive. Wheatland models are available with non-adjustable front axles only.

INDEX (By Starting Paragraph)

FRONT SYSTEM CONT.	Series 1755	Series 1855	Series 1955
Front bolster	4	4	4
Pivot pin	1	1	1
Spindle (knuckle)	6	6	6
Tie rods & toe-in	5	5	5
GOVERNOR			
Adjustment, non-diesel	119	119	....
Adjustment, diesel	114	114	114
Overhaul, non-diesel	123	123	....
R&R, non-diesel	123	123	....
HYDRA-POWER	145	145	145
HYDRAUL SHIFT	162	162	162
LIFT SYSTEM, HYDRAULIC			
Draft control spring, adjust	245	245	245
Draft input shaft	266	266	266
Drain and refill	240	240	240
External lift cylinders	271	271	271
Hitch control lever	265	265	265
Hydraulic housing	262	262	262
Lubrication and maintenance	239	239	239
Cylinder and piston	269	269	269
Manifold	267	267	267
Oil filter	241	241	241
Pump	256	256	256

LIFT SYSTEM CONT.	Series 1755	Series 1855	Series 1955
Pressure relief valve	249	249	249
Quick check	237	237	237
Remote cylinders	288	288	288
Remote valves	280	280	280
Rockshaft	263	263	263
Servo valve	267	267	267
System adjustments	243	243	243
Trouble shooting	225	225	225
POWER STEERING	40	40	40
POWER TAKE-OFF			
Control valve	219	219	219
Clutch overhaul	217	217	217
Drive shaft, R&R	215	215	215
PTO unit, R&R	216	216	216
TRANSFER DRIVE	32	32	32
TRANSMISSION			
Bevel pinion shaft	191	191	191
Countershaft	190	190	190
Input shaft	188	188	188
Lubrication system	176	176	176
Reverse idler	194	194	194
Shifter rails & forks	184	184	184
Top cover	183	183	183
TURBOCHARGER	....	117	117

CONDENSED SERVICE DATA

GENERAL	Series 1755	Series 1855	Series 1955
Engine Make	Own	Own	Own
Cylinders, No. of	6	6	6
Cylinder Bore—Inches	3⅞	3⅞	3⅞
Stroke—Inches			
Non-Diesel	4	4	....
Diesel	4⅜	4⅜	4⅜
Displacement—Cubic Inches			
Non-Diesel	283	283	....
Diesel	310	310	310
Compression Ratio:			
Gasoline	8.5:1	8.5:1	....
Diesel	16.0:1	16.5:1	16.0:1
Main Bearings No. of	7	7	7
Cylinder sleeves Type	Wet	Wet	Wet
Forward Speeds, No. of	6	6	6
Battery Terminal Grounded	Negative		
TUNE-UP			
Firing Order	1-5-3-6-2-4		
Valve Tappet Gap Inlet:			
Non-Diesel	0.020	0.020	....
Diesel	0.030	0.030	0.030
Valve Tappet Gap, Exhaust:			
Non-Diesel	0.030	0.030	....
Diesel	0.030	0.030	0.030
Valve Face Angle, Degrees	See Par. 58		
Valve Seat Angle, Degrees	See Par. 58		
Ignition Distributor Make	Holley		....
Ignition Distributor Model	D-2563AA		....
Generator and Regulator Make	Delco-Remy		
Generator Model	1100808		
Regulator Model	1119511		
Starting Motor Make	Delco-Remy		
Starting Motor Model:			
Non-Diesel	1108431	1108431	....
Diesel	1113139	1113656	1113656
Ignition Distributor Contact Gap	0.025	0.025	....
Ignition Distributor Timing (Static):			
Gasoline	0.025	0.025	....
Injection Pump Make	Roosa-Master		
Injection Pump Timing (Static)	4°	4°	2°
Carburetor Make	-Marvel Schebler-		....

TUNE-UP (Cont.)	Series 1755	Series 1855	Series 1955
Carburetor Model	USX-44	USX-37	....
Engine Low Idle RPM	800	800	800
Engine High Idle RPM	2640	2640	2640
Engine Rated RPM	2400	2400	2400
PTO RPM @ Engine Rated RPM:			
540 rpm pto	549	549	549
1000 rpm pto	984	984	984
SIZES—CLEARANCES—CAPACITIES			
Crankshaft Journal Dia.	2.624-2.625		
Crankpin Diameter	2.4365-2.4375		
Rod Length	6.749-6.750		
Camshaft Journal Diameter:			
Front	1.749-1.750		
Others	1.7485-1.7495		
Piston Pin Diameter	1.2494-1.2497		
Valve Stem Diameter:			
Inlet	0.372-0.373		
Exhaust	0.371-0.372		
Piston Ring Side Clearance	See Par. 71		
Main Bearing Clearance	0.0015-0.0045		
Rod Bearings Clearance	0.0005-0.0015		
Piston Skirt Clearance	See Par. 70		
Crankshaft End Play	0.0045-0.0095		
Camshaft Bearing Clearance	See Par. 66		
Cooling System—Gallons	5	5	5
Engine Crankcase w/filter—Qts	9	9	9
Fuel Tank, Gasoline—Gals.	35	35	35
Fuel Tank Diesel—Gallons	35	35	35
Transmission and Final Drive—Qts	43	43	43
Transfer Case—Quarts	1	1	1
Hydra-Power Drive—Quarts	6	6	6
Hydraulic Lift—Quarts	27	27	27
Diff. Housing (4WD)—Quarts	8	8	8
Planetary Drive (4WD)—Qts	2.5	2.5	2.5
TIGHTENING TORQUES—Ft.-Lbs.			
Cylinder Head:			
Non-Diesel	129-133		....
Diesel	See Par. 57		....
Main Bearings	129-133		
Connecting Rods	44-46		
Flywheel	67-69		

SHOP MANUAL

OLIVER

MODEL 2255

Also Covers MINNEAPOLIS-MOLINE
Models G955-G1355

Tractor ser. no. plate is located on rear side of instrument panel support.

Engine serial number plates for Oliver tractors are located on left side of cylinder block and on top side of left valve cover.

Engine serial number plate for Minneapolis-Moline tractors is located on right side of engine crankcase.

INDEX (By Starting Paragraph)

INDEX CONT.

CONDENSED SERVICE DATA

	Model G955	Model G1355	Model 2255
GENERAL			
Engine Make	Own	Own	Caterpillar
Number of Cylinders	6	6	8
Bore & Stroke—Inches (Non-Diesel)	4¼x5	4-5/8x5	.....
Bore & Stroke—Inches (Diesel)	4-3/8x5	4¾x5½	*4½x5
Displacement—Cu. In. (Non-Diesel)	425	504	.....
Displacement—Cu. In. (Diesel)	451	585	*636
Cylinders Sleeved	No	No	No
Main Bearings, Number of	4	4	5
TUNE-UP			
Firing Order	1-5-3-6-2-4	1-5-3-6-2-4	1-2-7-3-4-5-6-8
Valve Tappet Gap—Inlet (Cold)			
Diesel	0.015	0.010	0.015
Non-Diesel	0.012	0.010	.....
Valve Tappet Gap—Exhaust (Cold)			
Diesel	0.022	0.020	0.025
Non-Diesel	0.028	0.028	.....
Compression At Cranking Speed (PSI)			
LPG	185-215	185-215	.....
Diesel	440-460	440-460	640
Ignition Distributor Make	Delco-Remy	Delco-Remy	.....
Breaker Contact Gap	0.021	0.021	.....
Ignition Timing (LP-Gas)	16° at 1200	17° at 1500	.....
Injection Timing	2° BTDC	4° ATDC	16° BTDC Static
Timing Mark Location	Flywheel	Flywheel	Par. 138
Spark Plug Electrode Gap			
LP-Gas	0.015	0.015	.....
Carburetor Make (LP-Gas)	Century	Century	.....
Engine Low Idle RPM (Non-Diesel)	600	600	.....
Engine Low Idle RPM (Diesel)	600	700	800
Engine High Idle RPM (Non-Diesel)	2040	2400	.....
Engine High Idle RPM (Diesel)	1950	2335	2820
Engine Loaded RPM (Non-Diesel)	1800	2200	.....
Engine Loaded RPM (Diesel)	1800	2200	2625
SIZES—CAPACITIES—CLEARANCES			
(CLearances in Thousandths)			
Crankshaft Journal Diameter			
(Non-Diesel)	2.9110-2.9120	2.9110-2.9120	.....
Crankshaft Journal Diameter (Diesel)	2.9110-2.9120	3.4980-3.4990	Par. 91
Crankpin Diameter (Non-Diesel)	2.9115-2.9120	2.9115-2.9120	.....
Crankpin Diameter (Diesel)	2.9115-2.9120	3.4980-3.4990	Par. 91
Camshaft Journal Diameter			
No. 1 (Front)	3.3380-3.3390	3.3380-3.3390	Par. 85
No. 2	3.3075-3.3085	3.3075-3.3085	.....
No. 3	3.2750-3.2760	3.2750-3.2760	.....
No. 4	1.9960-1.9970	1.9960-1.9970	.....
Main Bearings, Diameter Clearance			
Non-Diesel	1.4-4.4	1.4-4.4	.....
Diesel	1.4-4.4	3.3-5.3	1.5-4.5
Rod Bearing, Diameter Clearance			
Non-Diesel	1.4-3.9	1.4-3.9	.....
Diesel	1.4-3.9	2.3-5.3	1.5-4.5
Cooling System—Gallons			
Non-Diesel	7.5	7.5	.....
Diesel	8.25	8.25	10.0
Crankcase Oil—Quarts (Including Filter)			
Non-Diesel	15	15	.....
Diesel	15	15	12
Transmission and Differential—Gals.	10.75	10.75	10.75

*For 3208 engine; 4½x4½ bore and stroke, 573 C.I.D. for 3150 engine.