### 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- <b>T</b>

# 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.

	Series					Series			
	1800,	Series	Series	Series		1800,	Series	Series	Series
	1850	1850	1900,	1750,		1850	1850	1900,	1750,
MODELS	Non-Diesel	Diesel	1950	1950- <b>T</b>	MODELS	Non-Diesel	Diesel	1950	1950-T
BELT PULLEY	. 350	350	350	350	COOLING SYSTEM				
BRAKES	. 345	345	345	345	Water pump	. 223	223		223
CARBURETOR					Radiator	. 222	222	251	222
Gasoline	. 145			145	Thermostat	. 225	225	255	225
LP-Gas	. 158, 172				Fan and Fan Drive			252	
CLUTCH					CREEPER DRIVE	. 275	275	275	275
Engine clutch adjustment	. 261	261	261	261	DIESEL SYSTEM				
Engine clutch R&R		262	262	262	Energy cells	. 211			
Engine clutch overhaul	. 264	264	266	264	Fuel supply pump	. 214	215		214
Power take-off clutch	. 355	355	355	355	Fuel system bleeding	. 176	180		176

MODELS N	Series 1800, 1850 Jon-Diesel	Series 1850 Diesel	Series 1900, 1950	Series 1750, 1950-T	MODELS	Series 1800, 1850 Non-Diesel	Series 1850 Diesel	Series 1900, 1950	Series 1750, 1950-T
					FRONT SYSTEM (Cont'd)				
DIESEL SYSTEM (Cont'd)	000	205	0.40	205		41 7	41 8	41.8	41 8
Governor adjust		205 189	246	205 196 A	Hydraulic front wheel drive.		41A 1	41A 1	41A 1
Nozzles, testing		190	• • •	196B	Pivot pin Spindle (knuckle)		9	9	9
Nozzles, nan		196		196H	Steering gear (manual)		12	12	12
Injection pump, R&R		204		198	Tie rods & toe-in		2	2	2
Injector timing			243			_	_	_	_
Injection pump, timing		203		197	GOVERNOR				
Injector rack, adjust			245		Adjustment, non-diesel	. 217			217
Trouble shooting	173	173		173	Adjustment, diesel		205	246	• • •
DIFFERENCES					Overhaul, non-diesel		• • •	• • •	221
DIFFERENTIAL					R&R, non-diesel	. 221	• • •	• • •	221
Overhaul		388	338	338	HYDRA-POWER	. 290	290	290	290
Remove and reinstall	335	335	335	335	TINDD FILL CITIES				
ELECTRICAL					HYDRAUL SHIFT	• • • • •	• • •	• • •	308
Distributor	229, 231			231	LIFT SYSTEM, HYDRAULIC				
Generator	233	234	256, 257	234	Control levers and				
Regulator	233	234	256, 257	234	linkαge, R&R	. 415	415	415	415
Starting motor	235	236	258	236	Depth-Stop: Internal valve	. 413	413	413	413
ENGINE					External valve		430	430	430
	95	95	240	95, 95 A	Draft control actuating assy.		420	420	420
Assembly, R&R		116			Draft control spring, adjust .		421	421	421
Cam followers		104	• • •	103	Drain and refill		395	395	395
Camshaft		114		113	Electrical tests	. 385	385	385	385
Connecting rod and bearings		131		130	Hydraulic housing	. 414	414	414	414
Crankshaft and bearings		133		132	Hydra-Lectric control unit	. 411	411	411	411
Cylinder head		97		96, 96A	Interlock bleed screws		401	401	401
Cylinder sleeves	. 119	126		119	Lubrication and maintenance		394	394	394
Flywheel		139		138	Cylinder and piston		418	418	418
Front oil seal	134	136		134	Manifold		406	406	406
Idler gears		115		115	Pump		404		404, 404A
Main bearings		133	• • •	132	Pressure relief valve  R&R hydraulic unit		403 414	403 414	403 414
Oil cooler		144	• • •	144A	Remote (Hydra-Lectric)	. 414	414	414	414
Oil pump		142	• • •	140	cylinders	. 422	422	422	422
Pistons		126	• • •	119	Restrictor valves	. 399	399	399	399
Piston pins  Piston and rod removal		129 118	• • •	128 117	Rockshaft	. 417	417	417	417
Piston rings		126	• • •	117	Servo valve		416	416	416
Rear oil seal		137		135	Trouble shooting	. 365	365	365	365
Relief valve, oil pressure				143	POWER STEERING	. 44	44	44	44
Rocker arms		106		105, 105 A					
Tappets		104		103	POWER TAKE-OFF				
Timing gear cover	109	110		109	Clutch adjustment		355	355	355
Timing gears	111	112		111	Clutch overhaul		362	362	362
Tune-up			241		Drive shaft, R&R		356	356	356
Valve guides	98	99		98	PTO unit, R&R	. 357	357	357	357
Valve rotators			• • •	100	REVERSE-O-TORC	. 283	283	283	283
Valve springs		102	• • •	101	STEERING GEAR, MANUAL .	. 12	12	12	12
Valve timing		108	• • •	107	TRANSFER DRIVE	. 35	25	05	0.5
Valves and valve seats	98	99	• • •	98	IMANGILII DIIIVL	. 33	35	35	35
FINAL DRIVE					TRANSMISSION				
Bevel gears	339	339	339	339	Bevel pinion shaft	. 323	323	323	323
Bull gears	343	343	343	343	Countershaft		322	322	322
Bull pinions	344	344	344	344	Input shaft (prior 94 271-00)	0) 318	318	318	• • •
Differential		335	335	335	Input shaft (94 271-000— 134 683-000)	. 319	319	319	
Wheel axle shaft	341	341	341	341	Input shaft (135 685-000 & u)		230	319	320
FRONT SYSTEM					Reverse idler	•	331	331	331
Four-wheel drive	20	20	20	20	Shifter rails & forks		315	315	315
Front axle member		20 1	20 1	20 1	Top cover		310	310	310
Front bolster		16	16	16	TURBOCHARGER				
	20	20	10	10	a was withing it is a second	• • • • •	• • •	• • •	216A

	MODEL 1550 1555	MODEL 1600	MODEL 1650 1655		MODEL 1550 1555	MODEL 1600	MODEL 1650 1655
BELT PULLEY	214	214	214	FINAL DRIVE			
BRAKES	212	212	212	Bevel Gears Bull Gears Bull Pinions Differential	207 209 208 204	207 209 208 204	207 209 208 204
CARBURETOR LP-Gas Gasoline	109 89	96, <b>109</b> 89	109 89	High Clearance	211	211A 211	211A 211
CLUTCH				FRONT SYSTEM  Four-Wheel Drive	27	27	27
Engine Clutch Adjustment	150	150	150	Front Axle Member	1	1	1
Engine Clutch R&R Engine Clutch Overhaul	151 153	151 153	151 153	Front Bolster	13	13	13 46 <b>A</b>
Power Take-Off Clutch	217, 224	217	217, 224	Pivot Pin	1 5	1 5	1 5
COOLING SYSTEM				Steering Gear (Axle)	9	9	9
Radiator	138	138	138	Steering Gear (Tricycle) Tie Rods & Toe-In	21 4	21 4	21 4
Thermostat	140 139	140 139	140 139				_
water rump	100	100	100	GOVERNOR			
CREEPER DRIVE	172	172	172	Adjust, Non-Diesel	133 127	133 127	133 127
DIFFER OVERMAN				Overhaul, Non-Diesel	137	137	137
DIESEL SYSTEM Energy Cells	128	128	128	HYDRA-POWER DRIVE UNIT	154	154	154
Fuel Supply Pump		131	131	midmit own build out	101	101	101
Fuel System Bleeding Governor Adjustment	113 127	113 127	113, 113A 127	HYDRAUL SHIFT			171 A
Nozzles, Testing	116	116	116, 121A	HYDRAULIC SYSTEM (Other Than			
Nozzles, R&R	115 120 <b>A</b>	115 120A	115, 121 120 <b>A</b> , 121 <b>F</b>	Depth-Stop Cylinder)			
Injection Pump R&R	123	123	123	Adjustments	236	236	236
Injection Pump Timing Trouble Shooting	122 <b>A</b> 110	122 <b>A</b> 110	122A 110	Electrical Tests	232	232 233	232 233
mount shooting	110	110	110	Lubrication & Maintenance Hydra-Lectric Control Unit	233 250	250	250
DIFFERENTIAL				Hydraulic Housing	253	253	253
Overhaul	206	206	206	Control Levers & Linkage  Flow Divider Valve	254 244	254 244	254 244
Remove & Reinstall	204	204	204	Pump Shart 5 Division		245,246B, 24 247	46C
ELECTRICAL				Pump Drive Shaft & Pinion Rockshaft	247 256	256	256
Alternator	148		148	Rockshaft Cylinder	257 261	257 261	257 261
Distributor	143	142 147	143	Remote Cylinders Trouble Shooting	231	231	231
Generator	148	147	148				
Starting Motor	149	149 ges 69, 70	149	HYDRAULIC SYSTEM (Depth-Stop F	Remote		
Wiring Diagrams	ru	ges 03, 70	, /1, /2	Cylinder System Only) Adjustments	265		265
ENGINE				Fluid and Filters	268		268
Assembly R&R	60	60	60	Overhaul	269		269
Cam Followers	67 74	67 74	67 74	POWER STEERING	47	47	47
Connecting Rods & Bearings	79	79	79 79				
Crankshaft & Bearings	80	80	80	POWER TAKE-OFF			
Cylinder Head	61 76	61 76	61 76	Clutch Adjustment Clutch Overhaul	217, 224 219, 227	217 219	217, 224 219, 227
Flywheel	83	83	83	Drive Shaft R&R	221, 226	221	221, 226
Front Oil Seal	81 80	81 80	81 80	PTO Unit R&R	223, 229	223	223, 229
Oil Pump	84	84	84, 86, 87	REVERSE-O-TORC DRIVE UNIT	185	179	179, 185
Pistons Piston Pins	76 78	76 78	76 78			2,0	170,100
Piston & Rod Removal	75 77	75 77	75 77	STEERING GEAR (Manual)			
Piston Rings Rear Oil Seal	82	82	77 82	Axle Type Tricycle Type	9 21	9 21	9 21
Relief Valve, Oil Pressure	88	88	88	incycle type	21	21	41
Rocker Arms	68 67	68 67	68 67	TRANSMISSION			
Timing Gear Cover	70	70	70	Bevel Pinion Shaft	203G	202	202
Timing Gears	71 64	71 64	71 64	Countershaft	203F 203E	199 195	199 195
Valve Rotators	65	65	65	Reverse Idler	203H	201	201
Valve Springs Valves & Valve Seats	66 63	66 63	66 63	Shift Rails and Forks Shift Cover	203D 203D	197 192	197 192
							- <b></b>

# 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.

	Series	Series	Series		Series	Series	Series
	1755	1855	1955		1755	1855	1955
BRAKES	205	205	205	ENGINE CONT.			
CARBURETOR	86	86		Crankshaft and bearings	74	74	74
CLUTCH				Cylinder head	56	56	56
Engine clutch adjustment	133	133	133	Cylinder sleeves	68	68	68
Engine clutch R&R	134	134	134	Flywheel	77	77	77
Engine clutch overhaul	135	135	135	Front oil seal	75	75	75
COOLING SYSTEM				Idler gear	65	65	65
Water pump	125	125	125	Main bearings	74	74	74
Radiator	124	124	124	Oil cooler	82	82	82
Thermostat	127	127	127	Oil pump	78	78	78
DIESEL SYSTEM		127		Pistons	68	68	68
Fuel supply pump	115	115	115	Piston pins	72	72	72
Fuel system bleeding	96	96	96	Piston and rod removal	67	67	67
Governor adjust	114	114	114	Piston rings	71	71	71
Nozzles, testing	102	102	102	Rear oil seal	76	76	76
Nozzles, R&R	101	101	101	Relief valve, oil pressure	81	81	81
Nozzles, overhaul	107	107	107	Rocker arms	62	62	62
Injection pump, R&R	110	110	110	Tappets	61	61	61
Injection pump, timing	109	109	109	Timing gear cover	64	64	64
Trouble shooting	93	93	93	Timing gear cover	65	65	65
DIFFERENTIAL	30	30	30	Valve quides	58	58	58
O	198	198	198	Valve guides Valve rotators	59	59	59
Remove and reinstall	195	195	195	Valve oprings	60	60	60
ELECTRICAL	195	195	133	Valve springs			
	129	129		Valve timing	63	63	63
Distributor	131	131	131	FINAL DRIVE	58	58	58
Alternator	131	131	131		100	100	100
Regulator	132	132	132	Bevel gears	199	199	199
Starting motor	132	132	132	Bull gears	203	203	203
ENGINE			E E	Bull pinions	204	204	204
Assembly, R&R	55	55	55 61	Differential	195	195	195
Cam followers	61	61	66	Wheel axle shaft	201	201	201
Camshaft	66	66	99	FRONT SYSTEM	40	4.0	40
Connecting rod and	70	70	70	Four-wheel drive	13	13	13
bearings	73	73	73	Front axle member	1	1	1

EDON'T OVOTEN CONT	Series	Series	Series	LIET OVOTEN CONT	Series	Series	Series
FRONT SYSTEM CONT.	1755	1855	1955	LIFT SYSTEM CONT.	1755	1855	1955
Front bolster	4	4	4	Pressure relief valve	249	249	249
Pivot pin	1	1	1	Quick check	237	237	237
Spindle (knuckle)	6	6	6	Remote cylinders	288	288	288
Tie rods & toe-in	5	5	5	Remote valves	280	280	280
GOVERNOR				Rockshaft	263	263	263
Adjustment, non-diesel	119	119		Servo valve	267	267	267
Adjustment, diesel	114	114	114	System adjustments	243	243	243
Overhaul, non-diesel	123	123		Trouble shooting	225	225	225
R&R, non-diesel	123	123		POWER STEERING	40	40	40
HYDRA-POWER	145	145	145	POWER TAKE-OFF			
HYDRAUL SHIFT	162	162	162	Control valve	219	219	219
LIFT SYSTEM, HYDRAULIC				Clutch overhaul	217	217	217
Draft control spring,				Drive shaft,R&R	215	215	215
adjust	245	245	245	PTO unit, R&R	216	216	216
Draft input shaft	266	266	266	TRANSFER DRIVE	32	32	32
Drain and refill	240	240	240	TRANSMISSION			
External lift cylinders	271	271	271	Bevel pinion shaft	191	191	191
Hitch control lever	265	265	265	Countershaft	190	190	190
Hydraulic housing	262	262	262	Input shaft	188	188	188
Lubrication and				Lubrication system	176	176	176
maintenance	239	239	239	Reverse idler	194	194	194
Cylinder and piston	269	269	269	Shifter rails & forks	184	184	184
Manifold	267	267	267	Top cover	183	183	183
Oil filter	241	241	241	TURBOCHARGER		117	117
Pump	256	256	256		••••		,

# **CONDENSED SERVICE DATA**

GENERAL Engine Make	Series 1755 Own 6 378	Series 1855 Own 6 378	Series 1955 Own 6 37/8
Non-Diesel	4 4 <sup>3</sup> / <sub>8</sub>	4 4 <sup>3</sup> / <sub>8</sub>	43/8
Non-Diesel	283 310	283 310	310
Gasoline  Diesel  Main Bearings No. of	8.5:1 16.0:1 7	8.5:1 16.5:1 7	16.0:1 7
Cylinder sleeves Type Forward Speeds, No. of Battery Terminal Grounded	Wet 	Wet 6 —Negative	Wet 6
TUNE-UP Firing Order	_	—1-5-3-6-2-	4
Valve Tappet Gap Inlet: Non-Diesel Diesel Valve Tappet Gap, Exhaust:	0.020 0.030	0.020 0.030	0.030
Non-Diesel	0.030 0.030	0.030 0.030 -See Par. 5 -See Par. 5	0.030
Valve Seat Angle, Degrees Ignition Distributor Make Ignition Distributor Model Generator and Regulator	—— Но —— D-2	563AA ——	
Make		-Delco-Rem 1100808 1119511	
Starting Motor Make Starting Motor Model:		-Delco-Rem	ıy
Non-Diesel	1108431 1113139	1108431 1113656	1113656
Gap Ignition Distributor Timing (Static):	0.025	0.025	
Gasoline Injection Pump Make Injection Pump Timing	0.025	0.025 Roosa-Mast	er
(Static)	4° -Marvel	4° Schebler-	2°

TUNE-UP (Cont.)	Series	Series	Series
Carburetor Model	1755	1855	1955
Engine Low Idle RPM	USX-44	USX-37	
	800	800	800
Engine High Idle RPM	2640	2640	2640
Engine Rated RPM	2400	2400	2400
PTO RPM @ Engine Rated RPM:			
	E 40	E 40	E 40
540 rpm pto 1000 rpm pto	549 984	549 984	549 984
		904	904
SIZES—CLEARANCES—CAPAC			
Crankshaft Journal Dia		- 2.624-2.625 <i>-</i>	
Crankpin Diameter	-	2.4365-2.4375	
Rod Length		- 6.749-6.750 <del>-</del>	
Camshaft Journal Diameter:		-1.749-1.750—	
FrontOthers		1.7485-1.7495 <i>-</i>	
Piston Pin Diameter		1.2494-1.2497 -	
Valve Stem Diameter:			
Inlet		-0.372-0.373	
Exhaust		-0.371-0.372 —	
Piston Ring Side			
Clearance		<ul> <li>See Par. 71—</li> </ul>	
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 <u>.</u> 66 –	
Cooling System—Gallons	5	5	5
Engine Crankcase	0		0
w/filter—Qts	9	9	9
Fuel Tank, Gasoline—Gals Fuel Tank Diesel—Gallons	35 35	35 35	35 35
Transmission and Final	33	33	33
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—FtLb	S.		
Cylinder Head:			
Non-Diesel		9-133	
Diesel		Par. 57 —	
Main Bearings		— 129-133 <i>—</i> —	
Connecting Rods		— 44-46 —— — 67-69 ——	
Flywheel		<del></del> 67-69 <del></del>	

### 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.

	Model G955	Model G1355	Model 2255		Model G955	Model G1355	Model 2255
BRAKES	208	208	208	ENGINE CONT.			
CARBURETOR	99	99		Valve guides	. 53	53	78
CLUTCH				Valve springs		53	79
Engine clutch adjustment	156	156	156	Valve timing		56	82
Engine clutch R&R	157	157	157	Valves and valve seats	52	52	78
Engine clutch overhaul	158	158	158	FINAL DRIVE			
COOLING SYSTEM				Bevel gears		199	199
Water pump	148	148	149	Bull gears		206	206
Radiator	147	147	147	Bull pinions		207	207
Thermostat	151	151	151	Differential		195	195
DIESEL SYSTEM	4.4.4			Wheel axle shaft	201	201	201
Energy cells	144	100		FRONT SYSTEM			0
Fuel system bleeding	109	109	110	Four-wheel drive		•••	6
Governor adjust	135	135	141	Front axle member		1	1
Nozzles, testing	113	120	127	Front bolster		2	2
Nozzles, R&R	112 118	119 125	126	Pivot pin	1	1	1
Injection pump, R&R	134	134	132 140	Spindle (knuckle)		4	4
Injection pump, timing	133	133	138	Tie rods & toe-in	3	3	3
Trouble shooting	106	106	106	GOVERNOR	4.45	4.45	
DIFFERENTIAL	100	100	100	Adjustment, non-diesel	145 135	145 135	141
Overhaul	198	198	198	Adjustment, diesel		146	
Remove and reinstall	195	195	195	R&R, non-diesel	146	146	• • • •
ELECTRICAL	100	100	100	HYDRAUL SHIFT		162	 162
Distributor	152	152		LIFT SYSTEM, HYDRAULIC	102	102	102
Alternator	154	154	154	Draft control spring,			
Regulator	154	154	154	adjust	272	272	272
Starting motor	155	155	155	Draft input shaft	263	263	263
ENGINE				Drain and refill		237	237
Assembly, R&R	50	50	76	External lift cylinders		268	268
Cam followers	54	54	80	Hitch control lever	262	262	262
Camshaft	63	63	85	Hydraulic housing		259	259
Connecting rod bearings	68	68	90	Lubrication and			
Crankshaft and bearings	69	69	91	maintenance	236	236	236
Cylinder head	51	51	77	Cylinder and piston	266		
Flywheel	73	73	94	Manifold	264	264	264
Front oil seal	71	71	92	Oil filter	238	238	238
Main bearings	69	69	91	Pump	253	253	253
Oil cooler		75A	98	Pressure relief valve	246	246	246
Oil pump	75	75	96	Quick check	233	233	233
Pistons	65	65	87	Remote cylinders	285	285	285
Piston pins	67	67	89	Remote valves	277	277	277
Piston and rod removal	64	64	86	Rockshaft	260	260	260
Piston rings	65	65	88	Servo valve	264	264	264
Rear oil seal	72	72	93	System adjustments		240	240
Relief valve, oil pressure	75	75 55	97	Trouble shooting	221	221	221
Rocker arms	55	55	81	POWER STEERING	30	30	30
Tappets	54 57	54 57	80	POWER TAKE-OFF	000		
Timing gear cover	57 58	57 50	83	Control valve	220	220	220
Timing gears	28	58	84	Clutch overhaul	218	218	218

### INDEX CONT.

	Model	Model G1355	Model 2255	TRANSMISSION	Model G955	Model	Model
	G955	G 1355	2233			G1355	2255
POWER TAKE-OFF CONT.				Bevel pinion shaft	191	191	191
Drive shaft, R&R	216	216	216	Countershaft	190	190	190
PTO unit, R&R	217	217	217	Input shaft	188	188	188
				Lubrication system	176	176	176
				Reverse idler	194	194	194
				Shifter rails & forks	184	184	184
TRANSFER DRIVE			25	Top cover	183	183	183

## **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)	41/4 x5	4-5/8x5	* 41/- vE
Bore & Stroke—Inches (Diesel)	4-3/8x5	4 <sup>3</sup> / <sub>4</sub> x5 <sup>1</sup> / <sub>2</sub>	*4½ x5
Displacement—Cu. In. (Non-Diesel)	425	504 585	*636
Displacement—Cu. In. (Diesel) Cylinders Sleeved	451 No	No	No
Main Bearings, Number of	4	4	5
Main Bearings, Number Or	4	4	3
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	16° PTDC Statio
Injection Timing Timing Mark Location	2° BTDC Flywheel	4° ATDC Flywheel	16° BTDC Static Par. 138
Spark Plug Electrode Gap	rrywneer	Flywheel	Fai. 130
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	0.0440.0.0400	0.0440.0.0400	
(Non-Diesel) Diemeter (Diesel)	2.9110-2.9120	2.9110-2.9120	 Dor. 01
Crankshaft Journal Diameter (Diesel) Crankpin Diameter (Non-Diesel)	2.9110-2.9120 2.9115-2.9120	3.4980-3.4990 2.9115-2.9120	Par. 91
Crankpin Diameter (Non-Diesel)	2.9115-2.9120	3.4980-3.4990	 Par. 91
Camshaft Journal Diameter	2.3113-2.3120	0.4300-0.4330	1 41. 51
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	. 2.7.2
Diesel	1.4-3.9	2.3-5.3	1.5-4.5
Cooling System—Gallons	7.5	7.5	
Non-Diesel	7.5	7.5	10.0
Diesel	8.25	8.25	10.0
Crankcase Oil—Quarts (Including Filter)	45	15	
Non-Diesel	15 15	15	12
Diesel Transmission and Differential—Gals	15 10.75	15 10.75	12 10.75
*For 3208 engine; $4\frac{1}{2}$ x4 $\frac{1}{2}$ bore and stroke.			10.75
For 3200 engine, 472 x472 bore and stroke,	, 5/3 U.I.D. 101 3130 el	ngme.	