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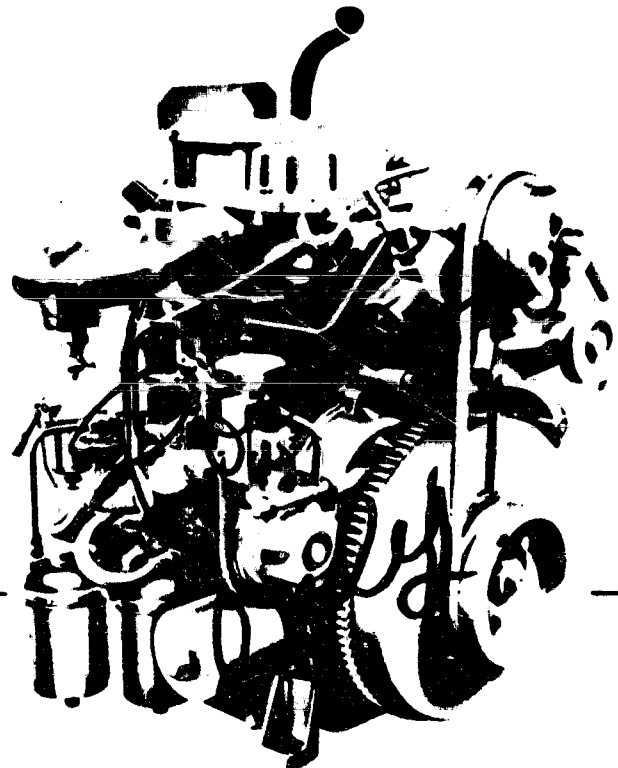
MCGRATH & SONS

Onan

Parts Manual

RDJE/RDJE A

**Industrial
Engine**



974-0252
3-82 (SPEC A)
REPLACES
7-76 (SPEC A)
Printed in U.S.A.

GENERAL INFORMATION

INSTRUCTIONS FOR ORDERING REPAIR PARTS

For parts or service, contact the dealer from whom you purchased this equipment or refer to your Nearest Authorized Onan Parts and Service Center.

To avoid errors or delay in filling your parts order, please furnish all information requested.

Always refer to the nameplate on your unit.

1. Always give the MODEL, SPEC NO. and SERIAL NO.

McGRAW-EDISON

Onan

MODEL AND SPEC NO.

SERIAL NO.

M-1149

For handy reference, insert "YOUR" nameplate information in the spaces above.

2. Do not order by reference number; always use part number and description.
3. Give the part number, description and quantity needed of each item. If an older part cannot be identified, return the part prepaid to your dealer or nearest Onan Parts and Service Center. Print your name and address plainly on the package. Write a letter to the same address stating the reason for returning the part.
4. State definite shipping instructions. Any claim for loss or damage to your unit in transit should be filed promptly against the transportation company making the delivery. Shipments are complete unless the packing list indicates items are back ordered.

Prices are purposely omitted from this Parts Manual due to the confusion resulting from fluctuating costs, import duties, sales taxes, exchange rates, etc.

For current parts prices, consult your Onan Dealer, Distributor or Parts and Service Center.

"En esta lista de partes los precios se omiten de proposito, ya que bastante confusion resulto de fluctuaciones de los precios, derechos aduanales, impuestos de venta, cambios extrajeros, etc."

Consiga los precios vigentes de su distribuidor de productos "ONAN."

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INTRODUCTION

This catalog applies to the standard RDJE and RDJEA Industrial Engines as listed in the Engine Data Table. Parts are arranged in groups of related items and each illustrated part is identified by a reference number corresponding to the same reference number in the parts list. Unless otherwise mentioned in the description, parts are interchangeable between models. Parts illustrations are typical. Using the model and specification number from your engine nameplate, select the Parts Key Number (1 or 2) that applies to your engine. This Parts Key Number represents parts that differ between RDJE and RDJEA models. Right and left sides are determined by facing the flywheel end (front) of the engine.

ENGINE DATA TABLE

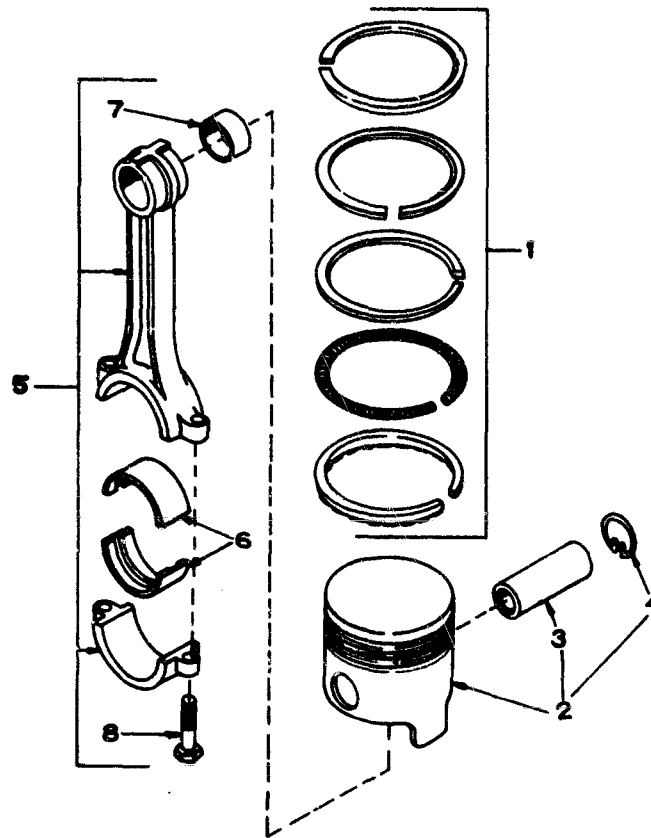
MODEL AND SPECIFICATION NUMBER	DESCRIPTION	PARTS KEY NUMBER
RDJE-MS/*	Electric Start, Stub Shaft Drive	1
RDJEA-MS/*	Electric Start, Stub Shaft Drive	2

- * - The diagonal line (/) in the model and specification number separates engine characteristics from the specification number and letter. The specification number denotes customer requested options or deviations from a standard (1A, 1B, etc.) model. The specification letter advances (A to B, B to C, etc.) with major manufacturing changes.

STANDARD PARTS SECTION

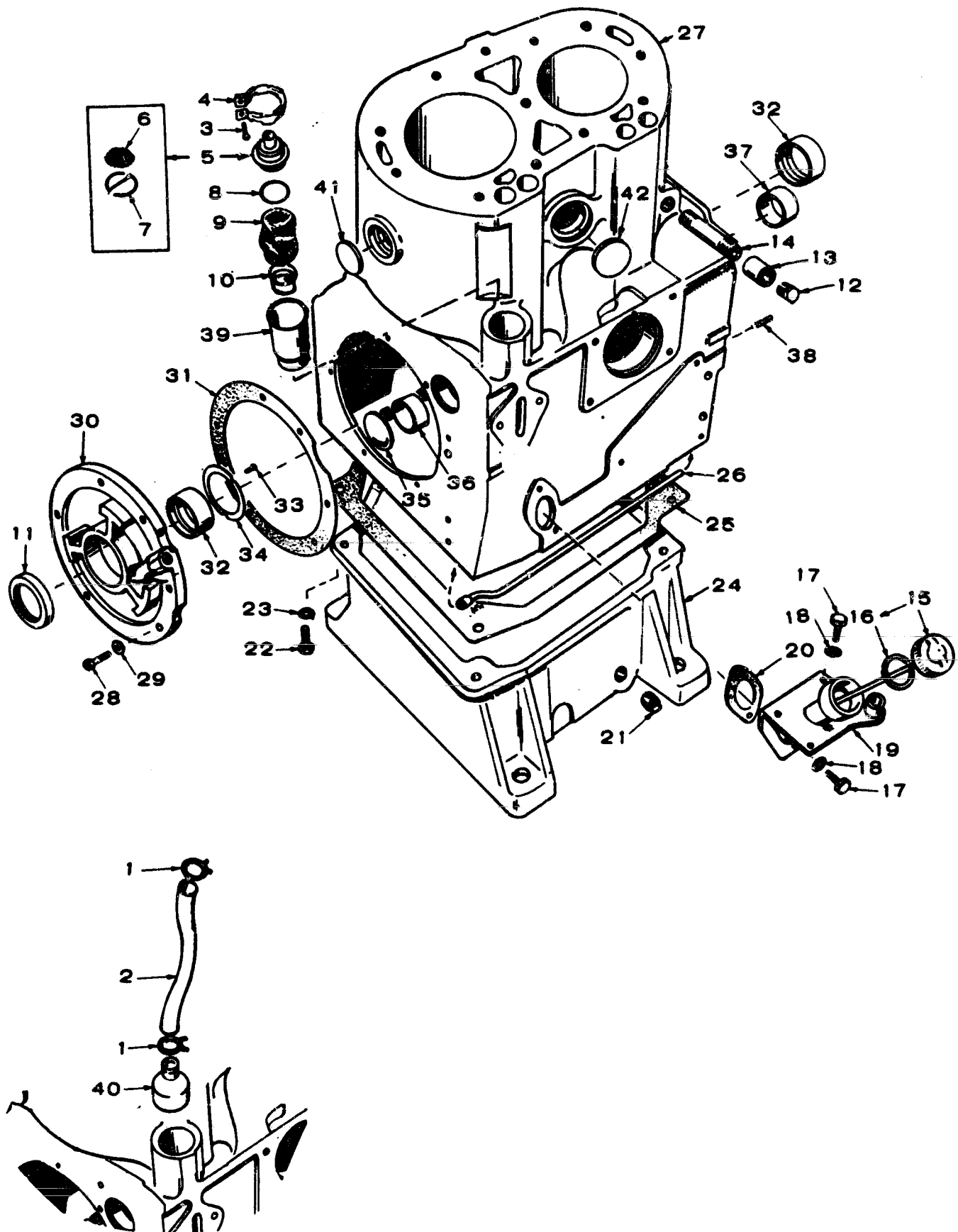
This section contains parts applicable to models listed in the engine data table.

PISTON AND ROD



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	RING SET, PISTON		
	113-0137	2	Standard
	113-0137-05	2	.005" Oversize
	113-0137-10	2	.010" Oversize
	113-0137-20	2	.020" Oversize
	113-0137-30	2	.030" Oversize
	113-0137-40	2	.040" Oversize
2	PISTON AND PIN (Includes Pin Retaining Rings)		
	112-0176	2	Standard
	112-0176-05	2	.005" Oversize
	112-0176-10	2	.010" Oversize
	112-0176-20	2	.020" Oversize
	112-0176-30	2	.030" Oversize
	112-0176-40	2	.040" Oversize
3	112-0117	2	Pin, Piston
4	112-0085	4	Ring, Retaining
5	114-0168	2	Rod Assembly, Connecting
6	BEARING HALF, CONNECTING ROD		
	114-0164	4	Standard
	114-0164-02	4	.002" Undersize
	114-0164-10	4	.010" Undersize
	114-0164-20	4	.020" Undersize
	114-0164-30	4	.030" Undersize
7	114-0170	4	Bushing, Piston Pin
			Connecting Rod
8	805-0012	4	Bolt, Place (Special)

CYLINDER BLOCK AND OIL BASE



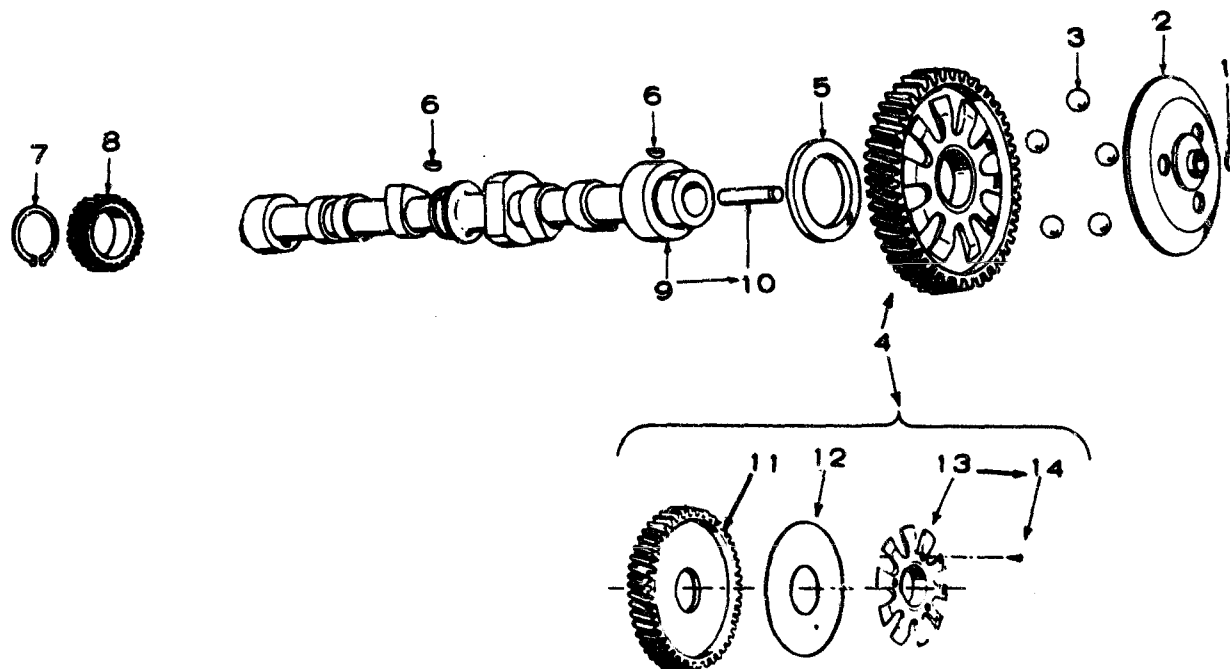
CYLINDER BLOCK AND OIL BASE

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	503-0170	2	Clamp, Hose
2	HOSE, BREATHER		
	503-0557	1	Key 1
	503-0600	1	Key 2
3	809-0035	1	Screw, Machine - Round Head Sheet Metal (#8 x 3/4") Key 1
4	123-0951	1	Clamp, Breather - Key 1
5	123-1203	1	Cap and Valve Assembly, Breather (Includes Screen and Retainer) Key 1
6	123-1202	1	Screen, Breather - Key 1
7	123-1201	1	Retainer, Breather Screen - Key 1
8	509-0117	1	Seal, "O" Ring - Breather - Key 1
9	123-1283	1	Filter, Breather Tube - Key 1
10	123-1153	1	Baffle Cup and Holder, Breather - Key 1
11	509-0086	1	Seal, Oil - Rear Housing Plate
12	502-0153	1	Plug, Pipe - Hex Head (Brass) (1/4") Water Drain
13	505-0027	1	Coupling, Pipe - Water Drain (1/4")
14	505-0449	1	Nipple, Pipe - Water Drain (1/4" x 6")
15	123-1058	1	Cap and Indicator
16	123-0667	1	Gasket, Cap
17	SCREW, CAP - HEX HEAD (5/16-18 x 3/4")		
	800-0026	2	Oil Fill Tube Mounting
	800-0026	3	Fuel Filter Adapter Mounting
18	WASHER, LOCK - SPRING (5/16")		
	850-0045	2	Oil Fill Tube Mounting
	850-0045	3	Fuel Filter Adapter Mounting
19	123-1085	1	Tube, Oil Fill
20	123-0667	1	Gasket, Oil Fill Tube
21	505-0056	1	Plug, Pipe - Square Head (1/2")
22	800-0072	4	Screw, Cap - Hex Head (7/16-14 x 1-1/4")

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
23	850-0055	4	Washer, Lock - Spring (7/16")
24	102-0448	1	Base, Oil
25	102-0451	1	Gasket, Oil Base
26	120-0553	1	*#Tube, Crankcase Oil
27	BLOCK ASSEMBLY, CYLINDER		
	110-2456	1	Key 1 (Includes Tappets and Parts Marked *)
	110-2458	1	Key 2 (Includes Tappets and Parts Marked #)
28	805-0019	6	*#Bolt, Rear Bearing Plate (Special)
29	526-0245	6	*#Washer, Rear Bearing Plate (Special)
30	101-0337	1	*#Plate, Rear Bearing
31	101-0386	1	*#Gasket and Shim Kit, Rear Bearing Plate - Includes Bearing Plate Mounting Washers
32	BEARING, MAIN - FRONT AND REAR		
	101-0359	2	*#Standard
	101-0359-02	2	.002" Undersize
	101-0359-10	2	.010" Undersize
	101-0359-20	2	.020" Undersize
	101-0359-30	2	.030" Undersize
33	516-0072	4	*#Screw, Drive - Crankshaft Thrust Washers
34	104-0420	2	*#Washer, Crankshaft Thrust
35	517-0053	1	*#Plug, Welch - Rear Camshaft Opening (1-7/16")
36	101-0365	1	*#Bearing, Camshaft - Rear
37	101-0363	1	*#Bearing, Camshaft - Front
38	516-0141	2	*#Pin, Gearcase Locating
39	123-0952	1	*Tube, Breather - Key 1
40	123-1168	1	*Cap, Breather - Key 2
41	517-0059	3	*#Plug, Welch - Cylinder Block (1-7/16")
42	517-0096	1	*#Plug, Welch - Cylinder Block (1-9/16")

* - Parts Included in 110-2456 Cylinder Block Assembly.
- Parts Included in 110-2458 Cylinder Block Assembly.

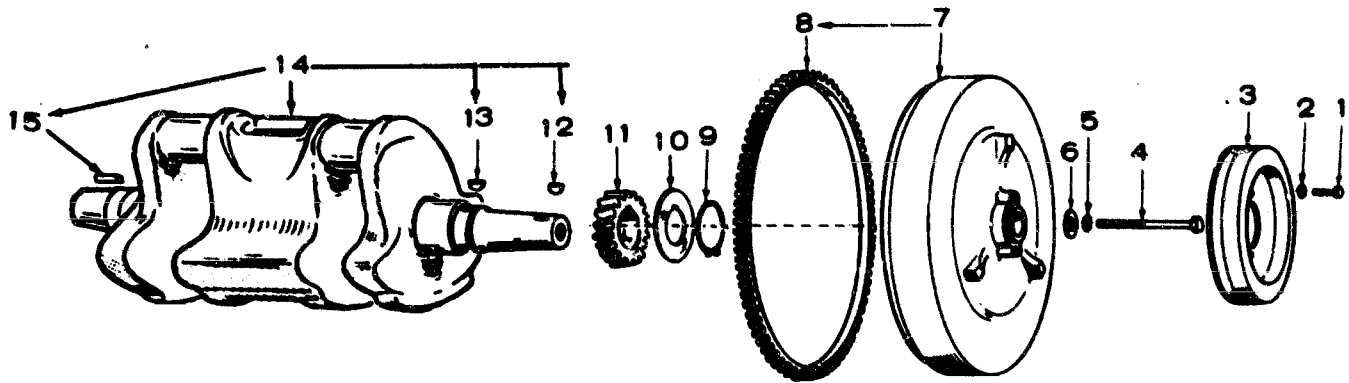
CAMSHAFT



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	150-0078	1	Ring, Center Pin
2	150-0775	1	Cup, Governor
3	510-0046	5	Flyball, Governor
4	105-0218	1	Gear Assembly, Camshaft (Includes Parts Marked *)
5	105-0205	1	Washer, Thrust
6	515-0001	2	Key, Camshaft and Injection Pump Gear
7	518-0195	1	Ring, Injection Pump Gear
8	147-0142	1	Gear, Injection Pump Drive
9	CAMSHAFT (Includes Center Pin)		
	105-0271	1	Key 1
	105-0286	1	Key 2
10	150-0075	1	Pin, Center
11	105-0465	1	*Gear, Camshaft
12	150-0773	1	*#Plate, Governor Flyball
13	150-1842	1	*#Spacer Kit, Governor Flyball (Includes Mounting Screws)
14	815-0506	3	*Screw, Spacer Mounting (Special)

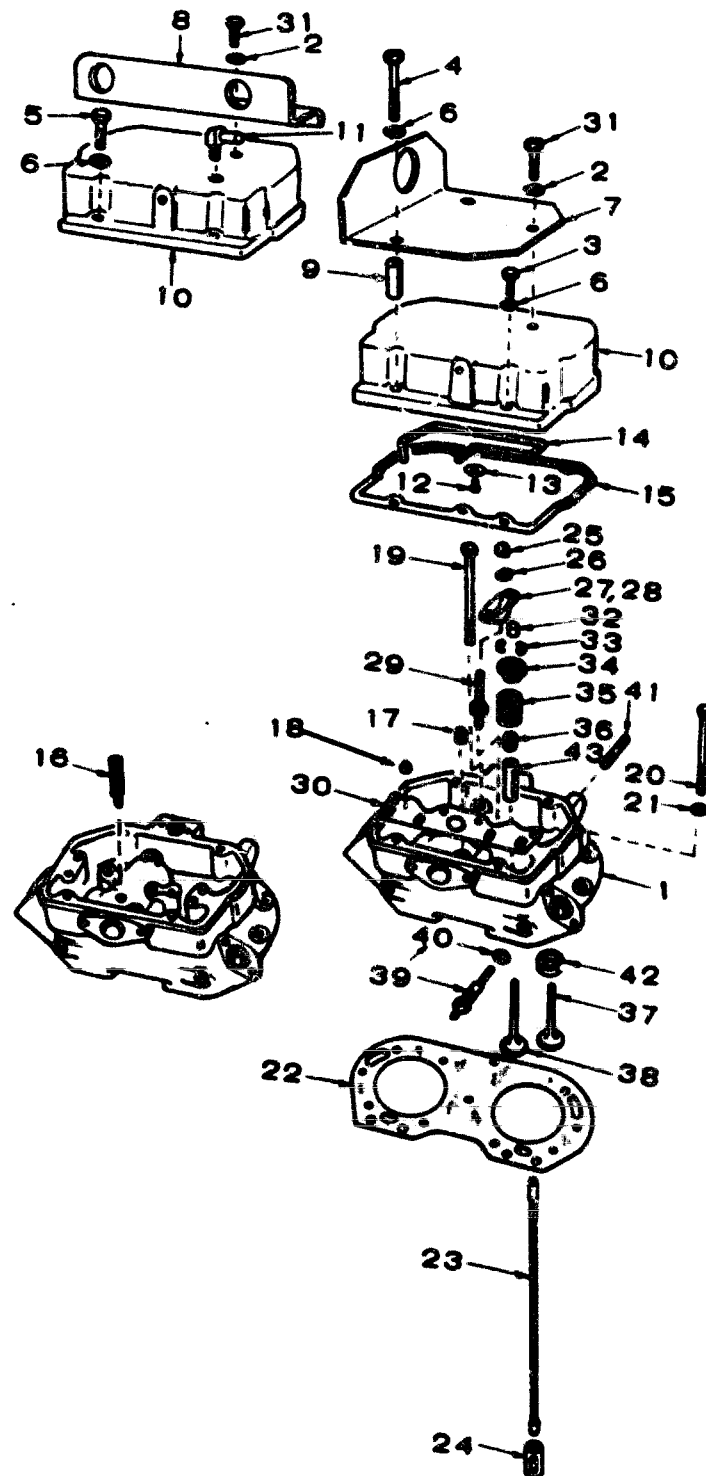
* - Parts included in 105-0218 Camshaft Gear Assembly
- Camshaft Gear Assemblies with Rivets Order 105-0218
Camshaft Gear Assembly

CRANKSHAFT AND FLYWHEEL



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	800-0050	2	Screw, Cap - Hex Head (3/8-16 x 1")
2	850-0050	2	Washer, Lock - Spring (3/8")
3	104-0949	1	Pulley, Flywheel
4	800-0500	1	Screw, Flywheel Mounting (Special)
5	850-0055	1	Washer, Lock - Spring (7/16")
6	526-0185	1	Washer, Flat (15/32" ID x 1-1/2" OD x 3/8" Thk)
7	104-0448	1	Flywheel Assembly (Includes Ring Gear)
8	104-0423	1	Gear, Ring
9	518-0188	1	Ring, Lock
10	104-0416	1	Washer, Retainer
11	104-0418	1	Gear, Crankshaft
12	515-0153	1	Key, Flywheel to Crankshaft
13	515-0001	1	Key, Gear to Crankshaft
14	CRANKSHAFT KIT (Includes All Keys)		
	104-1284	1	Key 1
	104-1299	1	Key 2
15	515-0003	1	Key, Stub Shaft

CYLINDER HEAD

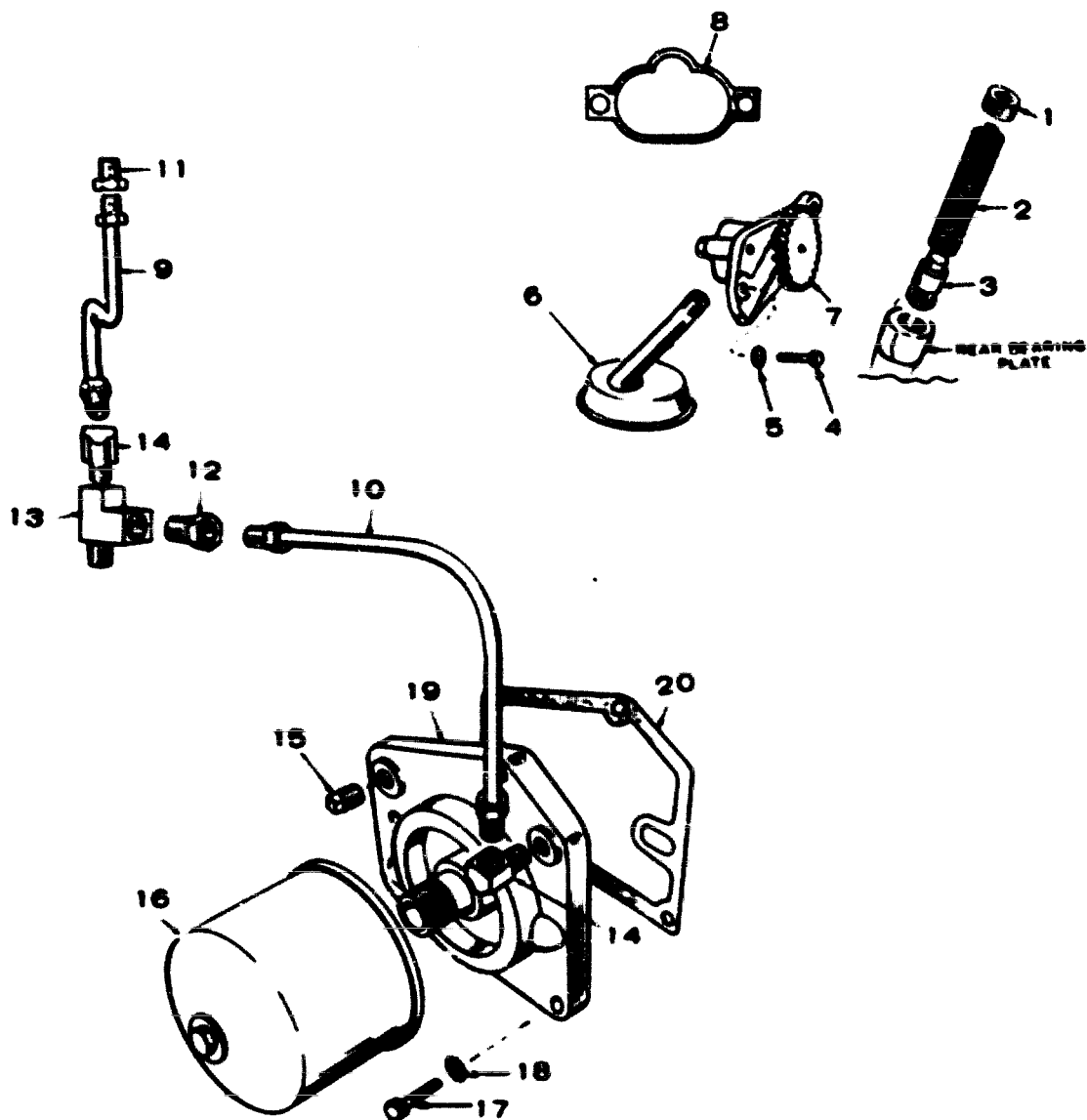


CYLINDER HEAD

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	HEAD, CYLINDER 110-2986	1	With Valves (Includes Cylinder Head Oil Line Connector and Parts Marked #)	19	110-1264	5	Screw, Cap - Hex Head (Special)
	110-2984	1	#Without Valves (Includes Parts Marked Δ)	20	800-0501	6	Screw, Cap - Hex Head (3/8-16 x 3-3/8")
2	850-0060	1	Washer, Lock - Spring (1/2")	21	526-0174	7	Washer, Flat (13/32" ID x 25/32" OD x 0.1345" Thk)
3	800-0030	2	Screw, Cap - Hex Head (5/16-18 x 1-1/4")	22	110-2464	1	Gasket, Cylinder Head
4	800-0036	2	Screw, Cap - Hex Head (5/16-18 x 3-1/4") - Key 1	23	115-0149	4	Rod, Push
5	800-0030	2	Screw, Cap - Hex Head (5/16-18 x 1-1/4") - Key 2	24	115-0195	4	†Tappet, Valve
6	850-0045	4	Washer, Lock - Spring (5/16")	25	115-0150	4	Locknut, Rocker Arm
7	403-0625	1	Bracket, Lifting - Key 1	26	115-0127	4	Bell, Rocker Arm
8	403-0650	1	Bracket, Lifting - Key 2	27	115-0128	2	Arm, Rocker - Exhaust
9	403-0626	2	Spacer, Lifting Bracket - Key 1	28	115-0129	2	Arm, Rocker - Intake
10	COVER ASSEMBLY, ROCKER 115-0134	1	Key 1 (Includes Parts Marked *)	29	115-0152	4	#Stud, Rocker Arm
	115-0199	1	Key 2 (Includes Parts Marked †)	30	115-0196	1	#ΔGuide, Push Rod
11	502-0304	1	†Elbow, Hose - 90° - Key 2	31	800-0091	1	Screw, Cap - Hex Head (1/2-13 x 1-1/4")
12	815-0562	1	*†Screw, Machine - Cross Recessed Pan Head (#10 x 5/16")	32	110-0659	4	Cap, Valve Stem
13	526-0130	1	*†Washer, Flat (17/64" ID x 1" OD x 1/16" Thk)	33	110-0658	8	#Lock, Valve Spring Retainer
14	120-0628	1	*†Line, Oil - Rocker Cover	34	110-1220	4	#Retainer, Valve Spring
15	115-0130	1	Gasket, Rocker Cover	35	110-1221	4	#Spring, Valve
16	123-1140	1	#ΔStandpipe - Key 2	36	509-0132	2	Seal, Oil - Intake Valve
17	505-0274	1	#ΔPlug, Pipe - Socket Drive - Key 1	37	110-1278	2	#Valve, Exhaust
18	505-0110	1	#ΔPlug, Pipe - Square Head (3/8")	38	110-1871	2	#Valve, Intake
				39	333-0106	2	Plug, Glow - Includes Gasket
				40	110-0546	2	Gasket, Glow Plug
				41	520-0808	4	#Stud, Exhaust Manifold
				42	INSERT, VALVE SEAT 110-1268	4	#ΔStandard
					110-1268-02	4	002" Oversize
					110-1268-05	4	005" Oversize
					110-1268-10	4	010" Oversize
					110-1268-25	4	025" Oversize
				43	110-1501	4	#ΔGuide, Valve

- # - Parts Included in 110-2986 Cylinder Head
- Δ - Parts Included in 110-2984 Cylinder Head
- * - Parts Included in 115-0134 Rocker Cover Assembly
- † - Parts Included in 115-0199 Rocker Cover Assembly
- ‡ - Parts Included in Cylinder Block Assemblies

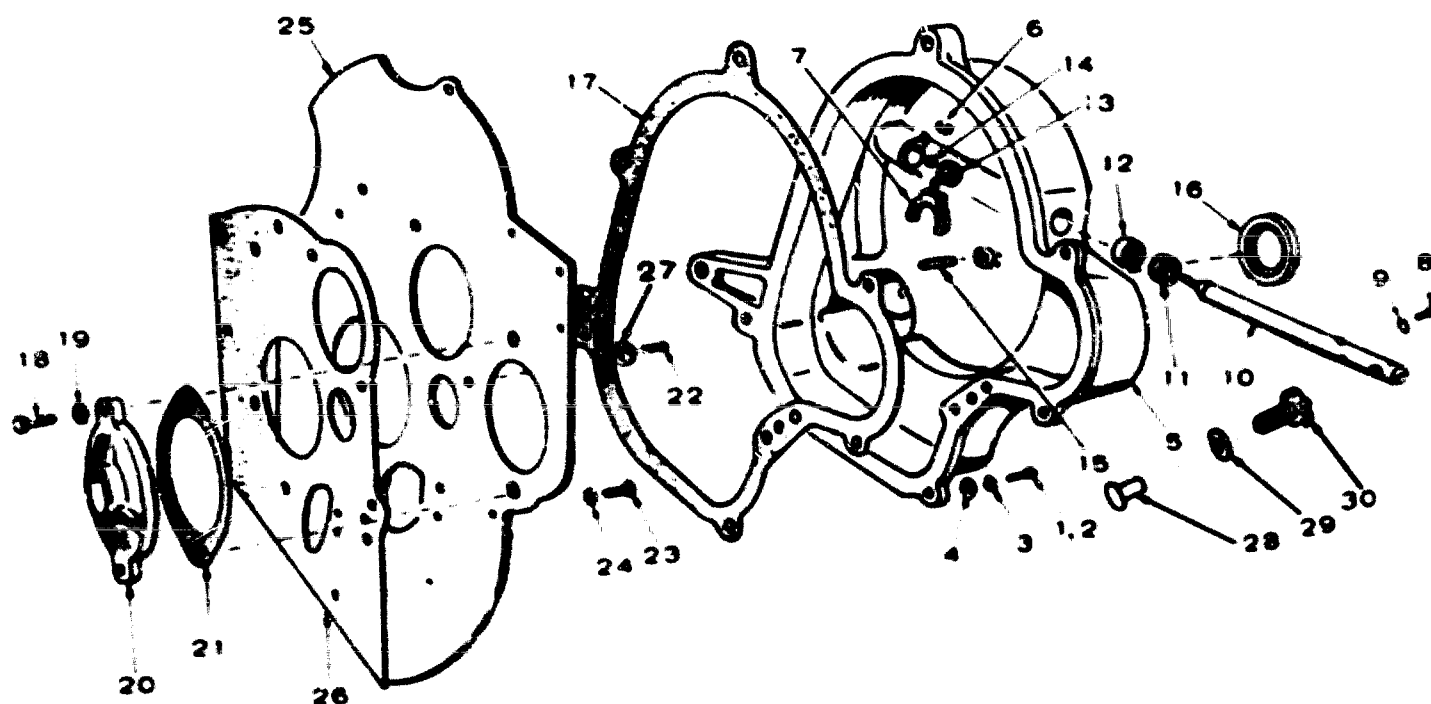
OIL SYSTEM



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	505-0274	1	Plug, Pipe - Countersunk - Oil Bypass
2	120-0555	1	Spring, Bypass Valve
3	120-0539	1	Valve, Oil Bypass
4	800-0030	2	Screw, Cap - Hex Head (5/16-18 x 1-1/4")
5	850-0045	2	Washer, Lock - Spring (5/16")
6	120-0551	1	Cup, Oil Pump Intake
7	120-0547	1	Pump, Oil
8	120-0580	1	Gasket Kit, Oil Pump
9	120-0631	1	Line, Oil - Cylinder Head
10	120-0636	1	Line, Oil - Adapter to Tee
11	502-0261	1	Connector, Pipe - Inverted Male, Cylinder Head
12	502-0274	1	Connector, Pipe - Inverted Male, Injection Pump Tee

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
13	502-0242	1	Tee, Restricted - Injection Pump Lubrication
14	502-0037	2	Elbow, Pipe - Brass, 90°
15	505-0057	2	Engines Without Low Oil Pressure Switch or Oil Pressure Gauge
	505-0057	1	Engines With Low Oil Pressure Switch or Oil Pressure Gauge
16	122-0185	1	Filter, Oil (4-3/8" Long)
17	800-0028	3	Screw, Cap - Hex Head (5/16-18 x 1")
18	850-0045	3	Washer, Lock - Spring (5/16")
19	122-0182	1	Adapter, Oil Filter
20	122-0186	1	Gasket, Oil Adapter

GEARCASE

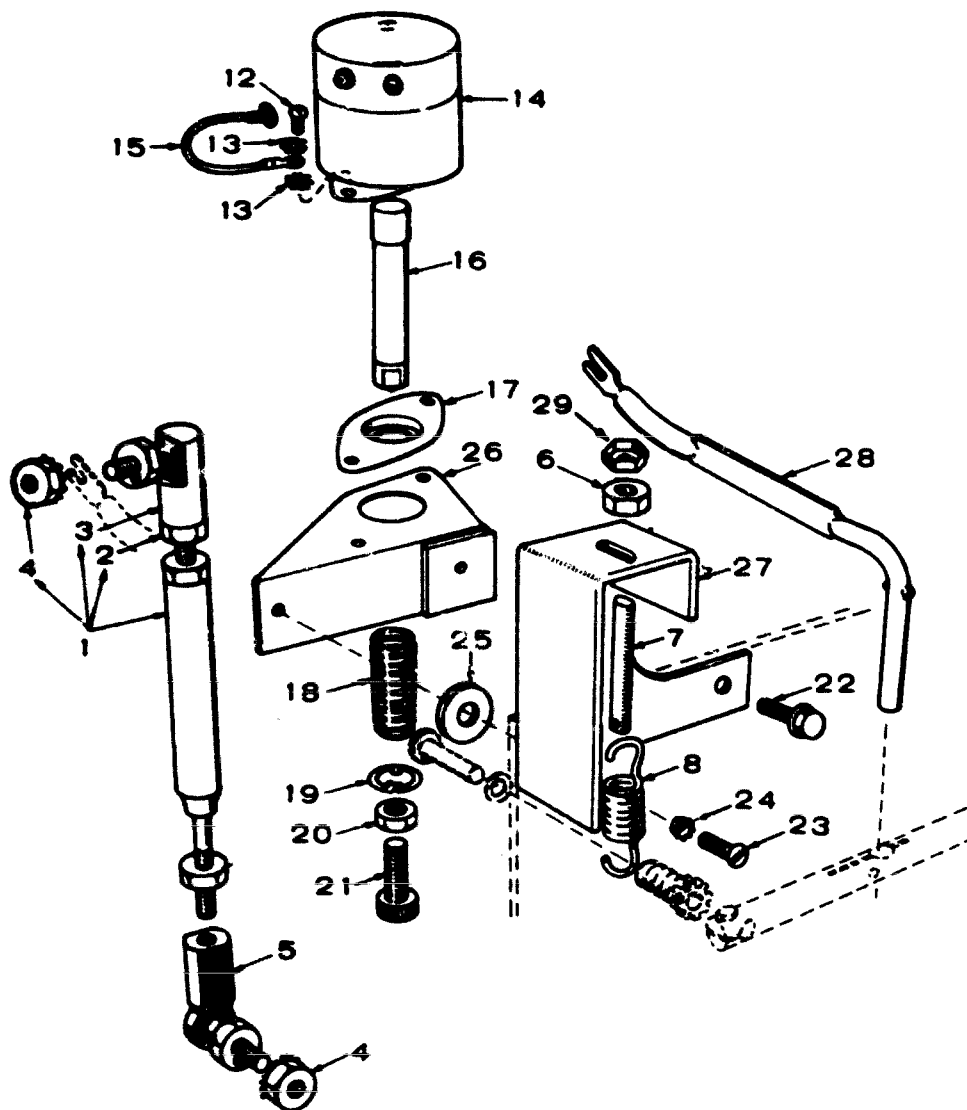


REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	800-0028	1	Screw, Cap - Hex Head (5/16-18 x 1")
2	110-0879	4	Screw, Cap - Hex Head (Special)
3	850-0045	5	Washer, Lock - Spring (5/16")
4	526-0115	4	Washer, Flat (11/32" ID x 11/16" OD x 1/16" Thk)
5	103-0302	1	Gearcase Assembly (Includes Parts Marked *)
6	518-0129	1	*Ring, Retaining
7	150-0777	1	*V-Ring
8	815-0176	2	*Screw, Machine - Hex Head (#8-32 x 1/2")
9	850-0025	2	*Washer, Lock - Spring (#8)
10	150-0801	1	*Shaft, Governor
11	509-0088	1	*Seal, Oil - Governor Shaft
12	510-0048	1	*Bearing, Needle - 1/2" Shaft
13	510-0082	1	*Bearing, Needle - 1/4" Shaft
14	510-0043	1	*Ball, Governor Shaft Thrust
15	516-0111	1	*Pin, Roll
16	503-0087	1	Seal, Oil

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
17	103-0251	1	Gasket, Gearcase
18	800-0052	2	Screw, Cap - Hex Head (3/8-16 x 1-1/2")
19	850-0050	2	Washer, Lock - Spring (3/8")
20	103-0221	1	Cover, Backplate Opening
21	180-0721	1	Gasket, Backplate Cover
22	815-0347	2	Screw, Self-locking - Flat Head, Socket Drive (1/4-20 x 1/2")
23	800-0026	1	Screw, Cap - Hex Head (5/16-18 x 3/4")
24	850-0045	1	Washer, Lock - Spring (5/16")
25	103-0521	1	Backplate, Gearcase
26	103-0218	1	Gasket, Backplate
27	526-0115	2	Washer, Flat (11/32" ID x 11/16" OD x 1/16" Thk)
28	150-1154	1	*Pin, Governor
29	150-1155	1	*Washer, Spring Tension
30	150-1180	1	*Hub, Adjusting - Governor Spring

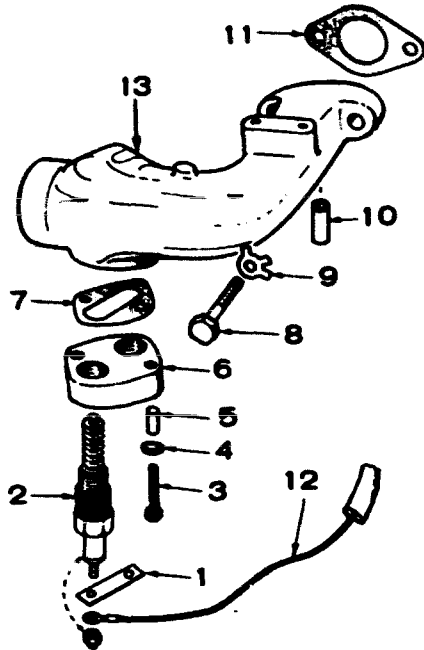
* - Parts Included in 103-0302 Gearcase Assembly

GOVERNOR



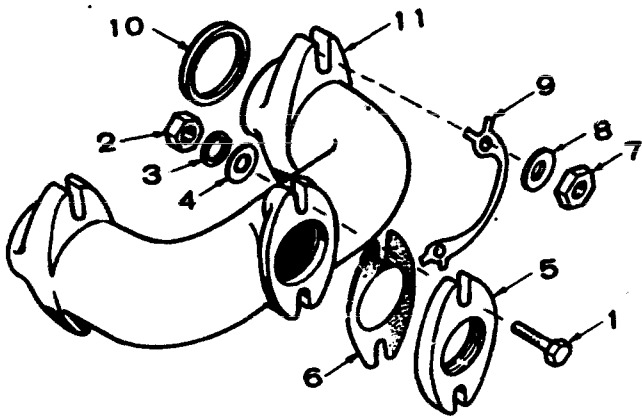
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	150-1132	1	Linkage Assembly, Governor (Includes Items 2,3 and 4)	18	306-0161	1	Spring, Solenoid Plunger
2	871-0010	1	Nut, Hex - Brass (#10-32)	19	518-0203	1	Ring, Retaining
3	150-1358	1	Joint, Ball - Governor Arm	20	862-0001	1	Nut, Hex (1/4-20)
4	870-0131	2	Nut, Hex - With ET Lockwasher (#10-32)	21	306-0242	1	Screw, Thumb - Solenoid Adjusting
5	150-0939	1	Joint, Ball - Injection Pump Arm	22	821-0018	1	Screw, Self-Locking - Hex Head (1/4-20 x 5/8")
6	862-0011	1	Nut, Hex (Special)	23	814-0151	1	Screw, Machine - Flat Head (1/4-20 x 3/4")
7	150-1082	1	Stud, Governor Spring	24	855-0011	1	Washer, Lock - Countersunk With ET (1/4")
8	150-1084	1	Spring, Governor	25	526-0180	1	Washer, Flat (17/64" ID x 7/8" OD x 1/8" Thk)
12	812-0148	2	Screw, Machine - Round Head (1/4-20 x 1/2")	26	306-0158	1	Bracket, Mounting - Solenoid
13	853-0013	2	Washer, Lock - ET (1/4")	27	150-1105	1	Bracket, Mounting - Governor Spring
14	307-0628	1	Solenoid, Stopping (12 Volt)	28	150-1228	1	Arm, Governor
15	336-0706	1	Lead, Electrical - Solenoid Ground	29	870-0133	1	Palnut, Governor Adjusting Lock
16	306-0159	1	Plunger, Solenoid				
17	306-0162	1	Retainer, Solenoid Plunger				

AIR INTAKE SYSTEM



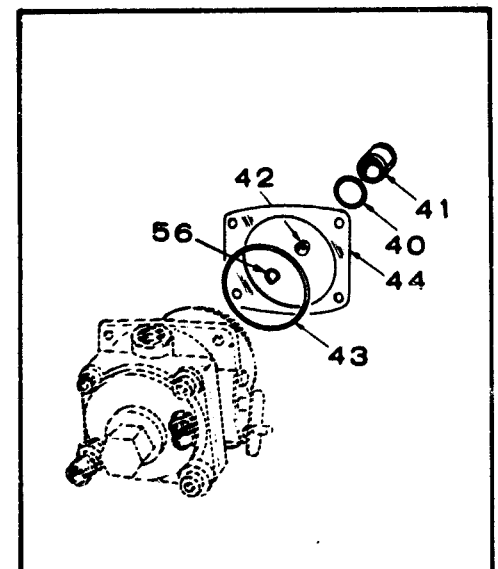
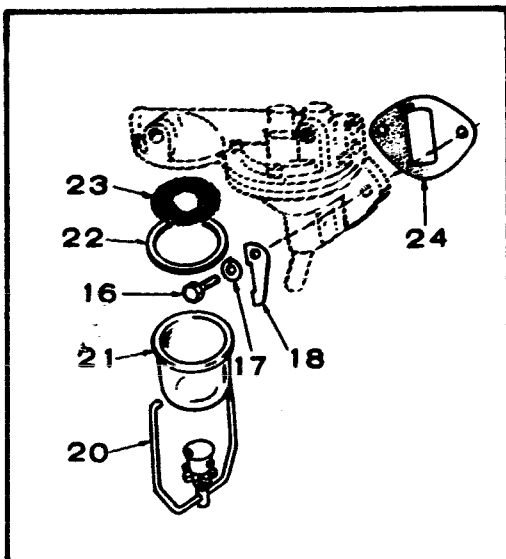
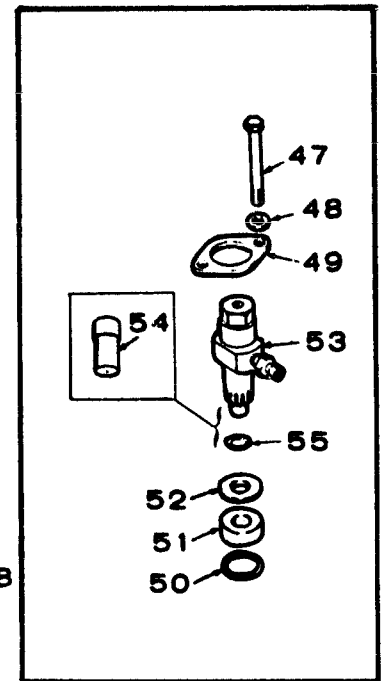
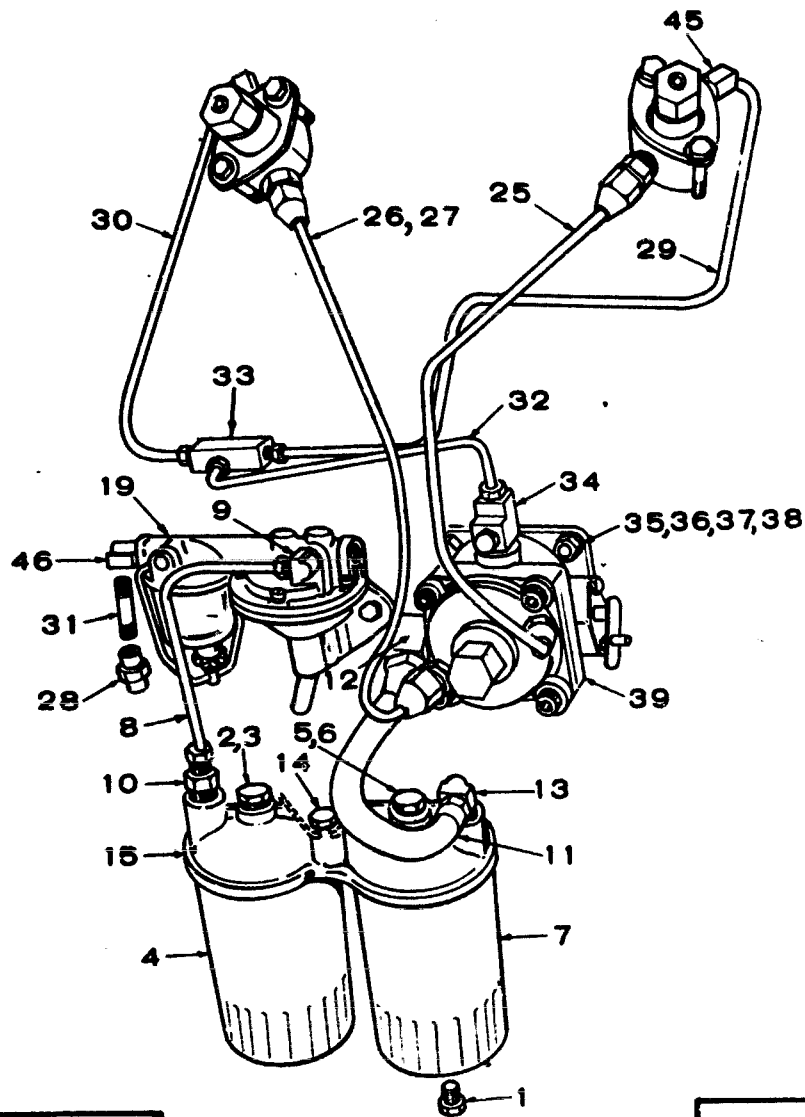
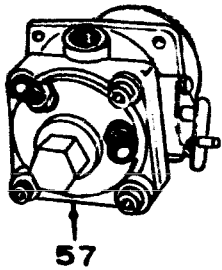
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	332-0829	1	Jumper, Air Heater
2	154-0712	2	Heater, Manifold
3	800-1008	2	Screw, Cap - Hex Head (Special)
4	850-1040	2	Washer, Lock - Spring (Special)
5	508-0103	2	Bushing, Insulator
6	140-0705	1	Adapter, Heater
7	140-0706	1	Gasket, Adapter Mounting
8	800-0031	2	Screw, Cap - Hex Head (5/16-18 x 1-1/2")
9	114-0059	2	Tab, Lock
10	123-1177	1	Tube, Breather Hose - Key 1
11	154-0733	1	Gasket, Manifold Mounting
12	LEAD, GLOW PLUG TO AIR HEATER		
	336-1505	1	No. 1 Cylinder (5-1/4" long)
	336-1504	1	No. 2 Cylinder (12-1/4" long)
13	MANIFOLD, INTAKE		
	154-1357	1	Key 1
	154-1853	1	Key 2

EXHAUST SYSTEM



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	800-0054	2	Screw, Cap - Hex Head (3/8-16 x 2")
2	862-0003	2	Nut, Hex (3/8-16)
3	850-0050	2	Washer, Lock - Spring (3/8")
4	526-0127	2	Washer, Flat (13/32" ID x 25/32" OD x 1/8" Thk)
5	155-0170	1	Flange, Exhaust
6	154-0133	1	Gasket, Exhaust Flange
7	110-0445	4	Nut, Hex (Special)
8	526-0045	4	Washer, Flat (21/64" ID x 5/8" OD x 1/8" Thk)
9	154-1665	2	Tab, Lock
10	154-1057	2	Gasket, Manifold Mounting
11	154-0695	1	Manifold, Exhaust

INJECTION SYSTEM



INJECTION SYSTEM

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
	149-1046	1	Repair Kit, Fuel Pump (Includes Diaphragm and Gaskets)	35	110-0445	4	Nut, Hex (Special)
1	502-0080	2	Plug - Fuel Filter Drain	36	850-0045	4	Washer, Lock - Spring (5/16")
2	801-0074	1	Screw, Cap - Hex Head (7/16-20 x 1-3/4")	37	526-0115	4	Washer, Flat - (11/32" ID x 11/16" OD x 1/16" Thk)
3	526-0068	1	Washer, Flat - Copper (29/64" ID x 3/4" OD x 1/16" Thk)	38	520-0129	4	Stud (5/16-18 x 5/16-24 x 1-17/32")
4	122-0325	1	Filter, Fuel - Primary	39	147-0219	1	Pump Kit, Injection (Includes Governor Ball Joint, Nut and Parts Marked £) - Key 1
5	801-0053	1	Screw, Cap - Hex Head (3/8-24 x 1-3/4")	40	147-0196	1	#£Gasket, O-Ring - Pump Tappet
6	526-0066	1	Washer, Flat - Copper (25/64" ID x 9/16" OD x 1/16" Thk)	41	147-0182	1	#£Tappet, Pump
7	122-0326	1	Filter, Fuel - Secondary	42	BUTTON, PLUNGER - INJECTION PUMP		
8	149-1190	1	Line, Fuel - Pump to Filter		147-0147	1	£.119 - Marked 1 or A
9	502-0065	1	Elbow, Pipe - 45°, Brass (1/8")		147-0148	1	#£.116 - Marked 2 or B
10	502-0003	1	Connector, Pipe - Brass (1/8")		147-0149	1	.113 - Marked 3 or C
11	501-0129	1	Line, Fuel - Flexible, Filter to Injection Pump		147-0150	1	#.110 - Marked 4 or D
12	502-0039	1	Elbow, Pipe - 90°, Brass (1/4")		147-0151	1	.107 - Marked 5 or E
13	502-0099	1	Elbow, Pipe - 90°, Reducing, Brass (1/4" x 1/8")		147-0161	1	#.104 - Marked 11 or No Mark
14	821-0016	3	Screw, Self-locking - Hex Head (5/16-18 x 3/4")		147-0152	1	.101 - Marked 6 or F
15	149-1185	1	Adapter, Mounting - Fuel Filters		147-0153	1	#.098 - Marked 7 or H - Key 2
16	800-0028	2	Screw, Cap - Hex Head (5/16-18 x 1")		147-0154	1	.095 - Marked 8 or J
17	850-0045	2	Washer, Lock - Spring (5/16")		147-0155	1	#.092 - Marked 9 or K - Key 2
18	149-1307	2	†Stiffener, Fuel Pump Flange		147-0156	1	.089 - Marked 10 or L
19	149-1704	1	Pump Kit, Fuel (Includes Parts Marked †)		147-0190	1	#£.122 - Marked 12 or M
20	149-1169	1	†Bail, Fuel Pump Bowl		147-0189	1	£.125 - Marked 13 or N
21	149-1168	1	†Bowl, Fuel Pump		147-0188	1	.128 - Marked 14 or P
22	149-0517	1	†Gasket - Fuel Pump Bowl		147-0187	1	.131 - Marked 15 or R
23	149-0463	1	†Screen - Fuel Pump		147-0186	1	.134 - Marked 16 or S
24	149-0792	1	†Gasket - Fuel Pump Mounting	43	509-0094	1	#£Gasket, O-Ring - Injection Pump Mounting
25	149-1101	1	Line, Fuel - Pump to #1 Cylinder Nozzle	44	147-0145	1	Shim Kit, Injection Pump Mounting
26	149-1102	1	Line, Fuel - Pump to #2 Cylinder Nozzle - Key 1	45	502-0065	2	Elbow, Pipe - 45°, Brass (1/8")
27	149-1118	1	Line, Fuel - Pump to #2 Cylinder Nozzle - Key 2	46	502-0002	1	Elbow, Pipe - 90°, Brass (1/8")
28	502-0017	1	Connector, Pipe - Inverted Female	47	114-0171	4	Screw, Cap - Hex Head (Special)
29	149-1056	1	Line, Fuel - #1 Cylinder Nozzle to Tee	48	526-0122	4	Washer, Flat (11/32" ID x 23/32" OD x 0.1345" Thk)
30	149-1057	1	Line, Fuel - #2 Cylinder Nozzle to Tee	49	147-0141	2	Flange - Injection Nozzle Hold-down
31	505-0061	1	Nipple, Pipe (1/8" x 2")	50	110-0419	2	Gasket, Shield to Head (Copper)
32	149-1058	1	Line, Fuel - Tee to Injection Pump	51	147-0044	4	Shield, Nozzle Heat (Steel)
33	502-0102	1	Tee - Fuel Return Lines	52	147-0043	2	Gasket, Nozzle Heat Shield (Asbestos)
34	147-0183	1	#£Valve, Check - Injection Pump	53	147-0136	2	Nozzle and Holder Assembly (Includes Parts Marked *)
				54	147-0134	2	*Nozzle - Includes Nozzle Gasket
				55	147-0243	2	*Gasket, Nozzle
				56	147-0259	1	#£Ring, Retaining - Timing Button
				57	147-0226	1	Pump Kit, Injection (Includes Governor Ball Joint, Nut and Parts Marked #) - Key 2

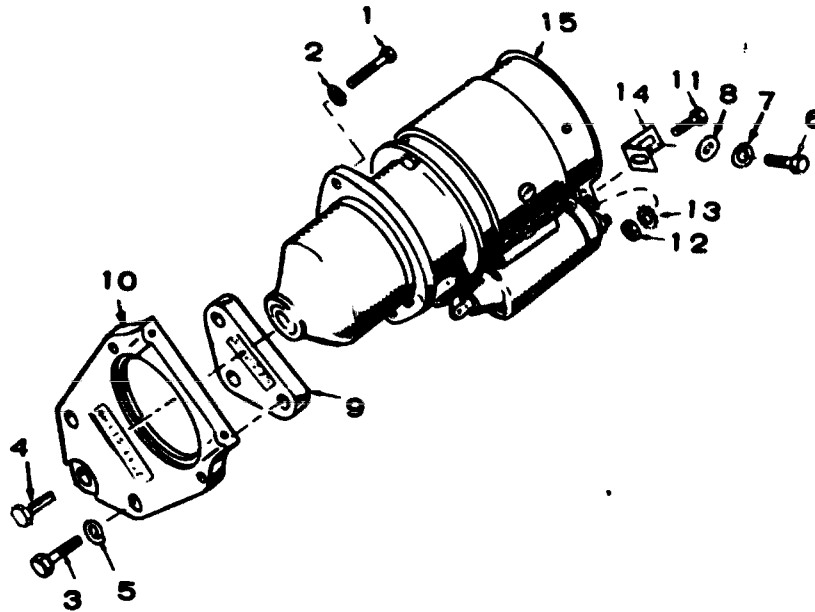
† - Parts Included in 149-1704 Fuel Pump Kit.

£ - Parts Included in 147-0219 Injection Pump Kit.

* - Parts Included in 147-0136 Nozzle and Holder Assembly.

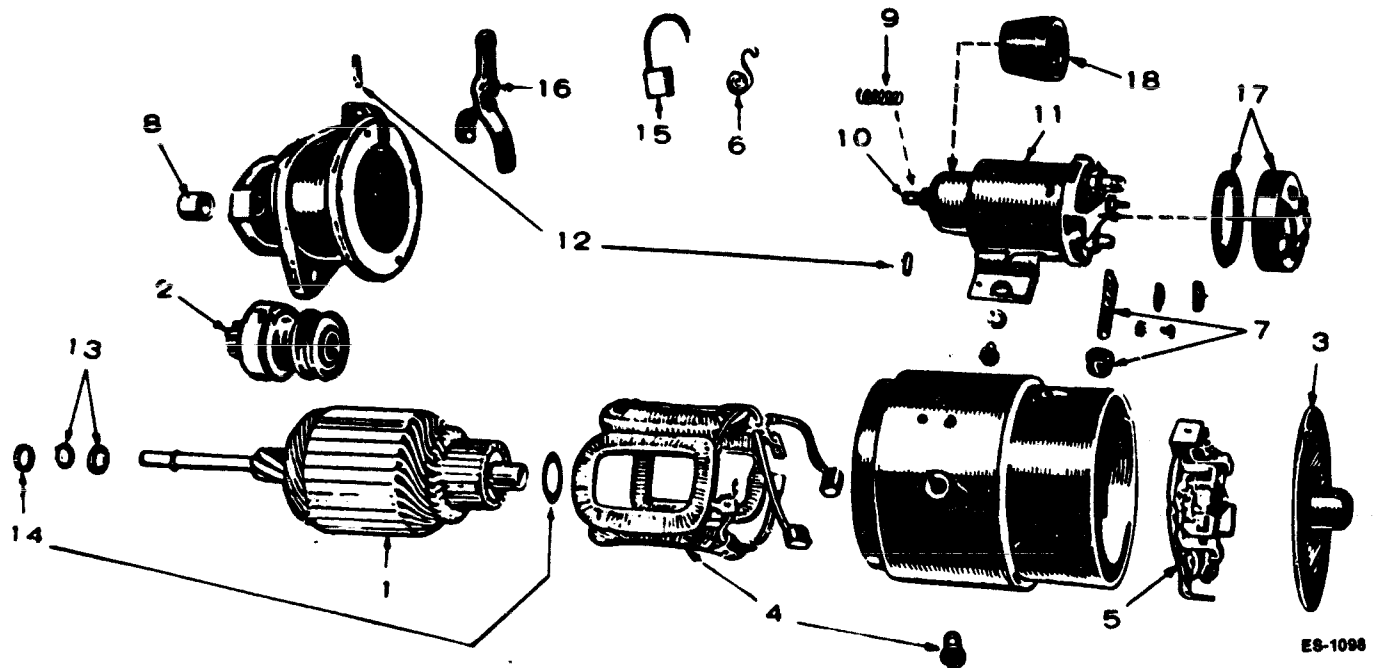
- Parts Included in 147-0226 Injection Pump Kit.

STARTER



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	800-0051	2	Screw, Cap - Hex Head (3/8-16 x 1-1/4")
2	850-0050	2	Washer, Lock - Spring (3/8")
3	800-0054	2	Screw, Cap - Hex Head (3/8-16 x 2")
4	800-0053	1	Screw, Cap - Hex Head (3/8-16 x 1-3/4")
5	850-0050	3	Washer, Lock - Spring (3/8")
6	800-0047	1	Screw, Cap - Hex Head (3/8-16 x 5/8")
7	850-0050	1	Washer, Lock - Spring (3/8")
8	528-0028	1	Washer, Flat (13/32" ID x 3/4" OD x 1/16" Thk)
9	191-0311	1	Spacer, Starter
10	191-0512	1	Flange, Starter
11	800-0047	1	Screw, Cap - Hex Head (3/8-16 x 5/8")
12	864-0003	1	Nut, Hex (3/8-16)
13	856-0010	1	Washer, Lock - EIT (3/8")
14	191-0365	1	Bracket, Starter
15	191-0324	1	Starter (See Separate Group for Components)

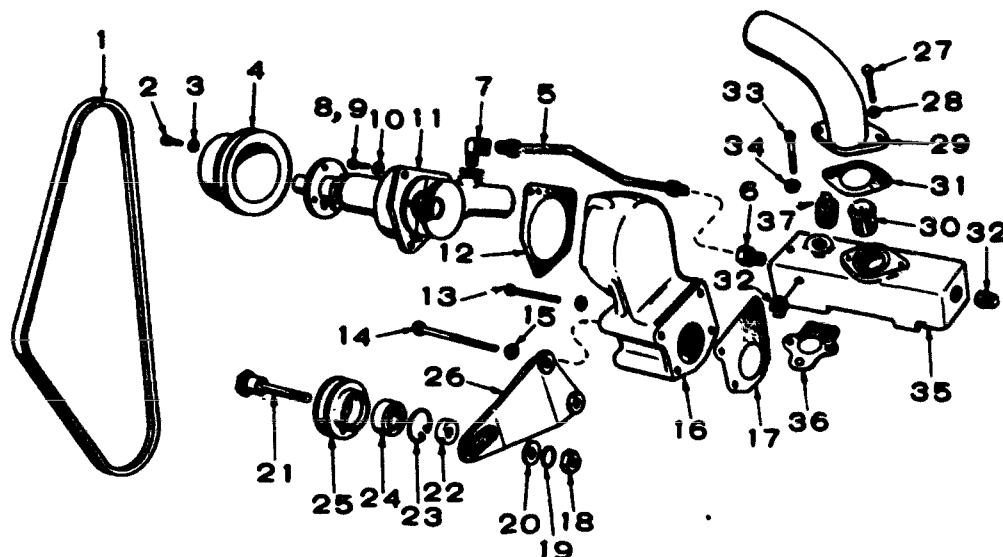
STARTER PARTS



ES-1098

REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
	191-0324	1	Starter
1	191-0712	1	Armature
2	191-0432	1	Clutch
3	191-1023	1	Head Assembly, Commutator End
4	191-1024	1	Coil Package, Field
5	191-1025	1	Plate Assembly, Brush
6	191-1020	1	Spring Set, Brush (Set of 4)
7	191-1263	1	Connector Package
8	191-0497	1	Bearing (Bronze), Drive End
9	191-1027	1	Spring, Plunger
10	191-1028	1	Core Assembly, Moving
11	191-0433	1	Switch, Solenoid
12	191-1029	1	Yoke Parts Package
13	191-1030	1	Stop and Lock Ring Package, Pinion
14	191-1031	1	Thrust Washer Package, Armature (Use as Required)
15	191-0434	1	Brush Set, Service
16	191-1032	1	Yoke
17	191-0468	1	Cover, Solenoid
18	191-1134	1	Boot, Rubber - Part of Moving Core Assembly

COOLING SYSTEM



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	BELT, DRIVE			18	110-0707	1	Nut, Hex (1/2-20)
	511-0066	1	Engines Without Alternator	19	850-0060	1	Washer, Lock - Spring (1/2")
	511-0101	1	Engines With Alternator	20	526-0035	1	Washer, Flat (17/32" ID x 7/8" OD x 1/8" Thk)
2	800-0029	4	Screw, Cap - Hex Head (5/16-18 x 1-1/8")	21	130-0556	1	Shaft, Idler Pulley
3	850-0045	4	Washer, Lock - Spring (5/16")	22	130-0560	1	Spacer, Idler Pulley
4	512-0039	1	Pulley	23	518-0210	1	Ring, Retaining
5	130-0592	1	Line, Water Bypass	24	510-0025	1	Bearing, Ball
6	502-0036	1	Connector, Pipe - Inverted Male	25	130-0557	1	Pulley, Idler
7	502-0043	1	Elbow, Pipe - 90° Inverted Male	26	130-0680	1	Bracket, Idler Pulley
8	800-0031	1	Screw, Cap - Hex Head (5/16-18 x 1-1/2")	27	800-0030	2	Screw, Cap - Hex Head (5/16-18 x 1-1/4")
9	800-0027	3	Screw, Cap - Hex Head (5/16-18 x 7/8")	28	526-0065	2	Washer, Flat - Copper (21/64" ID x 9/16" OD x 1/16" Thk)
10	526-0065	4	Washer, Flat - Copper (21/64" ID x 9/16" OD x 1/16" Thk)	29	131-0138	1	Elbow, Flanged - Water Outlet
11	132-0250	1	Pump Kit, Water (Includes Water Pump Gasket)	30	309-0054	1	Thermostat
12	132-0072	1	Gasket - Water Pump	31	131-0140	1	Gasket, Outlet Elbow
13	800-0057	2	Screw, Cap - Hex Head (3/8-16 x 2-3/4")	32	PLUG, PIPE - SQUARE HEAD (3/8")		
14	800-0064	2	Screw, Cap - Hex Head (3/8-16 x 4-1/2")	505-0110		2	Engines Without High Water Temperature Switch
15	526-0066	4	Washer, Flat - Copper (25/64" ID x 9/16" OD x 1/16" Thk)	505-0110		1	Engines With High Water Temperature Switch
16	131-0186	1	Housing, Water Pump	33	800-0034	2	Screw, Cap - Hex Head (5/16-18 x 2-1/4")
17	131-0139	1	Gasket - Water Pump Housing	34	526-0065	2	Washer, Flat - Copper (21/64" ID x 9/16" OD x 1/16" Thk)
				35	131-0204	1	Manifold, Water
				36	309-0145	1	Gasket, Water Manifold
				37	505-0057	1	Plug, Pipe - Square Head (1/8")

SERVICE KITS AND MISCELLANEOUS

PART NO.	QTY. USED	PART DESCRIPTION
98-1100	1	Decal Kit
168-0133	1	Gasket Kit, Engine
522-0285	1	Overhaul Kit, Engine
TOUCH-UP PAINT (13 oz. Pressurized Can)		
525-0137	-	Metallic Green
525-0305	-	Non-Metallic Green
525-0454	-	Greige - Enamel

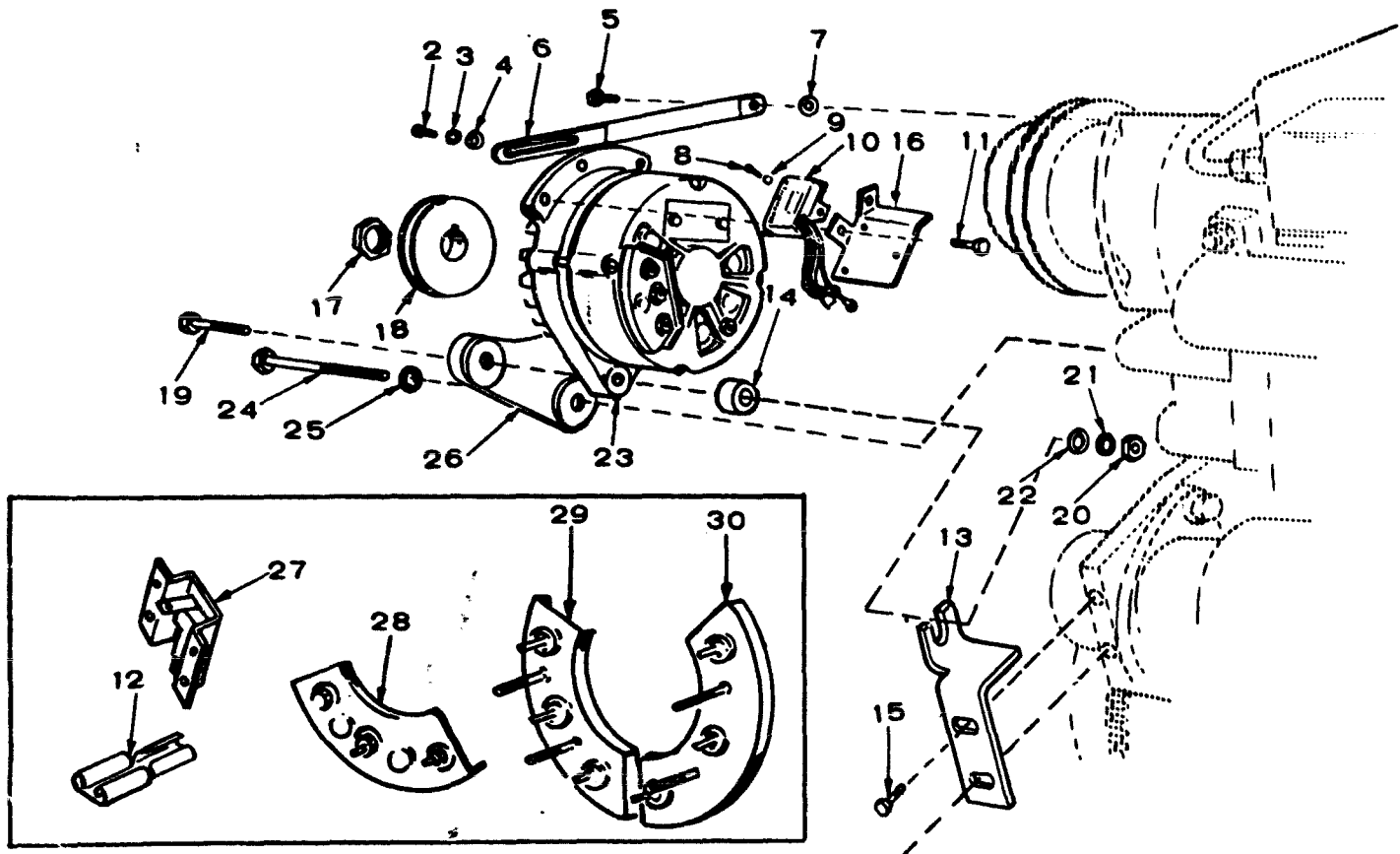
NOTE: For other kits refer to the related group

B8

OPTIONAL PARTS SECTION

This section contains illustrated parts listings of factory installed options. Options may not be applicable to all models; for field conversions additional parts are usually required.

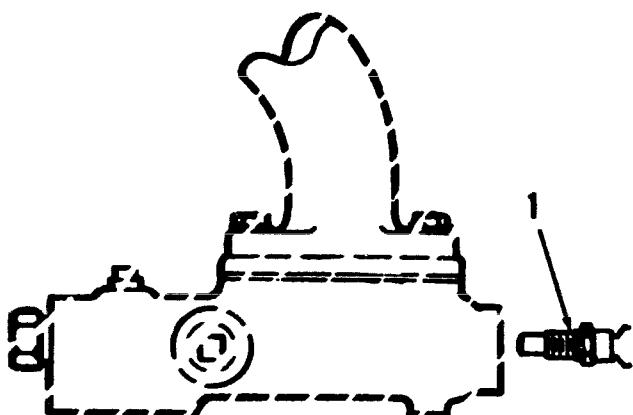
ALTERNATOR - OPTIONAL



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION	REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
2	800-0027	1	Screw, Cap - Hex Head (5/16-18 x 7/8")	16	191-0638	1	Bracket, Mounting - Voltage Regulator
3	850-0045	1	Washer, Lock - Spring (5/16")	17	—	1	Nut, Hex (Part of Alternator)
4	526-0115	1	Washer, Flat - (11/32" ID x 11/16" OD x 1/16" Thk)	18	191-0623	1	Pulley, Alternator
5	800-1030	1	Screw, Cap - Hex Head, Cadmium Plated, Grade 5 (5/16-18 x 1-1/4")	19	800-0102	1	Screw, Cap - Hex Head (1/2-13 x 4")
6	191-1166	1	Bracket, Adjusting - Alternator	20	862-0016	1	Nut, Hex (1/2-13)
7	526-0065	1	Washer, Flat - Copper (21/64" ID x 9/16" OD x 1/16" Thk)	21	850-0060	1	Washer, Lock - Spring (1/2")
8	813-0098	3	Screw, Machine - Round Head (#10-32 x 3/8")	22	526-0219	1	Washer, Flat (17/32" ID x 1" OD x 1/8" Thk)
9	850-0030	3	Washer, Lock - Spring (#10)	23	191-0543	1	Alternator - 12 Volt, 35 Amps (Includes Replacement Parts Marked †)
10	191-0642	1	Regulator, Voltage	24	800-0065	2	Screw, Cap - Hex Head (3/8-16 x 4-3/4")
11	821-0014	2	Screw, Locking Head (5/16-18 x 1/2")	25	526-0066	2	Washer, Flat - Copper (25/64" ID x 9/16" OD x 1/16" Thk)
12	332-0529	1	Terminal, Brass - Ignition Lead on Voltage Regulator	26	191-1173	1	Bracket, Mounting - Alternator
13	191-1277	1	Bracket, Alternator Support	27	191-0659	1	†Brush Holder Assembly
14	191-1278	1	Spacer, Alternator Support Bracket	28	191-0663	1	†Diode Assembly - Isolation
15	821-0016	2	Screw, Locking Head (5/16-18 x 3/4")	29	191-0661	1	†Diode Assembly - Positive
				30	191-0662	1	†Diode Assembly - Negative

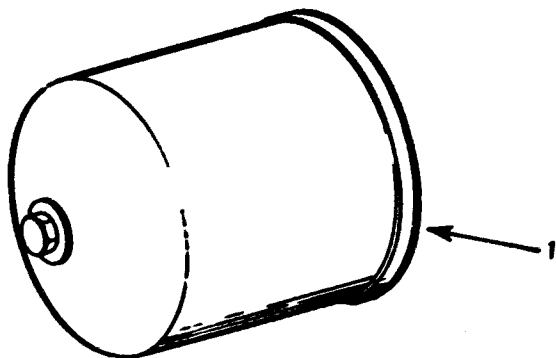
† - Parts Included in 191-0543 Alternator

HIGH WATER TEMPERATURE SWITCH - OPTIONAL



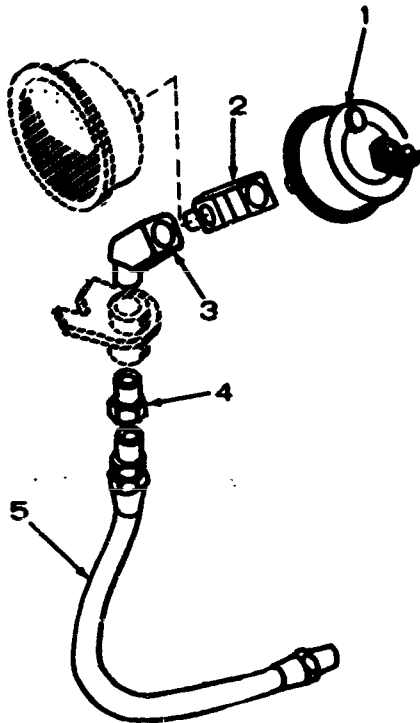
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	309-0302	1	Switch, High Water Temperature

OIL FILTER (HEAVY DUTY) - OPTIONAL



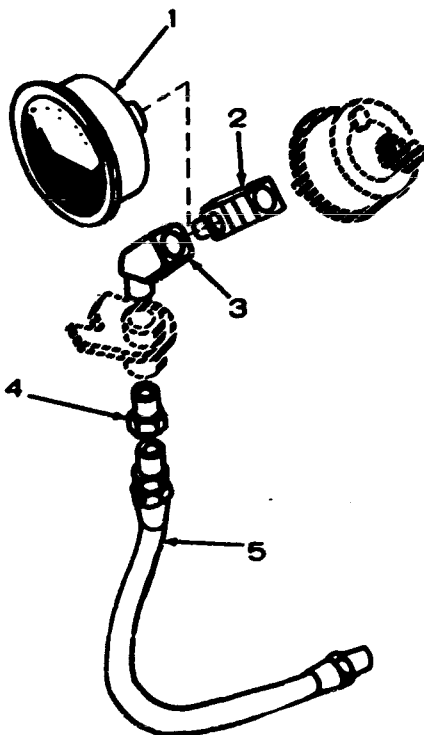
REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	122-0193	1	Filter, Oil - Heavy Duty (5-3/4")

LOW OIL PRESSURE SWITCH - OPTIONAL



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	SWITCH, LOW OIL PRESSURE		
	309-0169	1	Key 1
	309-0177	1	Key 2
2	502-0058	1	Tee, Street Pipe
3	502-0053	1	Elbow, Street Pipe
4	502-0003	1	Connector, Inverted Male
5	501-0003	1	Line, Oil - Oil Filter Adapter to Connector

OIL PRESSURE GAUGE - OPTIONAL



REF. NO.	PART NO.	QTY. USED	PART DESCRIPTION
1	193-0006	1	Gauge, Oil Pressure
2	502-0058	1	Tee, Street Pipe
3	502-0053	1	Elbow, Street Pipe
4	502-0003	1	Connector, Inverted Male
5	501-0003	1	Line, Oil - Oil Filter Adapter to Connector

SPECIAL PARTS LIST FOR **MODEL** RDJE-MS **SPEC** 1A

FOR STANDARD PARTS REFER TO **CATALOG** 974-0250 **KEY NO.** 1

OPTIONAL GROUPS IN CATALOG ARE LISTED BY GROUP NO. BELOW WHEN USED.

PART NO.	QTY.	DESCRIPTION	PART NO.	QTY.	DESCRIPTION
Standard Model					
123-1283	1	Filter, Breather Tube			
104-0450	1	Crankshaft			
102-0448	1	Base, Oil			
120-0551	1	Cup, Oil Pump Intake			

SPECIAL PARTS LIST FOR **MODEL** RDJEA-MS **SPEC** 1A
FOR STANDARD PARTS REFER TO **CATALOG** 974-0250 **KEY NO.** 2
OPTIONAL GROUPS IN CATALOG ARE LISTED BY GROUP NO. BELOW WHEN USED.

PART NO.	QTY.	DESCRIPTION	PART NO.	QTY.	DESCRIPTION
Standard Model					
104-0654	1	Crankshaft			
102-0448	1	Base, Oil			
120-0551	1	Cup, Oil Pump Intake			

SPECIAL PARTS LIST FOR MODEL RDJE-MS SPEC 2915A

FOR STANDARD PARTS REFER TO CATALOG 974-0250 KEY NO. 1

OPTIONAL GROUPS IN CATALOG ARE LISTED BY GROUP NO. BELOW WHEN USED.

PART NO.	QTY.	DESCRIPTION	PART NO.	QTY.	DESCRIPTION
Low Oil Pressure Cut Off					
120-0551	1	Cup, Oil Pump Intake			
104-0451	1	Crankshaft			
510-0046	10	Ball, Fly - Governor			
103-0228	1	Backplate, Gearcase			
104-0547	1	Flywheel - Includes Ring Gear			
104-0957	1	Hub, Flywheel			
104-0548	1	Flywheel Assembly - Includes Ring Gear And Hub			
104-0543	4	Spacer And Washer Assembly - Hub Mounting			
801-0054	4	Screw, Hub Mounting			
526-0273	4	Washer, Hub Mounting (1-1/8" O.D.)			
115-0150	4	Nut, Hub Mounting			
502-0103	1	Connector, Inverted Male - Thermostat Cover			
309-0160	1	Cover, Thermostat			
309-0145	1	Gasket, Thermostat Cover			
309-0130	1	Thermostat			
309-0156	1	Switch, High Water Temperature Cut Off			
501-0003	1	Line, Flexible - Oil Filter Adapter			
149-1279	1	Cover, Fuel Pump Opening			
309-0169	1	Switch, Low Oil Pressure			
193-0006	1	Gauge, Oil Pressure			
502-0058	1	Tee - Oil Pressure Switch And Gauge Mounting			
502-0053	1	Elbow - Oil Pressure Switch And Gauge Mounting			
502-0003	1	Connector, Inverted Male - Oil Fill Tube Assembly			
150-0823	1	Cover, Governor Spring			
141-0281	1	Gasket, Intake Manifold Mounting			
306-0193	1	Cover, Solenoid Plunger			
518-0218	2	Ring, Retaining - Solenoid Plunger Cover			
140-0645	1	Adapter, Air Cleaner Hose			
140-0584	1	Gasket, Air Cleaner Adapter To Air Cleaner Hose Adapter			
154-0712	1	Heater, Air Cleaner Adapter			
520-0011	2	Stud, Air Cleaner Adapter MTG.			
123-0865	1	Filter, Breather Tube			
102-0448	1	Base, Oil			
Parts Not Furnished By Onan Fuel Pump					

SPECIAL PARTS LIST FOR **MODEL** RDJEA-MS **SPEC** 3224A

FOR STANDARD PARTS REFER TO **CATALOG** 974-0250 **KEY NO.** 2

OPTIONAL GROUPS IN CATALOG ARE LISTED BY GROUP NO. BELOW WHEN USED.

PART NO.	QTY.	DESCRIPTION	PART NO.	QTY.	DESCRIPTION
Low Oil Pressure Cut Off					
104-0654	1	Crankshaft			
102-0448	1	Base, Oil			
306-0193	1	Cover, Solenoid Plunger			
518-0218	2	Ring, Retaining - Solenoid Plunger Cover			
193-0006	1	Gauge, Oil Pressure			
502-0058	1	Tee - Oil Pressure Switch And Gauge Mounting			
502-0053	1	Elbow - Oil Pressure Switch And Gauge Mounting			
502-0003	1	Connector, Inverted Male - Oil Fill Tube Assembly			
501-0003	1	Line, Flexible - Oil Filter Adapter			
309-0156	1	Switch, High Water Temperature Cut Off			
120-0551	1	Cup, Oil Pump Intake			

SPECIAL PARTS LIST FOR **MODEL** RDJEA-MS **SPEC** 3515A
 FOR STANDARD PARTS REFER TO **CATALOG** 974-0250 **KEY NO.** 2
 OPTIONAL GROUPS IN CATALOG ARE LISTED BY GROUP NO. BELOW WHEN USED.

PART NO.	QTY.	DESCRIPTION	PART NO.	QTY.	DESCRIPTION
Manufactured For: Advance Machine					
104-1042	1	Crankshaft			
122-0325	1	Filter, Fuel - Primary			
149-1020	1	Pump, Fuel			
120-0551	1	Cup, Oil Pump Intake			
306-0561	1	Bracket, Mounting - Stop Solenoid			
102-0509	1	Base, Oil			
505-0110	1	Plug, Pipe - Oil Drain (3/8" NPT)			
150-1591	1	Bracket, Mounting - Governor			
150-1590	1	Bracket, High Speed Stop - Governor			
150-1587	1	Spacer, Governor			
150-1624	1	Arm, Pivot - Governor			
104-1040	1	Pulley, Flywheel			
121-0025	1	Adapter - Hydraulic Pump			

SPECIAL PARTS LIST FOR **MODEL** RDJE-MS **SPEC** 3653A
 FOR STANDARD PARTS REFER TO **CATALOG** 974-0250 **KEY NO.** 1
 OPTIONAL GROUPS IN CATALOG ARE LISTED BY GROUP NO. BELOW WHEN USED.

PART NO.	QTY.	DESCRIPTION	PART NO.	QTY.	DESCRIPTION
Low Oil Pressure Cut Off Alternator					
191-1190	1	Flange, Starter			
123-1283	1	Filter, Breather Tube			
309-0177	1	Switch, Low Oil Pressure			
501-0003	1	Line, Flexible - Oil Filter Adapter			
309-0302	1	Thermostat, High Water Temperature Cut Off			
332-0529	1	Terminal, Brass - White Voltage Regulator Lead			
191-1277	1	Bracket, Alternator Support			
191-1278	1	Spacer, Alternator Support Bracket			
515-0003	1	Key, Crankshaft			
104-0450	1	Crankshaft			
102-0448	1	Base, Oil			
120-0551	1	Cup, Oil Pump Intake			

SPECIAL PARTS LIST FOR **MODEL** RDJEA-MS **SPEC** 3827A

FOR STANDARD PARTS REFER TO **CATALOG** 974-0250 **KEY NO.** 2

OPTIONAL GROUPS IN CATALOG ARE LISTED BY GROUP NO. BELOW WHEN USED.

PART NO.	QTY.	DESCRIPTION	PART NO.	QTY.	DESCRIPTION
104-0654	1	Crankshaft			
102-0448	1	Base, Oil			
120-0551	1	Cup, Oil Pump Intake			
104-1040	1	Pulley, Flywheel			
515-0003	1	Key, Crankshaft			