

MAVAER 02-05JR-44

CATALOG PART No.
852694

**Final Spare Parts List
with Prices**

FOR

**Wright Whirlwind R760-S & R975-28
Navy Engines**



Contract Number	Model
Navy NOs-75066 (150 Engines)	R760-S
Army W535 AC-15747 (199 Engines)	R975-28
Army W535 AC-17348 (18 Engines)	R975-28

WRIGHT AERONAUTICAL CORPORATION

A Division of Curtiss-Wright Corporation

PATERSON, N.J., U.S.A.

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SECTION II N T R O D U C T I O N1. General

a. This catalog lists and describes the parts for Whirlwind R760-8 and R975-28 engines and is divided into five (5) sections as shown in the index.

b. The Assembly Parts List (Section III) consists of the complete engine divided into seventeen (17) main groups as shown in the index. The major assemblies and sub-assemblies of the complete engine are listed in one of the main groups assigned for a particular assembly. Each assembly listed is followed immediately by its component parts properly indented thereunder to show their relationship to the assembly. Component parts of the complete engine which are not included in any assembly but which are used in conjunction with, attach, or attach to a certain assembly, are listed immediately following the last detail of that assembly and in line with the major assembly.

c. Parts not serviced are indicated in both the Assembly Parts List and Numerical Parts List by an asterisk (*) preceding the part number.

d. The quantities specified in the Assembly Parts List are those used at the location shown and not necessarily the total number used per engine. Refer to the Numerical Parts List (Section IV) for the total quantities used per engine.

e. Parts which may be obtained in oversize or undersize are indicated throughout the catalog by an at sign (@) preceding the part number. The oversize or undersize parts are listed in the Numerical Parts List immediately following the standard size part.

f. Part numbers are used exclusively to identify parts.

g. The "R" or reference numbers appearing on the illustrations are numerically arranged in the Assembly Parts List and are used mainly to assist in locating a part in the Assembly Parts List after it has been found on an illustration. A column listing Figure Nos. is also included in the Assembly Parts List adjacent to the Reference No. column to facilitate reference to the Illustrated Parts List.

h. The index at the front of the book shows the method of grouping the parts, the sequence of the groups and the illustration figure number on which they are shown.

i. Notes such as "Supersedes", "No longer supplied", etc., refer to future procurements and will be disregarded by overhaul personnel in the absence of separate specific instructions concerning the use of such items. All dimensions shown herein are nominal. They are inserted to facilitate identification for ordering and are not to be construed as restrictive in inspection.

2. Nomenclature of Parts

a. Drawing titles are used in the Numerical Parts List section only. In cases where the drawing title differs from the functional title, the functional title is sub-titled and shown in parenthesis under the drawing title.

b. Functional titles are used exclusively in both the Assembly and Alphabetical Parts List sections.

3. Replacement Studs

a. Replacement studs are furnished in the following sizes: Standard, .003" O.S., .007" O.S. and .012" O.S. Only the standard size or the .003" O.S. studs are listed in the Assembly Parts List. Additional oversize studs may be obtained as listed in paragraph "b" below.

b. The part number of any given size stud and its oversize are identical except for the letter designation. These letter designations and the markings used for identification are as follows:

<u>Letter Designation</u>	<u>Size</u>	<u>Identification Marking</u>
xxxxDxx	Standard	Plain end
xxxxHxx	.003" O.S.	Pointed end
xxxxSxx	.007" O.S.	Countersunk end
xxxxJxx	.012" O.S.	Drilled end, 3/32" hole, 3/32" deep

c. Where "H" (.003" O.S.) studs are listed in the Assembly Parts List section, they are to be used as the first replacement of the "D" (standard size) studs originally installed in engines.

4. "Right" and "Left"

The terms "Right" and "Left" in connection with parts listed in this catalog refer to the viewpoint from the rear of the engine.

5. Cylinder Numbers

Viewing the engine from the rear, cylinders are numbered in the clockwise rotation, the top cylinder being number one.

6. Abbreviations

The abbreviations used throughout this catalog are as follows:

<u>Abbreviations</u>	<u>Full Name</u>
O.D.	Outside diameter
I.D.	Inside diameter
O.S.	Oversize
U.S.	Undersize
R.H.	Right hand
L.H.	Left hand
Hex.	Hexagon

7. Engine Numbers

a. The engine serial numbers of the engines included in this catalog are as follows:

<u>Bureau Engine Serial Numbers</u>	<u>Manufacturer's Engine Serial Numbers</u>	<u>Engine Model Designation</u>	<u>Contract Numbers</u>
7531 to 7545	14769 to 14783	R760-8	75066
7546 to 7680	39766 to 39900	R760-8	75066
9094 to 9148	40401 to 40455	R975-28	W535 AC-15747
9149	18692	R975-28	W535 AC-15747
9150 to 9292	40457 to 40599	R975-28	W535 AC-15747
13739 to 13744	18914 to 18919	R975-28	W535 AC-17348
16297 to 16308	18900 to 18911	R975-28	W535 AC-17348

(367 engines on contract)

b. In listing engines throughout this catalog the word "inclusive" has not been used. It will be understood that all groups of engine numbers, such as 14769 to 14783, include the first and last engines.

SECTION III L L U S T R A T E D P A R T S L I S TLIST OF ILLUSTRATIONS

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ILLUSTRATIONS

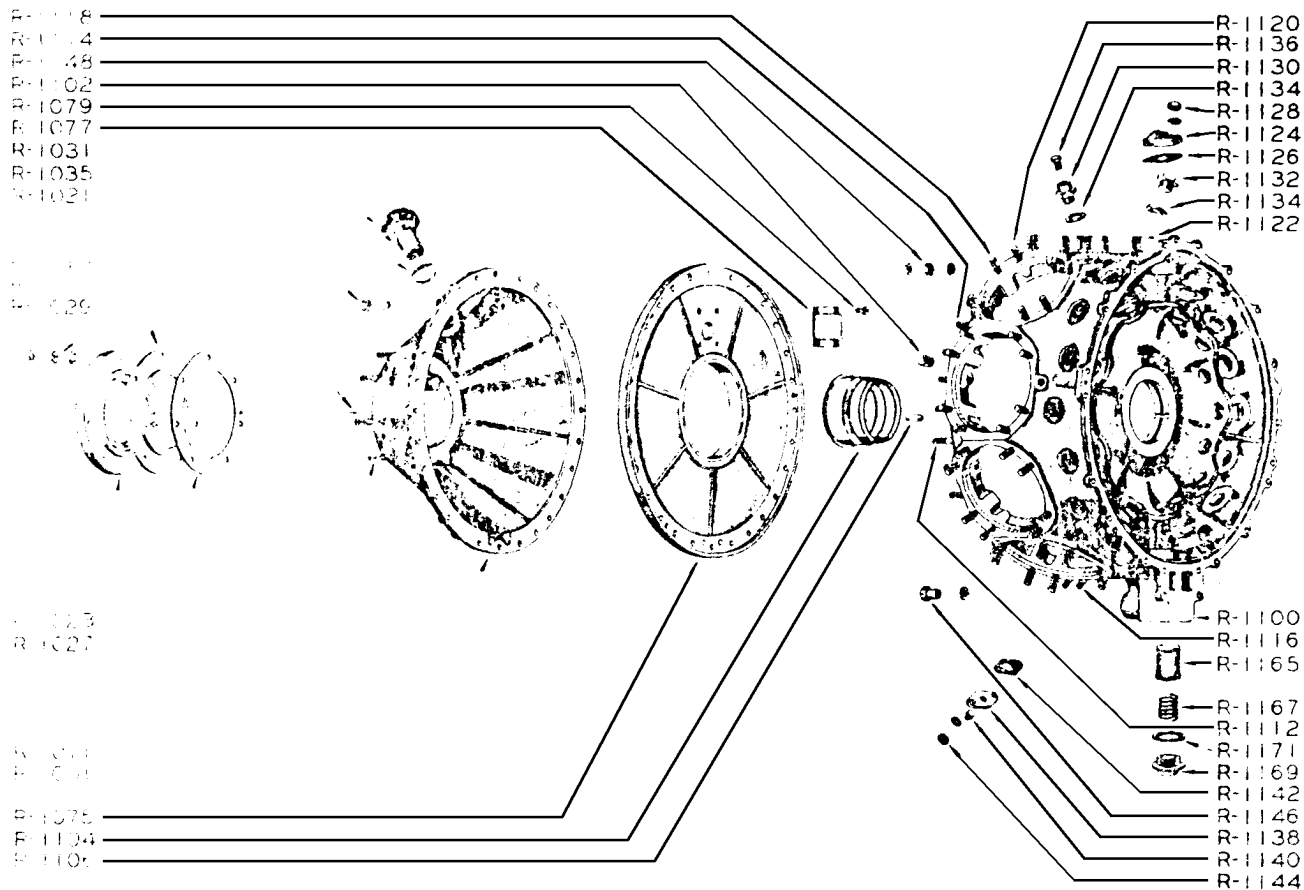


Figure 1

CRANKCASE FRONT SECTION (WITHOUT PROVISION FOR MOUNTING PROPELLER GOVERNOR)
MAIN BEARING SUPPORT AND MAIN SECTION

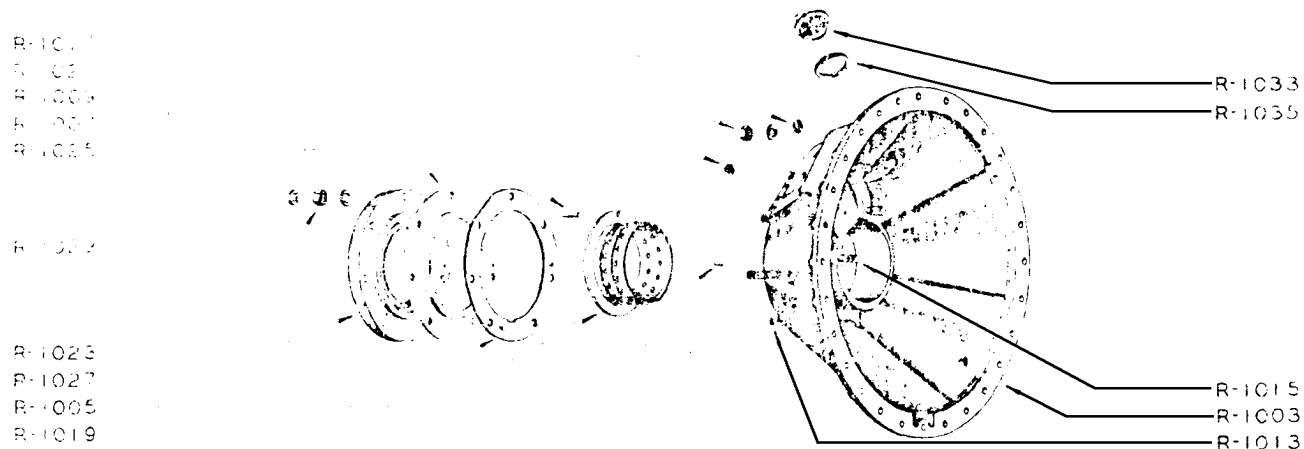


Figure 2

CRANKCASE FRONT SECTION (WITH PROVISION FOR MOUNTING PROPELLER GOVERNOR)

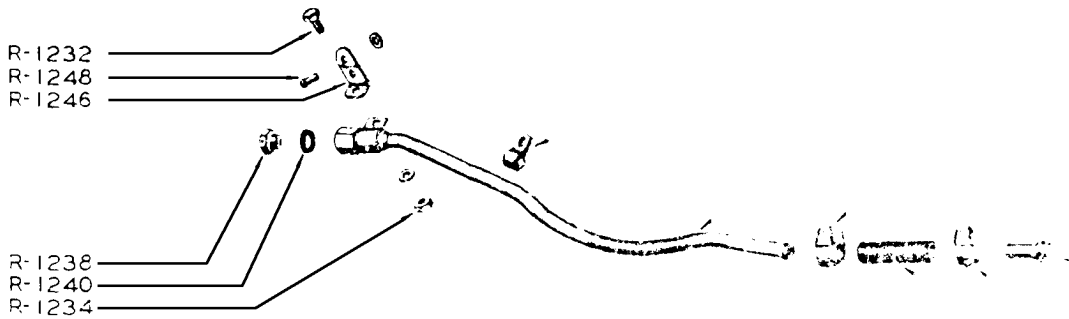
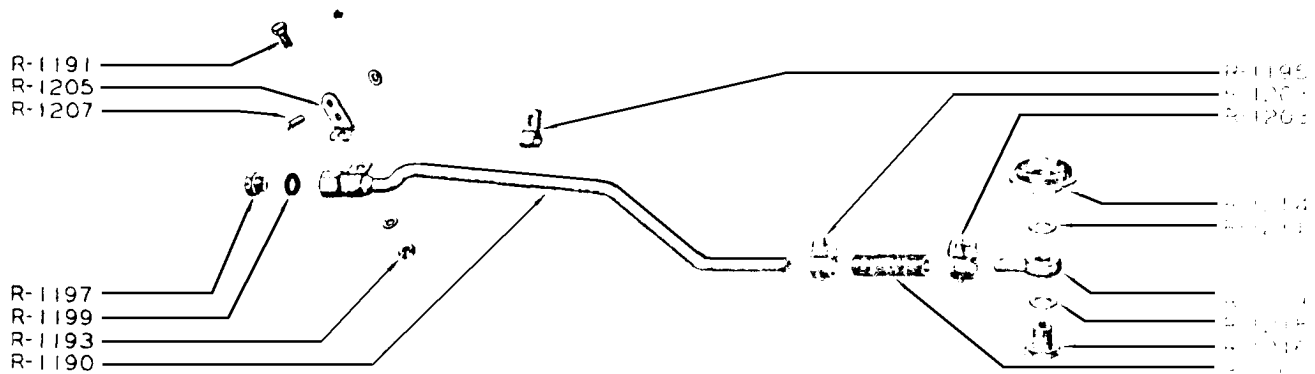
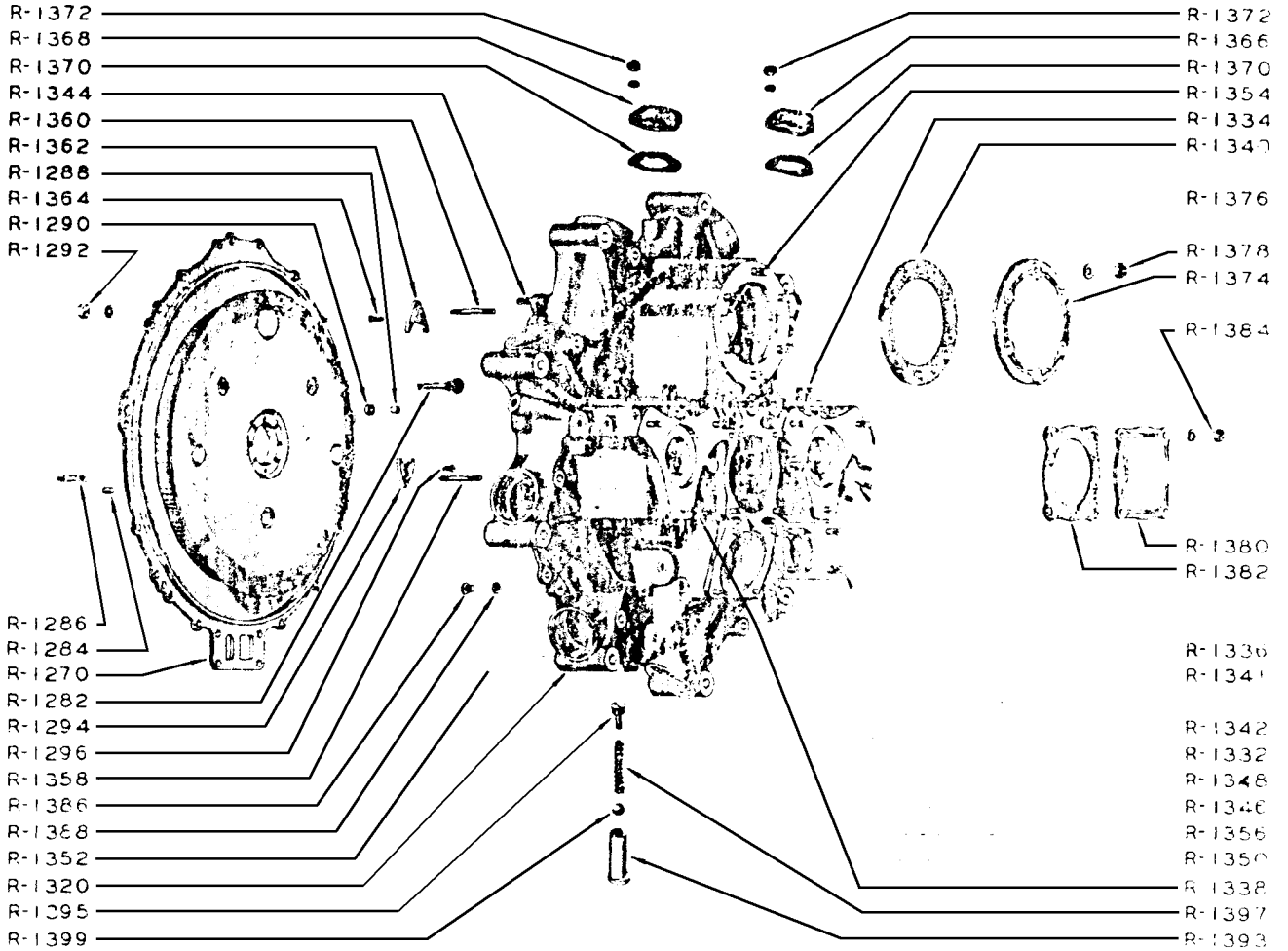


Figure 4
CRANKCASE MAIN SECTION OIL SUMP DRAIN TUBE (R975)



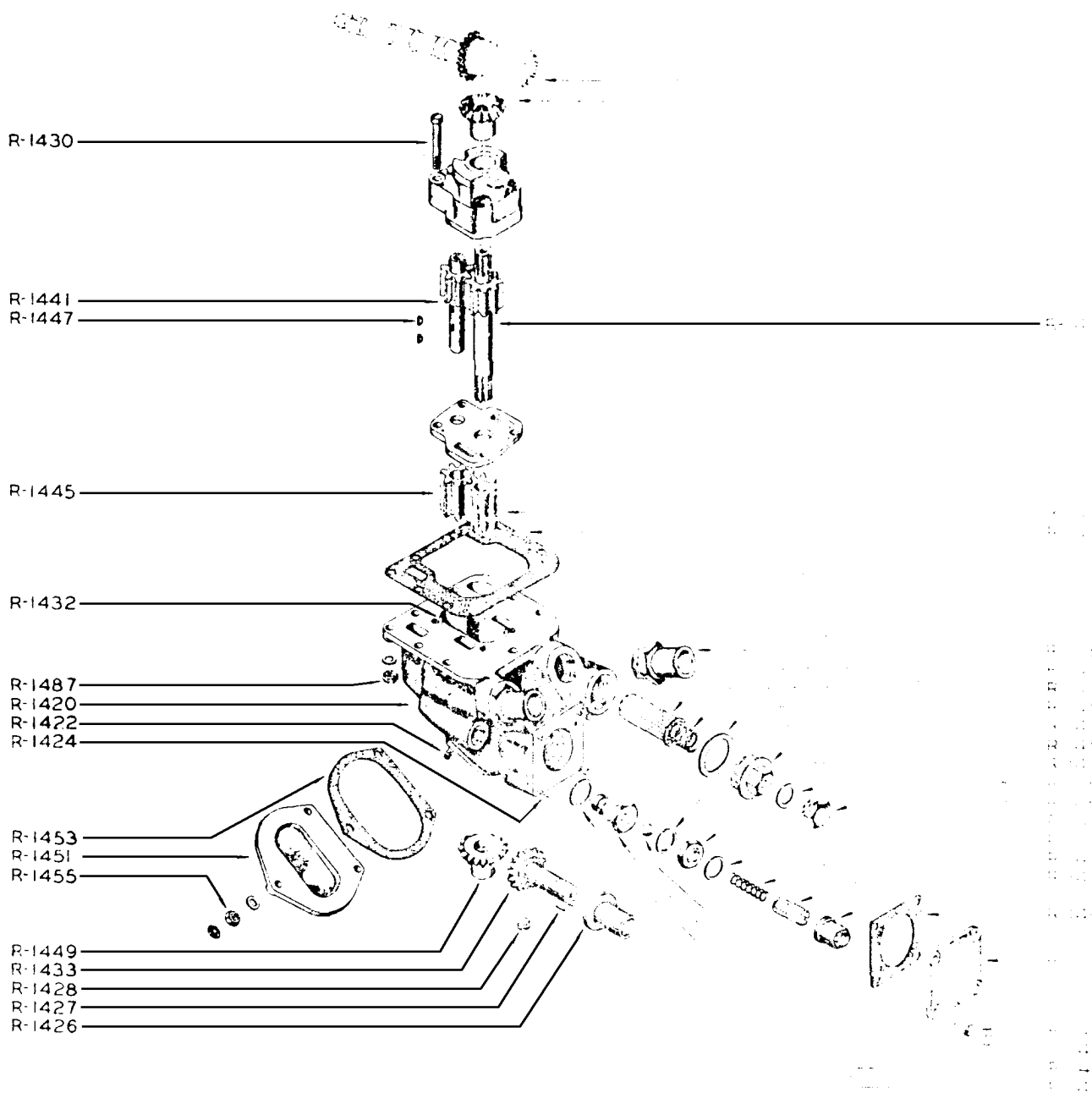


Figure 6
OIL PUMP

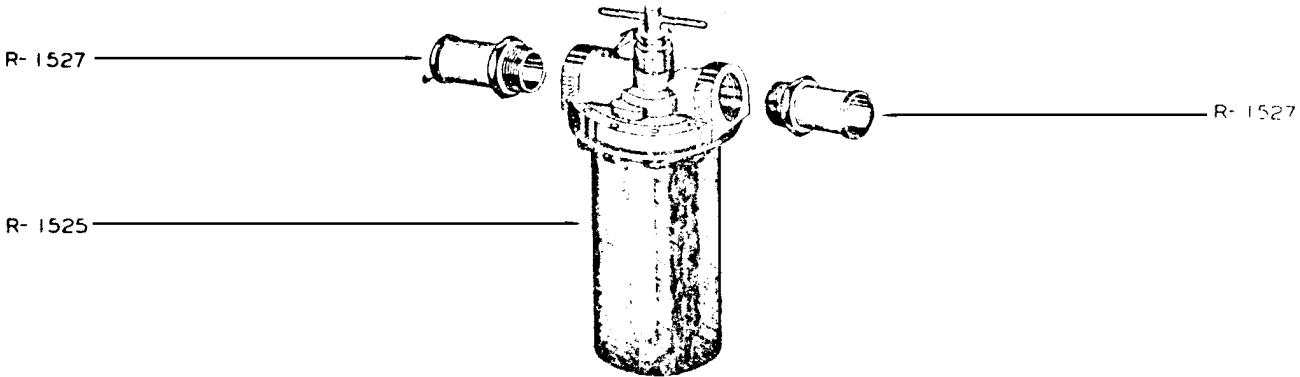


Figure 7
OIL STRAINER

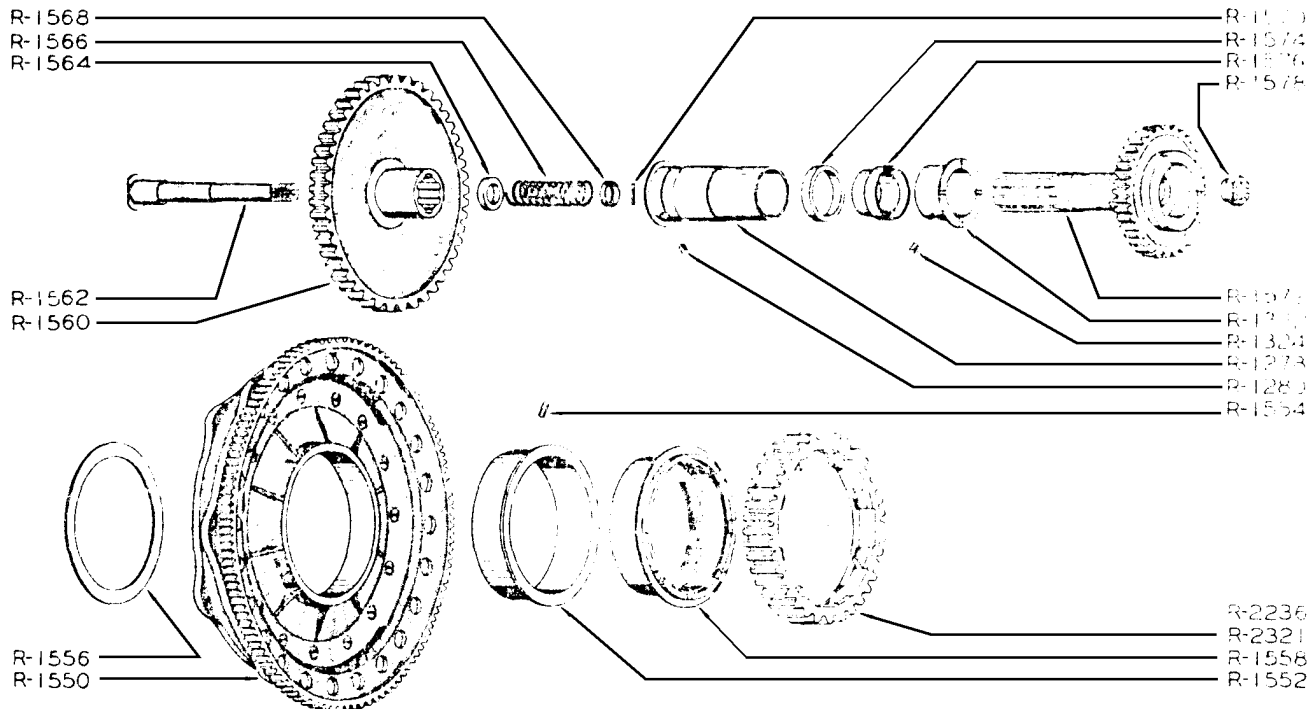


Figure 8
CAM, CAM DRIVE AND STARTER DRIVE

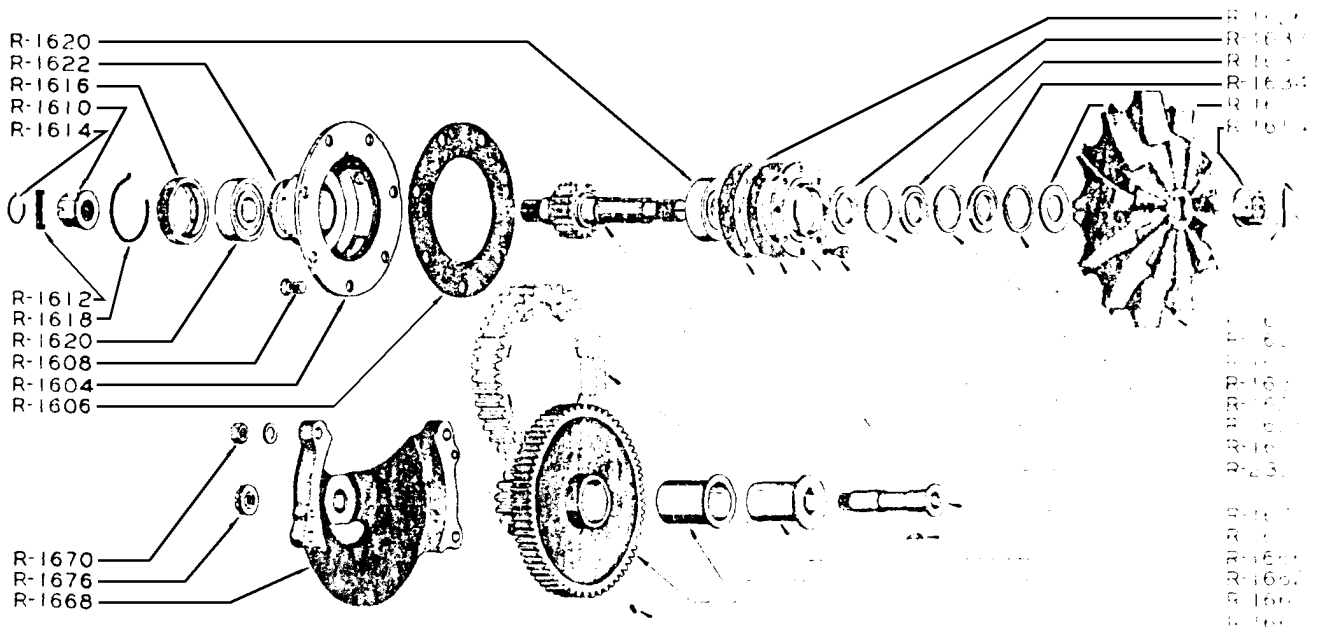


Figure 9
IMPELLER AND IMPELLER DRIVE

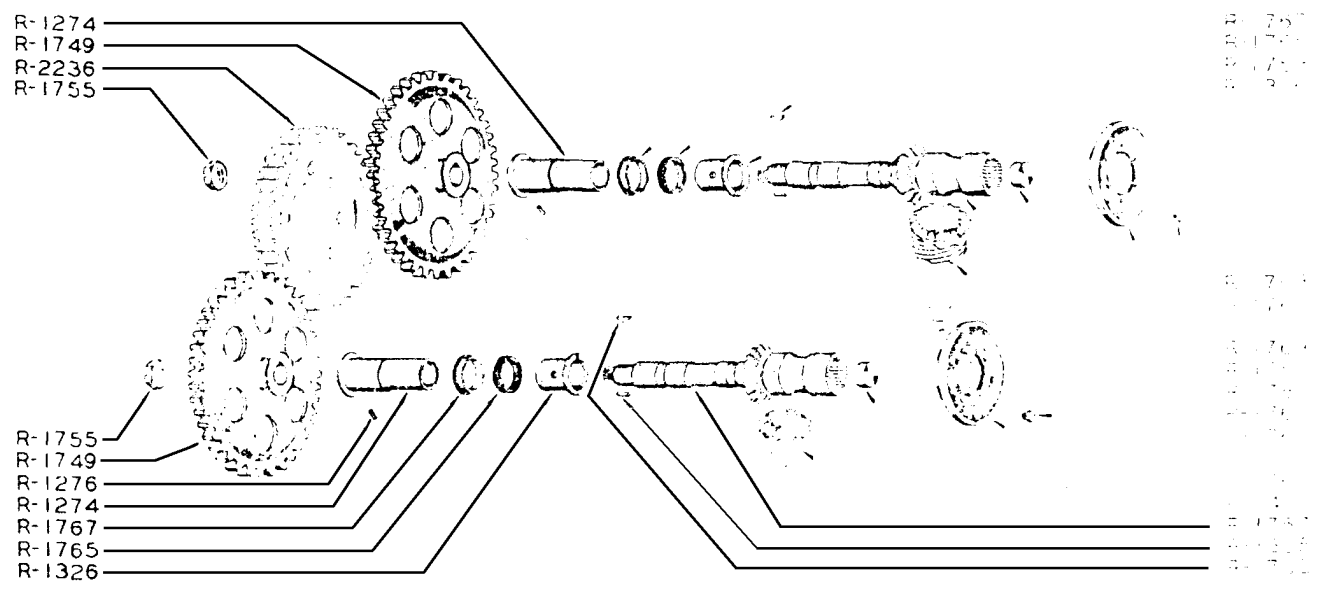


Figure 10
MAGNETO, OIL PUMP AND TACHOMETER DRIVES (R760)

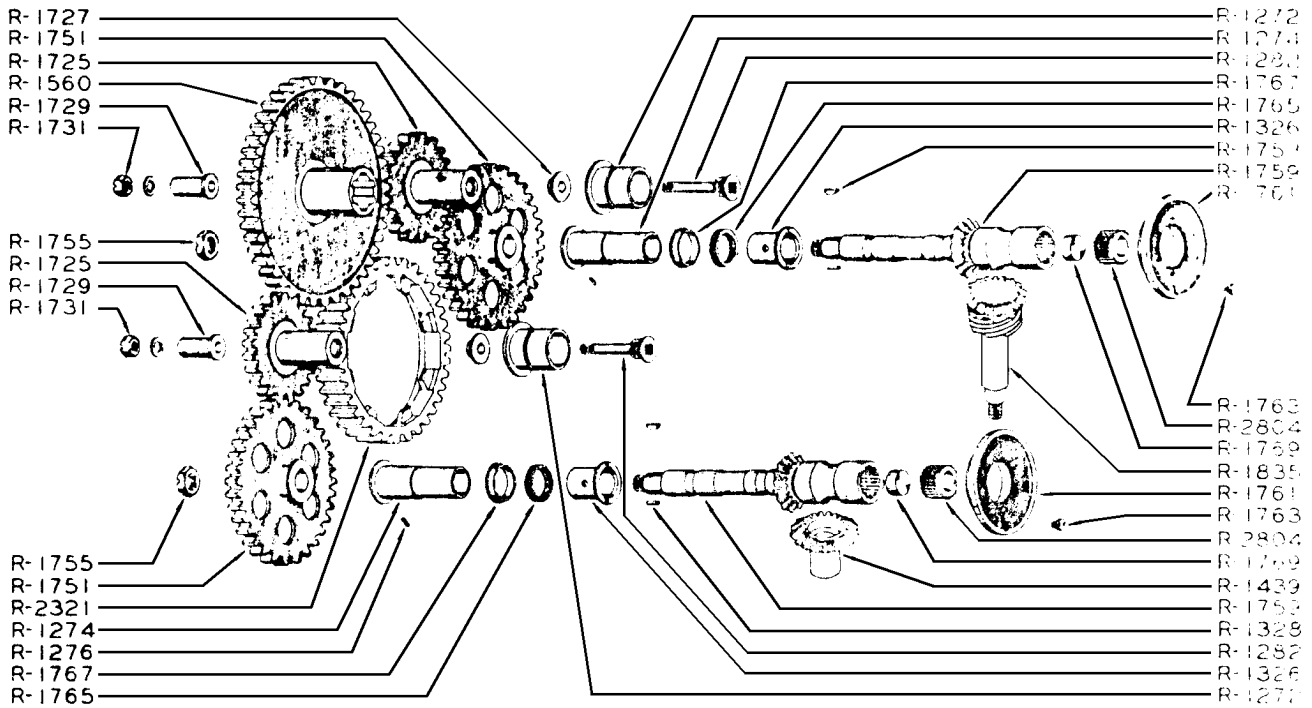


Figure 11

MAGNETO, OIL PUMP AND TACHOMETER DRIVES (R975)

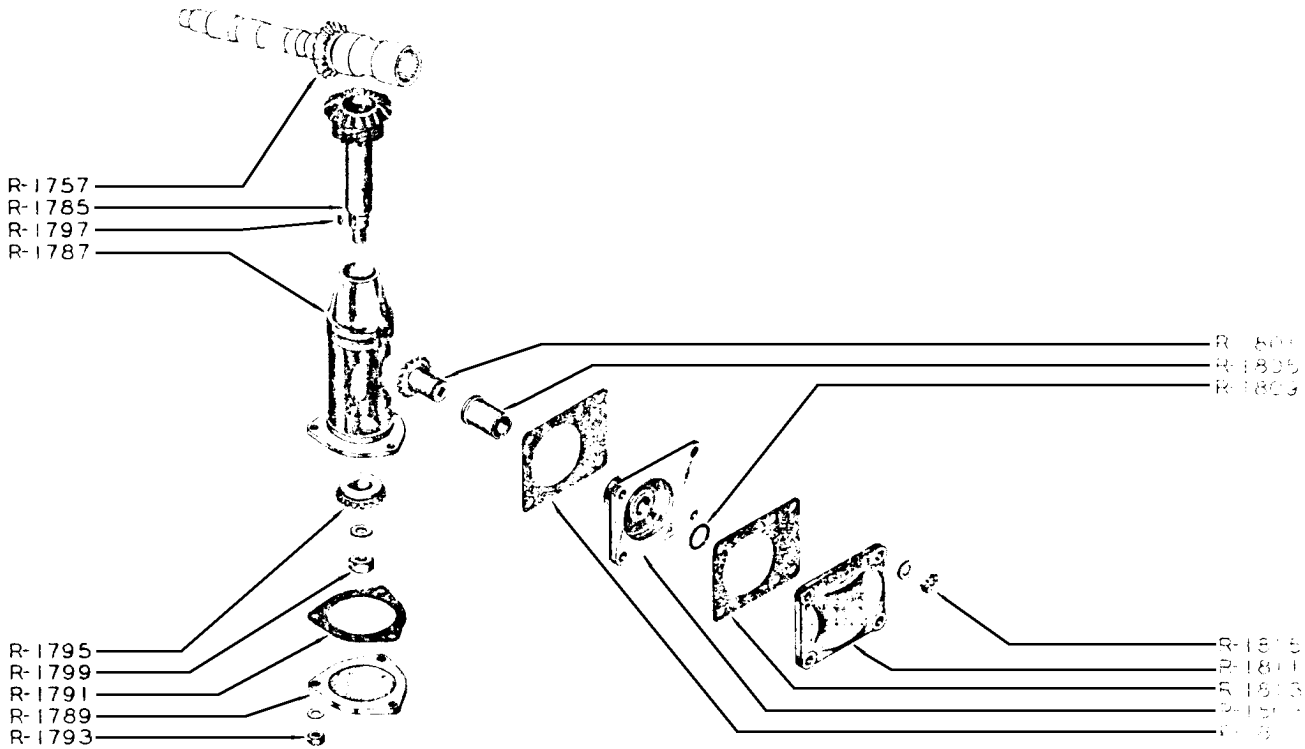


Figure 12

FUEL PUMP DRIVE (FOR ENGINE WITHOUT THREE-WAY ACCESSORY DRIVE)

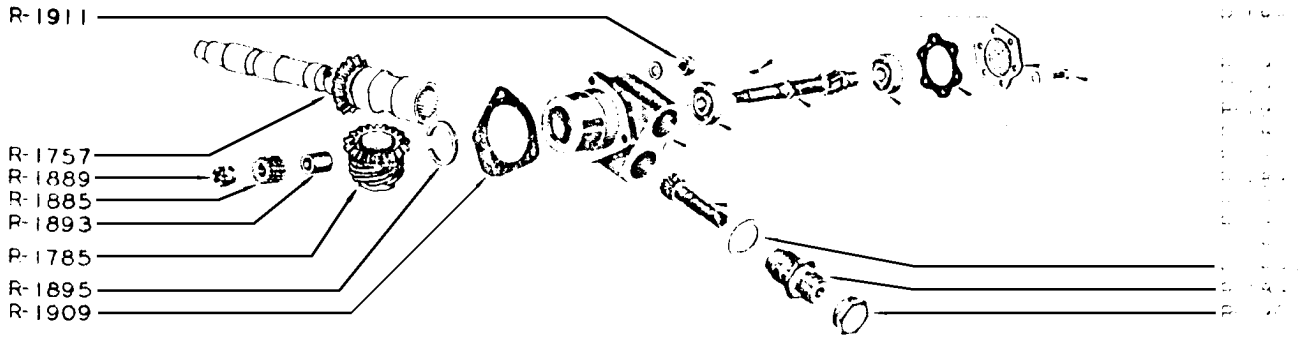


Figure 13

TACHOMETER DRIVE (FOR CABLE DRIVEN TACHOMETER ONLY)

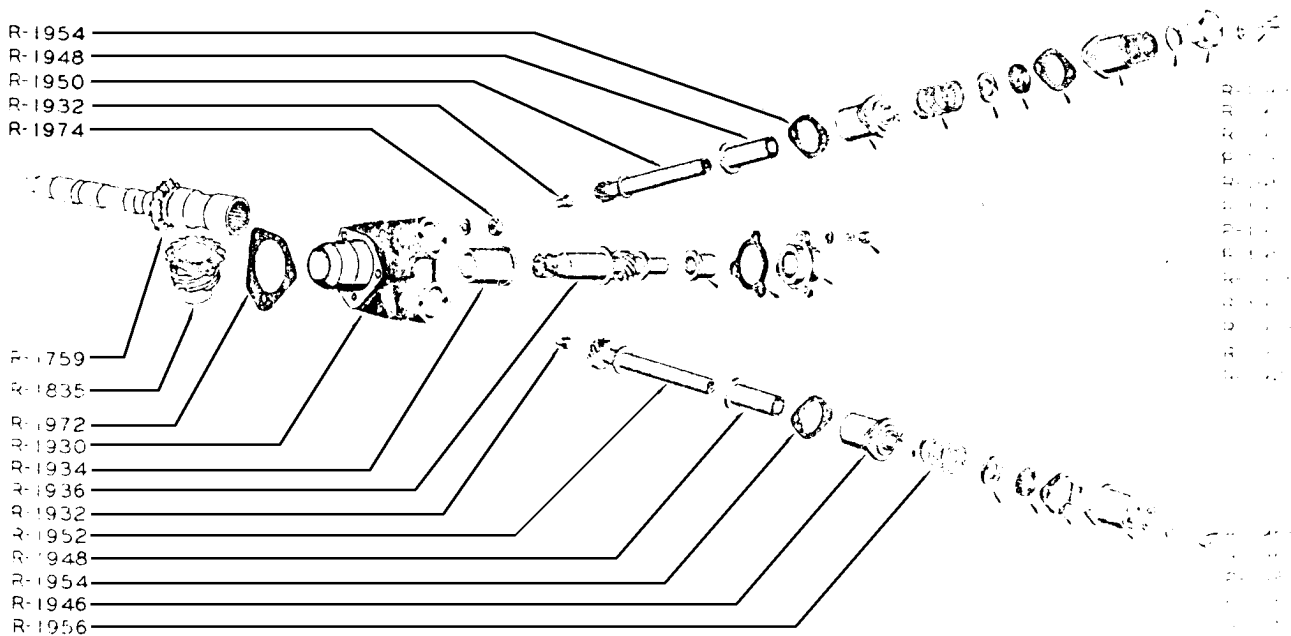


Figure 14

TACHOMETER DRIVE (FOR BOTH CABLE AND ELECTRICALLY DRIVEN TACHOMETERS)

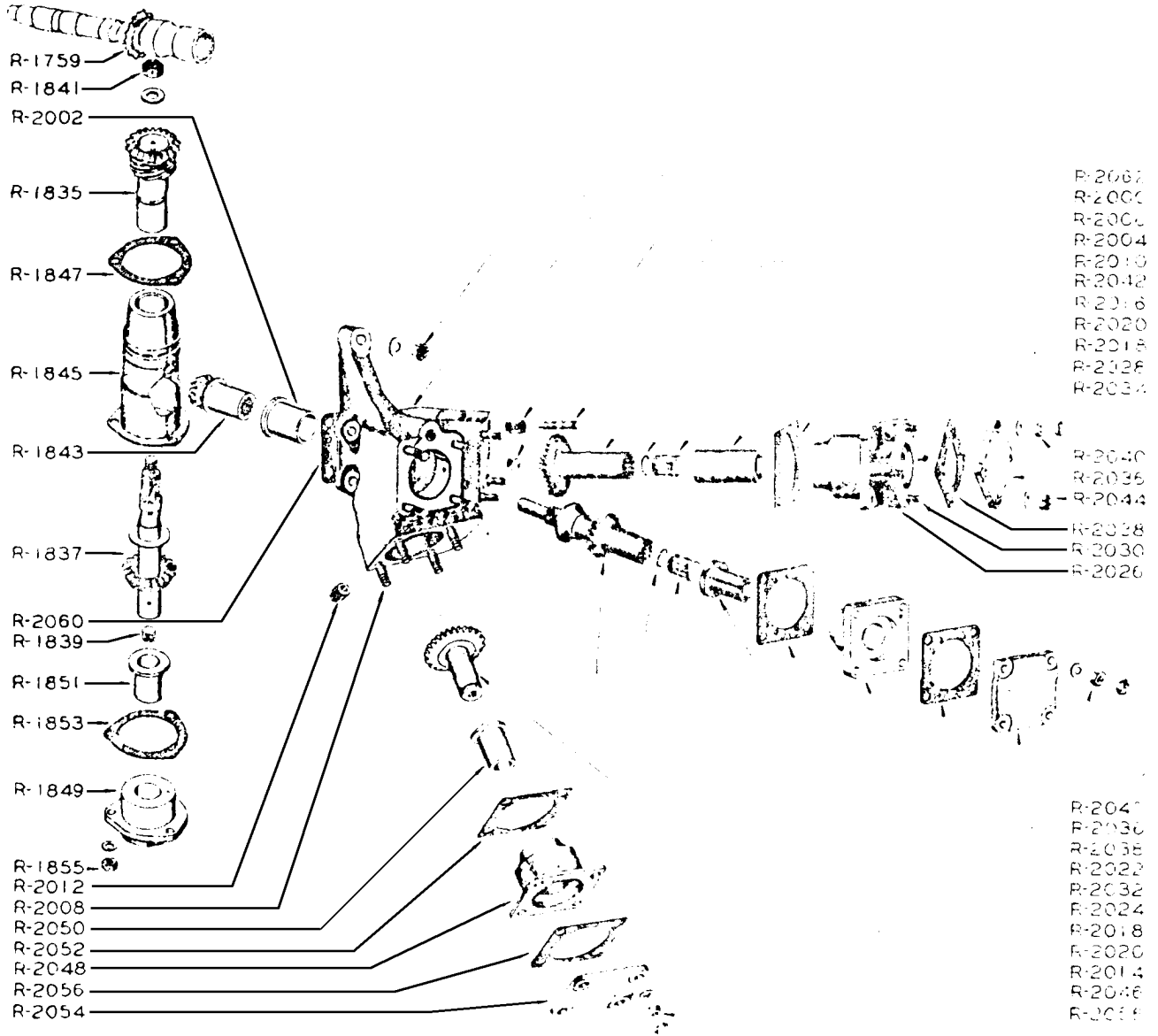


Figure 15

THREE-WAY ACCESSORY DRIVE

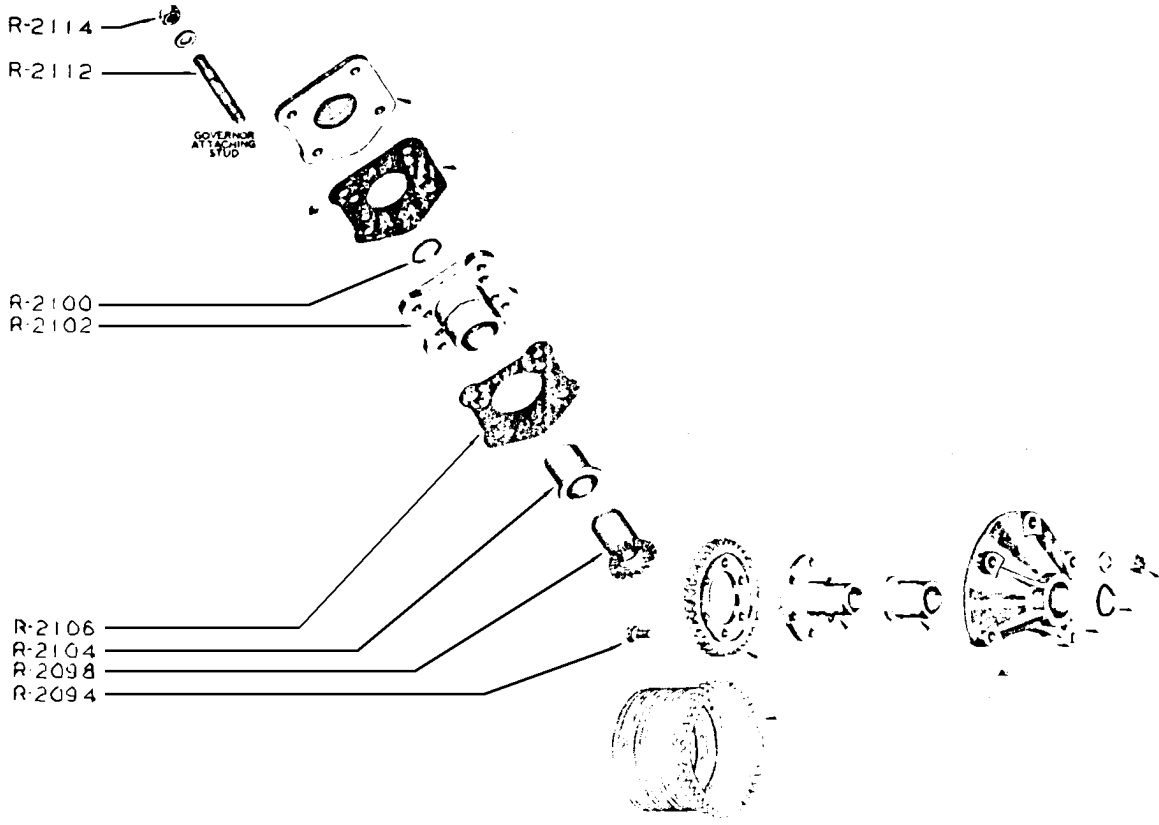


Figure 16

PROPELLER GOVERNOR DRIVE (FOR GOVERNOR MOUNTED ON CRANKCASE FRONT SECTION)

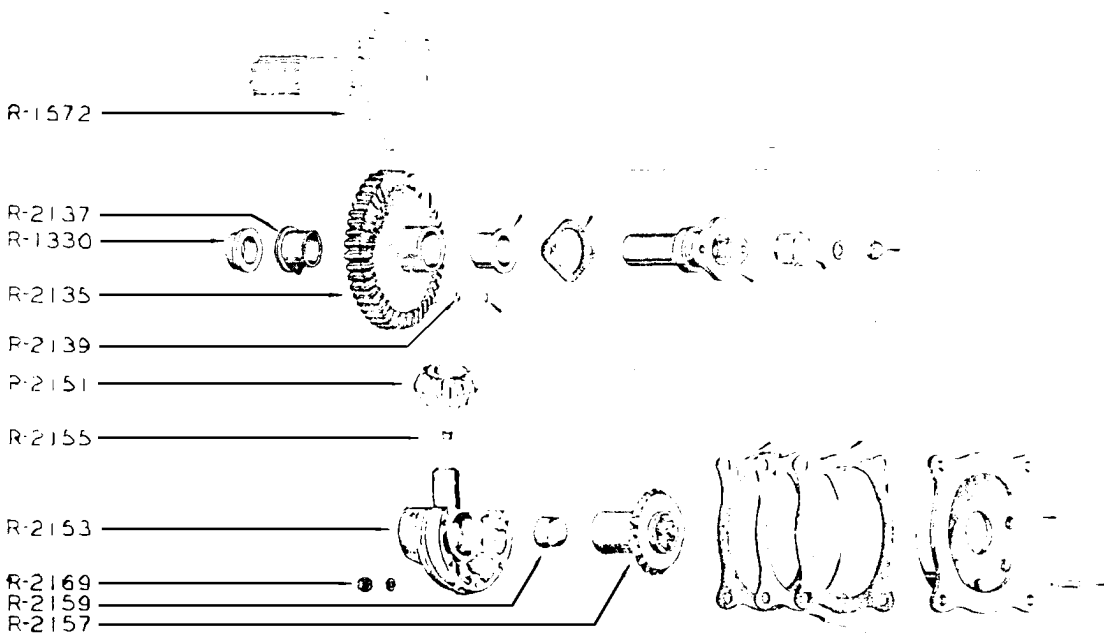


Figure 17

GENERATOR DRIVE (CLOCKWISE, BEVEL GEAR TYPE)

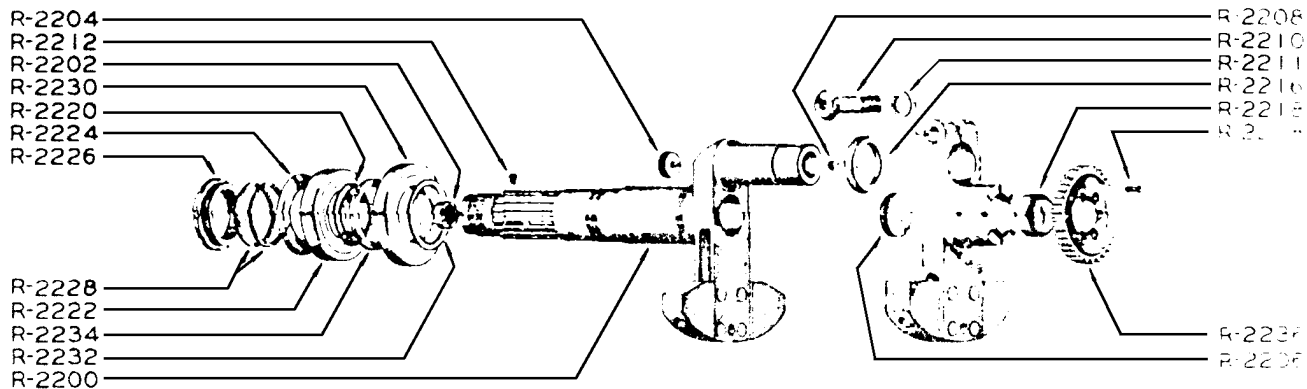


Figure 18
CRANKSHAFT (R760)

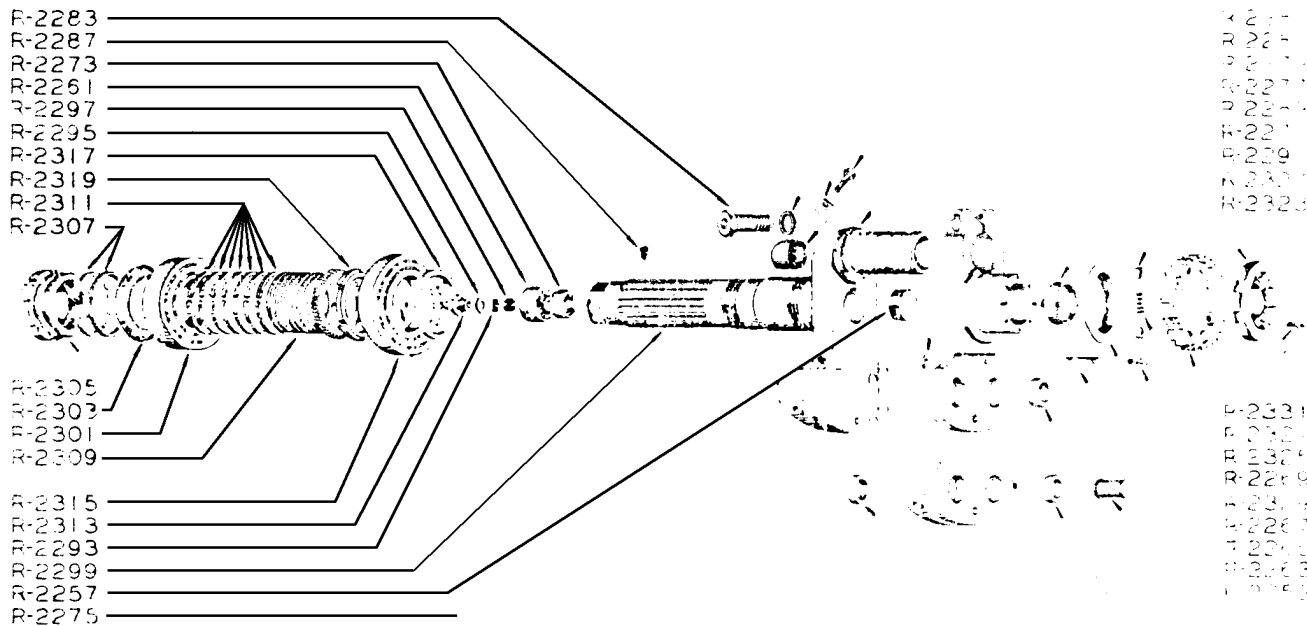


Figure 19
CRANKSHAFT (R975)

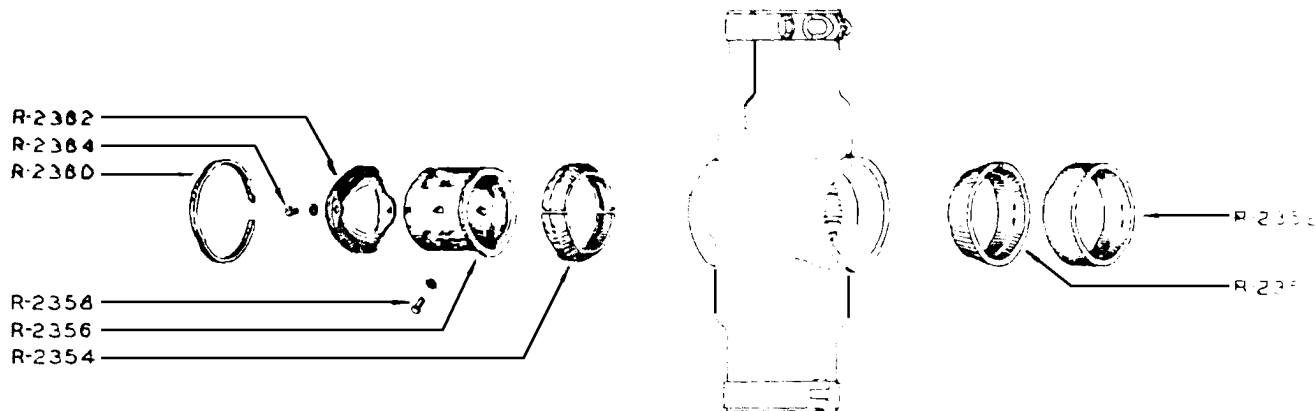


Figure 20
PROPELLER HUB ATTACHING PARTS

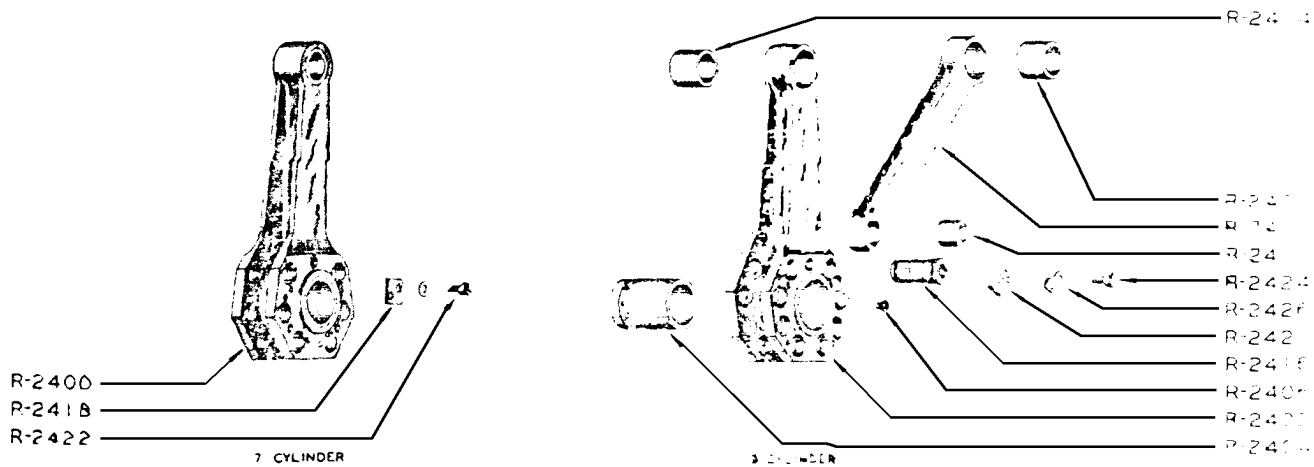


Figure 21
CONNECTING RODS

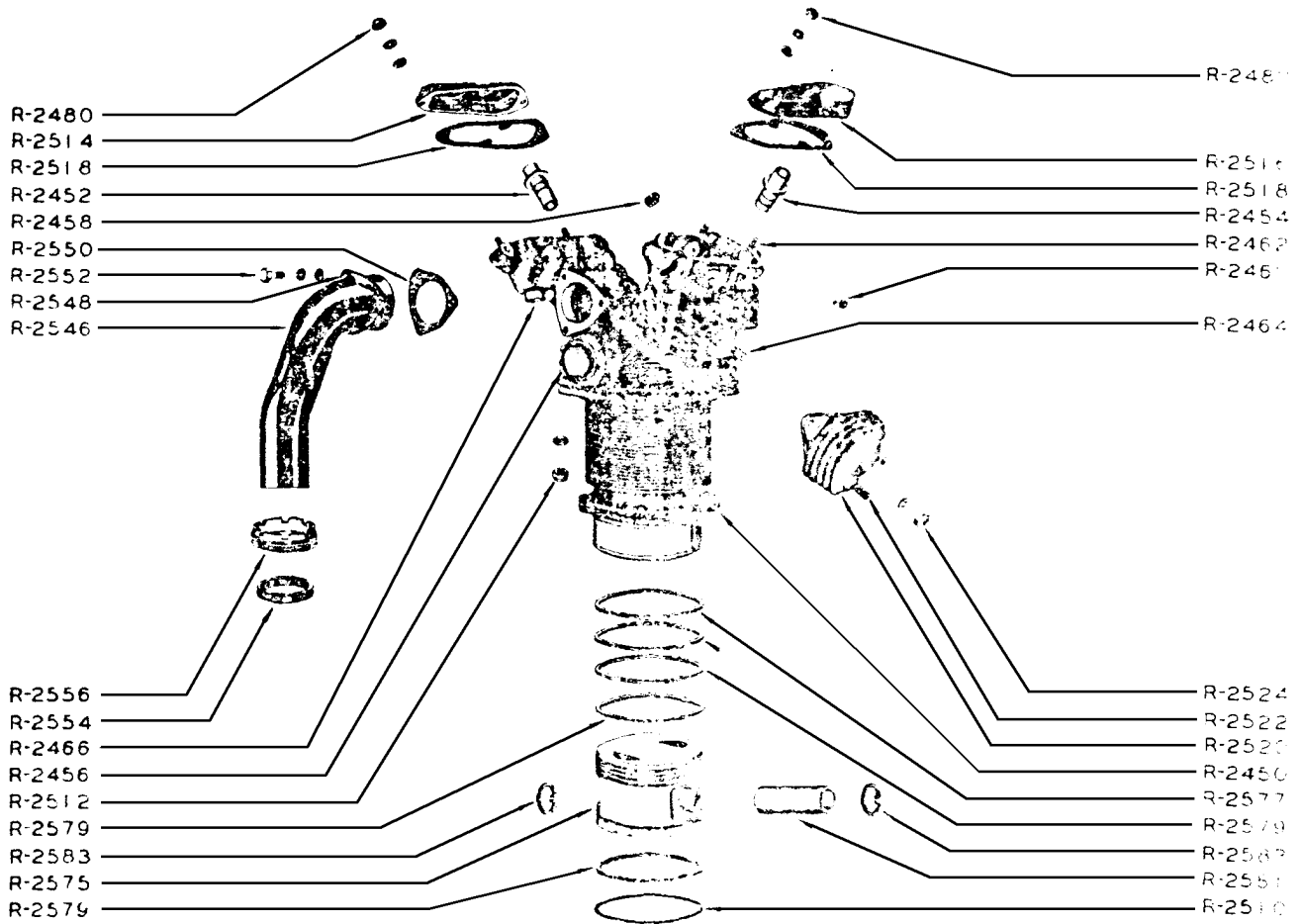


FIGURE 22
CYLINDER, INTAKE PIPE AND PISTON

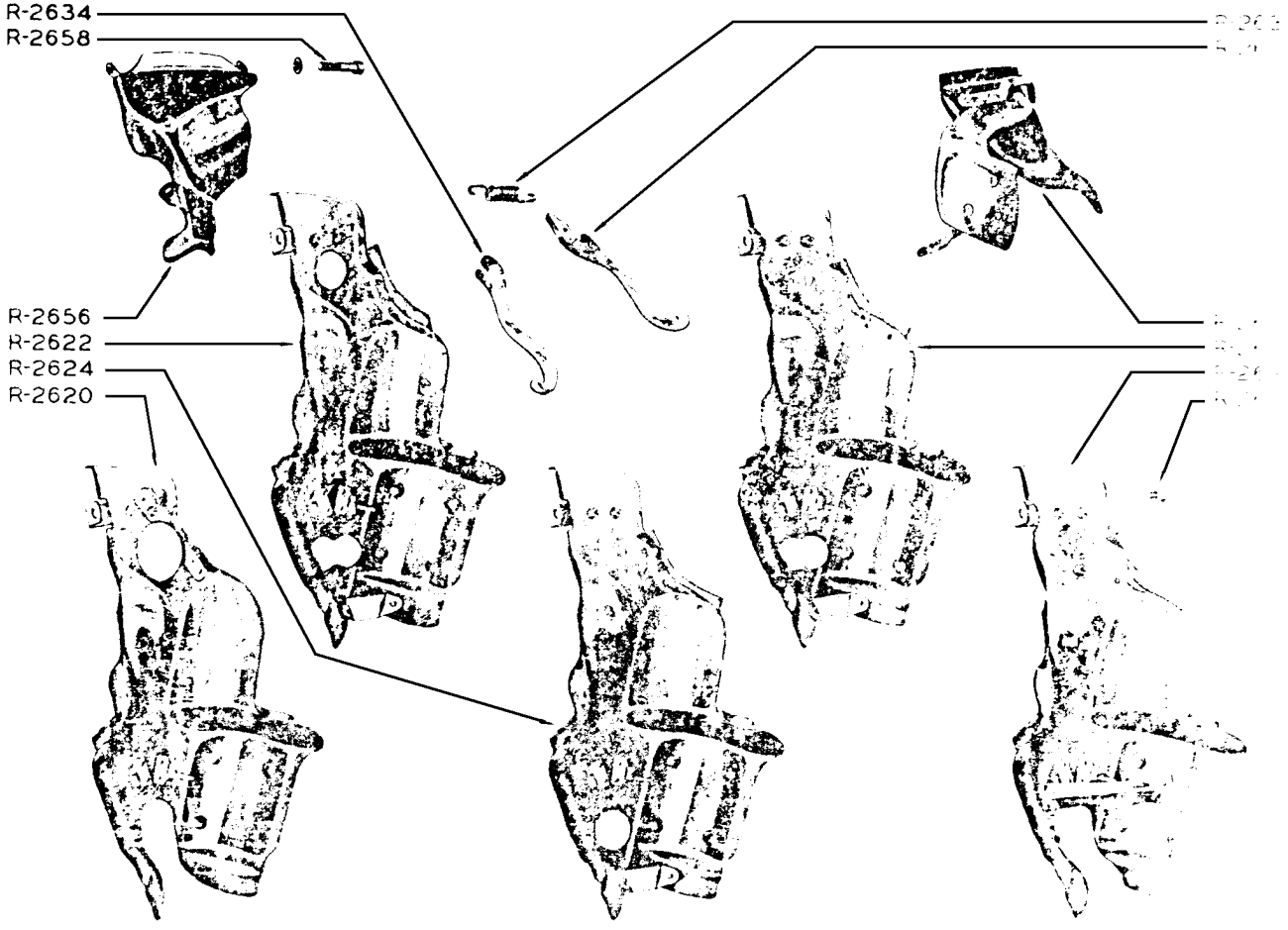


Figure 23
CYLINDER AIR DEFLECTORS

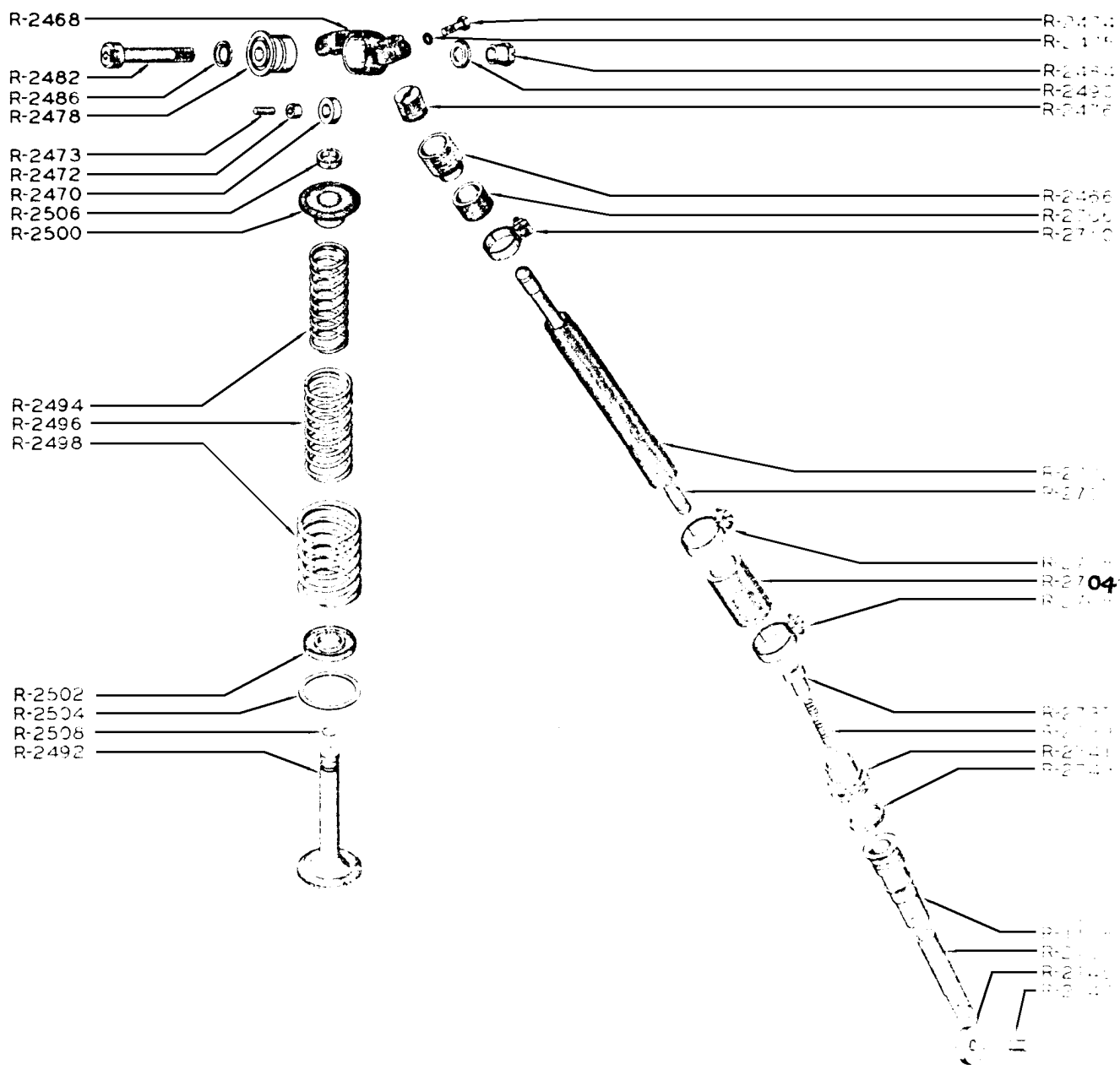


Figure 24
VALVE MECHANISM

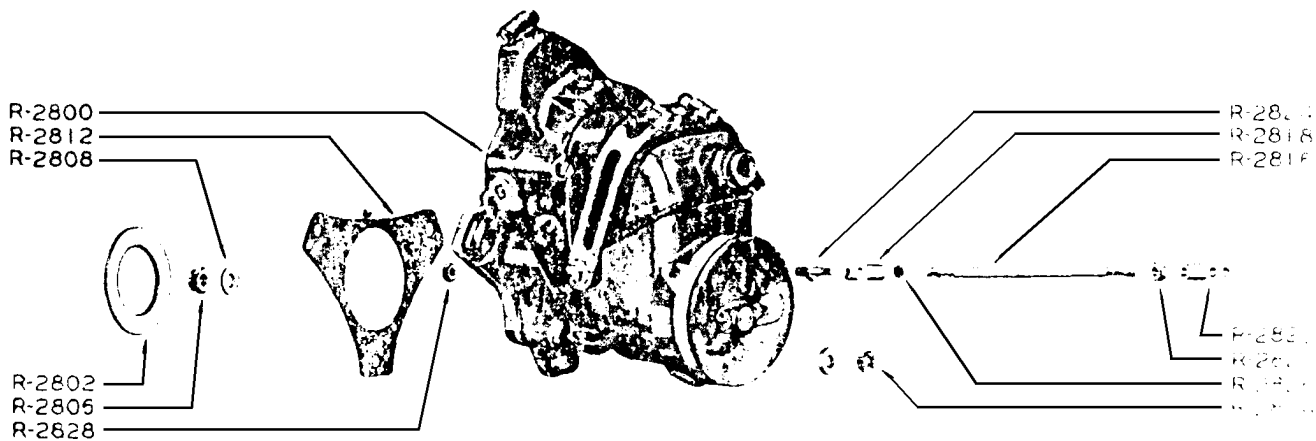


Figure 25

MAGNETO

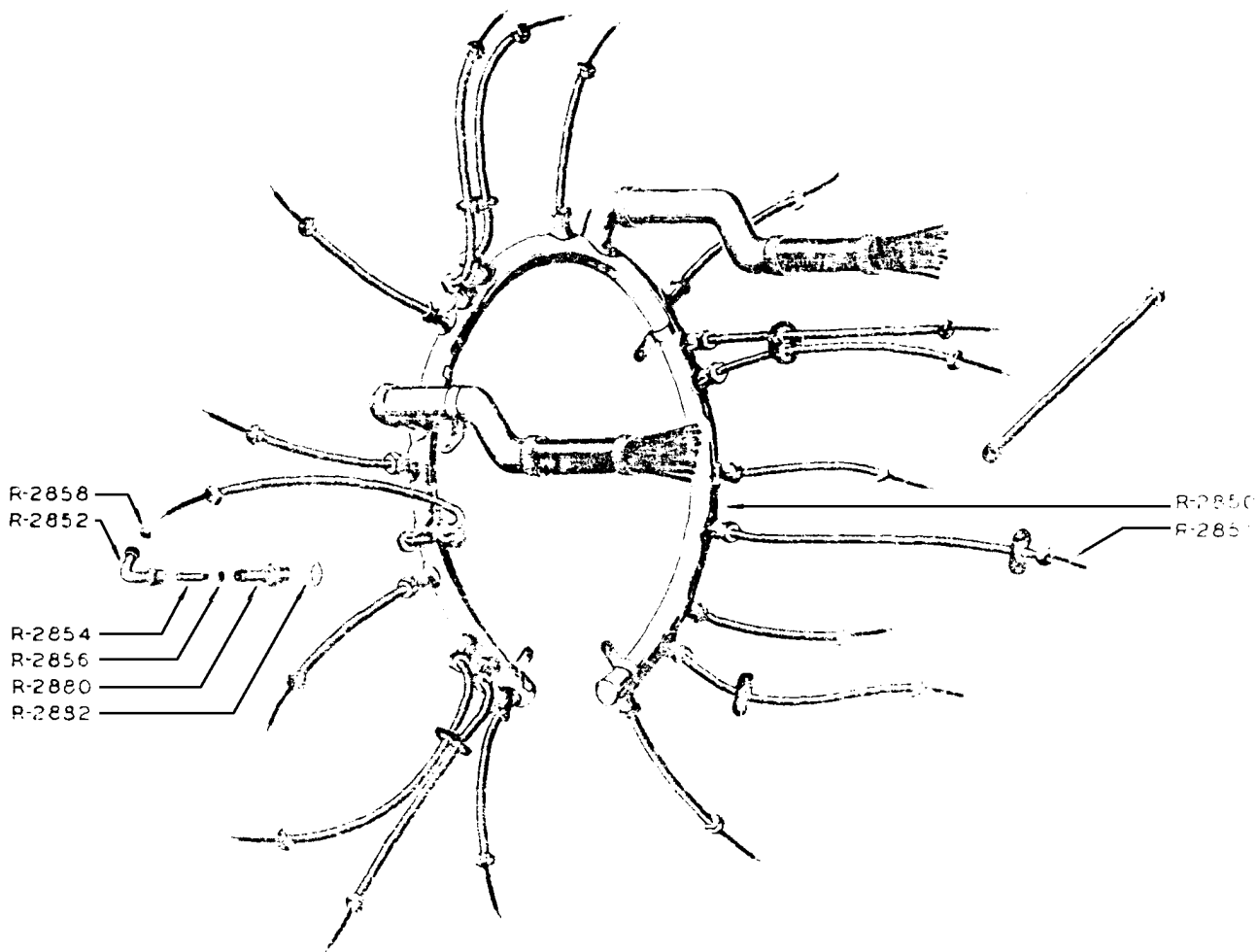


Figure 26

RADIO-SHIELDED WIRING HARNESS

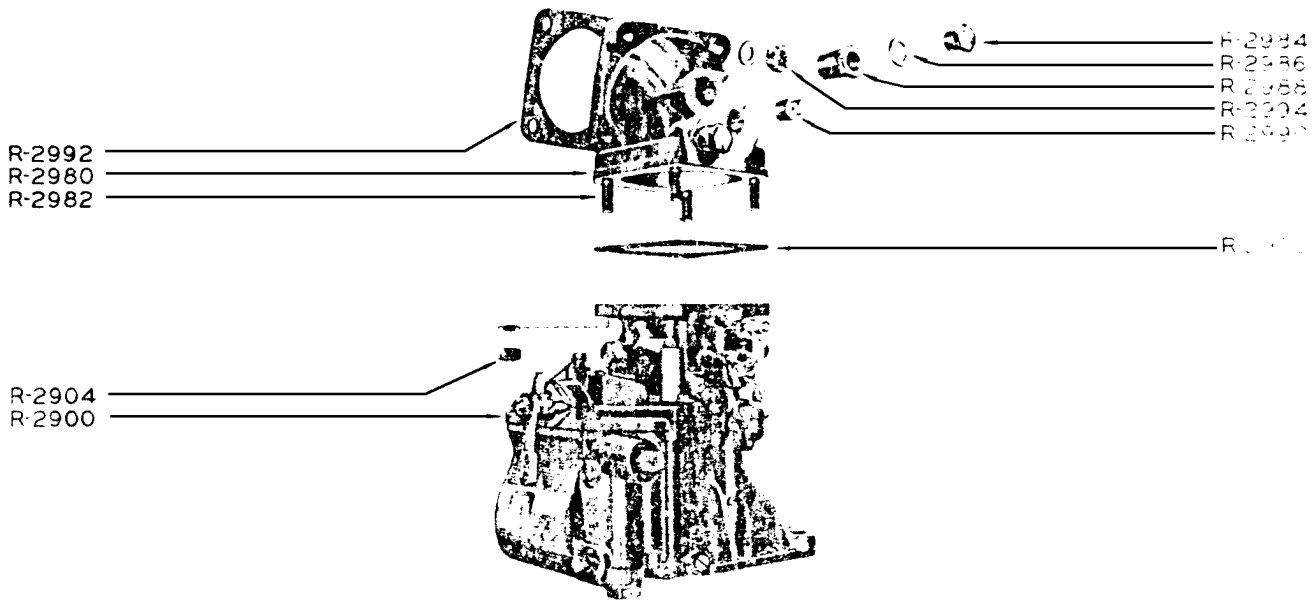


Figure 27

CARBURETOR AND CARBURETOR ELBOW

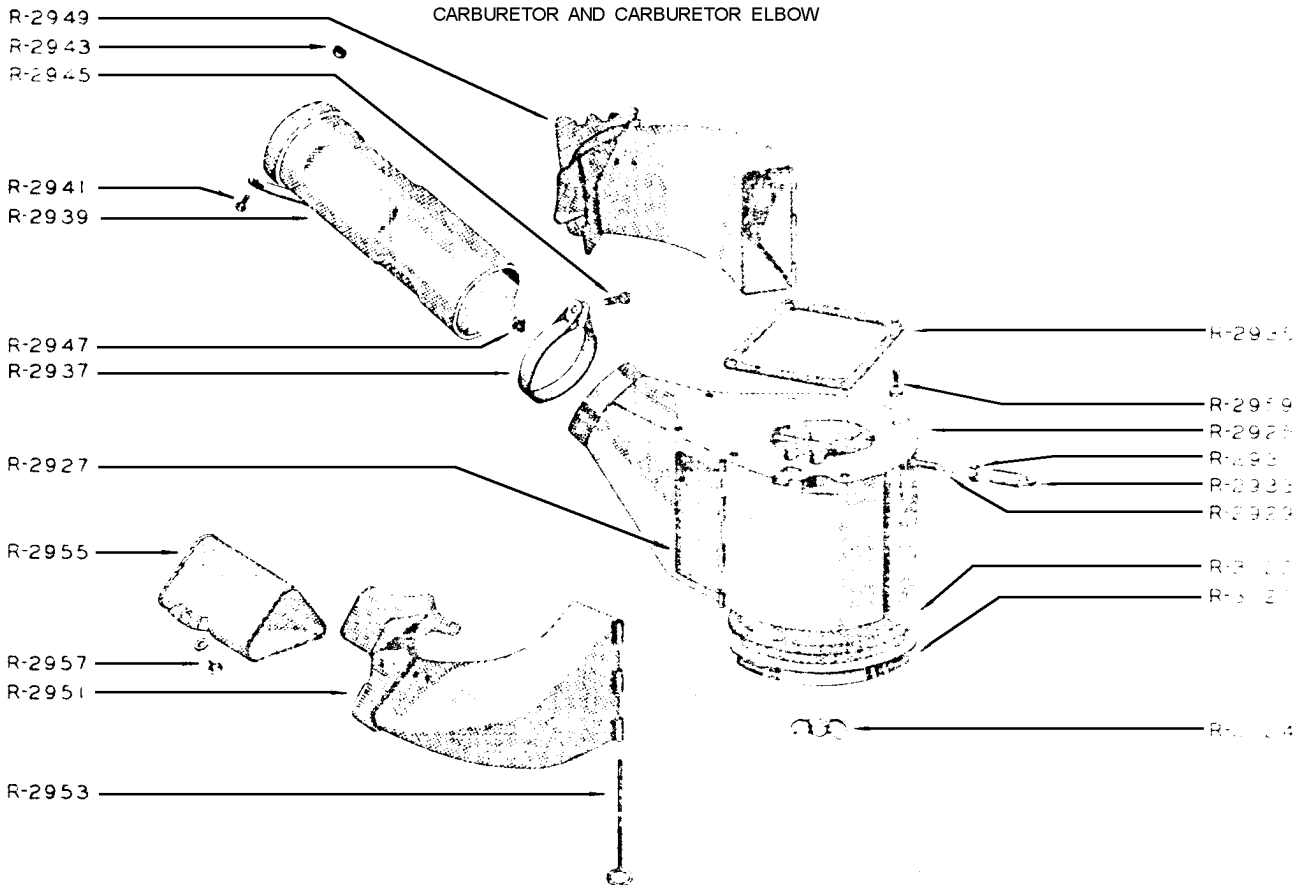


Figure 28

AIR HEATER (FRONT EXHAUST)

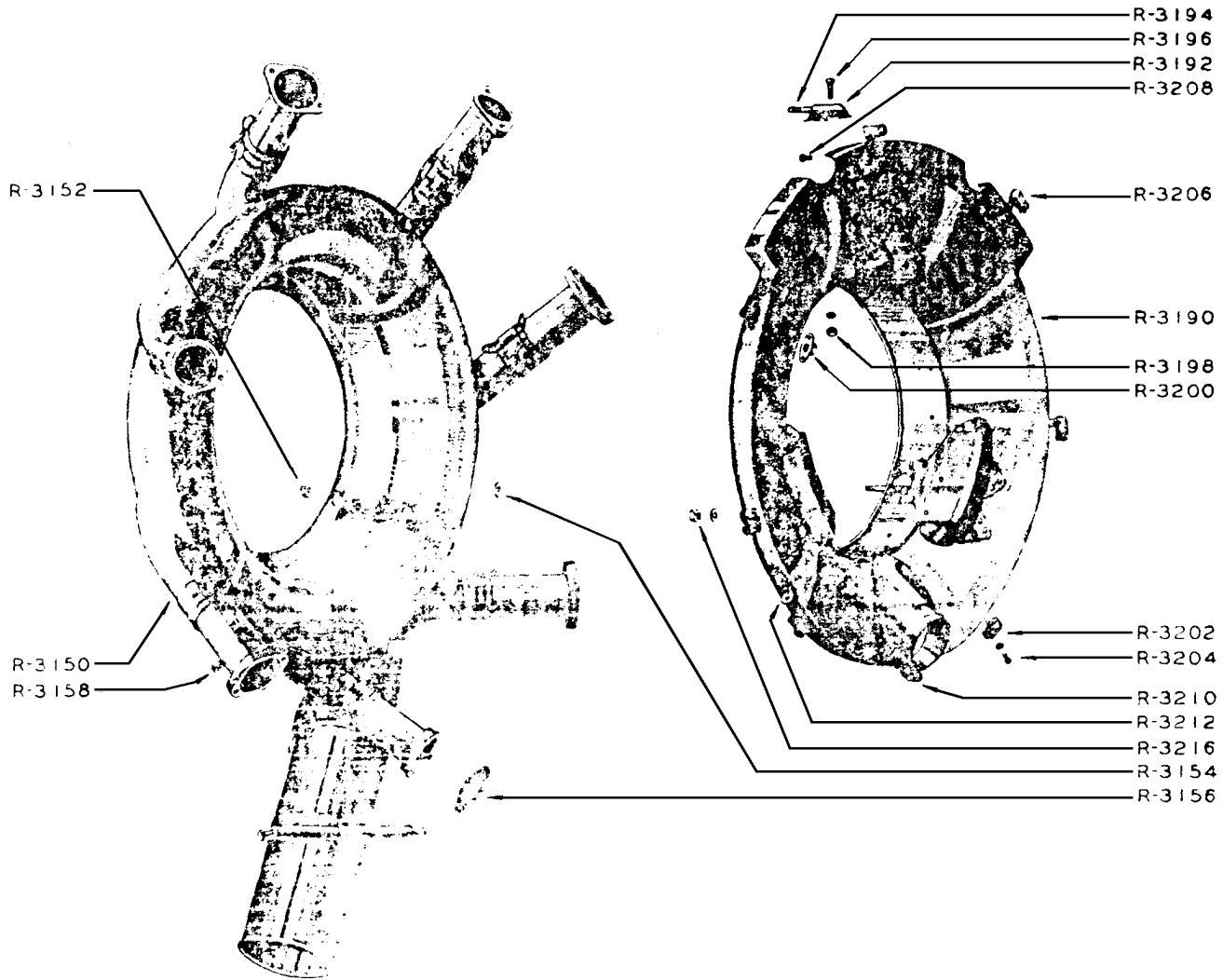


Figure 29

EXHAUST MANIFOLD AND NOSE COWL (FRONT EXHAUST) (FOR ENGINES WITHOUT PROVISION FOR MOUNTING PROPELLER GOVERNOR ON CRANKCASE FRONT SECTION)

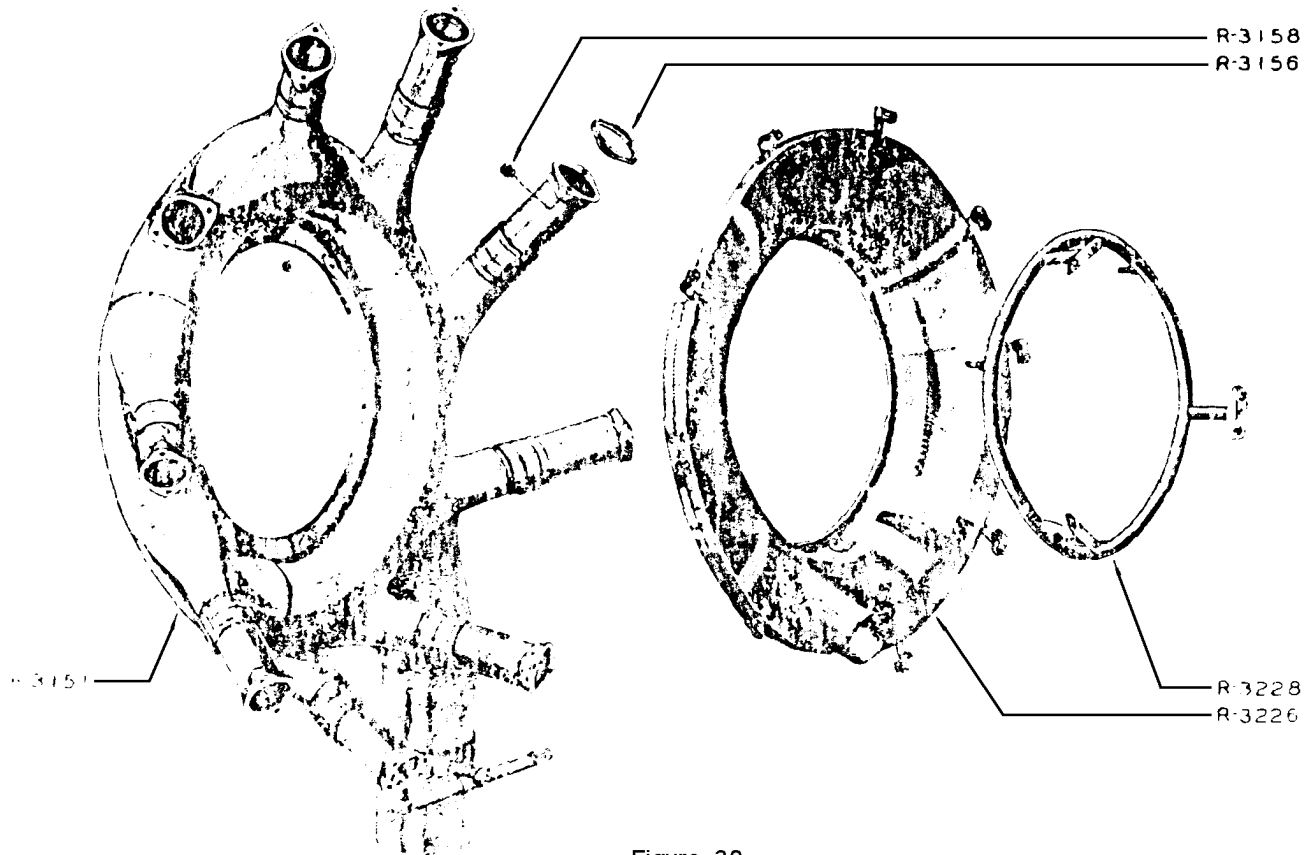


Figure 30

EXHAUST MANIFOLD AND NOSE COWL (FRONT EXHAUST) (FOR ENGINES WITHOUT PROVISION FOR MOUNTING PROPELLER GOVERNOR ON CRANKCASE FRONT SECTION)

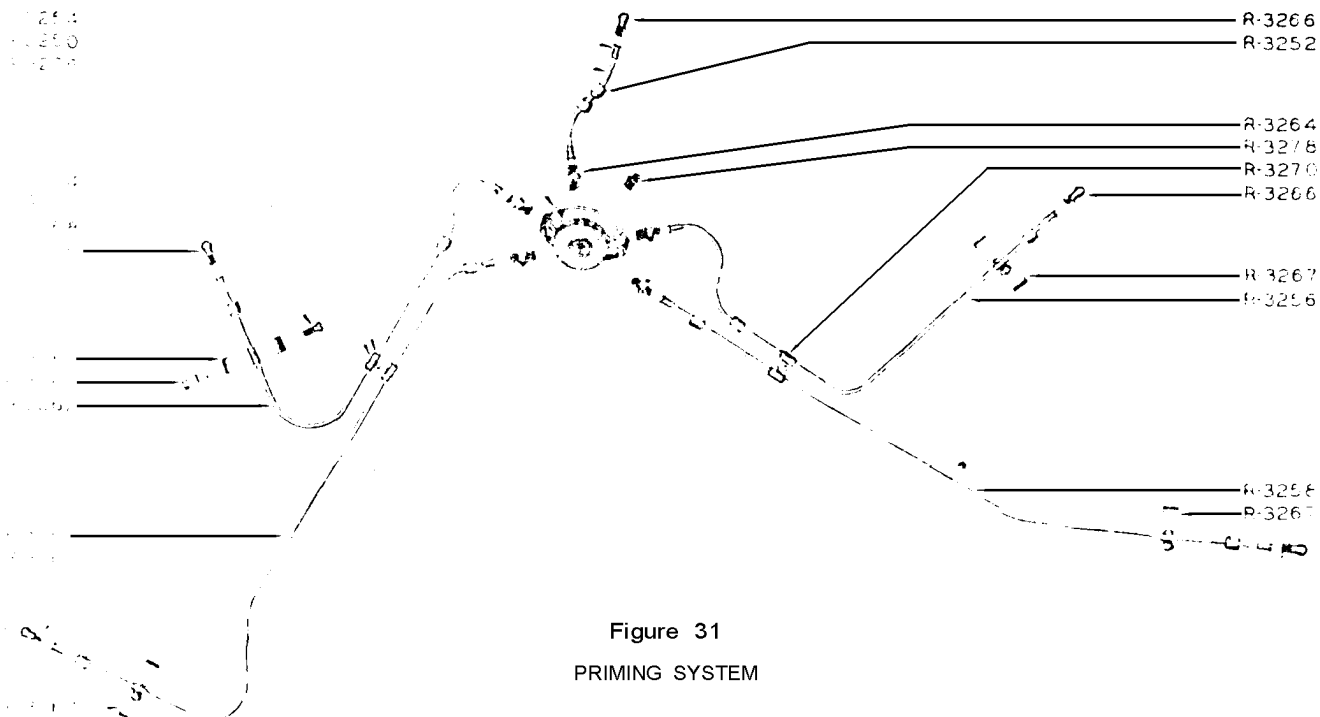


Figure 31

PRIMING SYSTEM

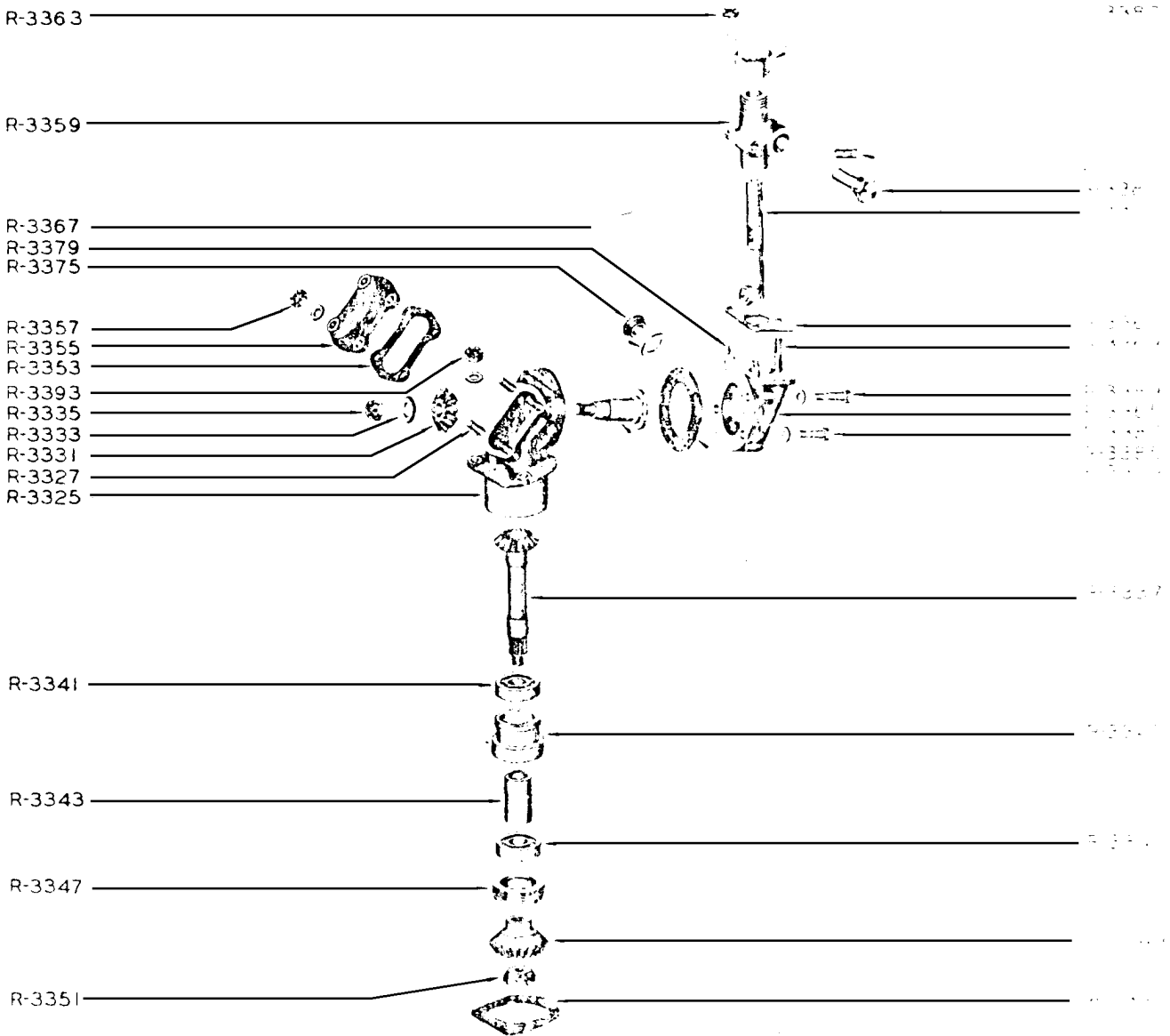


Figure 33
GUN SYNCHRONIZER

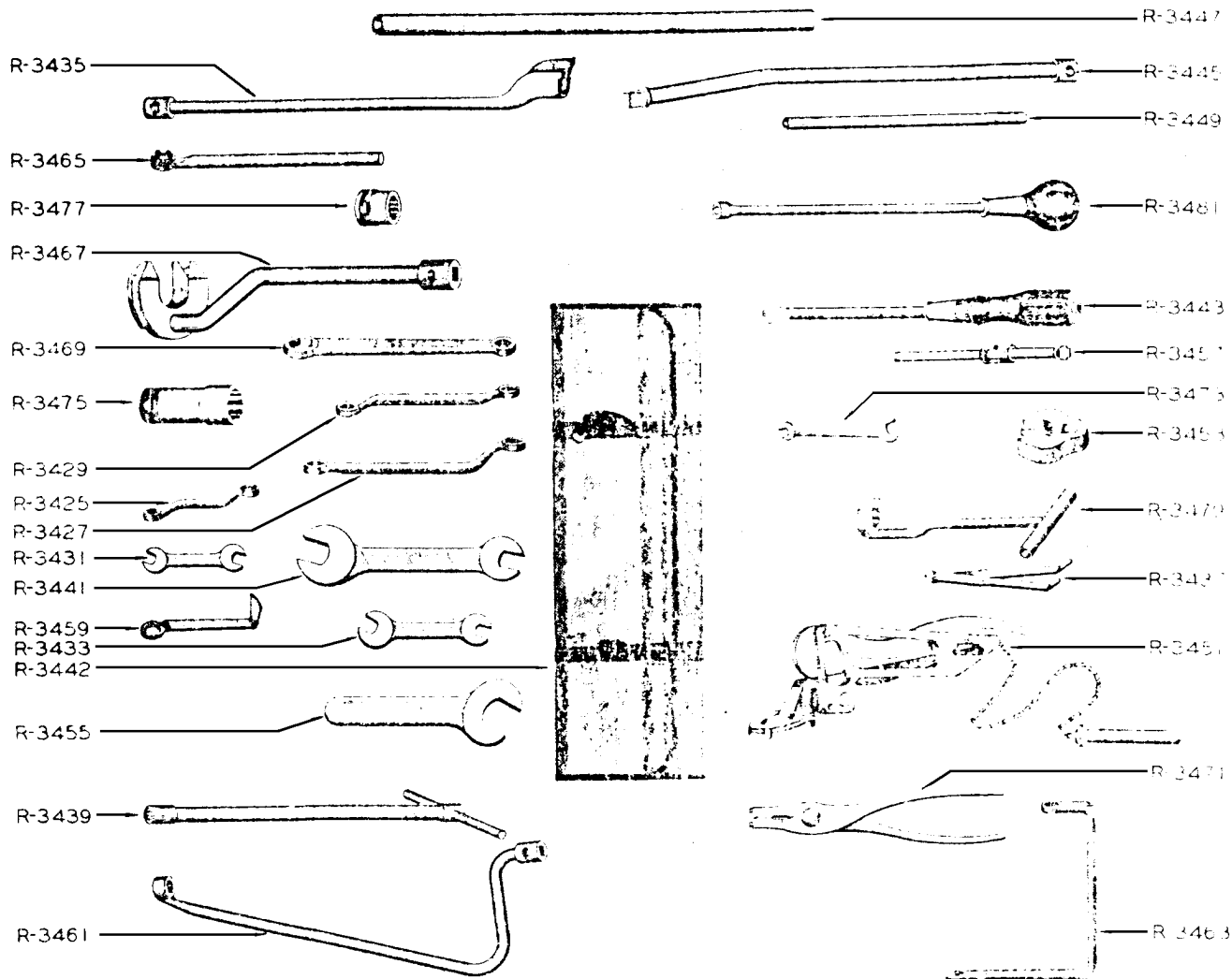


Figure 33
TOOL KIT

Ref. No.	Fig. No.	1	2	3	4	5	Description of Part	Part Number	Number Used			
									E	28		
<u>SECTION III</u>												
<u>ASSEMBLY PARTS LIST</u>												
<u>CRANKCASE</u>												
<u>FRONT SECTION</u>												
R-1001	1						CRANKCASE - Front section, studding assembly	48283	1	-		
R-1003	2						CRANKCASE - Front section, studding assembly	48284	-	1		
							CRANKCASE - Front section, machining assembly	*48283	-	1		
							CRANKCASE - Front section	*64349	-	1		
R-1005	2						SLEEVE - Crankcase front section	64333	-	1		
R-1007	2						PIN - Crankcase front section sleeve locating	13D31	-	1		
R-1009	2						BUSHING - Propeller governor stud	19S13	-	4		
							CRANKCASE - Front section	*64409	1	-		
R-1011	1						STUD - Crankcase front section to front cover	2032H47	7	-		
R-1013	2						STUD - Crankcase front section to front cover	2031H18	-	7		
R-1015	2						STUD - Governor drive bracket	2030H12	-	7		
R-1017	2						PLUG - Pressure gauge hole	2105D1	-	2		
R-1019	1,2						PIN - Crankcase front section cover locating	20D12	1	1		
R-1021	1,2						NUT - Crankcase front section to main section stud	1D40	28	28		
							WASHER - Crankcase front section to main section stud nut	27D118	28	28		
R-1023	1,2						COVER - Crankcase front section, assembly	416337	1	1		
							Cover 416337 is 33/64" thick at the stud holes and is used in conjunction with a spacer 114162. It is the only type supplied. For replacement of cover 47170 which is 43/64" thick at the stud holes and was originally installed on R760-8 engines, use cover 416337 and one (1) unit of spacer 114162.)					
							COVER - Crankcase front section	*114163	1	1		
							SLEEVE - Crankcase front section cover	*63541	1	1		
R-1025	1,2						SPACER - Crankcase front section cover	114162	1	1		
R-1027	1,2						SHIM - Crankcase front section cover to front section	62535	1	1		
R-1029	1,2						NUT - Crankcase front section cover to front section stud	2D7	7	7		
							WASHER - Crankcase front section cover to front section stud	34D14	7	7		
							LOCK - Crankcase front section cover to front section stud, pinnut	2000D7	7	7		
R-1031	1						BREATHER AND EXTENSION - Crankcase front section, assembly	415644	1	-		
							BREATHER - Crankcase front section	*20083	1	-		
							SCREEN - Crankcase front section breather, inner	*27727	1	-		
							SCREEN - Crankcase front section breather, outer	*27728	1	-		
							MESH - Crankcase front section breather baffle	*113055	1	-		
							EXTENSION - Crankcase front section breather	*113221	1	-		
							PIN - Crankcase front section breather screen retaining	*1405	1	-		
R-1033	2						PLUG - Crankcase front section breather hole	2072D2	-	1		
R-1035	1,2						GASKET - Crankcase front section breather or breather plug	21027	1	1		
							PLATE - Patent name	01111	1	1		
							RIVET - Patent name plate	11777	4	4		
							PLATE - Engine name	*113412	1	-		
							PLATE - Engine name	*113087	-	1		
							RIVET - Engine name plate	11777	4	4		
<u>MAIN BEARING SUPPORT</u>												
R-1075	1						SUPPORT - Crankcase main bearing, assembly	411785	1	-		
							SUPPORT - Crankcase main bearing, assembly	411785	1	-		
							FUNNEL - Crankcase main bearing oiling, assembly	*415617	1	-		
							FUNNEL - Crankcase main bearing oiling	*113023	1	-		
							FLANGE - Crankcase main bearing oiling funnel	*112302	1	-		
							SUPPORT - Crankcase main bearing	*113110	1	-		
							SUPPORT - Crankcase main bearing	*68411	1	-		
							RING - Crankcase main bearing support	*22012	1	-		
							PIN - Crankcase main bearing support ring retaining	*20033	7	7		
							PLATE - Crankcase main bearing support oil deflector	117220	1	-		
R-1077	1						PLATE - Crankcase main bearing support oil deflector	37331	-	1		
R-1079	1						SCREW - Crankcase main bearing support oil deflector	68D11	-	1		
							SCREW - Crankcase main bearing support oil funnel	125D125	4	-		
							NUT - Crankcase main bearing support oil funnel screw	104D127	4	-		
							WASHER - Crankcase main bearing support oil funnel	34D135	1	-		

Ref. No.	Fig. No.	1	2	3	4	5	Description of Part	Part Number	Number Used		
									8	28	
MAIN SECTION											
Crankcase main sections are supplied with the crankshaft rear bearing unfinished reamed.											
R-1100	1						CRANKCASE - Main section, studding assembly	89940	1	-	
							CRANKCASE - Main section, studding assembly (Crankcase main section 890048 installed on (a) engines has a breather substituting cover in the rear of #1 cylinder. It is the only type supplied. For replacement of crankcase main section 89936 which does not have a breather at the above mentioned location and was originally installed on (b) engines, use crankcase main section 890048.)	890048	-	1	
							CRANKCASE - Main section, machining assembly	*89939	1	-	
							CRANKCASE - Main section, machining assembly	*890030	-	1	
							CRANKCASE - Main section	*66844	1	-	
							CRANKCASE - Main section	*114198	-	1	
							PIPE - Crankcase oil feed, short	21592	1	1	
							RIVET - Crankcase oil feed pipe	2071D2	1	1	
R-1102	1						PLUG - Crankcase main section oil line (square head)	2105D1	1	1	
R-1104	1						BEARING - Crankshaft rear	825C88	1	1	
R-1106	1						KEY - Crankshaft rear bearing retaining	7D20	1	1	
							PLUG - Crankcase oil passage plug (headless)	2142D12	1	1	
R-1108	23,24						GUIDE - Valve tappet (drilled)	666C44	8	10	
							GUIDE - Valve tappet (undrilled)	829297	6	8	
R-1112	1						STUD - Crankcase main section to front section, long	2030H24	5	5	
R-1114	1						STUD - Crankcase main section to front section, short	2030H16	23	23	
R-1116	1						STUD - Crankcase main section oil drain substituting cover	2032H7	2	2	
R-1118	1						STUD - Cylinder hold-down, long	2112H2	14	18	
R-1120	1						STUD - Cylinder hold-down, short	2118H1	42	54	
R-1122	1						STUD - Crankcase breather substituting cover (Detail of crankcase main section 890048.)	2029H9	-	2	
R-1124	1						COVER - Crankcase breather substituting (Detail of crankcase main section 890048.)	174L37	-	1	
R-1126	1						GASKET - Crankcase breather substituting cover (Detail of crankcase main section 890048.)	202556	-	1	
R-1128	1						NUT - Crankcase breather substituting cover stud (Detail of crankcase main section 890048.)	2025	-	2	
							WASHER - Crankcase breather substituting cover stud (Detail of crankcase main section 890048.)	2025	-	2	
							LOCK - Crankcase breather substituting cover stud, palnut (Detail of crankcase main section 890048.)	2002D	-	2	
R-1130	1						PLUG - Crankcase main section vent	20240	1	1	
R-1132	1						PLUG - Lifting eye hole substituting	20201	1	1	
R-1134	1						GASKET - Crankcase main section vent and lifting eye hole substituting	20201	1	1	
R-1136	1						PLUG - Crankcase main section vent plug substituting	20201	1	1	
R-1138	1						COVER - Crankcase main section oil drain	20201	1	1	
R-1140	1						PLUG - Crankcase main section oil drain	20201	1	1	
R-1142	1						GASKET - Crankcase main section oil drain cover	20201	1	1	
R-1144	1						NUT - Crankcase main section oil drain stud	20201	2	2	
							WASHER - Crankcase main section oil drain stud	20201	2	2	
R-1146	1						NUT - Crankcase main section to rear section (slotted)	20201	2	2	
							NUT - Crankcase main section to rear section stud (slotted)	20201	2	2	
R-1148	1						NUT - Crankcase main section to rear section stud (slotted)	20201	2	2	
							WASHER - Crankcase main section to rear section stud	20201	2	2	
(a) Used for R975-28 engines 12011 to 12014 and 40523 to 4059 (b) Used for R975-28 engines 12342, 12343, 12344, 40401 to 40455 and 40457 to 40522.											

Ref. No.	Fig. No.	1	2	3	4	5	Description of Part	Part Number	Number Used		
									8	28	
							WASHER - Crankcase main section to rear section stud	27D118	-	20	
							LOCK - Crankcase main section to rear section stud, palnut	200CD2	18	-	
							<u>CRANKCASE MAIN SECTION OIL STRAINER</u>				
R-1165	1						STRAINER - Crankcase main section oil, assembly	411506	1	1	
							STRAINER - Crankcase main section oil	*21485	1	1	
							PLATE - Crankcase main section oil strainer	*21484	1	1	
							RING - Crankcase main section oil strainer	*21483	1	1	
R-1167	1						SPRING - Crankcase main section oil strainer	21452	1	1	
R-1169	1						PLUG - Crankcase main section oil strainer	2091D6	1	1	
R-1171	1						GASKET - Crankcase main section oil strainer plug	23D14	1	1	
							<u>CRANKCASE MAIN SECTION OIL SUMP DRAIN TUBE (R760-8)</u>				
							TUBE - Crankcase main section oil sump drain, assembly, complete	89716	1	-	
R-1190	3						TUBE - Crankcase main section oil sump drain, assembly	410635	1	-	
							TUBE - Crankcase main section oil sump drain	*67066	1	-	
							COUPLING - Crankcase main section oil sump drain tube	*67013	1	-	
							CLAMP - Crankcase main section oil sump drain tube	*67012	1	-	
R-1191	3						BOLT - Crankcase main section oil sump drain tube clamp to nose cowl bracket	6D17	1	-	
R-1193	3						NUT - Crankcase main section oil sump drain tube clamp to nose cowl bolt	1F1	1	-	
							WASHER - Crankcase main section oil sump drain tube clamp to nose cowl bracket bolt	34290	1	-	
R-1195	3						CLIP - Crankcase main section oil sump drain tube	67011	1	-	
R-1197	3						PLUG - Crankcase main section oil sump drain tube drain	97E5	1	-	
R-1199	3						GASKET - Crankcase main section oil sump drain tube drain plug	23D26	1	-	
R-1201	3						HOSE - Crankcase main section oil sump drain tube	2058D78	1	-	
R-1203	3						CLAMP - Crankcase main section oil sump drain tube hose	25CD1	2	-	
R-1205	3						BRACKET - Crankcase main section oil sump drain tube	67007	1	-	
							WASHER - Crankcase main section oil sump drain tube bracket to cowl rivet	24E80	2	-	
R-1207	3						RIVET - Crankcase main section oil sump drain tube bracket to cowl	112D5	2	-	
R-1209	3						CONNECTION - Oil scavenger strainer drain	67068	1	-	
R-1211	3						GASKET - Oil scavenger strainer drain connection	23D18	1	-	
R-1214	3						COVER - Oil scavenger strainer	67069	1	-	
R-1216	3						SCREW - Oil scavenger strainer drain connection to cover	67067	1	-	
R-1218	3						GASKET - Oil scavenger strainer drain connection to cover screw	23E11	1	-	
							<u>CRANKCASE MAIN SECTION OIL SUMP DRAIN TUBE (R975-28)</u>				
							TUBE - Crankcase main section oil sump drain, assembly, complete	89716	-	1	
R-1230	4						TUBE - Crankcase main section oil sump drain, assembly	411101	-	1	
							TUBE - Crankcase main section oil sump drain	*67068	-	1	
							COUPLING - Crankcase main section oil sump drain tube	*67067	-	1	
							SUPPORT - Crankcase main section oil sump drain tube	*67066	-	1	
R-1232	4						BOLT - Crankcase main section oil sump drain tube support to nose cowl bracket	6D17	-	1	
R-1234	4						NUT - Crankcase main section oil sump drain tube support to nose cowl bracket bolt	1F1	-	1	
							WASHER - Crankcase main section oil sump drain tube support to nose cowl bracket bolt	34290	-	1	
R-1236	4						CLIP - Crankcase main section oil sump drain tube	67011	-	1	
R-1238	4						PLUG - Crankcase main section oil sump drain tube drain	97E5	-	1	
R-1240	4						GASKET - Crankcase main section oil sump drain tube drain plug	23D26	-	1	
R-1242	4						HOSE - Crankcase main section oil sump drain tube	2058D78	-	1	
R-1244	4						CLAMP - Crankcase main section oil sump drain tube hose	25CD1	-	1	
R-1246	4						BRACKET - Crankcase main section oil sump drain tube	67007	-	1	

Ref. No.	Fig. No.	1	2	3	4	5	Description of Part	Part Number	Number Used		
									8	28	
R-1248	4						WASHER - Crankcase main section oil sump drain tube bracket to cowl rivet	27D80	-	2	
R-1250	4						RIVET - Crankcase main section oil sump drain tube bracket to cowl	119D5	-	2	
							PIPE - Crankcase main section oil sump drain tube to crankcase main section	176D10	-	1	
							<u>DIFFUSER SECTION</u>				
R-1270	5						DIFFUSER SECTION - Studding, assembly	41654	1	-	
							DIFFUSER SECTION - Studding, assembly	413266	-	1	
							DIFFUSER SECTION - Machining, assembly	*41653	1	-	
							DIFFUSER SECTION - Machining, assembly	*413316	-	1	
							DIFFUSER SECTION	*24121	1	-	
R-1272	11						DIFFUSER SECTION	*110336	-	1	
							BUSHING - Idler accessory drive gear	27586	-	2	
							BUSHING - Accessory drive shaft, long	21953	2	-	
							PIN - Accessory drive shaft long bushing	13D6	2	-	
							PLUG - Diffuser section oil line (Used at starter location)	20D25	1	-	
							BUSHING - Starter drive gear	201661	1	-	
R-1274	10,11						PIN - Starter drive gear bushing	17D42	1	-	
R-1276	10,11						BUSHING - Accessory drive shaft, long	21953	-	2	
							PIN - Accessory drive shaft long bushing	13D6	-	2	
							PLUG - Diffuser section oil line (Used at starter location)	20D25	-	2	
R-1278	8						BUSHING - Starter drive gear	211335	-	2	
R-1280	8						PIN - Starter drive gear bushing	13D40	-	1	
R-1282	10,11						RETAINER - Idler accessory drive gear	27584	-	1	
R-1284	5						PIN - Impeller drive gear shaft support locating	20D10	2	-	
R-1286	5						STUD - Impeller drive gear shaft support	2760H11	4	-	
							PLUG - Diffuser section oil line (At accessory drive shaft location)	20D34	2	-	
R-1288	5						SCREW - Diffuser section oil line plug	2734B1	2	-	
R-1290	5						TUBE - Diffuser section oil	27493	1	-	
R-1292	5						SEAL - Diffuser section oil	2087D25	1	-	
							NUT - Diffuser section to rear section stud	101	2	-	
							WASHER - Diffuser section to rear section stud	20D5	3	-	
							WASHER - Diffuser section to rear section stud	27D1	-	2	
							PLUG - Impeller drive gear shaft substituting	28316	1	-	
							GASKET - Impeller drive gear shaft substituting plug, small	27D74	1	-	
							GASKET - Impeller drive gear shaft substituting plug, large	27D73	1	-	
							NUT - Impeller drive gear shaft substituting plug retaining	101	1	-	
							WASHER - Impeller drive gear shaft substituting plug retaining nut	27D71	1	-	
							COVER - Supercharger drive substituting, small	20310	1	-	
							GASKET - Supercharger drive small substituting cover	20311	1	-	
							SCREW - Supercharger drive small substituting cover	27D20	1	-	
							COVER - Supercharger drive substituting, large	27314	1	-	
							GASKET - Supercharger drive large substituting cover	27D23	1	-	
							SCREW - Supercharger drive large substituting cover	27D24	1	-	
R-1294	5						SPACER - Diffuser section, small	28197	2	-	
R-1296	5						SCREW - Diffuser section spacer	27D3	2	-	

Ref. No.	Fig. No.	1	2	3	4	5	Description of Part	Part Number	Number Used		
									Part	Used	Stock
							REAR SECTION				
							CRANKCASE - Rear section, studding assembly (Crankcase 415832 installed on R760-8 engines 39611 to 39900 replaces an early type crankcase 413593 installed on R760-8 engines 14769 to 14783 and 39766 to 39810. Crankcase 415832 is the only type supplied. When replacing crankcase 413593 with crankcase 415832, it will be necessary to use two (2) units of 160D5, oil vent connection reducing bushing.)	415832	1	-	-
R-1320	5						CRANKCASE - Rear section, studding assembly	415832	-	-	
							CRANKCASE - Rear section, machining assembly	*412445	1	-	
							CRANKCASE - Rear section, machining assembly	*412447	1	-	
							CRANKCASE - Rear section	*69251	1	-	
							CRANKCASE - Rear section	*69270	1	-	
							PLUG - Crankcase rear section core hole (headless)	2142D4	1	-	
							PLUG - Crankcase rear section core hole (hex. head)	2132D4	1	-	
							PLUG - Crankcase rear section oil thermometer (hex. head)				
							PLUG - Crankcase rear section magneto pad (hex. head)	2132D6	1	-	
							PLUG - Crankcase rear section oil line (headless)	2132D4	1	-	
R-1322	8						BUSHING - Starter shaft	2142D1	2	-	
R-1324	8						PIV - Starter shaft bushing retaining	2145D1	1	-	
R-1326	10,11						BUSHING - Accessory drive shaft, short	13D42	1	-	
R-1328	10,11						PIV - Accessory drive shaft short bushing	@21954	2	2	
R-1330	17						BUSHING - Generator idler gear shaft, short	13D39	2	2	
R-1332	5						STUD - Crankcase rear section fuel pump mounting flange or three-way accessory drive housing	23481	1	-	
							STUD - Crankcase rear section generator idler gear shaft	2030H11	4	4	
R-1334	5						STUD - Crankcase rear section generator idler gear shaft	118H4	2	-	
R-1336	5						STUD - Crankcase rear section to magneto, long	2028H6	-	-	
R-1338	5						STUD - Crankcase rear section to magneto, short	2030H10	5	-	
							STUD - Crankcase rear section to gun synchronizer impulse generator substituting cover	2030H9	1	3	
R-1340	5						STUD - Crankcase rear section to gun synchronizer impulse generator or substituting cover	118H4	6	-	
							STUD - Crankcase rear section to tachometer drive housing, short	2028H6	-	6	
							STUD - Crankcase rear section to tachometer drive housing, long	2028H6	2	-	
R-1341	5						STUD - Crankcase rear section to tachometer drive housing	2028H19	1	-	
							STUD - Crankcase rear section to accessory drive housing	2028H33	1	-	
R-1342	5						STUD - Crankcase rear section to accessory drive housing	2023H18	1	-	
							STUD - Crankcase rear section to main section	2030H17	-	1	
R-1344	5						STUD - Crankcase rear section to main section	2030H17	2	-	
R-1346	5						STUD - Crankcase rear section to generator drive	2030H14	20	20	
							STUD - Crankcase rear section to carburetor elbow, long	2030H12	4	4	
R-1348	5						STUD - Crankcase rear section to carburetor elbow, long	120H185	2	-	
							STUD - Crankcase rear section to carburetor elbow, short	120H181	-	2	
R-1350	5						STUD - Crankcase rear section to carburetor elbow, short	120H183	2	-	
R-1352	5						STUD - Crankcase rear section to oil pump	160D130	-	2	
R-1354	5						STUD - Crankcase rear section to starter	2030H11	3	-	
R-1356	5						STUD - Crankcase rear section to tachometer and fuel pump drive shaft adapter cover	2030H6	6	6	
R-1358	5						STUD - Crankcase rear section to diffuser plate, short	2028H25	3	3	
R-1360	5						STUD - Crankcase rear section to diffuser plate, long	2028H20	3	3	
							DOVEL - Crankcase rear section to generator drive gear support locating				
R-1362	5						SPACER - Diffuser section, large	70D9	1	-	
R-1364	5						SCREW - Diffuser section, large spacer	22067	1	3	
							PLUG - Crankcase rear section priming connection and manifold pressure (square head)	54D1	1	-	
							BUSHING - Oil tank vent connection reducing	2165D1	2	-	
							(Used with crankcase rear section 415832. Read note under 415832 above.)	160D1	2	-	
							PLUG - Crankcase rear section, pipe (.125" - 27)	2165D1	4	-	

Ref. No.	Fig. No.	1	2	3	4	5	Description of Part	Part Number	Number Used		
									2	5	
							PLUG - Crankcase rear section, pipe (.375" - 18) (Five (5) units are used on R760-8 engines 14769 to 14783 and 39766 to 39810. Three (3) units are used for R760-8 engines 39811 to 39900 and all R975-28 engines.)	2105D3	See	Note	
							PLUG - Crankcase rear section, pipe (square head) (a)	2105D5	2	2	
							PLUG - Crankcase rear section, pipe (headless)	2142D4	1	1	
							PLUG - Crankcase rear section (hex. head)	93D18	1	1	
							GASKET - Crankcase rear section plug Used with plug 93D18.)	23D16	1	1	
R-1366	5						COVER - Gun synchronizer impulse generator substituting, R.H.	23754	1	1	
R-1368	5						COVER - Gun synchronizer impulse generator substituting, L.H.	23755	1	1	
R-1370	5						GASKET - Gun synchronizer impulse generator substituting cover	23717	2	2	
							NUT - Gun synchronizer impulse generator substituting cover stud	2D1	6	-	
R-1372	5						NUT - Gun synchronizer impulse generator substituting cover stud	1D1	-	6	
							WASHER - Gun synchronizer impulse generator substituting cover stud	34D51	6	-	
							WASHER - Gun synchronizer impulse generator substituting cover stud	27D1	-	6	
							LOCK - Gun synchronizer impulse generator substituting cover stud, palnut	2000D1	6	-	
R-1374	5						COVER - Starter substituting	23328	1	1	
R-1376	5						GASKET - Starter substituting cover	14981	1	1	
R-1378	5						NUT - Starter substituting cover stud	1D9	6	6	
							WASHER - Starter substituting cover stud	34D14	6	6	
R-1380	5						COVER - Generator substituting	23329	1	1	
R-1382	5						GASKET - Generator substituting cover	20104	1	1	
R-1384	5						NUT - Generator substituting cover stud	1D4C	4	4	
							WASHER - Generator substituting cover stud	27D118	4	4	
R-1386	5						SCREW - Crankcase rear section flange puller	2670D1	3	3	
R-1388	5						GASKET - Crankcase rear section flange puller screw	23D17	3	3	
							SPACER - Accessory drive housing stud substituting	2097D1	1	-	
							NUT - Accessory drive housing stud substituting spacer	2D4	1	-	
							WASHER - Accessory drive housing stud substituting spacer	27D218	1	-	
							LOCK - Accessory drive housing stud substituting spacer, palnut	2000D2	1	-	
							<u>OIL CHECK VALVE</u>				
							VALVE - Oil check, assembly	49523	1	1	
R-1393	5						BODY - Oil check valve	60069	1	1	
R-1395	5						PLUG - Oil check valve	80067	1	1	
R-1397	5						SPRING - Oil check valve	35002	1	1	
R-1399	5						VALVE - Oil check ball	5170	1	1	

(a) Used for R760-8 engines 39811 to 39900 and all R975-28 engines.

Ref. No.	Fig. No.	1	2	3	4	5	Description of Part	Part Number	Number		
									7	28	
<u>OIL PUMP SYSTEM</u>											
<u>OIL PUMP</u>											
R-1420	6						PUMP - Oil, complete	47724	1		
							PUMP - Oil, complete	415987	1	1	
							PUMP - Oil, machining assembly	47714	1		
							PUMP - Oil, machining assembly	415583	1	1	
							BODY - Oil pump, assembly	*47714	1		
							BODY - Oil pump, assembly	*415592	1	1	
							BODY - Oil pump	*63666	1		
							BODY - Oil pump	*112804	1	1	
							STUD - Oil pump body to cover	118H4	3	3	
							STUD - Oil pump body to strainer support	2028R41	4	4	
R-1422	6										
R-1424	6										
R-1426	6										
R-1427	6										
R-1428	6										
R-1430	6										
R-1432	6										
R-1433	6										
R-1435	6										
R-1437	5,10										
R-1439	11										
R-1441	6										
R-1443	6										
R-1445	6										
R-1447	6										
R-1449	6										
R-1451	6										
R-1453	6										
R-1455	6										
R-1456	6										
R-1457	6										
R-1458	6										
R-1459	6										
R-1461	6										
R-1463	6										
R-1465	6										
R-1467	6										
R-1469	6										
R-1471	6										
R-1473	6										
R-1475	6										
R-1477	6										
R-1479	6										
R-1481	6										
R-1483	6										
R-1485	6										
R-1487	6										

Ref. No.	Fig. No.	1	2	3	4	5	Description of Part	Part Number	Number Used		
									8	28	
							<u>ACCESSORY DRIVE COVER (OIL PUMP)</u>				
N-1489	6						COVER - Accessory drive	28922	1	1	
R-1491	6						GASKET - Accessory drive cover to oil pump	69072	1	1	
R-1493	6						NUT - Accessory drive cover to oil pump stud	2D1	4	4	
							WASHER - Accessory drive cover to oil pump stud	27D1	4	4	
							LOCK - Accessory drive cover to oil pump stud, palnut	2000D1	4	4	
							<u>OIL STRAINER</u>				
R-1525	7						STRAINER - Oil (Cuno)	110965	1	1	
R-1527	7						CONNECTION - Oil strainer hose	176D6	2	2	

Ref. No.	Fig. No.	1	2	3	4	5	Description of Part	Part Number	Number Used					
									8	28				
<u>CAM, CAM DRIVE AND STARTER DRIVE</u>														
R-1550	8						CAM - Complete, assembly	49336	1	-				
							CAM - Complete, assembly	48894	-	1				
							CAM	*65812	1	-				
							CAM	*65124	-	1				
							HUB - Cam	*65128	1	-				
							SCREW - Cam hub to cam	95D2	15	16				
							NUT - Cam hub to cam screw	1D1	28	16				
							WASHER - Cam hub to cam screw	27D3	15	16				
R-1552	8						BEARING - Cam hub	65111	2	1				
R-1554	8						PIW - Cam hub bearing retaining	20D43	3	3				
R-1556	8						SPACER - Cam hub bearing	21450	1	1				
R-1558	8						SUPPORT - Cam hub bearing	21457	1	1				
							GEAR - Starter drive and cam pinion, assembly	49089	1	-				
R-1560	8,11						GEAR - Starter drive and cam pinion, assembly	48728	-	1				
							GEAR - Starter drive, assembly	*49078	1	-				
							GEAR - Starter drive	*23148	1	-				
							HUB - Starter drive gear	*65448	1	-				
							PIW - Starter drive gear	2077D16	8	-				
							GEAR - Starter drive	*64944	-	1				
							PINION - Cam drive	*65450	1	-				
							PINION - Cam drive	*64942	-	1				
R-1562	8						BOLT - Starter shaft	23117	1	-				
R-1564	8						BOLT - Starter shaft	65694	-	1				
R-1566	8						WASHER - Starter shaft bolt spring seat	34D34	1	1				
R-1568	8						SPRING - Starter shaft bolt	21570	1	1				
R-1570	8						RETAINER - Starter shaft bolt spring	21530	1	1				
							PIW - Starter shaft bolt spring retaining	17D22	1	1				
							SHAFT - Starter	23414	1	-				
R-1572	8,17						SHAFT - Starter	65693	-	1				
R-1574	8						SEAL - Starter shaft oil	23480	1	1				
R-1576	8						RETAINER - Starter shaft oil seal	23483	1	1				
							NUT - Starter shaft bolt retaining	124D55	1	-				
R-1578	8						NUT - Starter shaft bolt retaining	124D87	-	1				

Ref. No.	Fig. No.	1	2	3	4	5	Description of Part	Part Number	Number Used		
									8	28	
<u>IMPELLER AND IMPELLER DRIVE</u>											
<u>IMPELLER AND IMPELLER SHAFT</u>											
R-1600	9						IMPELLER - Supercharger	26666	-	1	
R-1602	9						SHAFT - Impeller, with integral gear	57043	-	1	
R-1604	9						SUPPORT - Impeller shaft front ball bearing	65023	-	1	
R-1606	9						GASKET - Impeller shaft front ball bearing support	24763	-	1	
R-1608	9						SCREW - Impeller shaft front ball bearing support	46D4	-	7	
R-1610	9						NUT - Impeller shaft, front and rear	25350	-	2	
R-1612	9						LOCK - Impeller shaft front and rear nut	25351	-	2	
R-1614	9						RING - Impeller shaft front and rear nut lock	24028	-	2	
R-1616	9						NUT - Impeller shaft front ball bearing retainer	23522	-	1	
R-1618	9						RING - Impeller shaft front ball bearing retainer nut, lock	23520	-	1	
R-1620	9						BEARING - Impeller shaft front and rear	2001D13	-	2	
R-1622	9						SHIM - Impeller shaft front ball bearing	*2100D	-	1	
R-1624	9						CAGE - Impeller shaft rear ball bearing	65024	-	1	
R-1626	9						SHIM - Impeller shaft rear ball bearing cage	67022	-	1	
R-1628	9						GASKET - Impeller shaft rear ball bearing cage shim	67397	-	2	
R-1630	9						SCREW - Impeller shaft rear ball bearing cage	137D2	-	2	
R-1632	9						GUIDE - Impeller oil seal ring (.120" thick)	65045	-	2	
R-1633	9						GUIDE - Impeller oil seal ring (.150" thick)	37041	-	1	
R-1634	9						SPACER - Impeller oil seal ring guide	65046	-	1	
R-1636	9						RING - Impeller oil seal	65044	-	3	
<u>IMPELLER DRIVE</u>											
R-1660	9						GEAR - Impeller drive, assembly (10.15:1 ratio)	48633	-	1	
							GEAR - Impeller drive	*64856	-	1	
R-1662	9						BUSHING - Impeller drive gear	24086	-	1	
R-1664	9						PIN - Impeller drive gear bushing retaining	17D23	-	1	
R-1666	9						BEARING - Impeller drive gear hub	25982	-	1	
R-1668	9						SUPPORT - Impeller drive gear shaft	25983	-	1	
R-1670	9						NUT - Impeller drive gear shaft support	1D40	-	4	
							WASHER - Impeller drive gear shaft support	27D118	-	4	
R-1672	9						SHAFT - Impeller drive gear, assembly	42875	-	1	
							SHAFT - Impeller drive gear	*25981	-	1	
							PLUG - Impeller drive gear shaft	*24085	-	1	
R-1674	9						KEY - Impeller drive gear shaft	10D6	-	1	
R-1676	9						NUT - Impeller drive gear shaft	124D57	-	1	
⚠ This shim is not laminated and is supplied in thicknesses from .015" to .060" in steps of .005" under drawing numbers 2100D1 to 2100D10 respectively.											

Ref. No.	Fig. No.	1	2	3	4	5	Description of Part	Part Number	Number			
									1	2	3	
<u>ACCESSORY DRIVES</u>												
<u>IDLER ACCESSORY DRIVE (R975-28)</u>												
R-1725	11						GHAR - Idler accessory drive	27583	-	2		
R-1727	11						WASHER - Idler accessory drive gear	27587	-	2		
R-1729	11						SHACER - Idler accessory drive gear	27591	-	2		
R-1731	11						NUT - Idler accessory drive gear retaining	1D4	-	2		
							WASHER - Idler accessory drive gear retaining	272D5	-	2		
<u>ACCESSORY DRIVE (MAGNETO DRIVE)</u>												
R-1749	10						GHAR - Magneto drive	27592	-	2		
R-1751	11						GHAR - Magneto drive	27592	-	2		
R-1753	10,11						KHY - Magneto drive gear	1D57	2	2		
R-1755	10,11						NUT - Magneto drive gear	1D48	2	2		
R-1757	10						SHAFT - Magneto and accessory drive, assembly	44513	2	2		
R-1759	11						SHAFT - Magneto and accessory drive, assembly	44377	-	2		
							SHAFT - Magneto and accessory drive	61128	2	2		
							SHAFT - Magneto and accessory drive	61070	-	2		
							EXTENSION - Magneto and accessory drive shaft	28204	2	2		
							SCREW - Magneto and accessory drive shaft extension	28207	2	2		
R-1761	10,11						SEAL - Magneto drive oil, assembly	45231	2	2		
							SEAL - Magneto drive oil	23456	2	2		
							RING - Magneto drive oil seal packing	*61652	2	2		
							RING - Magneto drive oil seal packing retaining	*25930	2	2		
							RIVET - Magneto drive oil seal packing retaining ring	16D11	12	12		
							SPRING - Magneto drive oil seal	61653	2	2		
R-1763	10,11						SCREW - Magneto drive oil seal lock	147E1	2	2		
R-1765	10,11						SEAL - Magneto and accessory drive shaft rubber oil	28191	2	2		
R-1767	10,11						RETAINER - Magneto and accessory drive shaft rubber oil seal	27192	2	2		
R-1769	10,11						PLUG - Magneto and accessory drive shaft rubber oil seal, inner	65830	2	2		
<u>TACHOMETER AND FUEL PUMP DRIVE (R760-8)</u>												
R-1785	12						SHAFT - Tachometer and fuel pump drive, with internal gear	27597	1	-		
R-1787	12						ADAPTER - Tachometer and fuel pump drive shaft	27513	1	-		
R-1789	12						COVER - Tachometer and fuel pump drive shaft adapter	21775	1	-		
R-1791	12						GASKET - Tachometer and fuel pump drive shaft adapter cover	21776	1	-		
R-1793	12						NUT - Tachometer and fuel pump drive shaft adapter cover stud	1D1	3	-		
							WASHER - Tachometer and fuel pump drive shaft adapter cover stud	27511	3	-		
R-1795	12						GEAR - Fuel pump drive	21741	1	-		
R-1797	12						KHY - Fuel pump drive gear	27592	1	-		
R-1799	12						NUT - Fuel pump drive gear retaining	27592	1	-		
							WASHER - Fuel pump drive gear retaining nut	27592	1	-		
R-1801	12						GEAR - Fuel pump drive, assembly	27592	1	-		
							GEAR - Fuel pump drive	*61651	1	-		
							PLUG - Fuel pump drive gear, cup	*25927	1	-		
							FRUIT - Fuel pump drive gear	*27592	1	-		
R-1803	12						ADAPTER - Fuel pump, assembly	*27592	1	-		
							ADAPTER - Fuel pump	*27592	1	-		
R-1805	12						BUSHING - Fuel pump adapter	27592	1	-		
R-1807	12						GASKET - Fuel pump adapter to crankcase rear section	27592	1	-		
R-1809	12						CIRCLIP - Fuel pump drive gear	27592	1	-		
R-1811	12						COVER - Fuel pump drive	27592	1	-		
R-1813	12						GASKET - Fuel pump drive cover	27592	1	-		
R-1815	12						NUT - Fuel pump drive cover stud	27592	1	-		
							WASHER - Fuel pump drive cover stud	27592	1	-		
<u>TACHOMETER AND THREE-WAY ACCESSORY DRIVE (R975-28)</u>												
R-1835	15						GEAR - Tachometer and three-way accessory drive	27592	1	-		
R-1837	15						SHAFT - Tachometer and three-way accessory drive gear, assembly	27592	1	-		
							SHAFT - Tachometer and three-way accessory drive gear	*27592	-	1		
R-1839	15						PLUG - Tachometer and three-way accessory drive gear shaft oil hole	162D07	-	1		
R-1841	15						NUT - Tachometer and three-way accessory drive gear shaft	1D1	-	1		
							WASHER - Tachometer and three-way accessory drive gear shaft	27592	-	1		
R-1843	15						GEAR - Three-way accessory drive	27592	-	1		
R-1845	15						ADAPTER - Tachometer and three-way accessory drive gear shaft	27592	-	1		
R-1847	15						GASKET - Tachometer and three-way accessory drive gear shaft adapter	27592	-	1		

Ref. No.	Fig. No.	1	2	3	4	5	Description of Part	Part Number	Number Used		
									8	28	
R-1849	15						COVER - Tachometer and three-way accessory drive gear shaft adapter, assembly	47868	-	1	
							COVER - Tachometer and three-way accessory drive gear shaft adapter	*63949	-	1	
R-1851	15						BUSHING - Tachometer and three-way accessory drive gear shaft adapter cover	63950	-	1	
R-1853	15						GASKET - Tachometer and three-way accessory drive gear shaft adapter cover	21776	-	1	
R-1855	15						NUT - Tachometer and three-way accessory drive gear shaft adapter cover stud	1D1	-	3	
							WASHER - Tachometer and three-way accessory drive gear shaft adapter cover stud	27D1	-	3	
							<u>TACHOMETER DRIVE HOUSING AND GEARS (R760-8)</u>				
							TACHOMETER DRIVE - Assembly	411949	1	-	
R-1877	13						SHAFT AND SLEEVE - Tachometer driven, assembly, R.H.	411947	1	-	
							SHAFT - Tachometer driven	*21732	1	-	
							SLEEVE - Tachometer driven shaft	*68700	1	-	
R-1879	13						SHAFT AND SLEEVE - Tachometer driven, assembly, L.H.	411948	1	-	
							SHAFT - Tachometer driven	*21732	1	-	
							SLEEVE - Tachometer driven shaft	*68701	1	-	
R-1881	13						HOUSING - Tachometer drive	22697	1	-	
R-1883	13						SHAFT - Tachometer drive	22514	1	-	
R-1885	13						GEAR - Tachometer drive shaft	22518	1	-	
R-1887	13						KEY - Tachometer drive shaft gear	10D1	1	-	
R-1889	13						NUT - Tachometer drive shaft gear retaining	1D36	1	-	
R-1891	13						BEARING - Tachometer drive shaft, ball	21D5	2	-	
R-1893	13						SPACER - Tachometer drive shaft ball bearing	22516	1	-	
R-1895	13						RETAINER - Tachometer drive shaft ball bearing	22520	1	-	
R-1897	13						BUSHING - Tachometer driven shaft	68702	2	-	
R-1899	13						WASHER - Tachometer driven shaft bushing	37D63	2	-	
R-1901	13						CAP - Tachometer drive	2006D1	1	-	
R-1903	13						COVER - Tachometer drive housing	65790	1	-	
R-1905	13						GASKET - Tachometer drive housing cover	22690	1	-	
R-1907	13						SCREW - Tachometer drive housing cover	137D10	6	-	
R-1909	13						GASKET - Tachometer drive housing to crankcase rear section	64119	1	-	
R-1911	13						NUT - Tachometer drive housing to crankcase rear section stud	1D1	3	-	
							WASHER - Tach. drive housing to crankcase rear section stud	27D5	3	-	
							<u>TACHOMETER DRIVE HOUSING AND GEARS (R975-28)</u>				
R-1930	14						HOUSING - Tachometer drive, assembly	47855	-	1	
							HOUSING - Tachometer drive	*63882	-	1	
R-1932	14						BEARING - Tachometer driven shaft	63957	-	2	
R-1934	14						BUSHING - Tachometer drive shaft	63903	-	1	
R-1936	14						SHAFT - Tachometer drive	63906	-	2	
R-1938	14						COVER - Tachometer drive housing, assembly	47852	-	1	
							COVER - Tachometer drive housing	*63604	-	1	
R-1940	14						BUSHING - Tachometer drive shaft	63603	-	1	
R-1942	14						GASKET - Tachometer drive housing cover	63941	-	1	
R-1944	14						SCREW - Tachometer drive housing cover	132D3	-	2	
							WASHER - Tachometer drive housing cover screw	27D33	-	2	
R-1946	14						SLEEVE - Tachometer driven shaft, assembly	47854	-	1	
							SLEEVE - Tachometer driven shaft	*63929	-	2	
R-1948	14						BUSHING - Tachometer driven shaft	63924	-	2	
R-1950	14						SHAFT - Tachometer driven, upper, assembly	47851	-	1	
							SHAFT - Tachometer driven, upper	*63608	-	1	
							SLEEVE - Tachometer driven shaft	*17268	-	1	
R-1952	14						SHAFT - Tachometer driven, lower, assembly	47895	-	1	
							SHAFT - Tachometer driven, lower	*63979	-	1	
							SLEEVE - Tachometer driven shaft	*17268	-	1	
R-1954	14						GASKET - Tachometer driven shaft sleeve	129D53	-	2	
R-1956	14						SPRING - Tachometer drive oil seal packing gland	28152	-	2	
R-1958	14						WASHER - Tachometer drive oil seal packing	66851	-	2	
R-1960	14						PACKING - Tachometer drive oil seal	66850	-	2	
R-1962	14						HOUSING - Tachometer drive oil seal	66849	-	2	
R-1964	14						GASKET - Tachometer drive oil seal housing	129D46	-	2	
R-1966	14						SCREW - Tachometer drive oil seal housing	143D5	-	1	
R-1968	14						CAP - Tachometer drive shaft housing	114574	-	1	
R-1970	14						GASKET - Tachometer drive shaft housing cap	37D08	-	1	
R-1972	14						GASKET - Tachometer drive housing to crankcase rear section	64119	-	1	
R-1974	14						NUT - Tachometer drive housing to crankcase rear section stud	1D1	-	1	
							WASHER - Tach. drive housing to crankcase rear section stud	27D3	-	3	

Ref. No.	Fig. No.	1	2	3	4	5	Description of Part	Part Number	Number Used			
									8	28		
<u>THREE-WAY ACCESSORY DRIVE (R975-28)</u>												
R-2000	15						HOUSING - Three-way accessory drive, studding assembly	415582	-	1		
							HOUSING - Three-way accessory drive, assembly	*415572	-	1		
							HOUSING - Three-way accessory drive	*113272	-	1		
R-2002	15						BUSHING - Three-way accessory drive gear	63958	-	1		
R-2004	15						BUSHING - Right hand vacuum pump screw	488	-	4		
R-2006	15						STUD - Left hand vacuum pump	2028H40	-	4		
R-2008	15						STUD - Fuel pump	2030H14	-	4		
R-2010	15						PLUG - Oil pressure hole (headless)	2142D1	-	1		
R-2012	15						PLUG - Accessory drive housing oil drain hole (square head)	2105D2	-	1		
R-2014	15						SHAFT - Left hand vacuum pump and fuel pump drive, assembly	415589	-	1		
							SHAFT - Left hand vacuum pump and fuel pump drive	*113227	-	1		
							COLLAR - Left hand vacuum pump and fuel pump drive shaft	*64011	-	1		
R-2016	15						SHAFT - Right hand vacuum pump drive, assembly	412766	-	1		
							SHAFT - Right hand vacuum pump drive	*69654	-	1		
							EXTENSION - Right hand vacuum pump drive shaft	*69683	-	1		
R-2018	15						COUPLING - Vacuum pump drive shaft	69655	-	2		
R-2020	15						RING - Vacuum pump drive shaft coupling, lock	67490	-	2		
R-2022	15						ADAPTER - Left hand vacuum pump, assembly	415588	-	1		
							ADAPTER - Left hand vacuum pump	*113269	-	1		
R-2024	15						BUSHING - Left hand vacuum pump and fuel pump drive shaft	113268	-	1		
R-2026	15						ADAPTER - Right hand vacuum pump, studding assembly	410779	-	1		
							ADAPTER - Right hand vacuum pump, assembly	*410673	-	1		
							ADAPTER - Right hand vacuum pump	*67942	-	1		
R-2028	15						BUSHING - Right hand vacuum pump drive shaft	64321	-	1		
R-2030	15						STUD - Right hand vacuum pump adapter to vacuum pump	2028H41	-	4		
R-2032	15						GASKET - Left hand vacuum pump adapter to three-way accessory drive housing	28885	-	1		
R-2034	15						GASKET - Right hand vacuum pump adapter to three-way accessory drive housing	63940	-	1		
R-2036	15						COVER - Vacuum pump substituting	28922	-	2		
R-2038	15						GASKET - Vacuum pump substituting cover	69072	-	2		
R-2040	15						NUT - Vacuum pump substituting cover stud	2D1	-	8		
							WASHER - Vacuum pump substituting cover stud	34D51	-	8		
							LOCK - Vacuum pump substituting cover stud, palnut	2000D1	-	8		
R-2042	15						STUD - Right hand vacuum pump adapter to three-way accessory drive housing	2043D49	-	4		
R-2044	15						NUT - Right hand vacuum pump adapter to three-way accessory drive housing stud	2101D4	-	4		
							WASHER - Right hand vacuum pump adapter to three-way accessory drive housing stud	34D33	-	4		
R-2046	15						GEAR - Fuel pump drive, assembly	415596	-	1		
							GEAR - Fuel pump drive	*112669	-	1		
							PLUNGER - Fuel pump drive gear thrust	*63069	-	1		
							SPRING - Fuel pump drive gear thrust plunger	*63071	-	1		
							RETAINER - Fuel pump drive gear thrust plunger	*63942	-	1		
							PIN - Fuel pump drive gear thrust plunger retaining	*17D9	-	1		
R-2048	15						ADAPTER - Fuel pump, assembly	415587	-	1		
							ADAPTER - Fuel pump	*113270	-	1		
R-2050	15						BUSHING - Fuel pump drive gear	63943	-	1		
R-2052	15						GASKET - Fuel pump adapter to three-way accessory drive housing	113415	-	1		
R-2054	15						COVER - Fuel pump substituting	68668	-	1		
R-2056	15						GASKET - Fuel pump substituting cover	67575	-	1		
R-2058	15						NUT - Fuel pump substituting cover stud	2D4	-	4		
							WASHER - Fuel pump substituting cover stud	34D33	-	4		
							LOCK - Fuel pump substituting cover stud, palnut	2000D2	-	4		
R-2060	15						GASKET - Three-way accessory drive housing to crankcase rear section	114658	-	1		
R-2062	15						NUT - Three-way accessory drive housing to crankcase rear section stud	1D40	-	5		
							WASHER - Three-way accessory drive housing to crankcase rear section stud	27D118	-	5		

Ref. No.	Fig. No.	1	2	3	4	5	Description of Part	Part Number	Number Used			
									8	28		
<u>PROPELLER GOVERNOR DRIVE (R975-28)</u>												
R-2084	16						BRACKET - Propeller governor drive, assembly	48173	-	1		
							BRACKET - Propeller governor drive	*64337	-	1		
R-2086	16						BUSHING - Propeller governor drive intermediate bevel gear	63958	-	1		
R-2088	16						NUT - Propeller governor drive bracket to crankcase front section stud	1D4	-	5		
							WASHER - Propeller governor drive bracket to crankcase front section stud	34D33	-	5		
R-2090	16						GEAR - Propeller governor drive intermediate spur	64334	-	1		
R-2092	16						GEAR - Propeller governor drive intermediate bevel	64335	-	1		
R-2094	16						BOLT - Propeller governor drive intermediate spur gear to bevel gear	65D15	-	6		
R-2096	16						CIRCLIP - Propeller governor drive intermediate bevel gear	2019D4	-	1		
R-2098	16						GEAR - Propeller governor drive bevel, assembly	414316	-	1		
							GEAR - Propeller governor drive bevel	*64336	-	1		
							PLUG - Propeller governor drive bevel gear, cup	*2052D20	-	1		
R-2100	16						CIRCLIP - Propeller governor drive bevel gear	2019D4	-	1		
R-2102	16						ADAPTER - Propeller governor drive, assembly	48174	-	1		
							ADAPTER - Propeller governor drive	*64338	-	1		
R-2104	16						BUSHING - Propeller governor drive bevel gear	63958	-	1		
R-2106	16						GASKET - Propeller governor drive adapter	64339	-	1		
R-2108	16						COVER - Propeller governor substituting	112984	-	1		
R-2110	16						GASKET - Propeller governor substituting cover	63867	-	1		
R-2112	16						STUD - Propeller governor or substituting cover to propeller governor adapter	2043D52	-	4		
R-2114	16						NUT - Propeller governor or substituting cover to propeller governor adapter stud	1D4	-	4		
							WASHER - Propeller governor or substituting cover to propeller governor adapter stud	34D33	-	4		
<u>GENERATOR DRIVE</u>												
R-2135	17						GEAR - Generator idler, assembly	43444	1	1		
							GEAR - Generator idler	*26931	1	1		
R-2137	17						BUSHING - Generator idler gear, long	21512	2	2		
R-2139	17						PIW - Generator idler gear shaft front bushing retaining	17D21	1	1		
R-2141	17						PIW - Generator idler gear shaft rear bushing retaining	17D29	1	1		
R-2143	17						SHAFT - Generator idler gear	21508	1	1		
R-2145	17						PLUG - Generator idler gear shaft	36D20	1	1		
R-2147	17						GASKET - Generator idler gear shaft	21511	1	1		
R-2149	17						NUT - Generator idler gear shaft	1D1	2	2		
							WASHER - Generator idler gear shaft	27D3	2	2		
R-2151	17						PINION - Generator idler gear	66313	1	1		
R-2153	17						BRACKET - Generator drive gear, assembly	410087	1	1		
							BRACKET - Generator drive gear	*66314	1	1		
R-2155	17						PLUG - Generator drive gear bracket (headless)	2142D1	1	1		
R-2157	17						GEAR - Generator drive, assembly	43443	1	1		
							GEAR - Generator drive	*26929	1	1		
R-2159	17						PLUG - Generator drive gear, cup	2052D6	1	1		
R-2161	17						SUPPORT - Generator drive gear	26932	1	1		
R-2163	17						GASKET - Generator drive gear support	23079	2	2		
R-2165	17						SHIM - Generator drive gear support	27017	1	1		
R-2167	17						BOLT - Generator gear support to generator drive gear bracket	95D3	5	5		
R-2169	17						NUT - Generator gear support to generator drive gear bracket bolt	1D84	5	5		
							WASHER - Generator gear support to generator drive gear bracket bolt	27D30	5	5		

Ref. No.	Fig. No.	1	2	3	4	5	Description of Part	Part Number	Number Used			
									8	28		
<u>CRANKSHAFT AND PROPELLER HUB ATTACHING PARTS</u>												
<u>CRANKSHAFT (R760-8)</u>												
Worn crankpins can be reground to .010" undersize.												
R-2200	18						CRANKSHAFT ASSEMBLY	415523	1	-		
R-2202	18						PLUG AND SCREEN - Crankshaft breather, assembly	49295	1	-		
							SCREEN - Crankshaft breather plug	*65770	1	-		
							RETAINER - Crankshaft breather screen	*28638	1	-		
							PLUG - Crankshaft breather	*28637	1	-		
							RIVET - Crankshaft breather screen retainer	*16D6	6	-		
R-2204	18						PLUG - Crankpin front, assembly	415539	1	-		
							PLUG - Crankpin front	*113218	1	-		
							NOZZLE - Crankpin front plug	*113217	1	-		
							CRANKSHAFT - Front end	*64365	1	-		
							CRANKSHAFT - Rear end	*26147	1	-		
							COUNTERWEIGHT - Front	*65192	1	-		
							COUNTERWEIGHT - Rear	*65193	1	-		
							RIVET - Front counterweight	*21572	4	-		
							RIVET - Rear counterweight	*21573	4	-		
R-2206	18						PLUG - Crankshaft front end rear	2042D4	1	-		
R-2208	18						PLUG - Crankpin oil, rear	2142D2	1	-		
R-2210	18						SCREW - Crankcheek cap	21412	1	-		
R-2211	18						WASHER - Crankcheek cap screw	34D35	1	-		
R-2212	18						SCREW - Crankshaft spline	2075D1	1	-		
							NOZZLE - Crankshaft oil	*65185	1	-		
							NUT - Crankshaft front end	28672	1	-		
R-2216	18						SPACER - Master connecting rod bearing thrust	@65680	1	-		
R-2218	18						PLUG - Crankshaft rear end rear	24031	1	-		
R-2220	18						SPACER - Crankshaft thrust ball bearing	21556	1	-		
R-2222	18						BEARING - Crankshaft thrust ball	21D68	1	-		
R-2224	18						SLINGER - Crankshaft thrust ball bearing oil	62116	1	-		
R-2226	18						NUT - Crankshaft thrust ball bearing	62981	1	-		
R-2228	18						RING - Crankshaft thrust ball bearing nut oil seal	@62231	2	-		
R-2230	18						BEARING - Crankshaft main, front	155D35	1	-		
R-2232	18						SPACER - Crankshaft front main bearing	22695	1	-		
R-2234	18						NUT - Crankshaft front main bearing lock	22624	1	-		
							GEAR - Crankshaft (Spring loaded type)	(a) 68046	1	-		
When replacement becomes necessary, it is recommended that gear 113219 (solid type) be used. Hub 411389, spring 68309, pin 68270 and retainer 29187 are not required when gear 113219 is used.												
R-2236	10,18						GEAR - Crankshaft (Solid type)	(b) 113219	1	-		
							HUB - Crankshaft gear, assembly	(a) 411389	1	-		
							(Used with gear 68046.)					
							HUB - Crankshaft gear	(a) *67900	1	-		
							PLATE - Crankshaft gear	(a) *29185	1	-		
							SPRING - Crankshaft gear	(a) 68309	8	-		
							(Used with gear 68046.)					
							PIN - Crankshaft gear spring retaining	68270	16	-		
							(Used with gear 68046.)					
							RETAINER - Crankshaft gear spring	29187	1	-		
							(Used with gear 68046.)					
R-2238	18						SCREW - Crankshaft gear	28014	8	-		

(a) Used for R760-8 engines 14769 to 14783 and 39766 to 39795.
 (b) Used for R760-8 engines 39796 to 39900.

Ref. No.	Fig. No.	1	2	3	4	5	Description of Part	Part Number	Number Used		
									8	28	
							CRANKSHAFT (R975-28)				
							Worn crankpins can be reground to .010" undersize.				
R-2257	19						CRANKSHAFT ASSEMBLY	414502	-	1	
							COUNTERWEIGHT - Rear, assembly	*414517	-	1	
							COUNTERWEIGHT - Rear	*112039	-	1	
R-2259	19						BUSHING - Rear counterweight	63030	-	4	
							TUBE - Crankshaft to controllable pitch propeller oil, assembly	47250	-	1	
							TUBE - Crankshaft to controllable pitch propeller oil	*63079	-	1	
							COLLAR - Crankshaft to controllable pitch propeller oil tube				
R-2261	19						PLUG AND SCREEN - Crankshaft breather, assembly	*62145	-	1	
							SCREEN - Crankshaft breather plug	410989	-	1	
							PLUG - Crankshaft breather	*67504	-	1	
							CRANKSHAFT - Front end	*63102	-	1	
							CRANKSHAFT - Rear end	*112016	-	1	
							COUNTERWEIGHT - Front	*62965	-	1	
R-2263	19						RIVET - Front counterweight	*112045	-	1	
R-2265	19						BUSHING - Crankshaft rear counterweight	*21572	-	4	
R-2266	19						PIV - Crankshaft rear counterweight	63029	-	2	
R-2267	19						STOP - Crankshaft rear counterweight	112028	-	2	
R-2269	19						BOLT - Crankshaft rear counterweight stop	112038	-	1	
R-2271	19						NUT - Crankshaft rear counterweight stop bolt	63D27	-	2	
R-2273	19						PLUG - Crankshaft to controllable pitch propeller oil tube supporting	1D4	-	2	
							TUBE - Crankshaft oil feed	62123	-	1	
R-2275	19						PLUG - Crankshaft front end, rear	*63156	-	1	
R-2277	19						PLUG - Crankpin, front	2042D4	-	1	
R-2279	19						SCREW - Crankpin front plug retaining	2084D4	-	1	
R-2281	19						LOCK - Crankpin front plug screw, tab	45D1	-	1	
R-2283	19						SCREW - Crankcheek cap	2067D4	-	1	
R-2285	19						WASHER - Crankcheek cap screw	21412	-	1	
R-2287	19						SCREW - Propeller hub locating	34D35	-	1	
							NOZZLE - Crankshaft oil	2075D1	-	1	
							NUT - Crankshaft front end	*111617	-	1	
R-2289	19						SPACER - Master connecting rod bearing thrust	28672	-	1	
R-2291	19						PLUG - Crankshaft rear end, rear	@65680	-	1	
R-2293	19						PLUG - Crankshaft to controllable pitch propeller oil tube outlet	24031	-	1	
R-2295	19						GASKET - Crankshaft to controllable pitch propeller oil tube outlet plug	28709	-	1	
R-2297	19						PACKING - Crankshaft to controllable pitch propeller oil tube	23D17	-	1	
R-2299	19						GLAND - Crankshaft to controllable pitch propeller oil tube packing	28847	-	1	
R-2301	19						BEARING - Crankshaft thrust ball	62905	-	1	
R-2303	19						SLINGER - Crankshaft thrust ball bearing oil	21D68	-	1	
R-2305	19						NUT - Crankshaft thrust ball bearing	62116	-	1	
R-2307	19						RING - Crankshaft thrust ball bearing nut, oil seal	62901	-	1	
R-2309	16, 19						GEAR - Crankshaft propeller governor drive	@62231	-	2	
R-2311	19						RING - Crankshaft propeller governor drive gear oil seal	64332	-	1	
R-2313	19						KEY - Crankshaft propeller governor drive gear retaining	5015D6	-	3	
R-2315	19						BEARING - Crankshaft main, front	7D17	-	1	
R-2317	19						SPACER - Crankshaft main front bearing	155D35	-	1	
R-2319	19						NUT - Crankshaft main front bearing lock	22635	-	1	
R-2321	19						GEAR - Crankshaft	22624	-	1	
R-2323	19						HUB - Crankshaft gear, assembly	67899	-	1	
							HUB - Crankshaft gear	411422	-	1	
							PLATE - Crankshaft gear hub	*68047	-	1	
R-2325	19						SPRING - Crankshaft gear	*28009	-	1	
R-2327	19						PIV - Crankshaft gear spring	68308	-	8	
R-2329	19						RETAINER - Crankshaft gear spring	67901	-	16	
R-2331	19						SCREW - Crankshaft gear hub	*28012	-	1	
								28014	-	8	

Ref. No.	Fig. No.	1	2	3	4	5	Description of Part	Part Number	Number Used		
									8	28	
							<u>PROPELLER HUB ATTACHING PARTS (R760-8)</u>				
R-2350	20						CONE - Propeller hub centering, rear	5028D2	1	-	
R-2352	20						SPACER - Propeller hub rear centering ring	62272	1	-	
R-2354	20						RING - Propeller hub centering, front	4018D2	1	-	
R-2356	20						NUT - Propeller hub	62270	1	-	
R-2358	20						PIN - Propeller hub nut locking	183D7	1	-	
							WASHER - Propeller hub nut locking pin	27D1	1	-	
R-2360	20						RING - Propeller hub snap	23347	1	-	
R-2362	20						CAP - Propeller hub nut	62279	1	-	
R-2364	20						SCREW - Propeller hub nut cap	137D3	4	-	
							WASHER - Propeller hub nut cap screw	27D131	4	-	

Ref. No.	Fig. No.	1	2	3	4	5	Description of Part	Part Number	Number Used			
									8	28		
<u>CONNECTING RODS</u>												
R-2400	21						ROD - Master, complete	410851Y1	1	-		
R-2402	21						ROD - Master, complete	410852Y1	-	1		
							ROD - Master	*67357	1	-		
							ROD - Master	*67358	-	-		
R-2404	21						BEARING - Master rod crankshaft	@29547	1	1		
R-2406	21						DOWNEL - Master rod crankshaft bearing retaining	2077D6	1	1		
R-2408	21						BUSHING - Master rod piston pin	2119D13	1	1		
R-2410	21						ROD - Articulated, assembly	410850	6	8		
							ROD - Articulated	*67356	6	8		
R-2412	21						BUSHING - Articulated rod knuckle	2119D22	6	8		
R-2414	21						BUSHING - Articulated rod piston pin	2119D21	6	8		
R-2416	21						PIN - Articulated rod knuckle, assembly	@41603	6	8		
							PIN - Articulated rod knuckle	*24461	6	8		
							PLUG - Articulated rod knuckle	*29D13	6	8		
R-2418	21						LOCK - Articulated rod knuckle pin	21411	3	-		
R-2420	21						LOCK - Articulated rod knuckle pin	22771Y25	-	4		
R-2422	21						SCREW - Articulated rod knuckle pin lock	2060D11	6	-		
R-2424	21						BOLT - Articulated rod knuckle pin lock	46D12	-	8		
							WASHER - Articulated rod knuckle pin lock screw	27D137	6	-		
R-2426	21						LOCK - Articulated rod knuckle pin lock bolt	24490	-	4		

Ref. No.	Fig. No.	1	2	3	4	5	Description of Part	Part Number	Number Used					
									8	28				
<u>CYLINDERS, INTAKE PIPES, PISTONS AND AIR DEFLECTORS</u>														
<u>CYLINDERS</u>														
Cylinders can be reground to .015" oversize only.														
R-2450	22						CYLINDER - With valves and valve rockers, assembly	89826N3	7	-				
							CYLINDER - With valves and valve rockers, assembly	89990N1	-	9				
							CYLINDER - With studs, assembly	49681N3	7	-				
							CYLINDER - With studs, assembly	415466N1	-	9				
							HEAD - Cylinder	*64881	7	9				
							BARREL - Cylinder	*65663	7	9				
							SEAT - Intake valve	@20636	7	9				
							The standard size seat is catalogued for reference only. For all replacements, use oversize seats.)							
							SEAT - Exhaust valve	@64109	7	9				
							The standard size seat is catalogued for reference only. For all replacements, use oversize seats.)							
R-2452	22					GUIDE - Intake valve	@21397	7	9					
R-2454	22					GUIDE - Exhaust valve	@20637	7	9					
						COOLER - Spark plug	@44268	7	-					
						The standard size cooler is catalogued for reference only. For all replacements, use oversize coolers.)								
R-2456	22					COOLER - Spark plug	@48251		9					
						The standard size cooler is catalogued for reference only. For all replacements, use oversize coolers.)								
						PISTON - Spark plug cooler retaining	13D40	28	36					
						CONNECTION - Intake pipe	20630	7	9					
						RYLET - Intake pipe connection	66D18	14	18					
R-2458	22					BUSHING - Cylinder head air deflector bolt	19S14	14	18					
R-2460	22					BUSHING - Cylinder head air deflector bolt	19S10	14	18					
R-2462	22					STUD - Rocker box cover	118H2	56	72					
R-2464	22					STUD - Cylinder to exhaust elbow	2032H6	14	18					
R-2466	22,24					CONNECTION - Push rod housing hose	65933	14	18					
						ARM - Rocker, intake, complete assembly	412543	7	9					
						ARM - Rocker, intake, assembly	89356	7	9					
						ARM - Rocker, intake	*28260	7	9					
						ROLLER - Rocker arm	23065	7	9					
						HUB - Rocker arm roller	23066	7	9					
						PISTON - Rocker arm roller hub retaining	29D11	7	9					
						BOLT - Valve clearance adjusting screw clamp	46D13	7	9					
						LOCKWASHER - Valve clearance adjusting screw clamp bolt	189D58	7	9					
						SCREW - Valve clearance adjusting	62773	7	9					
						BEARING - Rocker arm roller	68174	7	9					
R-2468	24					ARM - Rocker, exhaust, complete assembly	412544	7	9					
						ARM - Rocker, exhaust, assembly	82445	7	9					
						ARM - Rocker, exhaust	*23443	7	9					
R-2470	24					ROLLER - Rocker arm	23065	7	9					
R-2472	24					HUB - Rocker arm roller	23066	7	9					
R-2473	24					PISTON - Rocker arm roller hub retaining	29D11	7	9					
R-2474	24					BOLT - Valve clearance adjusting screw clamp	46D13	7	9					
R-2475	24					LOCKWASHER - Valve clearance adjusting screw clamp bolt	189D58	7	9					
						SCREW - Valve clearance adjusting	62773	7	9					
R-2476	24					BEARING - Rocker arm roller	68174	7	9					
R-2478	24					NUT - Rocker box cover stud	124D95	56	72					
R-2480	22					WASHER - Rocker box cover stud	27D1	56	72					
						LOCKWASHER - Rocker box cover stud	28D14	56	72					
R-2482	24					BOLT - Rocker arm hub	66047	14	18					
R-2484	24					NUT - Rocker arm hub bolt	64768	14	18					

Ref. No.	Fig. No.	1	2	3	4	5	Description of Part	Part Number	Number Used		
									8	28	
R-2486	24						WASHER - Rocker arm hub bolt (Under bolt head)	34D71	14	18	
R-2490	24						WASHER - Rocker arm hub bolt	64126	14	18	
							VALVE - Intake	66898	7	9	
							VALVE - Exhaust	66899	7	-	
R-2492	24						VALVE - Exhaust (a)	66900	7	9	
R-2494	24						SPRING - Valve, inner (b)	64538	14	18	
R-2496	24						SPRING - Valve, intermediate	64539	14	18	
R-2498	24						SPRING - Valve, outer	64540	14	18	
R-2500	24						WASHER - Valve spring, upper	61663	14	18	
							WASHER - Valve spring, lower, intake	20609	7	9	
R-2502	24						WASHER - Valve spring, lower, intermediate, exhaust	24444	7	9	
R-2504	24						WASHER - Valve spring, lower, outer, exhaust	25619	7	9	
							LOCK - Valve spring washer, intake	20350	14	18	
R-2506	24						LOCK - Valve spring washer, exhaust	21419	14	18	
R-2508	24						CIRCLLET - Exhaust valve	20611	7	9	
R-2510	22						RING - Cylinder oil seal	24135	7	9	
R-2512	22						NUT - Cylinder hold-down stud	124D116	56	72	
							COVER - Rocker box, intake and exhaust	64825	14	-	
R-2514	22						COVER - Rocker box, intake	67379	-	9	
R-2516	22						COVER - Rocker box, exhaust	67380	-	9	
R-2518	22						GASKET - Rocker box cover	110001	14	18	
R-2520	22						ELBOW - Front exhaust, assembly	43466	14	18	
							ELBOW - Front exhaust	*26950	14	18	
R-2522	22						STUD - Front exhaust elbow to exhaust pipe	2030H10	14	18	
R-2524	22						NUT - Front exhaust elbow to cylinder head stud	1D42	14	18	
							WASHER - Front exhaust elbow to cylinder head stud	27D123	14	18	
<u>INTAKE PIPES</u>											
							PIPE - Intake, assembly (Without priming connection) (a)	415711	4	-	
R-2546	22						PIPE - Intake, assembly (Without priming connection) (b)	42762	4	4	
							PIPE - Intake	*25914	4	4	
							FLANGE - Intake pipe (a)	113221	4	-	
R-2548	22						FLANGE - Intake pipe (b)	67072	4	4	
							PIPE - Intake, assembly (With priming connection)	415542	3	-	
							PIPE - Intake, assembly (With priming connection)	48218	-	5	
							PIPE - Intake	*64436	3	5	
							BOSS - Intake pipe priming	*64437	3	5	
							FLANGE - Intake pipe	*113221	3	-	
							FLANGE - Intake pipe	*67072	-	5	
							PLUG - Intake pipe priming connection	2142D1	3	5	
R-2550	22						GASKET - Intake pipe flange	21396	7	9	
R-2552	22						SCREW - Intake pipe flange	45D18	21	27	
							WASHER - Intake pipe flange screw	27D118	21	27	
							LOCKWASHER - Intake pipe flange screw	28D13	21	27	
R-2554	22						PACKING - Intake pipe	21585	7	9	
R-2556	22						NUT - Intake pipe packing	21584	7	9	
<u>PISTONS (R760-8)</u>											
							PISTON - With rings, piston pin and retainers, assembly (Except two bottom cylinders)	6410908	5	-	
							PISTON - With rings, piston pin and retainers, assembly (Two bottom cylinders)	6410909	2	-	
							PISTON - With rings, assembly (Except two bottom cylinders)	689774	5	-	
							PISTON - With rings, assembly (Two bottom cylinders)	689775	2	-	
							PISTON (Except two bottom cylinders)	*66080	5	-	
							PISTON (Two bottom cylinders)	*66079	2	-	
							RING - Piston, compression	666239	21	-	
							RING - Piston, wiper	667159	14	-	
							PIN - Piston	26823	7	-	
							RETAINER - Piston pin	28751	14	-	
(a) Used for R760-8 engines 39766 to 39900.											
(b) Used for R760-8 engines 14769 to 14783 and all R975-28 engines.											

Final Spare Parts List for R760-8 and R975-28 Engines

Ref. No.	Fig. No.	1	2	3	4	5	Description of Part	Part Number	Number Used		
									8	28	
							<u>PISTONS (R975-28)</u>				
							A new "Uniflow Type" piston has been released for use on all R975-28 engines. This piston has the two top ring grooves tapered and fitted with wedge shaped rings. It is the only type supplied for replacement of the earlier type pistons using all flat rings.				
R-2575	22						PISTON - With rings, piston pin and retainers, assembly Piston 416336 has the two top ring grooves tapered and fitted with wedge shaped rings. For replacement of pistons 49553 originally installed on (a) engines in the seven upper cylinders and piston 49552 installed in the two bottom cylinders, use piston 416336.)	@416336	-	9	
							PISTON - With rings, assembly Piston 890023 has the two top ring grooves tapered and fitted with wedge shaped rings. For replacement of pistons 89668 and 89669, details of pistons 49552 and 49553 respectively, use piston 890023. Read note under 416336 above.)	@890023	-	9	
R-2577	22						PISTON (Detail of piston 890023.)	*112214	-	9	
R-2579	22						RING - Piston, compression (Grooves #1 & 2) (Detail of piston 890023.)	@112213	-	18	
							RING - Piston, compression (Installed in grooves #3, 4 and 5 of piston 890023. This ring is used in an inverted position in groove #5 and acts as a scraper ring. Installed in grooves #1, 2 and 3 of pistons 89668 and 89669. Read note under piston 890023.)	@66239	-	27	
							RING - Piston, wiper (Installed in groove #5 of pistons 89668 and 89669. Read note under piston 890023.)	@67159	-	9	
							RING - Piston, oil (Installed in groove #4 of pistons 89668 and 89669. Read note under piston 890023.)	@67160	-	9	
R-2581	22						PIN - Piston	26823	-	9	
R-2583	22						RETAINER - Piston pin	28751	-	13	
							<u>INTER-CYLINDER AIR DEFLECTORS</u>				
R-2620	23						DEFLECTOR - Inter-cylinder air, assembly (Between cylinders #1 & 2)	415991N1	-	1	
R-2622	23						DEFLECTOR - Inter-cylinder air, assembly (Between cylinders #2 & 3)	416258N1	-	1	
R-2624	23						DEFLECTOR - Inter-cylinder air, assembly (Between cylinders #3 & 4, 5, 7 & 8)	415817N1	-	3	
R-2626	23						DEFLECTOR - Inter-cylinder air, assembly (Between cylinders #6 & 7, 9 & 1)	415819N1	-	2	
R-2628	23						DEFLECTOR - Inter-cylinder air, assembly (Between cylinders #9 & 4)	416554N1	-	1	
R-2630	23						DEFLECTOR - Inter-cylinder air, assembly (Between cylinders #5 & 6)	414248	-	1	
							DEFLECTOR - Inter-cylinder air (Detail of deflector 415991N1.)	*114134	-	1	
							DEFLECTOR - Inter-cylinder air (Detail of deflectors 416258N1 and 415819N1.)	*113483	-	3	
							DEFLECTOR - Inter-cylinder air (Detail of deflector 415817N1.)	*113481	-	3	
							DEFLECTOR - Inter-cylinder air (Detail of deflector 416554N1.)	*113476	-	1	
							(a Used for R775-28 engines 18866, 18892, 18900 to 18903, 40401 to 40455 and 40457 to 40493.				

Ref. No.	Fig. No.	1	2	3	4	5	Description of Part	Part Number	Number Used		
									8	28	
							DEFLECTOR - Inter-cylinder air (Detail of deflector 414288.)	*111795	-	1	
							BRACKET - Inter-cylinder air deflector, upper (Detail of deflector 415991N1.)	113403	-	1	
							BRACKET - Inter-cylinder air deflector, upper (Detail of deflectors 415819N1, 415817N1 and 414288.)	69597N1	-	6	
							SCREW - Inter-cylinder air deflector upper bracket to deflector (Detail of deflectors 415991N1, 415819N1, 415817N1 and 414288.)	15D5	-	14	
							NUT - Inter-cylinder air deflector upper bracket to deflector screw (Detail of deflectors 415991N1, 415819N1, 415817N1 and 414288.)	2087D1	-	14	
							WASHER - Inter-cylinder air deflector upper bracket to deflector screw (Detail of deflectors 415991N1, 415819N1, 415817N1 and 414288.)	27D130	-	14	
							CLAMP - Inter-cylinder air deflector magneto blast tube, assembly (Detail of deflectors 416258N1 and 416554N1.)	416243	-	2	
							CLAMP - Inter-cylinder air deflector magneto blast tube	*114047	-	2	
							TUBE - Inter-cylinder air deflector magneto blast tube clamp	*114046	-	4	
							BRACKET - Inter-cylinder air deflector magneto blast tube clamp	*69597N2	-	2	
							BOLT - Inter-cylinder air deflector magneto blast tube clamp	3D7	-	2	
							NUT - Inter-cylinder air deflector magneto blast tube clamp bolt	4040D4	-	2	
							PLUG - Inter-cylinder air deflector magneto blast tube clamp	114043	-	2	
							SCREW - Inter-cylinder air deflector magneto blast tube clamp to deflector (Detail of deflectors 416258N1 and 416554N1.)	15D5	-	6	
							NUT - Inter-cylinder air deflector magneto blast tube clamp to deflector screw (Detail of deflectors 416258N1 and 416554N1.)	2087D1	-	6	
							WASHER - Inter-cylinder air deflector magneto blast tube clamp to deflector screw (Detail of deflectors 416258N1 and 416554N1.)	27D130	-	6	
							BRACE - Inter-cylinder air deflector (at gun blast hole) (Detail of deflector 415991N1.)	113404	-	1	
							RIVET - Inter-cylinder air deflector brace (Detail of deflector 415991N1.)	66D19	-	3	
							WASHER - Inter-cylinder air deflector brace rivet (Detail of deflector 415991N1.)	27D130	-	3	
							BRACKET - Inter-cylinder air deflector, lower (Detail of deflector 414288.)	111796	-	1	
							RIVET - Inter-cylinder air deflector lower bracket to deflector (Detail of deflector 414288.)	66D25	-	2	
							WASHER - Inter-cylinder air deflector lower bracket to deflector rivet	27D130	-	2	
							PAD AND GROMMET - Inter-cylinder air deflector (cylinder barrel) (Except deflector 414288.)	113394	-	32	
							PAD AND GROMMET - Inter-cylinder air deflector, R.H. (cylinder head) (Except deflector 414288.)	113395	-	8	
							PAD AND GROMMET - Inter-cylinder air deflector, L.H. (cylinder head) (Except deflector 414288.)	113396	-	8	
							HOOK - Inter-cylinder air deflector clamp (Except deflector 414288.)	69286	-	16	

Ref. No.	Fig. No.	1	2	3	4	5	Description of Part	Part Number	Number Used		
									8	28	
							RIVET - Inter-cylinder air deflector clamp to deflector (Except deflector 414288.)	66D19	-	32	
							WASHER - Inter-cylinder air deflector clamp to deflector rivet (Except deflector 414288.)	27D130	-	32	
							PAD - Inter-cylinder air deflector buffer (Except deflectorss415991N1 and 414288.)	113393	-	7	
							RIVET - Inter-cylinder air deflector buffer pad to deflector (Except deflectorss 415991N1 and 414288.)	66D47	-	28	
							WASHER - Inter-cylinder air deflector buffer pad to deflector rivet (Except deflectorss 415991N1 and 414288.)	27D116	-	28	
							BRACE - Inter-cylinder air deflector, bottom (Detail of deflectorss 416258N1, 415819N1 and 414817N1.)	69472	-	6	
							RIVET - Inter-cylinder air deflector bottom brace (Detail of deflectorss 416258N1, 415819N1 and 414817N1.)	66D19	-	12	
R-2632	23						WASHER - Inter-cylinder air deflector bottom brace rivet	27D130	-	12	
							CLAMP - Inter-cylinder air deflector, assembly (hinged)	412324	-	7	
							CLAMP - Inter-cylinder air deflector	69119	-	7	
							BUSHING - Inter-cylinder air deflector clamp	69197	-	7	
							HINGE - Inter-cylinder air deflector clamp	69198	-	7	
R-2634	23						RIVET - Inter-cylinder air deflector hinge to clamp	66D19	-	7	
R-2636	23						CLAMP - Inter-cylinder air deflector (flat)	69119	-	7	
R-2638	23						SPRING - Inter-cylinder air deflector clamp	69120	-	7	
							SCREW - Inter-cylinder air deflector to cylinder head	65D12	-	9	
<u>CYLINDER HEAD AIR DEFLECTORS</u>											
R-2656	23						DEFLECTOR - Cylinder head air, assembly	412907	-	7	
							DEFLECTOR - Cylinder head air	*6-378	-	7	
							SUPPORT - Cylinder head air deflector	62362	-	7	
							RIVET - Cylinder head air deflector support to deflector	66D2	-	14	
							BRACKET - Cylinder head air deflector	69865	-	7	
							RIVET - Cylinder head air deflector bracket to deflector	66D19	-	21	
							WASHER - Cylinder head air deflector bracket to deflector rivet	27D130	-	21	
R-2658	23						SCREW - Cylinder head air deflector to cylinder head	35D13	-	14	
							WASHER - Cylinder head air deflector to cylinder head screw	34D14	-	14	

Ref. No.	Fig No.	1	2	3	4	5	Description of Part	Part Number	Number Used		
									8	28	
<u>VALVE MECHANISM</u>											
<u>ROCKER ARMS</u>											
Listed in "Cylinder" group on page 45.											
							SHIM - Rocker arm roller bearing thrust, .005" thick	27D157	As	req'd.	
							SHIM - Rocker arm roller bearing thrust, .010" thick	27D158	As	req'd.	
							SHIM - Rocker arm roller bearing thrust, .015" thick (These shims are for service use only, to compensate for wear in the rocker arm bosses in the cylinder.)	27D146	As	req'd.	
<u>PUSH RODS AND HOUSINGS</u>											
R-2700	24						ROD - Push, assembly	49514	14	18	
							ROD - Push	*21884	14	18	
							END - Push rod	*66039	28	36	
R-2702	24						HOUSING - Push rod	65932	14	18	
R-2704	24						HOSE - Push rod housing, lower	2058D73	14	18	
R-2706	24						HOSE - Push rod housing, upper	2058D25	14	18	
R-2708	24						CLAMP - Push rod housing hose, lower	4019D2	28	36	
R-2710	24						CLAMP - Push rod housing hose, upper	4019D10	14	18	
<u>VALVE TAPPETS</u>											
R-2735	24						TAPPET - Valve	66950	14	18	
R-2737	24						SOCKET - Valve tappet ball	62728	14	18	
R-2739	24						SPRING - Valve tappet ball socket	66041	14	18	
R-2741	24						NUT - Valve tappet retainer	66040	14	18	
R-2743	24						SEAL - Valve tappet retainer nut oil	66042	14	18	
R-2745	24						ROLLER - Valve tappet	22522	14	18	
R-2747	24						PIN - Valve tappet roller	20453	14	18	
<u>VALVES AND SPRINGS</u>											
Listed in "Cylinder" group on page 46.											

Ref. No.	Fig. No.	1	2	3	4	5	Description of Part	Part Number	Number Used		
									8	28	
<u>MAGNETOS, IGNITION WIRING AND SPARK PLUGS</u>											
<u>MAGNETOS</u>											
R-2800	25						MAGNETO - Right hand Scintilla SF7R7-1	68495	1	-	
							MAGNETO - Left hand Scintilla SF7R7-1	68496	1	-	
R-2802	25						MAGNETO - Scintilla SF9R	67232	-	2	
							SPACER - Magneto pilot	63994	-	2	
							Used when magneto with a 1 7/8" diameter pilot is installed on crankcase rear section machined for a magneto with a 3" diameter pilot.)				
R-2804	11						COUPLING - Magneto	62949	-	2	
							KEY - Magneto coupling	10D6	-	2	
R-2806	25						NUT - Magneto coupling	16795	-	2	
R-2808	25						WASHER - Magneto coupling	34D46	2	2	
							WIRE - Magneto booster	62808	-	10	
							COUPLING - Magneto shield outlet (R.H. magneto)	27207	1	1	
							NUT - Magneto shield outlet coupling (R.H. magneto)	24876	1	1	
							DISC - Magneto shield outlet coupling nut (R.H. magneto)	113055	1	1	
R-2812	25						GASKET - Magneto to crankcase rear section	25677	2	2	
R-2814	25						NUT - Magneto to crankcase rear section stud	1D40	6	6	
							WASHER - Magneto to crankcase rear section stud	6	6	6	
R-2816	25						POD - Magneto advance control	32957	1	-	
R-2818	25						ROD END - Magneto advance control, short	21609	1	-	
R-2820	25						ROD END - Magneto advance control, long	21608	1	-	
R-2822	25						NUT - Magneto advance control rod adjusting	2D4	2	-	
R-2824	25						BOLT - Magneto advance lever to rod end	66524	2	-	
R-2826	25						NUT - Magneto advance lever to rod end	1D84	2	-	
R-2828	25						NUT - Magneto advance lever to rod end	2D35	2	-	
<u>IGNITION WIRING</u>											
R-2850	26						WIRING HARNESS - Radio-shielded (Breeze) (With cable)	112822N3	1	-	
							WIRING HARNESS - Radio-shielded (Breeze) (With cable)	112825N3	-	1	
							WIRING HARNESS - Radio-shielded (Breeze) (Without cable)	112822N1	1	-	
R-2851	26						WIRING HARNESS - Radio-shielded (Breeze) (Without cable)	112825N1	-	1	
							WIRE - High tension ignition	62808	62	96	
R-2852	26						ELBOW - Spark plug shielded terminal	113102N1	14	-	
R-2854	26						ELBOW - Spark plug shielded terminal	113102N2	-	18	
							CONTACT - Spark plug shielded terminal elbow	61722	14	18	
R-2856	26						WASHER - Spark plug shielded terminal elbow (Spark plug end)	27D208	14	-	
R-2858	26						WASHER - Spark plug shielded terminal elbow (Spark plug end)	27D209	-	18	
							PACKING - Spark plug shielded terminal elbow, rubber (Ignition wire end)	24391	14	18	
<u>SPARK PLUGS</u>											
R-2880	26						PLUG - Spark (E.G. 4B-2S)	29263	14	-	
R-2882	26						PLUG - Spark (E.G. 465-LS)	112895	-	18	
							GASKET - Spark plug	27D104	14	18	

Ref. No.	Fig. No.	1	2	3	4	5	Description of Part	Part Number	Number Used	
									8	28
							<u>CARBURETOR, AIR HEATER, ELBOW AND AIR CLEANER</u>			
							<u>CARBURETOR</u>			
R-2900	27						CARBURETOR - (KA-R7A) *	113267	1	-
							CARBURETOR - (KA-R9B)	113467	-	1
							STUD - Carburetor to air heater	2104D5	4	-
R-2902	27						GASKET - Carburetor to carburetor elbow	21835	1	1
R-2904	27						NUT - Carburetor to carburetor elbow stud	1D40	4	4
							WASHER - Carburetor to carburetor elbow stud	27D118	4	4
							WASHER - Carburetor to carburetor elbow stud	34D14	-	4
							<u>AIR HEATER</u>			
R-2925	28						BODY - Carburetor air heater, assembly, complete	89564	1	-
							BODY - Carburetor air heater, assembly, complete	89565	-	1
							BODY - Carburetor air heater, assembly	48512	1	-
							BODY - Carburetor air heater, assembly	48613	-	1
							BODY - Carburetor air heater front section	*23315	1	-
							BODY - Carburetor air heater front section	*23290	-	1
							WALL - Carburetor air heater, upper	*28602	1	-
							WALL - Carburetor air heater, upper	*28463	-	1
							WALL - Carburetor air heater, lower	*28464	1	1
							WALL - Carburetor air heater, side	*24986	1	-
							WALL - Carburetor air heater, side	*23241	-	1
							PLATE - Carburetor air heater mounting	*28926	1	1
							PLATE - Carburetor air heater mounting	*28928	3	3
							PLUG - Carburetor air heater upper wall	*26432	2	-
							PLUG - Carburetor air heater upper wall	*26433	-	2
							BRACKET - Carburetor air heater door control rod	*28927	1	1
							PLATE - Carburetor air heater scoop support	*64691	2	2
							PLATE - Carburetor air heater insert	*24983	1	-
							PLATE - Carburetor air heater insert	*24984	-	1
							SUPPORT - Carburetor air heater stud	*28460	2	2
							PLATE - Carburetor air heater insert	*23512	1	1
							STUD - Carburetor air heater	*28459	1	1
							HINGE - Carburetor air heater door	*28467	4	4
							TUBE - Carburetor air heater scoop hinge	*64689	4	4
							TUBE - Carburetor air heater scoop hinge	*64690	4	4
							TUBE - Carburetor air heater door control rod	*113585	1	1
							DOOR - Carburetor air heater, assembly, R.H.	44632	1	1
							DOOR - Carburetor air heater, R.H.	*28456	1	1
							LINK - Carburetor air heater control rod	28458	1	1
							CLIP - Carburetor air heater control rod	23235	1	1
R-2927	28						DOOR - Carburetor air heater, assembly, L.H.	44633	1	1
							DOOR - Carburetor air heater, L.H.	*28457	1	1
							LINK - Carburetor air heater control rod	28458	1	1
							CLIP - Carburetor air heater control rod	23235	1	1
R-2929	28						ROD - Carburetor air heater control	28461	1	1
R-2931	28						NUT - Carburetor air heater control rod	33D19	1	1
R-2933	28						END - Carburetor air heater control rod	23183	1	1
							WASHER - Carburetor air heater control rod	27D80	1	1
							PIN - Carburetor air heater door hinge	28455	2	2
R-2935	28						GASKET - Carburetor air heater to carburetor	25309	1	-
R-2937	28						GASKET - Carburetor air heater to carburetor	22543	-	1
							CLAMP - Carburetor air heater, assembly	413452	1	1
							CLAMP - Carburetor air heater	*110575	1	1
							PLATE - Carburetor air heater reinforcing	*110576	4	4
R-2939	28						BRACKET AND PIPE - Carburetor air heater, assembly	412533	1	-
							BRACKET AND PIPE - Carburetor air heater, assembly	412535	-	1
							BRACKET - Carburetor air heater	*110170	1	1
							PIPE - Carburetor air heater	*110962	1	-
							PIPE - Carburetor air heater	*110978	-	1
							RIVET - Carburetor air heater pipe bracket to pipe	*66D2	2	2

Ref. No.	Fig. No.	1	2	3	4	5	Description of Part	Part Number	Number Used	
									8	28
R-2941	28						BOLT - Carburetor air heater pipe bracket to cowl bracket	6D5	1	1
R-2943	28						NUT - Carburetor air heater pipe bracket to cowl bracket bolt WASHER - Carburetor air heater pipe bracket to cowl bracket bolt	2101D3	1	1
R-2945	28						SCREW - Carburetor air heater pipe clamp	34D51	2	2
R-2947	28						NUT - Carburetor air heater pipe clamp screw	6D35	1	1
R-2949	28						SCOOP - Carburetor air heater, assembly, R.H.	2101D3	1	1
							SCOOP - Carburetor air heater, assembly, R.H.	48602	1	-
							SCOOP - Carburetor air heater, R.H.	412574	-	1
							SCOOP - Carburetor air heater, R.H.	*64692	1	-
							TUBE - Carburetor air heater scoop hinge	*64871	-	1
							PLATE - Carburetor air heater	*64832	3	3
							PLATE - Carburetor air heater scoop deflector	*64833	1	-
							BRACKET - Carburetor air heater scoop deflector	*64947	1	1
							DEFLECTOR - Carburetor air heater scoop cylinder head air	*64948	1	1
							PLATE - Carburetor air heater scoop reinforcing, small	*64949	1	1
							PLATE - Carburetor air heater scoop reinforcing, large	*66929	1	1
							PLATE - Carburetor air heater cylinder head air deflector reinforcing	*66930	1	1
							SCOOP - Carburetor air heater, assembly, L.H.	*66931	1	1
							SCOOP - Carburetor air heater, assembly, L.H.	48603	1	-
		R-2951	28						SCOOP - Carburetor air heater, L.H.	412573
							SCOOP - Carburetor air heater, L.H.	*64693	1	-
							TUBE - Carburetor air heater scoop hinge	*64872	-	1
							PLATE - Carburetor air heater	*64832	3	3
							PLATE - Carburetor air heater cylinder air deflector	*64833	1	-
							BRACKET - Carburetor air heater cylinder air deflector	*64947	1	1
							DEFLECTOR - Carburetor air heater cylinder air	*64948	1	1
							PLATE - Carburetor air heater scoop reinforcing, small	*64949	1	1
							PLATE - Carburetor air heater scoop reinforcing, large	*66929	1	1
							PLATE - Carburetor air heater cylinder head air deflector reinforcing	*66930	1	1
R-2953	28						PIN - Carburetor air scoop hinge	*66931	1	1
							BRACKET - Carburetor air scoop, R.H.	68202	2	2
							BRACKET - Carburetor air scoop, L.H.	64266	1	-
							SCREW - Carburetor air scoop bracket	64267	1	-
							WASHER - Carburetor air scoop bracket	22D2	4	-
R-2955	28						EXTENSION - Carburetor air heater scoop, assembly	27D121	4	-
							EXTENSION - Carburetor air heater scoop	412569	-	2
R-2957	28						BRACKET - Carburetor air heater scoop extension	*69410	-	2
							SCREW - Carburetor air heater scoop extension to cylinder head	*69411	-	4
							WASHER - Carburetor air heater scoop extension to cylinder head screw	35D13	-	4
R-2959	28						NUT - Carburetor air heater to carburetor stud	34D14	-	4
							WASHER - Carburetor air heater to carburetor stud	1D40	4	-
							SCREW - Carburetor air heater to carburetor	34D33	4	-
							WASHER - Carburetor air heater to carburetor screw	2070D26	-	4
							34D33	-	4	
<u>CARBURETOR ELBOW</u>										
R-2980	27						ELBOW - Carburetor, assembly (a)	412409	1	-
							ELBOW - Carburetor, assembly (b)	410437	1	-
							ELBOW - Carburetor, assembly	412410	-	1
							ELBOW - Carburetor (a)	*69234	1	-
							ELBOW - Carburetor (b)	*66839	1	-
R-2982	27					STUD - Carburetor elbow to carburetor	*69233	-	1	
R-2984	27					PLUG - Carburetor elbow thermometer and ice warning indicator hole substituting	2032H10	4	4	
							93D18	2	2	
(a) Used for R760-8 engines 14769 to 14772.										
(b) Used for R760-8 engines 14773 to 14783 and 39766 to 39900.										

Ref. No.	Fig. No.	1	2	3	4	5	Description of Part	Part Number	Number Used			
									8	28		
R-2986	27						GASKET - Carburetor elbow thermometer plug and ice warning indicator hole substituting plug	23D16	2	2		
R-2988	27						BUSHING - Carburetor elbow thermometer plug and ice warning indicator hole substituting plug	64280	2	2		
R-2990	27						PLUG - Carburetor elbow vacuum connection pipe	2105D2	1	1		
R-2992	27						GASKET - Carburetor elbow to rear section	69258	1	-		
R-2994	27						GASKET - Carburetor elbow to rear section	69259	-	1		
							NUT - Carburetor elbow to rear section stud	2101D5	4	4		
							WASHER - Carburetor elbow to rear section stud	34D14	4	4		
							<u>AIR CLEANER</u>					
R-3120	28						CLEANER - Air, assembly	89186	1	1		
R-3122	28						CLEANER - Air	*28466	1	1		
R-3124	28						GASKET - Air cleaner	28465	1	1		
							NUT - Air cleaner support stud, wing	2008D4	1	1		

Ref. No.	Fig. No.	1	2	3	4	5	Description of Part	Part Number	Number Used		
									8	28	
<u>EXHAUST MANIFOLD AND NOSE COWL</u>											
<u>EXHAUST MANIFOLD</u>											
R-3150	29						MANIFOLD - Exhaust	113220N1	1	-	
R-3151	30						MANIFOLD - Exhaust	110612N1	-	1	
R-3152	29						NUT - Exhaust manifold to nose cowl stud	2101D4	3	-	
R-3154	29						SPACER - Exhaust manifold to nose cowl stud	66769	3	-	
R-3156	29,30						GASKET - Exhaust pipe to exhaust elbow	24789	7	9	
R-3158	29,30						NUT - Exhaust pipe to exhaust elbow stud	1D40	14	18	
<u>NOSE COWL (R760-8)</u>											
R-3190	29						COWL AND SUPPORT - Nose, assembly	411543	1	-	
							COWL - Nose, assembly	*411542	1	-	
							RIVET - Nose cowl	66D2	8	-	
R-3192	29						SUPPORT - Exhaust manifold, studding assembly	410748	3	-	
							SUPPORT - Exhaust manifold	*25196	3	-	
R-3194	29						STUD - Exhaust manifold support	2030H18	3	-	
R-3196	29						BOLT - Exhaust manifold support to nose cowl	182D7	12	-	
R-3198	29						NUT - Exhaust manifold support to nose cowl bolt	1D84	12	-	
							WASHER - Exhaust manifold support to nose cowl bolt	27D24	12	-	
R-3200	29						PLATE - Ignition wire nose cowl clip, assembly	414069	5	-	
							PLATE - Ignition wire nose cowl clip	*112464	5	-	
							NUT - Ignition wire nose cowl clip screw	*112463	5	-	
R-3202	29						CLIP - Ignition wire cowl support, assembly	413832	5	-	
							CLIP - Ignition wire cowl support	*111559	5	-	
							ANGLE - Ignition wire cowl support clip	*111560	5	-	
							SCREW - Ignition wire cowl support clip	123D5	5	-	
							NUT - Ignition wire cowl support clip screw	*2087D6	5	-	
R-3204	29						SCREW - Ignition wire cowl support clip to clip plate	123D1	5	-	
							LOCKWASHER - Ignition wire cowl support clip to clip plate screw	28D5	5	-	
							RIVET - Ignition wire nose cowl clip plate to cowl	66D2	10	-	
							WASHER - Ignition wire nose cowl clip plate to cowl rivet	27D130	10	-	
R-3206	29						CLIP - Ignition wire support, assembly (At air scoop)	414524	2	-	
							CLIP - Ignition wire support	*111559	2	-	
							PLATE - Ignition wire support	*112055	2	-	
R-3208	29						SCREW - Ignition wire support to nose cowl (At air scoop)	123D6	2	-	
R-3210	29						BRACKET - Carburetor air heater pipe support	110105	1	-	
							RIVET - Carburetor air heater pipe support bracket to cowl	66D7	2	-	
							WASHER - Carburetor air heater pipe support bracket to cowl rivet	27D130	2	-	
							PIPE - Carburetor air heater, upper	*58300	1	-	
							RIVET - Carburetor air heater upper pipe to cowl	119D4	13	-	
R-3212	29						BRACKET - Oil sump drain tube	67007	1	-	
							RIVET - Oil sump drain tube bracket to cowl	119D5	2	-	
							WASHER - Oil sump drain tube bracket to cowl rivet	27D80	2	-	
							SCOOP - Nose cowl air	*68195	1	-	
							RIVET - Nose cowl air scoop to cowl	66D2	20	-	
							LINING - Nose cowl	68194	4	-	
							RIVET - Nose cowl lining to cowl	66D37	16	-	
							SUPPORT - Exhaust manifold, R.H.	*25198	1	-	
							RIVET - Exhaust manifold support (R.H.) to cowl	*66D17	16	-	
							WASHER - Exhaust manifold support (R.H.) to cowl rivet	*27D116	9	-	
							SUPPORT - Exhaust manifold, center	*25197	1	-	
							RIVET - Exhaust manifold center support to cowl	*66D17	12	-	
							WASHER - Exhaust manifold center support to cowl rivet	*27D116	5	-	
							SUPPORT - Exhaust manifold, L.H.	*25199	1	-	
							RIVET - Exhaust manifold support (L.H.) to cowl	*66D17	16	-	
							WASHER - Exhaust manifold support (L.H.) to cowl rivet	*27D116	9	-	
R-3216	29						NUT - Nose cowl to crankcase main section stud	1D4	5	-	
							WASHER - Nose cowl to crankcase main section stud	27D118	5	-	
<u>NOSE COWL (R975-28)</u>											
R-3226	30						COWL - Nose	113937N1	-	1	
R-3228	30						SUPPORT - Nose cowl	113936N1	-	1	

Ref. No.	Fig. No.	1	2	3	4	5	Description of Part	Part Number	Number Used					
									8	28				
<u>PRIMING SYSTEM</u>														
<u>PRIMING SYSTEM (R975-28)</u>														
R-3250	31						TUBE - Priming assembly (Cylinder #1)	48947	-	1				
							TUBE - Priming	*65062	-	4"				
R-3252	31						NUT - Priming tube connection	163D3	-	2				
R-3254	31						CONE - Priming tube	163D20	-	2				
R-3256	31						TUBE - Priming assembly (Cylinder #2)	48942	-	1				
							TUBE - Priming	*65062	-	15"				
							NUT - Priming tube connection	163D3	-	2				
							CONE - Priming tube	163D20	-	2				
R-3258	31						TUBE - Priming assembly (Cylinder #3)	48949	-	1				
							TUBE - Priming	*65062	-	26"				
							NUT - Priming tube connection	163D3	-	2				
							CONE - Priming tube	163D20	-	2				
R-3260	31						TUBE - Priming assembly (Cylinder #8)	48948	-	1				
							TUBE - Priming	*65062	-	27"				
							NUT - Priming tube connection	163D3	-	2				
							CONE - Priming tube	163D20	-	2				
R-3262	31						TUBE - Priming assembly (Cylinder #9)	48941	-	1				
							TUBE - Priming	*65062	-	16"				
							NUT - Priming tube connection	163D3	-	2				
							CONE - Priming tube	163D20	-	2				
R-3264	31						NIPPLE - Priming tube to engine primer distributor	163D15	-	5				
R-3266	31						ELBOW - Intake pipe to priming tube	163D13	-	5				
R-3267	31						CLIP - Priming tube to intake pipe	64438	-	4				
R-3268	31						SCREW - Priming tube to intake pipe clip	94D4	-	4				
R-3369	31						NUT - Priming tube to intake pipe clip screw	33D16	-	4				
							WASHER - Priming tube to intake pipe clip screw	27D30	-	8				
							LOCKWASHER - Priming tube to intake pipe clip screw	28D5	-	4				
R-3270	31						CLAMP - Priming tube	61459	-	4				
							SCREW - Priming tube clamp	123D1	-	2				
							NUT - Priming tube clamp screw	33D18	-	2				
							LOCKWASHER - Priming tube clamp screw	28D5	-	2				
R-3274	31						BUSHING - Priming tube clamp	65345	-	4				
R-3276	31						DISTRIBUTOR - Engine primer	64439	-	1				
R-3278	31						PLUG - Engine primer distributor, pipe (square head)	2105D1	-	4				
							SCREW - Engine primer distributor to intake pipe	150D8	-	2				
							WASHER - Engine primer distributor to intake pipe screw	27D24	-	2				
<u>PRIMING TUBE FITTINGS (R760-C)</u>														
							ELBOW - Priming tube to crankcase rear section	163D61	1	-				
							NUT - Priming tube to crankcase rear section elbow	156D3	1	-				
							CONE - Priming tube to crankcase rear section elbow	157D3	1	-				

Ref. No.	Fig. No.	1	2	3	4	5	Description of Part	Part Number	Number Used			
									8	28		
GUN SYNCHRONIZER IMPULSE GENERATOR (R975-28)												
R-3325	32						GENERATOR - Gun synchronizer impulse, assembly, complete R.H. HOUSING - Gun synchronizer impulse generator, studding assembly	416018	-	1		
							HOUSING - Gun synchronizer impulse generator	43083	-	1		
R-3327	32						STUD - Gun synchronizer impulse generator housing cover	*26293	-	1		
R-3329	32						CAM - Gun synchronizer impulse generator (Double lobe)	2028H5	-	4		
R-3331	32						GEAR - Gun synchronizer impulse generator drive shaft	26307	-	1		
R-3333	32						WASHER - Gun synchronizer impulse generator drive shaft gear nut	25148	-	1		
R-3335	32						NUT - Gun synchronizer impulse generator drive shaft gear	34D6	-	1		
R-3337	32						SHAFT - Gun synchronizer impulse generator drive	14437	-	1		
R-3341	32						BEARING - Gun synchronizer impulse generator drive shaft, ball	28206	-	1		
R-3343	32						SPACER - Gun synchronizer impulse generator drive shaft ball bearing	21D1	-	2		
R-3345	32						CAGE - Gun synchronizer impulse generator drive shaft ball bearing	23715	-	1		
R-3347	32						NUT - Gun synchronizer impulse generator drive shaft ball bearing retaining	26304	-	1		
R-3349	32						GEAR - Gun synchronizer impulse generator drive	23721	-	1		
R-3351	32						NUT - Gun synchronizer impulse generator drive gear shaft	28205	-	1		
R-3353	32						GASKET - Gun synchronizer impulse generator housing cover	28208	-	1		
R-3355	32						COVER - Gun synchronizer impulse generator housing	26303	-	1		
R-3357	32						NUT - Gun synchronizer impulse generator housing cover stud WASHER - Gun synchronizer impulse generator housing cover stud	26295	-	1		
								1D1	-	4		
R-3359	32						HOUSING - Gun synchronizer impulse generator plunger, upper	27D3	-	4		
R-3361	32						CHIM - Gun synchronizer impulse generator plunger upper housing to lower housing	113728	-	1		
							WASHER - Gun synchronizer impulse generator plunger upper housing to lower housing stud	25175	-	1		
R-3363	32						NUT - Gun synchronizer impulse generator plunger upper housing to lower housing stud	27D3	-	3		
R-3365	32						HOUSING - Gun synchronizer impulse generator plunger, studding assembly, lower	1D1	-	3		
							HOUSING - Gun synchronizer impulse generator plunger, lower	46885	-	1		
R-3367	32						STUD - Gun synchronizer impulse generator plunger housing, short	*62582	-	1		
R-3369	32						STUD - Gun synchronizer impulse generator plunger housing, long	2028H6	-	2		
R-3371	32						PLUNGER - Gun synchronizer impulse generator, assembly	2028H15	-	1		
							PLUNGER - Gun synchronizer impulse generator	46854	-	1		
							ROLLER - Gun synchronizer impulse generator cam	*62547	-	1		
							WASHER - Gun synchronizer impulse generator cam roller retaining	*25189	-	1		
R-3373	32						PIB - Gun synchronizer impulse generator plunger guide	*27848	-	1		
R-3375	32						GASKET - Gun synchronizer impulse generator lower plunger housing plug	25174	-	1		
R-3379	32						PLUG - Gun synchronizer impulse generator lower plunger housing	23D16	-	1		
R-3381	32						PLUG - Gun synchronizer impulse generator cable replacement	2025D2	-	1		
R-3383	32						COVER - Gun synchronizer impulse generator operating cable replacement	110882	-	1		
R-3385	32						GASKET - Gun synchronizer impulse generator lower housing to gun synchronizer impulse generator housing	20513	-	1		
							WASHER - Gun synchronizer impulse generator lower housing to gun synchronizer impulse generator housing screw	23718	-	1		
R-3387	32						SCREW - Gun synchronizer impulse generator lower housing to gun synchronizer impulse generator housing, short	27D3	-	3		
R-3389	32						SCREW - Gun synchronizer impulse generator lower housing to gun synchronizer impulse generator housing, long	25228	-	2		
							PLATE - Gun synchronizer impulse generator data	25229	-	1		
							SCREW - Gun synchronizer impulse generator data plate	61618	-	1		
R-3391	32						GASKET - Gun synchronizer impulse generator to crankcase rear section	86D5	-	2		
							WASHER - Gun synchronizer impulse generator to crankcase rear section stud	23717	-	1		
R-3393	32						NUT - Gun synchronizer impulse generator to crankcase rear section stud	27D1	-	3		
								1D1	-	3		

Ref. No.	Fig. No.	1	2	3	4	5	Description of Part	Part Number	Number Used		
									8	28	
<u>TOOL KIT</u>											
							TOOL KIT - Complete assembly	801086	1	-	
							TOOL KIT - Complete assembly	84026	-	1	
							TOOL KIT - Complete assembly	801342	-	1	
R-3425	33						WRENCH - Box, 3/8" - 7/16"	80150	1	1	
R-3427	33						WRENCH - Box, 1/2" - 1/2"	80151	1	1	
R-3429	33						WRENCH - Box, 1/2" - 9/16"	80152	1	1	
R-3431	33						WRENCH - End, 3/8" - 7/16"	80158	1	1	
R-3433	33						WRENCH - End, 1/2" - 9/16"	80159	1	1	
R-3435	33						WRENCH - Intake pipe packing nut, lug	80171	1	1	
R-3437	33						GAUGE - Feeler	80180	1	1	
R-3439	33						WRENCH - Rocker box cover nut	80449	1	1	
R-3441	33						WRENCH - End, 3/4" - 1"	80537	1	1	
R-3442	33						ROLL - Tool kit tool	80540	-	1	
R-3443	33						SCREWDRIVER - Valve clearance adjusting screw	81132	1	1	
R-3445	33						EXTENSION - Wrench	81253	1	1	
R-3447	33						WRENCH - Propeller hub nut	81402	1	1	
R-3449	33						HANDLE - Universal (7/16" diameter)	81403	1	1	
R-3451	33						COMPRESSOR - Valve spring	81409	1	1	
R-3453	33						WRENCH - Push rod housing adapter, crowfoot	81507	1	1	
R-3455	33						WRENCH - End, 1 7/16"	81679	1	1	
R-3457	33						SCREWDRIVER - Carburetor jet	81680	1	1	
R-3459	33						WRENCH - Valve clearance adjusting and lock screw	81900	1	1	
R-3461	33						WRENCH - Cylinder hold-down nut, box	82860	1	1	
R-3463	33						WRENCH - Oil pump body to crankcase rear section stud nut	82972	1	1	
R-3465	33						WRENCH - Exhaust elbow stud nut	82973	1	1	
R-3467	33						WRENCH - Cupo oil strainer inlet elbow nut	83223	-	1	
R-3469	33						WRENCH - Oil pressure relief valve check nut	83472	1	1	
R-3471	33						PLIERS - Piston pin retaining lock ring removing and installing	83965	1	1	
R-3473	33						WRENCH - End, 9/32" - 3/8"	84325	1	1	
							WRENCH - Spark plug, socket	84449	1	-	
R-3475	33						WRENCH - Spark plug, socket	84450	-	1	
							WRENCH - Spark plug, socket	84458	-	1	
R-3477	33						WRENCH - Rocker hub bolt nut	84957	1	1	
							WRENCH - Spark plug terminal	800629	1	-	
R-3479	33						WRENCH - Spark plug terminal	800630	-	1	
R-3481	33						WRENCH - Push rod housing hose clamp, socket	800659	-	1	
(a)	Used for R975-28 engines 18892, 18904 to 18911, 18914 to 18919, 40451, 40452 and 49494 to 40599.										
(b)	Used for R975-28 engines 18900 to 18903, 40401 to 40450, 40453 to 40455 and 40457 to 40493.										
(c)	Used for all R760-8 engines and R975-28 engines 40401 to 40450, 40453 to 40455 and 40457 to 40493.										

Ref. No.	Fig. No.	1	2	3	4	5	Description of Part	Part Number	Number Used		
									8	28	
<u>ENGINE SLING</u>											
							SLING - Engine hoist, assembly	800037	1	-	
							SLING - Engine hoist, assembly	83285	-	1	
							CABLE - Engine hoist sling, assembly	*800038	1	-	
							CABLE - Engine hoist sling, assembly	84551	-	1	
							CABLE - Engine hoist sling	*83298	-	1	
							TUBE - Engine hoist sling cable	*83288	-	1	
							WIRE - Engine hoist sling cable serving	81521	-	2	
							THIMBLE - Engine hoist sling cable	*83293	-	2	
							CLAMP - Engine hoist sling cable	83292	-	6	
							PLATE - Engine hoist sling	83294	-	2	
							SPREADER - Engine hoist sling cable, assembly	84548	1	-	
							SPREADER - Engine hoist sling cable, assembly	84550	-	1	
							SPREADER - Engine hoist sling cable	*83296	1	-	
							SPREADER - Engine hoist sling cable	*83286	-	1	
							PLUG - Engine hoist sling cable spreader	*83295	2	2	
							SCREW - Engine hoist sling plate	82729	-	2	
							WASHER - Engine hoist sling plate screw	81157	-	2	
							PLUG - Engine hoist sling plate	81156	-	2	
							WASHER - Engine hoist sling plate plug	81157	-	2	

Q'ty. No.	Fig. No.	1	2	3	4	5	Description of Part	Part Number	Number Used		
									8	28	
							<u>MISCELLANEOUS</u>				
							<u>INSTRUCTION BOOK</u>				
							BOOK Instruction	111429	1	1	
							<u>SPARK PLUG THERMOCOUPLE</u>				
							THERMOCOUPLE - Spark plug (Cylinder #1)	68326	-	1	
							<u>GASKET SET</u>				
							GASKETS - Complete set (This set contains all the gaskets required to completely rebuild any R760 engines, except rocker box cover gaskets. It does not include cork, felt, leather or rubber washers and packings.)	41058	1	-	
							GASKETS - Complete set (This set contains all the gaskets required to completely rebuild any R975 engine, except rocker box cover gaskets. It does not include cork, felt, leather or rubber washers and packings.)	41059	-	1	

Navy Contract Nos. 75066 for R760-8 Engines
 Army Contract No. W535 AC-15747 for R975-28 Engines
 Army Contract No. W535 AC-17348 for R975-28 Engines

SECTION IVNUMERICAL PARTS LIST

Prices listed herein were in effect at date of contract. These prices cannot be guaranteed for subsequent orders.

Part Number	Description of Part	Page Number	Quantity per Engine		Unit Price
			-8	-28	
1D1	NUT - Slotted hex., 1/4" - 28 U.S.F. (Crankcase main section oil sump drain tube clamp to nose cowl bolt)		35	52	\$.135
	(Crankcase main section oil sump drain tube support to nose cowl bracket bolt)	29	1	-	
	(Diffuser section to rear section stud)	29	-	1	
	(Gun synchronizer impulse generator substituting cover stud)	30	3	3	
	(Oil pump to crankcase stud)	32	-	6	
	(Cam hub to cam screw)	33	8	8	
	(Tachometer and fuel pump drive shaft adapter cover stud)	35	15	16	
	(Tachometer and three-way accessory drive gear shaft adapter cover stud)	37	3	-	
	(Tachometer drive housing to crankcase rear section stud)	38	-	3	
	(Generator idler gear shaft)	38	3	3	
	(Gun synchronizer impulse generator housing cover stud)	40	2	2	
	(Gun synchronizer impulse generator plunger upper housing to lower housing stud)	57	-	4	
	(Gun synchronizer impulse generator to crankcase rear section stud)	57	-	3	
1D4	NUT - Slotted hex., .313" - 24 U.S.F. (Idler accessory drive gear retaining)		5	13	.135
	(Propeller governor drive bracket to crankcase front section stud)	37	-	2	
	(Propeller governor or substituting cover to propeller governor adapter stud)	40	-	5	
	(Crankshaft rear counterweight stop bolt)	40	-	4	
	(Nose cowl to crankcase main section stud)	42	-	2	
1D7	NUT - Slotted hex., 3/8" - 24 U.S.F. (Impeller drive gear shaft substituting plug retaining)		5	-	.162
	(Tachometer and three-way accessory drive gear shaft)	30	1	1	
1D9	NUT - Slotted hex., 3/8" - 24 U.S.F. (Starter substituting cover stud)		7	6	.162
	(Fuel pump drive gear retaining)	37	6	6	
1D36	NUT - Slotted hex., special, .313" - 24 U.S.F. (Tachometer drive shaft gear retaining)		1	-	.15
1D40	NUT - Slotted hex., .313" - 24 U.S.F. (Crankcase front section to main section stud)		66	66	.135
	(Crankcase main section oil drain cover stud)	27	28	28	
	(Crankcase main section to rear section stud)	28	2	2	
	(Generator substituting cover stud)	28	-	18	
	(Impeller drive gear shaft support)	32	4	4	
	(Fuel pump drive cover stud)	36	-	4	
	(Three-way accessory drive housing to crankcase rear section stud)	37	4	-	
	(Magneto to crankcase rear section stud)	39	-	5	
	(Carburetor to carburetor elbow stud)	51	6	6	
	(Carburetor air heater to carburetor stud)	52	4	4	
	(Exhaust pipe to exhaust elbow stud)	53	4	-	
		55	14	18	

Part Number	Description of Part	Page Number	Quantity per Engine		Unit Price
			-8	-28	
1D42	NUT - Slotted hex., 3/8" - 24 U.S.F. (Front exhaust elbow to cylinder head stud)	46	14	18	\$.162
1D48	NUT - Slotted hex., 1/2" - 20 U.S.F. (Magneto drive gear)	37	2	2	.18
1D84	NUT - Slotted hex., #10 - 32 U.S.F. (Generator gear support to generator drive gear bracket bolt)	40	19	5	.15
	(Magneto advance lever to rod end)	51	5	5	
	(Exhaust manifold support to nose cowl bolt)	55	2	-	
2D1	NUT - Plain hex., .250" - 28 U.S.F. (Gun synchronizer impulse generator substituting cover stud)	32	12	-	
	(Oil pump body cover stud)	33	13	15	.0867
	(Accessory drive cover to oil pump stud)	34	6	-	
	(Vacuum pump substituting cover stud)	39	3	3	
2D4	NUT - Plain hex., .313" - 24 U.S.F. (Crankcase breather substituting cover stud)	28	4	4	
	(Detail of crankcase main section 890048.)		-	8	
	(Crankcase main section to rear section stud)	28	21	6	.0867
	(Accessory drive housing stud substituting spacer)	32	-	2	
	(Fuel pump substituting cover stud)	39	18	-	
	(Magneto advance control rod adjusting)	51	1	-	
2D7	NUT - Plain hex., .375" - 24 U.S.F. (Crankcase front section cover to front section stud)	27	7	7	.102
2D35	NUT - Plain hex., special, 1/4" - 20 U.S.F. (Magneto advance lever to rod end)	51	2	-	.102
2D54	NUT - Plain hex., special, 9/16" - 18 U.S.F. (Oil pressure relief valve adjusting screw lock)	33	1	1	.15
3D7	BOLT - Hex. head, 1/4" - 28 U.S.F. x 1 1/16" (Inter-cylinder air deflector magneto blast tube clamp)	48	-	2	.12
4S8	BUSHING - Open screw, .313" - 24 & .438" - 20 U.S.F. x 1/2", .003" O.S. (Right hand vacuum pump screw)	39	-	4	.042
5D34	VALVE - 7/16" diameter (Oil pressure relief ball)	33	1	1	.03
5D38	VALVE - .531" diameter (Oil check ball)	32	1	1	.03
6D5	BOLT - Hex. head for slotted nut, long, .250" - 28 U.S.F. x .60" (Carburetor air heater pipe bracket to cowl bracket)	53	1	1	.12
6D17	BOLT - Hex. head for slotted nut, 1/4" - 28 U.S.F. x 9/16" (Crankcase main section oil sump drain tube clamp to nose cowl bracket)	29	1	-	.12
	(Crankcase main section oil sump drain tube support to nose cowl bracket)	29	-	1	
6D35	SCREW - Hex. head for slotted nut, .250" - 28 U.S.F. x .58" (Carburetor air heater pipe clamp)	53	1	1	.12
7D17	KEY - Flat, .125" x .250" x 43/64" (Crankshaft propeller governor drive gear retaining)	42	-	1	.24
7D20	KEY - Flat, 3/16" x 5/16" x 47/64" (Crankshaft rear bearing retaining)	28	1	1	.27
10D1	KEY - Woodruff #00 (Oil pump idler shaft gear)	33	3	2	.0072
	(Tachometer drive shaft gear)	38	2	2	
10D6	KEY - Woodruff #3, special (Impeller drive gear shaft)	36	1	3	.06
	(Fuel pump drive gear)	37	-	1	
	(Magneto coupling)	51	-	2	
10D7	KEY - Woodruff #5, special (Magneto drive gear)	37	2	2	.06

Part Number	Description of Part	Page Number	Quantity per Engine		Unit Price
			-8	-28	
415819N1	DEFLECTOR - Cylinder air, assembly (Front exhaust)(Double ignition wire hole) (Inter-cylinder air, assembly)(Between cylinders #6 & 7, 9 & 1)	47	-	2	\$ 8.10
415832	CRANKCASE - Rear section, bushing and studding assembly (Rear section, studding assembly)	31	1	-	210.00
415987	PUMP - Oil, complete	33	-	1	105.60
415991N1	DEFLECTOR - Cylinder air, assembly, front exhaust (Inter-cylinder air, assembly)(Between cylinders #1 & 2)	47	-	1	8.10
415996	CRANKCASE - Rear section, bushing and studding assembly (Rear section, studding assembly)	31	-	1	225.00
416018	GENERATOR - Gun synchronizer impulse, assembly, complete R.H.	57	-	1	114.00
416243	CLAMP - Magneto blast tube, assembly (Inter-cylinder air deflector magneto blast tube, assembly)	48	-	2	1.80
416258N1	DEFLECTOR - Cylinder air, assembly (Front exhaust)(Double ignition wire hole) (Inter-cylinder air, assembly)(Between cylinders #2 & 3)	47	-	1	9.75
@416336	PISTON - Complete, assembly, Standard size (With rings, piston pin and retainers, assembly)	47	-	9	21.09
416336Y1	PISTON - Complete, assembly, .015" O.S. (With rings, piston pin and retainers, assembly)	47	-	9	21.09
416337	COVER - Crankcase front section, assembly	27	1	1	13.02
416554N1	DEFLECTOR - Cylinder air, assembly (Between cylinders #8 & 9) (Inter-cylinder air, assembly)(Between cylinders #8 & 9)	47	-	1	9.75
800037	SLING - Engine hoist, assembly	59	1	-	6.26
*800038	CABLE - Engine hoist sling, assembly	59	1	-	-
800629	WRENCH - Spark plug terminal	58	1	-	1.35
800630	WRENCH - Spare plug terminal	58	-	1	1.35
800659	WRENCH - Push rod housing hose clamp, socket (Used for R975-28 engines 18892, 18904 to 18911, 18914 to 18919, 40451, 40452 and 40494 to 40599.)	58	-	1	.30
801086	TOOL KIT - Complete assembly	58	1	-	25.73
801342	TOOL KIT - Complete assembly (Used for R975-28 engines 18900 to 18903, 40401 to 40450, 40453 to 40455 and 40457 to 40493.)	58	-	1	25.10
@890023	PISTON - With rings, assembly, Standard size	47	-	9	17.31
890023Y1	PISTON - With rings, assembly, .015" O.S. (Detail of piston 416336. Read note under 416336 on page 47.)	47	-	9	17.71
*890030	CRANKCASE - Main section, machining assembly	28	-	1	-
890048	CRANKCASE - Main section, studding assembly	28	-	1	403.25

SECTION V

ALPHABETICAL PARTS LIST

<u>Description of Part</u>	<u>Part Number</u>	<u>Page Number</u>
A		
ADAPTER - Fuel pump, assembly	47456	37
ADAPTER - Fuel pump, assembly	415587	39
ADAPTER - Left hand vacuum pump, assembly	415588	39
ADAPTER - Oil thermometer	25701	33
ADAPTER - Propeller governor drive, assembly	48174	40
ADAPTER - Right hand vacuum pump, studding assembly	410779	30
ADAPTER - Tachometer and fuel pump drive shaft	22513	37
ADAPTER - Tachometer and three-way accessory drive gear shaft	63946	37
ARM - Rocker, exhaust, assembly	89445	45
ARM - Rocker, exhaust, complete assembly	412544	45
ARM - Rocker, intake, assembly	89356	45
ARM - Rocker, intake, complete assembly	412543	45
B		
BEARING - Cam hub	65111	35
BEARING - Crankshaft main front	155D35	41,42
BEARING - Crankshaft rear	@25088	28
BEARING - Crankshaft thrust ball	21D68	41,42
BEARING - Gun synchronizer impulse generator drive shaft, ball	21D1	57
BEARING - Impeller drive gear hub	25982	36
BEARING - Impeller shaft front and rear	2001D13	36
BEARING - Master rod crankshaft	@29547	44
BEARING - Rocker arm roller	68174	45
BEARING - Tachometer drive shaft, ball	21D5	38
BEARING - Tachometer driven shaft	63937	38
BODY - Carburetor air heater, assembly	48512	52
BODY - Carburetor air heater, assembly	48613	52
BODY - Carburetor air heater, assembly, complete	89564	52
BODY - Carburetor air heater, assembly, complete	89565	52
BODY - Oil check valve	66069	32
BODY - Oil pressure relief valve	110348	33
BOLT - Articulated rod knuckle pin lock	46D12	44
BOLT - Carburetor air heater pipe bracket to cowl bracket	6D5	53
BOLT - Crankcase main section oil sump drain tube clamp to nose cowl bracket	6D17	29
BOLT - Crankcase main section oil sump drain tube support to nose cowl bracket	6D17	29
BOLT - Crankshaft rear counterweight stop	63D27	42
BOLT - Exhaust manifold support to nose cowl	182D7	55
BOLT - Generator gear support to generator drive gear bracket	95D3	40
BOLT - Inter-cylinder air deflector magneto blast tube clamp	3D7	48
BOLT - Magneto advance lever to rod end	66524	51
BOLT - Propeller governor drive intermediate spur gear to bevel gear	65D15	40
BOLT - Rocker arm link	66047	45
BOLT - Starter shaft	23117	35
BOLT - Starter shaft	65694	35
BOLT - Valve clearance adjusting screw clamp	46D13	45
BOOK - Instruction	111429	60
BRACE - Inter-cylinder air deflector (at gun blast hole)	113404	48
BRACE - Inter-cylinder air deflector, bottom	69472	49
BRACKET - Carburetor air heater pipe support	110105	55
BRACKET - Carburetor air heater scoop extension	09411	53
BRACKET - Carburetor air scoop, L.H.	64267	53
BRACKET - Carburetor air scoop, R.H.	64266	53
BRACKET - Crankcase main section oil sump drain tube	67007	29
BRACKET - Cylinder head air deflector	69865	49
BRACKET - Generator drive gear, assembly	410087	40
BRACKET - Inter-cylinder air deflector, lower	111796	48
BRACKET - Inter-cylinder air deflector, upper	69597N1	48
BRACKET - Inter-cylinder air deflector, upper	113403	48
BRACKET - Oil sump drain tube	67007	55
BRACKET - Propeller governor drive, assembly	48173	40
BRACKET AND PIPE - Carburetor air heater, assembly	412533	52
BRACKET AND PIPE - Carburetor air heater, assembly	412535	52
BRACKET AND EXTENSION - Crankcase front section, assembly	415544	27
BUSHING - Accessory drive shaft, long	@21953	30
BUSHING - Accessory drive shaft, short	@21954	31
BUSHING - Articulated rod knuckle	2119D22	44

<u>Description of Part</u>	<u>Part Number</u>	<u>Page Number</u>
B - Cont'd.		
BUSHING - Articulated rod piston pin	2119D21	44
BUSHING - Carburetor elbow thermometer plug and ice warning indicator hole substituting plug	64280	54
BUSHING - Crankshaft rear counterweight	63029	42
BUSHING - Cylinder air deflector bolt	19S10	45
BUSHING - Cylinder head air deflector bolt	19S14	45
BUSHING - Fuel pump adapter	63342	37
BUSHING - Fuel pump drive gear	63943	39
BUSHING - Generator idler gear, long	21512	40
BUSHING - Generator idler gear shaft, short	23481	31
BUSHING - Idler accessory drive gear	27586	30
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WASHER - Spark plug shielded terminal elbow (Spark plug end)	27D209	51
WASHER - Starter shaft bolt spring seat	34D34	35
WASHER - Starter substituting cover stud	34D14	32
WASHER - Tachometer and fuel pump drive shaft adapter cover stud	34D51	37
WASHER - Tachometer and three-way accessory drive gear shaft	34D83	37
WASHER - Tachometer and three-way accessory drive gear shaft adapter cover stud	27D1	38
WASHER - Tachometer drive housing cover screw	27D33	38
WASHER - Tachometer drive housing to crankcase rear section stud	27D3	38
WASHER - Tachometer drive oil seal packing	66851	38
WASHER - Tachometer driven shaft bushing	37D63	38
WASHER - Three-way accessory drive housing to crankcase rear section stud	27D118	39
WASHER - Vacuum pump substituting cover stud	34D51	39
WASHER - Valve spring, lower, intake	20609	46
WASHER - Valve spring, lower, intermediate, exhaust	24444	46
WASHER - Valve spring, lower, outer, exhaust	25619	46
WASHER - Valve spring, upper	61663	46
WIRE - Engine hoist sling cable serving	81521	59
WIRE - High tension ignition	62808	51
WIRE - Magneto booster	62808	51
WIRING HARNESS - Radio-shielded (Breeze) (With cable)	112822N3	51
WIRING HARNESS - Radio-shielded (Breeze) (With cable)	112825N3	51
WIRING HARNESS - Radio-shielded (Breeze) (Without cable)	112822N1	51
WIRING HARNESS - Radio-shielded (Breeze) (Without cable)	112825N1	51
WRENCH - Box, 3/8" - 7/16"	80150	58
WRENCH - Box, 1/2" - 1/2"	80151	58
WRENCH - Box, 1/2" - 9/16"	80152	58
WRENCH - Cuno oil strainer inlet elbow nut	83223	58
WRENCH - Cylinder hold-down nut, box	82860	58
WRENCH - End, 9/32" - 3/8"	84325	58
WRENCH - End, 3/8" - 7/16"	80158	58
WRENCH - End, 1/2" - 9/16"	80159	58
WRENCH - End, 3/4" - 1"	80537	58
WRENCH - End, 1 7/16"	81679	58
WRENCH - Exhaust elbow stud nut	82973	58
WRENCH - Intake pipe packing nut, lug	80171	58
WRENCH - Oil pressure relief valve check nut	83472	58
WRENCH - Oil pump body to crankcase rear section stud nut	82972	58
WRENCH - Propeller hub nut	81402	58
WRENCH - Push rod housing adapter, crowfoot	81507	58
WRENCH - Push rod housing hose clamp, socket	800659	58
WRENCH - Rocker box cover nut	83449	58
WRENCH - Rocker hub bolt nut	84957	58
WRENCH - Spark plug socket	84449	58
WRENCH - Spark plug socket	84450	58
WRENCH - Spark plug socket	84458	58
WRENCH - Spark plug terminal	800629	58
WRENCH - Spark plug terminal	800630	58
WRENCH - Valve clearance adjusting and lock screw	81900	58