

IO-360-L2A Series Illustrated Parts Catalog

April 2012

PC-406-L2A

LYCOMING © 2012

652 Oliver Street
Williamsport, PA 17701

IO-360-L2A Illustrated Parts Catalog

Lycoming Part Number: PC-406-L2A

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*******NOTICE*******

This parts catalog, PC-406-L2A (model IO-360-L2A) supersedes the previous parts catalog PC-306-12 which covered the IO-360-L2A model engine.

NOTE: Service documents override parts information in this document.

RECORD OF REVISIONS

Rev No.	Issue Date	Initials	Insertion Date

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INTRODUCTION

⚠ CAUTION: DO NOT USE THIS CATALOG AS AN ASSEMBLY OR INSTALLATION DOCUMENT. THIS CATALOG MUST ONLY BE USED TO IDENTIFY PARTS IN CONJUNCTION WITH THE APPLICABLE OVERHAUL MANUAL.

Purpose of this Catalog

This Illustrated Parts Catalog (IPC) contains a complete list of spare parts for the Lycoming IO-360-L2A wide cylinder flange model engines.

How to Use this Catalog

This catalog is based on the Air Transport Association (ATA) Spec100 format. In order to clarify illustrations, Lycoming has taken discretion to classify non-system related assemblies and components in the same chapters, because they are physically connected.

This catalog is frequently updated by Service Bulletins (SB) and Service Instructions (SI). The updated information will be incorporated into subsequent full revisions of this catalog.

The ATA two element numbering system provides consistency throughout various manuals. The bottom of each page (beyond the frontal section) contains a two element number (##-##). In the two element numbering, the first two digits represent a chapter, and the next two digits subdivide the material into a more specific section.

The ATA 100 format specifies the subject matter for each chapter-section. According to the ATA Standards, the following chapters apply to the IO-360-L2A Illustrated Parts Catalog.

72 (Reciprocating Engine), 73 (Engine and Fuel Control), 74 (Ignition), and 76 (Engine Controls).

EXAMPLE: **74** — **20**
 Chapter Section
 Ignition **Distribution**

NOTE: See the IPC Table of Contents for the sub-systems listed in each section.

Numerical Index

The Numerical Index is a single list of part numbers, names and their locations within the IPC. It is useful for locating parts when you only know the number or name of the part.

Description column

Indentation of a part name represents a lower level of assembly. Attaching parts have the same indentation level and are listed below the parts grouping or assembly they attach to. This column is often referred to as the "Nomenclature" on other ATA Spec manuals.

Units per Assembly Column

Where more than one assembly exists, this column contains the quantity of a specific part required in the build sequence of only one next higher assembly. The letters "AR" represent "as required" for bulk items or non-illustrated select-from-range-parts. "RF" represents items listed for reference purposes only.

Cross Reference List of Manufacturer Parts to Standard Part Numbers**Vendor Accessories**

Parts coverage of Vendor Accessories used on Lycoming engines may be found in the appropriate Vendor's Parts Catalog. A list of vendor's addresses appears in the latest revision of Lycoming Service Letter No. L114.

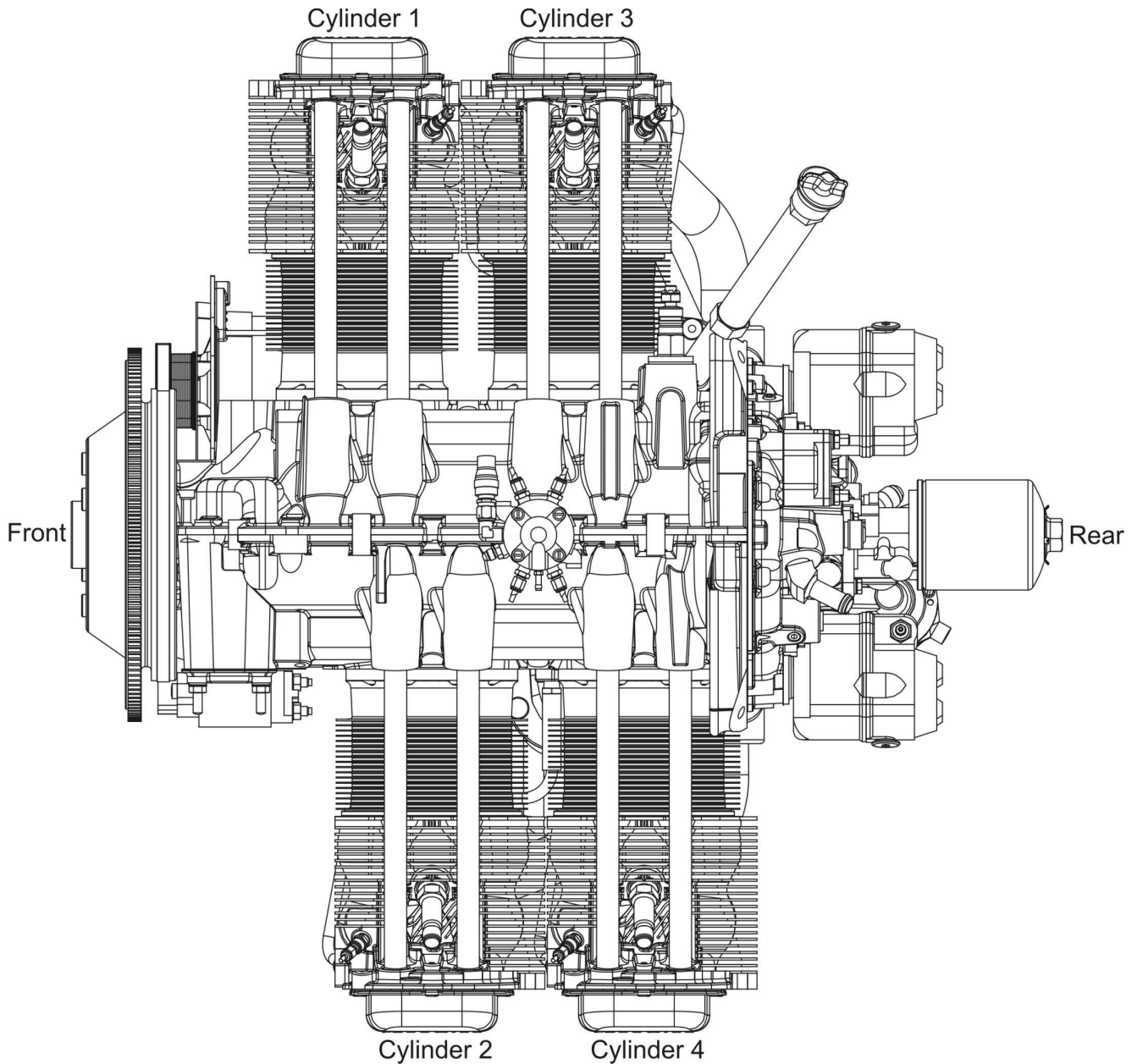
Any reference in this document to the suppliers/part manufacturer's product, by name, trademark, part number or other description is solely for the purpose of identification and does not indicate or infer that Lycoming accepts responsibility for quality control and/or airworthiness of parts, which do not pass through the Lycoming quality control system.

Environmental Compliance

Lycoming is concerned with preserving the environment. Lycoming strongly urges engine owners and repair/overhaul personnel to observe and comply with all federal, state, and local environmental regulations when solvents, paint, fuel, oil, chemicals, or other consumables are used in operating, maintaining, or overhauling an engine component. Please share our concern for, and commitment to a clean earth, clean water, and especially clean air for succeeding generations of flyers.

Perspective of References

In this manual, all references to locations of various components will be designated as if viewing the engine from the rear (or anti-propeller) end. The front of the engine is considered to be the propeller end and the oil sump is considered to be on the bottom of the engine. Cylinders are numbered from front to rear with the odd-numbered cylinders on the right-hand side. The firing order for this engine is 1-3-2-4

**Top View of Engine**

How to Order Parts and Publications

An Oversize and Undersize Parts List is included in the front section of this catalog, to aid in ordering parts as necessary during overhaul.

Although the information contained in this parts catalog is up-to-date at time of publication, users are advised to procure current information through all Lycoming distributors or from the factory by subscription. Refer to the latest revision of Service Letter No. L114 for subscription information.

1. In order to expedite correct part shipments without delay:
 - a. Always specify the model and serial number of your engine.
 - b. Always specify the part number, nomenclature, and quantity required.

The SB and SI documents are available from Lycoming distributors, or the factory, or by subscription.

Full Revisions of the Illustrated Parts Catalog are available from Lycoming distributors or the factory.

Every effort has been made in preparing this manual to ensure its accuracy. However, any comments, suggestions, or corrections to this manual are welcome and must be directed in writing to:

Technical Publications Coordinator
Lycoming Engines
652 Oliver Street
Williamsport, PA 17701

NOTE: The owner of the manual must give notification to the factory for a change of address.

Additionally, Lycoming has a Customer Service Hot Line for information and assistance to owners, operators, and maintenance personnel which are servicing Lycoming engines.

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ABBREVIATIONS AND ACRONYMS

A	
Adj.	Adjustable
C	
Cyl.	Cylinder
D	
Dia.	Diameter
F	
Fill.	Fillister
H	
Hex.	Hexagon
I	
I.D.	Inside Diameter
N	
No.	Number
O	
O.D.	Outside Diameter
S	
Scav.	Scavenge
T	
Temp.	Temperature
V	
Vac.	Vacuum

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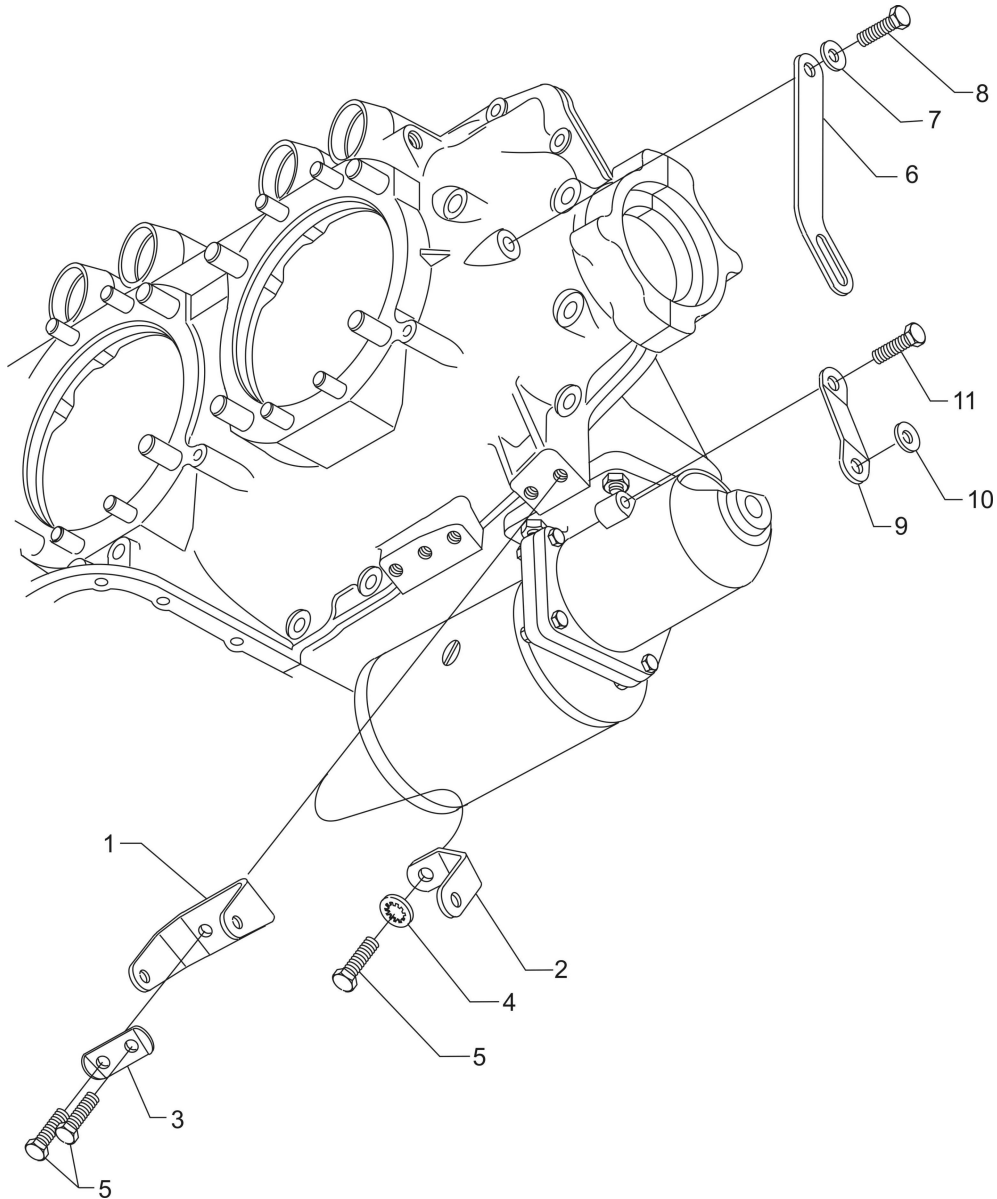
OVERSIZE AND UNDERSIZE PARTS LISTING

Part No.	Description	Oversize (in.)								Undersize (in.)		
		P02 .002	P05 .005	P10 .010	P15 .015	P20 .020	P30 .030	P40 .040	P50 .050	M03 .003	M06 .006	M10 .010
18D26098	BEARING									X	X	X
18A26093	BEARING									X	X	X
18M26105	BEARING									X	X	X
LW-13792	SEAL								X			
72155-S	BUSHING		X	X	X	X						
75656-S	BUSHING		X	X	X	X						
75657-S	BUSHING		X	X	X	X						
STD-1065	DOWEL	X	X	X	X							
74241	RING			X								
14H21950	RING			X		X						
72057	SEAT		X	X		X	X					
72058	SEAT		X	X		X	X					
61681*	GUIDE		X	X		X	X	X				
16R22291*	GUIDE		X	X		X	X	X				
66610	BUSHING		X	X								

* - Reference Figure 9 items no. 4 and 5 for valve guides.

NOTE

When ordering oversize and undersize parts, be sure to specify the required oversize and undersize dimension along with the proper part number. For example, to order bearing P/N 18D26098 bearing in .003 in. undersize, order P/N 18D26098-M03. Undersize code letter is "M" while oversize code letter is "P". These letters are then followed by the number designating the size in thousandths of an inch.



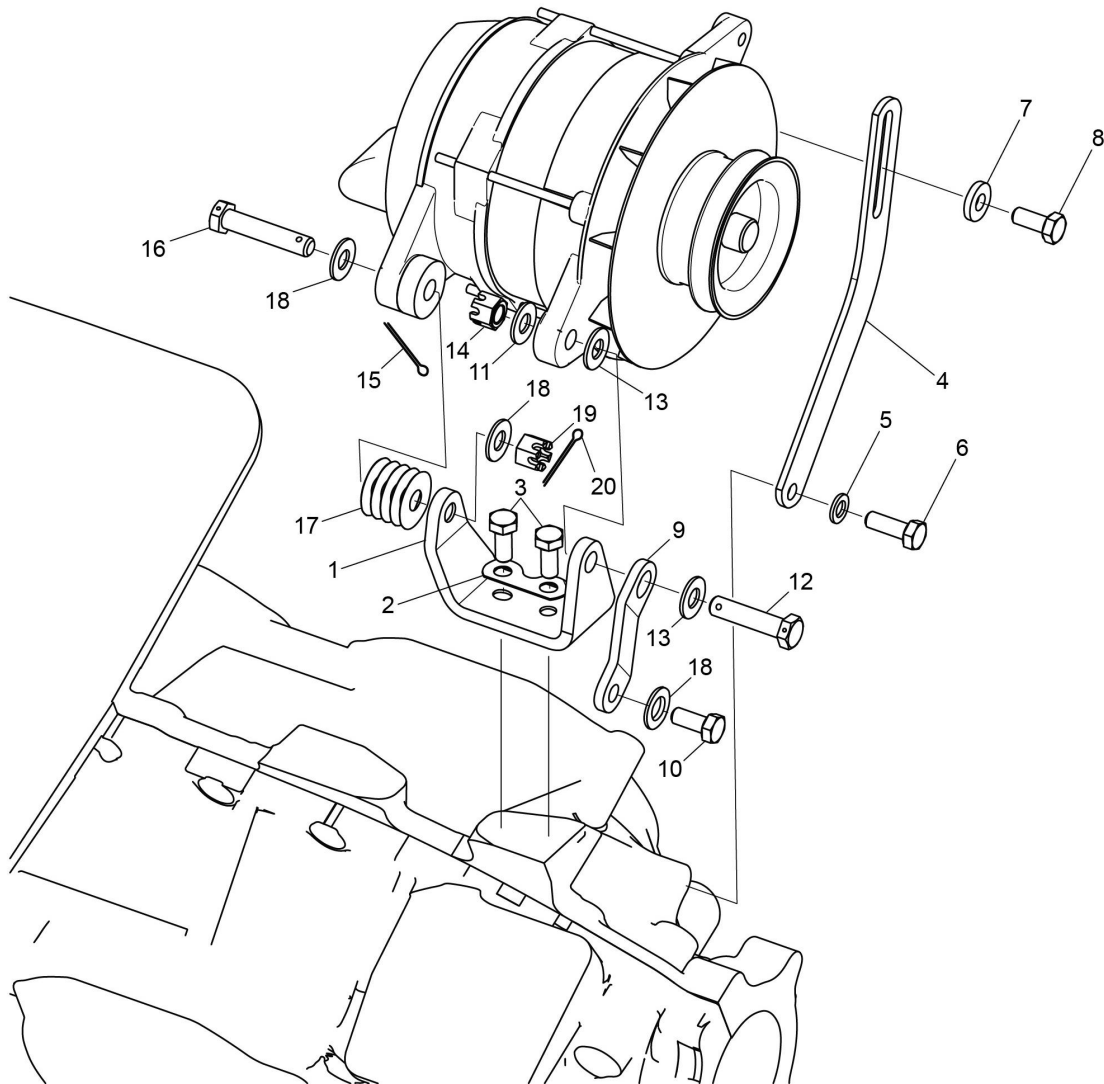
**Alternator Mounting and Attaching Parts
Figure 1**

ELECTRICAL POWER**FIGURE 1 – ALTERNATOR MOUNTING AND ATTACHING PARTS**

Figure Item	Code	Part Number	Description	Units per Assembly
1		07A21443	BRACKET, Alternator	1
2		LW-13365	BRACE, Alternator bracket	1
3		73383	LOCKPLATE, 5/16 bolt x 1.00	1
4		STD-475	WASHER, 5/16 lock, internal teeth	1
5		LW-31-0.94	BOLT, 5/16-18 x 15/16 long, hex. head	3
6		LW-10729	LINK, Alternator adjusting	1
7		STD-35	WASHER, 5/16 plain	1
8		LW-31H0.88	BOLT, 5/16-18 x 7/8 long, hex. head, drilled	1
9		76908	STRUT, Alternator support	1
10	*	STD-2197	WASHER, 5/16 I.D. x 13/16 O.D. x 1/16	1
11		LW-31H1.06	BOLT, 5/16-18 x 1-1/16 long, hex. head, drilled	1

* Shim 76908 strut with STD-2197 washer.

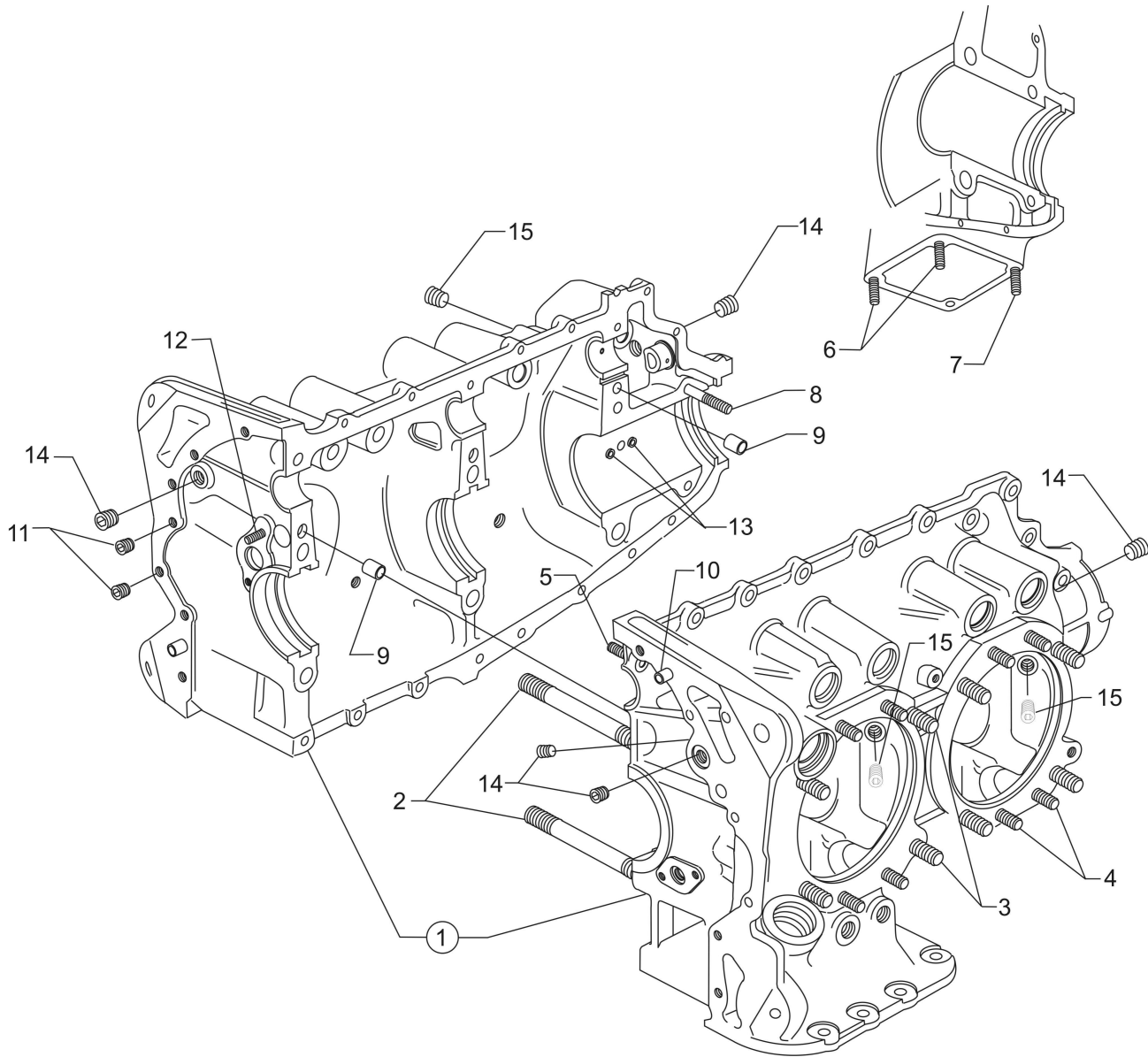
NOTE: Alternator is not supplied for this configuration.



**Alternator Mounting and Attaching Parts
Figure 2**

ELECTRICAL POWER**FIGURE 2 – ALTERNATOR MOUNTING AND ATTACHING PARTS**

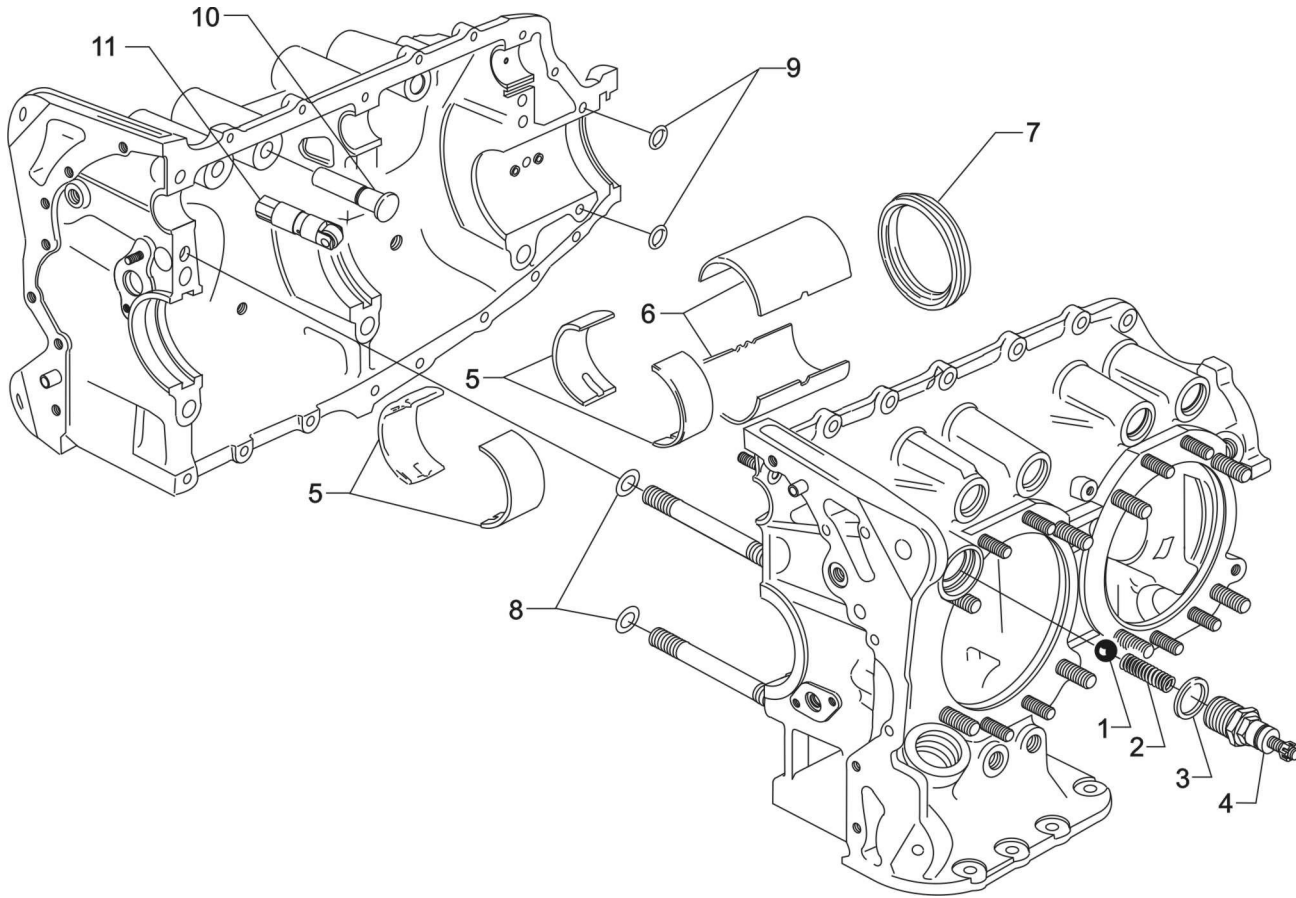
Figure Item	Code	Part Number	Description	Units per Assembly
1		07A19474	BRACKET, Alternator	1
2		73383	LOCKPLATE, 5/16 bolt x 1.00	1
3		LW-31-0.94	BOLT, 5/16-18 x 15/16 long, hex. head	2
4		75380	LINK, Alternator adjusting	1
5		STD-35	WASHER, 5/16 plain	1
6		LW-31H0.75	BOLT, 5/16-18 x 3/4 long, hex. head, drilled	1
7		STD-1727	WASHER, Plain, 3/4 O.D. x 11/32 I.D. x 1/8	1
8		LW-31H0.75	BOLT, 5/16-18 x 3/4 long, hex. head, drilled	1
9		07F23268	STRUT, Alternator support	1
10		LW-31H0.75	BOLT, 5/16-18 x 3/4 long, hex. head, drilled	1
11		STD-690	WASHER, 13/16 O.D. x 25/64 I.D. x 1/16 thick	1
12		AN6-14	BOLT, 3/8-24 x 1-19/32 long, drilled	1
		AN6-17	BOLT, 3/8-24 x 1-15/16 long, hex. head	1
13	AR	STD-690	WASHER, 13/16 O.D. x 25/64 I.D. x 1/16 thick	AR
14		STD-872	NUT, 3/8-24 slotted	1
15		STD-713	COTTER PIN, 3/32 diameter x 3/4 long	1
16		AN6-16	BOLT, 3/8-24 x 1-53/64 long, hex. head	1
17	AR	76534	SHIM, 1-1/8 O.D. x 13/32 I.D. x .005 thick (max. 5)	AR
18	AR	STD-690	WASHER, 13/16 O.D. x 25/64 I.D. x 1/16 thick	AR
19		STD-872	NUT, 3/8-24 slotted	1
20		STD-713	COTTER PIN, 3/32 diameter x 3/4 long	1
AR as required				



**Crankcase Assembly
Figure 3**

POWER SECTION**FIGURE 3 – CRANKCASE ASSEMBLY**

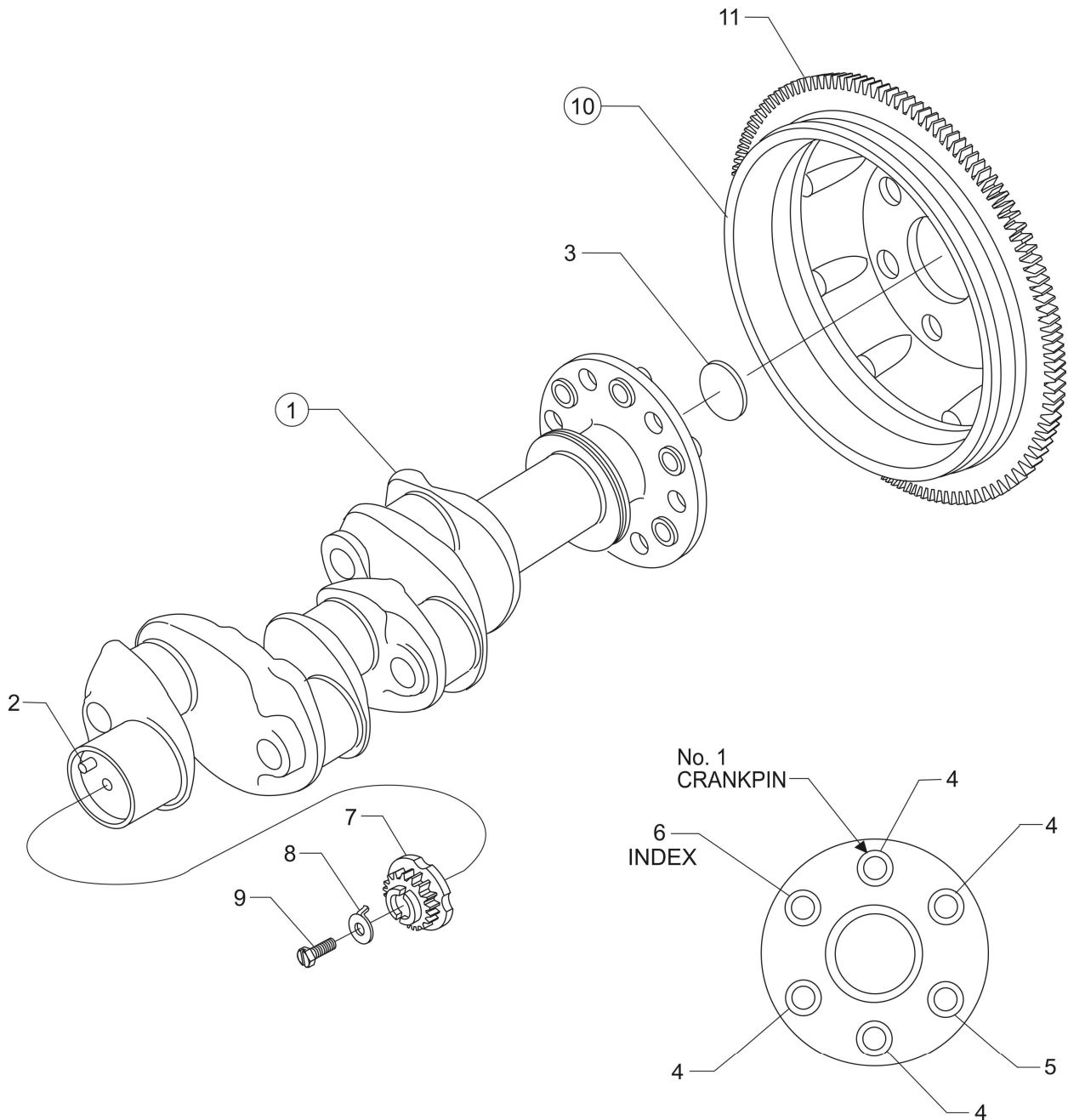
Figure Item	Code	Part Number	Description	Units per Assembly
1	*	LW-18402-2-S	CRANKCASE ASSEMBLY KIT	1
	P	LW-18402-2	CRANKCASE ASSEMBLY	1
	*	LW-18402-5-S	CRANKCASE ASSEMBLY KIT (Roller tappet engines)	1
	P	LW-18402-5	CRANKCASE ASSEMBLY (Roller tappet engines)	1
2		75154	STUD, 1/2-13 x 10-1/32 long	2
3		50-15	STUD, 1/2-13 x 1-7/8 long	8
4		38-13	STUD, 3/8-16 x 1-5/8 long	19
5		38D-17	STUD, 3/8-16 x 2-1/8 long, drilled	1
6		31C-12	STUD, 5/16-18 x 1-1/2 long	2
7		31C-13	STUD, 5/16-18 x 1-5/8 long	1
8		38-22	STUD, 3/8-16 x 2-3/4 long	1
9		STD-557	DOWEL, 1/2 dia. x 11/16 long, hollow	2
10		STD-514	DOWEL, 5/16 dia. x 1/2 long	2
11		STD-1623	INSERT, 1/4-20 Heli-coil x 3/8 long	2
12		LW-13793	STUD, 5/16-18 x 15/16 long, drilled	1
13		69796	DOWEL, Crankshaft bearing	2
14		1102	PLUG, 1/8-27 NPT, allen head	5
15		STD-1339	PLUG, 1/16-27 NPT, allen head	5
<p>P Lycoming proprietary part. Listed for reference purposes only, cannot be purchased.</p> <p>* Refer to Service Kits Section for applicable Crankcase Assembly and Governor Thru-Stud Kit Part Numbers.</p>				



**Crankcase Related Parts
Figure 4**

POWER SECTION**FIGURE 4 - CRANKCASE RELATED PARTS**

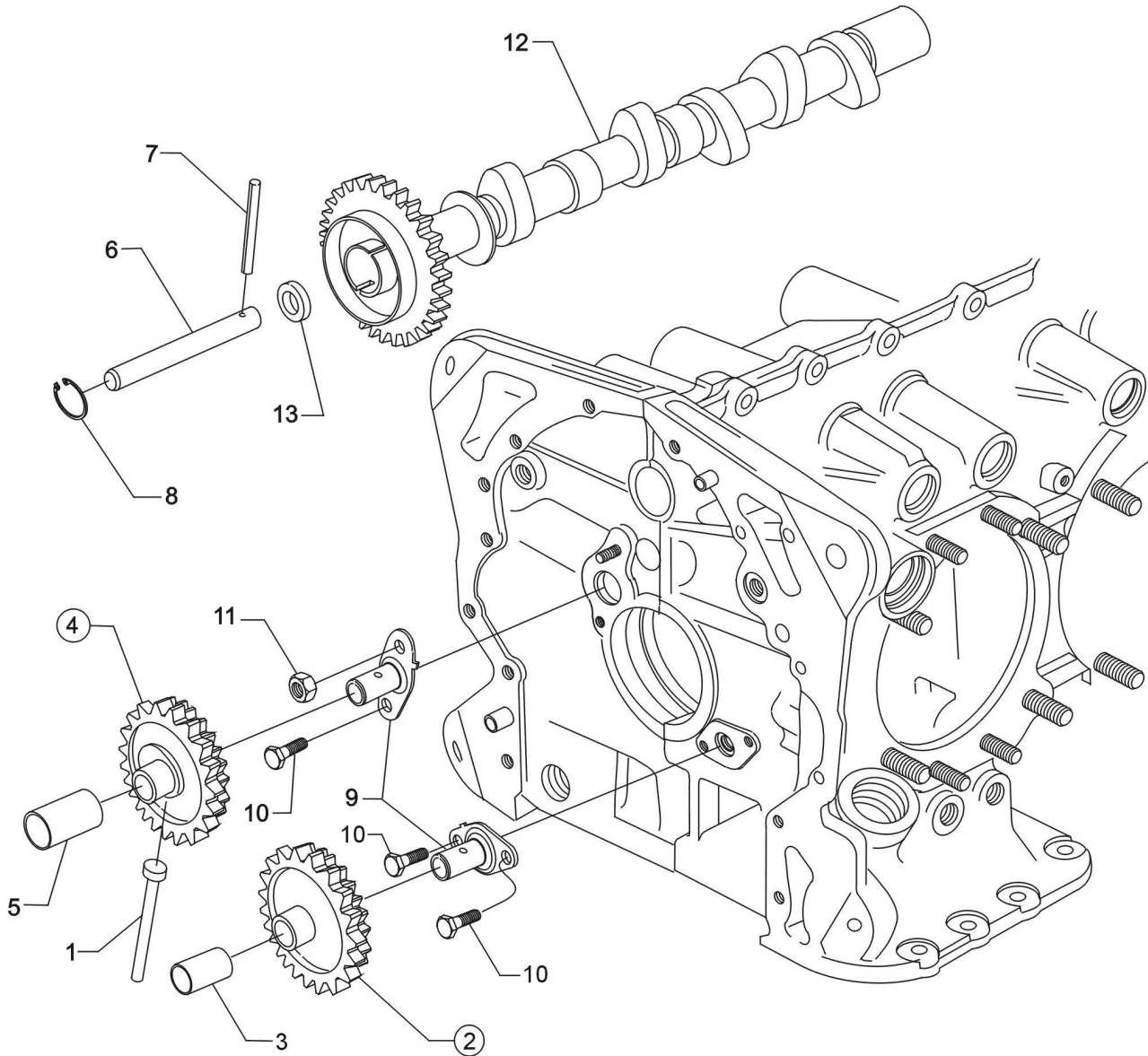
Figure Item	Code	Part Number	Description	Units per Assembly
1		1028-B	BALL, 11/16 diameter	1
2	*	61084	SPRING, Oil pressure relief valve	1
	*	68668	SPRING, Oil pressure relief valve	1
	*	77467	SPRING, Oil pressure relief valve	1
	*	LW-11713	SPRING, Oil pressure relief valve	1
	*	LW-18085	SPRING, Oil pressure relief valve	1
3		06E19769-1.25	GASKET, Annular, 1-1/4 I.D.	1
4		77808	VALVE ASSEMBLY, Oil pressure relief valve, adjustable	1
5		18D26098	BEARING, Crankshaft	4
6		18A26093	BEARING, Crankshaft	2
7		LW-13792	SEAL, Crankshaft oil	1
8		72075	SEAL, Oil, 3/32 section x 7/16 I.D.	2
9		72091	RING, Oil seal, 23/64 I.D. x 7/64 diameter	2
10		15B26064	BODY, Hydraulic tappet	8
11		LRT23381	BODY ASSEMBLY, Hydraulic tappet (Roller tappet engines)	8
<p>* Select spring to give a minimum of three threads exposed on adjusting screw to allow field adjustment. Reference latest revision of Lycoming Table of Limits SSP-1776, Part I for spring identification.</p>				



**Crankshaft Assembly and Related Parts
Figure 5**

POWER SECTION**FIGURE 5 - CRANKSHAFT ASSEMBLY AND RELATED PARTS**

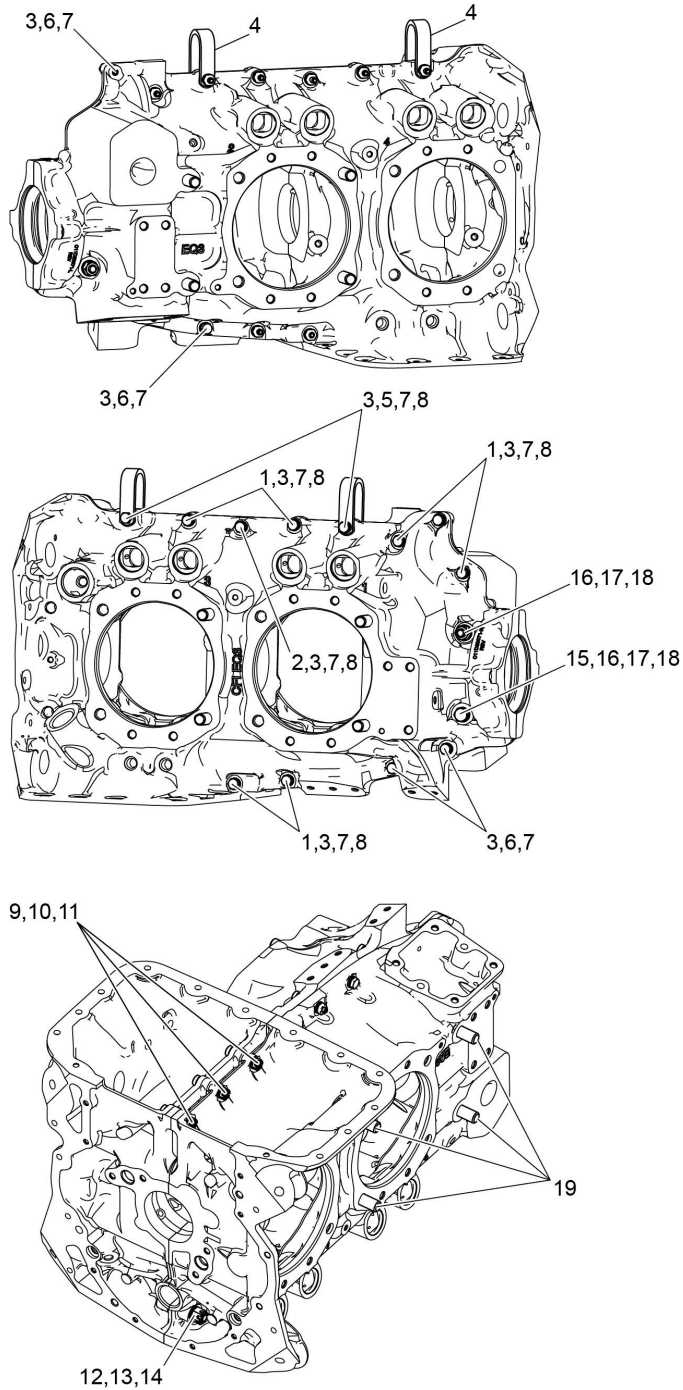
Figure Item	Code	Part Number	Description	Units per Assembly
1		13B47121	CRANKSHAFT ASSEMBLY	1
2		STD-1065	DOWEL, Stepped, 5/16 & 1/4 diameter	1
3		STD-1211	PLUG, 2.00 diameter expansion	1
4		75656-S	BUSHING, Propeller flange, long	4
5		72155-S	BUSHING, Propeller flange, short	1
6		75657-S	BUSHING, Propeller flange, indexing	1
7	SB*	13S19646	GEAR, Crankshaft	1
8		LW-18639	LOCKPLATE, Crankshaft gear	1
9		STD-2246	BOLT, 5/16-24 x 1.00 long	1
10		31M22045	SUPPORT ASSEMBLY, Starter ring gear	1
		LW-16471	SUPPORT ASSEMBLY, Starter ring gear	1
11		72566	GEAR, Starter ring, 12/14 pitch	1
<p>SB Referencing Service Bulletin * Refer to the latest revision of Lycoming Service Bulletin No. 475 for proper installation.</p>				



**Crankshaft Idler Gears, Tachometer Drive and Camshaft
Figure 6**

POWER SECTION**FIGURE 6 - CRANKSHAFT IDLER GEARS, TACHOMETER DRIVE AND CAMSHAFT**

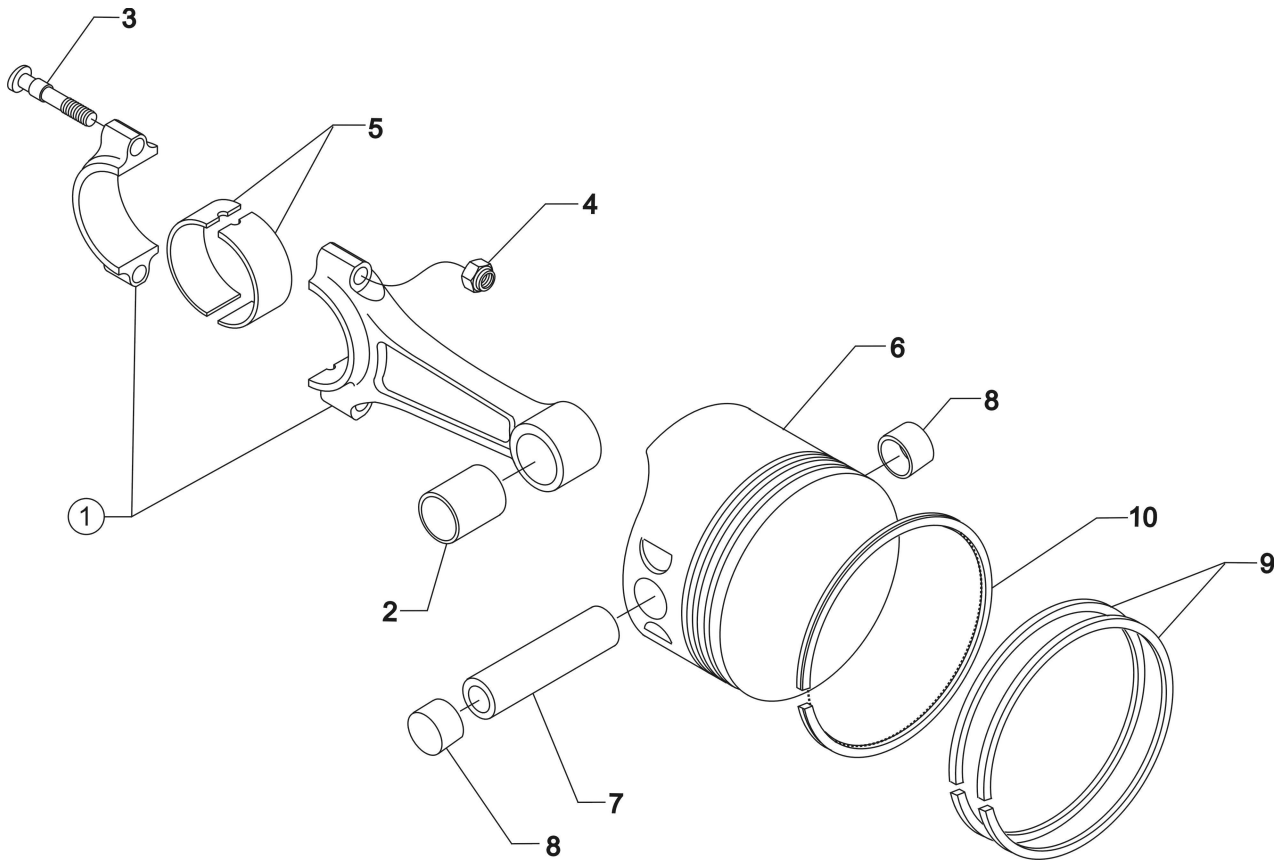
Figure Item	Code	Part Number	Description	Units per Assembly
1		61544	PLUNGER, Fuel pump, long	1
2		74996	GEAR ASSEMBLY, Crankshaft idler, plain	1
3		77309	BUSHING, Crankshaft idler gear	1
4		75072	GEAR ASSEMBLY, Crankshaft idler	1
5		77309	BUSHING, Crankshaft idler gear	1
6		76121	SHAFT ASSEMBLY, Tachometer	1
7		LW-18667	PIN, 3/16 diameter x 2-11/32 long	1
8		STD-2231	RING, Internal retaining (13/16)	1
9		LW-13796	SHAFT, Crankshaft idler gear	2
10		LW-31H0.88	BOLT, 5/16-18 x 7/8 long, hex. head, drilled	3
11		STD-2168	NUT, 5/16-18 NC-3 slotted shear	1
12		LW-18840	CAMSHAFT ASSEMBLY	1
		15M23452	CAMSHAFT ASSEMBLY (Roller tappet engines)	1
13		76118	SPACER, Tachometer shaft centering	1



**Crankcase Attaching Parts
Figure 7**

POWER SECTION**FIGURE 7 - CRANKCASE ATTACHING PARTS**

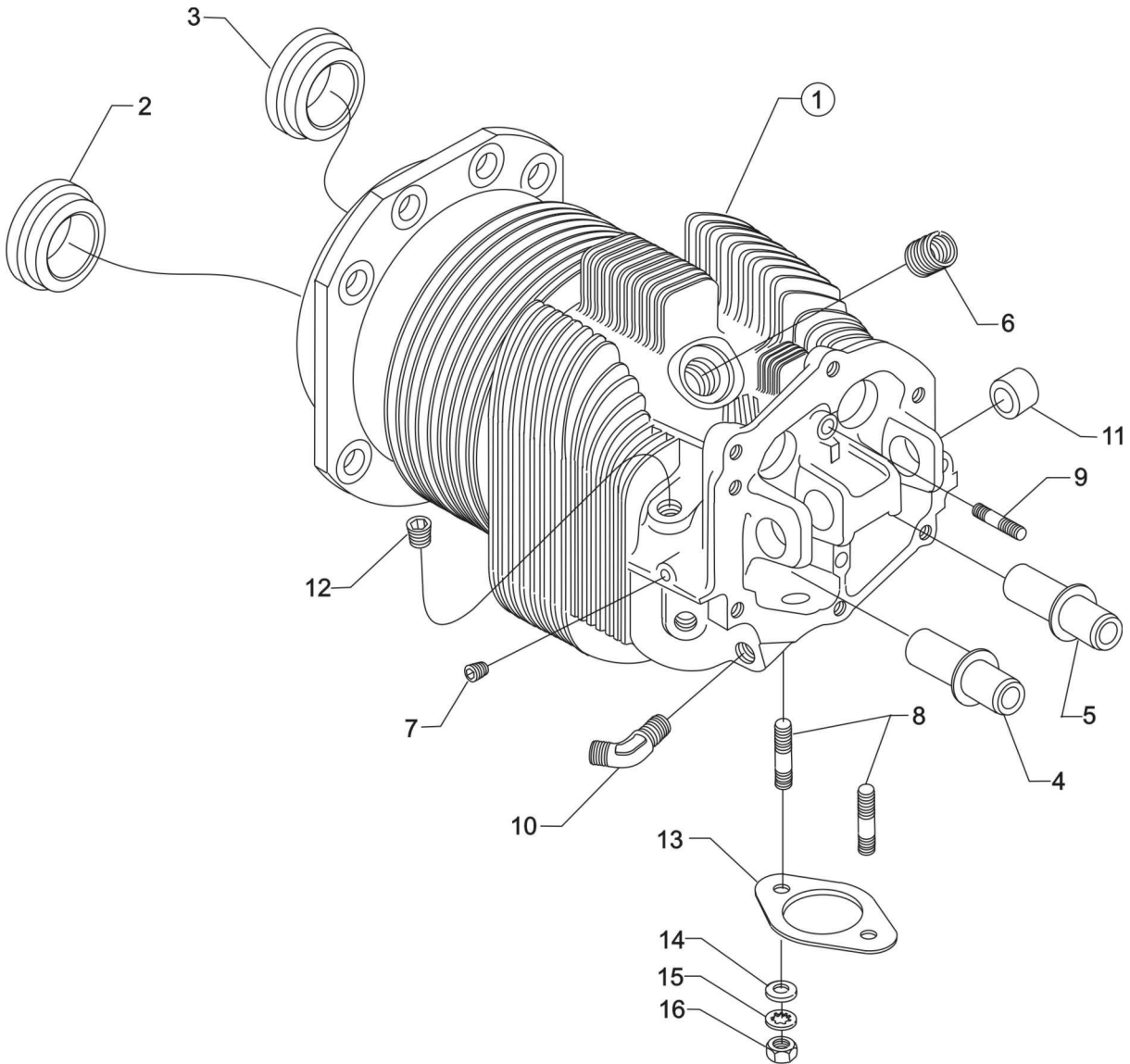
Figure Item	Code	Part Number	Description	Units per Assembly
1		LW-25-1.50	BOLT, 1/4-20 x 1-1/2 long, hex. head	6
2		LW-25-1.63	BOLT, 1/4-20 x 1-5/8 long, hex. head	1
3		STD-8	WASHER, 1/4 plain	22
4		60803	STRAP, Lifting	2
5		LW-25-1.88	BOLT, 1/4-20 x 1-7/8 long, hex. head	2
6		LW-25-1.13	BOLT, 1/4-20 x 1-1/8 long, hex. head	4
7		STD-160	WASHER, 1/4 lock, internal teeth	12
8		STD-1411	NUT, 1/4-20 plain	9
9		LW-25S1.50	BOLT, 1/4-20 x 1-1/2 long, drilled end	3
10	AR	STD-8	WASHER, 1/4-20 plain (max. 9)	AR
11		STD-2249	NUT, 1/4-20 slotted	3
12		STD-33	WASHER, 3/8 plain	3
13		AN960-616L	WASHER, 3/8 plain (thin)	3
14		STD-872	NUT, 3/8-24 slotted	1
15		AN6-34A	BOLT, 3/8-24 x 3-37/64 long, hex. head	1
16		STD-33	WASHER, 3/8 plain	2
17		STD-678	WASHER, 3/8 lock, internal teeth	2
18		STD-596	NUT, 3/8-24 plain	2
19		76220	STUD, 1/2-20 x 10-11/16 long	4
AR as required				



**Connecting Rods, Pistons and Ring Assemblies
Figure 8**

CYLINDER SECTION**FIGURE 8 - CONNECTING RODS, PISTONS AND RING ASSEMBLIES**

Figure Item	Code	Part Number	Description	Units per Assembly
1		LW-11750-S	CONNECTING ROD ASSEMBLY	4
2		LW-13923	BUSHING, Connecting rod, upper	4
3	* P	75061 14S23890	BOLT, Connecting rod	8
4		LW-12186	NUT, Connecting rod	8
5		18M26105	BEARING, Connecting rod	8
6		14D23912	PISTON, Compression ratio, 8.50:1	4
7		LW-14078	PIN, Piston	4
8		72198	PLUG, Piston pin	8
9		74241	RING, Piston compression	8
10		14H21950	RING, Piston, oil	4
<p>P Lycoming proprietary part. Listed for reference purposes only, cannot be purchased. * Service use only.</p>				

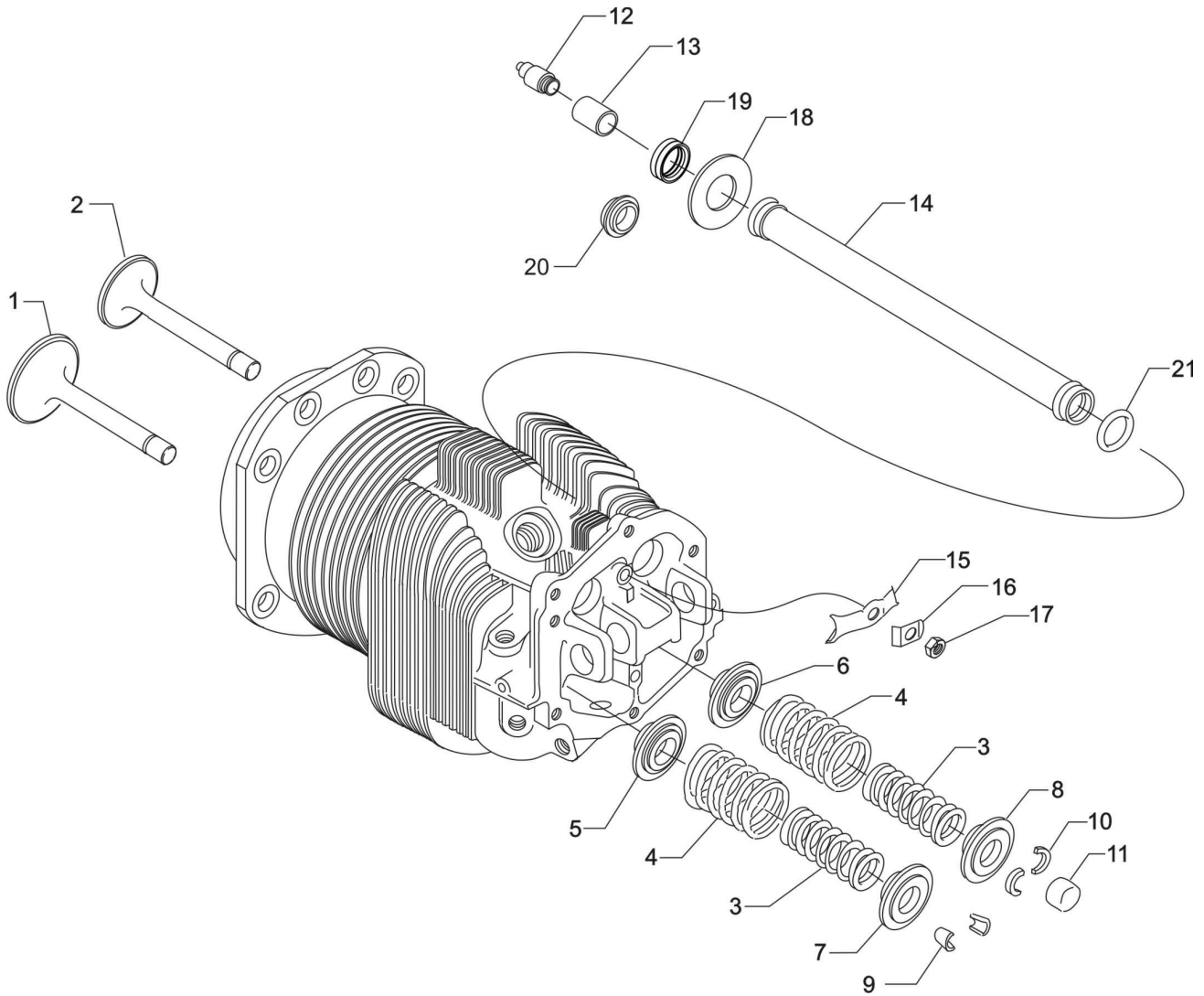


**Cylinder Assembly
Figure 9**

CYLINDER SECTION
FIGURE 9 - CYLINDER ASSEMBLY

Figure Item	Code	Part Number	Description	Units per Assembly
1		LW-12427	CYLINDER ASSEMBLY, Nitrided	4
2		72057	SEAT, Intake valve	4
3		72058	SEAT, Exhaust valve	4
4	P*	76943	GUIDE, Valve, intake	4
5	P*	16R22126	GUIDE, Valve, exhaust	4
6	P	66796	INSERT, Spark plug, 1.5 MM	8
7		STD-1353	INSERT, No. 10-24 UNC x 3/8 long	4
8		31C-12	STUD, 5/16-18 x 1-1/2 long	8
9		25C-8	STUD, 1/4-20 x 1.00 long	4
10		MS20823-6D	ELBOW, 45°, 3/8 flared tube	4
11		66610	BUSHING, Rocker shaft	16
12	**	1102	PLUG, 1/8-27 NPT, allen head	4
13		77611	GASKET, Exhaust flange	4
14		STD-35	WASHER, 5/16 plain	8
15		STD-475	WASHER, 5/16 lock, internal teeth	8
16		STD-1410	NUT, 5/16-18 plain	8

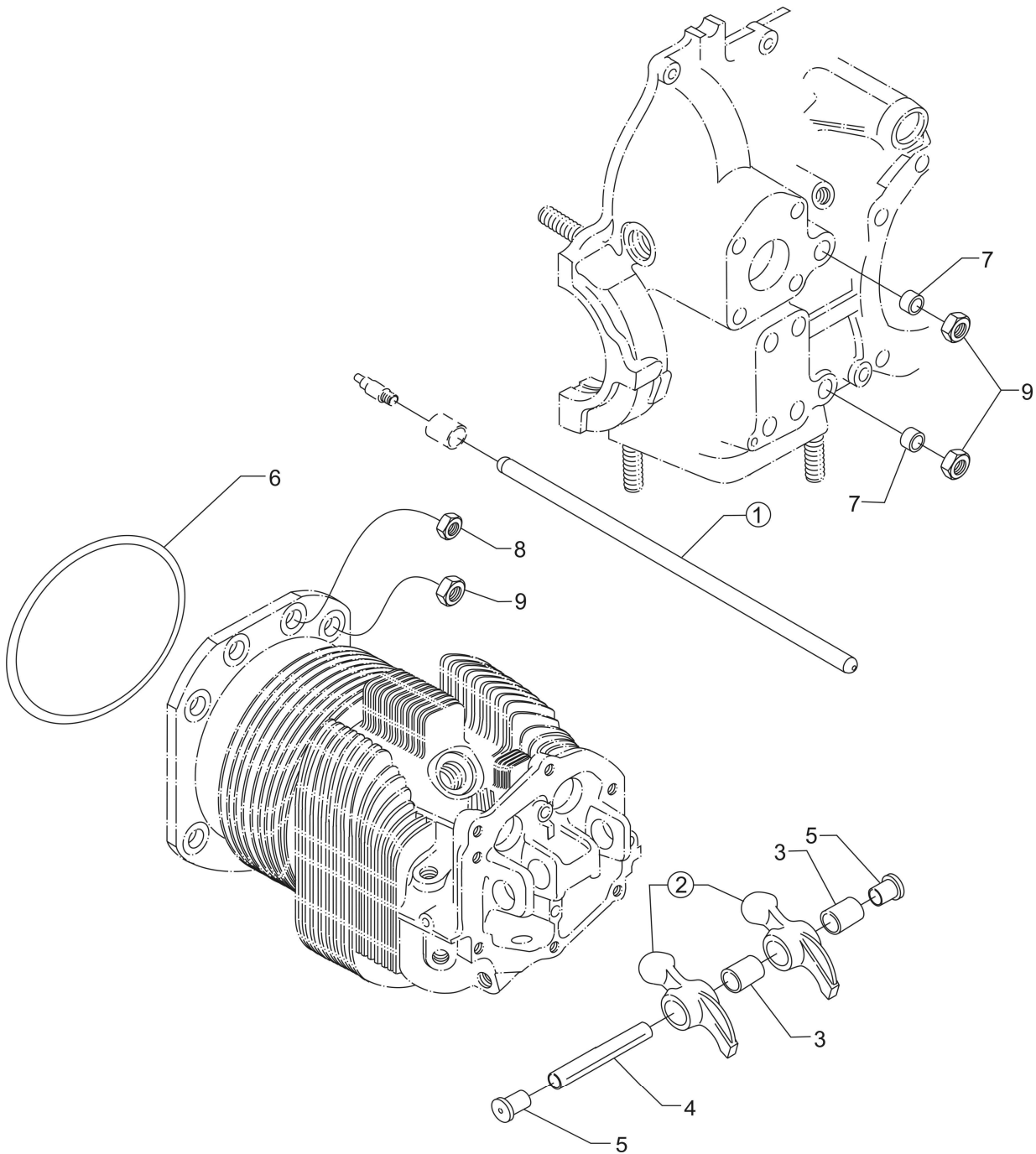
P Lycoming proprietary part. Listed for reference purposes only, cannot be purchased.
***** See latest revision of Service Instruction No. 1256 for service valve guides.
****** Used on installations without priming lines.



**Valve Assembly and Related Parts
Figure 10**

CYLINDER SECTION**FIGURE 10 – VALVE ASSEMBLY AND RELATED PARTS**

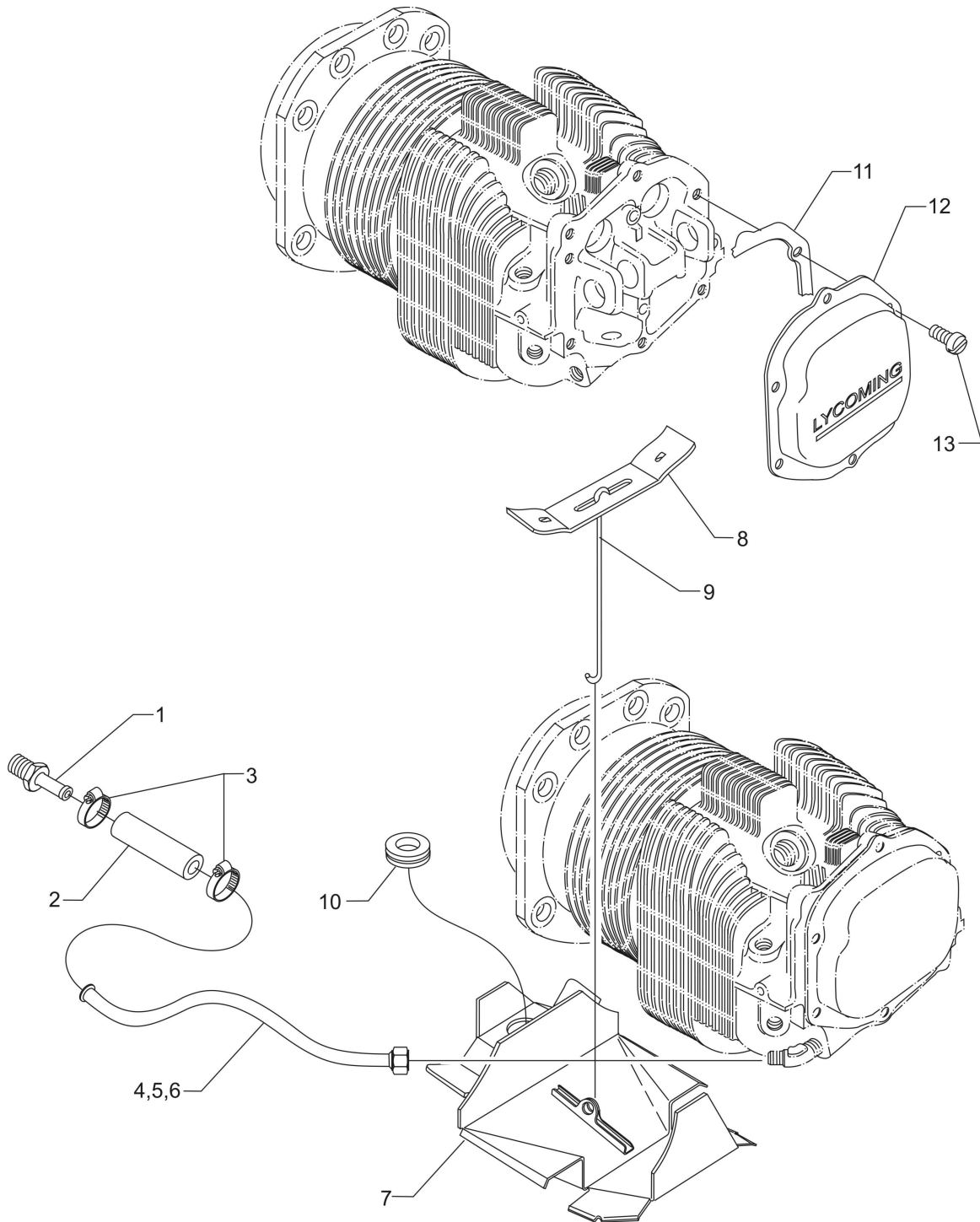
Figure Item	Code	Part Number	Description	Units per Assembly
1		17A23938	VALVE, Intake	4
2		17B23936	VALVE, Exhaust	4
3		LW-11795	SPRING, Valve, inner	8
4		LW-11800	SPRING, Valve, outer	8
5		65441	SEAT, Valve spring, lower intake	4
6		LW-13323	SEAT, Valve spring, lower exhaust	4
7		LW-10077	SEAT, Valve spring, upper intake	4
8		LW-16475	SEAT, Valve spring, upper exhaust (rotator type)	4
9		60009	KEY, Valve, intake	8
10		17C21191	KEY, Valve, exhaust (rotator type)	8
11		17C19386	CAP, Valve stem exhaust (rotator type)	4
12		15B26066	PLUNGER ASSEMBLY, Hydraulic lifter	8
13		15B21319	SOCKET, Hydraulic tappet	8
14		LW-11485	SHROUD TUBE ASSEMBLY, Push rod	8
		15G23461	SHROUD TUBE ASSEMBLY, Push rod (Roller tappet engines)	8
15		LW-14995	SPRING, Shroud tube	4
16		LW-12272	LOCKPLATE, Shroud tube	4
17		STD-1411	NUT, 1/4-20 plain	4
18		01L23459	WASHER, 25/32 I.D. x 3/8 O.D. x 1/32 thick (Roller tappet engines)	8
19	*	LW-18661	SEAL, Shroud tube	8
20		06A23493	SEAL, Shroud tube (Roller tappet engines)	8
21	**	70310	SEAL, Shroud tube	8
<p>* This seal is used on flat tappet engines only.</p> <p>** This seal is used on both flat tappet and roller tappet engines.</p>				



**Cylinder Related Parts
Figure 11**

CYLINDER SECTION**FIGURE 11 – CYLINDER RELATED PARTS**

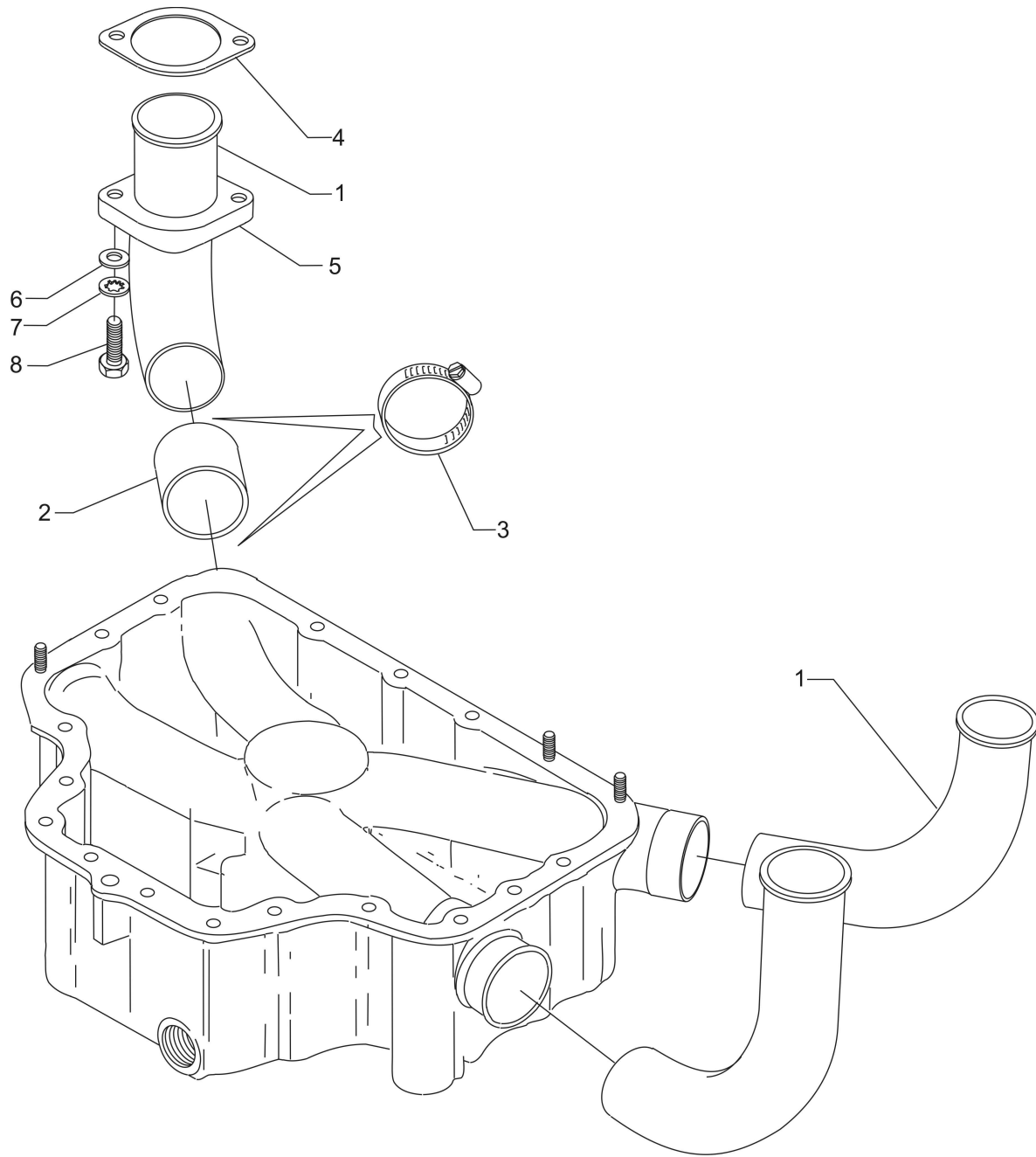
Figure Item	Code	Part Number	Description	Units per Assembly
1	AR*♦	15F19957-28	ROD ASSEMBLY, Push (A total of 8 required)	AR
	AR*♦	15F19957-29	ROD ASSEMBLY, Push (A total of 8 required)	AR
	AR*♦	15F19957-30	ROD ASSEMBLY, Push (A total of 8 required)	AR
	AR*♦	15F19957-31	ROD ASSEMBLY, Push (A total of 8 required)	AR
	AR*♦	15F19957-32	ROD ASSEMBLY, Push (A total of 8 required)	AR
	AR*♦	15F19957-33	ROD ASSEMBLY, Push (A total of 8 required)	AR
	AR†♦	15F19957-34	ROD ASSEMBLY, Push (A total of 8 required)	AR
	AR‡♦	15F19957-35	ROD ASSEMBLY, Push (A total of 8 required)	AR
	AR‡♦	15F19957-36	ROD ASSEMBLY, Push (A total of 8 required)	AR
	AR‡♦	15F19957-37	ROD ASSEMBLY, Push (A total of 8 required)	AR
2	**	17F19357	ROCKER ASSEMBLY, Valve	8
3		74637	BUSHING, Valve rocker	8
4		LW-13790	SHAFT, Valve rocker	4
5		LW-12892	THRUST BUTTON, Rocker shaft	8
6		71481	RING, Oil seal, 3/32 diameter x 4-27/32 long	4
7		74887	SPACER, 33/64 I.D. x 7/8 O.D. x 3/8 thick	2
8		383-B	NUT, 3/8-24 plain	16
9		STD-2090	NUT, 1/2-20 plain	18
<p>AR as required</p> <p>* These push rods are not to be used on flat tappet engines.</p> <p>† This push rod can be used on both flat tappet and roller tappet engines.</p> <p>‡ These push rods are not to be used on roller tappet engines.</p> <p>♦ See latest revision of Service Instruction No. 1060 for complete push rod application.</p> <p>** Due to the size of the area where the part number is stamped, the last five digits may be all that is shown (19357).</p> <p>NOTE: Various push rod lengths are used to set valve clearances.</p>				



**Cylinder Head Drain Tubes, Intercylinder Cooling Baffles and Rocker Box Covers
Figure 12**

CYLINDER SECTION**FIGURE 12 –CYLINDER HEAD DRAIN TUBES, INTERCYLINDER COOLING BAFFLES
AND ROCKER BOX COVERS**

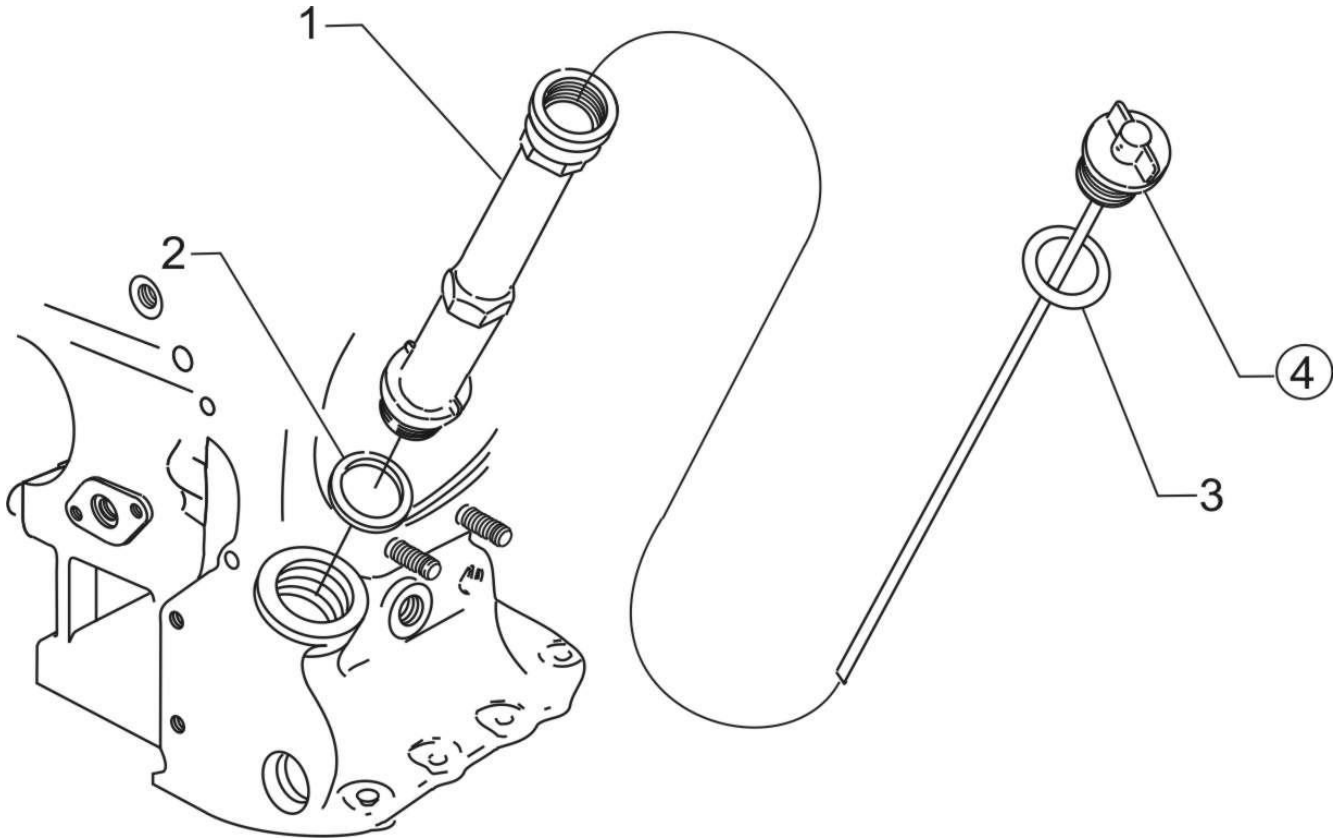
Figure Item	Code	Part Number	Description	Units per Assembly
1		STD-684	NIPPLE, Straight, 3/8 I.D. hose	4
2		STD-1821	HOSE, 3/8 I.D. x 2-1/2 long	4
3		LW-15592-5-05	CLAMP, Hose	8
4		68759	TUBE ASSEMBLY, Oil drain, cylinder no. 1	1
5		68760	TUBE ASSEMBLY, Oil drain, cylinder no. 2	1
6		68761	TUBE ASSEMBLY, Oil drain, cylinders no. 3 & 4	2
7	*	75339	BAFFLE ASSEMBLY, Intercylinder	1
	**	LW-13389	BAFFLE ASSEMBLY, Intercylinder	1
8		71611	RETAINER, Intercylinder baffle	2
9		71610	HOOK, Intercylinder baffle retainer	2
10		MS35489-20X	GROMMET	1
11		75906	GASKET, Rocker box cover	4
12		61247	COVER, Rocker box	4
		61247-C	COVER, Rocker box, chrome	4
13		STD-1925	SCREW, 1/4-20 x 5/8 long, pan. head, self-locking	24
	◆	01F22880	SCREW, 1/4-20 x 19/32 long, stainless	24
	◆	MS35335-33	WASHER	24
<p>* Install on left side between no. 2 and no. 4 cylinders. ** Install on right side between no. 1 and no. 3 cylinders. ◆ Used with chrome rocker box cover.</p>				



**Intake Pipes and Attaching Parts
Figure 13**

CYLINDER SECTION**FIGURE 13 – INTAKE PIPES AND ATTACHING PARTS**

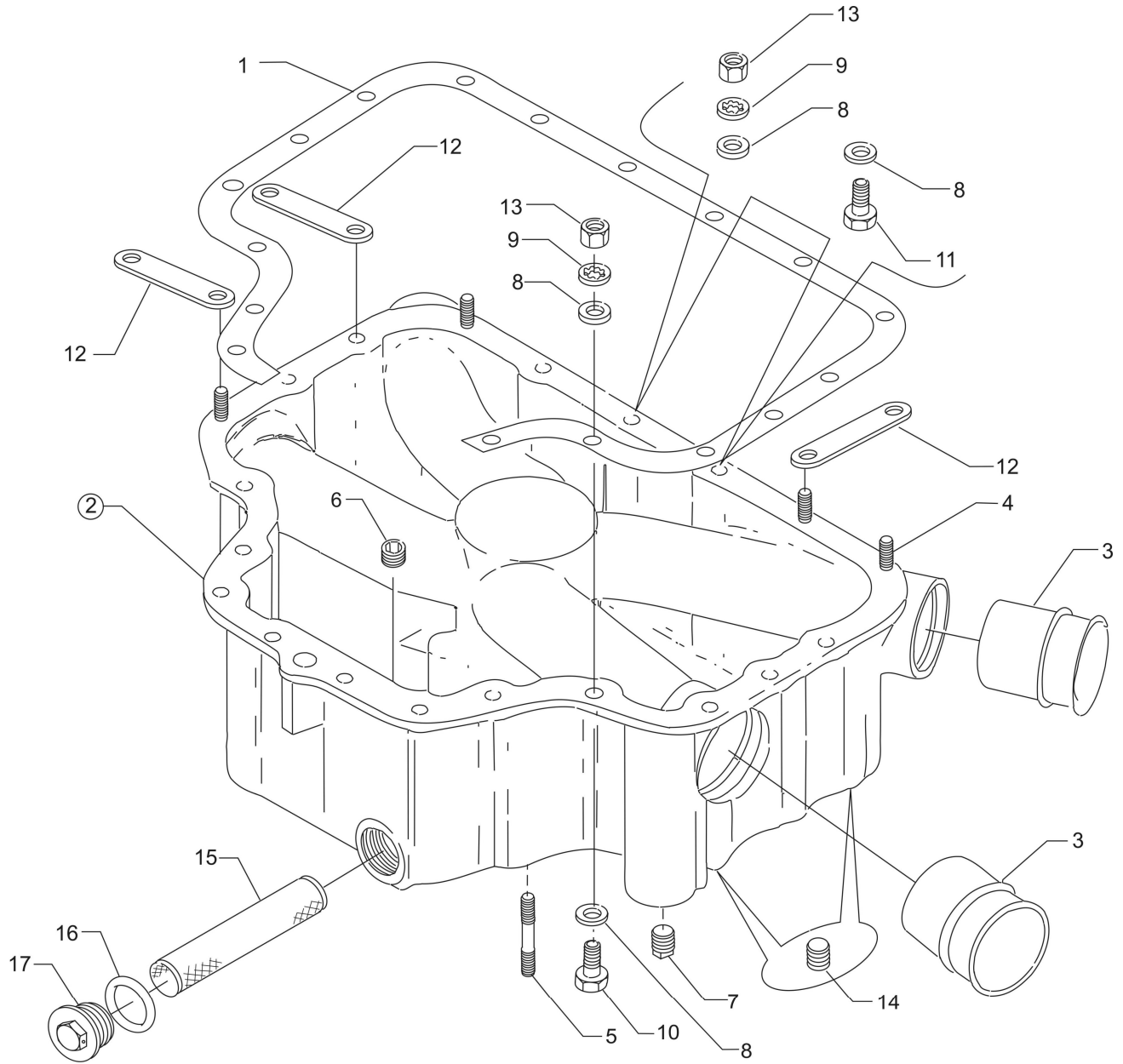
Figure Item	Code	Part Number	Description	Units per Assembly
1		70485	PIPE, Intake	4
2		69603	HOSE, 1-3/4 I.D. x 2-3/16 O.D. x 1-3/4	4
3		LW-15592-8-28	CLAMP, Hose	8
4		71973	GASKET, 2 bolt flange, 1-3/4 I.D.	4
5		73346	FLANGE, Intake pipe, upper	4
6		STD-8	WASHER, 1/4 plain	8
7		STD-160	WASHER, 1/4 lock, internal teeth	8
8		LW-25-1.25	BOLT, 1/4-20 x 1-1/4 long, hex. head	8



**Oil Level Gage
Figure 14**

LUBRICATION SYSTEM
FIGURE 14 – OIL LEVEL GAGE

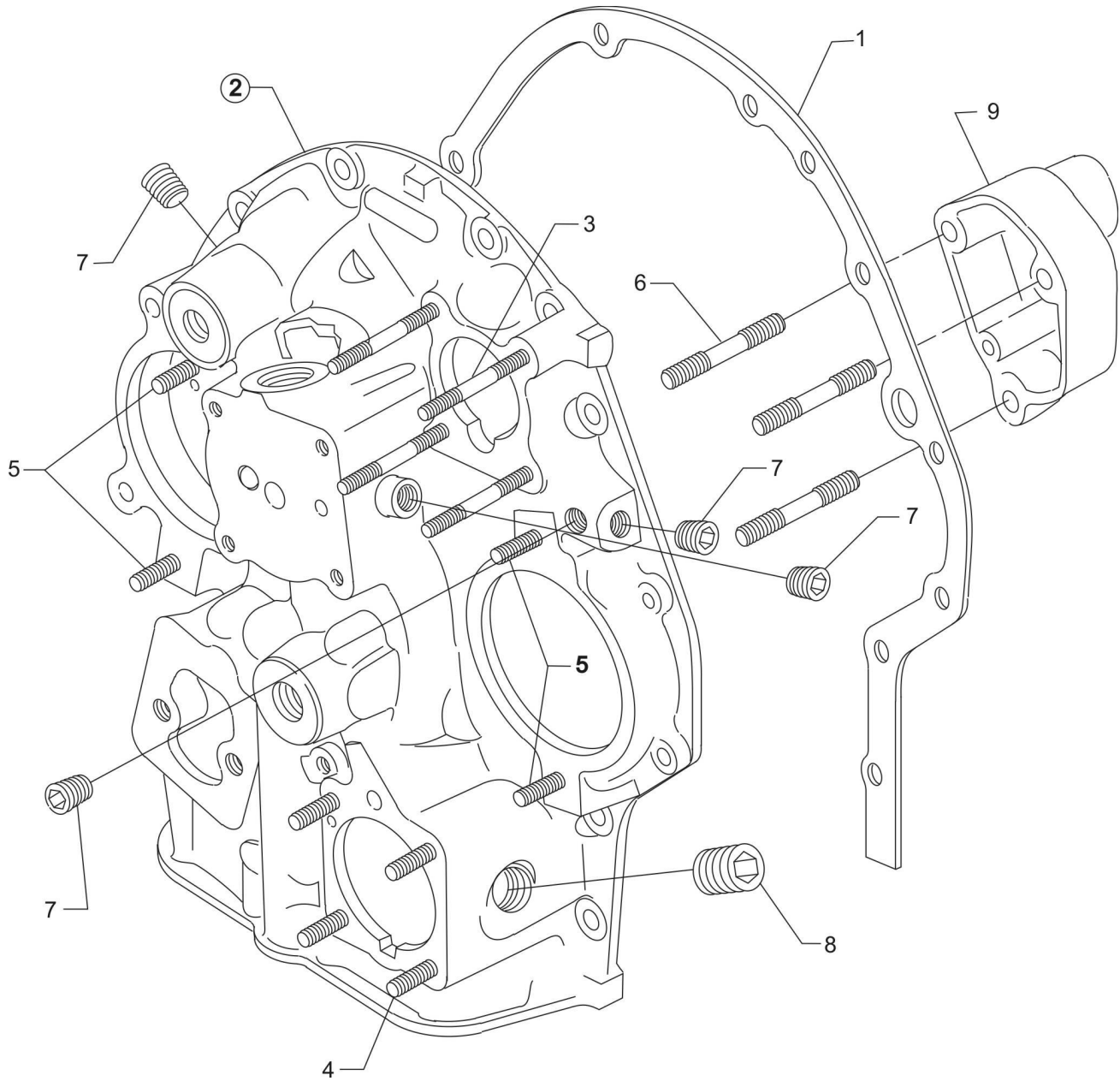
Figure Item	Code	Part Number	Description	Units per Assembly
1		56C23075	TUBE, Oil level gage, long	1
2		72059	GASKET, Oil level gage	1
3		74065	RING, Oil level gage seal	1
4		LW-14768	GAGE ASSEMBLY, Oil level	1



**Oil Sump Assembly and Oil Suction Screen
Figure 15**

LUBRICATION SYSTEM**FIGURE 15 – OIL SUMP ASSEMBLY AND OIL SUCTION SCREEN**

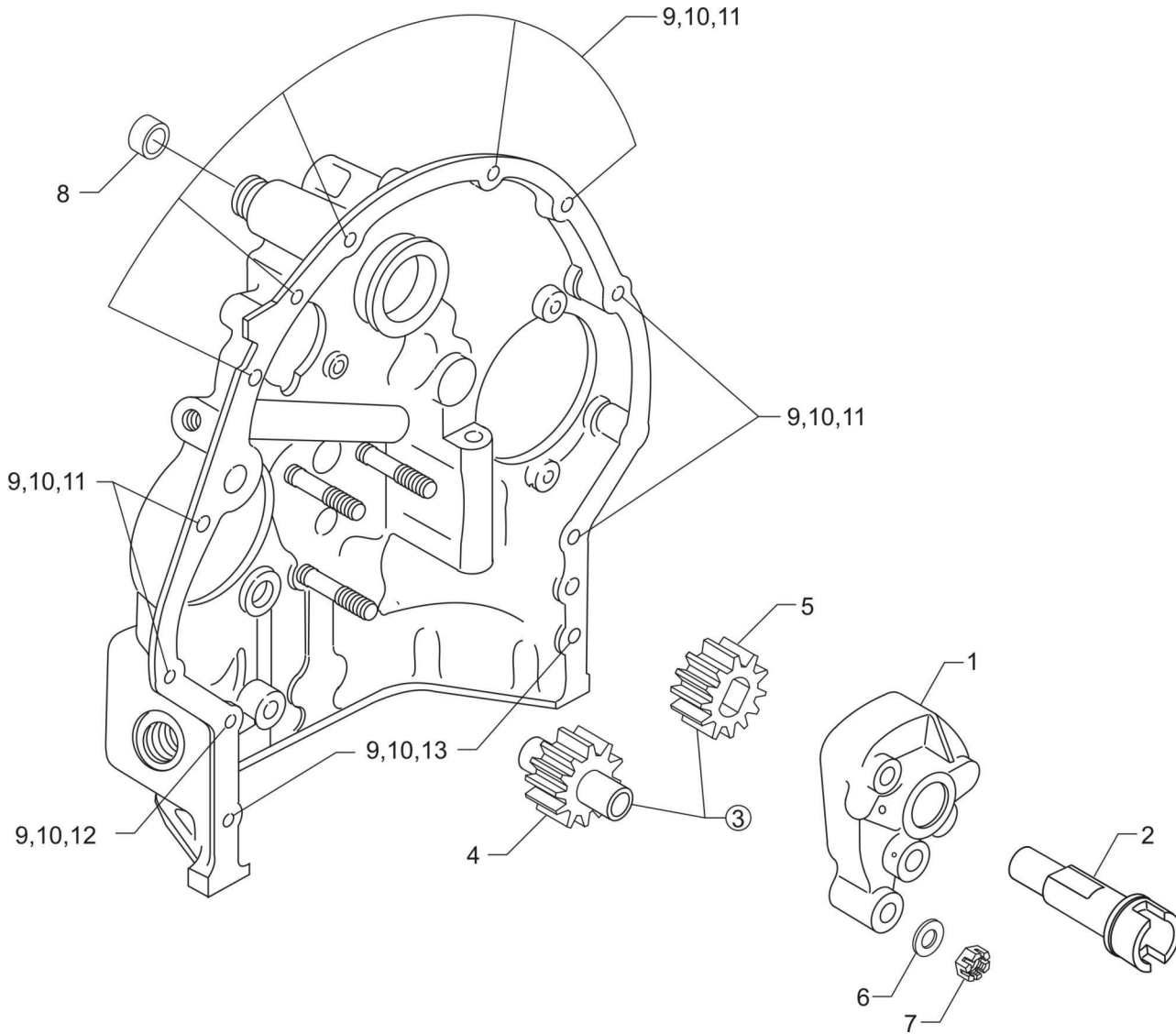
Figure Item	Code	Part Number	Description	Units per Assembly
1		LW-13353	GASKET, Oil sump	1
2		LW-13861	SUMP ASSEMBLY, Oil	1
3		78914	CONNECTION, Intake pipe	4
4		25C-10	STUD, 1/4-20 x 1-1/4 long	4
5		31C-17	STUD, 5/16-18 x 2-1/8 long	4
6		STD-91	PLUG, 1/2-14 NPT, allen head	1
7		STD-551	PLUG, 1/2-14 NPT, square head	2
8		STD-8	WASHER, 1/4 plain	28
9		STD-160	WASHER, 1/4 lock, internal teeth	20
10		LW-25-0.94	BOLT, 1/4-20 x 15/16 long, hex. head	13
11		LW-25-1.13	BOLT, 1/4-20 x 1-1/8 long, hex. head	3
12		73152	BRACKET, Support clamp	3
13		STD-1411	NUT, 1/4-20 plain	12
14		STD-2229	PLUG, 1/2 NPT, allen head	2
15		70484	SCREEN, Oil suction	1
16		06E19769-1.00	GASKET, Annular, 1.00 I.D.	1
17		LW-12545	PLUG, 5/8 hex. head x 1.00-20	1



**Accessory Housing Assembly
Figure 16**

ACCESSORY DRIVES**FIGURE 16 – ACCESSORY HOUSING ASSEMBLY**

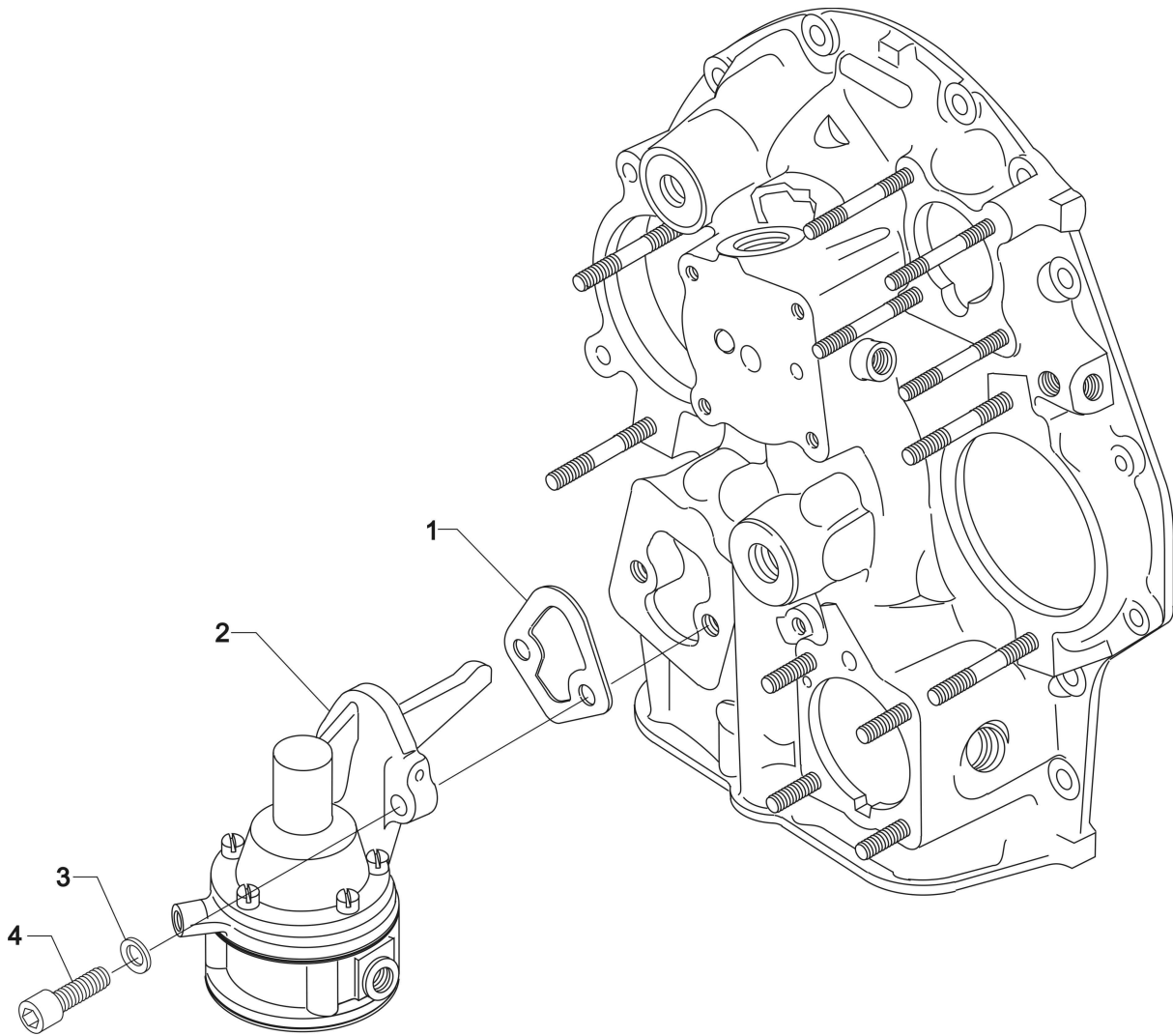
Figure Item	Code	Part Number	Description	Units per Assembly
1		73818	GASKET, Accessory housing	1
2		21A21533-05	HOUSING ASSEMBLY, Accessory	1
3		25C-22	STUD, 1/4-20 x 2-3/4 long	4
4		31C-12	STUD, 5/16-18 x 1-1/2 long	4
5		31C-19	STUD, 5/16-18 x 2-1/8 long	4
6		31CD-17	STUD, 5/16-18 x 2-1/8 long, drilled	3
7		1102	PLUG, 1/8-27 NPT, allen head	4
8		STD-784	PLUG, 3/8-18 NPT, allen head	1
9		76119	SHIELD, Accessory breather oil	1



**Oil Pump Assembly and Accessory Housing Attaching Parts
Figure 17**

ACCESSORY DRIVES**FIGURE 17 – OIL PUMP ASSEMBLY AND ACCESSORY HOUSING ATTACHING PARTS**

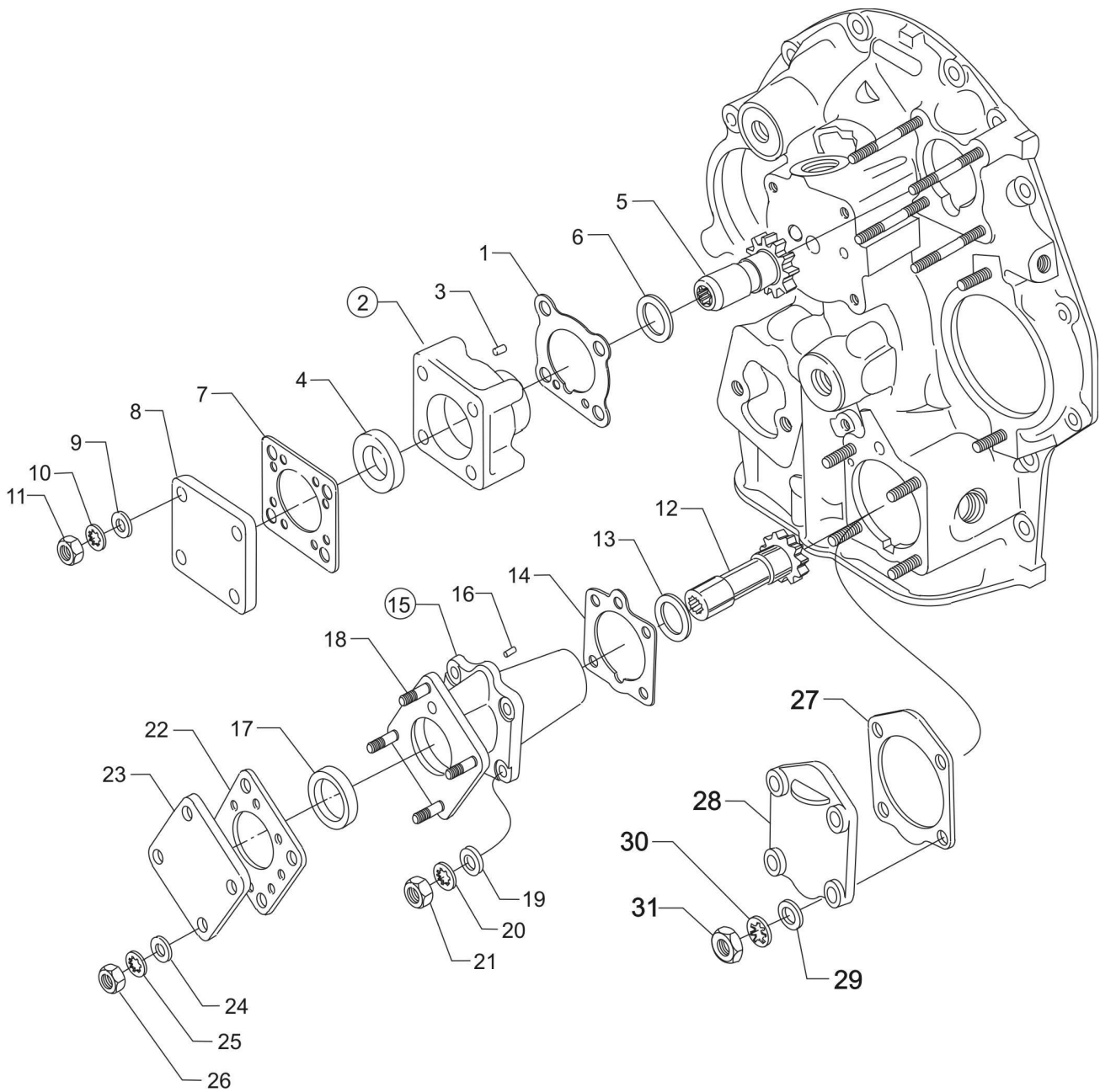
Figure Item	Code	Part Number	Description	Units per Assembly
1		78531	BODY ASSEMBLY, Oil pump	1
2		61174	SHAFT, Oil pump drive	1
3		05K19423-S	IMPELLER KIT	1
4	*	LW-18110	IMPELLER ASSEMBLY, Oil pump driven	1
5	*	LW-18109	IMPELLER, Oil pump driven	1
6		STD-35	WASHER, 5/16 plain	3
7		STD-1420	NUT, 5/16-18 slotted	3
8		LW-14260	SEAL, Oil, tachometer drive	1
9		STD-8	WASHER, 1/4 plain	12
10		STD-160	WASHER, 1/4 lock, internal teeth	12
11		LW-25-0.94	BOLT, 1/4-20 x 15/16 long, hex. head	9
12		LW-25-1.13	BOLT, 1/4-20 x 1-1/8 long, hex. head	1
13		LW-25-1.44	BOLT, 1/4-20 x 1-7/16 long, hex. head	2
* Sold in complete sets only (Kit P/N 05K19423-S).				



**Fuel Pump Assembly and Attaching Parts
Figure 18**

ACCESSORY DRIVES**FIGURE 18 – FUEL PUMP ASSEMBLY AND ATTACHING PARTS**

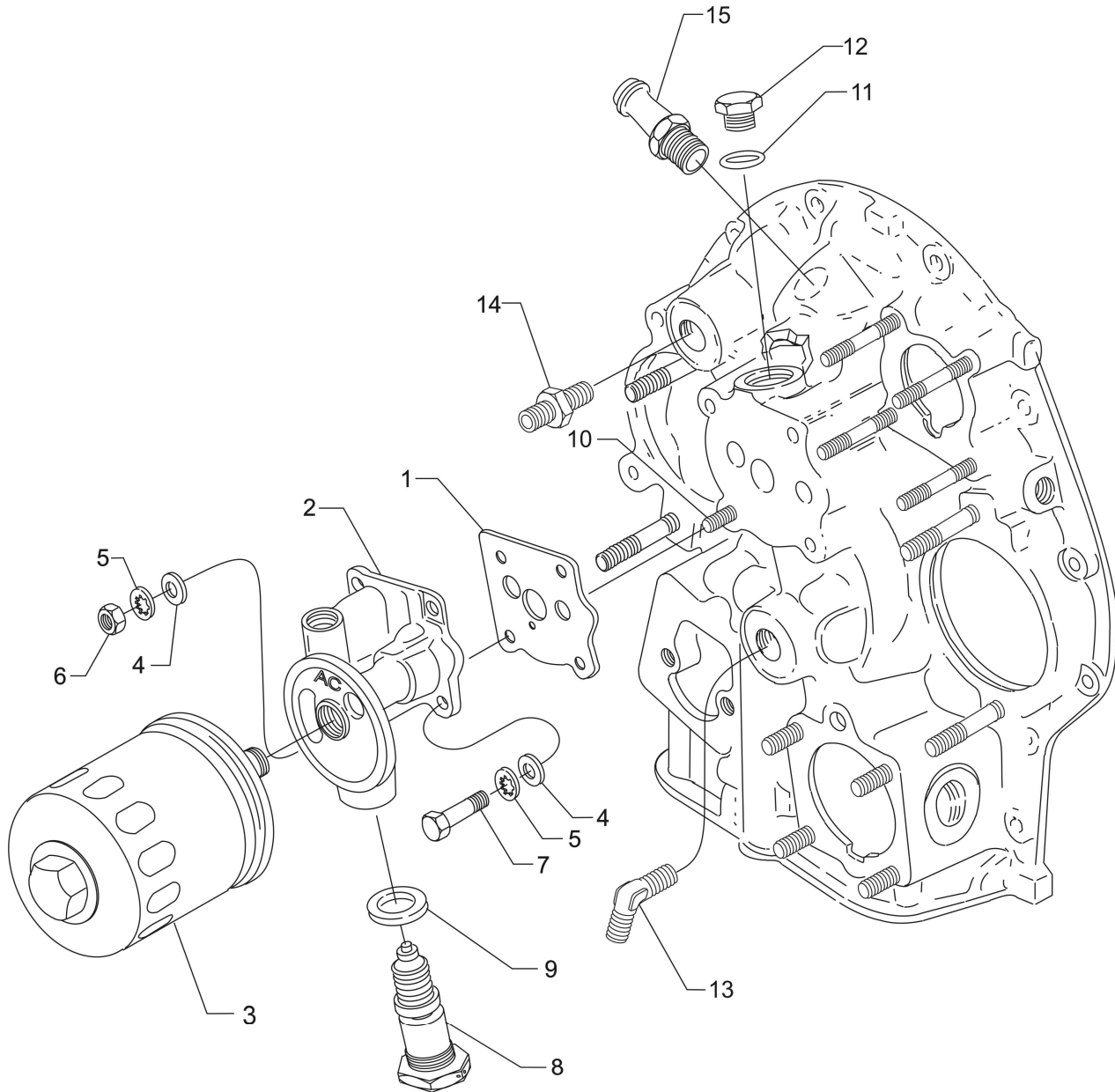
Figure Item	Code	Part Number	Description	Units per Assembly
1		60096	GASKET, Fuel pump	1
2		LW-15473	FUEL PUMP, Dual diaphragm, high pressure	1
3		STD-33	WASHER, 3/8 plain	2
4		STD-1882	SCREW, 3/8-16 x 1-9/32 long, socket head, drilled	2



**Vacuum and Hydraulic Pump Drives and Covers,
Propeller Governor Drive Cover
Figure 19**

ACCESSORY DRIVES**FIGURE 19 – VACUUM AND HYDRAULIC PUMP DRIVES AND COVERS,
PROPELLER GOVERNOR DRIVE COVER**

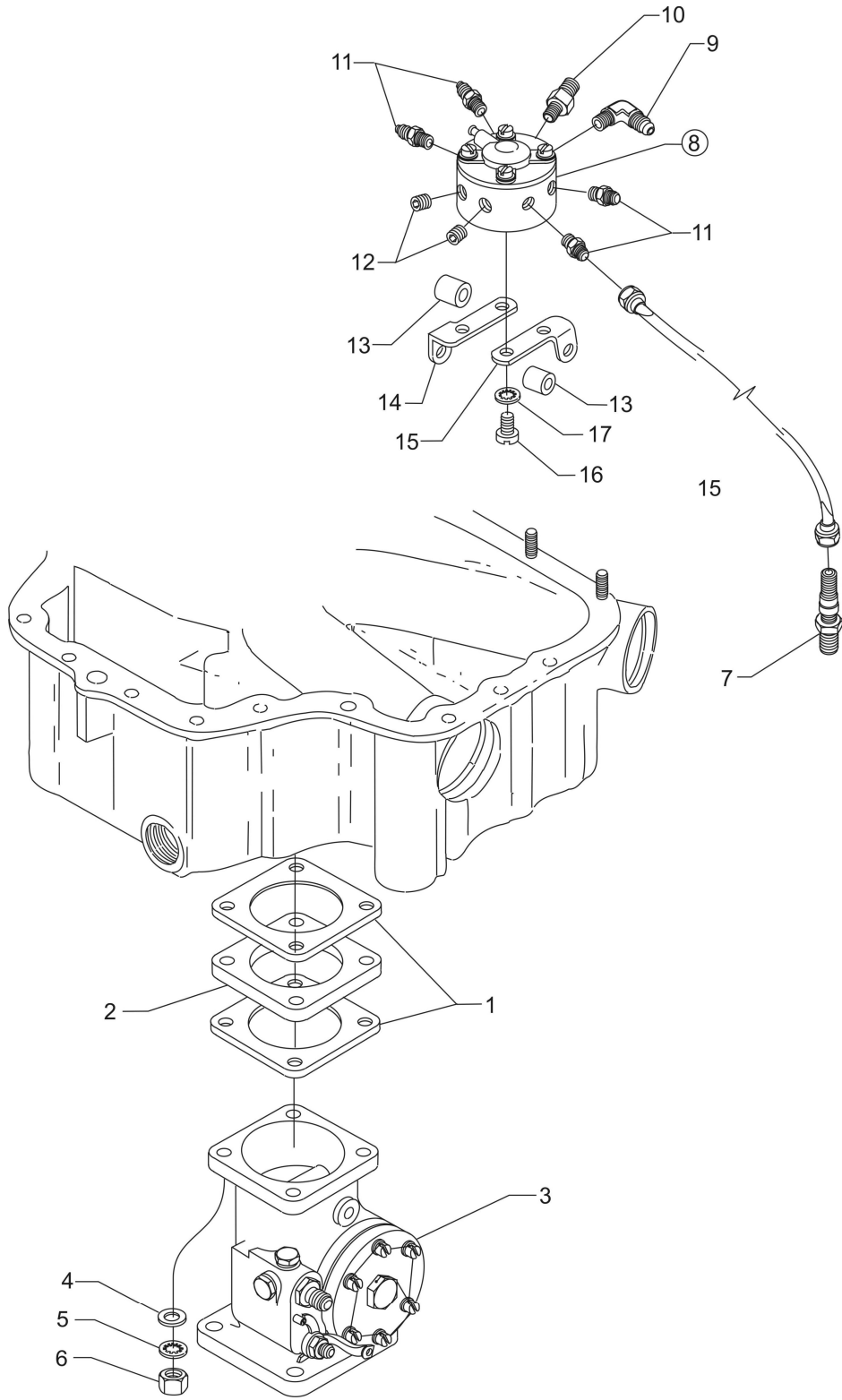
Figure Item	Code	Part Number	Description	Units per Assembly
1		61183	GASKET, Accessory adapter	1
2		28F21254	ADAPTER ASSEMBLY, Vacuum pump	1
3		STD-1774	PIN, 1/8 diameter x 1/4 long	1
4		06A19956	OIL SEAL, 7/8 I.D. x 1-1/2 O.D. x 5/16	1
5		72970	GEAR ASSEMBLY, Vacuum pump driven	1
6		71596	WASHER, Accessory drive gear	1
7		8313	GASKET, Vacuum pump	1
8		60430	COVER, Vacuum pump	1
9		STD-8	WASHER, 1/4 plain	4
10		STD-160	WASHER, 1/4 lock, internal teeth	4
11		STD-1411	NUT, 1/4-20 plain	4
12		27A22099	GEAR ASSEMBLY, Hydraulic pump driven	1
13		71596	WASHER, Accessory drive gear	1
14		68315	GASKET, Accessory drive adapter	1
15		27D21252	ADAPTER ASSEMBLY, Hydraulic pump	1
16		STD-1774	PIN, 1/8 diameter x 1/4 long	1
17		06A19956	OIL SEAL, 7/8 I.D. x 1-1/2 O.D. x 5/16 wide	1
18		25C-12	STUD, 1/4-20 x 1-1/2 long	4
19		STD-35	WASHER, 5/16 plain	4
20		STD-475	WASHER, 5/16 lock, internal teeth	4
21		STD-1410	NUT, 5/16-18 plain	4
22		8313	GASKET, Hydraulic pump	1
23		60430	COVER, Hydraulic pump	1
24		STD-8	WASHER, 1/4 plain	4
25		STD-160	WASHER, 1/4 lock, internal teeth	4
26		STD-1411	NUT, 1/4-20 plain	4
27		69551	GASKET, Accessory drive adapter cover, governor	1
28		69106	COVER, Governor drive adapter pad	1
29		STD-35	WASHER, 5/16 plain	4
30		STD-475	WASHER, 5/16 lock, internal teeth	4
31		STD-1410	NUT, 5/16-18 plain	4



**Oil Filter Assembly, Oil Cooler Bypass Valve and Breather Fitting
Figure 20**

ACCESSORY DRIVES**FIGURE 20 – OIL FILTER ASSEMBLY, OIL COOLER BYPASS VALVE
AND BREATHER FITTING**

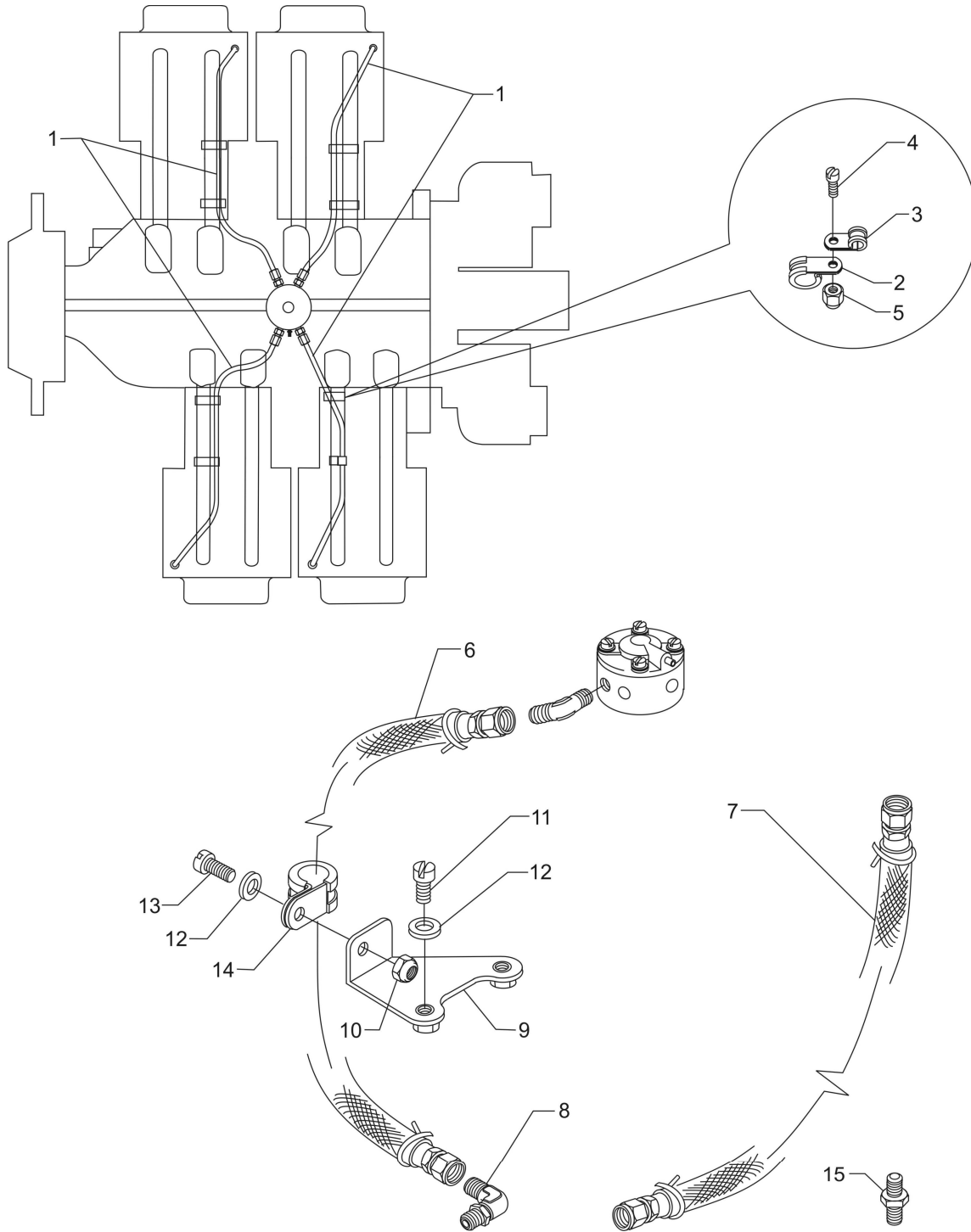
Figure Item	Code	Part Number	Description	Units per Assembly
1		06B23862	GASKET, Oil filter adapter	1
2		77852	OIL FILTER BASE ASSEMBLY	1
3		LW-13215	OIL FILTER, Short	1
4		STD-8	WASHER, 1/4 plain	4
5		STD-160	WASHER, 1/4 lock, internal teeth	4
6		STD-1411	NUT, 1/4-20 plain	1
7		LW-25-1.00	BOLT, 1/4-20 x 1.00 long, hex. head	3
8		53E22144	VALVE ASSEMBLY, Temperature control oil cooler bypass	1
9		76510	GASKET, Valve assembly	1
10		25C-10	STUD, 1/4-20 x 1-1/4 long	1
11		06E19769-0.63	GASKET, Annular, 5/8 I.D.	1
12		62417	PLUG, Oil cooler bypass	1
13		MS20823-8	ELBOW, 3/8 NPT, 1/2 flared tube	1
14		AN816-8	NIPPLE, 1/2 flared tube	1
15		71140	FITTING, Breather	1
<u>NOTE:</u> Refer to latest revision of Lycoming SSP-885 for oil filter kits and replacement filters.				



**Fuel Injector, Fuel Manifold and Brackets
Figure 21**

FUEL DISTRIBUTION**FIGURE 21 – FUEL INJECTOR, FUEL MANIFOLD AND BRACKETS**

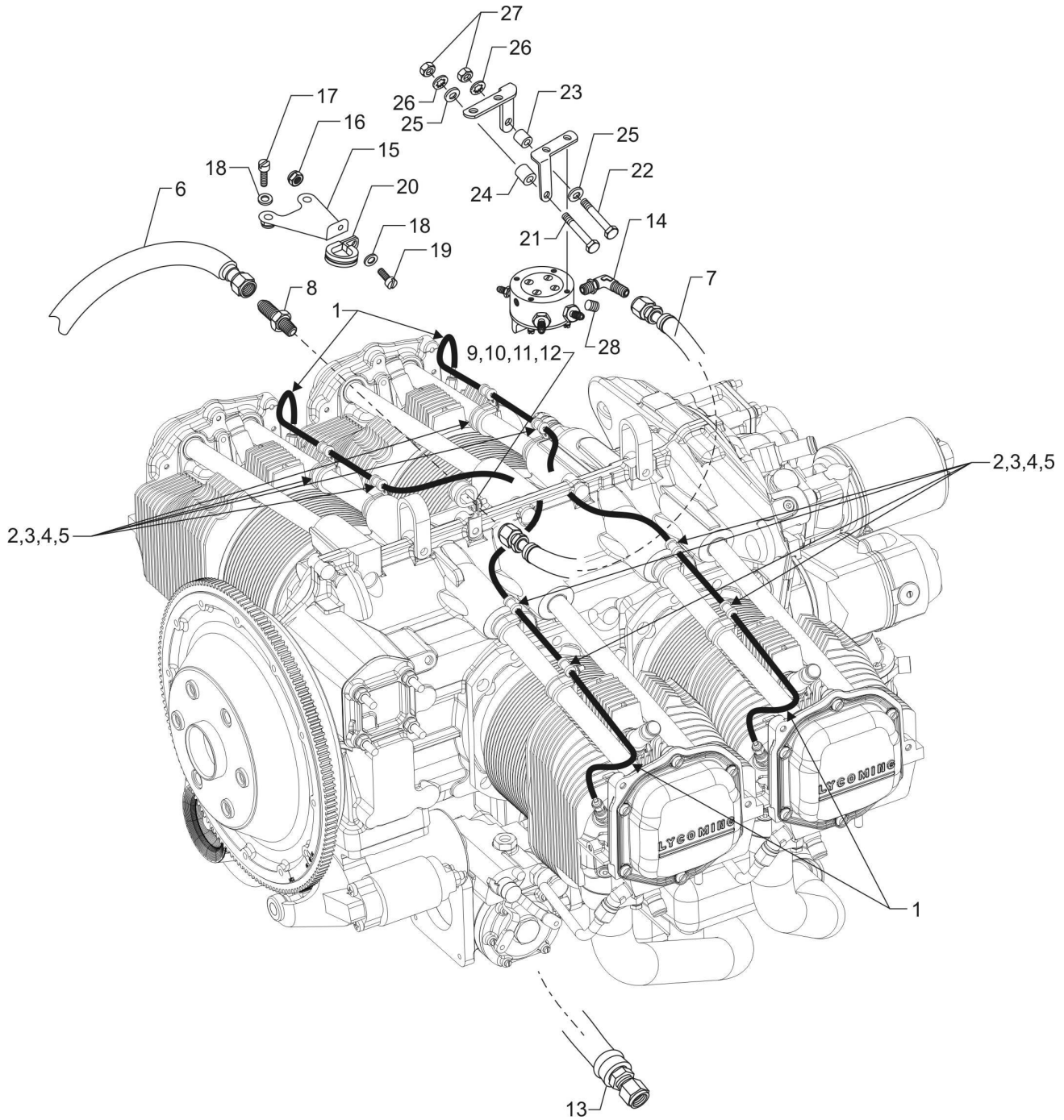
Figure Item	Code	Part Number	Description	Units per Assembly
1		66224	GASKET, Fuel injector	2
2		73161	SPACER, Fuel injector	1
3	V	61M23264	FUEL INJECTOR, RSA-5AD1, V AV 2576562-2	1
4		STD-35	WASHER, 5/16 plain	4
5		STD-475	WASHER, 5/16 lock, internal teeth	4
6		STD-1410	NUT, 5/16-18 plain	4
7		63C26450	NOZZLE, Injection	4
8		63B26586	MANIFOLD ASSEMBLY, Fuel	1
9		MS20822-4	ELBOW, 1/4 tube, 1/8 NPT, 90°	1
10		02G21382	NIPPLE, Nozzle pressure gage	1
11		STD-148	NIPPLE, Union, 1/8 NPT	4
12		1102	PLUG, 1/8-27 NPT, allen head	2
13		75966	SPACER, Fuel manifold	2
14		07A22995	BRACKET, Fuel manifold	1
		07A23031	BRACKET, Fuel manifold	1
15		07A22996	BRACKET, Fuel manifold	1
		07A23032	BRACKET, Fuel manifold	1
16		STD-82	SCREW, No. 10-24 x 1/2 long, fill. Head	4
17		STD-251	WASHER, No. 10 lock, internal teeth	4



Fuel Lines, Fuel Hoses and Attaching Parts
Figure 22

FUEL DISTRIBUTION**FIGURE 22 - FUEL LINES, FUEL HOSES AND ATTACHING PARTS**

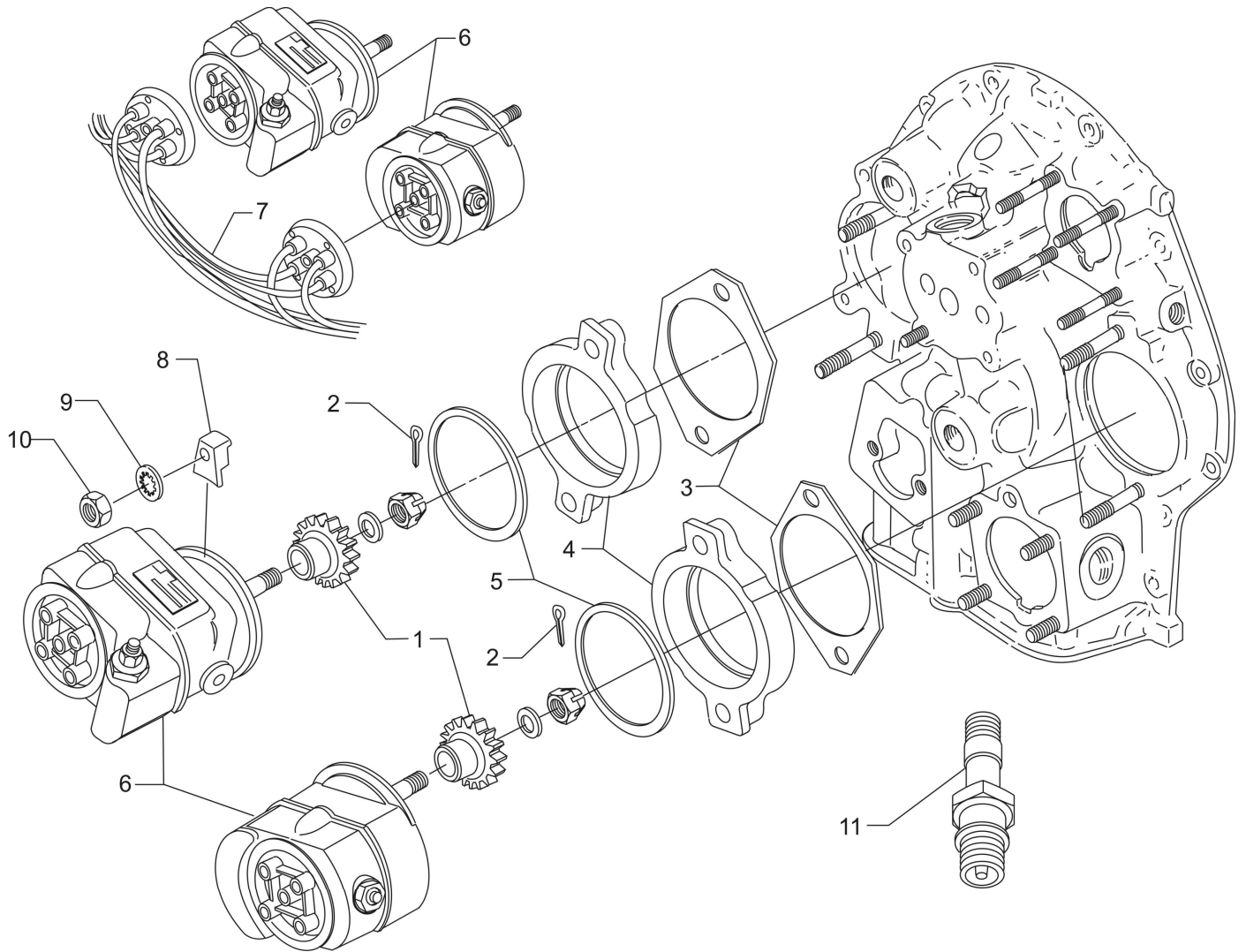
Figure Item	Code	Part Number	Description	Units per Assembly
1		LW-12098-0-180	TUBE ASSEMBLY, Fuel manifold to nozzle	4
2		LW-16266-10-75	CLAMP	8
3		LW-16266-10-13	CLAMP, 1/8 diameter for no. 10 screw	8
4		STD-860	SCREW, No. 10-32 x 5/8 long, fill. head	8
5		STD-670	LOCKNUT, No. 10-32	8
6		LW-12798-4S370	HOSE ASSEMBLY, 1/4 hose, straight	1
7		LW-12799-6S180	HOSE ASSEMBLY, 3/8 hose, straight	1
8		72377	ELBOW, 3/8 flared tube, adjustable	1
9		74278	BRACKET ASSEMBLY, Fuel line support	1
10		STD-670	LOCKNUT, No. 10-32	1
11		STD-692	SCREW, No. 10-32 x 1/2 long, round head	2
12		STD-425	WASHER, No. 10 plain	3
13		STD-860	SCREW, No. 10-32 x 5/8 long, fill head	1
14		LW-16266-25-50	CLAMP	1
15	*	02G22973	NIPPLE, 1/4 tube to 7/16-20 straight	1
* Ship loose.				



**Fuel Lines, Fuel Hoses and Attaching Parts (Inverted Manifold)
Figure 23**

FUEL DISTRIBUTION**FIGURE 23 - FUEL LINES, FUEL HOSES AND ATTACHING PARTS (INVERTED MANIFOLD)**

Figure Item	Code	Part Number	Description	Units per Assembly
1		LW-12098-0-180	TUBE ASSEMBLY, Fuel manifold to nozzle	4
2		LW-16266-10-75	CLAMP	8
3		LW-16266-10-13	CLAMP, 1/8 diameter for no. 10 screw	8
4		STD-860	SCREW, No. 10-32 x 5/8 long, fill. head	8
5		STD-670	LOCKNUT, No. 10-32	8
6		LW-12798-4S370	HOSE ASSEMBLY, 1/4 hose, straight	1
7		LW-12798-4S172	HOSE ASSEMBLY, 1/4 hose, straight	1
8		AN815-4	UNION, 1/4 flared tube	1
9		72815	BRACKET, Support clamp, 90°	1
10		STD-860	SCREW, No. 10-32 x 5/8 long, fill. head	1
11		STD-670	LOCKNUT, No. 10-32	1
12		LW-16266-10-63	CLAMP, 5/8 I.D. x no. 10 screw	1
13		LW-12799-6S180	HOSE ASSEMBLY, 3/8 hose, straight	1
14		72377	ELBOW, 3/8 flared tube, adjustable	1
15		74278	BRACKET ASSEMBLY, Fuel line support	1
16		STD-670	LOCKNUT, No. 10-32	1
17		STD-692	SCREW, No. 10-32 x 1/2 long, round head	2
18		STD-425	WASHER, No. 10 plain	3
19		STD-860	SCREW, No. 10-32 x 5/8 long, fill. head	1
20		LW-16266-25-50	CLAMP	1
21		LW-25-2.31	BOLT, 1/4-20 x 2-5/16 long, hex. head	1
22		LW-25-2.00	BOLT, 1/4-20 x 2.00 long, hex. head	1
23		74655	SPACER, Exhaust manifold	1
24		73966	SPACER, Fuel manifold bracket	1
25		STD-8	WASHER, 1/4 plain	4
26		STD-160	WASHER, 1/4 lock, internal teeth	2
27		STD-1411	NUT, 1/4-20 plain	2
28		1102	PLUG, 1/8-27 NPT, allen head	1

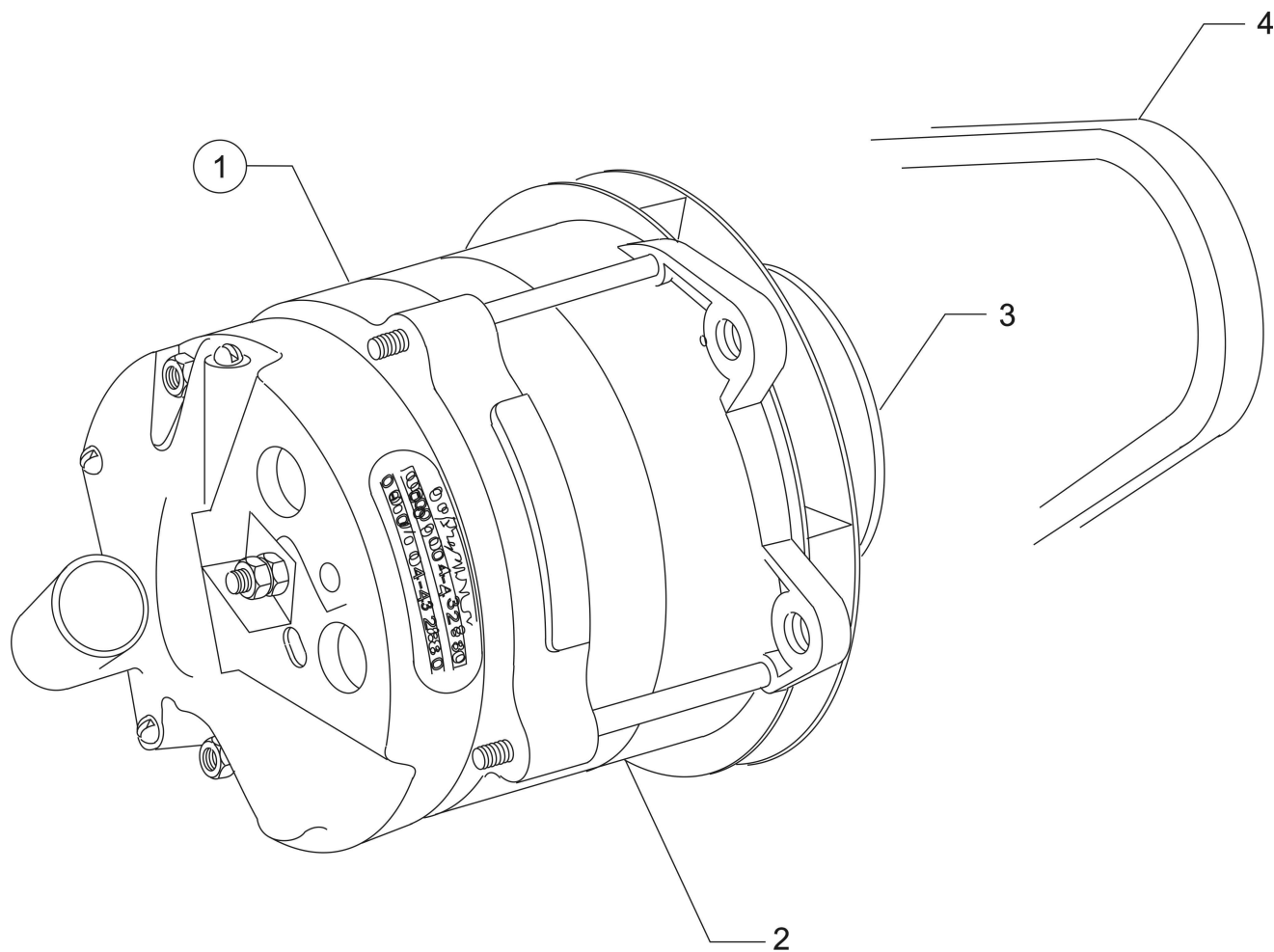


**Magnetos, Magneto Drives, Harnesses and Spark Plugs
Figure 24**

IGNITION DISTRIBUTION SYSTEM**FIGURE 24 -MAGNETOS, MAGNETO DRIVES, HARNESSES AND SPARK PLUGS**

Figure Item	Code	Part Number	Description	Units per Assembly
1		61665	GEAR, Magneto, impulse	2
2		STD-713	COTTER PIN, 3/32 diameter x 3/4 long	2
3		62224	GASKET, Magneto adapter	2
4		LW-12706	ADAPTER, Magneto, impulse coupling	2
5		LW-12681	GASKET, Magneto	2
6	V	66GC20SFNN	MAGNETO, Impulse, right and left, Slick V 4371	2
7	V	67P20408	HARNESS ASSEMBLY, Right, Slick V M2512	1
	V	67P20409	HARNESS ASSEMBLY, Left, Slick V M2513	1
8		66M21195	CLAMP, Magneto	4
9		STD-475	WASHER, 5/16 lock, internal teeth	4
10		STD-1410	NUT, 5/16-18 plain	4
11	V*	1182-E7	SPARK PLUG, Champion V REM38E	8
	**	76734	ZIP STRAP	4
	**	72815	BRACKET, Support clamp, 90°	1
	**	LW-14060	CLIP, Two wire	3
	**	LW-16266-25-25	CLAMP, One wire	2

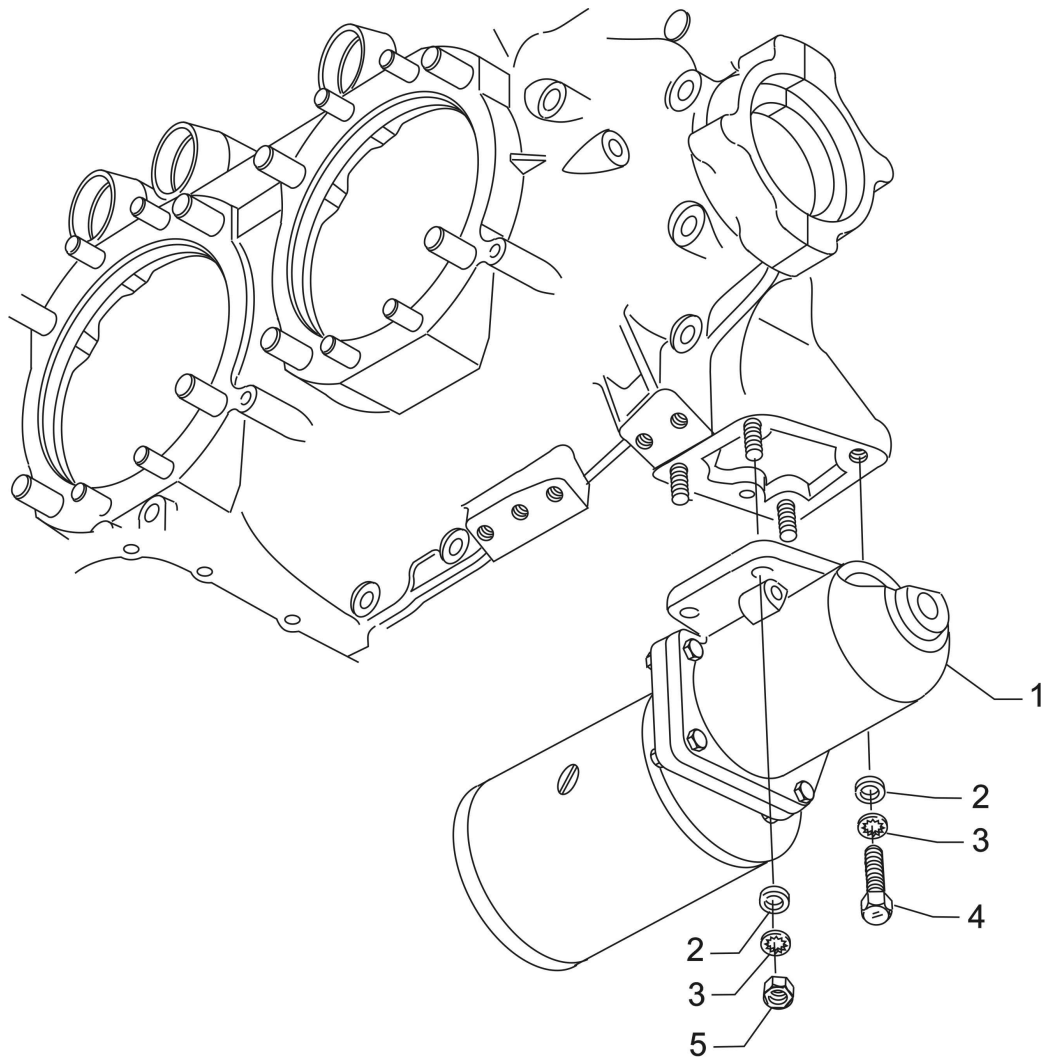
V Vendor Prime Manufacturer part
***** Item No. 11 spark plugs are used in current production only. Additional spark plugs are available for this engine. See latest revision of Lycoming Service Instruction No. 1042 for complete listing of all approved spark plugs.
****** These parts are shipped loose.



**Alternator Assembly and Belt
Figure 25**

IGNITION DISTRIBUTION SYSTEM**FIGURE 25 - ALTERNATOR ASSEMBLY AND BELT**

Figure Item	Code	Part Number	Description	Units per Assembly
1		LW-14371	ALTERNATOR ASSEMBLY, 12V.-60Amp.	1
		32B19549	ALTERNATOR ASSEMBLY, 12V.-70Amp.	1
2	V	LW-14313	ALTERNATOR, 12V.-60Amp., V ALY-8520LS	1
	V	LW-14318	ALTERNATOR, 12V.-70Amp., V ALX-8521LS	1
3		36B19484	PULLEY, Alternator	1
4		37A19773-376	BELT, Alternator drive, 3/8 wide	1
<p>V Vendor Prime Manufacturer part</p> <p>NOTE: See latest revision of Lycoming Service Instruction No. 1154 for complete listing of FAA approved starters, generators, alternators, regulators and relays.</p>				



**Starter Motor and Attaching Parts
Figure 26**

CRANKING SECTION**FIGURE 26 - STARTER MOTOR AND ATTACHING PARTS**

Figure Item	Code	Part Number	Description	Units per Assembly
1	V	31A22100	STARTER, Sky-Tec, V 149-12PM	1
	V	31A22104	STARTER, Sky-Tec, V 149-12LS	1
	V	31B26554	STARTER, Sky-Tec, V 149NL/EC	1
	V	31B26040	STARTER ASSEMBLY, Hartzell V ERB-8011	1
2	*	STD-35	WASHER, 5/16 plain	4
3		STD-475	WASHER, 5/16 lock, internal teeth	4
4		LW-31-0.94	BOLT, 5/16-18 x 15/16 long, hex. head	1
	*	LW-31-1.16	BOLT, 5/16-18 x 1-5/32 long, hex. head	1
5		STD-1410	NUT, 5/16-18 plain	3
<p>V Vendor Prime Manufacturer part * Use with Kelly starters only.</p> <p>NOTE: See latest revision of Lycoming Service Instruction No. 1154 for complete listing of FAA approved starters, generators, alternators, regulators and relays.</p>				

SERVICE KIT SECTION**SEAL AND GASKET SET**

PART NO.	PART NAME	Qty.
75439-1	KIT - SEAL AND GASKET SET	1
AN901-8A	GASKET, Metal tube connect seal	1
LW-10332	LOCKPLATE, Crankshaft gear	1
LW-12272	LOCKPLATE, Shroud tube	4
LW-12681	GASKET, Magneto	2
06B23862	GASKET, Oil filter adapter	1
LW-13353	GASKET, Oil sump	1
LW-13792	SEAL, Crankshaft oil	1
LW-14260	SEAL, Tachometer drive oil	1
LW-14995	SPRING, Shroud tube	4
LW-18639	LOCKPLATE, Crankshaft gear	1
LW-18661	SEAL, Shroud tube	8
STD-475	WASHER, 5/16 lock, internal teeth	4
STD-213	SEAL, Oil, 3/4 I.D. x 1-3/8 O.D.	1
06A19956	SEAL, Oil, 7/8 I.D. x 1-1/2 O.D.	1
06E19769-0.63	GASKET, Annular, 5/8 I.D.	2
06E19769-1.00	GASKET, Annular, 1.00 I.D.	1
06E19769-1.25	GASKET, Annular, 1-1/4 I.D.	1
1691-C	GASKET, Fuel pump	1
60096	GASKET, Fuel pump	1
61173	GASKET, Oil pressure housing	1
61183	GASKET, Accessory adapter	1
62224	GASKET, Magneto adapter	3
66224	GASKET, Fuel injector	2
68315	GASKET, Accessory drive adapter	1
69164	GASKET, Fuel pump adapter	1
69345	SPACER	4
69551	GASKET, Accessory drive adapter	1
70310	SEAL, Shroud tube	8
70455	GASKET, 3/4 I.D. x 1-1/8 O.D.	1
71481	RING, Oil seal, 3/32 diameter x 4-27/32 I.D.	4
71973	GASKET, 2 bolt flange	4
72053	GASKET, Governor	2
72059	GASKET, Oil level gage	1
72075	SEAL, Oil, 3/32 section x 29/64 I.D.	6

SERVICE KIT SECTION (CONT.)**SEAL AND GASKET SET (CONT.)**

75439-1	KIT – SEAL AND GASKET SET (CONT.)	1
72078	LOCKPLATE, 5/16 bolt	2
72091	RING, Oil seal, 3/8 I.D. x 7/64 diameter	2
72220	GASKET, Oil level gage	1
72312	RING, Oil seal, 1.00 x 1-5/16	1
72829	LOCKPLATE, 1/4 bolt x 1-3/4	1
73383	LOCKPLATE, 5/16 bolt x 1.00	2
73817	LOCKPLATE, 1/4 bolt x 1-3/4	2
73818	GASKET, Accessory housing	1
74065	RING, Oil level gage seal	1
74068	RING, Oil level gage plug	1
75906	GASKET, Rocker box cover	4
76510	GASKET, Oil cooler bypass valve	1
76940	SEAL, Crankshaft	1
77154	GASKET, Carburetor	1
77611	GASKET, Exhaust flange	4
8313	GASKET, Vacuum pump	1
77569	RING, Seal, intake pipe	4
MS29512-04	"O" RING	1
06A23493	SEAL, Shroud tube	8

SERVICE KIT SECTION (CONT.)
CYLINDER, PISTON AND RING ASSEMBLY

PART NO.	PART NAME	Qty.
05K21104	KIT - CYLINDER, PISTON AND RING ASSEMBLY	1
LW-12427	CYLINDER ASSEMBLY	1
17B23936	VALVE, Exhaust	1
17A23938	VALVE, Intake	1
LW-11800	SPRING, Valve, outer	2
LW-11795	SPRING, Valve, inner	2
LW-10077	SEAT, Valve spring, upper, intake	1
LW-16475	SEAT, Valve spring, upper, exhaust	1
65441	SEAT, Valve spring, lower, intake	1
LW-13323	SEAT, Valve spring, lower, exhaust	1
60009	KEY, Valve, intake	2
17C21191	KEY, Valve, exhaust	2
17C19386	CAP, Valve stem, exhaust	1
MS20823-6D	ELBOW, 45°, 3/8 flared tube	1
1102	PLUG, 1/8-27 NPT, allen head	2
75089	PISTON	1
74241	RING, Piston, compression	2
14H21950	RING, Piston, oil regulating	1
LW-14078	PIN, Piston	1
71481	RING, Oil seal, 3/32 diameter x 4-27/32 I.D.	1
LW-18661	SEAL, Shroud tube	2
70310	SEAL, Shroud tube	2
75906	GASKET, Rocker box cover	1
72198	PLUG, Piston pin	2
77611	GASKET, Exhaust flange	1
71973	GASKET, 2 bolt flange	1
06A23493	SEAL, Shroud tube	2
LW-12272	LOCKPLATE, Shroud tube	1
SSP-299	TAG, Use of piston pin plugs	1

SERVICE KIT SECTION (CONT.)**CRANKCASE ASSEMBLY AND THRU-STUD KIT**

PART NO.	PART NAME	Qty.
LW-18402-2-S	KIT - CRANKCASE ASSEMBLY AND THRU-STUD	1
LW-18402-2	CRANKCASE ASSEMBLY	1
76220	THRU-STUD	4
74887	SPACER, 33/64 I.D. x 7/8 O.D. x 3/8 thick	2
STD-2090	NUT, 1/4-20 plain	2
1102	PLUG, 1/8-27 NPT, allen head	5
STD-1339	PLUG, 1/16-27 NPT, allen head	5
SSP-272	TAG, Crankcase Assembly and Piston Cooling Nozzles	1
SSP-582	TAG, Crankcase Assembly and Thin Wall High Crush Bearings	1

CRANKCASE ASSEMBLY AND THRU-STUD KIT (ROLLER TAPPET ENGINES)

PART NO.	PART NAME	Qty.
LW-18402-5-S	KIT - CRANKCASE ASSEMBLY AND THRU-STUD	1
LW-18402-5	CRANKCASE ASSEMBLY (Roller tappet engines)	1
76220	THRU-STUD	4
74887	SPACER, 33/64 I.D. x 7/8 O.D. x 3/8 thick	2
STD-2090	NUT, 1/4-20 plain	2
1102	PLUG, 1/8-27 NPT, allen head	5
STD-1339	PLUG, 1/16-27 NPT, allen head	5
SSP-272	TAG, Crankcase Assembly and Piston Cooling Nozzles	1
SSP-582	TAG, Crankcase Assembly and Thin Wall High Crush Bearings	1

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AN6-17	Bolt	3	LW-12892	Thrust Button	21
AN6-34A	Bolt	13	LW-13215	Oil Filter	39
AN815-4	Union	45	LW-13323	Seat	19
AN816-8	Nipple	39	LW-13353	Gasket	29
AN960-616L	Washer	13	LW-13365	Brace	1
LRT23381	Body Assy.	7	LW-13389	Baffle Assy.	23
LW-25-0.94	Bolt	29	LW-13790	Shaft	21
LW-25-0.94	Bolt	33	LW-13792	Seal	7
LW-25-1.00	Bolt	39	LW-13793	Stud	5
LW-25-1.13	Bolt	13	LW-13796	Shaft	11
LW-25-1.13	Bolt	29	LW-13861	Sump Assy.	29
LW-25-1.13	Bolt	33	LW-13923	Bushing	15
LW-25-1.25	Bolt	25	LW-14060	Clip	47
LW-25-1.44	Bolt	33	LW-14078	Pin	15
LW-25-1.50	Bolt	13	LW-14260	Seal	33
LW-25-1.63	Bolt	13	LW-14313	Alternator	49
LW-25-1.88	Bolt	13	LW-14318	Alternator	49
LW-25-2.00	Bolt	45	LW-14371	Alternator Assy.	49
LW-25-2.31	Bolt	45	LW-14768	Gage Assy.	27
LW-25S1.50	Bolt	13	LW-14995	Spring	19
LW-31-0.94	Bolt	1	LW-15473	Fuel Pump	35
LW-31-0.94	Bolt	3	LW-15592-5-05	Clamp	23
LW-31-0.94	Bolt	51	LW-15592-8-28	Clamp	25
LW-31-1.16	Bolt	51	LW-16266-10-13	Clamp	43
LW-31H0.75	Bolt	3	LW-16266-10-13	Clamp	45
LW-31H0.88	Bolt	1	LW-16266-10-75	Clamp	43
LW-31H0.88	Bolt	11	LW-16266-10-75	Clamp	45
LW-31H1.06	Bolt	1	LW-16266-25-25	Clamp	47
LW-10077	Seat	19	LW-16266-25-50	Clamp	43
LW-10729	Link	1	LW-16266-25-50	Clamp	45
LW-11485	Shroud Tube Assy.	19	LW-16471	Support Assy.	9
LW-11713	Spring	7	LW-16475	Seat	19
LW-11750-S	Conn. Rod Assy.	15	LW-18085	Spring	7
LW-11795	Spring	19	LW-18109	Impeller	33
LW-11800	Spring	19	LW-18110	Impeller Assy.	33
LW-12098-0-180	Tube Assy.	43	LW-18402-2	Crankcase Assy.	5
LW-12098-0-180	Tube Assy.	45	LW-18402-2-S	Crankcase Assy. Kit	5
LW-12186	Nut	15	LW-18402-5	Crankcase Assy.	5
LW-12272	Lockplate	19	LW-18402-5-S	Crankcase Assy. Kit	5
LW-12427	Cylinder Assy.	17	LW-18639	Lockplate	9
LW-12545	Plug	29	LW-18661	Seal	19
LW-12681	Gasket	47	LW-18667	Pin	11
LW-12706	Adapter	47	LW-18840	Camshaft Assy.	11
LW-12798-4S172	Hose Assy.	45	MS20822-4	Elbow	41
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STD-33	Washer	13	STD-1339	Plug	5
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STD-35	Washer	3	STD-1410	Nut	37
STD-35	Washer	17	STD-1410	Nut	41
STD-35	Washer	33	STD-1410	Nut	47
STD-35	Washer	37	STD-1410	Nut	51
STD-35	Washer	41	STD-1411	Nut	13
STD-35	Washer	51	STD-1411	Nut	19
STD-82	Screw	41	STD-1411	Nut	29
STD-91	Plug	29	STD-1411	Nut	37
STD-148	Nipple	41	STD-1411	Nut	39
STD-160	Washer	13	STD-1411	Nut	45
STD-160	Washer	25	STD-1420	Nut	33
STD-160	Washer	29	STD-1623	Insert	5
STD-160	Washer	33	STD-1727	Washer	3
STD-160	Washer	37	STD-1774	Pin	37
STD-160	Washer	39	STD-1821	Hose	23
STD-160	Washer	45	STD-1882	Screw	35
STD-251	Washer	41	STD-1925	Screw	23
STD-425	Washer	43	STD-2090	Nut	21
STD-425	Washer	45	STD-2168	Nut	11
STD-475	Washer	1	STD-2197	Washer	1
STD-475	Washer	17	STD-2229	Plug	29
STD-475	Washer	37	STD-2231	Ring	11
STD-475	Washer	41	STD-2246	Bolt	9
STD-475	Washer	47	STD-2249	Nut	13
STD-475	Washer	51	25C-8	Stud	17
STD-514	Dowel	5	25C-10	Stud	29
STD-551	Plug	29	25C-10	Stud	39
STD-557	Dowel	5	25C-12	Stud	37
STD-596	Nut	13	25C-22	Stud	31
STD-670	Locknut	43	31C-12	Stud	5
STD-670	Locknut	45	31C-12	Stud	17
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STD-684	Nipple	23	31C-13	Stud	5
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60096	Gasket	35	73161	Spacer	41
60430	Cover	37	73346	Flange	25
60803	Strap	13	73383	Lockplate	1
61084	Spring	7	73383	Lockplate	3
61174	Shaft	33	73818	Gasket	31
61183	Gasket	37	73966	Spacer	45
61247	Cover	23	74065	Ring	27
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61544	Plunger	11	74278	Bracket Assy.	43
61665	Gear	47	74278	Bracket Assy.	45
62224	Gasket	47	74637	Bushing	21
62417	Plug	39	74655	Spacer	45
65441	Seat	19	74887	Spacer	21
66224	Gasket	41	74996	Gear Assy.	11
66610	Bushing	17	75061	Bolt	15
66796	Insert	17	75072	Gear Assy.	11
68315	Gasket	37	75154	Stud	5
68668	Spring	7	75339	Baffle Assy.	23
68759	Tube Assy.	23	75380	Link	3
68760	Tube Assy.	23	75656-S	Bushing	9
68761	Tube Assy.	23	75657-S	Bushing	9
69106	Cover	37	75906	Gasket	23
69551	Gasket	37	75966	Spacer	41
69603	Hose	25	76118	Spacer	11
69796	Dowel	5	76119	Shield	31
70310	Seal	19	76121	Shaft Assy.	11
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06E19769-0.63	Gasket	39	18D26098	Bearing	7
06E19769-1.00	Gasket	29	18M26105	Bearing	15
06E19769-1.25	Gasket	7	21A21533-05	Housing Assy.	31
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