

YO-233-B2A Illustrated Parts Catalog

March 2016

| PC-YO-233-B2A Supersedes PC-901-1

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652 Oliver Street
Williamsport, PA 17701

YO-233-B2A Illustrated Parts Catalog

Lycoming Part Number: PC-YO-233-B2A Supersedes PC-901-1

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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 YO-233-B2A SERIES ENGINE OVERHAUL MANUAL.

Purpose of this Catalog

This Illustrated Parts Catalog contains a complete parts listing for the Lycoming YO-233-B2A wide cylinder flange model engine.

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 YO-233-B2A Series Engine Maintenance Manual:

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 sequent of only one next higher assembly. The Letters “AR” represent “as required” for bulk items or non-illustrated select-from-range-parts.

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.

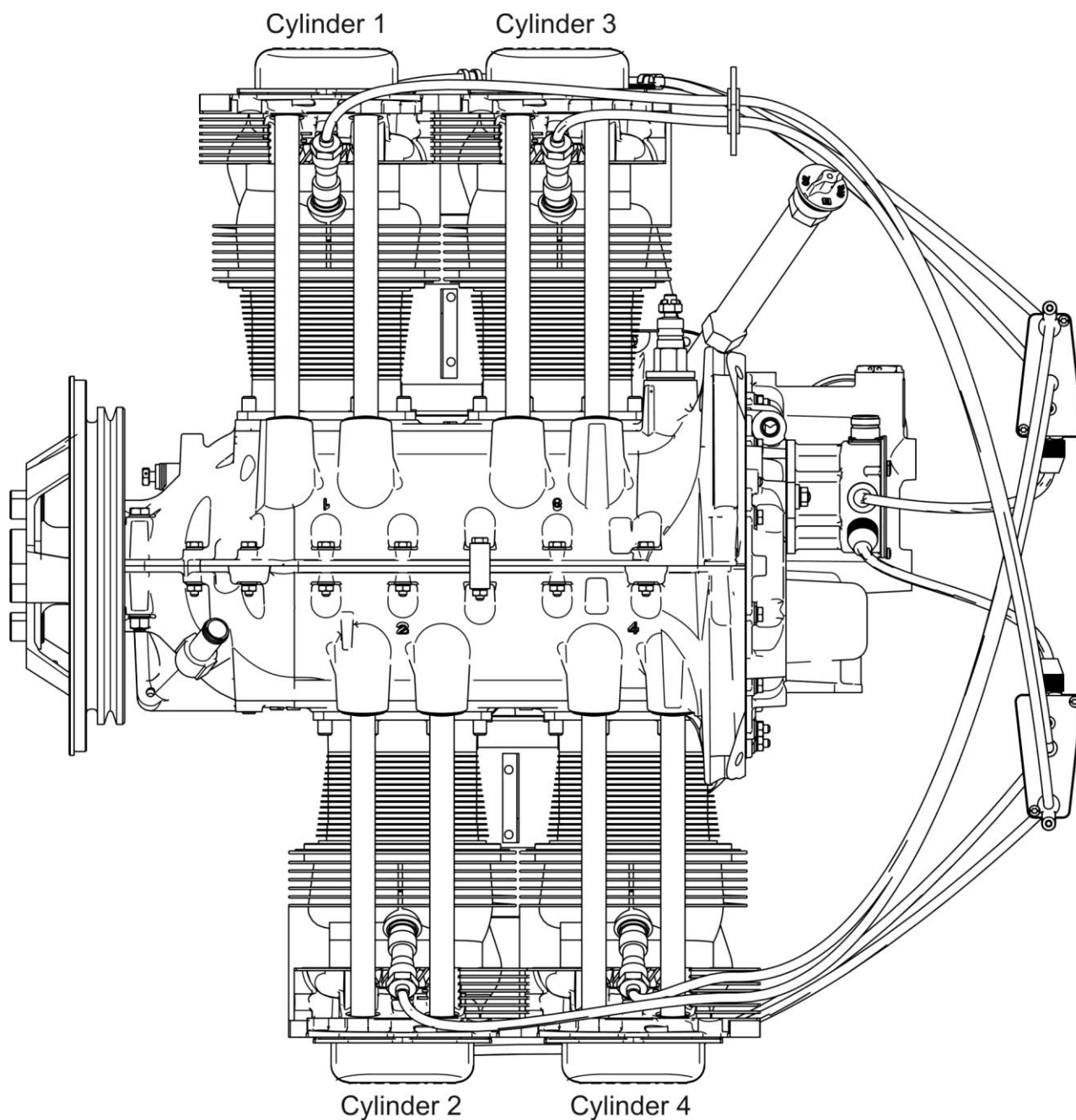
Any reference in this document to the suppliers/part manufacturer’s product, by name, trademark, part number or other description is solely for the purpose of identification and does not indicate or infer that Lycoming accepts responsibility for quality control and/or airworthiness of parts, which do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

The SB and SI documents are available from Lycoming distributors, 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 is responsible for notifying the factory of a change of address.

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

Call **(570) 323-6181**

8:00 A.M. – 5:00 P.M. EST (-5GMT)

Monday – Friday.

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Abbreviations and Acronyms

A	
Adj.	Adjustable
C	
Cyl.	Cylinder
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.)	
		P03 .003	P05 .005	P10 .010	P50 .050	M03 .003	M06 .006
66610	BUSHING			X			
66796	INSERT			X			
73757-S	BUSHING		X				
60814-S	BUSHING		X				
16R22291	GUIDE, VALVE EXHAUST		X	X			
61681	GUIDE, VALVE INTAKE		X	X			
18D26100	BEARING					X	X
LW-13792	SEAL				X		
STD-2078	DOWEL		X	X			
LW-16699	SEAT			X			
LW-11900	SEAT			X			
18M26104	BEARING					X	X

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 18M26104 bearing in .003 in. undersize, order P/N 18M26104-M03. Oversize code letter is "P" while undersize code letter is "M". These letters are then followed by the number designating the size in thousandths of an inch.

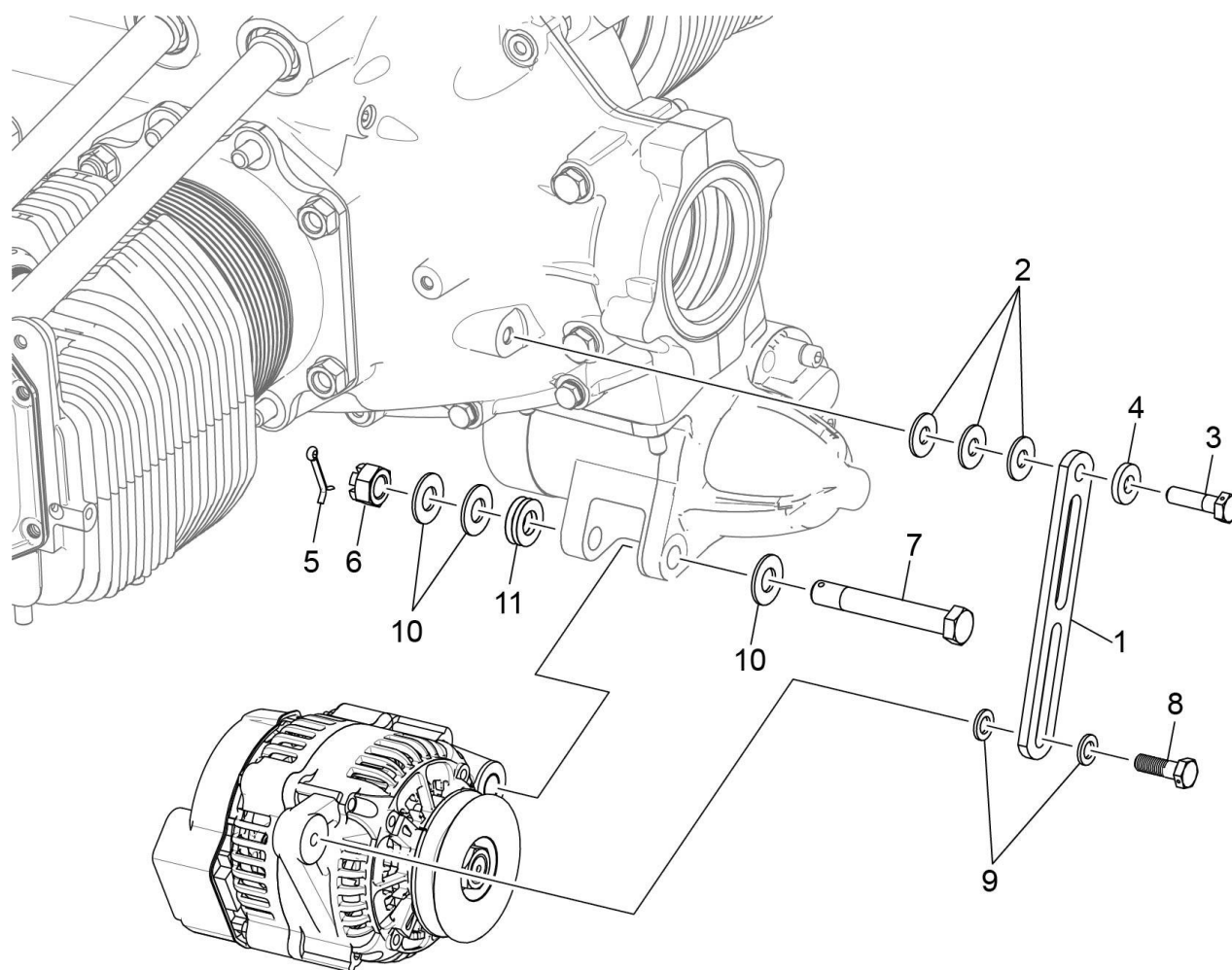


Figure 1
Alternator Mounting and Attaching Parts

Figure 1 – Alternator Mounting and Attaching Parts

Figure Item	Code	Part Number	Description	Units per Assembly
1		07F26610-Y	LINK, Adjusting	1
2		STD-2197	WASHER, 13/16 O.D. x 21/64 I.D. x 1/16 thick	3
3		LW-31H1.13	BOLT, 5/16-18 x 1-1/8 long, hex. head, drilled	1
4		STD-1727	WASHER, Plain, 3/4 O.D. x 11/32 I.D. x 1/8 thick	1
5		STD-713	COTTER PIN, 3/32 diameter x 3/4 long	1
6		MS9358-13	NUT, Slotted, 7/16-20	2
7		AN7-27	BOLT, 7/16-20 x 2-31/32 long, drilled	1
8		NAS1005-5H	BOLT, 5/16-24 x 15/16 long, hex. head, drilled	1
9		STD-35	WASHER, 5/16 plain	2
10		STD-632	WASHER, 7/16 plain	3
11		LW-14650	SHIM, 7/8 O.D. x 29/64 I.D. x 0.005 thick	8

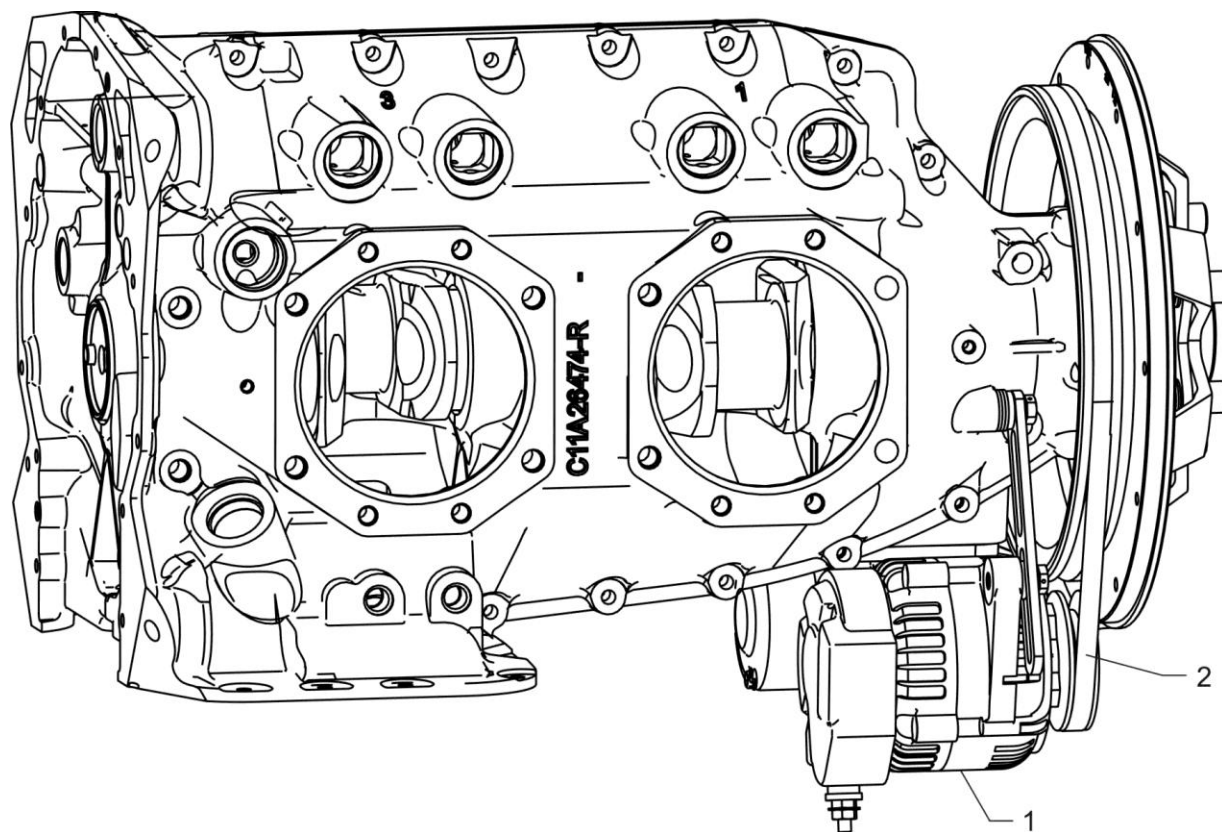


Figure 2
Alternator Assembly and Belt

Figure 2 – Alternator Assembly and Belt

Figure Item	Code	Part Number	Description	Units per Assembly
1		32B26654-Y	ALTERNATOR, 12V.-60Amp.	1
2		37A19773-350	BELT, Alternator, 3/8 wide	1

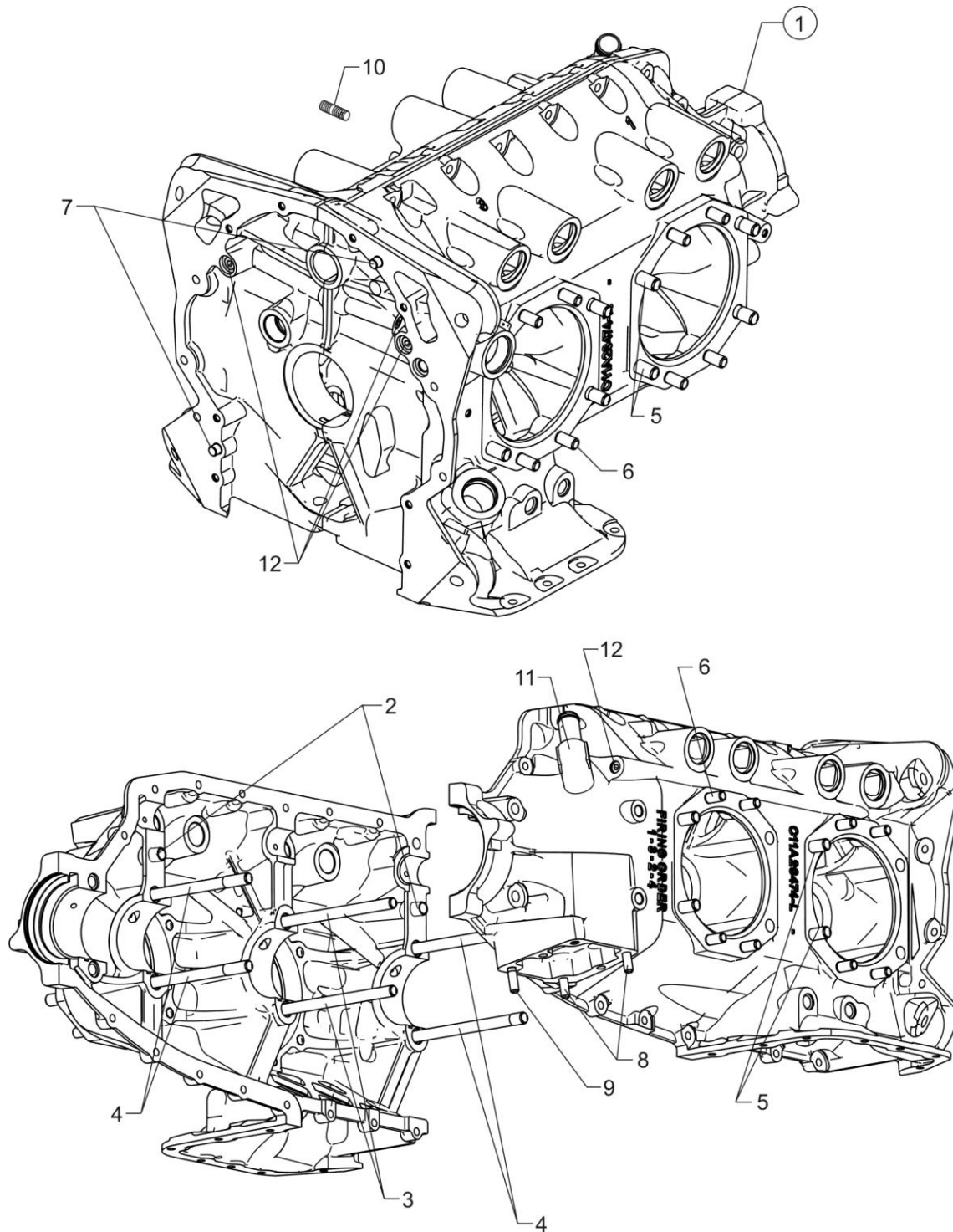


Figure 3
Crankcase Assembly

Figure 3 - Crankcase Assembly

Figure Item	Code	Part Number	Description	Units per Assembly
1		11A26824-S	CRANKCASE ASSEMBLY	1
	P	11A26824-Y	CRANKCASE ASSEMBLY	1
2		STD-557	DOWEL, 1/2 diameter x 11/16 long	2
3		LW-11623	STUD, 7/16-20 x 10-7/16 long	2
4		LW-11622	STUD, 7/16-14 x 9-25/32 long	4
5		44-13	STUD, 7/16-14 x 1-5/8 long	8
6		38-13	STUD, 3/8-16 x 1-5/8 long	16
7		STD-514	DOWEL, 5/16 diameter x 1/2 long	2
8		31C-12	STUD, 5/16-18 x 1-1/2 long	2
9		31C-13	STUD, 5/16-18 x 1-5/8 long	1
10		38D-17	STUD, 3/8-16 x 2-1/8 long	1
11		AN842-12D	ELBOW, 3/4 NPT and 90°	1
12		1102	PLUG, 1/8-27 NPT, Allen head	5

P Lycoming proprietary part. Listed for reference purposes only, cannot be purchased.

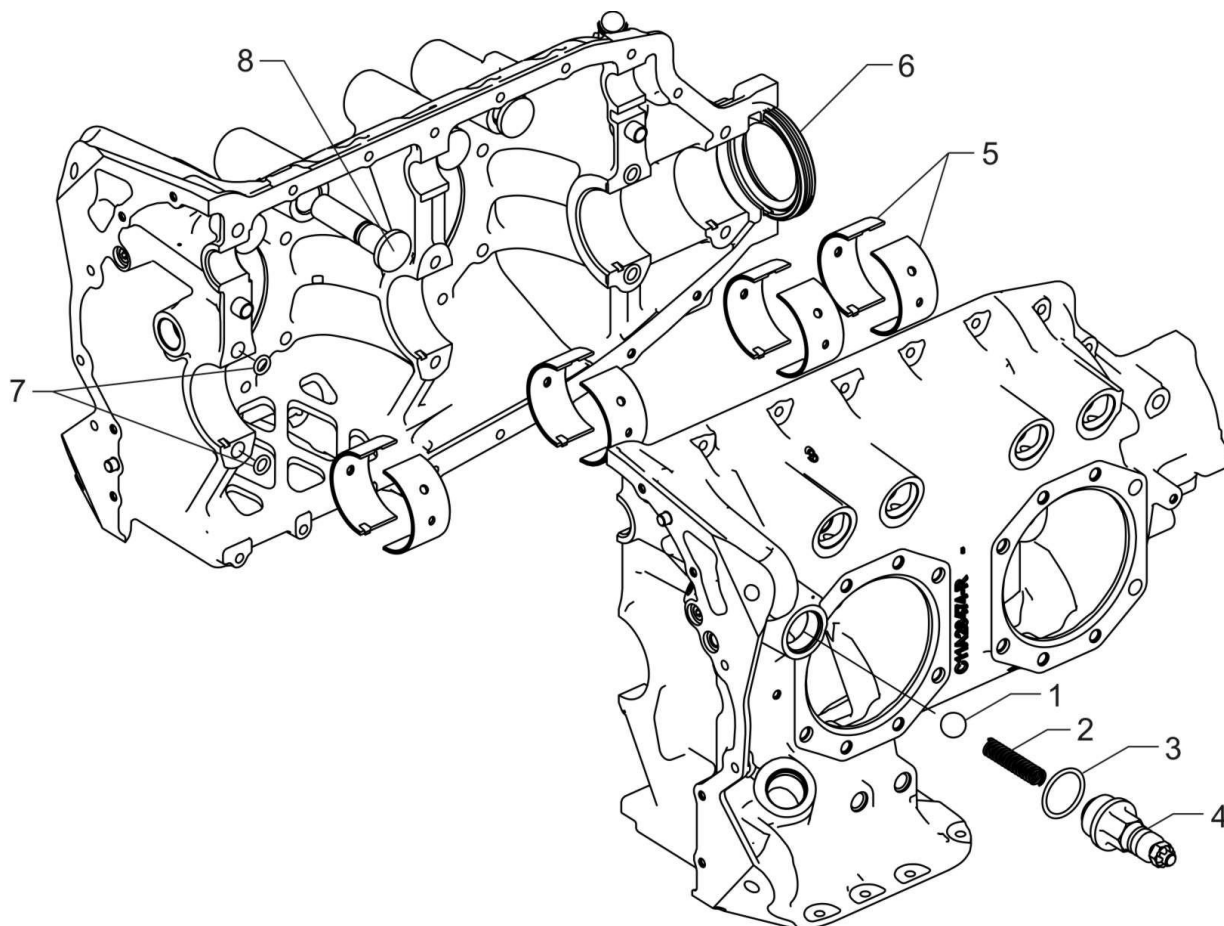


Figure 4
Crankcase Related Parts

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, 1-1/4 I.D. annular	1
4		77808	VALVE ASSEMBLY, Oil pressure relief, adjustable	1
5		18D26100	BEARING, Crankshaft	8
6		LW-13792	SEAL, Crankshaft oil	1
7		72091	RING, Oil seal, 23/64 I.D. x 7/64 diameter section	8
8		15B26262	BODY, Hydraulic tappet	8
* Select spring to give a minimum of three threads exposed on adjusting screw to allow field adjustment. Reference latest revision of SSP-1776, Part I for spring identification.				

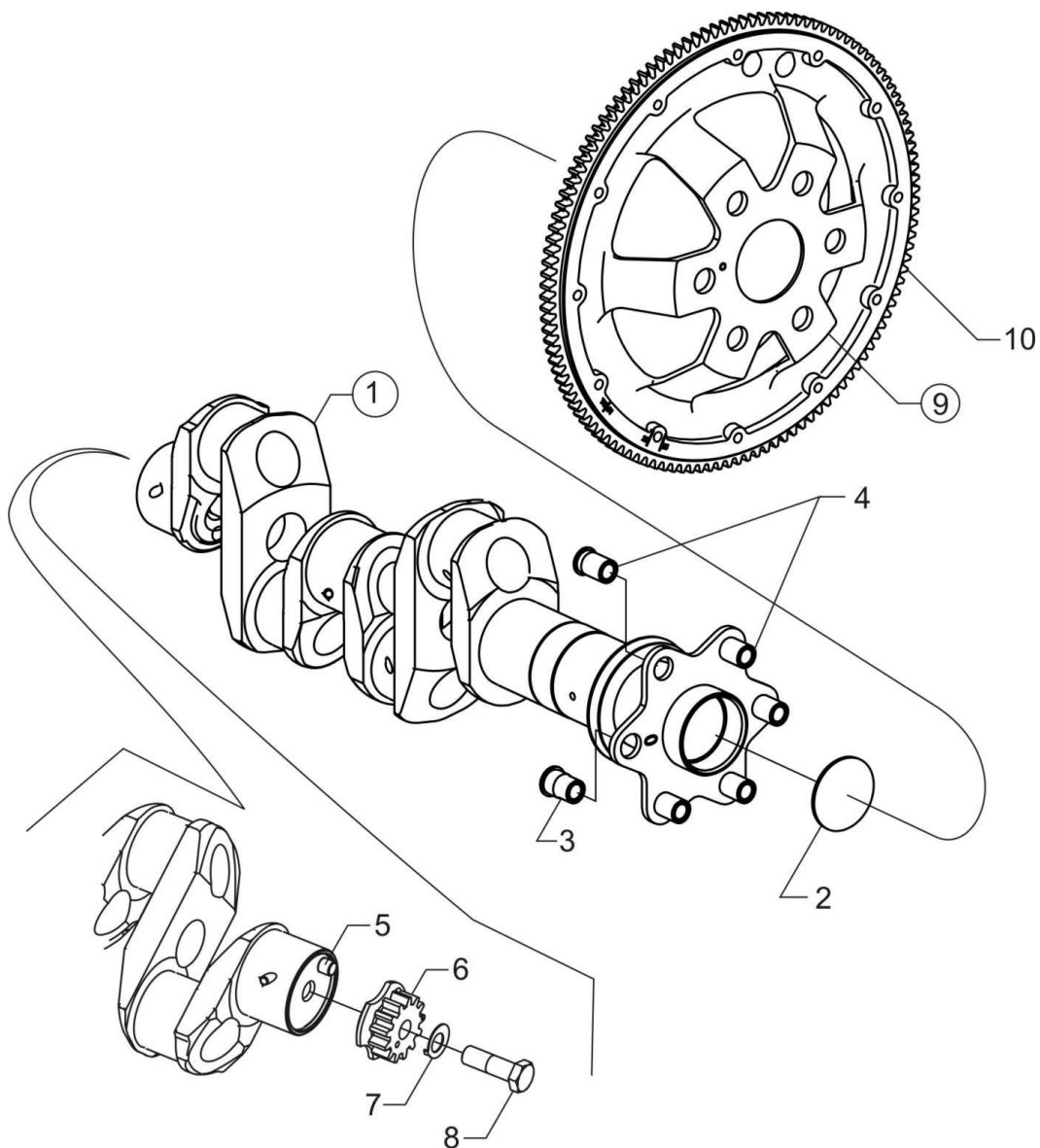


Figure 5
Crankshaft Assembly and Related Parts

Figure 5 - Crankshaft Assembly and Related Parts

Figure Item	Code	Part Number	Description	Units per Assembly
1		13B47433-Y	CRANKSHAFT ASSEMBLY	1
2		STD-1211	PLUG, 2.00 diameter expansion	1
3		73757-S	BUSHING, Propeller flange	1
4		60814-S	BUSHING, Propeller flange	5
5		STD-2078	DOWEL, Stepped, 3/8 O.D. x 1/2 long	1
6		13S19649	GEAR, Crankshaft	1
7		LW-10332	LOCKPLATE, Crankshaft gear	1
8		STD-2251	BOLT, 1/2-20 UNF-3A x 1-19/32, hex. head	1
9		31M26918-Y	SUPPORT ASSEMBLY, Starter ring gear	1
10		60882	GEAR, Starter ring	1

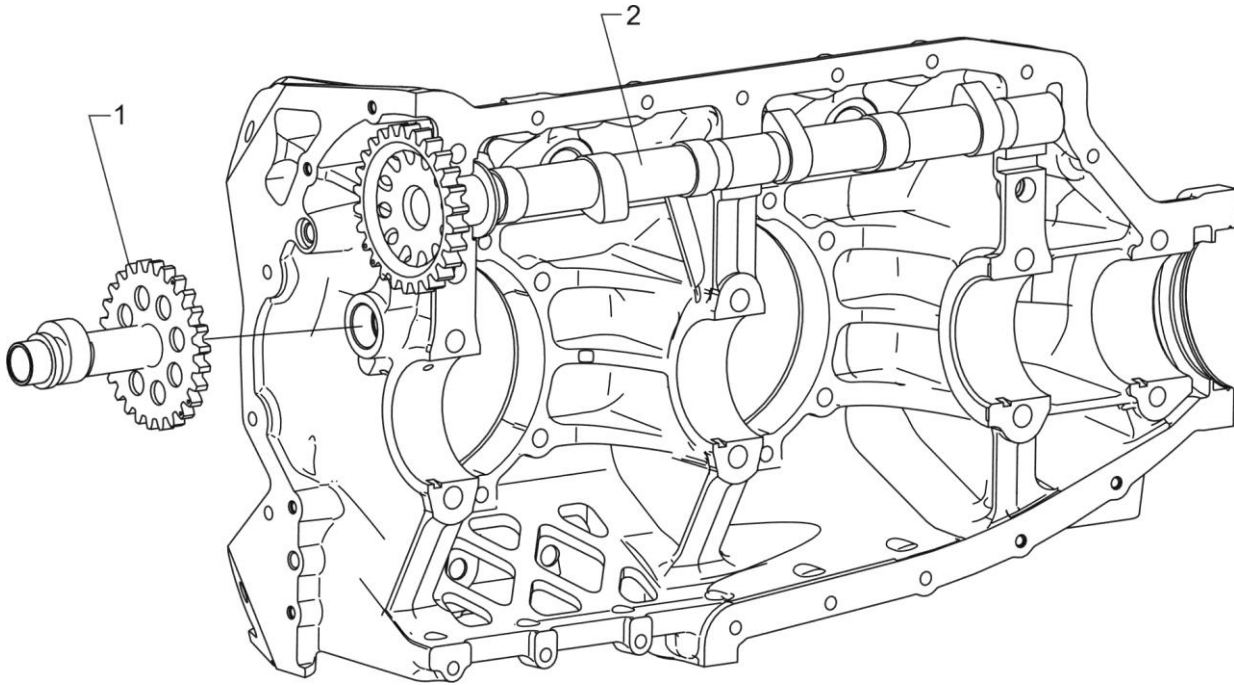


Figure 6
Crankshaft Idler Gears and Camshaft

Figure 6 - Crankshaft Idler Gears and Camshaft

Figure Item	Code	Part Number	Description	Units per Assembly
1		26F26498-Y	GEAR, Crankshaft idler	1
2		15M26642-Y	CAMSHAFT, Low speed	1

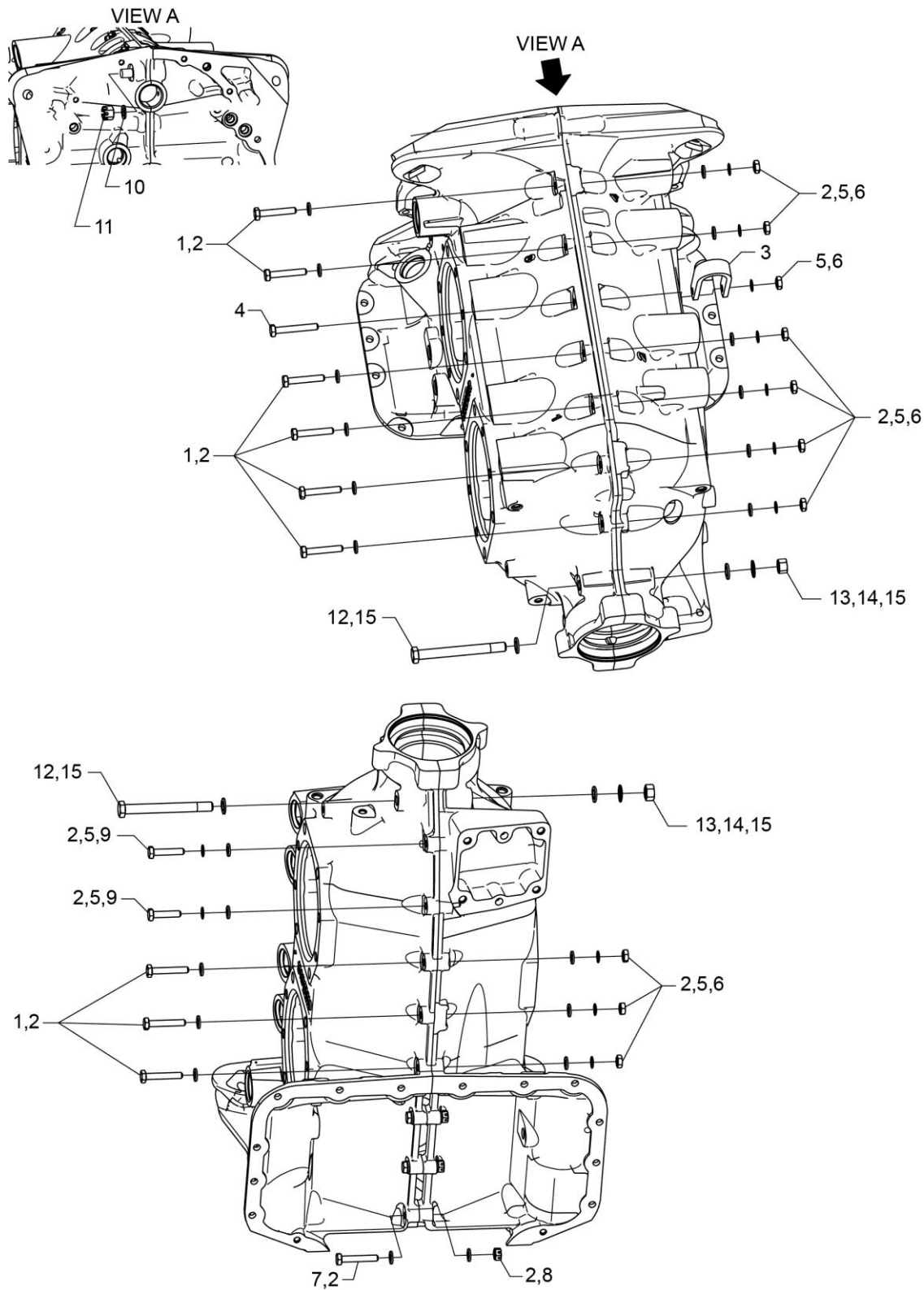


Figure 7
Crankcase Attaching Parts

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	9
2		STD-8	WASHER, 1/4 plain	26
3		60803	STRAP, Lifting	1
4		LW-25-1.75	BOLT, 1/4-20 x 1-3/4 long, hex. head	1
5		STD-160	WASHER, 1/4 lock, internal teeth	12
6		STD-1411	NUT, 1/4-20 plain	10
7		LW-25S1.50	BOLT, 1/4-20 x 1-1/2 long, hex. head, drilled end	3
8		STD-2249	NUT, 1/4-20 slotted shear	3
9		LW-25-1.13	BOLT, 1/4-20 x 1-1/8 long, hex. head	2
10		STD-33	WASHER, 3/8 plain	1
11		STD-872	NUT, 3/8-24 slotted	1
12		AN6-34A	BOLT, 3/8-24 x 3-1/2 long, hex. head	2
13		STD-678	WASHER, 3/8 lock, internal lock	2
14		STD-596	NUT, 3/8-24 plain	2
15		STD-33	WASHER, 3/8 plain	4

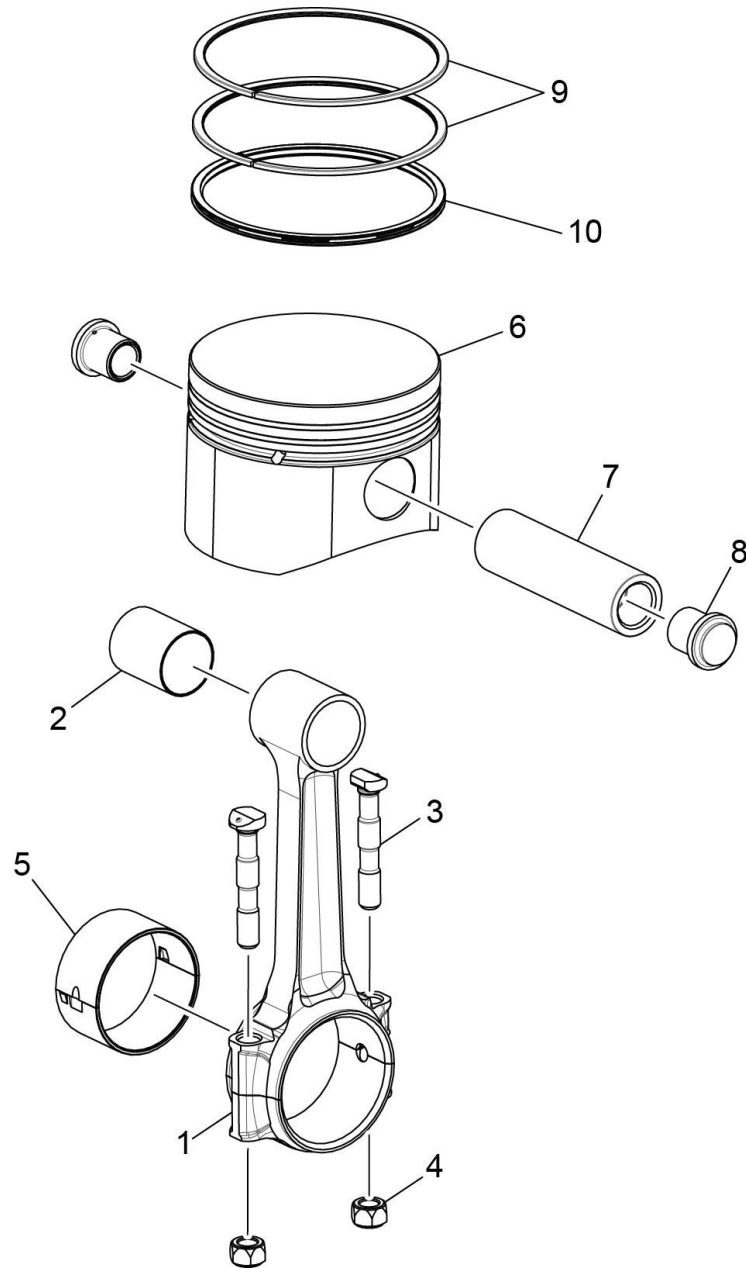


Figure 8
Connecting Rods, Pistons and Ring Assemblies

Figure 8 - Connecting Rods, Pistons and Ring Assemblies

Figure Item	Code	Part Number	Description	Units per Assembly
1		14M26496-Y	CONNECTING ROD ASSEMBLY	4
2		LW-13923	BUSHING, Connecting rod, upper	4
3		78027	BOLT, Connecting rod	8
4		LW-12186	NUT, Connecting rod bolt	8
5		18M26104	BEARING, Connecting rod	8
6		14B23918	PISTON, Compression ratio 8.50:1	4
7		LW-13445	PIN, Piston	4
8		LW-11625	PLUG, Piston pin	8
9		78862	RING, Piston compression	8
10		78864	RING, Piston, oil regulating	4

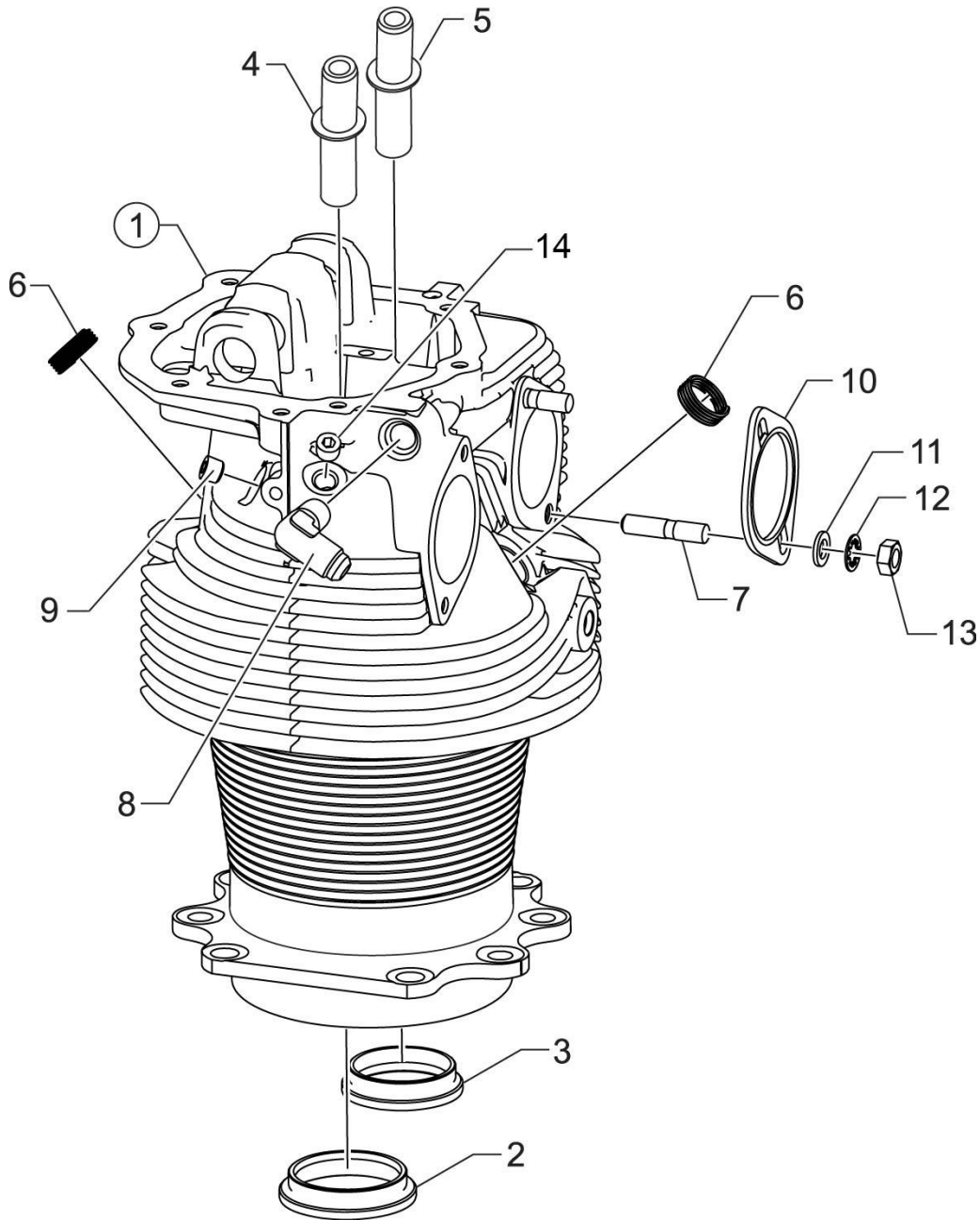


Figure 9
Cylinder Assembly

Figure 9 - Cylinder Assembly

Figure Item	Code	Part Number	Description	Units per Assembly
1		16A26821-Y	CYLINDER AND HEAD ASSEMBLY, Nitrided	4
2		LW-11900	SEAT, Intake valve	4
3		LW-16699	SEAT, Exhaust valve	4
4	P *	76943	GUIDE, Valve, intake	4
5	P *	LW-12137	GUIDE, Valve, exhaust (ni-resist)	4
6		66796	INSERT, Spark plug, 18 - 1.5 MM	8
7		31C-12	STUD, 5/16-18 x 1-1/2 long	8
8		STD-700	ELBOW, 90°, 3/8 flared tube	4
9		1102	PLUG, 1/8-27 NPT, Allen head	4
10		77611	GASKET, Exhaust flange	4
11		STD-35	WASHER, 5/16 plain	8
12		STD-475	WASHER, 5/16 lock, internal teeth	8
13		STD-1410	NUT, 5/16-18 plain	8
14		1102	PLUG, 1/8-27 NPT, Allen head	4
<p>P Lycoming proprietary part. Listed for reference purposes only, cannot be purchased.</p> <p>* See latest revision of Lycoming Service Instruction No. 1256 for service valve guides.</p>				

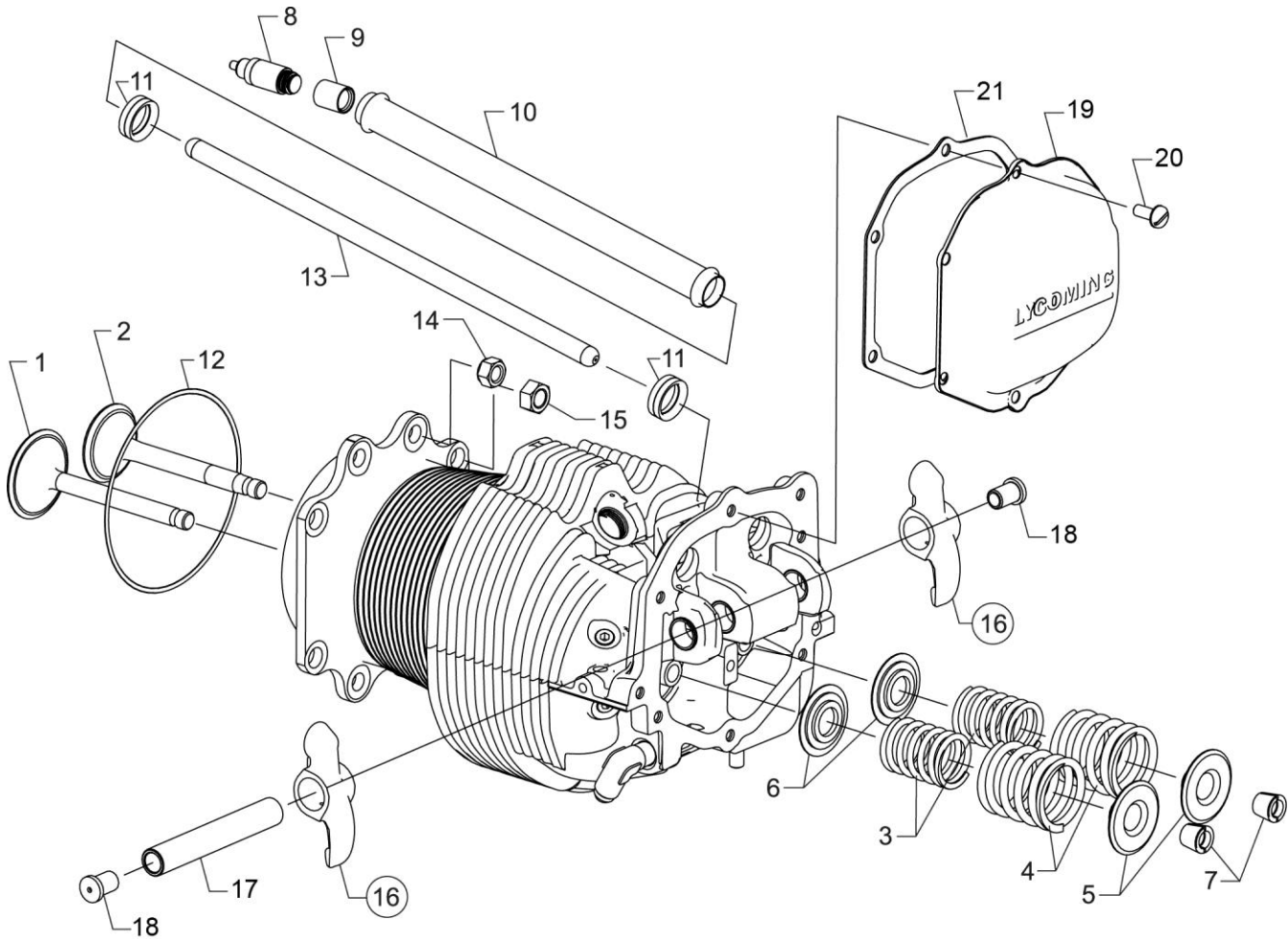


Figure 10
Valve Assembly and Related Parts

Figure 10 – Valve Assembly and Related Parts

Figure Item	Code	Part Number	Description	Units per Assembly
1		17A23939	VALVE, Intake	4
2		17B23940	VALVE, Exhaust	4
3		LW-11795	SPRING, Valve, inner	8
4		LW-11800	SPRING, Valve, outer	8
5		LW-10077	SEAT, Valve spring, upper	8
6		65441	SEAT, Valve spring, lower	8
7		60009	KEY, Valve intake	16
8		15B26066	PLUNGER ASSEMBLY, Hydraulic tappet	8
9		15B21319	SOCKET, Hydraulic tappet	8
10		60903	SHROUD TUBE ASSEMBLY, Push rod	8
11		LW-18661	SEAL, Shroud tube	16
12		62869	RING, Oil seal	4
13	♦	15F19957-08	ROD ASSEMBLY, Push (A total of 8 required)	AR
	♦	15F19957-09	ROD ASSEMBLY, Push (A total of 8 required)	AR
	♦	15F19957-10	ROD ASSEMBLY, Push (A total of 8 required)	AR
	♦	15F19957-11	ROD ASSEMBLY, Push (A total of 8 required)	AR
14		383-B	NUT, 3/8-24 plain	16
15		STD-2106	NUT, 7/16-20 plain	16
16	*	17F19357	ROCKER ASSEMBLY, Valve, with bushing	8
17		LW-13790	SHAFT, Valve rocker	4
18		LW-12892	THRUST BUTTON, Rocker shaft	8
19		17J26536-Y	COVER, Rocker box	4
20		STD-1925	SCREW, 1/4-20 x 5/8 long, pan. head	24
21		06B26669-Y	GASKET, Rocker box cover	4

AR as required

* Due to the size of the area where the number is stamped, the last five digits may be all that is shown (19357).

♦ See latest revision of Service Instruction No. 1060 for complete push rod application.

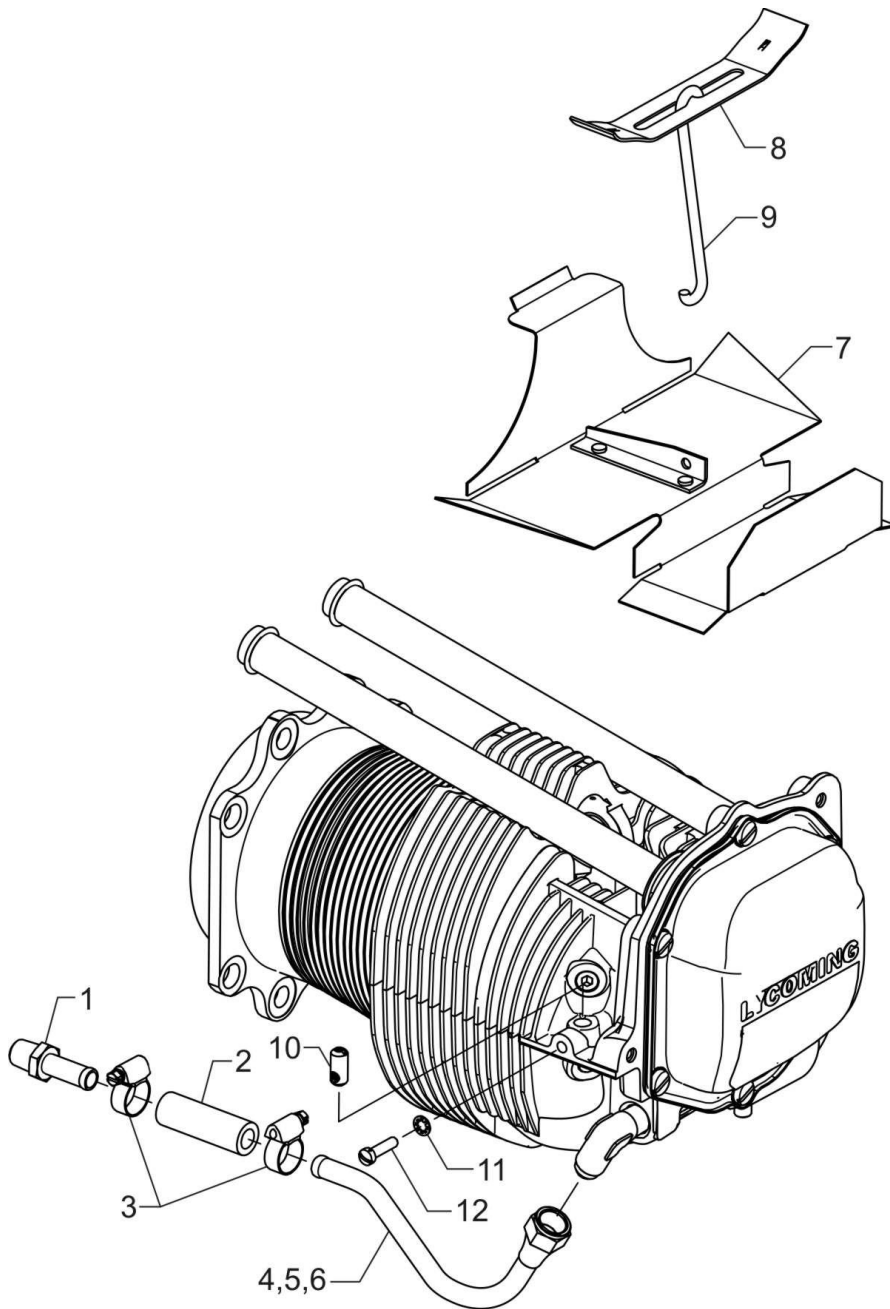


Figure 11
Cylinder Related Parts

Figure 11 – Cylinder Related Parts

Figure Item	Code	Part Number	Description	Units per Assembly
1		STD-684	NIPPLE, Straight, 3/8 I.D. hose	4
2		STD-2180	HOSE, 3/8 I.D. x 1-13/16 long	4
3		LW-15592-5-05	CLAMP, Hose	8
4		60890	TUBE ASSEMBLY, Drain, cylinder no. 1	1
5		60821	TUBE ASSEMBLY, Drain, cylinder no. 2	1
6		60928	TUBE ASSEMBLY, Drain, cylinders no. 3 and 4	2
7		17L26550-Y	BAFFLE ASSEMBLY, Intercylinder	2
8		71611	RETAINER, Intercylinder baffle	2
9		LW-13303	HOOK, Intercylinder baffle	2
10		65614	PLUG, Baffle attaching	4
11		STD-251	WASHER, No. 10 lock, internal teeth	4
12		STD-665	SCREW, No. 10-32 x 3/4 long, fill. head	4

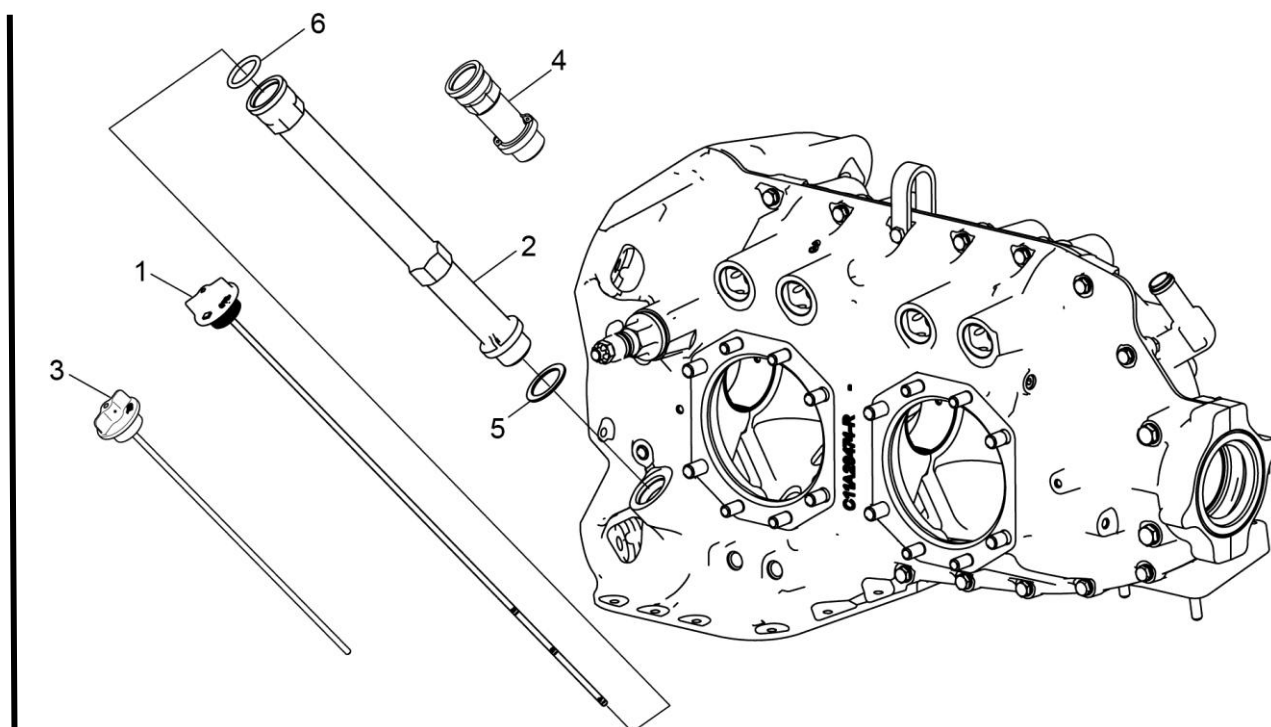


Figure 12
Oil Level Gage

Figure 12 – Oil Level Gage

Figure Item	Code	Part Number	Description	Units per Assembly
1		LW-14792	GAGE ASSEMBLY, Oil level	1
2		75736	TUBE, Oil level gage (11-9/16 long)	1
3		LW-16783-13	GAGE ASSEMBLY, Oil level	1
4		LW-15970	TUBE, Oil level gage (3.00 long)	1
5		72059	GASKET, Oil level gage	1
6		74068	RING, Oil level gage plug	1

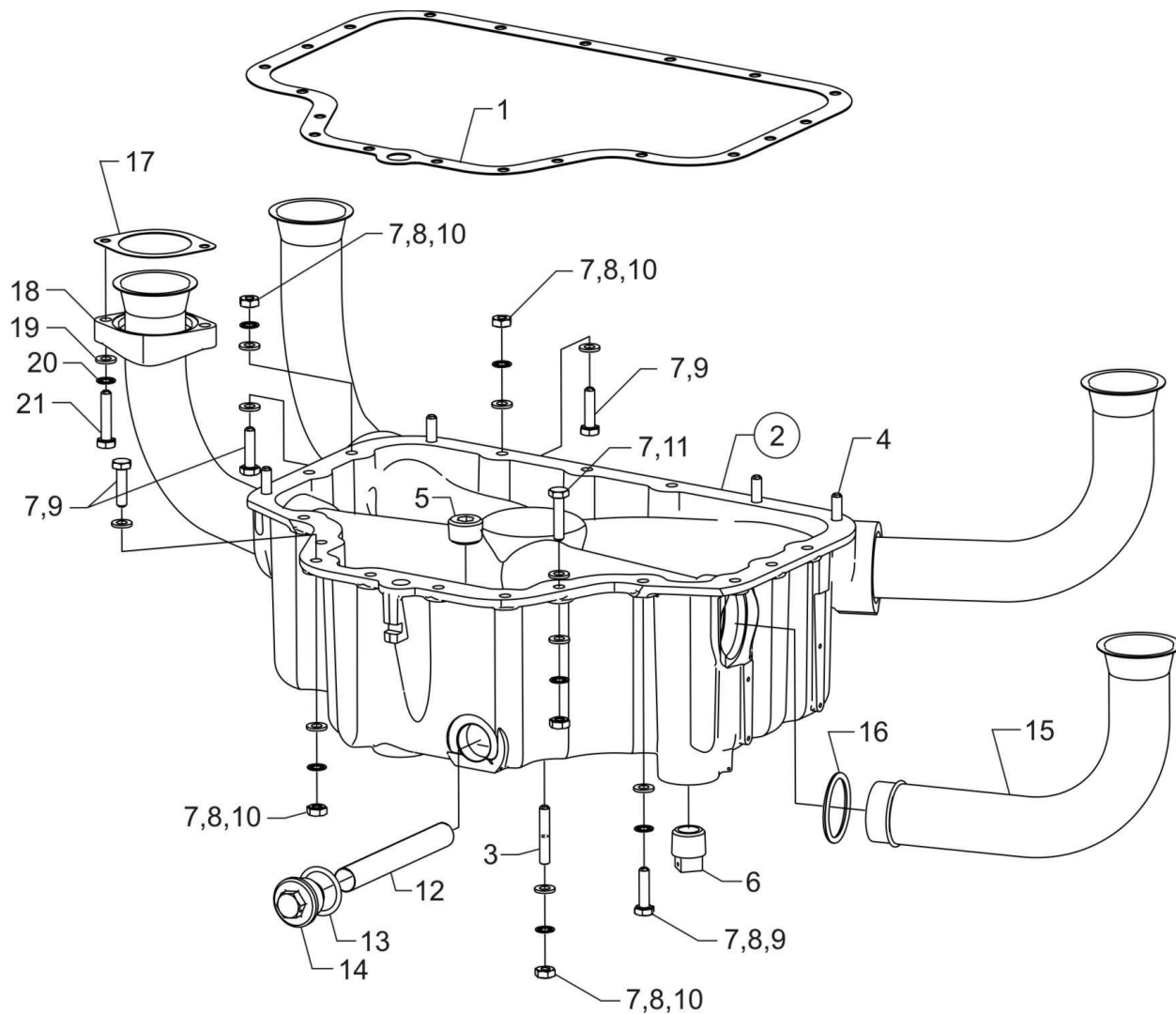


Figure 13
Oil Sump Assembly, Oil Suction Screen and Intake Pipes

Figure 13 – Oil Sump Assembly, Oil Suction Screen and Intake Pipes

Figure Item	Code	Part Number	Description	Units per Assembly
1		LW-13353	GASKET, Oil sump	1
2		56A26671-Y	SUMP ASSEMBLY, Oil	1
3		25C-12	STUD, 1/4-20 x 1-1/2 long	4
4		25C-10	STUD, 1/4-20 X 1-1/4 long	4
5		STD-91	PLUG, 1/2-14 NPT, Allen head	1
6		STD-551	PLUG, 1/2-14 square head, drilled	2
7		STD-8	WASHER, 1/4 plain	34
8		STD-160	WASHER, 1/4 lock, internal teeth	20
9		LW-25-1.00	BOLT, 1/4-20 x 1.00 long, hex. head	14
10		STD-1411	NUT, 1/4-20 plain	18
11		LW-25-1.13	BOLT, 1/4-20 x 1-1/8 long, hex. head	2
12		70484	SCREEN, Oil suction	1
13		06E19769-1.00	GASKET, Annular, 1.00 I.D.	1
14		LW-12545	PLUG, 5/8 x 1.00-20, hex. head	1
15		42E26766-Y	PIPE, Intake	4
16		06C26551-Y	O-RING, 1-31/64 I.D. x 1-3/4 O.D.	4
17		71973	GASKET, 2 bolt flange, 1-13/16 I.D.	4
18		73346	FLANGE, Intake pipe, upper	4
19		STD-8	WASHER, 1/4 plain	8
20		STD-160	WASHER, 1/4 lock, internal teeth	8
21		LW-25-1.25	BOLT, 1/4-20 x 1-1/4 long, hex. head	8

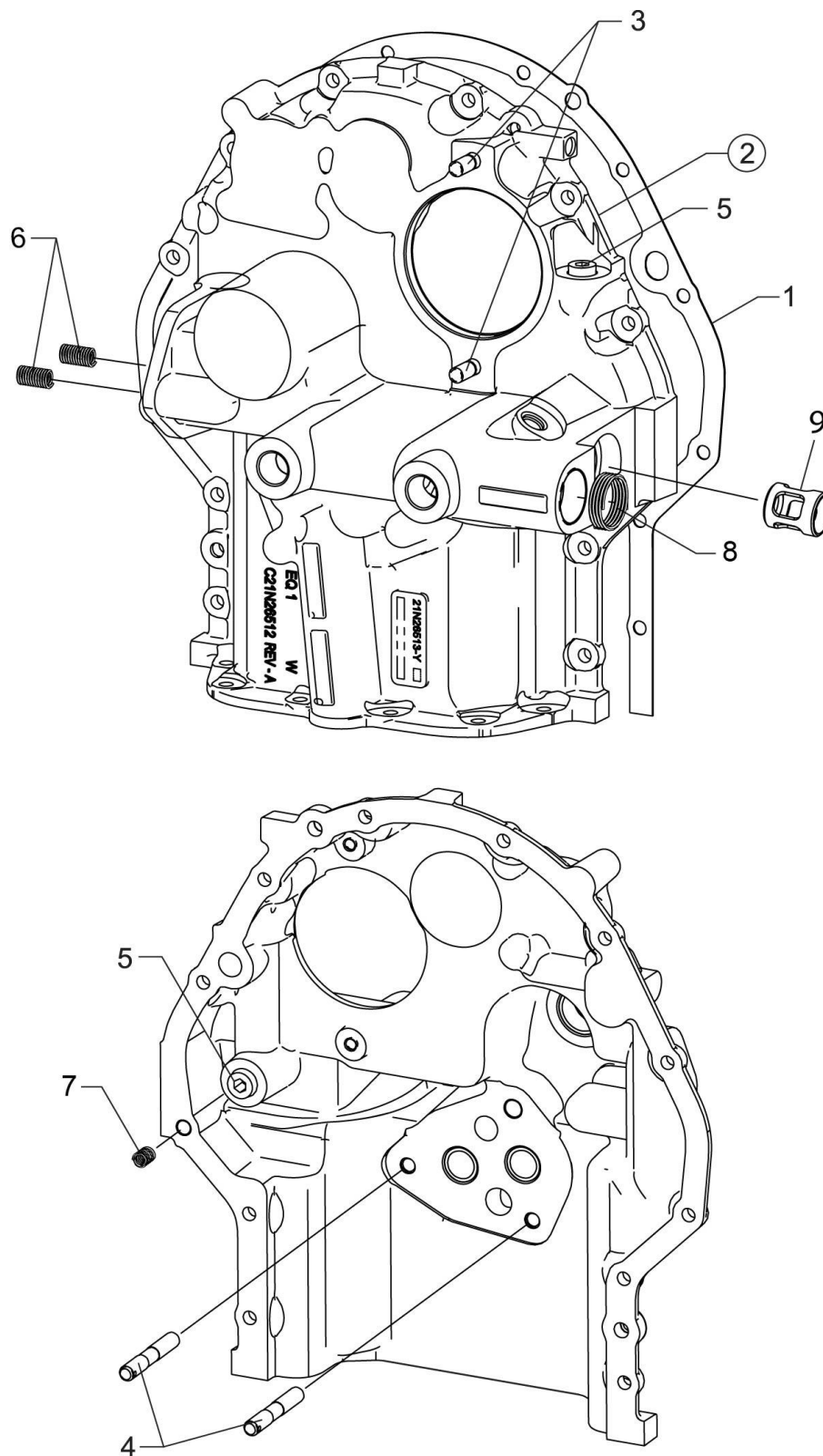


Figure 14
Accessory Housing Assembly

Figure 14 – Accessory Housing Assembly

Figure Item	Code	Part Number	Description	Units per Assembly
1		73818	GASKET, Accessory housing	1
2		21N26513-01-Y	HOUSING ASSEMBLY, Accessory	1
3		31C-12	STUD, 5/16-18 x 1-1/2 long	2
4		31CD-17	STUD, 5/16-18 x 2-1/4 long	2
5		STD-783	PLUG, 1/4-18 NPT, Allen head	2
6		STD-1171	INSERT, 3/8-16 UNC x 3/4 long	2
7		STD-1173	INSERT, 1/4-20 UNC x 1/2 long	1
8		LW-10341	INSERT, 1.00-14 UNF x 3/8 long	1
9		77607	SLEEVE, Oil relief valve	1

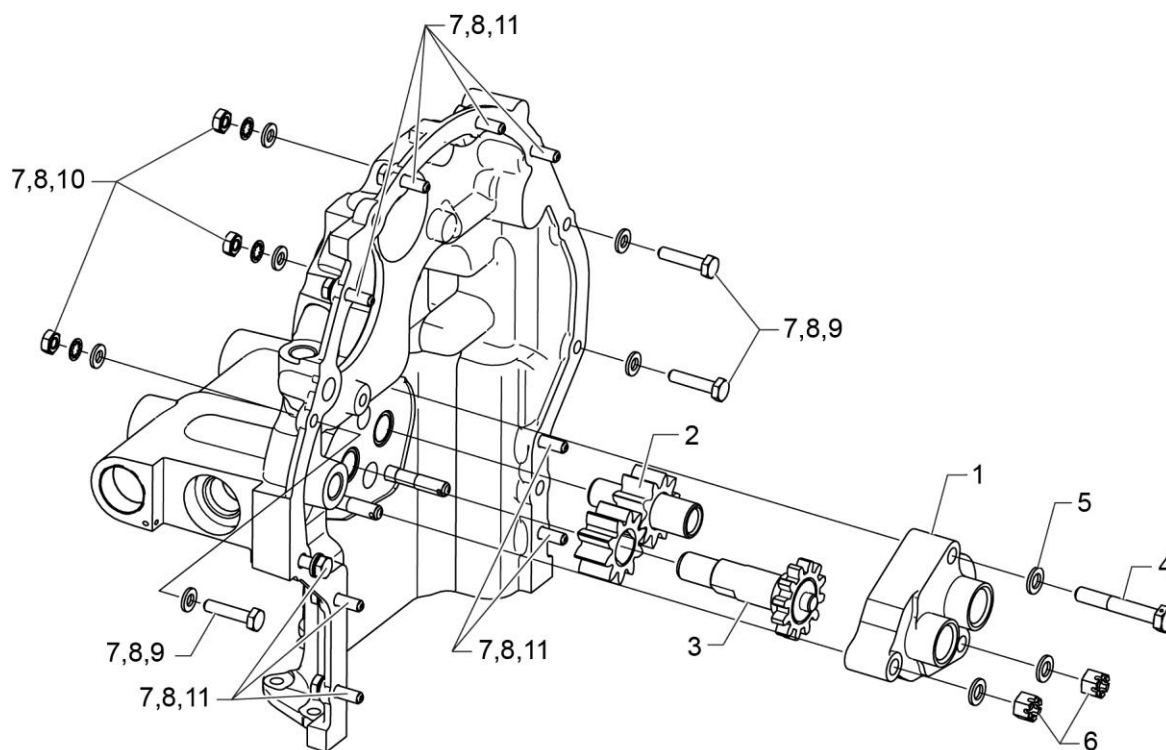


Figure 15
Oil Pump Assembly and Accessory Housing Attaching Parts

Figure 15 – Oil Pump Assembly and Accessory Housing Attaching Parts

Figure Item	Code	Part Number	Description	Units per Assembly
1		15F26561-YB	BODY, Oil pump	1
2		05K28659-Y	KIT-Oil pump impeller	1
3	P	LW-14040	GEAR ASSEMBLY, Oil pump drive	1
4		LW-31H2.00	BOLT, 5/16-18 x 2.00 long, hex. head	1
5		STD-35	WASHER, 5/16 plain	3
6		STD-1420	NUT, 5/16-18 slotted	2
7		STD-8	WASHER, 1/4 plain	19
8		STD-160	WASHER, 1/4 lock, internal teeth	12
9		LW-25-1.00	BOLT, 1/4-20 x 1.00 long	3
10		STD-1411	NUT, 1/4-20 plain	3
11		LW-25-0.94	BOLT, 1/4-20 x 15/16 long, hex. head	9
P Lycoming proprietary part. Listed for reference purposes only, cannot be purchased.				

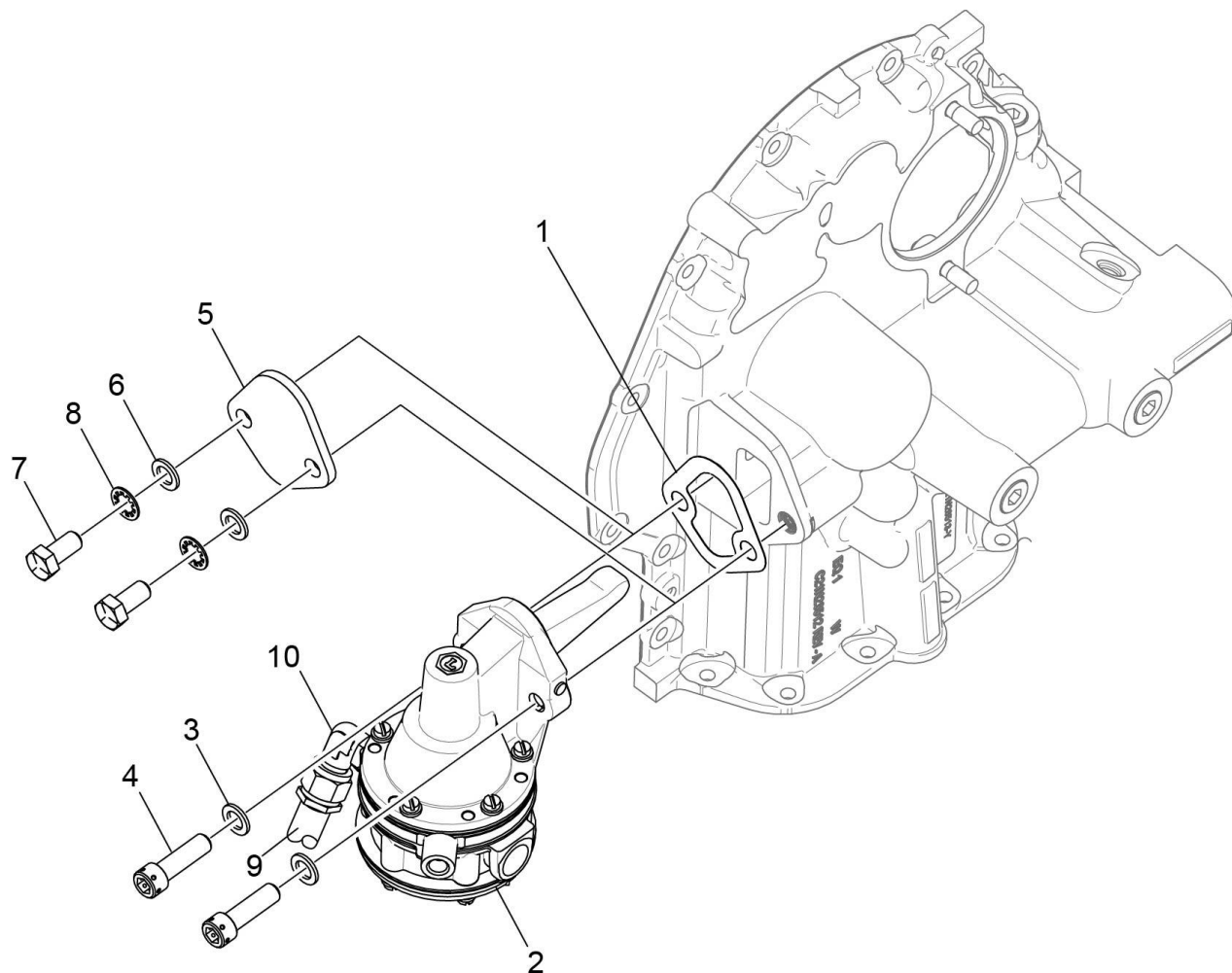


Figure 16
Fuel Pump Assembly and Attaching Parts

Figure 16 – Fuel Pump Assembly and Attaching Parts

Figure Item	Code	Part Number	Description	Units per Assembly
1		60096	GASKET, Fuel pump	1
2		62A26675-Y	FUEL PUMP, Low pressure	1
3		STD-33	WASHER, 3/8 plain	2
4		STD-1882	SCREW, 3/8-16 x 1-9/32 long, drilled	2
5		03D23350	COVER, Fuel pump	1
6		STD-33	WASHER, 3/8 plain	2
7		LW-38-0.75	BOLT, 3/8-16 x 3/4 long hex.	2
8		STD-678	WASHER, 3/8 lock, internal teeth	2
9	*	LW-12877-6S170	HOSE ASSEMBLY, 3/8 hose, 90 elbow	1
10	*	72377	ELBOW, 3/8 flared tube	1
* Applicable on some models				

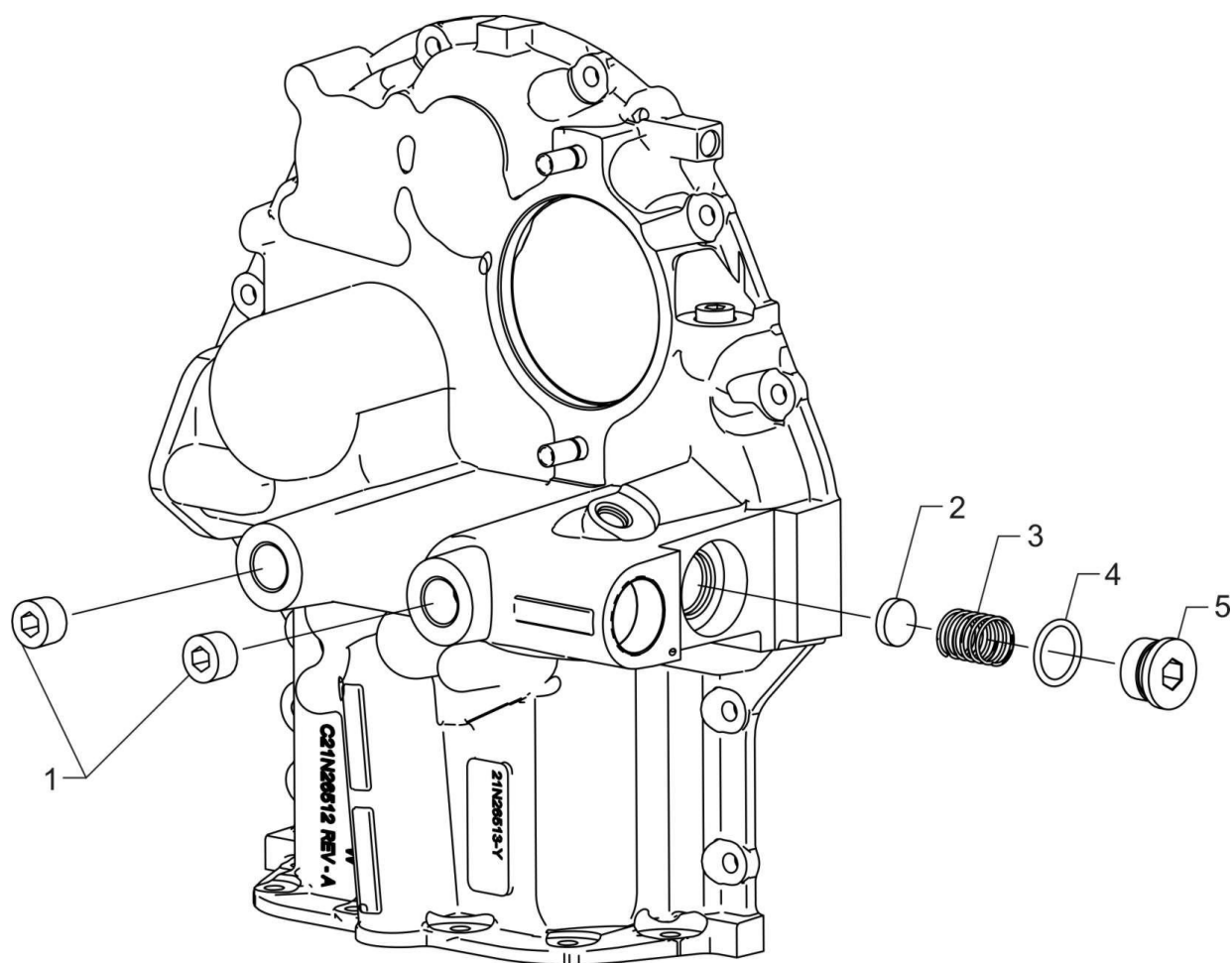


Figure 17
Oil Cooler

Figure 17 – Oil Cooler

Figure Item	Code	Part Number	Description	Units per Assembly
1		STD-784	PLUG, 3/8-18 NPT, Allen head	2
2		76539	SEAT, Oil relief valve	1
3		05S21021	SPRING, Oil filter bypass valve	1
		76542	SPRING, Oil relief valve	1
4		MS29512-10	SEAL, Oil, 3/32 section x 45/64	1
		MS29512-12	SEAL, Oil, 7/64 section x 59/64	1
5		03C21720	PLUG, 7/8-14 thread	1
		03C21076	PLUG, Oil relief valve	1

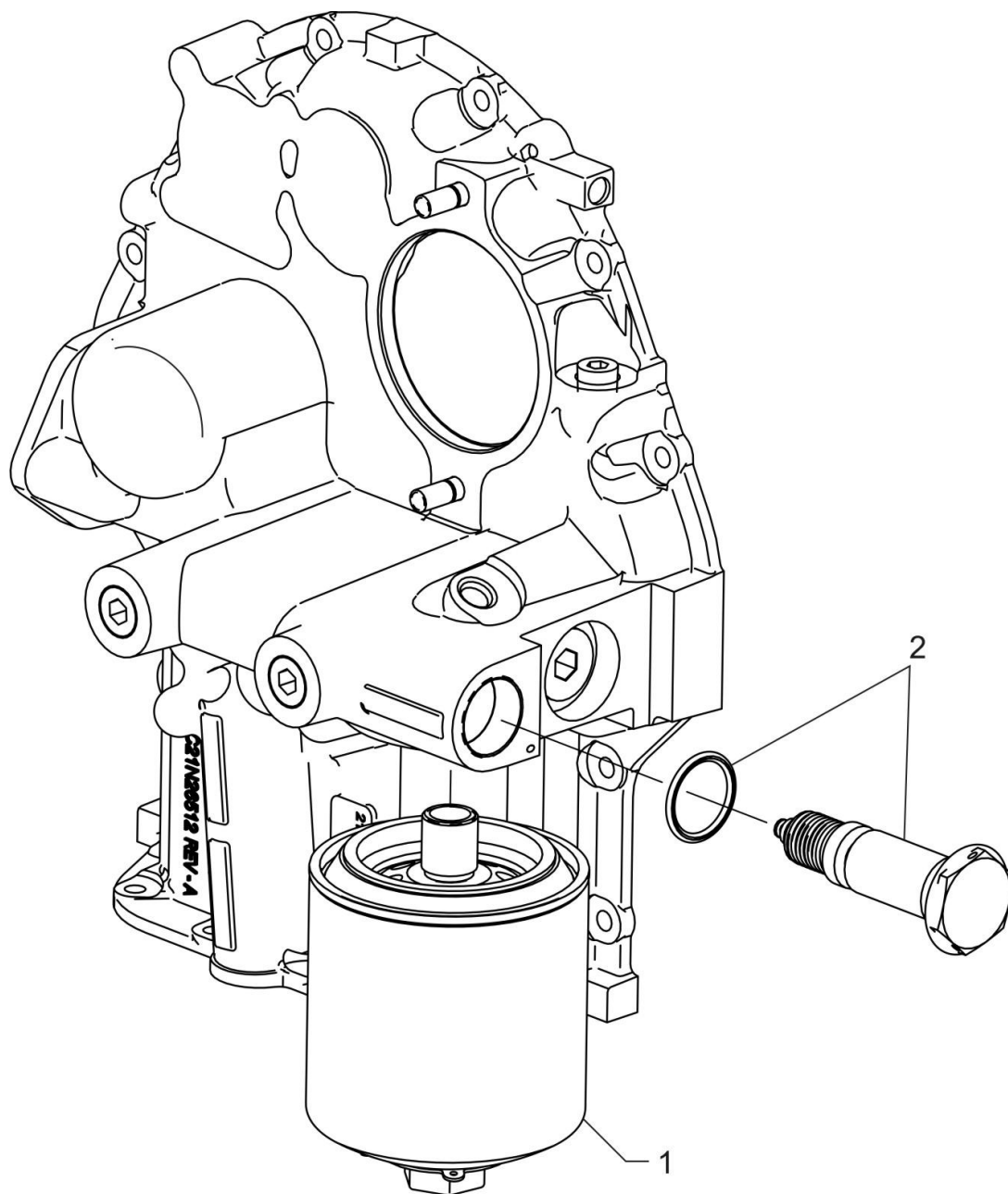


Figure 18
Oil Filter Assembly and Oil Cooler Bypass Valve

Figure 18 – Oil Filter Assembly and Oil Cooler Bypass Valve

Figure Item	Code	Part Number	Description	Units per Assembly
1		54D26826-Y	OIL FILTER, Short	1
2		53E22144	VALVE ASSEMBLY, Temp. control oil cooler bypass w/ gasket	1

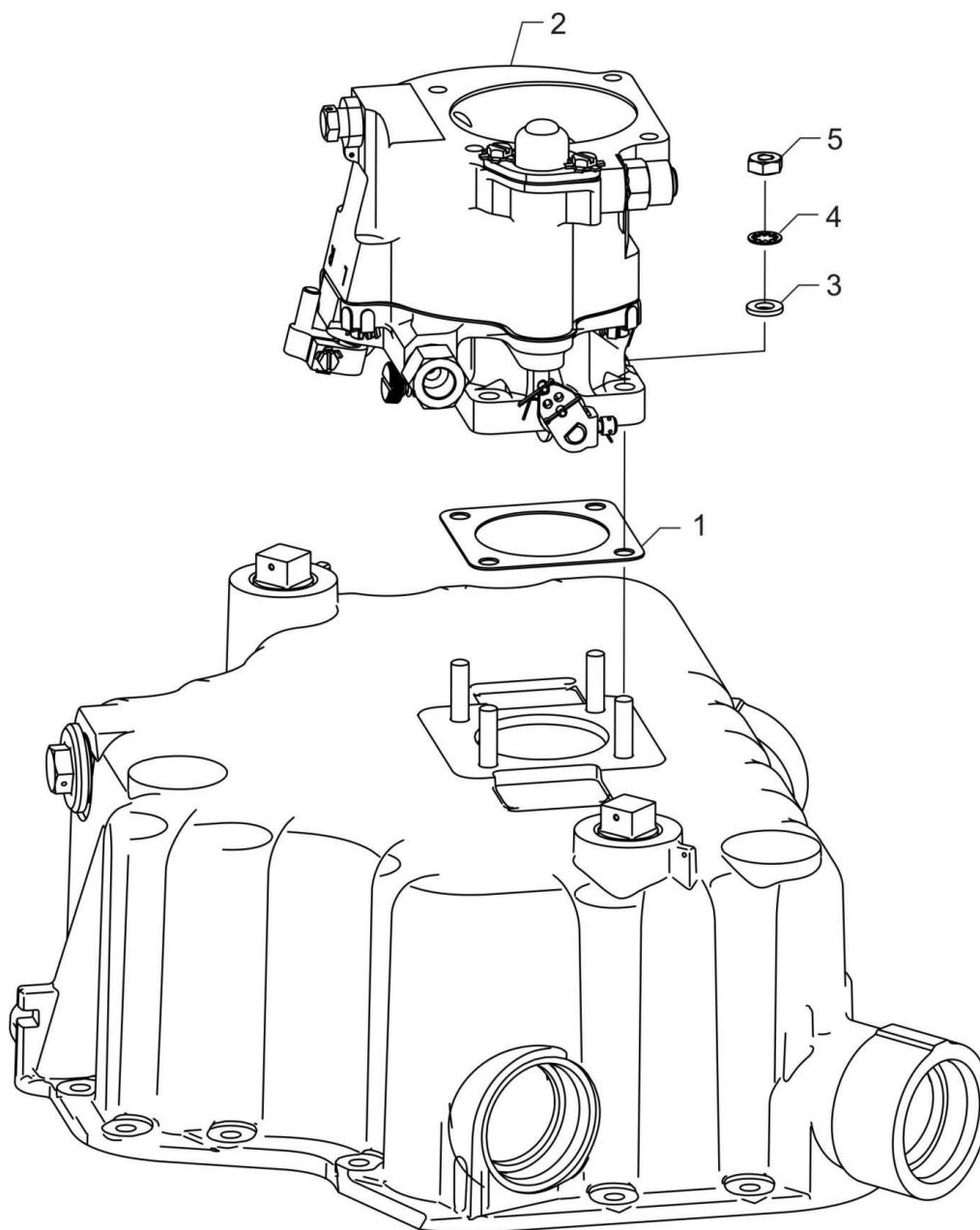


Figure 19
Carburetor and Attaching Parts

Figure 19 – Carburetor and Attaching Parts

Figure Item	Code	Part Number	Description	Units per Assembly
1		60592	GASKET, Carburetor	1
2	V	61A26385	CARBURETOR (V AV 10-5267)	1
3		STD-8	WASHER, 1/4 plain	4
4		STD-160	WASHER, 1/4 lock, internal teeth	4
5		STD-1411	NUT, 1/4-20 plain	4
V Vendor Prime Manufacturer part				

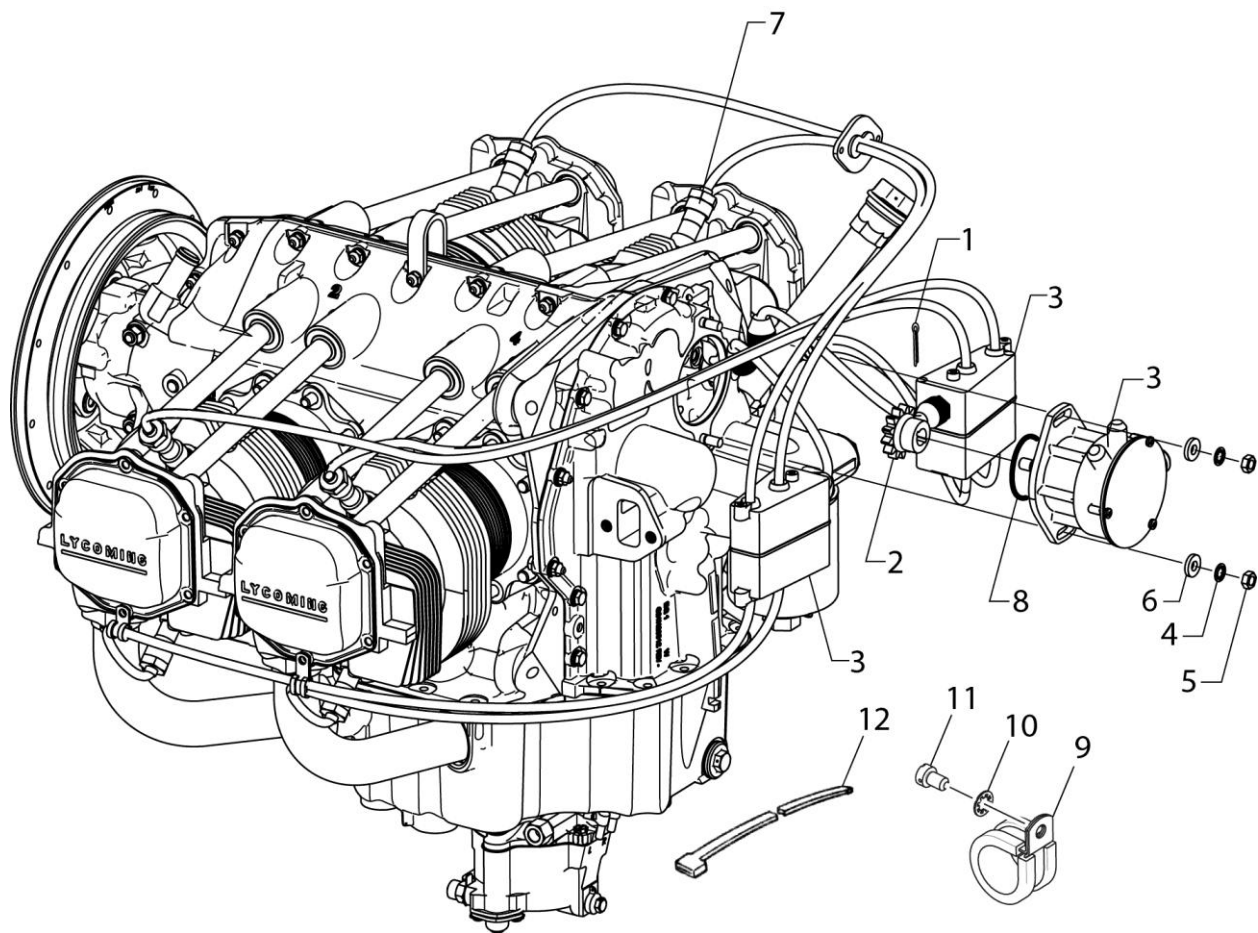


Figure 20
Electronic Ignition System and Spark Plugs

Figure 20 – Electronic Ignition System and Spark Plugs

Figure Item	Code	Part Number	Description	Units per Assembly
1		MS9245-44	COTTER PIN, 3/32 diameter x 5/8 long	1
2		68C19622	GEAR, Magneto	1
3		66K26674-Y	IGNITION SYSTEM, Electronic (Champion)	1
4		STD-475	WASHER, 5/16 lock, internal teeth	2
5		STD-1410	NUT, 5/16-18 plain	2
6		STD-1727	WASHER, Plain, 3/4 O.D. x 11/32 I.D. x 1/8 thick	2
7	V	1182-B7	SPARK PLUG, Champion, V REM37BY	8
8		06C26919-Y	O-RING, 2.989 I.D. x 0.07 diameter section	1
9		LW-16266-10-75	CLAMP	8
10		STD-251	WASHER, #10, internal lock	8
11		MS35275-260	SCREW, 10-24, fillister head, drilled	8
12		76734	ZIP STRAP	4
V Vendor Prime Manufacturer part				

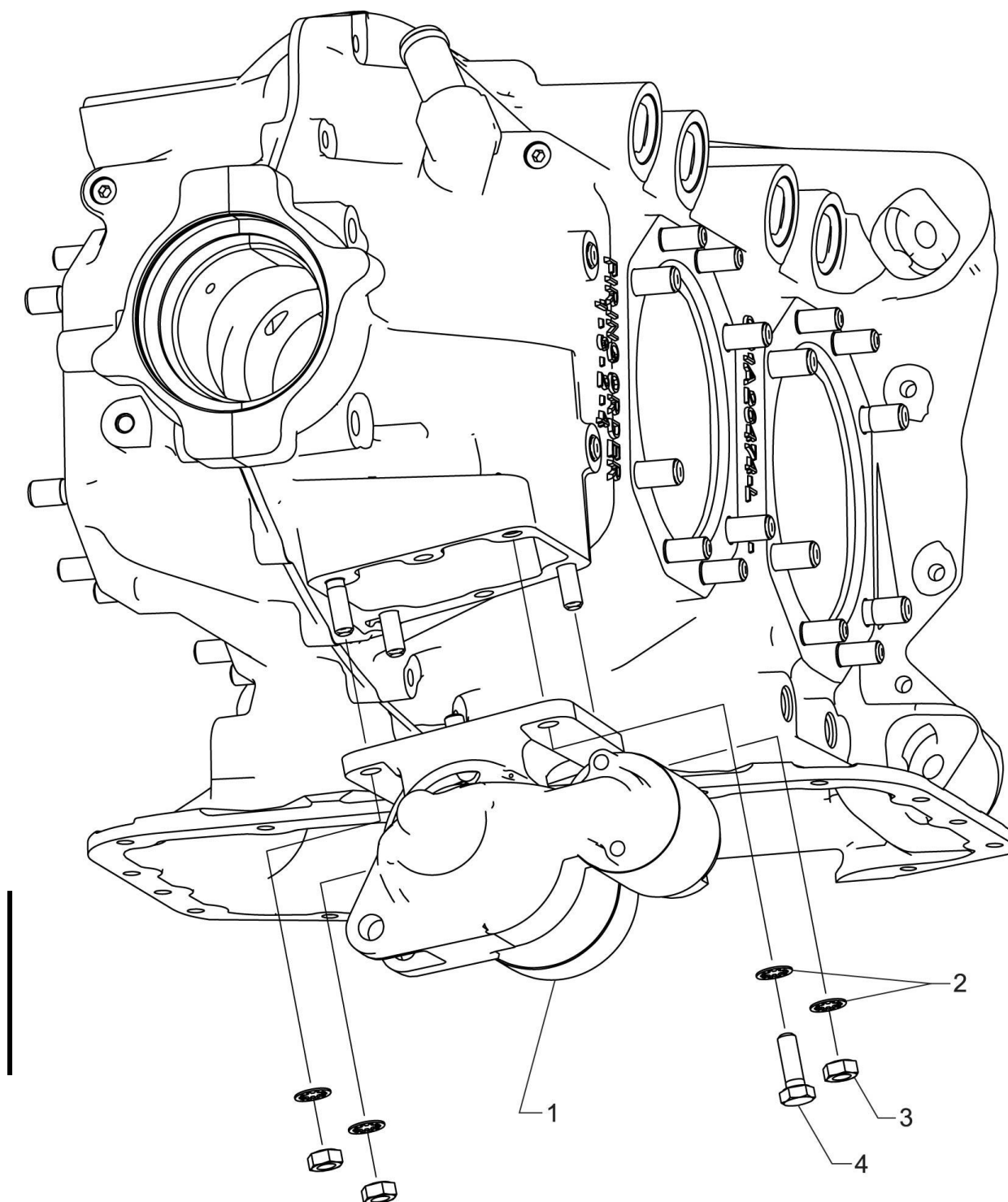


Figure 21
Starter Motor and Attaching Parts

Figure 21 - Starter Motor and Attaching Parts

Figure Item	Code	Part Number	Description	Units per Assembly
1	V	31A26639-Y	STARTER, Sky-Tec, Lightweight, V 122-12LSA	1
2		STD-475	WASHER, 5/16 lock, internal teeth	4
3		STD-1410	NUT, 5/16-18 plain	3
4		LW-31-0.94	BOLT, 5/16-18 x 15/16 long, hex. head	1
V Vendor Prime Manufacturer part				

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Service Kit Section**Crankcase Assembly Kit**

PART NO.	PART NAME	Qty.
11A26824-S	KIT - CRANKCASE ASSEMBLY	1
11A26824-Y *P	CRANKCASE ASSEMBLY	1
AN842-12D	ELBOW, .750 NPT, 90 deg.	1
1102	PLUG, 1/8 PIPE	5
AN6-34A	BOLT, 3/8-24 X 3.58 long hex head	2
STD-33	WASHER, 3/8 plain	4
STD-678	WASHER, 3/8 lock, int. teeth	2
STD-596	NUT, 3/8-24 plain	2
STD-33	WASHER, 3/8 plain	4
*P Lycoming proprietary part. Listed for reference purposes only, cannot be purchased.		

Crankshaft Kit

PART NO.	PART NAME	Qty.
05K28382-Y	KIT - CRANKSHAFT	1
13B47433-Y	CRANKSHAFT	1
STD-1211	PLUG, 2.00 dia., expansion	1
18D26100	BEARING, Crankshaft	8
STD-2251	BOLT, 1/2-20 UNF-3A X 1.594, hex head	1
LW-10332	LOCKPLATE, Crankshaft gear	1
LW-13792	SEAL, Crankshaft, oil	1

Cylinder, Piston and Ring Assembly

PART NO.	PART NAME	Qty.
05K28199	KIT - CYLINDER, PISTON AND RING ASSEMBLY	1
16A26821-Y	CYLINDER HEAD AND VALVE ASSEMBLY	1
06B26669	GASKET, Rocker box cover, silicone	1
06C26551-Y	O-RING, 1.484 I.D. X 1.762 O.D. X 0.139 W.	1
1102	PLUG, 1/8 pipe	1
14B23918	PISTON, compression ratio 8.50:1	1
62869	RING, Oil seal, 0.09 dia. x 4.38 I.D.	1
71973	GASKET, 2 bolt flange, 1.81 I.D	1
77611	GASKET, Exhaust flange	1
78862	RING, Piston-comp, 4.375 bore	2
78864	RING, Piston-oil, 4.375 bore	1
LW-11625	PLUG, Piston pin	2
LW-13445	PIN, Piston	1
LW-18661	SEAL, Shroud tube	4

Seal and Gasket Set

PART NO.	PART NAME	Qty.
05K28383-Y	KIT – SEAL AND GASKET SET	1
06B26669	GASKET, Rocker box cover, silicone	4
06C26551-Y	O-RING, 1.484 I.D. X 1.762 O.D. X 0.139 W.	4
06C26919-Y	O-RING, 2.989 I.D. X .070 dia. section	1
06E19769-1.00	GASKET, Annular, 1.000 I.D.	1
06E19769-1.25	GASKET, Annular, 1.250 I.D.	1
60096	GASKET, Fuel pump	1
60592	GASKET, Carburetor	1
62224	GASKET, Mag. adapter	1
62869	RING, Oil seal, 0.09 dia. X 4.38 I.D.	4
71973	GASKET, 2 bolt flange, 1.81 I.D.	4
72059	GASKET, Oil level gage	1
72091	RING, Oil seal, 0.36 I.D. X 0.10 dia.	8
73818	GASKET, Accessory housing	1
74068	RING, Oil level gage plug	1
76510	GASKET, Oil cooler by-pass valve	1
77611	GASKET, Exhaust flange	4
LW-10332	LOCKPLATE, Crankshaft gear	1
LW-13353	GASKET, Oil sump	1
LW-13792	SEAL, Crankshaft, oil	1
LW-18661	SEAL, Shroud tube	16
MS29512-12	SEAL, Oil 0.116 dia. sect. X 0.924	1
MS9245-44	PIN, 0.09 dia. X 5/8 long, cotter style D	1
MS9358-13	NUT, Slotted, 7/16-20	1
STD-713	PIN, Cotter, 0.09 dia. X 3/4 long	1
STD-2180	HOSE, 0.38 I.D. X 1.88 long	4
STD-2251	BOLT, 1/2-20 UNF-3A X 1.594, hex head	1

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PART NO.	PART NAME	PAGE NO.	PART NO.	PART NAME	PAGE NO.
AN6-34A	BOLT	13	LW-25-1.75	BOLT	13
AN7-27	BOLT	1	LW-25S1.50	BOLT	13
AN842-12D	ELBOW	5	LW-31-0.94	BOLT	41
LW-10077	SEAT	19	LW-31H1.13	BOLT	1
LW-10332	LOCKPLATE	9	LW-31H2.00	BOLT	29
LW-10341	INSERT	27	LW-38-0.75	BOLT	31
LW-11622	STUD	5	MS122202	INSERT	27
LW-11623	STUD	5	MS124663	INSERT	27
LW-11625	PLUG	15	MS29512-10	SEAL	33
LW-11713	SPRING	7	MS29512-12	SEAL	33
LW-11795	SPRING	19	MS35275-260	SCREW	39
LW-11800	SPRING	19	MS9245-44	COTTER PIN	39
LW-11900	SEAT	17	MS9358-13	NUT	1
LW-12137	GUIDE	17	NAS1005-5H	BOLT	1
LW-12186	NUT	15	STD-8	WASHER	13
LW-12545	PLUG	25	STD-8	WASHER	25
LW-12877-6S170	HOSE ASSEMBLY	31	STD-8	WASHER	25
LW-12892	THRUST BUTTON	19	STD-8	WASHER	29
LW-13303	HOOK	21	STD-8	WASHER	37
LW-13353	GASKET	25	STD-33	WASHER	13
LW-13445	PIN	15	STD-33	WASHER	13
LW-13790	SHAFT	19	STD-33	WASHER	31
LW-13792	SEAL	7	STD-33	WASHER	31
LW-13923	BUSHING	15	STD-35	WASHER	1
LW-14040	GEAR ASSEMBLY	29	STD-35	WASHER	17
LW-14650	SHIM	1	STD-35	WASHER	29
LW-15592-5-05	CLAMP	21	STD-91	PLUG	25
LW-15970	TUBE	23	STD-160	WASHER	13
LW-16266-10-75	CLAMP	39	STD-160	WASHER	25
LW-16699	SEAT	17	STD-160	WASHER	25
LW-16783-13	GAGE ASSEMBLY	23	STD-160	WASHER	29
LW-16783-18	GAGE ASSEMBLY	23	STD-160	WASHER	37
LW-18085	SPRING	7	STD-251	WASHER	21
LW-18661	SEAL	19	STD-251	WASHER	39
LW-25-0.94	BOLT	29	STD-475	WASHER	17
LW-25-1.00	BOLT	25	STD-475	WASHER	39
LW-25-1.00	BOLT	29	STD-475	WASHER	41
LW-25-1.13	BOLT	13	STD-514	DOWEL	5
LW-25-1.13	BOLT	25	STD-551	PLUG	25
LW-25-1.25	BOLT	25	STD-557	DOWEL	5
LW-25-1.50	BOLT	13	STD-596	NUT	13

PART NO.	PART NAME	PAGE NO.	PART NO.	PART NAME	PAGE NO.
STD-632	WASHER	1	383-B	NUT	19
STD-665	SCREW	21	1028-B	BALL, 11/16 diameter	7
STD-678	WASHER	13	1102	PLUG	5
STD-678	WASHER	31	1102	PLUG	17
STD-684	NIPPLE	21	1102	PLUG	17
STD-700	ELBOW	17	1182-B7	SPARK PLUG	39
STD-713	COTTER PIN	1	60009	KEY	19
STD-783	PLUG	27	60096	GASKET	31
STD-784	PLUG	33	60592	GASKET	37
STD-872	NUT	13	60803	STRAP	13
STD-1171	INSERT	27	60814-S	BUSHING	9
STD-1173	INSERT	27	60821	TUBE ASSEMBLY	21
STD-1211	PLUG	9	60882	GEAR	9
STD-1410	NUT	17	60890	TUBE ASSEMBLY	21
STD-1410	NUT	39	60903	SHR'D TUBE ASSY	19
STD-1410	NUT	41	60928	TUBE ASSEMBLY	21
STD-1411	NUT	13	61084	SPRING	7
STD-1411	NUT	25	62869	RING	19
STD-1411	NUT	29	65441	SEAT	19
STD-1411	NUT	37	65614	PLUG	21
STD-1420	NUT	29	66796	INSERT	17
STD-1727	WASHER	1	68668	SPRING	7
STD-1727	WASHER	39	70484	SCREEN	25
STD-1882	SCREW	31	71611	RETAINER	21
STD-1925	SCREW	19	71973	GASKET	25
STD-2078	DOWEL	9	72059	GASKET	23
STD-2106	NUT	19	72091	RING	7
STD-2180	HOSE	21	72377	ELBOW	31
STD-2197	WASHER	1	73346	FLANGE	25
STD-2249	NUT	13	73757-S	BUSHING	9
STD-2251	BOLT	9	73818	GASKET	27
25C-10	STUD	25	74068	RING	23
25C-12	STUD	25	75736	TUBE	23
31C-12	STUD	5	76510	GASKET	35
31C-12	STUD	17	76539	SEAT	33
31C-12	STUD	27	76542	SPRING	33
31C-13	STUD	5	76734	ZIP STRAP	39
31CD-17	STUD	27	76943	GUIDE	17
38-13	STUD	5	77467	SPRING	7
38D-17	STUD	5	77607	SLEEVE	27
44-13	STUD	5	77611	GASKET	17

PART NO.	PART NAME	PAGE NO.	PART NO.	PART NAME	PAGE NO.
77808	VALVE ASSEMBLY	7	17B23940	VALVE	19
78027	BOLT	15	17F19357	ROCKER ASSMBLY	19
78862	RING	15	17J26536-Y	COVER	19
78864	RING	15	17L26550-Y	BAFFLE ASSEMBLY	21
03C21076	PLUG	33	18D26100	BEARING	7
03C21720	PLUG	33	18M26104	BEARING	15
03D23350	COVER	31	21N26513-01-Y	HOUSING ASSY	27
05K28659-Y	KIT	29	26F26498-Y	GEAR	11
05S21021	SPRING	33	31A26639-Y	STARTER	41
06B26669-Y	GASKET	19	31M26918-Y	SUPPORT ASSY	9
06C26551-Y	O-RING	25	32B26654-Y	ALTERNATOR	3
06C26919	O-RING	39	37A19773-350	BELT	3
06E19769-1.00	GASKET	25	42E26766-Y	PIPE	25
06E19769-1.25	GASKET	7	53E22144	VALVE ASSEMBLY	35
07F26610-Y	LINK	1	54D26826-Y	OIL FILTER	35
11A26824-S	CRANKCASE ASSY	5	56A26671-Y	SUMP ASSEMBLY	25
11A26824-Y	CRANKCASE ASSY	5	61A26385	CARBURETOR	37
13B47433-Y	CRKSHAFT ASSY	9	62A26675-Y	FUEL PUMP	31
13S19649	GEAR	9	66K26674-Y	IGNITION SYSTEM	39
14B23918	PISTON	15	68C19622	GEAR	39
14M26496-Y	CONN. ROD ASSY	15			
15B21319	SOCKET,	19			
15B26066	PLUNGER ASSY	19			
15B26262	BODY	7			
15F19957-08	ROD ASSEMBLY	19			
15F19957-09	ROD ASSEMBLY	19			
15F19957-10	ROD ASSEMBLY	19			
15F19957-11	ROD ASSEMBLY	19			
15F26561-YB	BODY	29			
15M26642-Y	CAMSHAFT	11			
16A26821-Y	CYLD - HEAD ASSY	17			
17A23939	VALVE	19			

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