# IO-360-L2A Illustrated Parts Catalog

**June 2025** 

PC-IO-360-L2A (Supersedes PC-406-L2A)



## **IO-360-L2A Illustrated Parts Catalog**

Lycoming Part Number: PC-IO-360-L2A (Supersedes PC-406-L2A)

### For additional information:

### Mailing address:

Lycoming Engines 652 Oliver Street Williamsport, PA 17701 U.S.A.

#### Phone:

Factory: U.S. and Canada toll free: +1(800) 258-3279 International Customers: +1(570) 323-6181

Lycoming's regular business hours are Monday through Friday from 8:00 A.M. through 5:00 P.M. Eastern Time (-5 GMT)

#### Visit us online at:

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## **Record of Revisions**

**NOTICE:** Service Documents with a later release date than this parts catalog override parts information in this document.

Rev No.	Revision Changes	Issue Date
New	Initial Release of PC-IO-360-L2A (Supersedes PC-406-L2A)	June 2025



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## **Introduction**

<u>CAUTION</u>: 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 contains a complete list of spare parts for the Lycoming IO-360-L2A Certified Series wide cylinder flange model engines.

#### How to Use this Catalog

This catalog is based on the Air Transport Association (ATA) Spec100 format.

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 designates chapters by the numeric code. In the example below, Chapter 74 is for Ignition with a subsection 20 for Distribution.

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.



#### **Roller Tappets**

As a product improvement, Lycoming is installing roller tappets on its aircraft engines. Wide deck engines with roller tappets are identified with an "E" suffix after the serial number dash number (Example – L-\*\*\*\*\*-48E.) On rebuilt and Lycoming overhauled wide deck engines with roller tappets, the letter "A" suffix is replaced with the letter "E" suffix on the engine serial number.

The new parts include roller tappet body assembly, crankcase, camshaft, shorter push rods, shroud tubes and shroud tube seal. The engines use the same hydraulic units and the dry tappet clearance does not change. Refer to Reference 618 in the Table of Limits (SSP-1776) for dry tappet clearance values.

At this time, roller tappets are not installed in narrow deck engines.

ROLLER TAPPET PARTS ARE NOT INTERCHANGEABLE WITH CURRENT FLAT FACED TAPPETS.

If it is necessary to remove the roller tappet bodies prior to overhaul, they **must be reinstalled in the same location in the crankcase.** The roller tappets are indexed with flats in the new crankcase. It is possible to assemble the roller tappet bodies in two different orientations 180 degrees apart. Either orientation is acceptable while reinstalling. Lubricate all tappet bores, cam lobes and roller tappets with engine oil mixture only. (Refer to the latest revision of Service Instruction No. 1059.) Install the shroud tube seal in the crankcase, then install the shroud tube.

THE ROLLER TAPPETS ARE NOT FIELD REPAIRABLE AND NO DISASSEMBLY IS ALLOWED. THEREFORE, MAGNAFLUX OR ZYGLO INSPECTIONS ARE NOT ALLOWED. A VISUAL INSPECTION FOR INTEGRITY AND FREE ROTATION OF THE ROLLER ACTION IS ACCEPTABLE TO RETURN AN IN-USE ROLLER TAPPET TO SERVICE; HOWEVER, IT IS MANDATORY TO REPLACE ROLLER TAPPETS AT OVERHAUL.

#### 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 supplier's/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.

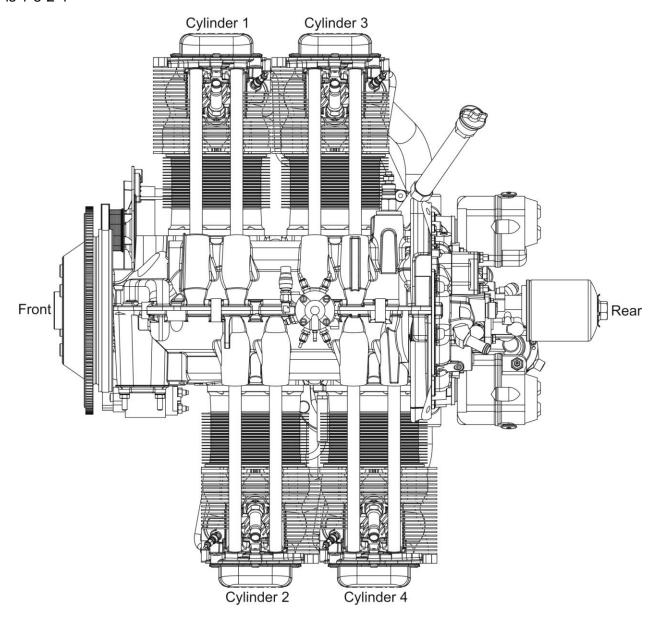
#### **Environmental Compliance**

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.

#### To order parts:

- 1. Contact the applicable Customer Service Hot Lines:
  - U.S. and Canada toll free +1-800-258-3279
  - International Customers +1-570-323-6181
  - 8:00 A.M. 5:00 P.M. EST (-5GMT) Monday through Friday
- 2. Give the model and serial number of your engine.
- 3. Give the part number, nomenclature, and quantity.

This publication eventually will be available for viewing and download on the Lycoming.com website.

To supply any comments, suggestions, or corrections to this parts catalog, go online to the Lycoming.com website on the internet.

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

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## **Abbreviations and Acronyms**

Abbieviations and Actoryms			
	A		
Adj.	Adjustable		
amp.	Ampere		
Assy	Assembly		
	F		
F	Flat Tappet		
Fill.	Fillister		
	Н		
Hex.	Hexagon		
I.D.	Inside Diameter		
	M		
mm	Millimeter		
	N		
No.	Number		
NPT	National Pipe Taper (thread)		
	0		
O.D.	Outside Diameter		
	Р		
P/N	Part Number		
psi	Pounds per square inch		
RT	Roller Tappet		



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### **OVERSIZE AND UNDERSIZE PARTS LISTING**

Dort No.	Description				Oversi	ze (in.)	)			Unde (ir	
Part No.	Description	P02 .002	P05 .005	P10 .010	P15 .015	P20 .020	P30 .030	P40 .040	P50 .050	M03 .003	M06 .006
18D26098	BEARING									X	Х
18A26093	BEARING									X	Х
18M26105	BEARING									Х	Х
LW-13792	SEAL								Х		
72155-S	BUSHING		Х	Х	Х	Х					
75656-S	BUSHING		Х	Х	Х	Х					
75657-S	BUSHING		Х	Х	Х	Х					
STD-1065	DOWEL	Х	Х	Х	Х						
74241	RING			Х							
14H29884	RING			Х		Х					
72057	SEAT		Х	Х		Х	Х				
72058	SEAT		Х	Х		Х	Х				
61681*	GUIDE		Х	Х		Х	Х	Х			
16R22291*	GUIDE		Х	Х		Х	Х	Х			
66610	BUSHING		Х	Х						-	

<sup>\* -</sup> 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 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.



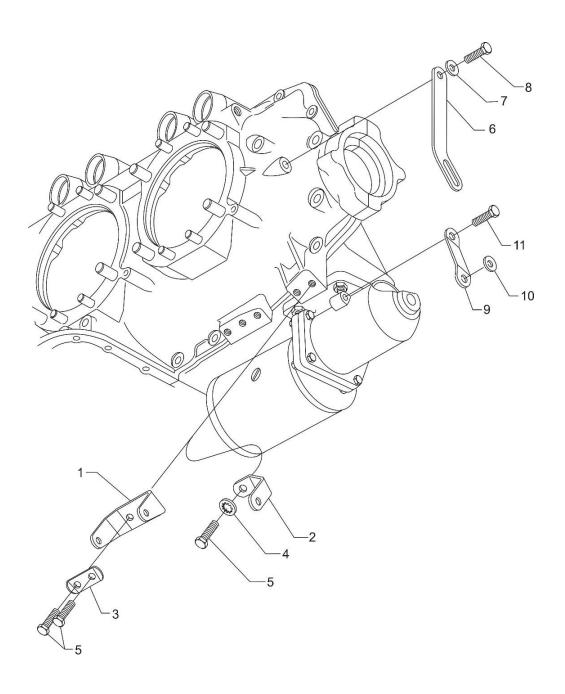


Figure 1
Alternator Mounting and Attaching Parts



## DC Generation 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		07F29604	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

<sup>\*</sup> Shim 76908 strut with STD-2197 washer.

**NOTE:** Alternator is not supplied for this configuration.



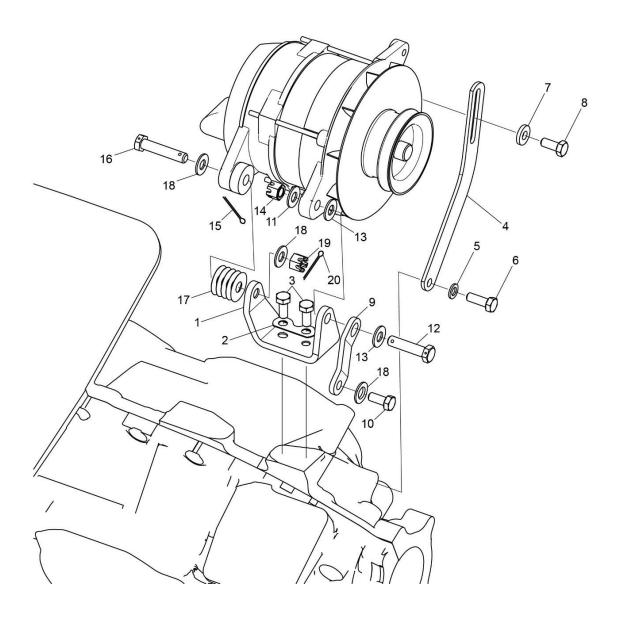


Figure 2
Alternator Mounting and Attaching Parts



## DC Generation 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		AN6-17	BOLT, 3/8-24 x 1-15/16 long, hex. head	1
13		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		76534	SHIM, 1-1/8 O.D. x 13/32 I.D. x .005 thick (max. 5)	AR
18		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

**NOTE:** Alternator is not supplied for this configuration.



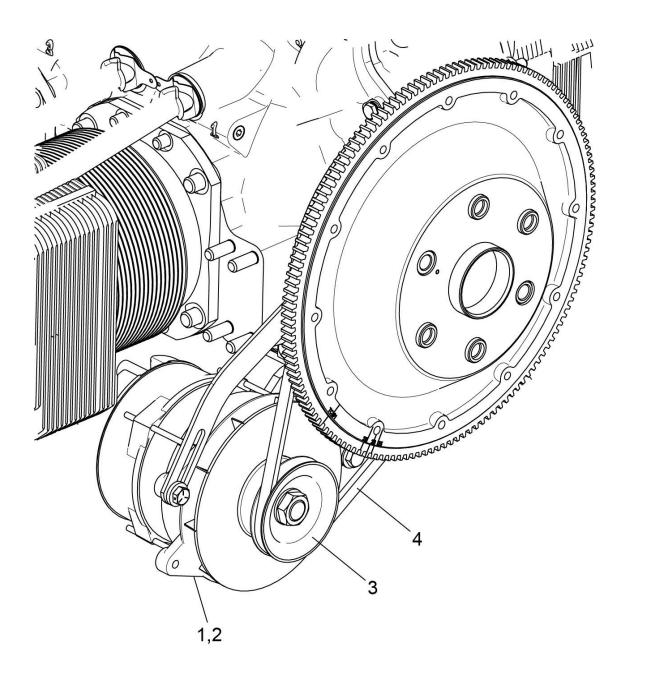


Figure 3
Alternator Assembly and Belt



## **DC Generation**

## FIGURE 3 - ALTERNATOR ASSEMBLY AND BELT

Figure Item	Code	Part Number	Description	Units per Assembly
1		32C19553	ALTERNATOR ASSEMBLY, 24V70 Amp.	1
		32B19549	ALTERNATOR ASSEMBLY, 12V70 Amp.	1
2	V	LW-14326	ALTERNATOR, 24V70 Amp.  V ALU-8521LS	1
	V	LW-14318	ALTERNATOR, 12V70 Amp. <b>V</b> ALX-8521LS	1
3		36B19484	PULLEY, Alternator	1
4		37A19773-376	BELT, Alternator drive, 3/8 wide	1

V Vendor Prime Manufacturer part

**NOTE:** See latest revision of Lycoming Service Instruction No. 1154 for complete listing of

FAA approved starters, generators, alternators, regulators and relays.



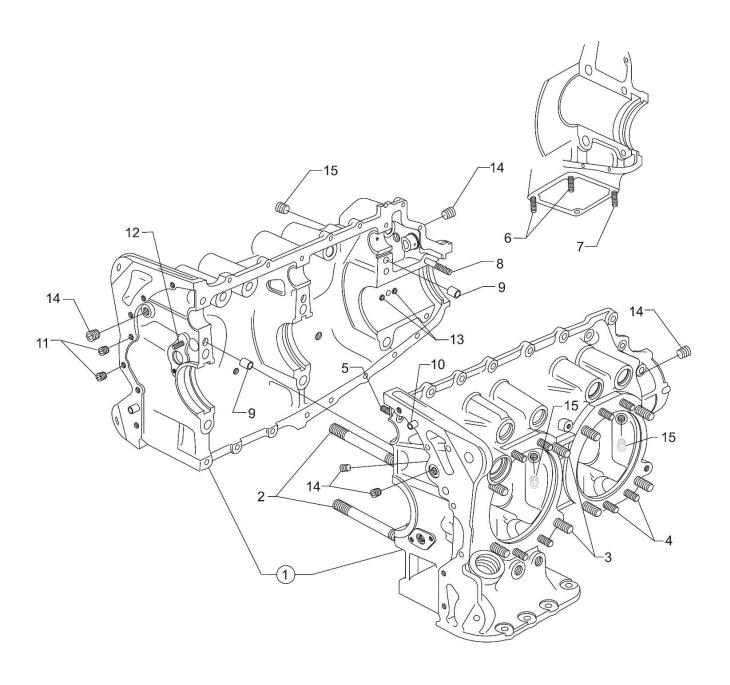


Figure 3
Crankcase Assembly



## Power Section FIGURE 3 – CRANKCASE ASSEMBLY

Figure Item	Code	Part Number	Description	Units per Assembly
1	*	LW-18402-2	CRANKCASE ASSEMBLY KIT	1
	*	LW-18402-5	CRANKCASE ASSEMBLY KIT (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

Refer to Service Kits Section for applicable Crankcase Assembly and Governor Thru-Stud Kit Part Numbers.



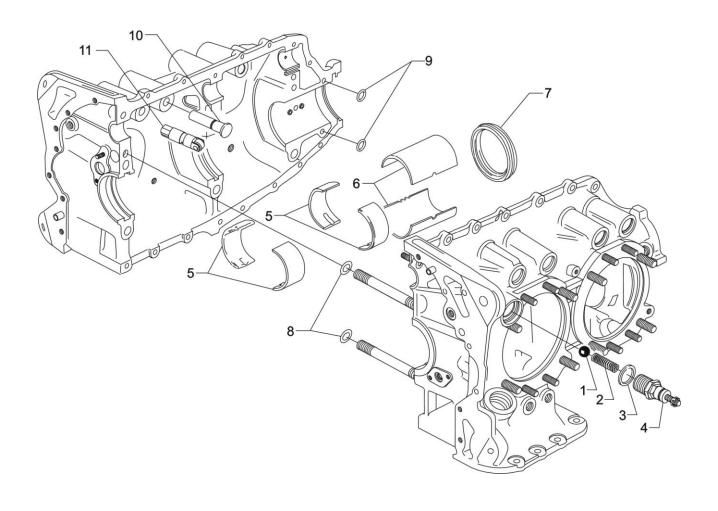


Figure 4
Crankcase Related Parts



## 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	**	15B26262	BODY, Hydraulic tappet (Flat tappet)	8
11	**	LRT23381	BODY ASSEMBLY, Hydraulic tappet (Roller tappet engines)	8

<sup>\*</sup> 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.

<sup>\*\*</sup> Refer to the latest revision of Service Instruction No. SI 1011 for tappet details and crankcase requirements



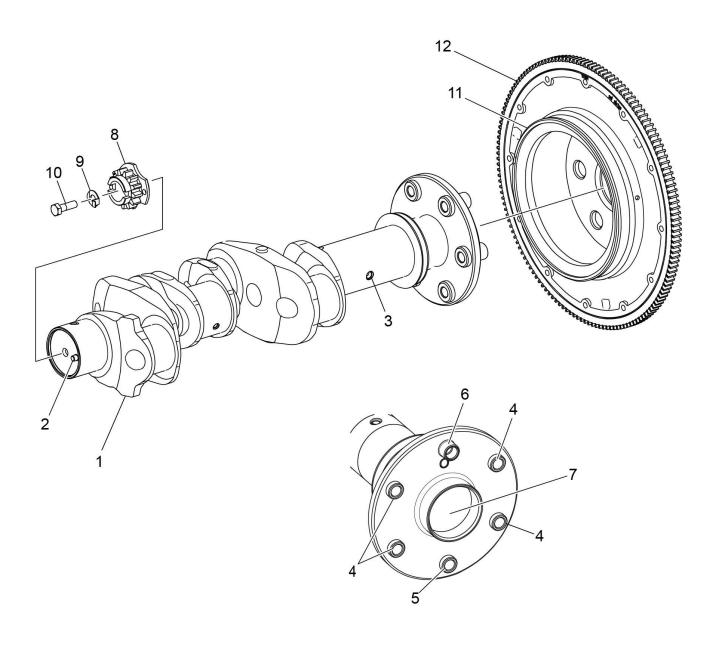


Figure 5
Crankshaft Assembly and Related Parts



## **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		68484	TUBE, Crankshaft prop, oil	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		STD-1211	PLUG, 2.00 diameter expansion	1
8	SB*	13S19646	GEAR, Crankshaft	1
9		LW-18639	LOCKPLATE, Crankshaft gear	1
10		STD-2246	BOLT, 5/16-24 x 1.00 long	1
11		31M22045	SUPPORT ASSEMBLY, Starter ring gear	1
		LW-16471	SUPPORT ASSEMBLY, Starter ring gear	1
12		72566	GEAR, Starter ring, 12/14 pitch	1

**SB** Referencing Service Bulletin

<sup>\*</sup> Refer to the latest revision of Lycoming Service Bulletin No. 475 for proper installation.



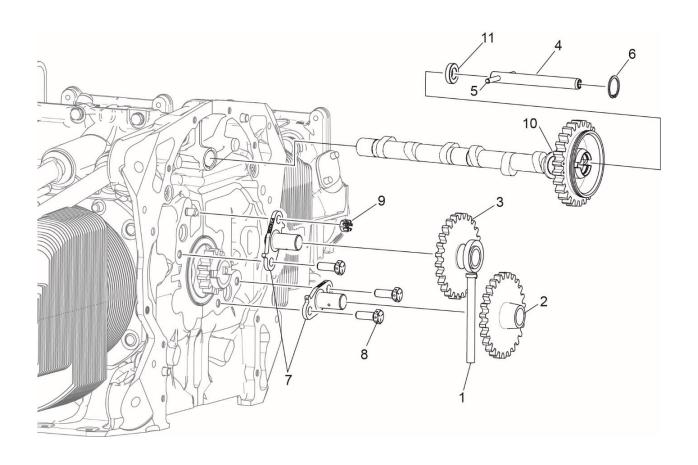


Figure 6
Crankshaft Idler Gears, Tachometer Drive and Camshaft



#### **Power Section**

## FIGURE 6 - CRANKSHAFT IDLER GEARS, TACHOMETER DRIVE AND CAMSHAFT

Figure Item	Code	Part Number	Description	Units per Assembly
1		23D26777	PLUNGER, Fuel pump, long	1
2		74996	GEAR ASSEMBLY, Crankshaft idler, plain	1
3		75072	GEAR ASSEMBLY, Crankshaft idler	1
4		76121	SHAFT ASSEMBLY, Tachometer	1
5		LW-18667	PIN, 3/16 diameter x 2-11/32 long	1
6		STD-2231	RING, Internal retaining (13/16)	1
7		LW-13796	SHAFT, Crankshaft idler gear	2
8		LW-31H0.88	BOLT, 5/16-18 x 7/8 long, hex. head, drilled	3
9		STD-2168	NUT, 5/16-18 NC-3 slotted shear	1
10		LW-18840	CAMSHAFT ASSEMBLY (Flat tappet engines)	1
		15M23452	CAMSHAFT ASSEMBLY (Roller tappet engines)	1
11		76118	SPACER, Tachometer shaft centering	1



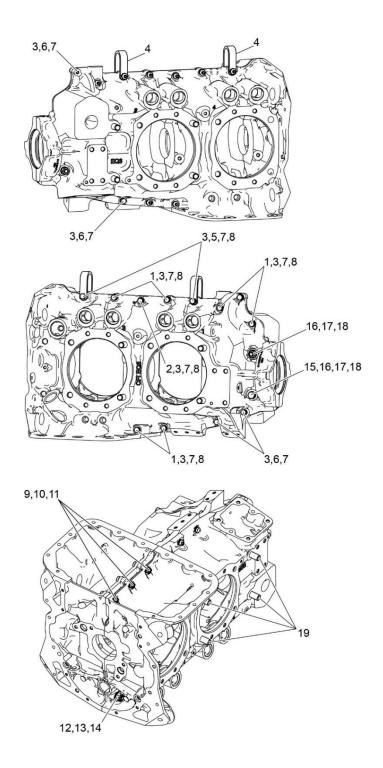


Figure 7
Crankcase Attaching Parts



## 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		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		NAS1149F0632P	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



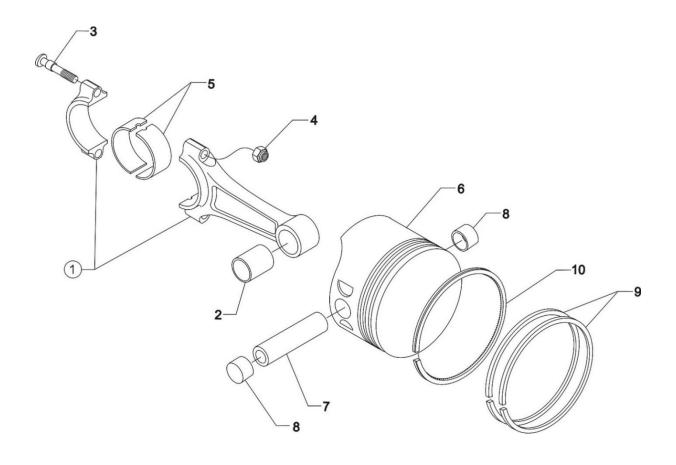


Figure 8
Connecting Rods, Pistons and Ring Assemblies



## Cylinder Section

## FIGURE 8 - CONNECTING RODS, PISTONS AND RING ASSEMBLIES

Figure Item	Code	Part Number	Description	Units per Assembly
1		LW-11750	CONNECTING ROD ASSEMBLY	4
2		01K28983	BUSHING, Connecting rod, upper	4
3	*	75061	BOLT, Connecting rod	8
	Р	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		14H29884	RING, Piston, oil	4

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

<sup>\*</sup> Service use only.



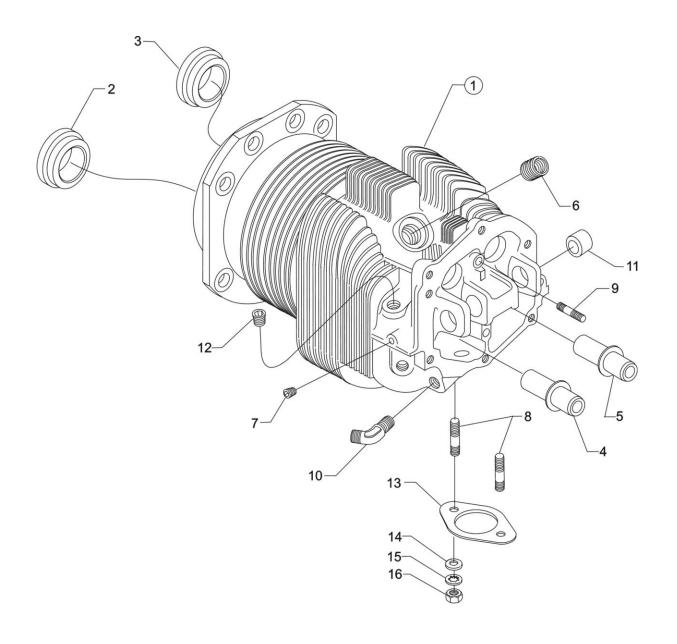


Figure 9 Cylinder Assembly



## **Cylinder Section FIGURE 9 - CYLINDER ASSEMBLY**

Figure Item	Code	Part Number	Description	Units per Assembly
1		16A30080-01	CYLINDER ASSEMBLY, Nitrided	4
2		72057-P20	SEAT, Intake valve	4
3		72058-P20	SEAT, Exhaust valve	4
4		76943-P30	GUIDE, Valve, intake	4
5		16R22126-P30	GUIDE, Valve, exhaust	4
6		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



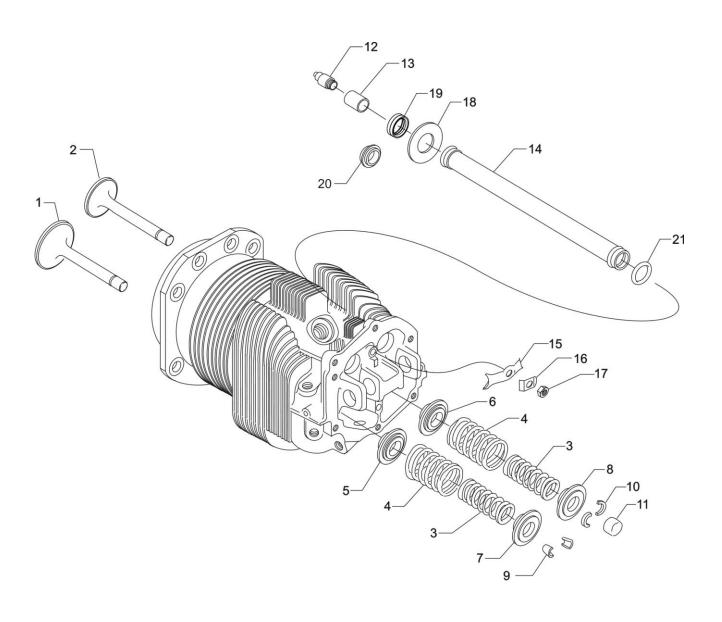


Figure 10
Valve Assembly and Related Parts



## 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		17D29055	SPRING, Valve, inner	8
4		17D29060	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 (Flat tappet engines)	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 (Flat tappet engines)	8
20		06A23493	SEAL, Shroud tube (Roller tappet engines)	8
21	**	70310	SEAL, Shroud tube	8

<sup>\*</sup> This seal is used on flat tappet engines only.

<sup>\*\*</sup> This seal is used on both flat tappet and roller tappet engines.



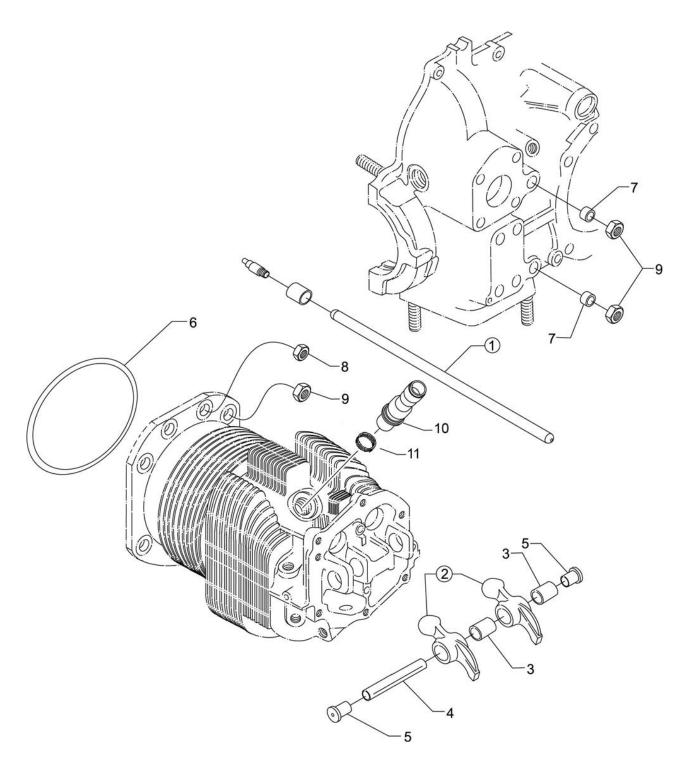


Figure 11
Cylinder Related Parts and Spark Plugs



#### **Cylinder Section**

#### FIGURE 11 – CYLINDER RELATED PARTS AND SPARK PLUGS

Figure Item	Code	Part Number	Description	Units per Assembly
1	*•	15F28835-28	ROD ASSEMBLY, Push (A total of 8 required) RT	AR
	*•	15F28835-29	ROD ASSEMBLY, Push (A total of 8 required) RT	AR
	*•	15F28835-30	ROD ASSEMBLY, Push (A total of 8 required) RT	AR
	*•	15F28835-31	ROD ASSEMBLY, Push (A total of 8 required) RT	AR
	*•	15F28835-32	ROD ASSEMBLY, Push (A total of 8 required) RT	AR
	*•	15F28835-33	ROD ASSEMBLY, Push (A total of 8 required) RT	AR
	†+	15F28835-34	ROD ASSEMBLY, Push (A total of 8 required)	AR
	<b>‡</b> +	15F28835-35	ROD ASSEMBLY, Push (A total of 8 required)	AR
	<b>‡</b> +	15F28835-36	ROD ASSEMBLY, Push (A total of 8 required)	AR
	<b>‡</b> +	15F28835-37	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
10	V#	1182-E7	SPARK PLUG, Champion V REM38E	8
11		STD-295	GASKET, Spark Plug	8

#### AR as required

- \* These push rods are not to be used on flat tappet engines.
- † This push rod can be used on both flat tappet and roller tappet engines.
- **‡** These push rods are not to be used on roller tappet engines.
- ♦ See latest revision of Service Instruction No. 1060 for complete push rod application.
- \*\* Due to the size of the area where the part number is stamped, the last five digits may be all that is shown (19357).
- V Vendor Prime Manufacturer part
- # Item No. 1182-E7 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.

**NOTE:** Various push rod lengths are used to set valve clearances.



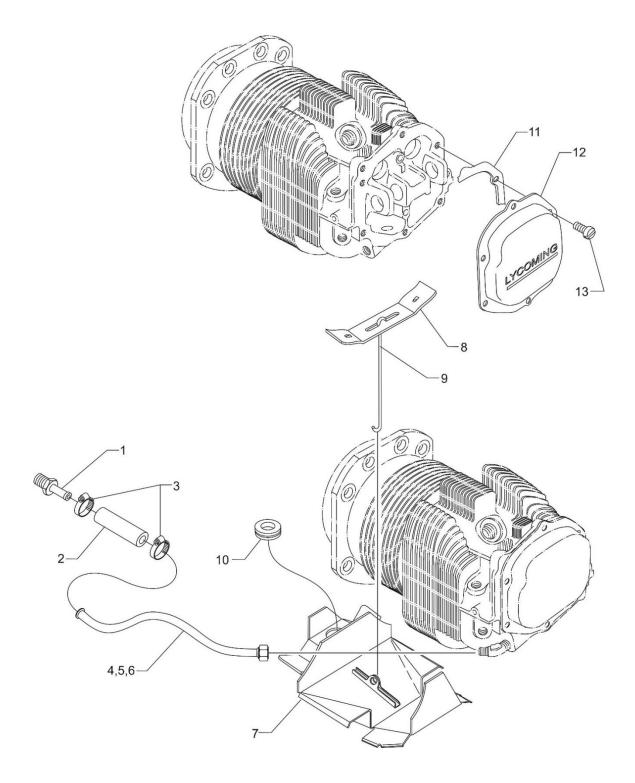


Figure 12
Cylinder Head Drain Tubes, Intercylinder Cooling Baffles and Rocker Box Covers



#### **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-15592-5-04	CLAMP, 7/16 O.D. 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		06B26669	GASKET, Rocker box cover (Silicone)	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

<sup>\*</sup> Install on left side between no. 2 and no. 4 cylinders.

<sup>\*\*</sup> Install on right side between no. 1 and no. 3 cylinders.

<sup>♦</sup> Used with chrome rocker box cover.



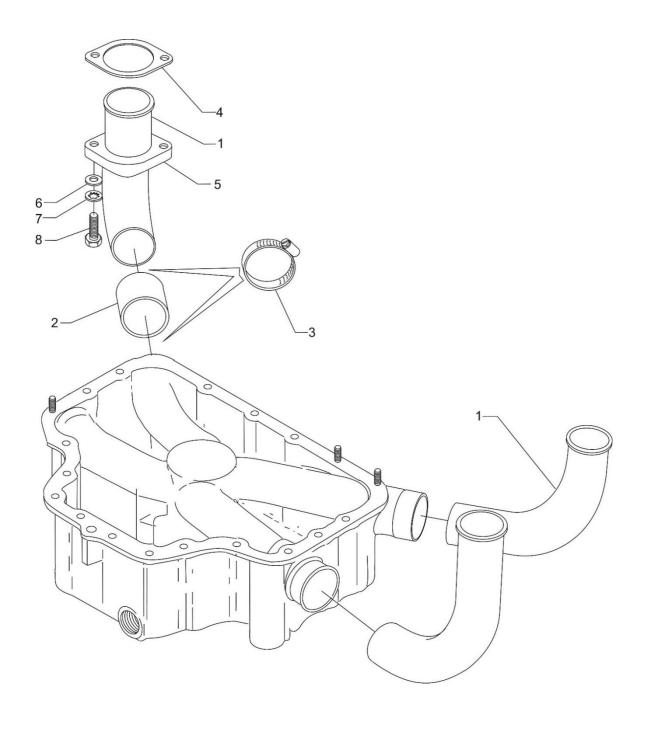


Figure 13 Intake Pipes and Attaching Parts



## 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



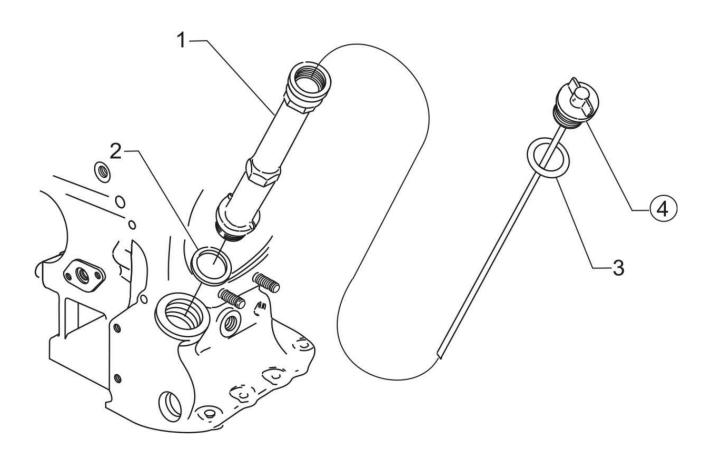


Figure 14 Oil Level Gage



## 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



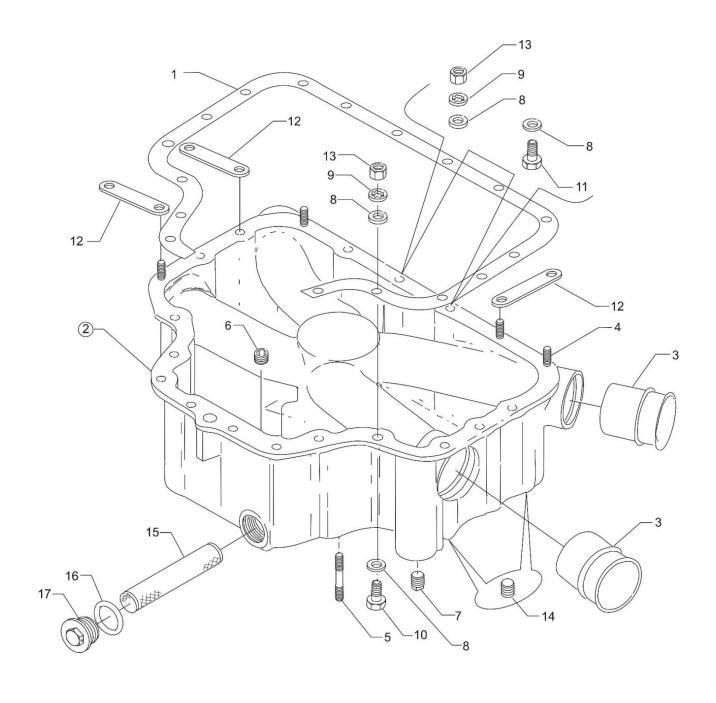


Figure 15
Oil Sump Assembly and Oil Suction Screen



## 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



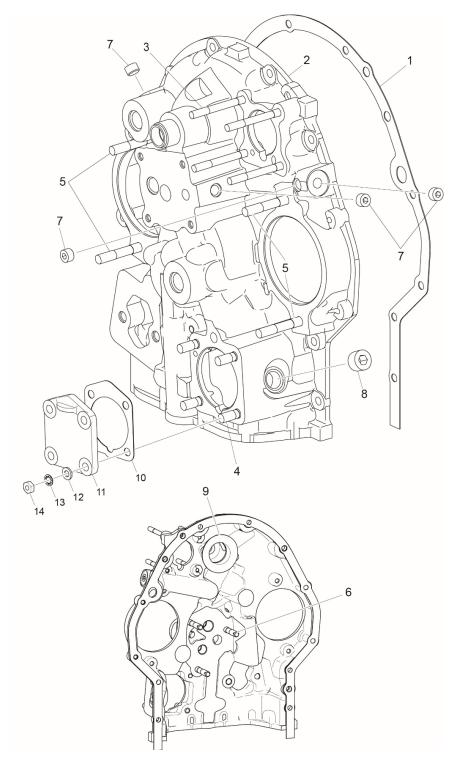


Figure 16
Accessory Housing Assembly



# 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
10		69551	GASKET, Accessory drive adapter	1
11		69106	COVER, Governor drive adapter pad	1
12		STD-35	WASHER, 5/16 plain	4
13		STD-475	WASHER, 5/16 lock, internal teeth	4
14		STD-1410	NUT, 5/16-18 plain	4



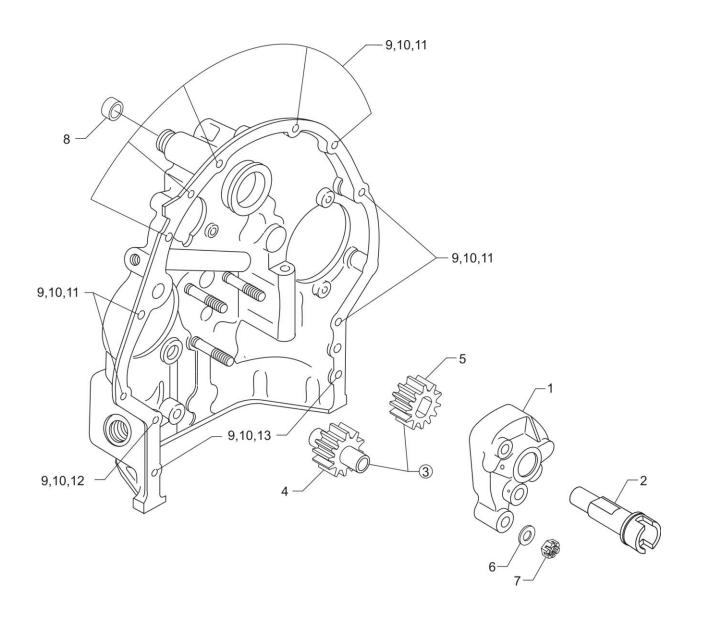


Figure 17
Oil Pump Assembly and Accessory Housing Attaching Parts



#### **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		
* 5						



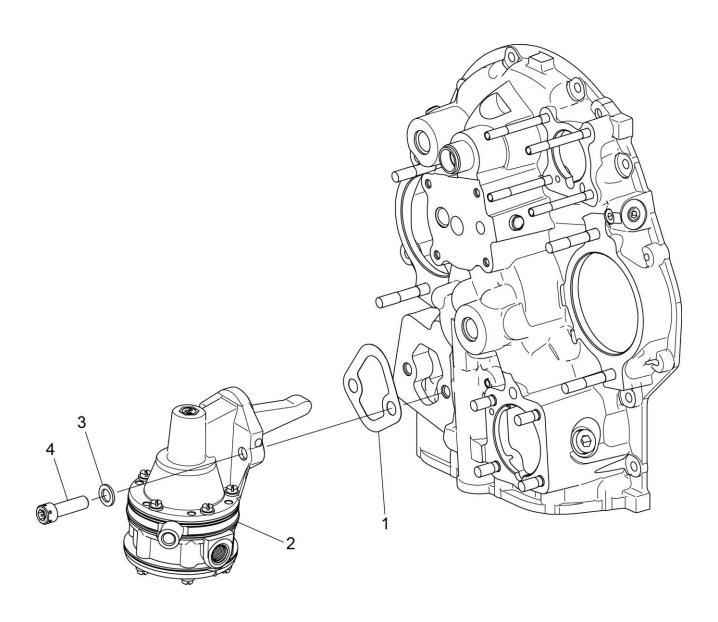


Figure 18
Fuel Pump Assembly and Attaching Parts



## 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		62B26931	FUEL PUMP, 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



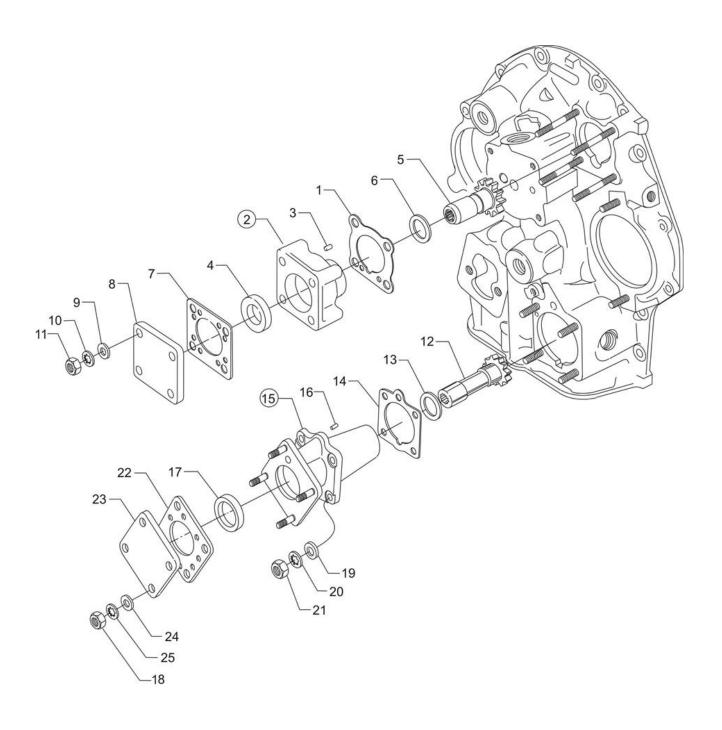


Figure 19
Vacuum and Hydraulic Pump Drives and Covers,
Propeller Governor Drive Cover



#### **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		STD-1411	NUT, 1/4-20 plain	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



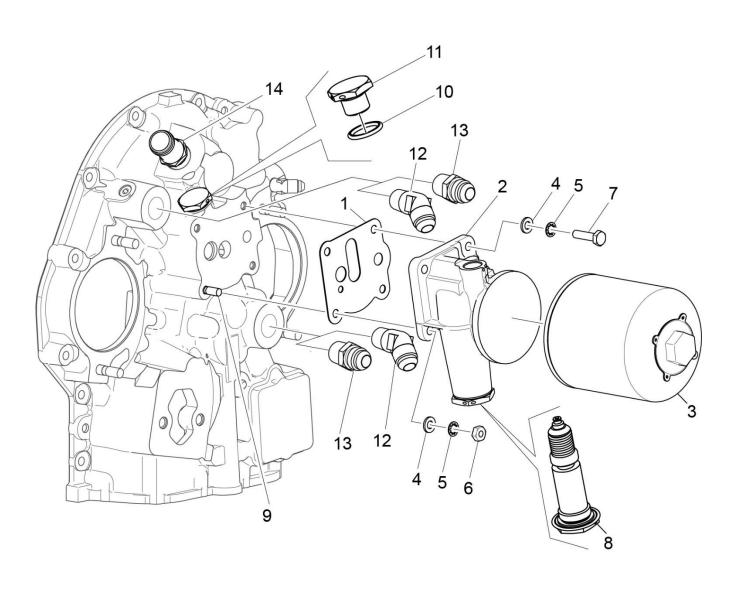


Figure 20
Oil Filter Assembly, Oil Cooler Bypass Valve and Breather Fitting



#### **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 with gasket	1
9		25C-10	STUD, 1/4-20 x 1-1/4 long	1
10		06E19769-0.63	GASKET, Annular, 5/8 I.D.	1
11		62417	PLUG, Oil cooler bypass	1
*12		MS20823-8	ELBOW, 3/8 NPT, 1/2 flared tube	1
*13		AN816-8	NIPPLE, 1/2 flared tube	1
14		71140	FITTING, Breather	2

**NOTE:** Refer to latest revision of Lycoming SSP-885 for oil filter kits and replacement filters.

<sup>\*</sup> Some configurations of the IO-360-L2A will have the elbow P/N MS20823-8 installed in the upper oil cooler boss and the nipple P/N AN816-8 installed in the lower oil cooler boss. Other configurations will have the nipple P/N AN816-8 installed in the upper oil cooler boss and the elbow P/N MS20823-8 installed in the lower oil cooler boss



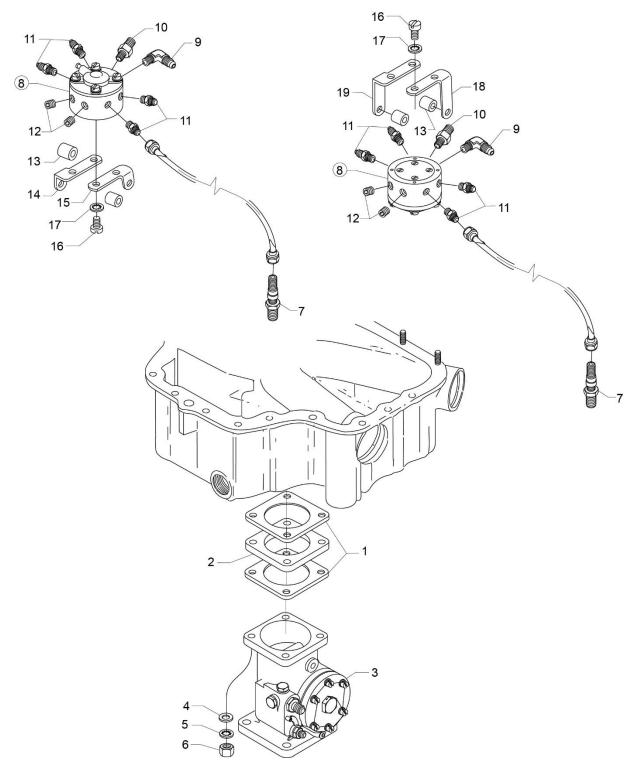


Figure 21 Fuel Injector, Fuel Manifold and Brackets



## 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 *	61J26428	FUEL INJECTOR, RSA-5AD1, V AV 2576536-2	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		63B26449	MANIFOLD ASSEMBLY, Fuel	1
		63B22997	MANIFOLD ASSEMBLY, Fuel	1
		63B26706	MANIFOLD ASSEMBLY, Fuel	1
		63B26716	MANIFOLD ASSEMBLY, Fuel	1
		63B26756	MANIFOLD ASSEMBLY, Fuel	1
		63B26715	MANIFOLD ASSEMBLY, Fuel	1
9		MS20822-4	ELBOW, 1/4 tube, 1/8 NPT, 90°	1
10		02G21382	NIPPLE, Nozzle pressure gage	1 or 0
11		STD-148	NIPPLE, Union, 1/8 NPT	4
12		1102	PLUG, 1/8-27 NPT, allen head	2 or 3
13		73966	SPACER, Fuel manifold	2
14		07A23031	BRACKET, Fuel manifold	1
15		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
18	**	07A22995	BRACKET, Fuel manifold	1
19	**	07A22996	BRACKET, Fuel manifold	1

- V Vendor Prime Manufacturer part
- \* Refer to SI 1532 for a list of approved alternate Fuel Injectors.
- \*\* Use brackets 07A22995 and 07A22996 for inverted fuel manifold. Refer to the latest revision of Service Instruction No. 1502 for additional details.



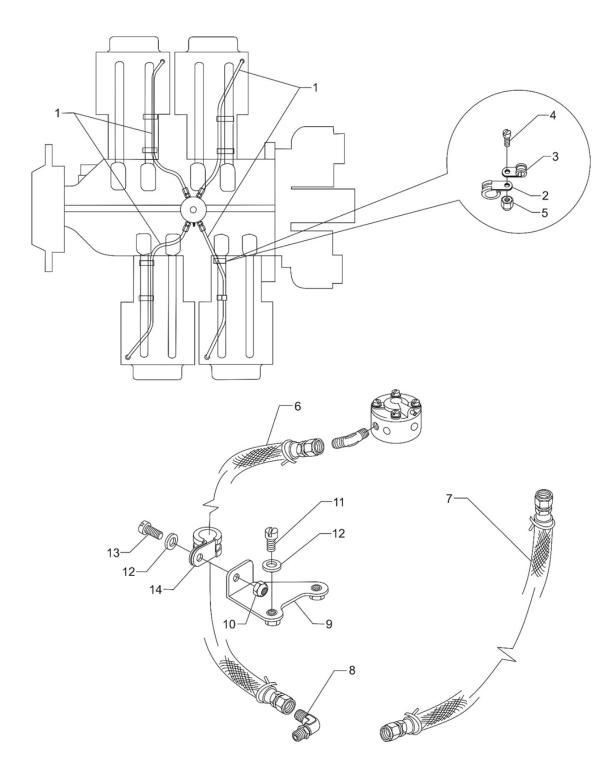


Figure 22
Fuel Lines, Fuel Hoses and Attaching Parts



### **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		07A28507	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-16266-10-63	CLAMP	1



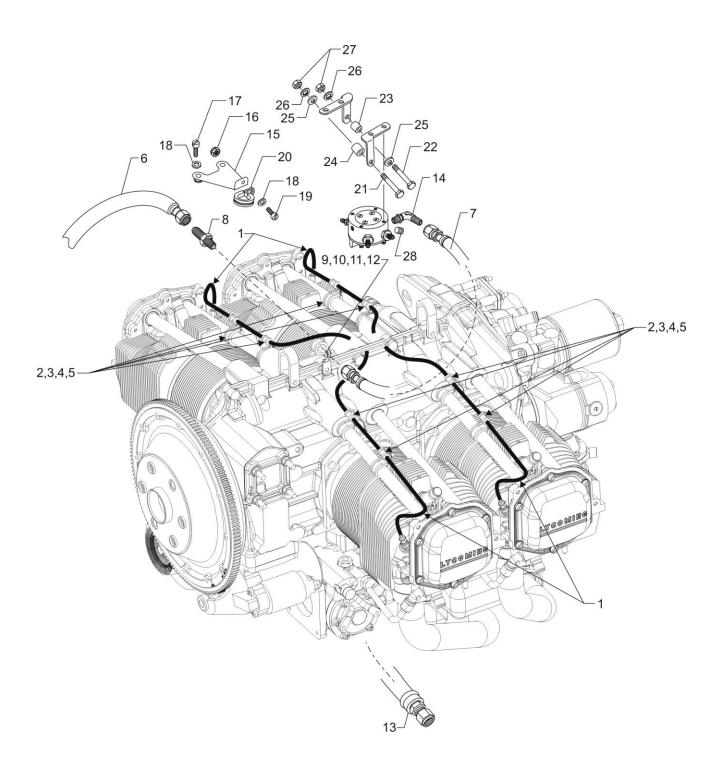


Figure 23
Fuel Lines, Fuel Hoses and Attaching Parts (Inverted Manifold)



#### **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		07A28507	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-16266-10-63	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



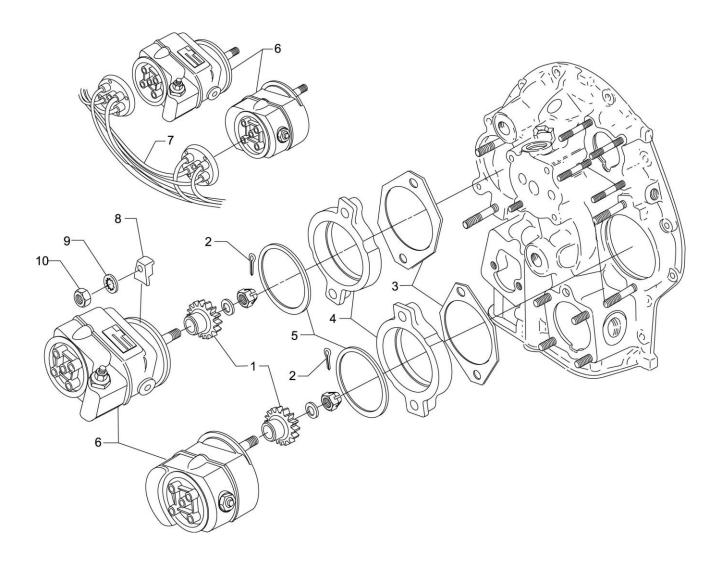


Figure 24
Magnetos, Magneto Drives, Harnesses and Spark Plugs



#### **Distribution**

#### 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		MS9245-44	COTTER PIN, 3/32 diameter x 5/8 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
	*	66GHC20SANN	MAGNETO, (ES4371)	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
	**	76734	ZIP STRAP	4
	**	72815	BRACKET, Support clamp, 90°	1
	**	71824	CLAMP, Rubber dip, Two wire	3
	**	LW-16266-25-25	CLAMP, One wire	2

<sup>\*</sup> Refer to the latest revision of Service Instruction No. 1443 for a listing of approved alternate ignition systems.

V Vendor Prime Manufacturer part

<sup>\*\*</sup> These parts are shipped loose.



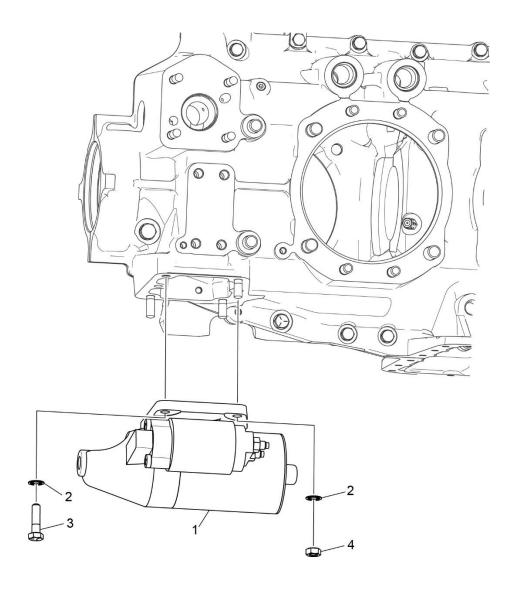


Figure 26
Starter Motor and Attaching Parts



### Cranking

### FIGURE 26 - STARTER MOTOR AND ATTACHING PARTS

Figure Item	Code	Part Number	Description	Units per Assembly
1	V	31A22104	STARTER, Sky-Tec, V 149-12LS	1
	V	31B22105	STARTER, Sky-Tec, <b>V</b> 149-24LS	1
	V	31B26554	STARTER, Sky-Tec, <b>V</b> 149NL/EC	1
2		STD-475	WASHER, 5/16 lock, internal teeth	4
3		LW-31-0.94	BOLT, 5/16-18 x 15/16 long, hex. head	1
4		STD-1410	NUT, 5/16-18 plain	3

V Vendor Prime Manufacturer part

**NOTE:** See latest revision of Lycoming Service Instruction No. 1154 for complete listing of

FAA approved starters, generators, alternators, regulators and relays.



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### **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
06B26669	GASKET, Rocker box cover (Silicone)	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
14D23912	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
14D23912	PISTON	1
74241	RING, Piston, compression	2
14H29884	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
06B26669	GASKET, Rocker box cover (Silicone)	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



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01K28983	BUSHING	17
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06A19956	OIL SEAL	39
06A23493	SEAL	21
06B23862	GASKET	41
06B26669	GASKET	25
06E19769-0.63	GASKET	41
06E19769-1.00	GASKET	31
06E19769-1.25	GASKET	9
07A19474	BRACKET	3
07A21443	BRACKET	1
07A22995	BRACKET	43
07A22996	BRACKET	43
07A23031	BRACKET	43
07A23032	BRACKET	43
07A28507	BRACKET ASSY	45
07A28507	BRACKET ASSY	47
07F23268	STRUT	3
07F29604	LINK	1
1028-B	BALL	9
1102	PLUG	7
1102	PLUG	19
1102	PLUG	33
1102	PLUG	43
1102	PLUG	47
1182-E7	SPARK PLUG	23
13B47121	CRANKSHAFT	11
13S19646	GEAR	11
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14H29884	RING	17
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15B21319	SOCKET	21
15B26066	PLUNGER ASSY	21
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15F28835-29	ROD ASSEMBLY	23
15F28835-30	ROD ASSEMBLY	23
15F28835-31	ROD ASSEMBLY	23
15F28835-32	ROD ASSEMBLY	23
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15F28835-34	ROD ASSEMBLY	23
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15G23461	SHROUD TUBE	21
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16A30080-01	CYLINDER ASSY	19
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17A23938	VALVE	21
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17C19386	CAP	21
17C21191	KEY	21
17D29055	SPRING	21
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18A26093	BEARING	9
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31CD-17	STUD	33
31M22045	SUPPORT ASSY	11
32B19549	ALTERNATOR	5
32C19553	ALTERNATOR	5
36B19484	PULLEY	5
37A19773-376	BELT	5
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56C23075	TUBE	29
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60096	GASKET	37
60430	COVER	39
60803	STRAP	15
61084	SPRING	9
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62224	GASKET	49
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66610	BUSHING	19
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66GC20SFNN	MAGNETO	49
66GHC20SANN	MAGNETO	49
66M21195	CLAMP	49
67P20408	HARNESS ASSY	49
67P20409	HARNESS ASSY	49
68315	GASKET	39
68484	TUBE	11
68668	SPRING	9
68759	TUBE ASSEMBLY	25
68760	TUBE ASSEMBLY	25
68761	TUBE ASSEMBLY	25
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74637	BUSHING	23
74655	SPACER	47
74887	SPACER	23
74996	GEAR ASSEMBLY	13
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75154	STUD	7
75339	BAFFLE ASSY	25
75380	LINK	3
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75657-S	BUSHING	11
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LRT23381	BODY ASSEMBLY	9
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LW-12798-4S370	HOSE ASSEMBLY	47
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LW-13323	SEAT	21
LW-13353	GASKET	31
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LW-13389	BAFFLE ASSY	25
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LW-25-2.31         BOLT         47           LW-25S1.50         BOLT         15           LW-31-0.94         BOLT         1           LW-31-0.94         BOLT         3           LW-31-0.94         BOLT         51           LW-31H0.75         BOLT         3           LW-31H0.88         BOLT         1           LW-31H0.88         BOLT         1           LW-31H1.06         BOLT         1           MS20822-4         ELBOW         43           MS20823-6D         ELBOW         19           MS20823-8         ELBOW         41           MS35335-33         WASHER         25           MS35489-20X         GROMMET         25           MS9245-44         COTTER PIN         49           NAS1149F0632P         WASHER         15           STD-8         WASHER         15           STD-8         WASHER         31           STD-8         WASHER         35           STD-8         WASHER         35           STD-8         WASHER         35           STD-8         WASHER         37           STD-8         WASHER         37 <tr< th=""><th>PART NO.</th><th>PART NAME</th><th>PAGE NO.</th></tr<>	PART NO.	PART NAME	PAGE NO.
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LW-31-0.94         BOLT         51           LW-31-0.94         BOLT         51           LW-31H0.75         BOLT         3           LW-31H0.88         BOLT         1           LW-31H1.06         BOLT         1           MS20822-4         ELBOW         43           MS20823-6D         ELBOW         49           MS20823-8         ELBOW         41           MS35335-33         WASHER         25           MS35489-20X         GROMMET         25           MS9245-44         COTTER PIN         49           NAS1149F0632P         WASHER         15           STD-8         WASHER         15           STD-8         WASHER         31           STD-8         WASHER         35           STD-8         WASHER         35           STD-8         WASHER         37           STD-8         WASHER         31           STD-8         WASHER         35           STD-8         WASHER         37           STD-33         WASHER         15           STD-33         WASHER         15           STD-35         WASHER         3	LW-25S1.50	BOLT	15
LW-31-0.94         BOLT         3           LW-31H0.75         BOLT         1           LW-31H0.88         BOLT         1           LW-31H1.06         BOLT         1           MS20822-4         ELBOW         43           MS20823-6D         ELBOW         49           MS20823-8         ELBOW         41           MS35335-33         WASHER         25           MS35489-20X         GROMMET         25           MS9245-44         COTTER PIN         49           NAS1149F0632P         WASHER         15           STD-8         WASHER         15           STD-8         WASHER         31           STD-8         WASHER         35           STD-8         WASHER         35           STD-8         WASHER         35           STD-8         WASHER         35           STD-8         WASHER         31           STD-8         WASHER         35           STD-8         WASHER         35           STD-33         WASHER         15           STD-33         WASHER         15           STD-35         WASHER         3           <	LW-31-0.94	BOLT	1
LW-31H0.75         BOLT         1           LW-31H0.88         BOLT         1           LW-31H0.88         BOLT         13           LW-31H1.06         BOLT         1           MS20822-4         ELBOW         43           MS20823-6D         ELBOW         19           MS20823-8         ELBOW         41           MS35335-33         WASHER         25           MS35489-20X         GROMMET         25           MS9245-44         COTTER PIN         49           NAS1149F0632P         WASHER         15           STD-8         WASHER         15           STD-8         WASHER         31           STD-8         WASHER         35           STD-8         WASHER         35           STD-8         WASHER         37           STD-8         WASHER         47           STD-8         WASHER         47           STD-8         WASHER         47           STD-33         WASHER         15           STD-33         WASHER         1           STD-35         WASHER         1           STD-35         WASHER         33	LW-31-0.94	BOLT	3
LW-31H0.88         BOLT         1           LW-31H0.88         BOLT         13           LW-31H1.06         BOLT         1           MS20822-4         ELBOW         43           MS20823-6D         ELBOW         19           MS20823-8         ELBOW         41           MS35335-33         WASHER         25           MS35489-20X         GROMMET         25           MS9245-44         COTTER PIN         49           NAS1149F0632P         WASHER         15           STD-8         WASHER         15           STD-8         WASHER         31           STD-8         WASHER         31           STD-8         WASHER         35           STD-8         WASHER         39           STD-8         WASHER         47           STD-8         WASHER         47           STD-8         WASHER         47           STD-33         WASHER         15           STD-33         WASHER         15           STD-35         WASHER         1           STD-35         WASHER         35           STD-35         WASHER         35	LW-31-0.94	BOLT	51
LW-31H0.88         BOLT         13           LW-31H1.06         BOLT         1           MS20822-4         ELBOW         43           MS20823-6D         ELBOW         19           MS20823-8         ELBOW         41           MS35335-33         WASHER         25           MS35489-20X         GROMMET         25           MS9245-44         COTTER PIN         49           NAS1149F0632P         WASHER         15           STD-8         WASHER         15           STD-8         WASHER         31           STD-8         WASHER         31           STD-8         WASHER         35           STD-8         WASHER         39           STD-8         WASHER         41           STD-8         WASHER         47           STD-8         WASHER         15           STD-33         WASHER         15           STD-33         WASHER         15           STD-35         WASHER         1           STD-35         WASHER         30           STD-35         WASHER         35           STD-35         WASHER         35           <	LW-31H0.75	BOLT	3
LW-31H1.06         BOLT         1           MS20822-4         ELBOW         43           MS20823-6D         ELBOW         19           MS20823-8         ELBOW         41           MS35335-33         WASHER         25           MS35489-20X         GROMMET         25           MS9245-44         COTTER PIN         49           NAS1149F0632P         WASHER         15           STD-8         WASHER         15           STD-8         WASHER         27           STD-8         WASHER         31           STD-8         WASHER         35           STD-8         WASHER         39           STD-8         WASHER         47           STD-8         WASHER         47           STD-8         WASHER         47           STD-8         WASHER         15           STD-33         WASHER         15           STD-33         WASHER         1           STD-35         WASHER         3           STD-35         WASHER         35           STD-35         WASHER         35           STD-35         WASHER         39           S	LW-31H0.88	BOLT	1
MS20822-4         ELBOW         43           MS20823-6D         ELBOW         19           MS20823-8         ELBOW         41           MS35335-33         WASHER         25           MS35489-20X         GROMMET         25           MS9245-44         COTTER PIN         49           NAS1149F0632P         WASHER         15           STD-8         WASHER         15           STD-8         WASHER         27           STD-8         WASHER         31           STD-8         WASHER         35           STD-8         WASHER         39           STD-8         WASHER         47           STD-8         WASHER         47           STD-8         WASHER         47           STD-33         WASHER         15           STD-33         WASHER         1           STD-35         WASHER         1           STD-35         WASHER         33           STD-35         WASHER         35           STD-35         WASHER         39           STD-35         WASHER         39           STD-35         WASHER         39           S	LW-31H0.88	BOLT	13
MS20823-6D         ELBOW         19           MS20823-8         ELBOW         41           MS35335-33         WASHER         25           MS35489-20X         GROMMET         25           MS9245-44         COTTER PIN         49           NAS1149F0632P         WASHER         15           STD-8         WASHER         27           STD-8         WASHER         31           STD-8         WASHER         35           STD-8         WASHER         39           STD-8         WASHER         41           STD-8         WASHER         47           STD-8         WASHER         47           STD-8         WASHER         47           STD-33         WASHER         15           STD-33         WASHER         1           STD-35         WASHER         1           STD-35         WASHER         33           STD-35         WASHER         35           STD-35         WASHER         39           STD-35         WASHER         39           STD-35         WASHER         39           STD-35         WASHER         39           STD	LW-31H1.06	BOLT	1
MS20823-8         ELBOW         41           MS35335-33         WASHER         25           MS35489-20X         GROMMET         25           MS9245-44         COTTER PIN         49           NAS1149F0632P         WASHER         15           STD-8         WASHER         15           STD-8         WASHER         27           STD-8         WASHER         31           STD-8         WASHER         35           STD-8         WASHER         39           STD-8         WASHER         41           STD-8         WASHER         47           STD-8         WASHER         47           STD-33         WASHER         15           STD-33         WASHER         15           STD-35         WASHER         3           STD-35         WASHER         19           STD-35         WASHER         35           STD-35         WASHER         39           STD-35         WASHER         39           STD-35         WASHER         39           STD-35         WASHER         39           STD-35         WASHER         43           STD-9	MS20822-4	ELBOW	43
MS35335-33         WASHER         25           MS35489-20X         GROMMET         25           MS9245-44         COTTER PIN         49           NAS1149F0632P         WASHER         15           STD-8         WASHER         15           STD-8         WASHER         27           STD-8         WASHER         31           STD-8         WASHER         35           STD-8         WASHER         39           STD-8         WASHER         41           STD-8         WASHER         47           STD-8         WASHER         47           STD-33         WASHER         15           STD-33         WASHER         15           STD-35         WASHER         1           STD-35         WASHER         19           STD-35         WASHER         33           STD-35         WASHER         39           STD-35         WASHER         39           STD-35         WASHER         39           STD-35         WASHER         39           STD-35         WASHER         43           STD-91         PLUG         31           STD-160 </td <td>MS20823-6D</td> <td>ELBOW</td> <td>19</td>	MS20823-6D	ELBOW	19
MS35489-20X         GROMMET         25           MS9245-44         COTTER PIN         49           NAS1149F0632P         WASHER         15           STD-8         WASHER         27           STD-8         WASHER         31           STD-8         WASHER         35           STD-8         WASHER         39           STD-8         WASHER         41           STD-8         WASHER         47           STD-8         WASHER         47           STD-33         WASHER         15           STD-33         WASHER         15           STD-35         WASHER         1           STD-35         WASHER         3           STD-35         WASHER         33           STD-35         WASHER         35           STD-35         WASHER         39           STD-35         WASHER         39           STD-35         WASHER         43           STD-36         WASHER         43           STD-91         PLUG         31           STD-148         NIPPLE         43           STD-160         WASHER         15           STD-160 <td>MS20823-8</td> <td>ELBOW</td> <td>41</td>	MS20823-8	ELBOW	41
MS9245-44         COTTER PIN         49           NAS1149F0632P         WASHER         15           STD-8         WASHER         27           STD-8         WASHER         31           STD-8         WASHER         35           STD-8         WASHER         39           STD-8         WASHER         41           STD-8         WASHER         47           STD-8         WASHER         47           STD-33         WASHER         15           STD-33         WASHER         15           STD-35         WASHER         3           STD-35         WASHER         19           STD-35         WASHER         33           STD-35         WASHER         35           STD-35         WASHER         39           STD-35         WASHER         39           STD-35         WASHER         43           STD-82         SCREW         43           STD-148         NIPPLE         43           STD-160         WASHER         15           STD-160         WASHER         27	MS35335-33	WASHER	25
NAS1149F0632P         WASHER         15           STD-8         WASHER         15           STD-8         WASHER         27           STD-8         WASHER         31           STD-8         WASHER         35           STD-8         WASHER         39           STD-8         WASHER         41           STD-8         WASHER         47           STD-8         WASHER         15           STD-33         WASHER         15           STD-33         WASHER         1           STD-35         WASHER         3           STD-35         WASHER         19           STD-35         WASHER         33           STD-35         WASHER         35           STD-35         WASHER         39           STD-35         WASHER         39           STD-35         WASHER         39           STD-35         WASHER         39           STD-482         SCREW         43           STD-91         PLUG         31           STD-148         NIPPLE         43           STD-160         WASHER         15           STD-160	MS35489-20X	GROMMET	25
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