

(L)TO-360-E1A6D Illustrated Parts Catalog

June 2025

PC-(L)TO-360-E1A6D (Supersedes PC-124)



652 Oliver Street
Williamsport, PA 17701

(L)TO-360-E1A6D Illustrated Parts Catalog

Lycoming Part Number: PC-(L)TO-360-E1A6D (Supersedes PC-124)

For additional information:

Mailing address:

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

Phone:

Product Support: U.S. and Canada toll free: +1-877-839-7878
International Customers: +1-570-323-7222

Lycoming Product Support regular business hours are:

Monday through Thursday from 8:00 A.M. through 10:00 P.M. Eastern Time (-5 GMT)
Friday from 8:00 A.M. through 6:00 P.M. Eastern Time (-5 GMT)

or Email: Technicalsupport@lycoming.com

Visit us online at:

www.lycoming.com



©20** Lycoming. All Rights Reserved.

Lycoming and "Powered by Lycoming" are trademarks or registered trademarks of Lycoming.
Lycoming Engines, a division of AVCO Corporation.

All brand and product names referenced in this publication are trademarks or registered trademarks of their respective companies.



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
--	Initial Release of PC-(L)TO-360-E1A6D (Supersedes PC-124)	June 2025

This page intentionally left blank.

TABLE OF CONTENTS

<u>Subject</u>	<u>Chapter - Section</u>	<u>Page</u>
Frontal		
Record of Revisions		i
Table of Contents		iii
Introduction		v
Abbreviations and Acronyms		ix
Oversize and Undersize Part Listing		xi
Electrical Power	24-00	
DC Generation	24-30	
1. Alternator Attaching Parts		0-1
Reciprocating Engine	72-00	
Front Section	72-10	
1. Propeller Governor Drive Assembly		2-3
Power Section	72-20	
1. Crankcase Assembly		4-5
2. Crankcase Related Parts		6-7
3. Crankshaft Assembly and Related Parts		8-9
4. Camshaft and Tachometer Drive		10-11
5. Crankcase Attaching Parts		12-13
Cylinder Section	72-30	
1. Connecting Rods, Pistons and Ring Assemblies		14-15
2. Cylinder Assembly		16-17
3. Cylinder Related Parts		18-19
4. Valve Assembly and Related Parts		20-21
5. Cylinder Head Drain Tubes and Intercylinder Cooling Baffles		22-23
6. Intake Pipes Assembly and Carburetor		24-25
Turbocharger	72-40	
1. Turbocharger and Attaching Parts		26-29
Lubrication System	72-50	
1. Oil Sump Assembly and Oil Suction Screen		30-31
2. Oil Filter and Fuel Pump		32-33
3. Oil Pump and Vacuum Pump Drive		34-35

<u>Subject</u>	<u>Chapter - Section</u>	<u>Page</u>
Ignition Distribution System	74-00	
Distribution	74-20	
1. Magnetos, Magneto Drive, and Spark Plugs		36-37
Starting	78-00	
Exhaust System	78-00	
1. Exhaust and Air Inlet Attaching Parts		38-39
Starting	80-00	
Cranking	80-10	
1. Starter Attaching Parts		40-42
Back Section		
Service Kit Section		43-46
Numerical Index		47-52

INTRODUCTION



⚠ CAUTION:

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

PART NUMBERS AND DESCRIPTIONS IN THIS PARTS CATALOG ARE NOT
AUTHORITATIVE AND CAN BE SUPERSEDED BY FAA APPROVED SERVICE
BULLETINS AND SERVICE INSTRUCTIONS.

Purpose of this Catalog

This Illustrated Parts Catalog (IPC) contains a complete list of spare parts for the Lycoming (L)TO-360-E1A6D wide cylinder flange model engine.

How to Use this Catalog

This catalog is based on the Air Transport Association (ATA) Spec 100 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 format specifies the subject matter for each chapter-section. According to the ATA Standards, the following chapters apply to the (L)TO-360-E1A6D Illustrated Parts Catalog:

24 (Electrical Power), 72 (Reciprocating Engine), 73 (Engine and Fuel Control), 74 (Ignition), and 80 (Starting).

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 below their associated parts grouping or assembly. 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.

Lockwire, Safety Cable

To maintain as assembled torque integrity Lockwire used is to be a one continuous strand twisted to keep tension on various internal fasteners ensuring a minimum torque is retained. Lockwire installed correctly will pull in the direction of fastener assembled tension. Lycoming Engines does not recommend the use of safety cable for retention of internal engine parts or assemblies. Refer to the latest revision of **Service Instruction No. 1566**.

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.

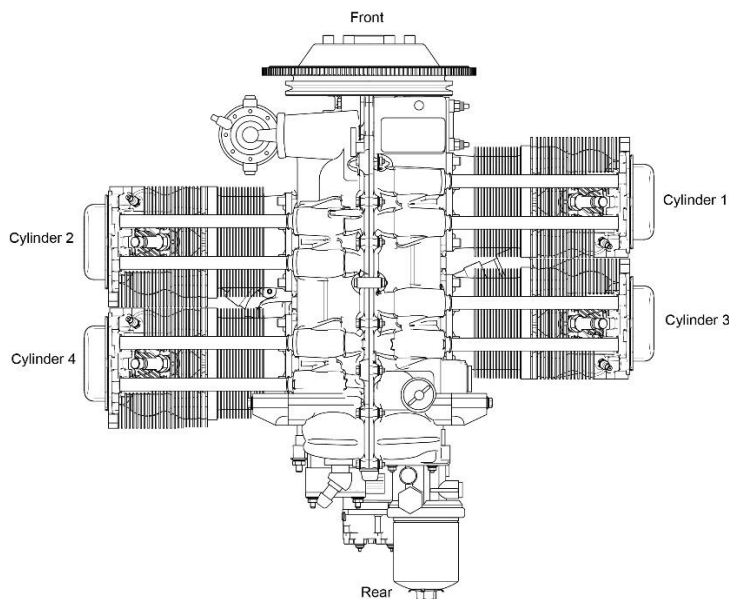
Any reference in this document to the suppliers/part manufacturer’s product, by name, trademark, part number or other description is solely for the purpose of identification and does not indicate or infer that Lycoming accepts responsibility for quality control and/or airworthiness of parts, which do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

To order parts from this parts catalog, contact an Authorized Lycoming Distributor with the part number(s), nomenclature, and quantity along with the model and serial number of your engine. Authorized Lycoming Distributors will have up-to-date part number supersedure, pricing, and availability information on parts listed in this parts catalog.

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

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

NOTE:

Lycoming recommends that owners of this manual sign up for email notification on the Technical Publications page of our website <https://www.lycoming.com/contact/knowledge-base/publications>. By submitting your email address, you will receive notification whenever Lycoming publishes a new or revised technical publication, including any revisions to this parts catalog.

©20** by Lycoming. "All Rights Reserved." All Lycoming publications are to be considered copyrighted and may not be reproduced without permission of the company.

This page intentionally left blank.

Abbreviations and Acronyms

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

This page intentionally left blank.

OVERSIZE AND UNDERSIZE PARTS LISTING

PART NO.	DESCRIPTION	OVERSIZE (IN.)				OVERSIZE (IN.)		
		P05	P10	P20	P30	M03	M06	M10
66145	DOWEL, Oil pump body		X	X				
69260	INSERT, Spark plug 18-1. 5mm, long reach		X					
69796	DOWEL, Crankshaft bearing		X					
72057	SEAT, Intake valve	X	X	X	X			
72058	SEAT, Exhaust valve	X	X	X	X			
79023-S	BUSHING, Propeller flange	X	X	X				
72155-S	BUSHING, Propeller flange	X	X	X				
72657-S	BUSHING, Propeller flange	X	X	X				
72656-S	BUSHING, Propeller flange	X	X	X				
76943	GUIDE, Valve intake		X	X	X			
16R22126	GUIDE, Valve exhaust		X	X	X			
18M23887	BEARING, Connecting rod					X	X	X
18D26101	BEARING, Crankshaft					X	X	X
18A26094	BEARING, Crankshaft					X	X	X

Studs available in P03, P07 and P12.

NOTE

When ordering oversize and undersize parts, be sure to specify the required oversize and undersize dimension with the proper part number. For example, to order bearing P/N 18A26093 in .003 undersize, order P/N 18A26093-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.

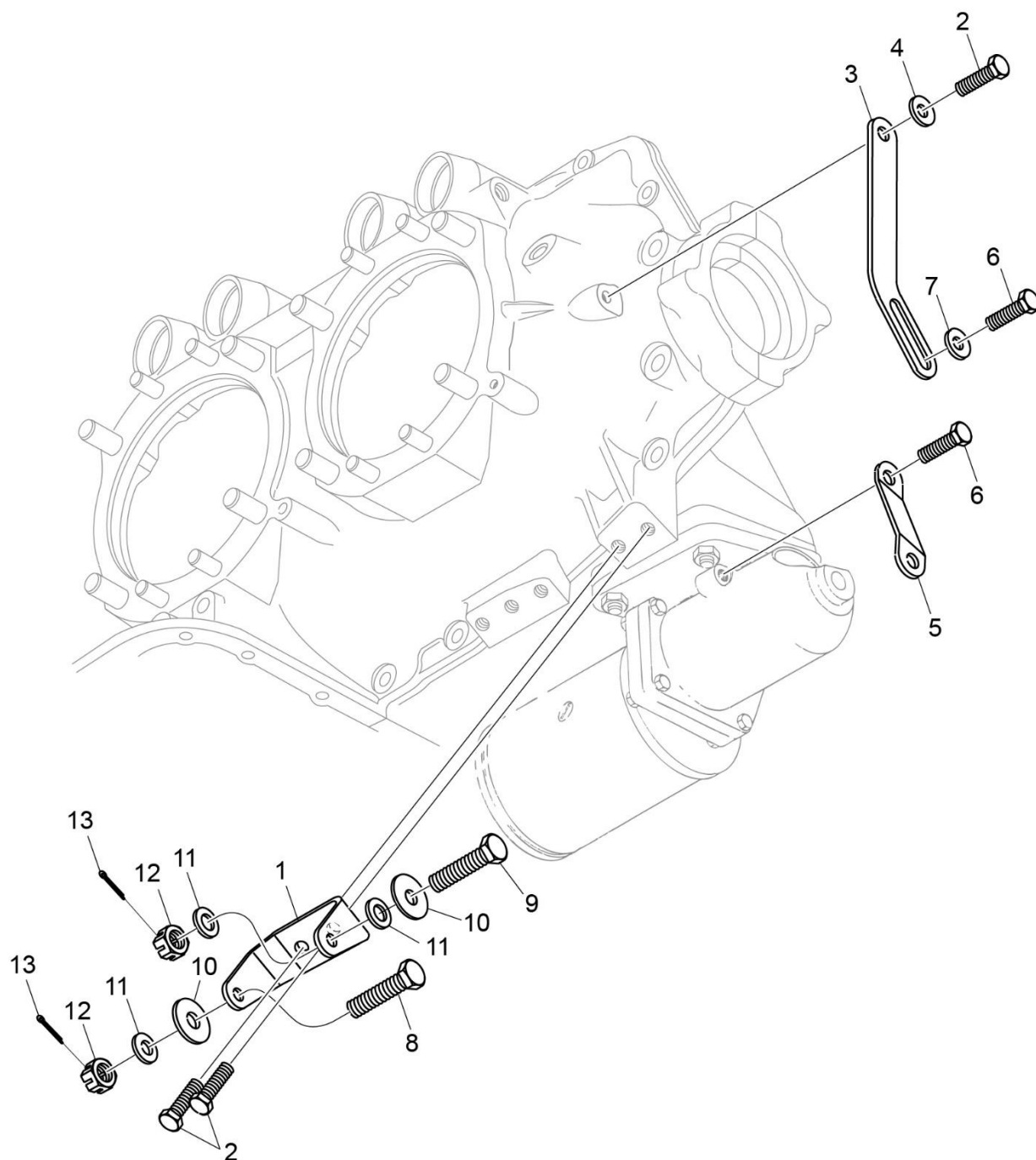


Figure 1
Alternator Attaching Parts

DC GENERATION**Figure 1 - Alternator Attaching Parts**

Figure Item	Code	Part Number	Description	Units per Assembly
1		LW-15267	BRACKET, Alternator	1
2		LW-31H0.88	BOLT, 5/16-18 x 7/8 long, hx. dr.	3
3		LW-15266	LINK, Alternator adjusting	1
4		STD-35	WASHER, 5/16 plain	1
5		LW-16390	STRUT, Alternator support	1
6		LW-31H0.75	BOLT, 5/16-18 x 3/4 long, hx. dr.	2
7		STD-1727	WASHER, plain, 3/4 OD x 5/16 ID x 1/8 thick	1
8		AN6-14	BOLT, 3/8-24 x 1-9/16 long, dr. end	1
9		AN6-13	BOLT, 3/8-24 x 1-29/64 long, dr. end	1
10		76534	SHIM, 1 -1/8 OD x 13/32 x .005 thick	3
11		STD-690	WASHER, 13/16 ID x 3/8 OD x 1/16	3
12		STD-872	NUT, 3/8-24 slotted	2
13		STD-713	COTTER PIN, 3/32 dia. x 3/4 long_	2

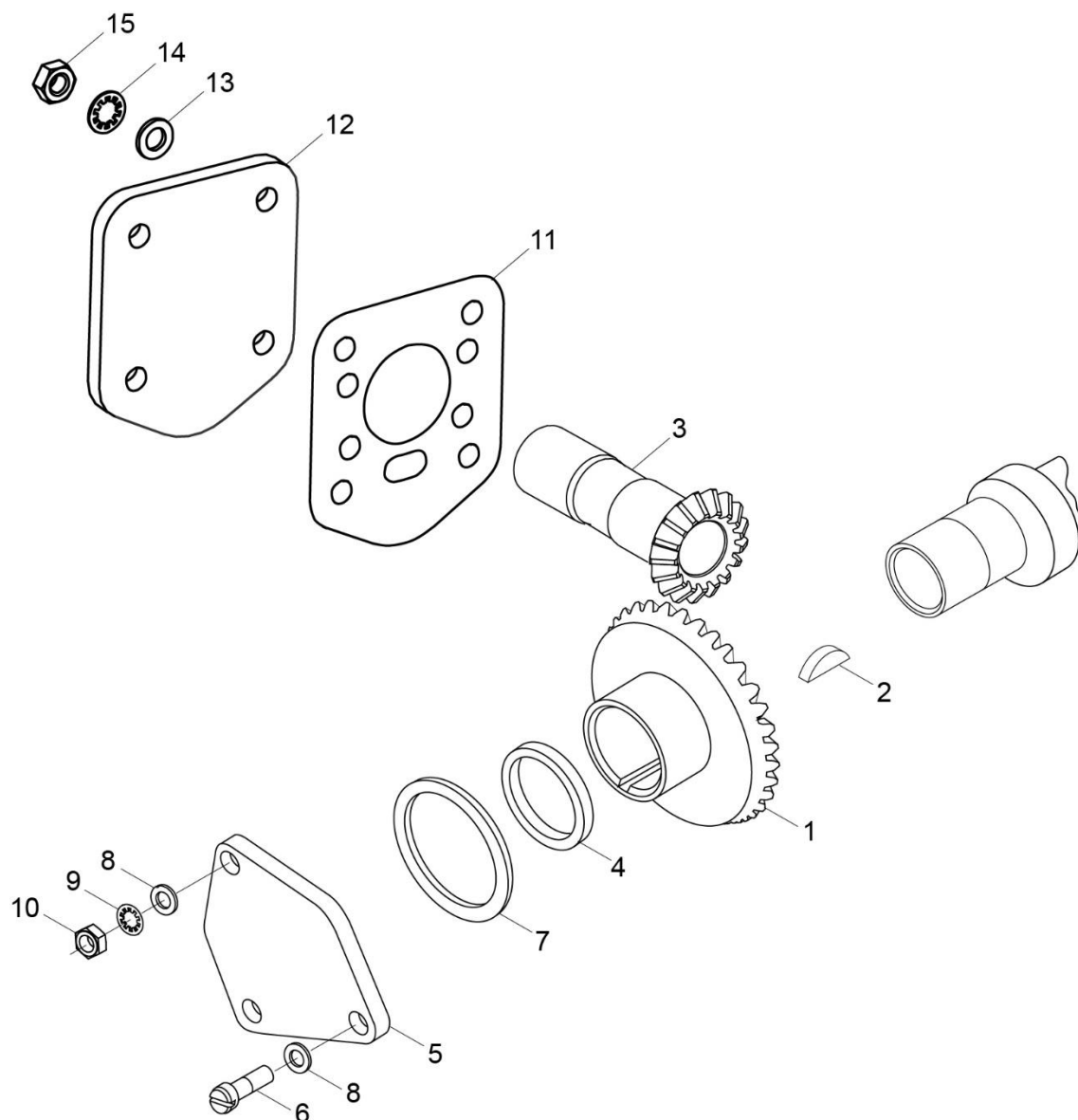


Figure 2
Propeller Governor Drive Assembly

FRONT SECTION**Figure 2 – Propeller Governor Drive Assembly**

Figure Item	Code	Part Number	Description	Units per Assembly
1		LW-15274	GEAR, Prop. Governor drive	1
2		STD-96	KEY, Woodruff, 3/4 die. x 3/16 thick	1
3		LW-15140	SHAFTGEAR, Prop. governor drive	1
4		LW-15141	WASHER, Thrust prop. governor drive	1
5		LW-15142	COVER, Prop. governor drive	1
6		STD-2081	SCREW, 1/4-20, self-locking	1
7		LW-15109	O-RING, 1-39/64 ID x 7 /64 die. sect.	1
8		STD-8	WASHER, 1 /4 plain	3
9		STD-160	WASHER, 1/4 internal lock	2
10		STD-1411	NUT, 1/4-20 plain	2
11		72053	GASKET, Governor (LTO Engines)	1
12		72378	COVER, Governor drive (LTO Engines)	1
13		STD-35	WASHER, 5/16 plain (LTO Engines)	4
14		STD-475	WASHER, 5/16 internal lock (LTO Engines)	4
15		STD-1410	NUT, 5/16-18 plain (LTO Engines)	4

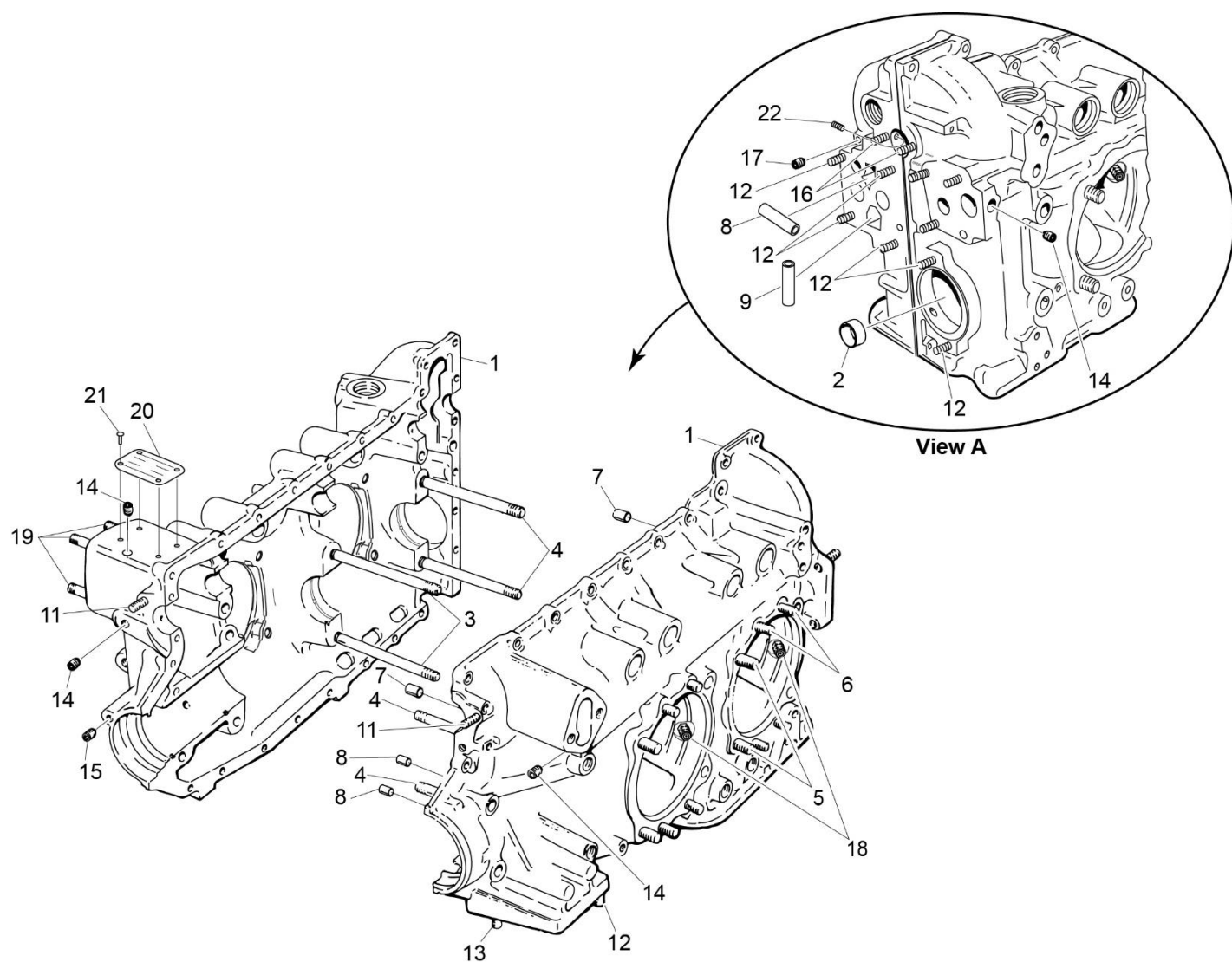


Figure 3
Crankcase Assembly

POWER SECTION**Figure 3 - Crankcase Assembly**

Figure Item	Code	Part Number	Description	Units per Assembly
1		LW-18464	CRANKCASE ASSEMBLY (TO Engines)	1
		LW-18465	CRANKCASE ASSEMBLY (LTO Engines)	1
2		LW-15045	BUSHING, Magneto drive	1
3		LW-15276	STUD, 1 /2-20 x 10-23/32 long	2
4		LW-15277	STUD, 1/2-13 x B-23/32 long	4
5		50-15	STUD, 1/2-20 x 1-7/8 long	8
6		38-13	STUD, 3/8-16 x 1-5/8 long	16
7		STD-557	DOWEL, 25/64 ID x 1 /2 OD x 11 /16 long, hollow	3
8		LW-15376	TUBE, Oil transfer (LTO Engines)	1
9		LW-15377	TUBE, Oil transfer (LTO Engines)	1
10		69796	DOWEL, Crankshaft bearing	2
11		25C-10	STUD, 1/4-20 x 1-1/4 long	3
12		31 C-12	STUD, 5/16-18 x 1-1/2 long	8
13		31C-13	STUD, 5/16-18 x 1-5/8 long	1
14		1102	PLUG, 1/8-27 NPT, Allen hd. (LTO Engines)	4
15		STD-1339	PLUG, 1 /16-27 NPT, Allen hd. (LTO Engines)	1
16		25C-9	STUD	2
17		1102	PLUG, 1/8-27 NPT, Allen hd. (LTO Engines)	1
18	*	73772	NOZZLE ASSY, Piston cooling	4
19		31C-16	STUD, 5/16-18 x 2.00 long	4
20		61548	PLATE, Name (LTO Engines)	1
		61548-Y8	PLATE, Name	1
21		STD-1901	DRIVE STUD, No. 4 x 3/16 long, rd. hd. (LTO Engines)	4
22		STD-394	DOWEL, 3/32 dia. x 11 /32 long	1

* Some crankcases not equipped for piston cooling nozzles

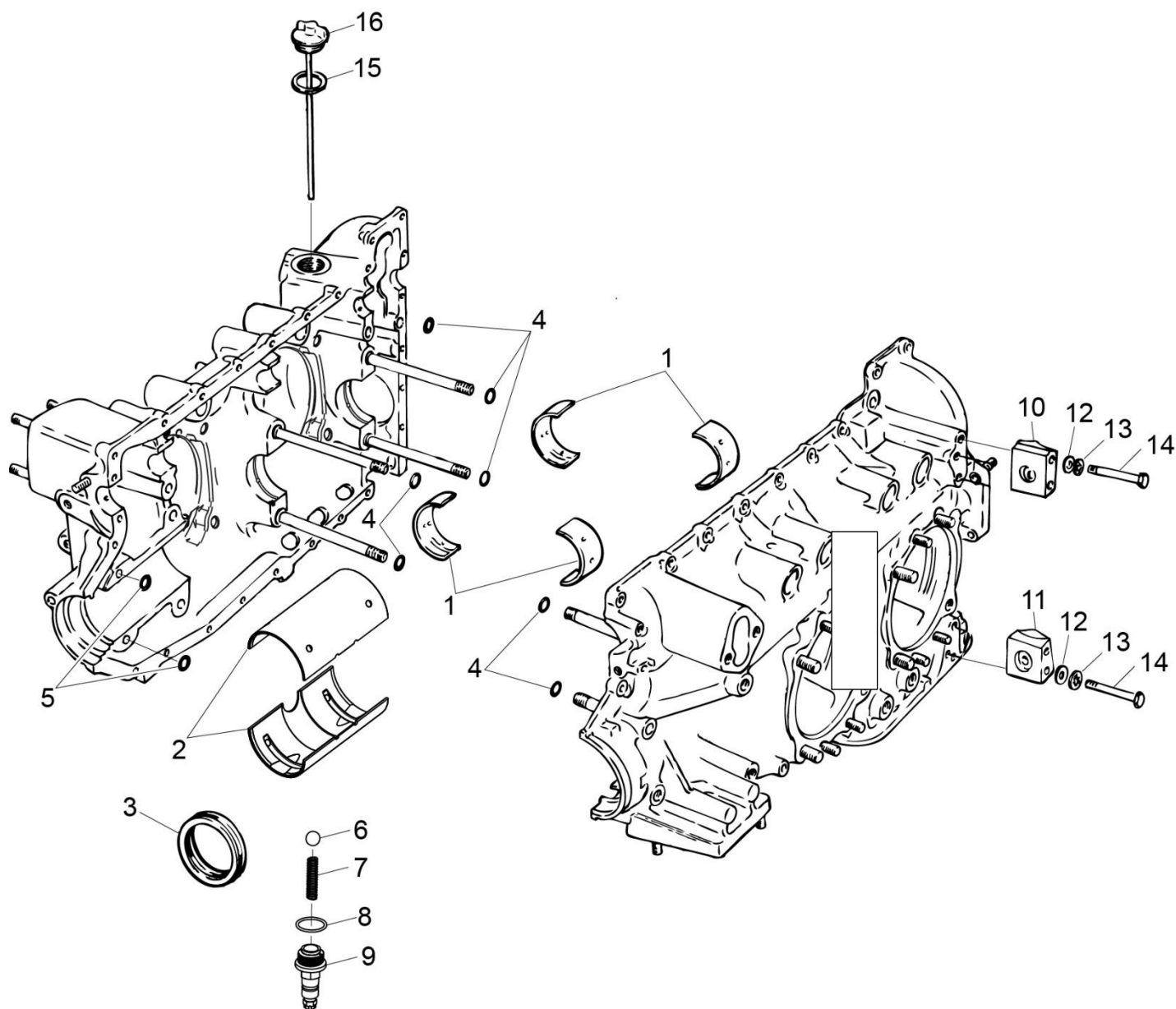


Figure 4
Crankcase Related Parts

POWER SECTION**Figure 4 - Crankcase Related Parts**

Figure Item	Code	Part Number	Description	Units per Assembly
1		18D26101	BEARING, Crankshaft	4
2		18A26094	BEARING, Crankshaft, front	2
3		LW-13792	SEAL, Crankshaft, oil	1
4		72075	RING, Oil seal, 3/8 ID x 7/64 section (6 thru studs & rear)	7
5		72091	RING, Oil seal, 3/8 ID x 7/60 section (front end)	2
6		1028-B	BALL, 11/16 dia.	1
7	*	61084	SPRING, Oil pressure relief valve	1
	*	LW-11713	SPRING, Oil pressure relief valve	1
	*	LW-18085	SPRING, Oil pressure relief valve	1
8		06E19769-1.25	GASKET, Annular, 1-1/4 ID	1
9		77808	VALVE ASSY., Oil pressure relief, adjustable	1
10		LW-15617	BRACKET, Engine mount, upper, right	1
		LW-16351	BRACKET, Engine mount, upper, left	1
11		LW-15618	BRACKET, Engine mount, lower, right	1
		LW-16350	BRACKET, Engine mount, lower, left	1
12		STD-2191	WASHER, 3/8 ID x 13/16 OD x 3/32	8
13		STD-678	WASHER, 3/8 internal lock	8
14		LW-38-2.75	BOLT, 3/8-16 x 2-3/4 long, hex. hd.	8
15		72220	GASKET, Oil level gage	1
16		LW-14785	GAGE ASSEMBLY, Oil level (TO Engines)	1
		LW-16783-1	GAGE ASSEMBLY, Oil level (LTO Engines)	1

* Select spring to give a minimum of three threads exposed on adjusting screw to allow field adjustment.
Reference latest revision of Lycoming Engines Table of Limits SSP-1776, Part I for spring identification.

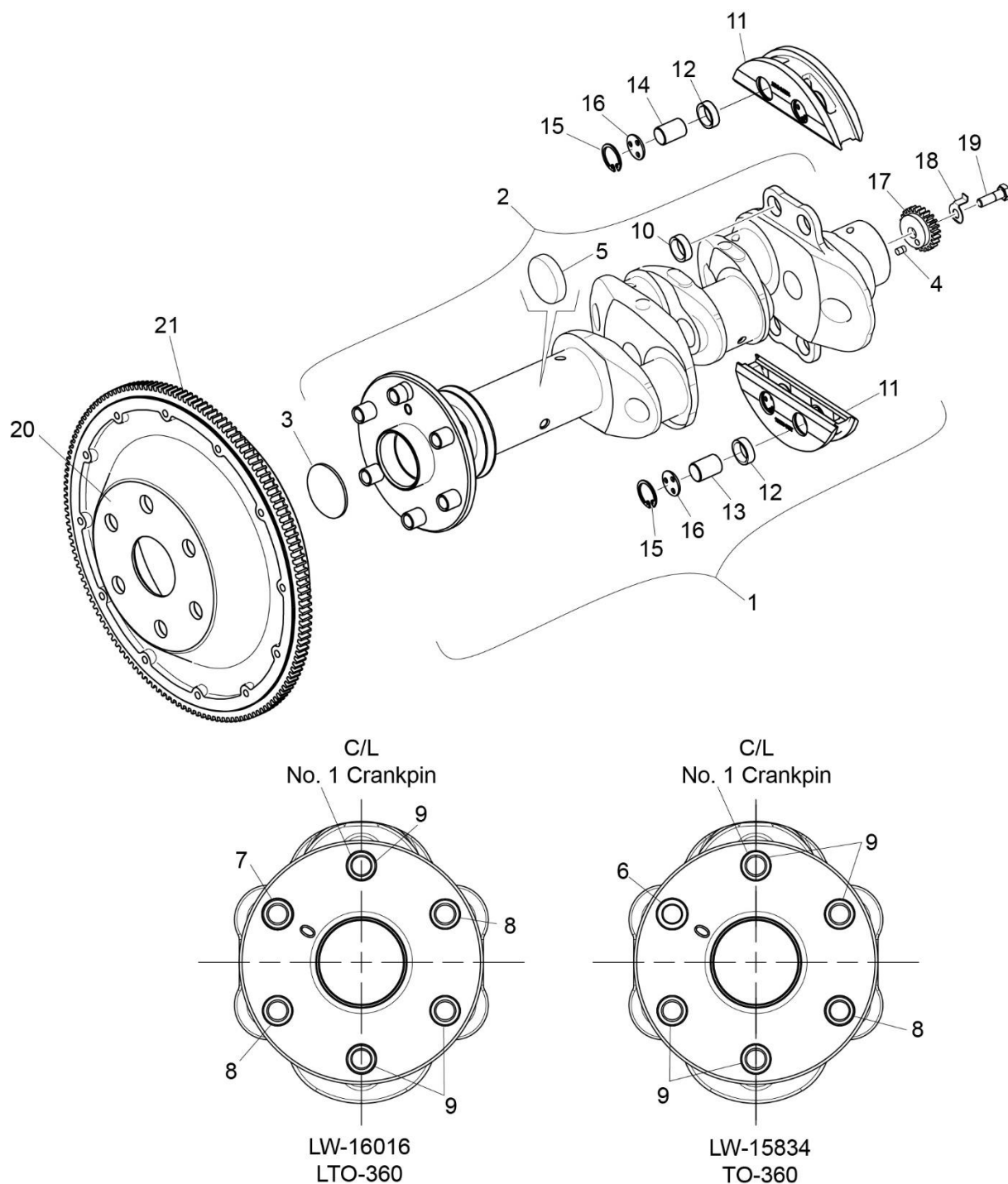


Figure 5 Crankshaft Assembly and Related Parts

POWER SECTION**Figure 5 - Crankshaft Assembly and Related Parts**

Figure Item	Code	Part Number	Description	Units per Assembly
1	*	13B47224	CRANKSHAFT & BUSHING ASSY.	1
	**	13B47227	CRANKSHAFT & BUSHING ASSY.	1
2	*	13B47205	CRANKSHAFT ASSEMBLY	1
	**	13B47208	CRANKSHAFT ASSEMBLY	1
3		STD-1211	PLUG, 2.00 dia. expansion	1
4		STD-2078	DOWEL, 3/8 OD x 1 /2 long	1
5		61510	PLUG, 1-3/4 OD	1
6	*	72657	BUSHING, Propeller flange, indexing	1
7	**	79024	BUSHING, Propeller flange, indexing, long	1
8		72155	BUSHING, Propeller flange, indexing, short	TO – 1 LTO – 2
9		72656	BUSHING, Propeller flange, long	TO – 4 LTO - 3
10		73810	BUSHING, Crankshaft, dynamic counterweight	4
11		72801	COUNTERWEIGHT ASSMEMBLY	2
12		71903	BUSHING, Dynamic counterweight	8
13		14W21696	ROLLER, Dynamic counterweight, - 8th order	2
14		72797	ROLLER, Dynamic counterweight, - 6.3 order	2
15		LW-14820	RING, Internal retaining	8
16		71907	WASHER, Dynamic counterweight	8
17		LW-14708	GEAR, Crankshaft	1
18		LW-10332	LOCKPLATE	1
19		STD-2250	BOLT, 1/2-20 x 1-3/32 long	1
20	*	LW-16471	SUPPORT ASSY., Starter ring gear. 1 2/ 14 pitch	1
	**	LW-11519	SUPPORT ASSY., Starter ring gear. 1 2/ 14 pitch	1
21	*	72566	GEAR. Starter ring, 12/14 pitch	1
	**	I.W-10551	GEAR, Starter ring, 12/14 pitch	1
* Used on TO-360-E1A6D engines. ** Used on LTO-360-E1A6D engines.				

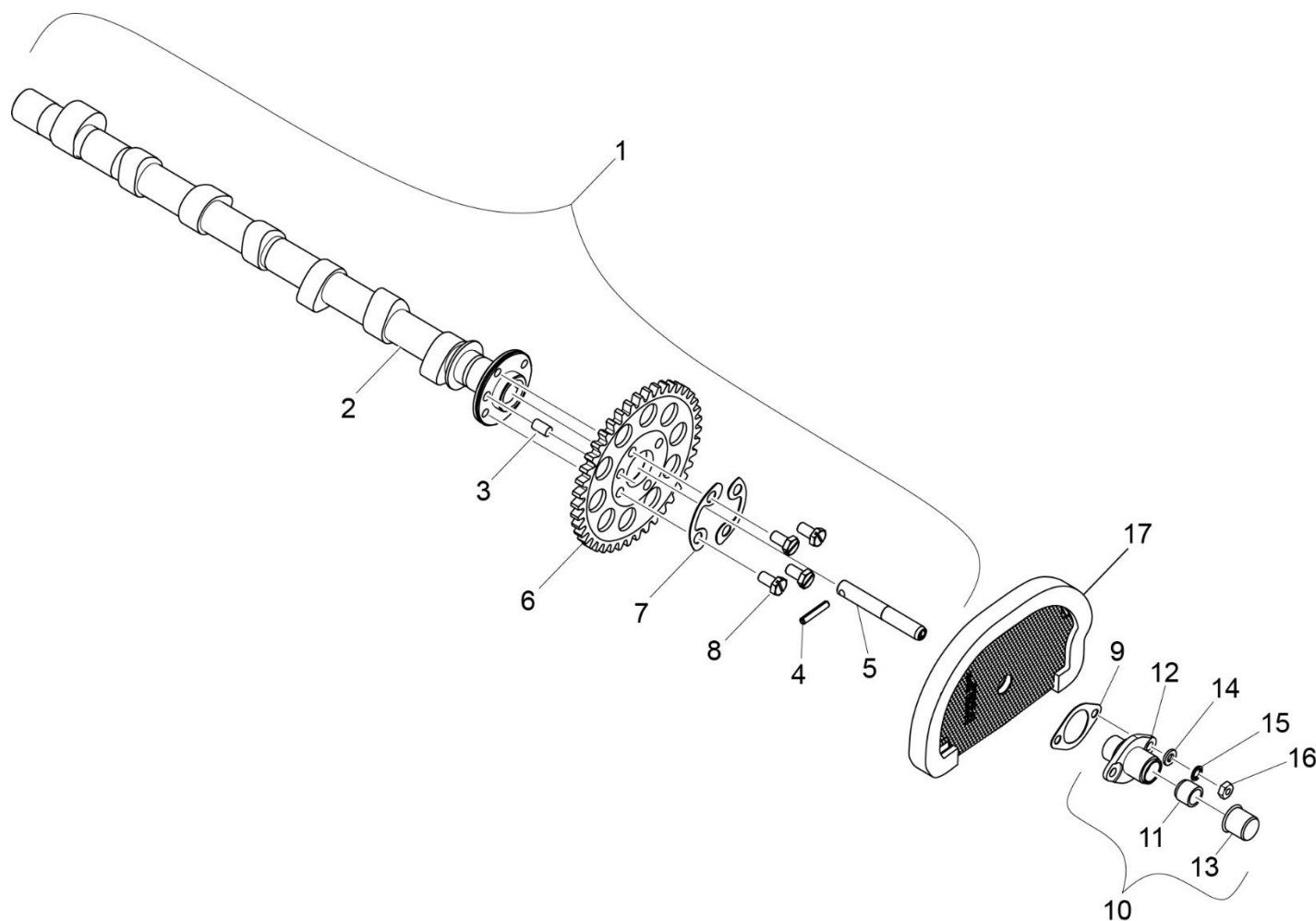


Figure 6
Camshaft and Tachometer Drive

POWER SECTION**Figure 6 - Camshaft and Tachometer Drive**

Figure Item	Code	Part Number	Description	Units per Assembly
1	*	LW-16508	CAMSHAFT, GEAR & TACHOMETER SHAFT ASSEMBLY	1
	**	LW-16514	CAMSHAFT, GEAR & TACHOMETER SHAFT ASSEMBLY	1
2	*	LW-16507	CAMSHAFT ASSEMBLY	1
	**	LW-16513	CAMSHAFT ASSEMBLY	1
3		STD-1066	DOWEL, Stepped, 5/16 & 1/4 dia. x1 3/32 long	1
4		LW-15032	SHAFT ASSEMBLY, Tachometer	1
5		STD-2169	ROLL PIN, 3/ 16 dia. x 1-1 /8 long	1
6		LW-15031	GEAR, Camshaft	1
7		72078	LOCKPLATE, 5/16 bolt x 1-21/64 spacing	2
8		STD-703	BOLT, 5/16-24 x 37/64 long, hex. hd.	4
9		LW-16573	GASKET, Tachometer adapter	1
10		LW-16575	TACH. ADAPTER & SEAL ASSY.	1
11		LW-14260	SEAL, Tachometer drive oil	1
12		LW-16574	ADAPTER, Tachometer	1
13		62732	CAP, Tachometer drive	1
14		STD-8	WASHER, 1 /4 plain	2
15		STD-160	WASHER, 1 /4 lock	2
16		STD-1411	NUT, 1/4-20	2
17		LW-15379	BAFFLE, Breather	1
* Used on O-360-A1H6 engines. ** Used on LO-360-A1H6 engines.				

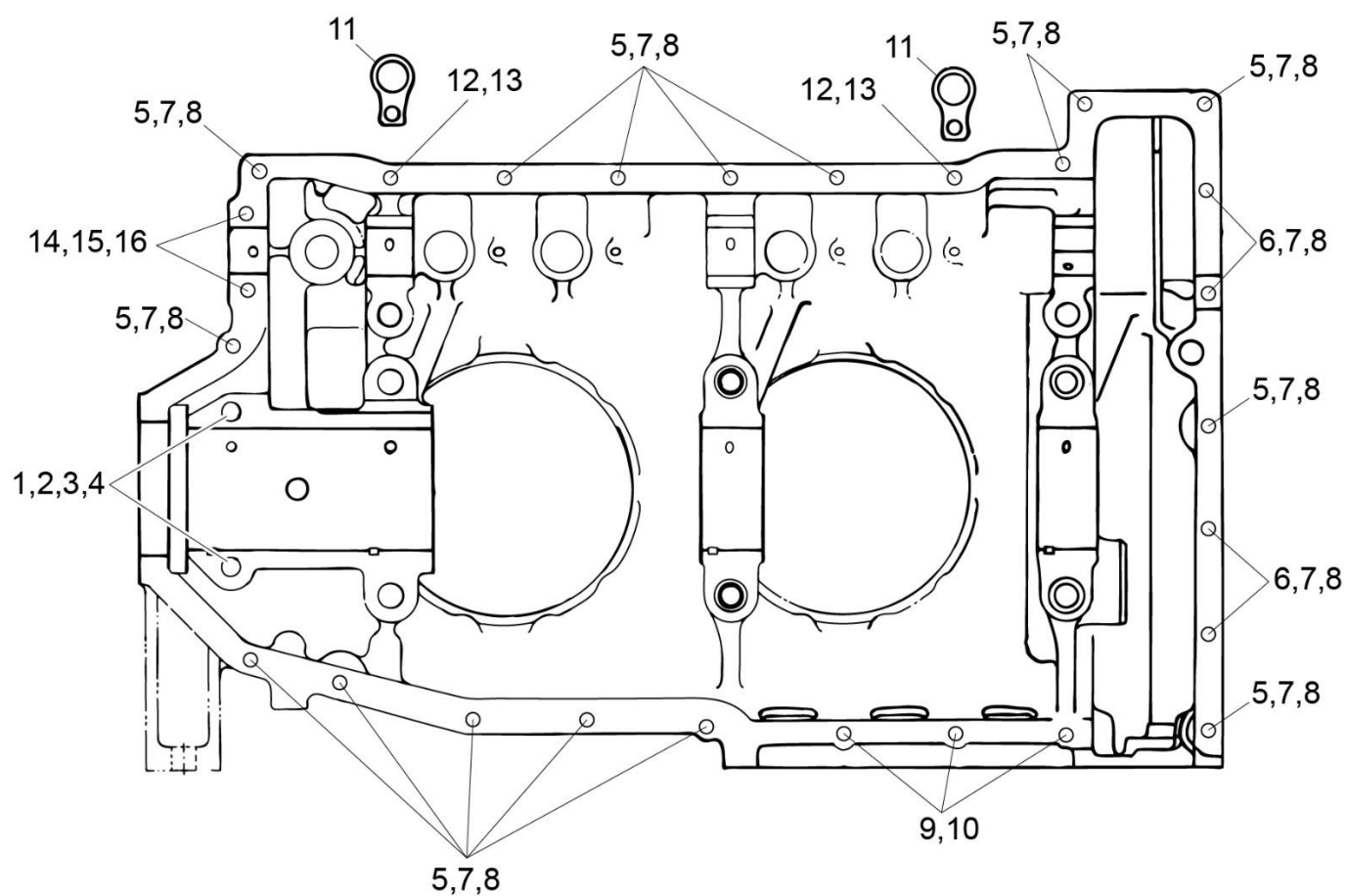


Figure 7
Crankcase Attaching Parts

POWER SECTION**Figure 7 - Crankcase Attaching Parts**

Figure Item	Code	Part Number	Description	Units per Assembly
1		AN6-36A	BOLT, 3/8-24 x 3-13/16 long, hex. hd.	2
2		STD-33	WASHER, 3/8 plain	4
3		STD-678	WASHER, 3/8 internal lock	2
4		STD-596	NUT, 3/8-24 plain	2
5		LW-25-1.25	BOLT, 1/4-20 x 1-1/4 long, hex. hd.	16
6		LW-25-3.38	BOLT, 1/4-20 x 3-3/8 long, hex. hd.	4
7		STD-8	WASHER, 1/4 plain	20
8		STD-160	WASHER, 1/4 interlock	20
9		LW-25H1.25	BOLT, 1/4-20 x 1-1/4 long	3
10		STD-8	WASHER, 114 plain	3
11		LW-15063	EYE, Lifting	2
12		STD-2047	BOLT, 114-20 x 1-3/8 long, hex. hd.	2
13		STD-160	WASHER, 114 internal lock	2
14		STD-8	WASHER, 1/4 plain	2
15		STD-160	WASHER, 1/4 internal lock	2
16		LW-25-2.00	BOLT, 1/4-20 x 2.00 long, hex. hd.	2

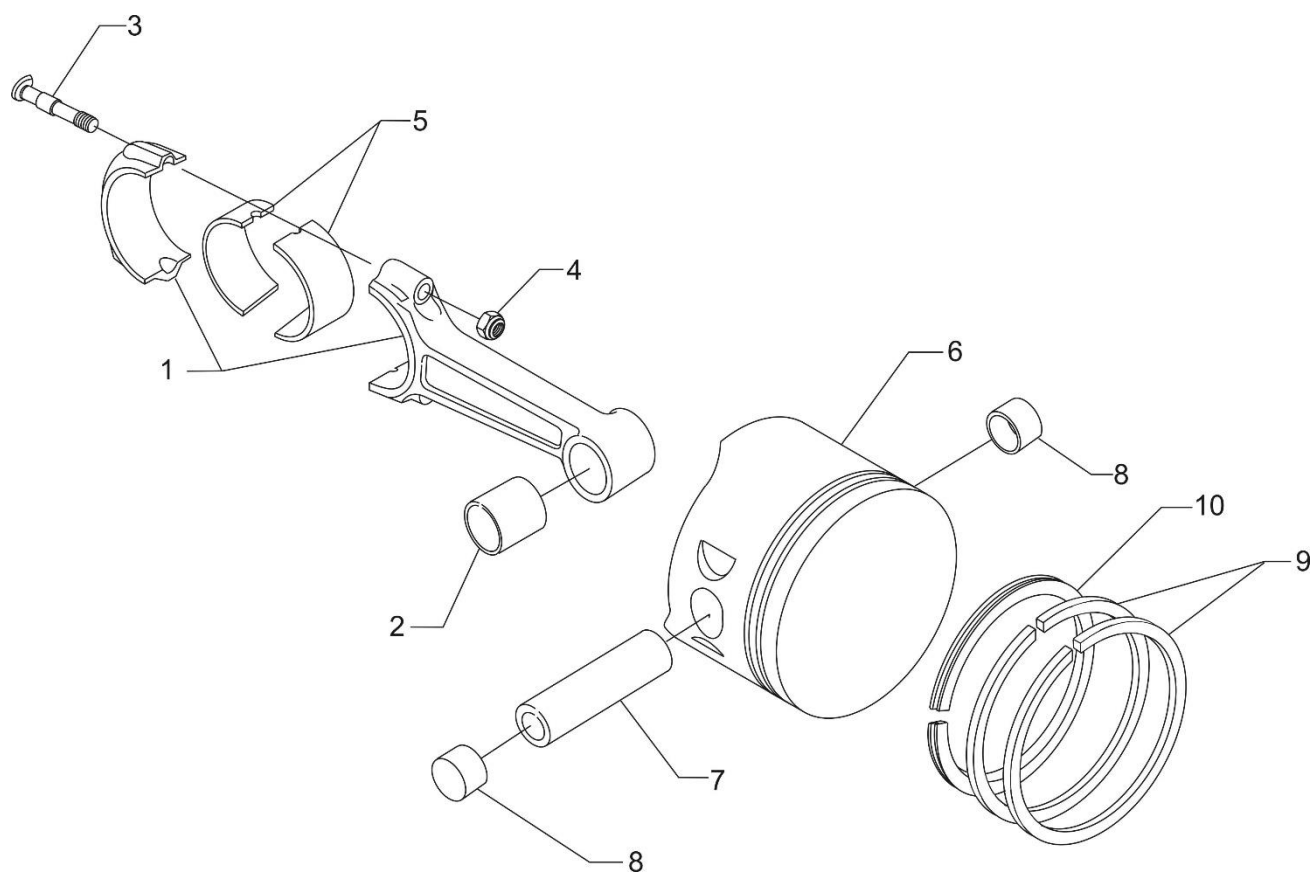


Figure 8
Connecting Rods, Pistons and Ring Assemblies

CYLINDER SECTION**Figure 8 - Connecting Rods, Pistons and Ring Assemblies**

Figure Item	Code	Part Number	Description	Units per Assembly
1		LW-15288	CONNECTING ROD ASSEMBLY	4
2		01K28983	BUSHING, Connecting rod, upper	4
3		78027	BOLT, Connecting rod	8
4		LW-12186	NUT, Connecting rod bolt	8
5		18M23887	BEARING, Connecting rod	8
6		14D23913	PISTON, Compression ratio, 8.00:1	4
7	❖	LW-14078	PIN, Piston	4
8	❖	72198	PLUG, Piston pin	8
9		74241	RING, Piston compression	8
10		14H29884	RING, Piston, oil regulating, expander type	4
❖ Refer to the latest revision of Lycoming Service Instruction No. 1267.				

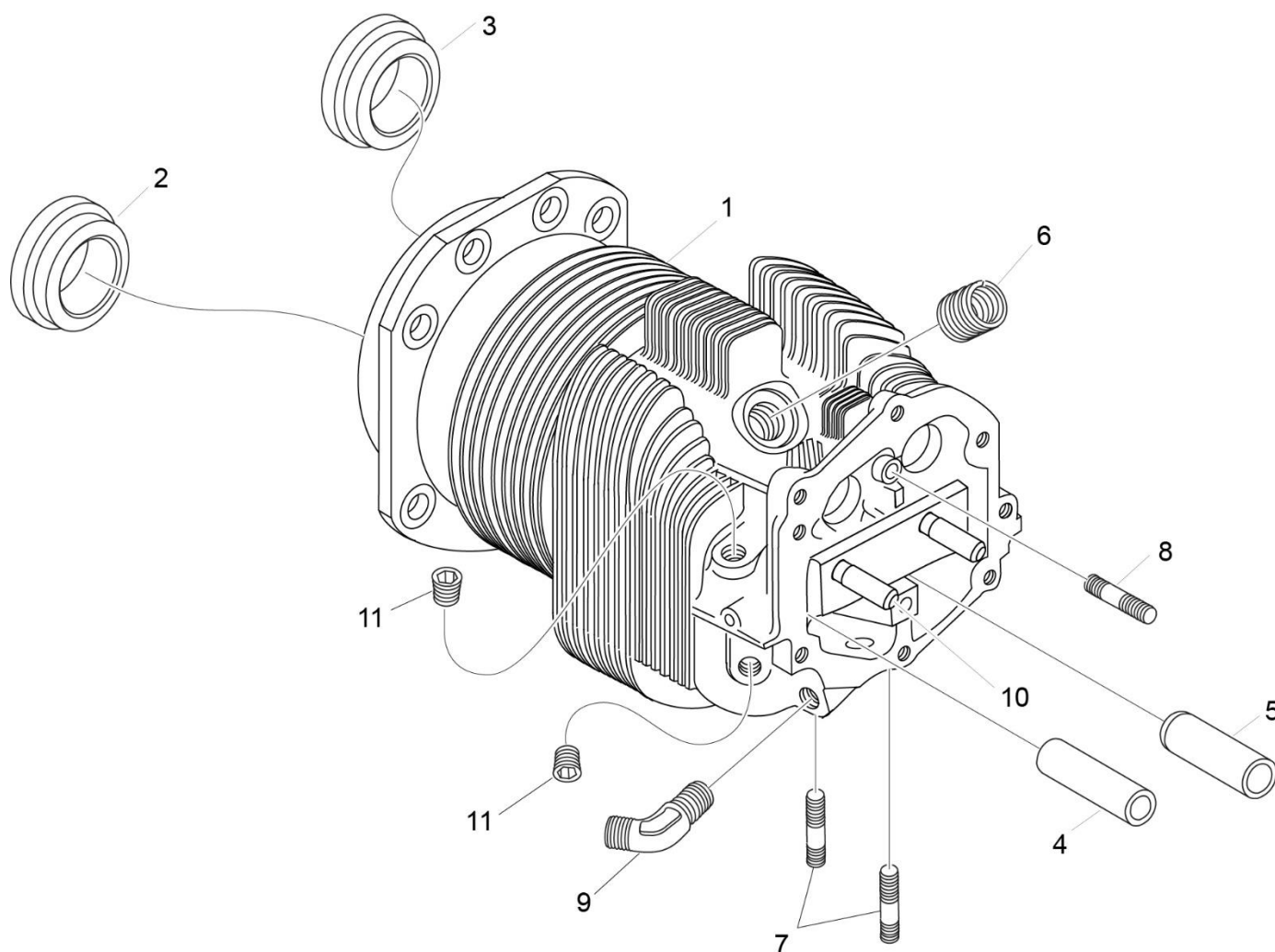


Figure 9
Cylinder Assembly

CYLINDER SECTION**Figure 9 - Cylinder Assembly**

Figure Item	Code	Part Number	Description	Units per Assembly
1		16A30140-01	CYLINDER & HEAD ASSY., Nitrided	4
2		72057	SEAT, Intake valve	4
3		72058	SEAT, Exhaust valve	4
4		76943	GUIDE, Valve, intake	4
5		16R22126	GUIDE, Valve, exhaust	4
6		69260	INSERT, Spark plug 18-1.5MM	8
7		31C-12	STUD, 5/16-18 x 1-1/2 long	8
8		25C-8	STUD, 1/4-20 x 1-1/8 long	4
9		LW-15360	ELBOW, 1 /2 flared tube, 45°	4
10		31-16	STUD, 5/16-18 x 2.00 long	8
11		1102	PLUG, 1 /8-27 NPT, Allen hd.	4

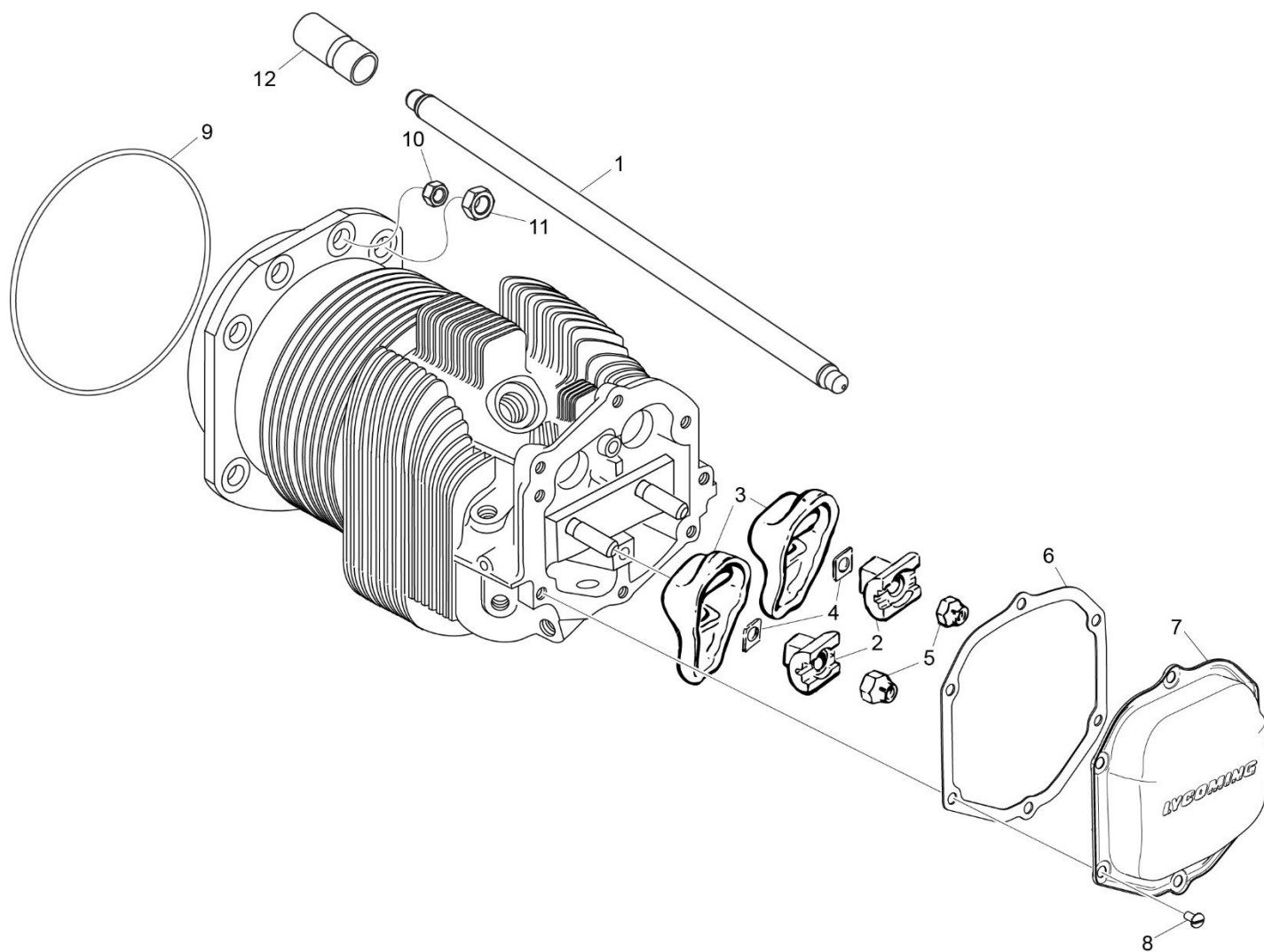


Figure 10
Cylinder Related Parts

CYLINDER SECTION**Figure 10 - Cylinder Related Parts**

Figure Item	Code	Part Number	Description	Units per Assembly
1		LW-15324	ROD ASSEMBLY. Push	8
2		LW-15407	SEAT, Valve, rocker arm fulcrum	8
3		LW-15014	ARM, Valve rocker	8
4		LW-15709	WASHER, 21/64 ID x 1 /64 thick	3
5		STD-2237	NUT, 5/16-24 self-locking	8
6		06B26669	GASKET, Rocker box cover (Silicone)	4
7		LW-15330	COVER, Rocker	4
8		STD-1925	SCREW. 1/4-20 x 5/8 long, pan. Hd, self-locking	24
9		71481	RING. Oil seal, 09 dia. x 4-27/32 ID	4
10		383-B	NUT. 3/8-24 plain	16
11		STD-2090	NUT. 1/2-20 plain	16
12		15B28093	LIFTER ASSY., Hydraulic	8

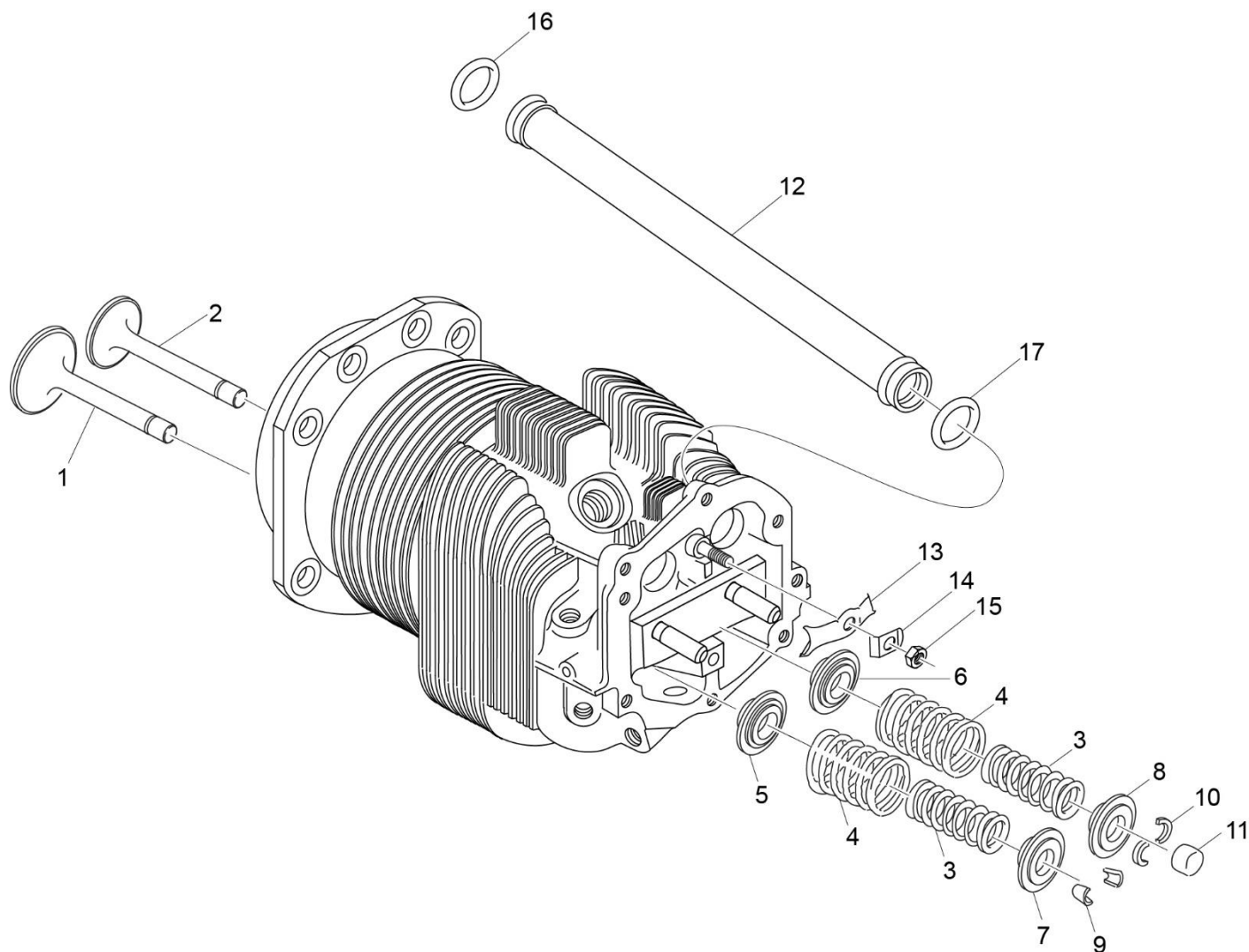


Figure 11
Valve Assembly and Related Parts

CYLINDER SECTION**Figure 11 – Valve Assembly and Related Parts**

Figure Item	Code	Part Number	Description	Units per Assembly
1		17A23945	VALVE, Intake	4
2		17B23936	VALVE, Exhaust	4
3		17D29055	SPRING, Valve, inner, orange	8
4		17D29060	SPRING, Valve, outer, orange	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	8
11		LW-15316	CAP, Valve, exhaust	4
12		LW-16056	TUBE, Push rod shroud	8
13		LW-14995	SPRING, Shroud tube	4
14		LW-12272	LOCKPLATE, Shroud tube	4
15		STD-1411	NUT, 1/4-20 plain	4
16		LW-R-0.750-275	SEAL, Shroud tube	8
17		70310	SEAL, Shroud tube	8

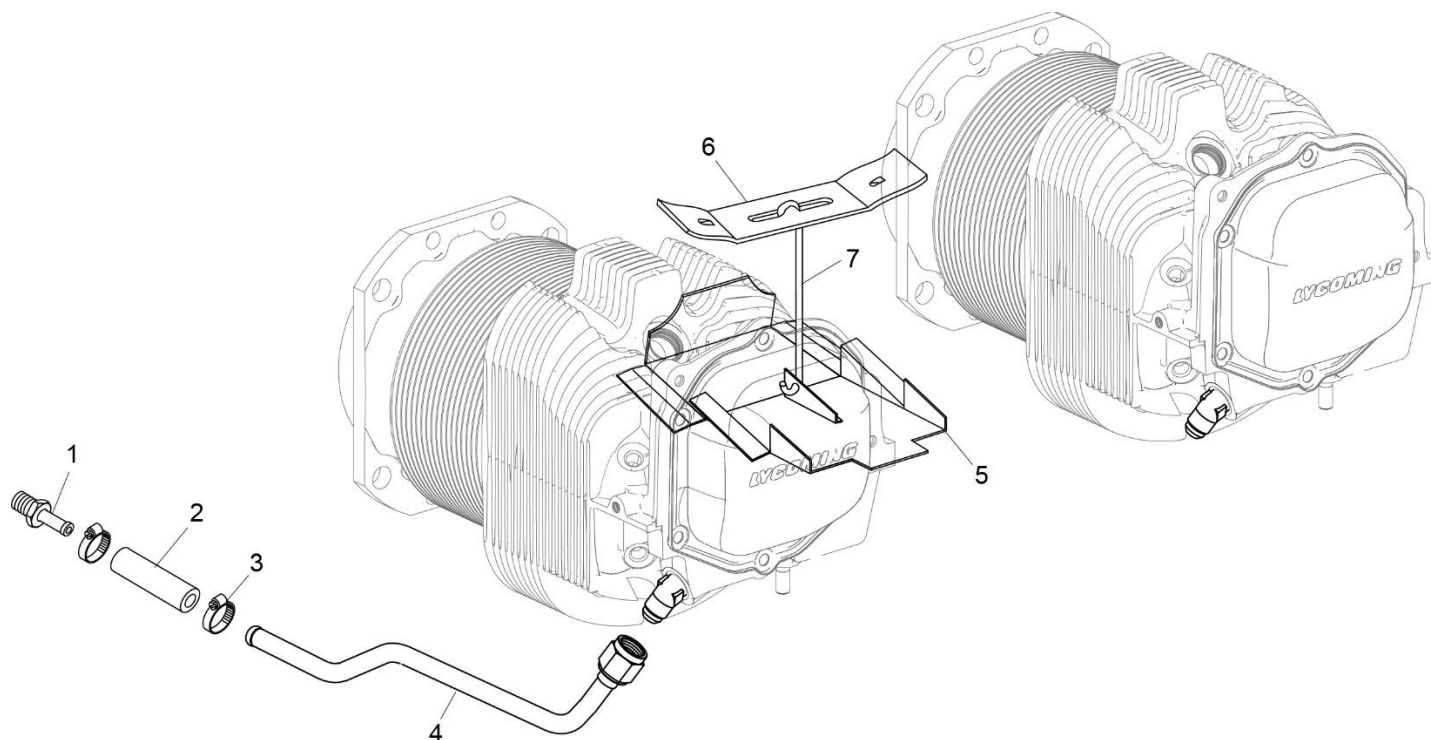


Figure 12
Cylinder Head Drain Tubes and Intercylinder Cooling Baffles

CYLINDER SECTION**Figure 12 - Cylinder Head Drain Tubes and Intercylinder Cooling Baffles**

Figure Item	Code	Part Number	Description	Units per Assembly
1		LW-15359	NIPPLE. 1 /4-1 8 x 1 / 2 ID Hose	4
2		STD-2182	HOSE, 1 /2 ID x 2-1 5/32 long	4
3		LW-15592-8-08	CLAMP. Hose	8
4		LW-15361	TUBE ASSEMBLY. Cyl. hd. oil drain, cyl. no. 1	1
		LW-15362	TUBE ASSEMBLY. Cyl. hd. oil drain, cyl. no. 2	1
		LW-14680	TUBE ASSEMBLY. Cyl. hd. oil drain, cyls. no. 3 & 4	2
5		75339	BAFFLE ASSEMBLY. Intercylinder	2
6		71611	RETAINER. Intercylinder	2
7		71610	HOOK, Intercylinder baffle retainer	2

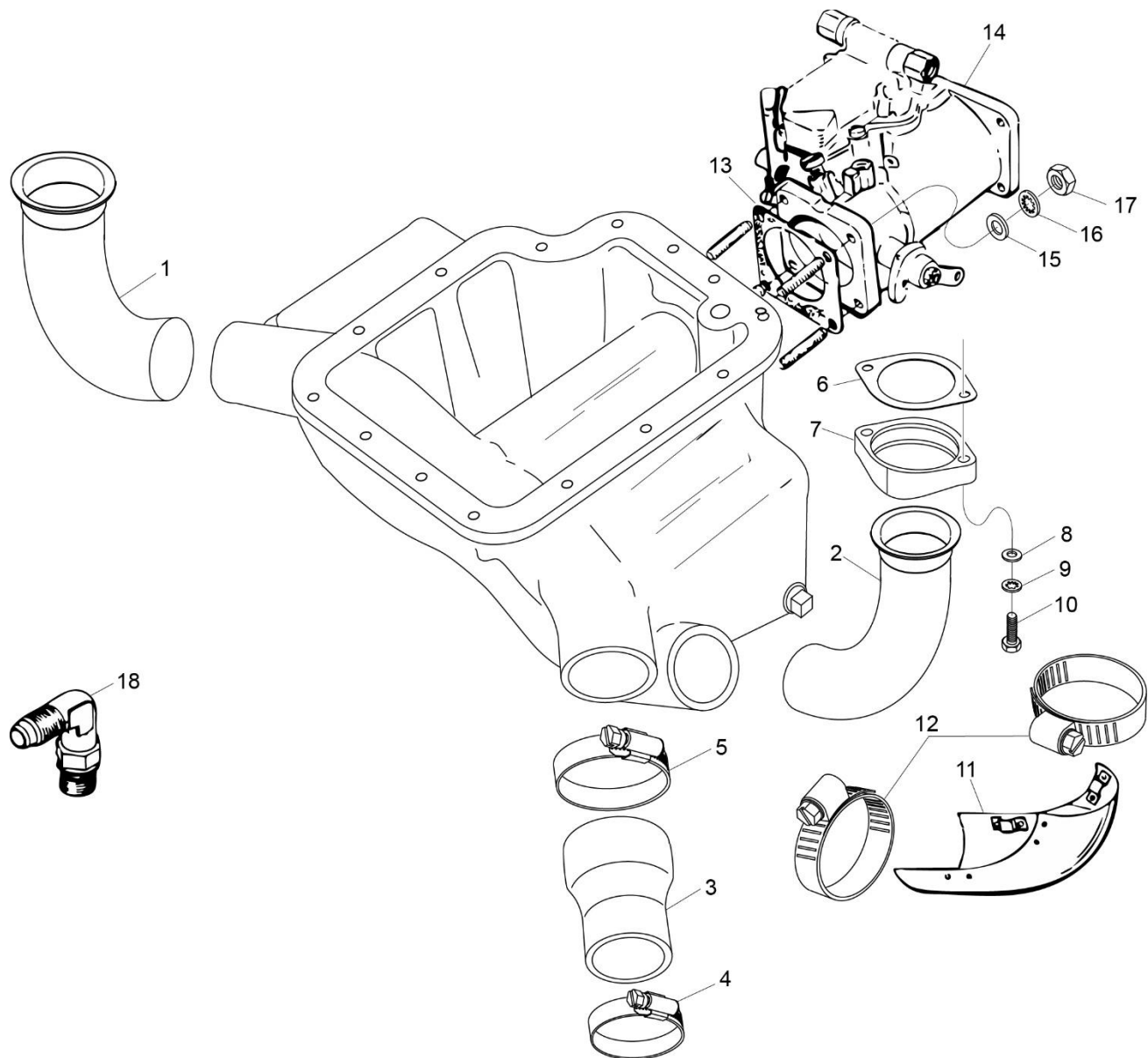


Figure 13
Intake Pipes Assembly and Carburetor

CYLINDER SECTION**Figure 13 – Intake Pipes Assembly and Carburetor**

Figure Item	Code	Part Number	Description	Units per Assembly
1		71712	PIPE, Intake, cyls. no. 1 & 2	2
2		LW-14916	PIPE, Intake, cyls. no. 3 & 4	2
3		LW-18101	HOSE, Intake pipes	4
4		LW-15592-8-28	CLAMP, Hose	4
5		LW-15592-8-32	CLAMP, Hose	4
6		71973	GASKET, 2 bolt flange, 1-13/16 ID	4
7		73346	FLANGE, Intake pipe, upper	4
8		STD-8	WASHER, 1 /4 plain	8
9		STD-160	WASHER, 1 /4 internal lock	8
10		LW-25-1.25	BOLT, 1 /4-20 x 1-1 /4 long, hex. hd.	8
11		LW-16407	HEAT SHIELD, (Cyl. 1, 2 & 4)	3
12		LW-15592-8-24	CLAMP	6
13		77154	GASKET, Carburetor	1
14		61E26394	CARBURETOR, LHC-6-6BA, AVStar (AV 10-5256-1)	1
15		STD-35	WASHER, 5/16 plain	4
16		STD-475	WASHER, 5/16 lock, internal teeth	4
17		STD-1410	NUT, 5/16-18 plain	4
18		72377	ELBOW, 3/8 tube, adj., 90° (fuel pump inlet)	1

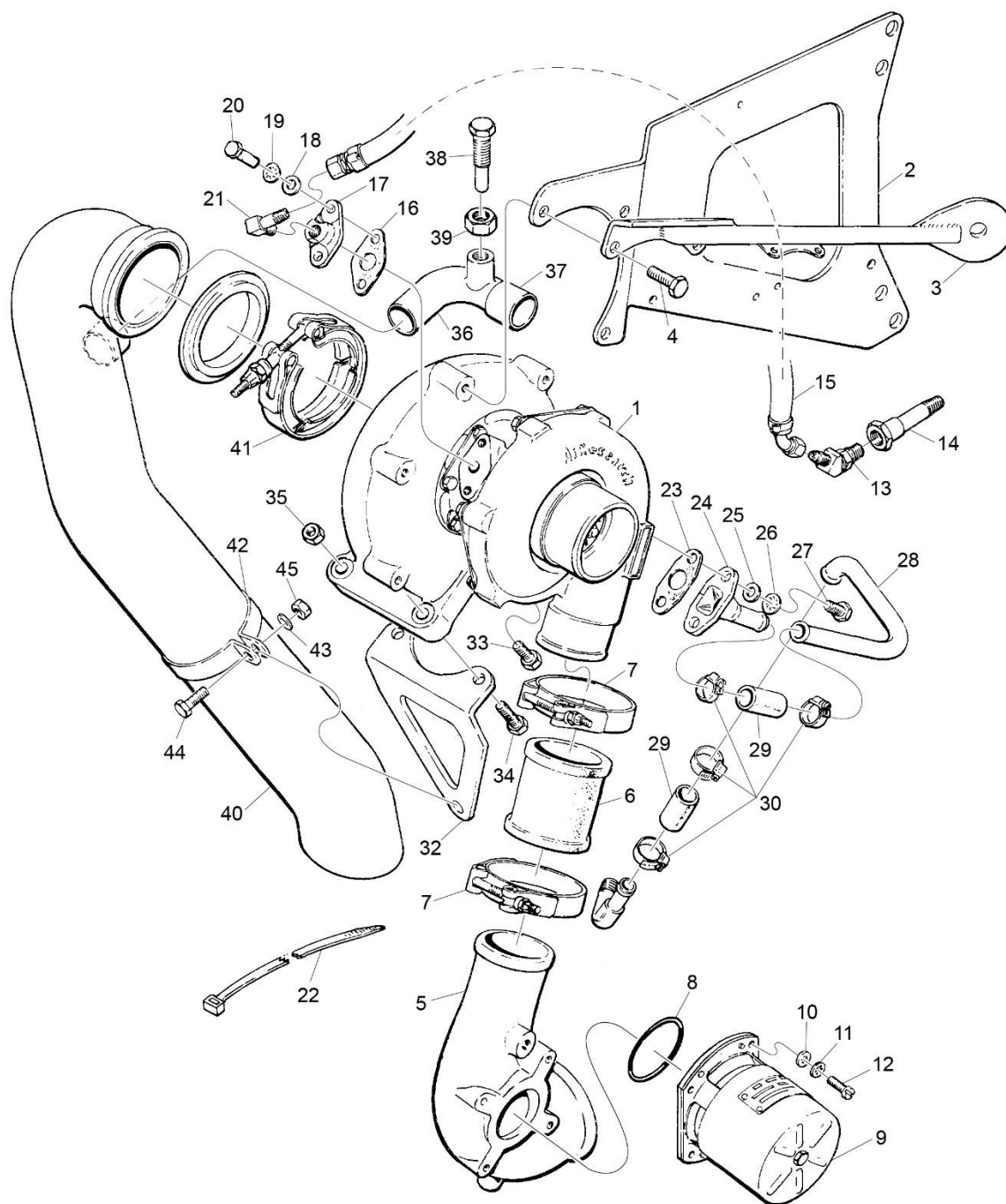


Figure 14
Turbocharger and Attaching Parts

TURBOCHARGER SECTION**Figure 14 – Turbocharger and Attaching Parts**

Figure Item	Code	Part Number	Description	Units per Assembly
1		LW-16264	TURBOCHARGER	1
2		LW-16395	BRACKET, Turbocharger	1
3		LW-16415	STRUT, Turbocharger	1
4		LW-31SSH0.81	BOLT, 5/16-18 x 13/16 long, hex. hd., dr. hd.	3
5		LW-16246	DUCT, Air inlet	1
6		LW-16217	HOSE, 2.00 ID x 3116 wall x 2-9116 long	1
7		LW-15858-62-244	CLAMP, Hose, 2-7/16 dia. x 9116 wide	2
8		MS29513-138	SEAL, O-Ring, 2-7/64 OD x 3132 sect.	1
9		LW-16265-1	VALVE ASSY., Absolute pressure relief	1
10		STD-425	WASHER, No. 10 plain	4
11		STD-251	WASHER, No. 10 internal lock	4
12		STD-375	SCREW, No. 10-24 x 5/8 long, fill hd.	4
13		73944	ELBOW, 114 tube adj., 45°	1
14		LW-14114	CONNECTOR, Exh. valve oil line	1
15		LW-12878-4S170	HOSE ASSY., (Nipple to turbo oil inlet	1
16		77813	GASKET, Turbo oil inlet	1
17		77814	ADAPTER, Turbo oil inlet	1
18		STD-35	WASHER, 5/16 plain	2
19		STD-475	WASHER, 5/16 internal lock	2
20		LW-31-0.94	BOLT, 5/16-18 x 1.00 long, hex. hd.	2
21		LW-12690	ELBOW, 90°, Tube to male pipe (turbo oil inlet)	1
22		76734	ZIP STRAP	2
23		LW-18038	GASKET, Turbo oil drain	1
24		LW-16416	FLANGE, Turbo oil drain	1
25		STD-33	WASHER, 3/8 plain	2
26		STD-678	WASHER, 3/8 internal lock	2
27		LW-38-1.00	BOLT, 3/8-16 x 1.00 long, hex. hd.	2
28		LW-16417	TUBE, Turbo oil drain	1
29		LW-14394	HOSE, Turbo oil drain	2
30		LW-15592-8-08	CLAMP, Hose	4

TURBOCHARGER SECTION**Figure 14 – Turbocharger and Attaching Parts (Cont.)**

Figure Item	Code	Part Number	Description	Units per Assembly
31		LW-16747	ELBOW, 5/8 ID Hose x 1 /2 NPT (in sump)	1
32		LW-16618	SUPPORT, Exhaust tail pipe	1
33		AN6C11A	BOLT, 3/8-24 x 1-1 3/64 long, hex. hd.	2
34		AN6C12A	BOLT, 3/8-24 x 1 -21 /64 long, hex. hd.	2
35		MS20500-624	NUT, 3/8-25 self-locking	4
36		LW-16615	WELDED ASSY., Exhaust air bleed	1
37		LW-16614	TUBE, Exhaust bleed	1
38		LW-16612	BOLT, 1 /2-13 x 2.00 long, hex. hd. (special)	1
39		LW-16613	NUT, 1/2-13 NC-3	1
40		LW-16393	PIPE, Exhaust, tail	1
41		LW-12093-8	COUPLING, V-band	1
42		LW-16705	BAND, Tail pipe support	1
43		AN960C516	WASHER, 5/16 plain (on nut end)	1
44		LW-31SS-0.88	BOLT, 5/16-18 x 7/8 long	1
45		STD-2043	NUT, 5/ 16-1 8 self-locking	1

This page intentionally left blank.

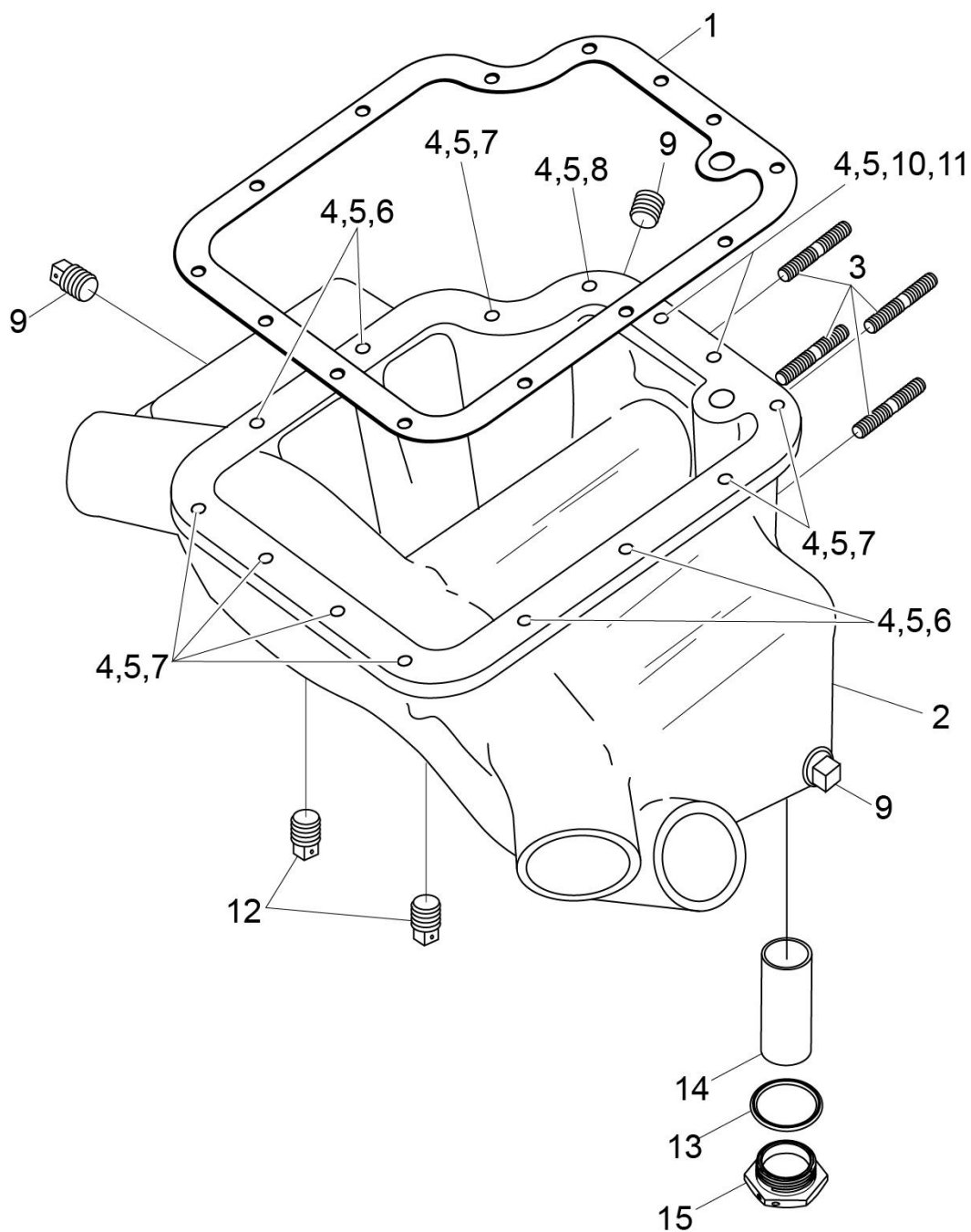


Figure 15
Oil Sump Assembly and Oil Suction Screen

LUBRICATION SYSTEM**Figure 15 – Oil Sump Assembly and Oil Suction Screen**

Figure Item	Code	Part Number	Description	Units per Assembly
1		LW-15071	GASKET, Oil sump	1
2		LW-14888	SUMP ASSEMBLY, Oil	1
3		31C-14	STUD, 5/16-18 x 1-3/4	4
4		STD-8	WASHER, 1 /4 plain	14
5		STD-160	WASHER, 1 /4 internal lock	14
6		LW-25-6.00	BOLT, 1 /4-20 x 6.00 long	4
7		LW-25-0.94	BOLT, 1/4-20 x 15/16 long	7
8		LW-25-2.56	BOLT, 1 /4-20 x 2-9/ 16 long	1
9		STD-551	PLUG, 1/2-14 NPT, Sq. hd.	3
10		25C-10	STUD, 1/4-20 x 1-1/4 long	2
11		STD-1411	NUT, 1/4-20 plain	2
12		STD-405	PLUG, 1/8-27 NPT, Sq. hd., drilled	2
13		61378	SCREEN, Oil suction	1
14		06E19769-1.25	GASKET, Annular, 1-1/4 ID	1
15		61358	PLUG, 1 2 hex. hd x 1-1 /4-12	1

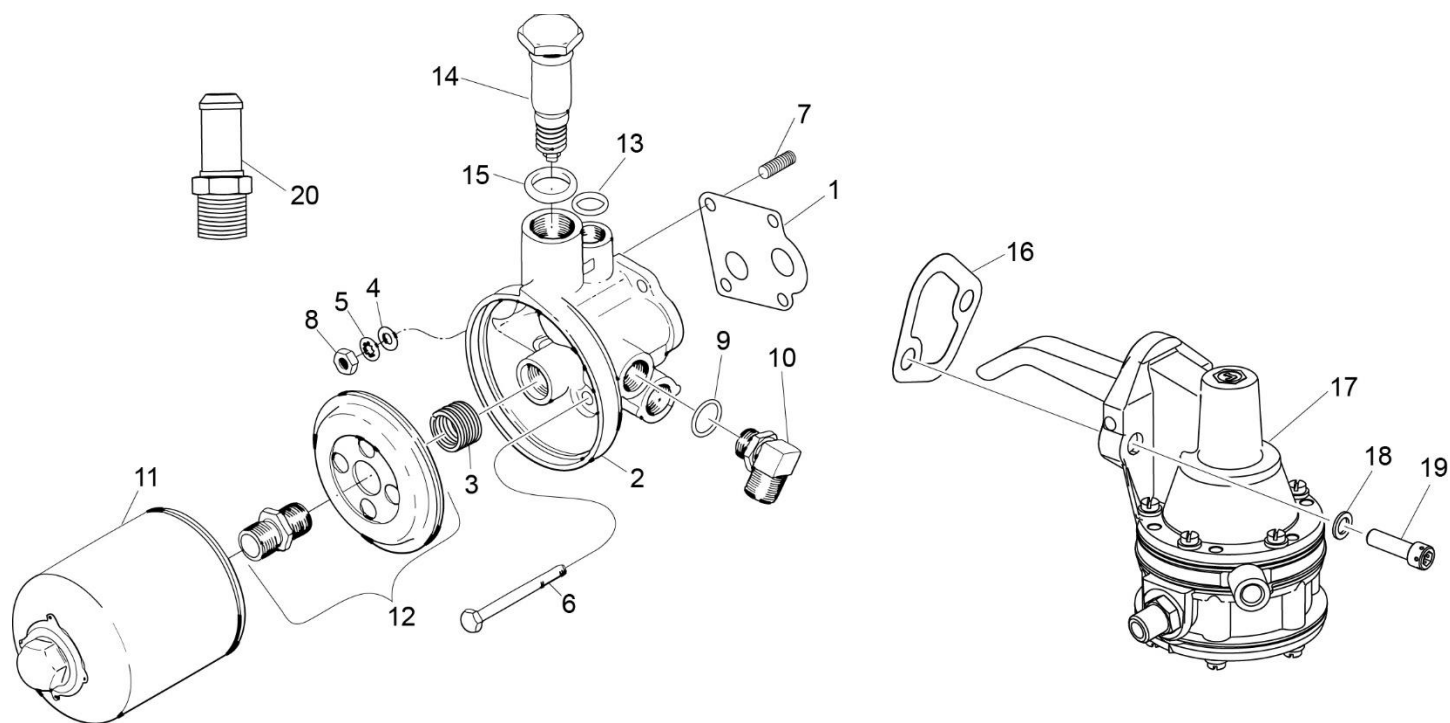


Figure 16
Oil Filter and Fuel Pump

LUBRICATION SYSTEM**Figure 16 – Oil Filter and Fuel Pump**

Figure Item	Code	Part Number	Description	Units per Assembly
1		LW-15046	GASKET, Oil filter adapter	1
2		LW-15047	OIL FILTER ADAPTER ASSEMBLY	1
3		MS124703	INSERT, Heli-coil, 3/4-16 NF-3 x 1-1/4 long	1
4		STD-8	WASHER, 1 /4 plain	4
5		STD-160	WASHER, 1 /4 internal lock	4
6		LW-25-3.00	BOLT, 1 /4-20 x 3.00 long, hex. hd.	1
7		25C-10	STUD, 1/4-20 x 1-1/4 long	3
8		STD-1411	NUT, 1 /4-20 plain	3
9		MS29512-8	SEAL, Oil, 21 /32 OD x 3/32 sect.	2
10		LW-10637	ELBOW, 1/2 tube x 3/4-16 thd., 90° adjustable	2
11		LW-13906	FILTER ASSEMBLY, Oil, short	1
		LW-16286	FILTER ASSEMBLY, Oil, short, alternate	1
12		54E23092	KIT, Converter plate, oil filter	1
13		06E19769-0.63	GASKET, Annular, 5/8 ID	1
14		53E22144	VALVE ASSY., Temp. control, oil cooler bypass	1
15		76510	GASKET, Valve assembly	1
16		60096	GASKET, Fuel pump	1
17		LW-16947	FUEL PUMP, Dual diaphragm	1
18		STD-33	WASHER, 3/8 plain	2
19		STD-1882	SCREW, 3/8-16 :: 1-9/32 long, socket hd., drive hd.	2
20		AN840-12D	FITTING, Breather (TO Engines)	1
		AN844-12D	FITTING, Breather, 45° (LTO Engines)	1

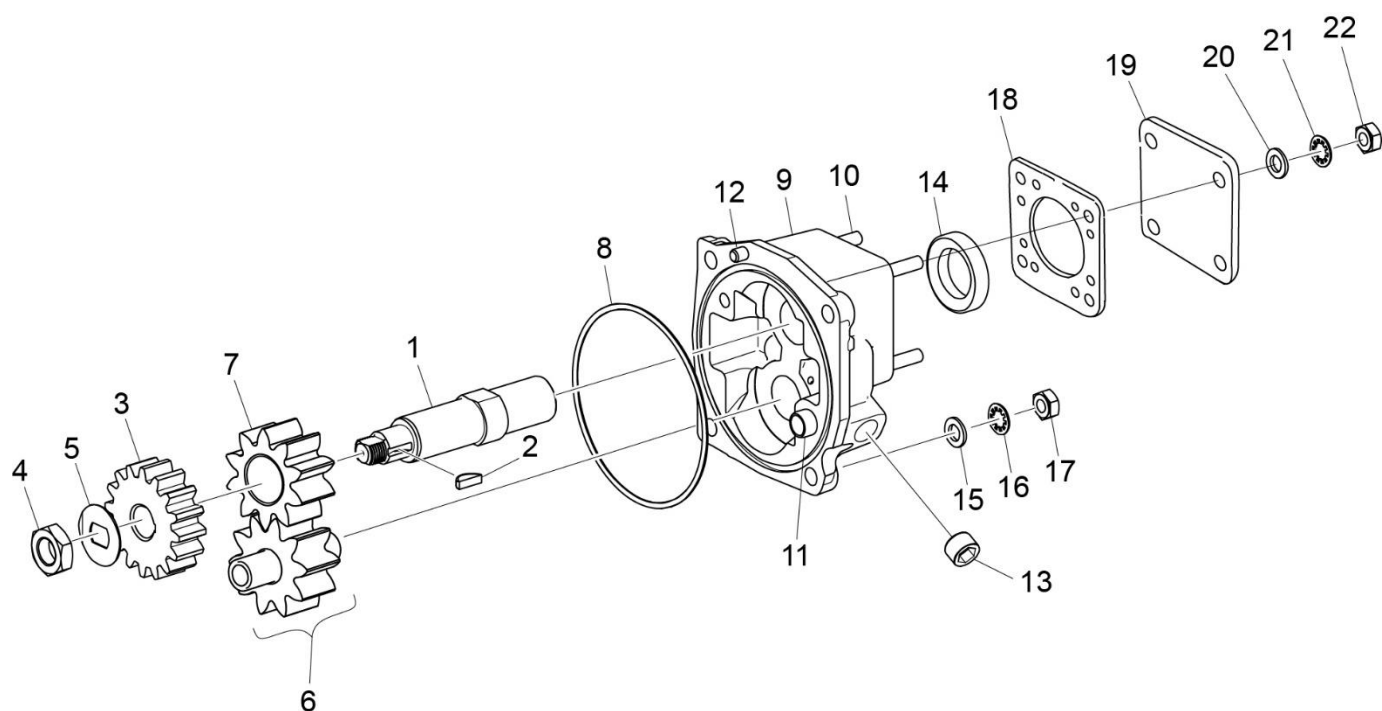


Figure 17
Oil Pump and Vacuum Pump Drive

ACCESSORY DRIVES

Figure 17 – Oil Pump and Vacuum Pump Drive

Figure Item	Code	Part Number	Description	Units per Assembly
1		LW-15345	SHAFT, Oil & Vacuum pump drive	1
2		STD-2057	KEY, 5/8 dia. x 5/32 woodruff	1
3		LW-15263	GEAR, Oil pump drive	1
4		STD-1063	NUT, 9/16-18 x 9/32 high	1
5		LW-15262	LOCKPLATE, Oil pump gear	1
6	❖	LW-15999	IMPELLER ASSY, Oil pump driven	1
7	❖	LW-15998	IMPELLER, Oil pump driving	1
8		LW-15070	SEAL, O-ring, 3-1/2 ID x 7/64 dia. sect.	1
9		51A21091	BODY ASSY, Oil pump & vacuum pump drive (TO Engines)	1
		51A21092	BODY ASSY, Oil pump & vacuum pump drive (LTO Engines)	1
10		25C-12	STUD, 1/4-20 x 1-1/2 long	4
11		STD-557	DOWEL, 2 5/64 ID x 1/2 OD x 11 / 16 long, hollow	1
12		66145	DOWEL, 1/4 dia. x 1/2 long	1
13		STD-2203	PLUG, 1/4-18 NPT, Socket hd. (LTO Engines)	1
14		06A19956	OIL SEAL, 7/8 ID x 1-1/2 OD x 5/16 wide	1
15		STD-35	WASHER, 5/16, plain	4
16		STD-475	WASHER, 5/16, internal lock	4
17		STD-1410	NUT, 5/16, plain	4
18		8313	GASKET, Vacuum pump	1
19		60430	COVER, Vacuum pump	1
20		STD-8	WASHER, 1/4, plain	4
21		STD-160	WASHER, 1/4, lock, internal teeth	4
22		STD-1411	NUT, 1/4-20, plain	4
❖ To ensure impellers are replaced together, oil pump impellers available in kit form only.				

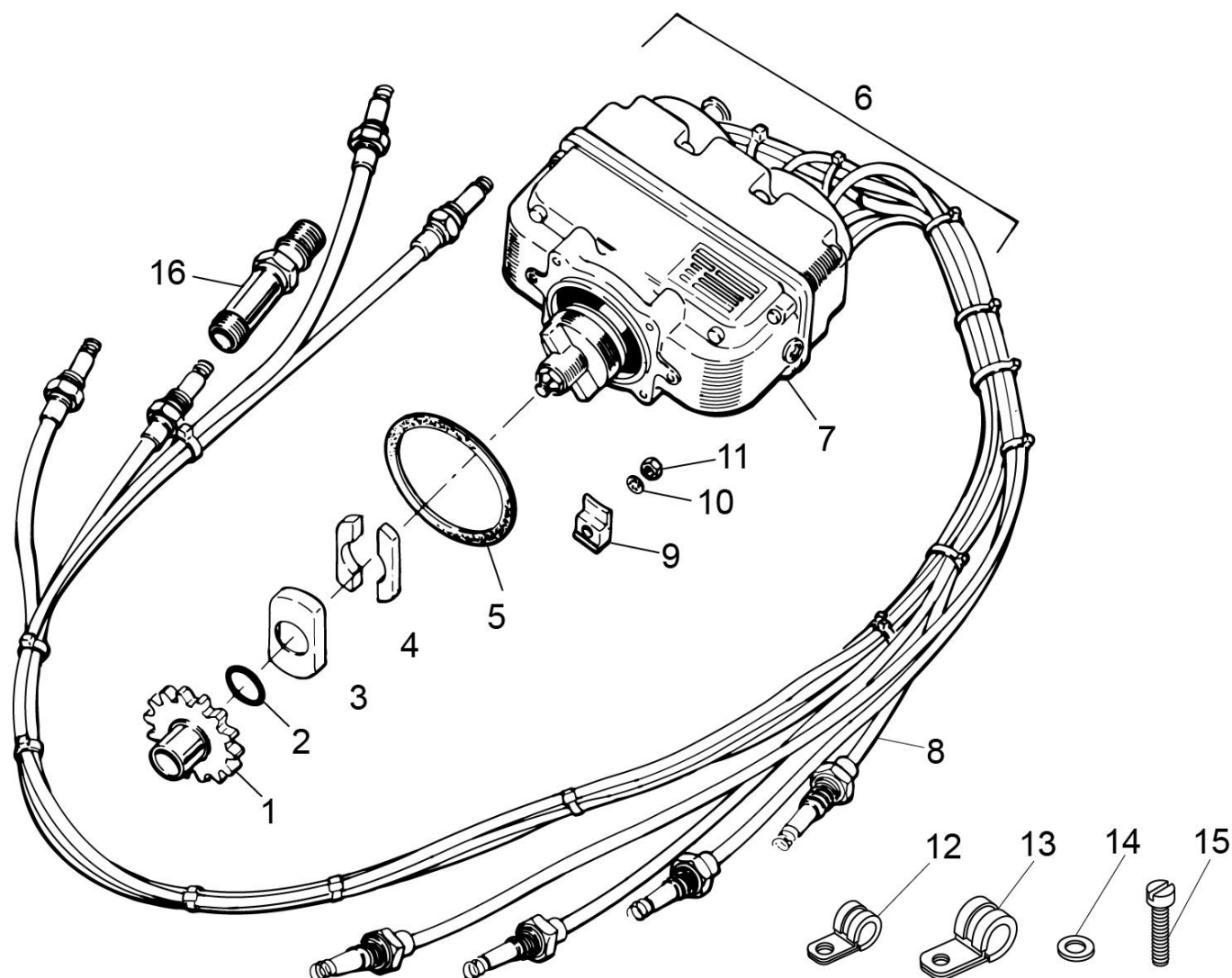


Figure 18
Magneto, Magneto Drive, and Spark Plugs

DISTRIBUTION**Figure 18 – Magneto, Magneto Drive, and Spark Plugs**

Figure Item	Code	Part Number	Description	Units per Assembly
1		LW-15659	GEAR, Magneto	1
2		LW-15097	O-RING, 13/16 ID x 5/64 dia. section	1
3		68875	RETAINER, Magneto dr. cushion	1
4		LW-16784	CUSHION, Magneto drive	2
5		LW-12681	GASKET, Magneto adapter & magneto	1
6		66E21574	MAGNETO IGNITION SYSTEM (TO Engines)	1
		66E21575	MAGNETO IGNITION SYSTEM (LTO Engines)	1
7		LW-682555-16	MAGNETO, Ignition (TO Engines)	1
		LW-682555-13	MAGNETO, Ignition (LTO Engines)	1
8		67H21455	HARNESS, Assy, TCM 10-821414-14	1
9		66M19385	CLAMP, Magneto	2
10		STD-475	WASHER, 5/16 internal lock	2
11		STD-1410	NUT, 5/ 16-18 plain	2
		01P21501-4-50	BAG, Harness attaching	1
12		LW-16266-10-50	CLAMP, 1/2 dia. for #10 screw	1
13		LW-16266-25-63	CLAMP, 5/8 ID x 1/4 dia. screw	1
14		STD-8	WASHER, 1/4 plain	4
15		STD-1874	SCREW, ¼-20 x 13/16 lg. fill.	12
16		1182-H7	SPARK PLUG, Champion (RHB37E)	8
		1182-Q4	SPARK PLUG, URHB37E	8

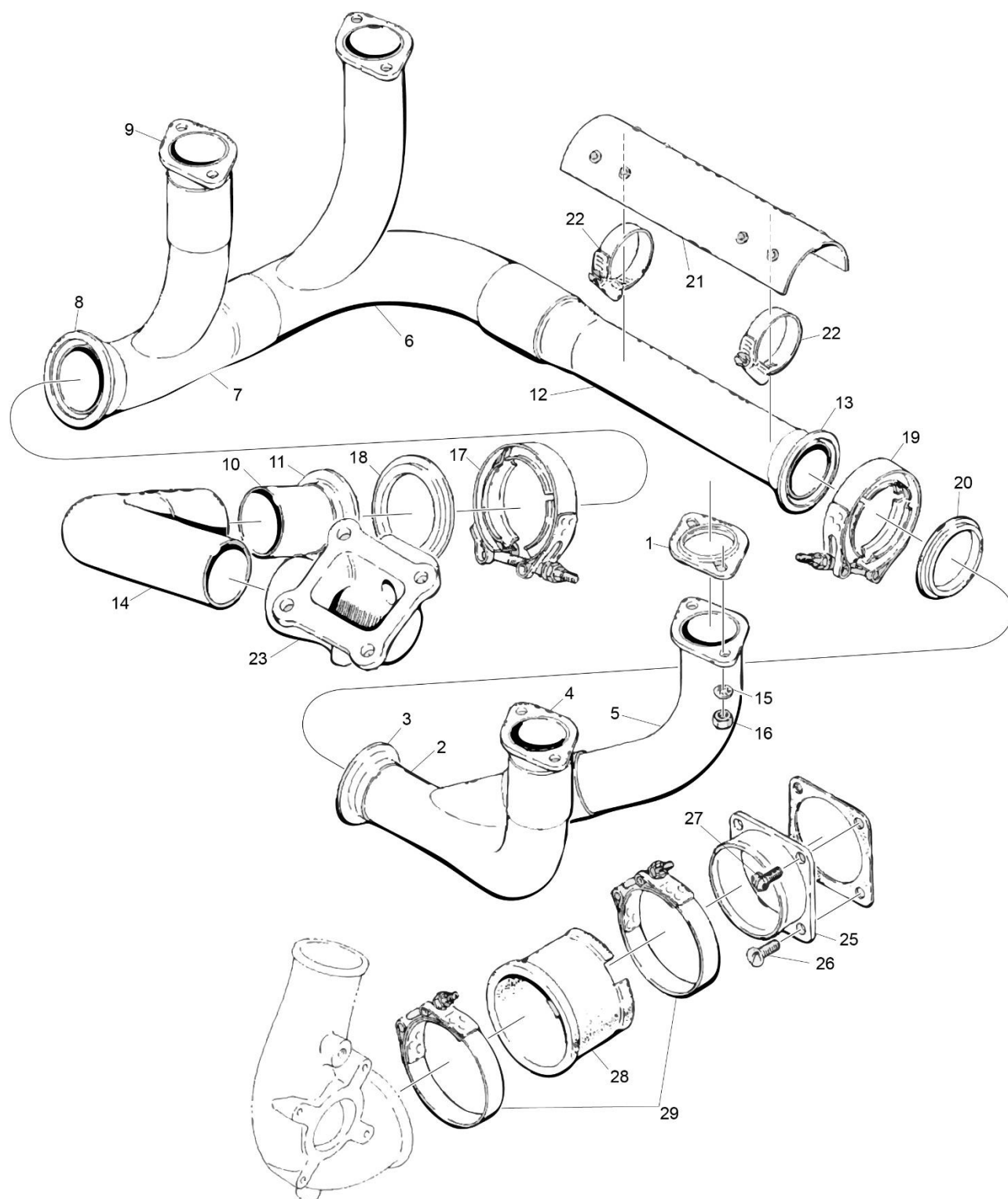


Figure 19
Exhaust and Air Inlet Attaching Parts

EXHAUST SECTION**Figure 19 – Exhaust and Air Inlet Attaching Parts**

Figure Item	Code	Part Number	Description	Units per Assembly
1		77611	GASKET, Exhaust flange	4
2		LW-16381	PIPE, Exhaust, cyl. no. 1 & 3	1
3		78082	FLANGE, V-band	1
4		LW-16383	ADAPTER, Exhaust pipe, cyl. no. 1 & 3	2
5		LW-16384	ADAPTER, Exh ust pipe, cyl. no. 1	1
6		LW-16386	PIPE, Exhaust, cyl. no. 2	1
7		LW-16387	PIPE, Exhaust, cyl. no. 4	1
8		78077	FLANGE, V-band	1
9		LW-16383	ADAPTER, Exhaust pipe, cyl. no. 2 & 4	1
10		LW-16380	PIPE, Exhaust, rear, intermediate, left	1
11		78077	FLANGE, V-band	1
12		LW-16382	PIPE, Exhaust crossover	1
13		78082	FLANGE, V-band	1
14		LW-16385	PIPE, Exhaust, rear, left	1
15		STD-475	WASHER, 5/16 lock, int. teeth	8
16		STD-1410	NUT, 5/16-16 plain	8
17		LW-12093-5	COUPLING, V-band, 2.00 OD pipe	1
18		78084	GASKET, V-band, 2.00 pipe	1
19		LW-12093-4	COUPLING, V-band, 1-3/4 OD pipe	1
20		78257	GASKET, V-band, 1-3/4 OD pipe	1
21		LW-16406	HEAT SHIELD	1
22		LW-15592-8-24	CLAMP, 1-9/16 x 2.00 dia. x 1/2 wide	2
23		LW-16399	TRANSITION, Exhaust	1
24		LW-13473	GASKET, Carburetor inlet	1
25		LW-15886	ADAPTER, Carburetor inlet	1
26		STD-1874	SCREW, 1/4-20 x 13/16 long, fill	3
27		STD-1925	SCREW, 1/4-20 x 5/8 long, pan. hd., self-locking	1
28		LW-15859	HOSE, 3.00 ID x 2-1/2 long	1
29		LW-15858-62-350	CLAMP, Hose, 3-1/2 ID x 9/16 wide	2

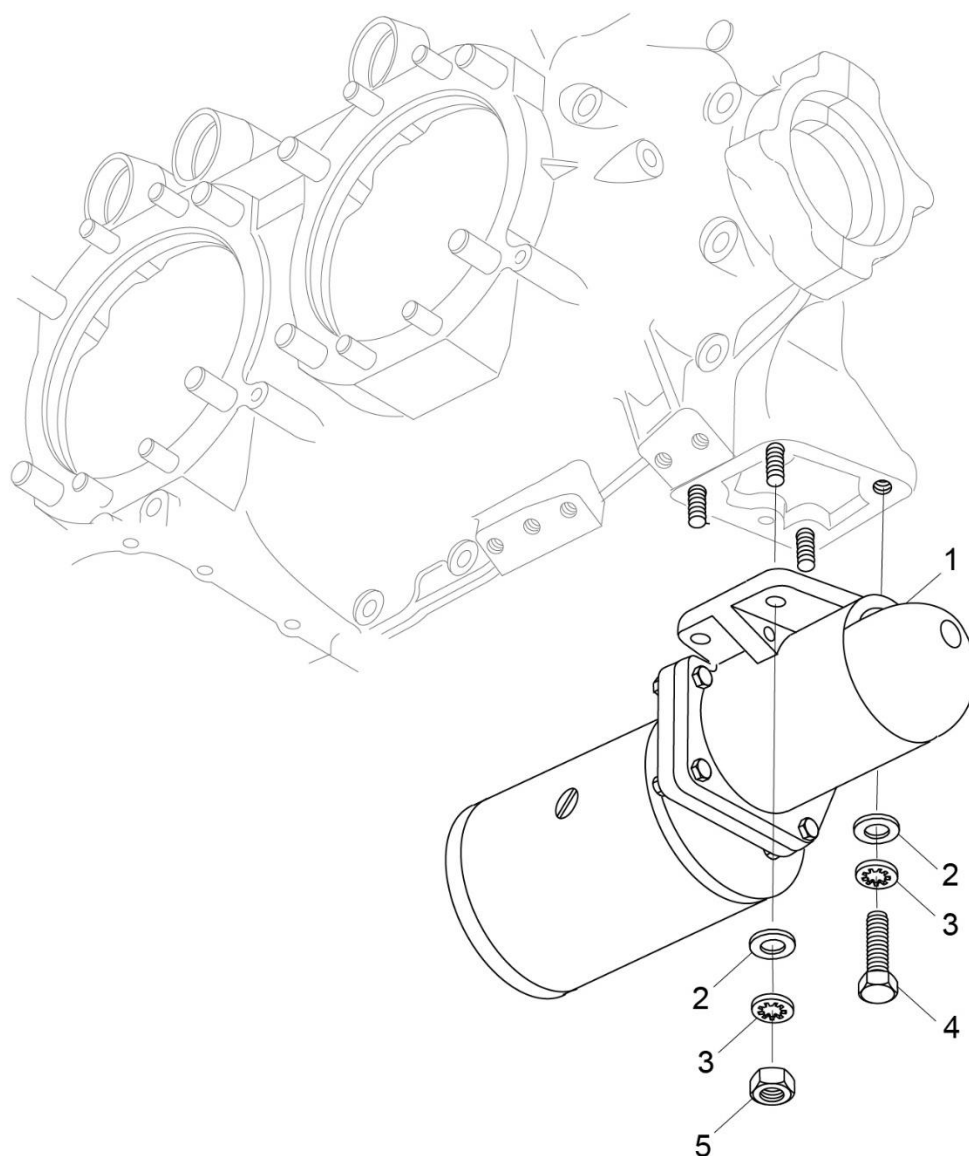


Figure 20
Starter Attaching Parts

CRANKING**Figure 20 - Starter Attaching Parts**

Figure Item	Code	Part Number	Description	Units per Assembly
1		31A26041	STARTER, 12 volt (3.38: 1 int. red.) (MZ-4222) (TO Engines)	1
		31A26901	STARTER, 12 volt (3.38:1 int. red.) (MZ-4220) (LTO Engines)	1
2		STD-35	WASHER, 5/16 plain	4
3		STD-475	WASHER, 5/16 internal lock	4
4		LW-31-0.94	BOLT, 5/16-18 x 15/16 long, hex. hd.	1
5		STD-1410	NUT, 5/16-18 plain	3
NOTE: See latest revision of Lycoming Service Instruction No. 1154 for complete listing of FAA approved starters and alternators.				

This page intentionally left blank.

SERVICE KIT SECTION**Seal and Gasket Set**

PART NO.	PART NAME	Qty.
LW-16765	SEAL AND GASKET SET	1
LW-12272	LOCKPLATE-SHROUD TUBE	4
LW-12681	GASKET-MAGNETO	1
LW-13473	GASKET-CARBURETOR INLET ADAPT.	1
LW-13792	SEAL-CRANKSHAFT-OIL	1
LW-14260	SEAL-TACHOMETER DRIVE-OIL	1
LW-14995	SPRING-SHROUD TUBE	4
LW-15046	GASKET-OIL FILTER ADAPTER	1
LW-15070	O-RING - 3.737 I.D X .103 DIA SECTION	1
LW-15071	GASKET-OIL SUMP	1
LW-15097	O RING-.81 ID X .07 DIA.	1
LW-15109	O RING-1.612ID X .103 DIA.	1
LW-15262	LOCKPLATE-OIL PUMP	1
LW-15280	SEAL-SHROUD TUBE	8
LW-18038	GASKET-TURBO OIL DRAIN ADAPTER	1
MS29512-08	O RING-.644 ID X .087 SECT-.	2
MS29513-138	O RING-2.112 ID X .103 SECT-	1
06A19956	OIL SEAL-.875ID X 1.50 OD X .31	1
06E19769-0.63	GASKET-ANNULAR-.625 ID	1
06E19769-1.25	GASKET-ANNULAR-1.250 ID	2
60096	GASKET-FUEL PUMP	1
61173	GASKET-OIL PRESS HOUSING	1
66224	GASKET-CARBURETOR	1
70310	SEAL-SHROUD TUBE	8
71481	RING-OIL SEAL-.09 DIA X 4.84ID	4
71973	GASKET-2 BOLT FLANGE-1.81 ID	4
72053	GASKET-GOVERNOR	2
72075	SEAL-OIL-.090 SEC. X .455 ID	7
72078	LOCKPLATE-.3125 BOLT X 1.33 SP	2
72091	RING-OIL SEAL-.36ID X.10 DIA	2
72220	GASKET-OIL LEVEL GAGE	1
72312	RING-OIL SEAL-1.00 X 1.3	1
06B26669	GASKET - ROCKER BOX COVER (SILICONE)	4
77154	GASKET-CARBURETOR	1
77611	GASKET-EXHAUST FLANGE	4
77813	GASKET-TURBO OIL INLET	1
8313	GASKET-VACUUM PUMP	1

Cylinder, Piston and Ring Assembly

PART NO.	PART NAME	Qty.
05K21122	KIT – CYLINDER, PISTON AND RING ASSEMBLY	1
14D23913	PISTON-COMPRESSION RATIO 8.00:1	1
74241	RING-PISTON-COMP-5.125 BORE	2
14H29884	RING ASSY - PISTON - OIL REGULATING, EXPANDER TYPE	1
LW-14078	PIN-PISTON	1
72198	PLUG-PISTON PIN	2
71481	RING-OIL SEAL-.09 DIA X 4.84ID	1
70310	SEAL-SHROUD TUBE	2
W-15280	SEAL-SHROUD TUBE	2
06B26669	GASKET - ROCKER BOX COVER (SILICONE)	1
71195	CONTAINER	1
LW-R-0.750-275	O RING	2
77611	GASKET-EXHAUST FLANGE	1
71973	GASKET-2 BOLT FLANGE-1.81 ID	1
SSP-299	TAG: USE OF PISTON PIN PLUGS	1
16G23272-03	CYLINDER HEAD & VALVE ASSEMBLY	0
LW-16290	CYLINDER ASSY	1
78474	BARREL-CYLINDER	1
LW-16289	HEAD-CYLINDER	1
72057	SEAT-VALVE-INTAKE	1
72058	SEAT-VALVE-EXHAUST	1
76943	GUIDE-VALVE-INTAKE	1
16R22126	GUIDE-VALVE-EXHAUST(NI-RESIST)	1
69260	INSERT-SPARK PLUG-18-1.5MM	2
STD-1353	INSERT-#10-24 UNC X .380 LONG	1
31C-12	STUD-.3125-18 X 1.50 LONG	2
25C-8	STUD-.250-20 X 1.00 LONG	1
31-16	STUD-.3125-18 X 2.00 LONG	2
LW-15360	ELBOW-.250-18 X .50 TUBE-45DEG	1
17A23945	VALVE - INTAKE	1
17B23936	VALVE - EXHAUST	1
65441	SEAT-VALVE SPRING-LOWER INTAKE	1
LW-13323	SEAT-VALVE SPRING-LOWER EXHAUST	1
LW-11800	SPRING-VALVE-OUTER (ORANGE)	2
LW-11795	SPRING-VALVE-INNER (ORANGE)	2
LW-10077	SEAT-VALVE SPRING-UPPER INTAKE	1
LW-16475	SEAT-VALVE SPRING-UPPR.EXHAUST	1
60009	KEY - VALVE	2
17C21191	KEY-VALVE-EXHAUST	2

Cylinder, Piston and Ring Assembly (Cont.)

PART NO.	PART NAME	Qty.
LW-15316	CAP-VALVE-EXHAUST	1
16G30140-0101	CYLINDER HEAD & VALVE ASSY (PARALLEL VALVE)	1
16A30140-01	CYLINDER & HEAD ASSY (5.125 BORE) (4.375 STROKE)	1
72057	SEAT-VALVE-INTAKE	1
72058	SEAT-VALVE-EXHAUST	1
76943	GUIDE-VALVE-INTAKE	1
16R22126	GUIDE-VALVE-EXHAUST(NI-RESIST)	1
69260	INSERT-SPARK PLUG-18-1.5MM	2
STD-1353	INSERT-#10-24 UNC X .380 LONG	1
31C-12	STUD-.3125-18 X 1.50 LONG	2
25C-8	STUD-.250-20 X 1.00 LONG	1
31-16	STUD-.3125-18 X 2.00 LONG	2
17A23945	VALVE - INTAKE	1
17B23936	VALVE - EXHAUST	1
LW-11800	SPRING - VALVE - OUTER (ORANGE)	2
17D29055	SPRING - VALVE - AUXILLARY (ORANGE)	2
LW-10077	SEAT-VALVE SPRING-UPPER INTAKE	1
LW-16475	SEAT-VALVE SPRING-UPPR.EXHAUST	1
65441	SEAT-VALVE SPRING-LOWER INTAKE	1
LW-13323	SEAT-VALVE SPRING-LOWER EXHAUST	1
60009	KEY - VALVE	2
17C21191	KEY-VALVE-EXHAUST	2
LW-15316	CAP-VALVE-EXHAUST	1
LW-15360	ELBOW-.250-18 X .50 TUBE-45DEG	1
1102	PLUG-.125 PIPE	2

This page intentionally left blank.

Numerical Index

PART NO.	PART NAME	PAGE NO.
01K28983	BUSHING	15
01P21501-4-50	BAG	37
06A19956	OIL SEAL	35
06B26669	GASKET	19
06E19769-0.63	GASKET	33
06E19769-1.25	GASKET	7
06E19769-1.25	GASKET	31
1028-B	BALL	7
1102	PLUG	5
1102	PLUG	5
1102	PLUG	17
1182-H7	SPARK PLUG	37
1182-Q4	SPARK PLUG	37
13B47205	CRANKSHAFT ASSY	9
13B47208	CRANKSHAFT ASSY	9
13B47224	CRANKSHAFT ASSY	9
13B47227	CRANKSHAFT ASSY	9
14D23913	PISTON	15
14H29884	RING	15
14W21696	ROLLER	9
15B28093	LIFTER ASSY	19
16A30140-01	CYLINDER & HEAD	17
16R22126	GUIDE	17
17A23945	VALVE	21
17B23936	VALVE	21
17C21191	KEY	21
17D29055	SPRING	21
17D29060	SPRING	21
18A26094	BEARING	7
18D26101	BEARING	7
18M23887	BEARING	15
25C-10	STUD	5
25C-10	STUD	31
25C-10	STUD	33
25C-12	STUD	35
25C-8	STUD	17
25C-9	STUD	5
31 C-12	STUD	5
31-16	STUD	17

PART NO.	PART NAME	PAGE NO.
31A26041	STARTER	41
31A26901	STARTER	41
31C-12	STUD	17
31C-13	STUD	5
31C-14	STUD	31
31C-16	STUD	5
38-13	STUD	5
383-B	NUT	19
50-15	STUD	5
51A21091	BODY ASSY	35
51A21092	BODY ASSY	35
53E22144	VALVE ASSY	33
54E23092	KIT	33
60009	KEY	21
60096	GASKET	33
60430	COVER	35
61084	SPRING	7
61358	PLUG	31
61378	SCREEN	31
61510	PLUG	9
61548	PLATE	5
61548-Y8	PLATE	5
61E26394	CARBURETOR	25
62732	CAP	11
65441	SEAT	21
66145	DOWEL	35
66E21574	MAGNETO	37
66E21575	MAGNETO	37
66M19385	CLAMP	37
67H21455	HARNESS	37
68875	RETAINER	37
69260	INSERT	17
69796	DOWEL	5
70310	SEAL	21
71481	RING	19
71610	HOOK	23
71611	RETAINER	23
71712	PIPE	25
71903	BUSHING	9

PART NO.	PART NAME	PAGE NO.
71907	WASHER	9
71973	GASKET	25
72053	GASKET	3
72057	SEAT	17
72058	SEAT	17
72075	RING	7
72078	LOCKPLATE	11
72091	RING	7
72155	BUSHING	9
72198	PLUG	15
72220	GASKET	7
72377	ELBOW	25
72378	COVER	3
72566	GEAR	9
72656	BUSHING	9
72657	BUSHING	9
72797	ROLLER	9
72801	COUNTERWEIGHT	9
73346	FLANGE	25
73772	NOZZLE ASSY	5
73810	BUSHING	9
73944	ELBOW	27
74241	RING	15
75339	BAFFLE ASSEMBLY	23
76510	GASKET	33
76534	SHIM	1
76734	ZIP STRAP	27
76943	GUIDE	17
77154	GASKET	25
77611	GASKET	39
77808	VALVE ASSY	7
77813	GASKET	27
77814	ADAPTER	27
78027	BOLT	15
78077	FLANGE	39
78077	FLANGE	39
78082	FLANGE	39
78082	FLANGE	39
78084	GASKET	39
78257	GASKET	39

PART NO.	PART NAME	PAGE NO.
79024	BUSHING	9
8313	GASKET	35
AN6-13	BOLT	1
AN6-14	BOLT	1
AN6-36A	BOLT	13
AN6C11A	BOLT	28
AN6C12A	BOLT	28
AN840-12D	FITTING	33
AN844-12D	FITTING	33
AN960C516	WASHER	28
I.W-10551	GEAR	9
LW-10077	SEAT	21
LW-10332	LOCKPLATE	9
LW-10637	ELBOW	33
LW-11519	SUPPORT ASSY	9
LW-11713	SPRING	7
LW-12093-4	COUPLING	39
LW-12093-5	COUPLING	39
LW-12093-8	COUPLING	28
LW-12186	NUT	15
LW-12272	LOCKPLATE	21
LW-12681	GASKET	37
LW-12690	ELBOW	27
LW-12878-4S170	HOSE ASSY	27
LW-13323	SEAT	21
LW-13473	GASKET	39
LW-13792	SEAL	7
LW-13906	FILTER ASSEMBLY	33
LW-14078	PIN	15
LW-14114	CONNECTOR	27
LW-14260	SEAL	11
LW-14394	HOSE	27
LW-14680	TUBE ASSEMBLY.	23
LW-14708	GEAR	9
LW-14785	GAGE ASSEMBLY	7
LW-14820	RING	9
LW-14888	SUMP ASSEMBLY	31
LW-14916	PIPE	25
LW-14995	SPRING	21
LW-15014	ARM	19

PART NO.	PART NAME	PAGE NO.
LW-15031	GEAR	11
LW-15032	SHAFT ASSEMBLY	11
LW-15045	BUSHING	5
LW-15046	GASKET	33
LW-15047	OIL FILTER ADAPT.	33
LW-15063	EYE	13
LW-15070	SEAL	35
LW-15071	GASKET	31
LW-15097	O-RING	37
LW-15109	O-RING	3
LW-15140	SHAFTGEAR	3
LW-15141	WASHER	3
LW-15142	COVER	3
LW-15262	LOCKPLATE	35
LW-15263	GEAR	35
LW-15266	LINK	1
LW-15267	BRACKET	1
LW-15274	GEAR	3
LW-15276	STUD	5
LW-15277	STUD	5
LW-15288	CONNECTING ROD	15
LW-15316	CAP	21
LW-15324	ROD ASSEMBLY	19
LW-15330	COVER	19
LW-15345	SHAFT	35
LW-15359	NIPPLE	23
LW-15360	ELBOW	17
LW-15361	TUBE ASSEMBLY	23
LW-15362	TUBE ASSEMBLY	23
LW-15376	TUBE	5
LW-15377	TUBE	5
LW-15379	BAFFLE	11
LW-15407	SEAT	19
LW-15592-8-08	CLAMP	23
LW-15592-8-08	CLAMP	27
LW-15592-8-24	CLAMP	25
LW-15592-8-24	CLAMP	39
LW-15592-8-28	CLAMP	25
LW-15592-8-32	CLAMP	25
LW-15617	BRACKET	7

PART NO.	PART NAME	PAGE NO.
LW-15618	BRACKET	7
LW-15659	GEAR	37
LW-15709	WASHER	19
LW-15858-62-244	CLAMP	27
LW-15858-62-350	CLAMP	39
LW-15859	HOSE	39
LW-15886	ADAPTER	39
LW-15998	IMPELLER	35
LW-15999	IMPELLER ASSY	35
LW-16056	TUBE	21
LW-16217	HOSE	27
LW-16246	DUCT	27
LW-16264	TURBOCHARGER	27
LW-16265-1	VALVE ASSY	27
LW-16266-10-50	CLAMP	37
LW-16266-25-63	CLAMP	37
LW-16286	FILTER ASSEMBLY	33
LW-16350	BRACKET	7
LW-16351	BRACKET	7
LW-16380	PIPE	39
LW-16381	PIPE	39
LW-16382	PIPE	39
LW-16383	ADAPTER	39
LW-16383	ADAPTER	39
LW-16384	ADAPTER	39
LW-16385	PIPE	39
LW-16386	PIPE	39
LW-16387	PIPE	39
LW-16390	STRUT	1
LW-16393	PIPE	28
LW-16395	BRACKET	27
LW-16399	TRANSITION	39
LW-16406	HEAT SHIELD	39
LW-16407	HEAT SHIELD	25
LW-16415	STRUT	27
LW-16416	FLANGE	27
LW-16417	TUBE	27
LW-16471	SUPPORT ASSY	9
LW-16475	SEAT	21
LW-16507	CAMSHAFT ASSY	11

PART NO.	PART NAME	PAGE NO.
LW-16508	CAMSHAFT, GEAR	11
LW-16513	CAMSHAFT ASSY	11
LW-16514	CAMSHAFT, GEAR	11
LW-16573	GASKET	11
LW-16574	ADAPTER	11
LW-16575	TACH. ADAPTER	11
LW-16612	BOLT	28
LW-16613	NUT	28
LW-16614	TUBE	28
LW-16615	WELDED ASSY	28
LW-16618	SUPPORT	28
LW-16705	BAND	28
LW-16747	ELBOW	28
LW-16783-1	GAGE ASSEMBLY	7
LW-16784	CUSHION	37
LW-16947	FUEL PUMP	33
LW-18038	GASKET	27
LW-18085	SPRING	7
LW-18101	HOSE	25
LW-18464	CRANKCASE ASSY	5
LW-18465	CRANKCASE ASSY	5
LW-25-0.94	BOLT	31
LW-25-1.25	BOLT	13
LW-25-1.25	BOLT	25
LW-25-2.00	BOLT	13
LW-25-2.56	BOLT	31
LW-25-3.00	BOLT	33
LW-25-3.38	BOLT	13
LW-25-6.00	BOLT	31
LW-25H1.25	BOLT	13
LW-31-0.94	BOLT	27
LW-31-0.94	BOLT	41
LW-31H0.75	BOLT	1
LW-31H0.88	BOLT	1
LW-31SS-0.88	BOLT	28
LW-31SSH0.81	BOLT	27
LW-38-1.00	BOLT	27
LW-38-2.75	BOLT	7
LW-682555-13	MAGNETO	37
LW-682555-16	MAGNETO	37

PART NO.	PART NAME	PAGE NO.
LW-R-0.750-275	SEAL	21
MS124703	INSERT	33
MS20500-624	NUT	28
MS29512-8	SEAL	33
MS29513-138	SEAL	27
STD-8	WASHER	3
STD-8	WASHER	11
STD-8	WASHER	13
STD-8	WASHER	25
STD-8	WASHER	31
STD-8	WASHER	33
STD-8	WASHER	35
STD-8	WASHER	37
STD-33	WASHER	13
STD-33	WASHER	27
STD-33	WASHER	33
STD-35	WASHER	1
STD-35	WASHER	3
STD-35	WASHER	25
STD-35	WASHER	27
STD-35	WASHER	35
STD-35	WASHER	41
STD-96	KEY	3
STD-160	WASHER	3
STD-160	WASHER	11
STD-160	WASHER	13
STD-160	WASHER	25
STD-160	WASHER	31
STD-160	WASHER	33
STD-160	WASHER	35
STD-251	WASHER	27
STD-375	SCREW	27
STD-394	DOWEL	5
STD-405	PLUG	31
STD-425	WASHER	27
STD-475	WASHER	3
STD-475	WASHER	25
STD-475	WASHER	27
STD-475	WASHER	35
STD-475	WASHER	37



PART NO.	PART NAME	PAGE NO.
STD-475	WASHER	39
STD-475	WASHER	41
STD-551	PLUG	31
STD-557	DOWEL	5
STD-557	DOWEL	35
STD-596	NUT	13
STD-678	WASHER	7
STD-678	WASHER	13
STD-678	WASHER	27
STD-690	WASHER	1
STD-703	BOLT	11
STD-713	COTTER PIN	1
STD-872	NUT	1
STD-1063	NUT	35
STD-1066	DOWEL	11
STD-1211	PLUG	9
STD-1339	PLUG	5
STD-1410	NUT	3
STD-1410	NUT	25
STD-1410	NUT	35
STD-1410	NUT	37
STD-1410	NUT	39
STD-1410	NUT	41
STD-1411	NUT	3

PART NO.	PART NAME	PAGE NO.
STD-1411	NUT	11
STD-1411	NUT	21
STD-1411	NUT	31
STD-1411	NUT	33
STD-1411	NUT	35
STD-1727	WASHER	1
STD-1874	SCREW	37
STD-1874	SCREW	39
STD-1882	SCREW	33
STD-1901	DRIVE STUD	5
STD-1925	SCREW	19
STD-1925	SCREW	39
STD-2043	NUT	28
STD-2047	BOLT	13
STD-2057	KEY	35
STD-2078	DOWEL	9
STD-2081	SCREW	3
STD-2090	NUT	19
STD-2169	ROLL PIN	11
STD-2182	HOSE	23
STD-2191	WASHER	7
STD-2203	PLUG	35
STD-2237	NUT	19
STD-2250	BOLT	9

This page intentionally left blank.