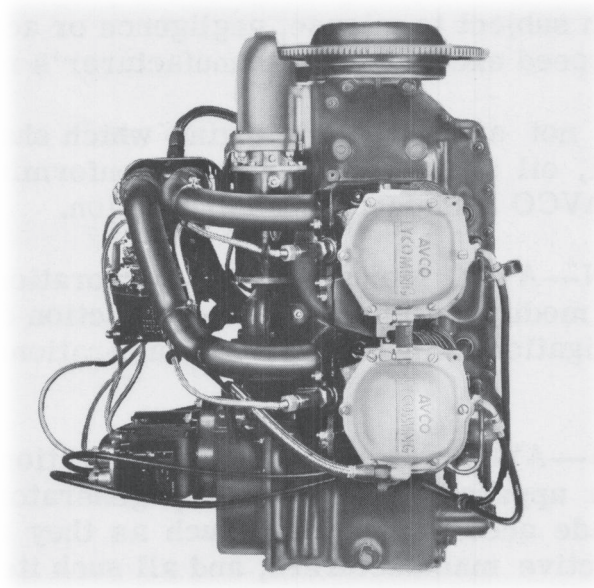


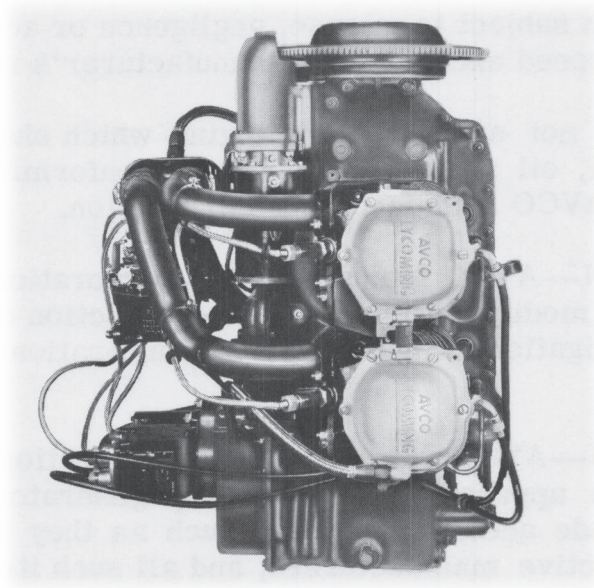
Lycoming Aircraft Engines Parts Catalog



VO-360 Series and IVO-360-A1A Helicopter Engines

LYCOMING

Lycoming Aircraft Engines Parts Catalog



VO-360 Series and IVO-360-A1A Helicopter Engines

LYCOMING

WARRANTY

LYCOMING warrants each new engine to be free from defects in material and workmanship, when properly installed and used under normal conditions, for ninety days after the shipment of each engine from the plant or one hundred hours of operation, whichever event takes place sooner. This warranty is limited to replacing or repairing at its shops any part or parts which have been returned to LYCOMING, with transportation charges prepaid and which, in its opinion, are defective, and LYCOMING shall have no responsibility for any consequential damages. This warranty is expressly in lieu of all other warranties and representations, expressed or implied, and all other obligations are liabilities on the part of LYCOMING.

This warranty does not cover any labor charges for replacement of parts, adjustments, repairs or any other work done on LYCOMING engines.

This warranty shall not apply to any engine which shall have been repaired or altered outside of our factory in anyway so as in our judgment to affect its operation, or which has been subject to misuse, negligence or accident, or which shall have been operated at a speed exceeding the manufacturer's rated speed.

This warranty shall not apply to any engine which shall have been operated with any other fuel, oil and other lubricants conforming to specifications of LYCOMING.

LYCOMING reserves the right at anytime to revise, modify or change the construction of LYCOMING engines without incurring any obligation to incorporate such alterations to engines previously sold.

LYCOMING makes no warranty with respect to ignition apparatus, carburetors, starters, voltage regulators or other trade accessories, inasmuch as they are usually warranted specially by their respective manufacturers, and all such items are sold "as is".

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST

TABLE OF CONTENTS

WARRANTY	i
INTRODUCTION	iii
SPECIAL SERVICE SECTION	iv
MODEL EXPLANATION SECTION	vi
GROUP ASSEMBLY PARTS LIST	1
Figure 1. Crankcase Group	ALL MODELS 2
Figure 2. Crankshaft and Camshaft Group	ALL MODELS 6
Figure 3. Piston, Piston Rings and Connecting Rod Group	ALL MODELS 10
Figure 4. Cylinder Group	ALL MODELS 12
Figure 5. Accessory Case and Related Parts Group	ALL MODELS 16
Figure 6. Magneto Case and Accessory Drives Group	ALL MODELS 18
Figure 7. Magnetos and Magneto Drives Group (S4LN-21)	VO-360-A1A 22
Figure 8. Magnetos and Magneto Drives Group (S4LN-200 and S4LN-204)	VO-360-A1B, B1A, IVO-360-A1A 24
Figure 9. Ignition Shielded Cable Assembly Group	ALL MODELS 26
Figure 10. Induction System	VO-360-A1A, A1B, B1A 28
Figure 11. Induction System	IVO-360-A1A 30
Figure 12. Starter, Generator and Voltage Regulator Group	ALL MODELS 32
Figure 13. Intercylinder Cooling Baffles	ALL MODELS 34
Figure 14. Priming System	VO-360-A1A, A1B, B1A 36
Figure 15. Fuel Injection System	IVO-360-A1A 38
NUMERICAL OVERSIZE AND UNDERSIZE PARTS SECTION	40
SERVICE REPLACEMENT SET SECTION	41
NUMERICAL INDEX PARTS SECTION	44

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST

INTRODUCTION

1. GENERAL.

This Illustrated Parts Catalog lists, describes and illustrates all procurable parts for the Lycoming Helicopter Engines listed herein.

2. THE SPECIAL SERVICE SECTION.

This section provides service parts replacement information for Model VO-360-A1A Engines with serial numbers 101-45 to 120-45 inclusive. These twenty (20) engines incorporate certain parts of Brantly manufacture that are no longer available. Complete instructions for servicing these Brantly parts, in the event replacement is necessary, are provided in the SPECIAL SERVICE SECTION.

3. MODEL EXPLANATION SECTION.

This section provides information which will familiarize the user with the various models in this publication. This information - relating to accessories, accessory drives and major components - is listed under individual model headings.

4. GROUP ASSEMBLY PARTS LIST.

The Group Assembly Parts list divides the equipment into various groups of assemblies and related parts; however, this grouping bears no relationship to the order of assembly or disassembly of the engine. Each parts group listing is accompanied by an exploded view illustrating the parts listed and showing their relationship to each other. The illustrations are adjacent to each parts group.

The "Ref. No." column provides the necessary cross reference between the parts listing and the applicable illustration.

The "Part Number" column indicates the Lycoming, AN or vendor part number. In cases where vendor items have an equivalent Lycoming part number, the Lycoming number will appear in this column and the vendor part number and reference to the vendor and vendor part will be made in the description column. Details of certain vendor items do not have an equivalent Lycoming number; in these instances the vendor number will appear in the part number column.

The "Description Column" provides the basic noun name together with descriptive or dimensional information required to completely describe the part. The descriptions are indented under the numbered subcolumn headings to show the relationship of the parts to assemblies or subassemblies, non-procurable parts such as a crankcase half, cylinder barrel or unstudded housings are not listed. The NOTES appearing in the description column contain pertinent service information and reference should be made to the contents before ordering parts. References to Lycoming Service Bulletins, Letters and Instructions should be carefully observed.

The "QTY. Per Eng." column indicates the number required for each engine at that particular location only and is not to be construed to mean quantity for the complete engine.

The "Model Usage" column is utilized to reflect the application of parts to specific engine models. When this column is blank the particular parts are common to all engines covered by this publication.

5. NUMERICAL INDEX PARTS SECTION.

This section consists of an alpha-numerical arrangement of all assemblies and detail parts in the Group Assembly Parts List.

In the "Figure and Reference Number" column, the digits preceding the dash refer to the figure in the Group Assembly Parts List on which a part or assembly is illustrated. The digits following the dash are the assigned reference numbers of parts or assemblies.

The "Part Number" column in paragraph (3) also applies to the "Numerical Index Parts Section".

The "Description" column provides the basic noun only.

The "QTY. Per Eng." column in paragraph (3) also applies to the "Numerical Index Parts Section".

6. NUMERICAL OVERSIZE AND UNDERSIZE PARTS SECTION.

This section consists of a list of such parts that may be procured in sizes other than standard.

7. SERVICE REPLACEMENT SET SECTION.

This section consists of a listing of service replacement sets or kits such as seal and gasket sets of complete cylinder, piston and ring assembly kits. The individual details of these service kits are listed individually in the group assembly parts list section and may be so procured.

8. INSTRUCTIONS FOR ORDERING PARTS.

When ordering parts it is essential that the complete and correct part number and name be given. In addition it will be helpful if the engine model and serial number be provided. This information will be found on the name plate of the engine.

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST

SPECIAL SERVICE SECTION

**APPLICABLE ONLY TO MODEL VO-360-A1A ENGINES
WITH SERIAL NUMBERS 101-45 TO 120-45 INCLUSIVE.**

The information in this section applies only to the VO-360-A1A engines with the above noted serial numbers. These engines incorporate certain Brantly parts that must be serviced with Lycoming parts in the event replacement becomes necessary.

For purposes of identification, several illustrations of the VO-360-A1A engine are included in this section whereon are identified - by Brantly part number - the items that are no longer available.

Listed below in the left column are the parts of Brantly manufacture that have been replaced by design changes and shall no longer be ordered for replacement. Directly opposite each listing, under the column heading - Service With - is the Lycoming part or parts that must be ordered to service the replaced item.

<u>Brantly Part No.</u>		<u>Service With Lycoming Part No.</u>
B2-206-1	Manifold Assy.	73732
B2-213-1	Pipe Intake, #1	72355
B2-213-2	Pipe Intake, #2	72356
B2-214-1	Pipe Intake, #3	72357
B2-215-1	Pipe Intake, #4	72358

The above group of parts are servicable as a complete set only.

B2-235-1	Cover-Rocker box #1	(1) 72310
B2-235-3	Cover-Rocker box #3	(1) 72310
B2-118-42	Hose-Rocker box drain	(1) 72382
STD-1821	Hose-3/8 ID x 1.66 in.	(2) STD-1793
AN816-6	Nipple-3/8 in. hose	(1) STD-684
-----	Tube-Rocker box drain	(1) 72381

With the exception of STD-1821 and AN816-6, which are procurable individually, the above group of five items must be serviced as a complete set.

B2-235-2	Cover-Rocker box #2	(1) 72380
B2-235-4	Cover-Rocker box #4	(1) 72380
B2-118-42	Hose-Rocker box drain	(1) 72382
STD-1821	Hose-3/8 ID x 1.66 in.	(2) STD-1793
AN816-6	Nipple-3/8 in. hose	(1) STD-684
-----	Tube-Rocker box drain	(1) 72381

With the exception of STD-1821 and AN816-6, which are procurable individually, the above group of five parts must be serviced as a complete set.

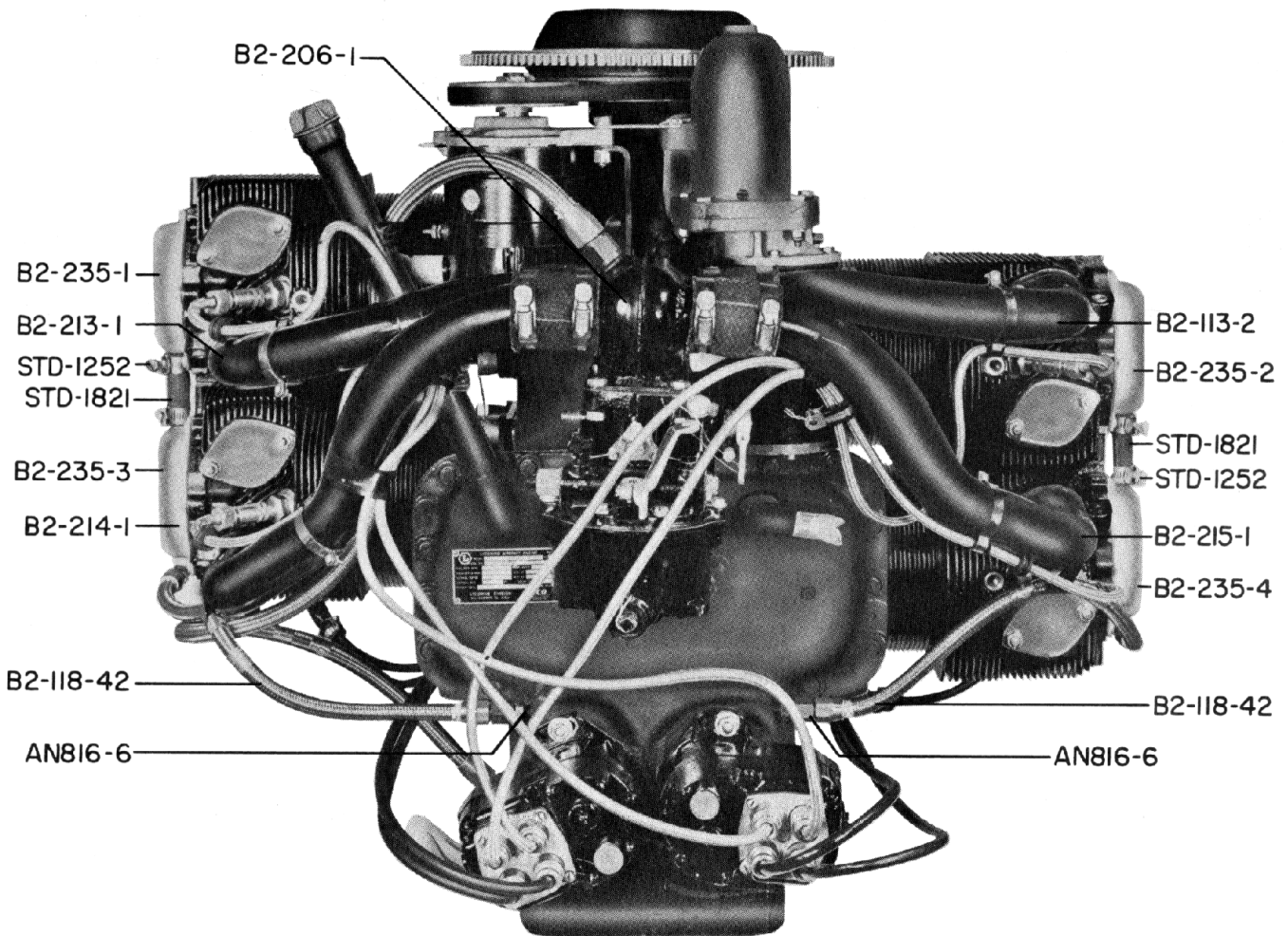
B2-114	Case Assy-Magneto	72295
B2-115	Case Assy Accessory	72294
B2-113-30	Tube-Oil level gage	69098

The above parts supersedure provides for the relocation of the nameplate from the magneto case to the accessory case and the use of an improved type oil level gage tube. With the exception of the accessory cases, which are interchangeable, the above listed items are servicable as a complete set only.

B2-113-20	Gage Assy-Oil level	72948
-----------	---------------------	-------

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST

SPECIAL SERVICE SECTION



LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST

MODEL EXPLANATION SECTION

MODEL VO-360-A1A

INCLUDES FOLLOWING MAJOR COMPONENTS AND DRIVES:

Vertical drive (direct)
Starter, 12 volt (3.38:1) internal reduction and relay
Generator, 12 volt - 20 amp (1.91:1) and regulator
Support, Starter and generator drives
Tachometer drive (SAE)
Carburetor, Float type manual alt. control (MA-4-5)
Dual magnetos (2 impulse S4LN-21)
Shielded ignition (Auto-Lite)
Accessory case (sump)
Magneto case and oil filler and gage (long extension tube)
Provision for full flow oil cooler
(Std. thermometer connection in oil pressure housing)
Chrome plated cylinder barrels - plain piston rings
Fuel pump drive - using vacuum pump drive parts
Crankcase for conical rubber mounts
Engine support bushing and washer
Spark plugs, high compression (shielded)
Exhaust valve pressure oil line
Gasket, Exhaust flange

OPTIONAL EQUIPMENT

Primer system, 3 point
Exhaust flange (stainless) less gasket
Less exhaust flange and gasket
Fuel pump and vacuum pump drives
Altitude compensated carburetor (MA4-5AA)
12 volt - 50 amp. generator and regulator
Mounting bushing - less washers
Intercylinder baffles
Gen. drive (Std. speed), 12/14 pitch ring gear smaller than 24 volt - 40 amp starter and starter switch
Nitrided cylinder barrels - chrome plated piston rings

MODEL VO-360-A1B

SAME AS -A1A WITH THE FOLLOWING EXCEPTIONS:

Magneto case and oil filler and gage (short extension tube)
Dual magnetos (200 series - retard)
Altitude compensated carburetor (MA4-5AA)

MODEL VO-360-B1A

SAME AS -A1B WITH THE FOLLOWING EXCEPTIONS:

Crankcase with piston cooling oil jets.

MODEL IVO-360-A1A

SAME AS -B1A WITH THE FOLLOWING EXCEPTIONS:

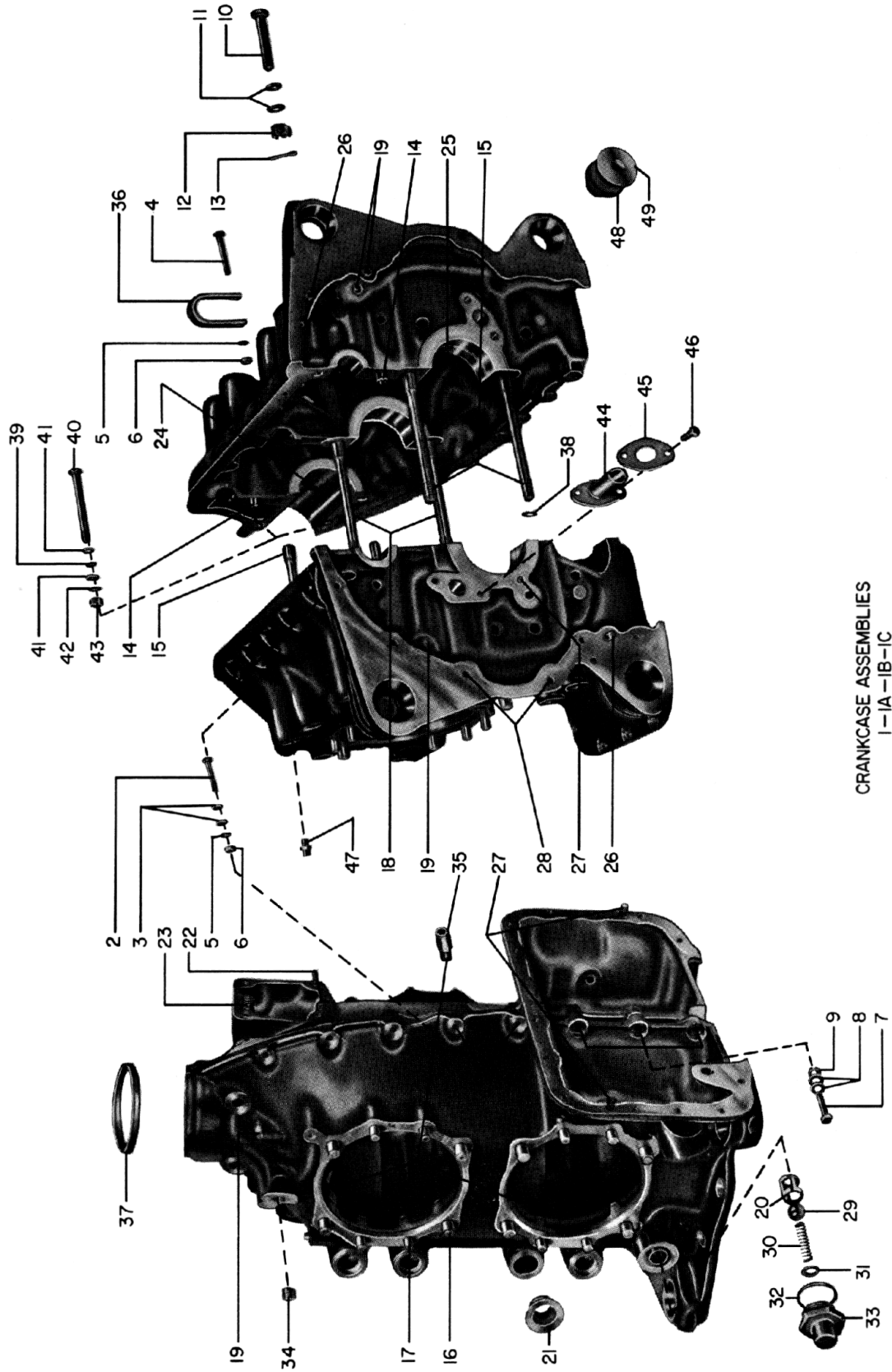
Starter, 12 volt (3.38:1) int. reduction and relay - 12/14 pitch pinion
Support, Starter and generator drives - 12/14 pitch ring gear
Fuel Injector (Bendix)
Magneto case, oil filler, cam action dip stick
Nitrided cylinder barrels - chrome piston rings
Exhaust flange
Intercylinder baffles

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST

FIGURE 1 - CRANKCASE GROUP

Ref. No.	Part Number	1	2	3	4	5	Description	Qty. per Eng.	Model Usage
APPLICABLE MODELS - VO-360-A1A, A1B, B1A AND IVO-360-A1A									
1-1	72137						CRANKCASE ASSEMBLY, Machining All 72137 machining crankcase assemblies with engine serial numbers 219-45 and up have been reworked at Lycoming for use of body fit thru-studs. It is mandatory at next overhaul that 72137 crankcase assemblies with engine serial numbers 101-45 to 149-45 inclusive and 202-45 be reworked in accordance with Lycoming Service Bulletin No. 273. Crankcase assembly 72137 requires four 72112 exhaust valve oil line tube assemblies. In the event 72137 crankcase assembly need be replaced; service with 72623 crankcase assembly which incorporates body fit thru-studs and requires four 72624 exhaust valve oil line tube assemblies.	1	VO-360-A1A, A1B
1A	72867						CRANKCASE ASSEMBLY, Machining Supersedes and replaces 72137 crankcase assembly and differs in that 72867 is machined to receive 69679 body fit thru-studs. Crankcase assembly 72867 requires four 72112 exhaust valve oil line tube assemblies. In the event 72867 crankcase assembly need be replaced; service with 72623 crankcase assembly which incorporates body fit thru-studs and requires four 72624 exhaust valve oil line tube assemblies.	1	" " "
1B	72623						CRANKCASE ASSEMBLY, Machining Supersedes and replaces 72867 crankcase assembly and differs in that 72623 provides additional stock for exhaust valve oil line tube fittings, which require new (72624) exhaust valve oil line tube assemblies.	1	" " "
1C	74262						CRANKCASE ASSEMBLY, Machining 74262 crankcase assembly incorporates body fit thru-studs, employs the use of four piston cooling nozzle assemblies and requires the new (72624) exhaust valve oil line tube assemblies.	1	VO-360-B1A, IVO-360-A1A
ATTACHING PARTS									
2	STD-1414						BOLT, Hex. head, 1/4-20 X 1-1/2 in. long	8	VO-360-A1A, A1B, B1A
3	STD-1414						BOLT, Hex. head, 1/4-20 X 1-1/2 in. long	6	IVO-360-A1A
	STD-8						WASHER, Plain, 1/4 in.	16	VO-360-A1A, A1B, B1A
4	STD-8						WASHER, Plain, 1/4 in.	14	IVO-360-A1A
	STD-1415						BOLT, Hex. head, 1/4-20 X 1-3/4 in. long	1	VO-360-A1A, A1B, B1A
5	STD-1415						BOLT, Hex. head, 1/4-20 X 1-3/4 in. long	3	IVO-360-A1A
	STD-160						WASHER, Internal teeth, 1/4 in. lock	9	
6	STD-1411						NUT, Plain, 1/4-20	9	
7	STD-1416						BOLT, Hex. head dr. end, 1/4-20 X 1-1/2 in. long	3	
8	STD-8						WASHER, Plain, 1/4 in. (Maximum of 9 pcs.)	AR	

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST



CRANKCASE ASSEMBLIES
1-1A - 1B-1C

ALL MODELS

Figure 1 - Crankcase Group

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST

FIGURE 1 - CRANKCASE GROUP

Ref. No.	Part Number	1	2	3	4	5	Description	Qty. per Eng.	Model Usage
ATTACHING PARTS (Continued)									
1-9	STD-1409						NUT, Slotted shear, 1/4-20	3	
10	STD-1205						BOLT, Hex. head (drilled), 3/8-24 X 2-3/16 in. long	1	
11	STD-33						WASHER, Plain, 3/8 in.	2	
12	STD-872						NUT, Slotted, 3/8-24	1	
13	STD-713						PIN, Cotter, 3/32 dia. X 3/4 in. long	1	
-----*									
14	STD-557						DOWEL, Hollow, 1/2 dia. x 11/16 in. long	2	
15	66734						STUD, 1/2-13 X 9-7/8 in. long	4	
16	50-15						STUD, 1/2-13 X 1-7/8 in. long	8	
17	38-13						STUD, 3/8-16 X 1-5/8 in. long	16	
18	68751						STUD, 1/2-20 X 10-21/32 in. long	2	VO-360-A1A, A1B
							When reworking 72137 machining crankcase assembly to incorporate body fit thru studs, (68751) stud must be serviced with 72698-P07 stud. See Lycoming Service Bulletin No. 273.		
	69679						STUD, 9/16-18 X 10-21/32 in. long (Body fit thru-stud) Detail part of 72867, 72623 and 74262 machining crankcase assemblies.	2	
19	1102						PLUG, Allen, 1/8-27 NPT Detail part of 72137 and 72867 machining crankcase assemblies.	3	VO-360-A1A, A1B
	1102						PLUG, Allen, 1/8-27 NPT Detail part of 72623 and 74262 machining crankcase assemblies.	5	
20	61387						SLEEVE, Oil relief valve	1	
21	65007						RETAINER, Shroud tube seal	8	
22	61261						STUD, 5/16-18 X 1-1/2 in. long	2	
23	67528						STUD, 5/16-18 X 1-5/8 in. long	1	
24	67453						DOWEL, Crankshaft bearing	2	
25	67453						DOWEL, Crankshaft bearing Detail part of 72137, 72867 and 72623 machining crankcase assemblies.	4	VO-360-A1A, A1B
	69796						DOWEL, Crankshaft bearing Detail part of 74262 machining crankcase assembly.	4	VO-360-B1A, IVO-360-A1A
26	STD-514						DOWEL, 5/16 dia. X 1/2 in. long	2	
27	66145						DOWEL, 1/4 dia. X 1/2 in. long	3	
28	STD-1623						INSERT, Helicoil (notched), 1/4-20 X 3/8 in. long	2	
29	1028-B						BALL, 11/16 in. dia.	1	
30	68668						SPRING, Oil pressure relief valve	1	VO-360-A1A, A1B
	61084						SPRING, Oil pressure relief valve Provides desired oil pressure on VO-360 Engines with piston cooling nozzle assemblies.	1	VO-360-B1A, IVO-360-A1A
31	STD-425						WASHER, Plain, no. 10 (Maximum of 3 pcs.)	AR	
32	STD-1045						GASKET, Annular, 1-1/4 ID X 1-1/2 X 3/32 in.	1	
33	71714						PLUG, Oil relief valve	1	
34	STD-783						PLUG, Allen, 1/4-18 NPT (2 each half crankcase)	4	
35	73772						NOZZLE ASSEMBLY, Piston cooling Detail part of 74262 machining crankcase assembly.	4	VO-360-B1A, IVO-360-A1A
36	60803						STRAP, Lifting	1	

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST

FIGURE 1 - CRANKCASE GROUP

Ref. No.	Part Number	Description					Qty. per Eng.	Model Usage
		1	2	3	4	5		
1-37	60734	SEAL, Crankshaft oil (Remove garter spring from seal at engine assembly) 60734 replaces alternate crankshaft oil seal (71879). See Lycoming Service Instruction No. 1050.					1	
38	72075	SEAL, Oil, 3/32 section X 15/32 in. ID					6	
39	72091	RING, Oil seal, 23/64 ID X 7/64 in. dia. section					2	
40	STD-1197	BOLT, Hex. head, 3/8-24 X 3-1/2 in. long					2	
41	STD-33	WASHER, Plain, 3/8 in.					4	
42	STD-678	WASHER, Internal teeth, 3/8 in. lock					2	
43	STD-596	NUT, Plain, 3/8-24					2	
44	68749	SHAFT, Crankshaft idler gear					1	
ATTACHING PARTS								
45	61864	LOCKPLATE, 1/4 in. bolt X 1-3/4 in. spacing When 61864 is exhausted; service with 73817.					1	
46	STD-705	SCREW, Hex. head, 1/4-20 X 11/16 in. long					2	
47	AN780-4	NIPPLE, Union, 7/16-20 X 1/8 in. NPT (1/4 in. OD Tube)					4	
48	71032	BUSHING, Engine support					8	
49	STD-619	WASHER, 17/32 ID X 1-3/4 OD X 5/32 in. thick					8	VO-360-A1A, A1B, B1A

NOTE

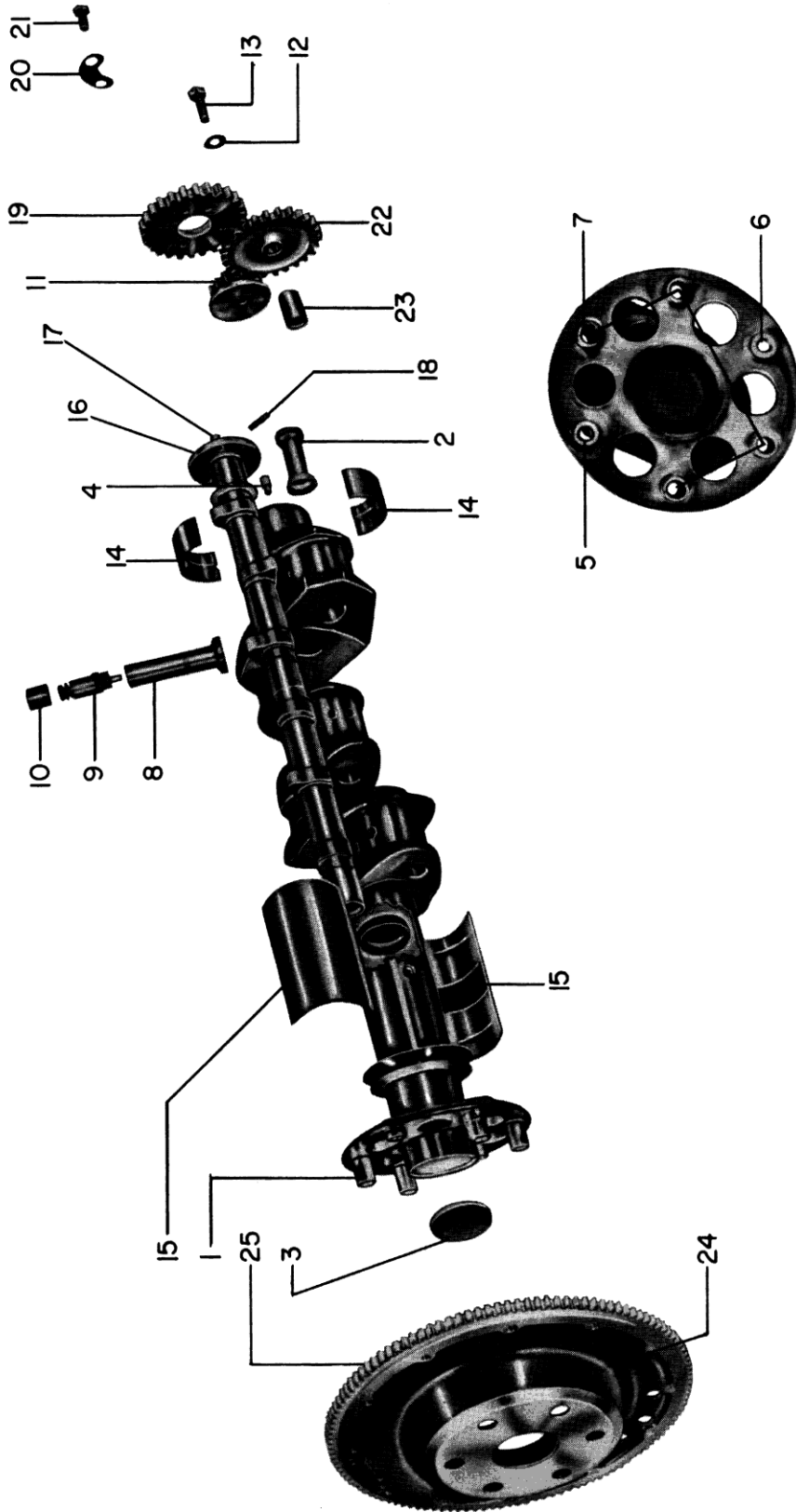
See Figure 12, References Nos. 19 to 23 inclusive for crankcase attaching parts at generator bracket location.

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST

FIGURE 2 - CRANKSHAFT AND CAMSHAFT GROUP

Ref. No.	Part Number	1	2	3	4	5	Description	Qty. per Eng.	Model Usage
APPLICABLE MODELS - VO-360-A1A, A1B, B1A AND IVO-360-A1A									
2-1	71541						CRANKSHAFT ASSEMBLY (For fixed pitch propeller installation)	1	
2	71577						TUBE, Crankpin oil	4	
3	STD-1211						PLUG, Expansion, 2.00 in. dia.	1	
4	STD-1065						DOWEL, Stepped, .310-.251 dia. X 35/64 in. long	1	
5	72060-S						BUSHING, Propeller flange, indexing	1	
6	72061-S						BUSHING, Propeller flange, short	1	
7	72062-S						BUSHING, Propeller flange, long	4	
8	69529						BODY, Hydraulic tappet (Straight body, narrow seat) Superseded by and service with 72877.	8	VO-360-A1A, A1B, B1A
NOTE									
69529 can be used with either 71791 or 72876 hydraulic tappet plunger assemblies.									
	72877						BODY, Hydraulic tappet (Straight body, wide seat) Supersedes 69529.	8	
NOTE									
72877 can be used only with 72876 hydraulic tappet plunger assembly.									
9	71791						PLUNGER ASSEMBLY, Hydraulic tappet (Fast leakdown, narrow seat) Superseded by and service with 72876 hydraulic tappet plunger assembly.	8	VO-360-A1A, A1B, B1A
	72876						PLUNGER ASSEMBLY, Hydraulic tappet (Fast leakdown, wide seat) Supersedes 71791.	8	
NOTE									
Hydraulic tappet plunger assembly 71791 can be used only with 69529 hydraulic tappet body, whereas hydraulic tappet plunger assembly 72876 can be used with either 69529 or 72877 hydraulic tappet bodies. Hydraulic tappet plungers must be used in complete sets in regard to their leakdown rate. See Lycoming Service Instruction No. 1011A.									
10	65074						SOCKET, Push rod, hydraulic tappet	8	
11	72348						GEAR, Crankshaft	1	
ATTACHING PARTS									
12	72353						LOCKPLATE, Crankshaft gear	1	
13	STD-1865						BOLT, 5/16-24 X 13/16 in. long	1	
-----*									

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST



ALL MODELS

Figure 2 - Crankshaft and Camshaft Group

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST

FIGURE 2 - CRANKSHAFT AND CAMSHAFT GROUP

Ref. No.	Part Number	1	2	3	4	5	Description	Qty. per Eng.	Model Usage
2-14	69961						BEARING, Crankshaft (Alternate 72415) Engines manufactured prior to the incorporation of body fit thru-studs even though reworked in accordance with Lycoming Service Bulletin No. 273 should be reassembled with Lycoming Part No. 69961 or 72415 main bearings (whichever is available). This will provide proper running clearance for the crankshaft.	4	VO-360-A1A, A1B, B1A
	73048						BEARING, Crankshaft (Alternate 73049) Engines with serial numbers 219-45 and up must be serviced at overhaul with 73048 or 73049 main bearings (whichever is available). See Lycoming Service Instruction No. 1020.	4	
15	71637						BEARING, Crankshaft, front	1	
16	70492						CAMSHAFT ASSEMBLY	1	
17	STD-1065						DOWEL, Stepped, .310 and .251 dia. X 35/64 in. long	1	
18	STD-1199						PIN, 3/16 dia. X 1-1/8 in. long	1	
19	72080						GEAR, Camshaft	1	
ATTACHING PARTS									
20	72078						LOCKPLATE, 5/16 bolt X 1-21/64 in. spacing	2	
21	STD-1791						BOLT, Hex. head, 5/16-24 X 21/32 in. long	4	
-----*									
22	61278						GEAR ASSEMBLY, Crankshaft idler, plain	1	
23	61154						BUSHING, Crankshaft idler gear	1	
24	71328						SUPPORT ASSEMBLY, Starter ring gear (For standard speed generators.) This starter ring gear support assembly requires use of 60886 generator drive belt with 12 volt-20 amp. generator (68764).	1	VO-360-A1A, A1B, B1A
	72565						SUPPORT ASSEMBLY, Starter ring gear (12/14 pitch) (For standard speed generators.) This starter ring gear support assembly requires use of 60886 generator drive belt with 12 volt-50 amp. generator (71744).	1	Std. Equipt. For IVO-360-A1A Opt. Equipt. For VO-360-A1A, A1B, B1A
25	60882						GEAR, Starter ring Detail part of 71328 starter ring gear support assembly.	1	VO-360-A1A, A1B, B1A
	72566						GEAR, Starter ring (12/14 pitch) Detail part of 72565 starter ring gear support assembly.	1	Std. Equipt. For IVO-360-A1A. Opt. Equipt. For VO-360-A1A, A1B, B1A

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST

FIGURE 3 - PISTON, PISTON RINGS AND CONNECTING ROD GROUP

Ref. No.	Part Number	1	2	3	4	5	Description	Qty. per Eng.	Model Usage
APPLICABLE MODELS - VO-360-A1A, A1B, B1A AND IVO-360-A1A									
3-1	71594						PISTON, High compression (3 rings) (Used in 72114 cylinder and head assembly.)	4	VO-360-A1A
NOTE									
72967 (4-ring piston) supersedes and is interchangeable with 71594 (3-ring piston) in complete sets only. A supply of 71594 pistons is being maintained for service purposes. 71594 piston requires 2-71556 and 1-72454 unplated piston rings.									
1A	72967						PISTON, High compression (4 rings) (Used in either 72114, 73924 or 74498 cylinder and head assemblies.)	4	VO-360-A1B, B1A, IVO-360-A1A
NOTE									
72967 piston requires either 3-72446, 1-69457 chrome plated piston rings or 3-71939, 1-72454 unplated piston rings. VO-360 engines with serial numbers 247-45 and up and IVO-360-A1A engines incorporate 72967 piston.									
2	71556						RING, Piston, top and second compression (unplated)	8	VO-360-A1A
2A	72446						RING, Piston, top, second and third compression (Chrome plated)	12	VO-360-A1B, B1A, IVO-360-A1A
	71939						RING, Piston, top, second and third compression (unplated)	12	VO-360-A1B, B1A
3	72454						RING, Piston, oil regulating, expander type (unplated)	4	VO-360-A1A, A1B
3A	69457						RING, Piston, oil regulating, expander type (Chrome plated)	4	VO-360-A1B, B1A, IVO-360-A1A
	72454						RING, Piston, oil regulating, expander type	4	VO-360-A1B, B1A

WARNING

Do not under any circumstances, assemble chrome plated piston rings in a chrome plated cylinder barrel. Chrome plated cylinders are identified by an orange band around the base of the cylinder barrel or orange paint on the cylinder fins between the push rods.

REFERENCE NUMBERS 2 AND 3 (PISTON RINGS) APPLY TO 3-RING PISTON.
REFERENCE NUMBERS 2A AND 3A (PISTON RINGS) APPLY TO 4-RING PISTON.

SEE PAGE 9 FOR APPROVED CYLINDER - PISTON RING COMBINATIONS.

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST

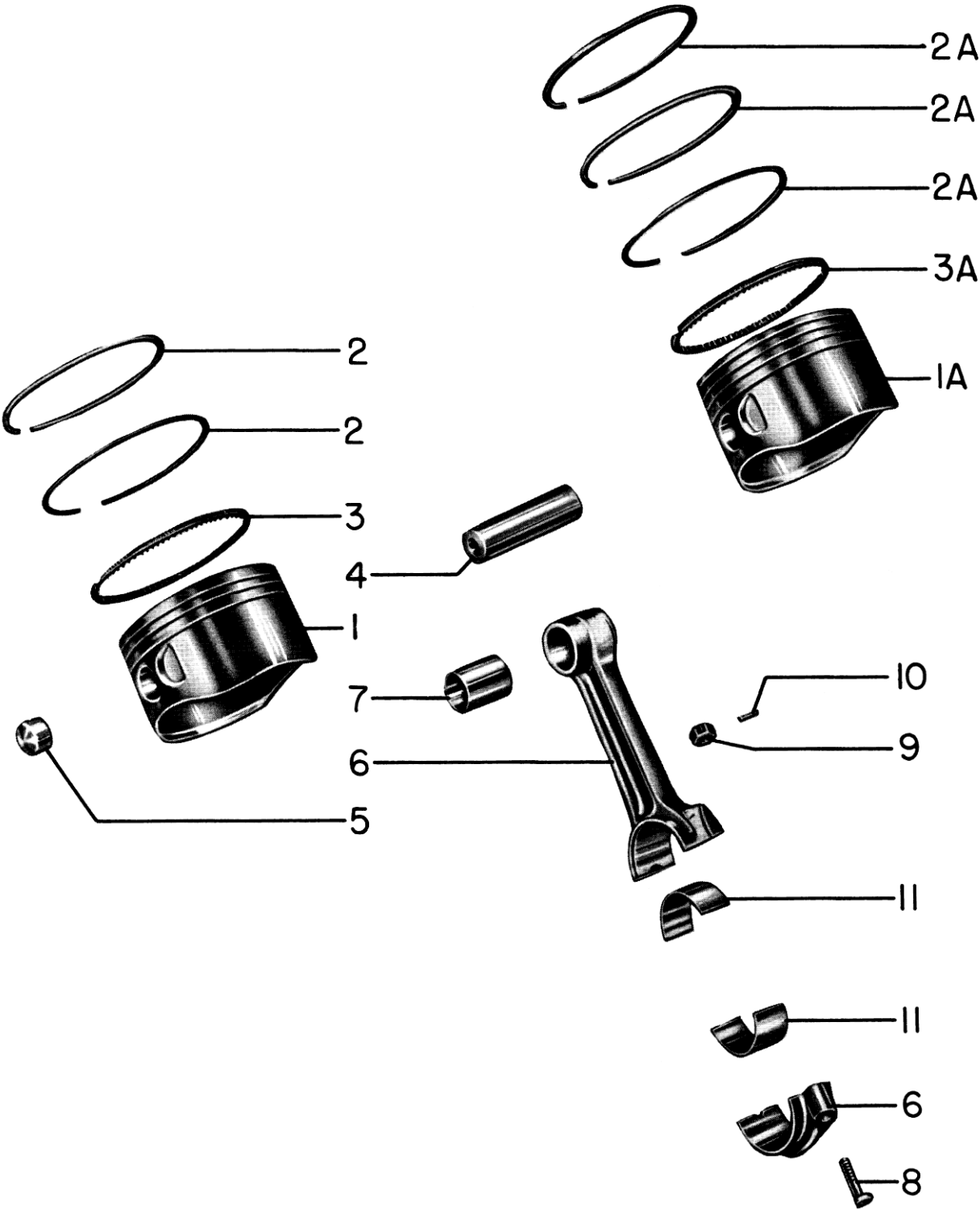
FIGURE 3 - PISTON, PISTON RINGS AND CONNECTING ROD GROUP

Ref. No.	Part Number	1	2	3	4	5	Description	Qty. per Eng.	Model Usage
3-4	69650						PIN, Piston	4	
5	72198						PLUG, Piston pin	8	
6	71987-S						ROD ASSEMBLY, Connecting	4	
7	65819						BUSHING, Connecting rod, upper	4	
8	71087						BOLT, Connecting rod	8	
9	71950						NUT, Slotted, 3/8-24	8	
10	STD-1853						PIN, 3/32 dia. X 9/16 in. long	8	
11	67276						BEARING, Connecting rod	8	
	72218						BEARING, Connecting rod (Alternate to 67276; use in pairs)	8	

APPROVED CYLINDER - PISTON RING COMBINATIONS

High Compression	Chrome	Nitrided Steel With Half Wedge Rings	Chrome With Half Wedge Rings
	VO-360-A1A	VO-360-A1B, B1A	VO-360-A1B, B1A
Cylinder	72114	73924	72114
Piston	71594	72967	72967
Top Ring	71556 pl.	72446 ch.	71939 pl.
Second Ring	71556 pl.	72446 ch.	71939 pl.
Third Ring	-----	72446 ch.	71939 pl.
Oil Regulating	72454 pl.	69457 ch.	72454 pl.
		IVO-360-A1A	
Cylinder		74498	
Piston		72967	
Top Ring		72446 ch.	
Second Ring		72446 ch.	
Third Ring		72446 ch.	
Oil Regulating		69457 ch.	

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST



ALL MODELS

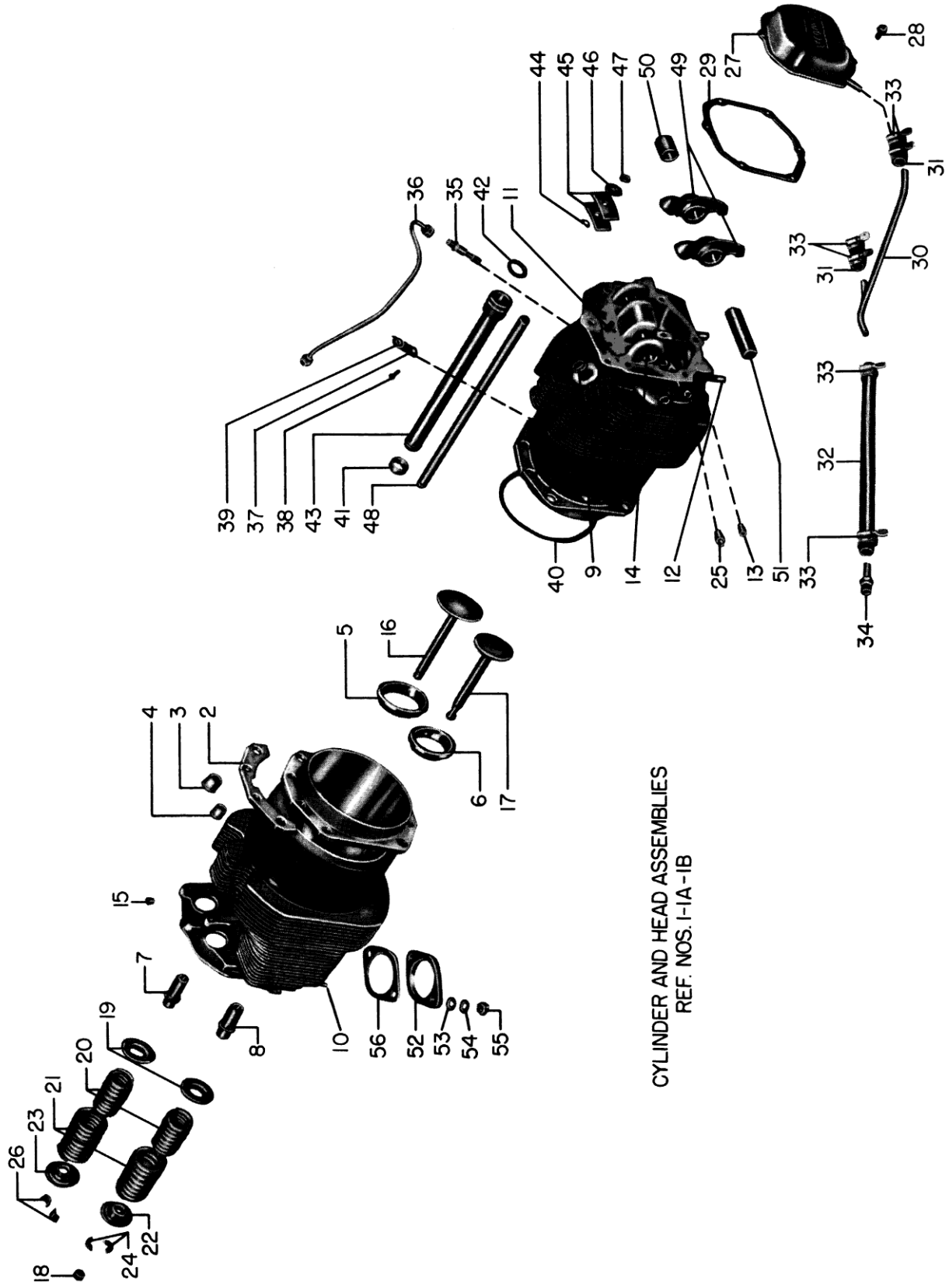
Figure 3 - Piston, Piston Rings and Connecting Rod Group

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST

FIGURE 4 - CYLINDER GROUP

Ref. No.	Part Number	1	2	3	4	5	Description	Qty. per Eng.	Model Usage
APPLICABLE MODELS - VO-360-A1A, A1B, B1A AND IVO-360-A1A									
4-1	72114						CYLINDER AND HEAD ASSEMBLY (Chrome plated barrels)	4	VO-360-A1A, A1B, B1A
1A	73924						CYLINDER AND HEAD ASSEMBLY (Opt. Equipt.) (Nitrided barrels) See "Service Replacement Set Section" for use of 73924 cyl. and hd. assemblies in regard to VO-360-A1A engines.	4	VO-360-A1B, B1A
1B	74498						CYLINDER AND HEAD ASSEMBLY (Nitrided barrels)	4	IVO-360-A1A
ATTACHING PARTS									
2	69531						PLATE, Cylinder hold-down, notched	8	
3	71133						NUT, Allen head, 1/2-20 NF-3	16	
4	71134						NUT, Allen head, 3/8-24 NF-3	16	
-----*									
5	72057						SEAT, Intake valve	4	
6	72058						SEAT, Exhaust valve	4	
7	60028						GUIDE, Intake valve	4	
	61681						GUIDE, Intake valve (Alternate to 60028)	4	
8	72115						GUIDE, Exhaust valve	4	
9	66796 P10						INSERT, Spark plug, 18-1.5MM (Short reach) Procurable in P10 oversize only.	8	
10	61261						STUD, 5/16-18 X 1-1/2 in. long	8	
11	68510						STUD, 1/4-20 X 1-1/16 in. long	4	
12	61262						STUD, 1/4-20 X 1-17/32 in. long	8	
13	STD-783						PLUG, Allen, 1/4-18 NPT	4	
14	66610						BUSHING, Rocker shaft	16	
15	STD-1872						INSERT, Heli-Coil taper pipe thread Detail part of 74498 cylinder and head assembly.	4	IVO-360-A1A
16	73938						VALVE, Intake Supersedes and interchangeable with 72625.	4	
17	71595						VALVE, Exhaust (Rotator Type)	4	
18	62388						CAP, Valve stem	4	
19	61625						SEAT, Valve spring, lower	8	
20	65567						SPRING, Valve auxiliary	8	
21	65427						SPRING, Valve, outer	8	
22	69532						SEAT, Valve spring, exhaust	4	
23	68327						SEAT, Valve spring, intake	4	
24	72050						KEY, Valve	8	
25	1102						PLUG, Socket, 1/8 pipe X 3/8 in. long	4	
	1102						PLUG, Socket, 1/8 pipe X 3/8 in. long (Opt. equipt.) Required for (3) three point primer system	1	VO-360-A1A, A1B, B1A
26	60009						KEY, Valve	8	
27	72310						COVER ASSY., Rocker box (left)	2	
	72380						COVER ASSY., Rocker box (right)	2	
ATTACHING PARTS									
28	STD-1826						SCREW, Fill. hd. self-locking, 1/4-20 X 5/8 in. long	24	
-----*									
29	61246						GASKET, Rocker box cover	4	
30	72381						TUBE, Rocker box drain	2	

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST



CYLINDER AND HEAD ASSEMBLIES
REF. NOS. 1-1A-1B

ALL MODELS

Figure 4 - Cylinder Group

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST

FIGURE 4 - CYLINDER GROUP

Ref. No.	Part Number	1	2	3	4	5	Description	Qty. per Eng.	Model Usage
4-31	STD-1793						HOSE, 3/8 ID X 3/4 OD X 1-21/32 in. long	4	
32	72382						HOSE, Rocker box drain tube	2	
ATTACHING PARTS									
33	STD-1252						CLAMP, Hose, 3/4 in. dia.	12	
-----*									
34	STD-684						NIPPLE, Straight, 3/8 in. hose	2	
35	61634						CONNECTOR, Exhaust valve oil line	4	
36	72112						TUBE ASSEMBLY, Exhaust valve oil line Used with 72137 and 72867 machining crankcase assemblies.	4	VO-360-A1A, A1B
	72624						TUBE ASSEMBLY, Exhaust valve oil line Can only be used with 72623 and 74262 machining crankcase assemblies.	4	
37	72111						PLATE, Grommet	4	
ATTACHING PARTS									
38	AN500A10-8						SCREW, Fill. hd. drilled, no. 10-24 X 1/2 in. long	4	
-----*									
39	STD-957						GROMMET, 17/64 in. ID	4	
40	71481						RING, Oil seal, 3/32 dia. section X 4-27/32 in. ID	4	
41	60053						SEAL, Shroud tube	8	
42	70310						SEAL, Shroud tube	8	
43	71083						TUBE, Push rod shroud	8	
44	69345						SPACER, Shroud tube spring	4	
45	68517						SPRING, Shroud tube	8	
46	68518						LOCKPLATE, Shroud tube	4	
47	STD-1411						NUT, Plain, 1/4-20	4	
48	73434						ROD ASSEMBLY, Push (12.477-12.490)	AR	
	73435						ROD ASSEMBLY, Push (12.504-12.517)	AR	
	73436						ROD ASSEMBLY, Push (12.531-12.544)	AR	
(A total of 8 push rod assemblies required; select for proper fit.)									
73434, 73435 and 73436 replace 71135, 71136 and 71137 respectively.									
49	72117						ROCKER ASSEMBLY, Valve	8	
50	60398						BUSHING, Valve rocker	8	
51	60401						SHAFT, Valve rocker	4	
52	61260						FLANGE, Exhaust (stainless) (ship loose)	4	Std. Equip. For IVO-360-A1A. Opt. Equip. For VO-360- A1A, A1B, B1A
ATTACHING PARTS									
53	STD-35						WASHER, Plain, 5/16 in.	8	
54	STD-475						WASHER, Shakeproof lock, 5/16 in.	8	
55	STD-1410						NUT, Plain, 5/16-18	8	
-----*									
56	65321						GASKET, Exhaust flange (ship loose)	4	VO-360-A1A, A1B, B1A

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST

FIGURE 5 - ACCESSORY CASE AND RELATED PARTS GROUP

Ref. No.	Part Number	1	2	3	4	5	Description	Qty. per Eng.	Model Usage
APPLICABLE MODELS - VO-360-A1A, A1B, B1A AND IVO-360-A1A									
5-1	72294						CASE ASSEMBLY, Accessory (Opt. Equipt.) Machined and studded for fuel pump and vacuum pump drives.	1	VO-360-A1A, A1B, B1A
NOTE									
Acc. case assembly 74336 may be converted to a 72294 acc. case assembly by installing four (4) 61238 studs in the vacuum pump pad.									
1A	74336						CASE ASSEMBLY, Accessory (Std. Equipt.) 74336 is identical to 72294 except the vacuum pump pad of 74336 is not studded. See "NOTE", reference number 54.	1	
ATTACHING PARTS									
2	STD-8						WASHER, Plain, 1/4 in.	12	
3	STD-160						WASHER, Internal teeth, 1/4 in. lock	12	
4	STD-1204						BOLT, Hex. hd., 1/4-20 X 15/16 in. long	10	
5	STD-1415						BOLT, Hex. hd., 1/4-20 X 1-3/4 in. long	2	
-----*									
6	STD-91						PLUG, Allen, 1/2-14 NPT	3	
7	61265						STUD, Drilled, 5/16-18 X 2-3/16 in. long (Not Illustrated)	3	
8	61238						STUD, 1/4-20 X 2-25/32 in. long Detail part of 72294 accessory case assembly.	8	
	61238						STUD, 1/4-20 X 2-25/32 in. long Detail part of 74336 accessory case assembly.	4	
9	STD-783						PLUG, Allen head, 1/4-18 NPT	1	
10	60981						COVER ASSEMBLY, Oil pump	1	
ATTACHING PARTS									
11	STD-35						WASHER, Plain, 5/16 in.	3	
12	STD-1420						NUT, Slotted, 5/16-18	3	
-----*									
13	60983						COVER, Oil pump	1	
14	60329						SHAFT, Oil pump idler	1	
15	STD-714						PIN, Cotter, 1/8 dia. X 1.00 in. long	1	
16	60984						BODY, Oil pump	1	
17	61174						SHAFT, Oil pump drive	1	
18	72347						COUPLING, Oil pump drive	1	
19	60746						IMPELLER, Oil pump driving	1	
20	60747						IMPELLER, Oil pump driven	1	
21	70484						SCREEN, Oil suction	1	
22	72397						ADAPTER, Oil drain and suction screen	1	
ATTACHING PARTS									
23	STD-8						WASHER, Plain, 1/4 in.	3	
24	STD-1856						SCREW, Hex. hd. self-locking, 1/4-20 X 1.00 in. long	3	
-----*									
25	72391						GASKET, Oil drain and suction screen adapter	1	
26	61165						SEAL, Tachometer drive, oil	1	
27	61175						ADAPTER, Tachometer	1	

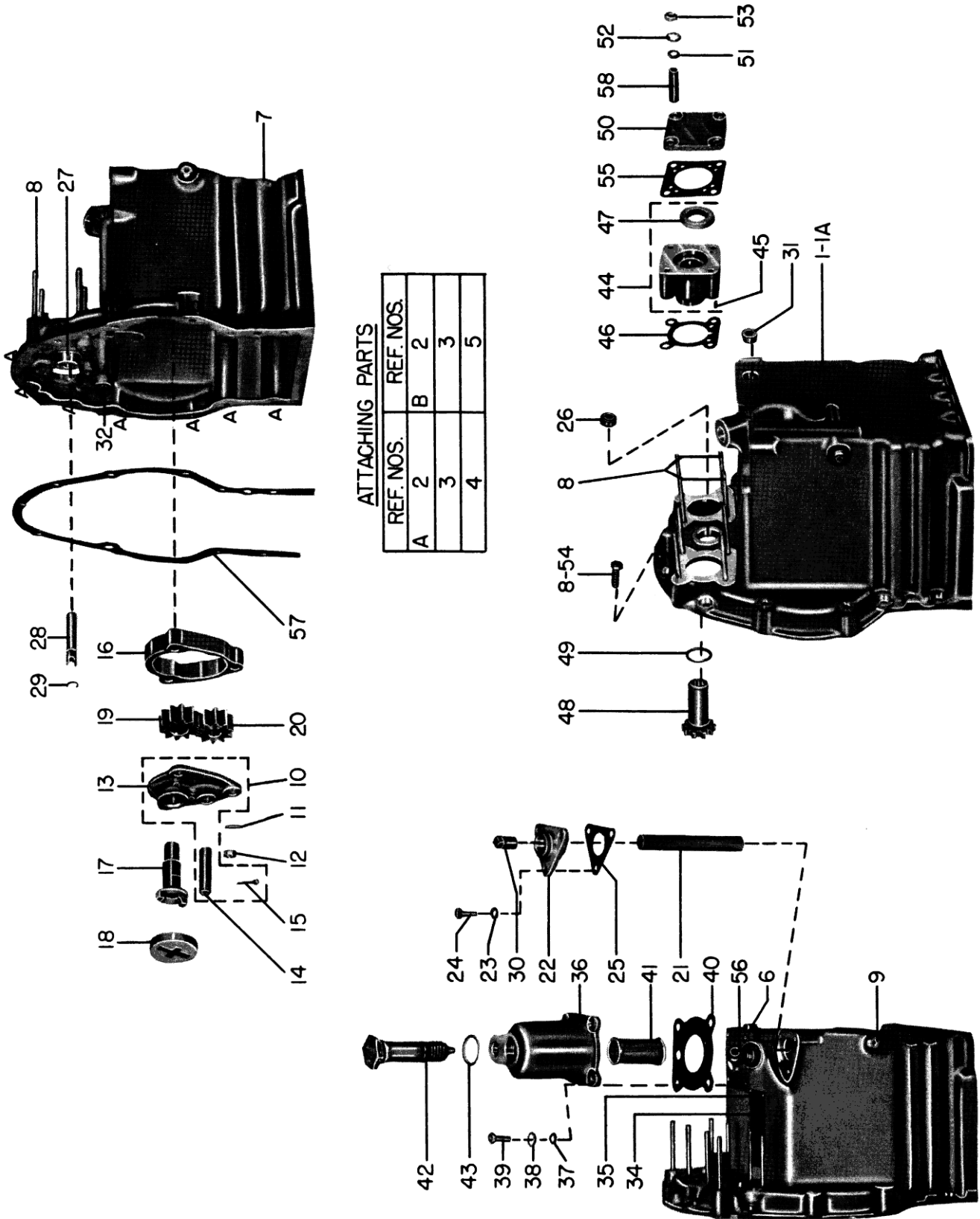
LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST

FIGURE 5 - ACCESSORY CASE AND RELATED PARTS GROUP

Ref. No.	Part Number	1	2	3	4	5	Description	Qty. per Eng.	Model Usage
5-28	60930						SHAFT ASSEMBLY, Tachometer drive	1	
29	45530						RING, Oil pump shaft retaining	1	
30	STD-453						PLUG, Sq. hd. drilled (drain) 3/8-18 NPT	1	
31	STD-784						PLUG, Allen, 3/8-18 NPT	2	
32	AN932-2						PLUG, Allen, 1/8-27 NPT	2	
33	STD-783						PLUG, Allen, 1/4-18 NPT (Not Illustrated)	1	
34	61548						PLATE, Name	1	
ATTACHING PARTS									
35	STD-1901						STUD, Drive rd. head, no. 4 X 3/16 in. long Replaces AN535-4-3.	4	
-----*									
36	69510						HOUSING, Thermostatic-valve and oil pressure screen	1	
ATTACHING PARTS									
37	STD-8						WASHER, Plain, 1/4 in.	4	
38	STD-160						WASHER, Internal teeth, 1/4 in. lock	4	
39	STD-460						BOLT, Hex. head, 1/4-20 X 3/4 in. long	4	
-----*									
40	61173						GASKET, Oil pressure housing	1	
41	62817						SCREEN ASSEMBLY, Oil pressure	1	
42	69451						VALVE ASSEMBLY, Temp. control-oil cooler by-pass	1	
43	STD-294						GASKET, Annular, 7/8 OD X 5/8 ID X 3/32 in.	1	
44	61098						ADAPTER ASSEMBLY, Vacuum pump (used for fuel pump drive) One (1) additional adapter assembly is required when vacuum pump drive is employed.	1	
45	STD-1774						PIN, 1/8 dia. X 1/4 in. long	1	
46	61183						GASKET, Accessory adapter One (1) additional gasket is required when vacuum pump drive is employed.	1	
47	STD-208						SEAL, Oil, 7/8 ID X 1-1/2 OD X 5/16 in. wide	1	
48	72970						GEAR ASSEMBLY, Vacuum pump drive (used for fuel pump drive) Supersedes and interchangeable with 61164. One (1) additional gear assembly is required when vacuum pump drive is employed.	1	
49	71596						WASHER, Accessory driven gear One (1) additional washer is required when vacuum pump drive is employed.	1	
50	60430						COVER, Vacuum pump	2	
ATTACHING PARTS									
51	STD-8						WASHER, Plain, 1/4 in.	8	
52	STD-160						WASHER, Internal teeth, 1/4 in. lock	8	
53	STD-1411						NUT, Plain, 1/4-20 Attaches cover to fuel pump drive pad when using 74336 accessory case assembly.	4	
	STD-1411						NUT, Plain, 1/4-20 Attaches covers to fuel pump and vacuum pump drive pads when using 72294 or a converted 74336 acc. case assy. See "NOTE", reference no. 5-1.	8	

Attaching Parts Continued on Next Page

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST



ALL MODELS

Figure 5 - Accessory Case and Related Parts Group

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST

FIGURE 5 - ACCESSORY CASE AND RELATED PARTS GROUP

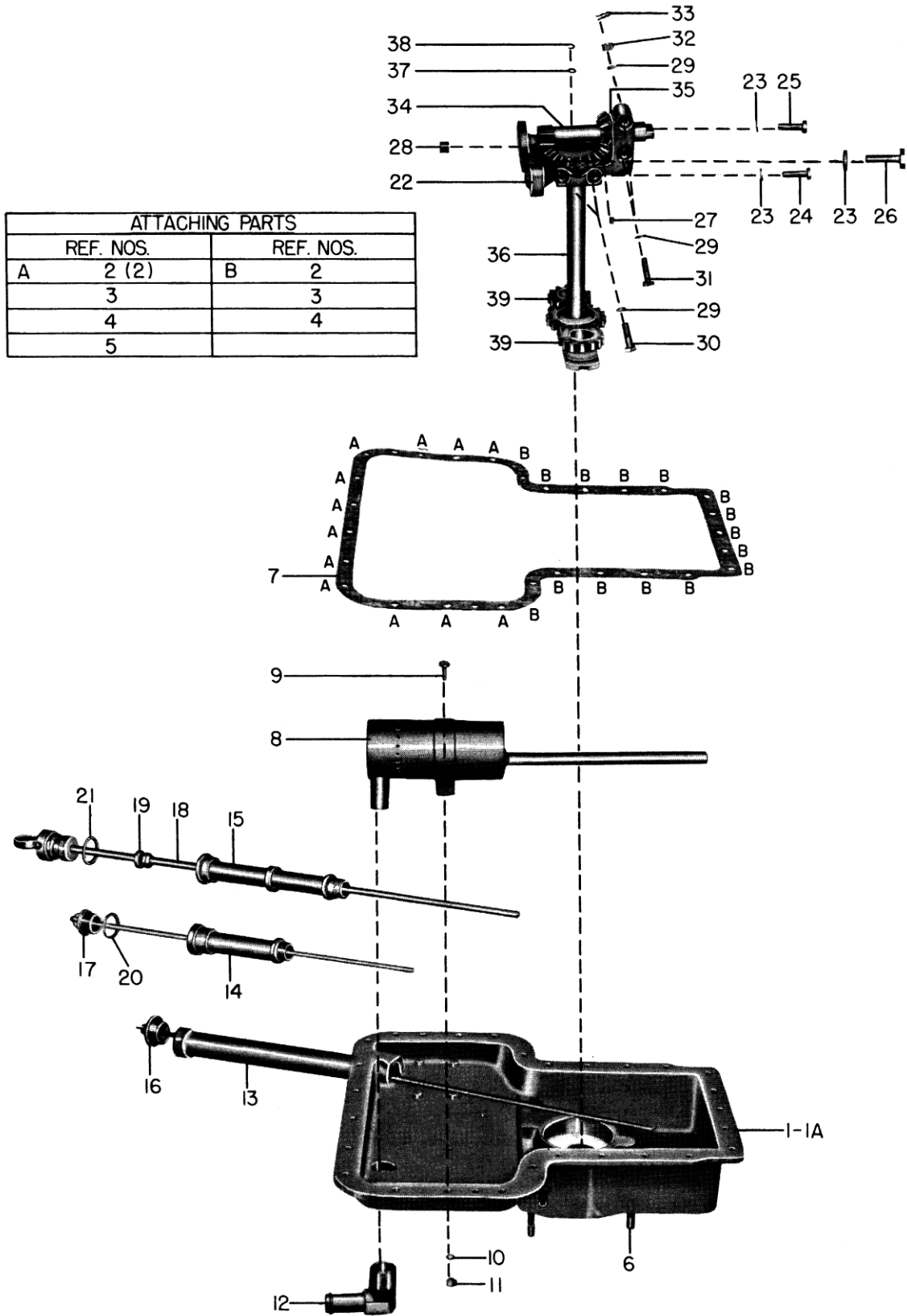
Ref. No.	Part Number	1	2	3	4	5	Description	Qty. per Eng.	Model Usage
ATTACHING PARTS (Continued)									
5-54	STD-1204						BOLT, Hex. head, 1/4-20 X 15/16 in. long	4	
NOTE									
Engines with serial nos. 375-45 incorporate 74336 acc. case assy. (not using vacuum pump drive) which will use 4-STD-1204 bolts instead of 4-61238 studs and 4-68593 spacers at the vacuum pump pad.									
-----*									
55	8313						GASKET, Vacuum pump	2	
56	AN823-8						ELBOW, 1/2 in. flared tube and 3/8 NPT, 45°	1	
57	61352						GASKET, Accessory housing	1	
58	68593						SPACER, Vacuum pump stud (See above "NOTE".)	4	

FIGURE 6 - MAGNETO CASE AND ACCESSORY DRIVES GROUP

APPLICABLE MODELS - VO-360-A1A, A1B, B1A AND IVO-360-A1A

6-1	72295						CASE ASSEMBLY, Magneto Studded for two (2) S4LN-21 magnetos which require impulse coupling magneto adapters (2-61666).	1	VO-360-A1A
1A	72512						CASE ASSEMBLY, Magneto This assembly is identical to 72295 except the studs of 72512 are shorter due to the fact that 200 series magnetos do not require magneto adapters (61666).	1	VO-360-A1B, B1A, IVO-360-A1A
ATTACHING PARTS									
2	STD-8						WASHER, Plain, 1/4 in.	39	
3	STD-160						WASHER, Internal teeth, 1/4 in. lock	27	
4	STD-1204						BOLT, Hex. head, 1/4-20 X 15/16 in. long	27	
5	STD-1411						NUT, Plain, 1/4-20	12	
-----*									
NOTE									
Magneto case 72295 may be modified for use of new retard S4LN-200 and S4LN-204 dual breaker magnetos by removing the (4) 61668 studs and installing (4) 61261 studs at the magneto pad locations.									
6	61668						STUD, 5/16-18 X 2-3/8 in. long Detail part of 72295 magneto case assembly.	4	VO-360-A1A
	61261						STUD, 5/16-18 X 1-1/2 in. long Detail part of 72512 magneto case assembly.	4	VO-360-A1B, B1A, IVO-360-A1A
7	72278						GASKET, Magneto case	1	

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST



ALL MODELS

Figure 6 - Magneto Case and Accessory Drives Group

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST

FIGURE 6 - MAGNETO CASE AND ACCESSORY DRIVES GROUP

Ref. No.	Part Number	1	2	3	4	5	Description	Qty. per Eng.	Model Usage
6-8	72379						SEPARATOR ASSEMBLY, Oil	1	
ATTACHING PARTS									
9	STD-1650						BOLT, Hex. head, no. 10-32 X 21/32 in. long	2	
10	STD-1803						WASHER, Plain, no. 10	2	
11	STD-670						NUT, Self-locking, no. 10-32	2	
-----*									
12	STD-1111						ELBOW, 3/4-14 NPT and hose 90°	1	
13	69098						TUBE, Oil level gage (11.57 in. long, screw-in type) Required with engine oil level gage assemblies 72329 or 72948.	1	VO-360-A1A, A1B
14	69097						TUBE, Oil level gage (6.32 in. long, screw-in type) Required with engine oil level gage assemblies 72235 or 72950.	1	VO-360-A1B, B1A
15	74526						TUBE, Oil level gage (8.00 in. long screw-in type) Required with oil level gage assembly 74663.	1	IVO-360-A1A
16	72948						GAGE ASSY., Engine oil level (28.00 in. long) Supersedes and interchangeable with 72329 engine oil level gage assembly.	1	VO-360-A1A, A1B
17	72950						GAGE ASSY., Engine oil level (22.75 in. long) Supersedes and interchangeable with 72235 engine oil level gage assembly.	1	VO-360-A1B, B1A
18	74663						GAGE ASSY., Oil level (24.08 in. long)	1	IVO-360-A1A
19	74524						RING, Oil level gage bushing seal		" "
20	72059						RING, Oil level gage seal Use until stock is exhausted; then service with 74068. Required with 72235, 72329, 72948 and 72950 engine oil level gage assemblies.	1	VO-360-A1A, A1B, B1A
21	72312						RING, Oil seal, 1.00 ID X 1/8 in. section Required with 74663 oil level gage assembly.	1	IVO-360-A1A
22	72359						SUPPORT ASSY., Mag. and oil pump drive machining	1	
ATTACHING PARTS									
23	STD-8						WASHER, Plain, 1/4 in.	3	
24	AN74A10						BOLT, Hex. hd. dr. head, 1/4-20 X 1-1/32 in. long	1	
25	STD-1866						BOLT, Hex. hd. dr. head, 1/4-20 X 27/32 in. long	1	
26	STD-1867						BOLT, Hex. hd. dr. head, 1/4-20 X 3.00 in. long	1	
-----*									
27	STD-1408						DOWEL, 3/16 dia. X 5/16 in. long	2	
28	72354						DOWEL, 5/8 OD X 1/2 ID X 23/64 in. long	1	
29	STD-8						WASHER, Plain, 1/4 in.	6	
30	AN74A10						BOLT, Hex. hd. dr. head, 1/4-20 X 1-1/32 in. long	2	
31	STD-1859						BOLT, Hex. hd. dr. shank, 1/4-20 X 1-41/64 in. long	2	
32	STD-1409						NUT, Slotted shear, 1/4-20	2	
33	STD-68						PIN, Cotter, 1/16 dia. X 1/2 in. long	2	
34	72349						SHAFTGEAR, Accessory drive	1	
35	72273						WASHER, Accessory drive thrust (.041-.042 in. thk.)	AR	
	72274						WASHER, Accessory drive thrust (.0495-.0505 in. thk.)	AR	
	72275						WASHER, Accessory drive thrust (.058-.059 in. thk.) (Select one only for fit.)	AR	

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST

FIGURE 6 - MAGNETO CASE AND ACCESSORY DRIVES GROUP

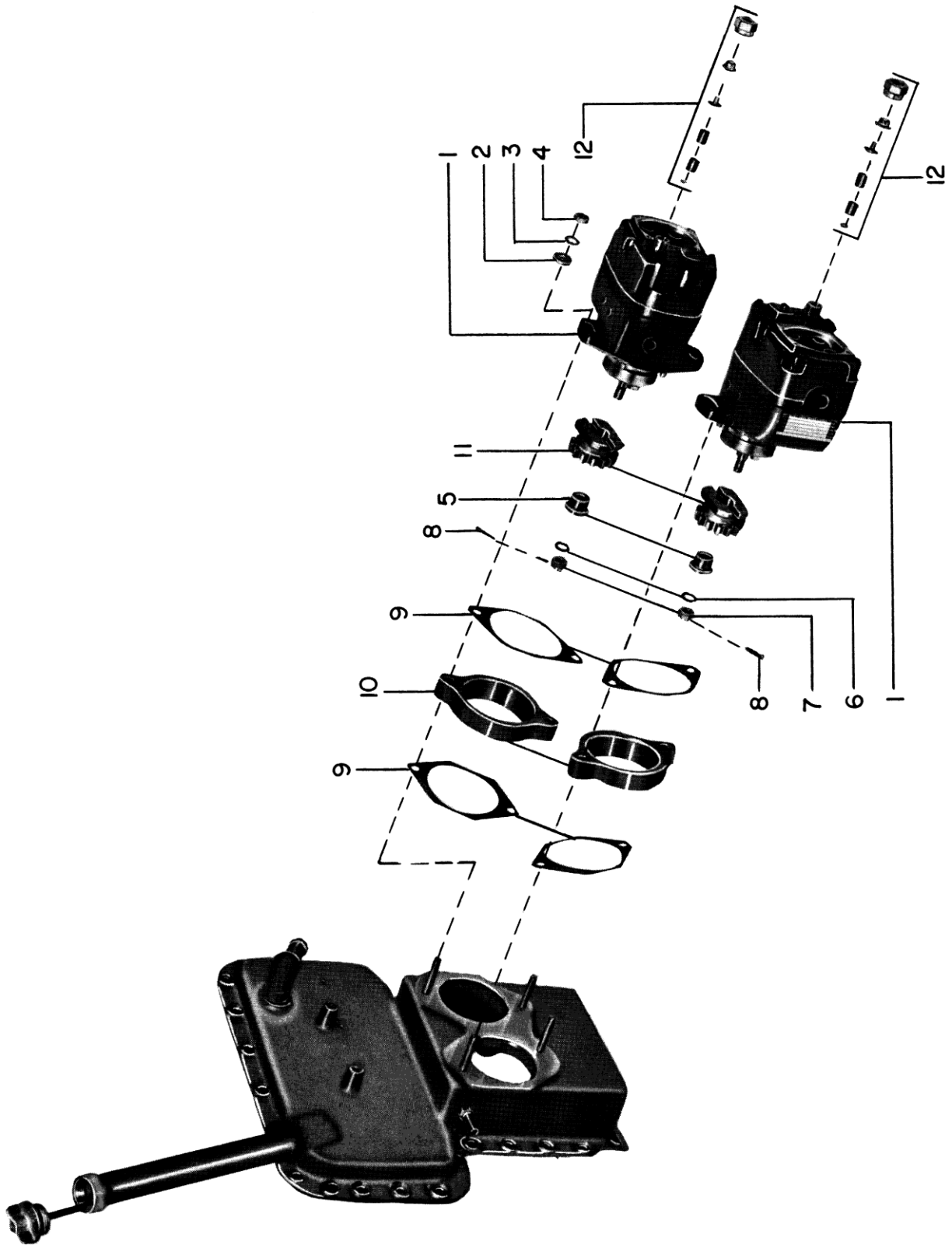
Ref. No.	Part Number	Description					Qty. per Eng.	Model Usage
		1	2	3	4	5		
6-36	72400	SHAFTGEAR ASSY., Magneto driven					1	
37	72399	PLUG, 33/64 dia. X 5/32 in. long					1	
38	MS16625-1050	RING, Internal retaining Supersedes MS9014-07.					1	
39	61665	GEAR, Magneto (impulse coupling) Requires use of two (2) 71397 impulse coupling magnetos. (See Figure 7.)					2	VO-360-A1A
	73683	GEAR, Magneto These two (2) gears, beginning with engine serial number 260-45, replace one (1) 72495 gear and one (1) 61163 gear. 73683 requires use of 72524 and 73360 magnetos. (See Figure 8.)					2	VO-360-A1B, B1A, IVO-360-A1A

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST

FIGURE 7 - MAGNETOS AND MAGNETO DRIVES GROUP (S4LN-21)

Ref. No.	Part Number	1	2	3	4	5	Description	Qty. per Eng.	Model Usage
APPLICABLE MODEL - VO-360-A1A									
7-1	71397						MAGNETO, Impulse coupling Same as Scintilla Div., Bendix Aviation Corp., Sidney, N. Y. Part No. 10-51360-30, Type S4LN-21.	2	
ATTACHING PARTS									
2	STD-1727						WASHER, Plain, 3/4 OD X 21/64 ID X 1/8 in.	4	
3	STD-475						WASHER, Shakeproof lock, 5/16 in.	4	
4	STD-1410						NUT, Plain, 5/16-18	4	
-----*									
5	10-88514-4						BUSHING, Impulse coupling (sintered steel)	2	
6	10-3793						WASHER, Plain	2	
7	10-51643						NUT, Drive shaft	2	
8	10-90751-19						PIN, Cotter	2	
9	62224						GASKET, Magneto adapter and magneto	4	
10	61666						ADAPTER, Magneto (impulse coupling)	2	
11	61665						GEAR, Magneto (impulse coupling)	2	
12	61566						KIT ASSY., Magneto ground terminal (Procurable as an assembly only.)	2	

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST



MODEL - VO-360-A1A

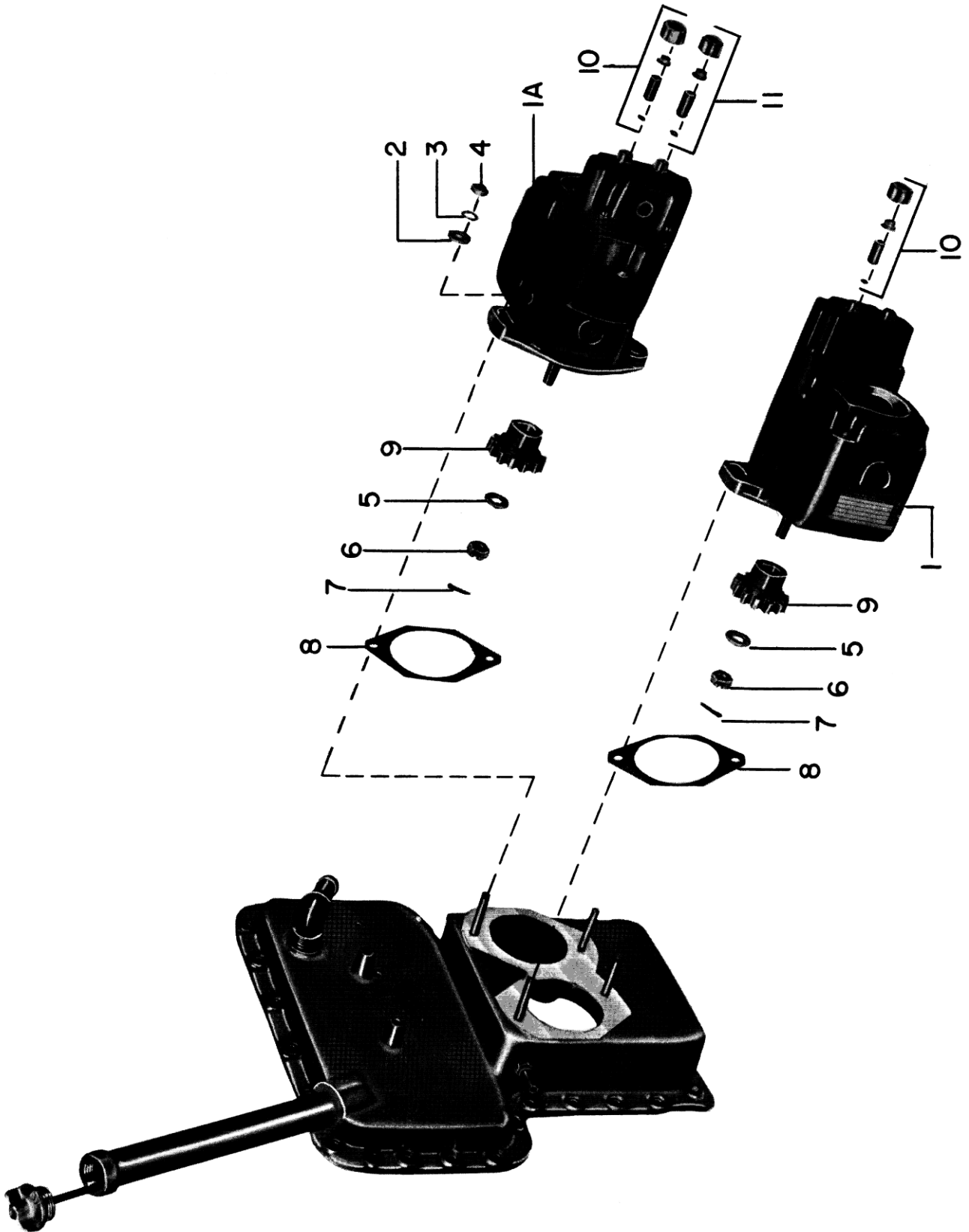
Figure 7 - Magnetos and Magneto Drives Group (S4LN-21)

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST

FIGURE 8 - MAGNETOS AND MAGNETO DRIVES GROUP (S4LN-200 AND S4LN-204)

Ref. No.	Part Number	1	2	3	4	5	Description	Qty. per Eng.	Model Usage
APPLICABLE MODELS - VO-360-A1B, B1A AND IVO-360-A1A									
8-1	72524						MAGNETO Same as Scintilla Div., Bendix Aviation Corp., Sidney, N. Y. Part No. 10-163045-3, Type S4LN-204.	1	
1A	73360						MAGNETO, Retard breaker (#1 and #3 cylinder side) Same as Scintilla Div., Bendix Aviation Corp., Sidney, N. Y. Part No. 10-163005-2, Type S4LN-200.	1	
ATTACHING PARTS									
2	STD-1727						WASHER, Plain, 3/4 OD X 21/64 ID X 1/8 in.	4	
3	STD-475						WASHER, Shakeproof lock, 5/16 in.	4	
4	STD-1410						NUT, Plain, 5/16-18	4	
-----*									
5	10-4093						WASHER, Plain	2	
6	10-163151						NUT, Drive shaft	2	
7	10-90751-19						PIN, Cotter	2	
8	62224						GASKET, Magneto Supersedes 45663.	2	
9	73683						GEAR, Magneto (See Figure 6, reference number 39.)	2	
10	71574						KIT, Magneto ground terminal (Same as Scintilla P/N 10-157209.) Procurable as an assembly only.	2	
11	71571						KIT, Magneto retard terminal (Same as Scintilla P/N 10-157208.)	1	

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST



MODELS - VO-360-A1B, B1A AND IVO-360-A1A

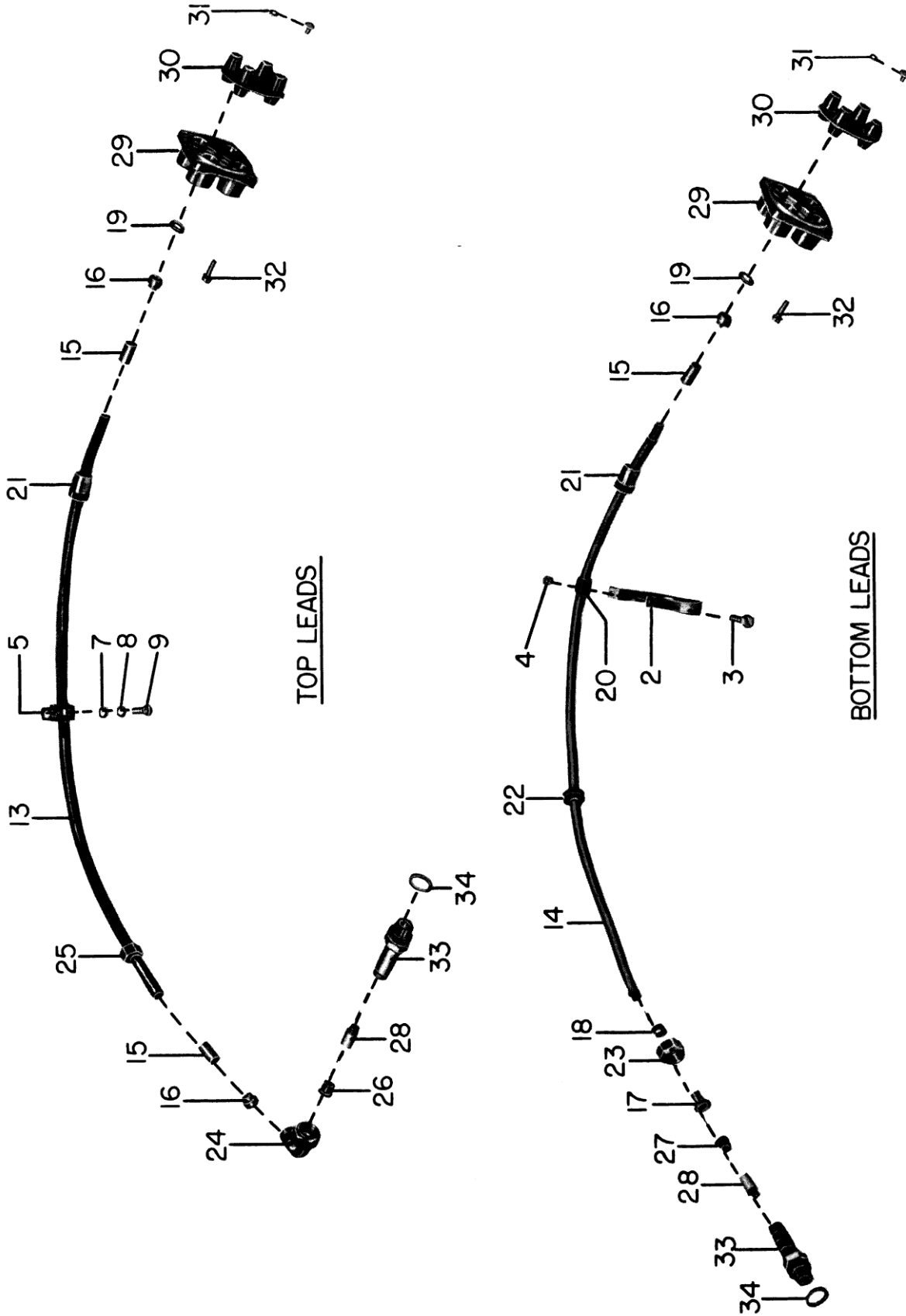
Figure 8 - Magnetos and Magneto Drives Group (S4LN-200 and S4LN-204)

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST

FIGURE 9 - IGNITION SHIELDED CABLE ASSEMBLY GROUP

Ref. No.	Part Number	1	2	3	4	5	Description	Qty. per Eng.	Model Usage
APPLICABLE MODELS - VO-360-A1A, A1B, B1A AND IVO-360-A1A									
9-1	72199						CABLE ASSEMBLY, Ignition shielded	1	
ATTACHING PARTS									
2	71911						CLAMP, Offset, 1-3/4 ID with 7/16 in. dia.	4	
3	STD-553						SCREW, Round head, no. 6-32 X 1/2 in. long	4	
4	AN365-632C						NUT, Self-locking, no. 6-32	4	
5	71824						CLIP, Ignition cable	6	VO-360-A1A, A1B, B1A
	71824						CLIP, Ignition cable	4	IVO-360-A1A
6	AN742D16C						CLIP, Ignition cable (Not Illustrated)	2	" "
7	STD-8						WASHER, Plain, 1/4 in.	2	VO-360-A1A, A1B, B1A
8	STD-160						WASHER, Internal teeth, 1/4 in. lock	2	" " "
9	STD-705						SCREW, Hex. head, 1/4-20 X 11/16 in. long	2	" " "
10	STD-860						SCREW, Fill. head, no. 10-32 X 5/8 in. long (Not Illustrated)	4	IVO-360-A1A
11	STD-425						WASHER, Plain, no. 10 (Not Illustrated)	4	" "
12	STD-670						NUT, Self-locking, no. 10-32 (Not Illustrated)	4	" "
-----*									
13	71882						CABLE, High tension shielded (Top lead)	AR	
14	72161						CABLE, High tension shielded (Bottom lead)	AR	
15	71259						SLEEVE, Shielded terminator insulation support	16	
16	71974						FERRULE, Shielded terminator braid confining (Supersedes 71258)	12	
17	72484						FERRULE, Spark plug terminal, inner Bottom spark plug leads only.	4	
18	72485						FERRULE, Spark plug terminal, outer Bottom spark plug leads only.	4	
19	71488						WASHER, Shield terminator magneto adapting	8	
20	66216						SLEEVE, Ignition cable	4	
21	61563						NUT, Coupling, 11/16-24 round	8	
22	STD-883						GROMMET, 5/16 in. ID	4	
23	72195						NUT, Spark plug union (5/8-24 thd.)	4	
24	72196						ELBOW ASSEMBLY, Spark plug (5/8-24 thd.)	4	
25	68487						NUT, Spark plug union (9/16-24 thd.)	4	
26	71401						COLLAR, Spark plug terminal	4	
27	72194						COLLAR, Spark plug terminal	4	
28	71489						SLEEVE, Spark plug terminal	8	
29	61560						PLATE, Ignition cable outlet, shielded	2	
30	61559						GROMMET, Ignition cable, 4-wire	2	
31	71875						WASHER, High tension cable contact Use 71875 until exhausted; then service with 73245.	8	
	73245						EYELET, High tension cable contact	8	
32	72351						SCREW, Self-locking, no. 10-32	8	
33	1182-B3						SPARK PLUG (.018-.022 gap) Same as Champion REM40E.	8	
	1182-F3						SPARK PLUG (.018-.022 gap) Same as AC-SR-88D. Alternate to 1182-B3.	8	
34	STD-295						GASKET, Spark plug Furnished with spark plug.	8	

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST



IGNITION SHIELDED CABLE ASSY.
REF. NO.1

ALL MODELS

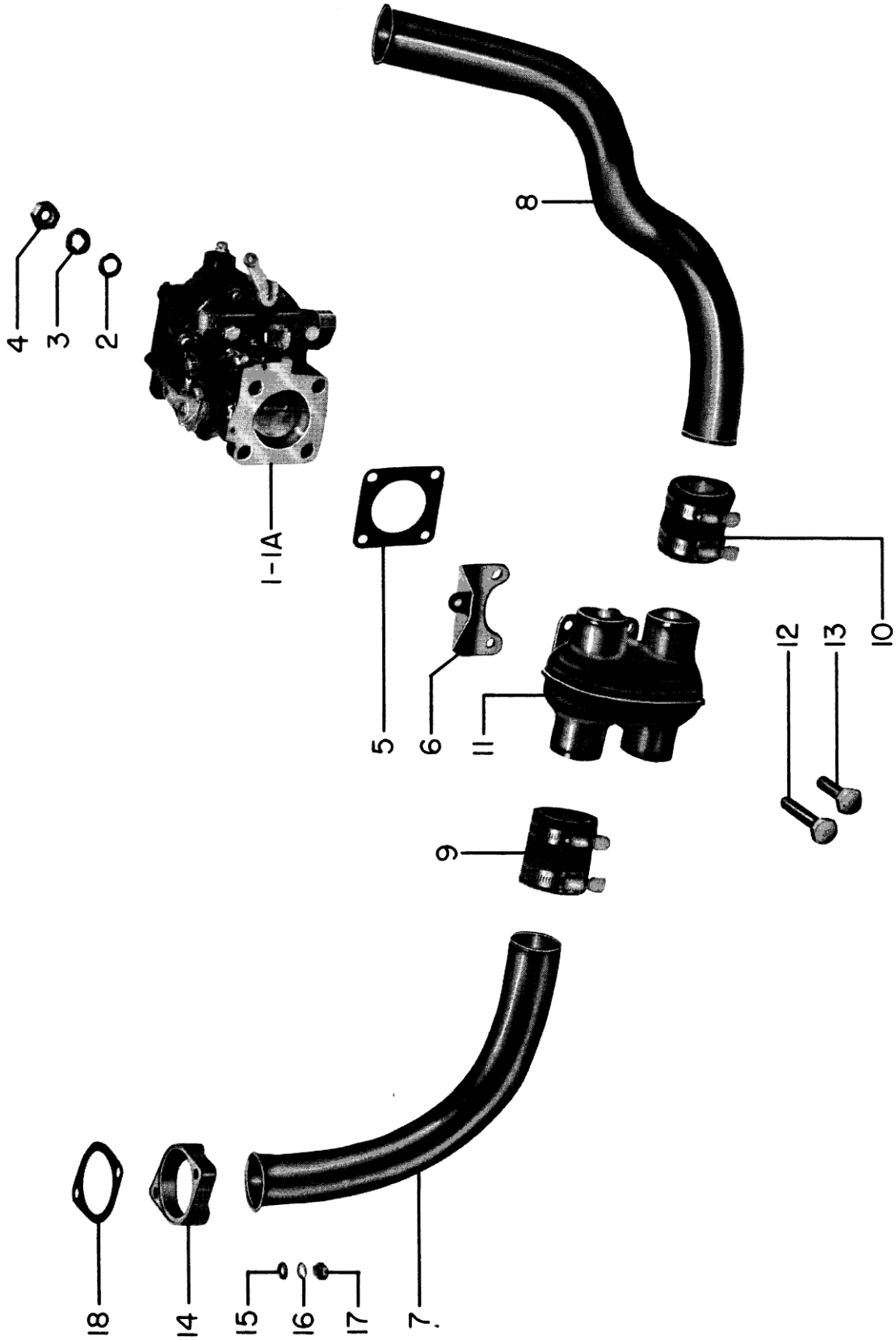
Figure 9 - Ignition Shielded Cable Assembly Group

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST

FIGURE 10 - INDUCTION SYSTEM

Ref. No.	Part Number	1	2	3	4	5	Description	Qty. per Eng.	Model Usage
APPLICABLE MODELS - VO-360-A1A, A1B AND B1A.									
10-1	72386						CARBURETOR Same as Marvel-Schebler P/N 10-4329, Model MA-4-5.	1	
1A	73257						CARBURETOR Same as Marvel-Schebler P/N 10-4495, Model MA4-5AA.	1	
ATTACHING PARTS									
2	STD-35						WASHER, Plain, 5/16 in.	4	
3	STD-475						WASHER, Internal teeth, 5/16 in. lock	4	
4	STD-1410						NUT, Plain, 5/16-18	4	
-----*									
5	66224						GASKET, Carburetor	1	
6	72374						BRACKET, Carburetor mounting	1	
7	72355						PIPE, Intake, cylinder no. 1	1	
	72356						PIPE, Intake, cylinder no. 2	1	
8	72357						PIPE, Intake, cylinder no. 3	1	
	72358						PIPE, Intake, cylinder no. 4	1	
9	STD-1792						HOSE, 1-3/4 ID X 2-3/16 OD X 2-3/8 in. long	4	
ATTACHING PARTS									
10	STD-1269						CLAMP, Hose, 1-7/8-2-1/4 ID X 9/16 in. wide Supersedes 72417.	8	
-----*									
11	72396						MANIFOLD ASSEMBLY, Carburetor Incorporates oil circulating jacket which requires (72290) oil pump to carburetor manifold hose assembly. Hose and jacket are no longer necessary; service 72396 with 73732 carburetor manifold assembly which does not require (72290) hose and jacket.	1	
	73732						MANIFOLD ASSEMBLY, Carburetor	1	
ATTACHING PARTS									
12	STD-1201						BOLT, Hex. head, 5/16-18 X 1-1/4 in. long	2	
13	STD-1323						BOLT, Hex. head, 5/16-18 X 1-5/32 in. long	2	
-----*									
14	73346						FLANGE, Intake pipe, upper (Supersedes 60069.)	4	
ATTACHING PARTS									
15	STD-8						WASHER, Plain, 1/4 in.	8	
16	STD-160						WASHER, Internal teeth, 1/4 in. lock	8	
17	STD-1411						NUT, Plain, 1/4 in.	8	
-----*									
18	60131						GASKET, 2 bolt flange, 1-3/4 in. ID	4	

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST



MODELS - VO-360-A1A, A1B AND B1A

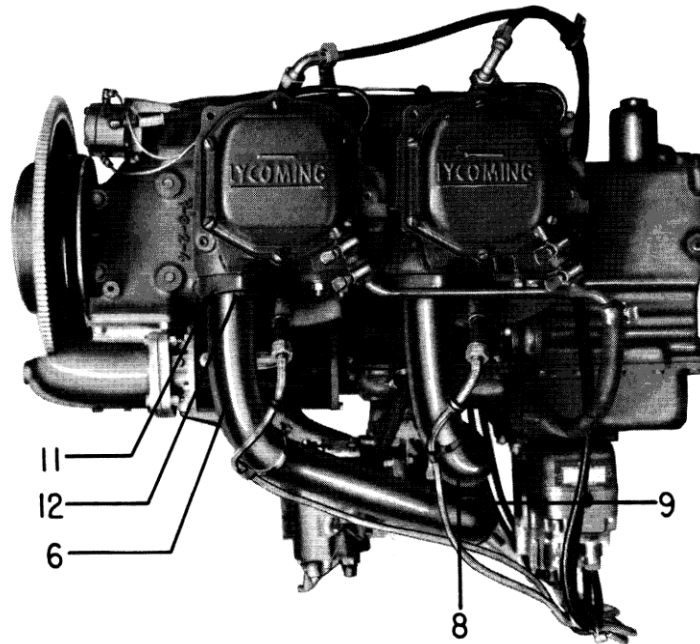
Figure 10 - Induction System

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST

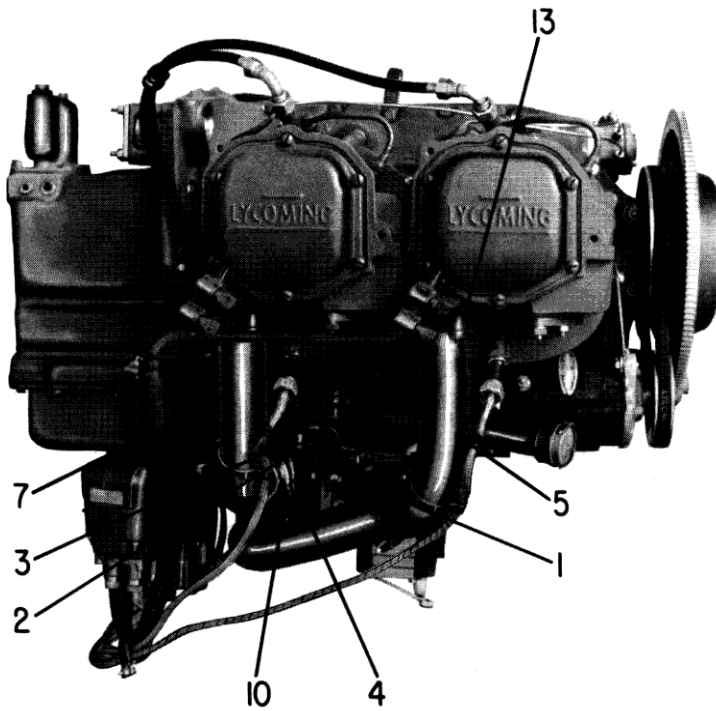
FIGURE 11 - INDUCTION SYSTEM

Ref. No.	Part Number	1	2	3	4	5	Description	Qty. per Eng.	Model Usage
APPLICABLE MODEL - IVO-360-A1A									
11-1	74658						BRACKET, Fuel injector manifold	1	
ATTACHING PARTS									
2	STD-160						WASHER, Internal teeth, 1/4 in. lock	2	
	STD-1419						BOLT, Hex. head, 1/4-20 X 1-1/8 in. long	2	
-----*									
3	74655						SPACER, Fuel manifold bracket	2	
4	74659						MANIFOLD ASSEMBLY, Fuel injector	1	
5	74764						PIPE, Intake, cylinder no. 1 (Replaces 74651)	1	
6	74652						PIPE, Intake, cylinder no. 2	1	
7	74653						PIPE, Intake, cylinder no. 3	1	
8	74654						PIPE, Intake, cylinder no. 4	1	
9	STD-1792						HOSE, 1-3/4 ID X 2-3/16 OD X 2-3/8 in. long	4	
ATTACHING PARTS									
10	STD-1269						CLAMP, Hose, 1-7/8-2-1/4 ID X 9/16 in. wide	8	
-----*									
11	73346						FLANGE, Intake pipe, upper	4	
ATTACHING PARTS									
12	STD-8						WASHER, Plain, 1/4 in.	8	
	STD-160						WASHER, Internal teeth, 1/4 in. lock	8	
	STD-1411						NUT, Plain, 1/4-20	8	
-----*									
13	60131						GASKET, 2 bolt flange, 1-3/4 in. ID	4	

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST



LEFT SIDE VIEW OF IVO-360-A1A ENGINE



RIGHT SIDE VIEW OF IVO-360-A1A ENGINE

MODEL - IVO-360-A1A

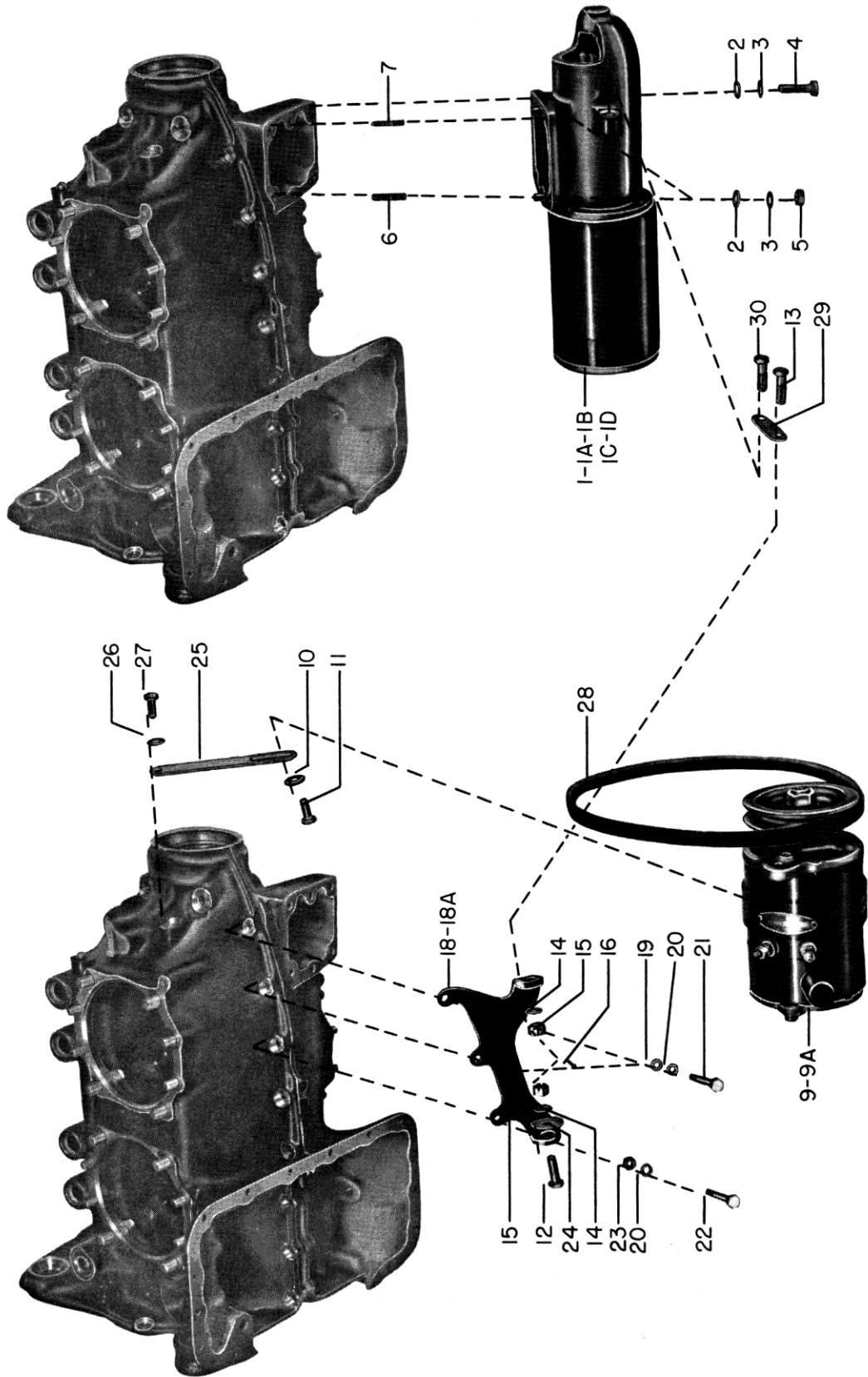
Figure 11 - Induction System

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST

FIGURE 12 - STARTER, GENERATOR AND VOLTAGE REGULATOR GROUP

Ref. No.	Part Number	1	2	3	4	5	Description	Qty. per Eng.	Model Usage
APPLICABLE MODELS - VO-360-A1A, A1B, B1A AND IVO-360-A1A									
12-1	71091						STARTER, 12 volt (2:27:1 geared) Same as Delco-Remy P/N 1109673. This starter (71091) is no longer available; service with 72465.	1	VO-360-A1A, A1B, B1A
1A	72340						STARTER, 12 volt (2.27:1 internal reduction) 10/12 pinion pitch Same as Delco-Remy P/N 1109689. This starter (72340) may be used with either standard or high speed generator drive. 72340 starter differs from 71091 starter in that 72340 incorporates a flat in front housing for belt clearance when using high speed generator drive. 72340 starters are no longer available; service with 72465.	1	" " "
1B	72465						STARTER, 12 volt (3.38:1 internal reduction) 10/12 pinion pitch Same as Delco-Remy P/N 1109519. This starter is equipped with rubber cushioned drive and is of needle bearing construction.	1	" " "
1C	73269						STARTER, 12 volt (3.38:1 internal reduction) 12/14 pinion pitch Same as Delco-Remy P/N 1109504. This starter (73269) is no longer available; replaced by 74092 starter.	1	
1D	74092						STARTER, 12 volt (3.38:1 internal reduction) 12/14 pinion pitch Same as Delco-Remy P/N 1109511. This starter is equipped with rubber cushioned drive and is of needle bearing construction.	1	
ATTACHING PARTS									
2	STD-35						WASHER, Plain, 5/16 in.	4	
3	STD-475						WASHER, Shakeproof lock, 5/16 in.	4	
4	STD-1202						BOLT, Hex. head, 5/16-18 X 1-3/32 in. long	1	
5	STD-1410						NUT, Plain, 5/16-18	3	
-----*-----									
STARTER MOUNTING STUDS LOCATED IN LEFT CRANKCASE HALF									
(REFERENCE NUMBERS, 6 AND 7)									
6	61261						STUD, 5/16-18 X 1-1/2 in. long	2	
7	67528						STUD, 5/16-18 X 1-5/8 in. long	1	
8	61427						SWITCH, Magnetic (Not Illustrated) Same as Delco-Remy P/N 001464. For use with 12 volt system only.	1	
9	68764						GENERATOR, 12 volts - 20 amp Same as Delco-Remy P/N 1101899. Requires 69113 generator bracket.	1	VO-360-A1A, A1B, B1A

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST



MAGNETIC SWITCH
(REF. NO.8)

VOLTAGE REGULATORS
(REF. NOS. 17-17A)

ALL MODELS

Figure 12 - Starter, Generator and Voltage Regulator Group

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST

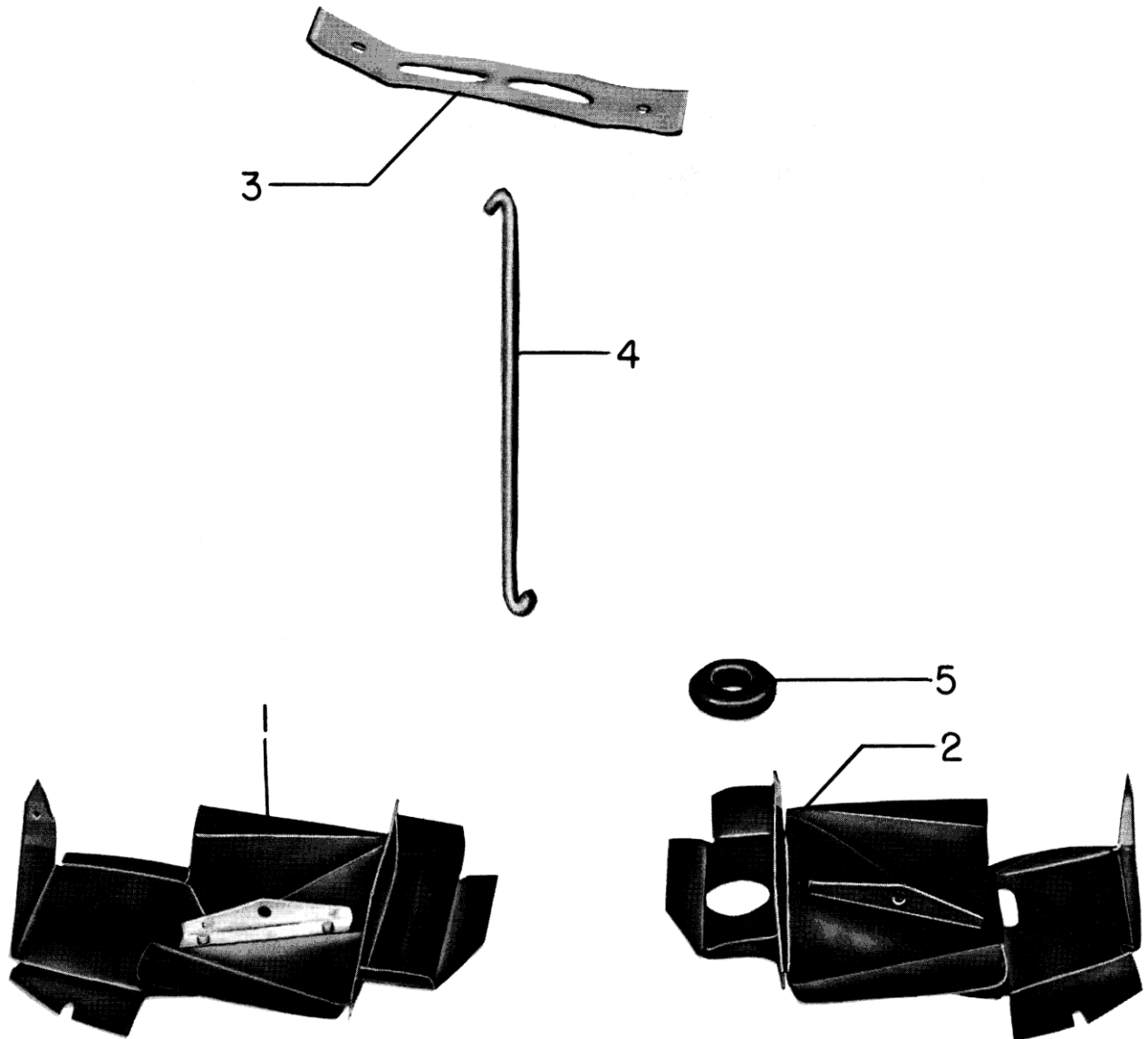
FIGURE 12 - STARTER, GENERATOR AND VOLTAGE REGULATOR GROUP

Ref. No.	Part Number	1	2	3	4	5	Description	Qty. per Eng.	Model Usage
12-9A	71744						GENERATOR, 12 volts - 50 amp. Same as Delco-Remy P/N 1101915. Requires 69452 generator bracket.	1	
ATTACHING PARTS									
10	STD-1727						WASHER, Plain, 3/4 OD X 11/32 ID X 1/8 in.	1	
11	STD-1817						BOLT, Hex. hd. dr., 5/16-18 X 3/4 in. long	1	
12	STD-1834						BOLT, Hex. hd. dr. end, 5/16-18 X 1-1/16 in. long	1	
13	STD-1835						BOLT, Hex. hd. dr. end, 5/16-18 X 1-23/64 in. long	1	
14	STD-35						WASHER, Plain, 5/16 in.	AR	
15	STD-1420						NUT, Slotted, 5/16-18	2	
16	STD-68						PIN, Cotter, 1/16 dia. X 1/2 in. long	2	
-----*									
17	72205						REGULATOR, Voltage Same as Delco-Remy P/N 1119226. For use with 12 volt - 20 amp generator. (Supersedes and interchangeable with 62831.)	1	VO-360-A1A, A1B, B1A
17A	71745						REGULATOR, Voltage Same as Delco-Remy P/N 1119224. For use with 12 volt - 50 amp generator.	1	
18	69113						BRACKET, Generator Required with 12 volt - 20 amp generator	1	VO-360-A1A, A1B, B1A
18A	69452						BRACKET, Generator Required with 12 volt - 50 amp generator. This bracket requires 60733 shim (as required) to establish end clearance between generator and generator bracket.	1	
ATTACHING PARTS									
19	STD-8						WASHER, Plain, 1/4 in.	1	
20	STD-160						WASHER, Internal teeth, 1/4 in. lock	3	
21	STD-1415						BOLT, Hex. head, 1/4-20 X 1-3/4 in. long	1	
22	STD-1215						BOLT, Hex. head, 1/4-20 X 1-1/4 in. long	2	
23	STD-1411						NUT, Plain, 1/4-20	1	
-----*									
24	60733						SHIM, 1-1/8 OD X 11/32 ID X .005 in. thick Used only with 69452 generator bracket to establish maximum end clearance of .005 in. between bracket and generator rear flange.	AR	
25	60861						LINK, Generator adjusting	1	
ATTACHING PARTS									
26	STD-35						WASHER, Plain, 5/16 in.	1	
27	STD-1817						BOLT, Hex. hd. dr., 5/16-18 X 3/4 in. long	1	
-----*									
28	60886						BELT, Generator drive	1	
29	69951						STRUT, Generator support	1	
ATTACHING PARTS									
30	STD-1817						BOLT, Hex. hd. dr., 5/16-18 X 3/4 in. long	1	
-----*									

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST

FIGURE 13 - INTERCYLINDER COOLING BAFFLES

Ref. No.	Part Number	1	2	3	4	5	Description	Qty. per Eng.	Model Usage
APPLICABLE MODELS - VO-360-A1A, A1B, B1A AND IVO-360-A1A									
13-1	72152						BAFFLE ASSY., Intercylinder	2	VO-360-A1A, A1B B1A
	72152						BAFFLE ASSY., Intercylinder	1	IVO-360-A1A
2	73975						BAFFLE ASSY., Intercylinder	1	" "
3	71611						RETAINER, Intercylinder baffle	2	" "
4	71610						HOOK, Intercylinder baffle retainer	2	" "
5	AN931-12-17						GROMMET, 3/4 ID X 1-3/8 OD X 3/8 in. thk.	1	IVO-360-A1A



ALL MODELS

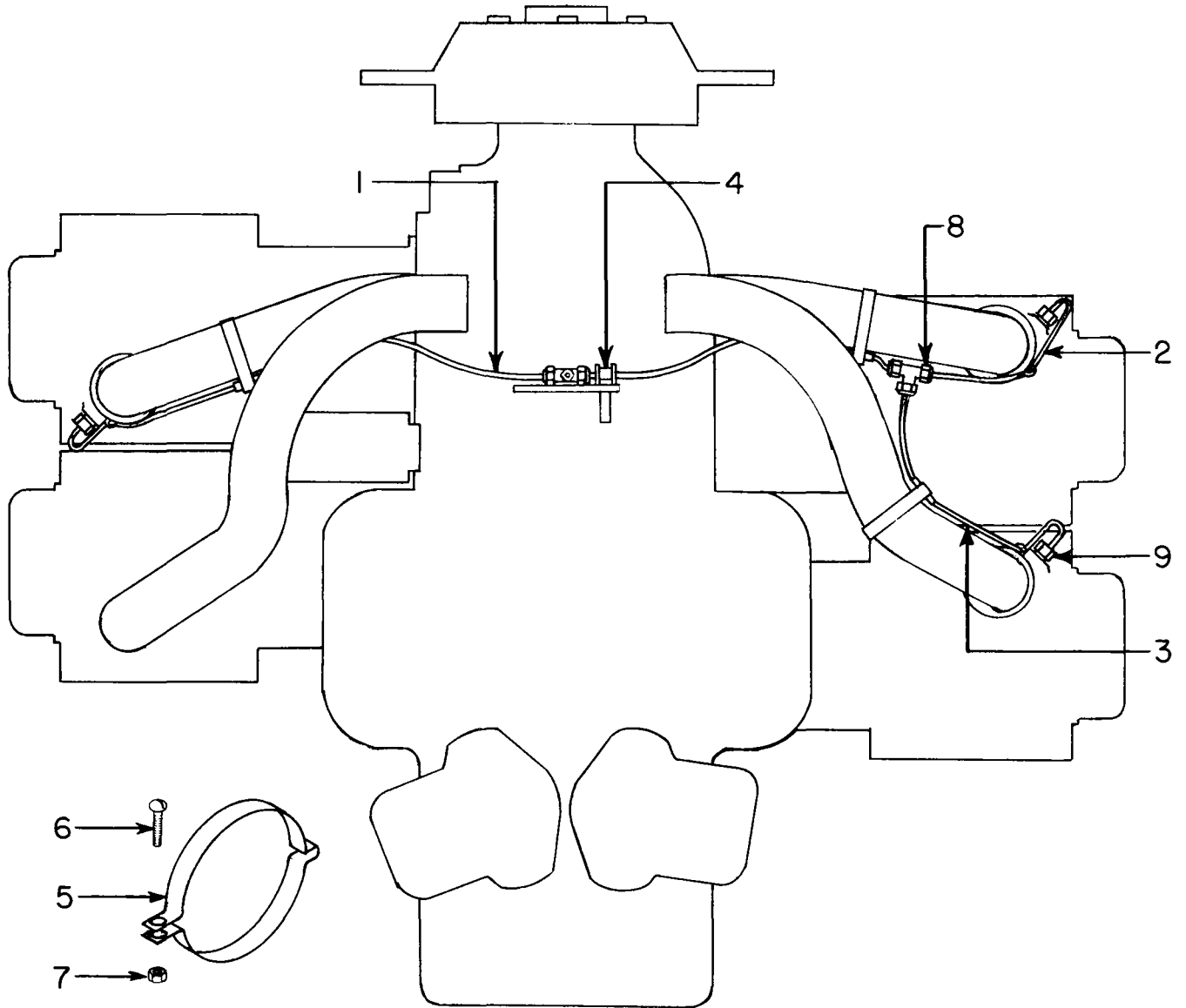
Figure 13 - Intercylinder Cooling Baffles

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST

FIGURE 14 - PRIMING SYSTEM

Ref. No.	Part Number	1	2	3	4	5	Description	Qty. per Eng.	Model Usage
APPLICABLE MODELS - VO-360-A1A, A1B AND B1A									
14-1	61581-17A						TUBE ASSEMBLY, Primer, 22-1/2 in. long, cyl. no. 1	1	
2	61581-18						TUBE ASSEMBLY, Primer, 10-5/16 in. long, cyl. no. 2 and intermediate	2	
3	61581-19						TUBE ASSEMBLY, Primer, 16-5/16 in. long, cyl. no. 4	1	
4	62811						CLIP, 3/16 in. ID for 5/16 in. dia. screw	1	
5	71910						CLAMP, Primer line	6	
ATTACHING PARTS									
6	STD-553						SCREW, Round head, no. 6-32 X 1/2 in. long	6	
7	AN365-632C						NUT, Self-locking, no. 6-32	6	
-----*									
8	STD-853						TEE, Union, 1/8 in. tube	2	
9	74225						NIPPLE ASSY., Priming Replaces STD-546 primer nipple.	3	

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST



MODELS - VO-360-A1A, A1B AND B1A

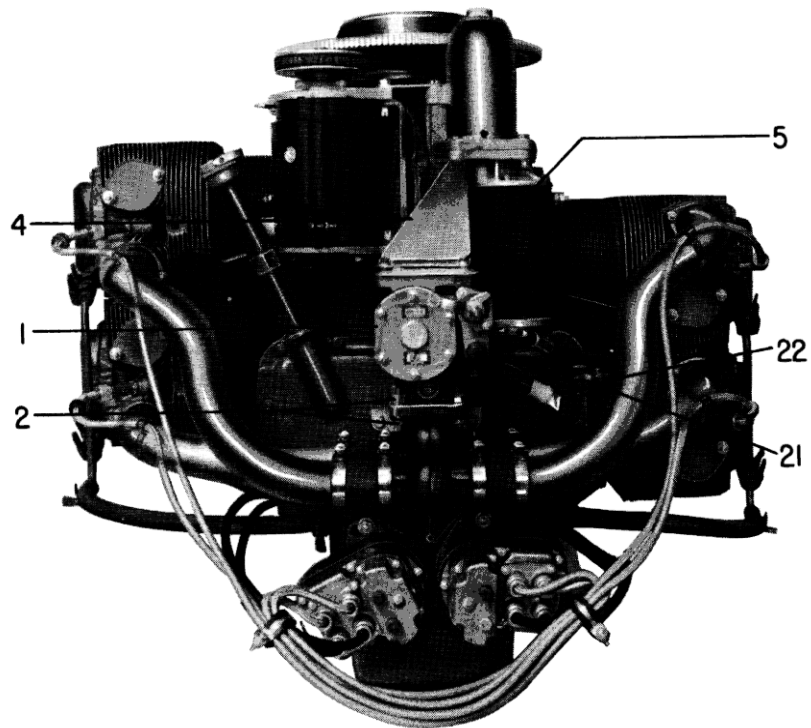
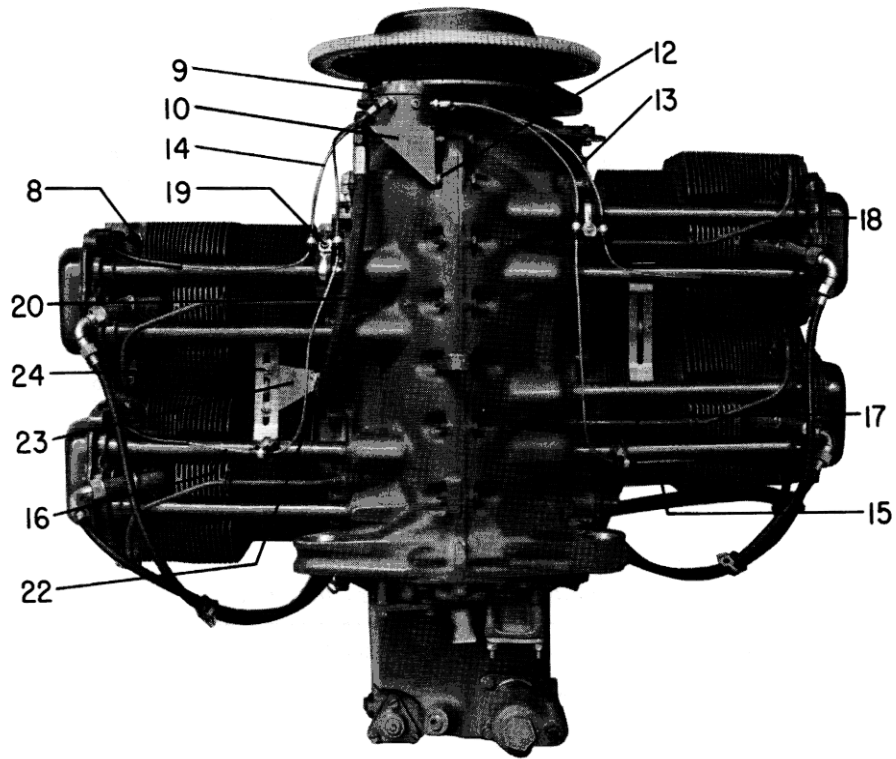
Figure 14 - Priming System

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST

FIGURE 15 - FUEL INJECTION SYSTEM

Ref. No.	Part Number	1	2	3	4	5	Description	Qty. per Eng.	Model Usage
APPLICABLE MODEL - IVO-360-A1A									
15-1	74642						FUEL INJECTOR Same as Bendix Corp., Bendix Products Aerospace Division, South Bend, Indiana, P/N 2524171-1 Model No. RSA5AD1.	1	
ATTACHING PARTS									
2	STD-1323						BOLT, Hex. head, 5/16-18 X 1-5/32 in. long	4	
	STD-35						WASHER, Plain, 5/16 in.	4	
	STD-1410						NUT, Plain, 5/16-18	4	
	STD-1763						LOCKNUT, Palnut, 5/16 in.	4	
							-----*		
3	66224						GASKET, Fuel injector (Not Illustrated)	1	
4	74657						BRACKET, Fuel injector	1	
ATTACHING PARTS									
5	STD-8						WASHER, Plain, 1/4 in.	4	
	STD-1826						SCREW, Fill. hd. self-locking, 1/4-20 X 5/8 in. long	2	
							-----*		
6	74668						BRACE, Fuel injector bracket (Not Illustrated)	1	
ATTACHING PARTS (Not Illustrated)									
7	STD-8						WASHER, Plain, 1/4-20	1	
	STD-160						WASHER, Internal teeth, 1/4 in. lock	1	
	STD-1411						NUT, Plain, 1/4-20	1	
	STD-705						SCREW, Hex. head, 1/4-20 X 11/16 in. long	1	
							-----*		
8	74151						NOZZLE, Injection (without filter) Same as Bendix Corp., Bendix Products Aerospace Division, South Bend, Indiana, P/N 2524107-1.	4	
9	74643						MANIFOLD ASSY., Fuel Same as Bendix Corp., Bendix Products Aerospace Division, South Bend, Indiana, P/N 2524172-1.	1	
10	74656						BRACKET, Fuel manifold	1	
ATTACHING PARTS (Not Illustrated)									
11	STD-251						WASHER, Internal teeth, no. 10 lock	4	
	AN500A10-8						SCREW, Rd. head, no. 10-24 X 1/2 in. long	4	
							-----*		
12	74655						SPACER, Fuel manifold bracket	2	
13	74647						TUBE ASSY., Fuel manifold to nozzle, cyl. no. 1 (21.00 in. long)	1	
14	74648						TUBE ASSY., Fuel manifold to nozzle, cyl. no. 2 (18.00 in. long)	1	
15	74649						TUBE ASSY., Fuel manifold to nozzle, cyl. no. 3 (27-3/4 in. long)	1	
16	74650						TUBE ASSY., Fuel manifold to nozzle, cyl. no. 4 (26.00 in. long)	1	

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST



MODEL - IVO-360-A1A

Figure 15 - Fuel Injection System

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST

FIGURE 15 - FUEL INJECTION SYSTEM

Ref. No.	Part Number	1	2	3	4	5	Description	Qty. per Eng.	Model Usage
ATTACHING PARTS (For Tube Assemblies)									
15-17	72036						CLIP, 3/4 ID for 3/16 in. dia. screw	4	
18	73650						CLIP, 1/4 ID for 1/4 in. dia. screw	6	
19	STD-860						SCREW, Fill. head, no. 10-32 X 5/8	6	
	STD-425						WASHER, Plain, no. 10	6	
	STD-670						NUT, Self-locking, no. 10-32	6	
							-----*		
20	73970						HOSE ASSY., Fuel injector to fuel manifold	1	
ATTACHING PARTS									
21	72815						BRACKET, Support clamp, 90° twist	1	
22	73971						CLIP, 1/2 ID (cushion type), 17/64 in. dia. hole	2	
							-----*		
23	74278						BRACKET ASSEMBLY, Fuel line support	1	
ATTACHING PARTS									
24	STD-860						SCREW, Fill. hd., no. 10-32 X 5/8 in. long	4	
	STD-425						WASHER, Plain, no. 10	4	
	STD-670						NUT, Self-locking, no. 10-32	2	
							-----*		

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST

NUMERICAL OVERSIZE AND UNDERSIZE PARTS SECTION

The following is a listing of all parts that may be procured in sizes other than standard and an explanation of the oversize and undersize symbols.

The symbol "P" suffixed to the standard size part number indicates the part may be procured in oversize; the symbol "M" indicates undersize. The numerals 03, 10, 12, 20, etc., following the symbol "P" or "M" indicate the extent of deviation from standard, in thousandths of an inch, in oversize or undersize.

Example A: 72967-P10 indicates 72967 may be procured in 0.010 oversize.

Example B: 67276-M03 indicates 67276 may be obtained in 0.003 undersize.

<u>Part No.</u>	<u>Part Name</u>	<u>Undersize or Oversize Available</u>
66610	Bushing - Rocker Shaft	P05-P10
-----	Bushing - Propeller Flange	P05-P10-P20
67276	Bearing - Connecting Rod	M03-M10
-----	Bearing - Crankshaft	M03-M10
-----	Guides, Valve	P05-P10-P20-P30
71594-72967	Pistons (For use in unplated barrels only.)	P10-P20
-----	Rings - Piston (For use in plain steel barrels only.)	P10-P20
-----	Seats - Valve	P10-P20-P30
-----	Studs	P03-P07-P12

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST

SERVICE REPLACEMENT SET SECTION

<u>Part No.</u>	<u>Part Name</u>	
71182	CYLINDER, PISTON AND RING ASSY. (Chrome plated cylinder barrel and plain piston rings.) Consisting of:	VO-360-A1A
	6 STD-1826	Screw
	2 60009	Key, Valve
	1 60401	Shaft, Valve Rocker
	1 61246	Gasket, Rocker Box Cover
	2 61625	Seat, Valve Spring, Lower
	2 72050	Key, Valve
	1 62388	Cap, Valve Stem
	2 65427	Spring, Valve, Outer
	2 65567	Spring, Valve Auxiliary
	1 73938	Valve, Intake
	1 68327	Seat, Valve Spring
	1 72454	Ring, Piston, Oil Regulating (Expander Type)
	1 69532	Seat, Valve Spring
	1 69650	Pin, Piston
	1 71195	Box, Set-Up
	1 71481	Seal, Cylinder Base Oil
	2 60053	Seal, Shroud Tube
	2 70310	Seal, Shroud Tube
	2 71556	Ring, Piston, Top and Second Compression
	1 71594	Piston
	1 71595	Valve, Exhaust (Rotator Type)
	1 72114	Cylinder and Head Assy.
	2 72117	Rocker Assy., Valve
	2 72198	Plug, Piston Pin
73600	CYLINDER, PISTON AND RING ASSY. (Chrome plated cylinder barrels, half wedge rings, 4-Ring Piston.) NOTE: This kit is used on VO-360-A1B and B1A engines only; may be used on VO-360-A1A in complete engine sets. Consisting of:	VO-360-A1B, B1A
	6 STD-1826	Screw
	2 60009	Key, Valve
	1 60401	Shaft, Valve Rocker
	1 61246	Gasket, Rocker Box Cover
	2 61625	Seat, Valve Spring, Lower
	2 72050	Key, Valve
	1 62388	Cap, Valve Stem
	2 65427	Spring, Valve, Outer
	2 65567	Spring, Valve Auxiliary
	1 73938	Valve, Intake
	1 68327	Seat, Valve Spring
	1 72454	Ring, Piston, Oil Regulating (Expander Type)
	1 69532	Seat, Valve Spring
	1 69650	Pin, Piston
	1 71195	Box, Set-Up
	3 71939	Ring, Piston Compression
	1 72967	Piston
	1 71595	Valve, Exhaust (Rotator Type)
	1 72114	Cylinder and Head Assy.
	2 72117	Rocker Assy., Valve
	2 72198	Plug, Piston Pin
	2 60053	Seal, Shroud Tube
	2 70310	Seal, Shroud Tube
	1 71481	Seal, Cylinder Base Oil

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST

SERVICE REPLACEMENT SET SECTION

<u>Part No.</u>	<u>Part Name</u>																																																																									
73600-1	<p>CYLINDER, PISTON AND RING ASSY. (Nitrided barrels, chrome half wedge compression rings, 4-Ring.)</p> <p>NOTE: This kit is used on VO-360-A1B and B1A engines only; may be used on VO-360-A1A in complete engine sets.</p> <p>Consisting of:</p>	<p>VO-360-A1B, B1A</p>																																																																								
	<table border="0"> <tr><td>6</td><td>STD-1826</td><td>Screw</td></tr> <tr><td>2</td><td>60009</td><td>Key, Valve</td></tr> <tr><td>1</td><td>60401</td><td>Shaft, Valve Rocker</td></tr> <tr><td>1</td><td>61246</td><td>Gasket, Rocker Box Cover</td></tr> <tr><td>2</td><td>61625</td><td>Seat, Valve Spring, Lower</td></tr> <tr><td>2</td><td>72050</td><td>Key, Valve</td></tr> <tr><td>1</td><td>62388</td><td>Cap, Valve Stem</td></tr> <tr><td>2</td><td>65427</td><td>Spring, Valve, Outer</td></tr> <tr><td>2</td><td>65567</td><td>Spring, Valve, Auxiliary</td></tr> <tr><td>1</td><td>73938</td><td>Valve, Intake</td></tr> <tr><td>1</td><td>68327</td><td>Seat, Valve Spring</td></tr> <tr><td>1</td><td>69457</td><td>Ring, Piston, Oil Regulating (Expander Type)</td></tr> <tr><td>1</td><td>69532</td><td>Seat, Valve Spring</td></tr> <tr><td>1</td><td>69650</td><td>Pin, Piston</td></tr> <tr><td>1</td><td>71195</td><td>Box, Set-Up</td></tr> <tr><td>3</td><td>72446</td><td>Ring, Piston Compression</td></tr> <tr><td>1</td><td>72967</td><td>Piston</td></tr> <tr><td>1</td><td>71595</td><td>Valve, Exhaust (Rotator Type)</td></tr> <tr><td>1</td><td>73924</td><td>Cylinder and Head Assy.</td></tr> <tr><td>2</td><td>72117</td><td>Rocker Assy., Valve</td></tr> <tr><td>2</td><td>72198</td><td>Plug, Piston Pin</td></tr> <tr><td>2</td><td>60053</td><td>Seal, Shroud Tube</td></tr> <tr><td>2</td><td>70310</td><td>Seal, Shroud Tube</td></tr> <tr><td>1</td><td>71481</td><td>Seal, Cylinder Base Oil</td></tr> </table>	6	STD-1826	Screw	2	60009	Key, Valve	1	60401	Shaft, Valve Rocker	1	61246	Gasket, Rocker Box Cover	2	61625	Seat, Valve Spring, Lower	2	72050	Key, Valve	1	62388	Cap, Valve Stem	2	65427	Spring, Valve, Outer	2	65567	Spring, Valve, Auxiliary	1	73938	Valve, Intake	1	68327	Seat, Valve Spring	1	69457	Ring, Piston, Oil Regulating (Expander Type)	1	69532	Seat, Valve Spring	1	69650	Pin, Piston	1	71195	Box, Set-Up	3	72446	Ring, Piston Compression	1	72967	Piston	1	71595	Valve, Exhaust (Rotator Type)	1	73924	Cylinder and Head Assy.	2	72117	Rocker Assy., Valve	2	72198	Plug, Piston Pin	2	60053	Seal, Shroud Tube	2	70310	Seal, Shroud Tube	1	71481	Seal, Cylinder Base Oil	
6	STD-1826	Screw																																																																								
2	60009	Key, Valve																																																																								
1	60401	Shaft, Valve Rocker																																																																								
1	61246	Gasket, Rocker Box Cover																																																																								
2	61625	Seat, Valve Spring, Lower																																																																								
2	72050	Key, Valve																																																																								
1	62388	Cap, Valve Stem																																																																								
2	65427	Spring, Valve, Outer																																																																								
2	65567	Spring, Valve, Auxiliary																																																																								
1	73938	Valve, Intake																																																																								
1	68327	Seat, Valve Spring																																																																								
1	69457	Ring, Piston, Oil Regulating (Expander Type)																																																																								
1	69532	Seat, Valve Spring																																																																								
1	69650	Pin, Piston																																																																								
1	71195	Box, Set-Up																																																																								
3	72446	Ring, Piston Compression																																																																								
1	72967	Piston																																																																								
1	71595	Valve, Exhaust (Rotator Type)																																																																								
1	73924	Cylinder and Head Assy.																																																																								
2	72117	Rocker Assy., Valve																																																																								
2	72198	Plug, Piston Pin																																																																								
2	60053	Seal, Shroud Tube																																																																								
2	70310	Seal, Shroud Tube																																																																								
1	71481	Seal, Cylinder Base Oil																																																																								
74433	<p>CYLINDER, PISTON AND RING ASSEMBLY (Nitrided barrels, chrome half wedge compression rings, 4-Ring.)</p> <p>Consisting of:</p>	<p>IVO-360-A1A</p>																																																																								
	<table border="0"> <tr><td>6</td><td>STD-1826</td><td>Screw, Fill. Hd. Self-Locking 1/4-20 X 5/8 In. Long</td></tr> <tr><td>2</td><td>60009</td><td>Key, Valve</td></tr> <tr><td>2</td><td>60053</td><td>Seal, Shroud Tube</td></tr> <tr><td>1</td><td>60401</td><td>Shaft, Valve Rocker</td></tr> <tr><td>1</td><td>61246</td><td>Gasket, Rocker Box Cover</td></tr> <tr><td>2</td><td>61625</td><td>Seat, Valve Spring, Lower</td></tr> <tr><td>1</td><td>62388</td><td>Cap, Valve Stem</td></tr> <tr><td>2</td><td>65427</td><td>Spring, Valve, Outer</td></tr> <tr><td>2</td><td>65567</td><td>Spring, Valve, Auxiliary</td></tr> <tr><td>1</td><td>68327</td><td>Seat, Valve Spring</td></tr> <tr><td>1</td><td>69457 or 69544</td><td>Ring, Piston, Oil Regulating (Expander Type)</td></tr> <tr><td>1</td><td>69532</td><td>Seat, Valve Spring</td></tr> <tr><td>1</td><td>69650</td><td>Pin, Piston</td></tr> <tr><td>2</td><td>70310</td><td>Seal, Shroud Tube</td></tr> <tr><td>1</td><td>71195</td><td>Box, Set-Up</td></tr> <tr><td>1</td><td>71481</td><td>Seal, Cylinder Base Oil</td></tr> <tr><td>1</td><td>71595</td><td>Valve, Exhaust (Rotator Type)</td></tr> <tr><td>2</td><td>72050</td><td>Key, Valve</td></tr> <tr><td>2</td><td>72117</td><td>Rocker Assy., Valve</td></tr> <tr><td>2</td><td>72198</td><td>Plug, Piston Pin</td></tr> <tr><td>3</td><td>72446</td><td>Ring, Piston, Compression</td></tr> <tr><td>1</td><td>72967</td><td>Piston</td></tr> <tr><td>1</td><td>73938</td><td>Valve, Intake</td></tr> <tr><td>1</td><td>74498</td><td>Cylinder and Head Assembly</td></tr> </table>	6	STD-1826	Screw, Fill. Hd. Self-Locking 1/4-20 X 5/8 In. Long	2	60009	Key, Valve	2	60053	Seal, Shroud Tube	1	60401	Shaft, Valve Rocker	1	61246	Gasket, Rocker Box Cover	2	61625	Seat, Valve Spring, Lower	1	62388	Cap, Valve Stem	2	65427	Spring, Valve, Outer	2	65567	Spring, Valve, Auxiliary	1	68327	Seat, Valve Spring	1	69457 or 69544	Ring, Piston, Oil Regulating (Expander Type)	1	69532	Seat, Valve Spring	1	69650	Pin, Piston	2	70310	Seal, Shroud Tube	1	71195	Box, Set-Up	1	71481	Seal, Cylinder Base Oil	1	71595	Valve, Exhaust (Rotator Type)	2	72050	Key, Valve	2	72117	Rocker Assy., Valve	2	72198	Plug, Piston Pin	3	72446	Ring, Piston, Compression	1	72967	Piston	1	73938	Valve, Intake	1	74498	Cylinder and Head Assembly	
6	STD-1826	Screw, Fill. Hd. Self-Locking 1/4-20 X 5/8 In. Long																																																																								
2	60009	Key, Valve																																																																								
2	60053	Seal, Shroud Tube																																																																								
1	60401	Shaft, Valve Rocker																																																																								
1	61246	Gasket, Rocker Box Cover																																																																								
2	61625	Seat, Valve Spring, Lower																																																																								
1	62388	Cap, Valve Stem																																																																								
2	65427	Spring, Valve, Outer																																																																								
2	65567	Spring, Valve, Auxiliary																																																																								
1	68327	Seat, Valve Spring																																																																								
1	69457 or 69544	Ring, Piston, Oil Regulating (Expander Type)																																																																								
1	69532	Seat, Valve Spring																																																																								
1	69650	Pin, Piston																																																																								
2	70310	Seal, Shroud Tube																																																																								
1	71195	Box, Set-Up																																																																								
1	71481	Seal, Cylinder Base Oil																																																																								
1	71595	Valve, Exhaust (Rotator Type)																																																																								
2	72050	Key, Valve																																																																								
2	72117	Rocker Assy., Valve																																																																								
2	72198	Plug, Piston Pin																																																																								
3	72446	Ring, Piston, Compression																																																																								
1	72967	Piston																																																																								
1	73938	Valve, Intake																																																																								
1	74498	Cylinder and Head Assembly																																																																								

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST

SERVICE REPLACEMENT SET SECTION

Part No.

Part Name

ALL MODELS

71187-1

SEAL AND GASKET SET

Consisting of:

1	STD-208	Seal, Oil
1	STD-294	Gasket, Annular
1	STD-1045	Gasket, Annular
2	8313	Gasket, Vacuum Pump
1	72312	Ring, Oil Seal
8	60053	Seal, Shroud Tube
4	60131	Gasket, 2-Bolt Flange
1	61165	Seal, Oil, Tachometer Drive
1	61173	Gasket, Oil Pressure Housing
1	61183	Gasket, Accessory Adapter
4	61246	Gasket, Rocker Box Cover
1	61352	Gasket, Accessory Housing
1	62224	Gasket, Magneto Adapter
4	65321	Gasket, Exhaust Flange
1	66224	Gasket, Carburetor
8	70310	Seal, Shroud Tube
1	72353	Lockplate, Crankshaft Gear
2	72078	Lockplate, Camshaft Gear
4	68518	Lockplate, Shroud Tube
1	61864	Lockplate
4	71481	Ring, Oil Seal
1	71879 Or 60734	Seal, Crankshaft Oil
1	74068	Ring, Oil Level Gage Seal
6	72075	Ring, Oil Seal
2	72091	Ring, Oil Seal
1	72278	Gasket, Magneto Case
1	72391	Gasket, Oil Drain and Suction Screen Adapter

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST

NUMERICAL INDEX PARTS SECTION

FIG-REF. NO.	PART NO.	PART NAME	QTY.	FIG-REF. NO.	PART NO.	PART NAME	QTY.
6-24	AN74A10	Bolt	1	4-54	STD-475	Washer	8
6-30	AN74A10	Bolt	2	7-3	STD-475	Washer	4
9-4	AN365-632C	Nut	4	8-3	STD-475	Washer	4
14-7	AN365-632C	Nut	6	10-3	STD-475	Washer	4
4-38	AN500A10-8	Screw	4	12-3	STD-475	Washer	4
15-11	AN500A10-8	Screw	4	1-26	STD-514	Dowel	2
9-6	AN742D16C	Clip	2	9-3	STD-553	Screw	4
1-47	AN780-4	Nipple	4	14-6	STD-553	Screw	6
5-56	AN823-8	Elbow	1	1-14	STD-557	Dowel	2
13-5	AN931-12-17	Grommet	1	1-43	STD-596	Nut	2
5-32	AN932-2	Plug	2	1-49	STD-619	Washer	8
6-38	MS16625-1050	Ring	1	6-11	STD-670	Nut	2
1-3	STD-8	Washer	14	9-12	STD-670	Nut	4
1-3	STD-8	Washer	16	15-19	STD-670	Nut	6
1-8	STD-8	Washer	AR	15-24	STD-670	Nut	2
5-2	STD-8	Washer	12	1-42	STD-678	Washer	2
5-23	STD-8	Washer	3	4-34	STD-684	Nipple	2
5-37	STD-8	Washer	4	1-46	STD-705	Screw	2
5-51	STD-8	Washer	8	9-9	STD-705	Screw	2
6-2	STD-8	Washer	39	15-7	STD-705	Screw	1
6-23	STD-8	Washer	3	1-13	STD-713	Pin	1
6-29	STD-8	Washer	6	5-15	STD-714	Pin	1
9-7	STD-8	Washer	2	1-34	STD-783	Plug	4
10-15	STD-8	Washer	8	4-13	STD-783	Plug	4
11-12	STD-8	Washer	8	5-9	STD-783	Plug	1
12-19	STD-8	Washer	1	5-33	STD-783	Plug	1
15-5	STD-8	Washer	4	5-31	STD-784	Plug	2
15-7	STD-8	Washer	1	14-8	STD-853	Tee	2
1-11	STD-33	Washer	2	9-10	STD-860	Screw	4
1-41	STD-33	Washer	4	15-19	STD-860	Screw	6
4-53	STD-35	Washer	8	15-24	STD-860	Screw	4
5-11	STD-35	Washer	3	1-12	STD-872	Nut	1
10-2	STD-35	Washer	4	9-22	STD-883	Grommet	4
12-2	STD-35	Washer	4	4-39	STD-957	Grommet	4
12-14	STD-35	Washer	AR	1-32	STD-1045	Gasket	1
12-26	STD-35	Washer	1	2-4	STD-1065	Dowel	1
15-2	STD-35	Washer	4	2-17	STD-1065	Dowel	1
6-33	STD-68	Pin	2	6-12	STD-1111	Elbow	1
12-16	STD-68	Pin	2	1-40	STD-1197	Bolt	2
5-6	STD-91	Plug	3	2-18	STD-1199	Pin	1
1-5	STD-160	Washer	9	10-12	STD-1201	Bolt	2
5-3	STD-160	Washer	12	12-4	STD-1202	Bolt	1
5-38	STD-160	Washer	4	5-4	STD-1204	Bolt	10
5-52	STD-160	Washer	8	5-54	STD-1204	Bolt	4
6-3	STD-160	Washer	27	6-4	STD-1204	Bolt	27
9-8	STD-160	Washer	2	1-10	STD-1205	Bolt	1
10-16	STD-160	Washer	8	2-3	STD-1211	Plug	1
11-2	STD-160	Washer	2	12-22	STD-1215	Bolt	2
11-12	STD-160	Washer	8	4-33	STD-1252	Clamp	12
12-20	STD-160	Washer	3	10-10	STD-1269	Clamp	8
15-7	STD-160	Washer	1	11-10	STD-1269	Clamp	8
5-47	STD-208	Seal	1	10-13	STD-1323	Bolt	2
15-11	STD-251	Washer	4	15-2	STD-1323	Bolt	4
5-43	STD-294	Gasket	1	6-27	STD-1408	Dowel	2
9-34	STD-295	Gasket	8	1-9	STD-1409	Nut	3
1-31	STD-425	Washer	AR	6-32	STD-1409	Nut	2
9-11	STD-425	Washer	4	4-55	STD-1410	Nut	8
15-19	STD-425	Washer	6	7-4	STD-1410	Nut	4
15-24	STD-425	Washer	4	8-4	STD-1410	Nut	4
5-30	STD-453	Plug	1	10-4	STD-1410	Nut	4
5-39	STD-460	Bolt	4	12-5	STD-1410	Nut	3

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST

NUMERICAL INDEX PARTS SECTION

FIG-REF. NO.	PART NO.	PART NAME	QTY.	FIG-REF. NO.	PART NO.	PART NAME	QTY.
15-2	STD-1410	Nut	4	9-33	1182-B3	Spark Plug	8
1-6	STD-1411	Nut	9	9-33	1182-F3	Spark Plug	8
4-47	STD-1411	Nut	4	5-55	8313	Gasket	2
5-53	STD-1411	Nut	4	5-29	45530	Ring	1
5-53	STD-1411	Nut	8	4-26	60009	Key	8
6-5	STD-1411	Nut	12	4-7	60028	Guide	4
10-17	STD-1411	Nut	8	4-41	60053	Seal	8
11-12	STD-1411	Nut	8	10-18	60131	Gasket	4
12-23	STD-1411	Nut	1	11-13	60131	Gasket	4
15-7	STD-1411	Nut	1	5-14	60329	Shaft	1
1-2	STD-1414	Bolt	6	4-50	60398	Bushing	8
1-2	STD-1414	Bolt	8	4-51	60401	Shaft	4
1-4	STD-1415	Bolt	1	5-50	60430	Cover	2
1-4	STD-1415	Bolt	3	12-24	60733	Shim	AR
5-5	STD-1415	Bolt	2	1-37	60734	Seal	1
12-21	STD-1415	Bolt	1	5-19	60746	Impeller	1
1-7	STD-1416	Bolt	3	5-20	60747	Impeller	1
11-2	STD-1419	Bolt	2	1-36	60803	Strap	1
5-12	STD-1420	Nut	3	12-25	60861	Link	1
12-15	STD-1420	Nut	2	2-25	60882	Gear	1
1-28	STD-1623	Insert	2	12-28	60886	Belt	1
6-9	STD-1650	Bolt	2	5-28	60930	Shaft Assy.	1
7-2	STD-1727	Washer	4	5-10	60981	Cover Assy.	1
8-2	STD-1727	Washer	4	5-13	60983	Cover	1
12-10	STD-1727	Washer	1	5-16	60984	Body	1
15-2	STD-1763	Locknut	4	1-30	61084	Spring	1
5-45	STD-1774	Pin	1	5-44	61098	Adapter Assy.	1
2-21	STD-1791	Bolt	4	2-23	61154	Bushing	1
10-9	STD-1792	Hose	4	5-26	61165	Seal	1
11-9	STD-1792	Hose	4	5-40	61173	Gasket	1
4-31	STD-1793	Hose	4	5-17	61174	Shaft	1
6-10	STD-1803	Washer	2	5-27	61175	Adapter	1
12-11	STD-1817	Bolt	1	5-46	61183	Gasket	1
12-27	STD-1817	Bolt	1	5-8	61238	Stud	4
12-30	STD-1817	Bolt	1	5-8	61238	Stud	8
4-28	STD-1826	Screw	24	4-29	61246	Gasket	4
15-5	STD-1826	Screw	2	4-52	61260	Flange	4
12-12	STD-1834	Bolt	1	1-22	61261	Stud	2
12-13	STD-1835	Bolt	1	4-10	61261	Stud	8
3-10	STD-1853	Pin	8	6-6	61261	Stud	4
5-24	STD-1856	Screw	3	12-6	61261	Stud	2
6-31	STD-1859	Bolt	2	4-12	61262	Stud	8
2-13	STD-1865	Bolt	1	5-7	61265	Stud	3
6-25	STD-1866	Bolt	1	2-22	61278	Gear Assy.	1
6-26	STD-1867	Bolt	1	5-57	61352	Gasket	1
4-15	STD-1872	Insert	4	1-20	61387	Sleeve	1
5-35	STD-1901	Stud	4	12-8	61427	Switch	1
7-6	10-3793	Washer	2	5-34	61548	Plate	1
8-5	10-4093	Washer	2	9-30	61559	Grommet	2
7-7	10-51643	Nut	2	9-29	61560	Plate	2
7-5	10-88514-4	Bushing	2	9-21	61563	Nut	8
7-8	10-90751-19	Pin	2	7-12	61566	Kit Assy.	2
8-7	10-90751-19	Pin	2	14-1	61581-17A	Tube Assy.	1
8-6	10-163151	Nut	2	14-2	61581-18	Tube Assy.	2
1-17	38-13	Stud	16	14-3	61581-19	Tube Assy.	1
1-16	50-15	Stud	8	4-19	61625	Seat	8
1-29	1028-B	Ball	1	4-35	61634	Connector	4
1-19	1102	Plug	5	6-39	61665	Gear	2
1-19	1102	Plug	3	7-11	61665	Gear	2
4-25	1102	Plug	1	7-10	61666	Adapter	2
4-25	1102	Plug	4	6-6	61668	Stud	4

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST

NUMERICAL INDEX PARTS SECTION

FIG-REF. NO.	PART NO.	PART NAME	QTY.	FIG-REF. NO.	PART NO.	PART NAME	QTY.
4-7	61681	Guide	4	2-24	71328	Support Assy.	1
1-45	61864	Lockplate	1	7-1	71397	Magneto	2
7-9	62224	Gasket	4	9-26	71401	Collar	4
8-8	62224	Gasket	2	4-40	71481	Ring	4
4-18	62388	Cap	4	9-19	71488	Washer	8
14-4	62811	Clip	1	9-28	71489	Sleeve	8
5-41	62817	Screen Assy.	1	2-1	71541	Crankshaft Assy.	1
1-21	65007	Retainer	8	3-2	71556	Ring	8
2-10	65074	Socket	8	8-11	71571	Kit	1
4-56	65321	Gasket	4	8-10	71574	Kit	2
4-21	65427	Spring	8	2-2	71577	Tube	4
4-20	65567	Spring	8	3-1	71594	Piston	4
3-7	65819	Bushing	4	4-17	71595	Valve	4
1-27	66145	Dowel	3	5-49	71596	Washer	1
9-20	66216	Sleeve	4	13-4	71610	Hook	2
10-5	66224	Gasket	1	13-3	71611	Retainer	2
15-3	66224	Gasket	1	2-15	71637	Bearing	1
4-14	66610	Bushing	16	1-33	71714	Plug	1
1-15	66734	Stud	4	12-9A	71744	Generator	1
4-9	66796 P10	Insert	8	12-17A	71745	Regulator	1
3-11	67276	Bearing	8	2-9	71791	Plunger Assy.	8
1-24	67453	Dowel	2	9-5	71824	Clip	4
1-25	67453	Dowel	4	9-5	71824	Clip	6
1-23	67528	Stud	1	9-31	71875	Washer	8
12-7	67528	Stud	1	9-13	71882	Cable	AR
4-23	68327	Seat	4	14-5	71910	Clamp	6
9-25	68487	Nut	4	9-2	71911	Clamp	4
4-11	68510	Stud	4	3-2A	71939	Ring	12
4-45	68517	Spring	8	3-9	71950	Nut	8
4-46	68518	Lockplate	4	9-16	71974	Ferrule	12
5-58	68593	Spacer	4	3-6	71987-S	Rod Assy.	4
1-30	68668	Spring	1	15-17	72036	Clip	4
1-44	68749	Shaft	1	4-24	72050	Key	8
1-18	68751	Stud	2	4-5	72057	Seat	4
12-9	68764	Generator	1	4-6	72058	Seat	4
6-14	69097	Tube	1	6-20	72059	Ring	1
6-13	69098	Tube	1	2-5	72060-S	Bushing	1
12-18	69113	Bracket	1	2-6	72061-S	Bushing	1
4-44	69345	Spacer	4	2-7	72062-S	Bushing	4
5-42	69451	Valve Assy.	1	1-38	72075	Seal	6
12-18A	69452	Bracket	1	2-20	72078	Lockplate	2
3-3A	69457	Ring	4	2-19	72080	Gear	1
5-36	69510	Housing	1	1-39	72091	Ring	2
2-8	69529	Body	8	4-37	72111	Plate	4
4-2	69531	Plate	8	4-36	72112	Tube Assy.	4
4-22	69532	Seat	4	4-1	72114	Cyl. and Hd. Assy.	4
3-4	69650	Pin	4	4-8	72115	Guide	4
1-18	69679	Stud	2	4-49	72117	Rocker Assy.	8
1-25	69796	Dowel	4	1-1	72137	Crankcase Assy.	1
12-29	69951	Strut	1	13-1	72152	Baffle Assy.	1
2-14	69961	Bearing	4	13-1	72152	Baffle Assy.	2
4-42	70310	Seal	8	9-14	72161	Cable	AR
5-21	70484	Screen	1	9-27	72194	Collar	4
2-16	70492	Camshaft Assy.	1	9-23	72195	Nut	4
1-48	71032	Bushing	8	9-24	72196	Elbow Assy.	4
4-43	71083	Tube	8	3-5	72198	Plug	8
3-8	71087	Bolt	8	9-1	72199	Cable Assy.	1
12-1	71091	Starter	1	12-17	72205	Regulator	1
4-3	71133	Nut	16	3-11	72218	Bearing	8
4-4	71134	Nut	16	6-35	72273	Washer	AR
9-15	71259	Sleeve	16	6-35	72274	Washer	AR

LYCOMING AIRCRAFT ENGINE GROUP ASSEMBLY PARTS LIST

NUMERICAL INDEX PARTS SECTION

FIG-REF. NO.	PART NO.	PART NAME	QTY.	FIG-REF. NO.	PART NO.	PART NAME	QTY.
6-35	72275	Washer	AR	5-48	72970	Gear Assy.	1
6-7	72278	Gasket	1	2-14	73048	Bearing	4
5-1	72294	Case Assy.	1	9-31	73245	Eyelet	8
6-1	72295	Case Assy.	1	10-1A	73257	Carburetor	1
4-27	72310	Cover Assy.	2	12-1C	73269	Starter	1
6-21	72312	Ring	1	10-14	73346	Flange	4
12-1A	72340	Starter	1	11-11	73346	Flange	4
5-18	72347	Coupling	1	8-1A	73360	Magneto	1
2-11	72348	Gear	1	4-48	73434	Rod Assy.	AR
6-34	72349	Shaftgear	1	4-48	73435	Rod Assy.	AR
9-32	72351	Screw	8	4-48	73436	Rod Assy.	AR
2-12	72353	Lockplate	1	15-18	73650	Clip	6
6-28	72354	Dowel	1	6-39	73683	Gear	2
10-7	72355	Pipe	1	8-9	73683	Gear	2
10-7	72356	Pipe	1	10-11	73732	Manifold Assy.	1
10-8	72357	Pipe	1	1-35	73772	Nozzle Assy.	4
10-8	72358	Pipe	1	4-1A	73924	Cyl. and Hd. Assy.	4
6-22	72359	Support Assy.	1	4-16	73938	Valve	4
10-6	72374	Bracket	1	15-20	73970	Hose Assy.	1
6-8	72379	Separator Assy.	1	15-22	73971	Clip	2
4-27	72380	Cover Assy.	2	13-2	73975	Baffle Assy.	1
4-30	72381	Tube	2	12-1D	74092	Starter	1
4-32	72382	Hose	2	15-8	74151	Nozzle	4
10-1	72386	Carburetor	1	14-9	74225	Nipple Assy.	3
5-25	72391	Gasket	1	1-1C	74262	Crankcase Assy.	1
10-11	72396	Manifold Assy.	1	15-23	74278	Bracket Assy.	1
5-22	72397	Adapter	1	5-1A	74336	Case Assy.	1
6-37	72399	Plug	1	4-1B	74498	Cyl. & Hd. Assy.	4
6-36	72400	Shaftgear Assy.	1	6-19	74524	Ring	1
3-2A	72446	Ring	12	6-15	74526	Tube	1
3-3	72454	Ring	4	15-1	74642	Fuel Injector	1
3-3A	72454	Ring	4	15-9	74643	Manifold Assy.	1
12-1B	72465	Starter	1	15-13	74647	Tube Assy.	1
9-17	72484	Ferrule	4	15-14	74648	Tube Assy.	1
9-18	72485	Ferrule	4	15-15	74649	Tube Assy.	1
6-1A	72512	Case Assy.	1	15-16	74650	Tube Assy.	1
8-1	72524	Magneto	1	11-6	74652	Pipe	1
2-24	72565	Support Assy.	1	11-7	74653	Pipe	1
2-25	72566	Gear	1	11-8	74654	Pipe	1
1-1B	72623	Crankcase Assy.	1	11-3	74655	Spacer	2
4-36	72624	Tube Assy.	4	15-12	74655	Spacer	2
15-21	72815	Bracket	1	15-10	74656	Bracket	1
1-1A	72867	Crankcase Assy.	1	15-4	74657	Bracket	1
2-9	72876	Plunger Assy.	8	11-1	74658	Bracket	1
2-8	72877	Body	8	11-4	74659	Manifold Assy.	1
6-16	72948	Gage Assy.	1	6-18	74663	Gage Assy.	1
6-17	72950	Gage Assy.	1	15-6	74668	Brace	1
3-1A	72967	Piston	4	11-5	74764	Pipe	1