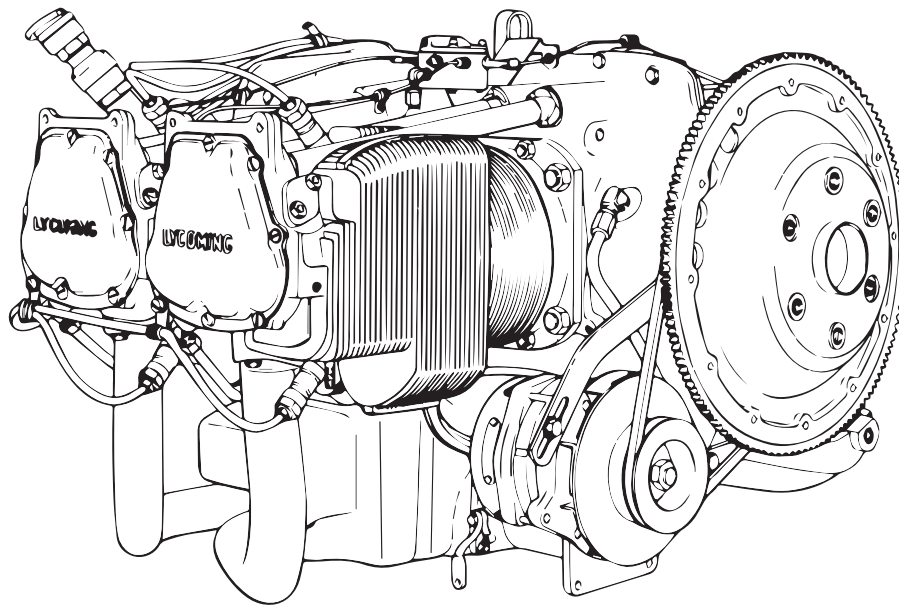


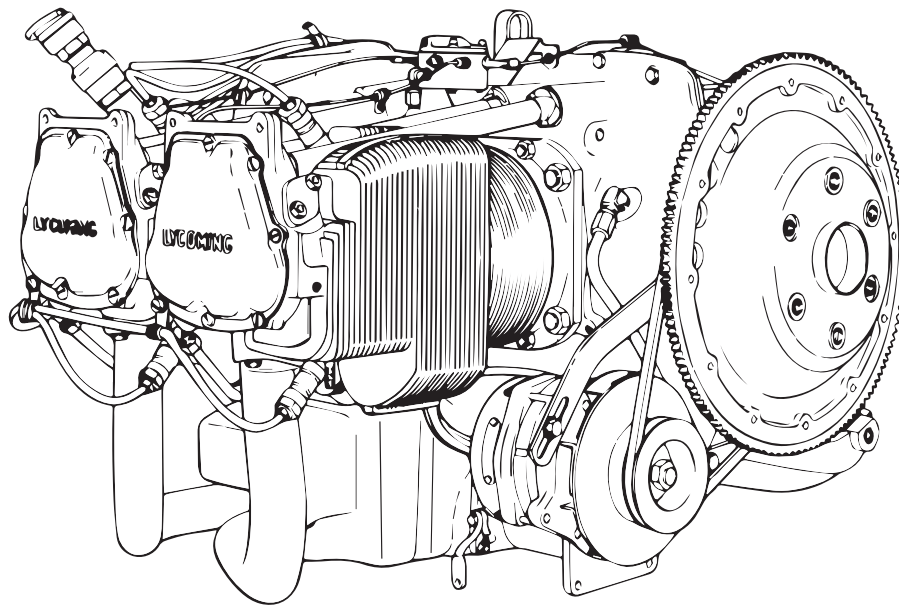
Lycoming Aircraft Engines Parts Catalog



IO, AIO-360-A, -B Series Wide Cylinder Flange Models

LYCOMING

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LYCOMING

FEBRUARY 1995

This supplement is arranged in the same basic format as PC-406-1. The Reference Numbers match the Text and Illustration Pages or they are marked as "Not Applicable."

Lycoming

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SECTION 1 ... CRANKCASE, CRANKSHAFT AND CAMSHAFT GROUP

Figure 1 - CRANKCASE ASSEMBLY, Pages 1-1 & 1-2

| | | | QTY. PER ASSEMBLY |
|----|--------------|--------------------------------------|----------------------|
| 1 | 11B20061-1SL | CRANKCASE ASSEMBLY (See NOTE) | 1 |
| 2 | 75154 | STUD, 1/2-13 x 10-1/32 long | 2 |
| 3 | 50-15 | STUD, 1/2-13 x 1-7/8 long | 8 |
| 4 | 38-13 | STUD, 3/8-16 x 1-5/8 long | 16 |
| 5 | 38D-17 | STUD, 3/8-16 x 2-1/8 long, drilled | 1 |
| 6 | | Not Applicable | |
| 7 | LW-13793 | STUD, 5/16-18 x 15/16 long, drilled | 1 |
| 8 | 31C-12 | STUD, 5/16-18 x 1-1/2 long | 2 |
| 9 | 31C-13 | STUD, 5/16-18 x 1-5/8 long | 1 |
| 10 | | Not Applicable | |
| 11 | | Not Applicable | |
| 12 | | Not Applicable | |
| 13 | | Not Applicable | |
| 14 | STD-557 | DOWEL, 1/2 dia. x 11/16 long, hollow | 2 |
| 15 | STD-514 | DOWEL, 5/16 dia. x 1/2 long | 2 |
| 16 | 69796 | DOWEL, Crankshaft bearing | 2 |
| 17 | | Not Applicable | |
| 18 | STD-1623 | INSERT, 1/4-20 Helicoil x 3/8 long | 2 |
| 19 | | Not Applicable | |
| 20 | 1102 | PLUG, 1/8-27 NPT, Allen | 6 |
| 21 | | Not Applicable | |
| 22 | | Not Applicable | |
| 23 | | Not Applicable | |
| 24 | 73772 | NOZZLE ASSY., Piston cooling | 4 |

NOTE

This part is not available as a service item. Refer to Service Kit Section 7 for applicable Crankcase Assy. and Governor Stud Kit part number.

SECTION 1 ... CRANKCASE, CRANKSHAFT AND CAMSHAFT GROUP

Figure 2 - OIL LEVEL GAGES AND CRANKCASE RELATED PARTS, Pages 1-3 & 1-4

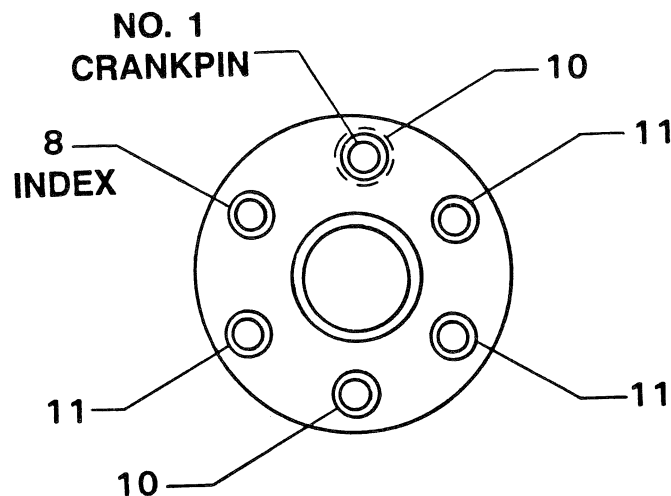
| | | | QTY. PER ASSEMBLY |
|----|---------------|--|----------------------|
| 1 | 75736 | TUBE, Oil level gage, long | 1 |
| 2 | | Not Applicable | |
| 3 | 72059 | GASKET, Oil level gage | 1 |
| 4 | 74068 | RING, Oil level gage seal | 1 |
| 5 | LW-14760 | GAGE ASSY., Oil level | 1 |
| 6 | | Not Applicable | |
| 7 | 1028-B | BALL, 11/16 diameter | 1 |
| 8 | 61084 * | SPRING, Oil pressure relief valve | 1 |
| | LW-11713 * | SPRING, Oil pressure relief valve | 1 |
| | 68668 * | SPRING, Oil pressure relief valve | 1 |
| | 77467 * | SPRING, Oil pressure relief valve | 1 |
| | LW-18085 * | SPRING, Oil pressure relief valve | 1 |
| 9 | | Not Applicable | |
| 10 | 06E19769-1.25 | GASKET, 1-1/4 I.D. x 1-1/2 O.D. x 3/32 annular | 1 |
| 11 | | Not Applicable | |
| 12 | 77808 | VALVE ASSY., Oil pressure relief valve, adj. | 1 |
| 13 | LW-16711 | BEARING, Crankshaft | 4 |
| 14 | LW-13884 | BEARING, Crankshaft, front | 2 |
| 15 | LW-13792 ** | SEAL, Crankshaft oil, solid | 1 |
| | LW-11997 ** | SEAL, Crankshaft oil split | 1 |
| 16 | 72075 | SEAL, Oil, 3/32 section x 15/32 I.D. | 2 |
| 17 | 72091 | RING, Oil seal, 23/64 I.D. x 7/64 dia. section | 2 |
| 18 | 72877 | BODY, Hydraulic tappet | 8 |
| 19 | | Not Applicable | |
| 20 | | Not Applicable | |

* Select spring to give a minimum of three threads exposed on adjusting screw to allow field adjustment. Reference latest revision of SSP-1776, Part 1 for spring identification.

** Refer to latest edition of Lycoming Service Instruction No. 1324.

SECTION 1 ... CRANKCASE, CRANKSHAFT AND CAMSHAFT GROUP
Figure 3 - CRANKSHAFT AND COUNTERWEIGHT ASSEMBLY, Pages 1-5 & 1-6

| | | | QTY. PER ASSEMBLY |
|----|----------|---|------------------------------|
| 1 | | Not Applicable | |
| 2 | 13B27221 | CRANKSHAFT & BUSHING ASSEMBLY | 1 |
| 3 | STD-1211 | PLUG, 2.00 dia. expansion | 1 |
| 4 | 1102 | PLUG, 1/8-27 pipe, Allen | 1 |
| 5 | STD-1065 | DOWEL, Stepped, 19/64 x 1/4 dia. x 35/64 long | 1 |
| 6 | | Not Applicable | |
| 7 | 74711 | PLUG, 1-1/4 O.D. (1/8 NPT) | 1 |
| 8 | 79024-S | BUSHING, Propeller flange, indexing | 1 |
| 9 | | Not Applicable | |
| 10 | 72155-S | BUSHING, Propeller flange, short | 2 |
| 11 | 75656-S | BUSHING, Propeller flange, long | 3 |
| 12 | | Not Applicable | |
| 13 | | Not Applicable | |
| 14 | 73810 | BUSHING, Crankshaft, dynamic counterweight | 4 |
| 15 | LW-19227 | COUNTERWEIGHT ASSEMBLY | 2 |
| 16 | 71903 | BUSHING, Dynamic counterweight | 8 |
| 17 | 14W21696 | ROLLER, Dynamic counterweight, 8th order | 2 |
| | 72797 | ROLLER, Dynamic counterweight, 6.3 order | 2 |
| 18 | LW-14820 | RING, Internal retaining | 8 |
| 19 | 71907 | WASHER, Dynamic counterweight | 8 |



SECTION 1 ... CRANKCASE, CRANKSHAFT AND CAMSHAFT GROUP
Figure 4 - STARTER RING GEAR SUPPORT ASSEMBLY, Pages 1-7 & 1-8

| | | | QTY. PER ASSEMBLY |
|---|----------|----------------------------------|----------------------|
| 1 | LW-16471 | SUPPORT ASSY., Starter ring gear | 1 |
| 2 | 72566 | GEAR, Starter ring, 12/14 pitch | 1 |

Figure 5 - CRANKSHAFT IDLER GEARS, TACHOMETER DRIVE AND CAMSHAFT,
Pages 1-9 & 1-10

| | | | QTY. PER ASSEMBLY |
|----|------------|---|----------------------|
| 1 | | Not Applicable | |
| 2 | | Not Applicable | |
| 3 | | Not Applicable | |
| 4 | | Not Applicable | |
| 5 | | Not Applicable | |
| 6 | 61544 | PLUNGER, Fuel pump, long | 1 |
| 7 | 74996 | GEAR ASSY., Crankshaft idler, plain | 1 |
| 8 | 77309 | BUSHING, Crankshaft idler, plain | 1 |
| 9 | 75072 | GEAR ASSY., Crankshaft idler (w/ fuel pump cam) | 1 |
| 10 | 77309 | BUSHING, Crankshaft idler | 1 |
| 11 | | Not Applicable | |
| 12 | | Not Applicable | |
| 13 | | Not Applicable | |
| 14 | | Not Applicable | |
| 15 | | Not Applicable | |
| 16 | | Not Applicable | |
| 17 | 76121 | SHAFT ASSY., Tachometer | 1 |
| 18 | LW-18667 | PIN, 3/16 dia. x 2-21/64 long | 1 |
| 19 | STD-2231 | RING, Internal retaining | 1 |
| 20 | LW-13796 | SHAFT, Crankshaft idler gear | 2 |
| 21 | LW-31H0.88 | SCREW, 5/16-18 x 7/8 long, hex. hd. | 3 |
| 22 | STD-2168 | NUT, 5/16-18 NC-3 slotted shear | 1 |
| 23 | 13S19646 | GEAR, Crankshaft | 1 |
| 24 | | Not Applicable | |
| 25 | LW-18639 | LOCKPLATE, Crankshaft gear | 1 |
| 26 | | Not Applicable | |
| 27 | STD-2213 | SCREW, 5/16-24 x 1.00 long | 1 |
| 28 | | Not Applicable | |
| 29 | LW-18840 | CAMSHAFT ASSEMBLY | 1 |
| 30 | 76118 | SPACER, Tachometer shaft centering | 1 |

SECTION 1 ... CRANKCASE, CRANKSHAFT AND CAMSHAFT GROUP
Figure 6 - CRANKCASE ATTACHING PARTS, Pages 1-11 & 1-12

| | | | QTY. PER ASSEMBLY |
|----|------------|--|------------------------------|
| 1 | LW-25-1.50 | BOLT, 1/4-20 x 1-1/2 long, hex. hd. | 8 |
| 2 | | Not Applicable | |
| 3 | | Not Applicable | |
| 4 | | Not Applicable | |
| 5 | STD-8 | WASHER, 1/4 plain | 19 |
| 6 | 60803 | STRAP, Lifting | 1 |
| 7 | LW-25-1.75 | BOLT, 1/4-20 x 1-3/4 long, hex. hd. | 1 |
| 8 | LW-25-1.13 | BOLT, 1/4-20 x 1-1/8 long, hex. hd. | 3 |
| 9 | STD-160 | WASHER, 1/4 lock, internal teeth | 12 |
| 10 | STD-1411 | NUT, 1/4-20 plain | 9 |
| 11 | LW-25S1.50 | BOLT, 1/4-20 x 1-1/2 long, hex. hd., dr. end | 3 |
| 12 | STD-8 | WASHER, 1/4 plain | 9 |
| 13 | STD-1409 | NUT, 1/4-20 slotted shear | 3 |
| 14 | STD-33 | WASHER, 3/8 plain | 3 |
| 15 | AN960-616L | WASHER, 3/8 plain (thick - Max. 3) | AR |
| 16 | STD-872 | NUT, 3/8-24 slotted | 1 |
| 17 | AN6-34A | BOLT, 3/8-24 x 3-37/64 long, hex. hd. | 2 |
| 18 | | Not Applicable | |
| 19 | | Not Applicable | |
| 20 | | Not Applicable | |
| 21 | STD-33 | WASHER, 3/8 plain | 2 |
| 22 | STD-678 | WASHER, 3/8 lock, internal teeth | 2 |
| 23 | STD-596 | NUT, 3/8-24 plain | 2 |
| 24 | 76220 | STUD, 1/2-20 x 10-11/16 long | 4 |

**Figure 6A - CRANKCASE ATTACHING PARTS (Front Mounted Prop. Governor),
Pages 1-13. & 1-14
NOT APPLICABLE to IO-360-A3B6**

SECTION 2 ... ACCESSORY HOUSING AND RELATED PARTS
Figure 7 - ACCESSORY HOUSING ASSEMBLY, Pages 2-1 & 2-2

| | | | QTY. PER ASSEMBLY |
|----|-------------|-------------------------------------|------------------------------|
| 1 | 73818 | GASKET, Accessory housing | 1 |
| 2 | 21A21533-04 | HOUSING ASSY., Accessory | 1 |
| 3 | | Not Applicable | |
| 4 | | Not Applicable | |
| 5 | | Not Applicable | |
| 6 | | Not Applicable | |
| 7 | 25C-22 | STUD, 1/4-20 x 2-3/4 long | 4 |
| 8 | | Not Applicable | |
| 9 | 31C-12 | STUD, 5/16-18 x 1-1/2 long | 6 |
| 10 | | Not Applicable | |
| 11 | | Not Applicable | |
| 12 | | Not Applicable | |
| 13 | | Not Applicable | |
| 14 | | Not Applicable | |
| 15 | 31C-19 | STUD, 5/16-18 x 2-3/8 long | 2 |
| 16 | | Not Applicable | |
| 17 | 31CD-17 | STUD, 5/16-18 x 2-1/8 long, drilled | 3 |
| 18 | | Not Applicable | |
| 19 | | Not Applicable | |
| 20 | | Not Applicable | |
| 21 | | Not Applicable | |
| 22 | 1102 | PLUG, 1/8-27 NPT, Allen head | 4 |
| 23 | STD-784 | PLUG, 3/8-18 NPT, Allen head | 1 |
| 24 | | Not Applicable | |

SECTION 2 ... ACCESSORY HOUSING AND RELATED PARTS
Figure 8 - PROPELLER GOVERNOR DRIVES, ADAPTER ASSEMBLY AND COVERS,
Pages 2-3 & 2-4

| | | | QTY. PER ASSEMBLY |
|----|----------|---|----------------------|
| 1 | 68317 | SHAFTGEAR, Propeller governor drive | 1 |
| 2 | | Not Applicable | |
| 3 | 71596 | WASHER, Accessory driven gear | 1 |
| 4 | STD-1221 | RING, 13/16 dia. x 1/32 thick | 1 |
| 5 | | Not Applicable | |
| 6 | | Not Applicable | |
| 7 | | Not Applicable | |
| 8 | | Not Applicable | |
| 9 | | Not Applicable | |
| 10 | | Not Applicable | |
| 11 | | Not Applicable | |
| 12 | | Not Applicable | |
| 13 | | Not Applicable | |
| 14 | | Not Applicable | |
| 15 | 68315 | GASKET, Accessory drive adapter | 1 |
| 16 | 75153 | ADAPTER ASSY., Propeller governor drive | 1 |
| 17 | 1102 | PLUG, 1/8-27 NPT, Allen | 1 |
| 18 | 31C-16 | STUD, 5/16-18 x 2.00 long | 4 |
| 19 | | Not Applicable | |
| 20 | STD-1774 | PIN, 1/8 dia. x 1/4 long | 1 |
| 21 | STD-35 | WASHER, 5/16 plain | 4 |
| 22 | STD-475 | WASHER, 5/16 lock, internal teeth | 4 |
| 23 | STD-1410 | NUT, 5/16 plain | 4 |
| 24 | | Not Applicable | |
| 25 | | Not Applicable | |
| 26 | | Not Applicable | |
| 27 | | Not Applicable | |
| 28 | | Not Applicable | |
| 29 | 72053 | GASKET, Governor | 1 |
| 30 | 72378 | COVER, Governor drive | 1 |
| 31 | | Not Applicable | |
| 32 | STD-35 | WASHER, 5/16 plain (Woodward Governor) | 32 |
| | STD-35 | WASHER, 5/16 plain (AN Governor) | 4 |
| 33 | STD-475 | WASHER, 5/16 lock, internal teeth | 4 |
| 34 | | Not Applicable | |
| 35 | STD-1410 | NUT, 5/16-18 plain | 4 |
| 36 | | Not Applicable | |

SECTION 2 ... ACCESSORY HOUSING AND RELATED PARTS
Figure 9 - PROPELLER GOVERNOR OIL LINES, Pages 2-5 & 2-6

| | | | QTY. PER ASSEMBLY |
|----|----------------|--|------------------------------|
| 1 | 75167 | TUBE ASSY., Propeller governor oil line | 1 |
| 2 | STD-1930 | HOSE, 3/8 I.D. x 1.00 long | 1 |
| 3 | 75165 | CLIP, Propeller governor oil line support | 1 |
| 4 | STD-35 | WASHER, 5/16 plain | 3 |
| 5 | STD-475 | WASHER, 5/16 lock, internal teeth | 1 |
| 6 | LW-31-0.94 | BOLT, 5/16-18 x 15/16 long, hex. hd. | 1 |
| 7 | LW-16266-25-38 | CLAMP, 3/8 I.D. x 1/4 dia. screw | 1 |
| 8 | MS20822-6 | ELBOW, 3/8 flared tube & 1/4 NPT, 90° | 1 |
| 9 | 74070 | ELBOW, 3/8 flared tube & 9/16-18 str. thd., 45° adj. | 1 |
| 10 | | Not Applicable | |
| 11 | | Not Applicable | |
| 12 | | Not Applicable | |
| 13 | | Not Applicable | |

**Figure 10 - OIL SCAVENGE PUMP AND OIL SUCTION TUBES (AIO-360),
Pages 2-7 & 2-8
NOT APPLICABLE to IO-360-A3B6**

SECTION 2 ... ACCESSORY HOUSING AND RELATED PARTS

Figure 11 - OIL FILTER ASSEMBLY, Pages 2-9 & 2-10

| | | | QTY. PER ASSEMBLY |
|----|----------|---------------------------------------|------------------------------|
| 1 | | Not Applicable | |
| 2 | | Not Applicable | |
| 3 | | Not Applicable | |
| 4 | | Not Applicable | |
| 5 | | Not Applicable | |
| 6 | | Not Applicable | |
| 7 | | Not Applicable | |
| 8 | | Not Applicable | |
| 9 | | Not Applicable | |
| 10 | | Not Applicable | |
| 11 | | Not Applicable | |
| 12 | LW-12795 | GASKET, Oil filter adapter | 2 |
| 13 | LW-14089 | KIT, Oil filter element | 1 |
| 14 | 77852 | OIL FILTER BASE ASSEMBLY | 1 |
| 15 | 54D19625 | OIL FILTER, (short - with stud) | 1 |
| 16 | STD-8 | WASHER, 1/4 plain | 4 |
| 17 | STD-160 | WASHER, 1/4 lock, internal teeth | 1 |
| 18 | STD-1411 | NUT, 1/4-20 plain | 1 |
| 19 | STD-1856 | SCREW, 1/4-20 x 1.00 long, hex. hd. | 3 |
| 20 | 53E19600 | VALVE ASSY., Temp. control oil cooler | 1 |
| 21 | 76510 | GASKET, Valve assembly | 1 |
| 22 | 25C-10 | STUD, 1/4-20- x 1-1/4 long | 1 |
| 23 | | Not Applicable | |
| 24 | | Not Applicable | |
| 25 | | Not Applicable | |
| 26 | | Not Applicable | |
| 27 | | Not Applicable | |
| 28 | | Not Applicable | |
| 29 | | Not Applicable | |
| 30 | | Not Applicable | |

NOTE

See latest edition of **Lycoming SSP-885** for oil filter kits and replacement filters.

SECTION 2 ... ACCESSORY HOUSING AND RELATED PARTS
Figure 12 - OIL COOLER AND BREATHER FITTINGS, Pages 2-11 & 2-12

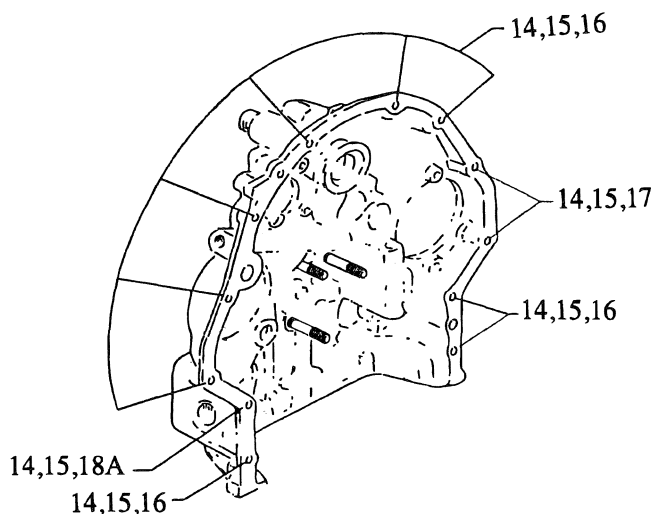
| | | | QTY. PER ASSEMBLY |
|----|---------------|--|----------------------|
| 1 | | Not Applicable | |
| 2 | | Not Applicable | |
| 3 | | Not Applicable | |
| 4 | | Not Applicable | |
| 5 | | Not Applicable | |
| 6 | | Not Applicable | |
| 7 | 06E19769-0.63 | GASKET, 7/8 O.D. x 5/8 I.D. x 3/32 annular | 1 |
| 8 | 62417 | PLUG, Oil cooler bypass | 1 |
| 9 | | Not Applicable | |
| 10 | | Not Applicable | |
| 11 | | Not Applicable | |
| 12 | | Not Applicable | |
| 13 | | Not Applicable | |
| 14 | MS20823-8 | ELBOW, 1/2 flared tube, 3/8 pipe thd. (upper & lower oil cooler bosses) | 2 |
| 15 | AN844-10D | ELBOW, 5/8 I.D. hose, pipe thd., 45° (breather boss) | 1 |
| 16 | | Not Applicable | |
| 17 | | Not Applicable | |
| 18 | | Not Applicable | |
| 19 | | Not Applicable | |
| 20 | | Not Applicable | |
| 21 | | Not Applicable | |
| 22 | | Not Applicable | |
| 23 | | Not Applicable | |
| 24 | | Not Applicable | |
| 25 | | Not Applicable | |
| 26 | | Not Applicable | |
| 27 | | Not Applicable | |
| 28 | | Not Applicable | |
| 29 | | Not Applicable | |

SECTION 2 ... ACCESSORY HOUSING AND RELATED PARTS

Figure 13 - OIL PUMP ASSEMBLY AND ACCESSORY HOUSING ATTACHING PARTS,
Pages 2-13 & 2-14

| | | | QTY. PER ASSEMBLY |
|-----|------------|--------------------------------------|----------------------|
| 1 | | Not Applicable | |
| 2 | | Not Applicable | |
| 3 | 78531 | BODY, Oil Pump | 1 |
| 4 | | Not Applicable | |
| 5 | LW-18110 * | IMPELLER ASSY., Oil pump driven | 1 |
| 6 | | Not Applicable | |
| 7 | | Not Applicable | |
| 8 | 61174 | SHAFT, Oil pump drive | 1 |
| 9 | LW-18109 * | IMPELLER, Oil pump driving | 1 |
| 10 | STD-35 | WASHER, 5/16 plain | 3 |
| 11 | STD-1420 | NUT, 5/16- 18 slotted | 3 |
| 12 | | Not Applicable | |
| 13 | LW-14260 | SEAL, Tachometer drive oil | 1 |
| 14 | STD-8 | WASHER, 1/4 plain | 12 |
| 15 | STD-160 | WASHER, 1/4 lock, internal teeth | 12 |
| 16 | LW-25-0.94 | BOLT, 1/4-20 x 15/16 long, hex. hd. | 9 |
| 17 | LW-25-1.50 | BOLT, 1/4-20 x 1-1/2 long, hex. hd.. | 2 |
| 18 | | Not Applicable | |
| 18A | LW-25-1.13 | BOLT, 1/4-20 x 1-1/8 long, hex. hd. | 1 |
| 19 | | Not Applicable | |

* When ordering, use P/N 05K19423-S OIL PUMP IMPELLER KIT. Refer to the latest edition of Lycoming Service Bulletin No. 456 for kit availability.



SECTION 2 ... ACCESSORY HOUSING AND RELATED PARTS
Figure 14 - VACUUM PUMP DRIVES AND COVERS, Pages 2-15 & 2-16

| | | | QTY. PER ASSEMBLY |
|----|----------|---|------------------------------|
| 1 | 61183 | GASKET, Accessory adapter | 1 |
| 2 | 61098 | ADAPTER ASSY., Vacuum pump | 1 |
| 3 | STD-1774 | PIN, 1/8 dia. x 1/4 long | 1 |
| 4 | 06A19956 | OIL SEAL, 7/8 I.D. x 1-1/2 O.D. x 5/16 wide | 1 |
| 5 | 72970 | GEAR ASSY., Vacuum pump driven | 1 |
| 6 | | Not Applicable | |
| 7 | | Not Applicable | |
| 8 | 71596 | WASHER, Accessory driven gear | 1 |
| 9 | | Not Applicable | |
| 10 | 8313 | GASKET, Vacuum pump | 1 |
| 11 | | Not Applicable | |
| 12 | 60430 | COVER, Vacuum pump | 1 |
| 13 | | Not Applicable | |
| 14 | STD-8 | WASHER, 1/4 plain | 4 |
| 15 | STD-160 | WASHER, 1/4 lock, internal teeth | 4 |
| 16 | STD-1411 | NUT, 1/4-20 plain | 4 |

**Figure 15 - VACUUM PUMP AND PROPELLER GOVERNOR (Dual Drive),
Pages 2-17 & 2-18
NOT APPLICABLE to IO-360-A3B6**

SECTION 2 ... ACCESSORY HOUSING AND RELATED PARTS
Figure 16 - FUEL PUMP AND FUEL PUMP COVERS, Pages 2-19 & 2-20

| | | | QTY. PER ASSEMBLY |
|-----|-------------|--|------------------------------|
| 1 | 60096 | GASKET, Fuel pump | 1 |
| 2 | | Not Applicable | |
| 3 | LW-15473 | FUEL PUMP, Dual diaphragm (6441234) | 1 |
| 4 | | Not Applicable | |
| 5 | STD-33 | WASHER, 3/8 plain | 2 |
| 6 | | Not Applicable | |
| 7 | STD-1882 | SCREW, 3/8-16 x 1-9/32 long, socket hd., dr. hd. | 2 |
| 8 | | Not Applicable | |
| 9 | | Not Applicable | |
| 10 | | Not Applicable | |
| 11 | | Not Applicable | |
| 12 | | Not Applicable | |
| 13 | | Not Applicable | |
| 14 | | Not Applicable | |
| 15 | 74070* | ELBOW, 3/8 tubing, adj., 45° | 1 |
| 15A | MS29512-06* | "O" RING | 1 |
| 16 | | Not Applicable | |
| 17 | | Not Applicable | |
| 18 | | Not Applicable | |
| 19 | | Not Applicable | |
| 20 | | Not Applicable | |
| 21 | | Not Applicable | |
| 22 | | Not Applicable | |
| 23 | | Not Applicable | |

* Assemble in fuel pump outlet.

SECTION 3 ... CYLINDER, PISTON AND VALVE TRAIN**Figure 17 - CONNECTING ROD, PISTON AND RING ASSEMBLIES, Pages 3-1 & 3-2**

| | | | QTY. PER ASSEMBLY |
|----|------------|-------------------------------------|------------------------------|
| 1 | 77450-S | CONNECTING ROD ASSEMBLY | 4 |
| 2 | LW-13923 | BUSHING, Connecting rod, upper | 4 |
| 3 | 75060 | BOLT, Connecting rod | 8 |
| 4 | LW-12186 | NUT, Connecting rod bolt | 8 |
| 5 | LW-13212 | BEARING, Connecting rod | 8 |
| | LW-13209 | BEARING, Connecting rod (alternate) | 8 |
| | LW-16143 | BEARING, Connecting rod (alternate) | 8 |
| 6 | LW-10207-S | PISTON, Compression ratio, 8.70:1 | 4 |
| 7 | LW-14077 | PIN, Piston | 4 |
| 8 | LW-11775 | PLUG, Piston pin, piloted | 8 |
| 9 | 74241 | RING, Piston, compression | 8 |
| 10 | 14H21950 | RING, Piston, oil regulating | 4 |

SECTION 3 ... CYLINDER, PISTON AND VALVE TRAIN

Figure 18 - CYLINDER ASSEMBLY, Pages 3-3 & 3-4

| | | | QTY. PER ASSEMBLY |
|----|------------|--------------------------------------|------------------------------|
| 1 | LW-12993 | CYLINDER AND HEAD ASSY., Nitrided | 4 |
| 2 | LW-12688 | SEAT, Intake valve | 4 |
| 3 | 16T19468 | SEAT, Exhaust valve | 4 |
| 4 | 66713 | GUIDE, Valve, intake (flanged) | 4 |
| 5 | 75838 | GUIDE, Valve, exhaust (flanged) | 4 |
| 6 | 66796 | INSERT, Spark plug 18-1.5 MM | 8 |
| 7 | | Not Applicable | |
| 8 | 31C-12 | STUD, 5/16-18 x 1-1/2 long | 8 |
| 9 | | Not Applicable | |
| 10 | 25C-8 | STUD, 1/4-20 x 1.00 long | 16 |
| 11 | | Not Applicable | |
| 12 | 66670 | BUSHING, Rocker shaft, inner | 16 |
| 13 | MS20823-6D | ELBOW, 3/8 flared tube, 45° | 4 |
| 14 | | Not Applicable | |
| 15 | 72343 | STABILIZER, Cyl. head fins, 15 teeth | 4 |
| 16 | 72344 | STABILIZER, Cyl. head fins, 26 teeth | 4 |
| 17 | 1102 | PLUG, 1/8-27 NPT, Allen | 4 |

SECTION 3 ... CYLINDER, PISTON AND VALVE TRAIN

Figure 19 - VALVE ASSEMBLY, Pages 3-5 & 3-6

| | | | QTY. PER ASSEMBLY |
|----|----------|--|------------------------------|
| 1 | LW-13622 | VALVE, Intake | 4 |
| 2 | LW-16740 | VALVE, Exhaust (rotator type) | 4 |
| 3 | LW-11797 | SPRING, Valve, inner | 8 |
| 4 | LW-11796 | SPRING, Valve, outer | 8 |
| 5 | | Not Applicable | |
| 5A | LW-13321 | SEAT, Valve spring, lower intake | 4 |
| 6 | | Not Applicable | |
| 7 | LW-13322 | SEAT, Valve spring, lower exhaust | 4 |
| 8 | 69532 | SEAT, Valve spring, upper intake | 4 |
| 9 | LW-16475 | SEAT, Valve spring, upper exhaust | 4 |
| 10 | 72050 | KEY, Valve, intake | 8 |
| 11 | 17C21191 | KEY, Valve, exhaust (rotator type) | 8 |
| 12 | 62388 | CAP, Valve stem, intake | 4 |
| 13 | 17C19386 | CAP, Valve stem, exhaust (rotator type) | 4 |
| 14 | 78290 | PLUNGER ASSY., Hydraulic tappet | 8 |
| 15 | 15B21319 | SOCKET, Push Rod, hydraulic tappet | 8 |
| 16 | | Not Applicable | |
| 17 | 72255 | SHROUD TUBE ASSY., Push rod | 8 |
| 18 | | Not Applicable | |
| 19 | 15H21201 | SPRING, Shroud tube | 16 |
| 20 | | Not Applicable | |
| 21 | | Not Applicable | |
| 22 | 66728 | WASHER, 25/32 I.D. x 1-1/4 O.D. x 1/32 thick | 16 |
| 23 | 61503 | SLEEVE, Shroud tube seal | 8 |
| 24 | | Not Applicable | |
| 25 | LW-18661 | SEAL, Shroud tube (green) | 16 |

SECTION 3 ... CYLINDER, PISTON AND VALVE TRAIN

Figure 20 - CYLINDER RELATED PARTS, Pages 3-7 & 3-8

| | | | QTY. PER ASSEMBLY |
|----|--------------|--|----------------------|
| 1 | 15F19957-55* | ROD ASSY., Push (A total of 8 req'd.) | AR |
| | 15F19957-56* | ROD ASSY., Push (A total of 8 req'd.) | AR |
| | 15F19957-57* | ROD ASSY., Push (A total of 8 req'd.) | AR |
| | 15F19957-58* | ROD ASSY., Push (A total of 8 req'd.) | AR |
| | 15F21362-21* | ROD ASSY., Push (A total of 8 req'd.) | AR |
| | 73556* | ROD ASSY., Push (A total of 8 req'd.) | AR |
| | 15F21362-23* | ROD ASSY., Push (A total of 8 req'd.) | AR |
| | 15F21362-24* | ROD ASSY., Push (A total of 8 req'd.) | AR |
| 2 | 17F21188 | ROCKER ASSY., Intake | 4 |
| 3 | | Not Applicable | |
| 4 | 17F21187 | ROCKER ASSY., Exhaust | 4 |
| 5 | 74389 | BUSHING, Valve rocker, intake & exhaust | 8 |
| 6 | 71549 | WASHER, Valve rocker, thrust | 8 |
| 7 | 72626 | SHAFT, Valve rocker | 8 |
| 8 | | Not Applicable | |
| 9 | 66732 | GASKET, Valve rocker shaft cover | 8 |
| 10 | 72710 | COVER, Valve rocker shaft | 8 |
| 11 | STD-160 | WASHER, 1/4 lock, internal teeth | 16 |
| 12 | STD-1411 | NUT, 1/4-20 plain | 16 |
| 13 | | Not Applicable | |
| 14 | 67193 | GASKET, Rocker box cover | 4 |
| 15 | | Not Applicable | |
| 16 | 68795 | COVER ASSY., Rocker box | 4 |
| 17 | STD-1925 | SCREW, 1/4-20 x 5/8 long, pan. hd. | 32 |
| 18 | 71481 | RING, Oil seal, 3/32 dia. section x 4-27/32 I.D. | 4 |
| 19 | 74887 | SPACER, 33/64 I.D. x 7/8 O.D. x 3/8 thick | 2 |
| 20 | 383-B | NUT, 3/8-24 plain | 16 |
| 21 | STD-2090 | NUT, 1/2-20 plain | 18 |
| 22 | | Not Applicable | |
| 23 | 75118 | GASKET, Exhaust flange (copper) | 8 |
| 24 | | Not Applicable | |
| 25 | STD-35 | WASHER, 5/16 plain | 8 |
| 26 | STD-475 | WASHER, 5/16 lock, internal teeth | 8 |
| 27 | STD-1410 | NUT, 5/16-18 plain | 8 |

* See latest edition of application.

Lycoming Service Instruction No. 1060 for complete push rod

SECTION 3 ... CYLINDER, PISTON AND VALVE TRAIN

**Figure 21 - CYLINDER HEAD DRAIN TUBES AND INTERCYLINDER COOLING BAFFLES,
Pages 3-9 & 3-10**

| | | | QTY. PER ASSEMBLY |
|-----|---------------|---|------------------------------|
| 1 | STD-684 | NIPPLE, Straight, 3/8 I.D. hose | 4 |
| 2 | STD-2180 | HOSE, 3/8 I.D. x 1-13/16 long | 4 |
| 3 | LW-15592-5-05 | CLAMP, Hose | 8 |
| 4 | 72702 | TUBE ASSY., Cyl. head oil drain, cyl. no. 1 | 1 |
| 5 | LW-11847 | TUBE ASSY., Cyl. head oil drain, cyl. no. 2 | 1 |
| 6 | 74808 | TUBE ASSY., Cyl. head oil drain, cyl. no. 3 | 1 |
| 7 | 73027 | TUBE ASSY., Cyl. head oil drain, cyl. no. 4 | 1 |
| 8 | 75337 | BAFFLE ASSY., Intercylinder | 1 |
| | 75338 | BAFFLE ASSY., Intercylinder | 1 |
| 9 | 71611 | RETAINER, Intercylinder baffle | 2 |
| 10 | 71610 | HOOK, Intercylinder baffle retainer | 2 |
| 11 | 72834 | COVER, Baffle, ignition cable hole | 2 |
| 12 | STD-692 | SCREW, No. 10-32 x 1/2 long, rd. hd. | 4 |
| 13 | STD-670 | LOCKNUT, No. 10-32 | 4 |
| 14 | | Not Applicable | |
| 14A | MS35489-20X | GROMMET | 1 |
| 15 | 65614* | PLUG, Baffle attaching | 1 |
| 16 | STD-251* | WASHER, No. 10 lock, internal teeth | 1 |
| 17 | STD-1686* | SCREW, No. 10-32 x 7/16 long, fill. hd. | 1 |

* Assemble in front of no. 1 cylinder head.

SECTION 4 ... IGNITION SYSTEM

Figure 22 - MAGNETOS AND MAGNETO DRIVES (IO-360-A), Pages 4-1 & 4-2

| | | | QTY. PER ASSEMBLY |
|----|--------------|--|------------------------------|
| 1 | 61665 | GEAR, Magneto, impulse coupling | 1 |
| 2 | 68C19622 | GEAR, Magneto | 1 |
| 3 | STD-713 | COTTER PIN, 3/32 x 3/4 long | 2 |
| 4 | 62224 | GASKET, Magneto adapter | 1 |
| 5 | LW-12706 | ADAPTER, Magneto, impulse coupling | 1 |
| 6 | LW-12681 | GASKET, Magneto | 2 |
| | | --- BENDIX --- | |
| 7 | LW-349305-1 | MAGNETO, (Right), S4LN-1209 | 1 |
| | LW-349365-9* | MAGNETO, (Left), S4LN-1227, impulse coupling | 1 |
| | | --- SLICK --- | |
| 8 | 66GP-0SANN | MAGNETO, (Right), Model No. 4370 | 1 |
| | 66GC15SFNN | MAGNETO, (Left), Model No. 4372 | 1 |
| 9 | | Not Applicable | |
| 10 | 66M21195 | CLAMP, Magneto | 4 |
| 11 | | Not Applicable | |
| 12 | STD-475 | WASHER, 5/16 lock, internal teeth | 4 |
| 13 | STD-1410 | NUT, 5/16-18 plain | 4 |
| 14 | | Not Applicable | |

* Refer to the latest edition of Lycoming Service Bulletin No. 516.

SECTION 4 ... IGNITION SYSTEM

Figure 23 - IGNITION HARNESSSES, SPARK PLUGS AND ATTACHING HARDWARE
(IO-360-A), Pages 4-3 & 4-4

| | | | QTY. PER ASSEMBLY |
|----|----------------|---|----------------------|
| 1 | 67P20412 | HARNESS, (Right), Slick No. M-4020 | 1 |
| | 67P20413 | HARNESS, (Left), Slick No. M-4019 | 1 |
| 2 | | Not Applicable | |
| 2A | 1182-E7* | SPARK PLUG, Champion (REM38E) or Auburn (SR87) | 8 |
| | 01P19762-2-7** | BAG, Magneto harness attaching | 1 |

* Item No. 2A spark plugs used in current production only. Additional spark plugs are available for these engines. See latest edition of Service Instruction No. 1042 for complete listing of all approved spark plugs.

** See page 4-4 for a breakdown of individual parts contained in the magneto and harness attaching parts bag. These parts to be attached by customer per engine line drawing included in each bag.

**Figures 24 thru 29 - MAGNETOS, DRIVES, HARNESSSES, SPARK PLUGS,
Pages 4-5 thru 4-14
NOT APPLICABLE to IO-360-A3B6**

SECTION 5 ... ELECTRICAL SYSTEM

Figure 30 - ALTERNATOR AND GENERATOR MOUNTING BRACKETS, Pages 5-1 & 5-2

| | | | QTY. PER ASSEMBLY |
|----|------------|--|------------------------------|
| 1 | | Not Applicable | |
| 2 | 07A19474 | BRACKET, Alternator | 1 |
| 3 | | Not Applicable | |
| 4 | 73383 | LOCKPLATE, 5/16 bolt x 1.00 spacing | 1 |
| 5 | | Not Applicable | |
| 6 | LW-31-0.94 | BOLT, 5/16-18 x 15/16 long, hex. hd. | 2 |
| 7 | | Not Applicable | |
| 8 | 75380 | LINK, Alternator adjusting | 1 |
| 9 | STD-35 | WASHER, 5/16 plain | AR |
| 10 | LW-31H0.75 | BOLT, 5/16-18 x 3/4 long, hex. hd. | 1 |
| 11 | STD-1727 | WASHER, Plain, 3/4 O.D. x 11/32 I.D. x 1/8 thick | 1 |
| 12 | LW-31H0.75 | BOLT, 5/16-18 x 3/4 long, hex. hd. | 1 |
| 13 | | Not Applicable | |
| 14 | 74323 | STRUT, Alternator support | 1 |
| 15 | LW-31H0.75 | BOLT, 5/16-18 x 3/4 long, hex. hd. | 1 |
| 16 | | Not Applicable | |
| 17 | | Not Applicable | |
| 18 | | Not Applicable | |
| 19 | | Not Applicable | |
| 20 | | Not Applicable | |
| 21 | STD-690 | WASHER, 13/16 O.D. x 25/64 I.D. x 1/16 thick | AR |
| 22 | AN6-14 | BOLT, 3/8-24 x 1-37/64 long, hex. hd., dr. end | 1 |
| | AN6-17 | BOLT, 3/8-24 x 1-61/64 long, hex. hd., dr. end | 1 |
| 23 | STD-690 | WASHER, 13/16 O.D. x 25/64 I.D. x 1/16 thick | 1 |
| 24 | STD-872 | NUT, 3/8-24 slotted | 1 |
| 25 | STD-713 | PIN, Cotter, 3/32 dia. x 3/4 long | 1 |
| 26 | AN6-16 | BOLT, 3/8-24 x 1-53/64, hex. hd., dr. end | 1 |
| 27 | 76534 | SHIM, 1-1/8 O.D. x 13/32 I.D. x .005 thick | AR |
| 28 | STD-690 | WASHER, 13/16 O.D. x 25/64 I.D. x 1/16 thick | AR |
| 29 | STD-872 | NUT, 3/8-24 slotted | 1 |
| 30 | STD-713 | PIN, Cotter, 3/32 dia. x 3/4 long | 1 |

**Figure 31 - 100 AMP ALTERNATOR MOUNTING & ATTACHING PARTS,
Pages 5-3 & 5-4
NOT APPLICABLE to IO-360-A3B6**

SECTION 5 ... ELECTRICAL SYSTEM
Figure 32 - ALTERNATOR ASSEMBLIES AND BELTS, Pages 5-5 & 5-6

| | | | QTY. PER ASSEMBLY |
|------------|--------------|--|----------------------|
| 1 | | Not Applicable | |
| 2 | | Not Applicable | |
| 3 | | Not Applicable | |
| 4 | | Not Applicable | |
| 5 | | Not Applicable | |
| 6 | | Not Applicable | |
| 7 | | Not Applicable | |
| 8 | | Not Applicable | |
| 9 | | Not Applicable | |
| 10 | | Not Applicable | |
| 11 | | Not Applicable | |
| 12 | | Not Applicable | |
| 13 | | Not Applicable | |
| 14 | | Not Applicable | |
| 15 | | Not Applicable | |
| 16 | | Not Applicable | |
| 17 | | Not Applicable | |
| 18 | | Not Applicable | |
| 19 | | Not Applicable | |
| 20 | 32B19549 | ALTERNATOR ASSY., 12 volt, 70 amp. (3.25:1) | 1 |
| 21 | LW-14318 | ALTERNATOR, (ALX-8421LS) | 1 |
| 22 | 36B19484 | PULLEY, Alternator (3.25:1) | 1 |
| 20A | 32B19550 | ALTERNATOR ASSY., 12 volt, 70 amp. (3.25:1) | 1 |
| 21A | LW-14336 | ALTERNATOR, (ALX-8421LS) | 1 |
| 22 | 36B19484 | PULLEY, Alternator (3.25:1) | 1 |
| 23 | 32B19555 | ALTERNATOR ASSY., 12 volt, 60 amp. (3.25:1) | 1 |
| 24 | LW-15403 | WASHER, 11/16 I.D. x 1-1/4 O.D. x .115 thick | 1 |
| 25 | LW-14333 | ALTERNATOR, (ALY-6420LS) | 1 |
| 26 | 36B19484 | PULLEY, Alternator (3.25:1) | 1 |
| 27 thru 29 | | Not Applicable | |
| 30 | 32C19553 | ALTERNATOR ASSY., 24 volt, 70 amp. (3.25:1) | 1 |
| 31 | LW-14326 | ALTERNATOR, (ALU-8421LS) | 1 |
| 32 | 36B19484 | PULLEY, Alternator (3.25:1) | 1 |
| 33 thru 39 | | Not Applicable | |
| 40 | 37A19773-376 | BELT, Alternator drive (3/8 wide) | 1 |

NOTE: See latest edition of Lycoming Service Instruction No. 1154 for complete listing of FAA approved starters, generators, alternators, regulators and relays.

SECTION 5 ... ELECTRICAL SYSTEM

Figure 33 - STARTER MOTOR AND ATTACHING PARTS, Pages 5-7 & 5-8

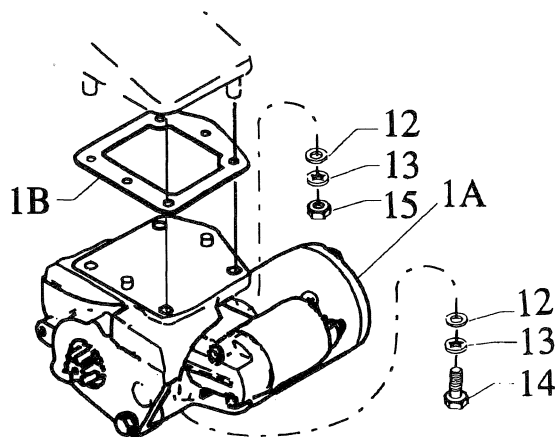
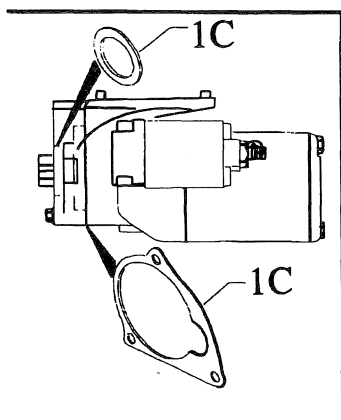
| | | | QTY. PER ASSEMBLY |
|----|-------------|--|----------------------|
| 1 | LW-15571 | STARTER, Prestolite, 12/14 pitch, 12 volt | 1 |
| | LW-15572 | STARTER, Prestolite, 12/14 pitch, 24 volt | 1 |
| 1A | 05K21302-1* | KIT, Lightweight starter, 12/14 pitch, 12 volt | 1 |
| | 05K21302-2* | KIT, Lightweight starter, 12/14 pitch, 24 volt | 1 |
| 1B | LW-16152 | SPACER, Starter / crankcase | 1 |
| 1C | 05K21194** | KIT, Shim, lightweight starter | 1 |
| 2 | | Not Applicable | |
| 3 | | Not Applicable | |
| 4 | | Not Applicable | |
| 5 | | Not Applicable | |
| 6 | | Not Applicable | |
| 7 | | Not Applicable | |
| 8 | | Not Applicable | |
| 9 | | Not Applicable | |
| 10 | | Not Applicable | |
| 11 | | Not Applicable | |
| 12 | STD-35 | WASHER, 5/16 plain | 4 |
| 13 | STD-475 | WASHER, 5/16 lock, internal teeth | 4 |
| 14 | LW-31-1.16 | BOLT, 5/16-18 x 1-5/32 long, hex. hd. | 1 |
| 15 | STD-1410 | NUT, 5/16-18 plain | 3 |

* Refer to latest edition of parts breakdown.

Lycoming Starter Maintenance Manual SSP-490 for complete

** Refer to latest edition of

Lycoming Service Instruction No. 1447 for shim application.



SECTION 6 ... OIL SUMP AND INDUCTION SYSTEM

Figure 34 - OIL SUMP ASSEMBLY AND OIL SUCTION SCREEN, Pages 6-1 & 6-2

| | | | QTY. PER ASSEMBLY |
|-----|---------------|---|------------------------------|
| 1 | LW-13353 | GASKET, Oil sump | 1 |
| 2 | LW-13864 | SUMP ASSY., Oil | 1 |
| 3 | | Not Applicable | |
| 4 | 61400 | STUD, 1/4-20 x 1-3/16 long | 6 |
| 5 | 31C-14 | STUD, 5/16-18 x 1-3/4 long | 4 |
| 6 | | Not Applicable | |
| 7 | | Not Applicable | |
| 8 | | Not Applicable | |
| 9 | 1102 | PLUG, 1/8-27 NPT, Allen head | 1 |
| 10 | | Not Applicable | |
| 11 | STD-551 | PLUG, 1/2-14 NPT, Sq. hd., drilled | 2 |
| 11A | STD-2229 | PLUG, 1/2 NPT, Allen head | 1 |
| 12 | STD-8 | WASHER, 1/4 plain | 26 |
| 13 | STD-160 | WASHER, 1/4 lock, internal teeth | 20 |
| 14 | LW-25-0.94 | BOLT, 1/4-20 x 15/16 long, hex. hd. | 12 |
| 15 | LW-25-1.13 | BOLT, 1/4-20 x 1-1/8 long, hex. hd. | 2 |
| 16 | STD-1411 | NUT, 1/4-20 plain | 12 |
| 17 | | Not Applicable | |
| 18 | | Not Applicable | |
| 19 | | Not Applicable | |
| 20 | 70484 | SCREEN, Oil suction | 1 |
| 21 | 06E19769-1.00 | GASKET, 1.00 I.D. x 1-1/4 O.D. x 3/32 annular | 1 |
| 22 | LW-12545 | PLUG, 5/8 hex. hd. x 1.00-20 thd. | 1 |

**Figure 35 - CRANKCASE COVERS & INDUCTION HOUSING (AIO-360),
Pages 6-3 & 6-4
NOT APPLICABLE to IO-360-A3B6**

SECTION 6 ... OIL SUMP AND INDUCTION SYSTEM

Figure 36 - INTAKE PIPES, Pages 6-5 & 6-6

| | | | QTY. PER ASSEMBLY |
|----|------------|-------------------------------------|------------------------------|
| 1 | 77569 | SEAL, Intake pipe | 4 |
| 2 | 78741 | PIPE, Intake, cylinder no. 1 | 1 |
| | 78742 | PIPE, Intake, cylinder no. 2 | 1 |
| | 78743 | PIPE, Intake, cylinder no. 3 | 1 |
| | 78744 | PIPE, Intake, cylinder no. 4 | 1 |
| 3 | | Not Applicable | |
| 4 | | Not Applicable | |
| 5 | 71973 | GASKET, 2 bolt flange, 1-7/8 I.D. | 4 |
| 6 | | Not Applicable | |
| 7 | STD-8 | WASHER, 1/4 plain | 8 |
| 8 | STD-160 | WASHER, 1/4 lock, internal teeth | 8 |
| 9 | LW-25-1.25 | BOLT, 1/4-20 x 1-1/4 long, hex. hd. | 8 |
| 10 | | Not Applicable | |
| 11 | | Not Applicable | |

SECTION 6 ... OIL SUMP AND INDUCTION HOUSING**Figure 37 - FUEL INJECTORS AND INJECTION NOZZLES, Pages 6-7 & 6-8**

| | | | QTY. PER ASSEMBLY |
|----|----------|-----------------------------------|------------------------------|
| 1 | 66224 | GASKET, Fuel injector | 1 |
| 2 | | Not Applicable | |
| 3 | 73937 | FUEL INJECTOR (2524054-11) | 1 |
| 4 | STD-35 | WASHER, 5/16 plain | 4 |
| 4A | STD-475 | WASHER, 5/16 lock, internal teeth | 4 |
| 5 | STD-1410 | NUT, 5/16-18 plain | 4 |
| 6 | | Not Applicable | |
| 7 | LW-18265 | NOZZLE, Injection | 4 |
| 8 | | Not Applicable | |
| 9 | | Not Applicable | |

SECTION 6 ... OIL SUMP AND INDUCTION SYSTEM
Figure 38 - FUEL MANIFOLDS AND BRACKETS, Pages 6-9 & 6-10

| | | | QTY. PER ASSEMBLY |
|----|------------|--|------------------------------|
| 1 | LW-18476 | MANIFOLD ASSY., Fuel | 1 |
| 2 | MS20822-4 | ELBOW, 1/4 tube & 1/8 NPT, 90° | 1 |
| 3 | AN791-2 | ELBOW, Union, 1/8 tube, 45° | 4 |
| 4 | | Not Applicable | |
| 5 | | Not Applicable | |
| 6 | | Not Applicable | |
| 7 | 1102 | PLUG, 1/8-27 NPT, Allen head | 3 |
| 8 | | Not Applicable | |
| 9 | | Not Applicable | |
| 10 | 75009 | BRACKET, Fuel manifold | 1 |
| 11 | | Not Applicable | |
| 12 | | Not Applicable | |
| 13 | | Not Applicable | |
| 14 | STD-251 | WASHER, No. 10 lock, internal teeth | 4 |
| 15 | STD-82 | SCREW, No. 10-24 x 1/2 long, fill. hd. | 4 |
| 16 | STD-160 | WASHER, 1/4 lock, internal teeth | 1 |
| 17 | LW-25-0.50 | BOLT, 1/4-20 x 1/2 long, hex. hd. | 1 |
| 18 | | Not Applicable | |

SECTION 6 ... OIL SUMP AND INDUCTION HOUSING
Figure 39 - FUEL LINES AND ATTACHING PARTS, Pages 6-11 & 6-12

| | | | QTY. PER ASSEMBLY |
|----|----------------|--|------------------------------|
| 1 | | Not Applicable | |
| 2 | LW-12098-0-140 | TUBE ASSY., Fuel manifold to nozzle, cyls. 1 & 3 | 2 |
| 3 | LW-12098-0-210 | TUBE ASSY., Fuel manifold to nozzle, cyls. 2 & 4 | 2 |
| 4 | | Not Applicable | |
| 5 | | Not Applicable | |
| 6 | LW-16266-10-75 | CLAMP | 4 |
| 7 | LW-16266-10-13 | CLAMP | 6 |
| 8 | STD-860 | SCREW, No. 10-32 x 5/8 long, fill. hd. | 6 |
| 9 | STD-670 | NUT, No. 10-32 self-lockng | 6 |
| 10 | 73136 | BRACKET, 90° | 2 |
| 11 | | Not Applicable | |

SECTION 6 ... OIL SUMP AND INDUCTION SYSTEM

Figure 40 - FUEL HOSES AND ATTACHING PARTS (IO-360), Pages 6-13 & 6-14

| | | | QTY. PER ASSEMBLY |
|----|----------------|--------------------------------------|------------------------------|
| 1 | | Not Applicable | |
| 2 | | Not Applicable | |
| 3 | LW-12798-4S172 | HOSE, Fuel injector to fuel manifold | 1 |
| 4 | | Not Applicable | |
| 5 | | Not Applicable | |
| 6 | | Not Applicable | |
| 7 | | Not Applicable | |
| 8 | | Not Applicable | |
| 9 | | Not Applicable | |
| 10 | | Not Applicable | |
| 11 | | Not Applicable | |
| 12 | | Not Applicable | |
| 13 | | Not Applicable | |
| 14 | | Not Applicable | |
| 15 | | Not Applicable | |
| 16 | | Not Applicable | |
| 17 | | Not Applicable | |
| 18 | | Not Applicable | |

**Figure 41 - FUEL HOSES AND ATTACHING PARTS (AIO-360),
Pages 6-15 & 6-16
NOT APPLICABLE to IO-360-A3B6**

SECTION 7 SERVICE KIT SECTION

| | |
|--------------------------------------|-----------------------------|
| Seal and Gasket Set | 75441-1, See Page 7-1 |
| Cylinder, Piston and Ring Assy. | Page 7-2 ... Not Applicable |
| | Page 7-3 ... Not Applicable |
| | Page 7-4 ... Not Applicable |
| | 05K21120, See Page 7-5 |



See Page 7-6 ... Qty.

| | | |
|--|----------------|---|
| CRANKCASE ASSY. & GOVERNOR STUD KIT .. | 11B20061-1SL-S | 1 |
| Crankcase Assembly (See Figure 1) | 11B20061-1SL | 1 |
| Thru Stud | 76220 | 4 |
| Spacer | 74887 | 2 |
| Nut | STD-2090 | 2 |
| Plug, 1/8 pipe | 1102 | 6 |
| PLUG, 1/16 pipe (piston squirts) | STD-1339 | 4 |
| TAG - Thin wall bearing | SSP-582 | 1 |
| TAG - Piston cooling nozzles | SSP-272 | 1 |

Lycoming

TECHNICAL PUBLICATION SUPPLEMENT

| SUPPLEMENT No. | ENGINE MODEL | PUBLICATION No. | PUBLICATION DATE |
|----------------|------------------------------|-----------------|------------------|
| SSP-291 | IO, AIO-360-A & -B Series | PC-406-1 | April, 1991 |

This supplement is arranged in the same basic format as the original parts catalog
Insert in front of catalog for useage of subject matter.

AEROBATIC CONFIGURATIONS

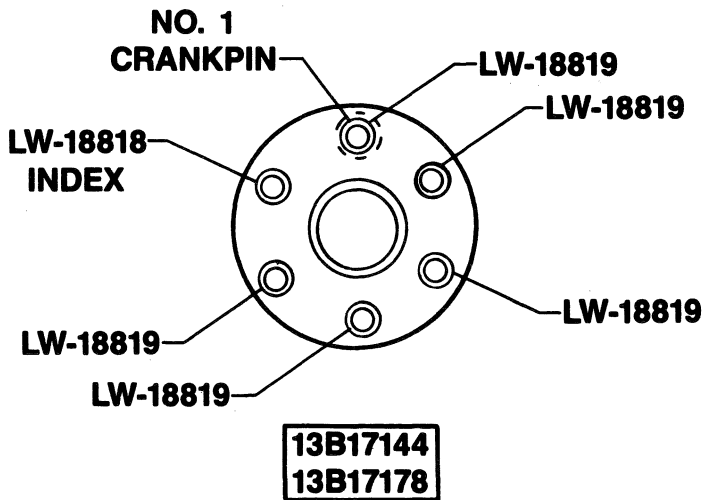
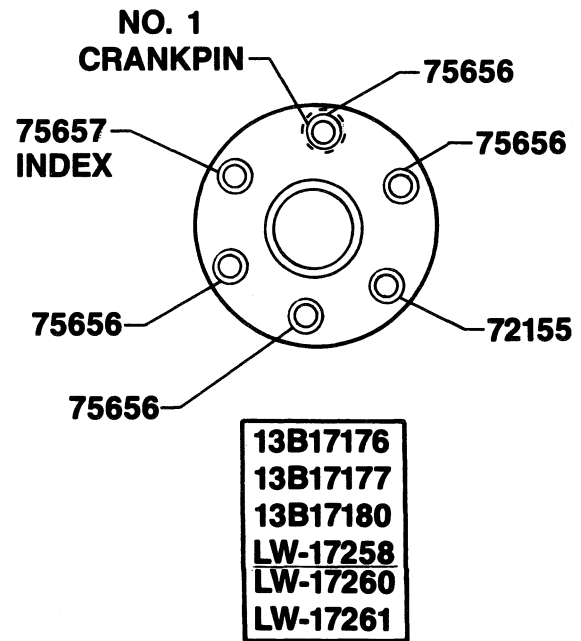
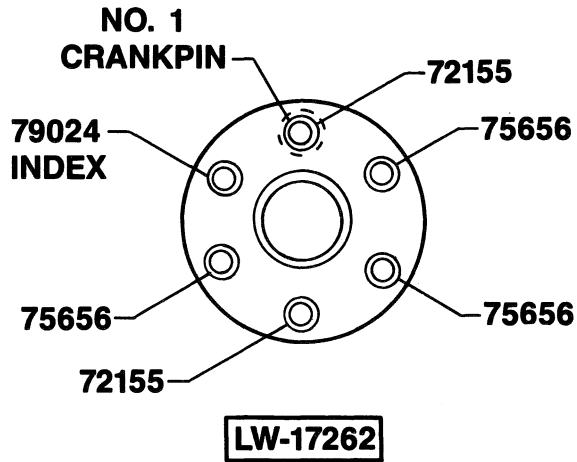
- Figure 3A - Thicker Flange Crankshaft for Aerobatic Configuration
- Figure 34A - Oil Sump Assembly, Suction Screen and Aerobatic Components
- For all other parts, use PC-406-1 and look under the IO-360-xxxx listing.

This SSP-291 replaces SSP-984-1 dated January, 1985.

Figure 3A - Thicker Flange Crankshaft For Aerobatic Configuration

| Engine Model | Nomenclature | CRANKSHAFT Aerobatic Configuration |
|--|----------------------------|--|
| Production — | | |
| AEIO-360-A1A | CRANKSHAFT & PLUG ASSEMBLY | 13B17176 |
| AEIO-360-A1B | CRANKSHAFT & PLUG ASSEMBLY | 13B17176 |
| AEIO-360-A1B6 | CRANKSHAFT & PLUG ASSEMBLY | LW-17258 |
| AEIO-360-A1D | CRANKSHAFT & PLUG ASSEMBLY | 13B17176 |
| AEIO-360-B1F | CRANKSHAFT & PLUG ASSEMBLY | 13B17177 |
| AEIO-360-B2F | CRANKSHAFT & PLUG ASSEMBLY | 13B17178 |
| AEIO-360-B4A | CRANKSHAFT & BUSHING ASSY. | 13B17144 |
| IO-360 Models that could be field converted for Aerobatic use — | | |
| IO-360-A1B6D | CRANKSHAFT & PLUG ASSEMBLY | LW-17261 |
| IO-360-A1C | CRANKSHAFT & PLUG ASSEMBLY | 13B17176 |
| IO-360-A1D6 | CRANKSHAFT & PLUG ASSEMBLY | LW-17258 |
| IO-360-A2A | CRANKSHAFT & PLUG ASSEMBLY | 13B17180 |
| IO-360-A2B | CRANKSHAFT & PLUG ASSEMBLY | 13B17180 |
| IO-360-A3B6D | CRANKSHAFT & PLUG ASSEMBLY | LW-17262 |
| IO-360-B1B | CRANKSHAFT & PLUG ASSEMBLY | 13B17177 |
| IO-360-B1D | CRANKSHAFT & PLUG ASSEMBLY | 13B17177 |
| IO-360-B1E | CRANKSHAFT & PLUG ASSEMBLY | 13B17177 |
| IO-360-B2F6 | CRANKSHAFT & PLUG ASSEMBLY | LW-17260 |

Figure 3A (Continued) - Bushing Locations



IO, AIO-360-A, -B SERIES PARTS CATALOG

WIDE CYLINDER FLANGE CRANKCASE MODEL ENGINES

OIL SUMP AND INDUCTION SYSTEM

OIL SUMP ASSEMBLY, SUCTION SCREEN AND AEROBATIC COMPONENTS

| FIG. REF. 34A | PART NUMBER | DESCRIPTION | O N A L L | QUANTITY PER ASSEMBLY | | | | | | | | | | | | | | | |
|---------------------|----------------|---|-----------------------|-----------------------|-------------|------------------|-------------|-------------|-------------|-------------|--|--|--|--|--|--|--|--|--|
| | | | | AEIO-360 | | | | | | | | | | | | | | | |
| | | | | A 1 A | A 1 B | A 1 B 6 | A 1 D | B 1 F | B 2 F | B 4 A | | | | | | | | | |
| 1 | LW-13353 | GASKET, Oil sump | 1 | | | | | | | | | | | | | | | | |
| 2 | LW-13864 | SUMP ASSY., Oil | | 1 | 1 | 1 | 1 | | | | | | | | | | | | |
| | LW-13861 | SUMP ASSY., Oil | | | | | | 1 | 1 | 1 | | | | | | | | | |
| 3 | 78914 | CONNECTION, Intake pipe | | | | | | 4 | 4 | 4 | | | | | | | | | |
| 4 | 61400 | STUD, 1/4-20 x 1-3/16 long | | 6 | 6 | 6 | 6 | 4 | 4 | 4 | | | | | | | | | |
| 5 | 31C-14 | STUD, 5/16-18 x 1-3/4 long | | 4 | 4 | 4 | 4 | | | | | | | | | | | | |
| 6 | 31C-17 | STUD, 5/16-18 x 2-1/8 long | | | | | | 4 | 4 | 4 | | | | | | | | | |
| 7 | 1102 | PLUG, 1/8-27 NPT, Allen head | | 1 | 1 | 1 | 1 | | | | | | | | | | | | |
| 8 | STD-91 | PLUG, 1/2-14 NPT, Allen head | | | | | | 1 | 1 | 1 | | | | | | | | | |
| 9 | STD-551 | PLUG, 1/2-14 NPT, sq. hd., drilled | | 3 | 3 | 3 | 3 | 4 | 4 | 4 | | | | | | | | | |
| 10 | STD-8 | WASHER, 1/4 plain | | 26 | 26 | 26 | 26 | 28 | 28 | 28 | | | | | | | | | |
| 11 | STD-160 | WASHER, 1/4 lock, internal teeth | 20 | | | | | | | | | | | | | | | | |
| 12 | STD-1204 | BOLT, 1/4-20 x 15/16 long, hex. hd. | | 12 | 12 | 12 | 12 | 14 | 14 | 14 | | | | | | | | | |
| 13 | LW-25-0.94 | BOLT, 1/4-20 x 1-1/8 long, hex. hd. | 2 | | | | | | | | | | | | | | | | |
| 14 | LW-25-1.13 | NUT, 1/4-20 plain | 12 | | | | | | | | | | | | | | | | |
| 15 | LW-13752 | PLUG, Sump | 1 | | | | | | | | | | | | | | | | |
| 16 | 50004-111 | RING, "O" | 1 | | | | | | | | | | | | | | | | |
| 17 | LW-13888 | SCREEN, Oil suction (3.81 long) | 1 | | | | | | | | | | | | | | | | |
| | 70484 | SCREEN, Oil suction (4.50 long) | | 1 | | | | | | 1 | | | | | | | | | |
| 18 | LW-13751 | FITTING, Sump, oil suction | 1 | | | | | | | | | | | | | | | | |
| 19 | 50004-018 | RING, "O" | 1 | | | | | | | | | | | | | | | | |
| 20 | LW-14035 | FITTING, Sump, oil suction | | 1 | | | | | | 1 | | | | | | | | | |
| 21 | AN-900-16 | RING, "O" | | 1 | | | | | | 1 | | | | | | | | | |
| 22 | LW-13753 | FITTING, Sump, oil strainer | | | | 1 | 1 | 1 | 1 | 1 | | | | | | | | | |
| 23 | LW-15394 | FITTING, Sump, oil strainer (45° elbow) | | | | | | | | | | | | | | | | | |
| | | long | | 1 | | 1 | 1 | | | | | | | | | | | | |
| 24 | LW-14149 | FITTING, Sump, oil strainer (45° elbow) | | | | | | | | 1 | | | | | | | | | |
| 25 | LW-15393 | FITTING, Sump, oil strainer | | 1 | 1 | 1 | 1 | | | | | | | | | | | | |
| 26 | LW-16712 | FITTING, Sump, oil strainer | | | | 1 | | | | | | | | | | | | | |
| 27 | LW-13754 | FITTING, Sump, oil return | 1 | | | | | | | | | | | | | | | | |
| 28 | LW-14148 | FITTING, Sump, oil return (45° elbow) | | 1 | | | 1 | | | | | | | | | | | | |
| 29 | LW-14247 | FITTING, Sump, oil return (nipple) | | | | 1 | | | | | | | | | | | | | |
| 30 | 57A21009 | SEPARATOR, Oil | 1 | | | | | | | | | | | | | | | | |
| 31 | LW-13755 * | TEE, Breather | | | | | | | | | | | | | | | | | |
| 32 | 57B19829 | VALVE, Oil | 1 | | | | | | | | | | | | | | | | |
| 33 | 50004-027 | RING, "O" | 1 | | | | | | | | | | | | | | | | |
| 34 | LW-16878 ** ★ | ADAPTER, Breather | | | | | | | | | | | | | | | | | |

NOTE

"Breather Option"

A visual check should be made to determine which optional installation is applicable on any given engine model.

- * See Figure 1 on illustration page for useage.
- ** See Figure 2 on illustration page for useage.
- ★ Not used if vacuum pump is installed.

SSP-291

Page 4

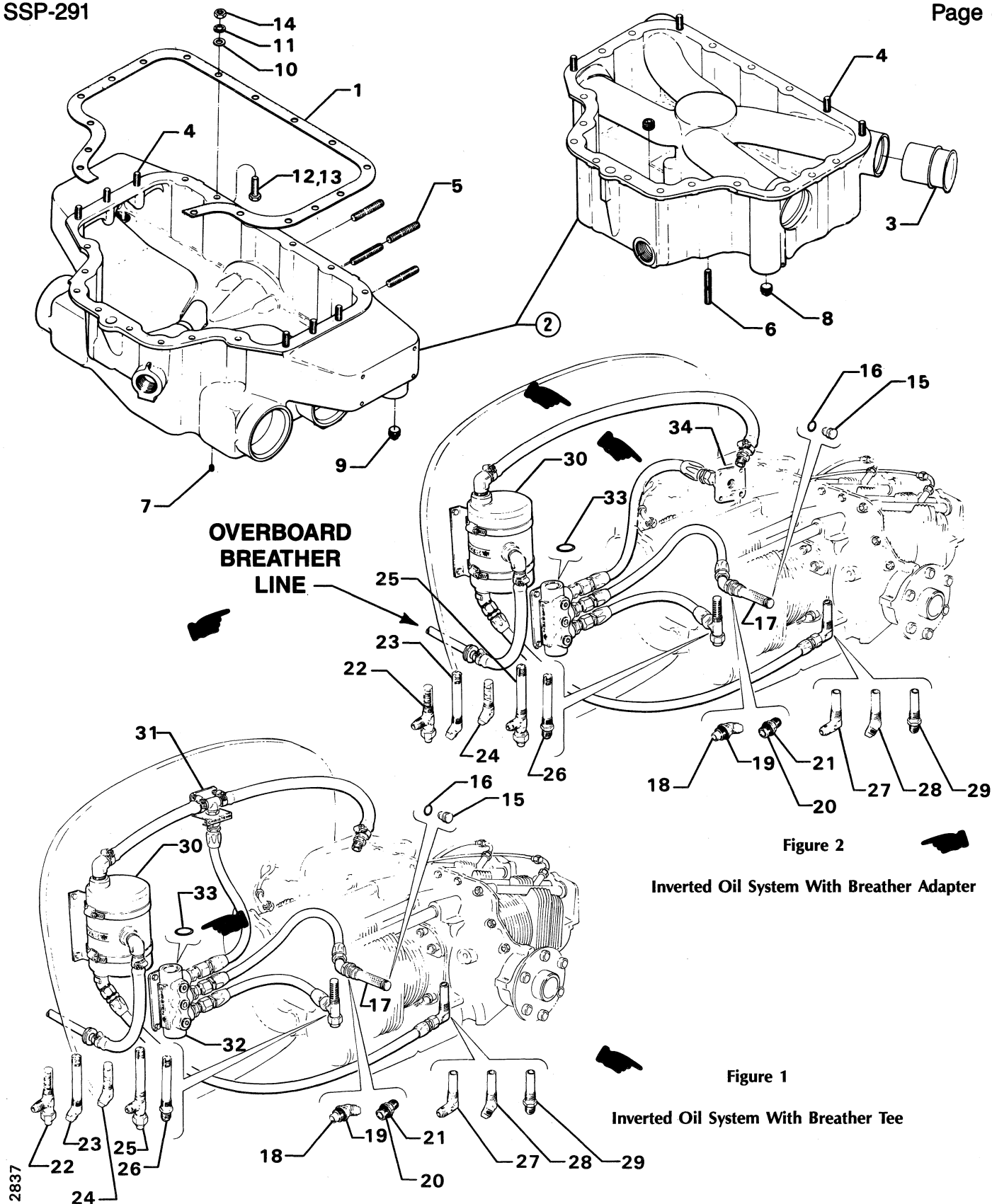


Figure 34A. OIL SUMP ASSEMBLY, SUCTION SCREEN AND AEROBATIC COMPONENTS

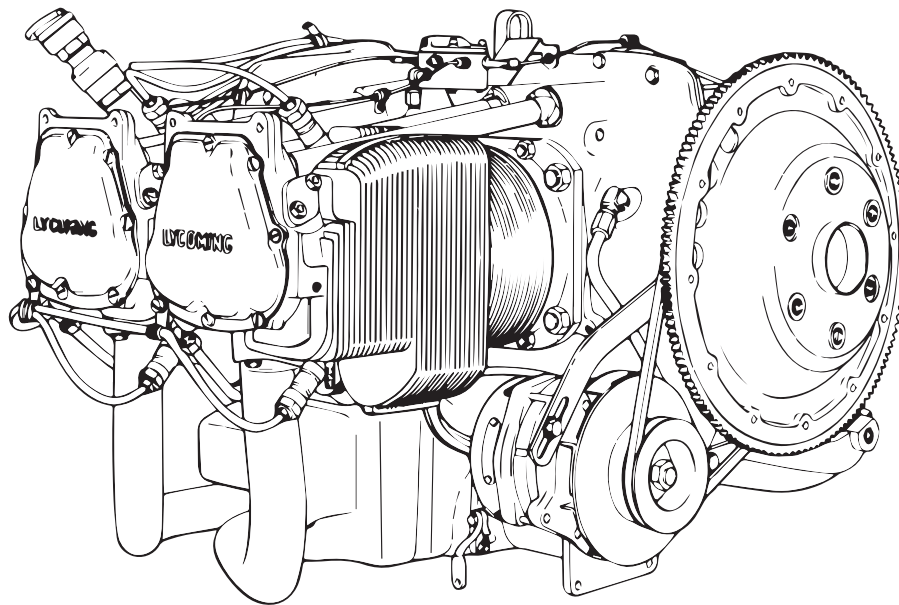
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Lycoming Aircraft Engines Parts Catalog



IO, AIO-360-A, -B Series Wide Cylinder Flange Models

LYCOMING

INTRODUCTION

This illustrated parts catalog contains a complete parts listing for the -B Series wide cylinder flange model aircraft engines.

Lycoming IO-360-A, -B and AIO-360-A,

Major assembly and sub-assembly parts of the engines are listed in the Group Assembly sections in the general sequence of engine build up.

A Service Kits section and Oversize and Undersize Parts List are included to aid in ordering parts as necessary during overhaul

The Numerical Index is provided for convenience in finding parts when only the part number is known.

Parts coverage of Vendor Accessories used on Lycoming engines may be found in the appropriate Vendor's Parts Catalog. A list of addresses of where to obtain these publications appears in the latest edition of Service Letter No. L114.

NOTE

The illustrations, pictures and drawings shown in this publication are typical of the subject matter they portray.

This catalog, when used in conjunction with the appropriate overhaul manual, shall be used for parts identification only. Under no circumstances shall this catalog be used as an assembly or installation document.

Any reference in this document to a suppliers/parts manufacturers' product, by name, trademark, part number or other description is solely for the purposes 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.

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SERVICE BULLETINS, INSTRUCTIONS AND LETTERS

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

HOW TO ORDER PARTS

In ordering parts for your engine, observe the following instructions which will expedite shipment of correct parts required without delay.

- a. Always specify the model and serial number of your engine.
- b. Always specify Part Number, Nomenclature and quantity required.

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Oversize and Undersize Parts Listing

| PART NO. | DESCRIPTION | OVERSIZE | | | | | | | | | | UNDERSIZE | | |
|----------|-------------|---|-------------|--------------|-------------|---------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | | P02 .002 | P05 .005 | P75 .0075 | P10 .010 | P125 .0125 | P15 .015 | P20 .020 | P30 .030 | P40 .040 | P50 .050 | M03 .003 | M06 .006 | M10 .010 |
| 61681 | GUIDE | SEE LATEST EDITION OF SERVICE INSTRUCTION NO. 1256 FOR APPLICATION. | | | | | | | | | | | | |
| 66145 | DOWEL | | | | X | | | X | | | | | | |
| 66610 | BUSHING | | X | | X | | | | | | | | | |
| 66670 | BUSHING | | X | | X | | | | | | | | | |
| 66713 | GUIDE | SEE LATEST EDITION OF SERVICE INSTRUCTION NO. 1256 FOR APPLICATION. | | | | | | | | | | | | |
| 66796 | INSERT | | | | X | | | | | | | | | |
| 69260 | INSERT | | | | X | | | | | | | | | |
| 69796 | DOWEL | | X | | | | | | | | | | | |
| 72057 | SEAT | | X | | X | | | X | X | | | | | |
| 72058 | SEAT | | | | X | | | X | X | | | | | |
| 72060 | BUSHING | | X | | X | | X | X | | | | | | |
| 72061 | BUSHING | | X | | X | | X | X | | | | | | |
| 72062 | BUSHING | | X | | X | | X | X | | | | | | |
| 72074 | BUSHING | | X | | X | | | X | | | | | | |
| 72897 | GUIDE | SEE LATEST EDITION OF SERVICE INSTRUCTION NO. 1256 FOR APPLICATION. | | | | | | | | | | | | |
| 73810 | BUSHING | SEE LATEST EDITION OF SERVICE INSTRUCTION NO. 1142 FOR APPLICATION. | | | | | | | | | | | | |
| 74230 | GUIDE | SEE LATEST EDITION OF SERVICE INSTRUCTION NO. 1256 FOR APPLICATION. | | | | | | | | | | | | |
| 74248 | BUSHING | | X | | X | | X | | | | | | | |
| 74249 | BUSHING | | X | | X | | X | | | | | | | |
| 74309 | BEARING | | | | X | | | | | | | X* | X* | X |
| 75838 | GUIDE | SEE LATEST EDITION OF SERVICE INSTRUCTION NO. 1256 FOR APPLICATION. | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| LW-11021 | BEARING | | | | | | X | | | | | X● | X● | X● |
| LW-11997 | SEAL | SEE LATEST EDITION OF SERVICE INSTRUCTION NO. 1324 FOR APPLICATION. | | | | | | | | | | | | |
| LW-12688 | SEAT | | | | X | | | X | X | | | | | |
| LW-13212 | BEARING | | | | X | | | | | | | X* | X* | X* |
| LW-13521 | BEARING | | | | X | | | | | | | X* | X* | X* |
| LW-13522 | BEARING | | | | | | | | | | | X | X | X |
| LW-13792 | SEAL | SEE LATEST EDITION OF SERVICE INSTRUCTION NO. 1324 FOR APPLICATION. | | | | | | | | | | | | |
| LW-13884 | BEARING | | | | | | X | | | | | X | X | X● |
| LW-16711 | BEARING | | | | | | | | | | | X | X | X |
| STD-1065 | DOWEL | X | X | | X | | X | | | | | | | |
| STD-2078 | DOWEL | X | X | | X | | X | | | | | | | |
| 16T19468 | SEAT | | | | X | | | X | X | | | | | |

Studs available in P03, P07 and P12.

* Also available in P10 oversize.

● Also available in P15 oversize.

NOTE

When ordering oversize and undersize parts, be sure to specify the required oversize and undersize dimension along with the proper part number. For example, to order bearing LW-13884 in .003 undersize, order part number LW-13884-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.

CRANKCASE, CRANKSHAFT AND CAMSHAFT GROUP CRANKCASE ASSEMBLY

| FIG. REF. 1 | PART NUMBER | DESCRIPTION | O N A L L | QUANTITY PER ASSEMBLY | | | | | | | | | | | | | | | | | | |
|-------------------|----------------|--------------------------------------|-----------------------|-----------------------|-------------|------------------|-----------------------|-------------|-------------|------------------|-------------|-------------|-----------------------|-------------|-------------|-------------|-------------|-------------|------------------|-------------|-------------|-------------|
| | | | | IO-360 | | | | | | | | | | | | | | | | AIO-360 | | |
| | | | | A 1 A | A 1 B | A 1 B 6 | A 1 B 6 D | A 1 C | A 1 D | A 1 D 6 | A 2 A | A 2 B | A 3 B 6 D | B 1 B | B 1 D | B 1 E | B 1 F | B 2 F | B 2 F 6 | B 4 A | A 1 A | A 1 B |
| 1 | 11B20061-1DL | CRANKCASE ASSEMBLY (see Note) | | | | | 1 | | | | | | | | | | | | | | | |
| | 11B20061-1SH | CRANKCASE ASSEMBLY (see Note) | | | | | | | | | | | | | | | | | 1 | | | |
| | 11B20061-1SL | CRANKCASE ASSEMBLY (see Note) | | 1 | 1 | 1 | | | 1 | 1 | | | 1 | 1 | 1 | 1 | 1 | 1 | | | | |
| | LW-18389 | CRANKCASE ASSEMBLY (see Note) | | | | | | | | | | | | | | | | | | 1 | 1 | 1 |
| | LW-18399-1 | CRANKCASE ASSEMBLY (see Note) | | | | | | | 1 | | | | | | | | | | | | | |
| 2 | 75154 | STUD, 1/2-13 x 10-1/32 long | 2 | | | | | | | | | | | | | | | | | | | |
| 3 | 50-15 | STUD, 1/2-13 x 1-7/8 long | 8 | | | | | | | | | | | | | | | | | | | |
| 4 | 38-13 | STUD, 3/8-16 x 1-5/8 long | | 16 | 16 | 16 | 16 | 16 | 16 | 13 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| 5 | 38D-17 | STUD, 3/8-16 x 2-1/8 long, drilled | 1 | | | | | | | | | | | | | | | | | | | |
| 6 | 38-22 | STUD, 3/8-16 x 2-3/4 long | | | | | | | | | | | | | | | | | | 1 | 1 | 1 |
| 7 | LW-13793 | STUD, 5/16-18 x 15/16 long, drilled | | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 8 | 31C-12 | STUD, 5/16-18 x 1-1/2 long | 2 | | | | | | | | | | | | | | | | | | | |
| 9 | 31C-13 | STUD, 5/16-18 x 1-5/8 long | 1 | | | | | | | | | | | | | | | | | | | |
| 10 | 38-22 | STUD, 3/8-16 x 2-3/4 long | | | | | | | | 1 | | | | | | | | | | | | |
| 11 | 25C-10 | STUD, 1/4-20 x 1-1/4 long | | | | | | | | | | | | | | | | | | 2 | 2 | 2 |
| 12 | 25CD-14 | STUD, 1/4-20 x 1-3/4 long, drilled | | | | | | | | | | | | | | | | | | 2 | 2 | 2 |
| 13 | 72158 | BUSHING, Gov. drive idler shaft | | | | | | | | 1 | | | | | | | | | | 1 | 1 | 1 |
| 14 | STD-557 | DOWEL, 1/2 dia. x 11/16 long, hollow | 2 | | | | | | | | | | | | | | | | | | | |
| 15 | STD-514 | DOWEL, 5/16 dia. x 1/2 long | 2 | | | | | | | | | | | | | | | | | | | |
| 16 | 69796 | DOWEL, Crankshaft bearing | 2 | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| 18 | STD-1623 | INSERT, 1/4-20 Helicoil x 3/8 long | 2 | | | | | | | | | | | | | | | | | | | |
| 19 | 65007 * | RETAINER, Shroud tube seal | | | | | | | | 8 | | | | | | | | | | 8 | 8 | 8 |
| 20 | 1102 | PLUG, 1/8-27 NPT, Allen | | 6 | 6 | 6 | 6 | 6 | 6 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| 21 | STD-1339 | PLUG, 1/16-27 NPT, Allen | | | | | | | | 1 | | | | 4 | 4 | 4 | 4 | 4 | 4 | 1 | 1 | 1 |
| 22 | 31C-16 * * | STUD, 5/16-18 x 2.00 long | | | | | | | | 4 | | | | | | | | | | 4 | 4 | 4 |
| 23 | 31C-14 ★ | STUD, 5/16-18 x 1-3/4 long | | | | | | | | | | | | | | | | | | | | 4 |
| 24 | 73772 | NOZZLE ASSY., Piston cooling | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | | 4 | 4 | 4 |

* Early crankcases used item no. 19, P/N 65007 retainer, installed in shroud tube bosses. Later crankcases are machined as a product improvement to accept shroud tubes without retainers. This part is a service item only.

* * Woodward governor.

★ "AN" governor.

NOTE

This part is not available as a service item. Refer to Section 7, Service Kits, Page 7-6 for applicable Crankcase Assy. and Thru Stud Kit part number.

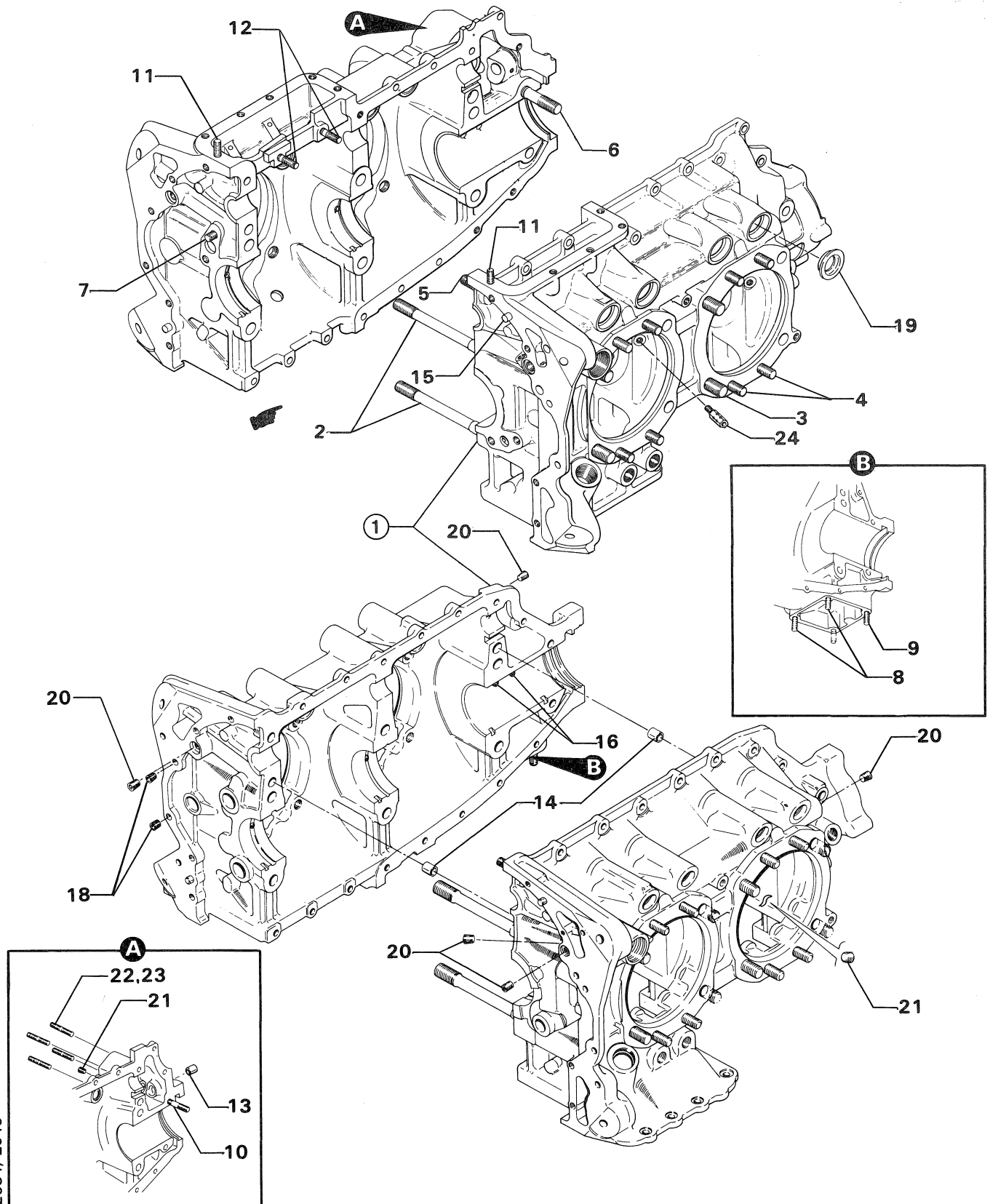


Figure 1. CRANKCASE ASSEMBLY

CRANKCASE, CRANKSHAFT AND CAMSHAFT GROUP

OIL LEVEL GAGES AND CRANKCASE RELATED PARTS

| FIG. REF. 2 | PART NUMBER | DESCRIPTION | O N A L L | QUANTITY PER ASSEMBLY | | | | | | | | | | | | | | | | | | |
|-------------------|----------------|---|-----------------------|-----------------------|----------|------------|-----------------|----------|----------|------------|----------|----------|-----------------|----------|----------|----------|----------|------------|----------|----------|----------|----------|
| | | | | IO-360 | | | | | | | | | | | | | | | | AIO-360 | | |
| | | | | A 1 A | A 1 B | A 1 B 6 | A 1 B 6 D | A 1 C | A 1 D | A 1 D 6 | A 2 A | A 2 B | A 3 B 6 D | B 1 B | B 1 D | B 1 E | B 1 F | B 2 F 6 | B 4 A | A 1 A | A 1 B | B 1 B |
| 1 | 75735 | TUBE, Oil level gage, short | | | | | | | | | | | | 1 | | | | | | | | |
| | 75767 | TUBE, Oil level gage, intermediate | | 1 | 1 | 1 | | 1 | | 1 | 1 | 1 | | 1 | | | | | | | | |
| | 75736 | TUBE, Oil gage, long | | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | |
| | LW-12789 | TUBE ASSY., Oil level gage, 12-13/16 long | | | | | | | | | | | | | | | | | | | | |
| | 78626 | TUBE ASSY., Oil level gage, 15-1/8 lg. | | | | 1 | | | | | | | | | | | | | | | | |
| 2 | 77962 | ADAPTER, Oil level gage | | | | | | | | 1 | | | | | | | | | | | | |
| 3 | 72059 | GASKET, Oil level gage | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | |
| 4 | 74068 | RING, Oil level gage seal | | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | |
| | 74065 | RING, Oil level gage seal | | 1 | 1 | 1 | | 1 | | 1 | 1 | 1 | | 1 | | 1 | | | | | | |
| | 72312 | RING, Oil seal, 1.00 I.D. x 1/8 section | | | | 1 | | | 1 | | 1 | | | | | | | | | | | |
| 5 | LW-14759 * | GAGE ASSY., Oil level | | | | | | | | | | | | 1 | | | | | | | | |
| | LW-14780 * * | GAGE ASSY., Oil level | | | | | | | | | | | 1 | | 1 | | | | | | | |
| | LW-14758 ★ | GAGE ASSY., Oil level | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 | | | | |
| | LW-14760 ★ | GAGE ASSY., Oil level | | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | | | | | | | | | |
| | LW-14769 * * | GAGE ASSY., Oil level, intermediate | | 1 | 1 | 1 | | 1 | | 1 | 1 | 1 | | | | | | | | | | |
| | LW-14725 ● | GAGE ASSY., Oil level | | | | | | | | 1 | | | | | | | | | | | | |
| | LW-14733 ‡ | GAGE ASSY., Oil level | | | | 1 | | | 1 | | | | | | | | | | | | | |
| | LW-14763 ■ | GAGE ASSY., Oil level | | | | 1 | | | | | | | | | | | | | | | | |
| 6 | 74524 | RING, Oil level gage bushing | | | | 1 | | | 1 | | | | | | | | | | | | | |
| 7 | 1028-B | BALL, 11/16 diameter | 1 | | | | | | | | | | | | | | | | | | | |
| 8 | 61084► | SPRING, Oil pressure relief valve | 1 | | | | | | | | | | | | | | | | | | | |
| | LW-11713► | SPRING, Oil pressure relief valve | 1 | | | | | | | | | | | | | | | | | | | |
| | 68668► | SPRING, Oil pressure relief valve | 1 | | | | | | | | | | | | | | | | | | | |
| | 77467► | SPRING, Oil pressure relief valve | 1 | | | | | | | | | | | | | | | | | | | |
| | LW-18085► | SPRING, Oil pressure relief valve | 1 | | | | | | | | | | | | | | | | | | | |
| 9 | STD-425 | WASHER, No. 10 plain (max. 9) | | AR | AR | AR | AR | AR | AR | | AR | AR | AR | AR | AR | AR | AR | AR | | AR | | |
| 10 | 06E19769-1.25 | GASKET, 1-1/4 I.D. x 1-1/2 O.D. x 3/32 annular | 1 | | | | | | | | | | | | | | | | | | | |
| 11 | 76529 | CAP, Oil relief valve, non-adjustable | | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | |
| 12 | 77808 | VALVE ASSY., Oil pressure relief, adj. | | 1 | | 1 | | | 1 | 1 | 1 | | | | | | | 1 | 1 | 1 | | |
| 13 | LW-11021 | BEARING, Crankshaft | 4 | | | | | | | | | | | | | | | | | | | |
| | LW-16047 | BEARING, Crankshaft (alternate) | 4 | | | | | | | | | | | | | | | | | | | |
| | 18D19394 | BEARING, Crankshaft (alternate) | 4 | | | | | | | | | | | | | | | | | | | |
| | LW-16711 | BEARING, Crankshaft (thin wall, high crush) | | 4 | 4 | 4 | 4 | | 4 | | | 4 | 4 | 4 | 4 | 4 | | 4 | | | | |
| 14 | LW-13884 | BEARING, Crankshaft, front | 2 | | | | | | | | | | | | | | | | | | | |
| | 18A19441 | BEARING, Crankshaft, front (alternate) | 2 | | | | | | | | | | | | | | | | | | | |
| 15 | LW-13792◄ | SEAL, Crankshaft oil, solid | 1 | | | | | | | | | | | | | | | | | | | |
| | LW-11997◄ | SEAL, Crankshaft oil, split | 1 | | | | | | | | | | | | | | | | | | | |
| 16 | 72075 | SEAL, Oil, 3/32 section x 15/32 I.D. | 2 | | | | | | | | | | | | | | | | | | | |
| 17 | 72091 | RING, Oil seal, 23/64 I.D. x 7/64 dia. section | 2 | | | | | | | | | | | | | | | | | | | |
| 18 | 72877 | BODY, Hydraulic tappet | 8 | | | | | | | | | | | | | | | | | | | |
| 19 | 77120 | FITTING ASSY., Crankcase breather | | | | | | | | | | | | | | | | | 1 | 1 | 1 | |
| 20 | MS29512-12 | SEAL, Oil, 7/64 dia. section x 59/64 I.D. | | | | | | | | | | | | | | | | | 1 | 1 | 1 | |

- * Used with P/N 75735 oil level gage tube and P/N 74068 oil level gage seal ring.
- * * Used with P/N 75767 oil level gage tube and P/N 74065 oil level gage seal ring.
- ★ Used with P/N 75736 oil level gage tube and P/N 74068 oil level gage seal ring.
- Used with P/N 77962 oil level gage adapter and P/N 72312 oil seal ring.
- ± Used with P/N LW-12789 oil level gage tube assy. and P/N 72312 oil seal ring.
- Used with P/N 78626 oil level gage tube assy. and P/N 74065 oil level gage seal ring.
- ▶ Select spring to give a minimum of three threads exposed on adjusting screw to allow field adjustment. Reference latest revision of SSP-1776, Part 1 for spring identification.
- ◀ See latest edition of Lycoming Service Instruction No. 1324.

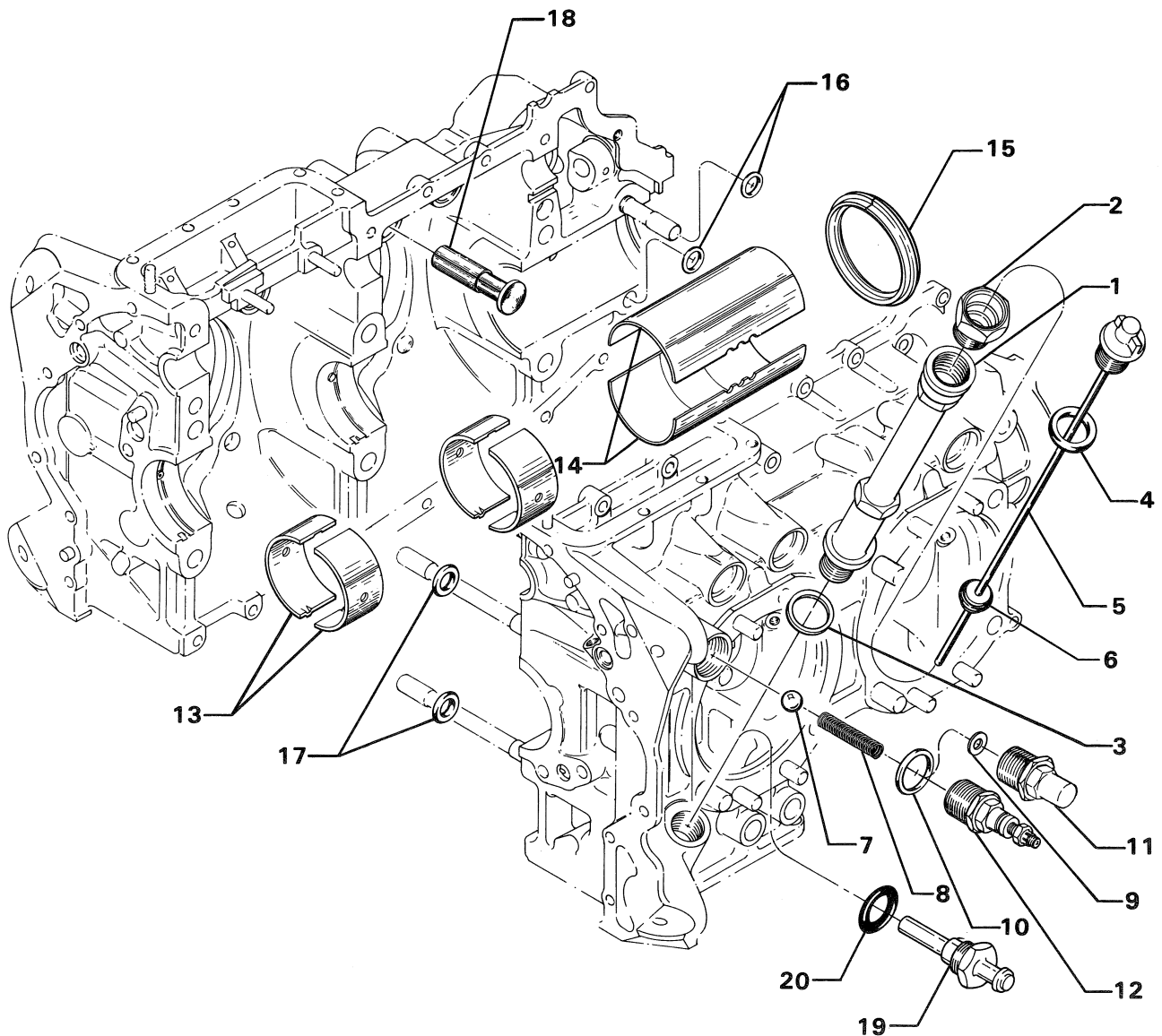


Figure 2. OIL LEVEL GAGES AND CRANKCASE RELATED PARTS

CRANKCASE, CRANKSHAFT AND CAMSHAFT GROUP CRANKSHAFT AND COUNTERWEIGHT ASSEMBLY

| FIG. REF. 3 | PART NUMBER | DESCRIPTION | O N A L L | QUANTITY PER ASSEMBLY | | | | | | | | | | | | | | | |
|-------------------|----------------|--|-----------------------|-----------------------|-------------|------------------|-----------------------|-------------|-------------|------------------|-------------|-------------|-----------------------|-------------|-------------|-------------|-------------|-------------|------------------|
| | | | | IO-360 | | | | | | | | | | | | AIO-360 | | | |
| | | | | A 1 A | A 1 B | A 1 B 6 | A 1 B 6 D | A 1 C | A 1 D | A 1 D 6 | A 2 A | A 2 B | A 3 B 6 D | B 1 B | B 1 D | B 1 E | B 1 F | B 2 F | B 2 F 6 |
| 1 | 13B17283 | CRANKSHAFT & C'WT. ASSY. | | | | | | | | | | | | | | | | | 1 |
| | 13B17273 | CRANKSHAFT & C'WT. ASSY. | | | | 1 | | | | 1 | | | | | | | | | |
| | 13B17275 | CRANKSHAFT & C'WT. ASSY. | | | | | 1 | | | | | | | | | | | | |
| | 13B17276 | CRANKSHAFT & C'WT. ASSY. | | | | | | | | | | | 1 | | | | | | |
| 2 | 13B17131 ● | CRANKSHAFT & BUSHING ASSY. | | | | | | | | | | | | | | | | | 1 |
| | 13B17132 ‡ | CRANKSHAFT & BUSHING ASSY. | | | | | | | | | | | | | | | | | 1 |
| | 13B17256 | CRANKSHAFT & PLUG ASSEMBLY | | | | | | | | | | | | | | | | 1 | |
| | 13B17166 | CRANKSHAFT & PLUG ASSEMBLY | | 1 | 1 | | | 1 | 1 | | | | | | | | | | |
| | 13B17167 | CRANKSHAFT & PLUG ASSEMBLY | | | | | | | | 1 | 1 | | | | | | | | |
| | 13B17179 | CRANKSHAFT & PLUG ASSEMBLY | | | | | | | | | | | | | | | | | 1 |
| | 13B17246 | CRANKSHAFT & PLUG ASSEMBLY | | | | 1 | | | | 1 | | | | | | | | | |
| | 13B17248 | CRANKSHAFT & PLUG ASSEMBLY | | | | | 1 | | | | | | | | | | | | |
| | 13B17249 | CRANKSHAFT & PLUG ASSEMBLY | | | | | | | | | | | 1 | | | | | | |
| | 13B17160 * | CRANKSHAFT & PLUG ASSEMBLY | | | | | | | | | | | | 1 | 1 | 1 | 1 | | |
| | 13B17161 ** | CRANKSHAFT & PLUG ASSEMBLY | | | | | | | | | | | | | | | | 1 | |
| | 13B17162 ★ | CRANKSHAFT & PLUG ASSEMBLY | | | | | | | | | | | | | | | | 1 | |
| 3 | STD-1211 | PLUG, 2.00 dia. expansion | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 4 | 1102 | PLUG, 1/8-27 pipe, Allen | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | | | | | | 1 |
| 5 | STD-1065 | DOWEL, Stepped, 19/64 x 1/4 dia. x 35/64 long | | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 |
| 6 | STD-2078 | DOWEL, 3/8 O.D. x 1/2 long | | | | | 1 | | | | | | 1 | | | | | | |
| 7 | 61510 * | PLUG, 1-3/4 O.D. | | | | | | | | | | | | 1 | 1 | 1 | 1 | | |
| | 74711 | PLUG, 1-1/4 O.D. (1/8 NPT) | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 |
| 8 | 72060-S | BUSHING, Prop. flange, indexing | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 |
| | 72060-S ‡ | BUSHING, Prop. flange, indexing | | | | | | | | | | | | | | | | | 1 |
| 9 | 74248-S ★ | BUSHING, Prop. flange, indexing, long | | | | | | | | | | | | | | | | 1 | |
| | 74248-S ● | BUSHING, Prop. flange, indexing, long | | | | | | | | | | | | | | | | | 1 |
| 10 | 72061-S | BUSHING, Propeller flange, short | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 72061-S ‡ | BUSHING, Propeller flange, short | | | | | | | | | | | | | | | | | 1 |
| 11 | 72062-S | BUSHING, Propeller flange, long | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 |
| | 72062-S ‡ | BUSHING, Propeller flange, long | | | | | | | | | | | | | | | | | 4 |
| 12 | 74249-S ★ | BUSHING, Propeller flange, long | | | | | | | | | | | | | | | 5 | | |
| | 74249-S ● | BUSHING, Propeller flange, long | | | | | | | | | | | | | | | | | 5 |
| 13 | 72074-S | BUSHING, Prop. flange, indexing, long | | | | | | | | | | | 1 | | | | | | |
| 14 | 73810 | BUSHING, Crankshaft, dyn. c'wt. | | | | 4 | 4 | | | 4 | | | 4 | | | | | 4 | |
| 15 | LW-19227 | COUNTERWEIGHT ASSEMBLY | | | | 2 | 2 | | | 2 | | | 2 | | | | | 2 | |
| 16 | 71903-A | BUSHING, Dynamic counterweight | | | | 8 | 8 | | | 8 | | | 8 | | | | | 8 | |
| 17 | 14W21696 | ROLLER, Dynamic c'wt., 8th order | | | | 2 | 2 | | | 2 | | | 2 | | | | | 2 | |
| | 72797 | ROLLER, Dynamic c'wt., 6.3 order | | | | 2 | 2 | | | 2 | | | 2 | | | | | 2 | |
| 18 | LW-14820 | RING, Internal retaining | | | | 8 | 8 | | | 8 | | | 8 | | | | | 8 | |
| 19 | 71907 | WASHER, Dynamic counterweight | | | | 8 | 8 | | | 8 | | | 8 | | | | | 8 | |

- * Controllable pitch propeller.
- * * Fixed pitch propeller.
- ★ Fixed pitch Sensenich propeller, longer propeller bushings.
- Solid crankshaft, fixed pitch Sensenich propeller, longer propeller bushings.
- ‡ Solid crankshaft, fixed pitch propeller.

NOTE

Before converting any engine to aerobatic configuration, reference the latest edition of Bulletin No. 465 and Special Service Publication SSP-291 for proper crankshaft.

Lycoming Service

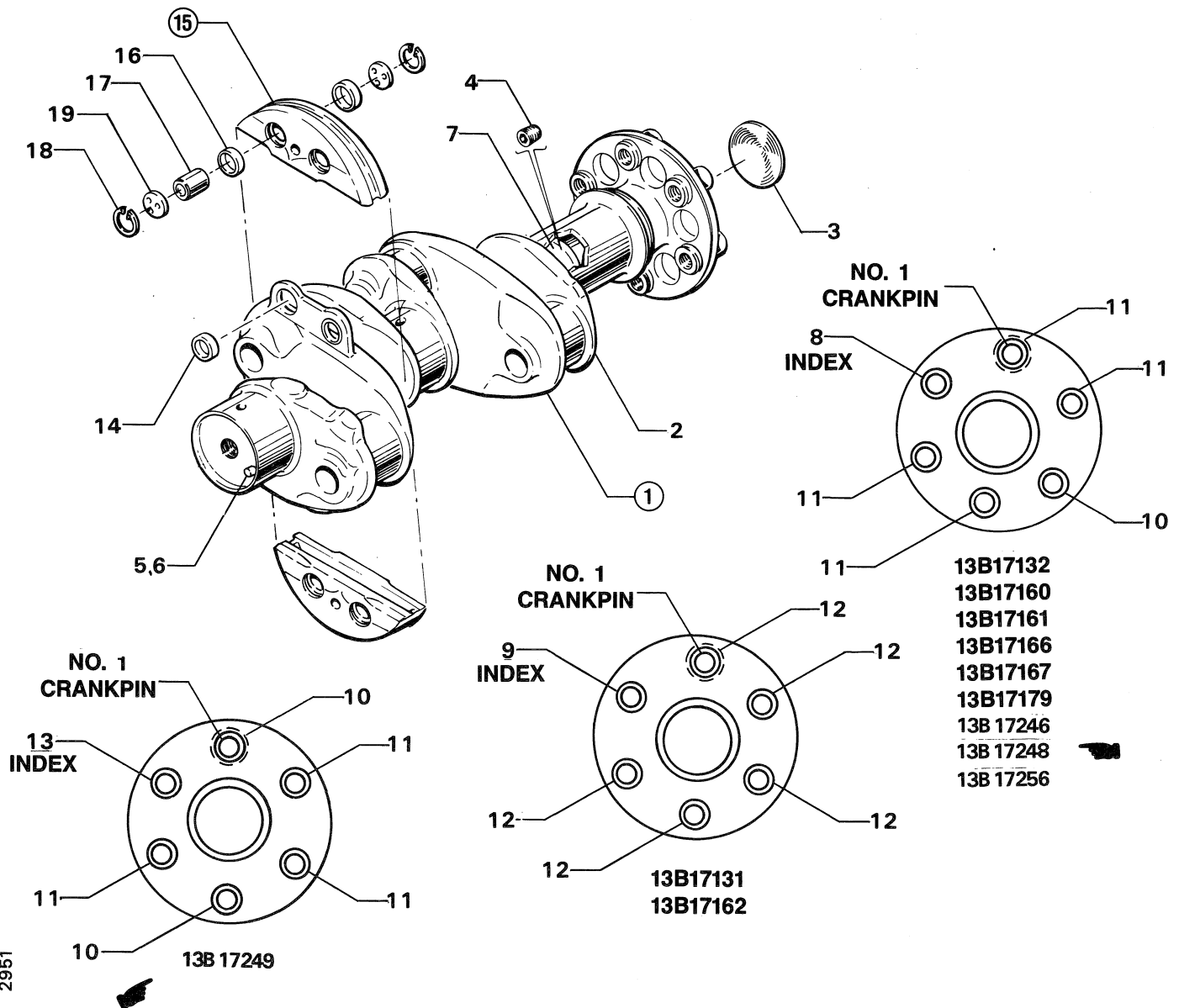


Figure 3. CRANKSHAFT AND COUNTERWEIGHT ASSEMBLY

CRANKCASE, CRANKSHAFT AND CAMSHAFT GROUP STARTER RING GEAR SUPPORT ASSEMBLY

| FIG. REF. 4 | PART NUMBER | DESCRIPTION | O N A L L | QUANTITY PER ASSEMBLY | | | | | | | | | | | | | | | | | |
|-------------------|----------------|----------------------------------|-----------------------|-----------------------|-------------|------------------|-----------------------|-------------|-------------|------------------|-------------|-------------|-----------------------|-------------|-------------|-------------|-------------|-------------|------------------|-------------|-------------|
| | | | | IO-360 | | | | | | | | | | | | | | | AIO-360 | | |
| | | | | A 1 A | A 1 B | A 1 B 6 | A 1 B 6 D | A 1 C | A 1 D | A 1 D 6 | A 2 A | A 2 B | A 3 B 6 D | B 1 B | B 1 D | B 1 E | B 1 F | B 2 F | B 2 F 6 | B 4 A | A 1 A |
| 1 | LW-16064 * | SUPPORT ASSY., Starter ring gear | | | | | | | | | 1 | | 1 | 1 | 1 | | 1 | | | | |
| | 75221 * * | SUPPORT ASSY., Starter ring gear | | 1 | | 1 | | 1 | 1 | | | 1 | 1 | | | | | | | | |
| | 77579★ | SUPPORT ASSY., Starter ring gear | 1 | | | | | | | | | | | | | | | | | | |
| | 75030● | SUPPORT ASSY., Starter ring gear | | 1 | 1 | 1 | | 1 | 1 | | 1 | 1 | | | 1 | | | | | | |
| | LW-10504‡ | SUPPORT ASSY., Starter ring gear | | | | | | | | 1 | | | | | | | | | | | |
| | LW-16471■ | SUPPORT ASSY., Starter ring gear | | | | 1 | 1 | | | | | | | | | | | | | | |
| | 74977► | SUPPORT ASSY., Starter ring gear | | | | 1 | | | | | | | | | | | | | | | |
| 2 | 72566 | GEAR, Starter ring, 12/14 pitch | 1 | | | | | | | | | | | | | | | | | | |

- * 1.91:1 drive.
- * * 2.50:1 drive, provision for de-icing.
- ★ 3.20:1 drive, no provision for de-icing.
- 3.20:1 drive, provision for de-icing.
- ‡ 3.20:1 drive, for 7mm and 11mm belts.
- 3.20:1 drive, has additional timing marks.
- 3.20:1 drive, dual groove, no provision for de-icing.

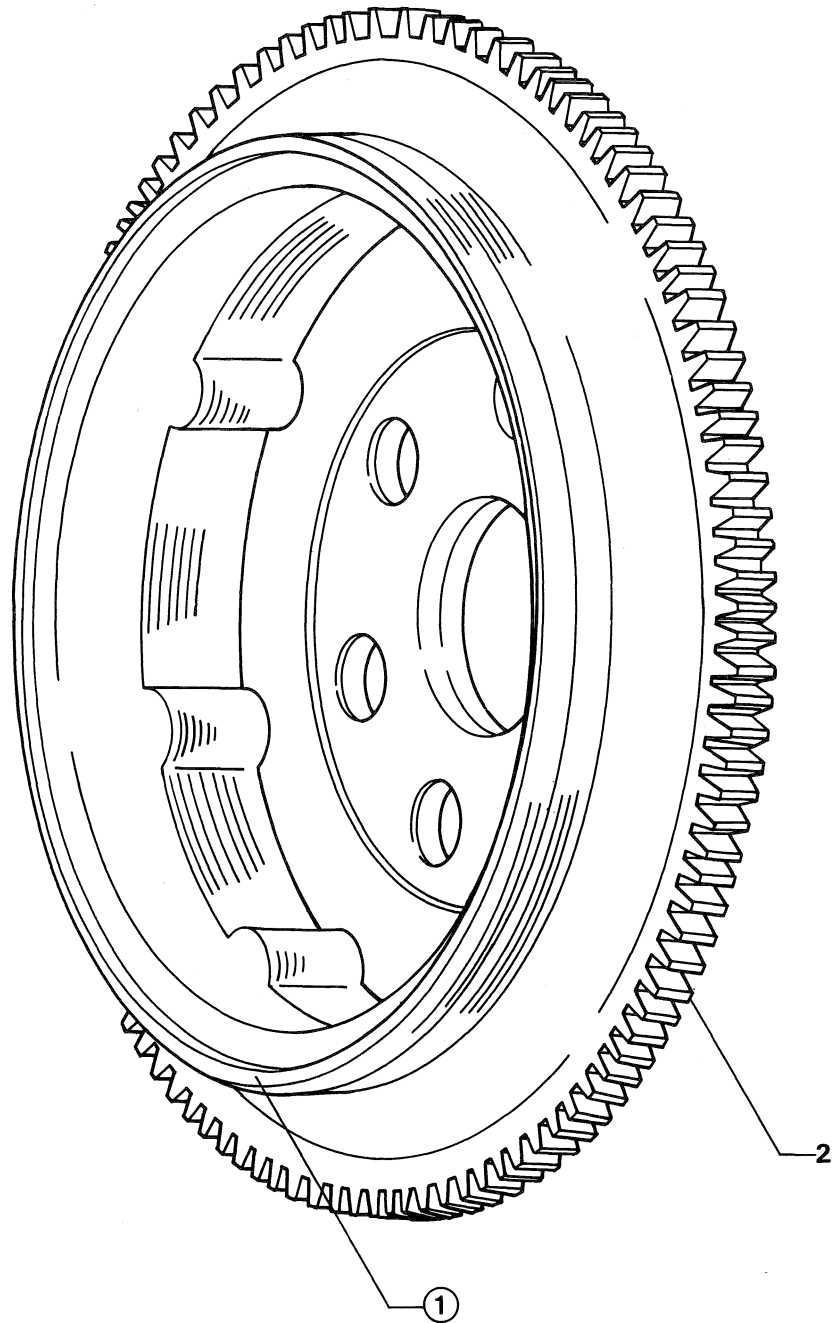


Figure 4. STARTER RING GEAR SUPPORT ASSEMBLY

CRANKCASE, CRANKSHAFT AND CAMSHAFT GROUP CRANKSHAFT IDLER GEARS, TACHOMETER DRIVE AND CAMSHAFT

| FIG. REF. 5 | PART NUMBER | DESCRIPTION | O N A L L | QUANTITY PER ASSEMBLY | | | | | | | | | | | | | | | | | | |
|-------------------|----------------|---------------------------------------|-----------------------|-----------------------|-------------|------------------|-----------------------|-------------|-------------|------------------|-------------|-------------|-----------------------|-------------|-------------|-------------|-------------|-------------|------------------|-------------|-------------|-------------|
| | | | | IO-360 | | | | | | | | | | | | | | AIO-360 | | | | |
| | | | | A 1 A | A 1 B | A 1 B 6 | A 1 B 6 D | A 1 C | A 1 D | A 1 D 6 | A 2 A | A 2 B | A 3 B 6 D | B 1 B | B 1 D | B 1 E | B 1 F | B 2 F | B 2 F 6 | B 4 A | A 1 A | A 1 B |
| 1 | 72230 | SHAFT, Injector pump idler gear | | | | | | | | | | | 1 | | | | | | | | | |
| 2 | 72829 | LOCKPLATE, 1/4 bolt x 1-3/4 spacing | | | | | | | | | | | 1 | | | | | | | | | |
| 3 | LW-25-0.63 | SCREW, 1/4-20 x 5/8 long, hex. hd. | | | | | | | | | | | 2 | | | | | | | | | |
| 4 | 72231 | GEAR ASSY., Fuel pump idler | | | | | | | | | | | 1 | | | | | | | | | |
| 5 | 77309 | BUSHING, Crankshaft idler gear | | | | | | | | | | | 1 | | | | | | | | | |
| 6 | 61544 | PLUNGER, Fuel pump, long | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 7 | 74996 | GEAR ASSY., Crankshaft idler, plain | | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 8 | 77309 | BUSHING, Crankshaft idler, plain | | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 9 | 75072 | GEAR ASSY., Crankshaft idler | | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 10 | 77309 | BUSHING, Crankshaft idler gear | | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 11 | LW-10296 * | GEAR ASSY., Crankshaft idler | | | | | 1 | | | | | | | | | | | | | | | |
| 12 | LW-10299 * | SHAFT, Crankshaft idler gear | | | | | 1 | | | | | | | | | | | | | | | |
| 13 | LW-12911 * * | GEAR ASSY., Crankshaft idler | | | | | 1 | | | | | 1 | | | | | | | | | | |
| 14 | LW-10299 * * | SHAFT, Crankshaft idler gear | | | | | 1 | | | | | 1 | | | | | | | | | | |
| 15 | LW-10286 * * | GEAR ASSY., Crankshaft idler | | | | | 1 | | | | | 1 | | | | | | | | | | |
| 16 | LW-10298 * * | SHAFT, Crankshaft idler gear | | | | | 1 | | | | | 1 | | | | | | | | | | |
| 17 | 76121 | SHAFT ASSY., Tachometer | 1 | | | | | | | | | | | | | | | | | | | |
| 18 | LW-18667 | PIN, 3/16 dia. x 2-21/64 long | 1 | | | | | | | | | | | | | | | | | | | |
| 19 | STD-2231 | RING, Internal retaining | 1 | | | | | | | | | | | | | | | | | | | |
| 20 | LW-13796 | SHAFT, Crankshaft idler gear | | 2 | 2 | 2 | | 2 | 2 | 2 | 2 | 2 | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 21 | LW-31H0.88 | BOLT, 5/16-18 x 7/8 long, hex. hd. | | 3 | 3 | 3 | | 3 | 3 | 3 | 3 | 3 | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 22 | STD-2168 | NUT, 5/16-18 NC-3 slotted shear | | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 23 | 13S19646 | GEAR, Crankshaft | | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 24 | 13S19649 | GEAR, Crankshaft | | | | | 1 | | | | | 1 | | | | | | | | | | |
| 25 | LW-18639 | LOCKPLATE, Crankshaft gear | | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 26 | LW-10332 | LOCKPLATE, Crankshaft gear | | | | | 1 | | | | | 1 | | | | | | | | | | |
| 27 | STD-2213 | SCREW, 5/16-24 x 1.00 long | | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 28 | AN8-14A | BOLT, 1/2-20 x 1-19/32 long, hex. hd. | | | | | 1 | | | | | 1 | | | | | | | | | | |
| 29 | LW-18840 | CAMSHAFT ASSEMBLY | | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | |
| | LW-18843★ | CAMSHAFT ASSEMBLY | | | | | | | | 1 | | | | | | | | | | 1 | 1 | 1 |
| | LW-15445● | CAMSHAFT ASSEMBLY | | | | 1 | | | | | | | | | | | | | | | | |
| 30 | 76118 | SPACER, Tachometer shaft centering | 1 | | | | | | | | | | | | | | | | | | | |

- * Used when engine employs a front end (crankcase) propeller governor drive or employs no propeller governor drive.
- * * "AC" fuel pump drive (dual magneto).
- ★ Propeller governor drive at front end (crankcase).
- Used on engines employing hyperbolic tappets.

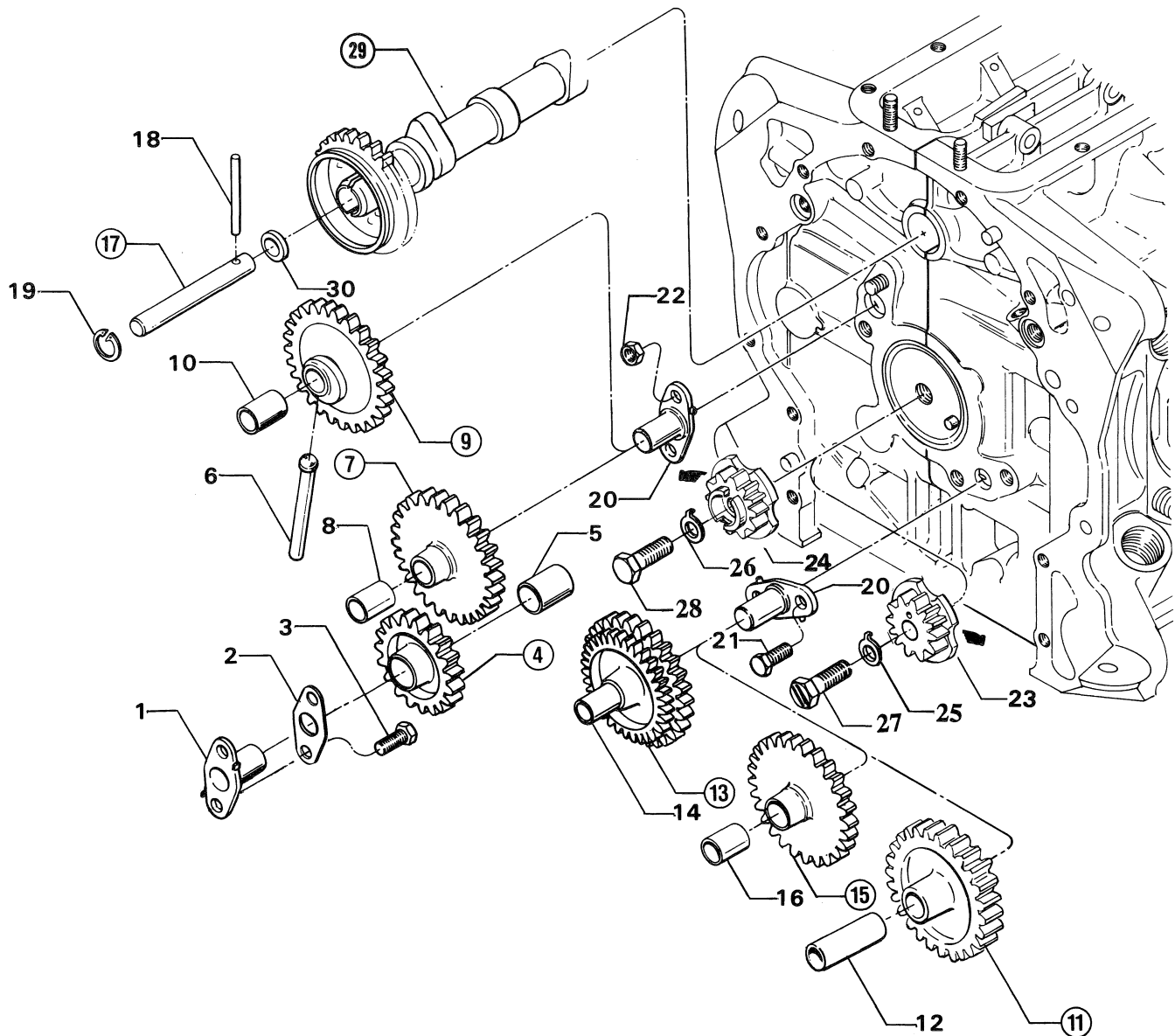


Figure 5. CRANKSHAFT IDLER GEARS, TACHOMETER DRIVE AND CAMSHAFT

CRANKCASE, CRANKSHAFT AND CAMSHAFT GROUP

CRANKCASE ATTACHING PARTS

| FIG. REF. 6 | PART NUMBER | DESCRIPTION | O N A L L | QUANTITY PER ASSEMBLY | | | | | | | | | | | | | | | | | | |
|-------------------|----------------|---------------------------------------|-----------------------|-----------------------|----------|------------|-----------------|----------|----------|------------|----------|----------|-----------------|----------|----------|----------|----------|----------|------------|----------|----------|----------|
| | | | | IO-360 | | | | | | | | | | | | | | | | AIO-360 | | |
| | | | | A 1 A | A 1 B | A 1 B 6 | A 1 B 6 D | A 1 C | A 1 D | A 1 D 6 | A 2 A | A 2 B | A 3 B 6 D | B 1 B | B 1 D | B 1 E | B 1 F | B 2 F | B 2 F 6 | B 4 A | A 1 A | A 1 B |
| 1 | LW-25-1.50 | BOLT, 1/4-20 x 1-1/2 long, hex. hd. | | 8 | 8 | 8 | 8 | 8 | 8 | | 8 | 8 | 8 | | 8 | | | 8 | | | | |
| | LW-25-1.50 * | BOLT, 1/4-20 x 1-1/2 long, hex. hd. | | | | | | | | 5 | | | | | | | | | | | | |
| | LW-25-1.50 * * | BOLT, 1/4-20 x 1-1/2 long, hex. hd. | | | | | | | | | | | 5 | | 5 | 5 | 5 | 5 | 5 | | | |
| | LW-25-1.50★ | BOLT, 1/4-20 x 1-1/2 long, hex. hd. | | | | | | | | | | | | | 6 | | | | | | | |
| 2 | LW-25-2.00 * * | BOLT, 1/4-20 x 2.00 long, hex. hd. | | | | | | | | | | | 2 | | 2 | 2 | 2 | 2 | 2 | | | |
| | LW-25-2.00★ | BOLT, 1/4-20 x 2.00 long, hex. hd. | | | | | | | | | | | | | 2 | | | | | | | |
| 3 | LW-25-1.75 * | BOLT, 1/4-20 x 1-3/4 long, hex. hd. | | | | | | | | 2 | | | | | | | | | | | | |
| 4 | LW-10572 * | BOLT, 1/4-20, Crankcase attaching | | | | | | | | 1 | | | | | | | | | | | | |
| 5 | STD-8 | WASHER, 1/4 plain | | 19 | 19 | 19 | 19 | 19 | 19 | | 19 | 19 | 19 | | 19 | | | 19 | | | | |
| | STD-8 | WASHER, 1/4 plain | | | | | | | | | | | | 13 | | 13 | 13 | 13 | 13 | 13 | | |
| 6 | 60803 | STRAP, Lifting | | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | | 1 | 1 | | 1 | | | | |
| | 60803 * * | STRAP, Lifting | | | | | | | | | | | | 2 | | 2 | 2 | 2 | 2 | 2 | | |
| 7 | LW-25-1.75 | BOLT, 1/4-20 x 1-3/4 long, hex. hd. | | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | | 1 | 1 | | 1 | | | | |
| | LW-25-1.75 | BOLT, 1/4-20 x 1-3/4 long, hex. hd. | | | | | | | | | | | | 2 | | 2 | 2 | 2 | 2 | 2 | | |
| 8 | LW-25-1.13 | BOLT, 1/4-20 x 1-1/8 long, hex. hd. | | 3 | 3 | 3 | 3 | 3 | 3 | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | |
| 9 | STD-160 | WASHER, 1/4 lock, internal teeth | | 12 | 12 | 12 | 12 | 12 | 12 | | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | | |
| 10 | STD-1411 | NUT, 1/4-20 plain | | 9 | 9 | 9 | 9 | 9 | 9 | | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | | |
| 11 | LW-25S1.50 | BOLT, 1/4-20 x 1-1/2 long, hex. hd., | | | | | | | | | | | | | | | | | | | | |
| | | dr. end | | 3 | 3 | 3 | 3 | 3 | 3 | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | |
| 12 | STD-8 | WASHER, 1/4 plain | | 9 | 9 | 9 | 9 | 9 | 9 | | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | | |
| 13 | STD-1409 | NUT, 1/4-20 slotted shear | | 3 | 3 | 3 | 3 | 3 | 3 | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | |
| 14 | STD-33 | WASHER, 3/8 plain | | 3 | 3 | 3 | 3 | 3 | 3 | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | | |
| 15 | AN960-616L | WASHER, 3/8 plain (thick) (max. 3) | | AR | AR | AR | AR | AR | AR | | AR | AR | AR | AR | AR | AR | AR | AR | AR | AR | | |
| 16 | STD-872 | NUT, 3/8-24 slotted | | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | |
| 17 | AN6-34A | BOLT, 3/8-24 x 3-37/64 long, hex. hd. | | 2 | 2 | 2 | 2 | 2 | 2 | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | |
| | AN6-34A * | BOLT, 3/8-24 x 3-37/64 long, hex. hd. | | | | | | | | 1 | | | | | | | | | | | | |
| 18 | LW-10573 * | BOLT, 3/8-24, Crankcase attaching | | | | | | | | 1 | | | | | | | | | | | | |
| 19 | LW-10574 * | SPACER, Crankcase bolt | | | | | | | | 1 | | | | | | | | | | | | |
| 20 | LW-11866● | SPACER NUT, Compressor | | | | | | | | | | | | | 1 | | | | | | | |
| 21 | STD-33 | WASHER, 3/8 plain | | 2 | 2 | 2 | 2 | 2 | 2 | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | |
| | STD-33● | WASHER, 3/8 plain | | | | | | | | | | | | | 5 | | | | | | | |
| | STD-33 * | WASHER, 3/8 plain | | | | | | | | 4 | | | | | | | | | | | | |
| 22 | STD-678 | WASHER, 3/8 lock, internal teeth | | 2 | 2 | 2 | 2 | 2 | 2 | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | |
| | STD-678● | WASHER, 3/8 lock, internal teeth | | | | | | | | | | | | | 1 | | | | | | | |
| 23 | STD-596 | NUT, 3/8-24 plain | | 2 | 2 | 2 | 2 | 2 | 2 | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | |
| | STD-596● | NUT, 3/8-24 plain | | | | | | | | | | | | | 1 | | | | | | | |
| 24 | 76220 | STUD, 1/2-20 x 10-11/16 long | | 4 | 4 | 4 | 4 | 4 | 4 | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | |

- * Special crankcase bolts for attaching rotor system (McCulloch installation).
- * * To attach fuel manifold brackets.
- ★ Fuel manifold mounted on top of the engine.
- Engines employing optional freon compressor (not sold by Lycoming).

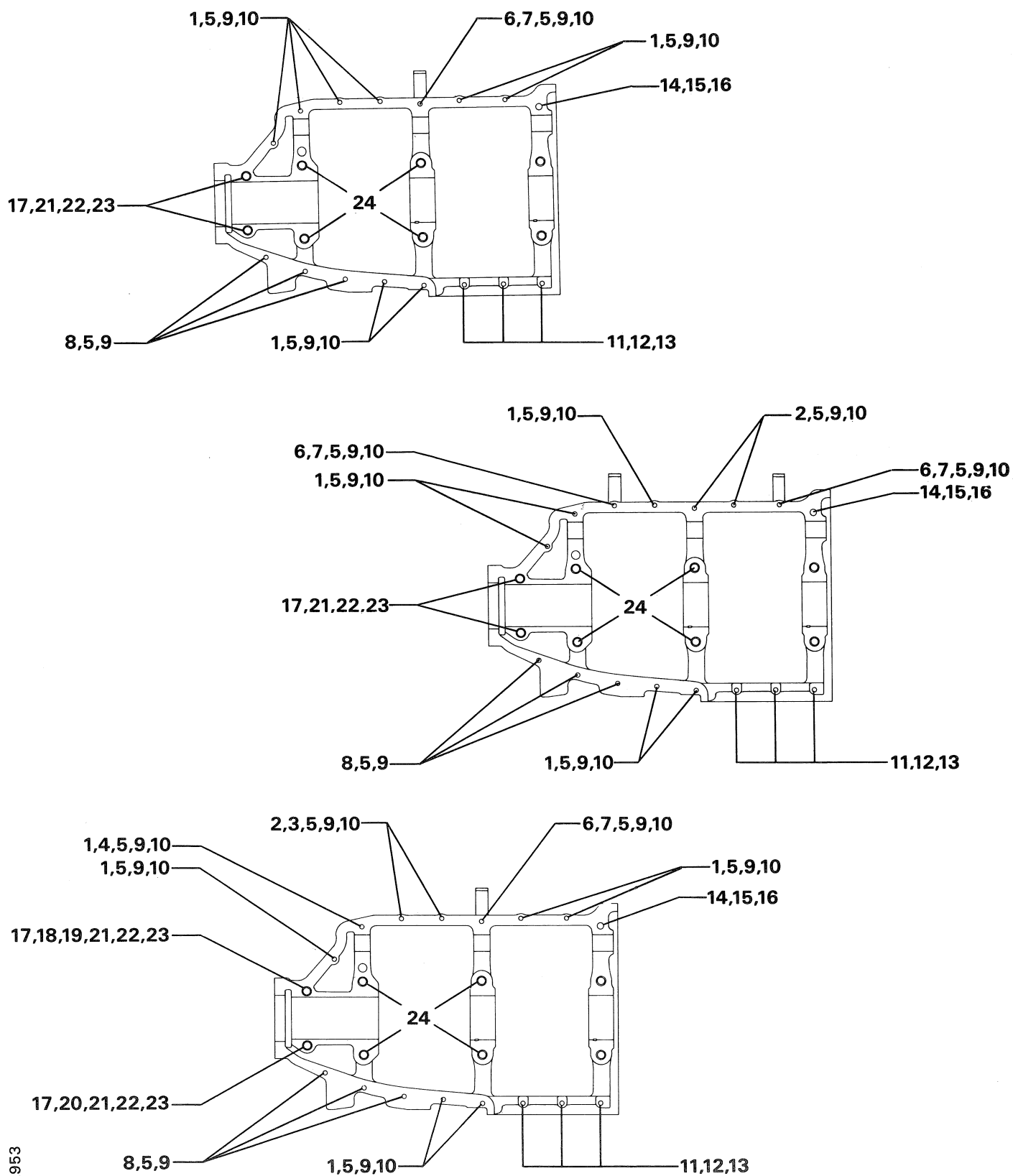


Figure 6. CRANKCASE ATTACHING PARTS

CRANKCASE, CRANKSHAFT AND CAMSHAFT GROUP

CRANKCASE ATTACHING PARTS (AIO & FRONT MOUNTED PROP. GOVERNOR)

| FIG. REF. 6A | PART NUMBER | DESCRIPTION | O N A L L | QUANTITY PER ASSEMBLY | | | | | | | | | | | | | | | | | | | |
|--------------------|----------------|--|-----------------------|-----------------------|-------------|------------------|-----------------------|-------------|-------------|------------------|-------------|-------------|-----------------------|-------------|-------------|-------------|-------------|-------------|------------------|-------------|-------------|-------------|-------------|
| | | | | IO-360 | | | | | | | | | | | | | | | | AIO-360 | | | |
| | | | | A 1 A | A 1 B | A 1 B 6 | A 1 B 6 D | A 1 C | A 1 D | A 1 D 6 | A 2 A | A 2 B | A 3 B 6 D | B 1 B | B 1 D | B 1 E | B 1 F | B 2 F | B 2 F 6 | B 4 A | A 1 A | A 1 B | B 1 B |
| 1 | LW-25-1.50 | BOLT, 1/4-20 x 1-1/2 long, hex. hd. | | | | | | 8 | | | | | | | | | | | 5 | 5 | 5 | | |
| 2 | STD-8 | WASHER, 1/4 plain | | | | | | 20 | | | | | | | | | | | 15 | 15 | 15 | | |
| 3 | 60803 | STRAP, Lifting | | | | | | 1 | | | | | | | | | | | 1 | 1 | 1 | | |
| 4 | LW-25-1.75 | BOLT, 1/4-20 x 1-3/4 long, hex. hd. | | | | | | 1 | | | | | | | | | | | 1 | 1 | 1 | | |
| 5 | LW-25-1.13 | BOLT, 1/4-20 x 1-1/8 long, hex. hd. | | | | | | 4 | | | | | | | | | | | 4 | 4 | 4 | | |
| 6 | LW-25S2.97 | BOLT, 1/4-20 x 2-31/32 long, hex. hd. | | | | | | | | | | | | | | | | | 1 | 1 | 1 | | |
| 7 | STD-160 | WASHER, 1/4 lock, internal teeth | | | | | | 12 | | | | | | | | | | | 11 | 11 | 11 | | |
| 8 | STD-1411 | NUT, 1/4-20 plain | | | | | | 9 | | | | | | | | | | | 6 | 6 | 6 | | |
| 9 | LW-25S1.50 | BOLT, 1/4-20 x 1-1/2 long, hex. hd., | | | | | | | | | | | | | | | | | | | | | |
| | | dr. end | | | | | | 3 | | | | | | | | | | | | | | | |
| 10 | LW-25S1.80 | BOLT, 1/4-20 x 1-13/16 long, hex. hd., | | | | | | | | | | | | | | | | | | | | | |
| | | dr. end | | | | | | | | | | | | | | | | | 3 | 3 | 3 | | |
| 11 | STD-8 | WASHER, 1/4 plain | | | | | | 9 | | | | | | | | | | | 8 | 8 | 8 | | |
| 12 | STD-1409 | NUT, 1/4-20 slotted shear | | | | | | 3 | | | | | | | | | | | 5 | 5 | 5 | | |
| 13 | STD-33 | WASHER, 3/8 plain | | | | | | 3 | | | | | | | | | | | 3 | 3 | 3 | | |
| 14 | AN960-616L | WASHER, 3/8 plain (thick) (max. 3) | | | | | | AR | | | | | | | | | | | AR | AR | AR | | |
| 15 | STD-872 | NUT, 3/8-24 slotted | | | | | | 1 | | | | | | | | | | | 1 | 1 | 1 | | |
| 16 | AN6-34A | BOLT, 3/8-24 x 3-37/64 long, hex. hd. | | | | | | 1 | | | | | | | | | | | 1 | 1 | 1 | | |
| 17 | STD-33 | WASHER, 3/8 plain | | | | | | 2 | | | | | | | | | | | 3 | 3 | 3 | | |
| 18 | STD-678 | WASHER, 3/8 lock, internal teeth | | | | | | 2 | | | | | | | | | | | 2 | 2 | 2 | | |
| 19 | STD-596 | NUT, 3/8-24 plain | | | | | | 2 | | | | | | | | | | | 2 | 2 | 2 | | |
| 20 | 76220 | STUD, 1/2-20 x 10-11/16 long | | | | | | 4 | | | | | | | | | | | 4 | 4 | 4 | | |

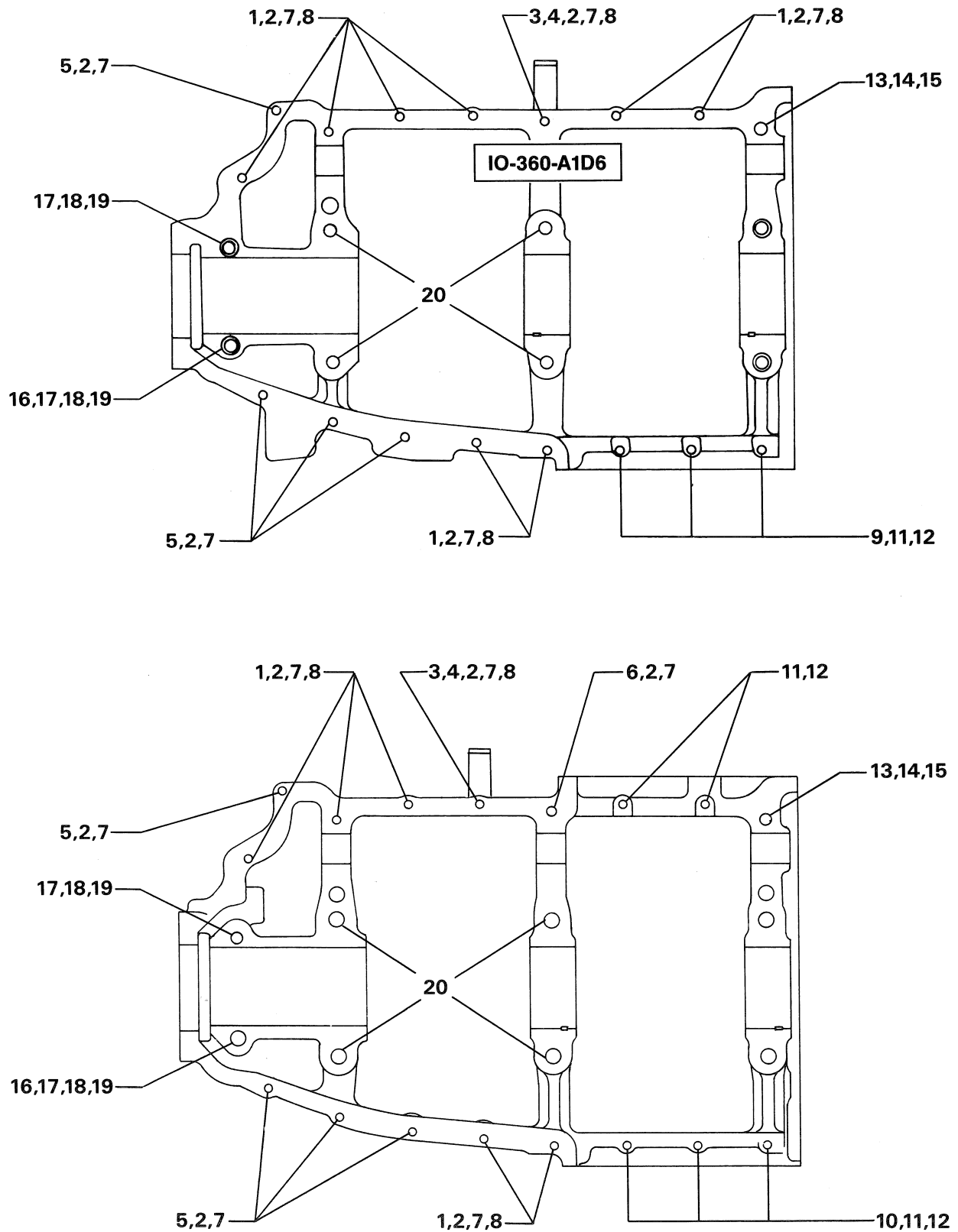


Figure 6A. CRANKCASE ATTACHING PARTS (AIO & FRONT MOUNTED PROP. GOVERNOR)

ACCESSORY HOUSING AND RELATED PARTS

ACCESSORY HOUSING ASSEMBLY

| FIG. REF. 7 | PART NUMBER | DESCRIPTION | O N A L L | QUANTITY PER ASSEMBLY | | | | | | | | | | | | | | | | | | |
|-------------------|-----------------|---------------------------------------|-----------------------|-----------------------|-------------|------------------|-----------------------|-------------|-------------|------------------|-------------|-------------|-----------------------|-------------|-------------|-------------|-------------|-------------|------------------|-------------|-------------|-------------|
| | | | | IO-360 | | | | | | | | | | | | | | | AIO-360 | | | |
| | | | | A 1 A | A 1 B | A 1 B 6 | A 1 B 6 D | A 1 C | A 1 D | A 1 D 6 | A 2 A | A 2 B | A 3 B 6 D | B 1 B | B 1 D | B 1 E | B 1 F | B 2 F | B 2 F 6 | B 4 A | A 1 A | A 1 B |
| 1 | 73818 | GASKET, Accessory housing | 1 | | | | | | | | | | | | | | | | | | | |
| 2 | 21A21533-04 | HOUSING ASSY., Accessory | | | 1 | 1 | | | 1 | 1 | | 1 | | | | | | | 1 | | 1 | 1 |
| | 21A21533-06 | HOUSING ASSY., Accessory | | 1 | | | | 1 | | | 1 | | | 1 | | | | | | 1 | | |
| | 21A21534-07 | HOUSING ASSY., Accessory | | | | | | | | | | | | 1 | | | | | | | | |
| | 21A21533-02 | HOUSING ASSY., Accessory | | | | | | | | | | | | 1 | | | | | | | | |
| | 21A21533-10 ‡ | HOUSING ASSY., Accessory | | | | | | | | | | | 1 | | | | | | | | | |
| | 21A21533-05 ◀ | HOUSING ASSY., Accessory | | | | | | | | | | | | | 1 | 1 | 1 | | | 1 | | |
| | 21A21533-01 ▶ | HOUSING ASSY., Accessory | | | | | | | | | | | | 1 | | | | | | | | |
| | 21B21601-01 * * | HOUSING ASSY., Accessory | | | | | 1 | | | | | | | | | | | | | | | |
| | 21B21601-02 ★ | HOUSING ASSY., Accessory | | | | | 1 | | | | | 1 | | | | | | | | | | |
| | 21A21533-12 * | HOUSING ASSY., Accessory | | | | 1 | | | | | | | | | | | | | | | | |
| | 21A21534-09 ■ | HOUSING ASSY., Accessory | | | | | | | | | | | | 1 | | | | | | | | |
| | 21A21533-14 ‡‡ | HOUSING ASSY., Accessory | | | | | | | | | | | | | | | | 1 | | | | |
| | 21A21533-18 ● | HOUSING ASSY., Accessory | | | | | | | 1 | | | | | | | | | | | | | |
| 3 | 25C-10 | STUD, 1/4-20 x 1-1/4 long | | | | | | | 4 | | | | | | | | | | | | | |
| 4 | 25C-11 | STUD, 1/4-20 x 1-3/8 long | | | | | | | | | | | | 1 | | | | | | | | |
| 5 | 25C-12 * * | STUD, 1/4-20 x 1-1/2 long | | | | | 4 | | | | | | | | | | | | | | | |
| | 25C-12★ | STUD, 1/4-20 x 1-1/2 long | | | | | 4 | | | | | 4 | | | | | | | | | | |
| 6 | 25C-20 * | STUD, 1/4-20 x 2-1/2 long | | | | 4 | | | | | | | | | | | | | | | | |
| 7 | 25C-22 | STUD, 1/4-20 x 2-3/4 long | | 4 | 4 | 4 | | 4 | 4 | 4 | 4 | 4 | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 8 | 31C-12▶ | STUD, 5/16-18 x 1-1/2 long | | | | | | | | | | | | | 4 | | | | | | | |
| | 31C-12◀ | STUD, 5/16-18 x 1-1/2 long | | | | | | | | | | | | | | 4 | 4 | 4 | | | 4 | |
| | 31C-12‡‡ | STUD, 5/16-18 x 1-1/2 long | | | | | | | | | | | | | | | | | 4 | | | |
| 9 | 31C-12 | STUD, 5/16-18 x 1-1/2 long | | 6 | 6 | 6 | | 6 | 6 | 6 | 6 | 6 | | 6 | | 6 | | | 6 | 6 | 6 | 6 |
| 10 | 31C-12 | STUD, 5/16-18 x 1-1/2 long | | | | | | | | | | | | 8 | | | | | | | | |
| 11 | 31C-13 | STUD, 5/16-18 x 1-5/8 long | | 2 | | | 2 | 2 | | | 2 | | 2 | 2 | | | | | | 2 | | |
| 12 | 31C-15 * * | STUD, 5/16-18 x 1-7/8 long | | | | | 4 | | | | | | | | | | | | | | | |
| 13 | 31C-16‡‡ | STUD, 5/16-18 x 2.00 long | | | | | | | | | | | | | | | | | 2 | | | |
| 14 | 31C-17★ | STUD, 5/16-18 x 2-1/8 long | | | | | 4 | | | | | 4 | | | | | | | | | | |
| 15 | 31C-19 | STUD, 5/16-18 x 2-3/8 long | | | 2 | 2 | | | 2 | 2 | | 2 | | | 2 | | | | 2 | | 2 | 2 |
| 16 | 31C-19 | STUD, 5/16-18 x 2-3/8 long | | | | | | | | | | | | | 4 | | | | | | | |
| | 31C-19■ | STUD, 5/16-18 x 2-3/8 long | | | | | | | | | | | | | 4 | | | | | | | |
| | 31C-19▶ | STUD, 5/16-18 x 2-3/8 long | | | | | | | | | | | | | | 4 | | | | | | |
| | 31C-19◀ | STUD, 5/16-18 x 2-3/8 long | | | | | | | | | | | | | | | 4 | 4 | 4 | | | 4 |
| 17 | 31CD-17 | STUD, 5/16-18 x 2-1/8 long, drilled | | 3 | 3 | 3 | | 3 | 3 | 3 | 3 | 3 | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 18 | LW-12589 | INSERT, Helicoil, 5/8-18 x 3/8 long | | | | | 1 | | | | | | 1 | | | | | | | | | |
| 19 | MS124703 | INSERT, Helicoil, 3/4-16 x 1-1/8 long | | | | | 1 | | | | | | 1 | | | | | | | | | |
| 20 | LW-10341 | INSERT, Helicoil, 1.00-14 x 3/8 long | | | | | 1 | | | | | | 1 | | | | | | | | | |
| 21 | 75888 | STUD, 1/4-20 x 1-1/4 long | | | | | | | | | | | | | | 6 | | | | | | |
| 22 | 1102 | PLUG, 1/8-27 NPT, Allen | | | | | | | | | | | | | 2 | | | | | | | |
| | 1102 | PLUG, 1/8-27 NPT, Allen | | 3 | 3 | 3 | | 3 | 3 | 3 | 3 | 3 | | 3 | | | 3 | 3 | 3 | 3 | 3 | 3 |
| | 1102 | PLUG, 1/8-27 NPT, Allen | | | | | | | | | | | | | | 4 | | | | | | |
| 23 | STD-784 | PLUG, 3/8 pipe, Allen | | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | | | | 1 | 1 | 1 |
| 24 | 1102☆ | PLUG, 1/8-27 NPT, Allen | | | | | 1 | | | | | | 1 | | | | | | | | | |

- * This accessory housing uses shorter studs (P/N 25C-20) at vacuum pump pad.
- * * "AN" governor.
- ★ Woodward governor.
- This accessory housing uses shorter studs (P/N 25C-10) at vacuum pump pad.
- ‡ This accessory housing uses one P/N 25C-11 stud at vacuum pump pad.
- Driven height of fuel pump studs is longer to accommodate a P/N LW-10799 insulating spacer between the fuel pump and housing.
- ▼ Longer studs (P/N 31C-19) used on magneto pad to accommodate two S4LN-1227 impulse magnetos.
- ▲ Longer studs (P/N 31C-19) used on magneto pad to accommodate two S4LN-21 impulse magnetos.
- ‡ Longer studs (P/N 31C-16) used on magneto pad to accommodate magneto absorption drive.
- ☆ Assemble in accessory housing on top of oil filter pad.

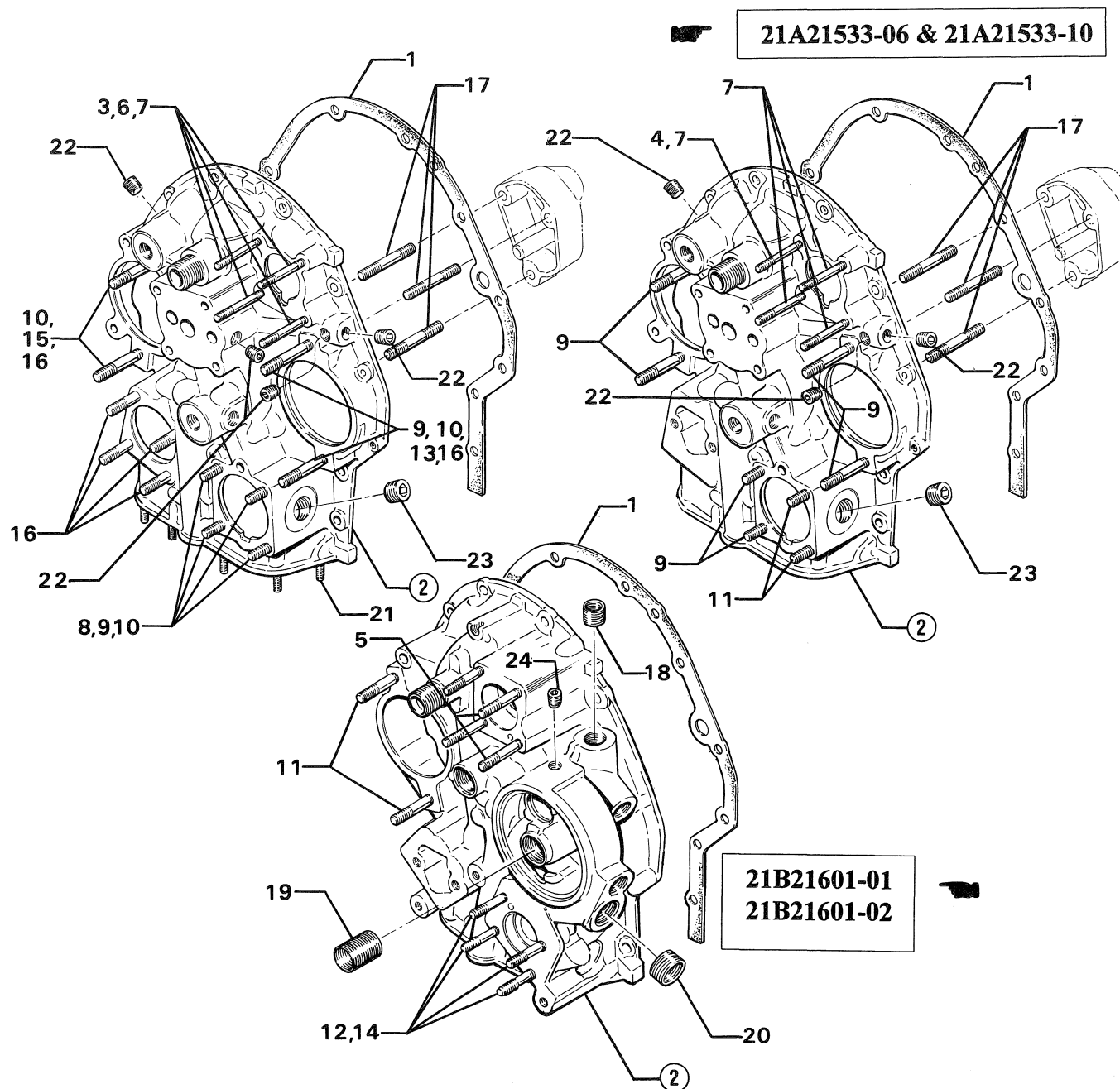


Figure 7. ACCESSORY HOUSING ASSEMBLY

ACCESSORY HOUSING AND RELATED PARTS

PROPELLER GOVERNOR DRIVES, ADAPTER ASSEMBLY AND COVERS

| FIG. REF. 8 | PART NUMBER | DESCRIPTION | O N A L | QUANTITY PER ASSEMBLY | | | | | | | | | | | | | | | | | | | |
|-------------------|----------------|--|------------------|-----------------------|-------------|------------------|-----------------------|-------------|-------------|------------------|-------------|-------------|-----------------------|-------------|-------------|-------------|-------------|-------------|------------------|-------------|-------------|-------------|-------------|
| | | | | IO-360 | | | | | | | | | | | | | | AIO-360 | | | | | |
| | | | | A 1 A | A 1 B | A 1 B 6 | A 1 B 6 D | A 1 C | A 1 D | A 1 D 6 | A 2 A | A 2 B | A 3 B 6 D | B 1 B | B 1 D | B 1 E | B 1 F | B 2 F | B 2 F 6 | B 4 A | A 1 A | A 1 B | B 1 B |
| 1 | 68317 | SHAFTGEAR, Propeller governor drive | | 1 | 1 | 1 | | 1 | 1 | | | | | 1 | 1 | 1 | 1 | | | | | | |
| 2 | LW-12914● | GEAR ASSY., Accessory driven | | | | | 1 | | | | | | 1 | | | | | | | | | | |
| 3 | 71596 | WASHER, Accessory driven gear | | 1 | 1 | 1 | 1 | 1 | 1 | | | | 1 | 1 | 1 | 1 | 1 | | | | | | |
| 4 | STD-1221 | RING, 13/16 dia. x 1/32 thick | | 1 | 1 | 1 | | 1 | 1 | | | | | 1 | 1 | 1 | 1 | | | | | | |
| 5 | 77875 | GEAR, Propeller governor driven | | | | | | | | 1 | | | | | | | | | | | 1 | 1 | 1 |
| 6 | LW-14021 | SHAFT, Propeller governor idler gear | | | | | | | | 1 | | | | | | | | | | | 1 | 1 | 1 |
| 7 | 77874 | GEAR ASSY., Propeller governor idler | | | | | | | | 1 | | | | | | | | | | | 1 | 1 | 1 |
| 8 | 77872 | BUSHING, Propeller gov. idler gear | | | | | | | | 2 | | | | | | | | | | | 2 | 2 | 2 |
| 9 | STD-19 | DOWEL, 3/32 dia. x 7/32 long | | | | | | | | 1 | | | | | | | | | | | 1 | 1 | 1 |
| 10 | STD-798 | DOWEL, 3/32 dia. x 9/32 long | | | | | | | | 1 | | | | | | | | | | | 1 | 1 | 1 |
| 11 | 73249 | WASHER, Thrust | | | | | | | | AR | | | | | | | | | | | AR | AR | AR |
| | 73250 | WASHER, Thrust | | | | | | | | AR | | | | | | | | | | | AR | AR | AR |
| | 73251 | WASHER, Thrust | | | | | | | | AR | | | | | | | | | | | AR | AR | AR |
| | 73252 | WASHER, Thrust | | | | | | | | AR | | | | | | | | | | | AR | AR | AR |
| 12 | AN565B1032H5 | SET SCREW, No. 10-32 x 5/16 long | | | | | | | | 1 | | | | | | | | | | | 1 | 1 | 1 |
| 13 | 70455 | GASKET, 25/32 I.D. x 1-1/8 O.D. x 1/16 | | | | | | | | | | | | | | | | | | | | | |
| | | thick | | | | | | | | 1 | | | | | | | | | | | 1 | 1 | 1 |
| 14 | LW-13896 | PLUG, 3/4-16 hex. hd. | | | | | | | | 1 | | | | | | | | | | | 1 | 1 | 1 |
| 15 | 68315 | GASKET, Accessory drive adapter | | 1 | 1 | 1 | | 1 | 1 | | | | | 1 | 1 | 1 | 1 | | | | | | |
| 16 | 75153★ | ADAPTER ASSY., Propeller gov. drive | | 1 | 1 | 1 | | 1 | 1 | | | | | 1 | 1 | 1 | 1 | | | | | | |
| | 75545★ ★ | ADAPTER ASSY., Propeller gov. drive | | 1 | 1 | 1 | | 1 | 1 | | | | | 1 | | 1 | | | | | | | |
| | 78594★ | ADAPTER ASSY., Propeller gov. drive | | 1 | 1 | 1 | | | | | | | | | | | | | | | | | |
| 17 | 1102 | PLUG, 1/8-27 NPT, Allen | | 1 | 1 | 1 | | 1 | 1 | | | | | 1 | 1 | 1 | 1 | | | | | | |
| 18 | 31C-16★ | STUD, 5/16-18 x 2.00 long | | 4 | 4 | 4 | | 4 | 4 | | | | | 4 | 4 | 4 | 4 | | | | | | |
| | 31C-14★ ★ | STUD, 5/16-18 x 1-3/4 long | | 4 | 4 | 4 | | 4 | 4 | | | | | 4 | | 4 | | | | | | | |
| 19 | STD-1164★ | INSERT, 5/16-18 x 5/8 long, Helicoil | | 4 | 4 | 4 | | | | | | | | | | | | | | | | | |
| 20 | STD-1774 | PIN, 1/8 dia. x 1/4 long | | 1 | 1 | 1 | | 1 | 1 | | | | | 1 | 1 | 1 | 1 | | | | | | |
| 21 | STD-35 | WASHER, 5/16 plain | | 4 | 4 | 4 | | 4 | 4 | | | | | 4 | 4 | 4 | 4 | | | | | | |
| 22 | STD-475 | WASHER, 5/16 lock, internal teeth | | 4 | 4 | 4 | | 4 | 4 | | | | | 4 | 4 | 4 | 4 | | | | | | |
| 23 | STD-1410 | NUT, 5/16 plain | | 4 | 4 | 4 | | 4 | 4 | | | | | 4 | 4 | 4 | 4 | | | | | | |
| 24 | 69551 | GASKET, Accessory drive adapter | | | | | | | | 1 | 1 | 1 | | | | | | 1 | 1 | 1 | | | |
| 25 | 69106 | COVER, Governor drive adapter pad | | | | | | | | 1 | 1 | 1 | | | | | | 1 | 1 | 1 | | | |
| 26 | STD-35 | WASHER, 5/16 plain | | | | | | | | 4 | 4 | 4 | | | | | | 4 | 4 | 4 | | | |
| 27 | STD-475 | WASHER, 5/16 lock, internal teeth | | | | | | | | 4 | 4 | 4 | | | | | | 4 | 4 | 4 | | | |
| 28 | STD-1410 | NUT, 5/16-18 plain | | | | | | | | 4 | 4 | 4 | | | | | | 4 | 4 | 4 | | | |
| 29 | 72053 | GASKET, Governor | | 1 | 1 | 1 | | 1 | 1 | 1 | | | | 1 | 1 | 1 | 1 | | | | 1 | 1 | 1 |
| | 72053● | GASKET, Governor | | | | | 2 | | | | | | 2 | | | | | | | | | | |
| | 72053‡ | GASKET, Governor | | | | | | | | | | | | 2 | | | | | | | | | |
| 30 | 72378 | COVER, Governor drive | | 1 | 1 | 1 | | 1 | 1 | 1 | | | | 1 | 1 | 1 | 1 | | | | 1 | 1 | 1 |
| | 72378● | COVER, Governor drive | | | | | 1 | | | | | | 1 | | | | | | | | | | |
| | 72378‡ | COVER, Governor drive | | | | | | | | | | | | 2 | | | | | | | | | |
| 31 | LW-12347● | PLATE, Propeller governor pad | | | | | 1 | | | | | | 1 | | | | | | | | | | |
| 32 | STD-35★ | WASHER, 5/16 plain | | 32 | 32 | 32 | 32 | 32 | 32 | 32 | | | 32 | 32 | 32 | 32 | 32 | | | | 32 | 32 | 32 |
| | STD-35★ ★ | WASHER, 5/16 plain | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | 4 | 4 | 4 | 4 | 4 | | | | 4 | 4 | 4 |
| | STD-35‡ | WASHER, 5/16 plain | | | | | | | | | | | | 6 | | | | | | | | | |
| 33 | STD-475 | WASHER, 5/16 lock, internal teeth | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | 4 | 4 | 4 | 4 | 4 | | | | 4 | 4 | 4 |
| | STD-475‡ | WASHER, 5/16 lock, internal teeth | | | | | | | | | | | | 8 | | | | | | | | | |

ACCESSORY HOUSING AND RELATED PARTS

PROPELLER GOVERNOR DRIVES, ADAPTER ASSEMBLY AND COVERS (Continued)

| FIG. REF. 8 | PART NUMBER | DESCRIPTION | O N A L L | QUANTITY PER ASSEMBLY | | | | | | | | | | | | | | | | | | |
|-------------------|----------------|--|-----------------------|-----------------------|-------------|------------------|-----------------------|-------------|-------------|------------------|-------------|-------------|-----------------------|-------------|-------------|-------------|-------------|-------------|------------------|-------------|-------------|-------------|
| | | | | IO-360 | | | | | | | | | | | | | | | | AIO-360 | | |
| | | | | A 1 A | A 1 B | A 1 B 6 | A 1 B 6 D | A 1 C | A 1 D | A 1 D 6 | A 2 A | A 2 B | A 3 B 6 D | B 1 B | B 1 D | B 1 E | B 1 F | B 2 F | B 2 F 6 | B 4 A | A 1 A | A 1 B |
| 34 | LW-31-1.69‡ | BOLT, 5/16-18 x 1-11/16 long, hex. hd. | | | | | | | | | | | 4 | | | | | | | | | |
| 35 | STD-1410 | NUT, 5/16-18 plain | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | 4 | 4 | 4 | 4 | 4 | | | 4 | 4 | 4 |
| | STD-1410‡ | NUT, 5/16-18 plain | | | | | | | | | | | 4 | | | | | | | | | |
| 36 | LW-31H1.22★ | BOLT, 5/16-18 x 1-7/32 long | | 4 | 4 | 4 | | | | | | | | | | | | | | | | |

- * Woodward governor.
- ** "AN" governor.
- ★ "AN" governor; cap screws instead of studs.
- Dual magneto.
- ‡ Propeller governor drive cover for dual drive pad.

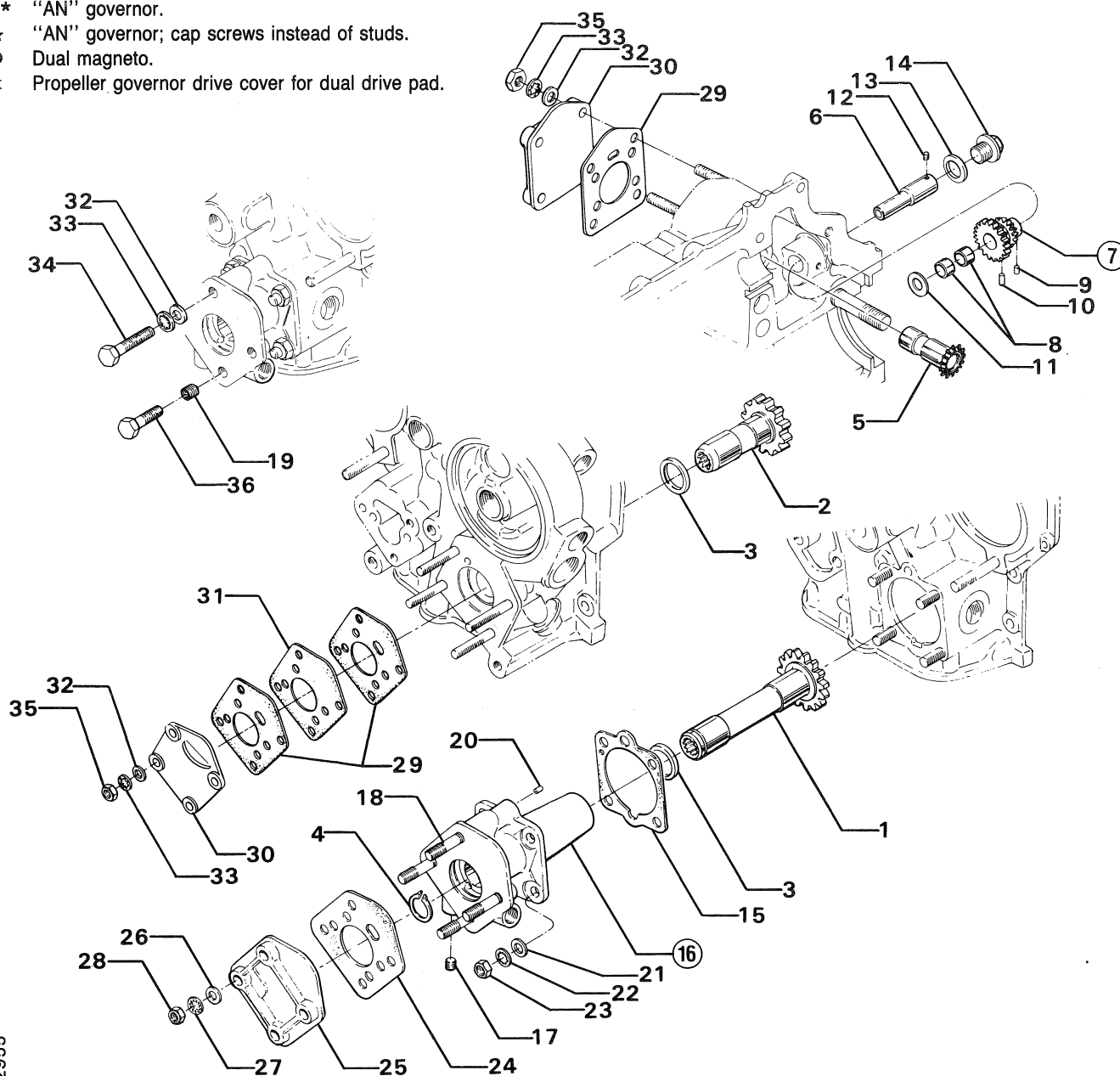


Figure 8. PROPELLER GOVERNOR DRIVES, ADAPTER ASSEMBLY AND COVERS

ACCESSORY HOUSING AND RELATED PARTS

PROPELLER GOVERNOR OIL LINES

| FIG. REF. 9 | PART NUMBER | DESCRIPTION | O N A L L | QUANTITY PER ASSEMBLY | | | | | | | | | | | | | | | |
|-------------------|----------------|---|-----------------------|-----------------------|-------------|------------------|-----------------------|-------------|-------------|------------------|-------------|-------------|-----------------------|-------------|-------------|-------------|-------------|-------------|------------------|
| | | | | IO-360 | | | | | | | | | | | | AIO-360 | | | |
| | | | | A 1 A | A 1 B | A 1 B 6 | A 1 B 6 D | A 1 C | A 1 D | A 1 D 6 | A 2 A | A 2 B | A 3 B 6 D | B 1 B | B 1 D | B 1 E | B 1 F | B 2 F | B 2 F 6 |
| 1 | 75166 * | TUBE ASSY., Propeller gov. oil line | | | | | | | | | | | | 1 | | | | | |
| | 75166 * * | TUBE ASSY., Propeller gov. oil line | | | | | | | | | | | | 1 | | | | | |
| | 75167 ★ | TUBE ASSY., Propeller gov. oil line | | 1 | 1 | 1 | | 1 | 1 | | 1 | | | 1 | | 1 | 1 | | |
| | 75167 ● | TUBE ASSY., Propeller gov. oil line | | | | 1 | | | | | | | | 1 | 1 | | 1 | | |
| | 75730 ‡ | TUBE ASSY., Propeller gov. oil line | | 1 | 1 | | | | | | | | | | | | | | |
| | 75730 ■ | TUBE ASSY., Propeller gov. oil line | | 1 | | | | 1 | | | | | | | | | | | |
| | LW-10494 ★ | TUBE ASSY., Propeller gov. oil line | | | 1 | 1 | | | 1 | | | | | | | | | | |
| | LW-12920 ► | TUBE ASSY., Propeller gov. oil line | | | | | 1 | | | | | | 1 | | | | | | |
| 2 | STD-1930 | HOSE, 3/8 I.D. x 1.00 long | | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | 1 | 1 | 1 | 1 | 1 | | |
| 3 | 75165 | CLIP, Propeller gov. oil line support | | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | 1 | 1 | 1 | 1 | 1 | | |
| 4 | STD-35 | WASHER, 5/16 plain | | 3 | 3 | 3 | 3 | 3 | 3 | | 3 | | 3 | 3 | | 3 | 3 | | |
| 5 | STD-475 | WASHER, 5/16 lock, internal teeth | | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | 1 | 1 | | 1 | 1 | | |
| 6 | LW-31-0.94 | BOLT, 5/16-18 x 15/16 long, hex. hd. | | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | 1 | 1 | | 1 | 1 | | |
| 7 | LW-16266-25-38 | CLAMP | | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | 1 | 1 | 1 | 1 | 1 | | |
| 8 | MS20822-6 | ELBOW, 3/8 flared tube & 1/4 NPT, 90° | | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | 1 | 1 | 1 | 1 | 1 | | |
| 9 | 74070 | ELBOW, 3/8 flared tube & 9/16-18 str. | | | | | | | | | | | | | | | | | |
| | | thd., 45° adj. | | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | 1 | 1 | 1 | 1 | 1 | | |
| 10 | 75739 | NIPPLE, 3/8 flared tube & 9/16-18 str. | | | | | | | | | | | | | | | | | |
| | | thd. | | | | | | | | | | | | 1 | | | | | |
| 11 | AN814-6L ◀ | PLUG, Governor oil line | | | | | | | | | | | | 1 | | | | | |
| 12 | MS29512-6 ◀ | SEAL, Oil, 5/64 dia. sect. x 15/32 I.D. | | | | | | | | | | | | 1 | | | | | |
| 13 | STD-783 ◀ | PLUG, 1/4-18 NPT, Allen head | | | | | | | | | 1 | 1 | | 1 | | | | 1 | 1 |

- * Used with P/N 75739 straight nipple at governor adapter set-up used with alternator.
- * * Used with P/N 75739 straight nipple at governor adapter set-up used with generator.
- ★ Used with P/N 74070 (45°) elbow at governor adapter set-up used with alternator.
- Used with P/N 74070 (45°) elbow at governor adapter set-up used with generator.
- ‡ Used with P/N 74070 (45°) elbow at governor adapter set-up used with alternator for Mooney.
- Used with P/N 74070 (45°) elbow at governor adapter set-up used with generator for Mooney.
- Dual magneto.
- ◀ No propeller governor oil line installed.

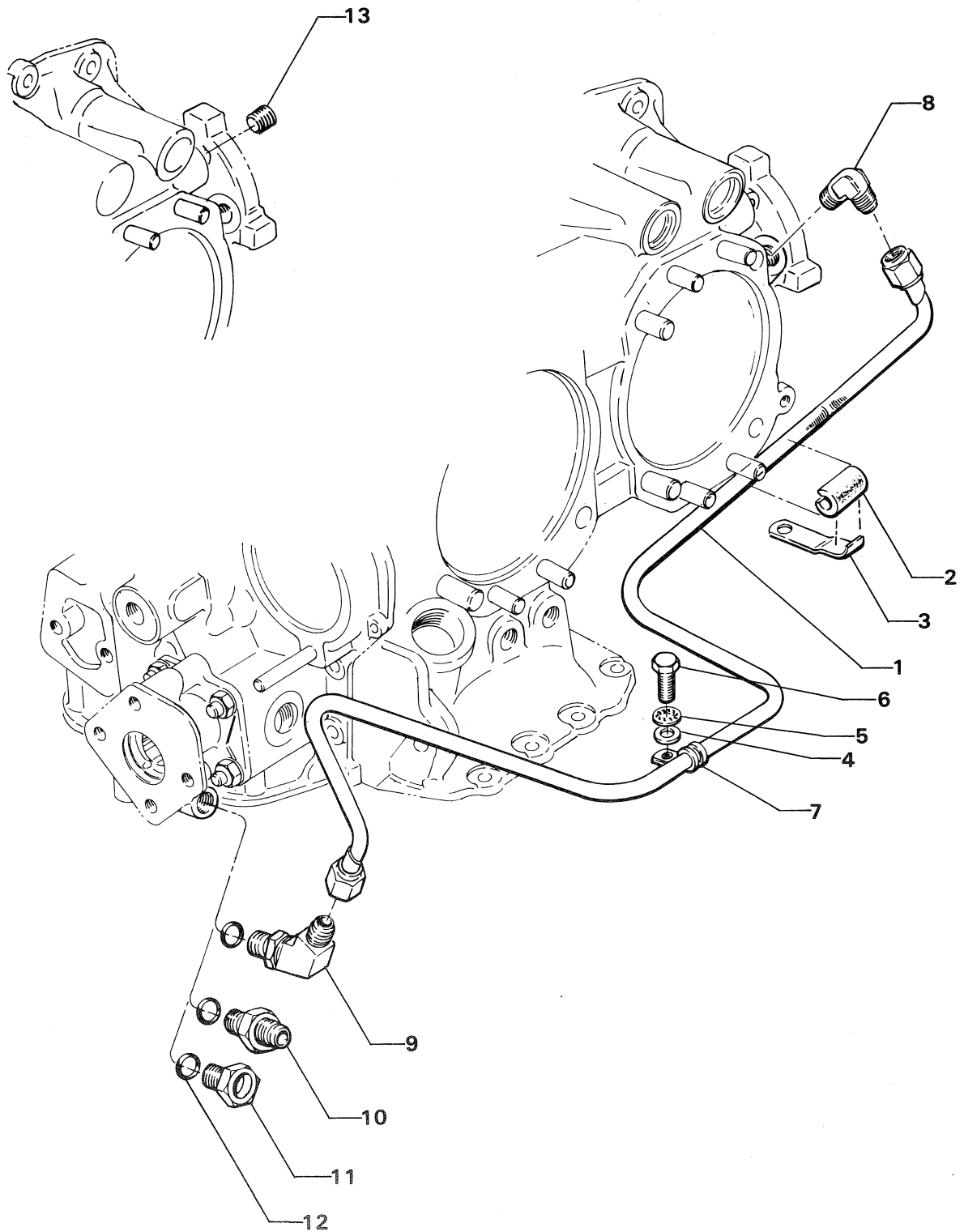


Figure 9. PROPELLER GOVERNOR OIL LINES

ACCESSORY HOUSING AND RELATED PARTS

OIL SCAVENGE PUMP AND OIL SUCTION TUBES (AIO-360)

| FIG. REF. 10 | PART NUMBER | DESCRIPTION | O N A L L | QUANTITY PER ASSEMBLY | | | | | | | | | | | | | | | | | | |
|--------------------|----------------|---------------------------------------|-----------------------|-----------------------|-------------|------------------|-----------------------|-------------|-------------|------------------|-------------|-------------|-----------------------|-------------|-------------|-------------|-------------|-------------|------------------|-------------|-------------|-------------|
| | | | | IO-360 | | | | | | | | | | | | | | | | AIO-360 | | |
| | | | | A 1 A | A 1 B | A 1 B 6 | A 1 B 6 D | A 1 C | A 1 D | A 1 D 6 | A 2 A | A 2 B | A 3 B 6 D | B 1 B | B 1 D | B 1 E | B 1 F | B 2 F | B 2 F 6 | B 4 A | A 1 A | A 1 B |
| 1 | 68315 | GASKET, Accessory drive adapter | | | | | | | | | | | | | | | | | | 1 | 1 | |
| 2 | 77172 | PUMP ASSY., Oil scavenge | | | | | | | | | | | | | | | | | | 1 | 1 | 1 |
| 3 | 77125 | ADAPTER ASSY., Oil scav. pump | | | | | | | | | | | | | | | | | | 1 | 1 | 1 |
| 4 | 77118 | SHAFT, Oil pump idler | | | | | | | | | | | | | | | | | | 2 | 2 | 2 |
| 5 | STD-2013 | RING, Oil seal, 39/64 I.D. x 1/16 | | | | | | | | | | | | | | | | | | | | |
| | | section | | | | | | | | | | | | | | | | | | 2 | 2 | 2 |
| 6 | AN381-4-22 | PIN, Cotter, 1/8 dia. x 1-3/8 long | | | | | | | | | | | | | | | | | | 2 | 2 | 2 |
| 7 | STD-1173 | INSERT, 1/4-20 Helicoil x 1/2 long | | | | | | | | | | | | | | | | | | 2 | 2 | 2 |
| 8 | 66145 | DOWEL, 1/4 dia. x 1/2 long | | | | | | | | | | | | | | | | | | 2 | 2 | 2 |
| 9 | 77116 | SHAFT ASSY., Scavenge pump drive | | | | | | | | | | | | | | | | | | 1 | 1 | 1 |
| 10 | 66426 | IMPELLER, Oil scav. pump, driving | | | | | | | | | | | | | | | | | | 1 | 1 | 1 |
| 11 | 68403 | IMPELLER, Oil scav. pump, driven | | | | | | | | | | | | | | | | | | 2 | 2 | 2 |
| 12 | 77124 | HOUSING ASSY., Oil scav. pump | | | | | | | | | | | | | | | | | | 1 | 1 | 1 |
| 13 | STD-1173 | INSERT, 1/4-20 Helicoil x 1/2 long | | | | | | | | | | | | | | | | | | 6 | 6 | 6 |
| 14 | STD-1353 | INSERT, No. 10-24 Helicoil x 3/8 | | | | | | | | | | | | | | | | | | | | |
| | | long | | | | | | | | | | | | | | | | | | 4 | 4 | 4 |
| 15 | STD-8 | WASHER, 1/4 plain | | | | | | | | | | | | | | | | | | 8 | 8 | 8 |
| 16 | STD-160 | WASHER, 1/4 lock, internal teeth | | | | | | | | | | | | | | | | | | 8 | 8 | 8 |
| 17 | LW-25-0.94 | BOLT, 1/4-20 x 15/16 long, hex. hd. | | | | | | | | | | | | | | | | | | 6 | 6 | 6 |
| 18 | LW-25-2.94 | BOLT, 1/4-20 x 2-15/16 long, hex. hd. | | | | | | | | | | | | | | | | | | 2 | 2 | 2 |
| 19 | STD-35 | WASHER, 5/16 plain | | | | | | | | | | | | | | | | | | 4 | 4 | 4 |
| 20 | STD-475 | WASHER, 5/16 lock, internal teeth | | | | | | | | | | | | | | | | | | 4 | 4 | 4 |
| 21 | STD-1410 | NUT, 5/16-18 plain | | | | | | | | | | | | | | | | | | 4 | 4 | 4 |
| 22 | 77155 | FITTING, 5/8 adjustable, 90° | | | | | | | | | | | | | | | | | | 2 | 2 | 2 |
| 23 | 77131 | TUBE ASSY., Oil scav., upper cover | | | | | | | | | | | | | | | | | | 1 | 1 | 1 |
| 24 | 77128 | TUBE ASSY., Oil scav., upper pump | | | | | | | | | | | | | | | | | | 1 | 1 | 1 |
| 25 | 77115 | TUBE ASSY., Oil scav., lower cover | | | | | | | | | | | | | | | | | | 1 | 1 | 1 |
| 26 | 77130 | TUBE ASSY., Oil scav., lower pump | | | | | | | | | | | | | | | | | | 1 | 1 | 1 |
| 27 | LW-16266-25-63 | CLAMP | | | | | | | | | | | | | | | | | | 1 | 1 | 1 |
| 28 | STD-1576 | HOSE, 5/8 I.D. x 31/32 O.D. x 2-1/2 | | | | | | | | | | | | | | | | | | | | |
| | | long | | | | | | | | | | | | | | | | | | 2 | 2 | 2 |
| 29 | LW-15592-8-08 | CLAMP, Hose, 15/16 I.D. x 1/2 wide | | | | | | | | | | | | | | | | | | 4 | 4 | 4 |

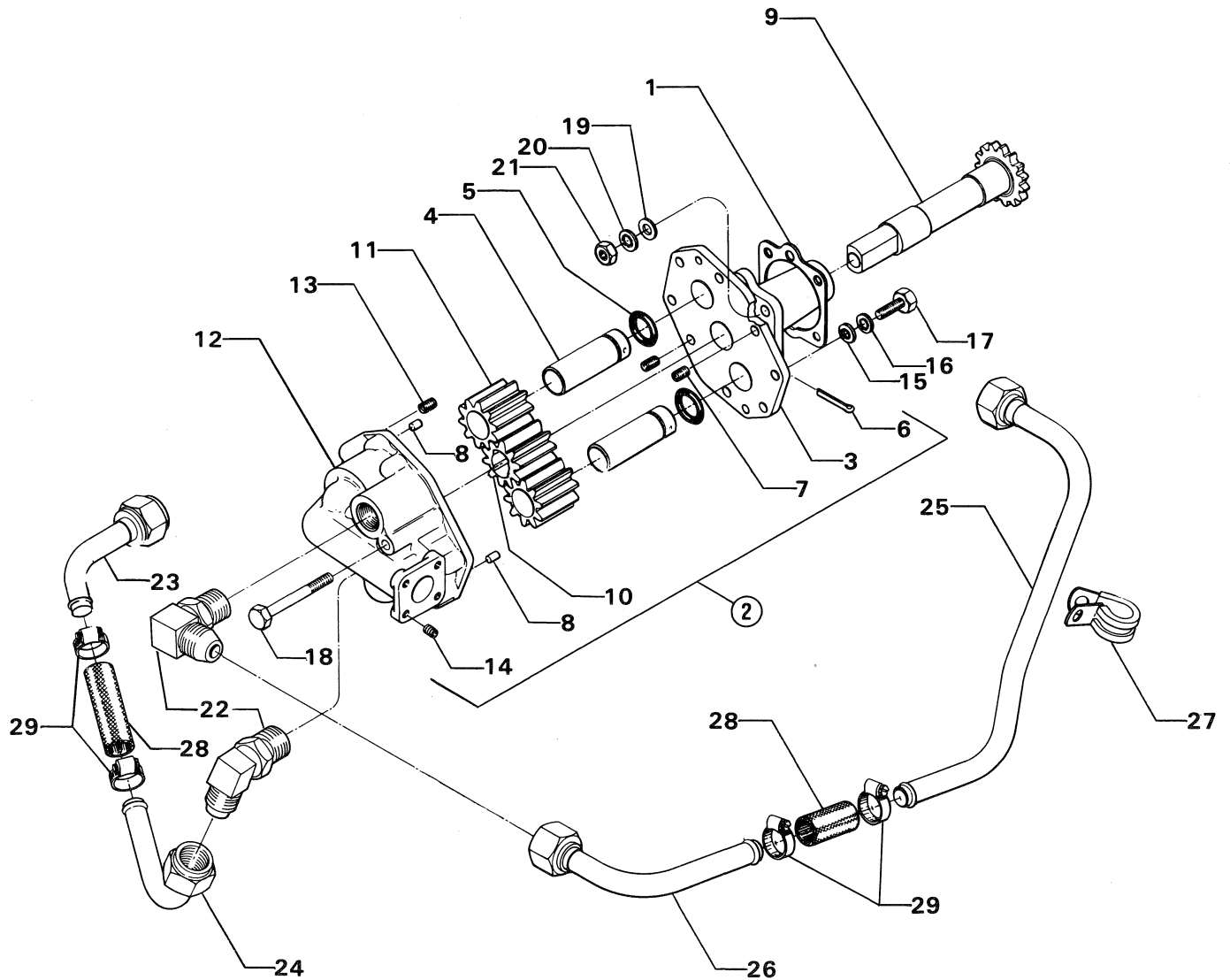


Figure 10. OIL SCAVENGE PUMP AND OIL SUCTION TUBES (AIO-360)

ACCESSORY HOUSING AND RELATED PARTS OIL FILTER ASSEMBLY

| FIG. REF. 11 | PART NUMBER | DESCRIPTION | O N A L L | QUANTITY PER ASSEMBLY | | | | | | | | | | | | | | | | | | | |
|--------------------|-----------------|--|-----------------------|-----------------------|-------------|------------------|-----------------------|-------------|-------------|------------------|-------------|-------------|-----------------------|-------------|-------------|-------------|-------------|-------------|------------------|-------------|-------------|-------------|-------------|
| | | | | IO-360 | | | | | | | | | | | | | | | | AIO-360 | | | |
| | | | | A 1 A | A 1 B | A 1 B 6 | A 1 B 6 D | A 1 C | A 1 D | A 1 D 6 | A 2 A | A 2 B | A 3 B 6 D | B 1 B | B 1 D | B 1 E | B 1 F | B 2 F | B 2 F 6 | B 4 A | A 1 A | A 1 B | B 1 B |
| 1 | 62817 * | SCREEN ASSY., Oil pressure | | 1 | 1 | 1 | | 1 | 1 | | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 2 | 61173 * | GASKET, Oil pressure housing | | 1 | 1 | 1 | | 1 | 1 | | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 3 | 69510 * | HOUSING, Thermostatic valve & oil pressure screen | | 1 | 1 | 1 | | 1 | 1 | | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 4 | 68974 * * | HOUSING, Oil pressure screen | | | | | | | | | | | | | | | | 1 | | | | | |
| 5 | 06E19769-0.63 * | GASKET, 7/8 O.D. x 5/8 I.D. x 3/32 annular | | 1 | 1 | 1 | | 1 | 1 | | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 6 | STD-8 * | WASHER, 1/4 plain | | 4 | 4 | 4 | | 4 | 4 | | 4 | 4 | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | |
| 7 | STD-160 * | WASHER, 1/4 lock, internal teeth | | | | 4 | | | | | | | | | | | 4 | | | | | | |
| 8 | LW-25-0.75 * | BOLT, 1/4-20 x 3/4 long, hex. hd. | | | | 4 | | | | | | | | | | | 4 | | | | | | |
| 9 | STD-1856 * | SCREW, 1/4-20 x 1.00 long, hex. hd. | | 4 | 4 | 4 | | 4 | 4 | | 4 | 4 | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | |
| 10 | 53E19600 * | VALVE ASSY., Temp. control oil cooler bypass | | 1 | 1 | 1 | | 1 | 1 | | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 11 | 76510 * | GASKET, Valve assembly | | 1 | 1 | 1 | | 1 | 1 | | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 12 | LW-12795 ★ | GASKET, Oil filter adapter | | 2 | 2 | 2 | | | | 2 | 2 | | 2 | 2 | 2 | 2 | | 2 | | | | 2 | |
| 13 | LW-14089 ★ | KIT, Oil filter element | | 1 | 1 | 1 | | | | 1 | | | 1 | 1 | 1 | | | 1 | | | | 1 | |
| 14 | 77852 ★ | OIL FILTER BASE ASSEMBLY | | 1 | 1 | 1 | | | | 1 | | | 1 | 1 | 1 | | | 1 | | | | 1 | |
| | 77852 ● | OIL FILTER BASE ASSEMBLY | | 1 | 1 | 1 | | | | 1 | | | 1 | 1 | | | | 1 | | | | 1 | |
| 15 | 54D19625 ● | OIL FILTER, (short - with stud) | | 1 | 1 | 1 | | | | 1 | | | 1 | 1 | | | | 1 | | | | 1 | |
| 16 | STD-8 ★ | WASHER, 1/4 plain | | 4 | 4 | 4 | | | | 4 | 4 | | 4 | 4 | 4 | 4 | | 4 | | | | 4 | |
| 17 | STD-160 ★ | WASHER, 1/4 lock, internal teeth | | 1 | 1 | 1 | | | | 1 | 1 | | 1 | 1 | 1 | | | 1 | | | | 1 | |
| 18 | STD-1411 ★ | NUT, 1/4-20 plain | | 1 | 1 | 1 | | | | 1 | 1 | | 1 | 1 | 1 | | | 1 | | | | 1 | |
| 19 | STD-1856 ★ | SCREW, 1/4-20 x 1.00 long, hex. hd. | | 3 | 3 | 3 | | | | 3 | 3 | | 3 | 3 | 3 | | | 3 | | | | 3 | |
| 20 | 53E19600 ★ | VALVE ASSY., Temp. control oil cooler bypass | | 1 | 1 | 1 | | | | 1 | 1 | | 1 | 1 | 1 | | | 1 | | | | 1 | |
| 21 | 76510 ★ | GASKET, Valve assembly | | 1 | 1 | 1 | | | | 1 | 1 | | 1 | 1 | 1 | | | 1 | | | | 1 | |
| 22 | 25C-10 ★ | STUD, 1/4-20 x 1-1/4 long | | 1 | 1 | 1 | | | | 1 | 1 | | 1 | 1 | 1 | | | 1 | | | | 1 | |
| 23 | 55C21021 ‡ | SPRING, Oil filter bypass valve | | | | | 1 | | | | | | 1 | | | | | | | | | | |
| 24 | 76539 ‡ | SEAT, Oil relief valve | | | | | 1 | | | | | | 1 | | | | | | | | | | |
| 25 | LW-10320 ‡ | SLEEVE, Oil filter bypass valve | | | | | 1 | | | | | | 1 | | | | | | | | | | |
| 26 | MS16625-1100 ‡ | RING, Internal retaining | | | | | 1 | | | | | | 1 | | | | | | | | | | |
| 27 | LW-13904 ‡ | KIT, Converter plate, oil filter | | | | | 1 | | | | | | 1 | | | | | | | | | | |
| 28 | 54D19627 ‡ | OIL FILTER, (short - no stud) | | | | | 1 | | | | | | 1 | | | | | | | | | | |
| 29 | 53E19600 ‡ | VALVE ASSY., Temp. control oil cooler bypass | | | | | 1 | | | | | | 1 | | | | | | | | | | |
| 30 | 76510 ‡ | GASKET, Valve assembly | | | | | 1 | | | | | | 1 | | | | | | | | | | |

- * Oil pressure screen housing assembly incorporating a thermostatic valve.
- ** Oil pressure screen housing assembly without thermostatic valve.
- ★ Oil filter housing assembly (canister type). P/N 77853 oil filter housing (shown by offset view) will no longer be sold by Lycoming.
- Throw away oil filter.
- ‡ Dual magneto.

NOTE

See latest edition of

Lycoming SSP-885 for oil filter kits and replacement filters.

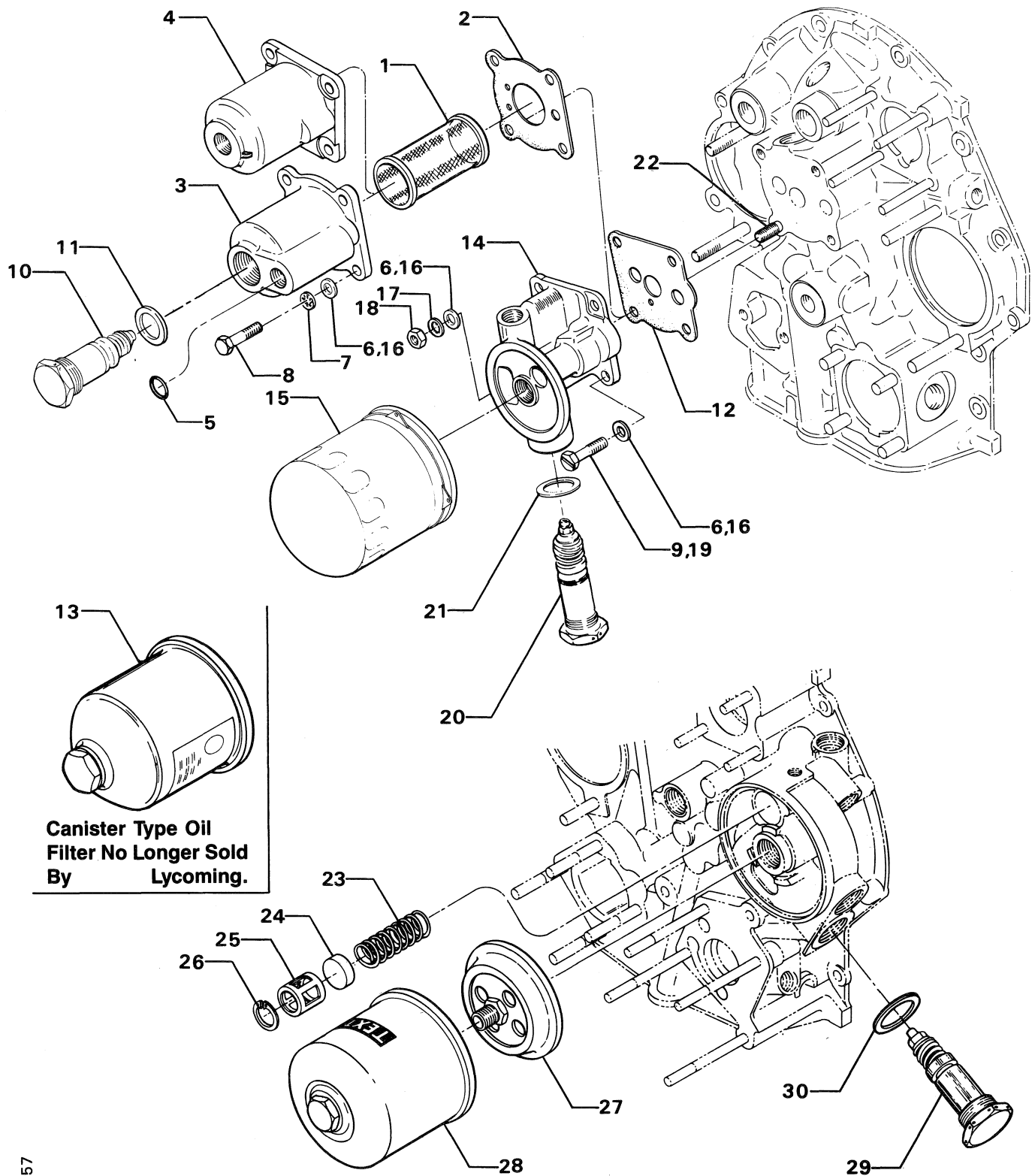


Figure 11. OIL FILTER ASSEMBLY

ACCESSORY HOUSING AND RELATED PARTS

OIL COOLER AND BREATHER FITTINGS

| FIG. REF. 12 | PART NUMBER | DESCRIPTION | O N A L L | QUANTITY PER ASSEMBLY | | | | | | | | | | | | | | | | | | |
|--------------------|-------------------|---------------------------------------|-----------------------|-----------------------|-------------|------------------|-----------------------|-------------|-------------|------------------|-------------|-------------|-----------------------|-------------|-------------|-------------|-------------|-------------|------------------|-------------|-------------|-------------|
| | | | | IO-360 | | | | | | | | | | | | | | | | AIO-360 | | |
| | | | | A 1 A | A 1 B | A 1 B 6 | A 1 B 6 D | A 1 C | A 1 D | A 1 D 6 | A 2 A | A 2 B | A 3 B 6 D | B 1 B | B 1 D | B 1 E | B 1 F | B 2 F | B 2 F 6 | B 4 A | A 1 A | A 1 B |
| 1 | 69436 | SPRING, Oil cooler bypass | | | | | | | | | | | | | | | | | 1 | | | |
| 2 | 62415 | PLUNGER, Oil cooler bypass | | | | | | | | | | | | | | | | | 1 | | | |
| 3 | 06E19769-0.63 | GASKET, 7/8 O.D. x 5/8 I.D. x 3/32 | | | | | | | | | | | | | | | | | | | | |
| | | annular | | | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 |
| 4 | 62417 | PLUG, Oil cooler bypass | | | | | | | | | | | | | | | | | 1 | 1 | 1 | 1 |
| 5 | STD-784 | PLUG, 3/8-18 NPT, Allen | | | | | | | | | | | | | | | | | 2 | 2 | 2 | 2 |
| 6 | 71140 * | FITTING, Breather | | | | | | | | | | | | | | | | | 1 | | | |
| 7 | 06E19769-0.63 | GASKET, 7/8 O.D. x 5/8 I.D. x 3/32 | | | | | | | | | | | | | | | | | | | | |
| | | annular | | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | | | |
| 8 | 62417 * * | PLUG, Oil cooler bypass | | 1 | 1 | 1 | | 1 | | 1 | | | | | 1 | 1 | | 1 | | | | |
| 9 | 69675 ★ | CONNECTOR, Acc. hsg. to oil cooler | | | | | | | | | | | | | | | | | | | | |
| | | inlet hose | | 1 | 1 | 1 | | 1 | 1 | 1 | | 1 | | 1 | | 1 | 1 | 1 | 1 | | | |
| 10 | 71600 ● | ADAPTER, Oil cooler connection | | | | | | | | 1 | | | | 1 | | | | | | | | |
| 11 | STD-784 * * | PLUG, 3/8 pipe, Allen | | 2 | 2 | 2 | | 2 | | 2 | | | | | 1 | 2 | | 2 | | | | |
| | STD-784 ★ | PLUG, 3/8 pipe, Allen | | 2 | 2 | 2 | | 2 | 2 | 2 | | 2 | | 2 | 2 | 2 | 2 | 2 | 2 | | | |
| | STD-784 ● | PLUG, 3/8 pipe, Allen | | | | | | | | 2 | | | | 2 | | | | | | | | |
| 12 | 71140 * * | FITTING, Breather | | 1 | 1 | 1 | | | | 1 | | | | | 1 | | 1 | | | | | |
| | 71140 ★ | FITTING, Breather | | 1 | 1 | 1 | | 1 | 1 | 1 | | 1 | | 1 | 1 | 1 | 1 | 1 | | | | |
| | 71140 ● | FITTING, Breather | | | | | | | | 1 | | | | 1 | | | | | | | | |
| 13 | 72413 ‡ | FITTING, Breather, 120° | | | | 1 | | 1 | | | | | | | | | | | | | | |
| 14 | MS20823-8 ■ | ELBOW, 1/2 flared tube, 3/8 pipe thd. | | | | | | | | | | | | | 1 | | | | | | | |
| 15 | AN844-10D ► | ELBOW, 5/8 I.D. hose, pipe thd., 45° | | | | | | | | | | | | | 1 | | | | | | | |
| 16 | AN932-5 ◄ | PLUG, 1/2 pipe, Allen hd. | | | | | | | | | | | | | | | | | 1 | 1 | 1 | |
| 17 | 71623 | WASHER, Oil cooler fitting | | | 1 | 1 | | | 1 | | 1 | 1 | | 1 | | 1 | 1 | | | | | |
| 18 | AN777-8D | ELBOW, Universal, 75° | | | 1 | 1 | | | 1 | | 1 | 1 | | 1 | | 1 | 1 | | | | | |
| 19 | AN901-8A | GASKET, Metal tube connection seal | | | 1 | 1 | | | 1 | | 1 | 1 | | 1 | | 1 | 1 | | | | | |
| 20 | 71620 | BOLT, Oil cooler fitting | | | 1 | 1 | | | 1 | | 1 | 1 | | 1 | | 1 | 1 | | | | | |
| 21 | STD-784 | PLUG, 3/8 pipe, Allen | | | 2 | 2 | | | 2 | | 2 | 2 | | 2 | | 2 | 2 | | | | | |
| 22 | 72413 | FITTING, Breather, 120° elbow | | | 1 | 1 | 1 | | 1 | | 1 | 1 | | 1 | | 1 | 1 | | | | | |
| | 71140 | FITTING, Breather | | | | | 1 | | | | | | | | | | | | | | | |
| 23 | AN844-10D | ELBOW, 5/8 I.D. hose, pipe thd., 45° | | | | | 1 | | | | | | 1 | | | | | | | | | |
| 24 | MS29512-10 | SEAL, Oil, 3/32 section x 45/64 I.D. | | | | | 1 | | | | | | 1 | | | | | | | | | |
| 25 | AN814-10L | PLUG, Turbo drain back | | | | | 1 | | | | | | 1 | | | | | | | | | |
| 26 | 06E19769-0.63 ‡ ‡ | GASKET, 7/8 O.D. x 5/8 I.D. x 3/32 | | | | | | | | | | | | | | | | | | | | |
| | | annular | | | | | 2 | | | | | | 2 | | | | | | | | | |
| 27 | 1540 ‡ ‡ | PLUG, Thermometer well | | | | | 2 | | | | | | 2 | | | | | | | | | |
| 28 | MS29512-10 | SEAL, Oil, 3/32 section x 45/64 I.D. | | | | | 2 | | | | | | 2 | | | | | | | | | |
| 29 | LW-12903 | REDUCER, 3/8 tube to 5/8 tube | | | | | 2 | | | | | | | | | | | | | | | |
| | AN919-15 | REDUCER, 1/2 tube to 5/8 tube | | | | | 2 | | | | | | 2 | | | | | | | | | |

- * Oil cooler bypass spring and plunger with breather fitting.
- * * Used in place of oil cooler outlet fitting.
- ★ 3/8 flared tube connection to oil cooler.
- 3/8 pipe tap connection to oil cooler.
- ‡ 120° elbow used with P/N 69675 (3/8) flared tube connector.
- Assemble in lower oil cooler boss.
- Assemble in accessory housing breather boss.
- ◄ Assemble in accessory housing breather hole.
- ‡ ‡ Assemble at oil temperature and oil pressure bosses.

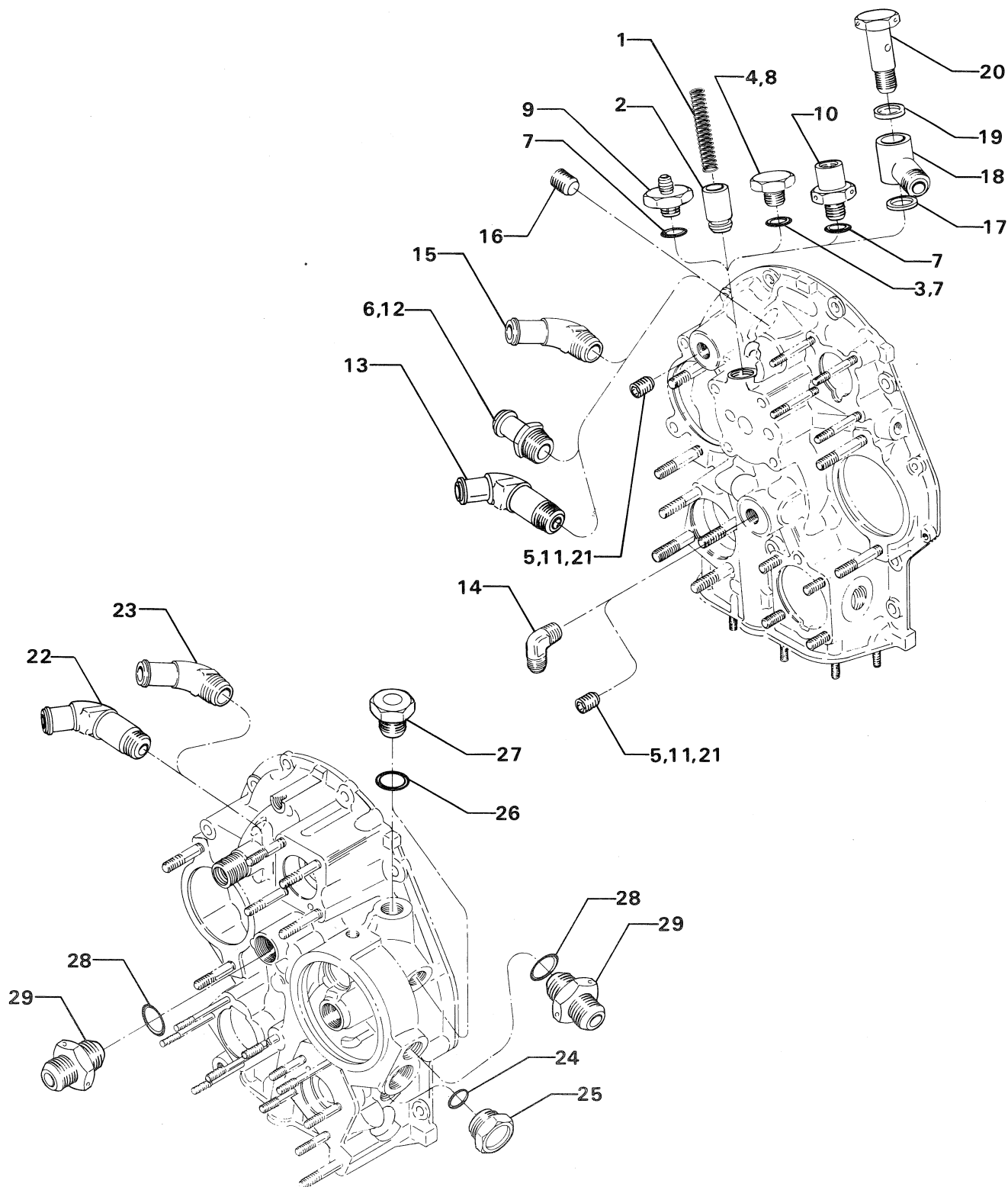


Figure 12. OIL COOLER AND BREATHER FITTINGS

ACCESSORY HOUSING AND RELATED PARTS

OIL PUMP ASSEMBLY AND ACCESSORY HOUSING ATTACHING PARTS

| FIG. REF. 13 | PART NUMBER | DESCRIPTION | O N A L L | QUANTITY PER ASSEMBLY | | | | | | | | | | | | | | | | | | |
|--------------------|----------------|-------------------------------------|-----------------------|-----------------------|-------------|------------------|-----------------------|-------------|-------------|------------------|-------------|-------------|-----------------------|-------------|-------------|-------------|-------------|-------------|------------------|-------------|-------------|-------------|
| | | | | IO-360 | | | | | | | | | | | | | | AIO-360 | | | | |
| | | | | A 1 A | A 1 B | A 1 B 6 | A 1 B 6 D | A 1 C | A 1 D | A 1 D 6 | A 2 A | A 2 B | A 3 B 6 D | B 1 B | B 1 D | B 1 E | B 1 F | B 2 F | B 2 F 6 | B 4 A | A 1 A | A 1 B |
| 1 | 78528 * | BODY ASSY., Oil pump | | | | | | | | | | | 1 | | | | | | | | | |
| 2 | STD-1339 | PLUG, 1/16-27 NPT, Allen hd. | | | | | | | | | | | 1 | | | | | | | | | |
| 3 | 78531 * * | BODY, Oil pump | | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 4 | LW-10342★ | BODY, Oil pump | | | | | 1 | | | | | | 1 | | | | | | | | | |
| 5 | LW-18110● | IMPELLER ASSY., Oil pump driven | 1 | | | | | | | | | | | | | | | | | | | |
| 6 | LW-14040★ | GEAR ASSY., Oil pump drive | | | | | 1 | | | | | | 1 | | | | | | | | | |
| 7 | 61166★ | THRUST BUTTON | | | | | 1 | | | | | | 1 | | | | | | | | | |
| 8 | 61174 | SHAFT, Oil pump drive | | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 9 | LW-18109● | IMPELLER, Oil pump driving | 1 | | | | | | | | | | | | | | | | | | | |
| 10 | STD-35 | WASHER, 5/16 plain | 3 | | | | | | | | | | | | | | | | | | | |
| 11 | STD-1420 | NUT, 5/16-18 slotted | | 3 | 3 | 3 | | 3 | 3 | 3 | 3 | 3 | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 12 | LW-31H1.75★ | BOLT, 5/16-18 x 1-3/4 long | | | | | 3 | | | | | | 3 | | | | | | | | | |
| 13 | LW-14260 | SEAL, Tachometer drive, oil | 1 | | | | | | | | | | | | | | | | | | | |
| 14 | STD-8 | WASHER, 1/4 plain | 12 | | | | | | | | | | | | | | | | | | | |
| 15 | STD-160 | WASHER, 1/4 lock, internal teeth | 12 | | | | | | | | | | | | | | | | | | | |
| 16 | LW-25-0.94 | BOLT, 1/4-20 x 15/16 long, hex. hd. | | 10 | 10 | 10 | | 10 | 10 | 10 | 10 | 10 | | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| | LW-25-0.94★ | BOLT, 1/4-20 x 15/16 long, hex. hd. | | | | | 9 | | | | | | 9 | | | | | | | | | |
| 17 | LW-25-1.50 | BOLT, 1/4-20 x 1-1/2 long, hex. hd. | | 2 | 2 | 2 | | 2 | 2 | 2 | 2 | 2 | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 18 | LW-25-1.25★ | BOLT, 1/4-20 x 1-1/4 long, hex. hd. | | | | | 1 | | | | | | 1 | | | | | | | | | |
| 19 | LW-25-0.81★ | BOLT, 1/4-20 x 13/16 long, hex. hd. | | | | | 2 | | | | | | 2 | | | | | | | | | |

* "AN" fuel pump drive.

* * "AC" fuel pump drive.

★ "AN" or "AC" fuel pump drive, dual magneto.

● Refer to the latest edition of Lycoming Service Bulletin No. 455 for kit availability.

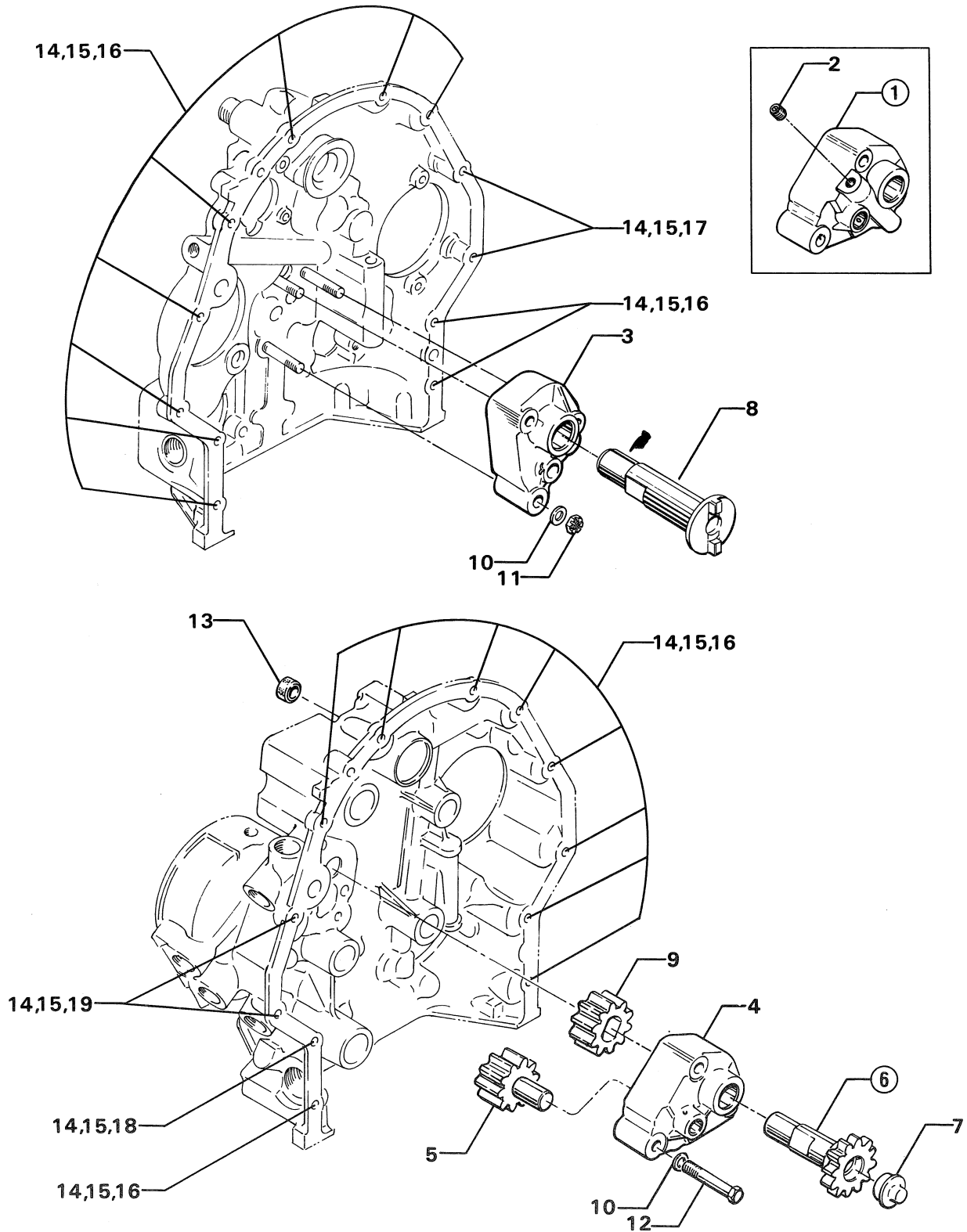


Figure 13. OIL PUMP ASSEMBLY AND ACCESSORY HOUSING ATTACHING PARTS

ACCESSORY HOUSING AND RELATED PARTS VACUUM PUMP DRIVES AND COVERS

| FIG. REF. 14 | PART NUMBER | DESCRIPTION | O N A L L | QUANTITY PER ASSEMBLY | | | | | | | | | | | | | | | | | | | |
|--------------------|----------------|--|-----------------------|-----------------------|-------------|------------------|-----------------------|-------------|-------------|------------------|-------------|-------------|-----------------------|-------------|-------------|-------------|-------------|-------------|------------------|-------------|-------------|-------------|-------------|
| | | | | IO-360 | | | | | | | | | | | | | | | | | AIO-360 | | |
| | | | | A 1 A | A 1 B | A 1 B 6 | A 1 B 6 D | A 1 C | A 1 D | A 1 D 6 | A 2 A | A 2 B | A 3 B 6 D | B 1 B | B 1 D | B 1 E | B 1 F | B 2 F | B 2 F 6 | B 4 A | A 1 A | A 1 B | B 1 B |
| 1 | 61183 | GASKET, Accessory adapter | | 1 | 1 | 1 | | 1 | | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 2 | 61098 | ADAPTER ASSY., Vacuum pump | | 1 | 1 | 1 | | 1 | | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 3 | STD-1774 | PIN, 1/8 dia. x 1/4 long | | 1 | 1 | 1 | | 1 | | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 4 | 06A19956 | OIL SEAL, 7/8 I.D. x 1-1/2 O.D. x | | | | | | | | | | | | | | | | | | | | | |
| | | 5/16 wide | | 1 | 1 | 1 | | 1 | | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 5 | 72970 | GEAR ASSY., Vacuum pump driven | | 1 | 1 | 1 | | 1 | | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 6 | LW-10305 | GEAR ASSY., Accessory driven | | | | | 1 | | | | | | 1 | | | | | | | | | | |
| 7 | 61166 | THRUST BUTTON | | | | | 1 | | | | | | 1 | | | | | | | | | | |
| 8 | 71596 | WASHER, Accessory driven gear | | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 9 | STD-2217 | OIL SEAL, 7/8 I.D. x 1-1/2 O.D. x 5/16 | | | | | | | | | | | | | | | | | | | | | |
| | | wide | | | | | 1 | | | | | | 1 | | | | | | | | | | |
| 10 | 8313 | GASKET, Vacuum pump | | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 11 | 61183 * | GASKET, Accessory adapter | | 1 | 1 | 1 | | | 1 | | 1 | 1 | | 1 | | | 1 | 1 | 1 | 1 | 1 | 1 | |
| 12 | 60430 | COVER, Vacuum pump | 1 | | | | | | | | | | | | | | | | | | | | |
| 13 | 68593 * * | SPACER, Vacuum pump stud | | 4 | 4 | 4 | | | 4 | | 4 | 4 | | 4 | | | 4 | 4 | 4 | 4 | 4 | 4 | |
| 14 | STD-8 | WASHER, 1/4 plain | 4 | | | | | | | | | | | | | | | | | | | | |
| 15 | STD-160 | WASHER, 1/4 lock, internal teeth | 4 | | | | | | | | | | | | | | | | | | | | |
| 16 | STD-1411 | NUT, 1/4-20 plain | 4 | | | | | | | | | | | | | | | | | | | | |

* This gasket is fashioned to fit between P/N 61098 adapter assy. and accessory housing.

* * Required when no vacuum pump is used.

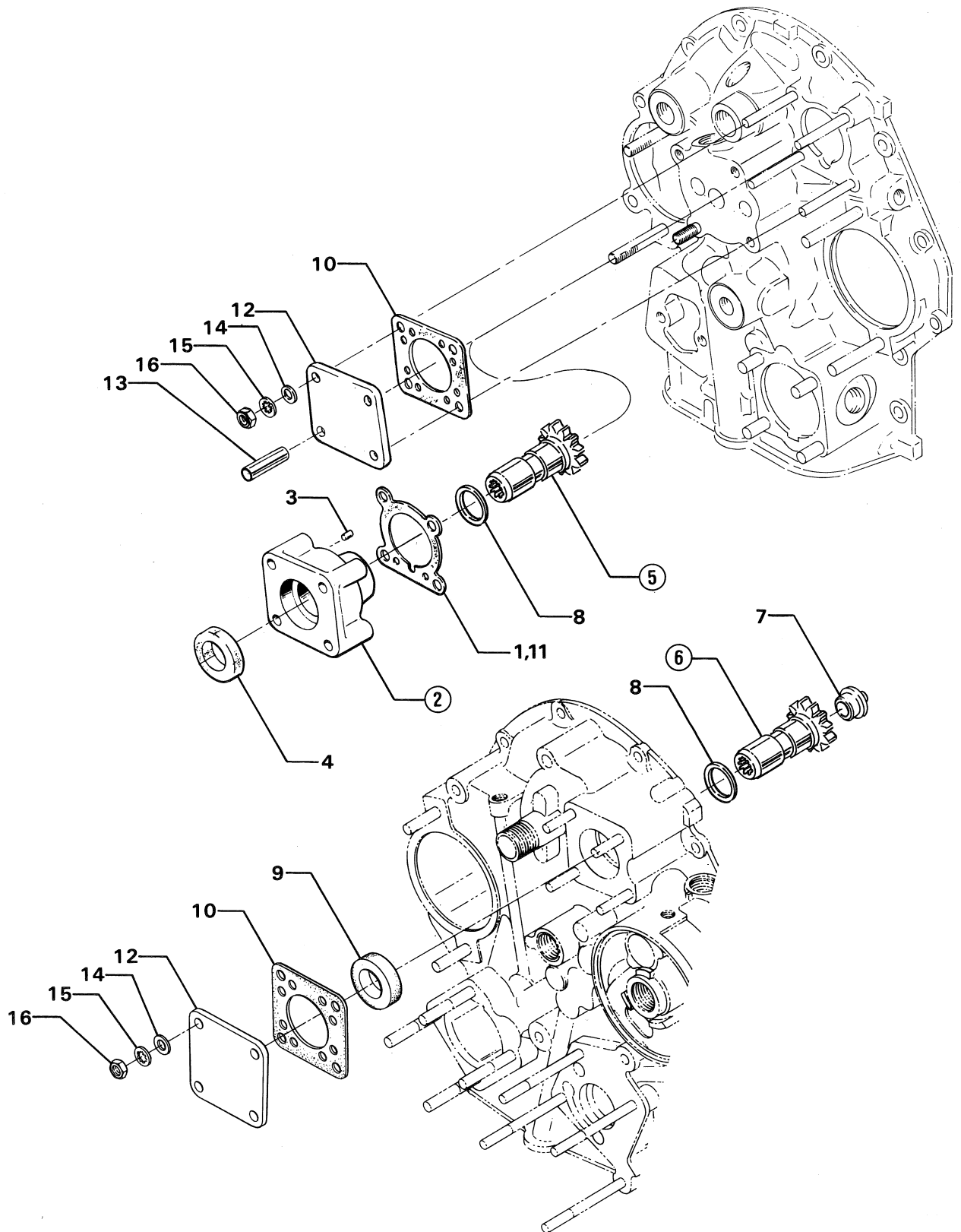


Figure 14. VACUUM PUMP DRIVES AND COVERS

ACCESSORY HOUSING AND RELATED PARTS

VACUUM PUMP AND PROPELLER GOVERNOR (DUAL DRIVE)

| FIG. REF. 15 | PART NUMBER | DESCRIPTION | O N A L L | QUANTITY PER ASSEMBLY | | | | | | | | | | | | | | | | | | |
|--------------------|----------------|--|-----------------------|-----------------------|-------------|------------------|-----------------------|-------------|-------------|------------------|-------------|-------------|-----------------------|-------------|-------------|-------------|-------------|-------------|------------------|-------------|-------------|-------------|
| | | | | IO-360 | | | | | | | | | | | | | | | AIO-360 | | | |
| | | | | A 1 A | A 1 B | A 1 B 6 | A 1 B 6 D | A 1 C | A 1 D | A 1 D 6 | A 2 A | A 2 B | A 3 B 6 D | B 1 B | B 1 D | B 1 E | B 1 F | B 2 F | B 2 F 6 | B 4 A | A 1 A | A 1 B |
| 1 | 61183 | GASKET, Accessory adapter | | | | | | | | | | 1 | | | | | | | | | | |
| 2 | 70348 | DUAL DRIVE ASSY., Vacuum pump & prop. governor | | | | | | | | | | 1 | | | | | | | | | | |
| 3 | 69725 | ADAPTER ASSY., Dual access. drive | | | | | | | | | | 1 | | | | | | | | | | |
| 4 | 25C-12 | STUD, 1/4-20 x 1-1/2 long | | | | | | | | | | 1 | | | | | | | | | | |
| 5 | 25C-29 | STUD, 1/4-20 x 3-5/8 long | | | | | | | | | | 3 | | | | | | | | | | |
| 6 | 66145 | DOWEL, 1/4 dia. x 1/2 long | | | | | | | | | | 2 | | | | | | | | | | |
| 7 | 69319 | GEAR ASSY., Accessory drive | | | | | | | | | | 1 | | | | | | | | | | |
| 8 | 61166 | THRUST BUTTON, Vacuum pump gear | | | | | | | | | | 1 | | | | | | | | | | |
| 9 | 71596 | WASHER, Accessory driven gear | | | | | | | | | | 1 | | | | | | | | | | |
| 10 | 69316 | GEAR, Dual accessory drive | | | | | | | | | | 1 | | | | | | | | | | |
| 11 | 69730 | GEAR ASSY., Accessory idler | | | | | | | | | | 1 | | | | | | | | | | |
| 12 | 69731 | BUSHING, Accessory idler gear | | | | | | | | | | 1 | | | | | | | | | | |
| 13 | 71596 | WASHER, Accessory driven gear | | | | | | | | | | 2 | | | | | | | | | | |
| 14 | STD-2072 | “O” RING, Static seal | | | | | | | | | | 1 | | | | | | | | | | |
| 15 | 73231 | GEAR ASSY., Vacuum pump driven | | | | | | | | | | 1 | | | | | | | | | | |
| 16 | 69720 | GASKET, Dual accessory drive adapter cover | | | | | | | | | | 1 | | | | | | | | | | |
| 17 | 69719 | COVER ASSY., Vacuum pump & prop. gov. adapter | | | | | | | | | | 1 | | | | | | | | | | |
| 18 | STD-2217 | SEAL, 7/8 I.D. x 1-1/2 O.D. x 5/16 wide | | | | | | | | | | 1 | | | | | | | | | | |
| 19 | 25C-12 | STUD, 1/4-20 x 1-1/2 long | | | | | | | | | | 1 | | | | | | | | | | |
| 20 | 25C-16 | STUD, 1/4-20 x 2.00 long | | | | | | | | | | 1 | | | | | | | | | | |
| 21 | 69318 | SHAFT, Accessory idler gear | | | | | | | | | | 1 | | | | | | | | | | |
| 22 | STD-938 | DOWEL, 3/32 dia. x 11/32 long | | | | | | | | | | 1 | | | | | | | | | | |
| 23 | STD-1339 | PLUG, 1/16-27 pipe, Allen | | | | | | | | | | 1 | | | | | | | | | | |
| 24 | 1102 | PLUG, 1/8-27 pipe, Allen | | | | | | | | | | 1 | | | | | | | | | | |
| 25 | STD-1774 | PIN, 1/8 dia. x 1/4 long | | | | | | | | | | 1 | | | | | | | | | | |
| 26 | STD-8 | WASHER, 1/4 plain | | | | | | | | | | 2 | | | | | | | | | | |
| 27 | STD-160 | WASHER, 1/4 lock, internal teeth | | | | | | | | | | 2 | | | | | | | | | | |
| 28 | STD-1411 | NUT, 1/4-20 plain | | | | | | | | | | 2 | | | | | | | | | | |
| 29 | STD-8 | WASHER, 1/4 plain | | | | | | | | | | 4 | | | | | | | | | | |
| 30 | STD-160 | WASHER, 1/4 lock, internal teeth | | | | | | | | | | 4 | | | | | | | | | | |
| 31 | 69320 | CAPSCREW, 1/4-20 x 2-23/32 long, socket hd. | | | | | | | | | | 3 | | | | | | | | | | |
| 32 | STD-1411 | NUT, 1/4-20 plain | | | | | | | | | | 1 | | | | | | | | | | |
| 33 | STD-696 | WASHER, 17/64 I.D. x 1/2 O.D. x 1/32 thick | | | | | | | | | | AR | | | | | | | | | | |
| 34 | 71023 | BRACE, Dual drive, vac. pump & prop. gov. support | | | | | | | | | | 1 | | | | | | | | | | |
| 35 | STD-160 | WASHER, 1/4 lock, internal teeth | | | | | | | | | | 1 | | | | | | | | | | |
| 36 | LW-25-1.25 | BOLT, 1/4-20 x 1-1/4 long, hex. hd. | | | | | | | | | | 1 | | | | | | | | | | |
| 37 | 69827 | GASKET, Governor spacer | | | | | | | | | | 1 | | | | | | | | | | |
| 38 | 69737 | SPACER, Governor | | | | | | | | | | 1 | | | | | | | | | | |

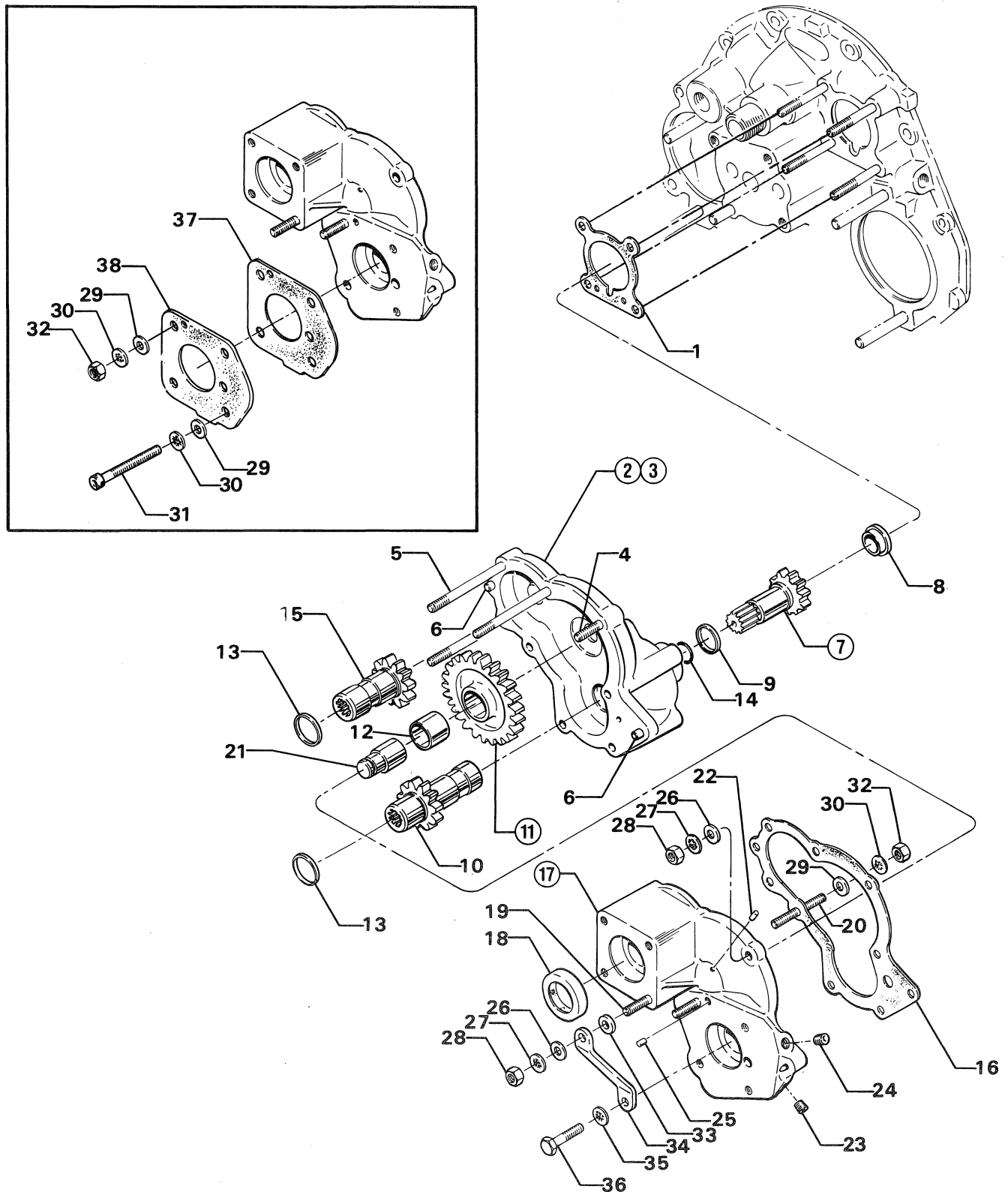


Figure 15. VACUUM PUMP AND PROPELLER GOVERNOR (DUAL DRIVE)

ACCESSORY HOUSING AND RELATED PARTS

FUEL PUMP AND FUEL PUMP COVERS

| FIG. REF. 16 | PART NUMBER | DESCRIPTION | O N A L L | QUANTITY PER ASSEMBLY | | | | | | | | | | | | | | | | | | | | | |
|--------------------|----------------|---|-----------------------|-----------------------|-------------|------------------|-----------------------|-------------|-------------|------------------|-------------|-------------|-----------------------|-------------|-------------|-------------|-------------|-------------|------------------|-------------|-------------|-------------|-------------|---|---|
| | | | | IO-360 | | | | | | | | | | | | | | | | AIO-360 | | | | | |
| | | | | A 1 A | A 1 B | A 1 B 6 | A 1 B 6 D | A 1 C | A 1 D | A 1 D 6 | A 2 A | A 2 B | A 3 B 6 D | B 1 B | B 1 D | B 1 E | B 1 F | B 2 F | B 2 F 6 | B 4 A | A 1 A | A 1 B | B 1 B | | |
| 1 | 60096 | GASKET, Fuel pump | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | LW-10799 | SPACER, Fuel pump insulating | | | | | | | | | | | | | | | 1 | | | | | | | | |
| 3 | LW-15473 | FUEL PUMP, Dual diaphragm | | | | | | | | | | | | | | | | | | | | | | | |
| | | (6441234) | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 4 | 78993 | FUEL PUMP, (RG-17980-J) | | | | | | | | | | | | | | | 1 | | | | | | | | |
| 5 | STD-33 | WASHER, 3/8 plain | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 6 | STD-35 | WASHER, 5/16 plain | | | | | | | | | | | | | | | 4 | | | | | | | | |
| 7 | STD-1882 | SCREW, 3/8-16 x 1-9/32 long, socket | | | | | | | | | | | | | | | | | | | | | | | |
| | | hd., dr. hd. | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 8 | STD-475 | WASHER, 5/16 lock, internal teeth | | | | | | | | | | | | | | | 4 | | | | | | | | |
| 9 | STD-1410 | NUT, 5/16-18 plain | | | | | | | | | | | | | | | 4 | | | | | | | | |
| 10 | 1691-C | GASKET, Fuel pump | | | | | | | | | | | | | | | 1 | | | | | | | | |
| 11 | 60431 | COVER, Fuel pump | | | | | | | | | | | | | | | 1 | | | | | | | | |
| 12 | STD-35 | WASHER, 5/16 plain | | | | | | | | | | | | | | | 4 | | | | | | | | |
| 13 | STD-475 | WASHER, 5/16 lock, internal teeth | | | | | | | | | | | | | | | 4 | | | | | | | | |
| 14 | STD-1410 | NUT, 5/16-18 plain | | | | | | | | | | | | | | | 4 | | | | | | | | |
| 15 | 74070 * | ● ELBOW, 3/8 tubing, adj. 45° | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | | |
| | LW-16562 * | ● NIPPLE, 3/8 flared tube to 9/16-18 str. | | | | | | | | | | | | | | | | | | | | | | | |
| | | thd. | | | | 1 | | | | | | | | | | | | 1 | | | | | | | |
| 16 | 74070 * * | ● ELBOW, 3/8 tubing, adj. 45° | | | | | | | | | | | | | | | | 1 | | | | | | | |
| 17 | 72377 * | ● ELBOW, 3/8 tubing, adj. 90° | | | | | | | | | | | | | | | 1 | | | 1 | 1 | 1 | 1 | | |
| | 72377 ★ | ● ELBOW, 3/8 tubing, adj. 90° | | | 2 | 2 | | | | | | | | | | | | | | | | 2 | | 2 | 2 |
| 18 | 75924 | SHAFTGEAR ASSY., Fuel pump drive | | | | | | | | | | | | | | | | 1 | | | | | | | |
| 19 | 61166 | THRUST BUTTON, Fuel pump gear | | | | | | | | | | | | | | | | 1 | | | | | | | |
| 20 | 69164 | GASKET, Fuel pump adapter | | | | | | | | | | | | | | | | 1 | | | | | | | |
| 21 | 69159 | ADAPTER ASSY., Fuel pump drive | | | | | | | | | | | | | | | | 1 | | | | | | | |
| 22 | STD-1774 | PIN, 1/8 dia. x 1/4 long | | | | | | | | | | | | | | | | 1 | | | | | | | |
| 23 | STD-213 | SEAL, Oil, 3/4 I.D. x 1-3/8 O.D. x | | | | | | | | | | | | | | | | | | | | | | | |
| | | 5/16 wide | | | | | | | | | | | | | | | | 1 | | | | | | | |

* Assemble in fuel pump outlet.

* * Assemble in fuel pump inlet (horizontal).

★ Assemble in fuel pump inlet and outlet.

● Use 1 each, P/N MS29512-06 "O" Ring with these fittings.

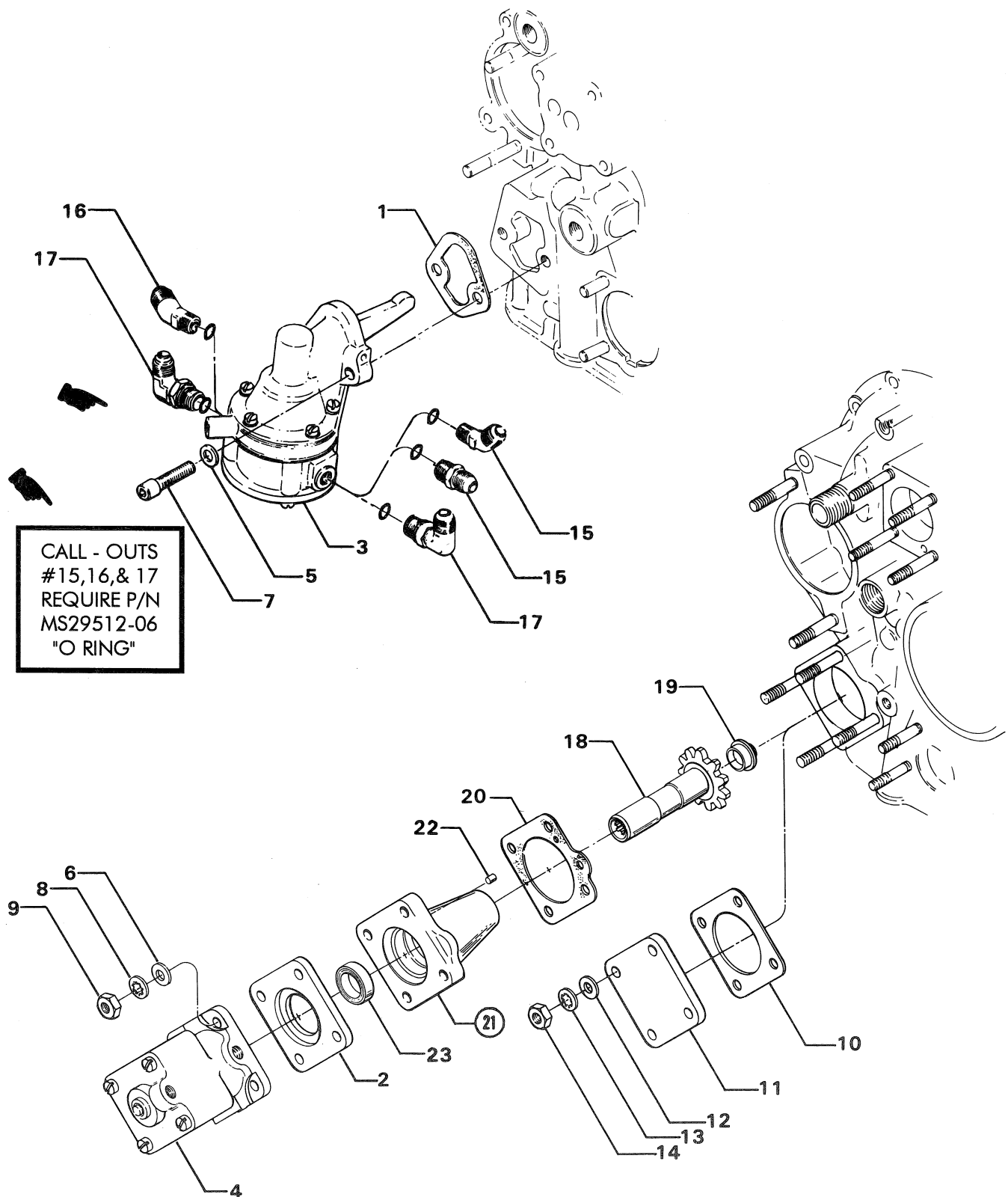


Figure 16. FUEL PUMPS AND FUEL PUMP COVERS

CYLINDER, PISTON AND VALVE TRAIN

CONNECTING ROD, PISTON AND RING ASSEMBLIES

| FIG. REF. 17 | PART NUMBER | DESCRIPTION | O N A L L | QUANTITY PER ASSEMBLY | | | | | | | | | | | | | | | | | |
|--------------------|----------------|-------------------------------------|-----------------------|-----------------------|-------------|------------------|-----------------------|-------------|-------------|------------------|-------------|-------------|-----------------------|-------------|-------------|-------------|-------------|-------------|------------------|-------------|-------------|
| | | | | IO-360 | | | | | | | | | | | | | | | | AIO-360 | |
| | | | | A 1 A | A 1 B | A 1 B 6 | A 1 B 6 D | A 1 C | A 1 D | A 1 D 6 | A 2 A | A 2 B | A 3 B 6 D | B 1 B | B 1 D | B 1 E | B 1 F | B 2 F | B 2 F 6 | B 4 A | A 1 A |
| 1 | LW-11750-S | CONNECTING ROD ASSEMBLY | | | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | |
| | LW-19332-S * | CONNECTING ROD ASSEMBLY | | 4 | 4 | | | 4 | 4 | | 4 | 4 | | | | | | | | | |
| | 77450-S | CONNECTING ROD ASSEMBLY | | | | 4 | 4 | | | 4 | | 4 | | | | | | | 4 | 4 | 4 |
| 2 | LW-13923 | BUSHING, Connecting rod, upper | 4 | | | | | | | | | | | | | | | | | | |
| 3 | 75060● | BOLT, Connecting rod | | | | 8 | 8 | | | 8 | | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 |
| | 75061★ | BOLT, Connecting rod | | | | | | | | | | 8 | 8 | 8 | 8 | 8 | 8 | 8 | | | |
| | LW-12596 * | BOLT, Connecting rod | | 8 | 8 | | | 8 | 8 | | 8 | 8 | | | | | | | | | |
| 4 | LW-12186 | NUT, Connecting rod bolt | 8 | | | | | | | | | | | | | | | | | | |
| 5 | 74309 * | BEARING, Connecting rod | | 8 | 8 | | | 8 | 8 | | 8 | 8 | | | | | | | | | |
| | 76394 * | BEARING, Connecting rod (alternate) | | 8 | 8 | | | 8 | 8 | | 8 | 8 | | | | | | | | | |
| | 18N19391 * | BEARING, Connecting rod (alternate) | | 8 | 8 | | | 8 | 8 | | 8 | 8 | | | | | | | | | |
| | LW-13212 | BEARING, Connecting rod | | | | 8 | 8 | | | 8 | | 8 | | | | | | | 8 | 8 | 8 |
| | LW-13209 | BEARING, Connecting rod (alternate) | | | | 8 | 8 | | | 8 | | 8 | | | | | | | 8 | 8 | 8 |
| | LW-16143 | BEARING, Connecting rod (alternate) | | | | 8 | 8 | | | 8 | | 8 | | | | | | | 8 | 8 | 8 |
| | LW-13521 | BEARING, Connecting rod | | | | | | | | | | 8 | 8 | 8 | 8 | 8 | 8 | 8 | | | |
| | LW-13522 | BEARING, Connecting rod (alternate) | | | | | | | | | | 8 | 8 | 8 | 8 | 8 | 8 | 8 | | | |
| | LW-16048 | BEARING, Connecting rod (alternate) | | | | | | | | | | 8 | 8 | 8 | 8 | 8 | 8 | 8 | | | |
| 6 | 75089 | PISTON, Compression ratio 8.50:1 | | | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | |
| | LW-10207-S | PISTON, Compression ratio 8.70:1 | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | | 4 | 4 | 4 |
| 7 | LW-14077* * | PIN, Piston | | | | 4 | | | | | | | | | 4 | | | | | | |
| | LW-14078 | PIN, Piston | 4 | | | | | | | | | | | | | | | | | | |
| 8 | LW-11775 | PLUG, Piston pin, piloted | | | | 8 | | | | | | | | | 8 | | | | | | |
| | 60828 | PLUG, Piston pin | 8 | | | | | | | | | | | | | | | | | | |
| 9 | 74241 | RING, Piston, compression | 8 | | | | | | | | | | | | | | | | | | |
| 10 | 14H21950 | RING, Piston, oil regulating | 4 | | | | | | | | | | | | | | | | | | |

* Large journal (2.25 dia.) connecting rod.

* * Receives a P/N LW-11775 piloted piston pin plug (use in complete sets only).

★ Torque bolt.

● Stretch, machined on both ends. (Used in some applications as an alternate to P/N 75061 bolt. See latest edition of Lycoming Service Instruction No. 1450.)

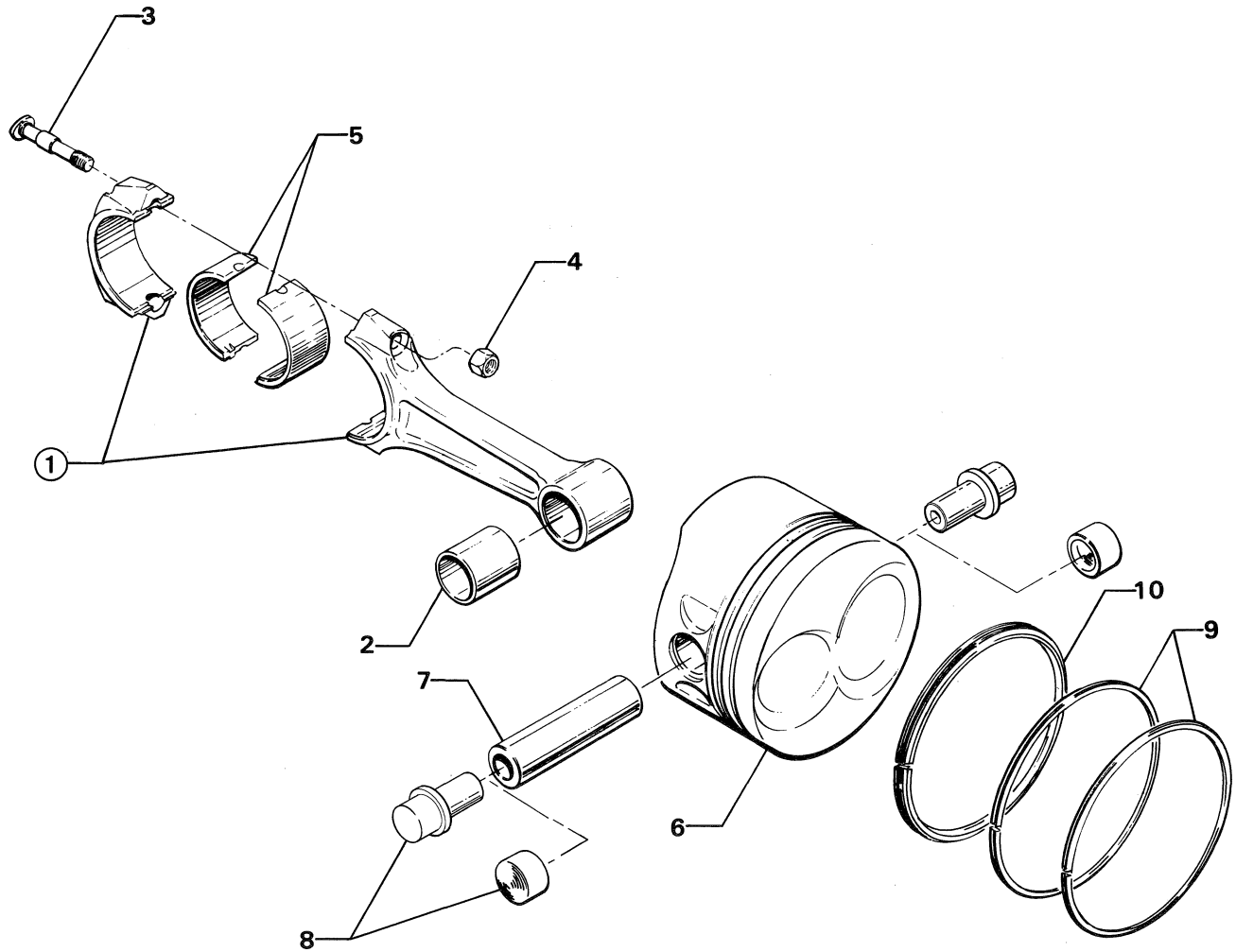


Figure 17. CONNECTING ROD, PISTON AND RING ASSEMBLIES

CYLINDER, PISTON AND VALVE TRAIN

CYLINDER ASSEMBLY

| FIG. REF. 18 | PART NUMBER | DESCRIPTION | O N A L | QUANTITY PER ASSEMBLY | | | | | | | | | | | | | | | |
|--------------------|----------------|--------------------------------------|------------------|-----------------------|-------------|------------------|-----------------------|-------------|-------------|------------------|-------------|-------------|-----------------------|-------------|-------------|-------------|-------------|-------------|------------------|
| | | | | IO-360 | | | | | | | | | | | | AIO-360 | | | |
| | | | | A 1 A | A 1 B | A 1 B 6 | A 1 B 6 D | A 1 C | A 1 D | A 1 D 6 | A 2 A | A 2 B | A 3 B 6 D | B 1 B | B 1 D | B 1 E | B 1 F | B 2 F | B 2 F 6 |
| 1 | LW-12427 | CYLINDER AND HEAD ASSY., Nitrided | | | | | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 |
| | LW-12988 * | CYLINDER AND HEAD ASSY., Nitrided | | | | 4 | | | | | | | 4 | | | | | | |
| | LW-12993 | CYLINDER AND HEAD ASSY., Nitrided | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | 4 |
| 2 | 72057 | SEAT, Intake valve | | | | | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 |
| | LW-12688 | SEAT, Intake valve | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | 4 |
| 3 | 72058 | SEAT, Exhaust valve | | | | | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 |
| | 16T19468 | SEAT, Exhaust valve | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | 4 |
| 4 | 61681 | GUIDE, Valve, intake | | | | | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 |
| | 66713 | GUIDE, Valve, intake | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | 4 |
| 5 | 74230 | GUIDE, Valve, exhaust | | | | | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 |
| | 72897 | GUIDE, Valve, exhaust | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | 4 |
| | 75838 | GUIDE, Valve, exhaust (ni-resist) | | | | 4 | | | | | | | 4 | | | | | | |
| 6 | 66796 | INSERT, Spark plug 18-1.5MM | 8 | | | | | | | | | | | | | | | | |
| | 69260 * | INSERT, Spark plug (long reach) | | | | 8 | | | | | | | 8 | | | | | | |
| 7 | STD-1872 | INSERT, 1/8-27 Helicoil, taper pipe | | | | | | | | | | | | | | | | | |
| | | thd. | 8 | | | | | | | | | | | | | | | | |
| 8 | 31C-12 | STUD, 5/16-18 x 1-1/2 long | 8 | | | | | | | | | | | | | | | | |
| 9 | 31C-13 * | STUD, 5/16-18 x 1-5/8 long | | | | 8 | | | | | | | 8 | | | | | | |
| 10 | 25C-8 | STUD, 1/4-20 x 1.00 long | | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | | | | | | 16 |
| 11 | 25C-9 | STUD, 1/4-20 x 1-1/8 long | | | | | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 |
| 12 | 66670 | BUSHING, Rocker shaft, inner | | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | | | | | | 16 |
| 13 | MS20823-6D | ELBOW, 3/8 flared tube, 45° | 4 | | | | | | | | | | | | | | | | |
| 14 | 66610 | BUSHING, Rocker shaft | | | | | | | | | | | | 16 | 16 | 16 | 16 | 16 | 16 |
| 15 | 72343 | STABILIZER, Cyl. head fins, 15 teeth | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | 4 |
| 16 | 72344 | STABILIZER, Cyl. head fins, 26 teeth | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | 4 |
| 17 | 1102 * * | PLUG, 1/8-27 NPT, Allen | 4 | | | | | | | | | | | | | | | | |

* Cylinder Assembly employing long reach spark plugs.

* * Assemble in cylinder head.

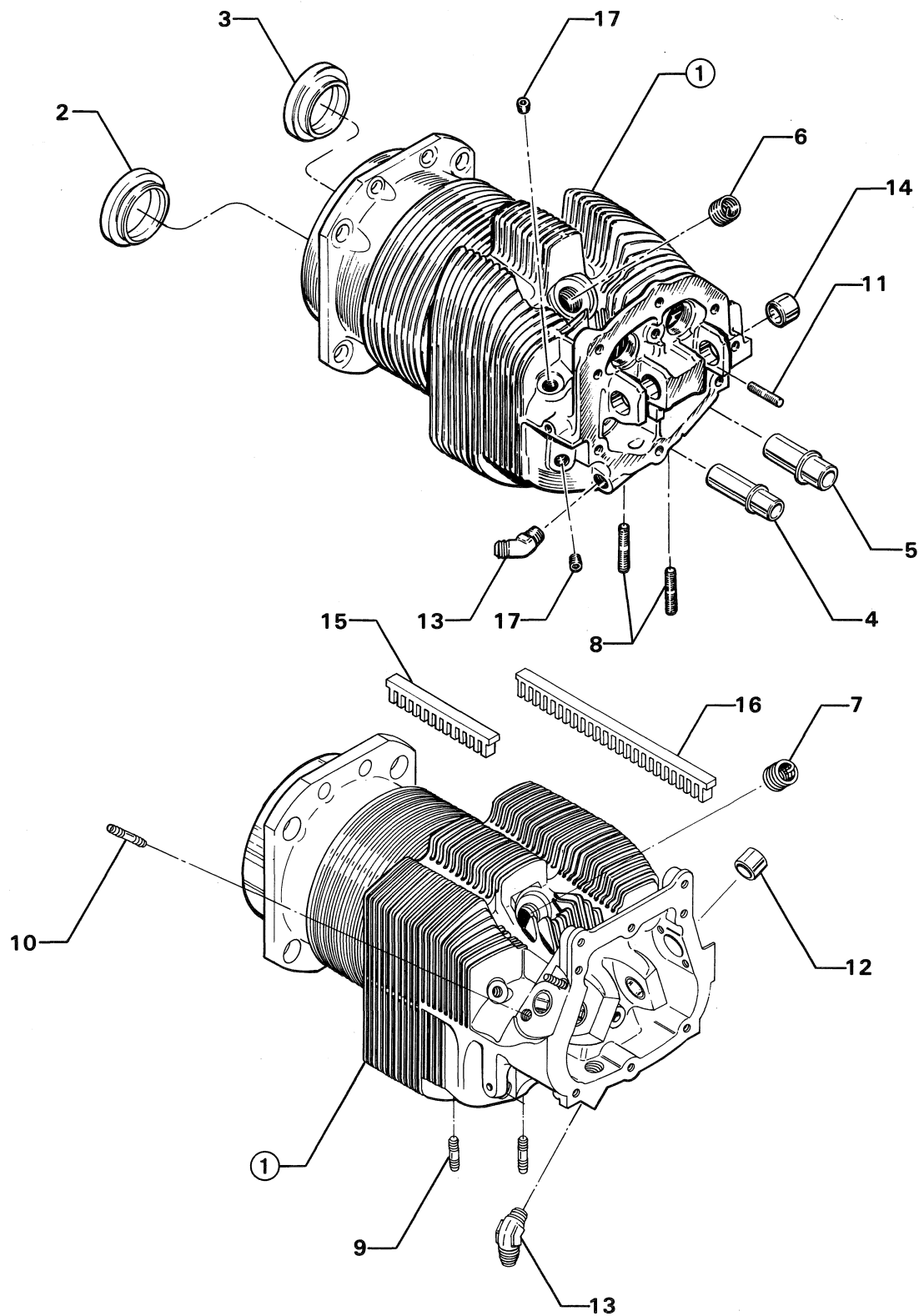


Figure 18. CYLINDER ASSEMBLY

CYLINDER, PISTON AND VALVE TRAIN VALVE ASSEMBLY

| FIG. REF. 19 | PART NUMBER | DESCRIPTION | O N A L L | QUANTITY PER ASSEMBLY | | | | | | | | | | | | | | | | | | | |
|--------------------|----------------|---|-----------------------|-----------------------|-------------|------------------|-----------------------|-------------|-------------|------------------|-------------|-------------|-----------------------|-------------|-------------|-------------|-------------|-------------|------------------|-------------|-------------|-------------|-------------|
| | | | | IO-360 | | | | | | | | | | | | | | AIO-360 | | | | | |
| | | | | A 1 A | A 1 B | A 1 B 6 | A 1 B 6 D | A 1 C | A 1 D | A 1 D 6 | A 2 A | A 2 B | A 3 B 6 D | B 1 B | B 1 D | B 1 E | B 1 F | B 2 F | B 2 F 6 | B 4 A | A 1 A | A 1 B | B 1 B |
| 1 | 73938 | VALVE, Intake | | | | | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | |
| | LW-13622 | VALVE, Intake | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | | | 4 | 4 | 4 |
| 2 | LW-19001 | VALVE, Exhaust (rotator type) | | | | | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | |
| | LW-16740 | VALVE, Exhaust (rotator type) | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | | | 4 | 4 | 4 |
| 3 | LW-11795 | SPRING, Valve, inner | | | | | | | | | | | | 8 | 8 | 8 | 8 | 8 | 8 | 8 | | | |
| | LW-11797 | SPRING, Valve, inner | | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | | | | | | | | 8 | 8 | 8 |
| 4 | LW-11800 | SPRING, Valve, outer | | | | | | | | | | | | 8 | 8 | 8 | 8 | 8 | 8 | 8 | | | |
| | LW-11796 | SPRING, Valve, outer | | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | | | | | | | | 8 | 8 | 8 |
| 5 | 65441 | SEAT, Valve spring, lower intake | | | | | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | |
| 6 | LW-13323 | SEAT, Valve spring, lower exhaust | | | | | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | |
| 7 | LW-13322 | SEAT, Valve spring, lower intake & exh. | | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | | | | | | | | 8 | 8 | 8 |
| 8 | LW-10077 | SEAT, Valve spring, upper intake | | | | | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | |
| | 69532 | SEAT, Valve spring, upper intake | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | | | 4 | 4 | 4 |
| 9 | LW-16475 | SEAT, Valve spring, upper exhaust | | | | | | | | | | | | | | | | | | | | | |
| | | (rotator type) | 4 | | | | | | | | | | | | | | | | | | | | |
| 10 | 60009 | KEY, Valve, intake | | | | | | | | | | | | 8 | 8 | 8 | 8 | 8 | 8 | 8 | | | |
| | 72050 | KEY, Valve, intake | | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | | | | | | | | 8 | 8 | 8 |
| 11 | 17C21191 | KEY, Valve, exhaust (rotator type) | 8 | | | | | | | | | | | | | | | | | | | | |
| 12 | 62388 | CAP, Valve stem, intake | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | | | 4 | 4 | 4 |
| 13 | 17C19386 | CAP, Valve stem, exhaust (rotator type) | 4 | | | | | | | | | | | | | | | | | | | | |
| 14 | 78290 | PLUNGER ASSY., Hydraulic tappet | 8 | | | | | | | | | | | | | | | | | | | | |
| 15 | 78524 | SOCKET, Push rod, hydraulic tappet | 8 | | | | | | | | | | | | | | | | | | | | |
| 16 | LW-11485 | TUBE, Push rod shroud | | | | | | | | | | | | 8 | 8 | 8 | 8 | 8 | 8 | 8 | | | |
| 17 | 72255 | SHROUD TUBE ASSY., Push rod | | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | | | | | | | | 8 | 8 | 8 |
| 18 | LW-14995 | SPRING, Shroud tube | | | | | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | |
| 19 | LW-13077 | SPRING, Shroud tube | | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | | | | | | | | 16 | 16 | 16 |
| 20 | LW-12272 | LOCKPLATE, Shroud tube | | | | | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | |
| 21 | STD-1411 | NUT, 1/4-20 plain | | | | | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | |
| 22 | 66728 | WASHER, 25/32 I.D. x 1-1/4 O.D. x . | | | | | | | | | | | | | | | | | | | | | |
| | | 1/32 thick | | AR | AR | AR | AR | AR | AR | AR | AR | AR | AR | | | | | | | | AR | AR | AR |
| 23 | 61503 | SLEEVE, Shroud tube seal | | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | | | | | | | | 8 | 8 | 8 |
| 24 | 70310 | SEAL, Shroud tube | | | | | | | | | | | | 8 | 8 | 8 | 8 | 8 | 8 | 8 | | | |
| 25 | LW-18661 | SEAL, Shroud tube (green) | | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 16 | 16 | 16 |

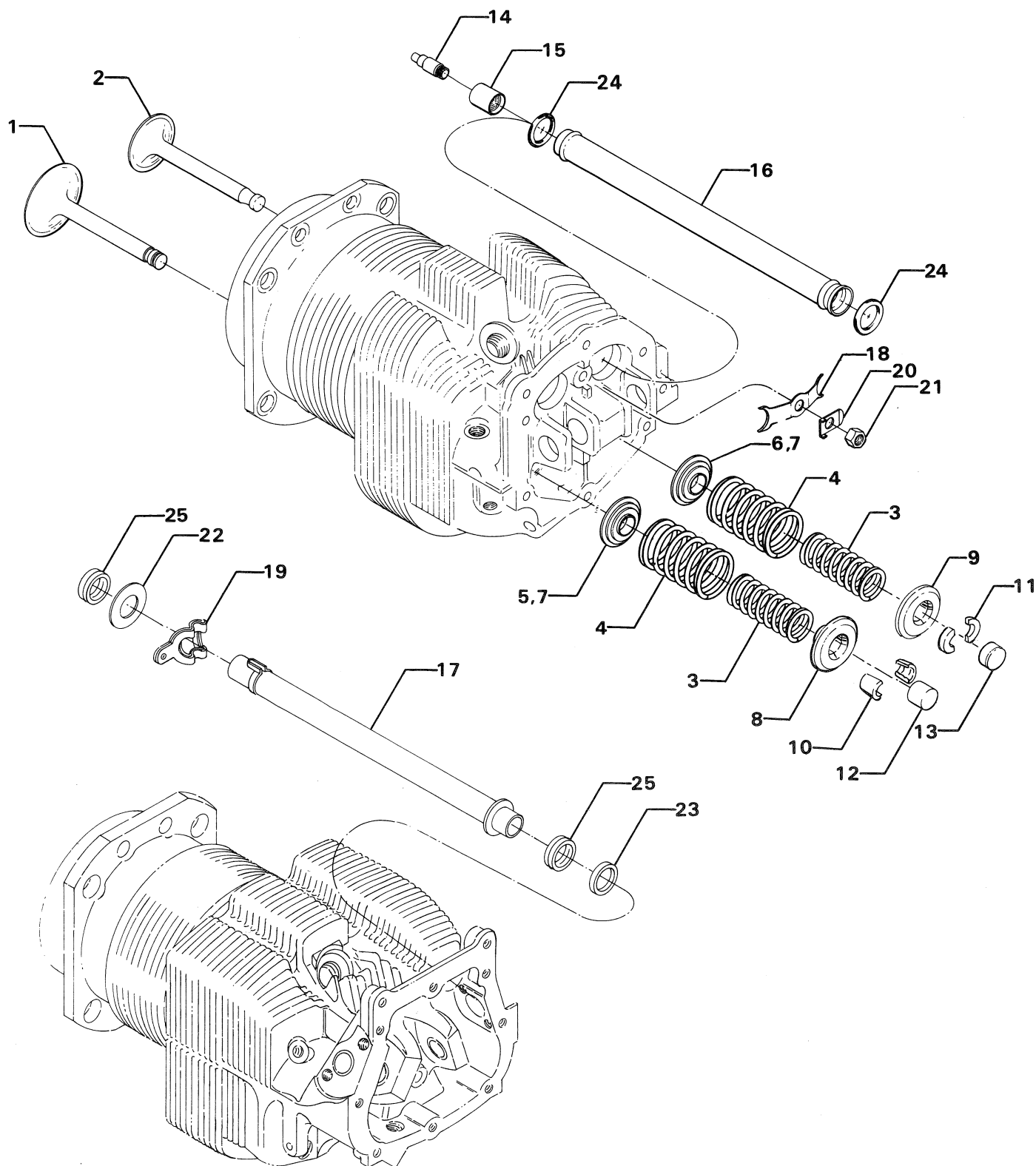


Figure 19. VALVE ASSEMBLY

CYLINDER, PISTON AND VALVE TRAIN

CYLINDER RELATED PARTS

| FIG. REF. 20 | PART NUMBER | DESCRIPTION | O N A L L | QUANTITY PER ASSEMBLY | | | | | | | | | | | | | | | | | | | |
|--------------------|----------------|---------------------------------------|-----------------------|-----------------------|-------------|------------------|-----------------------|-------------|-------------|------------------|-------------|-------------|-----------------------|-------------|-------------|-------------|-------------|-------------|------------------|-------------|-------------|-------------|-------------|
| | | | | IO-360 | | | | | | | | | | | | | | | | AIO-360 | | | |
| | | | | A 1 A | A 1 B | A 1 B 6 | A 1 B 6 D | A 1 C | A 1 D | A 1 D 6 | A 2 A | A 2 B | A 3 B 6 D | B 1 B | B 1 D | B 1 E | B 1 F | B 2 F | B 2 F 6 | B 4 A | A 1 A | A 1 B | B 1 B |
| 1 | 73434 * | ROD ASSY., Push (A total of 8 req'd.) | | | | | | | | | | | | AR | AR | AR | AR | AR | AR | AR | | | |
| | 15F19957-35 * | ROD ASSY., Push (A total of 8 req'd.) | | | | | | | | | | | | AR | AR | AR | AR | AR | AR | AR | | | |
| | 15F19957-36 * | ROD ASSY., Push (A total of 8 req'd.) | | | | | | | | | | | | AR | AR | AR | AR | AR | AR | AR | | | |
| | 73437 * | ROD ASSY., Push (A total of 8 req'd.) | | | | | | | | | | | | AR | AR | AR | AR | AR | AR | AR | | | |
| | 73455 * | ROD ASSY., Push (A total of 8 req'd.) | | AR | AR | AR | AR | AR | AR | AR | AR | AR | AR | | | | | | | | AR | AR | AR |
| | 73456 * | ROD ASSY., Push (A total of 8 req'd.) | | AR | AR | AR | AR | AR | AR | AR | AR | AR | AR | | | | | | | | AR | AR | AR |
| | 15F19957-57 * | ROD ASSY., Push (A total of 8 req'd.) | | AR | AR | AR | AR | AR | AR | AR | AR | AR | AR | | | | | | | | AR | AR | AR |
| | 73458 * | ROD ASSY., Push (A total of 8 req'd.) | | AR | AR | AR | AR | AR | AR | AR | AR | AR | AR | | | | | | | | AR | AR | AR |
| | 73555 * | ROD ASSY., Push (A total of 8 req'd.) | | AR | AR | AR | AR | AR | AR | AR | AR | AR | AR | | | | | | | | AR | AR | AR |
| | 73556 * | ROD ASSY., Push (A total of 8 req'd.) | | AR | AR | AR | AR | AR | AR | AR | AR | AR | AR | | | | | | | | AR | AR | AR |
| | 73557 * | ROD ASSY., Push (A total of 8 req'd.) | | AR | AR | AR | AR | AR | AR | AR | AR | AR | AR | | | | | | | | AR | AR | AR |
| | 73558 * | ROD ASSY., Push (A total of 8 req'd.) | | AR | AR | AR | AR | AR | AR | AR | AR | AR | AR | | | | | | | | AR | AR | AR |
| 2 | 17F19353 | ROCKER ASSY., Valve, intake & exh. | | | | | | | | | | | | 8 | 8 | 8 | 8 | 8 | 8 | 8 | | | |
| | 71266 | ROCKER ASSY., Valve, intake | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | | | 4 | 4 | 4 |
| 3 | 74637 | BUSHING, Valve rocker, int. & exh. | | | | | | | | | | | | 8 | 8 | 8 | 8 | 8 | 8 | 8 | | | |
| | 67114 | BUSHING, Valve rocker, intake | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | | | 4 | 4 | 4 |
| 4 | 74390 | ROCKER ASSY., Valve, exhaust | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | | | 4 | 4 | 4 |
| 5 | 74389 | BUSHING, Valve rocker, exhaust | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | | | 4 | 4 | 4 |
| 6 | 71549 | WASHER, Valve rocker, thrust | | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | | | | | | | | 8 | 8 | 8 |
| 7 | LW-13790 | SHAFT, Valve rocker | | | | | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | |
| | 72626 | SHAFT, Valve rocker | | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | | | | | | | | 8 | 8 | 8 |
| 8 | LW-12892 | THRUST BUTTON, Rocker shaft | | | | | | | | | | | | 8 | 8 | 8 | 8 | 8 | 8 | 8 | | | |
| 9 | 66732 | GASKET, Valve rocker shaft cover | | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | | | | | | | | 8 | 8 | 8 |
| 10 | 72710 | COVER, Valve rocker shaft | | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | | | | | | | | 8 | 8 | 8 |
| 11 | STD-160 | WASHER, 1/4 lock, internal teeth | | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | | | | | | | | 16 | 16 | 16 |
| 12 | STD-1411 | NUT, 1/4-20 plain | | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | | | | | | | | 16 | 16 | 16 |
| 13 | 75906 | GASKET, Rocker box cover | | | | | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | |
| 14 | 67193 | GASKET, Rocker box cover | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | | | 4 | 4 | 4 |
| 15 | 61247 | COVER, Rocker box | | | | | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | |
| 16 | 68795 | COVER ASSY., Rocker box | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | | | 4 | 4 | 4 |
| 17 | STD-1925 | SCREW, 1/4-20 x 5/8 long, pan. hd. | | | | | | | | | | | | 24 | 24 | 24 | 24 | 24 | 24 | 24 | | | |
| | STD-1925 | SCREW, 1/4-20 x 5/8 long, pan. hd. | | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | | | | | | | | 32 | 32 | 32 |
| 18 | 71481 | RING, Oil seal, 3/32 dia. section x | | | | | | | | | | | | | | | | | | | | | |
| | | 4-27/32 I.D. | 4 | | | | | | | | | | | | | | | | | | | | |
| 19 | 74887 | SPACER, 33/64 I.D. x 7/8 O.D. x 3/8 | | | | | | | | | | | | | | | | | | | | | |
| | | thick | 2 | | | | | | | | | | | | | | | | | | | | |
| 20 | 383-B | NUT, 3/8-24 plain | 16 | | | | | | | | | | | | | | | | | | | | |
| 21 | STD-2090 | NUT, 1/2-20 plain | 18 | | | | | | | | | | | | | | | | | | | | |
| 22 | 74494 | PLATE, Spark plug reach caution | | | | 4 | | | | | | | 4 | | | | | | | | | | |
| 23 | 75118 | GASKET, Exhaust flange (cooper) | | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | | | | | | 8 | | 8 | 8 | 8 |
| | LW-19296 | GASKET, Exhaust flange | | | | | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | |
| 24 | 61260 | FLANGE, Exhaust | | | | | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | |
| | 67195 | FLANGE, Exhaust | | 4 | 4 | 4 | 4 | 4 | | 4 | 4 | 4 | | | | | | | | | 4 | 4 | 4 |
| 25 | STD-35 | WASHER, 5/16 plain | 8 | | | | | | | | | | | | | | | | | | | | |
| 26 | STD-475 | WASHER, 5/16 lock, internal teeth | 8 | | | | | | | | | | | | | | | | | | | | |
| 27 | STD-1410 | NUT, 5/16-18 plain | 8 | | | | | | | | | | | | | | | | | | | | |

* See latest edition of

Lycoming Service Instruction No. 1060 for complete push rod application.

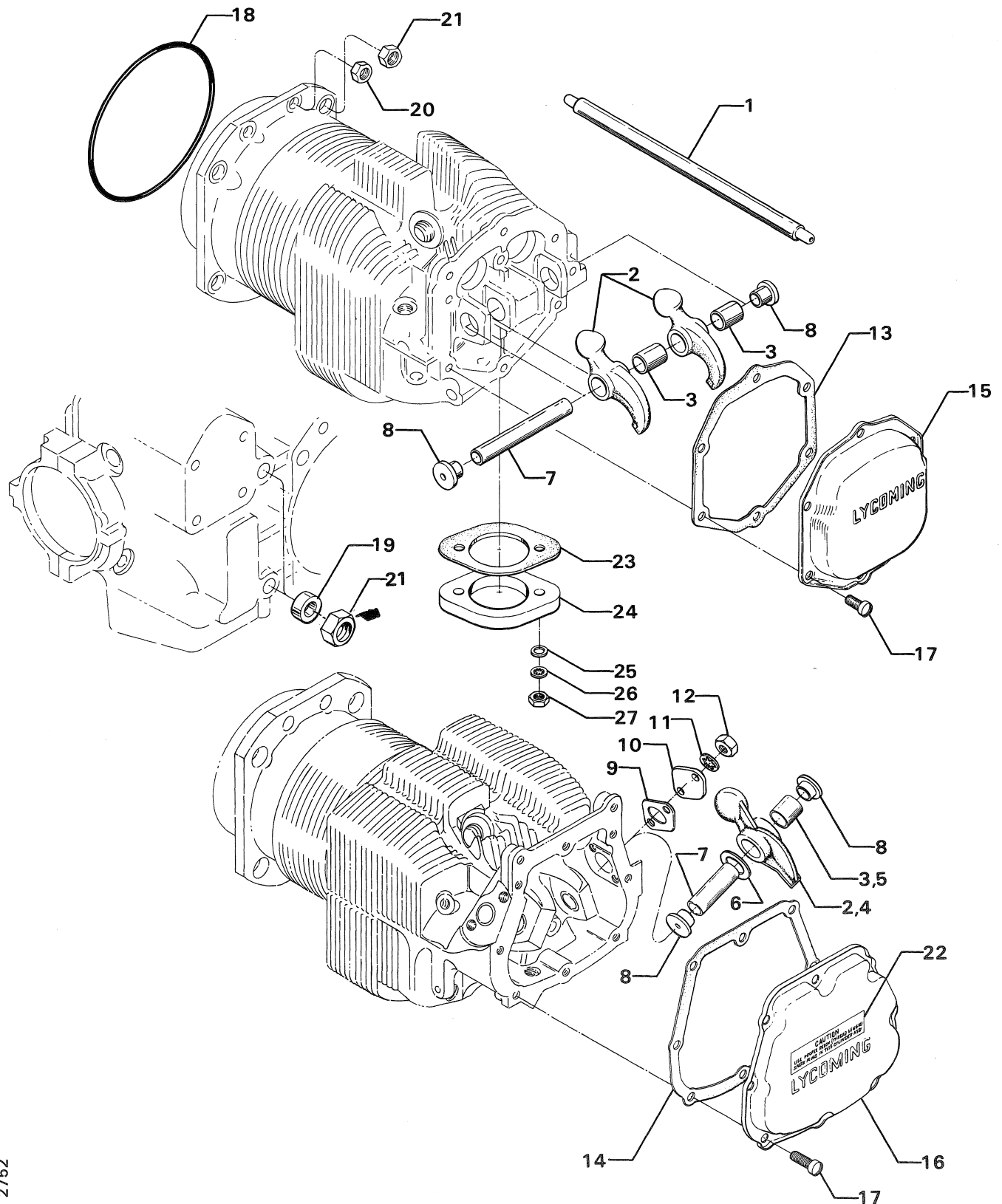


Figure 20. CYLINDER RELATED PARTS

CYLINDER, PISTON AND VALVE TRAIN

CYLINDER HEAD DRAIN TUBES AND INTERCYLINDER COOLING BAFFLES

| FIG. REF. 21 | PART NUMBER | DESCRIPTION | O N A L L | QUANTITY PER ASSEMBLY | | | | | | | | | | | | | | | |
|--------------------|----------------|--|-----------------------|-----------------------|-------------|------------------|-----------------------|-------------|-------------|------------------|-------------|-------------|-----------------------|-------------|-------------|-------------|-------------|-------------|------------------|
| | | | | IO-360 | | | | | | | | | | | | AIO-360 | | | |
| | | | | A 1 A | A 1 B | A 1 B 6 | A 1 B 6 D | A 1 C | A 1 D | A 1 D 6 | A 2 A | A 2 B | A 3 B 6 D | B 1 B | B 1 D | B 1 E | B 1 F | B 2 F | B 2 F 6 |
| 1 | STD-684 | NIPPLE, Straight, 3/8 I.D. hose | 4 | | | | | | | | | | | | | | | | |
| 2 | STD-1821 * | HOSE, 3/8 I.D. x 2-1/2 long | | | | | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 |
| | STD-2180 ** | HOSE, 3/8 I.D. x 1-13/16 long | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | 4 |
| | STD-2180 ★ | HOSE, 3/8 I.D. x 1-13/16 long | | | 4 | 4 | 4 | | | | | | 4 | | | | | | |
| 3 | LW-15592-5-05 | CLAMP, Hose | 8 | | | | | | | | | | | | | | | | |
| 4 | 68759 * | TUBE ASSY., Cyl. hd. oil drain, cyl. no. 1 | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 |
| | 72702 ** | TUBE ASSY., Cyl. hd. oil drain, cyl. no. 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 |
| | 72702 ★ | TUBE ASSY., Cyl. hd. oil drain, cyl. no. 1 | | | 1 | 1 | 1 | | | | | | 1 | | | | | | |
| 5 | 68760 * | TUBE ASSY., Cyl. hd. oil drain, cyl. no. 2 | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 |
| | 72703 ** | TUBE ASSY., Cyl. hd. oil drain, cyl. no. 2 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 |
| | LW-11847 ★ | TUBE ASSY., Cyl. hd. oil drain, cyl. no. 2 | | | 1 | 1 | 1 | | | | | | 1 | | | | | | |
| 6 | 68761 * | TUBE ASSY., Cyl. hd. oil drain, cyls. no. 3 & 4 | | | | | | | | | | | | 2 | 2 | 2 | 2 | 2 | 2 |
| | 74808 ** | TUBE ASSY., Cyl. hd. oil drain, cyl. no. 3 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 |
| | 74808 ★ | TUBE ASSY., Cyl. hd. oil drain, cyl. no. 3 | | | 1 | 1 | 1 | | | | | | 1 | | | | | | |
| 7 | 73027 ** | TUBE ASSY., Cyl. hd. oil drain, cyl. no. 4 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 |
| | 73027 ★ | TUBE ASSY., Cyl. hd. oil drain, cyl. no. 4 | | | 1 | 1 | 1 | | | | | | 1 | | | | | | |
| 8 | 75337 | BAFFLE ASSY., Intercylinder | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 |
| | 75338 | BAFFLE ASSY., Intercylinder | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | 1 |
| | 75339 | BAFFLE ASSY., Intercylinder | | | | | | | | | | | | 2 | | 2 | 2 | 2 | 2 |
| | 75339 | BAFFLE ASSY., Intercylinder | | | | | | | | | | | | | 1 | | 1 | | |
| | LW-13389 ● | BAFFLE ASSY., Intercylinder | | | | | | | | | | | | | 1 | | 1 | | |
| 9 | 71611 | RETAINER, Intercylinder baffle | 2 | | | | | | | | | | | | | | | | |
| 10 | 71610 | HOOK, Intercylinder baffle retainer | 2 | | | | | | | | | | | | | | | | |
| 11 | 72834 | COVER, Baffle, ignition cable hole | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | | | | | 2 |
| 12 | STD-692 | SCREW, No. 10-32 x 1/2 long, rd. hd. | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | 4 |
| 13 | STD-670 | NUT, No. 10-32 self-locking | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | 4 |
| 14 | MS35489-20X | GROMMET, 3/4 I.D. x 1-3/8 O.D. x 3/8 thick | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | | 1 | 1 |
| 15 | 65614‡ | PLUG, Baffle attaching | | | | 1 | 1 | | | | | | 1 | | | | | | |
| | 65614■ | PLUG, Baffle attaching | | 3 | 3 | 3 | | 3 | 3 | 3 | 3 | 3 | | | | | | | 3 |
| | 65614► | PLUG, Baffle attaching | | 4 | | 4 | 4 | | 4 | | | | | | | | | | |
| | 65614◄ | PLUG, Baffle attaching | | | | 5 | | | | | | | | | | | | | |
| 16 | STD-251‡ | WASHER, No. 10 lock, internal teeth | | | | 1 | 1 | | | | | | 1 | | | | | | |
| | STD-251■ | WASHER, No. 10 lock, internal teeth | | 3 | 3 | 3 | | 3 | 3 | 3 | 3 | 3 | | | | | | | 3 |
| | STD-251► | WASHER, No. 10 lock, internal teeth | | 4 | | 4 | 4 | | 4 | | | | | | | | | | |

CYLINDER, PISTON AND VALVE TRAIN CYLINDER HEAD DRAIN TUBES AND INTERCYLINDER COOLING BAFFLES (Continued)

| FIG. REF. 21 | PART NUMBER | DESCRIPTION | O N A L L | QUANTITY PER ASSEMBLY | | | | | | | | | | | | | | | |
|--------------------|----------------|---|-----------------------|-----------------------|-------------|------------------|-----------------------|-------------|-------------|------------------|-------------|-------------|-----------------------|-------------|-------------|-------------|-------------|-------------|------------------|
| | | | | IO-360 | | | | | | | | | | | | | AIO-360 | | |
| | | | | A 1 A | A 1 B | A 1 B 6 | A 1 B 6 D | A 1 C | A 1 D | A 1 D 6 | A 2 A | A 2 B | A 3 B 6 D | B 1 B | B 1 D | B 1 E | B 1 F | B 2 F | B 2 F 6 |
| | STD-251◀ | WASHER, No. 10 lock, internal teeth | | | | 5 | | | | | | | | | | | | | |
| 17 | STD-1686‡ | SCREW, No. 10-32 x 7/16 long, fill. hd. | | | | 1 | 1 | | | | | | 1 | | | | | | |
| | STD-1686■ | SCREW, No. 10-32 x 7/16 long, fill. hd. | | 3 | 3 | 3 | | 3 | 3 | 3 | 3 | 3 | | | | | | | 3 |
| | STD-1686▶ | SCREW, No. 10-32 x 7/16 long, fill. hd. | | 4 | | 4 | | 4 | | | | | | | | | | | |
| | STD-1686◀ | SCREW, No. 10-32 x 7/16 long, fill. hd. | | | | 5 | | | | | | | | | | | | | |

- * Parallel valve head.
- * * Angle valve head; Mooney installations.
- ★ Angle valve head; Cessna installations.
- Assemble between cyls. no. 1 & 3.
- ‡ Assemble in front of no. 1 cylinder head.
- Assemble in rear of no. 3 & 4 cylinder heads and front of no. 1 cylinder head.
- ▶ Baffle attaching parts for all cylinders.
- ◀ Customer request; baffle attaching parts for each cylinder plus 1 extra set.

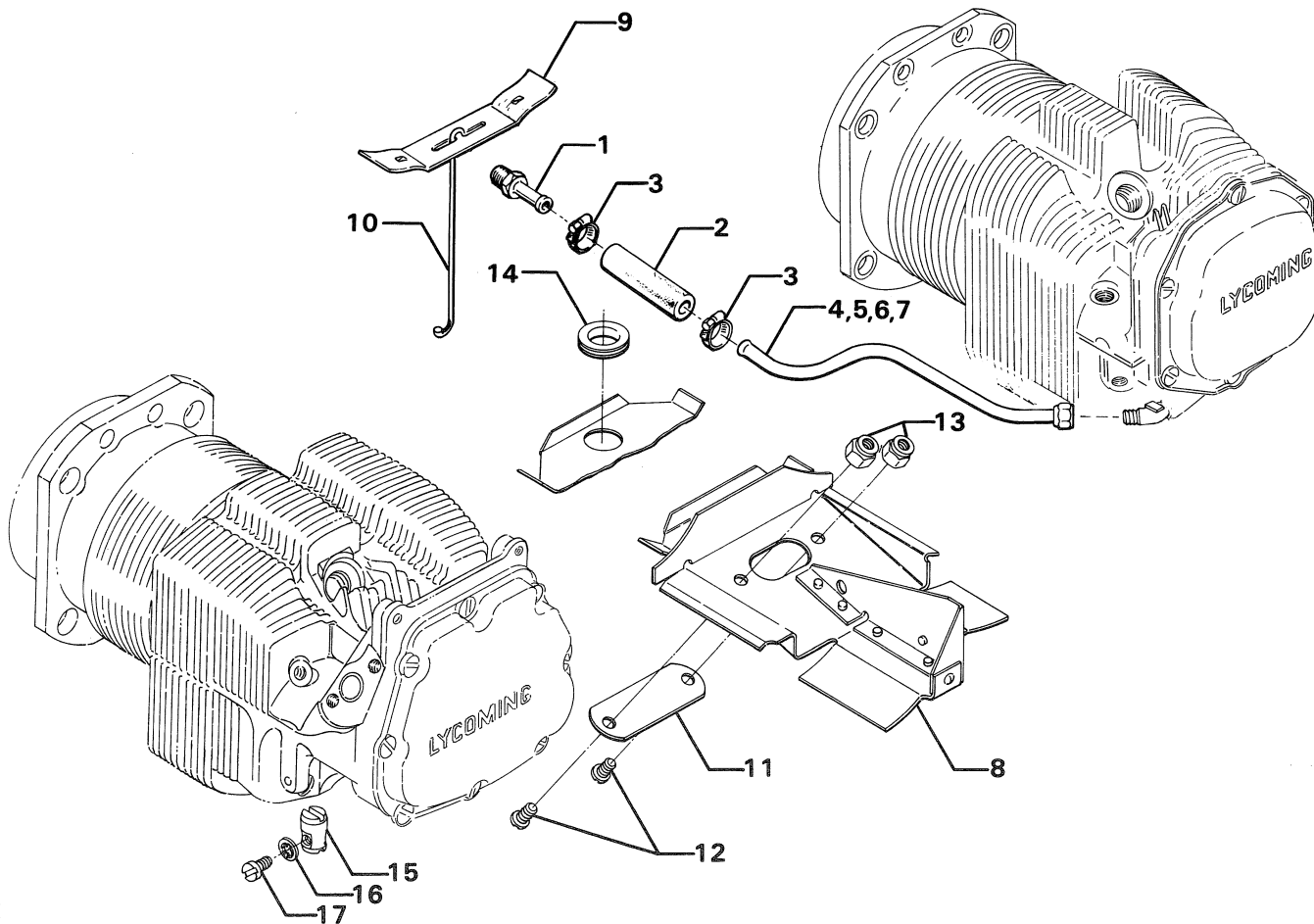


Figure 21. CYLINDER HEAD DRAIN TUBES AND INTERCYLINDER COOLING BAFFLES

IGNITION SYSTEM

MAGNETOS AND MAGNETO DRIVES (IO-360-A)

| FIG. REF. 22 | PART NUMBER | DESCRIPTION | O N A L L | QUANTITY PER ASSEMBLY | | | | | | | | | | | | | | | | | | | |
|--------------------|----------------|--------------------------------------|-----------------------|-----------------------|-------------|------------------|-----------------------|-------------|-------------|------------------|-------------|-------------|-----------------------|-------------|-------------|-------------|-------------|-------------|------------------|-------------|-------------|-------------|-------------|
| | | | | IO-360 | | | | | | | | | | | | | | | | | AIO-360 | | |
| | | | | A 1 A | A 1 B | A 1 B 6 | A 1 B 6 D | A 1 C | A 1 D | A 1 D 6 | A 2 A | A 2 B | A 3 B 6 D | B 1 B | B 1 D | B 1 E | B 1 F | B 2 F | B 2 F 6 | B 4 A | A 1 A | A 1 B | B 1 B |
| 1 | 61665 | GEAR, Magneto, impulse coupling | | | 1 | 1 | | | | 1 | 1 | | 1 | | | | | | | | | | |
| 2 | 68C19622 | GEAR, Magneto | | | 1 | 1 | | | | 1 | 1 | | 1 | | | | | | | | | | |
| | 68C19622 | GEAR, Magneto | | 2 | 2 | 2 | | | 2 | | | 2 | | | | | | | | | | | |
| 3 | STD-713 | COTTER PIN, 3/32 x 3/4 long | | 2 | 2 | 2 | | | 2 | 2 | 2 | 2 | 2 | | | | | | | | | | |
| 4 | 62224 | GASKET, Magneto adapter | | | 1 | 1 | | | | 1 | 1 | | 1 | | | | | | | | | | |
| | 62224 | GASKET, Magneto adapter | | 2 | | | | | | | | 2 | | | | | | | | | | | |
| | 62224 | GASKET, Magneto adapter & magneto | | | | | | | | 3 | | | | | | | | | | | | | |
| 5 | LW-12706 | ADAPTER, Magneto, impulse coupling | | | 1 | 1 | | | | 1 | 1 | | 1 | | | | | | | | | | |
| 6 | LW-12681 | GASKET, Magneto | | 2 | 2 | 2 | | | 2 | 2 | 2 | | 2 | | | | | | | | | | |
| | | — BENDIX — | | | | | | | | | | | | | | | | | | | | | |
| 7 | 66B21778 | MAGNETO, S4LSC-204 | | 1 | | | | | | | | | | | | | | | | | | | |
| | 66B21772 | MAGNETO, S4LSC-200, retard | | 1 | | | | | | | | | | | | | | | | | | | |
| | 66B21778 | MAGNETO, S4LSC-204 | | 1 | | | | | | | | 1 | | | | | | | | | | | |
| | 66B21773 | MAGNETO, S4LSC-200, retard | | 1 | | | | | | | | 1 | | | | | | | | | | | |
| | 66B21779 * | MAGNETO, S4LSC-204T | | | | | | | | | | 1 | | | | | | | | | | | |
| | 66B21773 | MAGNETO, S4LSC-200, retard | | | | | | | | | | 1 | | | | | | | | | | | |
| | 66B21778 | MAGNETO, S4LSC-204 | | | | | | | | 1 | | | | | | | | | | | | | |
| | 66A21766 ** ● | MAGNETO, S4LSC-21, impulse | | | | | | | | 1 | | | | | | | | | | | | | |
| | LW-349305-1 | MAGNETO, S4LN-1209 | | | 1 | 1 | | | | | 1 | | 1 | | | | | | | | | | |
| | LW-349365-3 ● | MAGNETO, S4LN-1227, impulse | | | 1 | 1 | | | | | 1 | | 1 | | | | | | | | | | |
| | LW-349305-1 | MAGNETO, S4LN-1209 | | | 1 | 1 | | | | | 1 | | 1 | | | | | | | | | | |
| | LW-349365-9 ● | MAGNETO, S4LN-1227, impulse | | | 1 | 1 | | | | | 1 | | 1 | | | | | | | | | | |
| | LW-349305-1 | MAGNETO, S4LN-1209 | | | | | | | 1 | | | | | | | | | | | | | | |
| | LW-349285-7 | MAGNETO, S4LN-1208, retard | | | | | | | 1 | | | | | | | | | | | | | | |
| | | — SLICK — | | | | | | | | | | | | | | | | | | | | | |
| 8 | 66GP-OSANN | MAGNETO, (Right), Model No. 4370 | | 1 | | | | | | | | | | | | | | | | | | | |
| | 66GR25SANN | MAGNETO, (Left), Model No. 4347 | | 1 | | | | | | | | | | | | | | | | | | | |
| | 66GP-OSAEN | MAGNETO, (Right), Model No. 4342 | | | | | | | | | | 1 | | | | | | | | | | | |
| | 66GR15SANN | MAGNETO, (Left), Model No. 4345 | | | | | | | | | | 1 | | | | | | | | | | | |
| | 66GP-OSANN | MAGNETO, (Right), Model No. 4370 | | | 1 | 1 | | | | | 1 | | 1 | | | | | | | | | | |
| | 66GC25SFNN | MAGNETO, (Left), Model No. 4373 | | | 1 | 1 | | | | | 1 | | 1 | | | | | | | | | | |
| | 66GP-OSANN | MAGNETO, (Right), Model No. 4370 | | 1 | 1 | 1 | | | 1 | | 1 | 1 | | | | | | | | | | | |
| | 66GR15SANN | MAGNETO, (Left), Model No. 4345 | | 1 | 1 | 1 | | | 1 | | 1 | 1 | | | | | | | | | | | |
| | 66GP-OSANN | MAGNETO, (Right), Model No. 4370 | | | 1 | 1 | | | | 1 | 1 | | 1 | | | | | | | | | | |
| | 66GC15SFNN | MAGNETO, (Left), Model No. 4372 | | | 1 | 1 | | | | 1 | 1 | | 1 | | | | | | | | | | |
| 9 | 66M19385 | CLAMP, Magneto | | 4 | 4 | 4 | | | 4 | 4 | 4 | 4 | 4 | | | | | | | | | | |
| 10 | 66M21195 | CLAMP, Magneto | | 4 | 4 | 4 | | | 4 | 4 | 4 | 4 | 4 | | | | | | | | | | |
| 11 | STD-1727 | WASHER, Plain, 3/4 O.D. x 11/32 I.D. | | | | | | | | | | | | | | | | | | | | | |
| | | x 1/8 thick | | 4 | 4 | 4 | | | 4 | 4 | 4 | 4 | 4 | | | | | | | | | | |
| 12 | STD-475 | WASHER, 5/16 lock, internal teeth | | 4 | 4 | 4 | | | 4 | 4 | 4 | 4 | 4 | | | | | | | | | | |
| 13 | STD-1410 | NUT, 5/16-18 plain | | 4 | 4 | 4 | | | 4 | 4 | 4 | 4 | 4 | | | | | | | | | | |
| 14 | LW-52305-1 | KIT ASSY., Magneto ground terminal | | | | | | | | | | | | | | | | | | | | | |
| | LW-157209 | KIT, Magneto ground terminal | | | | | | | | | | | | | | | | | | | | | |
| | LW-157209 | KIT, Magneto ground terminal | | | 2 | | | | | | | | | | | | | | | | | | |
| | LW-157208 | KIT, Magneto retard terminal | | | 1 | | | | | | | | | | | | | | | | | | |

* Magneto w/ electric tachometer pickup.

** Magneto w/ feed-thru capacitor.

● These magneto part numbers listed for reference only. See latest edition of

for the replacement magnetos.

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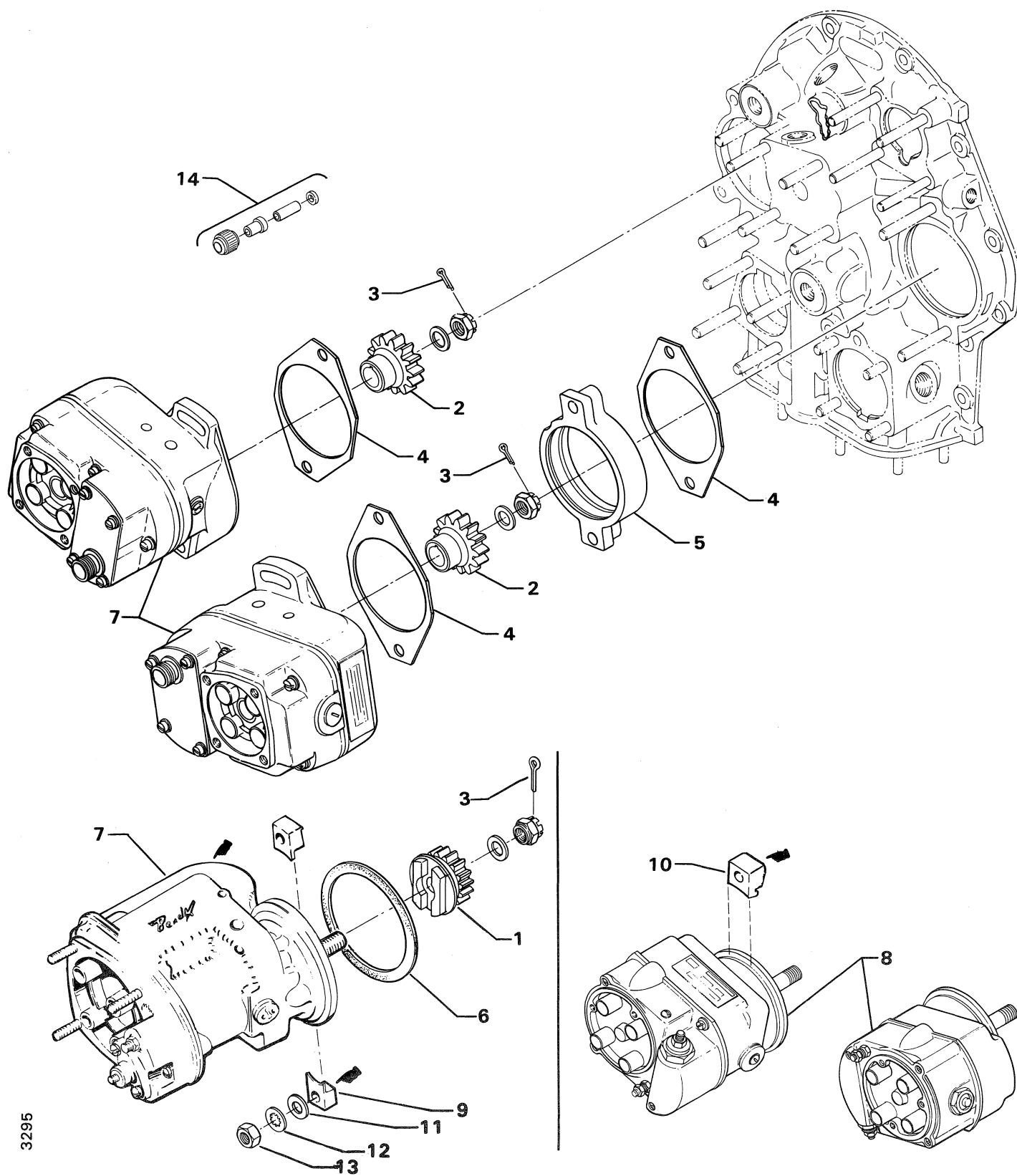


Figure 22. MAGNETOS AND MAGNETO DRIVES (IO-360-A)

IGNITION SYSTEM

IGNITION HARNESSES, SPARK PLUGS AND ATTACHING HARDWARE (IO-360-A)

| FIG. REF. 23 | PART NUMBER | DESCRIPTION | O N A L L | QUANTITY PER ASSEMBLY | | | | | | | | | | | | | | | | | | |
|--------------------|------------------|------------------------------------|-----------------------|-----------------------|-------|---------|-----------|-------|-------|---------|-------|-------|-----------|-------|-------|-------|-------|-------|---------|-------|---------|-------|
| | | | | IO-360 | | | | | | | | | | | | | | | | | AIO-360 | |
| | | | | A 1 A | A 1 B | A 1 B 6 | A 1 B 6 D | A 1 C | A 1 D | A 1 D 6 | A 2 A | A 2 B | A 3 B 6 D | B 1 B | B 1 D | B 1 E | B 1 F | B 2 F | B 2 F 6 | B 4 A | A 1 A | A 1 B |
| 1 | 67P20400 | HARNESS, (Right), Slick No. M-2976 | | | 1 | 1 | | 1 | | 1 | | 1 | | | | | | | | | | |
| | 67P20403 | HARNESS, (Left), Slick No. M-2977 | | | 1 | 1 | | 1 | | 1 | | 1 | | | | | | | | | | |
| | 67P20402 | HARNESS, (Right), Slick No. M-4010 | | 1 | | | | | | | | | | | | | | | | | | |
| | 67P20401 | HARNESS, (Left), Slick No. M-2975 | | 1 | | | | | | | | | | | | | | | | | | |
| | 67P20402 | HARNESS, (Right), Slick No. M-4010 | | | 1 | 1 | | 1 | | 1 | | | | | | | | | | | | |
| | 67P20405 | HARNESS, (Left), Slick | | | 1 | 1 | | 1 | | 1 | | | | | | | | | | | | |
| | 67P20412 | HARNESS, (Right), Slick No. M-4020 | | | 1 | 1 | | 1 | | 1 | | 1 | | | | | | | | | | |
| | 67P20413 | HARNESS, (Left), Slick No. M-4019 | | | 1 | 1 | | 1 | | 1 | | 1 | | | | | | | | | | |
| | 67P20414 | HARNESS, (Right), Slick No. M-2982 | | | 1 | 1 | | | | 1 | | | | | | | | | | | | |
| | 67P20415 | HARNESS, (Left), Slick No. M-2981 | | | 1 | 1 | | | | 1 | | | | | | | | | | | | |
| | 67P20416 | HARNESS, (Right), Slick No. M-2984 | | | 1 | 1 | | | 1 | 1 | | 1 | | | | | | | | | | |
| | 67P20417 | HARNESS, (Left), Slick No. M-2983 | | | 1 | 1 | | | 1 | 1 | | 1 | | | | | | | | | | |
| | 67P20418 | HARNESS, (Right), Slick No. M-4021 | | | 1 | 1 | | | | 1 | | | | | | | | | | | | |
| | 67P20419 | HARNESS, (Left), Slick No. M-4022 | | | 1 | 1 | | | | 1 | | | | | | | | | | | | |
| | 67P20428 | HARNESS, (Right), Slick No. M-2990 | | 1 | 1 | 1 | | | 1 | 1 | 1 | | | | | | | | | | | |
| | 67P20429 | HARNESS, (Left), Slick No. M-2989 | | 1 | 1 | 1 | | | 1 | 1 | 1 | | | | | | | | | | | |
| | 67L20422 | HARNESS, (Right), Slick No. M-4026 | | | 1 | 1 | | | | 1 | | | | | | | | | | | | |
| | 67L20423 | HARNESS, (Left), Slick No. M-4025 | | | 1 | 1 | | | | 1 | | | | | | | | | | | | |
| 2 | 1182-E 7 * | SPARK PLUG, (REM38E) or (SR87) | | 8 | 8 | 8 | | 8 | 8 | 8 | 8 | 8 | | | | | | | | | | |
| | 1182-G 7 * | SPARK PLUG, (REB37E) or (171) | | | | 8 | | | | | | | | | | | | | | | | |
| | 1182-P 3 * | SPARK PLUG, (SR86) | | | | | | | 8 | | | | | | | | | | | | | |
| | 01P19762-1-1 ** | BAG, Magneto harness attaching | | 1 | 1 | 1 | | | 1 | 1 | 1 | | | | | | | | | | | |
| | 01P19762-1-2 ** | BAG, Magneto harness attaching | | | 1 | 1 | | | | 1 | | | | | | | | | | | | |
| | 01P19762-1-6 ** | BAG, Magneto harness attaching | | | 1 | 1 | | | | | | 1 | | | | | | | | | | |
| | 01P19762-1-7 ** | BAG, Magneto harness attaching | | | | | | 1 | | | | | | | | | | | | | | |
| | 01P19762-1-43 ** | BAG, Magneto harness attaching | | 1 | | | | | | | | | | | | | | | | | | |
| | 01P19762-2-5 ** | BAG, Magneto harness attaching | | | 1 | 1 | | 1 | 1 | 1 | | 1 | | | | | | | | | | |
| | 01P19762-2-7 ** | BAG, Magneto harness attaching | | | 1 | 1 | | | | 1 | | 1 | | | | | | | | | | |
| | 01P19762-2-9 ** | BAG, Magneto harness attaching | | | 1 | 1 | | | | 1 | | | | | | | | | | | | |
| | 01P19762-2-12 ** | BAG, Magneto harness attaching | | | 1 | 1 | | | | 1 | | | | | | | | | | | | |

* Item No. 2 spark plugs are used in current production only. Additional spark plugs are available for these engines. See latest edition of Service Instruction No. 1042 for complete listing of all approved spark plugs.

** See page 4-4 for a breakdown of individual parts contained in the magneto and harness attaching parts bag. These parts to be attached by customer per engine line drawing included in each bag.

BAG - MAGNETO HARNESS ATTACHING

| P/N'S 01P19762-1-1, 01P19762-1-6, 01P19762-1-7, 01P19762-1-43 | | | P/N 01P19762-1-2 | | |
|---|------------------------------|------|------------------|------------------------------|------|
| Part No. | Part Name | Qty. | Part No. | Part Name | Qty. |
| LW-16266-25-25 | CLAMP, 1 wire | 2 | LW-16266-25-25 | CLAMP, 1 wire | 2 |
| LW-14060 | CLIP, 2 wire | 3 | LW-14060 | CLIP, 2 wire | 3 |
| STD-8 | WASHER, 1/4 plain | 8 | STD-8 | WASHER, 1/4 plain | 8 |
| STD-1874 | SCREW, 1/4 lock (rocker box) | 6 | STD-1874 | SCREW, 1/4 lock (rocker box) | 6 |
| 76734 | ZIP STRAP | 8 | 76734 | ZIP STRAP | 8 |
| LW-16266-25-50 | CLAMP, 4 wire | 1 | LW-16266-25-50 | CLAMP, 4 wire | 1 |
| STD-1411 | NUT, 1/4 plain | 2 | STD-696 | WASHER, 1/4 thin | 4 |
| STD-696 | WASHER 1/4 thin | 4 | STD-1916 | SCREW, 1/4 x 1-1/8 long | 3 |
| STD-1916 | SCREW, 1/4 x 1-1/8 long | 3 | LW-M-2375 | PLATE, Baffle | 2 |
| LW-M-2375 | PLATE, Baffle | 2 | | | |

| P/N'S 01P19762-2-5, 01P19762-2-7, 01P19762-2-9 | | |
|--|------------------------------|------|
| Part No. | Part Name | Qty. |
| LW-16266-25-25 | CLAMP, 1 wire | 4 |
| LW-14060 | CLIP, 2 wire | 4 |
| STD-8 | WASHER, 1/4 plain | 8 |
| STD-160 | WASHER, 1/4 lock | 1 |
| STD-1874 | SCREW, 1/4 lock (rocker box) | 4 |
| 76734 | ZIP STRAP | 12 |
| LW-16266-25-50 | CLIP, 4 wire | 3 |
| STD-1411 | NUT, 1/4 plain | 1 |
| STD-696 | WASHER, 1/4 thin | 4 |
| STD-1916 | SCREW, 1/4 x 1-1/8 long | 1 |
| STD-1925 | SCREW, 1/4 x 5/8 long | 2 |
| 72815 | BRACKET, Twist | 3 |
| 73152 | BRACKET, Straight | 2 |
| STD-692 | SCREW, No. 10 | 5 |
| STD-425 | WASHER, No. 10 | 5 |
| STD-670 | NUT, No. 10 | 5 |
| LW-M-2375 | PLATE | 2 |

| P/N 01P19762-2-12 | | |
|-------------------|------------------------------|------|
| Part No. | Part Name | Qty. |
| LW-16266-25-25 | CLAMP, 1 wire | 4 |
| LW-14060 | CLIP, 2 wire | 4 |
| STD-8 | WASHER, 1/4 plain | 8 |
| STD-160 | WASHER, 1/4 lock | 1 |
| 77410 | BRACKET, Ext. fuel inj. line | 1 |
| STD-1874 | SCREW, 1/4 lock | 4 |
| 76734 | ZIP STRAP | 12 |
| LW-16266-25-50 | CLAMP, 4 wire | 3 |
| STD-1411 | NUT, 1/4 plain | 1 |
| STD-696 | WASHER, 1/4 thin | 4 |
| STD-1916 | SCREW, 1/4 x 1-1/8 long | 1 |
| STD-1925 | SCREW, 1/4 x 5/8 long | 2 |
| 72815 | BRACKET, Twist | 3 |
| 73152 | BRACKET, Straight | 2 |
| STD-692 | SCREW, No. 10 | 5 |
| STD-425 | WASHER, No. 10 | 5 |
| STD-670 | NUT, No. 10 | 5 |
| LW-M-2375 | PLATE | 2 |

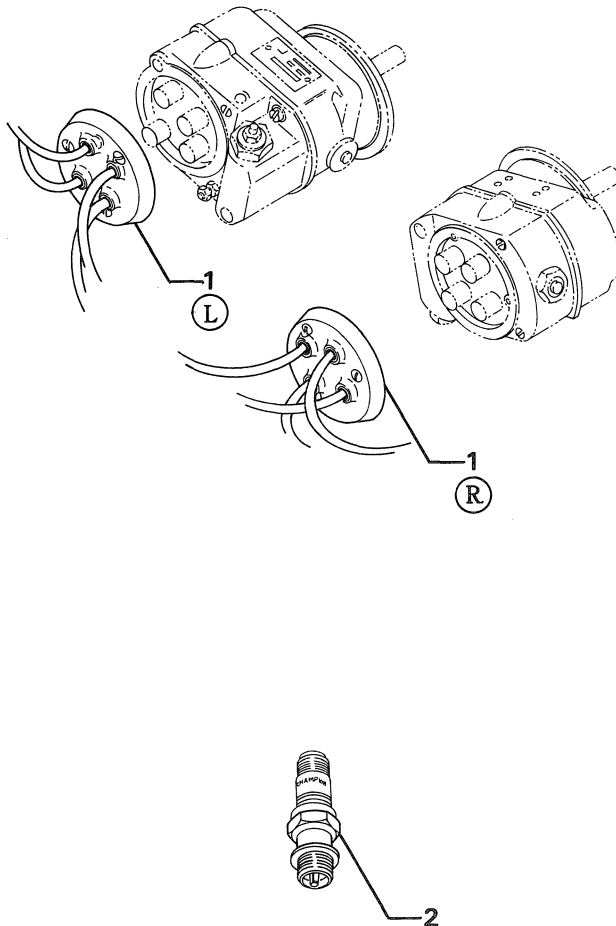


Figure 23. IGNITION HARNESSES, SPARK PLUGS AND ATTACHING HARDWARE (IO-360-A)

IGNITION SYSTEM

MAGNETOS AND MAGNETO DRIVES (IO-360-B)

| FIG. REF. 24 | PART NUMBER | DESCRIPTION | O N A L L | QUANTITY PER ASSEMBLY | | | | | | | | | | | | | | | |
|--------------------|----------------|--|-----------------------|-----------------------|-------------|------------------|-----------------------|-------------|-------------|------------------|-------------|-------------|-----------------------|-------------|-------------|-------------|-------------|-------------|------------------|
| | | | | IO-360 | | | | | | | | | | | | AIO-360 | | | |
| | | | | A 1 A | A 1 B | A 1 B 6 | A 1 B 6 D | A 1 C | A 1 D | A 1 D 6 | A 2 A | A 2 B | A 3 B 6 D | B 1 B | B 1 D | B 1 E | B 1 F | B 2 F | B 2 F 6 |
| 1 | 61665 | GEAR, Magneto, impulse coupling | | | | | | | | | | | | | | 1 | 1 | | 1 |
| | 61665 | GEAR, Magneto, impulse coupling | | | | | | | | | | | | | | 2 | 2 | 2 | 2 |
| 2 | 68C19622 | GEAR, Magneto | | | | | | | | | | | | | | 1 | 1 | | 1 |
| | 68C19622 | GEAR, Magneto | | | | | | | | | | | | 2 | 2 | | | | |
| 3 | STD-713 | COTTER PIN, 3/32 x 3/4 long | | | | | | | | | | | | 2 | 2 | 2 | 2 | 2 | 2 |
| 4 | 62224 | GASKET, Magneto adapter | | | | | | | | | | | | | | 1 | 1 | | 1 |
| | 62224 | GASKET, Magneto adapter | | | | | | | | | | | | 2 | 2 | 2 | 2 | 2 | 2 |
| | 62224 | GASKET, Magneto adapter & magneto | | | | | | | | | | | | | | 3 | | | 3 |
| | 62224 | GASKET, Magneto adapter & magneto | | | | | | | | | | | | | | | | | 4 |
| 5 | LW-12706 | ADAPTER, Magneto, impulse coupling | | | | | | | | | | | | | | 1 | 1 | | |
| | LW-12706 | ADAPTER, Magneto, impulse coupling | | | | | | | | | | | | | | 2 | 2 | 2 | 2 |
| 6 | LW-12681 | GASKET, Magneto | | | | | | | | | | | | 2 | 2 | 2 | 2 | 2 | 2 |
| 7 | LW-12706 | ADAPTER, Magneto, imp. coupling (left) | | | | | | | | | | | | | | | | | 1 |
| 8 | LW-15416 | ADAPTER ASSY., Magneto drive (right) | | | | | | | | | | | | | | | | | 1 |
| | LW-14229 | BEARING, Duplex | | | | | | | | | | | | | | | | | 1 |
| | LW-14228 | GEAR, Magneto drive retainer | | | | | | | | | | | | | | | | | 1 |
| 9 | LW-14910 | COUPLING, Magneto drive (right) | | | | | | | | | | | | | | | | | 1 |
| 10 | LW-14230 | CUSHION, Magneto drive (right) | | | | | | | | | | | | | | | | | 2 |
| | | — BENDIX — | | | | | | | | | | | | | | | | | |
| 11 | 66B21778 | MAGNETO, S4LSC-204 | | | | | | | | | | | | | | 1 | | | 1 |
| | 66A21765 ● | MAGNETO, S4LSC-21, impulse | | | | | | | | | | | | | | 1 | | | 1 |
| | 66B21778 | MAGNETO, S4LSC-204 | | | | | | | | | | | | 1 | 1 | | | | |
| | 66B21772 | MAGNETO, S4LSC-200, retard | | | | | | | | | | | | 1 | 1 | | | | |
| | 66B21779 * | MAGNETO, S4LSC-204T | | | | | | | | | | | | | 1 | | | | |
| | 66B21772 | MAGNETO, S4LSC-200, retard | | | | | | | | | | | | | 1 | | | | |
| | LW-349305-1 | MAGNETO, S4LN-1209 | | | | | | | | | | | | | | 1 | 1 | | |
| | LW-349365-3 ● | MAGNETO, S4LN-1227, impulse | | | | | | | | | | | | | | 1 | 1 | | |
| | LW-349365-3 ● | MAGNETO, S4LN-1227, impulse | | | | | | | | | | | | | | 2 | 2 | 2 | 2 |
| | | — SLICK — | | | | | | | | | | | | | | | | | |
| 12 | 66GP-OSANN | MAGNETO, (Right), Model No. 4370 | | | | | | | | | | | | 1 | 1 | | | | |
| | 66GR25SANN | MAGNETO, (Left), Model No. 4347 | | | | | | | | | | | | 1 | 1 | | | | |
| | 66GP-OSAEN | MAGNETO, (Right), Model No. 4342 | | | | | | | | | | | | | 1 | | | | |
| | 66GR25SANN | MAGNETO, (Left), Model No. 4347 | | | | | | | | | | | | | 1 | | | | |
| | 66GP-OSANN | MAGNETO, (Right), Model No. 4370 | | | | | | | | | | | | | | 1 | 1 | | 1 |
| | 66GC25SFNN | MAGNETO, (Left), Model No. 4373 | | | | | | | | | | | | | | 1 | 1 | | 1 |
| | 66GC25SFNN | MAGNETO, (Rt. & Lft.) Model No. 4373 | | | | | | | | | | | | | | 2 | 2 | 2 | 2 |
| 13 | 66M19385 | CLAMP, Magneto | | | | | | | | | | | | | | 4 | 4 | 4 | 4 |
| 14 | 66M21195 | CLAMP, Magneto | | | | | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 |
| 15 | STD-1727 | WASHER, Plain, 3/4 O.D. x 21/64 I.D. | | | | | | | | | | | | | | | | | |
| | | x 1/8 thick | | | | | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 |
| 16 | STD-475 | WASHER, 5/16 lock, internal teeth | | | | | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 |
| 17 | STD-1410 | NUT, 5/16-18 plain | | | | | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 |
| 18 | LW-52305-1 | NOTE: Refer to the latest edition of Installation of New Short Cover Magnetos changes ground/retard kit requirements. | | | | | | | | | | | | | | | | | |
| | LW-157209 | | | | | | | | | | | | | | | | | | |
| | LW-157208 | | | | | | | | | | | | | | | | | | |

* Magneto w/ electric tachometer pickup.

● These magneto part numbers listed for reference only. See latest edition of for the replacement magnetos.

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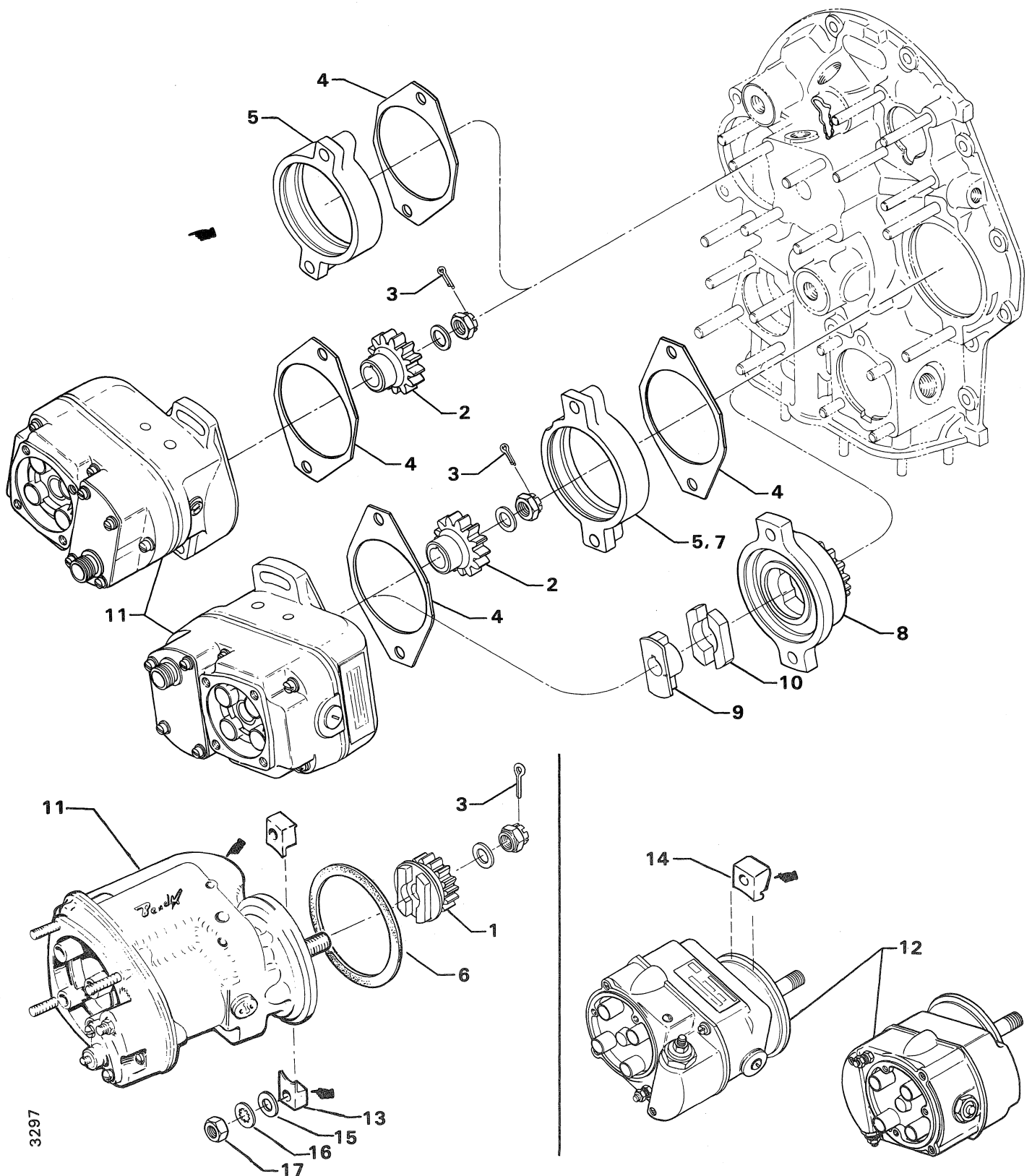


Figure 24. MAGNETOS AND MAGNETO DRIVES (IO-360-B)

IGNITION SYSTEM

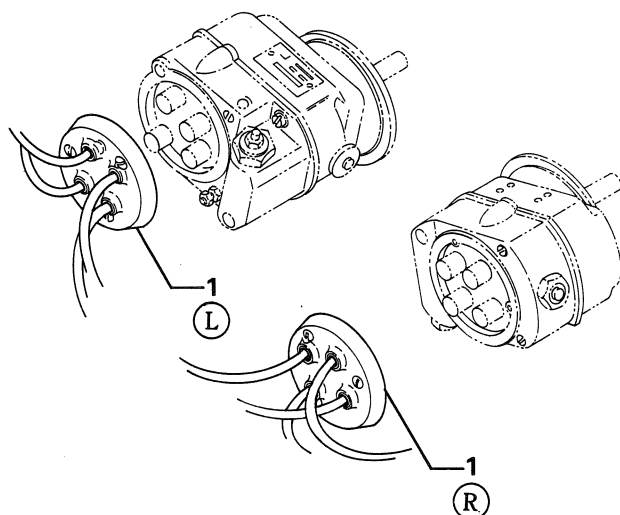
IGNITION HARNESSES, SPARK PLUGS AND ATTACHING HARDWARE (IO-360-B)

| FIG. REF. 25 | PART NUMBER | DESCRIPTION | O N A L L | QUANTITY PER ASSEMBLY | | | | | | | | | | | | | | | |
|--------------------|-------------------|------------------------------------|-----------------------|-----------------------|-------------|------------------|-----------------------|-------------|-------------|------------------|-------------|-------------|-----------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | | | | IO-360 | | | | | | | | | | | | AIO-360 | | | |
| | | | | A 1 A | A 1 B | A 1 B 6 | A 1 B 6 D | A 1 C | A 1 D | A 1 D 6 | A 2 A | A 2 B | A 3 B 6 D | B 1 B | B 1 D | B 1 E | B 1 F | B 2 F | B 4 A |
| 1 | 67P20400 | HARNESS, (Right), Slick No. M-2976 | | | | | | | | | | | | | | 1 | 1 | | |
| | 67P20403 | HARNESS, (Left), Slick No. M-2977 | | | | | | | | | | | | | | 1 | 1 | | |
| | 67P20402 | HARNESS, (Right), Slick No. M-4010 | | | | | | | | | | | | 1 | 1 | | | | |
| | 67P20401 | HARNESS, (Left), Slick No. M-2975 | | | | | | | | | | | | 1 | 1 | | | | |
| | 67P20412 | HARNESS, (Right), Slick No. M-4020 | | | | | | | | | | | | | | 1 | 1 | | |
| | 67P20413 | HARNESS, (Left), Slick No. M-4019 | | | | | | | | | | | | | | 1 | 1 | | |
| | 67P20416 | HARNESS, (Right), Slick No. M-2984 | | | | | | | | | | | | | | 1 | 1 | 1 | 1 |
| | 67P20417 | HARNESS, (Left), Slick No. M-2983 | | | | | | | | | | | | | | 1 | 1 | 1 | 1 |
| | 67P20418 | HARNESS, (Right), Slick No. M-4022 | | | | | | | | | | | | | | 1 | 1 | | |
| | 67P20419 | HARNESS, (Left), Slick No. M-4021 | | | | | | | | | | | | | | 1 | 1 | | |
| | 67P20428 | HARNESS, (Right), Slick No. M-2990 | | | | | | | | | | | | 1 | 1 | 1 | 1 | | |
| | 67P20429 | HARNESS, (Left), Slick No. M-2989 | | | | | | | | | | | | 1 | 1 | 1 | 1 | | |
| | 67L20422 | HARNESS, (Right), Slick No. M-4026 | | | | | | | | | | | | | | 1 | 1 | | |
| | 67L20423 | HARNESS, (Left), Slick No. M-4025 | | | | | | | | | | | | | | 1 | 1 | | |
| 2 | 1182-E7 * | SPARK PLUG, (REM38E) or (SR87) | | | | | | | | | | | | 8 | 8 | 8 | 8 | 8 | 8 |
| | 1182-J7 * | SPARK PLUG, (REM38S) or (SR83P) | | | | | | | | | | | | | | 8 | | | |
| | 1182-Q5 * | SPARK PLUG, (SR93) | | | | | | | | | | | | | | 8 | | | |
| | 01P19762-1-1 * * | BAG, Magneto harness attaching | | | | | | | | | | | | 1 | 1 | 1 | 1 | 1 | 1 |
| | 01P19762-1-6 * * | BAG, Magneto harness attaching | | | | | | | | | | | | | | | | 1 | |
| | 01P19762-1-43 * * | BAG, Magneto harness attaching | | | | | | | | | | | | 1 | 1 | | | | |
| | 01P19762-2-5 * * | BAG, Magneto harness attaching | | | | | | | | | | | | | | 1 | 1 | | |
| | 01P19762-2-7 * * | BAG, Magneto harness attaching | | | | | | | | | | | | | | 1 | 1 | | |
| | 01P19762-2-12 * * | BAG, Magneto harness attaching | | | | | | | | | | | | | | 1 | 1 | | |

* Item No. 2 spark plugs are used in current production only. Additional spark plugs are available for these engines. See latest edition of Service Instruction No. 1042 for complete listing of all approved spark plugs.

* * See page 4-8 for a breakdown of individual parts contained in the magneto & harness attaching parts bag. These parts to be attached by customer per engine line drawing included in each bag.

BAG - MAGNETO HARNESS ATTACHING



P/N'S 01P19762-1-1, 01P19762-1-6, 01P19762-1-43

| Part No. | Part Name | Qty. |
|----------------|-------------------------|------|
| LW-16266-25-25 | CLAMP, 1 wire | 2 |
| LW-14060 | CLIP, 2 wire | 3 |
| STD-8 | WASHER, 1/4 plain | 8 |
| STD-1874 | SCREW, 1/4 lock | 6 |
| 76734 | ZIP STRAP | 8 |
| LW-16266-25-50 | CLAMP, 4 wire | 1 |
| STD-1411 | NUT, 1/4 plain | 2 |
| STD-696 | WASHER, 1/4 thin | 4 |
| STD-1916 | SCREW, 1/4 x 1-1/8 long | 3 |
| LW-M-2375 | PLATE, Baffle | 2 |

P/N'S 01P19762-2-5, 01P19762-2-7

| Part No. | Part Name | Qty. |
|----------------|-------------------------|------|
| LW-16266-25-25 | CLAMP, 1 wire | 4 |
| LW-14060 | CLIP, 2 wire | 4 |
| STD-8 | WASHER, 1/4 plain | 8 |
| STD-160 | WASHER, 1/4 lock | 1 |
| STD-1874 | SCREW, 1/4 lock | 4 |
| 76734 | ZIP STRAP | 12 |
| LW-16266-25-50 | CLAMP, 4 wire | 3 |
| STD-1411 | NUT, 1/4 plain | 1 |
| STD-696 | WASHER, 1/4 thin | 4 |
| STD-1916 | SCREW, 1/4 x 1-1/8 long | 1 |
| STD-1925 | SCREW, 1/4 x 5/8 long | 2 |
| 72815 | BRACKET, Twist | 3 |
| 73152 | BRACKET, Straight | 2 |
| STD-692 | SCREW, No. 10 | 5 |
| STD-425 | WASHER, No. 10 | 5 |
| STD-670 | NUT, No. 10 | 5 |
| LW-M-2375 | PLATE | 2 |

P/N 01P19762-2-12

| Part No. | Part Name | Qty. |
|----------------|------------------------------|------|
| LW-16266-25-25 | CLAMP, 1 wire | 4 |
| LW-14060 | CLIP, 2 wire | 4 |
| STD-8 | WASHER, 1/4 plain | 8 |
| STD-160 | WASHER, 1/4 lock | 1 |
| 77410 | BRACKET, Ext. fuel inj. line | 1 |
| STD-1874 | SCREW, 1/4 lock | 4 |
| 76734 | ZIP STRAP | 12 |
| LW-16266-25-50 | CLAMP, 4 wire | 3 |
| STD-1411 | NUT, 1/4 plain | 1 |
| STD-696 | WASHER, 1/4 thin | 4 |
| STD-1916 | SCREW, 1/4 x 1-1/8 long | 1 |
| STD-1925 | SCREW, 1/4 x 5/8 long | 2 |
| 72815 | BRACKET, Twist | 3 |
| 73152 | BRACKET, Straight | 2 |
| STD-692 | SCREW, No. 10 | 5 |
| STD-425 | WASHER, No. 10 | 5 |
| STD-670 | NUT, No. 10 | 5 |
| LW-M-2375 | PLATE | 2 |

A-3296

Figure 25. IGNITION HARNESSES, SPARK PLUGS AND ATTACHING HARDWARE (IO-360-B)

IGNITION SYSTEM

MAGNETOS AND MAGNETO DRIVES (AIO-360)

| FIG. REF. 26 | PART NUMBER | DESCRIPTION | O N A L L | QUANTITY PER ASSEMBLY | | | | | | | | | | | | | | | | | | | |
|--------------------|----------------|--|-----------------------|-----------------------|-------------|------------------|-----------------------|-------------|-------------|------------------|-------------|-------------|-----------------------|-------------|-------------|-------------|-------------|-------------|------------------|-------------|-------------|-------------|-------------|
| | | | | IO-360 | | | | | | | | | | | | | | | AIO-360 | | | | |
| | | | | A 1 A | A 1 B | A 1 B 6 | A 1 B 6 D | A 1 C | A 1 D | A 1 D 6 | A 2 A | A 2 B | A 3 B 6 D | B 1 B | B 1 D | B 1 E | B 1 F | B 2 F | B 2 F 6 | B 4 A | A 1 A | A 1 B | B 1 B |
| 1 | 61665 | GEAR, Magneto, impulse coupling | | | | | | | | | | | | | | | | | | | 1 | 1 | |
| | 61665 | GEAR, Magneto, impulse coupling | | | | | | | | | | | | | | | | | | | 2 | | |
| 2 | 68C19622 | GEAR, Magneto | | | | | | | | | | | | | | | | | | | 1 | 1 | |
| | 68C19622 | GEAR, Magneto | | | | | | | | | | | | | | | | | | 2 | 2 | 2 | |
| 3 | STD-713 | COTTER PIN, 3/32 x 3/4 long | | | | | | | | | | | | | | | | | | 2 | 2 | 2 | |
| 4 | 62224 | GASKET, Magneto adapter | | | | | | | | | | | | | | | | | | | 1 | 1 | |
| | 62224 | GASKET, Magneto adapter | | | | | | | | | | | | | | | | | | | 2 | | |
| 5 | LW-12706 | ADAPTER, Magneto, impulse coupling | | | | | | | | | | | | | | | | | | | 1 | 1 | |
| | LW-12706 | ADAPTER, Magneto, impulse coupling | | | | | | | | | | | | | | | | | | | 2 | | |
| 6 | LW-12681 | GASKET, Magneto | | | | | | | | | | | | | | | | | | 2 | 2 | 2 | |
| | | — BENDIX — | | | | | | | | | | | | | | | | | | | | | |
| 7 | LW-349305-1 | MAGNETO, S4LN-1209 | | | | | | | | | | | | | | | | | | | | 1 | |
| | LW-349365-3 ● | MAGNETO, S4LN-1227, imp. coupling | | | | | | | | | | | | | | | | | | | | 1 | |
| | LW-349305-1 | MAGNETO, S4LN-1209 | | | | | | | | | | | | | | | | | | | 1 | 1 | |
| | LW-349365-9 ● | MAGNETO, S4LN-1227, imp. coupling | | | | | | | | | | | | | | | | | | | 1 | 1 | |
| | LW-349305-1 | MAGNETO, S4LN-1209 | | | | | | | | | | | | | | | | | | 1 | | | |
| | LW-349285-7 | MAGNETO, S4LN-1208, retard breaker | | | | | | | | | | | | | | | | | | 1 | | | |
| | LW-349365-9 ● | MAGNETO, S4LN-1227, imp. coupling | | | | | | | | | | | | | | | | | | | 2 | | |
| | | — SLICK — | | | | | | | | | | | | | | | | | | | | | |
| 8 | 66GP-OSANN | MAGNETO, (Right), Model No. 4370 | | | | | | | | | | | | | | | | | | 1 | 1 | 1 | |
| | 66GR15SANN | MAGNETO, (Left), Model No. 4345 | | | | | | | | | | | | | | | | | | 1 | 1 | 1 | |
| | 66GC15SFNN | MAGNETO, (Right & Left), Model No. 4372 | | | | | | | | | | | | | | | | | | | 2 | | |
| | 66GP-OSANN | MAGNETO, (Right), Model No. 4370 | | | | | | | | | | | | | | | | | | | | 1 | |
| | 66GC25SFNN | MAGNETO, (Left), Model No. 4373 | | | | | | | | | | | | | | | | | | | | 1 | |
| 9 | 66M19385 | CLAMP, Magneto | | | | | | | | | | | | | | | | | | 4 | 4 | 4 | |
| 10 | 66M21195 | CLAMP, Magneto | | | | | | | | | | | | | | | | | | 4 | 4 | 4 | |
| 11 | STD-1727 | WASHER, Plain, 3/4 O.D. x 11/32 I.D. x 1/8 thick | | | | | | | | | | | | | | | | | | | 4 | 4 | 4 |
| 12 | STD-475 | WASHER, 5/16 lock, internal teeth | | | | | | | | | | | | | | | | | | | 4 | 4 | 4 |
| 13 | STD-1410 | NUT, 5/16-18 plain | | | | | | | | | | | | | | | | | | | 4 | 4 | 4 |

● These magneto part numbers listed for reference only. See latest edition of for the replacement magnetos.

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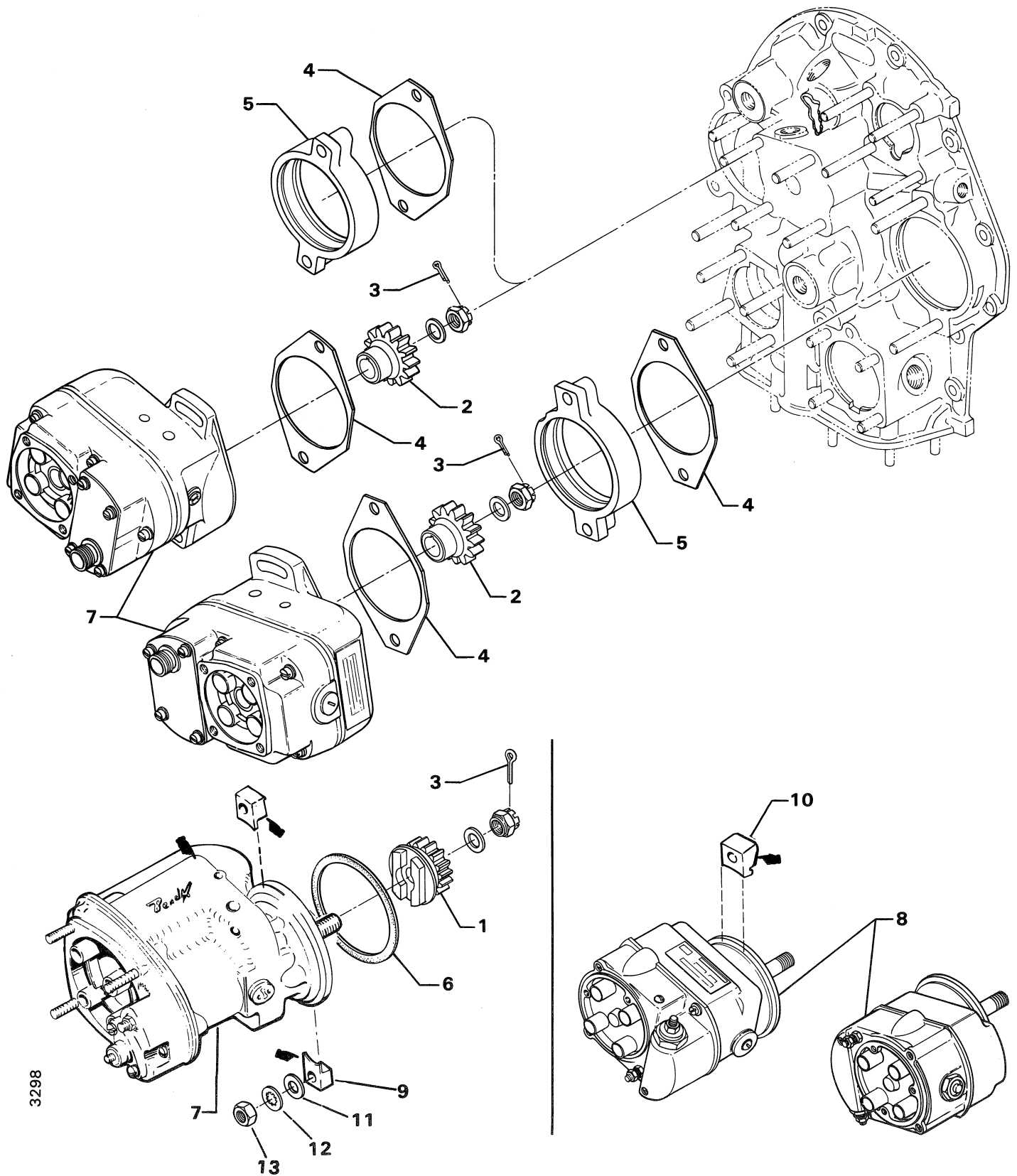


Figure 26. MAGNETOS AND MAGNETO DRIVES (AIO-360)

IGNITION SYSTEM

IGNITION HARNESSSES, SPARK PLUG AND ATTACHING HARDWARE (AIO-360)

| FIG. REF. 27 | PART NUMBER | DESCRIPTION | O N A L L | QUANTITY PER ASSEMBLY | | | | | | | | | | | | | | | | | | |
|--------------------|-------------------|------------------------------------|-----------------------|-----------------------|-------------|------------------|-----------------------|-------------|-------------|------------------|-------------|-------------|-----------------------|-------------|-------------|-------------|-------------|-------------|------------------|-------------|-------------|-------------|
| | | | | IO-360 | | | | | | | | | | | | | | AIO-360 | | | | |
| | | | | A 1 A | A 1 B | A 1 B 6 | A 1 B 6 D | A 1 C | A 1 D | A 1 D 6 | A 2 A | A 2 B | A 3 B 6 D | B 1 B | B 1 D | B 1 E | B 1 F | B 2 F | B 2 F 6 | B 4 A | A 1 A | A 1 B |
| 1 | 67P20400 | HARNESS, (Right), Slick No. M-2976 | | | | | | | | | | | | | | | | | | 1 | | 1 |
| | 67P20403 | HARNESS, (Left), Slick No. M-2977 | | | | | | | | | | | | | | | | | | 1 | | 1 |
| | 67P20402 | HARNESS, (Right), Slick No. M-4010 | | | | | | | | | | | | | | | | | | 1 | 1 | 1 |
| | 67P20405 | HARNESS, (Left), Slick | | | | | | | | | | | | | | | | | | 1 | 1 | 1 |
| | 67P20412 | HARNESS, (Right), Slick No. M-4020 | | | | | | | | | | | | | | | | | | 1 | | 1 |
| | 67P20413 | HARNESS, (Left), Slick No. M-4019 | | | | | | | | | | | | | | | | | | 1 | | 1 |
| | 67P20414 | HARNESS, (Right), Slick No. M-2982 | | | | | | | | | | | | | | | | | | | | 1 |
| | 67P20415 | HARNESS, (Left), Slick No. M-2981 | | | | | | | | | | | | | | | | | | | | 1 |
| | 67P20416 | HARNESS, (Right), Slick No. M-2984 | | | | | | | | | | | | | | | | | | | | 1 |
| | 67P20417 | HARNESS, (Left), Slick No. M-2983 | | | | | | | | | | | | | | | | | | | | 1 |
| | 67P20418 | HARNESS, (Right), Slick No. M-4022 | | | | | | | | | | | | | | | | | | | | 1 |
| | 67P20419 | HARNESS, (Left), Slick No. M-4021 | | | | | | | | | | | | | | | | | | | | 1 |
| | 67P20428 | HARNESS, (Right), Slick No. M-2990 | | | | | | | | | | | | | | | | | | | | 1 |
| | 67P20429 | HARNESS, (Left), Slick No. M-2989 | | | | | | | | | | | | | | | | | | | | 1 |
| | 67L20422 | HARNESS, (Right), Slick No. M-4026 | | | | | | | | | | | | | | | | | | | 1 | 1 |
| | 67L20423 | HARNESS, (Left), Slick No. M-4025 | | | | | | | | | | | | | | | | | | | 1 | 1 |
| 2 | 1182-F7 * | SPARK PLUG, (RHM38E) or (HSR86) | | | | | | | | | | | | | | | | | | 8 | 8 | 8 |
| | 01P19762-1-1 * * | BAG, Magneto harness attaching | | | | | | | | | | | | | | | | | | | | 1 |
| | 01P19762-1-2 * * | BAG, Magneto harness attaching | | | | | | | | | | | | | | | | | | | | 1 |
| | 01P19762-1-7 * * | BAG, Magneto harness attaching | | | | | | | | | | | | | | | | | 1 | | | |
| | 01P19762-2-5 * * | BAG, Magneto harness attaching | | | | | | | | | | | | | | | | | 1 | 1 | 1 | |
| | 01P19762-2-7 * * | BAG, Magneto harness attaching | | | | | | | | | | | | | | | | | | | | 1 |
| | 01P19762-2-9 * * | BAG, Magneto harness attaching | | | | | | | | | | | | | | | | | | | | 1 |
| | 01P19762-2-12 * * | BAG, Magneto harness attaching | | | | | | | | | | | | | | | | | | | 1 | 1 |

- * Item No. 2 spark plug is used in current production only. Additional spark plugs are available for these engines. See latest edition of Lycoming Service Instruction No. 1042 for complete listing of all approved spark plugs.
- * * See page.4-12 for a breakdown of individual parts contained in the magneto and harness attaching parts bag. These parts to be attached by customer per engine line drawing included with each bag.

BAG - MAGNETO HARNESS ATTACHING

| P/N'S 01P19762-1-1, 01P19762-1-7 | | | P/N 01P19762-1-2 | | |
|----------------------------------|-------------------------|------|------------------|------------------------------|------|
| Part No. | Part Name | Qty. | Part No. | Part Name | Qty. |
| LW-16266-25-25 | CLAMP, 1 wire | 2 | LW-16266-25-25 | CLAMP, 1 wire | 2 |
| LW-14060 | CLIP, 2 wire | 3 | LW-14060 | CLIP, 2 wire | 3 |
| STD-8 | WASHER, 1/4 plain | 8 | STD-8 | WASHER, 1/4 plain | 8 |
| STD-1874 | SCREW, 1/4 lock | 6 | STD-1874 | SCREW, 1/4 lock (rocker box) | 6 |
| 76734 | ZIP STRAP | 8 | 76734 | ZIP STRAP | 8 |
| LW-16266-25-50 | CLAMP, 4 wire | 1 | LW-16266-25-50 | CLIP, 4 wire | 1 |
| STD-1411 | NUT, 1/4 plain | 2 | STD-696 | WASHER, 1/4 thin | 4 |
| STD-696 | WASHER 1/4 thin | 4 | STD-1916 | SCREW, 1/4 x 1-1/8 long | 3 |
| STD-1916 | SCREW, 1/4 x 1-1/8 long | 3 | LW-M-2375 | PLATE, Baffle | 2 |
| LW-M-2375 | PLATE, Baffle | 2 | | | |

| P/N'S 01P19762-2-5, 01P19762-2-7, 01P19762-2-9 | | |
|--|-------------------------|------|
| Part No. | Part Name | Qty. |
| LW-16266-25-25 | CLAMP, 1 wire | 4 |
| LW-14060 | CLIP, 2 wire | 4 |
| STD-8 | WASHER, 1/4 plain | 8 |
| STD-160 | WASHER, 1/4 lock | 1 |
| STD-1874 | SCREW, 1/4 lock | 4 |
| 76734 | ZIP STRAP | 12 |
| LW-16266-25-50 | CLAMP, 4 wire | 3 |
| STD-1411 | NUT, 1/4 plain | 1 |
| STD-696 | WASHER, 1/4 thin | 4 |
| STD-1916 | SCREW, 1/4 x 1-1/8 long | 1 |
| STD-1925 | SCREW, 1/4 x 5/8 long | 2 |
| 72815 | BRACKET, Twist | 3 |
| 73152 | BRACKET, Straight | 2 |
| STD-692 | SCREW, No. 10 | 5 |
| STD-425 | WASHER, No. 10 | 5 |
| STD-670 | NUT, No. 10 | 5 |
| LW-M-2375 | PLATE | 2 |

| P/N 01P19762-2-12 | | |
|-------------------|------------------------------|------|
| Part No. | Part Name | Qty. |
| LW-16266-25-25 | CLAMP, 1 wire | 4 |
| LW-14060 | CLIP, 2 wire | 4 |
| STD-8 | WASHER, 1/4 plain | 8 |
| STD-160 | WASHER, 1/4 lock | 1 |
| 77410 | BRACKET, Ext. fuel inj. line | 1 |
| STD-1874 | SCREW, 1/4 lock (rocker box) | 4 |
| 76734 | ZIP STRAP | 12 |
| LW-16266-25-50 | CLIP, 4 wire | 3 |
| STD-1411 | NUT, 1/4 plain | 1 |
| STD-696 | WASHER, 1/4 thin | 4 |
| STD-1916 | SCREW, 1/4 x 1-1/8 long | 1 |
| STD-1925 | SCREW, 1/4 x 5/8 long | 2 |
| 72815 | BRACKET, Twist | 3 |
| 73152 | BRACKET, Straight | 2 |
| STD-692 | SCREW, No. 10 | 5 |
| STD-425 | WASHER, No. 10 | 5 |
| STD-670 | NUT, No. 10 | 5 |
| LW-M-2375 | PLATE, Baffle | 2 |

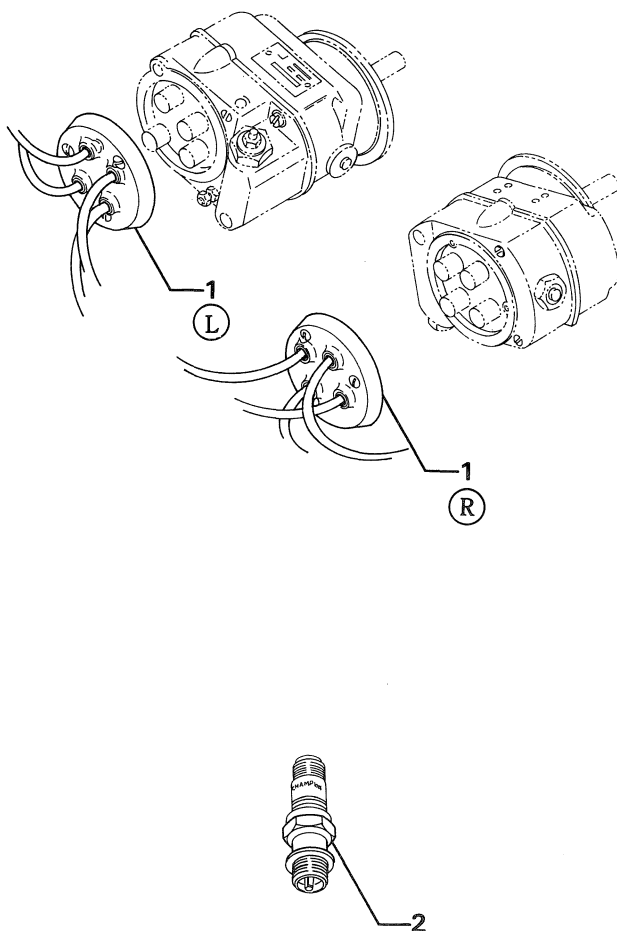


Figure 27. IGNITION HARNESSES, SPARK PLUG AND ATTACHING HARDWARE (AIO-360)

IGNITION SYSTEM

DUAL MAGNETOS AND MAGNETO DRIVES

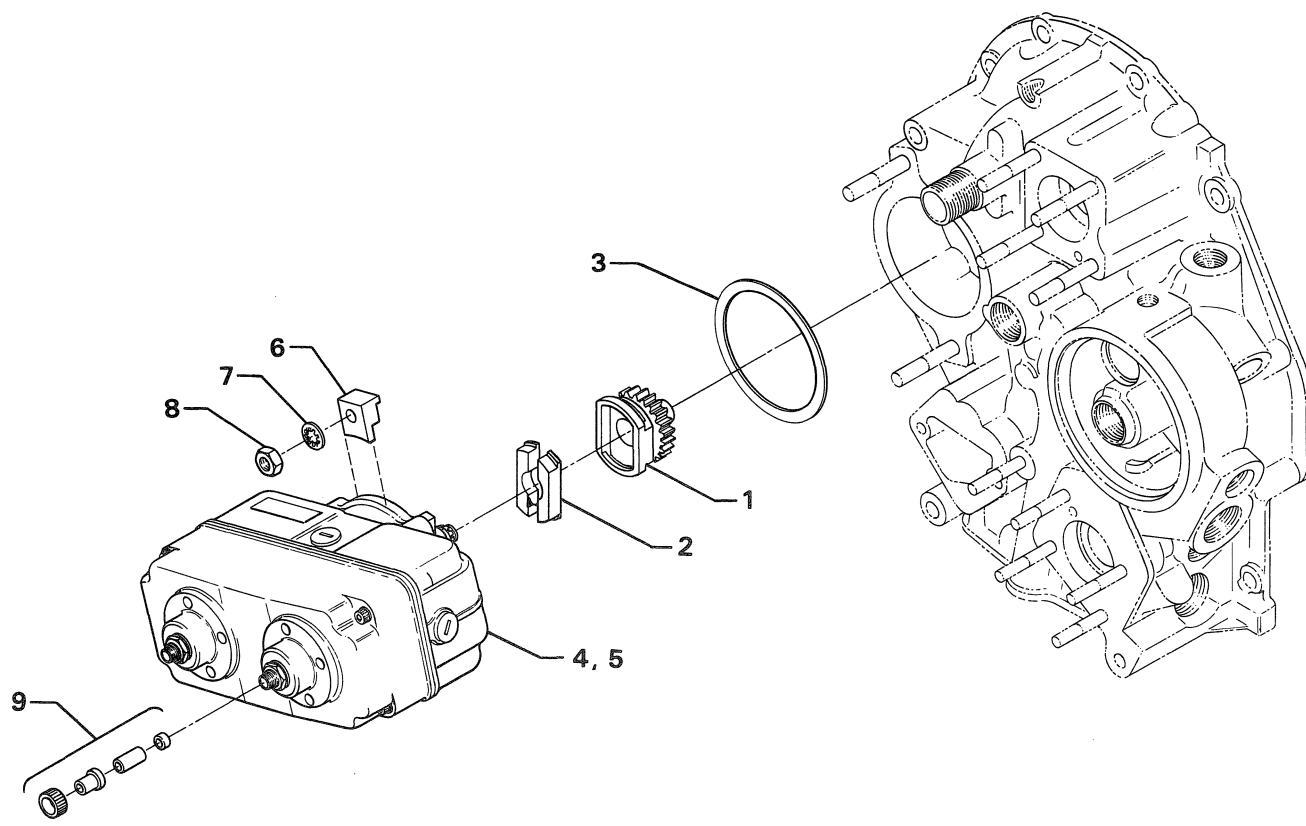
[illegible]

Figure 28. DUAL MAGNETOS AND MAGNETO DRIVES

IGNITION SYSTEM

IGNITION HARNESSES (DUAL), SPARK PLUGS AND ATTACHING HARDWARE

| FIG. REF. 29 | PART NUMBER | DESCRIPTION | O N A L L | QUANTITY PER ASSEMBLY | | | | | | | | | | | | | | | | | | |
|--------------------|------------------|--------------------------------|-----------------------|-----------------------|-------------|------------------|-----------------------|-------------|-------------|------------------|-------------|-------------|-----------------------|-------------|-------------|-------------|-------------|-------------|------------------|-------------|-------------|-------------|
| | | | | IO-360 | | | | | | | | | | | | | | | | | AIO-360 | |
| | | | | A 1 A | A 1 B | A 1 B 6 | A 1 B 6 D | A 1 C | A 1 D | A 1 D 6 | A 2 A | A 2 B | A 3 B 6 D | B 1 B | B 1 D | B 1 E | B 1 F | B 2 F | B 2 F 6 | B 4 A | A 1 A | A 1 B |
| 1 | 67H21450 | HARNESS, Ignition (Bendix) | | | | | 1 | | | | 1 | | | | | | | | | | | |
| | 67H21452 | HARNESS, Ignition (Bendix) | | | | | 1 | | | | | | | | | | | | | | | |
| | 67H21456 | HARNESS, Ignition (Bendix) | | | | | | | | | 1 | | | | | | | | | | | |
| 2 | 1182-D4 * | SPARK PLUG, Champion (RHM38E) | | | | | 8 | | | | 8 | | | | | | | | | | | |
| | 1182-U5 * | SPARK PLUG, Champion (RHB32E) | | | | | | | | | 8 | | | | | | | | | | | |
| | 01P21501-3-30 ** | BAG, Magneto harness attaching | | | | | 1 | | | | | | | | | | | | | | | |
| | 01P21501-6-31 ** | BAG, Magneto harness attaching | | | | | | | | | 1 | | | | | | | | | | | |
| | 01P21501-8-47 ** | BAG, Magneto harness attaching | | | | | 1 | | | | 1 | | | | | | | | | | | |

- * Item No. 2 spark plugs are used in current production only. Additional spark plugs are available for this engine. See latest edition of Service Instruction No. 1042 for complete listing of all approved spark plugs.
- ** See below for a breakdown of individual parts contained in the magneto and harness attaching parts bag. These parts to be attached by customer per engine line drawing included in each bag.

BAG - MAGNETO HARNESS ATTACHING

| P/N 01P21501-3-30 | | | P/N 01P21501-6-31 | | |
|-------------------|-----------------------------|------|-------------------|-----------------------------|------|
| Part No. | Part Name | Qty. | Part No. | Part Name | Qty. |
| LW-16266-10-75 | CLAMP, 6 wire | 1 | LW-14875 | BRACKET, Extension, 90° | 1 |
| LW-16266-25-25 | CLAMP, 1 wire | 5 | LW-16266-10-63 | CLAMP, 4 wire | 1 |
| LW-16266-25-75 | CLAMP, 6 wire | 1 | STD-692 | SCREW, No. 10-32 x 1/2 long | 2 |
| LW-16266-10-63 | CLAMP, 4 wire | 2 | STD-670 | NUT, No. 10-32 self-locking | 2 |
| 71824 | CLIP, 2 wire | 3 | LW-16266-10-75 | CLAMP, Shroud tube | 1 |
| STD-1874 | SCREW, 1/4-20 x 13/16 long | 5 | LW-16266-10-63 | CLAMP, 4 wire | 1 |
| STD-8 | WASHER, 1/4 plain | 10 | 76734 | ZIP STRAP | 19 |
| STD-670 | NUT, No. 10-32 self-locking | 2 | STD-1874 | SCREW, 1/4-20 x 13/16 long | 5 |
| STD-692 | SCREW, No. 10-32 x 1/2 long | 2 | STD-8 | WASHER, 1/4 plain | 10 |
| STD-28 | WASHER, No. 10 plain | 2 | 71824 | CLIP, 2 wire | 3 |
| LW-14875 | BRACKET, Extension, 90° | 1 | LW-16266-25-25 | CLAMP, 1 wire | 2 |
| 76734 | ZIP STRAP | 16 | | | |

| P/N 01P21501-8-47 | | |
|-------------------|-----------------------------|------|
| Part No. | Part Name | Qty. |
| LW-16266-10-75 | CLAMP, 6 wire | 3 |
| LW-16266-10-63 | CLAMP, 4 wire | 3 |
| LW-14875 | BRACKET, Extension, 90° | 1 |
| 71824 | CLIP, 2 wire | 3 |
| LW-16266-25-25 | CLAMP, 1 wire | 2 |
| 76734 | ZIP STRAP | 21 |
| STD-692 | SCREW, No. 10-32 x 1/2 long | 3 |
| STD-670 | NUT, No. 10-32 self-locking | 3 |
| STD-1874 | SCREW, 1/4-20 x 13/16 long | 5 |
| STD-8 | WASHER, 1/4 plain | 10 |

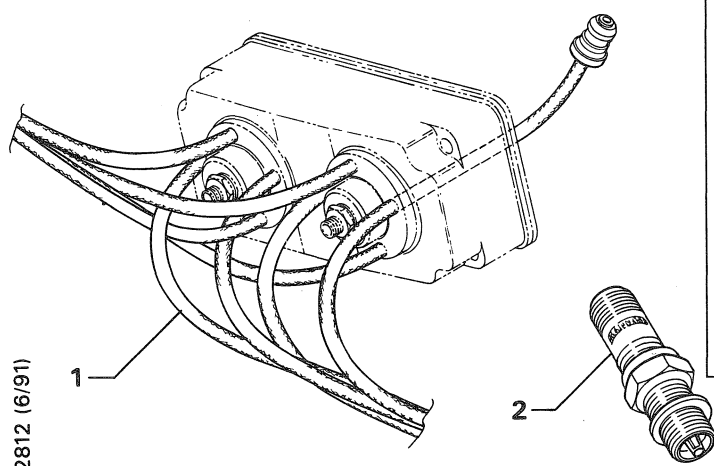


Figure 29. IGNITION HARNESSES (DUAL), SPARK PLUGS AND ATTACHING HARDWARE

ELECTRICAL SYSTEM

ALTERNATOR AND GENERATOR MOUNTING BRACKETS

| FIG. REF. 30 | PART NUMBER | DESCRIPTION | O N A L L | QUANTITY PER ASSEMBLY | | | | | | | | | | | | | | | | | | | |
|--------------------|----------------|--------------------------------------|-----------------------|-----------------------|-------------|------------------|-----------------------|-------------|-------------|------------------|-------------|-------------|-----------------------|-------------|-------------|-------------|-------------|-------------|------------------|-------------|-------------|-------------|-------------|
| | | | | IO-360 | | | | | | | | | | | | | | | | AIO-360 | | | |
| | | | | A 1 A | A 1 B | A 1 B 6 | A 1 B 6 D | A 1 C | A 1 D | A 1 D 6 | A 2 A | A 2 B | A 3 B 6 D | B 1 B | B 1 D | B 1 E | B 1 F | B 2 F | B 2 F 6 | B 4 A | A 1 A | A 1 B | B 1 B |
| 1 | 70419 | BRACKET, Generator | | 2 | | 2 | | 2 | 2 | | | | | 2 | 2 | | 2 | 2 | | 2 | | | |
| 2 | 74324 | BRACKET, Alternator | | 1 | 1 | | | 1 | | | 1 | | | 1 | | | 1 | | | | 1 | | |
| | 07A19474 | BRACKET, Alternator | 1 | | | | | | | | | | | | | | | | | | | | |
| | 76906 | BRACKET, Alternator | | | 1 | 1 | 1 | | 1 | | | 1 | | | | | | | | | | | |
| 3 | LW-13365 | BRACE, Alternator bracket | | | | 1 | | | | | | | | | | | | | | | | | |
| 4 | 73383 | LOCKPLATE, 5/16 b6lt x 1.00 spacing | 1 | | | | | | | | | | | | | | | | | | | | |
| | 73383■ | LOCKPLATE, 5/16 bolt x 1.00 spacing | | 2 | | | | 2 | | | | | | 2 | | | | | | | | | |
| | 73383► | LOCKPLATE, 5/16 bolt x 1.00 spacing | | 2 | | 2 | | | 2 | | | | | 2 | 2 | | 2 | 2 | | 2 | | | |
| 5 | STD-475● | WASHER, 5/16 lock, internal teeth | | | | 1 | | | | | | | | | | | | | | | | | |
| 6 | LW-31-0.94 | BOLT, 5/16-18 x 15/16 long, hex. hd. | 2 | | | | | | | | | | | | | | | | | | | | |
| | LW-31-0.94● | BOLT, 5/16-18 x 15/16 long, hex. hd. | | | | 3 | | | | | | | | | | | | | | | | | |
| | LW-31-0.94■ | BOLT, 5/16-18 x 15/16 long, hex. hd. | | 4 | | | | 4 | | | | | | 4 | | | | | | | | | |
| | LW-31-0.94► | BOLT, 5/16-18 x 15/16 long, hex. hd. | | 4 | | 4 | | | 4 | | | | | 4 | 4 | | 4 | 4 | | 4 | | | |
| 7 | 76028 | LINK, Generator adjusting | | 1 | | 1 | | 1 | 1 | | | | | 1 | 1 | | 1 | 1 | | 1 | | | |
| 8 | LW-10729 | LINK, Alternator adjusting | | | 1 | 1 | 1 | | 1 | | | 1 | | | | | | | | | | | |
| | 74325 * | LINK, Alternator adjusting | | 1 | 1 | | | 1 | | | 1 | | | 1 | | | 1 | | | | 1 | | |
| | 75380 * * | LINK, Alternator adjusting | | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 75380 ★ | LINK, Alternator adjusting | | 1 | 1 | 1 | 1 | 1 | | 1 | | | 1 | 1 | | | 1 | | | | 1 | 1 | 1 |
| 9 | STD-35 | WASHER, 5/16 plain | 1 | | | | | | | | | | | | | | | | | | | | |
| 10 | LW-31H0.75 | BOLT, 5/16-18 x 3/4 long, hex. hd. | 1 | | | | | | | | | | | | | | | | | | | | |
| | LW-31-0.94● | BOLT, 5/16-18 x 15/16 long, hex. hd. | | | | 1 | | | | | | | | | | | | | | | | | |
| | LW-31H0.88‡ | BOLT, 5/16-18 x 7/8 long, hex. hd. | | | 1 | 1 | 1 | | 1 | | | 1 | | | | | | | | | | | |
| 11 | STD-1727 | WASHER, Plain, 3/4 O.D. x 11/32 I.D. | | | | | | | | | | | | | | | | | | | | | |
| | | x 1/8 thick | 1 | | | | | | | | | | | | | | | | | | | | |
| 12 | LW-31H0.75 | BOLT, 5/16-18 x 3/4 long, hex. hd. | 1 | | | | | | | | | | | | | | | | | | | | |
| 13 | 77718 | STRUT, Generator support | | 1 | | | | 1 | | | | | | 1 | | | | | | | | | |
| 14 | 76908 | STRUT, Alternator support | | | 1 | 1 | 1 | | 1 | | | 1 | | | | | | | | | | | |
| | 74323 | STRUT, Alternator support | 1 | | | | | | | | | | | | | | | | | | | | |
| 15 | LW-31H0.75 | BOLT, 5/16-18 x 3/4 long, hex. hd. | 1 | | | | | | | | | | | | | | | | | | | | |
| | LW-31H0.88 | BOLT, 5/16-18 x 7/8 long, hex. hd. | | | 1 | 1 | 1 | | 1 | | | 1 | | | | | | | | | | | |
| 16 | LW-31S1.16■ | BOLT, 5/16-18 x 1-5/32 long, dr. end | | 1 | | | | 1 | | | | | | 1 | | | | | | | | | |
| | LW-31S1.16► | BOLT, 5/16-18 x 1-5/32 long, dr. end | | 2 | | 2 | | | 2 | | | | | 2 | 2 | | 2 | 2 | | 2 | | | |
| 17 | LW-31S1.28■ | BOLT, 5/16-18 x 1-9/32 long, dr. end | | 1 | | | | 1 | | | | | | 1 | | | | | | | | | |
| 18 | STD-35 | WASHER, 5/16 plain | | AR | | AR | | AR | AR | | | | | AR | AR | | AR | AR | | AR | | | |
| 19 | STD-1420 | NUT, 5/16-18 slotted | | 2 | | 2 | | 2 | 2 | | | | | 2 | 2 | | 2 | 2 | | 2 | | | |
| 20 | STD-68 | PIN, Cotter, 1/16 dia. x 1/2 long | | 2 | | 2 | | 2 | 2 | | | | | 2 | 2 | | 2 | 2 | | 2 | | | |
| 21 | STD-690 | WASHER, 13/16 O.D. x 25/64 I.D. | | | | | | | | | | | | | | | | | | | | | |
| | | x 1/16 thick | 1 | | | | | | | | | | | | | | | | | | | | |
| 22 | AN6-14 * * | BOLT, 3/8-24 x 1-37/64, hex. hd., | | | | | | | | | | | | | | | | | | | | | |
| | | dr. end | | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | AN6-17 ★ | BOLT, 3/8-24 x 1-61/64, hex. hd., | | | | | | | | | | | | | | | | | | | | | |
| | | dr. end | | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | | 1 | 1 | | 1 | | | | 1 | 1 | 1 |
| | AN6-32 * | BOLT, 3/8-24 x 3-21/64, hex. hd., | | | | | | | | | | | | | | | | | | | | | |
| | | dr. end | | 1 | 1 | | | 1 | | | 1 | | | 1 | | | 1 | | | | 1 | | |
| 23 | STD-690 | WASHER, 13/16 O.D. x 25/64 I.D. | | | | | | | | | | | | | | | | | | | | | |
| | | x 1/16 thick | AR | | | | | | | | | | | | | | | | | | | | |
| 24 | STD-872 | NUT, 3/8-24 slotted | 1 | | | | | | | | | | | | | | | | | | | | |
| 25 | STD-713 | PIN, Cotter, 3/32 dia. x 3/4 long | 1 | | | | | | | | | | | | | | | | | | | | |

ELECTRICAL SYSTEM

ALTERNATOR AND GENERATOR MOUNTING BRACKETS (Continued)

| FIG. REF. 30 | PART NUMBER | DESCRIPTION | O N A L L | QUANTITY PER ASSEMBLY | | | | | | | | | | | | | | | |
|--------------------|----------------|--------------------------------------|-----------------------|-----------------------|-------------|------------------|-----------------------|-------------|-------------|------------------|-------------|-------------|-----------------------|-------------|-------------|-------------|-------------|------------------|-------------|
| | | | | IO-360 | | | | | | | | | | | | | | AIO-360 | |
| | | | | A 1 A | A 1 B | A 1 B 6 | A 1 B 6 D | A 1 C | A 1 D | A 1 D 6 | A 2 A | A 2 B | A 3 B 6 D | B 1 B | B 1 D | B 1 E | B 1 F | B 2 F 6 | B 4 A |
| 26 | AN6-16 | BOLT, 3/8-24 x 1-53/64, hex. hd., | | | | | | | | | | | | | | | | | |
| | | dr. end | 1 | | | | | | | | | | | | | | | | |
| 27 | 76534 | SHIM, 1-1/8 O.D. x 13/32 I.D. x .005 | | | | | | | | | | | | | | | | | |
| | | thick | AR | | | | | | | | | | | | | | | | |
| 28 | STD-690 | WASHER, 13/16 O.D. x 25/64 I.D. x | | | | | | | | | | | | | | | | | |
| | | 1/16 thick | AR | | | | | | | | | | | | | | | | |
| 29 | STD-872 | NUT, 3/8-24 slotted | 1 | | | | | | | | | | | | | | | | |
| 30 | STD-713 | PIN, Cotter, 3/32 dia. x 3/4 long | 1 | | | | | | | | | | | | | | | | |

- * Used with P/N 74324 alternator bracket.
- * * Used with 12 volt-40 amp. alternators only, P/N 07A19474 alternator bracket and shorter bolt.
- ★ Used with 12 volt-70 amp., 24 volt-50 amp. or 24 volt-70 amp. alternators and P/N 07A19474 alternator bracket.
- Used with P/N 76906 alternator bracket and P/N LW-13365 brace.
- ‡ Used with P/N 76906 alternator bracket; no brace.
- Used with 24 volt-40 amp. and 24 volt-50 amp. generators, P/N 77718 strut and P/N 70419 generator bracket.
- Used with generators except 24 volt-40 & 50 amp. and P/N 70419 generator bracket.

CAUTION

**ENGINE MODELS COULD HAVE DIFFERENT
BRACKET CONFIGURATIONS DEPENDING ON
ALTERNATOR OR GENERATOR APPLICATION. FOR
YOUR SPECIFIC MODEL, CHECK PARTS LISTED ON
PAGES 5-1 & 5-2 AND SEE FIGURES 30 AND 30A.**

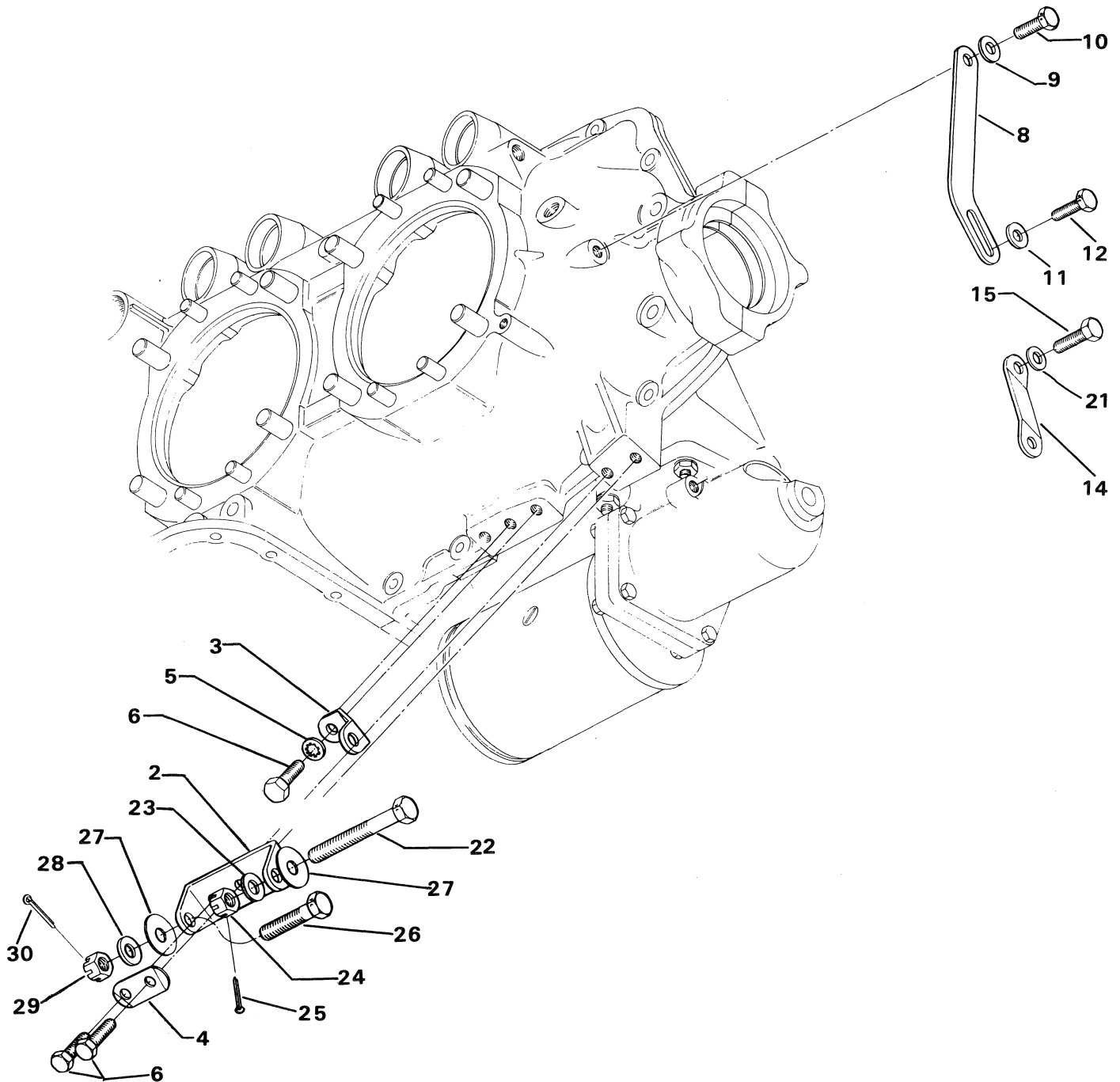


Figure 30. ALTERNATOR MOUNTING BRACKETS

Added October, 1995

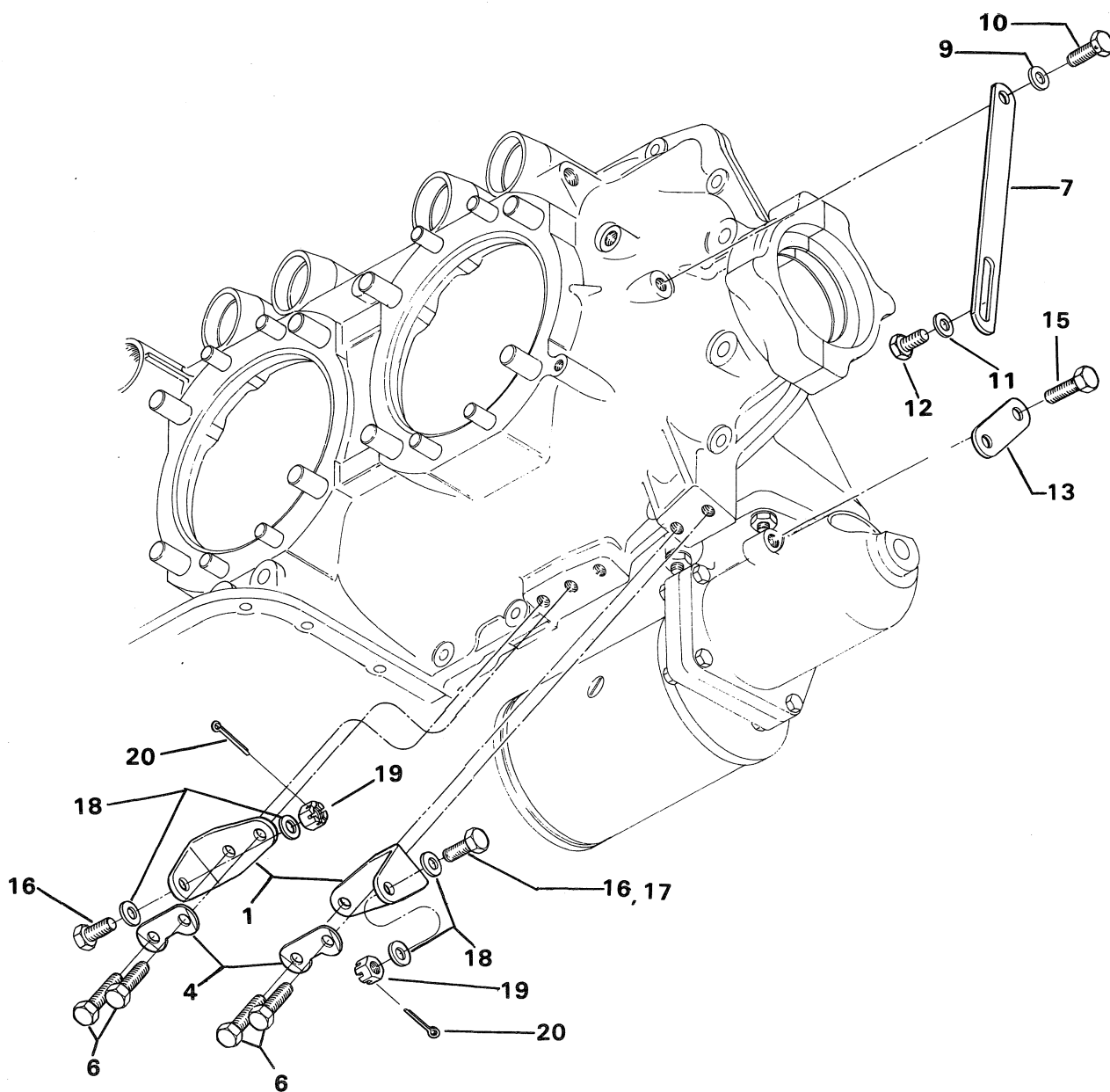


Figure 30A. GENERATOR MOUNTING BRACKETS

ELECTRICAL SYSTEM

100 AMP ALTERNATOR MOUNTING AND ATTACHING PARTS

| FIG. REF. 31 | PART NUMBER | DESCRIPTION | O N A L L | QUANTITY PER ASSEMBLY | | | | | | | | | | | | | | | | | | |
|--------------------|----------------|--|-----------------------|-----------------------|-------------|------------------|-----------------------|-------------|-------------|------------------|-------------|-------------|-----------------------|-------------|-------------|-------------|-------------|-------------|------------------|-------------|-------------|-------------|
| | | | | IO-360 | | | | | | | | | | | | | | AIO-360 | | | | |
| | | | | A 1 A | A 1 B | A 1 B 6 | A 1 B 6 D | A 1 C | A 1 D | A 1 D 6 | A 2 A | A 2 B | A 3 B 6 D | B 1 B | B 1 D | B 1 E | B 1 F | B 2 F | B 2 F 6 | B 4 A | A 1 A | A 1 B |
| 1 | LW-14141 | BRACKET, Alternator, front | | | 1 | | | | | | | | | | | | | | | | | |
| 2 | LW-14142 | BRACKET, Alternator, rear | | | 1 | | | | | | | | | | | | | | | | | |
| 3 | 73383 | LOCKPLATE, 5/16 bolt x 1.00 spacing | | | 2 | | | | | | | | | | | | | | | | | |
| 4 | LW-31-0.94 | BOLT, 5/16-18 x 15/16 long, hex. hd. | | | 4 | | | | | | | | | | | | | | | | | |
| 5 | LW-11147 | BRACKET, Alternator belt adjusting | | | 1 | | | | | | | | | | | | | | | | | |
| 6 | STD-1727 | WASHER, Plain, 3/4 O.D. x 11/32 I.D. | | | | | | | | | | | | | | | | | | | | |
| | | x 1/8 thick | | | 1 | | | | | | | | | | | | | | | | | |
| 7 | LW-14637 * | SHIM, 13/16 O.D. x 11/32 I.D. x .005 | | | | | | | | | | | | | | | | | | | | |
| | | thick | | | AR | | | | | | | | | | | | | | | | | |
| 8 | LW-14649 * | SHIM, 13/16 O.D. x 11/32 I.D. x .010 | | | | | | | | | | | | | | | | | | | | |
| | | thick | | | AR | | | | | | | | | | | | | | | | | |
| 9 | LW-31H1.22 | BOLT, 5/16-18 x 1-7/32 long, hex. hd., | | | | | | | | | | | | | | | | | | | | |
| | | drilled | | | 1 | | | | | | | | | | | | | | | | | |
| 10 | LW-19265 | PULLEY & SHAFT ASSY., Alternator | | | | | | | | | | | | | | | | | | | | |
| | | dual belt adjusting | | | 1 | | | | | | | | | | | | | | | | | |
| 11 | 76420 | PULLEY, Alternator idler, dual | | | 1 | | | | | | | | | | | | | | | | | |
| 12 | 78629 | BALL BEARING, Double row, alt. | | | | | | | | | | | | | | | | | | | | |
| | | idler pulley | | | 1 | | | | | | | | | | | | | | | | | |
| 13 | MS16625-1125 | RING, Internal retaining, 1-1/4 dia. | | | 2 | | | | | | | | | | | | | | | | | |
| 14 | LW-19238 | SHAFT, Alternator dual belt idler | | | 1 | | | | | | | | | | | | | | | | | |
| 15 | 76768 | LOCKWASHER, Alternator idler | | | | | | | | | | | | | | | | | | | | |
| | | pulley bearing | | | 1 | | | | | | | | | | | | | | | | | |
| 16 | 76769 | LOCKNUT, Alt. idler pulley bearing | | | 1 | | | | | | | | | | | | | | | | | |
| 17 | LW-11635 | SHIELD, Idler shaft | | | 1 | | | | | | | | | | | | | | | | | |
| 18 | STD-669 | WASHER, 33/64 I.D. x 1.00 O.D. x 1/8 | | | | | | | | | | | | | | | | | | | | |
| | | thick | | | 1 | | | | | | | | | | | | | | | | | |
| 19 | STD-2221 | NUT, 1/2-20 self-locking | | | 1 | | | | | | | | | | | | | | | | | |
| 20 | STD-1727 | WASHER, Plain, 3/4 I.D. x 11/32 I.D. x | | | | | | | | | | | | | | | | | | | | |
| | | 1/8 thick | | | 1 | | | | | | | | | | | | | | | | | |
| 21 | LW-31H1.22 | BOLT, 5/16-18 x 1-7/32 long, hex. hd., | | | | | | | | | | | | | | | | | | | | |
| | | drilled | | | 1 | | | | | | | | | | | | | | | | | |
| 22 | LW-14637 * | SHIM, 13/16 O.D. x 11/32 I.D. x .005 | | | | | | | | | | | | | | | | | | | | |
| | | thick | | | AR | | | | | | | | | | | | | | | | | |
| 23 | LW-10970 | STRUT, Alternator support | | | 1 | | | | | | | | | | | | | | | | | |
| 24 | LW-31H0.75 | BOLT, 5/16-18 x 3/4 long, hex. hd., | | | | | | | | | | | | | | | | | | | | |
| | | drilled | | | 1 | | | | | | | | | | | | | | | | | |
| 25 | LW-14650 * | SHIM, 7/8 O.D. x 15/32 I.D. x .005 thick | | | AR | | | | | | | | | | | | | | | | | |
| 26 | AN7-14 | BOLT, 7/16-20 UNF-3A x 1-19/32 long, | | | | | | | | | | | | | | | | | | | | |
| | | dr. end | | | 1 | | | | | | | | | | | | | | | | | |
| 27 | STD-632 | WASHER, 7/16 plain | | | AR | | | | | | | | | | | | | | | | | |
| 28 | AN310-7 | NUT, 7/16 plain, slotted | | | 1 | | | | | | | | | | | | | | | | | |
| 29 | STD-761 | PIN, Cotter, 3/32 dia. x 1.00 long | | | 1 | | | | | | | | | | | | | | | | | |
| 30 | AN7-12 | BOLT, 7/16-20 UNF-3A x 1-11/32 long, | | | | | | | | | | | | | | | | | | | | |
| | | dr. end | | | 1 | | | | | | | | | | | | | | | | | |
| 31 | STD-632 | WASHER, 7/16 plain | | | AR | | | | | | | | | | | | | | | | | |
| 32 | AN310-7 | NUT, 7/16-20 plain, slotted | | | 1 | | | | | | | | | | | | | | | | | |
| 33 | STD-761 | PIN, Cotter, 3/32 dia. x 1.00 long | | | 1 | | | | | | | | | | | | | | | | | |

* Shim as required for belt alignment between crankcase idler adjusting bracket, alternator and alternator bracket.

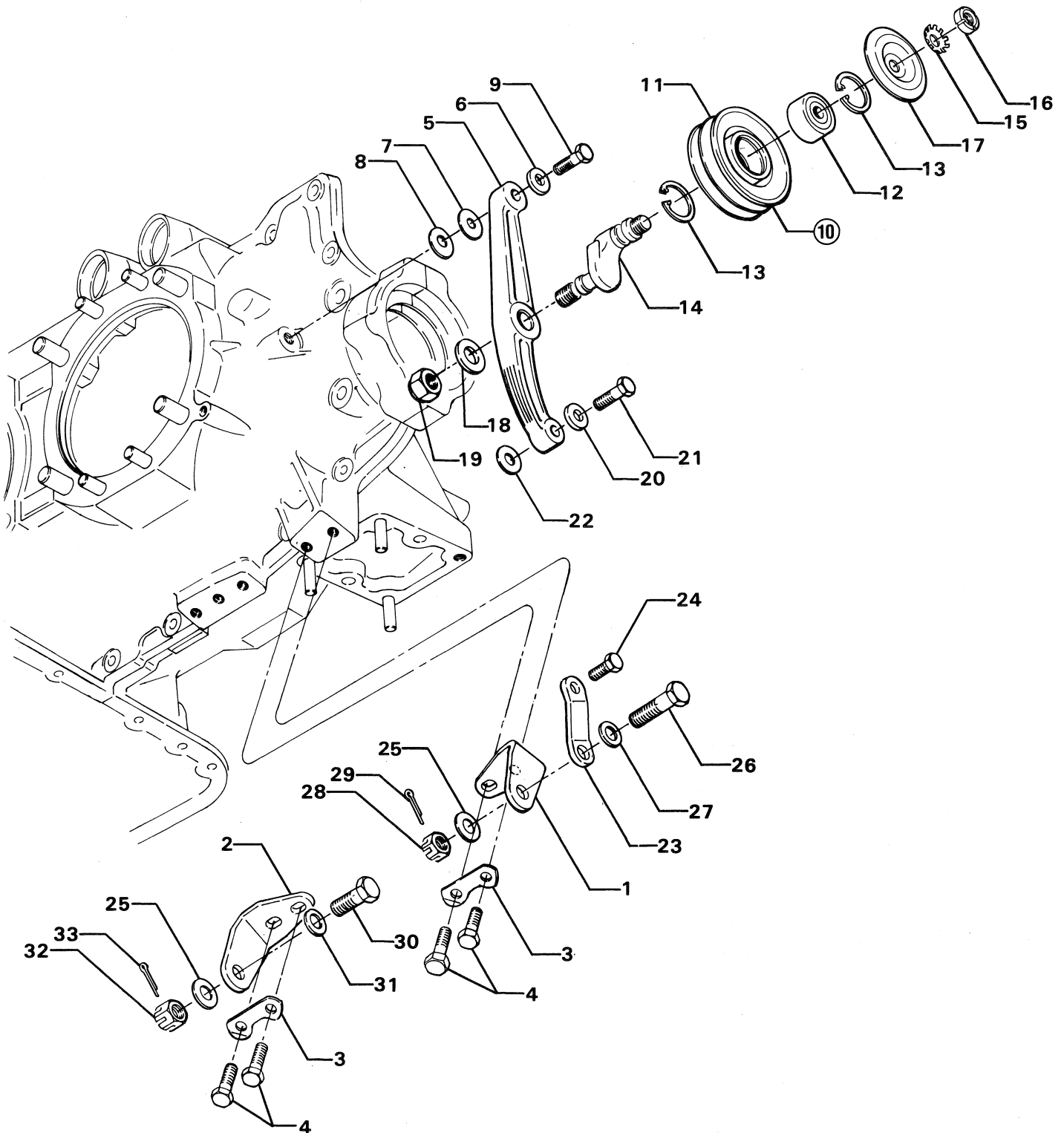


Figure 31. 100 AMP ALTERNATOR MOUNTING AND ATTACHING PARTS

ELECTRICAL SYSTEM

ALTERNATOR ASSEMBLY AND BELT

| FIG. REF. 32 | PART NUMBER | DESCRIPTION | O N A L L | QUANTITY PER ASSEMBLY | | | | | | | | | | | | | | | | | | |
|--------------------|----------------|---|-----------------------|-----------------------|-------------|------------------|-----------------------|-------------|-------------|------------------|-------------|-------------|-----------------------|-------------|-------------|-------------|-------------|-------------|------------------|-------------|-------------|-------------|
| | | | | IO-360 | | | | | | | | | | | | | | | | AIO-360 | | |
| | | | | A 1 A | A 1 B | A 1 B 6 | A 1 B 6 D | A 1 C | A 1 D | A 1 D 6 | A 2 A | A 2 B | A 3 B 6 D | B 1 B | B 1 D | B 1 E | B 1 F | B 2 F | B 2 F 6 | B 4 A | A 1 A | A 1 B |
| 1 | 74880 | ALTERNATOR ASSY., 12 volt, 70 amp. (3.25:1 ratio) | | | 1 | | | | | | | | | | | | | | | | | |
| 2 | 74319 | ALTERNATOR, (1100717) | | | 1 | | | | | | | | | | | | | | | | | |
| 3 | 74863 | PULLEY, Alternator (3.25:1 ratio) | | | 1 | | | | | | | | | | | | | | | | | |
| 4 | 74878 * | FAN & BAFFLE ASSY., Alternator | | | 1 | | | | | | | | | | | | | | | | | |
| 5 | 76165 | ALTERNATOR ASSY., 12 volt, 70 amp. (2.50:1 ratio) | | | | | | | | 1 | | | | | | | | | | | | |
| 6 | 74319 | ALTERNATOR, (1100717) | | | | | | | | 1 | | | | | | | | | | | | |
| 7 | 76158 | PULLEY, Alternator (2.50:1 ratio) | | | | | | | | 1 | | | | | | | | | | | | |
| 8 | 74878 * | FAN & BAFFLE ASSY., Alternator | | | | | | | | 1 | | | | | | | | | | | | |
| 9 | 78308 | ALTERNATOR, (ALE-8406) 12 volt, 40 amp. | | 1 | 1 | | | | | | 1 | | | | | 1 | | 1 | 1 | 1 | 1 | |
| 10 | LW-14304 | ALTERNATOR, (ALZ-8423) 12 volt, 50 amp. | | | 1 | | | | | 1 | | 1 | | 1 | | | | 1 | | | | |
| 11 | LW-18904 | ALTERNATOR ASSY., 12 volt, 100 amp. (3.25:1 ratio) | | | | | | | | | | | | | | 1 | | | | | | |
| 12 | LW-18888 | ALTERNATOR, (ALV-8512) | | | | | | | | | | | | | | 1 | | | | | | |
| 13 | 76421 | PULLEY, Alternator (3.25:1 ratio) | | | | | | | | | | | | | | 1 | | | | | | |
| 14 | LW-14351 | ALTERNATOR ASSY., 12 volt, 60 amp. (3.25:1 ratio) | | | | | | | | 1 | | | | | | | | | | | | |
| 15 | LW-14313 | ALTERNATOR, (ALY-8420LS) | | | | | | | | 1 | | | | | | | | | | | | |
| 16 | LW-10512 | PULLEY, Alternator (3.25:1 ratio) | | | | | | | | 1 | | | | | | | | | | | | |
| 17 | LW-14371 | ALTERNATOR ASSY., 12 volt, 60 amp. (3.25:1 ratio) | | 1 | 1 | 1 | 1 | | 1 | 1 | | 1 | | 1 | 1 | 1 | 1 | 1 | | | | 1 |
| 18 | LW-14313 | ALTERNATOR, (ALY-8420LS) | | 1 | 1 | 1 | 1 | | 1 | 1 | | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 |
| 19 | 36B19484 | PULLEY, Alternator (3.25:1 ratio) | | 1 | 1 | 1 | 1 | | 1 | 1 | | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 |
| 20 | 32B19549 | ALTERNATOR ASSY., 12 volt, 70 amp. (3.25:1 ratio) | | | | 1 | | 1 | | | | | | | 1 | | | | | | 1 | 1 |
| 21 | LW-14318 | ALTERNATOR, (ALX-8421LS) | | | | 1 | | 1 | | | | | | | 1 | | | | | | 1 | 1 |
| 22 | 36B19484 | PULLEY, Alternator (3.25:1 ratio) | | | | 1 | | 1 | | | | | | | 1 | | | | | | 1 | 1 |
| 23 | 32B19555 | ALTERNATOR ASSY., 12 volt, 60 amp. (3.25:1 ratio) | | | | | 1 | | | | | 1 | | | | | | | | | | |
| 24 | LW-15403 | WASHER, 11/16 I.D. x 1-1/4 O.D. x .115 thick | | | | | | | | | | | 1 | | | | | | | | | |
| 25 | LW-14333 | ALTERNATOR, (ALY-6420LS) | | | | | 1 | | | | | | 1 | | | | | | | | | |
| 26 | 36B19484 | PULLEY, Alternator (3.25:1 ratio) | | | | | 1 | | | | | | 1 | | | | | | | | | |
| 27 | 32C19551 | ALTERNATOR ASSY., 24 volt, 50 amp. (3.25:1 ratio) | | 1 | 1 | 1 | | 1 | | | | | | 1 | | | | | | 1 | 1 | 1 |
| 28 | LW-14321 | ALTERNATOR, (ALT-8421LS) | | 1 | 1 | 1 | | 1 | | | | | | 1 | | | | | | 1 | 1 | 1 |
| 29 | 36B19484 | PULLEY, Alternator (3.25:1 ratio) | | 1 | 1 | 1 | | 1 | | | | | | 1 | | | | | | 1 | 1 | 1 |
| 30 | 32C19553 | ALTERNATOR ASSY., 24 volt, 70 amp. (3.25:1 ratio) | | 1 | | 1 | 1 | | | | | | | | | | | | | 1 | 1 | |
| 31 | LW-14326 | ALTERNATOR, (ALU-8421LS) | | 1 | | 1 | 1 | | | | | | | | | | | | | 1 | 1 | |
| 32 | 36B19484 | PULLEY, Alternator (3.25:1 ratio) | | 1 | | 1 | 1 | | | | | | | | | | | | | 1 | 1 | |
| 33 | LW-14367 | ALTERNATOR ASSY., 24 volt, 70 amp. (3.25:1 ratio) | | | | | | | | | | | 1 | | | | | | | | | |
| 34 | LW-15403 | WASHER, 11/16 I.D. x 1-1/4 O.D. x .115 thick | | | | | | | | | | | | | | | | | | | | |

ELECTRICAL SYSTEM ALTERNATOR ASSEMBLY AND BELT (Continued)

| FIG. REF. 32 | PART NUMBER | DESCRIPTION | O N A L L | QUANTITY PER ASSEMBLY | | | | | | | | | | | | | | | | | |
|--------------------|----------------|-------------------------------------|-----------------------|-----------------------|-------------|------------------|-----------------------|-------------|-------------|------------------|-------------|-------------|-----------------------|-------------|-------------|-------------|-------------|-------------|------------------|-------------|-------------|
| | | | | IO-360 | | | | | | | | | | | | | | | | AIO-360 | |
| | | | | A 1 A | A 1 B | A 1 B 6 | A 1 B 6 D | A 1 C | A 1 D | A 1 D 6 | A 2 A | A 2 B | A 3 B 6 D | B 1 B | B 1 D | B 1 E | B 1 F | B 2 F | B 2 F 6 | B 4 A | A 1 A |
| 35 | LW-14329 | ALTERNATOR, (ALU-6421LS) | | | | | | | | | 1 | | | | | | | | | | |
| 36 | 36B19484 | PULLEY, Alternator (3.25:1 ratio) | | | | | | | | | 1 | | | | | | | | | | |
| 37 | LW-18900 | ALTERNATOR ASSY., 24 volt, 100 | | | | | | | | | | | | | | | | | | | |
| | | amp. (dual belt) | | | 1 | | | | | | | | | | | | | | | | |
| 38 | LW-18885 | ALTERNATOR, (ALV-8511) | | | 1 | | | | | | | | | | | | | | | | |
| 39 | 76421 | PULLEY, Alternator (dual belt) | | | 1 | | | | | | | | | | | | | | | | |
| 40 | 37A19773-367 | BELT, Alternator drive (3/8 wide) | | | | | | | | | | | 1 | | | | | | | | |
| | 37A19773-376 | BELT, Alternator drive (3/8 wide) | 1 | | | | | | | | | | | | | | | | | | |
| | 37A19773M396 | BELT, Alternator dual, idler pulley | | | | | | | | | | | | | | | | | | | |
| | | take-up | | | 1 | | | | | | | | | | | | | | | | |

* These parts are no longer available for purchase through Lycoming.

NOTE

See latest edition of Lycoming Service Instruction No. 1154 for complete listing of FAA approved starters, generators, alternators, regulators and relays.

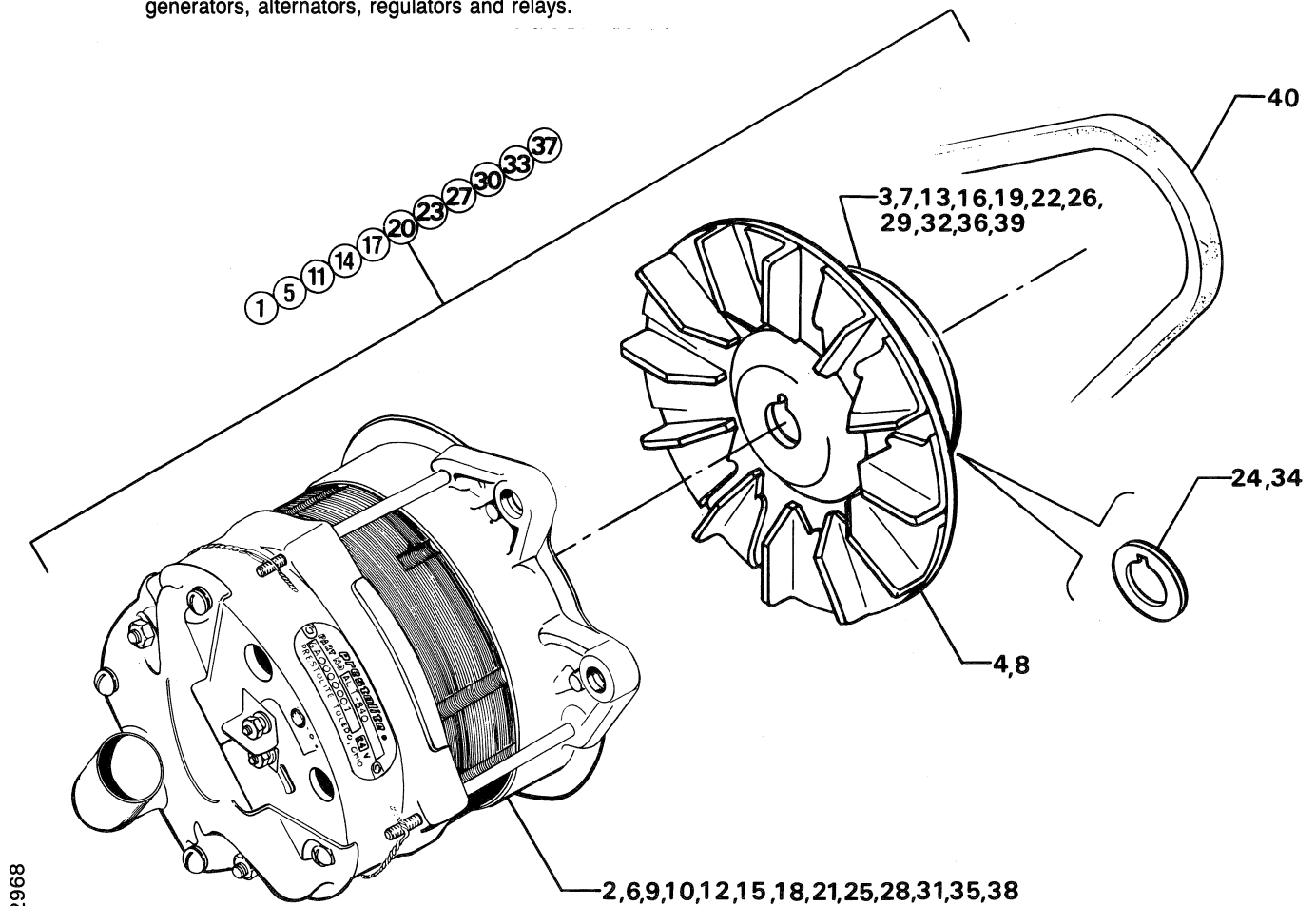


Figure 32. ALTERNATOR ASSEMBLY AND BELT

ELECTRICAL SYSTEM

STARTER MOTOR AND ATTACHING PARTS

| FIG. REF. 33 | PART NUMBER | DESCRIPTION | O N A L L | QUANTITY PER ASSEMBLY | | | | | | | | | | | | | | | | | | |
|--------------------|----------------|--|-----------------------|-----------------------|-------------|------------------|-----------------------|-------------|-------------|------------------|-------------|-------------|-----------------------|-------------|-------------|-------------|-------------|-------------|------------------|-------------|-------------|-------------|
| | | | | IO-360 | | | | | | | | | | | | | | AIO-360 | | | | |
| | | | | A 1 A | A 1 B | A 1 B 6 | A 1 B 6 D | A 1 C | A 1 D | A 1 D 6 | A 2 A | A 2 B | A 3 B 6 D | B 1 B | B 1 D | B 1 E | B 1 F | B 2 F | B 2 F 6 | B 4 A | A 1 A | A 1 B |
| 1 | LW-15571 | STARTER, Prestolite (MZ-4222), 12/14 pitch, 12 volt | 1 | | | | | | | | | | | | | | | | | | | |
| | LW-15572 | STARTER, Prestolite (MHB-4016), 12/14 pitch, 24 volt | | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | | | 1 | | | | 1 | 1 | 1 | |
| 2 | 31A21198 * | STARTER ASSY., Textron Lycoming (Lightweight), 12/14 pitch, 12 volt | 1 | | | | | | | | | | | | | | | | | | | |
| | 31B21064 * | STARTER ASSY., Lycoming (Lightweight), 12/14 pitch, 24 volt | | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | | | 1 | | | | 1 | 1 | 1 | |
| 3 | 31E21199 | MOTOR & SOLENOID ASSY. (12 volt) | 1 | | | | | | | | | | | | | | | | | | | |
| | 31E21143 | MOTOR & SOLENOID ASSY. (24 volt) | | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | | | 1 | | | | 1 | 1 | 1 | |
| 4 | 31D21088 | HOUSING ASSY., Starter support | 1 | | | | | | | | | | | | | | | | | | | |
| 5 | STD-514 | DOWEL | 2 | | | | | | | | | | | | | | | | | | | |
| 6 | LW-25-1.75 | BOLT, 1/4-20 x 1-3/4 long, hex. hd. | 1 | | | | | | | | | | | | | | | | | | | |
| 7 | LW-25-2.00 | BOLT, 1/4-20 x 2.00 long, hex. hd. | 2 | | | | | | | | | | | | | | | | | | | |
| 8 | STD-160 | WASHER, 1/4 lock, internal teeth | 3 | | | | | | | | | | | | | | | | | | | |
| 9 | STD-8 | WASHER, 1/4 plain | 3 | | | | | | | | | | | | | | | | | | | |
| 10 | 01L21158 * | SHIM, Starter (housing shaped) | 1 | | | | | | | | | | | | | | | | | | | |
| 11 | 01L21159 * | SHIM, Starter | 1 | | | | | | | | | | | | | | | | | | | |
| 12 | STD-35 | WASHER, 5/16 plain | 4 | | | | | | | | | | | | | | | | | | | |
| 13 | STD-475 | WASHER, 5/16 lock, internal teeth | 4 | | | | | | | | | | | | | | | | | | | |
| 14 | LW-31-1.16 | BOLT, 5/16-18 x 1-5/32 long, hex. hd. | 1 | | | | | | | | | | | | | | | | | | | |
| 15 | STD-1410 | NUT, 5/16-18 plain | 3 | | | | | | | | | | | | | | | | | | | |

* See latest edition of Lycoming Service Instruction No. 1447 for starter kit information.

NOTE

See latest edition of Lycoming Service Instruction No. 1154 for complete listing of FAA approved starters, generators, alternators, regulators and relays.

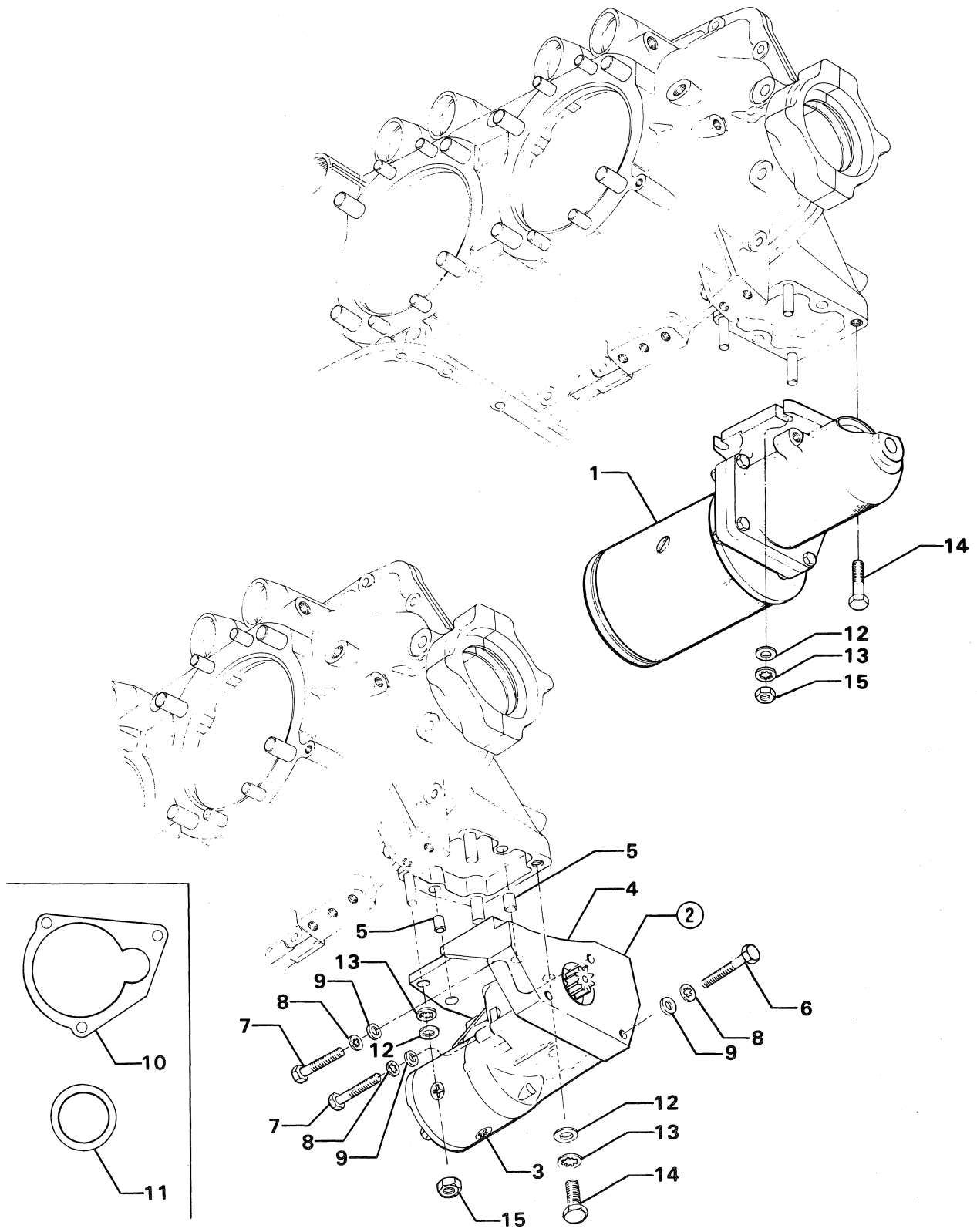


Figure 33. STARTER MOTOR AND ATTACHING PARTS

OIL SUMP AND INDUCTION SYSTEM

OIL SUMP ASSEMBLY AND OIL SUCTION SCREEN

| FIG. REF. 34 | PART NUMBER | DESCRIPTION | O N A L L | QUANTITY PER ASSEMBLY | | | | | | | | | | | | | | | | | |
|--------------------|----------------|---------------------------------------|-----------------------|-----------------------|-------------|------------------|-----------------------|-------------|-------------|------------------|-------------|-------------|-----------------------|-------------|-------------|-------------|-------------|------------------|-------------|-------------|-------------|
| | | | | IO-360 | | | | | | | | | | | | | | | | AIO-360 | |
| | | | | A 1 A | A 1 B | A 1 B 6 | A 1 B 6 D | A 1 C | A 1 D | A 1 D 6 | A 2 A | A 2 B | A 3 B 6 D | B 1 B | B 1 D | B 1 E | B 1 F | B 2 F 6 | B 4 A | A 1 A | A 1 B |
| 1 | LW-13353 | GASKET, Oil sump | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | |
| 2 | 74384 | SUMP ASSY., Oil | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | |
| | 78778★ | SUMP ASSY., Oil | | | | | | | | | | | | 1 | | | | | | | |
| | LW-10826 | SUMP ASSY., Oil | | | | | | | | | | | 1 | 1 | | 1 | 1 | 1 | 1 | | |
| | LW-13864★ | SUMP ASSY., Oil | | | | | | 1 | | | | | | | | | | | | | |
| | LW-14290★★ | SUMP ASSY., Oil | | | | | | | | | | | | 1 | | | | | | | |
| 3 | 69602 | CONNECTION, Intake pipe | | | | | | | | | | | | | 4 | | | | | | |
| | 78914 | CONNECTION, Intake pipe | | | | | | | | | | | | 4 | 4 | | 4 | 4 | 4 | 4 | |
| 4 | 61400 | STUD, 1/4-20 x 1-3/16 long | | | | | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | |
| | 61400 | STUD, 1/4-20 x 1-3/16 long | | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | | | | | | | | |
| 5 | 31C-14 | STUD, 5/16-18 x 1-3/4 long | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | | | |
| 6 | 31C-17 | STUD, 5/16-18 x 2-1/8 long | | | | | | | | | | | | 4 | 4 | | 4 | 4 | 4 | 4 | |
| | 31C-17★★ | STUD, 5/16-18 x 2-1/8 long | | | | | | | | | | | | | 2 | | | | | | |
| 7 | 31C-15★★ | STUD, 5/16-18 x 1-7/8 long | | | | | | | | | | | | | 2 | | | | | | |
| 8 | 31C-25 | STUD, 5/16-18 x 3-1/8 long | | | | | | | | | | | | | | 4 | | | | | |
| 9 | 1102 | PLUG, 1/8-27 NPT, Allen hd. | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | |
| 10 | STD-91 | PLUG, 1/2-14 NPT, Sq. hd., drilled | | | | | | | | | | | | 1 | 1 | | 1 | 1 | 1 | 1 | |
| 11 | STD-551★★ | PLUG, 1/2-14 NPT, Sq. hd., drilled | | | | | | | | | | | | | 1 | 1 | | | | | |
| | STD-551 | PLUG, 1/2-14 NPT, Sq. hd., drilled | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | 2 | 2 | 2 | 2 | |
| | STD-551★ | PLUG, 1/2-14 NPT, Sq. hd., drilled | | | | | | | 3 | | | | | | | | | | | | |
| 12 | STD-8 | WASHER, 1/4 plain | | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | 26 | | | | | | | | |
| | STD-8★ | WASHER, 1/4 plain | | | | | | | | | | | | | | 27 | | | | | |
| | STD-8 | WASHER, 1/4 plain | | | | | | | | | | | | 28 | 28 | | 28 | 28 | 28 | 28 | |
| 13 | STD-160★ | WASHER, 1/4 lock, internal teeth | | | | | | | | | | | | | | 19 | | | | | |
| | STD-160 | WASHER, 1/4 lock, internal teeth | | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | | 20 | 20 | 20 | 20 | |
| 14 | LW-25-0.94★ | BOLT, 1/4-20 x 15/16 long, hex. hd. | | | | | | | | | | | | | | 7 | | | | | |
| | LW-25-0.94 | BOLT, 1/4-20 x 15/16 long, hex. hd. | | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | | | | | | | |
| | LW-25-0.94 | BOLT, 1/4-20 x 15/16 long, hex. hd. | | | | | | | | | | | | | 14 | 14 | | 14 | 14 | 14 | |
| 15 | LW-25-1.13 | BOLT, 1/4-20 x 1-1/8 long, hex. hd. | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | |
| 16 | STD-1411 | NUT, 1/4-20 plain | | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | | 12 | 12 | 12 | 12 | |
| | STD-1411★ | NUT, 1/4-20 plain | | | | | | | | | | | | | | 17 | | | | | |
| 17 | STD-8★ | WASHER, 1/4 plain | | | | | | | | | | | | | | 4 | | | | | |
| 18 | LW-25-1.25★ | BOLT, 1/4-20 x 1-1/4 long, hex. hd. | | | | | | | | | | | | | | 1 | | | | | |
| 19 | AN365-420C★ | NUT, 1/4-20 self-locking | | | | | | | | | | | | | | 1 | | | | | |
| 20 | 70484 | SCREEN, Oil suction | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 21 | 06E19769-1.00 | GASKET, 1.00 I.D. x 1-1/4 O.D. x 3/32 | | | | | | | | | | | | | | | | | | | |
| | | annular | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 22 | LW-12545 | PLUG, 5/8 hex. hd. x 1.00-20 thd. | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |

- * This sump to be used in conjunction with Christen Kit when converting to aerobatic configuration. Reference the latest edition of Lycoming SSP-291 for aerobatic components.
- ★ ★ This sump has fuel injector mounted on two short studs in down position.
- ★ This sump has horizontal rear mounted fuel injector.

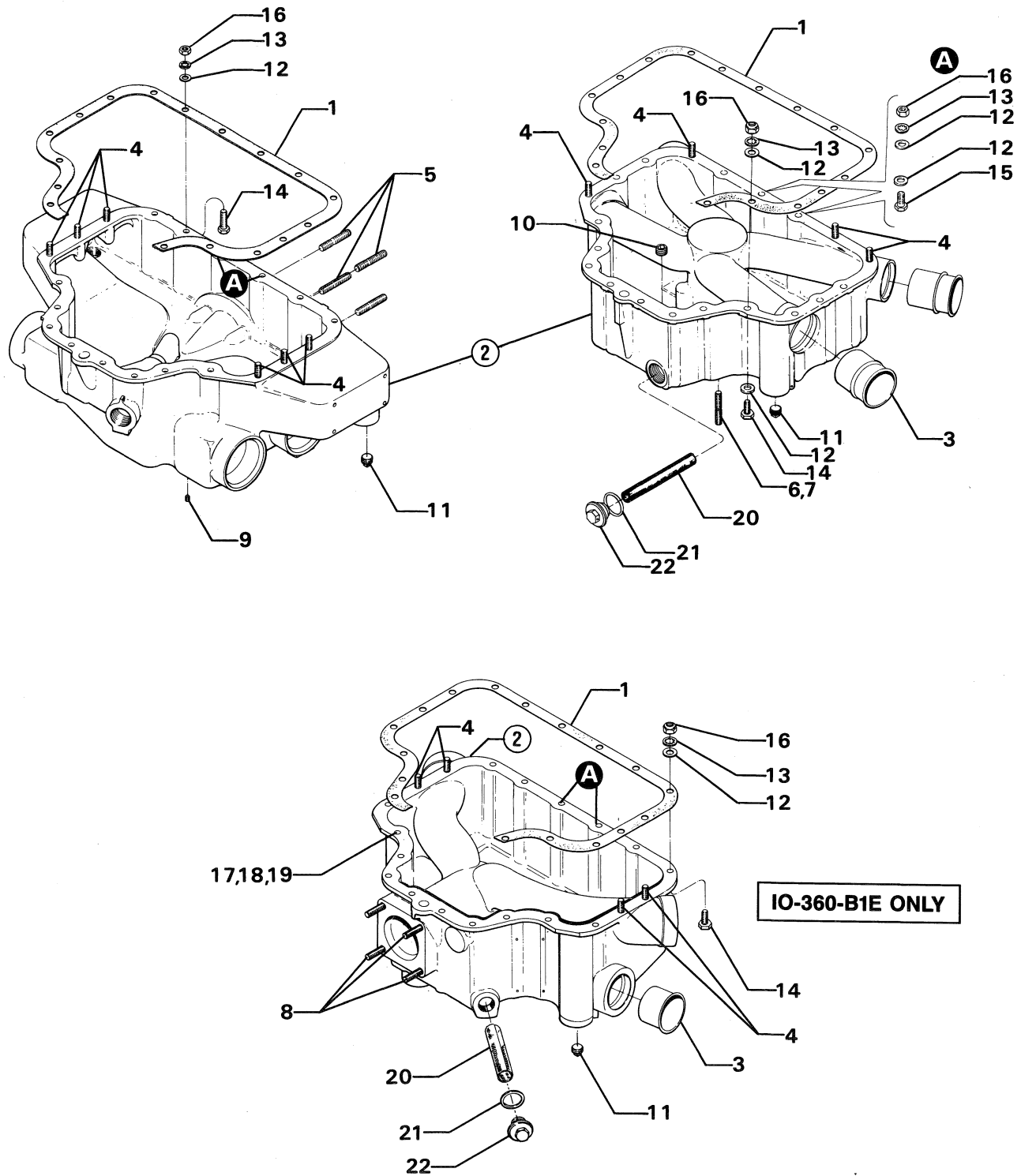


Figure 34. OIL SUMP ASSEMBLY AND OIL SUCTION SCREEN

OIL SUMP AND INDUCTION SYSTEM

CRANKCASE COVERS AND INDUCTION HOUSING (AIO-360)

| FIG. REF. 35 | PART NUMBER | DESCRIPTION | O N A L L | QUANTITY PER ASSEMBLY | | | | | | | | | | | | | | | | | | | | |
|--------------------|----------------|---|-----------------------|-----------------------|-------------|------------------|-----------------------|-------------|-------------|------------------|-------------|-------------|-----------------------|-------------|-------------|-------------|-------------|-------------|------------------|-------------|-------------|-------------|-------------|--|
| | | | | IO-360 | | | | | | | | | | | | | | | | AIO-360 | | | | |
| | | | | A 1 A | A 1 B | A 1 B 6 | A 1 B 6 D | A 1 C | A 1 D | A 1 D 6 | A 2 A | A 2 B | A 3 B 6 D | B 1 B | B 1 D | B 1 E | B 1 F | B 2 F | B 2 F 6 | B 4 A | A 1 A | A 1 B | B 1 B | |
| 1 | 77055 | GASKET, Crankcase cover, upper | | | | | | | | | | | | | | | | | | 1 | 1 | 1 | | |
| 2 | 77126 | CRANKCASE COVER ASSY., Upper | | | | | | | | | | | | | | | | | | 1 | 1 | 1 | | |
| 3 | STD-8 | WASHER, 1/4 plain | | | | | | | | | | | | | | | | | | 12 | 12 | 12 | | |
| 4 | STD-160 | WASHER, 1/4 lock, internal teeth | | | | | | | | | | | | | | | | | | 12 | 12 | 12 | | |
| 5 | LW-25-0.94 | BOLT, 1/4-20 x 15/16 long, hex. hd. | | | | | | | | | | | | | | | | | | 10 | 10 | 10 | | |
| 6 | STD-1411 | NUT, 1/4-20 plain | | | | | | | | | | | | | | | | | | 2 | 2 | 2 | | |
| 7 | MS29512-10 | SEAL, Oil, 3/32 dia. section x 3/4 I.D. | | | | | | | | | | | | | | | | | | 1 | 1 | 1 | | |
| 8 | AN815-10 | UNION, 5/8 dia. flared tube | | | | | | | | | | | | | | | | | | 1 | 1 | 1 | | |
| 9 | MS29512-12 | SEAL, Oil, 7/64 dia. section x 59/64 I.D. | | | | | | | | | | | | | | | | | | 1 | 1 | 1 | | |
| 10 | AN924-12D | NUT, Flared tube, bulkhead fitting | | | | | | | | | | | | | | | | | | 1 | 1 | 1 | | |
| 11 | AN838-12D | ELBOW, 3/4 dia. hose, bulkhead, 90° | | | | | | | | | | | | | | | | | | 1 | 1 | 1 | | |
| 12 | 77056 | GASKET, Crankcase cover, lower | | | | | | | | | | | | | | | | | | 1 | 1 | 1 | | |
| 13 | 77132 | CRANKCASE COVER ASSY., Lower | | | | | | | | | | | | | | | | | | 1 | 1 | 1 | | |
| 14 | 77155 | FITTING, 5/8 adjustable, 90° | | | | | | | | | | | | | | | | | | 1 | 1 | 1 | | |
| 15 | STD-1164 | INSERT, 5/16-18 Helicoil x 5/8 long | | | | | | | | | | | | | | | | | | 4 | 4 | 4 | | |
| 16 | STD-1353 | INSERT, No. 10-24 Helicoil x 3/8 long | | | | | | | | | | | | | | | | | | 4 | 4 | 4 | | |
| 17 | LW-25-1.13 | BOLT, 1/4-20 x 1-1/8 long, hex. hd. | | | | | | | | | | | | | | | | | | 2 | 2 | 2 | | |
| 18 | STD-8 | WASHER, 1/4 plain | | | | | | | | | | | | | | | | | | 20 | 20 | 20 | | |
| 19 | STD-160 | WASHER, 1/4 lock, internal teeth | | | | | | | | | | | | | | | | | | 16 | 16 | 16 | | |
| 20 | LW-25-0.94 | BOLT, 1/4-20 x 15/16 long, hex. hd. | | | | | | | | | | | | | | | | | | 12 | 12 | 12 | | |
| 21 | STD-1411 | NUT, 1/4-20 plain | | | | | | | | | | | | | | | | | | 4 | 4 | 4 | | |
| 22 | LW-25-1.13 | BOLT, 1/4-20 x 1-1/8 long, hex. hd. | | | | | | | | | | | | | | | | | | 2 | 2 | 2 | | |
| 23 | 77117 | SPACER, Induction housing | | | | | | | | | | | | | | | | | | 4 | 4 | 4 | | |
| 24 | 77127 | HOUSING ASSY., Induction | | | | | | | | | | | | | | | | | | 1 | 1 | 1 | | |
| 25 | 31C-14 | STUD, 5/16-18 x 1-3/4 long | | | | | | | | | | | | | | | | | | 4 | 4 | 4 | | |
| 26 | 1102 | PLUG, 1/8-27 pipe, Allen hd. | | | | | | | | | | | | | | | | | | 4 | 4 | 4 | | |
| 27 | STD-35 | WASHER, 5/16 plain | | | | | | | | | | | | | | | | | | 4 | 4 | 4 | | |
| 28 | STD-475 | WASHER, 5/16 lock, internal teeth | | | | | | | | | | | | | | | | | | 4 | 4 | 4 | | |
| 29 | LW-31-4.13 | BOLT, 5/16-18 x 4-1/8 long, hex. hd. | | | | | | | | | | | | | | | | | | 4 | 4 | 4 | | |
| 30 | 70484 | SCREEN, Oil suction | | | | | | | | | | | | | | | | | | 2 | 2 | 2 | | |
| 31 | 06E19769-1.00 | GASKET, 1.00 I.D. x 1-1/4 O.D. x 3/32 | | | | | | | | | | | | | | | | | | | | | | |
| | | annular | | | | | | | | | | | | | | | | | | 2 | 2 | 2 | | |
| 32 | LW-12545 | PLUG, 5/8 hex. hd. x 1.00-20 thd. | | | | | | | | | | | | | | | | | | 2 | 2 | 2 | | |

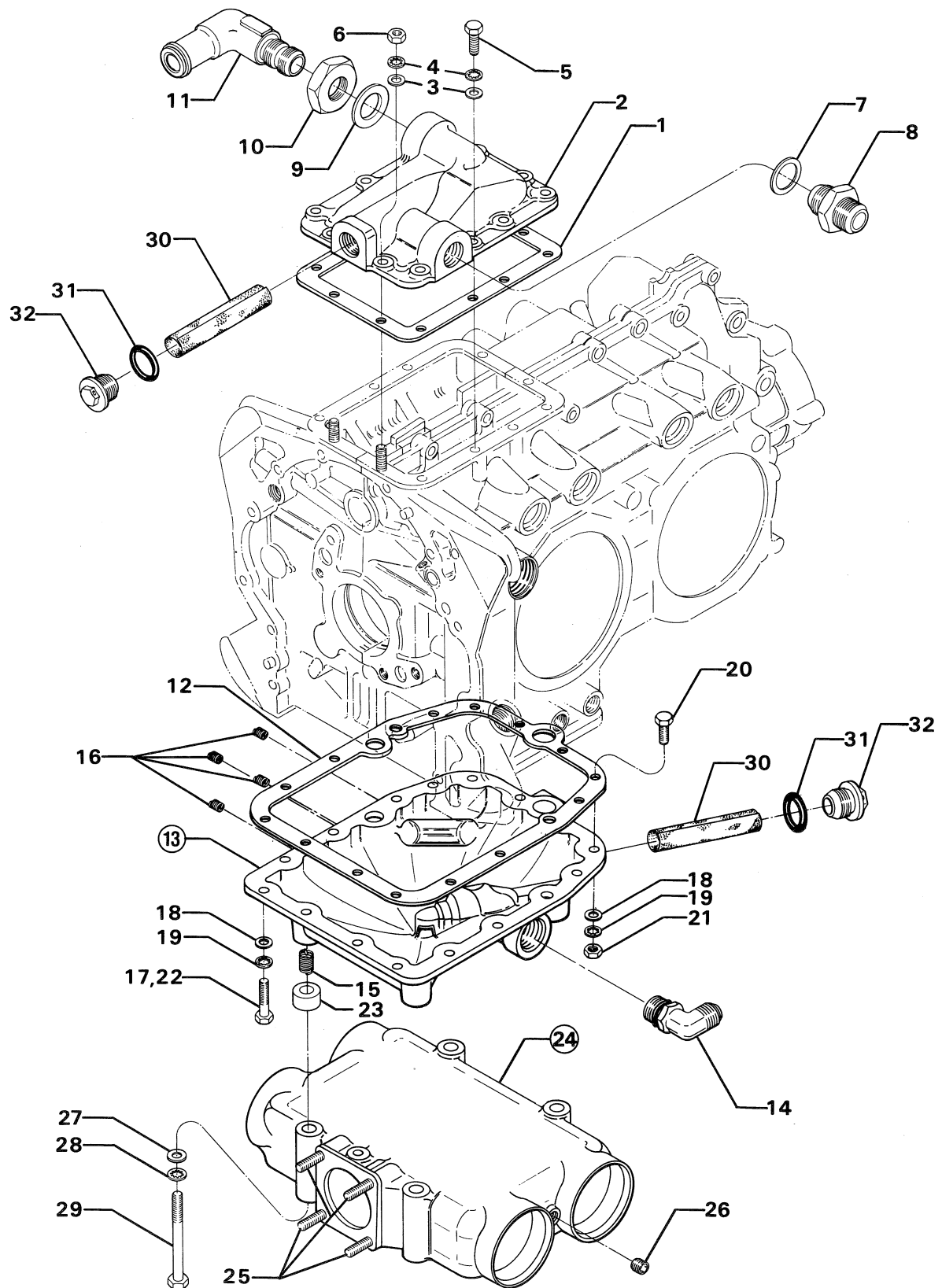


Figure 35. CRANKCASE COVERS AND INDUCTION HOUSING (AIO-360)

OIL SUMP AND INDUCTION SYSTEM

INTAKE PIPES

| FIG. REF. 36 | PART NUMBER | DESCRIPTION | O N A L L | QUANTITY PER ASSEMBLY | | | | | | | | | | | | | | | | | | |
|--------------------|----------------|--|-----------------------|-----------------------|-------------|------------------|-----------------------|-------------|-------------|------------------|-------------|-------------|-----------------------|-------------|-------------|-------------|-------------|-------------|------------------|-------------|-------------|-------------|
| | | | | IO-360 | | | | | | | | | | | | | | | | AIO-360 | | |
| | | | | A 1 A | A 1 B | A 1 B 6 | A 1 B 6 D | A 1 C | A 1 D | A 1 D 6 | A 2 A | A 2 B | A 3 B 6 D | B 1 B | B 1 D | B 1 E | B 1 F | B 2 F | B 2 F 6 | B 4 A | A 1 A | A 1 B |
| 1 | 77569 | SEAL, Intake pipe | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | | | 4 | 4 | 4 |
| 2 | 70485 | PIPE, Intake, all cylinders | | | | | | | | | | | 4 | 4 | | 4 | 4 | 4 | 4 | | | |
| | 71712 | PIPE, Intake, cylinders no. 1 & 2 | | | | | | | | | | | | | 2 | | | | | | | |
| | 71713 | PIPE, Intake, cylinders no. 3 & 4 | | | | | | | | | | | | | 2 | | | | | | | |
| | 78741 | PIPE, Intake, cylinder no. 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | |
| | 78742 | PIPE, Intake, cylinder no. 2 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | |
| | 78743 | PIPE, Intake, cylinder no. 3 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | |
| | 78744 | PIPE, Intake, cylinder no. 4 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | |
| | 78621 | PIPE, Intake, cylinder no. 1 | | | | | | | | | | | | | | | | | | 1 | 1 | 1 |
| | 78622 | PIPE, Intake, cylinder no. 2 | | | | | | | | | | | | | | | | | | 1 | 1 | 1 |
| | 78623 | PIPE, Intake, cylinder no. 3 | | | | | | | | | | | | | | | | | | 1 | 1 | 1 |
| | 78624 | PIPE, Intake, cylinder no. 4 | | | | | | | | | | | | | | | | | | 1 | 1 | 1 |
| | LW-10481 | PIPE, Intake, cylinder no. 1 | | | | | | | | | 1 | | | | | | | | | | | |
| | 79002 | PIPE, Intake, cylinder no. 2 | | | | | | | | | 1 | | | | | | | | | | | |
| | LW-10483 | PIPE, Intake, cylinder no. 3 | | | | | | | | | 1 | | | | | | | | | | | |
| | LW-10484 | PIPE, Intake, cylinder no. 4 | | | | | | | | | 1 | | | | | | | | | | | |
| 3 | 69603 | HOSE, 1-3/4 I.D. x 2-3/16 O.D. x 1-3/4 | | | | | | | | | | | | | | | | | | | | |
| | | long | | | | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | |
| 4 | LW-15592-8-28 | CLAMP, Hose | | | | | | | | | | | 8 | 8 | 8 | 8 | 8 | 8 | 8 | | | |
| 5 | 71973 | GASKET, 2 bolt flange, 1-7/8 I.D. | 4 | | | | | | | | | | | | | | | | | | | |
| 6 | 73346 | FLANGE, Intake pipe, upper | | | | | | | | | | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | |
| 7 | STD-8 | WASHER, 1/4 plain | 8 | | | | | | | | | | | | | | | | | | | |
| 8 | STD-160 | WASHER, 1/4 lock, internal teeth | 8 | | | | | | | | | | | | | | | | | | | |
| 9 | LW-25-1.25 | BOLT, 1/4-20 x 1-1/4 long, hex. hd. | 8 | | | | | | | | | | | | | | | | | | | |
| 10 | 74139 | ADAPTER ASSY., Fuel drain valve | | | | | | | | | | | | | 2 | | | | | | | |
| | 75444 | ADAPTER ASSY., Fuel drain valve | | | | 1 | | | | 1 | | | | | | | | | | 1 | 1 | 1 |
| 11 | 1102 * | PLUG, 1/8-27 NPT, Allen hd. | | | | | | | | | | | | | 2 | | | | | | | |
| | 1102 * | PLUG, 1/8-27 NPT, Allen hd. | | | | | | | | | 4 | | | | | | | | | | | |

* Assemble in fuel drain bosses in sump.

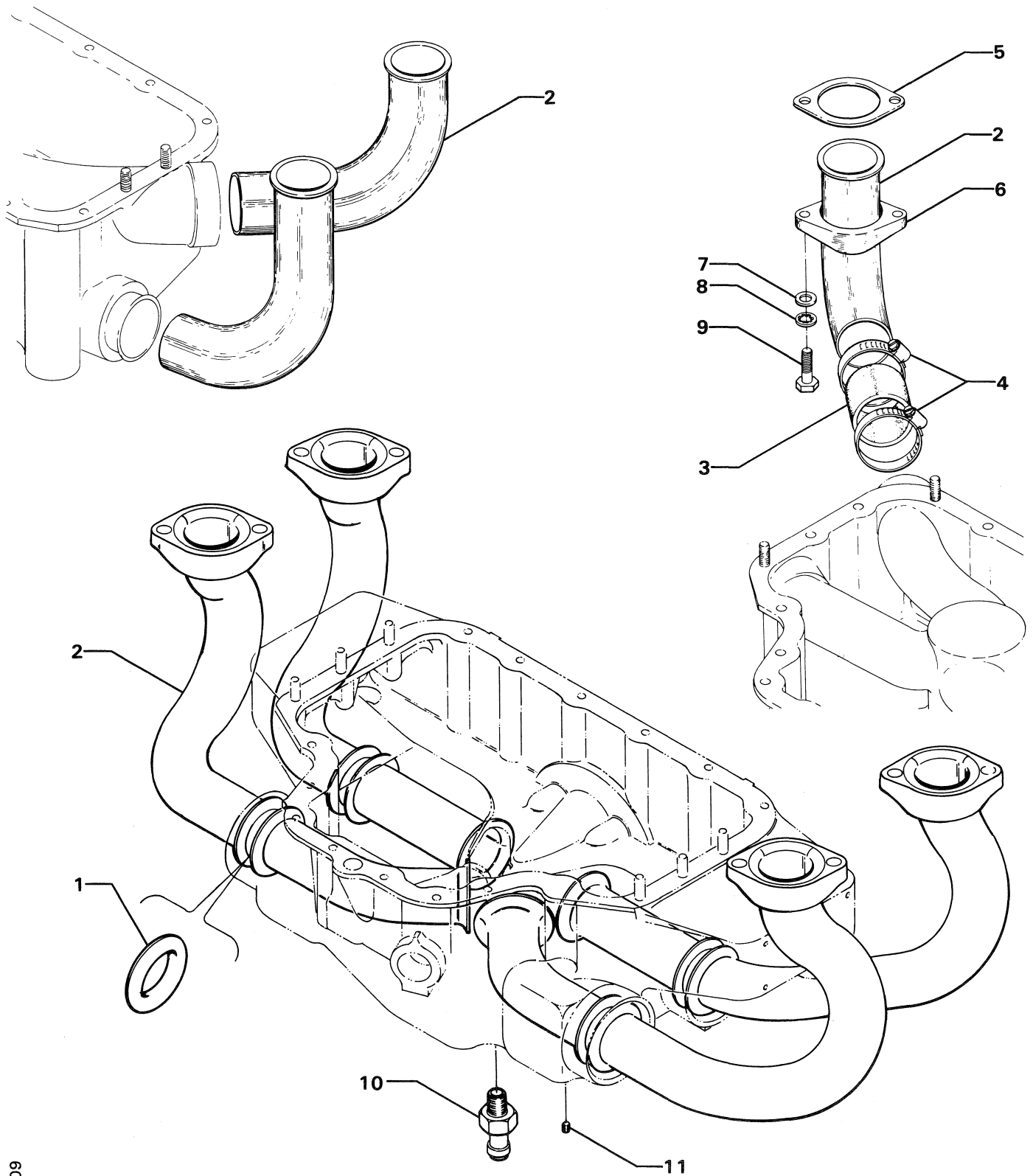


Figure 36. INTAKE PIPES

OIL SUMP AND INDUCTION SYSTEM FUEL INJECTORS AND INJECTION NOZZLES

| FIG. REF. 37 | PART NUMBER | DESCRIPTION | O N A L | QUANTITY PER ASSEMBLY | | | | | | | | | | | | | | | | | | | |
|--------------------|----------------|----------------------------------|------------------|-----------------------|-------------|------------------|-----------------------|-------------|-------------|------------------|-------------|-------------|-----------------------|-------------|-------------|-------------|-------------|-------------|------------------|-------------|-------------|-------------|-------------|
| | | | | IO-360 | | | | | | | | | | | | | | AIO-360 | | | | | |
| | | | | A 1 A | A 1 B | A 1 B 6 | A 1 B 6 D | A 1 C | A 1 D | A 1 D 6 | A 2 A | A 2 B | A 3 B 6 D | B 1 B | B 1 D | B 1 E | B 1 F | B 2 F | B 2 F 6 | B 4 A | A 1 A | A 1 B | B 1 B |
| 1 | 66224 | GASKET, Fuel injector | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | 1 | 1 | 1 |
| | 66224 | GASKET, Fuel injector | | | | | | | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | | |
| 2 | 73161 | SPACER, Fuel injector | | | | | | | | | | | | 1 | 1 | | 1 | 1 | 1 | 1 | | | |
| | 74842 | SPACER, Fuel injector | | | | | | | | | | | | | | 1 | | | | | | | |
| 3 | 73937 | FUEL INJECTOR (2524054-11) | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | | 1 |
| | 74556 | FUEL INJECTOR (2524147-13) | | | | | | | | | | | | 1 | | | 1 | 1 | 1 | 1 | | | |
| | 76504 | FUEL INJECTOR (2524297-10) | | | | | | | | | | | | | | 1 | | | | | | | |
| | 76817 | FUEL INJECTOR (2524291-11) | | | | | | | | | | | | | 1 | | 1 | 1 | | | | | |
| | 77752 | FUEL INJECTOR (2524341-10) | | | | | | | | | | | | | | | | | | | 1 | 1 | |
| | LW-11848 | FUEL INJECTOR (2524550-8) | | | 1 | 1 | | | 1 | | 1 | 1 | | | | | | | | | | | |
| | LW-14382 * | FUEL INJECTOR (2524682-8) | | | | | | | | | | | | | | | | 1 | | | | | |
| 4 | STD-35 | WASHER, 5/16 plain | 4 | | | | | | | | | | | | | | | | | | | | |
| 5 | STD-1410 | NUT, 5/16-18 plain | 4 | | | | | | | | | | | | | | | | | | | | |
| 6 | STD-1763 | LOCKNUT, 5/16 palnut | 4 | | | | | | | | | | | | | | | | | | | | |
| 7 | LW-18265 | NOZZLE, Injection | 4 | | | | | | | | | | | | | | | | | | | | |
| 8 | LW-18854 * * | NOZZLE ASSY., Manifold air bleed | | | | 4 | | | | | | | 4 | | | | | | | | | | |
| 9 | 951391 | “O” RING, (Bendix) | | | | 8 | | | | | | | 8 | | | | | | | | | | |

* Used with P/N LW-14576 manifold assembly.

* * Vented nozzles.

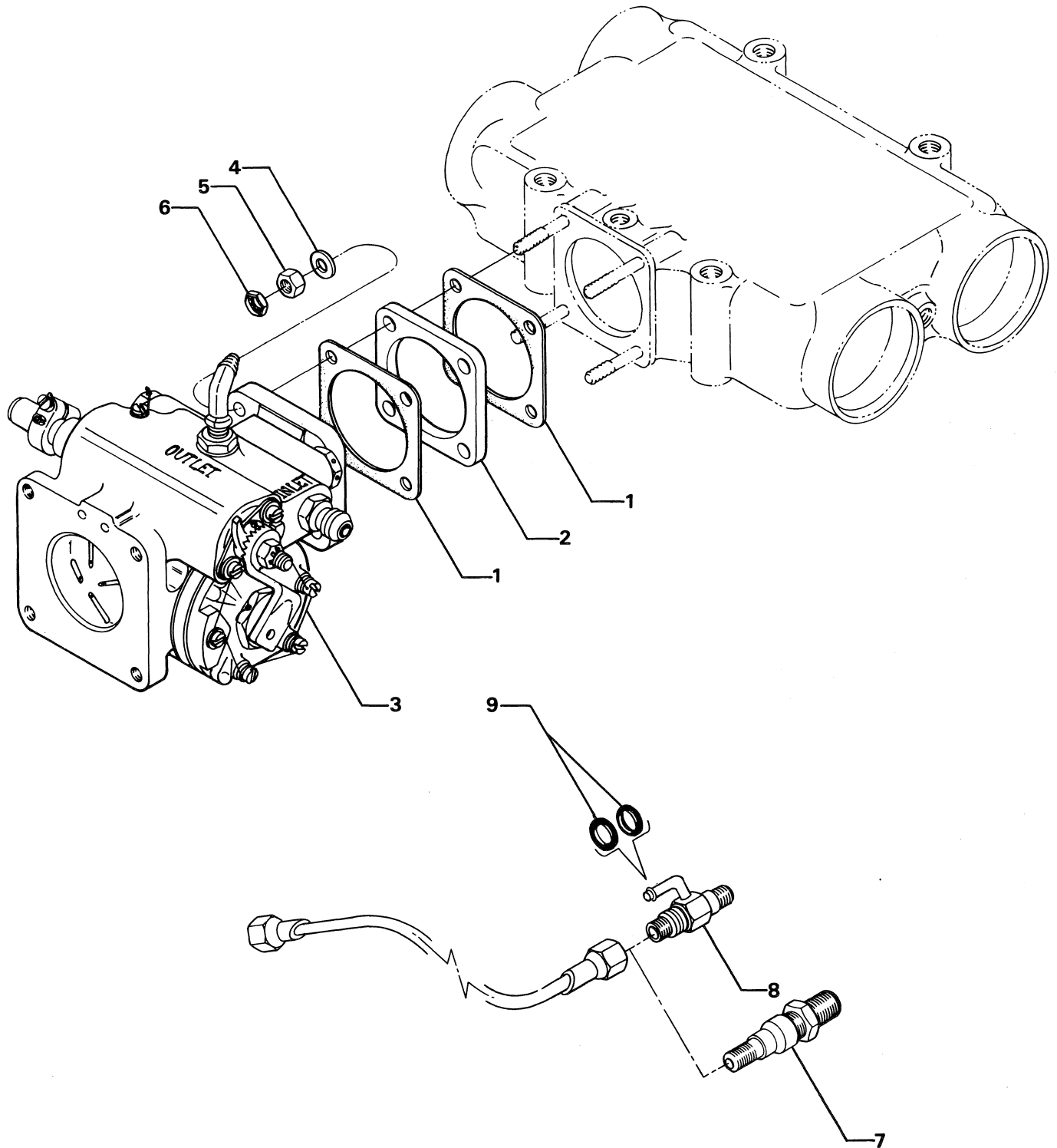


Figure 37. FUEL INJECTORS AND INJECTION NOZZLES

OIL SUMP AND INDUCTION SYSTEM FUEL MANIFOLDS AND BRACKETS

| FIG. REF. 38 | PART NUMBER | DESCRIPTION | O N A L L | QUANTITY PER ASSEMBLY | | | | | | | | | | | | | | | |
|--------------------|----------------|--|-----------------------|-----------------------|-------------|------------------|-----------------------|-------------|-------------|------------------|-------------|-------------|-----------------------|-------------|-------------|-------------|-------------|-------------|------------------|
| | | | | IO-360 | | | | | | | | | | | | AIO-360 | | | |
| | | | | A 1 A | A 1 B | A 1 B 6 | A 1 B 6 D | A 1 C | A 1 D | A 1 D 6 | A 2 A | A 2 B | A 3 B 6 D | B 1 B | B 1 D | B 1 E | B 1 F | B 2 F | B 2 F 6 |
| 1 | 75279 | MANIFOLD ASSY., Fuel | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | |
| | 75279 * | MANIFOLD ASSY., Fuel | | | | | | | | | | | | | 1 | | 1 | 1 | |
| | 75280 | MANIFOLD ASSY., Fuel | | | | | | | | | | | | 1 | | | 1 | 1 | 1 |
| | 77208 | MANIFOLD ASSY., Fuel | | | | | | | | | | | | | | | | | 1 |
| | 78805 | MANIFOLD ASSY., Fuel | | | | | | | | | | | | | 1 | | | | |
| | LW-14576 | MANIFOLD ASSY., Fuel | | | | | | | | | | | | | | | | 1 | |
| | LW-18476 * * | MANIFOLD ASSY., Fuel | | | | | | | | | | | 1 | | | | | | |
| 2 | MS20822-4 | ELBOW, 1/4 tube, 1/8 NPT, 90° | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | 1 |
| | MS20822-4 * | ELBOW, 1/4 tube, 1/8 NPT, 90° | | | | | | | | | | | | | 1 | | 1 | 1 | |
| 3 | AN791-2 | ELBOW, Union, 1/8 tube, 45° | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | | | | | 4 |
| | AN791-2 * | ELBOW, Union, 1/8 tube, 45° | | | | | | | | | | | | | 4 | | 4 | 4 | |
| 4 | STD-148 | NIPPLE, Union, 1/8 NPT | | | | | | | | | | | | 4 | | 4 | 4 | 4 | 4 |
| 5 | 75447 | NIPPLE, 3/16 tube to 1/8 NPT (rest.) | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 |
| | 75447 * | NIPPLE, 3/16 tube to 1/8 NPT (rest.) | | | | | | | | | | | | | 1 | | 1 | 1 | |
| 6 | AN816-4 | NIPPLE, 1/4 tube, 1/8 NPT | | | | | | | | | | | | | | 1 | | | |
| 7 | AN932-2 | PLUG, 1/8-27 NPT, Allen | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | 2 | 2 | 2 | 2 |
| | AN932-2 * * | PLUG, 1/8-27 NPT, Allen | | | | | | | | | | | 3 | | | | | | |
| | AN932-2 * | PLUG, 1/8-27 NPT, Allen | | | | | | | | | | | | | 2 | | 2 | 2 | |
| | 1102 | PLUG, 1/8-27 NPT, Allen (alternate) | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | 2 | 2 | 2 | 2 |
| | 1102 * * | PLUG, 1/8-27 NPT, Allen (alternate) | | | | | | | | | | | 3 | | | | | | |
| | 1102 * | PLUG, 1/8-27 NPT, Allen (alternate) | | | | | | | | | | | | | 2 | | 2 | 2 | |
| 8 | 73966 | SPACER, Fuel manifold bracket | | | | | | | | | | | | 2 | | | 2 | 2 | 2 |
| 9 | 74597 | BRACKET, Fuel manifold | | | | | | | | | | | | 1 | | | 1 | 1 | 1 |
| | 74598 | BRACKET, Fuel manifold | | | | | | | | | | | | 1 | | | 1 | 1 | 1 |
| 10 | 75009 ★ | BRACKET, Fuel manifold | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | |
| | 75009 * | BRACKET, Fuel manifold | | | | | | | | | | | | | 1 | | 1 | 1 | |
| | 77547 ● | BRACKET, Fuel manifold | | | | | | | | | | | | | | 1 | | | |
| 11 | 78714 | BRACKET, Fuel manifold | | | | | | | | | | | | | | | | | 1 |
| 12 | STD-1907 | SCREW, No. 10-24 x 9/16 long, flat hd. | | | | | | | | | | | | 4 | | | 4 | 4 | 4 |
| 13 | STD-1908 | WASHER, No. 10 lock, ext. teeth, 82° | | | | | | | | | | | | 4 | | | 4 | 4 | 4 |
| 14 | STD-251 | WASHER, No. 10 lock, internal teeth | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | 4 | | | | 4 |
| | STD-251 * | WASHER, No. 10 lock, internal teeth | | | | | | | | | | | | | 4 | | 4 | 4 | |
| 15 | STD-82 | SCREW, No. 10-24 x 1/2 long, rd. hd. | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | 4 | | | | 4 |
| | STD-82 * | SCREW, No. 10-24 x 1/2 long, rd. hd. | | | | | | | | | | | | | 4 | | 4 | 4 | |
| 16 | STD-160 | WASHER, 1/4 lock, internal teeth | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | | | |
| | STD-160 ‡ | WASHER, 1/4 lock, internal teeth | | | | | | | | | | | | | | | | | 2 |
| | STD-160 * | WASHER, 1/4 lock, internal teeth | | | | | | | | | | | | | 1 | | 1 | 1 | |
| 17 | LW-25-0.50 | BOLT, 1/4-20 x 1/2 long, hex. hd. | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | 1 | | | | |
| | LW-25-0.50 * | BOLT, 1/4-20 x 1/2 long, hex. hd. | | | | | | | | | | | | | 1 | | 1 | 1 | |
| 18 | AN500A416-10 ‡ | SCREW, 1/4-20 x 5/8 long, fill. hd. | | | | | | | | | | | | | | | | | 2 |

* Flow divider mounted on right side of engine between no. 1 and no. 3 cylinders.

* * This manifold assembly uses an extra 1/8-27 NPT Allen plug for a quantity of (3) three in place of a P/N 75447 nipple per customer request.

★ Assemble between no. 1 and no. 3 cylinders.

● Assemble between no. 2 and no. 4 cylinders.

‡ Used with P/N 78714 fuel manifold bracket.

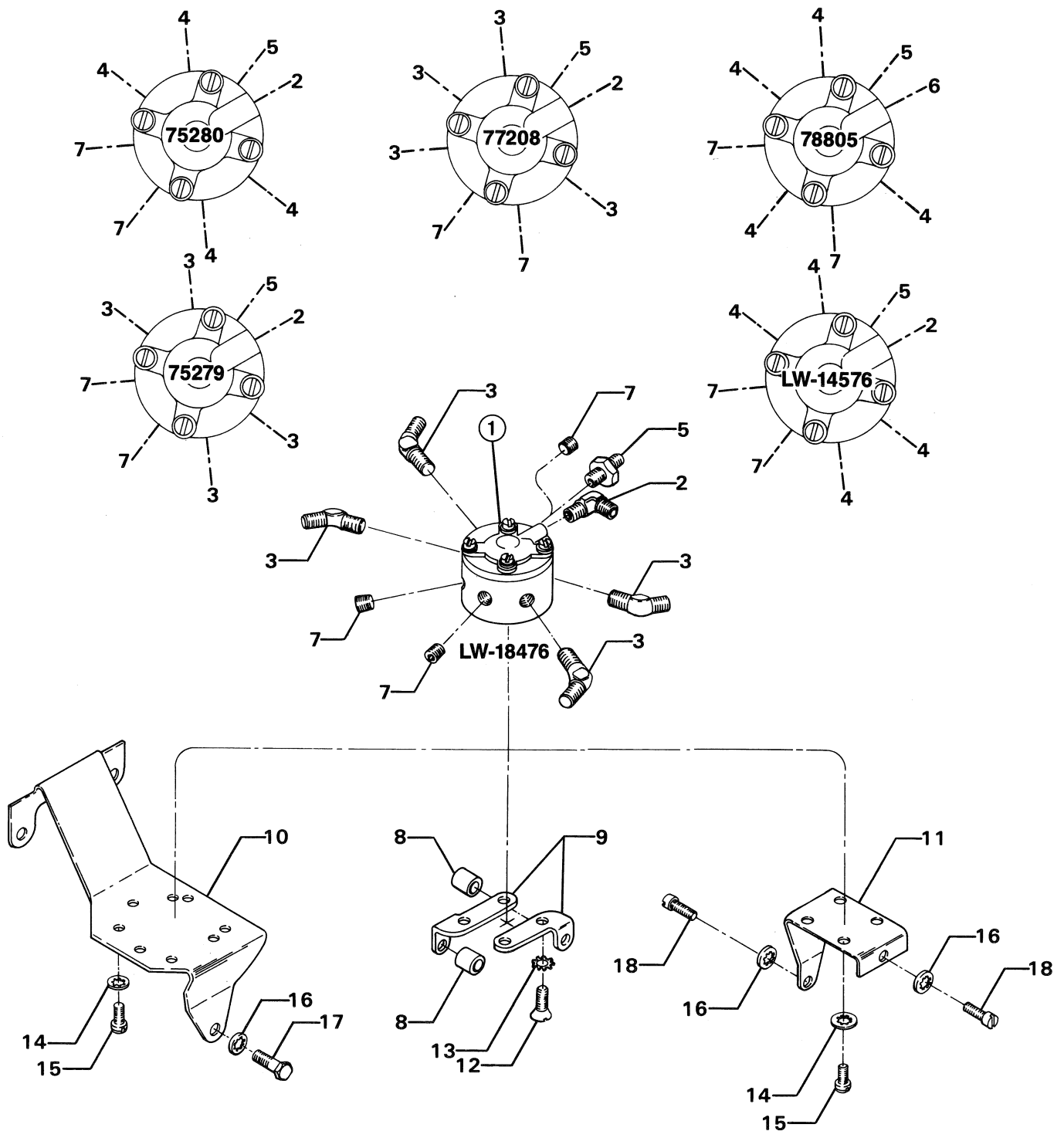


Figure 38. FUEL MANIFOLDS AND BRACKETS

OIL SUMP AND INDUCTION SYSTEM FUEL LINES AND ATTACHING PARTS

| FIG. REF. 39 | PART NUMBER | DESCRIPTION | O N A L | QUANTITY PER ASSEMBLY | | | | | | | | | | | | | | | | | | |
|--------------------|----------------|--|------------------|-----------------------|-------------|------------------|-----------------------|-------------|-------------|------------------|-------------|-------------|-----------------------|-------------|-------------|-------------|-------------|-------------|------------------|-------------|-------------|-------------|
| | | | | IO-360 | | | | | | | | | | | | | | | | AIO-360 | | |
| | | | | A 1 A | A 1 B | A 1 B 6 | A 1 B 6 D | A 1 C | A 1 D | A 1 D 6 | A 2 A | A 2 B | A 3 B 6 D | B 1 B | B 1 D | B 1 E | B 1 F | B 2 F | B 2 F 6 | B 4 A | A 1 A | A 1 B |
| 1 | LW-12098-0-170 | TUBE ASSY., Fuel manifold | | | | | | | | | | 4 | | | 4 | 4 | 4 | 4 | | | | |
| 2 | LW-12098-0-140 | TUBE ASSY., Fuel manifold to nozzle, | | | | | | | | | | | | | | | | | | | | |
| | | cyls. 1 & 3 | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | 2 | | 2 | 2 | | | 2 | 2 | 2 |
| 3 | LW-12098-0-210 | TUBE ASSY., Fuel manifold to nozzle, | | | | | | | | | | | | | | | | | | | | |
| | | cyls. 2 & 4 | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | 2 | | 2 | 2 | | | 2 | 2 | 2 |
| 4 | LW-12098-0-140 | TUBE ASSY., Fuel manifold to nozzle, | | | | | | | | | | | | | | | | | | | | |
| | | cyls. 2 & 4 | | | | | | | | | | | | 2 | | | | | | | | |
| 5 | LW-12098-0-210 | TUBE ASSY., Fuel manifold to nozzle, | | | | | | | | | | | | | | | | | | | | |
| | | cyls. 1 & 3 | | | | | | | | | | | | 2 | | | | | | | | |
| 6 | LW-16266-10-75 | CLAMP | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | 4 | 4 | 4 | 4 | | | 4 | 4 | 4 |
| | LW-16266-10-75 | CLAMP | | | | | | | | | | | 8 | | | 8 | 8 | 8 | 8 | | | |
| 7 | LW-16266-10-13 | CLAMP | | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | | 6 | 6 | 6 | 6 | | | 6 | 6 | 6 |
| | LW-16266-10-13 | CLAMP | | | | | | | | | | | 8 | | | 8 | 8 | 8 | 8 | | | |
| 8 | STD-860 | SCREW, No. 10-32 x 5/8 long, fill. hd. | | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | | 6 | 6 | 6 | 6 | | | 6 | 6 | 6 |
| | STD-860 | SCREW, No. 10-32 x 5/8 long, fill. hd. | | | | | | | | | | | 8 | | | 8 | 8 | 8 | 8 | | | |
| 9 | STD-670 | NUT, No. 10-32 self-locking | | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | | 6 | 6 | 6 | 6 | | | 6 | 6 | 6 |
| | STD-670 | NUT, No. 10-32 self-locking | | | | | | | | | | | 8 | | | 8 | 8 | 8 | 8 | | | |
| 10 | 73136 | BRACKET, 90° | | | | | | | | | | | | | | | | | | 1 | 1 | 1 |
| | 73136 | BRACKET, 90° | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | 2 | 2 | 2 | 2 | | | | | |
| 11 | 76735 | BRACKET, 90° | | | | | | | | | | | | | | | | | | 1 | 1 | 1 |

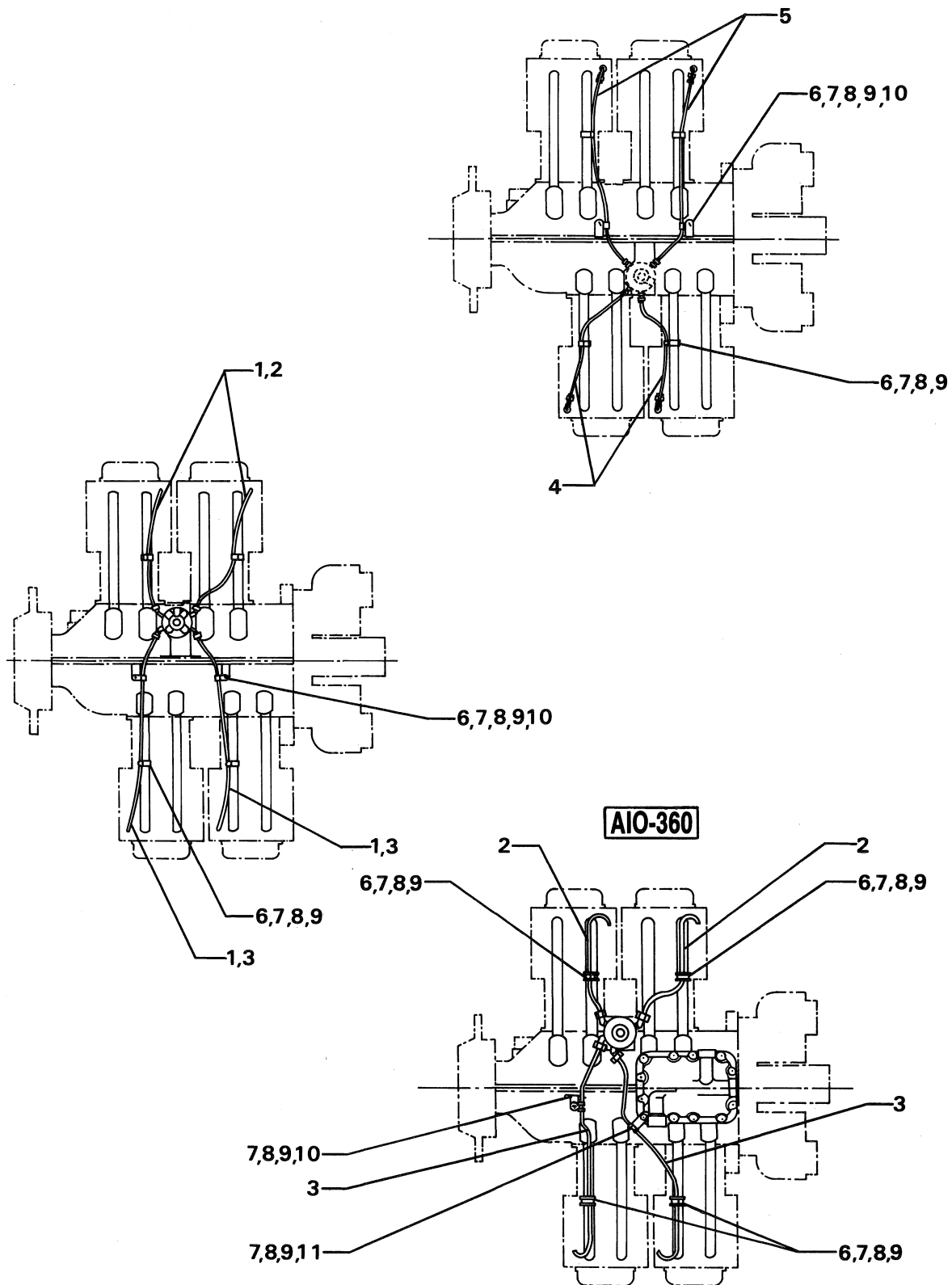


Figure 39. FUEL LINES AND ATTACHING PARTS

OIL SUMP AND INDUCTION SYSTEM

FUEL HOSES AND ATTACHING PARTS (IO-360)

| FIG. REF. 40 | PART NUMBER | DESCRIPTION | O N A L L | QUANTITY PER ASSEMBLY | | | | | | | | | | | | | | | | | |
|--------------------|---------------------|---|-----------------------|-----------------------|-------------|------------------|-----------------------|-------------|-------------|------------------|-------------|-------------|-----------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | | | | IO-360 | | | | | | | | | | | | | AIO-360 | | | | |
| | | | | A 1 A | A 1 B | A 1 B 6 | A 1 B 6 D | A 1 C | A 1 D | A 1 D 6 | A 2 A | A 2 B | A 3 B 6 D | B 1 B | B 1 D | B 1 E | B 1 F | B 2 F | B 4 A | A 1 A | A 1 B |
| 1 | LW-13192-4S-334 * | HOSE ASSY., Fuel injector to fuel manifold (lower) (33-1/2 inches long) | | | | | | | | | | 1 | | | 1 | 1 | 1 | 1 | | | |
| 2 | LW-12784-4-102 | HOSE ASSY., Fuel injector to fuel manifold (upper) (10-1/4 inches long) | | | | | | | | | | 1 | | | 1 | 1 | 1 | 1 | | | |
| 3 | LW-12784-4-202 | HOSE, Fuel injector to fuel manifold (20-1/4 inches long) | | | | | | | | | | | 1 | | 1 | 1 | | | | | |
| | LW-12784-4-340 | HOSE ASSY., Fuel injector to fuel manifold (34 inches long) | | | | | | | | | | | | 1 | | | | | | | |
| | LW-12784-4-172 | HOSE, Fuel injector to fuel manifold (17-1/4 inches long) | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | |
| | LW-12798-4S-172 * * | HOSE, Fuel injector to fuel manifold (17-1/4 inches long) | | | | 1 | | | | | 1 | | | | | | | | | | |
| 4 | AN837-4 | ELBOW, 1/4 flared tube (bulkhead) 45° | | | | | | | | | | 1 | | | 1 | 1 | 1 | 1 | | | |
| 5 | AN924-4 | NUT, Flared tube (bulkhead) | | | | | | | | | | 1 | | | 1 | 1 | 1 | 1 | | | |
| 6 | 72815 | BRACKET, Support clamp, 90° twist | | | | | | | | | | | 1 | 1 | 1 | 1 | | | | | |
| 7 | LW-16266-25-50 | CLAMP | | | | | | | | | | | 1 | 1 | 1 | 1 | | | | | |
| 8 | STD-860 | SCREW, No. 10-32 x 5/8 long, fill. hd. | | | | | | | | | | | 1 | 1 | 1 | 1 | | | | | |
| 9 | STD-425 | WASHER, No. 10 plain | | | | | | | | | | | 1 | 1 | 1 | 1 | | | | | |
| 10 | STD-670 | NUT, No. 10-32 self-locking | | | | | | | | | | | 1 | 1 | 1 | 1 | | | | | |
| 11 | 77287 | TUBE ASSY., Fuel pump to injector | | | | | | | | | | | | 1 | | | | | | | |
| 12 | LW-12799-6S-144 * * | HOSE ASSY., Fuel pump to injector (14-1/2 inches long) | | | | | | | | | | | | | | | 1 | | | | |
| | LW-12799-6S-254 * * | HOSE, Fuel pump to injector (25-1/2 inches long) | | | | 1 | | | | | 1 | | | | | | | | | | |
| | LW-13181-6-254 | HOSE, Fuel pump to injector (25-1/2 inches long) | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | |
| | LW-13181-6-303 | HOSE, Fuel pump to injector (30-3/8 inches long) | | | 1 | 1 | | | | | | | | | | | | | | | |
| | LW-12877-6S-161 ★ | HOSE ASSY., Fuel pump to injector (16-1/8 inches long) | | | | | | | | | | 1 | | | 1 | 1 | 1 | 1 | | | |
| 13 | LW-16266-10-75 | CLAMP | | | | 1 | | | | | | 1 | | | | | | | | | |
| 14 | LW-16266-25-63 | CLAMP | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | |
| 15 | 73152 | BRACKET, Support clamp | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | |
| 16 | STD-860 | SCREW, No. 10-32 x 5/8 long, fill. hd. | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | |
| 17 | STD-425 | WASHER, No. 10 plain | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | |
| 18 | STD-670 | NUT, No. 10-32 self-locking | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | | | | | |

* Rubber hose with fireproof sleeve.

* * Teflon hose with fireproof sleeve.

★ Teflon hose with fireproof sleeve and 90° elbow fitting.

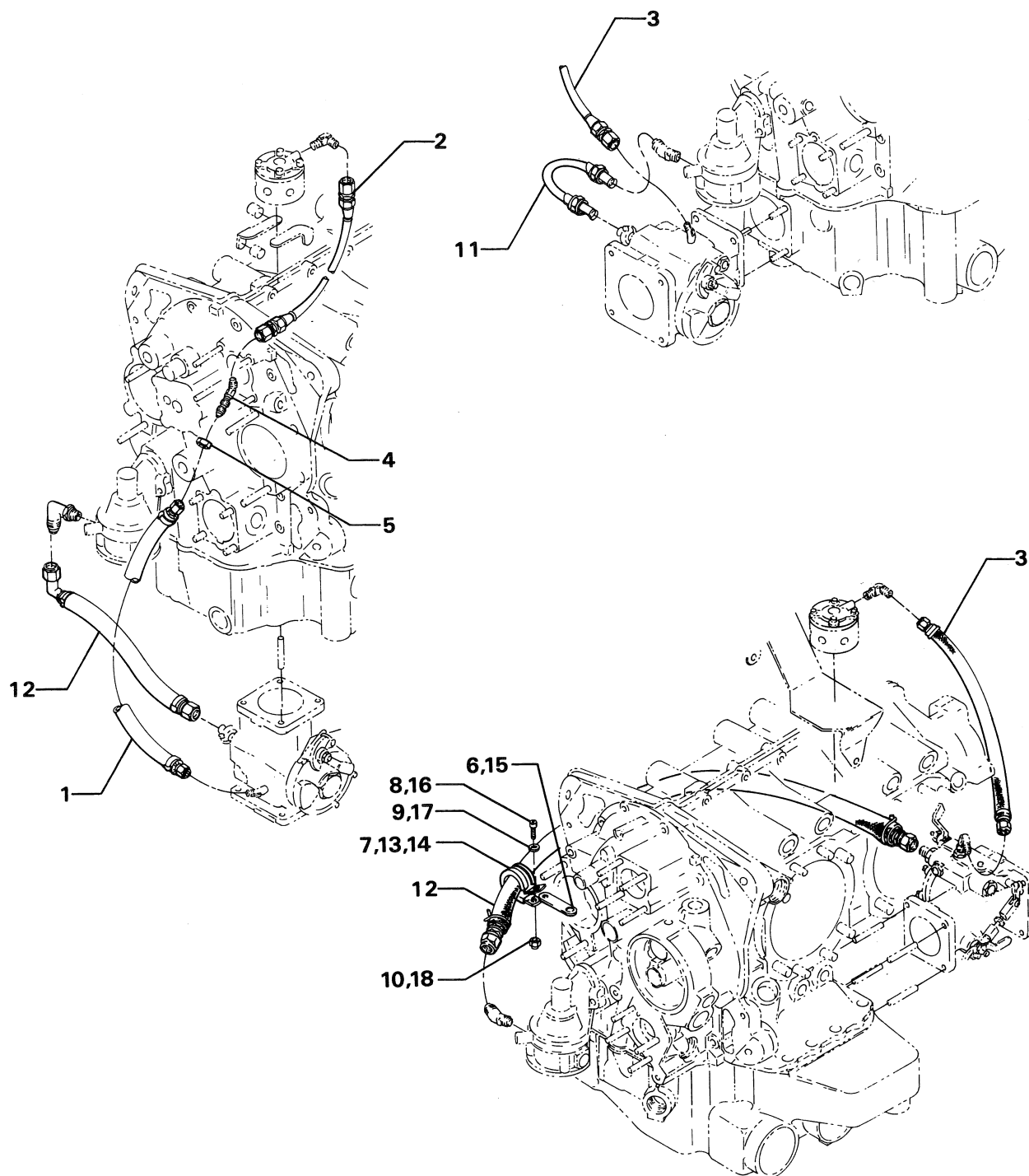


Figure 40. FUEL HOSES AND ATTACHING PARTS (IO-360)

OIL SUMP AND INDUCTION SYSTEM

FUEL HOSES AND ATTACHING PARTS (AIO-360)

| FIG. REF. 41 | PART NUMBER | DESCRIPTION | O N A L L | QUANTITY PER ASSEMBLY | | | | | | | | | | | | | | | | | | |
|--------------------|-----------------|---|-----------------------|-----------------------|-------------|------------------|-----------------------|-------------|-------------|------------------|-------------|-------------|-----------------------|-------------|-------------|-------------|-------------|-------------|------------------|-------------|-------------|-------------|
| | | | | IO-360 | | | | | | | | | | | | | | AIO-360 | | | | |
| | | | | A 1 A | A 1 B | A 1 B 6 | A 1 B 6 D | A 1 C | A 1 D | A 1 D 6 | A 2 A | A 2 B | A 3 B 6 D | B 1 B | B 1 D | B 1 E | B 1 F | B 2 F | B 2 F 6 | B 4 A | A 1 A | A 1 B |
| 1 | LW-13175-4-252 | HOSE ASSY., Fuel injector to fuel manifold (25-1/4 inches long) | | | | | | | | | | | | | | | | | | 1 | 1 | |
| | LW-12784-4-172 | HOSE ASSY., Fuel injector to fuel manifold (17-1/4 inches long) | | | | | | | | | | | | | | | | | | | | 1 |
| 2 | 73136 | BRACKET, Extension, 90° | | | | | | | | | | | | | | | | | | 2 | 2 | |
| 3 | LW-16266-25-50 | CLAMP | | | | | | | | | | | | | | | | | | 2 | 2 | |
| 4 | STD-860 | SCREW, No. 10-32 x 5/8 long, fill. hd. | | | | | | | | | | | | | | | | | | 2 | 2 | |
| 5 | STD-425 | WASHER, No. 10 plain | | | | | | | | | | | | | | | | | | 2 | 2 | |
| 6 | STD-670 | NUT, No. 10-32 self-locking | | | | | | | | | | | | | | | | | | 2 | 2 | |
| 7 | 77841 | TUBE ASSY., Fuel pump to injector | | | | | | | | | | | | | | | | | | 1 | 1 | |
| 8 | LW-12877-6S-142 | HOSE, Fuel pump to injector (14-1/4 inches long) | | | | | | | | | | | | | | | | | | | | 1 |
| 9 | LW-16266-25-75 | CLAMP | | | | | | | | | | | | | | | | | | | | 1 |

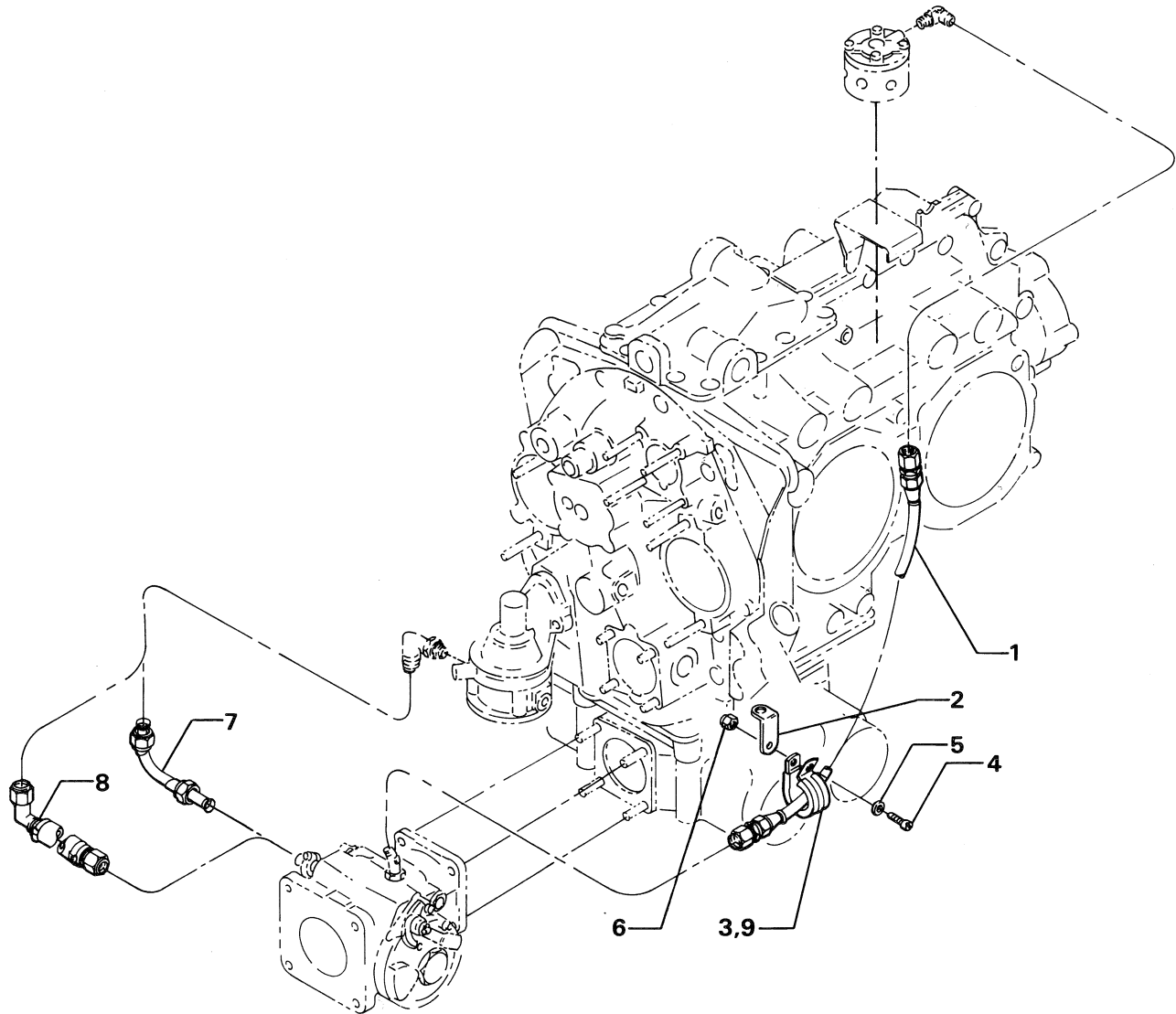


Figure 41. FUEL HOSES AND ATTACHING PARTS (AIO-360)

SERVICE KIT SECTION

SEAL AND GASKET SET

IO-360-A, -B Series

| Part No. | Part Name | Qty. |
|---------------|--|------|
| 75441-1 | SEAL AND GASKET SET | 1 |
| AN901-8A | GASKET | 1 |
| 06E19769-1.00 | GASKET, Annular | 1 |
| STD-2217 | SEAL, Oil | 1 |
| STD-213 | SEAL, Oil | 1 |
| 06E19769-0.63 | GASKET, Annular | 1 |
| 06E19769-1.25 | GASKET, Annular | 1 |
| 1691-C | GASKET, Fuel pump | 2 |
| 8313 | GASKET, Vacuum pump | 1 |
| 60096 | GASKET | 1 |
| LW-18639 | LOCKPLATE, Crankshaft gear | 1 |
| LW-14260 | SEAL, Tachometer drive | 1 |
| 61173 | GASKET, Oil pressure housing | 1 |
| 61183 | GASKET, Accessory adapter | 1 |
| 62224 | GASKET, Magneto | 3 |
| LW-18661 | SEAL, Shroud tube | 16 |
| 66224 | GASKET, Carburetor | 3 |
| 66732 | GASKET, Valve rocker shaft cover | 8 |
| 67193 | GASKET, Rocker box cover | 4 |
| 68129 | GASKET | 1 |
| 68315 | GASKET, Accessory drive adapter | 1 |
| LW-13353 | GASKET, Oil sump | 1 |
| 69164 | GASKET, Fuel pump adapter | 1 |
| 69551 | GASKET, Accessory drive adapter | 1 |
| 71481 | SEAL, Cylinder base | 4 |
| 71973 | GASKET | 4 |
| 72053 | GASKET, Governor | 1 |
| 72075 | SEAL, Oil | 6 |
| 72078 | LOCKPLATE, Camshaft gear | 2 |
| 72091 | RING, Oil seal | 2 |
| 73032 | GASKET, Injector elbow | 1 |
| 73383 | LOCKPLATE | 2 |
| 75118 | GASKET, Exhaust flange | 8 |
| 73817 | LOCKPLATE, Crankshaft idler gear shaft | 2 |
| 73818 | GASKET, Accessory housing | 1 |
| 74068 | RING, Oil level gage seal | 1 |
| 74712 | RING, Oil seal | 4 |
| 76510 | GASKET | 1 |
| LW-12795 | GASKET | 1 |
| 76940 | SEAL, Crankshaft oil | 1 |
| 77569 | RING, Oil seal | 4 |
| LW-12681 | GASKET | 2 |
| LW-13792 | SEAL, Crankshaft oil | 1 |
| 72059 | GASKET | 1 |
| 70455 | GASKET | 1 |
| 75906 | GASKET | 4 |
| 74065 | RING, Oil level gage | 1 |
| 72829 | LOCKPLATE | 1 |

SERVICE KIT SECTION

SEAL AND GASKET SET

AIO-360-A, -B Series

| Part No. | Part Name | Qty. |
|---------------|--|------|
| LW-10964 | SEAL AND GASKET SET | 1 |
| AN901-8A | GASKET | 1 |
| LW-12272 | LOCKPLATE | 4 |
| LW-12681 | GASKET, Magneto | 2 |
| LW-12795 | GASKET | 1 |
| LW-13353 | GASKET | 1 |
| LW-13792 | SEAL, Crankshaft oil | 1 |
| LW-14260 | SEAL, Tachometer drive | 1 |
| LW-18639 | LOCKPLATE, Crankshaft gear | 1 |
| LW-18661 | SEAL, Shroud tube | 16 |
| MS16625-1081 | RING | 1 |
| MS29512-10 | SEAL, Oil, 3/32 dia. sect. x 3/4 I.D. | 1 |
| MS29512-12 | SEAL, Oil, 7/64 dia. sect. x 59/64 I.D. | 2 |
| 06E19769-1.00 | GASKET, 1.00 I.D. x 1-1/4 O.D. x 3/32 annular | 2 |
| 06E19769-0.63 | GASKET, 7/8 O.D. x 5/8 I.D. x 3/32 annular | 2 |
| 06E19769-1.25 | GASKET, 1-1/4 I.D. x 1-1/2 O.D. x 3/32 annular | 1 |
| STD-1221 | RING | 1 |
| STD-2013 | RING, Oil seal | 2 |
| 8313 | GASKET, Vacuum pump | 1 |
| 60096 | GASKET, Fuel pump | 1 |
| 61173 | GASKET, Oil pressure housing | 1 |
| 61183 | GASKET, Accessory adapter | 1 |
| 61503 | SLEEVE, Shroud tube seal | 8 |
| 62224 | GASKET, Magneto adapter | 1 |
| LW-19296 | GASKET | 4 |
| 66224 | GASKET, Fuel injector | 1 |
| 66732 | GASKET, Valve rocker shaft cover | 8 |
| 67193 | GASKET, Rocker box cover | 4 |
| 68315 | GASKET, Accessory drive adapter | 1 |
| 69551 | GASKET | 1 |
| 70310 | SEAL | 8 |
| 70455 | GASKET, 25/32 I.D. x 1-1/8 O.D. x 1/16 thick | 1 |
| LW-14995 | SPRING, Shroud tube | 4 |
| 71481 | RING, Oil seal | 4 |
| 71973 | GASKET, 2 bolt flange, 1-7/8 I.D. | 4 |
| 72053 | GASKET, Governor | 1 |
| 72059 | GASKET | 1 |
| 72075 | SEAL, Oil | 4 |
| 72091 | RING, Oil seal | 2 |
| 73383 | LOCKPLATE, 5/16 bolt x 1.00 spacing | 1 |
| 73818 | GASKET, Accessory housing | 1 |
| 74065 | "O" RING | 1 |
| 74068 | "O" RING | 1 |
| 74712 | RING, Seal, 2-1/8 O.D. x 1/8 section | 4 |
| 75118 | GASKET, Exhaust flange | 8 |
| 75906 | GASKET | 4 |
| 77055 | GASKET, Crankcase cover, upper | 1 |
| 77056 | GASKET, Crankcase cover, lower | 1 |
| 77569 | SEAL | 1 |

SERVICE KIT SECTION

SEAL AND GASKET SET

IO-360-A1B6D, -A3B6D Engines

| Part No. | Part Name | Qty. |
|---------------|---------------------------------|------|
| LW-12944 | SEAL AND GASKET SET | 1 |
| MS16625-1081 | RING, Internal retaining | 1 |
| MS16625-1100 | RING, Internal retaining | 1 |
| MS29512-10 | SEAL | 3 |
| 06E19769-1.00 | GASKET | 1 |
| STD-2217 | SEAL, Oil | 1 |
| 06E19769-0.63 | GASKET | 2 |
| 06E19769-1.25 | GASKET | 1 |
| 8313 | GASKET | 1 |
| 60096 | GASKET | 1 |
| LW-14260 | SEAL, Tachometer drive | 1 |
| LW-18661 | SEAL, Shroud tube | 16 |
| 66224 | GASKET, Injector | 1 |
| 66732 | GASKET, Rocker shaft cover | 8 |
| 67193 | GASKET, Rocker box cover | 4 |
| 68315 | GASKET, Accessory drive adapter | 1 |
| LW-13353 | GASKET, Oil sump | 1 |
| 71481 | SEAL, Cylinder base | 4 |
| 71973 | GASKET | 4 |
| 72053 | GASKET, Governor | 1 |
| 72075 | "O" RING | 6 |
| 72091 | RING, Oil seal | 2 |
| 73383 | LOCKPLATE | 2 |
| 75118 | GASKET, Exhaust flange | 8 |
| 73818 | GASKET, Accessory housing | 1 |
| 74068 | RING, Oil level gage | 1 |
| 77569 | SEAL, Intake pipe | 4 |
| LW-12681 | GASKET, Dual magneto | 1 |
| LW-10332 | LOCKPLATE, Crankshaft | 1 |
| LW-13792 | SEAL, Crankshaft oil | 1 |
| 72059 | GASKET | 1 |
| 73032 | GASKET | 1 |
| 74065 | "O" RING | 1 |

SERVICE KIT SECTION

CYLINDER, PISTON AND RING KIT

IO-360-B Series

| Part No. | Part Name | Qty. |
|----------|------------------------------------|------|
| 05K21104 | CYLINDER, PISTON AND RING KIT | 1 |
| LW-12427 | CYLINDER & HEAD ASSEMBLY | 1 |
| LW-19001 | VALVE, Exhaust | 1 |
| 73938 | VALVE, Intake | 1 |
| LW-11800 | SPRING, Valve outer | 2 |
| LW-11795 | SPRING, Valve inner | 2 |
| LW-10077 | SEAT, Valve spring, upper, intake | 1 |
| LW-16475 | SEAT, Valve spring, upper, exhaust | 1 |
| 60009 | KEY, Valve, intake | 2 |
| 17C21191 | KEY, Valve, exhaust | 2 |
| 17C19386 | CAP, Valve stem, exhaust | 1 |
| 75089 | PISTON | 1 |
| 74241 | RING, Piston, compression | 2 |
| 73857 | RING, Piston, oil regulating | 1 |
| LW-14077 | PIN, Piston | 1 |
| LW-11775 | PLUG, Piston pin | 2 |
| 60828 | PLUG, Piston pin | 2 |
| 71481 | RING, Cylinder base seal | 1 |
| LW-18661 | SEAL, Shroud tube | 2 |
| 70310 | SEAL, Shroud tube | 2 |
| 75906 | GASKET, Rocker box cover | 1 |
| SSP-2272 | TAG | 1 |
| SSP-2472 | TAG | 1 |
| SSP-672 | TAG | 1 |
| 72198 | PLUG, Piston pin | 2 |

SERVICE KIT SECTION

CYLINDER, PISTON AND RING KIT

IO-360-A Series; AIO-360-A, -B Series

| Part No. | Part Name | Qty. |
|------------|--|------|
| 05K21120 | CYLINDER, PISTON AND RING KIT | 1 |
| LW-12993 | CYLINDER & HEAD ASSEMBLY | 1 |
| LW-16740 | VALVE, Exhaust | 1 |
| LW-13622 | VALVE, Intake | 1 |
| LW-11796 | SPRING, Valve outer | 2 |
| LW-11797 | SPRING, Valve inner | 2 |
| 69532 | SEAT, Valve spring, upper, intake | 1 |
| LW-16475 | SEAT, Valve spring, upper, exhaust | 1 |
| LW-13322 | SEAT, Valve spring, lower intake & exhaust | 2 |
| 71481 | RING, Cylinder base seal | 1 |
| 72050 | KEY, Valve, intake | 2 |
| 17C21191 | KEY, Valve, exhaust | 2 |
| 62388 | CAP, Valve stem, intake | 1 |
| 17C19386 | CAP, Valve stem, exhaust | 1 |
| LW-10207-S | PISTON | 1 |
| 74241 | RING, Piston, compression | 2 |
| 73857 | RING, Piston, oil regulating | 1 |
| LW-14077 | PIN, Piston | 1 |
| 60828 | PLUG, Piston pin | 2 |
| LW-11775 | PLUG, Piston pin | 2 |
| 66732 | GASKET, Valve rocker shaft cover | 2 |
| 67193 | GASKET, Rocker box cover | 1 |
| LW-18661 | SEAL, Shroud tube | 4 |
| SSP-2272 | TAG | 1 |

SERVICE KIT SECTION

CRANKCASE ASSY. AND THRU STUD KITS

| Part No. | Part Name | Qty. |
|----------------|-------------------------------------|------|
| 11B20061-1DL-S | CRANKCASE ASSY. AND THRU STUD KIT | 1 |
| 11B20061-1DL* | CRANKCASE ASSEMBLY | 1 |
| 76220 | THRU STUD | 4 |
| 74887 | SPACER | 2 |
| STD-2090 | NUT | 2 |
| 1102 | PLUG, 1/8 pipe | 6 |
| STD-1339 | PLUG, 1/16 pipe (piston squirts) | 4 |
| SSP-582 | TAG | 1 |
| SSP-272 | TAG | 1 |
| 11B20061-1SH-S | CRANKCASE ASSY. AND THRU STUD KIT | 1 |
| 11B20061-1SH* | CRANKCASE ASSEMBLY | 1 |
| 76220 | THRU STUD | 4 |
| 74887 | SPACER | 2 |
| STD-2090 | NUT | 2 |
| 1102 | PLUG, 1/8 pipe | 6 |
| STD-1339 | PLUG, 1/16 pipe | 4 |
| SSP-582 | TAG | 1 |
| SSP-272 | TAG | 1 |
| 11B20061-1SL-S | CRANKCASE ASSY. AND THRU STUD KIT | 1 |
| 11B20061-1SL* | CRANKCASE ASSEMBLY | 1 |
| 76220 | THRU STUD | 4 |
| 74887 | SPACER | 2 |
| STD-2090 | NUT | 2 |
| 1102 | PLUG, 1/8 pipe | 6 |
| STD-1339 | PLUG, 1/16 pipe (piston squirts) | 4 |
| SSP-582 | TAG | 1 |
| SSP-272 | TAG | 1 |
| LW-18389-S | CRANKCASE, GOV. STUD, THRU STUD KIT | 1 |
| LW-18389* | CRANKCASE ASSEMBLY | 1 |
| 31C-14 | STUD (AN Governor) | 4 |
| 31C-16 | STUD (Woodward Governor) | 4 |
| STD-1339 | PLUG | 4 |
| 76220 | THRU STUD | 4 |
| 74887 | SPACER | 2 |
| STD-2090 | NUT | 2 |
| AN565B1032-H4 | SET SCREW, 10-32 x 1/4 long | 1 |
| AN565B1032-H5 | SET SCREW, 10-32 x 5/16 long | 1 |
| SSP-1576 | TAG | 1 |
| LW-18399-S | CRANKCASE ASSY. AND THRU STUD KIT | 1 |
| LW-18399-1* | CRANKCASE ASSEMBLY | 1 |
| 31C-14 | STUD (AN Governor) | 4 |
| 76220 | THRU STUD | 4 |
| 74887 | SPACER | 2 |
| AN565B1032-H4 | SET SCREW, 10-32 x 1/4 long | 1 |
| AN565B1032-H5 | SET SCREW, 10-32 x 5/16 long | 1 |
| STD-2090 | NUT | 2 |
| SSP-1769 | TAG | 1 |
| SSP-1576 | TAG | 1 |
| SSP-582 | TAG | 1 |

* See Figure 1, Page 1-1 for component parts.

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| AN365-420C | Nut | 6-1 | LW-25-1.13 | Bolt | 6-3 |
| AN381-4-22 | Pin | 2-7 | LW-25-1.25 | Bolt | 2-13 |
| AN500A416-10 | Screw | 6-9 | LW-25-1.25 | Bolt | 2-17 |
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| AN7-12 | Bolt | 5-3 | LW-25-1.75 | Bolt | 5-7 |
| AN7-14 | Bolt | 5-3 | LW-25-2.00 | Bolt | 1-11 |
| AN777-8D | Elbow | 2-11 | LW-25-2.00 | Bolt | 5-7 |
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| AN814-6L | Plug | 2-5 | LW-25S1.50 | Bolt | 1-13 |
| AN814-10L | Plug | 2-11 | LW-25S1.80 | Bolt | 1-13 |
| AN815-10 | Union | 6-3 | LW-25S2.97 | Bolt | 1-13 |
| AN816-4 | Nipple | 6-9 | LW-31-0.94 | Bolt | 2-5 |
| AN837-4 | Elbow | 6-13 | LW-31-0.94 | Bolt | 5-1 |
| AN838-12D | Elbow | 6-3 | LW-31-0.94 | Bolt | 5-3 |
| AN844-10D | Elbow | 2-11 | LW-31-1.16 | Bolt | 5-7 |
| AN901-8A | Gasket | 2-11 | LW-31-1.69 | Bolt | 2-4 |
| AN919-15 | Reducer | 2-11 | LW-31-4.13 | Bolt | 6-3 |
| AN924-4 | Nut | 6-13 | LW-31H0.75 | Bolt | 5-1 |
| AN924-12D | Nut | 6-3 | LW-31H0.75 | Bolt | 5-3 |
| AN932-2 | Plug | 6-9 | LW-31H0.88 | Bolt | 1-9 |
| AN932-5 | Plug | 2-11 | LW-31H0.88 | Bolt | 5-1 |
| AN960-616L | Washer | 1-11 | LW-31H1.22 | Bolt | 2-4 |
| AN960-616L | Washer | 1-13 | LW-31H1.22 | Bolt | 5-3 |
| LW-25-0.50 | Bolt | 6-9 | LW-31H1.75 | Bolt | 2-13 |
| LW-25-0.63 | Screw | 1-9 | LW-31S1.16 | Bolt | 5-1 |
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| LW-25-0.94 | Bolt | 6-1 | LW-10296 | Gear Assy. | 1-9 |
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| LW-10970 | Strut | 5-3 | LW-12798-4S-172 | Hose | 6-13 |
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| LW-11485 | Tube | 3-5 | LW-12877-6S-142 | Hose | 6-15 |
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| LW-11713 | Spring. | 1-3 | LW-12892 | Thrust Button | 3-7 |
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| LW-11775 | Plug | 3-1 | LW-12914 | Gear Assy. | 2-3 |
| LW-11795 | Spring | 3-5 | LW-12920 | Tube Assy. | 2-5 |
| LW-11796 | Spring | 3-5 | LW-12988 | Cyl. & Head Assy. | 3-3 |
| LW-11797 | Spring | 3-5 | LW-12993 | Cyl. & Head Assy. | 3-3 |
| LW-11800 | Spring | 3-5 | LW-13077 | Spring | 3-5 |
| LW-11847 | Tube Assy. | 3-9 | LW-13175-4-252 | Hose Assy. | 6-15 |
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| LW-13641 | Cushion | 4-13 | LW-14758 | Gage Assy. | 1-3 |
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| LW-13790 | Shaft | 3-7 | LW-14760 | Gage Assy. | 1-3 |
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| LW-13796 | Shaft | 1-9 | LW-14780 | Gage Assy. | 1-3 |
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| LW-14228 | Gear | 4-5 | LW-15592-8-28 | Clamp | 6-5 |
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| LW-14230 | Cushion | 4-5 | LW-16048 | Bearing | 3-1 |
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| LW-14318 | Alternator | 5-5 | LW-16266-25-38 | Clamp | 2-5 |
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