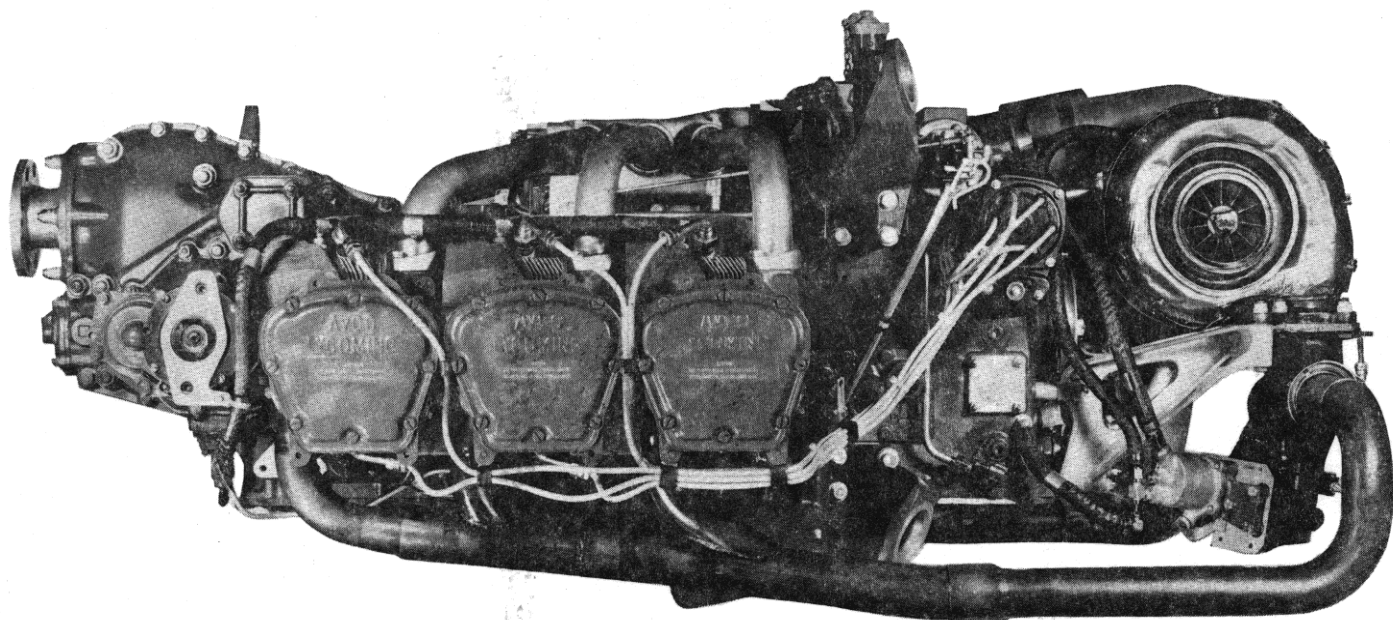


AVCO LYCOMING

PARTS CATALOG



**TIGO-541 SERIES
AIRCRAFT ENGINES**

AVCO LYCOMING WILLIAMSPORT DIVISION
AVCO CORPORATION
WILLIAMSPORT, PENNSYLVANIA 17701

PC-121

Nov. 1975

SUPPLEMENTAL PARTS LIST SSP1177

To Provide Parts Coverage for Avco Lycoming
TIGO-541-D1B Model Aircraft Engines

This supplement offers a complete parts list for the TIGO-541-D1B model engines. Parts are arranged herein in group assemblies similar to those in Parts Catalog PC-121. This allows use of the illustrations in PC-121 with this supplement. Each group assembly listed is headed by a page and illustration figure number corresponding to those in PC-121, followed by the parts list.

Use the Table of Contents in the original parts catalog PC-121 to find the page number and illustration of the desired parts (Example: Cylinder Assembly, Page 2-2). The corresponding page in this supplement (Cylinder Assembly, Page 2-2) lists the parts for the TIGO-541-D1B models.

TIGO-541-D1B

SECTION 1

Page 1-1 - Figure 1

Ref. No.	Part No.	Description	Qty. Per Assy.
1	LW-14052	CRANKCASE ASSEMBLY	1
2	STD-1984	DOWEL, 11/16 in. OD x 11/16 in. long (solid)	1
3	STD-1943	DOWEL, 11/16 in. OD x 9/16 ID x 11/16 in. long	2
4	LW-10734	DOWEL, Crankshaft bearing	3
	LW-10647	DOWEL, Crankshaft bearing	8
5	38-14	STUD, 3/8-16 x 1-3/4 in. long	24
6	50-16	STUD, 1/2-13 x 2.00 in. long	12
7	38-17	STUD, 3/8-16 x 2-1/8 in. long	6
8	38-23	STUD, 3/8-16 x 2-7/8 in. long	6
9	67528	STUD, 5/16-18 x 1-5/8 in. long	4
10	61261	STUD, 5/16-18 x 1-1/2 in. long	4
11	31CD-20	STUD, 5/16-18 x 2-1/2 in. long, drilled	4
12	25CD-18	STUD, 1/4-20 x 2-1/4 in. long, drilled	6
13	25C-10	STUD, 1/4-20 x 1-1/4 in. long	6
14	69943	STUD, 1/4-20 x 1-13/32 in. long	8
15	68510	STUD, 1/4-20 x 1-1/16 in. long	1
16	25C-9	STUD, 1/4-20 x 1-1/8 in. long	2
17	68437	STUD, 5/16-18 x 1-7/8 in. long	4
18	25C-18	STUD, 1/4-20 x 2-1/4 in. long	1
19	50-52	STUD, 1/2-13 x 6-1/2 in. long	1
20	38-25	STUD, 3/8-16 x 3-1/8 in. long	1
21	STD-2035	DOWEL, 5/16 in. dia. x 1/2 in. long	1
22	LW-11256	BUSHING, Starter housing	1
23	STD-1353	INSERT, Heli-coil, no. 10-24 x 3/8 in. long	2
24	STD-1774	PIN, 1/8 in. dia. x 1/4 in. long	2
25	25C-12	STUD, 1/4-20 x 1-1/2 in. long	4
26	STD-784	PLUG, Allen hd. 3/8 in. NPT	7
27	STD-405	PLUG, Square hd., 1/8 in. NPT	1
28	STD-355	PLUG, Allen hd., 3/4 in. NPT	2
29	1102	PLUG, Allen hd., 1/8 in. NPT	7
30	STD-1339	PLUG, Allen hd., 1/16 in. NPT	9
31	STD-1003	DOWEL, 1/4 OD x 3/16 ID x 1/2 in. long	2
32	38-18	STUD, 3/8-16 x 2-1/4 in. long	1
33	38-28	STUD, 3/8-16 x 3-1/2 in. long	1
34	AN913-0S	PLUG, Sq. hd., drilled, 1/16 NPT	1

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SECTION 1 (CONT.)

Page 1-1 - Figure 1 (Cont.)

Ref. No.	Part No.	Description	Qty. Per Assy.
35	AN932-6	PLUG, Allen hd. 3/4 NPT	1
36	STD-1173	INSERT, 1/4-20 x 1/2 long, Heli-coil	1
	38-13	STUD, 3/8-16 x 3-1/4 in. long	1
38	LW-13615	NOZZLE, Reduction gear, lubricating	1
39	73772	NOZZLE ASSEMBLY, Piston cooling	6
40	31C-17	STUD, 5/16-18 x 2-1/8 in. long (Gov. pad) (Driven ht. of studs 1.44 in.)	4

Page 1-3 - Figure 2

1	1028-B	BALL, 11/16 dia.	1
2	LW-11138	SPRING, Oil pressure relief valve	1
3	STD-1045	GASKET, 1-1/4 ID x 1-1/2 OD x 3/32 in. annular	1
4	77808	VALVE ASSY., Oil press. relief, adjustable	1
5	STD-294	GASKET, 7/8 OD x 5/8 ID x 3/32 annular	1
6	LW-14921	ADAPTER, Oil level gage	1
	LW-14923	TUBE ASSY., Oil level gage	1
7	71621	CLIP, 3/8 in. ID for 1/4 in. screw	1
8	LW-10081	GAGE ASSY., Oil level (Left engine)	1
10	STD-1733	RING, Oil seal, 1/4 ID x 1/16 dia.	1
11	LW-14922	BRACKET, Oil level gage	1

BRACKET ATTACHING PARTS

12	STD-8	WASHER, 1/4 plain	2
13	STD-160	WASHER, 1/4 internal lock	2
14	STD-705	BOLT, 1/4-20 x 11/16 in. long, hex hd.	1
15	STD-1499	BOLT, 1/4-20 x 1/2 in. long, hex hd.	1
16	STD-1411	NUT, 1/4-20 plain	1
17	70457	GASKET, Oil filler extension	1
18	LW-14605	CAP AND EXTENSION ASSY., Oil filler	1
19	LW-14592	EXTENSION ASSY., Oil filler	1
20	LW-10526	CAP ASSY., Oil filler	1
21	LW-14603	CHAIN ASSY., Oil filler cap	1

Page 1-5 - Figure 3

1	77663	BRACKET, Engine mounting, lower left	1
2	77664	BRACKET, Engine mounting, lower right	1
3	77678	BRACKET, Engine mounting, upper right	1
4	77677	BRACKET, Engine mounting, upper left	1

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SECTION 1 (CONT.)

Page 1-5 - Figure 3 (Cont.)

Ref. No.	Part No.	Description	Qty. Per Assy.
ATTACHING PARTS			
6	STD-33	WASHER, Plain, 3/8 in.	16
7	STD-678	WASHER, Internal lock, 3/8 in.	16
8	STD-2053	BOLT, Hex hd., 3/8-16 x 2-5/8 in. long	2
9	STD-1994	BOLT, Hex hd., 3/8-16 x 2-7/8 in. long	5
	STD-2111	BOLT, Self-sealing, 3/8-16 x 2-7/8 in. long, hex hd.	1
10	STD-2055	BOLT, 3/8-16 x 4-7/16 in. long	5
	STD-2107	BOLT, Self-sealing, 3/8-16 x 4-7/16 in. long, hex hd.	1
11	STD-2037	BOLT, 3/8-16 x 4-11/16 in. long	1
	STD-2128	BOLT, Self-sealing, 3/8-16 x 4-11/16 in. long, hex hd.	1
12	75688	STRAP, Lifting	1

ATTACHING PARTS

13	STD-8	WASHER, Plain, 1/4 in.	3
14	STD-160	WASHER, Internal lock, 1/4 in.	1
15	STD-1575	BOLT, Hex hd., 1/4-20 x 2-15/16 in. long	1
16	STD-1411	NUT, Plain, 1/4 in.	1
17	72707	EYE, Lifting, right side	1
18	78447	EYE, Lifting, left side	1
19	78448	SPACER, Lifting eye	2

Page 1-7 - Figure 4

1	74888	STUD, 1/2-20 x 11-1/2 in. long	6
1	STD-2181	WASHER, 33/64 ID x 7/8 OD x 1/8 in. thick	6
1	STD-2090	NUT, 1/2-20 plain	6
2	75714	STUD, 1/2-20 x 9-25/32 in. long	2
2	STD-2181	WASHER, 33/64 ID x 7/8 OD x 1/8 in. thick	2
2	STD-2090	NUT, 1/2-20 plain	2
2	LW-14044	WASHER, 1/2 in. seal at starter pad	2
3	75713	STUD, 1/2-20 x 8-13/32 in. long	1
3	STD-2181	WASHER, 33/64 ID x 7/8 OD x 1/8 in. thick	1

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SECTION 1 (CONT.)

Page 1-7 - Figure 4 (Cont.)

Ref. No.	Part No.	Description	Qty. Per Assy.
3	STD-2090	NUT, 1/2-20 plain	1
4	75782	STUD, 1/2-20 x 5-17/32 in. long	2
4	STD-2181	WASHER, 33/64 ID x 7/8 OD x 1/8 in. thick	2
4	STD-2090	NUT, 1/2-20 plain	2
5	75712	STUD, 1/2-20 x 6-21/32 in. long	1
5	STD-2181	WASHER, 33/64 ID x 7/8 OD x 1/8 in. thick	1
5	STD-2090	NUT, 1/2-20 plain	1
6	75799	STUD, 1/2-20 x 8-5/32 in. long	1
6	STD-2181	WASHER, 33/64 ID x 7/8 OD x 1/8 in. thick	1
6	STD-2090	NUT, 1/2-20 plain	1
7	75170	BOLT, 1/2-20 x 9-7/8 in. long	2
7	STD-2181	WASHER, 33/64 ID x 7/8 OD x 1/8 in. thick	2
7	STD-2090	NUT, 1/2-20 plain	2
7	STD-1940	WASHER, 1/2 dia. (seal)	2
8	STD-1948	BOLT, 1/4-20 x 2-11/16 in. long, hex hd.	8
8	STD-8	WASHER, 1/4 plain	18
8	STD-160	WASHER, 1/4 lock	9
8	STD-1411	NUT, 1/4-20 plain	9
8A	STD-1575	BOLT, 1/4-20 x 2-15/16 long	1
	MS20002C8	WASHER, Countersunk	2
9	STD-1948	BOLT, 1/4-20 x 2-11/16 in. long	1
9	STD-8	WASHER, 1/4 plain	1
9	STD-160	WASHER, 1/4 lock	1
9	STD-1411	NUT, 1/4-20 plain	1
10	STD-1414	BOLT, 1/4-20 x 1-1/2 in. long	5
10	STD-8	WASHER, 1/4 plain	5
10	STD-160	WASHER, 1/4 lock	5
10	STD-1411	NUT, 1/4-20 plain	5
11	STD-2084	BOLT, 1/4-20 x 1-3/4 in. long	4
11	STD-8	WASHER, 1/4 plain	4
11	STD-160	WASHER, 1/4 lock	4
12	STD-1419	BOLT, 1/4-20 x 1-1/8 in. long	2
12	STD-8	WASHER, 1/4 plain	2
12	STD-160	WASHER, 1/4 lock	2
13	STD-1951	BOLT, 1/4-20 x 3-5/8 in. long	1
13	STD-8	WASHER, 1/4 plain	1
13	STD-160	WASHER, 1/4 lock	1
14	STD-1952	BOLT, 1/4-20 x 2-1/8 in. long	1
14	STD-8	WASHER, 1/4 plain	1
14	STD-160	WASHER, 1/4 lock	1
14	STD-1411	NUT, 1/4-20 plain	1

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SECTION 1 (CONT.)

Page 1-7 - Figure 4 (Cont.)

Ref. No.	Part No.	Description	Qty. Per Assy.
15	STD-1830	BOLT, 1/4-20 x 3-1/16 in. long	1
15	STD-160	WASHER, 1/4 lock	1
15	STD-1411	NUT, 1/4-20 plain	1
16	STD-2015	BOLT, 5/16-18 x 3-1/8 in. long	1
16	STD-35	WASHER, 5/16 plain	1
16	STD-475	WASHER, 5/16 lock	1
17	STD-1979	BOLT, 3/8-24 x 2-13/16 in. long	1
17	STD-33	WASHER, 3/8 plain	2
17	STD-678	WASHER, 3/8 lock	1
17	383-B	NUT, 3/8 plain	1
18	STD-1420	NUT, 5/16-18 slotted	4
18	STD-35	WASHER, 5/16 plain	4
19	72075	SEAL, Oil, 15/32 ID x 3/32 dia. section	1
20	STD-1864	NUT, 1/4-20 slotted	6
20	STD-8	WASHER, 1/4 plain	un

Page 1-9 - Figure 5

1	LW-15876	CRANKSHAFT AND COUNTERWEIGHT ASSY.	1
	LW-15872	CRANKSHAFT ASSY.	1
2	74876	BUSHING, Crankshaft dynamic counterweight	10
3	76968	BUSHING, Crankshaft dynamic counterweight (2nd order)	2
4	74768	GEAR, Crankshaft	1
5	69641	DOWEL, Rear crankshaft gear	2
6	74770	LOCKPLATE, Crankshaft gear	1
7	STD-477	BOLT, 1/4-28 x 3/4 in. long, hex hd.	2
8	75462	BUSHING, Front crankshaft spline	1
9	75359	DOWEL, Front crankshaft spline bushing	3
10	75637	COUNTERWEIGHT ASSY., Dynamic (3rd order)	5
11	71903	BUSHING, Dynamic counterweight	20
12	77002	COUNTERWEIGHT ASSY., Dynamic (2nd order)	1
13	77001	BUSHING, Dynamic counterweight	4
14	75631	ROLLER, Dynamic counterweight, 3rd order	10
15	77007	ROLLER, Dynamic counterweight, 2.01 order	2
16	71907	WASHER, Dynamic counterweight	20
17	LW-14820	RING, Internal retaining	20
18	77004	WASHER, Dynamic counterweight, 2nd order	4

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SECTION 1 (CONT.)

Page 1-9 - Figure 5 (Cont.)

Ref. No.	Part No.	Description	Qty. Per Assy.
19	77005	RING, Internal retaining	4
20	LW-11576	BEARING, Crankshaft	8
21	75517	BEARING, Prop. drive gear	2
22	75519	BEARING, Prop. shaft	2
23	LW-12440	CAMSHAFT ASSEMBLY	1
24	STD-1066	DOWEL, Stepped, .310 and .251 dia. x 13/32 in. long	1
25	74769	GEAR, Camshaft	1
26	72078	LOCKPLATE, 5/16 in. bolt x 1-21/64 in. spacing	2
27	STD-679	BOLT, 5/16-24 x 27/64 in. long, hex hd.	4

Page 1-11 - Figure 6

1	75557	GEAR, Propeller governor driven	1
2	LW-13081	PROPELLER SHAFT AND GEAR ASSEMBLY	1
3	75538	SHAFT, Propeller	1
4	LW-12122	SEAL, Propeller shaft, oil (solid)	1
5	75618	CAP, Thrust bearing	1
6	75619	SHIM, Thrust bearing cap	1
7	77454	SLINGER, Thrust bearing, oil	1
8	LW-13335	BEARING, Thrust	1
9	75562	GEAR, Propeller shaft driven	1
10	AN5008-20	CONE, Propeller hub	1
11	LW-14577	CONE, Propeller hub, front	1
12	76715	NUT, Propeller shaft, lock	1
13	STD-2076	KEY, Woodruff, 3/16 in. x 5/8 in. dia.	1
14	75546	GEAR, Prop. shaft gov. drive	1
15	75822	SPRING, 1-1/16 in. OD x 1-57/64 in. long	1
16	77015	GEAR ASSY., Generator and starter	1
17	75537	SHAFTGEAR, Generator and starter	1
18	77016	ADAPTER, Spring	1
19	LW-12519	GEAR ASSY., Prop. shaft drive	1
20	75553	GEAR, Prop. shaft drive	1
21	LW-12518	RACE, Thrust bearing, rear	1
22	LW-11739	TUBE, Prop. oil supply	1
23	LW-10123	TUBE, Prop. oil transfer	1
24	MS29513-133	"O" RING, 1-51/64 ID x 0.103 in. dia. section	1
25	MS16625-200	RING, Internal retaining	1
26	LW-11738	SEAL, Oil, .070 dia. section x .431 ID	1

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SECTION 1 (CONT.)

Page 1-12 - Figure 7

Ref. No.	Part No.	Description	Qty. Per Assy.
1	LW-11953	DRIVE ASSEMBLY, Starter	1
2	LW-11784	ADAPTER ASSEMBLY, Starter drive	1
3	LW-11780	BUSHING, 1.00 in. ID x 1-3/16 in. OD flanged	2
4	STD-859	DOWEL, 1/8 in. dia. x 1/4 in. long	2
5	LW-11952	WASHER, Thrust	1
6	LW-10727	SEAL, 2-1/8 OD x 1-5/16 ID x 5/16 in. wide	1
7	LW-11781	SPACER, Starter drive gear	1
8	LW-12241	SHAFTGEAR, Starter drive	1
9	75395	GEAR, Starter drive	1
10	75843	NUT, 5/8-18, crimp lock	1
11	MS9068-009	RING, Oil seal, 7/32 ID x 1/16 in. dia. section	1
12	MS28775-147	RING, Oil seal, 2-39/64 ID x 1-1/32 dia. section	1

ADAPTER ATTACHING PARTS

13	STD-35	WASHER, Plain, 5/16 dia.	4
14	STD-475	WASHER, Internal lock, 5/16 in.	4
15	STD-1410	NUT, Plain, 5/16 in.	4

Page 1-13 - Figure 8

1	75747	GEAR, Accessory idler	1
2	74722	GEAR, Accessory drive (intermediate) bevel	1
3	76996	SHAFTGEAR, Hydraulic and vacuum pump drive	1
4	75508	GEAR, Accessory drive, bevel	1
5	76925	SHAFT, Fuel pump idler gear	1
6	76967	LOCKPLATE, 1/4 in. bolt x 1-3/4 in. spacing	1
7	STD-705	BOLT, Hex hd., 1/2-20 x 11/16 in. long	2
8	74755	GEAR ASSY., Fuel pump idler	1
9	77309	BUSHING, Crankshaft idler gear	1
10	70474	WASHER, Fuel pump idler gear thrust	1
11	STD-1737	RING, External retaining, 37/64 in. dia. x .035 in. thick	1
12	77217	GEAR ASSEMBLY, Fuel pump drive	1
13	77224	PLUG, 41/64 dia. x 1/8 in. thick	1
14	74926	WASHER, Thrust, 3/4 ID x 1-1/8 OD x 1/16 in. thick	1

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SECTION 1 (CONT.)

Page 1-13 - Figure 8 (Cont.)

Ref. No.	Part No.	Description	Qty. Per Assy.
15	STD-1800	RING, External retaining, 11/16 dia. x 3/64 in. thick	1

Page 1-14 - Figure 9

1	LW-13519	SHIM, Torquemeter oil pump body	1
2	72075	SEAL, Oil, 3/32 section x 15/32 ID	2
3	MS28775-148	SEAL, Oil, "O" ring	1
4	STD-8	WASHER, 1/4 plain	4
5	STD-160	WASHER, 1/4 lock	4
6	STD-1411	NUT, 1/4-20 plain	4
7	LW-13440	THRUST BEARING, Prop. shaft drive gear	1
8	LW-13441	SEAT, Thrust bearing	1
9	LW-13439	COVER ASSY., Torquemeter oil pump	1
10	STD-557	DOWEL, 1/2 dia. x 1-11/16 long	1

Page 1-15 - Figure 10

1	76546	GASKET, Propeller control access	1
2	LW-14604	BREATHER, Separator	1
	LW-11873	TUBE, Breather drain	1
	78844	HOSE, 3/4 ID x 2-1/2 long	2
	STD-2117	CLAMP, .56 to 1.06 range x 1/2 wide	4

ATTACHING PARTS

3	STD-8	WASHER, Plain, 1/4 in.	4
4	STD-160	WASHER, Internal lock, 1/4 in.	4
5	STD-1204	BOLT, 1/4-20 x 15/16 long, hex hd.	4
6	72741	GASKET, Timing pin hole cover	1
7	72540	COVER, Timing pin hole	1

ATTACHING PARTS

8	STD-28	WASHER, Plain, no. 10	2
9	STD-251	WASHER, Internal lock, no. 10	2
10	STD-82	SCREW, Fill. hd., No. 10-24 x 1/2 in. long	2
11	LW-13052	PLATE, Prop. shaft oil seal retainer	2
12	511	SPACER, Thrust bearing cap nut	12

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SECTION 1 (CONT.)

Page 1-15 - Figure 10 (Cont.)

Ref. No.	Part No.	Description	Qty. Per Assy.
ATTACHING PARTS			
13	STD-33	WASHER, Plain, 3/8 in.	6
14	STD-2045	NUT, Self-locking, 3/8-24	6
15	72053	GASKET, Governor	1
16	72378	COVER, Governor drive	1
ATTACHING PARTS			
17	STD-35	WASHER, Plain, 5/16 in.	20
18	STD-475	WASHER, Internal lock, 5/16 in.	4
19	STD-1410	NUT, Plain, 5/16-18	4
20	8313	GASKET, Vacuum pump	2
21	60430	COVER, Vacuum and hydraulic pump	2
ATTACHING PARTS			
22	STD-8	WASHER, Plain, 1/4 in.	8
23	STD-160	WASHER, Internal lock, 1/4 in.	8
24	STD-1411	NUT, Plain, 1/4-20	8
25	STD-208	SEAL, Oil, 7/8 ID x 1-1/2 OD x 5/16 in. wide	2
26	8313	GASKET, Tachometer drive	1
27	60430	COVER, Tachometer drive	1
ATTACHING PARTS			
28	STD-8	WASHER, Plain, 1/4 in.	4
29	STD-160	WASHER, Internal lock, 1/4 in.	4
30	STD-1411	NUT, Plain, 1/4-20	4

Page 1-17 - Figure 11

1	78585	SHAFT, Compressor drive	1
2	77707	GASKET, Crankcase rear	1
3	76240	ADAPTER ASSY., Compressor drive	1
4	76230	BUSHING, 1.00 ID x 1-1/8 in. OD flanged	1
5	STD-394	DOWEL, 3/32 dia. x 11/32 in. long	1
6	STD-1934	SEAL, Oil, 1.00 ID x 1-5/8 OD x 3/8 in. wide	1

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SECTION 1 (CONT.)

Page 1-17 - Figure 11 (Cont.)

Ref. No.	Part No.	Description	Qty. Per Assy.
ADAPTER ATTACHING PARTS			
7	STD-35	WASHER, Plain 5/16 in.	6
8	STD-475	WASHER, Internal lock, 5/16 in.	6
9	LW-31-1.09	BOLT, Hex hd., 5/16-18 x 1-3/32 in. long	6
10	STD-2057	KEY, Woodruff, 5/32 x 5/8 in. (Special)	1
11	LW-10516	PULLEY, Compressor drive	1
12	AN960-1216	WASHER, 5/64 ID x 1-5/16 OD x 3/32 in. thick	1
13	STD-1035	NUT, Slotted shear, 3/4-16	1
14	STD-761	PIN, Cotter, 3/32 dia. x 1.00 in. long	1
	LW-10955	BELT, Compressor drive	1
	STD-1342	SPACER, 7/8 OD x 3/8 ID x 1/8 thick	4

Page 1-18 - Figure 12

1	LW-12515	GASKET, Oil cooler bypass housing	1
2	LW-13247	HOUSING ASSY., Oil cooler bypass valve	1
3	LW-12896	SEAT, Thermostatic control valve	1
4	STD-1986	INSERT, Heli-coil, 1.00-14 NF-3	1

HOUSING ATTACHING PARTS

5	STD-8	WASHER, Plain, 1/4 in.	10
6	STD-160	WASHER, Internal lock, 1/4 in.	10
7	STD-1948	BOLT, 1/4-20 NC-3 x 2-11/16 in. long	1
8	STD-1688	BOLT, 1/4-20 NC-3 x 1.00 in. long	5
9	STD-2084	BOLT, 1/4-20 NC-3 x 1-3/4 in. long	4
10	LW-13230	VALVE ASSY., Temp. control, oil cooler bypass	1
11	STD-294	GASKET, 7/8 in. OD x 5/8 in. ID x 3/32 in. annular	1
12	1540	PLUG, Thermometer well	1

Page 1-19 - Figure 13

1	LW-11678	SHAFT ASSY., Tachometer drive	1
3	78199	BUSHING, Tachometer drive	1
	MS16624-1043	RING, Ext. retaining, 7/16 dia. x .025	1
4	74929	WASHER, Thrust, tachometer shaft	1
5	LW-10455	GASKET, Tachometer adapter	1
6	LW-11679	ADAPTER ASSY., Tachometer	1

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SECTION 1 (CONT.)

Page 1-19 - Figure 13 (Cont.)

Ref. No.	Part No.	Description	Qty. Per Assy.
7	25C-11	STUD, 1/4-20 x 1-3/8 in. long	4
8	STD-547	SEAL, 9/16 ID x 1-1/8 OD x 5/16 in. wide	1
9	STD-696	WASHER, Plain, 1/4 in.	2
10	STD-160	WASHER, Internal lock, 1/4 in.	2
11	STD-1875	BOLT, Hex hd., 1/4-20 x 13/16 in. long	2
12	70455	GASKET, 25/32 ID x 1-1/8 OD x .030-.040 thick	1
13	LW-13896	PLUG, .150 3/6 hex hd.	1

SECTION 2

Page 2-1 - Figure 14

1	LW-10545	PISTON, 3 ring, (Compression ratio 7.3:1)	6
2	74241	RING, Piston, compression	12
3	73857	RING, Piston, oil regulating	6
4	LW-14077	PIN, Piston	6
5	72198	PLUG, Piston pin	12
6	LW-13422	CONNECTING ROD ASSY.	6
7	LW-13923	BUSHING, Conn. rod, upper	6
8	LW-12596	BOLT, Conn. rod	12
9	LW-12186	NUT, Conn. rod bolt	12
10	LW-13212	BEARING, Conn. rod	12

Page 2-2 - Figure 15

1	LW-13121	CYLINDER AND HEAD ASSY., Nitrided	6
2	STD-2090	NUT, 1/2-20 plain	26
3	383-B	NUT, 3/8 plain	24
4	LW-12688	SEAT, Intake valve	6
5	71894	SEAT, Exhaust valve	6
6	76077	GUIDE, Valve, intake	6
7	79046	GUIDE, Valve, exhaust (ni-resist)	6
8	69260	INSERT, Spark plug, 18-1.5 mm (long reach)	12
9	25C-10	STUD, 1/4-20 x 1-1/4 in. long	24
10	25C-8	STUD, 1/4-20 x 1.00 in. long	12
11	66670	BUSHING, Rocker shaft	24
12	STD-1872	INSERT, Heli-coil, 1/8-27 NPT	6
13	72706	INSERT, Heli-coil, 1/4-20 x 3/8 in. long	12
	STD-1353	INSERT, Heli-coil, no. 10-24 x 3/8 in. long	12
	AN780-2	NIPPLE, Union	6
	LW-13123	BAFFLE, Center fin	6

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SECTION 2 (CONT.)

Page 2-2 - Figure 15 (Cont.)

Ref. No.	Part No.	Description	Qty. Per Assy.
	STD-1925	SCREW, 1/4-20 x 5/8 in. long	6
	STD-8	WASHER, 1/4 plain	6
	74887	SPACER, 7/8 in. OD x 0.52 in. ID x 3/8 in. thick	2
14	71481	RING, Oil seal	6
15	LW-13262	VALVE, Intake (hollow stem)	6
16	LW-11082	VALVE, Exhaust (rotator type)	6
17	LW-13321	SEAT, Valve spring lower, intake	6
18	76093	SEAT, Valve spring lower, exhaust	6
19	LW-11798	SPRING, Valve outer	12
20	LW-11799	SPRING, Valve, auxiliary	12
21	69532	SEAT, Valve spring, intake	6
22	72050	KEY, Valve, intake	12
	62388	CAP, Valve stem, intake	6
23	LW-10076	SEAT, Valve spring (rotator type)	6
24	MS13997-3	KEY, Valve (rotator type)	12
25	MS13998-3	CAP, Valve stem	6
26	LW-10937	LIFTER, Hydraulic	12
27	74906	GASKET, Shroud tube adapter	6
28	LW-13566	ADAPTER, Shroud tube	6
29	STD-8	WASHER, Plain, 1/4 in.	17
30	STD-160	WASHER, Internal lock, 1/4 in.	18
31	STD-1875	BOLT, 1/4-20 x 13/16 in. long, hex hd.	18
32	LW-14015	SHROUD TUBE ASSY., Push rod	12
33	LW-13565	SPRING, Shroud tube	12
34	LW-13340	WASHER, 25/32 ID x 31/32 OD x 1/32 in. thick	24
35	70310	SEAL, Shroud tube	24
36	76180	ROD ASSY., Push - Total of	un
36	76181	ROD ASSY., Push - 12 req'd.	un
36	76182	ROD ASSY., Push - Select of	un
36	76183	ROD ASSY., Push - fit.	un
37	76266	ROCKER ASSY., Valve	12
38	76242	BUSHING, Valve rocker	12
39	72626	SHAFT, Valve rocker	12
40	66732	GASKET, Valve rocker shaft cover	12
41	72710	COVER, Valve rocker shaft	12
42	72709	SCREW, 1/4-20 x 5/8 long, self-sealing	12
43	STD-160	WASHER, Internal lock, 1/4 in.	12
44	STD-1411	NUT, Plain, 1/4-20	18
45	76036	GASKET, Rocker box cover	6
46	76038	COVER ASSY., Rocker box	6
47	STD-2059	SCREW, 1/4-20 x 5/8 long, pan. hd., self-locking	48

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SECTION 2 (CONT.)

Page 2-2 - Figure 15 (Cont.)

Ref. No.	Part No.	Description	Qty. Per Assy.
48	74494	PLATE, Spark plug reach caution	6
	71549	WASHER, Valve rocker	12
	LW-11665	THRUST BUTTON, Rocker shaft	24

Page 2-4 - Figure 16

1	LW-12158	BAFFLE ASSEMBLY, Intercylinder	3
	LW-14588	BAFFLE ASSEMBLY, Intercylinder (Between 4 and 6)	
2	71610	HOOK, Intercylinder baffle retainer	4
3	71611	RETAINER, Intercylinder baffle	4
4	AN931-4S16	GROMMET, 1/4 ID x 1-1/4 OD split	1
6	STD-8	WASHER, Plain, 1/4 in.	1
7	STD-160	WASHER, Internal lock, 1/4 in.	1
8	STD-1968	BOLT, Hex hd., 1/4-20 x 5/8 in. long	1

Page 2-6 - Figure 17

1	LW-14114	CONNECTOR, Exhaust valve oil line (In cylinder heads)	6
2	72376	ELBOW, 1/4 in. tubing adjustable 90° (rear cyls.)	2
3	75948	TEE, 1/4 tubing, adjustable with st. thd. on side (center and forward cyls.)	4
4	LW-12876-4-066	HOSE ASSY., (Between cylinders)	4
5	LW-12798-4-222	HOSE ASSY., (Cyl. no. 1 to oil header, left side)	1
6	LW-12798-4-190	HOSE ASSY., (Cyl. no. 2 to oil header, right side)	1
7	AN816-4	NIPPLE	2
8	LW-10375	ELBOW	1
9	76734	ZIP STRAP	1

SECTION 3

Page 3-1 - Figure 18

1	75585	GASKET, Oil sump	1
2	LW-11155	SUMP ASSY., Oil	1
3	STD-1173	INSERT, Heli-coil, 1/4-20 x 1/2 in. long	2
4	77646	DOWEL, Oil pump inlet	1
5	STD-551	PLUG, Sq. hd., drilled, 1/2-14 NPT	2
6	AN932-5	PLUG, Allen hd., 1/2 NPT	1
7	71140	FITTING, Breather	1

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SECTION 3 (CONT.)

Page 3-1 - Figure 18 (Cont.)

Ref. No.	Part No.	Description	Qty. Per Assy.
ATTACHING PARTS			
8	STD-8	WASHER, Plain, 1/4 in.	36
9	STD-160	WASHER, Internal lock, 1/4 in.	36
10	STD-2039	BOLT, Hex hd., 1/4-20 x 4-1/2 in. long	8
11	STD-1688	BOLT, Hex hd., 1/4-20 x 1.00 in. long	22
12	STD-2001	BOLT, Hex hd., 1/4-20 x 3-1/2 in. long	2
13	STD-1887	BOLT, Hex hd., 1/4-20 x 4.00 in. long	4
14	STD-1272	GASKET, Oil suction screen	1
15	77644	SCREEN, Oil suction	1
16	77645	PLUG, 1-1/2-18 thd. x 1.00 hex hd.	1
17	MS28775-121	RING, Oil seal, 1-3/64 ID x .103 dia. section	1
18	LW-13024	PUMP, Oil assembly	1
19	77898	BODY ASSEMBLY, Oil pump	1
20	75145	DOWEL, Oil pump outlet	
21	76964	SHAFT, Oil pump idler	1
22	AN380C4-6	PIN, Cotter, 1/8 dia. x 1-1/2 in. long	1
23	76970	IMPELLER, Oil pump driven	1
24	76971	IMPELLER, Oil pump driving	1
25	LW-13026	COVER, Oil pump	1
26	LW-13022	VALVE ASSEMBLY, Relief	1
27	76824	SHAFT, Oil pump drive	1
28	STD-1941	PIN, 3/16 in. dia. x 7/8 in. long	1
29	STD-8	WASHER, Plain, 1/4 in.	10
30	STD-2003	BOLT, Hex hd., drilled end, 1/4-20 x 3-1/16 long	2
31	STD-2005	BOLT, Hex hd., drilled end, 1/4-20 x 2-7/32 long	2
32	STD-2004	BOLT, Hex hd., drilled end, 1/4-20 x 2-13/32 long	1
33	STD-1409	NUT, Slotted shear, 1/4-20	5
34	MS28775-120	RING, Oil seal, 1.00 ID x .103 dia. section	1
35	LW-10738	BAFFLE, Camshaft gear	1
36	STD-35	WASHER, Plain, 5/16 in.	3
37	STD-1955	BOLT, 5/16-18 x 4-1/4 in. long	3
38	LW-25H.75	BOLT, Hex hd., drilled hd., 1/4-20 x 3/4 in. long	2

Page 3-3 - Figure 19

1	LW-12517	GASKET, Oil filter adapter	1
2	76549	ADAPTER ASSY., Oil filter housing	1

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SECTION 3 (CONT.)

Page 3-3 - Figure 19 (Cont.)

Ref. No.	Part No.	Description	Qty. Per Assy.
3	STD-1989	INSERT, Heli-coil, 7/8-14 NF-3 x 1/2 long	1
4	STD-1849	INSERT, Heli-coil, 3/4-16 NF-3 x 3/4 long	1
	77607	SLEEVE, Oil relief valve	1
5	STD-8	WASHER, Plain, 1/4 in.	4
6	STD-160	WASHER, Internal lock, 1/4 in.	4
7	STD-1411	NUT, Plain, 1/4-20 in.	1
8	STD-1952	BOLT, Hex hd., 1/4-20 x 2-1/8 in. long	2
9	STD-1688	BOLT, Hex hd., 1/4-20 x 1.00 in. long	1
15	76539	SEAT, Oil relief valve	1
16	76542	SPRING, Oil relief valve	1
17	STD-589	GASKET, Copper asbestos	1
18	LW-14050	PLUG, Oil relief valve	1
20	LW-13905	FILTER ASSY., Oil, long	1
21	LW-13904	KIT, Converter plate oil filter	1

SECTION 4

Page 4-1 - Figure 20

1	LW-15584	HOUSING ASSY., Induction	1
2	75660	SPACER, Induction housing	6
3	STD-8	WASHER, Plain, 1/4 in.	3
4	STD-160	WASHER, Internal lock, 1/4 in.	3
5	STD-2028	BOLT, Hex hd., 1/4-20 x 5-21/32 in. long	1
6	STD-2027	BOLT, Hex hd., 1/4-20 x 4-13/32 in. long	2
7	72377	ELBOW, 3/8 in. tubing, adj. 90°	1
8	74070	ELBOW, 3/8 in. tubing, adj. 45°	1
	LW-14259	ELBOW, 1/4 in. tubing x 1/8 NPT (restricted 45°)	1
	75948	TEE, 1/4 in. tube, adjustable	1
9	AN929-4	CAP ASSEMBLY, 1/4 in. tube	3
10	STD-1164	INSERT, Heli-coil, 5/16-18 x 5/8 long	4
11	MS122200	INSERT, Heli-coil, no. 10-24 x 31/64 long	4
12	STD-2134	INSERT, Heli-coil, 7/16-20 x 3/8 long	6
	STD-514	DOWEL, 5/16 dia. x 1/2 in. long	2
13	76291	COVER, Pressurizing valve	1

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SECTION 4 (CONT.)

Page 4-1 - Figure 20 (Cont.)

Ref. No.	Part No.	Description	Qty. Per Assy.
14	STD-28	WASHER, Plain, no. 10	4
15	STD-1896	SCREW, No. 10-24 x 7/8 long, fill hd. dr. hd.	4
16	76399	VALVE ASSY., Pressurizing	1
17	76286	SEAT, Pressurizing valve	1
18	76292	VALVE AND DIAPHRAGM ASSEMBLY	1
19	76288	SPRING, Pressurizing	1
20	75955	PLUG, Induction housing, seal	1
21	75957	RING, Oil seal, 11/16 in. ID x 0.07 dia. section	1
22	MS16625-1081	RING, Internal retaining, 13/16 dia. x .042 thick	1
23	1102	PLUG, 1/8 pipe x 3/8 long	6
24	LW-14540	NOZZLE ASSEMBLY, Fuel injection	6
	STD-2173	WASHER, Plain	6
25	LW-11602	LCCKPLATE, Fuel injector nozzle	6
	LW-14915	ELBOW, 1/4 tube, 90°, restricted	1
	LW-14914	NIPPLE, 1/8 NPT to 1/4 tube, restric- ted	1
26	LW-13911	PIPE, Intake, cyl. no. 1	1
27	LW-13912	PIPE, Intake, cyl. no. 2	1
28	LW-13913	PIPE, Intake, cyl. no. 3	1
29	LW-13914	PIPE, Intake, cyl. no. 4	1
30	LW-13915	PIPE, Intake, cyl. no. 5	1
31	LW-13916	PIPE, Intake, cyl. no. 6	1
32	72711	RING, Seal, intake pipes	6
33	71973	GASKET, 2 bolt flange 1-7/8 ID	6
34	74360	FLANGE, Intake pipe, upper	6
35	STD-8	WASHER, Plain, 1/4 in.	12
36	STD-160	WASHER, Internal lock, 1/4 in.	12
37	STD-1215	BOLT, 1/4-20 x 1-1/4 long, hex hd.	12
	LW-14606	SPACER, Induction housing	1
38	77623	LUG, Induction housing	2
39	77622	SUPPORT, Induction housing, lug	1
40	STD-2042	BOLT, 1/4-20 x 1-3/16 long, hex hd.	2
41	STD-820	WASHER, 16/64 ID x 33/64 OD x 1/8 thick	2
42	STD-160	WASHER, Internal lock, 1/4 in.	2
43	STD-1204	BOLT, 1/4-20 x 15/16 in. long, hex hd.	1
44	STD-160	WASHER, Internal lock, 1/4 in.	1
45	STD-8	WASHER, Plain, 1/4 in.	1
46	STD-160	WASHER, Internal lock, 1/4 in.	1
47	STD-1887	BOLT, 1/4-20 x 4.00 long, hex hd.	1
48	STD-1411	NUT, 1/4-20 plain	1

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SECTION 4 (CONT.)

Page 4-3 - Figure 21

Ref. No.	Part No.	Description	Qty. Per Assy.
1	LW-14585	FUEL INJECTOR (RSA-10DB2)	1
2	STD-1727	WASHER, Plain, 21/64 ID x 3/4 OD x 1/8 thick	4
3	STD-475	WASHER, 5/16 internal lock	4
4	STD-1828	BOLT, 5/16-18 x 1-5/16 long, hex hd.	4
5	73032	GASKET, Air inlet housing	1
6	MS29512-6	SEAL, Oil, 15/32 ID x 5/64 dia. section	1
6	AN815-6	UNION, 3/8 tube	1
7	75940	TUBE ASSY., Fuel injector to induction housing	1
	LW-14621	ROD, Connecting, controller linkage	1
	STD-63	NUT, No. 10-32 plain	2
	LW-13429	ROD END, Injector controller linkage	2
	LW-14607	SPACER, 1/4 OD x 3/16 long	2
	STD-122	WASHER, 7/32 ID x 5/16 OD x .03 thick	2
	AN3-10	BOLT, No. 10-32 x 1.03 long, dr. end	1
	AN3-13	BOLT, No. 10-32 x 1-13/32 long, dr. end	1
	STD-303	NUT, No. 10-32 slotted shear	2
	STD-68	PIN, 1/16 x 1/2 long cotter	2
27	74944	GASKET, Turbocharger controller adapter	1
28	LW-14587	ADAPTER ASSY., Turbo controller	1
29	STD-783	PLUG, 1/4-18 NPT, Socket head	1
30	1102	PLUG, 1/8 NPT x 3/8 long, Allen hd.	3
31	STD-1727	WASHER, Plain, 21/64 ID x 3/4 OD x 1/8 thick	4
32	STD-475	WASHER, Internal lock, 5/16 in.	4
33	LW-31-1.09	BOLT, Hex hd., 5/16-18 x 1.00 long	4
34	LW-13037	TUBE ASSY., Induction housing to controller housing	1
35	MS29512-6	SEAL, Oil, 15/32 ID x 5/64 in. dia. section	1
36	LW-12745	CHECK VALVE, Vent line	1
	75993	GASKET, Sonic nozzle	1
	LW-14581	ADAPTER, Sonic nozzle and abs. pressure relief valve	1
	STD-8	WASHER, Plain, 1/4 in.	3
	STD-160	WASHER, Internal lock, 1/4 in.	3
	STD-1688	BOLT, 1/4-20 x 1.00 long, hex hd.	3
	MS29513-138	SEAL, "O" ring, 2-7/64 ID x 3/32 section	1
	LW-14445-5	VALVE ASSY., Absolute pressure relief	1
	STD-425	WASHER, Plain, no. 10	4
	STD-251	WASHER, Internal lock, no. 10	4
	STD-375	SCREW, Fill. hd., no. 10-24 x 5/8 long	4

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SECTION 4 (CONT.)

Page 4-3 - Figure 21 (Cont.)

Ref. No.	Part No.	Description	Qty. Per Assy.
	STD-784	PLUG, 3/8-18 NPT, Socket hd.	1
	LW-14192	GASKET, Sonic nozzle	1
	LW-14583	SONIC NOZZLE	1
	STD-8	WASHER, Plain, 1/4 in.	3
	STD-160	WASHER, Internal lock, 1/4 in.	3
	STD-1875	BOLT, Hex hd., 1/4-20 x 51/64 in. long	3
37	73314	GASKET, Density controller	1
38	LW-14590	CONTROLLER ASSY., Absolute pressure, adjustable	1
39	STD-28	WASHER, Plain, no. 10	4
40	STD-251	WASHER, Internal lock, no. 10	4
41	STD-375	SCREW, No. 10-24 x 5/8 long, fill. hd., dr. hd.	4
42	72377	ELBOW, 3/8 tube, adjustable 90°	2
	MS29512-6	SEAL, Oil, 15/32 ID x 5/64 in. dia. section	2
	AN822-6-6	ELBOW, 3/8 tube x 3/8 NPT, 90°	1
	LW-12799-6S-130C	HOSE ASSY., Controller outlet	1
46	61548	PLATE, Name	1
	STD-1901	DRIVE STUD, No. 4 x 3/16 in. long, round head	4
47	60096	GASKET, Fuel pump	1
48	77537	ADAPTER ASSY., Controller drain	1
49	STD-784	PLUG, Socket hd., 3/8-18 NPT	1
50	STD-33	WASHER, Plain, 3/8 in.	2
51	STD-678	WASHER, Internal lock, 3/8 in.	2
52	STD-1957	BOLT, Hex hd., 3/8-16 x 1-1/4 long	2

Page 4-5 - Figure 22

1	75890	GASKET, Fuel drain check valve	1
2	LW-13342	HOUSING ASSY., Fuel drain check valve	1
3	AN822-3	ELBOW, 90° flared tube, pipe	1
4	AN823-3	ELBOW, 45° flared tube, pipe	1
	AN825-4	TEE, 1/8-27 NPT to 7/16-20 thd.	1
	MS29513-015	RING, Oil seal 1/2 ID x 1/16 section	1
5	75087	SPRING, Fuel drain check valve	1
6	LW-13344	PLUNGER, Fuel drain check valve	1
7	STD-1006	SEAL, "O" ring, 7/16 ID x 3/32 dia. section	1
	STD-8	WASHER, Plain, 1/4 in.	2
	STD-160	WASHER, Internal lock, 1/4 in.	2
	STD-1411	NUT, 1/4-20 plain	2

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SECTION 4 (CONT.)

Page 4-5 - Figure 22 (Cont.)

Ref. No.	Part No.	Description	Qty. Per Assy.
8	77941	MANIFOLD ASSY., Fuel drain, right	1
9	77942	MANIFOLD ASSY., Fuel drain, left	1
10	STD-148	NIPPLE, Union	2
11	STD-2166	ELBOW, Union	1
12	AN822-3	ELBOW, 90° flared tube, pipe thd.	1
13	STD-8	WASHER, Plain, 1/4 in.	2
13	STD-160	WASHER, Internal lock, 1/4 in.	2
13	STD-1204	BOLT, 1/4-20 x 15/16 long, hex hd.	2
14	77921	TUBE ASSY., Manifold to check valve (right)	1
15	62254	CLIP, 3/16 in. ID for 1/4 dia. screw	2
16	77919	TUBE ASSY., Manifold to check valve (left)	1
17	62254	CLIP, 3/16 in. ID for 1/4 dia. screw	1
18	LW-12098-4-124	TUBE ASSY., Cyl. no. 1,2,4	3
19	LW-12098-1-116	TUBE ASSY., Cyl. no. 3	1
20	LW-12098-1-200	TUBE ASSY., Cyl. no. 5	1
21	LW-12098-1-183	TUBE ASSY., Cyl. no. 6	1
22	73650	CLIP, 1/4 ID for 1/4 dia. screw	6
23	MS21919-G12	CLIP, 3/4 dia. with no. 10 screw	6
24	STD-28	WASHER, Plain, no. 10	6
25	STD-969	SCREW, No. 10-32 x 1/2 long, fill. hd.	6
26	STD-670	NUT, No. 10-32 Self-locking	6

Page 4-7 - Figure 23

1	LW-10799	SPACER, Fuel injector pump	1
2	LW-13919	PUMP ASSY., Fuel	1
3	STD-35	WASHER, Plain, 5/16 in.	4
4	STD-475	WASHER, Internal lock, 5/16 in.	4
5	STD-1410	NUT, Plain, 5/16-18	4
6	STD-213	SEAL, Oil, 3/4 ID x 1-3/8 OD x 5/16 in. wide	1
7	78067	ELBOW, 1/4 tube to 1/8 NPT, vent	1
8	78523	ELBOW, 3/8 flared	1
9	76422	ELBOW, 90°	1
10	LW-14924	TUBE ASSY., Fuel pump to injector	1
	LW-14925	BRACKET, Angle inj. line clip 90°	1
	73034	CLIP, Ignition cable	1
	STD-160	WASHER, Internal lock, 1/4 in.	1
	STD-1499	BOLT, 1/4-20 x 1/2 long, hex hd.	1
	STD-1411	NUT, 1/4-20 plain	1
11	LW-11838	TUBE ASSY., Fuel pump to induction hsg.	1
12	73650	CLAMP, 1/4 ID cushion type	1
13	74117	BRACKET, Injector line, 90°	1
14	STD-28	WASHER, Plain, no. 10	1

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SECTION 4 (CONT.)

Page 4-7 - Figure 23 (Cont.)

Ref. No.	Part No.	Description	Qty. Per Assy.
15	STD-860	SCREW, Fill. hd., no. 10-24 x 5/8 in. long	1
16	STD-670	NUT, Self-locking, no. 10-24	1

SECTION 5

Page 5-1 - Figure 24

1	75473	SHAFTGEAR ASSY., Magneto drive	1
2	69565	SLEEVE, Magneto drive shaft	1
3	75467	COUPLING ASSY., Magneto, intermediate	1
4	69565	SLEEVE, Magneto drive shaft	1
5	LW-12136	CUSHION, Magneto drive	4
6	69208	COUPLING, Magneto drive	2
11	LW-12681	GASKET, Magneto	2
12	LW-349310-4	MAGNETO, Right, S6RN-1209	1
13	LW-349290-2	MAGNETO, Left, S6LN-1208	1

ATTACHING PARTS

14	75965	CLAMP, Magneto	4
15	STD-475	WASHER, Internal lock, 5/16 in.	4
16	STD-1410	NUT, Plain, 5/16-18 in.	4

Page 5-3 - Figure 25

1	LW-720580-2	CABLE ASSY., Ignition, shielded	1
	STD-1874	SCREW, 1/4-20 x 7/8 long, fill. hd., self-locking	4
	STD-2029	BOLT, 1/4-20 x 7/8 long, hex hd.	4
	STD-2079	NUT, Self-locking, 1/4-20	4
35	1182-Y5	SPARK PLUG, (Champion RHB-32W)	12

Page 5-5 - Figure 26

1	AN4047-1	GASKET, Accessory drive	1
2	LW-14464	COUPLING ASSY., Alternator drive	1
2A	LW-14472	SPRING, Coupling assy.	1
3	LW-10261	ADAPTER, Alternator drive coupling	1
4	LW-10259	ADAPTER ASSY., Alternator	1
5	31-12	STUD, 5/16-18 x 1-1/2 in. long	4

ADAPTER ASSEMBLY ATTACHING PARTS

6	STD-33	WASHER, Plain, 3/8 in.	6
---	--------	------------------------	---

TIGO-541-D1B

SECTION 5 (CONT.)

Page 5-5 - Figure 26 (Cont.)

Ref. No.	Part No.	Description	Qty. Per Assy.
ADAPTER ASSEMBLY ATTACHING PARTS (CONT.)			
7	STD-678	WASHER, Internal lock, 3/8 in.	6
8	STD-596	NUT, Plain, 3/8-24 in.	6
9	LW-10264	GASKET, Alternator adapter	1
10	LW-10256	ALTERNATOR, 24V-100 Amp.	1

ALTERNATOR ATTACHING PARTS

11	STD-35	WASHER, Plain, 5/16 in.	4
12	STD-475	WASHER, Internal lock, 5/16 in.	4
13	STD-37	NUT, Plain, 5/16-24	4
14	MS9047-077	ROLL PIN	1
17	75539	ADAPTER ASSY., Generator drive	1
18	STD-859	DOWEL, 1/8 dia. x 9/32 in. long	1
19	75536	BUSHING, Flanged, 1-1/8 ID x 1-1/2 OD	1
20	STD-1339	PLUG, Allen hd., 1/16-27 NPT	2
21	LW-10727	SEAL, Oil, 2-1/8 OD x 1-5/16 in. wide	1
22	STD-2068	SCREW, Nylon lock, 1/4-20 x 1-1/8 in. long	2
23	STD-8	WASHER, Plain, 1/4 in.	2
24	LW-11778	WASHER, Thrust	1
25	75500	GEAR ASSY., Generator drive	1
26	MS9068-009	RING, Oil seal, 7/32 ID x 1/16 dia. section	1
27	AN124001	RING, Oil seal, 3-7/8 ID x 1/8 dia. section	1

Page 5-7 - Figure 27

1	77900	HOUSING ASSY., Starter drive	1
2	25C-12	STUD, 1/4-20 x 1-1/2 long	3
3	STD-997	DOWEL, Oil, 5/16 in. dia. x 13/16 long	1
4	77870	SHAFT, Starter idler gear	1
5	STD-1133	DOWEL, 1/8 dia. x 13/16 in. long	1
6	STD-514	DOWEL, 5/16 in. dia. x 1/2 long	2

STARTER DRIVE HOUSING ATTACHING PARTS

7	STD-8	WASHER, Plain, 1/4 in.	6
8	STD-160	WASHER, Internal lock, 1/4 in.	6
9	STD-1411	NUT, Plain, 1/4-20 in.	6
10	75566	COUPLING ASSY., Starter slip	1

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SECTION 5 (CONT.)

Page 5-7 - Figure 27 (Cont.)

Ref. No.	Part No.	Description	Qty. Per Assy.
STARTER DRIVE HOUSING ATTACHING PARTS (CONT.)			
11	75510	SHAFT, Bendix drive	1
12	76528	GEAR ASSY., Starter slip coupling	1
13	76835	BUSHING, Slip coupling	1
14	STD-1025	KEY, 5/8 in. dia. x 1/8 in.	1
15	76842	COUPLING, Starter slip	1
16	76836	WASHER, Thrust slip coupling	1
17	75521	COUPLING ASSY., Bendix	1
18	73051	PIN, 1/4 dia. x 25/32 in. long	1
19	75655	WASHER, Thrust, 9/16 in. ID x 1-1/8 in. OD x 1/16 in. thick	1
20	LW-11329	GEAR ASSY., Starter idler	1
21	77987	BEARING, 1/2 ID x 11/16 OD x 3/4 long	1
22	78791	STARTER ASSY., Prestolite 24V.	1

STARTER ATTACHING PARTS

23	STD-8	WASHER, Plain, 1/4 in.	7
24	STD-160	WASHER, Internal lock, 1/4 in.	7
25	STD-1215	BOLT, Hex hd., 1/4-20 x 1-1/4 in. long	4
26	STD-1411	NUT, Plain, 1/4-20	3
27	78789	PLATE, Starter retaining	1
28	76815	STUD, Starter retaining plate	2
	LW-11515	HOSE, 1/4 ID x 5/8 OD x 2-5/16 in. long	2

PLATE ATTACHING PARTS

29	STD-8	WASHER, Plain, 1/4 in.	2
30	STD-160	WASHER, Internal lock, 1/4 in.	4
31	STD-1411	NUT, Plain, 1/4-20 in.	4

SECTION 6

Page 6-1 - Figure 28

1	LW-14622	TURBOCHARGER ASSY., T18A51	1
	LW-14811	VALVE ASSY., Exhaust bypass valve	1
2	LW-12154	HOSE, 3-1/2 ID x 2-5/8 long x 3/16 - 1/4 wall	1
3	LW-10539	CLAMP, Hose, 4.00 dia.	2
4	75371	GASKET, Turbocharger oil inlet	1
5	76889	ADAPTER, Turbocharger oil inlet	1
6	MS20822-6	ELBOW, Turbo oil inlet, 3/8 in. tube x 1/4 NPT 90°	1

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SECTION 6 (CONT.)

Page 6-1 - Figure 28 (Cont.)

Ref. No.	Part No.	Description	Qty. Per Assy.
7	LW-10122	GASKET, Turbo oil drain adapter	1
8	LW-11954	TUBE ASSY., Turbine oil drain, 1.00 dia.	1
9	STD-33	WASHER, Plain, 3/8 in.	4
10	STD-678	WASHER, Internal lock, 3/8 in.	4
11	STD-1946	BOLT, Hex hd., 3/8-16 x 7/8 in. long	4
12	AN840-17	NIPPLE, 1.00-11 1/2 NPT x 1.00 ID hose	1
13	LW-11373	HOSE, 1.00 ID x 1-3/8 OD x 2-1/2 in. long	1
15	AN737TW-46	CLAMP, Hose, 1.00 - 1-3/8 in.	2

Page 6-3 - Figure 29

1	LW-14634	BRACKET, Turbocharger and compressor	1
	LW-14660	STUD, 1/8-16 x 1-7/8 long	1

LW-14634 TO TURBO ATTACHING PARTS

2	AN6C-25A	BOLT, Hex hd., 3/8-24 x 2-49/64 in. long	1
3	MS20500-624	NUT, Self-locking, 3/8-24	2
4	LW-10090	SHIM, Turbo mounting (3 max.)	un
5	LW-13651	BRACKET, Turbocharger	1
6	77067	DAMPER	1
	AN960C-616	WASHER, 3/8 plain	2

LW-14634 TO LW-13651 ATTACHING PARTS

7	STD-1421	BOLT, 5/16-18 x 7/8 in. long	1
8	STD-596	NUT, 3/8-24 plain	1
	STD-678	WASHER, Internal lock, 3/8	1
9	LW-10066	SPACER, Turbocharger bracket	1

TURBO BRACKET TO CRANKCASE ATTACHING PARTS

10	LW-10089	SPACER, 13/16 OD x 13/32 ID x 59/64 long	1
11	LW-11105	LOCKPLATE, 3/8 in. dia. bolt	2
12	STD-2128	BOLT, Hex hd., 3/8-16 x 4-11/16 in. long	2
13	STD-2045	NUT, Self-locking, 3/8 in.	2
14	78840	SUPPORT, Turbo strut	1

ATTACHING PARTS

15	STD-1959	BOLT, Hex hd., 3/8-16 x 1-5/8 in. long	1
16	78592	LOCKPLATE, 3/8 in. bolt (Between 78840 and STD-1959)	1

TIGO-541-D1B

SECTION 6 (CONT.)

Page 6-3 - Figure 29 (Cont.)

Ref. No.	Part No.	Description	Qty. Per Assy.
17	STD-2045	NUT, Self-locking, 3/8-24 in.	1
18	LW-10836	STRUT, Turbocharger	1
ATTACHING PARTS			
19	STD-1115	BOLT, Hex. hd., 3/8-24 x 1-1/2 in. long	1
20	STD-2045	NUT, Self-locking, 3/8-24 in.	1
21	LW-14947	BRACKET, Turbocharger strut	1
TURBOCHARGER STRUT BRACKET TO TURBOCHARGER STRUT ATTACHING PARTS			
22	STD-2010	BOLT, Hex hd., 5/16-18 x 1-9/16 in. long	1
23	STD-2043	NUT, Self-locking, 5/16-18	1
24	STD-2157	BOLT, Hex hd., 5/16-18 x 7/8 in. long (Use to replace existing turbo bolts to attach LW-14947 to turbo)	2
25	LW-13652	SUPPORT, Turbo bracket	1
26	STD-475	WASHER, Internal lock, 5/16 in.	2
27	STD-1838	BOLT, Hex hd., 5/16-18 x 15/16 long	2
28	STD-2045	NUT, Self-locking, 3/8-24	1
30	STD-1342	SPACER, 7/8 OD x 3/8 ID x 1/8 thick	4

Page 6-5 - Figure 30

1	LW-14594	TRANSITION ASSEMBLY	1
2	LW-14636	STUD, 3/8-16 x 1-5/8 in. long	3
3	STD-1932	BUSHING, 1/4 to 1/8 NPT	1
4	STD-405	PLUG, Square hd., drilled, 1/8-27 NPT	1
5	AN960C616	WASHER, Plain, 3/8 in.	4
6	STD-1998	BOLT, Hex hd., 3/8-24 x 1-7/16 in. long	1
7	MS20500-624	NUT, Self-locking, 3/8-24	4
	73944	ELBOW, 1/4 tube, adj. 45° (in crankcase)	1
	72376	ELBOW, 1/4 tube, adj. 90° (in actuator outlet)	1
	LW-12878-4S-170	HOSE ASSY., (Crankcase to actuator inlet)	1
	72377	ELBOW, 3/8 tube, adj. 90° (actuator outlet)	1
	LW-12877-6S-280	HOSE ASSY., (Actuator outlet to controller inlet)	1
	LW-14948	ELBOW, 3/8 NPT x 1/4 NPT, female	1
	AN816-6	NIPPLE, 1/4 NPT to 3/8 hose	1
	LW-12877-6S-200	HOSE ASSY., (Crankcase to turbo oil in- let)	1

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SECTION 6 (CONT.)

Page 6-5 - Figure 30 (Cont.)

Ref. No.	Part No.	Description	Qty. Per Assy.
	76734	ZIP STRAP	3
	LW-14653	HEAT SHIELD	1
	LW-14654	BRACKET, Heat shield support, rear	1
	LW-14655	BRACKET, Heat shield support, top	1
	MS21919-G10	CIIP, 5/8 ID x no. 10 hole	1
	MS21919-G12	CLIP, 3/4 ID x no. 10 hole	1
	STD-860	SCREW, No. 10-32 x 5/8 long, fill. hd.	2
	STD-425	WASHER, Plain, no. 10	2
	AN365-1032C	NUT, Self-locking, no. 10-32	2

Page 6-7 - Figure 31

1	LW-13938	GASKET, Exhaust flange	12
2	LW-14619	MANIFOLD ASSY., Left	1
3	LW-14611	PIPE, Exhaust cyl. no. 1	1
4	LW-11400	ADAPTER, Exhaust pipe, cyl. head	1
5	LW-14613	PIPE, Exhaust cyl. no. 3	1
6	LW-14615	PIPE, Exhaust cyl. no. 5	1
7	LW-14617	PIPE, Exhaust, left, rear	1
9	LW-14620	MANIFOLD ASSY., Right	1
10	LW-14613	PIPE, Exhaust cyl. no. 2	1
11	LW-11400	ADAPTER, Exhaust pipe, cyl. head	1
12	LW-14614	PIPE, Exhaust cyl. no. 4	1
13	LW-14616	PIPE, Exhaust cyl. no. 6	1
14	LW-14618	PIPE, Exhaust, right rear	1

ATTACHING PARTS

16	STD-2044	NUT, Self-locking, 1/4-20	24
19	LW-14925	CLAMP, Exhaust pipe	2
21	LW-15437	CABLE ASSY., Exhaust manifold retainer	2
22	STD-2178	WASHER, Plain, 1/4 in.	4
23	STD-2177	BOLT, Hex hd., 1/4-20 x 15/16 in.	4
24	STD-2044	NUT, Self-locking, 1/4-20	4
	LW-14952	HEAT SHIELD, Freon compressor	1
	LW-15592-8-28	CLAMP, 1-7/8 - 2-5/16 x 9/16 in. wide	2

TECHNICAL PUBLICATION REVISION

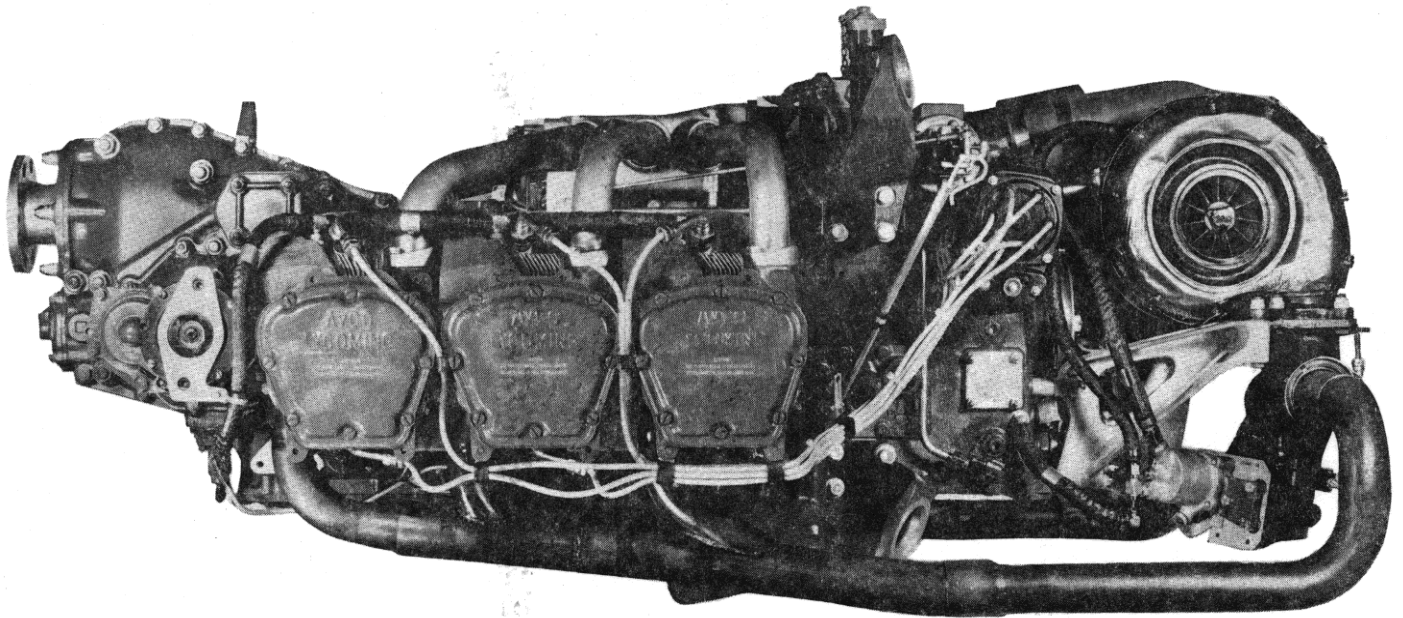
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Previous revisions to this publication	This revision consists of:-
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AVCO LYCOMING

PARTS CATALOG



TIGO-541 SERIES

AIRCRAFT ENGINES

AVCO LYCOMING WILLIAMSPORT DIVISION
AVCO CORPORATION
WILLIAMSPORT, PENNSYLVANIA 17701

PC-121

Nov. 1975

INTRODUCTION

This illustrated parts catalog provides parts coverage for the Avco Lycoming TIGO-541 Series Aircraft Engines. In addition to the illustrations a numerical parts list aids in finding a specific part by its number. Also included is a complete parts breakdown of Vendor accessories, as well as Service Replacement Kits.

SERVICE BULLETINS, INSTRUCTIONS AND LETTERS

Although the information in this catalog is up-to-date at the time of publication, users are urged to keep abreast of later information through Avco Lycoming Service Bulletins, Instructions and Letters which are available from all Avco Lycoming distributors or from the factory by subscription. Consult the latest edition of Service Letter No. L114 for subscription information.

NOTE

The illustrations, pictures and drawings shown in this publication are typical of the subject matter they portray; in no instance are they to be interpreted as examples of any specific engine, equipment or part thereof.

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List of Available Oversize and Undersize Parts

PART NO.	OVERSIZE															UNDERSIZE		
	P2	P3	P5	P6	P7	P10	P11	P12	P15	P20	P22	P30	P33	P75	P125	M3	M6	M10
74876			X			X			X					X	X			
76968			X			X			X					X	X			
71903-A,-B	SEE LATEST EDITION OF SERVICE INSTRUCTION NO. 1143 FOR APPLICATION																	
77001-A,-B																		
LW-11576																X	X	X
LW-13335									X									
72217																X	X	X
LW-12688						X			X			X						
71894						X			X			X						
76077			X			X			X			X						
79046			X			X			X			X						
69260						X												
66670			X			X												
LW-10647			X			X												
25C-8		X			X			X										
25C-9		X			X			X										
25C-10		X			X			X										
25C-12		X			X			X										
25C-18		X			X			X										
25CD-18		X			X			X										
31C-17		X			X													
31CD-20		X			X			X										
38-13		X			X			X										
38-14								X										
38-17		X			X			X										
38-18		X																
38-23		X			X			X										
38-25		X			X			X										
38-28		X			X			X										
50-16		X			X			X										
50-52		X			X			X										
69943		X			X			X										
68510		X			X			X										
68437		X			X			X										
67528		X			X			X										
61261		X			X			X										

NOTE 1

When ordering oversize or undersize parts, be sure to specify the required oversize or undersize dimension, along with the proper part number. For example: to order bearing LW-11576 in .006 undersize, order P/N LW-11576M6. Code letter P stands for oversize while code letter M is undersize.



LYCOMING

TIGO-541 PARTS CATALOG

CRANKCASE ASSEMBLY AND RELATED PARTS GROUP
CRANKCASE ASSEMBLY

FIG. REF.	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY															
			E/A															
1	LW-14052	CRANKCASE ASSEMBLY	1															
2	STD-1984	DOWEL, 11/16 in.OD x 11/16 in.long (solid)	1															
3	STD-1943	DOWEL, 11/16 in.OD x 9/16 ID x 11/16 in.long	2															
4	LW-10734	DOWEL, Crankshaft bearing	3															
	LW-10647	DOWEL, Crankshaft bearing	8															
5	38-14	STUD, 3/8-16 x 1-3/4 in.long	24															
6	50-16	STUD, 1/2-13 x 2.00 in.long	12															
7	38-17	STUD, 3/8-16 x 2-1/8 in.long	6															
8	38-23	STUD, 3/8-16 x 2-7/8 in.long	6															
9	67528	STUD, 5/16-18 x 1-5/8 in.long	4															
10	61261	STUD, 5/16-18 x 1-1/2 in.long	4															
11	31CD-20	STUD, Drilled,5/16-18 x 2-1/2 in. long	4															
12	25CD-18	STUD, Drilled,1/4-20 x 2-1/4 in. long	6															
13	25C-10	STUD, 1/4-20 x 1-1/4 in.long	6															
14	69943	STUD, 1/4-20 x 1-13/32 in.long	8															
15	68510	STUD, 1/4-20 x 1-1/16 in.long	1															
16	25C-9	STUD, 1/4-20 x 1-1/8 in.long	2															
17	68437	STUD, 5/16-18 x 1-7/8 in.long	4															
18	25C-18	STUD, 1/4-20 x 2-1/4 in.long	1															
19	50-52	STUD, 1/2-13 x 6-1/2 in.long	1															
20	38-25	STUD, 3/8-16 x 3-1/8 in.long	1															
21	STD-2035	DOWEL, 5/16 in.dia.x 1/2 in.long	1															
22	LW-11256	BUSHING, Starter housing	1															
23	STD-1353	INSERT, Heli-coil,no.10-24 x 3/8 in. long	2															
24	STD-1774	PIN, 1/8 in.dia.x 1/4 in.long	2															
25	25C-12	STUD, 1/4-20 x 1-1/2 in.long	4															
26	STD-784	PLUG, Allen head,3/8 in.NPT	7															
27	STD-405	PLUG, Square head,1/8 in.NPT	1															
28	STD-355	PLUG, Allen head,3/4 in.NPT	2															
29	1102	PLUG, Allen head,1/8 in.NPT	7															
30	STD-1339	PLUG, Allen head,1/16 in.NPT	9															
31	STD-1003	DOWEL, 1/4 OD x 3/16 ID x 1/2 in. long	2															
32	38-18	STUD, 3/8-16 x 2-1/4 in.long	1															
33	38-28	STUD, 3/8-16 x 3-1/2 in.long	1															
34	AN913-OS	PLUG, Sq.hd.,drilled,1/16 NPT	1															
35	AN932-6	PLUG, Allen hd.,3/4 NPT	1															
36	STD-1173	INSERT, 1/4-20 x 1/2 long	1															
37	38-13	STUD, 3/8-16 x 1-5/8 long	1															
38	LW-13615	NOZZLE, Reduction gear,lubricating	1															
39	73772	NOZZLE ASSEMBLY,Piston cooling	6															
40	31C-17	STUD, 5/16-18 x 2-1/8 in.long (Gov.pad) (Driven ht.of studs,1.44 in.)	4															

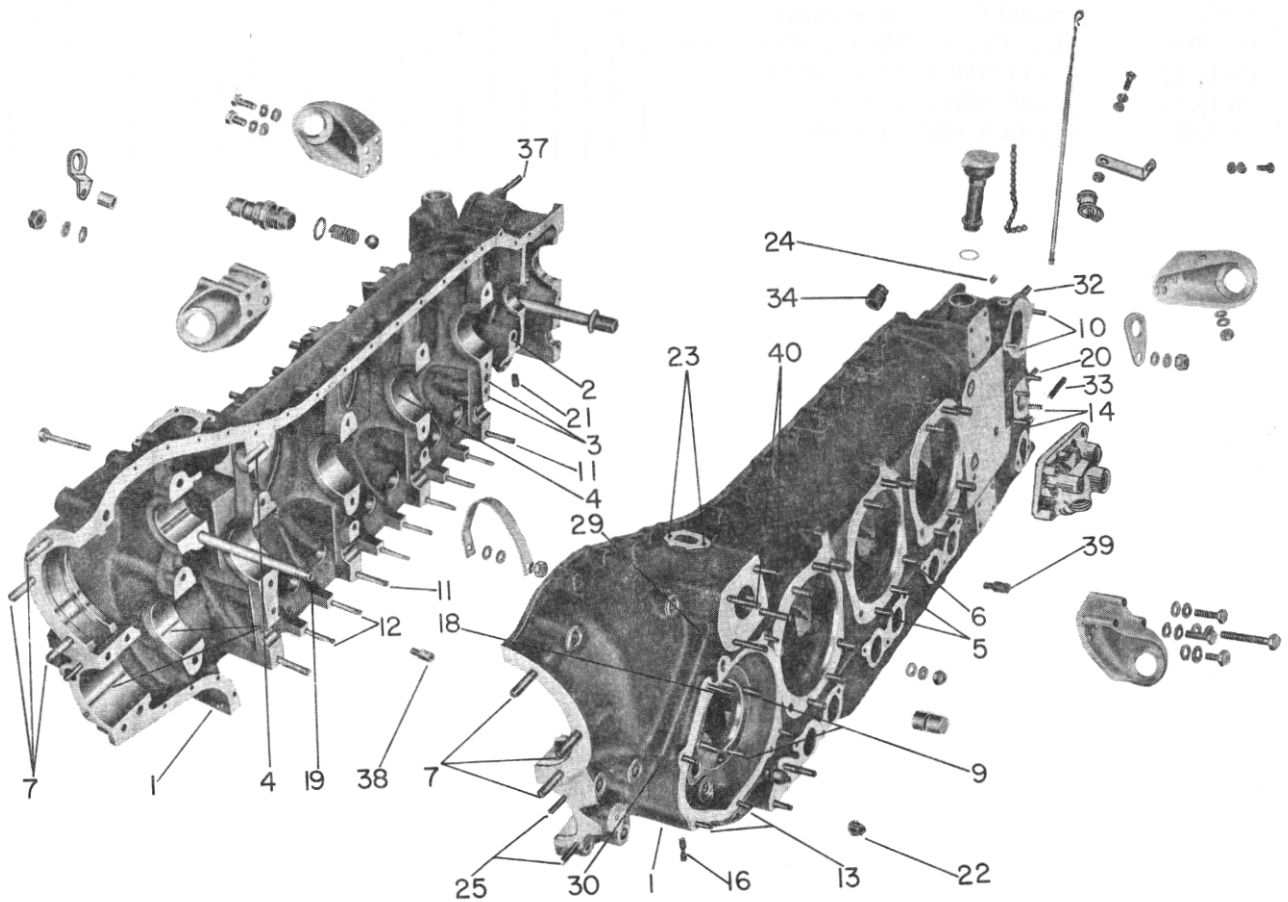
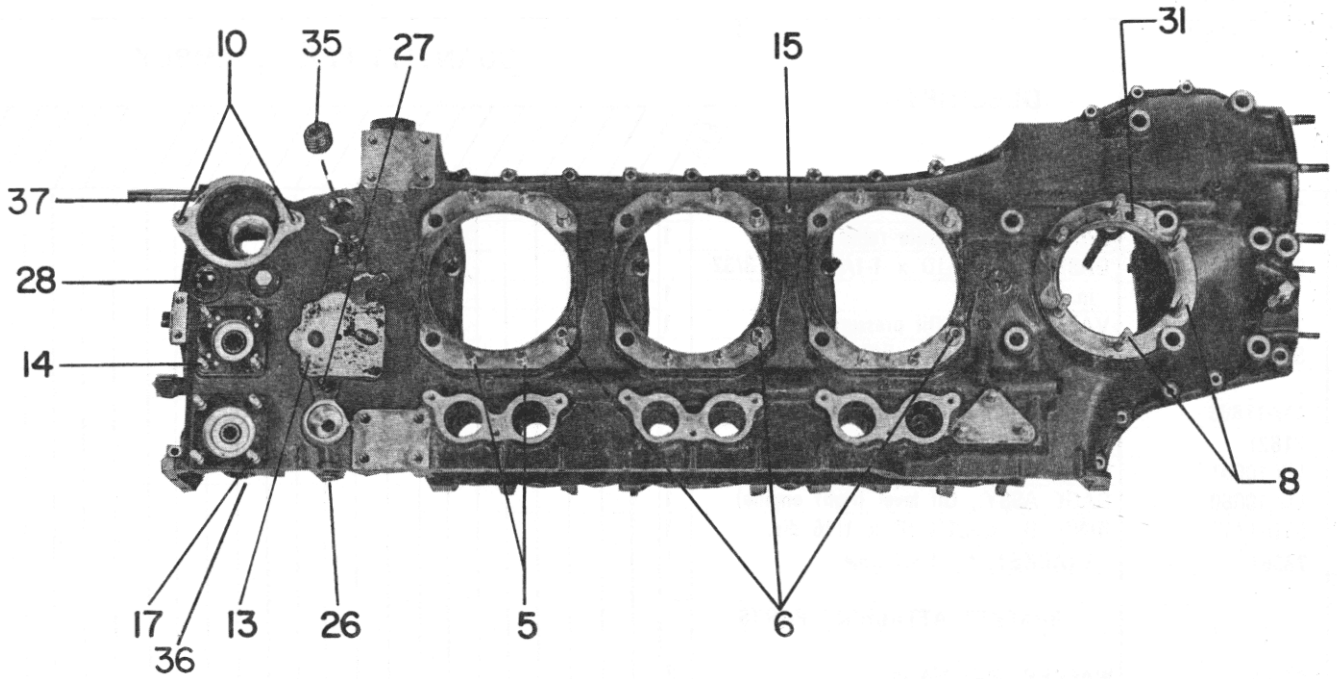


Figure 1

CRANKCASE ASSEMBLY



LYCOMING

TIGO-541 PARTS

CATALOG

CRANKCASE ASSEMBLY AND RELATED PARTS GROUP

OIL PRESSURE RELIEF VALVE AND OIL LEVEL GAGES

FIG. REF.	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY															
			EIA															
1	1028-B	BALL, 11/16 in.dia.	1															
2	LW-11138	SPRING, Oil pressure relief valve	1															
3	STD-1045	GASKET, 1-1/4 ID x 1-1/2 OD x 3/32																
		in. annular	1															
4	77808	VALVE ASSY., Oil pressure relief	1															
5	STD-294	GASKET, 7/8 OD x 5/8 ID x 3/32																
		annular	1															
6	LW-11886	TUBE ASSEMBLY, Oil Level gage	1															
7	71621	CLIP, 3/8 in.ID for 1/4 in.screw	1															
8	LW-10081	GAGE ASSY., Oil level (left engine)	1															
9	LW-10080	GAGE ASSY., Oil level (right engine)	1															
10	STD-1733	RING, Oil seal, 1/4 ID x 1/16 dia.	1															
11	78361	BRACKET, Oil level gage	1															
		BRACKET ATTACHING PARTS																
12	STD-8	WASHER, Plain, 1/4 in.	2															
13	STD-160	WASHER, Internal lock, 1/4 in.	2															
14	STD-705	BOLT, Hex.hd., 1/4-20 x 11/16 in.long	1															
15	STD-1499	BOLT, Hex.hd., 1/4-20 x 1/2 in.long	1															
16	STD-1411	NUT, Plain, 1/4-20	1															
17	70457	GASKET, Oil filler extension	1															
18	LW-10391	CAP AND EXTENSION ASSY., Oil filler	1															
19	LW-10383	EXTENSION ASSY., Oil filler	1															
20	LW-10526	CAP ASSY., Oil filler	1															
21	LW-10385	CHAIN ASSY., Oil filler	1															

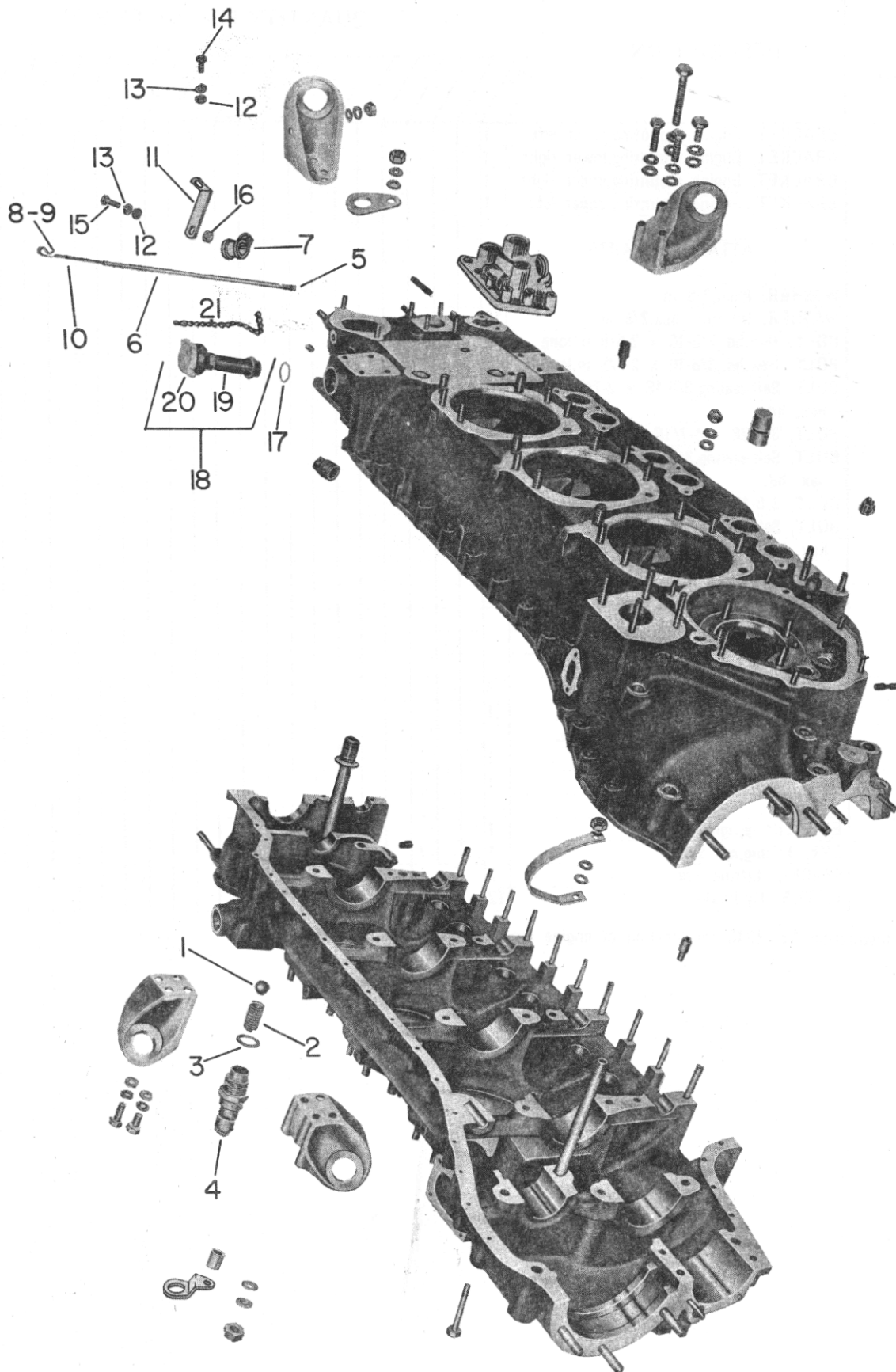


Figure 2 OIL PRESSURE RELIEF VALVE AND OIL LEVEL GAGES



LYCOMING

TIGO-541 PARTS CATALOG

CRANKCASE ASSEMBLY AND RELATED PARTS GROUP
ENGINE MOUNTING BRACKETS, LIFTING STRAP AND ATTACHING PARTS

FIG. REF.	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY															
			E/A															
1	77663	BRACKET, Engine mounting,lower left	1															
2	77664	BRACKET, Engine mounting,lower right	1															
3	77678	BRACKET, Engine mounting,upper right	1															
4	77677	BRACKET, Engine mounting,upper left	1															
ATTACHING PARTS																		
6	STD-33	WASHER, Plain,3/8 in.	16															
7	STD-678	WASHER, Internal lock,3/8 in.	16															
8	STD-2053	BOLT, Hex.hd.,3/8-16 x 2-5/8 in.long	2															
9	STD-1994	BOLT, Hex.hd.,3/8-16 x 2-7/8 in.long	5															
	STD-2111	BOLT, Self-sealing,3/8-16 x 2-7/8 hex. hd.	1															
10	STD-2055	BOLT, 3/8-26 x 4-7/16 in.long	5															
	STD-2107	BOLT, Self-sealing,3/8-16 x 4-7/16 hex. hd.	1															
11	STD-2037	BOLT, 3/8-16 x 4-11/16 in.long	1															
	STD-2128	BOLT, Self-sealing,3/8-16 x 4-11/16 hex. hd.	1															
12	75688	STRAP, Lifting	1															
ATTACHING PARTS																		
13	STD-8	WASHER, Plain,1/4 in.	3															
14	STD-160	WASHER, Internal lock,1/4 in.	1															
15	STD-1575	BOLT, Hex.hd.,1/4-20 x 2-15/16 in.																
		long	1															
16	STD-1411	NUT, Plain,1/4-20	1															
17	72707	EYE, Lifting,right side	1															
18	78447	EYE, Lifting,left side	1															
19	78448	SPACER, Lifting eye	2															
20	LW-10937	LIFTER, Hydraulic	12															

NOTE: See Service Instruction No. 1248 for location of engine mount attaching bolts.

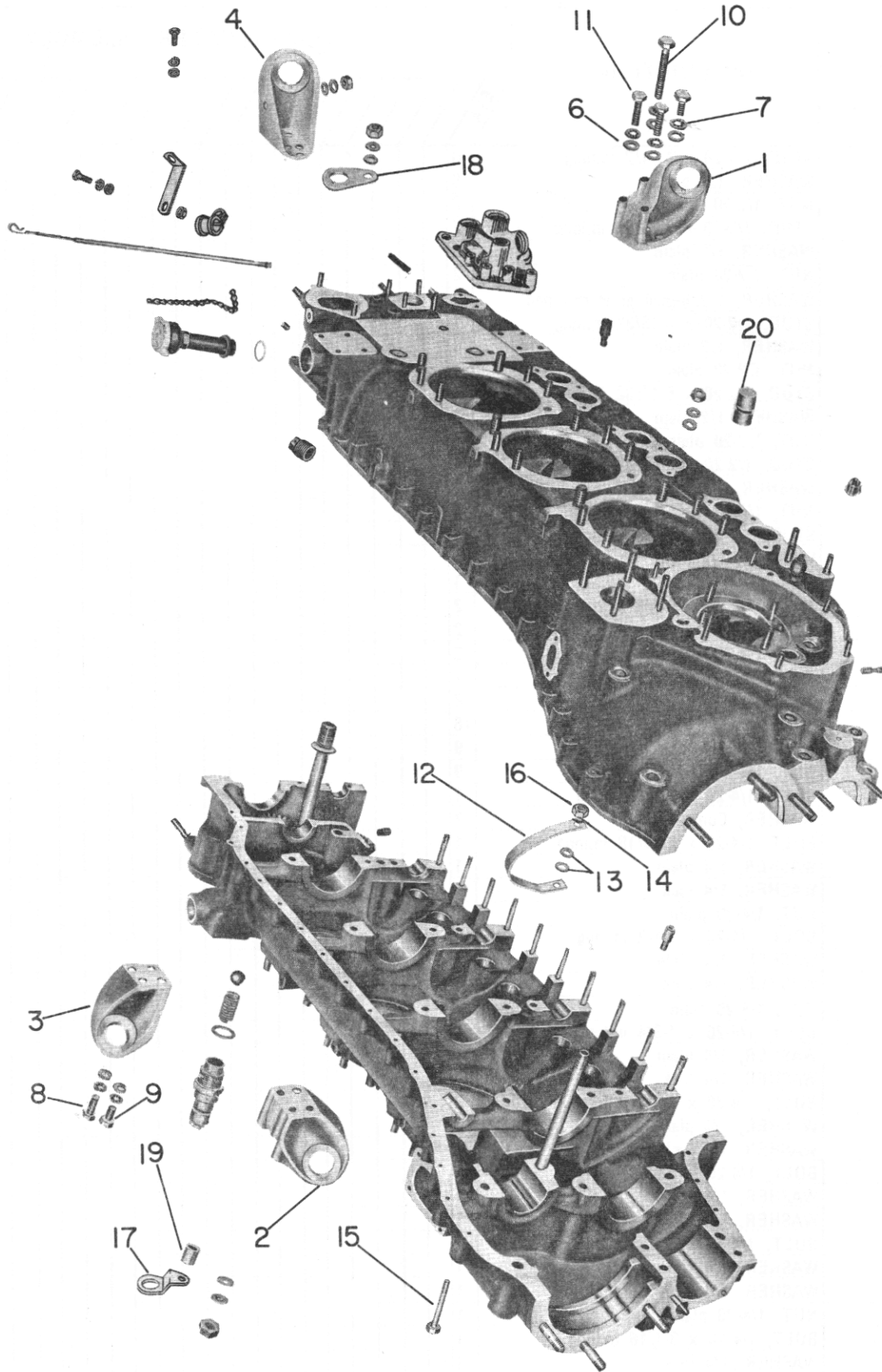


Figure 3 ENGINE MOUNTING BRACKETS LIFTING STRAP AND ATTACHING PARTS



LYCOMING

TIGO-541 PARTS CATALOG

CRANKCASE ASSEMBLY AND RELATED PARTS GROUP
CRANKCASE ATTACHING PARTS

FIG. REF.	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY															
			E/A															
1	74888	STUD, 1/2-20 x 11-1/2 in.long	6															
1	STD-143	WASHER, 1/2 plain	6															
1	STD-2090	NUT, 1/2-20 plain	6															
2	75714	STUD, 1/2-20 x 9-25/32 in.long	2															
2	STD-143	WASHER, 1/2 plain	2															
2	STD-2090	NUT, 1/2-20 plain	2															
2	LW-14044	WASHER, 1/2 in.seal at starter pad	2															
3	75713	STUD, 1/2-20 x 8-13/32 in.long	1															
3	STD-143	WASHER, 1/2 plain	1															
3	STD-2090	NUT, 1/2-20 plain	1															
4	75782	STUD, 1/2-20 x 5-17/32 in.long	2															
4	STD-143	WASHER, 1/2 plain	2															
4	STD-2090	NUT, 1/2-20 plain	2															
5	75712	STUD, 1/2-20 x 6-21/32 in.long	1															
5	STD-143	WASHER, 1/2 plain	1															
5	STD-2090	NUT, 1/2-20 plain	1															
6	75799	STUD, 1/2-20 x 8-5/32 in.long	1															
6	STD-143	WASHER, 1/2 plain	1															
6	STD-2090	NUT, 1/2-20 plain	1															
7	75170	BOLT, 1/2-20 x 9-7/8 in.long	2															
7	STD-143	WASHER, 1/2 plain	2															
7	STD-2090	NUT, 1/2-20 plain	2															
7	STD-1940	WASHER, 1/2 in.dia. (seal)	2															
8	STD-1948	BOLT, 1/4-20 x 2-11/16 in.long	8															
8	STD-8	WASHER, 1/4 plain	18															
8	STD-160	WASHER, 1/4 lock	9															
8	STD-1411	NUT, 1/4-20 plain	9															
8A	STD-1575	BOLT, 1/4-20 x 2-15/16 long	1															
	MS20002C8	WASHER, Countersunk	2															
9	STD-1948	BOLT, 1/4-20 x 2-11/16 in.long	1															
9	STD-8	WASHER, 1/4 plain	1															
9	STD-160	WASHER, 1/4 lock	1															
9	STD-1411	NUT, 1/4-20 plain	1															
10	STD-1414	BOLT, 1/4-20 x 1-1/2 in.long	5															
10	STD-8	WASHER, 1/4 plain	5															
10	STD-160	WASHER, 1/4 lock	5															
10	STD-1411	NUT, 1/4-20 plain	5															
11	STD-2084	BOLT, 1/4-20 x 1-3/4 in.long	4															
11	STD-8	WASHER, 1/4 plain	4															
11	STD-160	WASHER, 1/4 lock	4															
12	STD-1419	BOLT, 1/4-20 x 1-1/8 in.long	2															
12	STD-8	WASHER, 1/4 plain	2															
12	STD-160	WASHER, 1/4 lock	2															
13	STD-1951	BOLT, 1/4-20 x 3-5/8 in.long	1															
13	STD-8	WASHER, 1/4 plain	1															
13	STD-160	WASHER, 1/4 lock	1															
14	STD-1952	BOLT, 1/4-20 x 2-1/8 in.long	1															
14	STD-8	WASHER, 1/4 plain	1															
14	STD-160	WASHER, 1/4 lock	1															
14	STD-1411	NUT, 1/4-20 plain	1															
15	STD-1830	BOLT, 1/4-20 x 3-1/16 in.long	1															
15	STD-160	WASHER, 1/4 lock	1															
15	STD-1411	NUT, 1/4-20 plain	1															
16	STD-2015	BOLT, 5/16-18 x 3-1/8 in.long	1															
16	STD-35	WASHER, 5/16 plain	1															
16	STD-475	WASHER, 5/16 lock	1															
17	STD-1979	BOLT, 3/8-24 x 2-13/16 in.long	1															



LYCOMING

TIGO-541 PARTS CATALOG

CRANKCASE ASSEMBLY AND RELATED PARTS GROUP

CRANKCASE ATTACHING PARTS

FIG. REF.	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY															
			E1A															
17	STD-33	WASHER, 3/8 plain	2															
17	STD-678	WASHER, 3/8 lock	1															
17	383-B	NUT, 3/8 plain	1															
18	STD-1420	NUT, 5/16-18 slotted	4															
18	STD-35	WASHER, 5/16 plain	4															
19	72075	SEAL, Oil, .47 ID x .09 dia.section	1															
20	STD-1864	NUT, 1/4-20 slotted	6															
20	STD-8	WASHER, 1/4 plain	un															

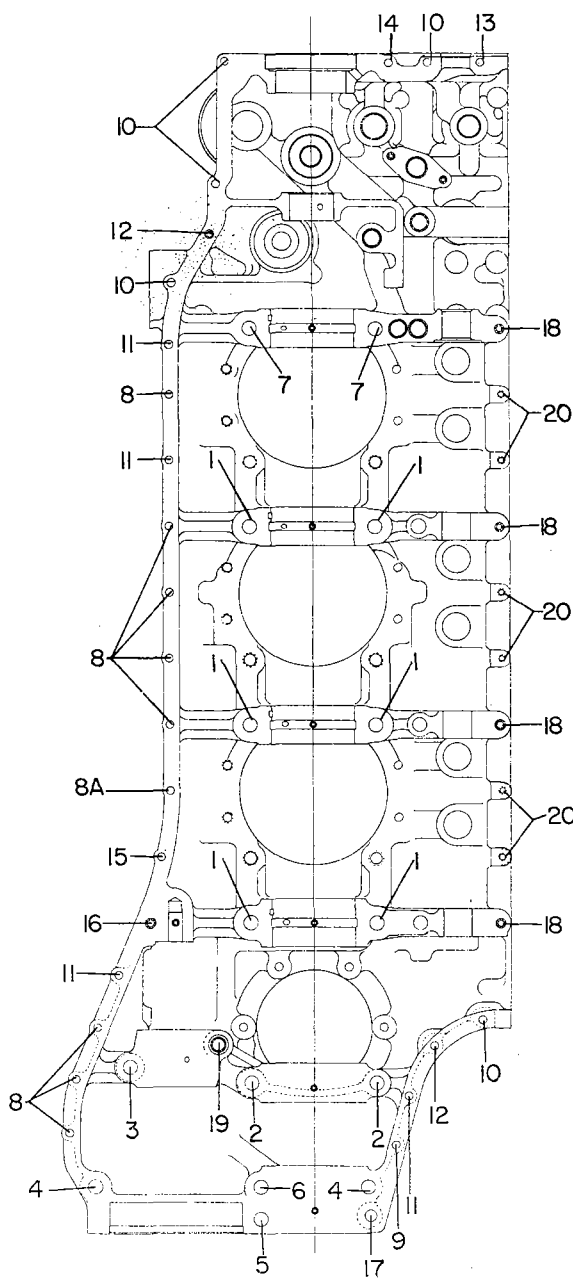


Figure 4
1-8



LYCOMING

TIGO-541 PARTS CATALOG

CRANKCASE ASSEMBLY AND RELATED PARTS GROUP
CRANKSHAFT AND COUNTERWEIGHT ASSEMBLY, CAMSHAFT ASSEMBLY

FIG. REF.	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY															
			E/A															
1	75670	CRANKSHAFT AND COUNTERWEIGHT	1															
	75458	CRANKSHAFT ASSEMBLY	1															
2	74876	BUSHING, Crankshaft dynamic counterweight	10															
3	76968	BUSHING, Crankshaft dynamic counterweight (2nd order)	2															
4	74768	GEAR, Crankshaft	1															
5	69641	DOWEL, Rear crankshaft gear	2															
6	74770	LOCKPLATE, Crankshaft gear	1															
7	STD-477	BOLT, Hex.hd.,1/4-28 x 3/4 in.long	3															
8	75462	BUSHING, Front crankshaft spline	1															
9	75359	DOWEL, Front crankshaft spline bushing	3															
10	75637	COUNTERWEIGHT ASSY., Dynamic (3rd order)	5															
11	71903	BUSHING, Dynamic counterweight	20															
12	77002	COUNTERWEIGHT ASSY., Dynamic (2nd order)	1															
13	77001	BUSHING, Dynamic counterweight	4															
14	75631	ROLLER, Dynamic counterweight,3rd order	10															
15	77007	ROLLER, Dynamic counterweight,2.01 order	2															
16	71907	WASHER, Dynamic counterweight	20															
17	71906	RING, Internal retaining	20															
18	77004	WASHER, Dynamic counterweight,2nd order	4															
19	77005	RING, Internal retaining	4															
20	LW-11576	BEARING, Crankshaft	8															
21	75517	BEARING, Propeller drive gear	2															
22	75519	BEARING, Propeller shaft	2															
23	LW-12440	CAMSHAFT ASSEMBLY	1															
24	STD-1066	DOWEL, Stepped,.310 and .251 dia.x 13/32 in.long	1															
25	74769	GEAR, Camshaft	1															
26	72078	LOCKPLATE, 5/16 in.bolt x 1-21/64 in. spacing	2															
27	STD-679	BOLT, Hex.hd.,5/16-24 x 27/64 in.long	4															

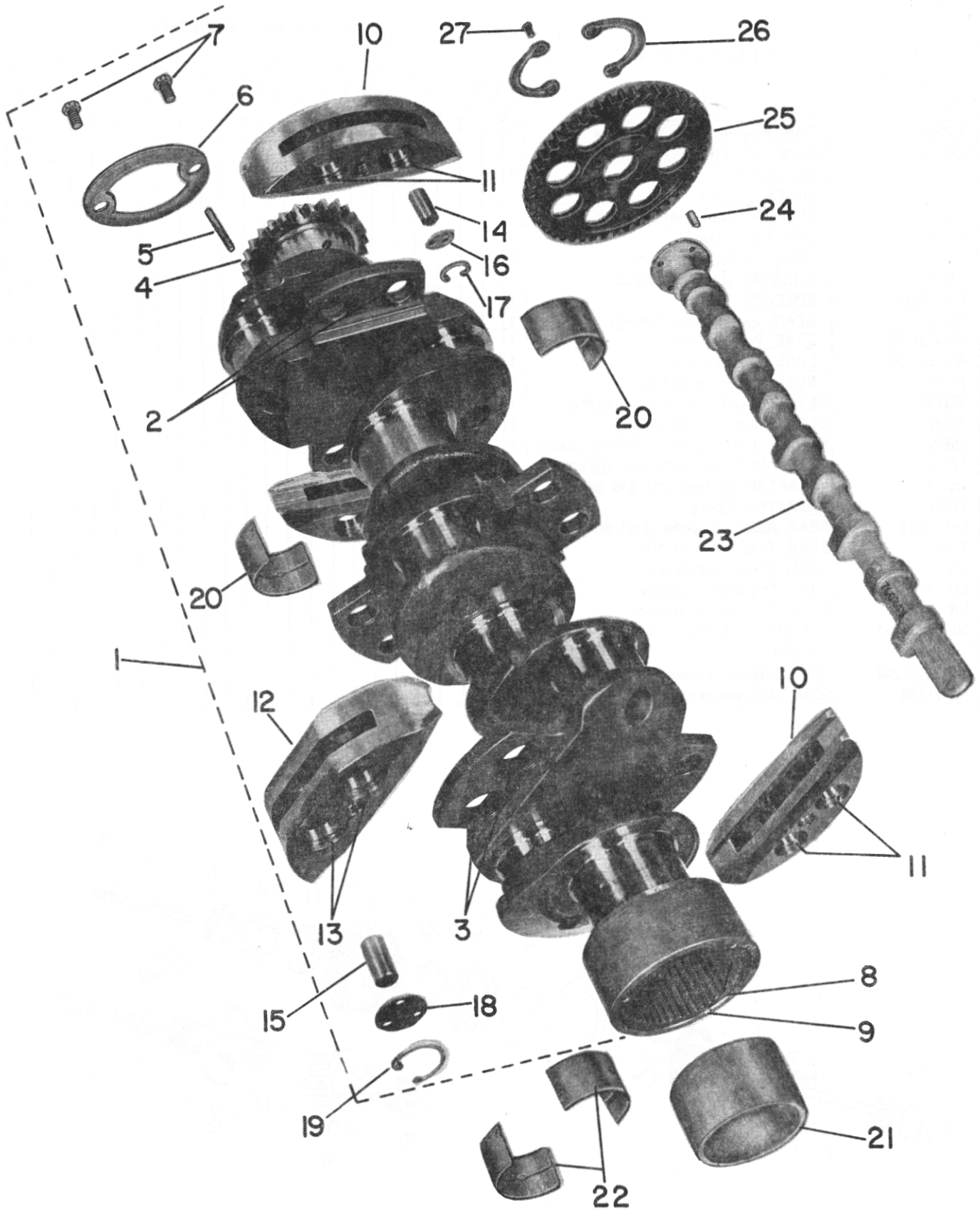


Figure 5 CRANKSHAFT AND COUNTERWEIGHT ASSEMBLY, CAMSHAFT ASSEMBLY

CRANKCASE ASSEMBLY AND RELATED PARTS GROUP
PROPELLER SHAFT, GENERATOR AND STARTER DRIVES

FIG. REF.	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY															
			E/A															
1	75557	GEAR, Propeller governor driven	1															
2	LW-13081	PROPELLER SHAFT AND GEAR ASSEMBLY	1															
3	75538	SHAFT, Propeller	1															
4	LW-12122	SEAL, Propeller shaft,oil (solid)	1															
5	75618	CAP, Thrust bearing	1															
6	75619	SHIM, Thrust bearing cap	1															
7	77454	SLINGER, Thrust bearing,oil	1															
8	LW-13335	BEARING, Thrust	1															
9	75562	GEAR, Propeller shaft driven	1															
10	AN5008-20	CONE, Propeller hub	1															
11	AN5007-20	CONE, Propeller hub	1															
12	76715	NUT, Propeller shaft,lock	1															
13	STD-2076	KEY, Woodruff,3/16 in.x 5/8 in.dia.	1															
14	75546	GEAR, Propeller shaft,gov.drive	1															
15	75822	SPRING, 1-1/16 in.OD x 1-57/64 in.long	1															
16	77015	GEAR ASSY., Generator and starter	1															
17	75537	SHAFTGEAR, Generator and starter	1															
18	77016	ADAPTER, Spring	1															
19	LW-12519	GEAR ASSY., Propeller shaft drive	1															
20	75553	GEAR, Propeller shaft drive	1															
21	LW-12518	RACE, Thrust bearing,rear	1															
22	LW-11739	TUBE, Propeller oil supply	1															
23	LW-10123	TUBE, Propeller oil transfer	1															
24	MS29513-133	"O" RING, 1-51/64 ID x 0.103 in.dia. section	1															
25	MS16625-200	RING, Internal retaining	1															
26	LW-11738	SEAL, .070 dia.section,x .431 ID	1															

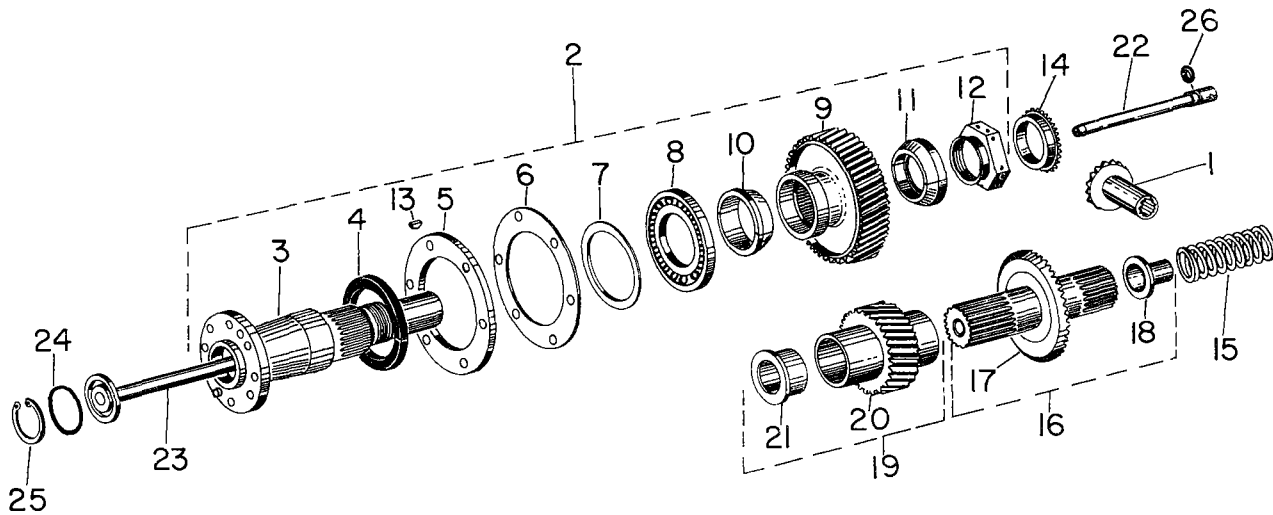


Figure 6
1-11

CRANKCASE ASSEMBLY AND RELATED PARTS GROUP
STARTER DRIVE ASSEMBLY

FIG. REF.	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY															
			E/A															
1	LW-11953	DRIVE ASSEMBLY, Starter	1															
2	LW-11784	ADAPTER ASSY., Starter drive	1															
3	LW-11780	BUSHING, 1.00 in.ID x 1-3/16 in. OD flanged	2															
4	STD-859	DOWEL, 1/8 in.dia.x 1/4 in.long	2															
5	LW-11952	WASHER, Thrust	1															
6	LW-10727	SEAL, 2-1/8 OD x 1-5/16 ID x 5/16 in. wide	1															
7	LW-11781	SPACER, Starter drive gear	1															
8	LW-12241	SHAFTGEAR, Starter drive	1															
9	75395	GEAR, Starter drive	1															
10	75843	NUT, 5/8-18,crimp lock	1															
11	STD-1004	RING, Oil seal,7/32 ID x 1/16 in.dia. section	1															
12	MS28775-147	RING, Oil seal,2-39/64 ID x 1-1/32 dia. section	1															
ADAPTER ATTACHING PARTS																		
13	STD-35	WASHER, Plain,5/16 in.	4															
14	STD-475	WASHER, Internal lock,5/16 in.	4															
15	STD-1410	NUT, Plain,5/16 in.	4															

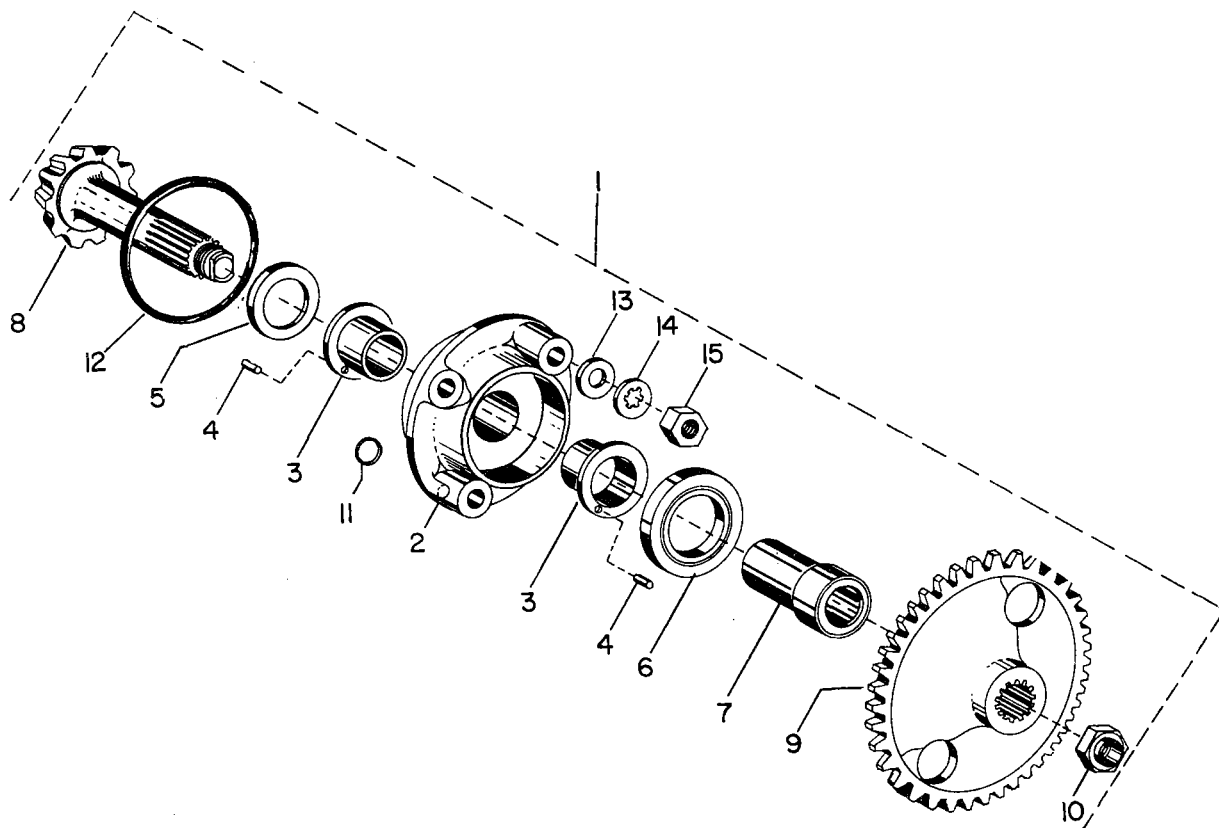


Figure 7
1-12

CRANKCASE ASSEMBLY AND RELATED PARTS GROUP
ACCESSORY DRIVE GEARS

FIG. REF.	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY															
			E/A															
1	75747	GEAR, Accessory idler	1															
2	74722	GEAR, Accessory drive (intermediate) bevel	1															
3	76996	SHAFTGEAR, Hydraulic and vacuum pump drive	1															
4	75508	GEAR, Accessory drive, bevel	1															
5	76925	SHAFT, Fuel pump idler gear	1															
6	76967	LOCKPLATE, 1/4 in. bolt x 1-3/4 in. spacing	1															
7	STD-705	BOLT, Hex. hd., 1/2-20 x 11/16 in. long	2															
8	74755	GEAR ASSY., Fuel pump idler	1															
9	77309	BUSHING, Crankshaft idler gear	1															
10	70474	WASHER, Fuel pump idler gear, thrust	1															
11	STD-1737	RING, External retaining, 37/64 in. dia. x .035 in. thick	1															
12	77217	GEAR ASSEMBLY, Fuel pump drive	1															
13	77224	PLUG, 41/64 dia. x 1/8 in. thick	1															
14	74926	WASHER, Thrust, 3/4 ID x 1-1/8 OD x 1/16 in. thick	1															
15	STD-1800	RING, External retaining, 11/16 dia. x 3/64 in. thick	1															

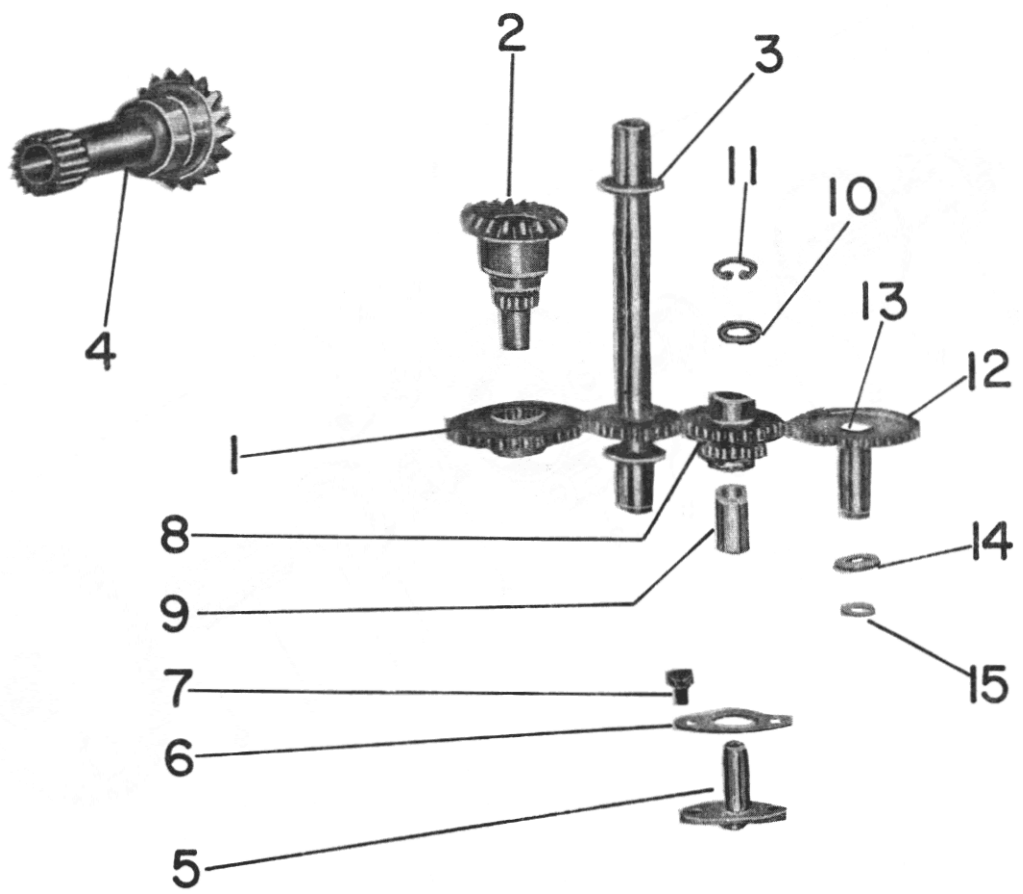


Figure 8
1-13

CRANKCASE ASSEMBLY AND RELATED PARTS GROUP
TORQUEMETER OIL PUMP ASSEMBLY

FIG. REF.	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY											
			E1A											
1	LW-13519	SHIM, Torquemeter oil pump body	1											
2	72075	SEAL, Oil, 3/32 section x 15/32 ID	2											
3	MS28775-148	SEAL, Oil, "o" ring	1											
4	STD-8	WASHER, 1/4 plain	4											
5	STD-160	WASHER, 1/4 lock	4											
6	STD-1411	NUT, 1/4-20 plain	4											
7	LW-13440	THRUST BEARING, Prop. shaft drive gear	1											
8	LW-13441	SEAT, Thrust bearing	1											
9	LW-13439	COVER ASSY., Torquemeter oil pump	1											
10	STD-557	DOWEL, 1/2 dia. x 1-11/16 long	1											

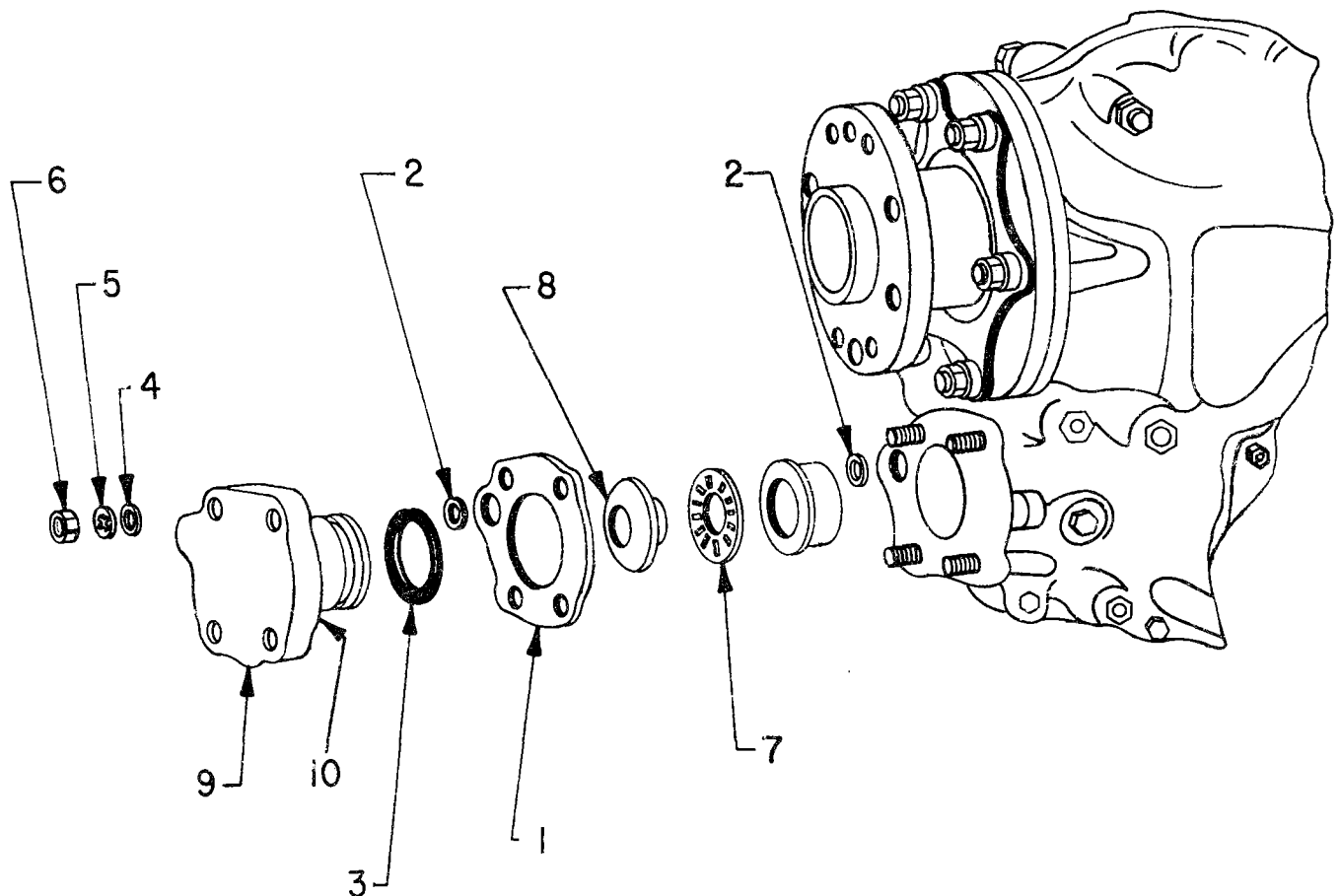


Figure 9
1-14



LYCOMING

TIGO-541 PARTS CATALOG

CRANKCASE ASSEMBLY AND RELATED PARTS GROUP
ACCESSORY COVERS, GASKETS AND ATTACHING PARTS (CRANKCASE)

FIG. REF.	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY											
			EIA											
1	76546	GASKET, Propeller control access	1											
2	LW-11874	BREATHER SEPARATOR	1											
	LW-11873	TUBE, Breather drain	1											
	78844	HOSE, 3/4 ID x 2-1/2 in.long	1											
	STD-2117	CLAMP, .56 to 1.06 range x 1/2 wide	2											
		ATTACHING PARTS												
3	STD-8	WASHER, Plain,1/4 in.	4											
4	STD-160	WASHER, Internal lock,1/4 in.	4											
5	STD-1204	BOLT, Hex.hd.,1/4-20 x 15/16 in.long	4											
6	72741	GASKET, Timing pin hole cover	1											
7	72540	COVER, Timing pin hole	1											
		ATTACHING PARTS												
8	STD-28	WASHER, Plain,no.10	2											
9	STD-251	WASHER, Internal lock,no.10	2											
10	STD-82	SCREW, Fill.hd.,no.10-24 x 1/2 in. long	2											
11	LW-13052	PLATE, Prop.shaft oil seal retainer	2											
12	511	SPACER, Thrust bearing cap nut	12											
		ATTACHING PARTS												
13	STD-33	WASHER, Plain,3/8 in.	6											
14	STD-2045	NUT, Self-locking,3/8-24	6											
15	72053	GASKET, Governor	1											
16	72378	COVER, Governor drive	1											
		ATTACHING PARTS												
17	STD-35	WASHER, Plain,5/16 in.	20											
18	STD-475	WASHER, Internal lock,5/16 in.	4											
19	STD-1410	NUT, Plain,5/16-18	4											
20	8313	GASKET, Vacuum pump	2											
21	60430	COVER, Vacuum and hydraulic pump	2											
		ATTACHING PARTS												
22	STD-8	WASHER, Plain,1/4 in.	8											
23	STD-160	WASHER, Internal lock,1/4 in.	8											
24	STD-1411	NUT, Plain,1/4-20	8											
25	STD-208	SEAL, Oil,7/8 ID x 1-1/2 OD x 5/16 in. wide	2											
26	8313	GASKET, Tachometer drive	1											
27	60430	COVER, Tachometer drive	1											
		ATTACHING PARTS												
28	STD-8	WASHER, Plain,1/4 in.	4											
29	STD-160	WASHER, Internal lock,1/4 in.	4											

AVCO LYCOMING TIGO-541 PARTS CATALOG

CRANKCASE ASSEMBLY AND RELATED PARTS GROUP
 ACCESSORY COVERS, GASKETS AND ATTACHING PARTS (CRANKCASE)

FIG. REF.	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY											
			E1A											
30	STD-1411	NUT, Plain, 1/4-20	4											

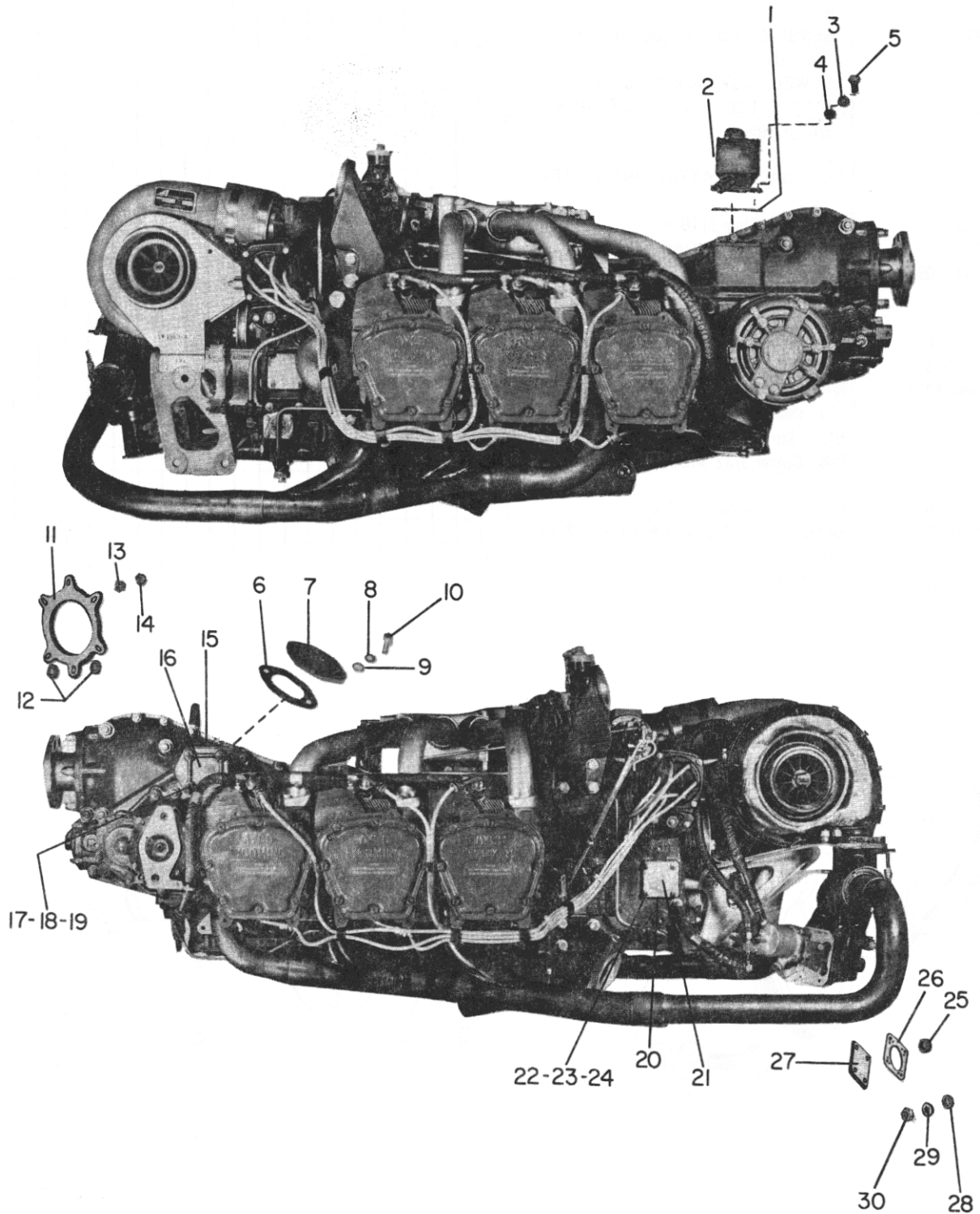


Figure 10
 1-16

CRANKCASE ASSEMBLY AND RELATED PARTS GROUP
COMPRESSOR DRIVE

FIG. REF.	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY															
			EIA															
1	78585	SHAFT, Compressor drive	1															
2	77707	GASKET, Crankcase rear	1															
3	76240	ADAPTER ASSEMBLY, Compressor drive	1															
4	76230	BUSHING, Flanged, 1.00 ID x 1-1/8 in. OD	1															
5	STD-394	DOWEL, 3/32 dia. x 11/32 in. long	1															
6	STD-1934	SEAL, Oil, 1.00 in. ID x 1-5/8 OD x 3/8 in. wide	1															
ADAPTER ATTACHING PARTS																		
7	STD-35	WASHER, Plain, 5/16 in.	6															
8	STD-475	WASHER, Internal lock, 5/16 in.	6															
9	LW-31-1.09	BOLT, Hex. hd., 5/16-18 x 1-3/32 in. long	6															
10	STD-2057	KEY, Woodruff, 5/32 x 5/8 in. (special)	1															
11	LW-10516	PULLEY, Compressor drive	1															
12	AN960-1216	WASHER, 5/64 ID x 1-5/16 OD x 3/32 in. thick	1															
13	STD-1035	NUT, Slotted shear, 3/4-16	1															
14	STD-761	PIN, Cotter, 3/32 dia. x 1.00 in. long	1															
	LW-10955	BELT, Compressor drive	1															
	STD-1342*	SPACER, 7/8 OD x 3/8 ID x 1/2 in. long	4															

* - Used to attach freon compressor.

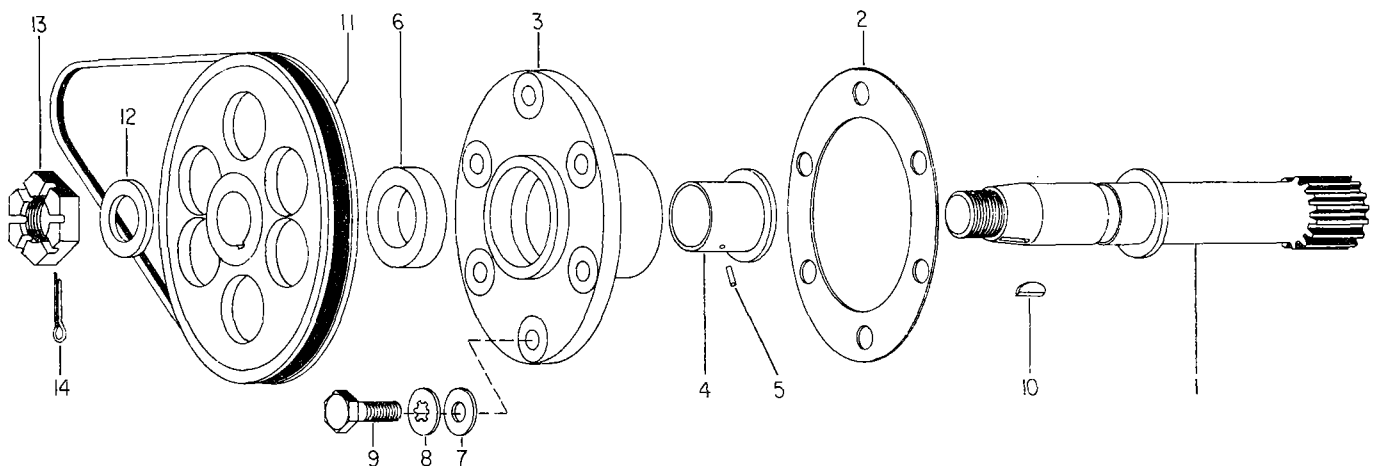


Figure 11
1-17

**CRANKCASE ASSEMBLY AND RELATED PARTS GROUP
OIL COOLER BYPASS VALVE ASSEMBLY**

FIG. REF.	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY																		
			E/A																		
1	LW-12515	GASKET, Oil cooler bypass housing	1																		
2	LW-13247	HOUSING ASSY., Oil cooler bypass valve	1																		
3	LW-12896*	SEAT, Thermostatic control valve	1																		
4	STD-1986	INSERT, Heli-coil, 1.00-14 NF-3	1																		
HOUSING ATTACHING PARTS																					
5	STD-8	WASHER, Plain, 1/4 in.	10																		
6	STD-160	WASHER, Internal lock, 1/4 in.	10																		
7	STD-1948	BOLT, 1/4-20 NC-3 x 2-11/16 in. long	1																		
8	STD-1688	BOLT, 1/4-20 NC-3 x 1.00 in. long	5																		
9	STD-2084	BOLT, 1/4-20 NC-3 x 1-3/4 in. long	4																		
10	LW-13230	VALVE ASSY., Temp. control, oil cooler bypass	1																		
11	STD-294	GASKET, 7/8 in. OD x 5/8 in. ID x 3/32 in. annular	1																		
12	1540	PLUG, Thermometer well	1																		

* - Not illustrated.

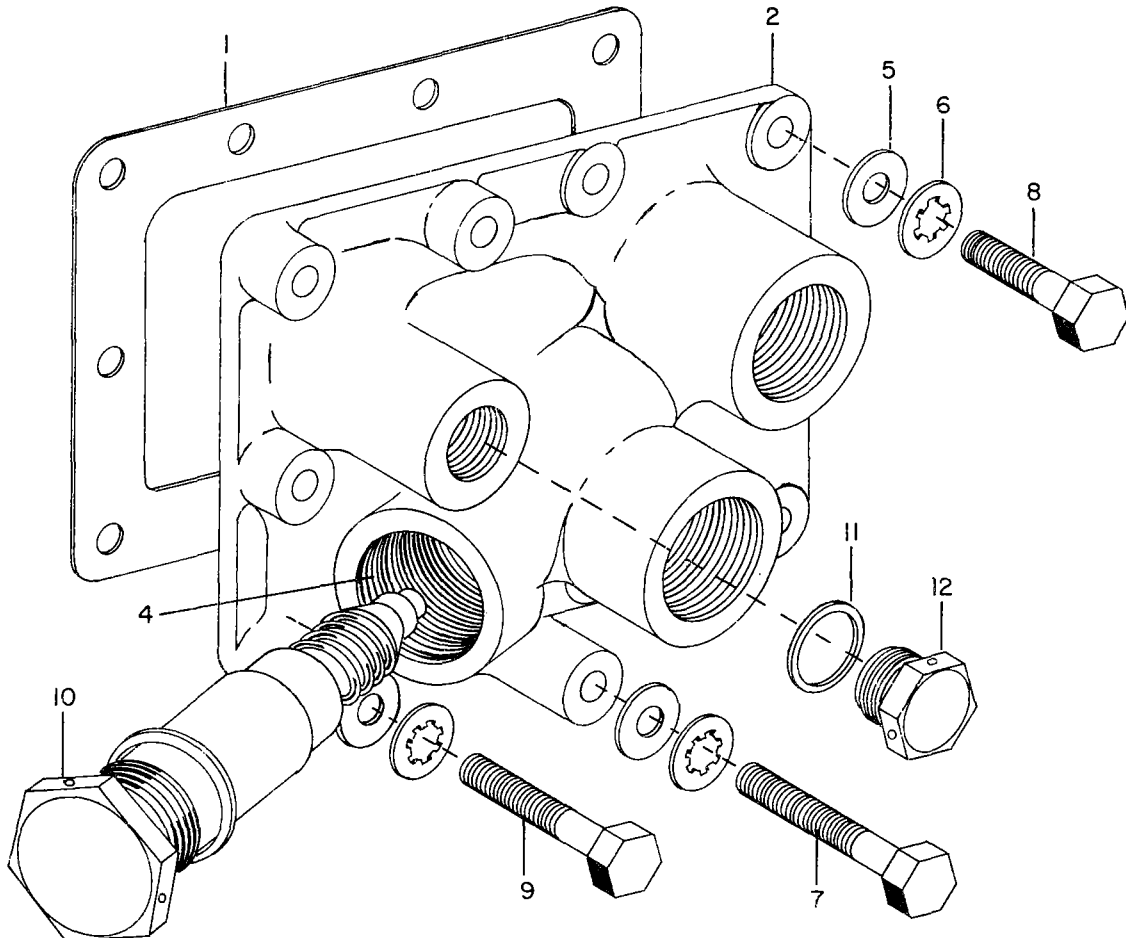


Figure 12
1-18

AVCO LYCOMING TIGO-541 PARTS CATALOG

CRANKCASE ASSEMBLY AND RELATED PARTS GROUP TACHOMETER DRIVE GROUP

FIG. REF.	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY															
			E1A															
1	LW-11678	SHAFT ASSY., Tachometer drive	1															
2	MS16624-1043	RING, Ext.retaining, 7/16 dia. x .025	1															
3	78199	BUSHING, Tachometer drive	1															
4	74929	WASHER, Thrust, tachometer drive	1															
5	LW-10455	GASKET, Tachometer adapter	1															
6	LW-11679	ADAPTER ASSY., Tachometer	1															
7	25C-11	STUD, 1/4-20 x 1-3/8 in. long	4															
8	STD-547	SEAL, 9/16 ID x 1-1/8 OD x 5/16 in. wide	1															
9	STD-696	WASHER, Plain, 1/4 in.	2															
10	STD-160	WASHER, Lock, 1/4 in.	2															
11	STD-1875	BOLT, Hex.hd., 1/4-20 x 13/16 in. long	2															
12	70455	GASKET, 25/32 ID x 1-1/8 OD x .030-.040 thick	1															
13	LW-13896	PLUG, .150 3/6 hex.hd.	1															

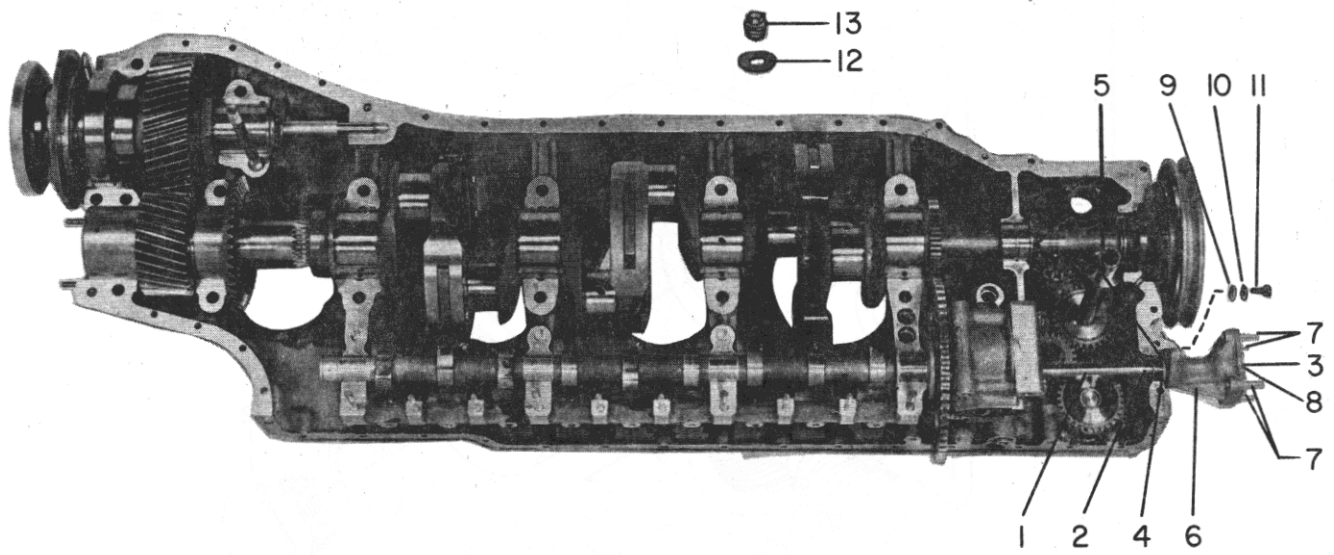


Figure 13
1-19

CYLINDER, PISTON, RINGS AND CONNECTING RODS GROUP
 PISTON, PISTON RINGS AND CONNECTING ROD

FIG. REF.	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY															
			E	A														
1	LW-10545-S	PISTON, 3 ring,(compression ratio 7.3:1)	6															
2	74241	RING, Piston,compression	12															
3	73857	RING, Piston,oil	6															
4	LW-14078	PIN, Piston	6															
5	72198	PLUG, Piston pin	12															
6	LW-13422	CONNECTING ROD ASSY.	6															
7	65819	BUSHING, Connecting rod,upper	6															
8	LW-12596	BOLT, Connecting rod	12															
9	LW-12186	NUT, Connecting rod bolt	12															
10	72217*	BEARING, Connecting rod	12															

* - Available in undersize M03, M06 and M10.

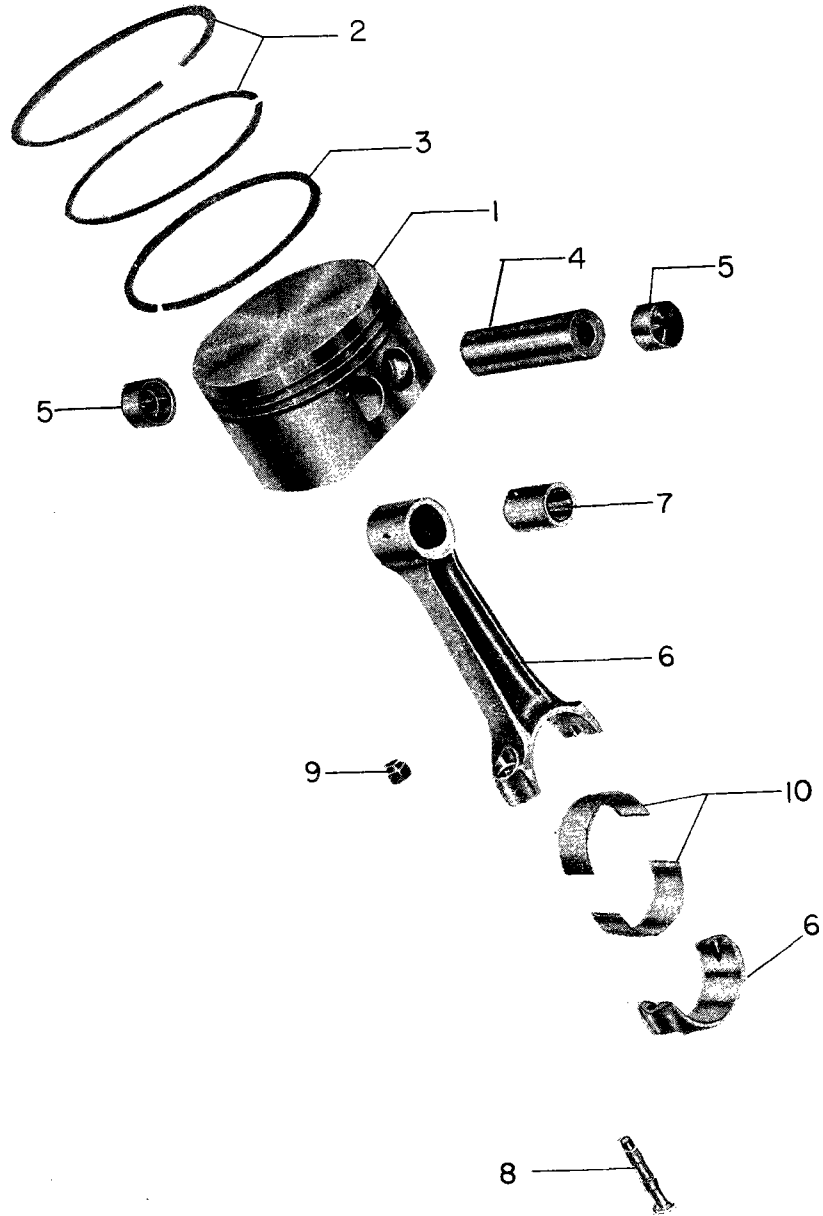


Figure 14
2-1



LYCOMING

TIGO-541 PARTS CATALOG

CYLINDER, PISTON, RINGS AND CONNECTING ROD GROUP
CYLINDER ASSEMBLY AND RELATED PARTS

FIG. REF.	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY											
			EIA											
1	LW-13561	CYLINDER AND HEAD ASSY., (nitrided)	6											
2	STD-2090	NUT, 1/2-20,plain	26											
3	383-B	NUT, 3/8-24,plain	24											
4	LW-12688	SEAT, Intake valve	6											
5	71894	SEAT, Exhaust valve	6											
6	76077	GUIDE, Valve,intake	6											
7	79046	GUIDE, Valve,exhaust (ni-resist)	6											
8	69260-P10	INSERT, Spark plug,18-1.5MM (long reach)	12											
9	25C-10	STUD, 1/4-20 x 1-1/4 in.long	24											
10	25C-8	STUD, 1/4-20 x 1.00 in.long	12											
11	66670	BUSHING, Rocker shaft	24											
12	STD-1872	INSERT, Heli-coil,1/8-27 NPT	6											
13	72706	INSERT, Heli-coil,1/4-20 NC x 3/8 in.long	12											
	STD-148	NIPPLE, Union,(fuel drain lines)	6											
	76423	BAFFLE, Center fin pack	6											
	STD-1925	SCREW, 1/4-20 x 5/8 in.long	6											
	STD-8	WASHER, Plain,1/4 in.	6											
	74887	SPACER, 7/8 in.OD x 0.52 in.ID x 3/8 in.thick	2											
14	71481	RING, Oil seal	6											
15	LW-13087	VALVE, Intake,(hollow stem)	6											
16	LW-11082	VALVE, Exhaust,(rotator type)	6											
17	LW-13321	SEAT, Valve spring lower,intake	6											
18	76093	SEAT, Valve spring lower,exhaust	6											
19	LW-11798	SPRING, Valve,cuter	12											
20	LW-11799	SPRING, Valve,auxiliary	12											
21	LW-10077	SEAT, Valve spring	6											
22	60009	KEY, Valve	12											
23	LW-10076	SEAT, Valve spring (rotator type)	6											
24	MS13997-3	KEY, Valve,rotator type	12											
25	MS13998-3	CAP, Valve stem	6											
26	LW-10937	LIFTER, Hydraulic	12											
27	74906	GASKET, Shroud tube adapter	6											
28	LW-13566	ADAPTER, Shroud tube	6											
29	STD-8	WASHER, Plain,1/4 in.	18											
30	STD-160	WASHER, Internal lock,1/4 in.	18											
31	STD-1875	BOLT, 1/4-20 x 13/16 in.long	18											
32	LW-13339	SHROUD TUBE ASSY., Push rod	12											
33	LW-13565	SPRING, Shroud tube	12											
34	LW-13340	WASHER, 25/32 ID x 1-1/4 OD x 1/32 in. thick	24											
35	70310	SEAL, Shroud tube	24											
36	76180	ROD ASSY., Push - Total of	un											
36	76181	ROD ASSY., Push - 12 req'd.	un											
36	76182	ROD ASSY., Push - Select for	un											
36	76183	ROD ASSY., Push - fit.	un											
37	76266	ROCKER ASSY., Valve	12											
38	76242	BUSHING, Valve rocker	12											
39	72626	SHAFT, Valve rocker	12											
40	66732	GASKET, Valve rocker shaft cover	12											
41	72710	COVER, Valve rocker shaft	12											
42	72709	SCREW, 1/4-20 x 5/8 in.long	6											
43	STD-160	WASHER, Internal lock,1/4 in.	18											
44	STD-1411	NUT, Plain,1/4-20	18											

CYLINDER, PISTON, RINGS AND CONNECTING ROD GROUP CYLINDER ASSEMBLY AND RELATED PARTS

FIG. REF.	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY											
			E1A											
45	76036	GASKET, Rocker box cover	6											
46	76038	COVER ASSY., Rocker box	6											
47	STD-2059	SCREW, 1/4-20 x 5/8 in.long	48											
	74494	PLATE, Spark plug reach caution	6											
48	71549	WASHER, Valve rocker	12											
	LW-11665	THRUST BUTTON, Rocker shaft	24											

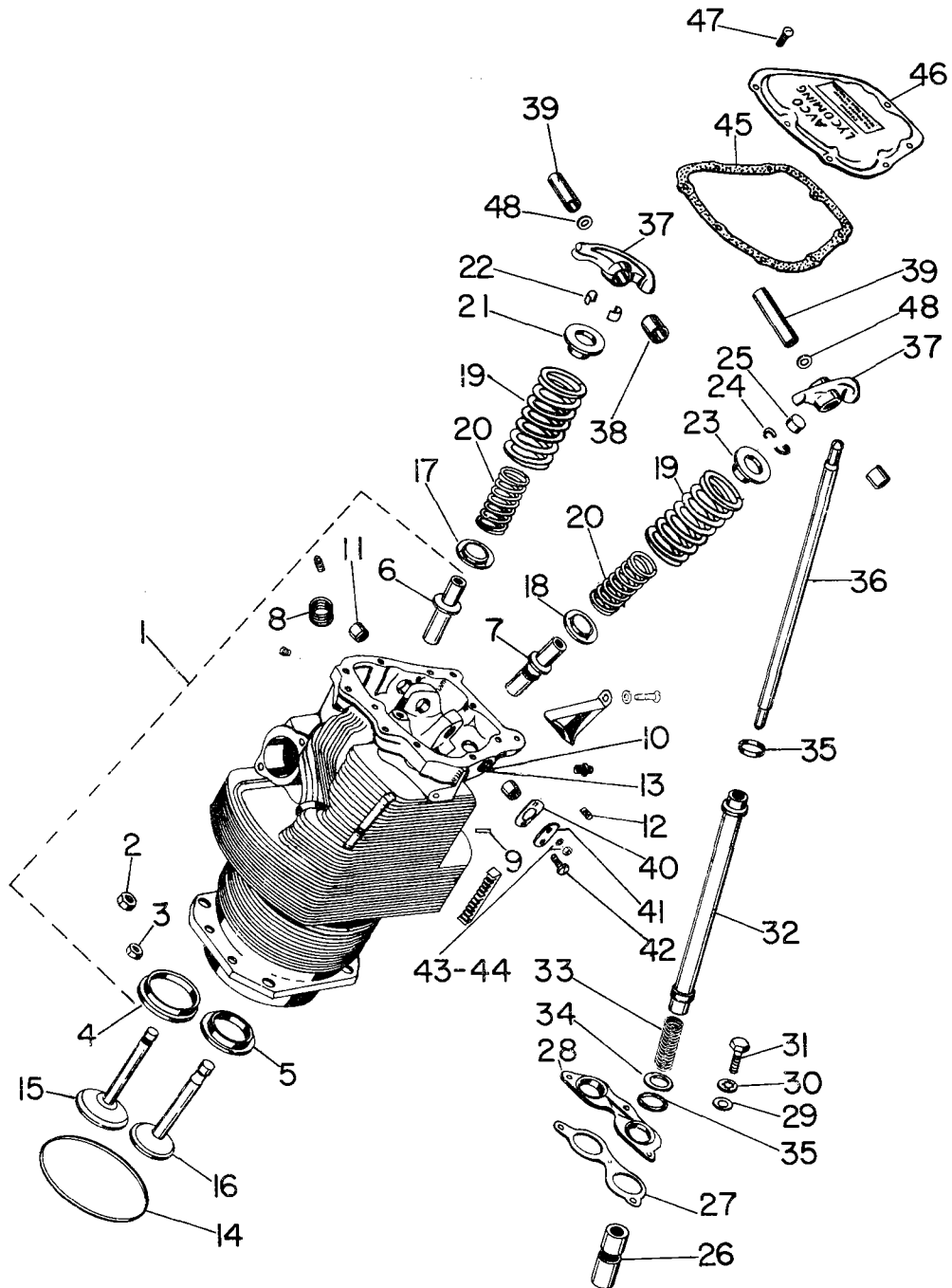


Figure 15
2-3

AVCO LYCOMING TIGO-541 PARTS CATALOG

CYLINDER, PISTON, RINGS AND CONNECTING ROD GROUP INTERCYLINDER BAFFLES

FIG. REF.	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY															
			E/A															
1	78692	BAFFLE ASSEMBLY, Intercylinder	4															
2	71610	HOOK, Intercylinder baffle retaining	4															
3	71611	RETAINER, Intercylinder baffle	4															
4	AN931-4S16*	GROMMET, 1/4 ID x 1-1/4 in.OD split	1															
5	76557	PLUG, Button,1-5/32 OD	3															
6	STD-8*	WASHER, Plain,1/4 in.	1															
7	STD-160**	WASHER, Internal lock,1/4 in.	1															
8	STD-1968**	BOLT, Hex.hd.,1/4-20 x 5/8 in.long	1															
	AN931-12S23	GROMMET, 3/4 ID x 1-3/8 OD x 3/8 in. thick	1															
9	LW-12094	HOSE, 1-5/8 ID x 53/64 wall x 2-5/8 long (split) cyl.no.1-3-4-6	4															
10	LW-12095	HOSE, 1-5/8 ID x 53/64 wall x 3-5/8 long (split) cyl.no.2	1															
11	STD-1530	CLAMP, 1-3/4 in.ID x 9/16 in.wide	5															
12	STD-8+	WASHER, Plain,1/4 in.	8															
13	STD-1412+	SCREW, Fill.hd.,1/4-20 x 5/8 long	4															
14	STD-1685+	NUT, Self-locking,1/4-20	4															
	STD-8\$	WASHER, Plain,1/4 in.	2															
15	STD-160\$	WASHER, Internal lock,1/4 in.	2															
16	STD-1875\$	BOLT, Hex.hd.,1/4-20 x 13/16 in. long	2															
17	STD-2125&	NUT, Clip floating	2															
18	STD-425&	WASHER, Plain,no.10	2															
19	STD-1686&	SCREW, Fill.hd.,no.10-32 x 7/16 long	2															
	STD-8*+	WASHER, Plain,1/4 in.	4															
	STD-1412*+	SCREW, Fill.hd.,1/4-20 x 5/8 long	2															
	STD-1685*+	NUT, Self-locking,1/4-20	2															
	STD-2125*\$	NUT, Clip floating	2															
	STD-425*\$	WASHER, Plain,no.10	2															
	STD-1686*\$	SCREW, No.10-32 x 7/16 in.long	2															
	STD-8*&	WASHER, Plain,1/4 in.	1															
20	STD-1826*&	SCREW, 1/4-20 x 5/8 long	1															

* - Assemble in baffle between cylinders numbers 4 and 6.

** - Install in no. 1 front cylinder baffle hole.

+ - To attach plate assembly to braces.

\$ - To attach braces to crankcases.

& - To attach plate assembly to baffle retainer.

*+ - To attach plate assembly to braces.

*\$ - To attach plate assembly to baffle retainer.

*& - To attach baffle at no. 6 cylinder.

NOTE: STD-1826 may be alternated with STD-1412.

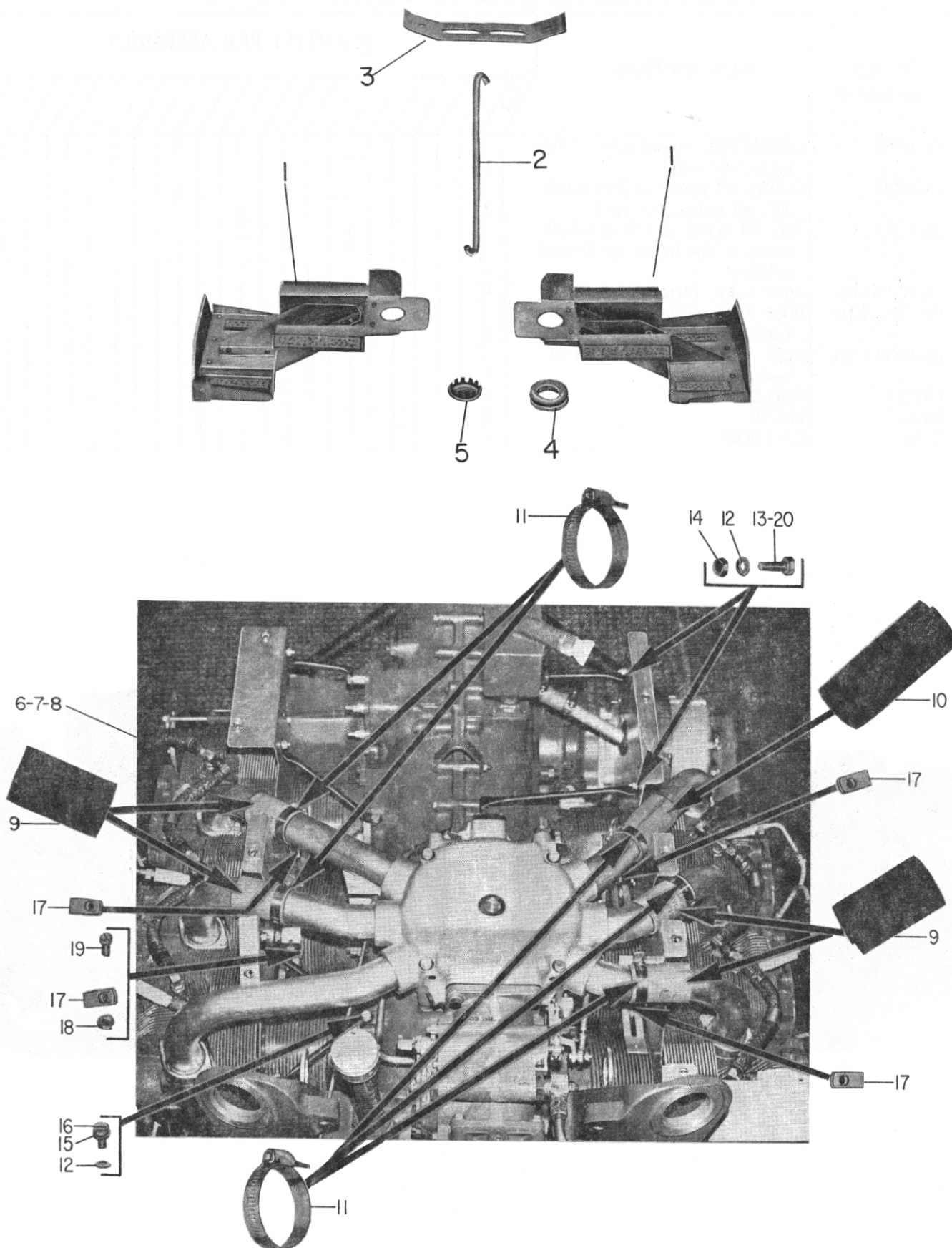


Figure 16 INTERCYLINDER BAFFLES
2-5

AVCO LYCOMING TIGO-541 PARTS CATALOG

CYLINDER, PISTON, RINGS AND CONNECTING ROD GROUP EXTERNAL PARTS FOR OIL COOLED EXHAUST VALVE GUIDES

FIG. REF.	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY																				
			E	T	A	[Grid]																	
1	LW-10042	CONNECTOR, Exhaust valve oil line (in cylinder heads)	6																				
2	LW-10045	ELBOW, 1/4 in.tube to 7/16 in.thd. 90°, self seating (rear cyls.)	2																				
3	LW-10044	TEE, 1/4 in.tube to 7/16 in.thd.self seating on side (center and forward cylinders)	4																				
4	LW-12876-4-066	HOSE ASSY., (Between cylinders)	4																				
5	LW-12798-4-222	HOSE ASSY., (Cylinder no.2 to oil header, right side)	1																				
6	LW-12876-4-224	HOSE ASSY., (Cylinder no.1 to oil header, left side)	1																				
7	AN816-4	NIPPLE	2																				
8	LW-10375	ELBOW	1																				
9	76734	ZIP STRAP	1																				

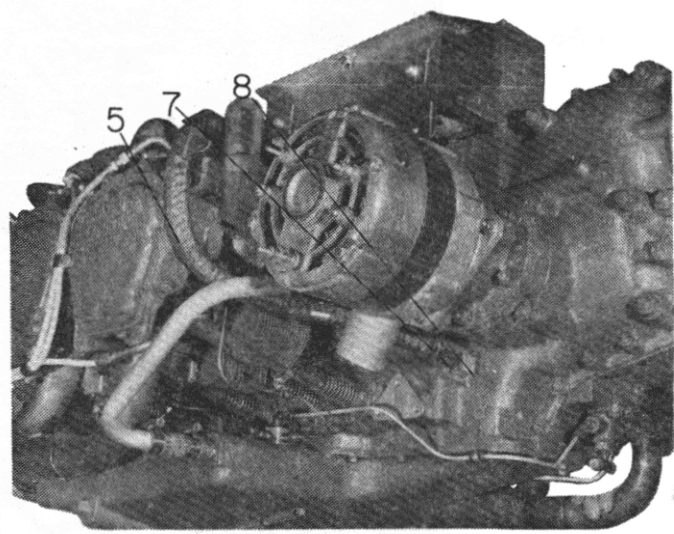
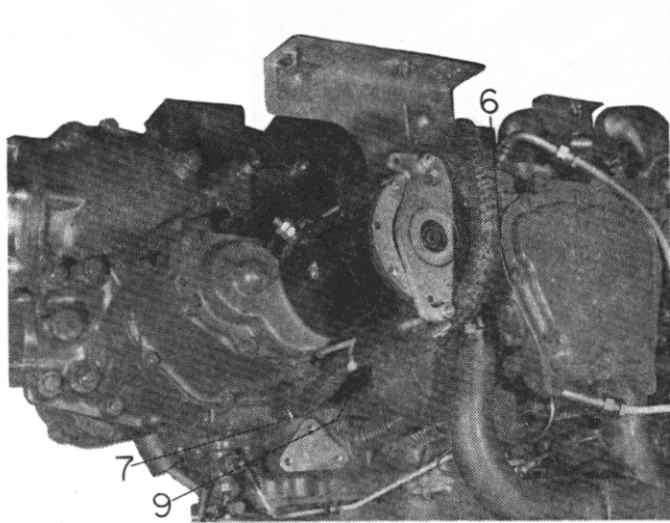


Figure 17
2-6

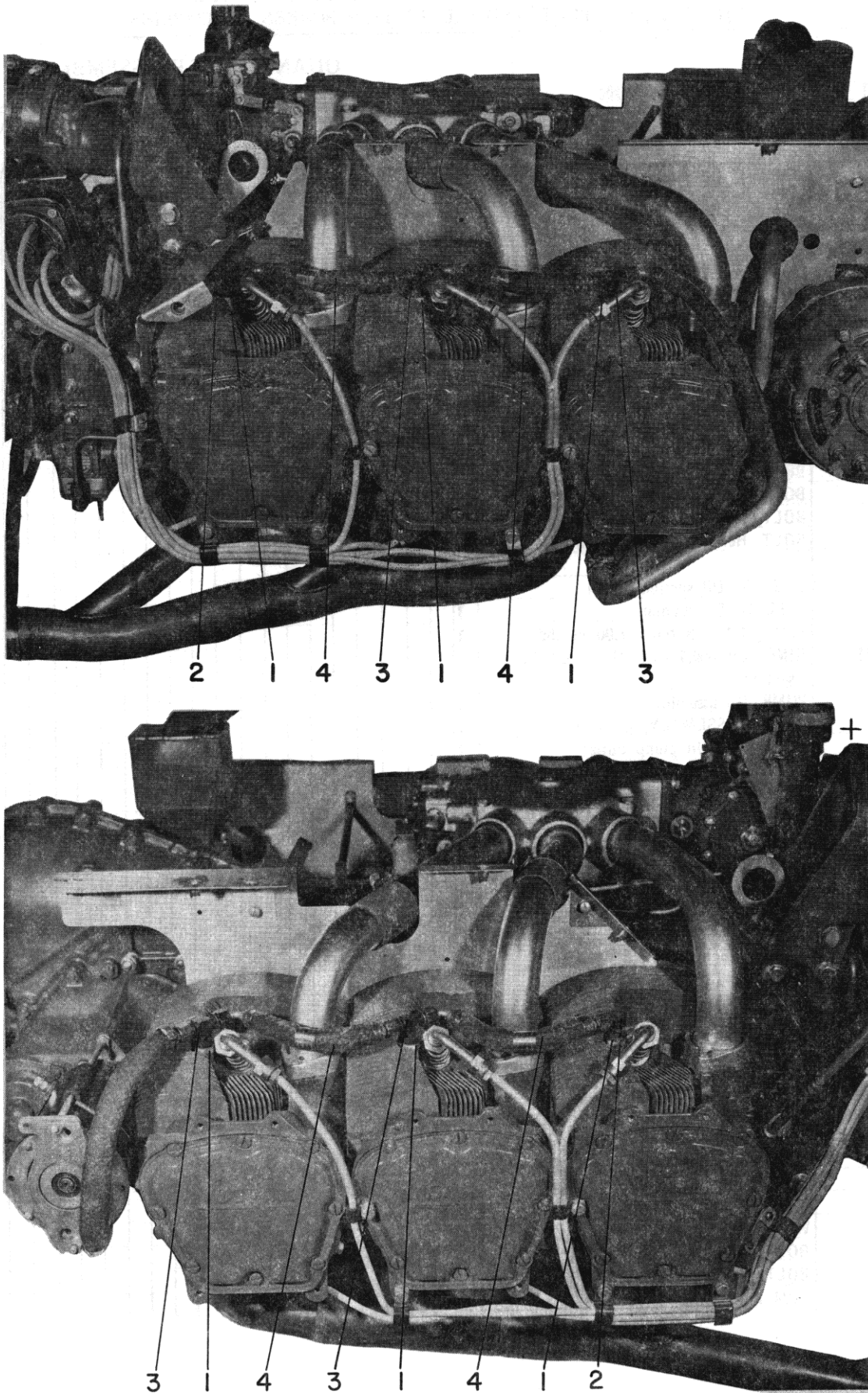


Figure 17 EXTERNAL PARTS FOR OIL COOLED EXHAUST VALVE GUIDES



LYCOMING

TIGO-541 PARTS CATALOG

OIL SUMP AND OIL PUMP ASSEMBLY GROUP
OIL SUMP, OIL PUMP AND OIL SUCTION SCREEN ASSEMBLIES

FIG. REF.	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY															
			EIA															
1	75585	GASKET, Oil sump	1															
2	LW-11155	SUMP ASSEMBLY, Oil	1															
3	STD-1173	INSERT, Heli-coil,1/4-20 x 1/2 in. long	2															
4	77646	DOWEL, Oil pump inlet	1															
5	STD-551	PLUG, Sq.hd.,drilled,1/2-14 NPT	1															
6	AN932-5	PLUG, Allen head,1/2-14 NPT	2															
7	71140	FITTING, Breather	1															
		ATTACHING PARTS																
8	STD-8	WASHER, Plain,1/4 in.	36															
9	STD-160	WASHER, Internal lock,1/4 in.	36															
10	STD-2039	BOLT, Hex.hd.,1/4-20 x 1/2 in.long	8															
11	STD-1688	BOLT, Hex.hd.,1/4-20 x 1.00 in.long	22															
12	STD-2001	BOLT, Hex.hd.,1/4-20 x 3-1/2 in.long	2															
13	STD-1887	BOLT, Hex.hd.,1/4-20 x 4.00 in.long	4															
14	STD-1272	GASKET, Oil suction screen	1															
15	77644	SCREEN, Oil suction	1															
16	77645	PLUG, 1-1/2-18 thd.x 1.00 hex.hd.	1															
17	MS28775-121	RING, Oil seal,1-3/64 ID x .103 dia. section	1															
18	LW-13024	PUMP, Oil assembly	1															
19	77898	BODY ASSEMBLY, Oil pump	1															
20	75145	DOWEL, Oil pump outlet	1															
21	76964	SHAFT, Oil pump idler	1															
22	AN380C4-6	PIN, Cotter,1/8 in.dia.x 1-1/2 in. long	1															
23	76970	IMPELLER, Oil pump driven	1															
24	76971	IMPELLER, Oil pump driving	1															
25	LW-13026	COVER, Oil pump	1															
26	LW-13022	VALVE ASSY., Relief	1															
27	76824	SHAFT, oil pump drive	1															
28	STD-1941	PIN, 3/16 in.dia.x 7/8 in.long	1															
29	STD-8	WASHER, Plain,1/4 in.	10															
30	STD-2003	BOLT, Hex.hd.,drilled end,1/4-20 x 3-1/16 long	2															
31	STD-2005	BOLT, Hex.hd.,drilled end,1/4-20 x 2-7/32 long	2															
32	STD-2004	BOLT, Hex.hd.,drilled end,1/4-20 x 2-13/32 long	1															
33	STD-1409	NUT, Slotted shear,1/4-20	5															
34	MS28775-120	RING, Oil seal,1.00 ID x .103 dia. section	1															
35	LW-10738	BAFFLE, Camshaft gear	1															
36	STD-35	WASHER, Plain,5/16 in.	3															
37	STD-1955	BOLT, 5/16-18 x 4-1/4 in.long	3															
38	LW-25H.75	BOLT, Hex.hd.,drilled hd.,1/4-20 x 3/4 in.long	2															

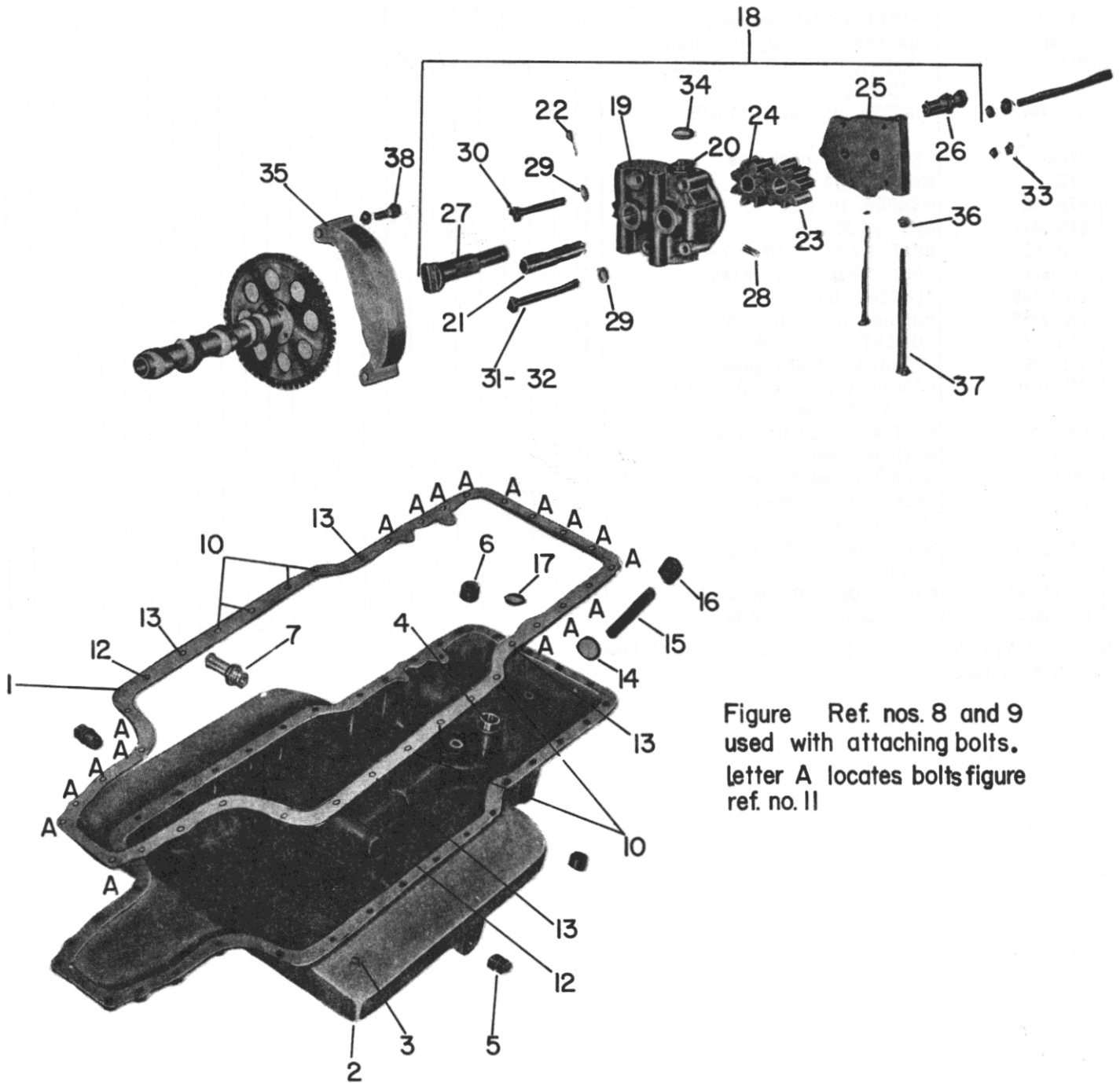


Figure Ref. nos. 8 and 9 used with attaching bolts. letter A locates bolts figure ref. no. 11

Figure 18 OIL SUMP, OIL PUMP AND OIL SUCTION SCREEN ASSEMBLIES



LYCOMING

TIGO-541 PARTS CATALOG

OIL SUMP AND OIL PUMP ASSEMBLY GROUP
OIL FILTER ASSEMBLY

FIG. REF.	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY															
			EIA															
1	LW-12517	GASKET, Oil filter adapter	1															
2	76549	ADAPTER ASSY., Oil filter housing	1															
3	STD-1989	INSERT, Heli-coil,7/8-14 NF3 x 1/2 long	1															
4	STD-1849	INSERT, Heli-coil,3/4-16 NF3 x 3/4 long	1															
	77607	SLEEVE, Oil relief valve	1															
5	STD-8	WASHER, 1/4 plain	4															
6	STD-160	WASHER, 1/4 lock	4															
7	STD-1411	NUT, 1/4-20 plain	1															
8	STD-1952	BOLT, 1/4-20 x 2-1/8 in.long	2															
9	LW-1688	BOLT, 1/4-20 x 1.00 in.long	1															
10	LW-11198	ELEMENT, Oil filter	1															
11	LW-12258	HOUSING ASSY., Oil filter	1															
12	STD-1872	INSERT, Heli-coil,1/8-27 NPT	1															
	STD-405	PLUG, 1/8-27 NPT,square hd.	1															
13	AN901-10C	GASKET, Copper,7/8 in.ID x 1-1/8 OD by .05 thick	1															
14	LW-12262	BOLT ASSY., Oil filter housing	1															
15	76539	SEAT, Oil relief valve	1															
16	76542	SPRING, Oil relief valve	1															
17	STD-589	GASKET, Copper asbestos	1															
18	76541	PLUG, Oil relief valve	1															
19	LW-12259	PLATE, Oil filter bolt,torque caution	1															
20	LW-13905*	FILTER ASSY., Oil (optional)	1															
21	LW-13904*	KIT, Converter plate oil filter	1															

* - See Service Instruction No.1319 for application of spin on full flow oil filters for these engines.

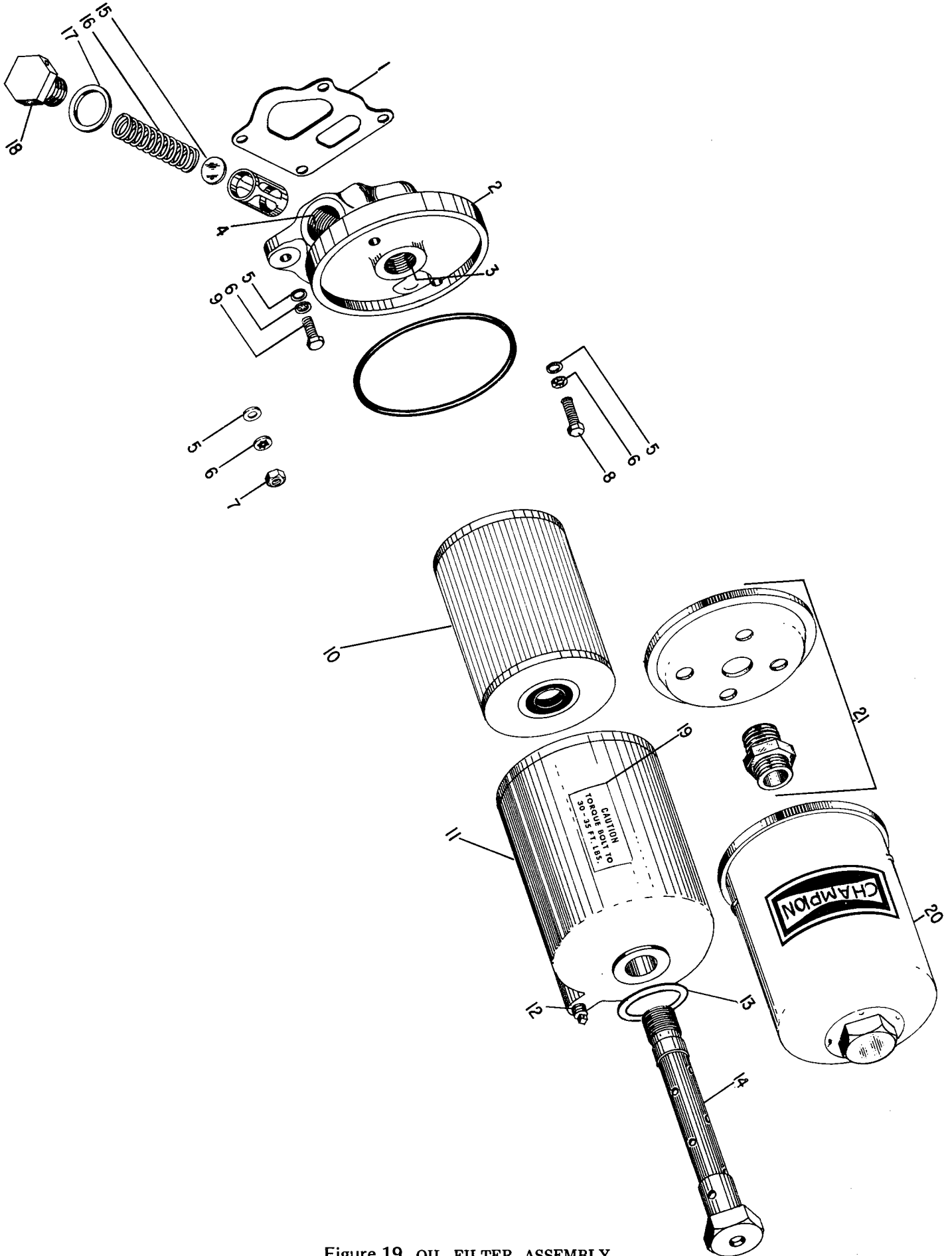


Figure 19 OIL FILTER ASSEMBLY



INDUCTION SYSTEM
FUEL DISTRIBUTION SYSTEM

FIG. REF.	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY															
			EIA															
1	LW-13889	HOUSING ASSY., Induction	1															
2	75660	SPACER, Induction housing	1															
3	STD-8	WASHER, Plain,1/4 in.	3															
4	STD-160	WASHER, Internal lock,1/4 in.	3															
5	STD-2028	BOLT, 1/4-20 x 5-21/32 in.long	1															
6	STD-2027	BOLT, 1/4-20 x 4-13/32 in.long	2															
7	72377	ELBOW, 3/8 in.tubing,adj.90°	1															
8	74070	ELBOW, 3/8 in.tubing,adj.45°	1															
	77627	ELBOW, 1/4 in.tube to 18 NPT	1															
	75948	TEE, 1/4 in.tubing,adjustable	1															
9	AN929-4	CAP ASSY., 1/4 in.flared tube fitting	3															
10	STD-1164	INSERT, Heli-coil,5/16-18 x 5/8	4															
11	MS122200	INSERT, Heli-coil,no.10-24 x 31/64 long	4															
12	STD-2134	INSERT, Heli-coil,7/16-20 x 3/4 long	6															
	STD-514	DOWEL, 5/16 in.dia.x 1/2 in.long	2															
13	76291	COVER, Pressurizing valve	1															
14	STD-28	WASHER, Plain,no.10	4															
15	STD-1896	SCREW, No.10-24 x 7/8 in.long	4															
16	76399	VALVE ASSY., Pressurizing	1															
17	76286	SEAT, Pressurizing valve	1															
18	76292	VALVE AND DIAPHRAGM	1															
19	76288	SPRING, Pressurizing	1															
20	75955	PLUG, Induction housing seal	1															
21	75957	RING, Oil seal,11/16 in.ID x 0.07 in.dia.	1															
22	MS16625-1081	RING, Internal retaining,13/16 in.	1															
23	1102	PLUG, Allen head,1/8-27 NPT	6															
24	LW-11980	NOZZLE ASSY., Fuel injection	6															
25	LW-11602	LOCKPLATE, Injector nozzle	6															
26	75741	PIPE, Intake,cyl.no.1	1															
27	75742	PIPE, Intake,cyl.no.2	1															
28	75743	PIPE, Intake,cyl.no.3	1															
29	75744	PIPE, Intake,cyl.no.4	1															
30	75745	PIPE, Intake,cyl.no.5	1															
31	75746	PIPE, Intake,cyl.no.6	1															
32	72711	RING, Seal,intake pipes	6															
33	71973	GASKET, 2 bolt flange	6															
34	74360	FLANGE, Intake pipe,upper	6															
35	STD-8	WASHER, Plain,1/4 in.	12															
36	STD-160	WASHER, Internal lock,1/4 in.	12															
37	STD-1215	BOLT, 1/4-20 x 1-1/4 in.long	12															
38	77623*	LUG, Induction housing	2															
39	77622*	SUPPORT, Induction housing lug	1															
40	STD-2042*	BOLT, Hex.hd.,1/4-20 x 1-3/16 in. long	2															
41	STD-820*	WASHER	2															
42	STD-160*	WASHER, Internal lock,1/4 in.	2															
43	STD-1204*	BOLT, 1/4-20 x 15/16 in.long	1															
44	STD-160*	WASHER, Internal lock,1/4 in.	1															
45	STD-8*	WASHER, Plain,1/4 in.	1															
46	STD-160*	WASHER, Internal lock,1/4 in.	1															
47	STD-1887*	BOLT, Hex.hd.,1/4-20 x 4.00 in. long	1															
48	STD-1411*	NUT, 1/4-20,plain	1															

See Avco Lycoming Service Instruction No.1234 for proper installation these parts.

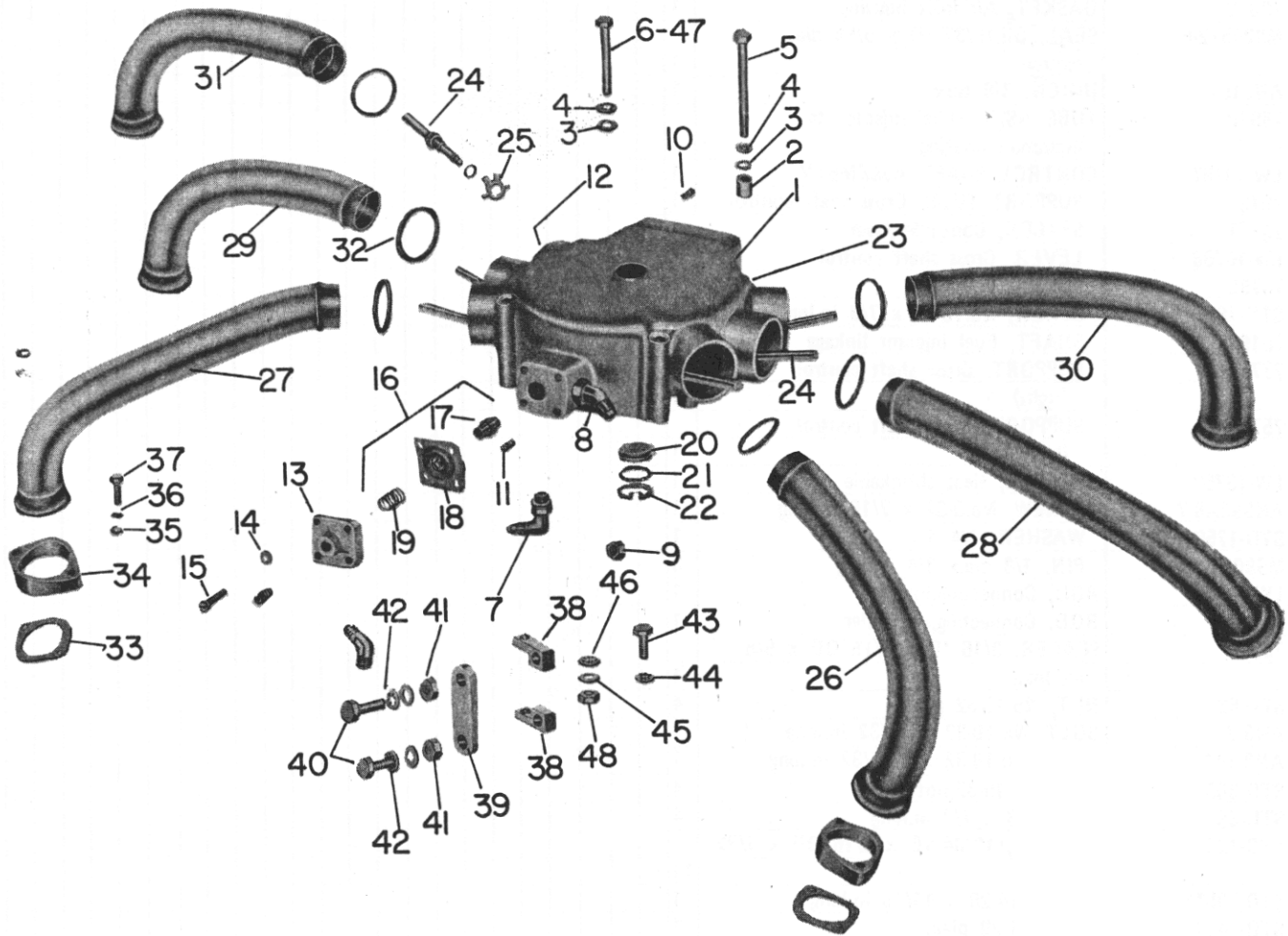


Figure 20 FUEL DISTRIBUTION SYSTEM



LYCOMING

TIGO-541

PARTS

CATALOG

INDUCTION SYSTEM
FUEL INJECTOR AND CONTROLLER LINKAGE GROUP

FIG. REF.	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY															
			E/A															
1	LW-11508	FUEL INJECTOR, (Model RSA10DB-1) Bendix 2524423-4	1															
2	STD-1727	WASHER, Plain,.33 ID x 3/4 OD x .13	4															
3	STD-475	WASHER, 5/16 lock	4															
4	STD-1828	BOLT, 5/16-18 x 1-5/16 in.long	4															
5	73032	GASKET, Air inlet housing	1															
	MS29512-6	SEAL, Oil,15/32 ID x 5/64 dia. section	1															
6	AN815-6	UNION, 3/8 tube	1															
7	75940	TUBE ASSY., Fuel injector to induction housing	1															
	LW-10797	CONTROL SHAFT ASSEMBLY	1															
8	76195	SUPPORT TUBE, Cross shaft control	1															
9	75771	SPACER, Controller,lever	1															
10	LW-10796	LEVER, Cross shaft control	1															
11	75795	LEVER, Controller	1															
12	STD-1896	SCREW, No.10-24 x 7/8 in.long	1															
13	76194	SHAFT, Fuel injector linkage	1															
14	77741	SUPPORT, Cross shaft control (right)	1															
15	75768	SUPPORT, Cross shaft control (left)	1															
	LW-13760	SLEEVE, Heat shrinkable	1															
	AN500A8-7	SCREW, No.8-32 x 7/16 in.long	1															
	STD-1756	WASHER, 3/4 dia.	1															
16	MS9047-104	PIN, 1/8 dia.x 3/4 in.long	3															
17	LW-12309	ROD, Connecting,injector	1															
18	75791	ROD, Connecting,controller	1															
	78370	SPACER, 3/16 ID x 5/16 OD x 5/8 in. long	1															
19	STD-63	NUT, No.10-32 plain	4															
20	AN3-7	BOLT, No.10-32 x 29/32 in.long	3															
	AN3-14*	BOLT, No.10-32 x 1-17/32 in.long	1															
21	STD-303	NUT, No.10-32,slotted	4															
22	STD-68	PIN, 1/16 x 1/2 in.long	4															
23	STD-122	WASHER, 13/64 ID x 5/16 OD x 1/32 thick	11															
	STD-705**	BOLT, 1/4-20 x 11/16 in.long	1															
	STD-1411	NUT, 1/4-20 plain	1															
	STD-160**	WASHER, 1/4 lock	2															
	STD-8**	WASHER, 1/4 plain	1															
24	LW-10753	SHIELD, Cross shaft - right	1															
25	LW-11446	SHIELD, Cross shaft - left	1															
26	LW-13429	ROD END, Injector controller rod	4															
27	74944	GASKET, Turbo controller adapter	1															
28	78858	ADAPTER ASSY., Turbo controller	1															
29	STD-783	PLUG, 1/4-18 NPT (socket head)	1															
30	STD-1102	PLUG, 1/8-27 NPT,allen	3															
31	STD-1727	WASHER, Plain,.33 ID x 3/4 in.OD x .13	4															
32	STD-475	WASHER, 5/16 lock	4															
33	LW-31-1.09	BOLT, 5/16-18 x 1.09 in.long	4															
34	LW-13037	TUBE ASSY., Induction housing to controller housing	1															
35	MS29512-6	SEAL, Oil,15/32 ID x 5/64 in.dia. section	1															

INDUCTION SYSTEM
FUEL INJECTOR AND CONTROLLER LINKAGE

FIG. REF.	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY														
			EIA														
36	LW-12745	CHECK VALVE, Vent line	1														
37	73314	GASKET, Density controller	1														
38	LW-11950	CONTROLLER, Absolute pressure, variable	1														
39	STD-28	WASHER, No.10,plain	4														
40	STD-251	WASHER, No.10 lock	4														
41	STD-375	SCREW, No.10-24 x 5/8 in.long	4														
42	72377	ELBOW, 3/8 tube,adjustable 90 ⁰ (variable controller outlet)	1														
	MS29512-6	SEAL, Oil,15/32 ID x 5/64 in.dia. section	1														
43	74070	ELBOW, 3/8 tube,9/16 st.thread,45 ⁰ , variable controller inlet	1														
	AN822-6-6	ELBOW, 3/8 tube to 3/8 NPT,90 ⁰	1														
	LW-10758	TUBE ASSY., Controller drain	1														
44	LW-12154	HOSE, 3-1/2 ID x 2-5/8 long	1														
45	LW-10539	CLAMP, Hose,4.00 in.dia.	2														
46	61548	PLATE, Name	1														
	STD-1901	DRIVE STUD, No.4 x 3/16 in.long, round head	4														
47	60096	GASKET, Fuel pump	1														
48	77537	ADAPTER ASSY., Controller drain	1														
49	STD-784	PLUG, Socket hd.,3/8-18 NPT	1														
50	STD-33	WASHER, Plain,3/8 in.	2														
51	STD-678	WASHER, Lock,3/8 in.	2														
52	STD-1957	BOLT, Hex.hd.,3/8-16	2														

* - Attaches control rod to controller.

** - Attaching parts for shields: right shield uses 1 STD-1411 and 1 STD-160.
Left shield uses 1 STD-705, 1 STD-160, and 1 STD-8.

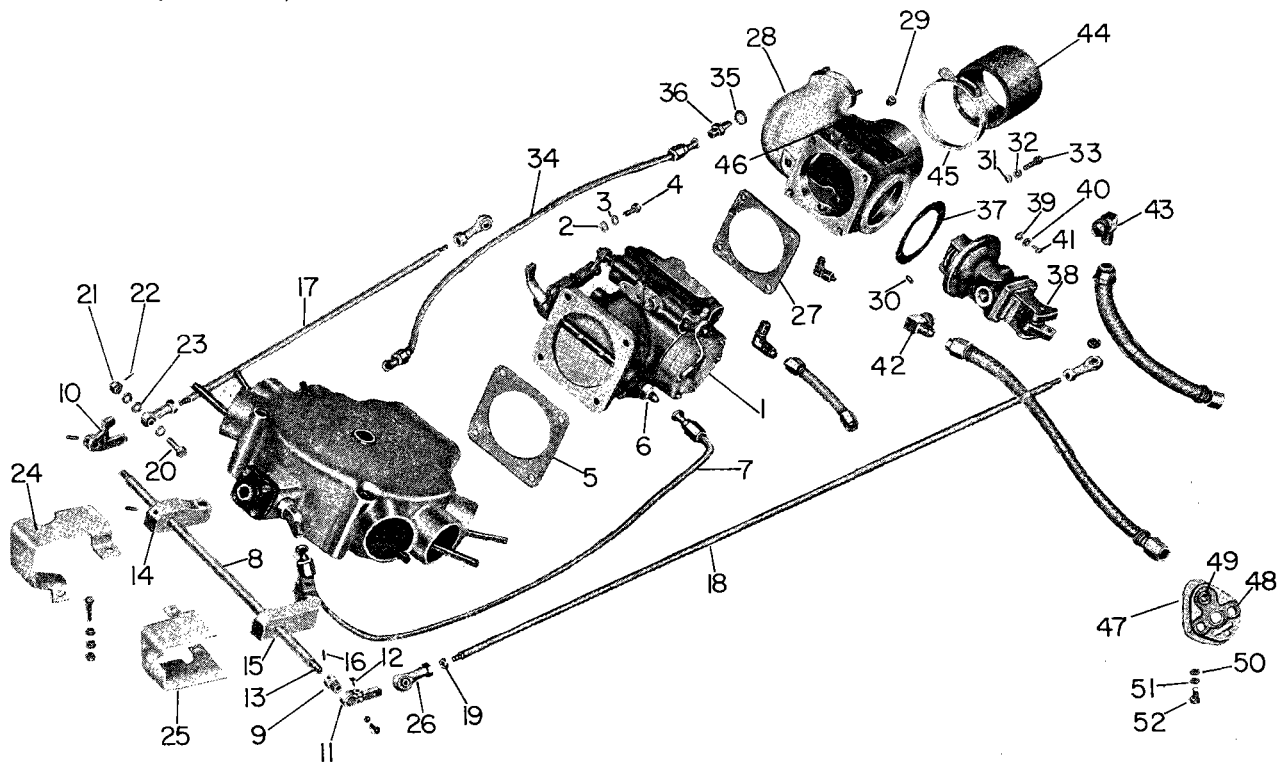


Figure 21



INDUCTION SYSTEM
FUEL DRAIN SYSTEM

FIG. REF.	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY														
			E/A														
1	75890	GASKET, Fuel drain check valve	1														
2	LW-13342	HOUSING ASSY., Fuel drain check valve	1														
3	AN822-3	ELBOW, 90 ⁰ flared tube,pipe	1														
4	AN823-3	ELBOW, 45 ⁰ flared tube,pipe	1														
	AN825-4	TEE, 1/8-27 NPT to 7/16-20 thd.	1														
	MS29513-015	RING, Oil seal,1/2 ID x 1/16 section	1														
5	75087	SPRING, Fuel drain check valve	1														
6	LW-13344	PLUNGER, Fuel drain check valve	1														
7	STD-1006	SEAL, "O" ring,.44 ID x .103 dia. section	1														
	STD-8*	WASHER, 1/4 plain	2														
	STD-160*	WASHER, 1/4 lock	2														
	STD-1411*	NUT, 1/4-20 plain	2														
8	77941	MANIFOLD ASSY., Fuel drain,right	1														
9	77942	MANIFOLD ASSY., Fuel drain,left	1														
10	STD-148	NIPPLE, Union	4														
11	STD-2166	ELBOW, Union,90 ⁰	2														
12	AN822-3	ELBOW, 90 ⁰ flared tube,pipe thd.	2														
13	STD-8	WASHER, 1/4 plain	2														
13	STD-160	WASHER, 1/4 lock	2														
13	STD-1204	BOLT, 1/4-20 x 15/16 in.long	2														
14	77921	TUBE ASSY., Manifold to check valve (right)	1														
15	62254	CLIP, 3/16 in.ID for 1/4 dia.screw	2														
16	77919	TUBE ASSY., Manifold to check valve (left)	1														
17	62254	CLIP, 3/16 in.ID for 1/4 dia.screw	1														
18	LW-12098-4-124	TUBE ASSY., Cyl.1,2,4	3														
19	LW-12098-1-100	TUBE ASSY., Cyl.3	1														
20	LW-12098-1-200	TUBE ASSY., Cyl.5	1														
21	LW-12098-1-183	TUBE ASSY., Cyl.6	1														
22	73650	CLIP, 1/4 ID for 1/4 dia.screw	6														
23	72036	CLIP, 3/4 ID for 3/16 dia.screw	6														
24	STD-28	WASHER, No.10 plain	6														
25	STD-969	SCREW, No.10-32 x 1/2 in.long	6														
26	STD-670	NUT, No.10-32 self-locking	6														

* - Attaching parts for housing 75909.

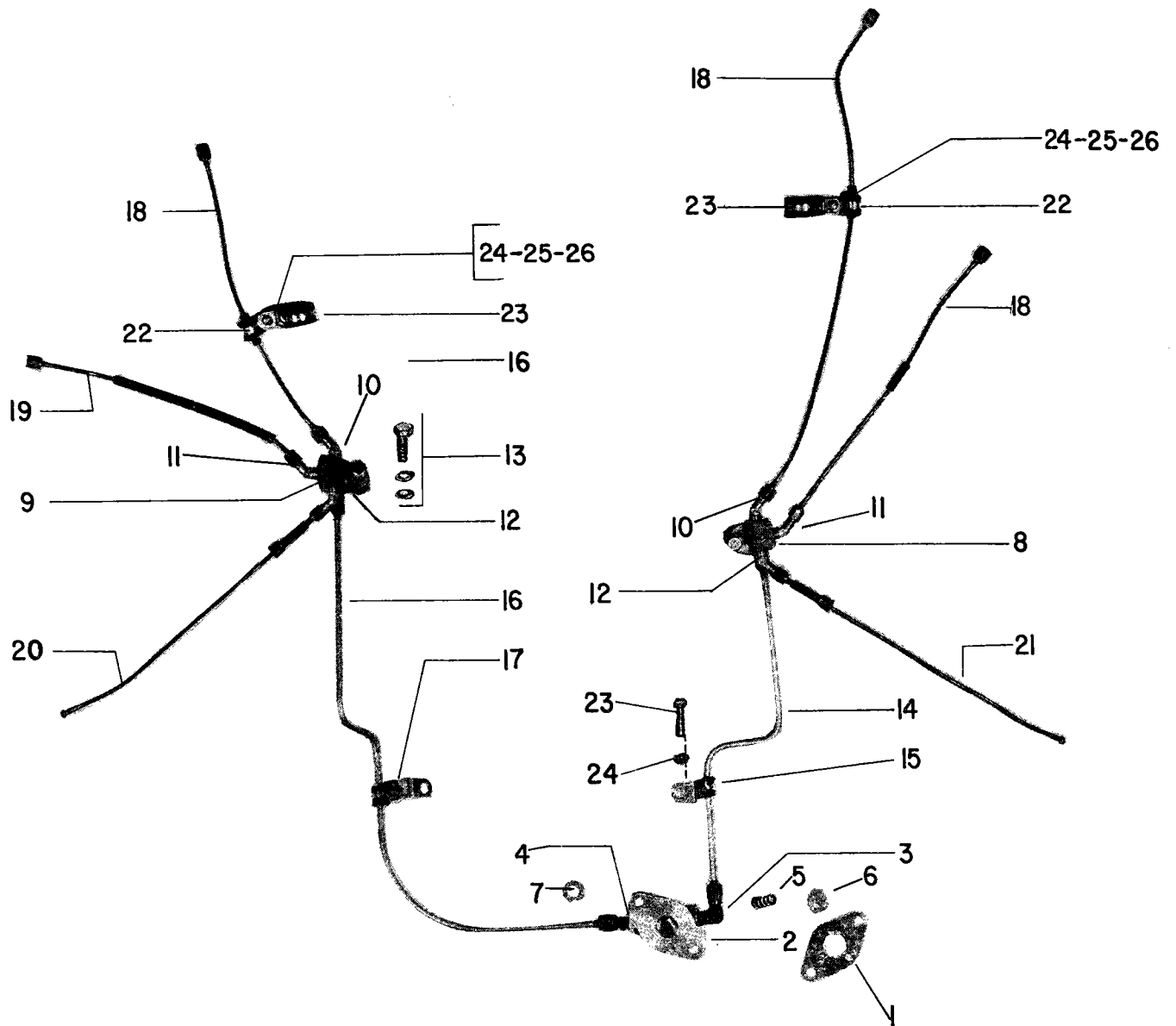


Figure 22 FUEL DRAIN SYSTEM
4-6



INDUCTION SYSTEM
FUEL PUMP ASSEMBLY AND ATTACHING PARTS

FIG. REF.	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY															
			E/A															
1	LW-10799	SPACER, Fuel injector pump	1															
2	LW-13919	PUMP ASSEMBLY, Fuel	1															
3	STD-35	WASHER, Plain, 5/16 in.	4															
4	STD-475	WASHER, Lock, 5/16 in.	4															
5	STD-1410	NUT, Plain, 5/16-18	4															
6	STD-213	SEAL, Oil, 3/4 ID x 1-3/8 OD x 5/16 in. wide	1															
7	78067	ELBOW, 1/4 tube to 1/8 NPT, vent	1															
8	78523	ELBOW, 3/8 tube to 3/8 NPT (outlet)	1															
9	76422	ELBOW, 1/2 tube to 21/64 NPT (inlet)	1															
10	76869	TUBE ASSY., Fuel pump to injector	1															
11	LW-11838	TUBE ASSY., Fuel pump to induction housing	1															
12	73650*	CLAMP, 1/4 ID cushion type	1															
13	74117	BRACKET, Injector line, 90° (attach to shroud tube adapter)	1															
14	STD-28	WASHER, Plain, no. 10	1															
15	STD-860	SCREW, Fill. hd., no. 10-24 x 5/8 in. long	1															
16	STD-670	NUT, Self-locking, no. 10-24	1															

* - Not illustrated.

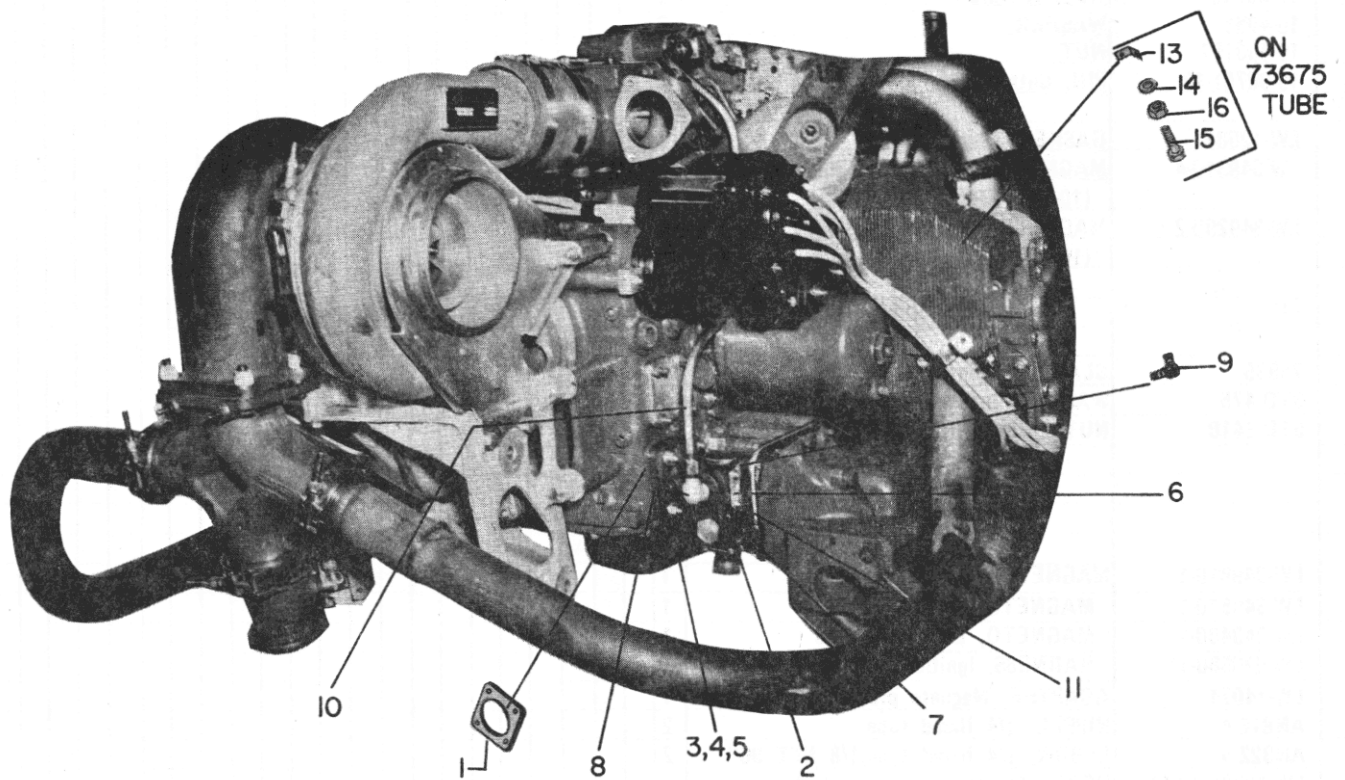


Figure 23 FUEL PUMP ASSEMBLY AND ATTACHING PARTS

ELECTRICAL COMPONENTS
MAGNETOS AND MAGNETO DRIVES GROUP

FIG. REF.	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY															
			EIA															
1	75473	SHAFTGEAR ASSY., Mag.drive	1															
2	69565	SLEEVE, Magneto drive shaft	1															
3	75467	COUPLING ASSEMBLY, Magneto, intermediate	1															
4	69565	SLEEVE, Magneto drive shaft	1															
5	LW-12136	CUSHION, Magneto drive	4															
6	69208	COUPLING, Magneto drive	2															
ATTACHING PARTS																		
7	10-90788-5	KEY, Woodruff	2															
8	10-4093	WASHER	2															
9	10-163151	NUT	2															
10	10-90751-19	PIN, Cotter	2															
11	LW-12681	GASKET, Magneto	2															
12	LW-349310-4	MAGNETO, Right,S6RN-1209 (10-349310-4)	1															
13	LW-349290-2	MAGNETO, Left,S6LN-1208 (10-349290-2)	1															
ATTACHING PARTS																		
14	75965	CLAMP, Magneto	4															
15	STD-475	WASHER, Internal lock,5/16 in.	4															
16	STD-1410	NUT, Plain,5/16-18	4															
-1200 SERIES PRESSURIZED MAGNETOS																		
	LW-349610-1	MAGNETO, Ignition system	1															
	LW-349510-1	MAGNETO, Right,S6RN-1259	1															
	LW-349490-1	MAGNETO, Left,S6LN-1258	1															
	LW-620580-11	HARNESS, Ignition	1															
	LW-14074	ADAPTER, Magneto pressurization	1															
	AN816-4	NIPPLE, 1/4 flared tube	2															
	AN822-4	ELBOW, 1/4 flared tube,1/8 NPT 90°	2															
	LW-12784-4-110	HOSE, Magneto to mag.press.adapter left	1															
	LW-12784-4-074	HOSE, Magneto to mag.press.adapter right	1															
	MS29512-04	SEAL, Oil,1/16 sect.x 11/32	1															
	LW-13134	VALVE ASSY., Relief	1															

NOTE: Attaching parts for pressurized magnetos and harness are same as for standard magnetos.

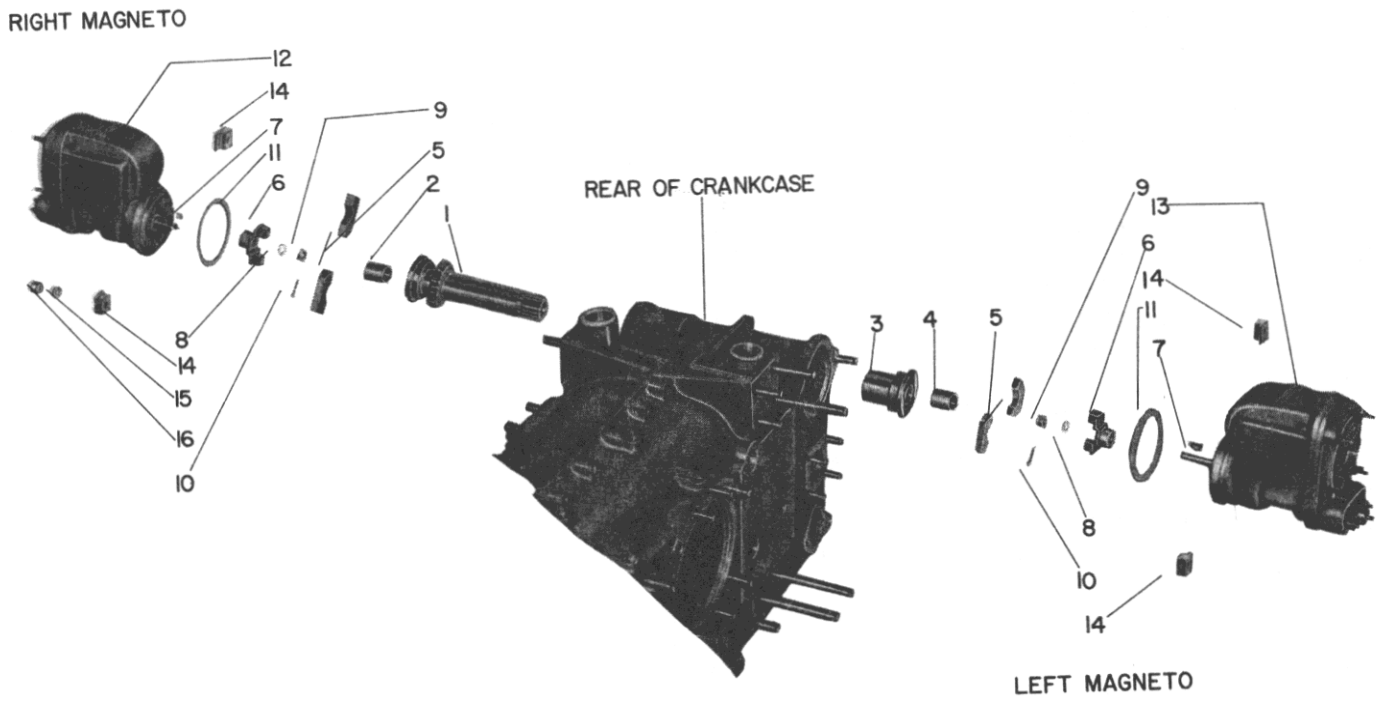


Figure 24 MAGNETO AND MAGNETO DRIVES GROUP
5-2



LYCOMING

TIGO-541 PARTS CATALOG

ELECTRICAL COMPONENTS
IGNITION HARNESS ASSEMBLY, SHIELDED

FIG. REF.	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY											
			E/A											
1	LW-620580-1	CABLE ASSY., Ignition, shielded, 3/4-20 spark plugs	1											
2	10-620633-48	LEAD ASSY., 48 in. long	6											
3	10-620633-72	LEAD ASSY., 72 in. long	6											
4	10-320602	FERRULE, Outer	12											
5	10-320601	FERRULE, Inner	12											
6	10-320573-3	ELBOW, Spark plug, 110°	12											
7	10-320297-2	CLAMP	2											
8	10-320298-2	CLAMP	2											
9	10-320298-3	CLAMP	1											
10	10-320299-1	CLAMP	1											
11	10-320476-1	CLAMP	4											
12	10-320232	CLAMP	2											
13	10-320432-1	CLAMP	1											
14	10-320416-1	CLAMP	2											
15	10-78916	BRACKET	1											
16	10-89027-4	BRACKET	1											
17	10-349661-2	PLATE	2											
18	10-163011	FERRULE	12											
19	10-349226	GROMMET	2											
20	10-163012	EYELET	12											
21	10-32326	SPRING	12											
22	10-94225-2	SPRING ASSEMBLY	12											
23	10-320582	SLEEVE TERMINAL	12											
		HARNESS ATTACHING PARTS												
24	STD-160	WASHER, Internal lock, 1/4 in.	11											
25	STD-705	BOLT, Hex. hd., 1/4-20 x 1 1/16 in. long	6											
26	73152	BRACKET, Support clamp	2											
27	STD-1968	BOLT, Hex. hd., 1/4-20 x 5/8 in. long	1											
28	STD-1685	NUT, Self-locking, 1/4-20	1											
29	STD-1650	BOLT, Hex. hd., no. 10-32 x 2 1/32 in. long	2											
30	STD-28	WASHER, Plain, no. 10	2											
31	STD-670	NUT, Self-locking, no. 10-32	2											
32	STD-2081	SCREW, Fill. hd., self-locking, 1/4-20 x 7/8 in. long	4											
33	77156	PROTECTOR, Ignition cable (assemble on top leads)	6											
34	1182-R5*	SPARK PLUG, AC-283, 3/4-20 (plat. electrode)	12											
35	1182-K4	SPARK PLUG, RHB-36W	12											
36	1182-55*	SPARK PLUG, AC-273, 3/4-20 (massive electrode)	12											

* - Optional spark plugs.

NOTE

The above spark plugs are those used in current production only; this list does not include additional spark plugs that are approved for use in these engines. See latest edition of Service Instruction No. 1042 for complete listing of all approved spark plugs.

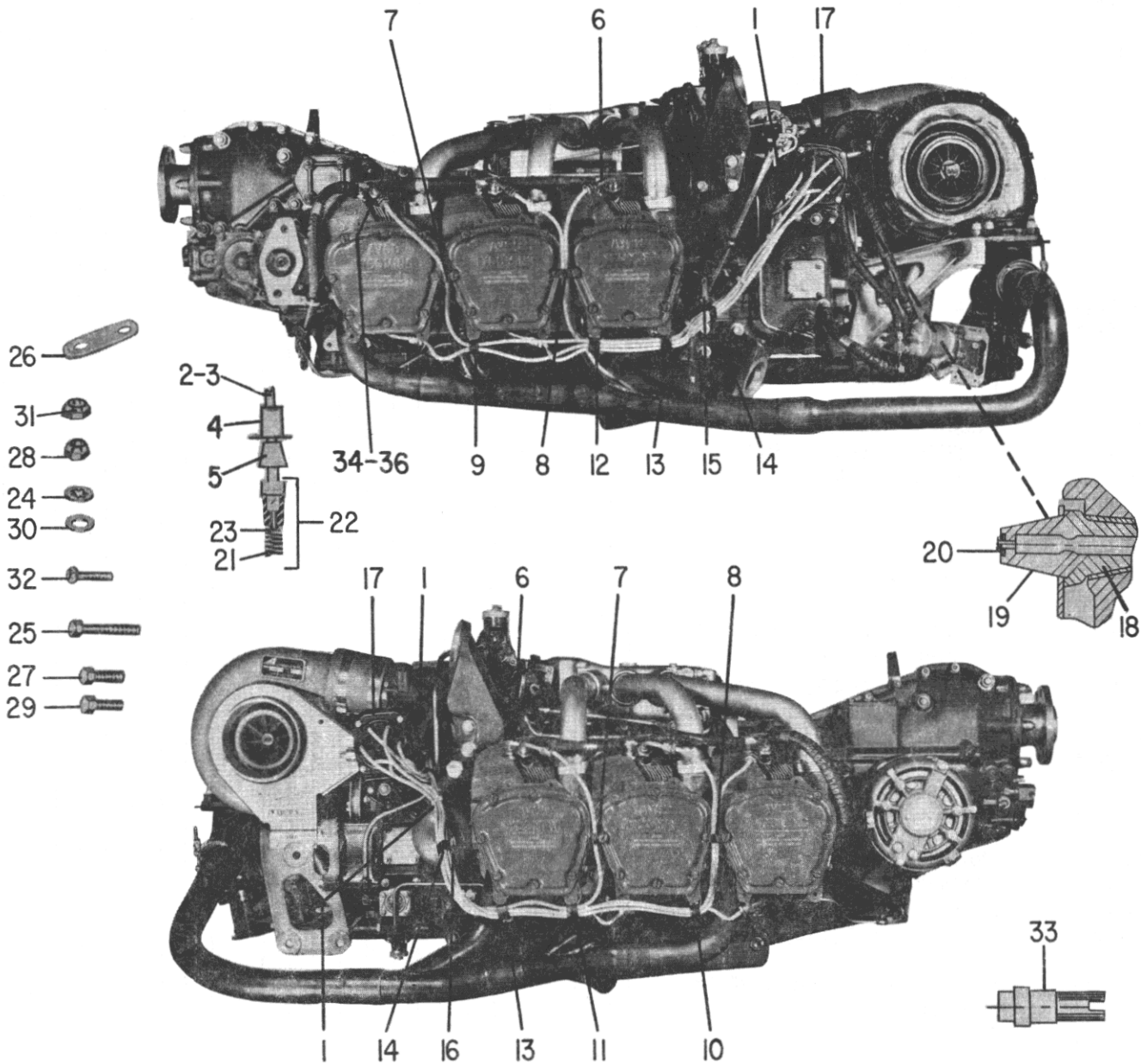


Figure 25 IGNITION HARNESS ASSEMBLY, SHIELDED



LYCOMING

TIGO-541 PARTS CATALOG

ELECTRICAL COMPONENTS
ALTERNATOR AND ALTERNATOR DRIVE

FIG. REF.	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY															
			EIA															
1	AN4047-1	GASKET, Accessory drive	1															
2	LW-14464	COUPLING ASSY., Alternator drive	1															
2A	LW-14472	SPRING, Alternator drive coupling	1															
3	LW-10261	ADAPTER, Alternator drive coupling	1															
4	LW-10259	ADAPTER ASSY., Alternator	1															
5	31-12	STUD, 5/16-18 x 1-1/2 in.long	4															
		ADAPTER ASSEMBLY ATTACHING PARTS																
6	STD-33	WASHER, Plain,3/8 in.	6															
7	STD-678	WASHER, Internal lock,3/8 in.	6															
8	STD-596	NUT, Plain,3/8-24	6															
9	LW-10264	GASKET, Alternator adapter	1															
10	LW-10256	ALTERNATOR, 24V-100Amp.	1															
		ALTERNATOR ATTACHING PARTS																
11	STD-35	WASHER, Plain,5/16 in.	4															
12	STD-475	WASHER, Internal lock,5/16 in.	4															
13	STD-37	NUT, Plain,5/16-24	4															
14	MS9047-077	ROLL, Pin	1															
15	LW-10179*	REGULATOR, Full transistor voltage	1															
16	78060*	RELAY, Overvoltage	1															
17	75539	ADAPTER ASSY., Generator drive	1															
18	STD-859	DOWEL, 1/8 dia.x 9/32 in.long	1															
19	75536	BUSHING, Flanged,1-1/8 ID x 1-1/2 OD	1															
20	STD-1339	PLUG, Allen hd.,1/16-27 NPT	2															
21	LW-10727	SEAL, Oil,2-1/8 OD x 1-5/16 ID x 5/16 in. wide	1															
22	STD-2068	SCREW, Nylon lock,1/4-20 x 1-1/8 in. long	2															
23	STD-8	WASHER, Plain,1/4 in.	2															
24	LW-11778	WASHER, Thrust	1															
25	75500	GEAR ASSY., Generator drive	1															
26	STD-1004	RING, Oil seal,7/32 ID x 1/16 dia. section	1															
27	AN124001	RING, Oil seal,3-7/8 ID x 1/8 dia. section	1															

* - Not illustrated.

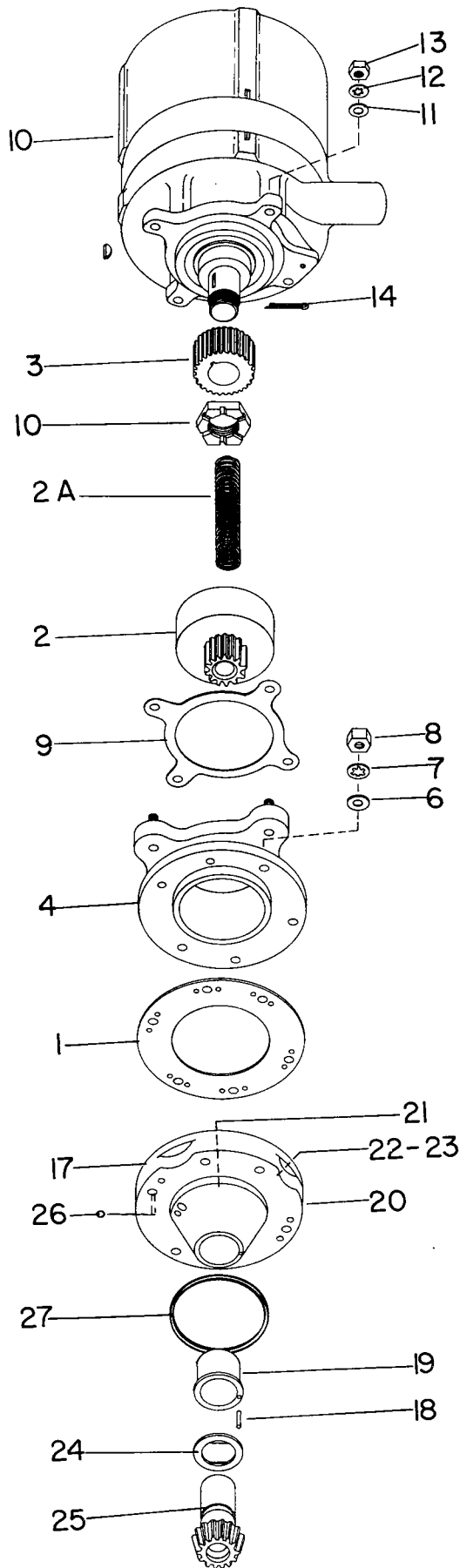


Figure 26 ALTERNATOR AND ALTERNATOR DRIVE



ELECTRICAL COMPONENTS
STARTER ASSEMBLY AND STARTER DRIVE

FIG. REF.	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY															
			EIA															
1	77900	HOUSING ASSY., Starter drive	1															
2	25C-12	STUD, 1/4-20 x 1-1/2 in.long	3															
3	STD-997	DOWEL, Oil,5/16 in.dia.x 11/16 in. long	1															
4	77870	SHAFT, Starter idler gear	1															
5	STD-1133	DOWEL, 1/8 in.dia.x 13/16 in.long	1															
6	STD-514	DOWEL, 5/16 in.dia.x 1/2 in.long	2															
		STARTER DRIVE HOUSING ATTACHING PARTS																
7	STD-8	WASHER, Plain,1/4 in.	6															
8	STD-160	WASHER, Internal lock,1/4 in.	6															
9	STD-1411	NUT, Plain,1/4-20	6															
10	75566	COUPLING ASSY., Starter slip	1															
11	75510	SHAFT, Bendix drive	1															
12	76528	GEAR ASSY., Starter slip coupling	1															
13	76835	BUSHING, Slip coupling	1															
14	STD-1025	KEY, 5/8 in.dia.x 1/8 in.	1															
15	76842	COUPLING, Starter slip	1															
16	76836	WASHER, Thrust,slip coupling	1															
17	75521	COUPLING ASSY., Bendix	1															
18	73051	PIN, 1/4 in.dia.x 25/32 in.long	1															
19	75655	WASHER, Thrust,9/16 in.ID x 1-1/8 in. OD x 1/16 in.thick	1															
20	LW-11329	GEAR ASSY., Starter idler	1															
21	77987	BEARING, 1/2 in.ID x 11/16 in.OD x 1/16 in.thick	1															
22	78791	STARTER ASSY., Prestolite 24V	1															
		STARTER ATTACHING PARTS																
23	STD-8	WASHER, Plain,1/4 in.	7															
24	STD-160	WASHER, Internal lock,1/4 in.	7															
25	STD-1215	BOLT, Hex.hd.,1/4-20 x 1-1/4 in. long	4															
26	STD-1411	NUT, Plain,1/4-20	3															
27	78789	PLATE, Starter retaining	1															
28	76815	STUD, Starter retaining plate	2															
	LW-11515*	HOSE, 1/4 in.ID x 5/8 OD x 2-5/16 in. long	2															
		PLATE ATTACHING PARTS																
29	STD-8	WASHER, Plain,1/4 in.	2															
30	STD-160	WASHER, Internal lock,1/4 in.	4															
31	STD-1411	NUT, Plain,1/4-20	4															
32	LW-12085	SWITCH, Magnetic,Prestolite (SAW-441-1)	1															

* - Assemble on 76815 stud between starter drive housing and starter retaining plate.

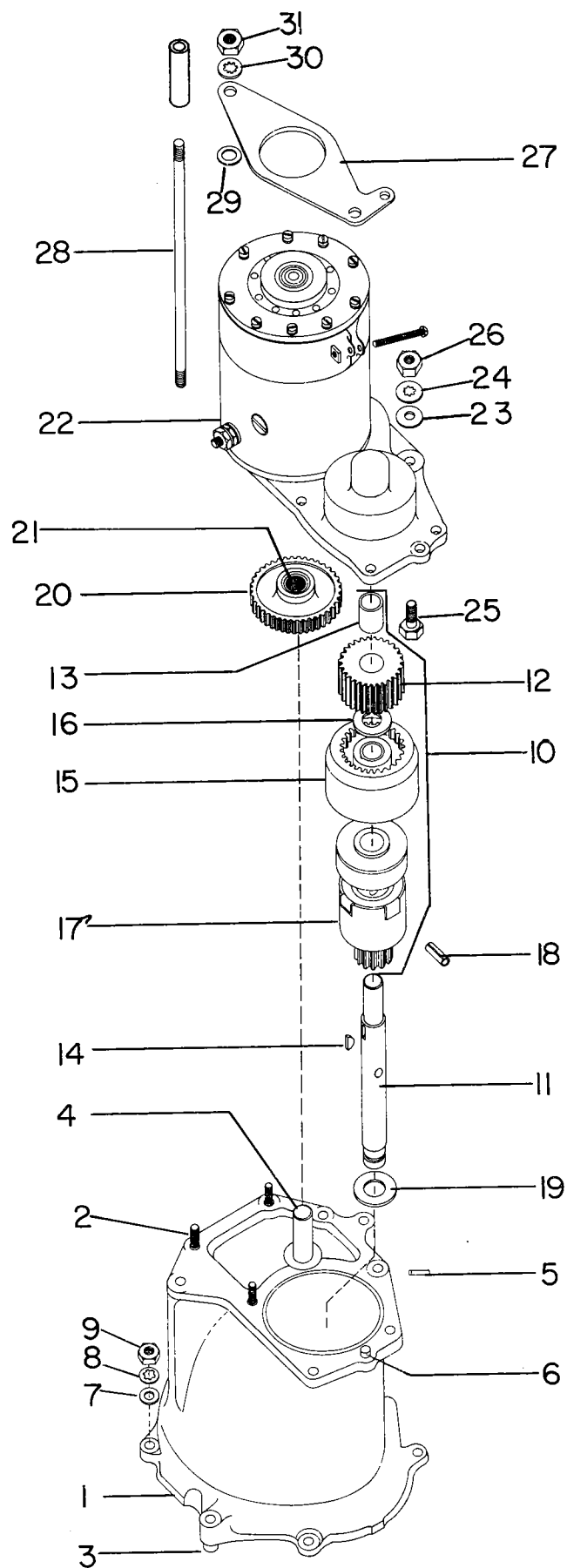


Figure 27 STARTER ASSEMBLY AND STARTER DRIVE



LYCOMING

TIGO-541 PARTS CATALOG

TURBOCHARGER, BYPASS VALVE AND EXHAUST MANIFOLDING
TURBOCHARGER ASSEMBLY

FIG. REF.	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY															
			E/A															
1	LW-13234	TURBOCHARGER ASSY., T18 A21	1															
2	LW-12154	HOSE, 3-1/2 in.ID x 3-11/16 in. long (.19-.25 wall)	1															
3	LW-10539	CLAMP, Hose,4.00 in.dia.	2															
4	75371	GASKET, Turbocharger,oil inlet	1															
5	76889	ADAPTER, Turbocharger oil inlet	1															
6	AN822-6	ELBOW, Turbo oil inlet,1/4 in.tube and 1/4 in.NPT,90°	1															
7	LW-10122	GASKET, Turbo oil drain adapter	1															
8	LW-11954	TUBE ASSY., Turbine oil drain 1.00 in.dia.	1															
9	STD-33	WASHER, Plain,3/8 in.	4															
10	STD-678	WASHER, Internal lock,3/8 in.	4															
11	STD-1946	BOLT, Hex.hd.,3/8-16 x 7/8 in.long	4															
12	AN840-17	NIPPLE, 1.00-11.5 NPT x 1.00 ID hose	1															
13	LW-11373	HOSE, 1.00 ID x 1-3/8 OD x 2-1/2 in. long	1															
14	LW-13060	BLANKET, Turbocharger	1															
15	AN737TW46	CLAMP, Hose,1-3/8 in.OD	2															

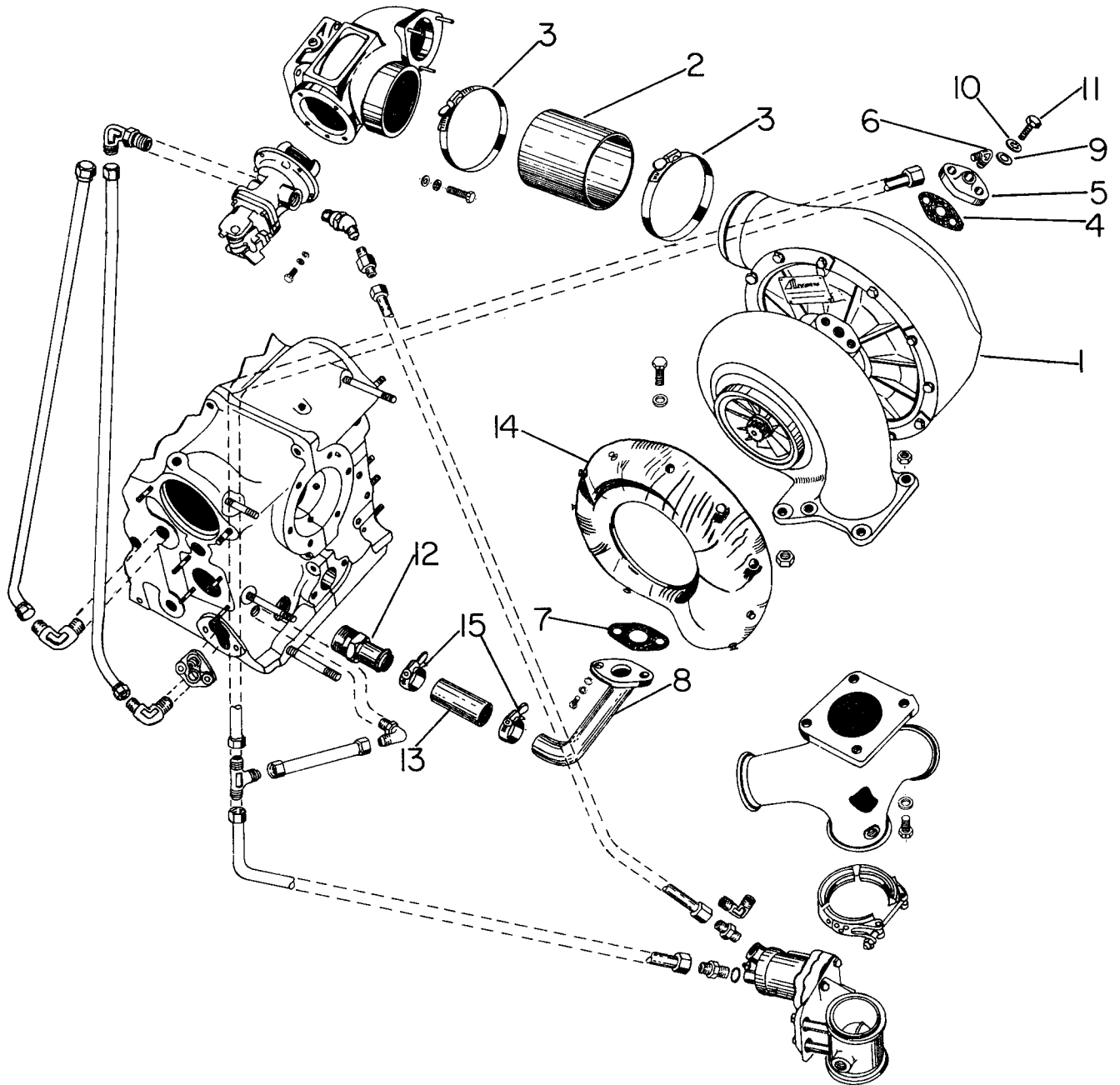


Figure 28 TURBOCHARGER ASSEMBLY
6-2



LYCOMING

TIGO-541 PARTS CATALOG

TURBOCHARGER, BYPASS VALVE AND EXHAUST MANIFOLDING TURBOCHARGER MOUNTING PARTS

FIG. REF.	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY															
			E/A															
1	LW-13649	BRACKET, Turbocharger and compressor	1															
		LW-13649 TO TURBO ATTACHING PARTS																
2	AN6C-25A	BOLT, Hex.hd.,3/8-24 x 2-49/64 in. long	2															
3	MS20500-624	NUT, Self-locking,3/8-24	2															
4	LW-10090	SHIM, Turbo mounting (3 max.)	un															
5	LW-13651	BRACKET, Turbocharger	1															
6	77067	DAMPER	1															
		LW-13649 TO LW-13651 ATTACHING PARTS																
7	STD-1421	BOLT, Hex.hd.,5/16-18 x 7/8 in. long	1															
8	STD-596	NUT, 3/8 plain	1															
	STD-678	WASHER, 3/8 lock	1															
9	LW-10066	SPACER, Turbocharger bracket	1															
		TURBO BRACKET TO CRANKCASE ATTACHING PARTS																
10	LW-10089	SPACER, 13/16 OD x 13/32 ID x 59/64 long	1															
11	LW-11105	LOCKPLATE, 3/8 in.dia.bolt	2															
12	STD-2128	BOLT, Hex.hd.,3/8-16 x 4-11/16 in. long	2															
13	STD-2045	NUT, Self-locking,3/8 in.	2															
14	78840	SUPPORT, Turbo strut	1															
		ATTACHING PARTS																
15	STD-1959	BOLT, Hex.hd.,3/8-16 x 1-5/8 in. long	1															
16	78592	LOCKPLATE, 3/8 in.bolt (between 78840 and STD-1959)	1															
17	STD-2045	NUT, Self-locking,3/8 in.	1															
18	LW-10836	STRUT, Turbocharger	1															
		ATTACHING PARTS																
19	STD-1115	BOLT, Hex.hd.,3/8-24 x 1-1/2 in.long	1															
20	STD-2045	NUT, Self-locking,3/8 in.	1															
21	78780	BRACKET, Turbocharger strut	1															
		TURBOCHARGER STRUT BRACKET TO TURBOCHARGER STRUT ATTACHING PARTS																
22	STD-2010	BOLT, Hex.hd.,5/16-18 x 1-9/16 in. long	1															

FIG. REF.	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY																	
			E1A																	
23	STD-2043	NUT, Self-locking, 5/16-18	1																	
24	STD-2157	BOLT, Hex. hd., 5/16-18 x 7/8 long (Use to replace existing turbo bolts to attach 78780 to turbo.)	2																	
25	LW-13652	SUPPORT, Turbo bracket	1																	
26	STD-475	WASHER, 5/16 internal lock	2																	
27	STD-1838	BOLT, 5/16-18 self-locking	2																	
28	STD-2045	NUT, 3/8-24 self-locking	1																	
29	LW-11904*	BUSHING, Compressor mount	6																	
30	LW-11905*	SPACER, Compressor mount bushings	3																	
31	LW-10961*	WASHER, 1-3/8 OD x 25/64 ID x 1/8 thick	3																	
32	LW-10074*	PLATE, Compressor	1																	
33	LW-11134*	BUSHING, Retaining	1																	
34	STD-2091*	BOLT, 3/8-24 x 2-7/16 long	3																	
35	511*	SPACER, Thrust bearing cap nut	3																	
36	STD-2045*	NUT, 3/8-24 self-locking	3																	

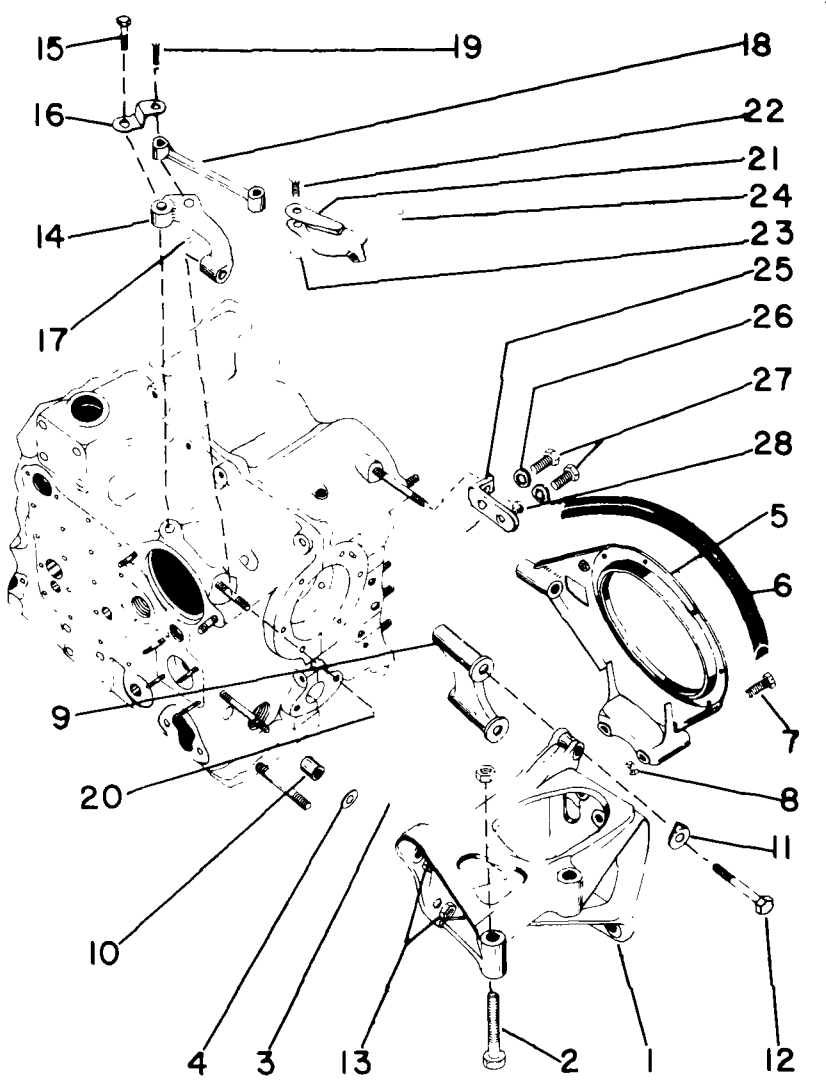


Figure 29

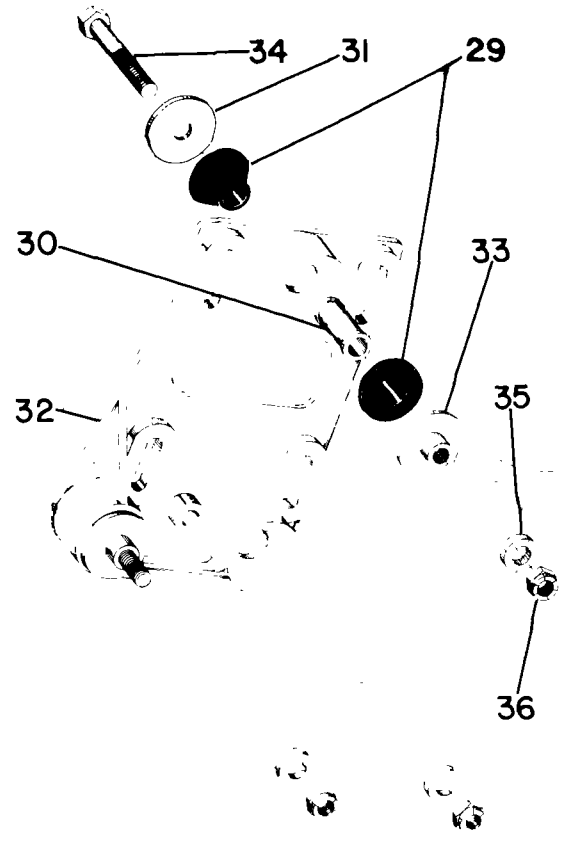


Figure 29A

* - Compressor mounting plate and related parts, to be used with turbo mounting bracket part no. LW-10063 only. See Service Bulletin No. 344.



TURBOCHARGER, BYPASS VALVE AND EXHAUST MANIFOLDING
EXHAUST BYPASS VALVE ASSEMBLY

FIG. REF.	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY																
			E/A																
1	LW-11016	TRANSITION ASSEMBLY	1																
2	LW-11015	STUD, No.10-24 NF x 7/8 in. long	2																
3	STD-1932	BUSHING, 1/4 to 1/8 NPT	1																
4	STD-405	PLUG, Square hd., drilled, 1/8-27 NPT	1																
5	AN960C-616	WASHER, Plain, 3/8 in.	8																
6	STD-1998	BOLT, Hex. hd., 3/8-24 x 1-7/16 in. long	4																
7	MS20500-624	NUT, Self-locking, 3/8-24	4																
8	LW-10759	VALVE ASSY., Exhaust bypass	1																
9	LW-12125-3	COUPLING, V-band, 2-1/4 in. tube	1																
10	LW-12093-6	COUPLING, V-band, 2-1/4 in. tube	1																
11	75845	GASKET, V-band coupling, 2-1/4 in. tube	2																
12	LW-12088	ELBOW, 3/8 in. tubing, adj., 45°	1																
13	LW-12877-6-066	HOSE ASSY., Waste gate to oil galley	1																
14	LW-13235	TEE, 1/4 in. and 3/8 in. tubing. Adj. with straight thread on side	1																
15	LW-12799-6-222	HOSE ASSY., Waste gate to turbo inlet	1																
16	75739	NIPPLE, 3/8 in. tube, std. thread	1																
17	LW-12799-6-150	HOSE ASSY.	1																
18	76734	ZIP STRAP	2																

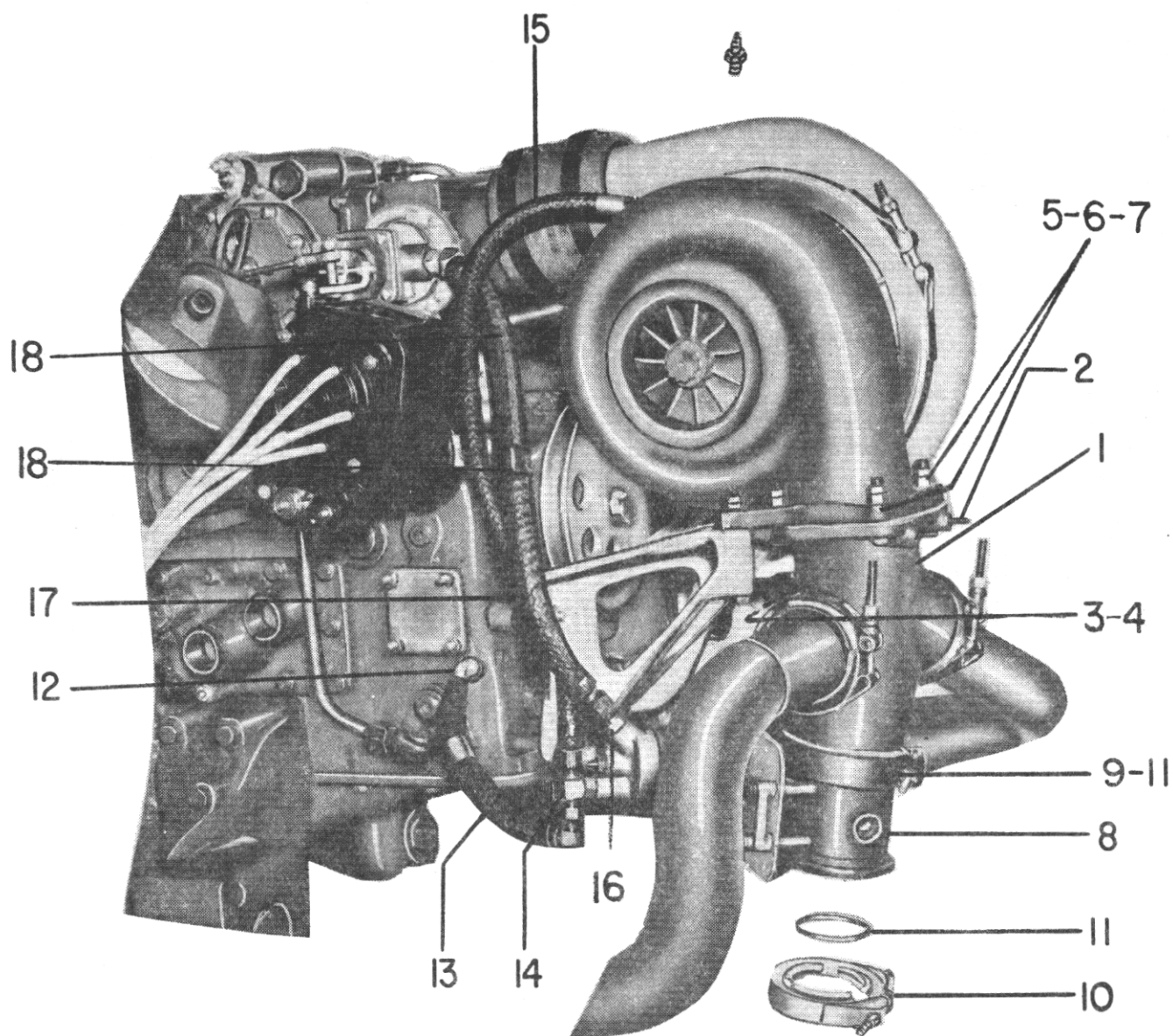


Figure 30 EXHAUST BYPASS VALVE ASSEMBLY



TURBOCHARGER, BYPASS VALVE AND EXHAUST MANIFOLDING
EXHAUST MANIFOLDING

FIG. REF.	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY																				
			E/A																				
1	78056	GASKET, Exhaust flange	12																				
2	LW-13055	MANIFOLD ASSY., Left	1																				
3	78004	PIPE, Exhaust,cyl.no.1	1																				
4	77930	ADAPTER, Exhaust pipe,cyl.head	1																				
5	78005	PIPE, Exhaust,cyl.no.3	1																				
6	78286	PIPE, Exhaust,cyl.no.5	1																				
7	78008	PIPE, Exhaust,left-rear	1																				
8	LW-13027	PIPE, Rear exhaust adapter	1																				
9	LW-13054	MANIFOLD ASSY., Right	1																				
10	77427	PIPE, Exhaust,cyl.no.2	1																				
11	77930	ADAPTER, Exhaust pipe,cyl.head	1																				
12	78287	PIPE, Exhaust,cyl.no.4	1																				
13	78011	PIPE, Exhaust,cyl.no.6	1																				
14	78012	PIPE, Exhaust,right-rear	1																				
15	LW-13027	PIPE, Rear exhaust,adapter	1																				
ATTACHING PARTS																							
16	STD-2044	NUT, Self-locking,1/4-20	24																				
17	LW-12093-5	COUPLING, V-band,2.00 in.tube	2																				
18	78083	GASKET, V-band coupling,2.00 in. tube	2																				
19	LW-14504	CLAMP, Exhaust pipe (2.10 ID)	2																				
20	LW-14525	CLAMP, Exhaust pipe (2.00 ID)	2																				
21	LW-14572	CABLE ASSY., Exhaust manifold retainer	2																				
22	STD-2178	WASHER, 1/4 plain	4																				
23	STD-2177	BOLT, 1/4-20 x 15/16 long,hex.hd.	4																				
24	STD-2044	NUT, 1/4 self-locking	4																				

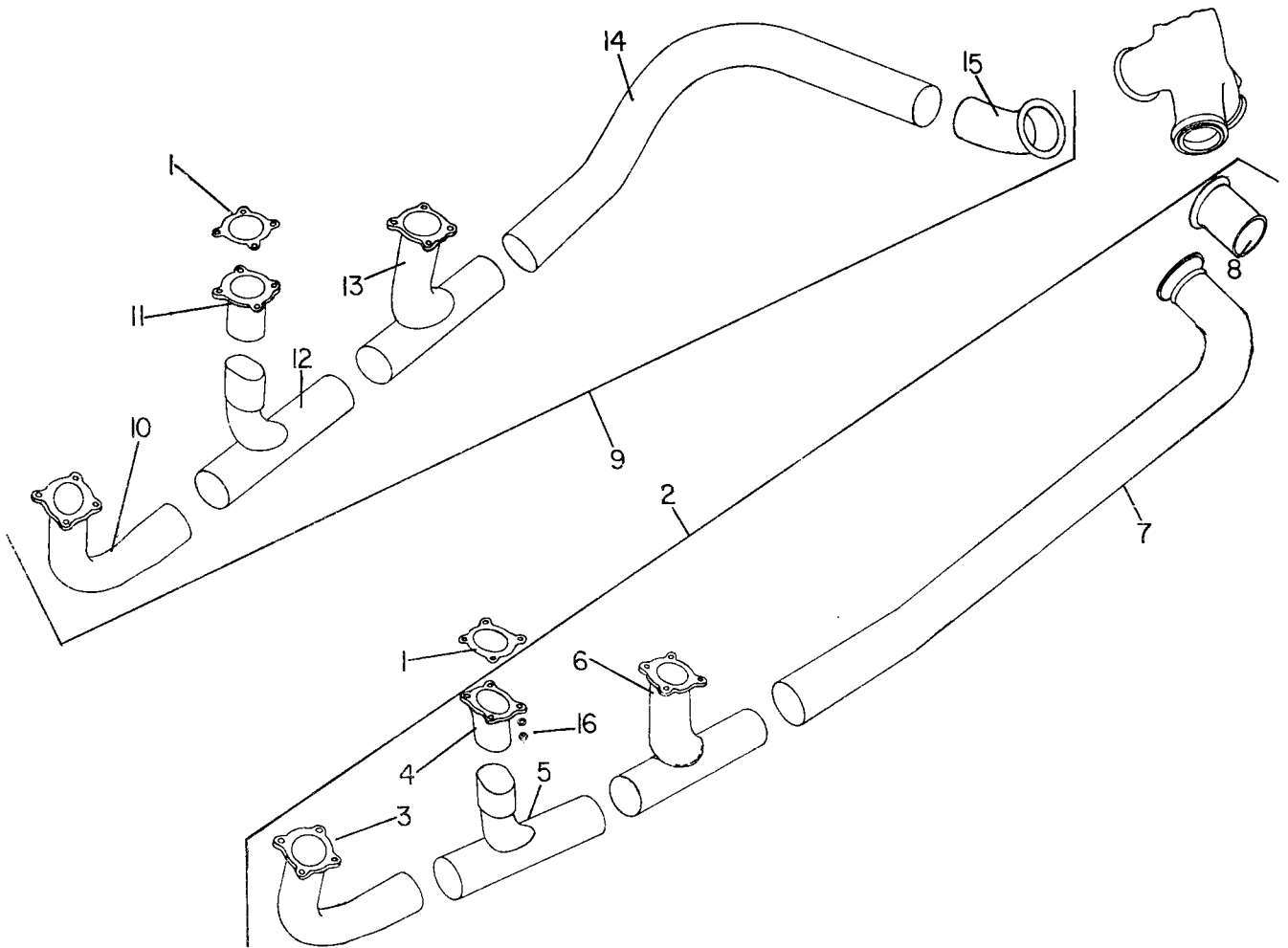
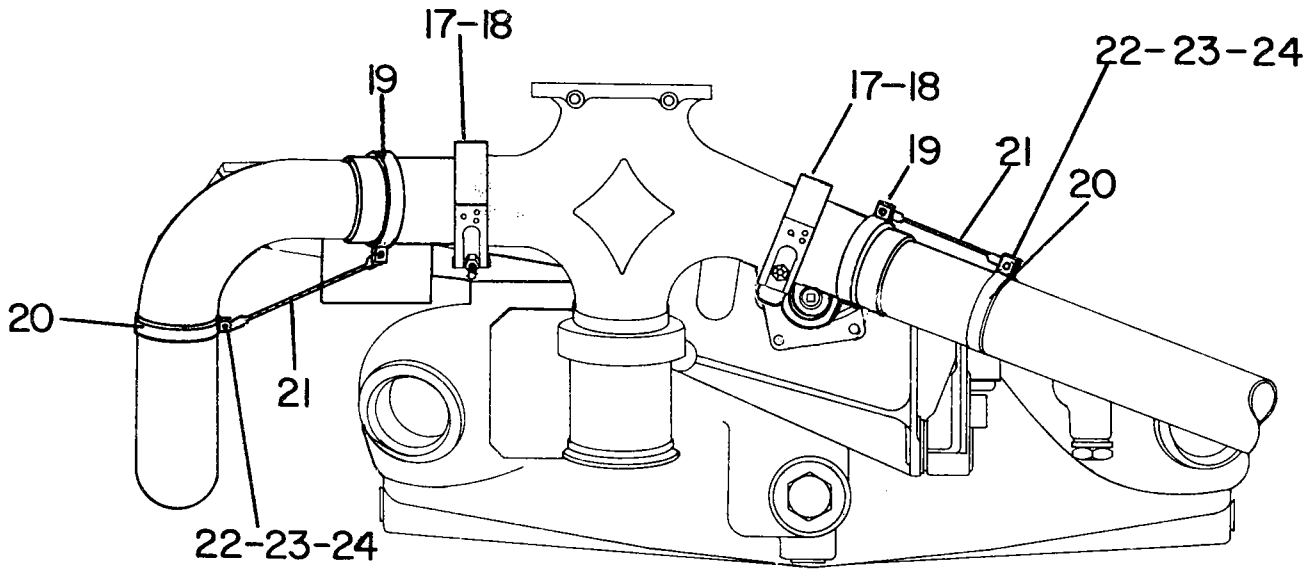


Figure 31 EXHAUST MANIFOLDING
6-8

SECTION 7

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PART NO.	PART NAME	PAGE NO.	PART NO.	PART NAME	PAGE NO.
AN3-7	Bolt	4-3	STD-8	Washer	1-7
AN3-14	Bolt	4-3	STD-8	Washer	1-8
AN6C-25A	Bolt	6-3	STD-8	Washer	1-14
AN380C4-6	Pin	3-1	STD-8	Washer	1-15
AN500A8-7	Screw	4-3	STD-8	Washer	1-18
AN737TW46	Clamp	6-1	STD-8	Washer	2-2
AN815-6	Union	4-3	STD-8	Washer	2-4
AN816-4	Nipple	2-6	STD-8	Washer	3-1
AN816-4	Nipple	5-1	STD-8	Washer	3-1
AN822-3	Elbow	4-5	STD-8	Washer	3-3
AN822-4	Elbow	5-1	STD-8	Washer	4-1
AN822-6-6	Elbow	4-4	STD-8	Washer	4-5
AN822-6	Elbow	6-1	STD-8	Washer	5-5
AN823-3	Elbow	4-5	STD-8	Washer	5-7
AN825-4	Tee	4-5	STD-28	Washer	1-15
AN840-17	Nipple	6-1	STD-28	Washer	4-1
AN901-10C	Gasket	3-3	STD-28	Washer	4-4
AN913-0S	Plug	1-1	STD-28	Washer	4-5
AN929-4	Cap	4-1	STD-28	Washer	4-7
AN931-4S16	Grommet	2-4	STD-28	Washer	5-3
AN931-12S23	Grommet	2-4	STD-33	Washer	1-5
AN932-5	Plug	3-1	STD-33	Washer	1-8
AN932-6	Plug	1-1	STD-33	Washer	4-4
AN960C-616	Washer	6-5	STD-33	Washer	5-5
AN960-1216	Washer	1-17	STD-33	Washer	6-1
AN4047-1	Gasket	5-5	STD-35	Washer	1-7
AN5007-20	Cone	1-11	STD-35	Washer	1-8
AN5008-20	Cone	1-11	STD-35	Washer	1-12
AN124001	Ring	5-5	STD-35	Washer	1-15
MS9047-977	Pin	5-5	STD-35	Washer	1-17
MS9047-104	Pin	4-3	STD-35	Washer	3-1
MS16624-1043	Ring	1-19	STD-35	Washer	4-7
MS16625-200	Ring	1-11	STD-35	Washer	5-5
MS16625-1081	Ring	4-1	STD-37	Nut	5-5
MS2000208	Washer	1-7	STD-63	Nut	4-3
MS20500-624	Nut	6-3	STD-68	Pin	4-3
MS20500-624	Nut	6-5	STD-82	Screw	1-15
MS28775-120	Ring	3-1	STD-122	Washer	4-3
MS28775-121	Ring	3-1	STD-143	Washer	1-7
MS28775-147	Ring	1-12	STD-148	Nipple	2-2
MS28775-148	Seal	1-14	STD-148	Nipple	4-5
MS29512-04	Seal	5-1	STD-160	Washer	1-3
MS29512-6	Seal	4-3	STD-160	Washer	1-5
MS29512-6	Seal	4-3	STD-160	Washer	1-7
MS29512-6	Seal	4-4	STD-160	Washer	1-19
MS29513-015	Ring	4-5	STD-160	Washer	1-14
MS29513-133	"O" Ring	1-11	STD-160	Washer	1-18
MS122200	Insert	4-1	STD-160	Washer	2-2
STD-8	Washer	1-3	STD-160	Washer	1-15
STD-8	Washer	1-5	STD-160	Washer	2-4

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PART NO.	PART NAME	PAGE NO.	PART NO.	PART NAME	PAGE NO.
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STD-160	Washer	3-3	STD-705	Bolt	1-13
STD-160	Washer	4-1	STD-705	Bolt	4-3
STD-160	Washer	4-3	STD-705	Bolt	5-3
STD-160	Washer	4-5	STD-761	Pin	1-17
STD-160	Washer	5-3	STD-783	Plug	4-3
STD-160	Washer	5-7	STD-784	Plug	1-1
STD-208	Seal	1-15	STD-784	Plug	4-4
STD-213	Seal	4-7	STD-820	Washer	4-1
STD-251	Washer	1-15	STD-859	Dowel	1-12
STD-251	Washer	4-4	STD-859	Dowel	5-5
STD-294	Gasket	1-3	STD-860	Screw	4-7
STD-294	Gasket	1-18	STD-969	Screw	4-8
STD-303	Nut	4-3	STD-997	Dowel	5-7
STD-355	Plug	1-1	STD-1003	Dowel	1-1
STD-375	Screw	4-4	STD-1004	Ring	1-12
STD-394	Dowel	1-17	STD-1004	Ring	5-5
STD-405	Plug	1-1	STD-1006	Seal	4-5
STD-405	Plug	3-3	STD-1025	Key	5-7
STD-405	Plug	6-5	STD-1035	Nut	1-17
STD-475	Washer	1-7	STD-1045	Gasket	1-3
STD-475	Washer	1-12	STD-1066	Dowel	1-9
STD-475	Washer	1-15	STD-1102	Plug	4-3
STD-475	Washer	1-17	STD-1115	Bolt	6-3
STD-475	Washer	2-4	STD-1133	Dowel	5-7
STD-475	Washer	4-3	STD-1164	Insert	4-1
STD-475	Washer	4-7	STD-1173	Insert	1-1
STD-475	Washer	5-1	STD-1173	Insert	3-1
STD-475	Washer	5-5	STD-1204	Bolt	1-15
STD-475	Washer	6-4	STD-1204	Bolt	4-1
STD-477	Bolt	1-9	STD-1204	Bolt	4-5
STD-514	Dowel	4-1	STD-1215	Bolt	4-1
STD-514	Dowel	5-7	STD-1215	Bolt	5-7
STD-547	Seal	1-19	STD-1272	Gasket	3-1
STD-551	Plug	3-1	STD-1339	Plug	1-1
STD-557	Dowel	1-14	STD-1339	Plug	5-5
STD-589	Gasket	3-3	STD-1342	Spacer	1-17
STD-596	Nut	5-5	STD-1353	Insert	1-1
STD-596	Nut	6-3	STD-1409	Nut	3-1
STD-670	Nut	4-5	STD-1410	Nut	1-15
STD-670	Nut	4-7	STD-1410	Nut	1-12
STD-670	Nut	5-3	STD-1410	Nut	4-7
STD-670	Washer	6-1	STD-1410	Nut	5-1
STD-676	Washer	4-4	STD-1411	Nut	1-3
STD-678	Washer	1-5	STD-1411	Nut	1-5
STD-678	Washer	1-8	STD-1411	Nut	1-7
STD-678	Washer	5-5	STD-1411	Nut	2-2
STD-678	Washer	6-3	STD-1411	Nut	1-14
STD-679	Bolt	1-9	STD-1411	Nut	3-3
STD-696	Washer	1-19	STD-1411	Nut	4-1

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PART NO.	PART NAME	PAGE NO.	PART NO.	PART NAME	PAGE NO.
STD-1411	Nut	4-3	STD-1952	Bolt	3-3
STD-1411	Nut	4-5	STD-1955	Bolt	3-1
STD-1411	Nut	5-7	STD-1957	Bolt	4-4
STD-1412	Screw	2-4	STD-1959	Bolt	6-3
STD-1414	Bolt	1-7	STD-1968	Bolt	2-4
STD-1419	Bolt	1-7	STD-1968	Bolt	5-3
STD-1420	Nut	1-8	STD-1979	Bolt	1-7
STD-1421	Bolt	6-3	STD-1984	Dowel	1-1
STD-1499	Bolt	1-3	STD-1986	Insert	1-18
STD-1530	Clamp	2-4	STD-1989	Insert	3-3
STD-1575	Bolt	1-5	STD-1994	Bolt	1-5
STD-1575	Bolt	1-7	STD-1998	Bolt	6-5
STD-1650	Bolt	5-3	STD-2001	Bolt	3-1
STD-1685	Nut	2-4	STD-2003	Bolt	3-1
STD-1685	Nut	5-3	STD-2004	Bolt	3-1
STD-1688	Bolt	1-18	STD-2005	Bolt	3-1
STD-1688	Bolt	3-1	STD-2010	Bolt	6-3
STD-1688	Bolt	3-3	STD-2015	Bolt	1-7
STD-1727	Washer	4-3	STD-2027	Bolt	4-1
STD-1733	Ring	1-3	STD-2028	Bolt	4-1
STD-1737	Ring	1-13	STD-2035	Dowel	1-1
STD-1756	Washer	4-3	STD-2037	Bolt	1-5
STD-1774	Pin	1-1	STD-2039	Bolt	3-1
STD-1800	Ring	1-13	STD-2042	Bolt	4-1
STD-1828	Bolt	4-3	STD-2043	Nut	6-4
STD-1830	Bolt	1-7	STD-2044	Nut	6-7
STD-1838	Bolt	6-4	STD-2044	Nut	6-7
STD-1849	Insert	3-3	STD-2045	Nut	1-15
STD-1864	Nut	1-8	STD-2045	Nut	6-3
STD-1872	Insert	2-2	STD-2045	Nut	6-4
STD-1872	Insert	3-3	STD-2053	Bolt	1-5
STD-1875	Bolt	1-19	STD-2055	Bolt	1-5
STD-1875	Bolt	2-2	STD-2057	Key	1-17
STD-1875	Bolt	2-4	STD-2059	Screw	2-3
STD-1887	Bolt	3-1	STD-2068	Screw	5-5
STD-1887	Bolt	4-1	STD-2076	Key	1-11
STD-1896	Screw	4-1	STD-2081	Screw	5-3
STD-1896	Screw	4-3	STD-2084	Bolt	1-7
STD-1901	Drive Stud	4-4	STD-2084	Bolt	1-18
STD-1925	Screw	2-2	STD-2090	Nut	1-7
STD-1932	Bushing	6-5	STD-2090	Nut	2-2
STD-1934	Seal	1-17	STD-2107	Bolt	1-5
STD-1940	Washer	1-7	STD-2111	Bolt	1-5
STD-1941	Pin	3-1	STD-2117	Clamp	1-15
STD-1943	Dowel	1-1	STD-2125	Nut	2-4
STD-1946	Bolt	6-1	STD-2128	Bolt	1-5
STD-1948	Bolt	1-7	STD-2128	Bolt	6-3
STD-1948	Bolt	1-18	STD-2134	Insert	4-1
STD-1951	Bolt	1-7	STD-2157	Bolt	6-4
STD-1952	Bolt	1-7	STD-2166	Elbow	4-5

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10-4093	Washer	5-1	1028B	Bali	1-3
10-32326	Spring	5-3	1102	Plug	1-1
10-78916	Bracket	5-3	1102	Plug	4-1
10-94225-2	Spring	5-3	1182K4	Spark Plug	5-3
10-89027-4	Bracket	5-3	1540	Plug	1-18
10-163011	Ferrule	5-3	8313	Gasket	1-15
10-163012	Eyelet	5-3	60009	Key	2-2
10-163151	Nut	5-1	60096	Gasket	4-4
10-320232	Clamp	5-3	60430	Cover	1-15
10-320297-2	Clamp	5-3	61261	Stud	1-1
10-320298-2	Clamp	5-3	61548	Plate	4-4
10-320298-3	Clamp	5-3	62254	Clip	4-5
10-320299-1	Clamp	5-3	65819	Bushing	2-1
10-320416-1	Clamp	5-3	66670	Bushing	2-2
10-320432-1	Clamp	5-3	66732	Gasket	2-2
10-320476-1	Clamp	5-3	67528	Stud	1-1
10-320573-3	Elbow	5-3	68437	Stud	1-1
10-320582	Sleeve	5-3	68510	Stud	1-1
10-320601	Ferrule	5-3	69208	Coupling	5-1
10-320602	Ferrule	5-3	69260-P10	Insert	2-2
10-349226	Grommet	5-3	69565	Sleeve	5-1
10-349661-2	Plate	5-3	69641	Dowel	1-9
10-620633-48	Lead	5-3	69943	Stud	1-1
10-620633-72	Lead	5-3	70310	Seal	2-2
10-90751-19	Pin	5-1	70455	Gasket	1-19
10-90788-5	Key	5-1	70457	Gasket	1-3
25C-8	Stud	2-2	70474	Washer	1-13
25C-9	Stud	1-1	71140	Fitting	3-1
25C-10	Stud	1-1	71481	Ring	2-2
25C-10	Stud	2-2	71549	Washer	2-3
25C-11	Stud	1-19	71610	Hook	2-4
25C-12	Stud	1-1	71611	Retainer	2-4
25C-12	Stud	5-7	71621	Clip	1-3
25C-18	Stud	1-1	71894	Seat	2-2
25CD-18	Stud	1-1	71903	Bushing	1-9
31-12	Stud	5-5	71906	Ring	1-9
31C-17	Stud	1-1	71907	Washer	1-9
31CD-20	Stud	1-1	71973	Gasket	4-1
38-13	Stud	1-1	72036	Clip	4-5
38-14	Stud	1-1	72053	Gasket	1-15
38-17	Stud	1-1	72075	Seal	1-8
38-18	Stud	1-1	72075	Seal	1-14
38-23	Stud	1-1	72078	Lockplate	1-9
38-25	Stud	1-1	72198	Plug	2-1
38-28	Stud	1-1	72217	Bearing	2-1
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72706	Insert	2-2	75539	Adapter	5-5
72707	Eye	1-5	75546	Gear	1-11
72709	Screw	2-2	75553	Gear	1-11
72710	Cover	2-2	75557	Gear	1-11
72711	Ring	4-1	75562	Gear	1-11
72741	Gasket	1-15	75566	Coupling	5-7
73032	Gasket	4-3	75585	Gasket	3-1
73051	Pin	5-7	75618	Cap	1-11
73152	Bracket	5-3	75619	Shim	1-11
73314	Gasket	4-4	75631	Roller	1-9
73650	Clip	4-5	75637	Counterweight	1-9
73650	Clamp	4-7	75655	Washer	5-7
73772	Nozzle	1-1	75660	Spacer	4-1
73857	Ring	2-1	75670	Crankshaft Assy.	1-9
74070	Elbow	4-1	75688	Strap	1-5
74070	Elbow	4-4	75712	Stud	1-7
74117	Bracket	4-7	75713	Stud	1-7
74241	Ring	2-1	75714	Stud	1-7
74360	Flange	4-1	75739	Nipple	6-5
74494	Plate	2-3	75741	Pipe	4-1
74722	Gear	1-13	75742	Pipe	4-1
74755	Gear	1-13	75743	Pipe	4-1
74768	Gear	1-9	75744	Pipe	4-1
74769	Gear	1-9	75745	Pipe	4-1
74770	Lockplate	1-9	75746	Pipe	4-1
74876	Bushing	1-9	75747	Gear	1-13
74887	Spacer	2-2	75768	Support	4-3
74888	Stud	1-7	75771	Spacer	4-3
74906	Gasket	2-2	75782	Stud	1-7
74926	Washer	1-13	75791	Rod	4-3
74929	Washer	1-19	75795	Lever	4-3
74944	Gasket	4-3	75799	Stud	1-7
75087	Spring	4-5	75822	Spring	1-11
75145	Dowel	3-1	75843	Nut	1-12
75170	Bolt	1-7	75845	Gasket	6-5
75359	Dowel	1-9	75890	Gasket	4-5
75371	Gasket	6-1	75940	Tube	4-3
75395	Gear	1-12	75948	Tee	4-1
75462	Bushing	1-9	75955	Plug	4-1
75467	Coupling	5-1	75957	Ring	4-1
75473	Shaft Gear	5-1	75965	Clamp	5-1
75500	Gear Assy.	5-5	76036	Gasket	2-3
75508	Gear	1-13	76038	Cover	2-3
75510	Shaft	5-7	76077	Guide	2-2
75517	Bearing	1-9	76093	Seat	2-2
75519	Bearing	1-9	76180	Rod Assy.	2-2
75521	Coupling	5-7	76181	Rod Assy.	2-2
75536	Bushing	5-5	76182	Rod Assy.	2-2

SECTION 7

NUMERICAL INDEX (CONT.)

PART NO.	PART NAME	PAGE NO.	PART NO.	PART NAME	PAGE NO.
76183	Rod Assy.	2-2	77427	Pipe	6-7
76194	Shaft	4-3	77454	Slinger	1-11
76195	Support	4-3	77537	Adapter	4-4
76230	Bushing	1-17	77607	Sleeve	3-3
76240	Adapter	1-17	77622	Support	4-1
76242	Bushing	2-2	77623	Lug	4-1
76266	Rocker Assy.	2-2	77644	Screen	3-1
76286	Seat	4-1	77645	Plug	3-1
76288	Spring	4-1	77646	Dowel	3-1
76291	Cover	4-1	77663	Bracket	1-5
76292	Valve	4-1	77664	Bracket	1-5
76399	Valve	4-1	77678	Bracket	1-5
76422	Elbow	4-7	77677	Bracket	1-5
76423	Baffle	2-2	77707	Gasket	1-17
76528	Gear	5-7	77741	Support	4-3
76539	Seat	3-3	77808	Valve Assy.	1-3
76541	Plug	3-3	77870	Shaft	5-7
76542	Spring	3-3	77898	Body	3-1
76546	Gasket	1-15	77900	Housing	5-7
76549	Adapter	3-3	77921	Tube	4-1
76557	Plug	2-4	77930	Adapter	6-7
76715	Nut	1-11	77941	Manifold	4-5
76734	Strap	2-6	77942	Manifold	4-5
76734	Strap	6-5	77987	Bearing	5-7
76815	Stud	5-7	78004	Pipe	6-7
76824	Shaft	3-1	78005	Pipe	6-7
76835	Bushing	5-7	78008	Pipe	6-7
76836	Washer	5-7	78011	Pipe	6-7
76842	Coupling	5-7	78012	Pipe	6-7
76869	Tube	4-7	78056	Gasket	6-7
76889	Adapter	6-1	78060	Relay	5-5
76925	Shaft	1-13	78067	Elbow	4-7
76964	Shaft	3-1	78083	Gasket	6-7
76967	Lockplate	1-13	78199	Bushing	1-19
76968	Bushing	1-9	78286	Pipe	6-7
76970	Impeller	3-1	78287	Pipe	6-7
76971	Impeller	3-1	78361	Bracket	1-3
76996	Shaft Gear	1-13	78370	Spacer	4-3
77001	Bushing	1-9	78447	Eye	1-5
77002	Counterweight	1-9	78488	Spacer	1-5
77004	Washer	1-9	78523	Elbow	4-7
77005	Ring	1-9	78585	Shaft	1-17
77007	Roller	1-9	78592	Lockplate	6-3
77015	Gear Assy.	1-11	78692	Baffle	2-4
77016	Adapter	1-11	78780	Bracket	6-3
77067	Damper	6-3	78789	Plate	5-7
77156	Protector	5-3	78791	Starter	5-7
77217	Gear	1-13	78840	Support	6-3
77224	Plug	1-13	78844	Hose	1-15
77309	Bushing	1-13	78858	Adapter	4-3

SECTION 7

NUMERICAL INDEX (CONT.)

PART NO.	PART NAME	PAGE NO.	PART NO.	PART NAME	PAGE NO.
79046	Guide	2-2	LW-11138	Spring	1-3
LW-25H.75	Bolt	3-1	LW-11155	Sump	3-1
LW-31-1.09	Bolt	1-17	LW-11198	Element	3-3
LW-31-1.09	Bolt	4-3	LW-11256	Bushing	1-1
LW-10042	Connector	2-6	LW-11329	Gear	5-7
LW-10044	Tee	2-6	LW-11373	Hose	6-1
LW-10045	Elbow	2-6	LW-11446	Shield	4-3
LW-10066	Spacer	6-3	LW-11508	Fuel Injector	4-3
LW-10076	Seat	2-2	LW-11515	Hose	5-7
LW-10077	Seat	2-2	LW-11576	Bearing	1-9
LW-10080	Gage	1-3	LW-11602	Lockplate	4-1
LW-10081	Gage	1-3	LW-11665	Button	2-3
LW-10089	Spacer	6-3	LW-11678	Shaft	1-19
LW-10090	Shim	6-3	LW-11679	Adapter	1-19
LW-10122	Gasket	6-1	LW-11738	Seal	1-11
LW-10123	Tube	1-11	LW-11739	Tube	1-11
LW-10179	Regulator	5-5	LW-11778	Washer	5-5
LW-10256	Alternator	5-5	LW-11780	Bushing	1-12
LW-10259	Adapter	5-5	LW-11781	Spacer	1-12
LW-10261	Adapter	5-5	LW-11784	Adapter	1-12
LW-10264	Gasket	5-5	LW-11798	Spring	2-2
LW-10375	Elbow	2-6	LW-11799	Spring	2-2
LW-10383	Ext. Assy.	1-3	LW-11838	Tube	4-7
LW-10385	Chain	1-3	LW-11873	Tube	1-15
LW-10391	Cap Assy.	1-3	LW-11874	Breather	1-15
LW-10455	Gasket	1-19	LW-11886	Tube	1-3
LW-10516	Pulley	1-17	LW-11950	Controller	4-4
LW-10526	Cap Assy.	1-3	LW-11952	Washer	1-12
LW-10539	Clamp	4-4	LW-11953	Drive Assy.	1-12
LW-10539	Clamp	6-1	LW-11954	Tube	6-1
LW-10545-S	Piston	2-1	LW-11980	Nozzle	4-1
LW-10647	Dowel	1-1	LW-12085	Switch	5-7
LW-10727	Seal	1-12	LW-12088	Elbow	6-5
LW-10727	Seal	5-5	LW-12093-5	Coupling	6-7
LW-10734	Dowel	1-1	LW-12093-6	Coupling	6-5
LW-10738	Baffle	3-1	LW-12094	Hose	2-4
LW-10753	Shield	4-3	LW-12095	Hose	2-4
LW-10758	Tube	4-4	LW-12098-1-100	Tube	4-5
LW-10759	Valve	6-5	LW-12098-4-124	Tube	4-5
LW-10796	Lever	4-3	LW-12098-1-183	Tube	4-5
LW-10797	Control Shaft	4-3	LW-12098-1-200	Tube	4-5
LW-10799	Spacer	4-7	LW-12122	Seal	1-11
LW-10836	Strut	6-3	LW-12125-3	Coupling	6-5
LW-10937	Lifter	1-5	LW-12136	Cushion	5-1
LW-10937	Lifter	2-2	LW-12154	Hose	4-4
LW-10955	Belt	1-17	LW-12154	Hose	6-1
LW-11015	Stud	6-5	LW-12186	Nut	2-1
LW-11016	Transition	6-5	LW-12258	Housing	3-3
LW-11082	Valve	2-2	LW-12259	Plate	3-3
LW-11105	Lockplate	6-3	LW-12262	Bolt	3-3

SECTION 7

NUMERICAL INDEX (CONT.)

PART NO.	PART NAME	PAGE NO.	PART NO.	PART NAME	PAGE NO.
LW-12309	Rod	4-3	LW-13342	Housing	4-5
LW-12440	Camshaft	1-9	LW-13344	Plunger	4-5
LW-12515	Gasket	1-18	LW-13422	Rod	2-1
LW-12517	Gasket	3-3	LW-13429	Rod	4-3
LW-12518	Race	1-11	LW-13439	Cover	1-14
LW-12519	Gear Assy.	1-11	LW-13440	Thrust Bearing	1-14
LW-12596	Bolt	2-1	LW-13441	Seat	1-14
LW-12681	Gasket	5-1	LW-13519	Shim	1-14
LW-12688	Seat	2-2	LW-13561	Cyl. Assy.	2-2
LW-12745	Valve	4-4	LW-13565	Spring	2-2
LW-12784-4-074	Hose	5-1	LW-13566	Adapter	2-2
LW-12784-4-110	Hose	5-1	LW-13615	Nozzle	1-1
LW-12798-4-222	Hose	2-6	LW-13649	Bracket	6-3
LW-12799-6-150	Hose	6-5	LW-13651	Bracket	6-3
LW-12799-6-222	Hose	6-5	LW-13652	Support	6-4
LW-12876-4-066	Hose	2-6	LW-13760	Sleeve	4-3
LW-12876-4-224	Hose	2-6	LW-13889	Housing	4-1
LW-12877-6-066	Hose	6-5	LW-13896	Plug	1-19
LW-12896	Seat	1-18	LW-13904	Kit	3-3
LW-13022	Valve	3-1	LW-13905	Filter	3-3
LW-13024	Pump	3-1	LW-13919	Pump	4-7
LW-13026	Cover	3-1	LW-13997-3	Key	2-2
LW-13027	Pipe	6-7	LW-13998-3	Cap	2-2
LW-13037	Tube	4-3	LW-14044	Washer	1-7
LW-13052	Plate	1-15	LW-14052	Crankcase Assy.	1-1
LW-13054	Manifold	6-7	LW-14054	Clamp	6-7
LW-13055	Manifold	6-7	LW-14074	Adapter	5-1
LW-13060	Blanket	6-1	LW-14078	Pin	2-1
LW-13081	Prop. Shaft	1-11	LW-14464	Coupling	5-5
LW-13087	Valve	2-2	LW-14472	Spring	5-5
LW-13134	Valve	5-1	LW-14525	Clamp	6-7
LW-13234	Turbocharger	6-1	LW-14572	Cable	6-7
LW-13235	Tee	6-5	LW-349290-2	Mag	5-1
LW-13247	Housing	1-18	LW-349310-4	Mag	5-1
LW-13321	Seat	2-2	LW-349490-1	Mag	5-1
LW-13230	Valve Assy.	1-18	LW-349510-1	Mag	5-1
LW-13335	Bearing	1-11	LW-349610-1	Mag	5-1
LW-13339	Shroud Tube	2-2	LW-620580-1	Cable	5-3
LW-13340	Washer	2-2	LW-620580-11	Harness	5-1

AVCO LYCOMING TIGO-541 PARTS CATALOG

VENDOR ACCESSORY

STARTER 24V, PRESTOLITE
 PRESTOLITE P/N - MHB-4005
 AVCO LYCOMING P/N - 78791

REF. NO.	PART NUMBER	DESCRIPTION	QTY. PER ENG.	MODEL USAGE
	MHB-4005	STARTER, 24 volt, Prestolite, Avco Lycoming P/N 78791	1	
1	MHB-2399	ARMATURE	1	
2	MZ-24A	BAND, Cover	1	
	X-3212	BEARING, Ball, sealed, commutator end	1	
3	MHB-2418	FRAME AND FIELD ASSEMBLY	1	
	MHB-3005BS	FIELD COIL PACKAGE	1	
4	P90-878	TERMINAL STUD PACKAGE	1	
5	MHB-2400A	HEAD ASSEMBLY, Commutator end	1	
6	MZ-19S	SPRING SET, Brush	1	
7	MHB-1030	HOUSING ASSEMBLY, Gear	1	
	XA-997	BEARING, Needle, 1/2 in.	1	
8	XA-998	BEARING, Needle, 13/16 in.	1	
	P90-601	THRUST WASHER PACKAGE	1	
9	MHB-2012AS	BRUSH SET, Service	1	

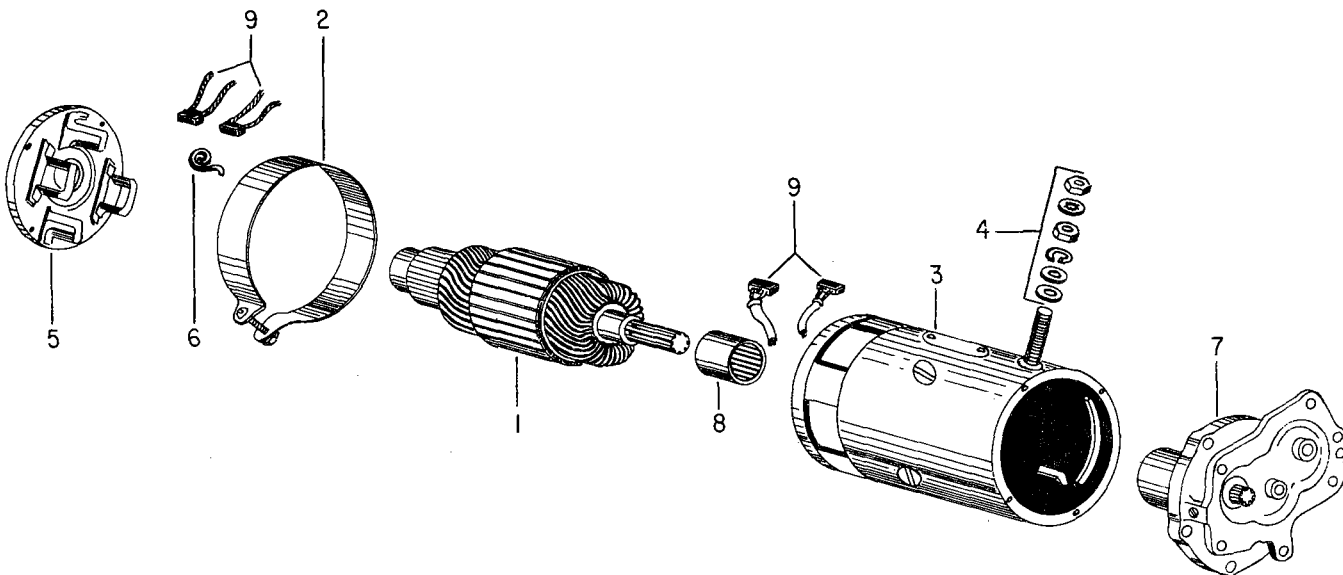


Figure 32. Starter, 24V, Prestolite

AVCO LYCOMING TIGO-541 PARTS CATALOG

VENDOR ACCESSORY

ALTERNATOR 24V-100AMP PRESTOLITE
 PRESTOLITE P/N - ALV-9401-L
 AVCO LYCOMING P/N - LW-10256

REF. NO.	PART NUMBER	12345	DESCRIPTION	QTY.	MODEL USAGE
				PER ENG.	
	ALV-9401-L		ALTERNATOR, 24V, 100Amp, Prestolite, Avco Lycoming P/N LW-10256	1	
1	ALV-2006		ROTOR ASSEMBLY	1	
2	ALV-1012S		BRUSH SET, Service	1	
3	ALV-1002S		HEAD ASSEMBLY, Slip ring end	1	
4	X-4087		BEARING, Ball, slip ring end	1	
5	ALV-1003		HEAD ASSEMBLY, Drive end	1	
6	X-4086		BEARING, Ball, sealed	1	
7	ALV-2008		STATOR ASSEMBLY	1	
8	ALV-1015		BRUSH HOLDER AND BRACKET	1	
9	AMA-19S		SPRING SET, Brush	1	
10	ALV-1004		PLATE AND RECTIFIER ASSY., Positive	1	
11	ALV-1004A		PLATE AND RECTIFIER ASSY., Negative	1	
12	GJT-47		COVER, Bearing, slip ring end	1	
13	GR-32		RETAINER, Slip ring end	1	
14	P90-2046		TERMINAL STUD AND PARTS PACKAGE	1	
15	ALV-21		SPACER, Rotor shaft	1	
16	8X-4075		NUT, Rotor shaft, hex, 5/8-32	1	
17	XA-1104		SEAL, Oil	1	
18	XA-744AZ		SEAL, "O" ring	1	
19	XA-744AB		SEAL, "O" ring, bearing, 1-3/4 in. OD	1	
20	MES-98S		LOCK TAB PACKAGE (25 pieces)	1	
21	P90-818		EYELET PACKAGE	1	
22	ALB-20AS-1		THRU BOLT PACKAGE	1	
23	VSF-7403S		REGULATOR	1	

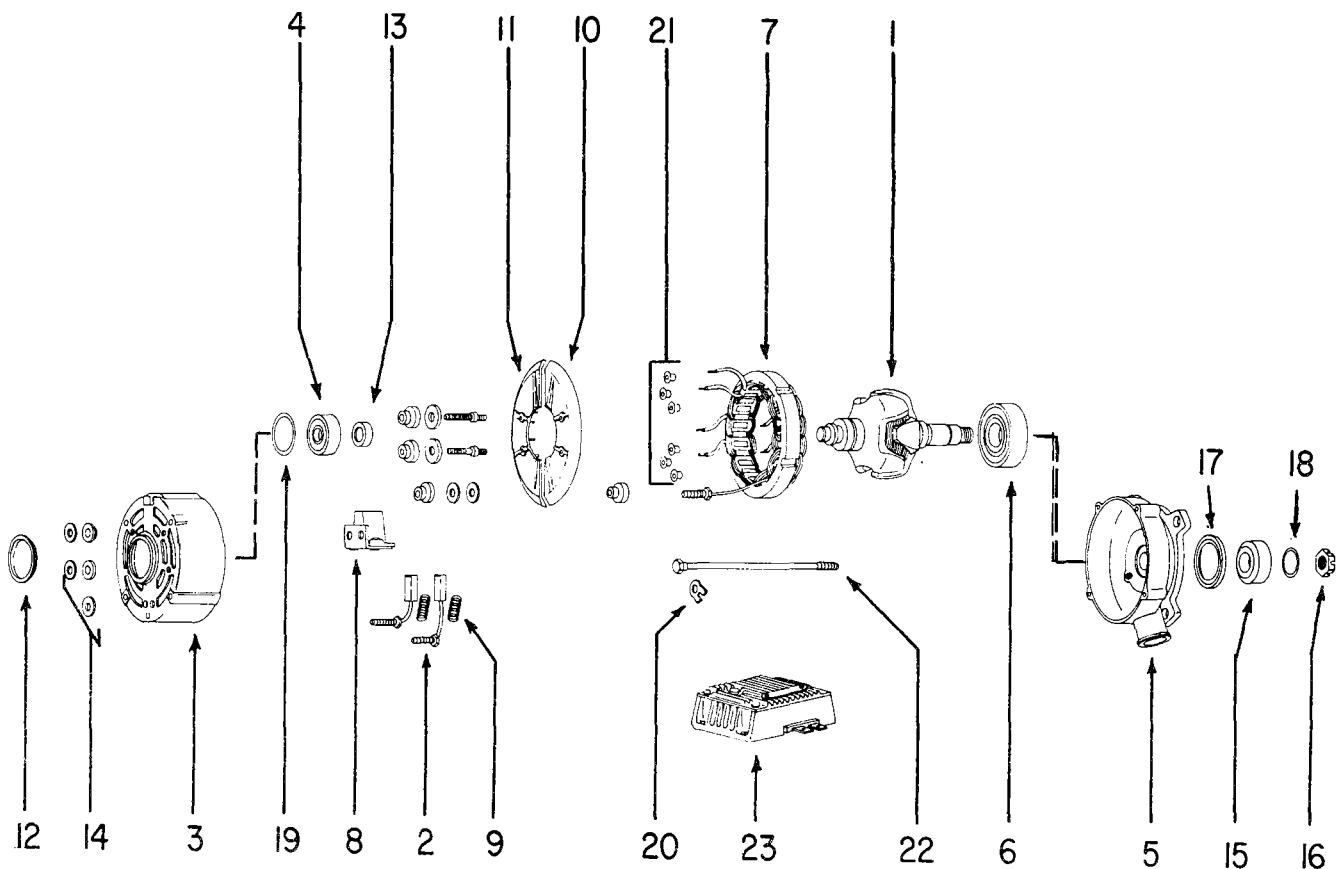


Figure 33. Alternator, 24V, 100Amp, Prestolite

AVCO LYCOMING TIGO-541 PARTS CATALOG

VENDOR ACCESSORY

MAGNETOS, BENDIX -1200 SERIES
 BENDIX S6RN-1209 (RIGHT) 10-349310-4
 BENDIX S6LN-1208 (LEFT) 10-349290-2
 AVCO LYCOMING P/N's - LW-349310-4, LW-349290-2

REF. NO.	PART NUMBFR	12345	DESCRIPTION	QTY. PER ENG.	MODEL USAGE
	10-349310-4		MAGNETO, S6LN-1208, Bendix, Avco Lycoming P/N LW-349290-2	1	A
	10-349290-2		MAGNETO, S6RN-1209, Bendix, Avco Lycoming P/N LW-349310-4	1	B
1	10-34937-24		SCREW, With lockwasher	1	
2	10-92873-302		NUT	4	
3	10-92873-302		NUT	1	B
4	10-90701-5		WASHER	8	
5	10-349393-2		COVER, Magneto	1	A
5	10-349393-1		COVER, Magneto	1	B
6	10-125996		BUSHING, Retard lead securing screw	1	B
7	10-34937-12		SCREW, Retard lead securing	1	B
8	10-16092		WASHER, Retard lead securing screw	1	B
9	10-349269		LEAD, Retard	1	B
10	10-35935-6		SCREW, Capacitor securing	2	
11	10-349276		CAPACITOR	1	
12	10-349263		PACKING, Capacitor mounting	1	
13	10-349221		STUD, Double end	4	
14	10-78655		WASHER, Stud securing	4	
15	10-92815-37		RING, Retaining (gear axle)	1	
16	10-349511		WASHER, (Gear axle)	1	
17	10-50752		WASHER, Felt (gear axle)	1	
18	10-349212		BLOCK, Distributor (6 cyl.)	1	
19	10-50737		SPRING, Helical	6	
20	10-162374		STRIP, Felt	1	
21	10-349237		GEAR ASSEMBLY, Large	1	
22	10-160844		BRUSH, Carbon	1	
23	10-35936-7		SCREW	2	A
23	10-35936-7		SCREW	4	B
24	10-14268		WASHER, Contact assembly securing screw	1	A
24	10-14268		WASHER, Contact assembly securing screw	2	B
25	10-382584		CONTACT ASSEMBLY, Left hand	1	A
25	10-382585		CONTACT ASSEMBLY, Right hand	1	B
26	10-35936-10		SCREW, Cam securing	1	
27	10-51354		WASHER, Cam securing screw	1	
28	10-349243-1		CAM	1	
29	10-349326		STRIP, Fish paper	1	
30	10-349219		WEDGE, (Coil)	2	
31	10-349271		COIL, Magneto (high tension)	1	
32	10-90751-19		PIN, Cotter	1	
33	10-163151		NUT, Castellated	1	
34	10-90788-5		KEY, Woodruff, drive shaft	1	
35	10-4093		WASHER, Drive shaft nut	1	
36	10-92815-62		RING, Retaining	1	
37	10-349328		WASHER, Flat (flange)	1	
38	10-349249		WASHER, Bowed (flange)	1	
39	10-349248		SLINGER, Oil	1	
40	10-349652		SCREW, (Flanged securing)	3	
41	10-53397		WASHER, Flange securing screw	3	
42	10-349392-2		FLANGE, Short round	1	
43	10-353056		BEARING, Magneto drive end	1	
44	10-349247		PLATE, Bearing retaining	1	
45	10-349351-3		MAGNET, Rotating	1	
46	10-349242		GEAR, Distributor (small)	1	
47	10-157134		VENTILATOR	1	
48	10-157135		PLUG, Timing	1	
49	10-90500-8		SCREW	2	
50	10-70616		PLATE, Identification	1	

AVCO LYCOMING TIGO-541 PARTS CATALOG

VENDOR ACCESSORY

MAGNETOS, BENDIX -1200 SERIES (CONT.)
 BENDIX S6RN-1209 (RIGHT) 10-349310-4
 BENDIX S6LN-1208 (LEFT) 10-349290-2
 AVCO LYCOMING P/N's - LW-349310-4, LW-349290-2

REF. NO.	PART NUMBER	DESCRIPTION	QTY. PER ENG.	MODEL USAGE
51	10-353060	BEARING, Roller	1	
52	10-349394-3	HOUSING, Magneto	1	A
52	10-349394-2	HOUSING, Magneto	1	B

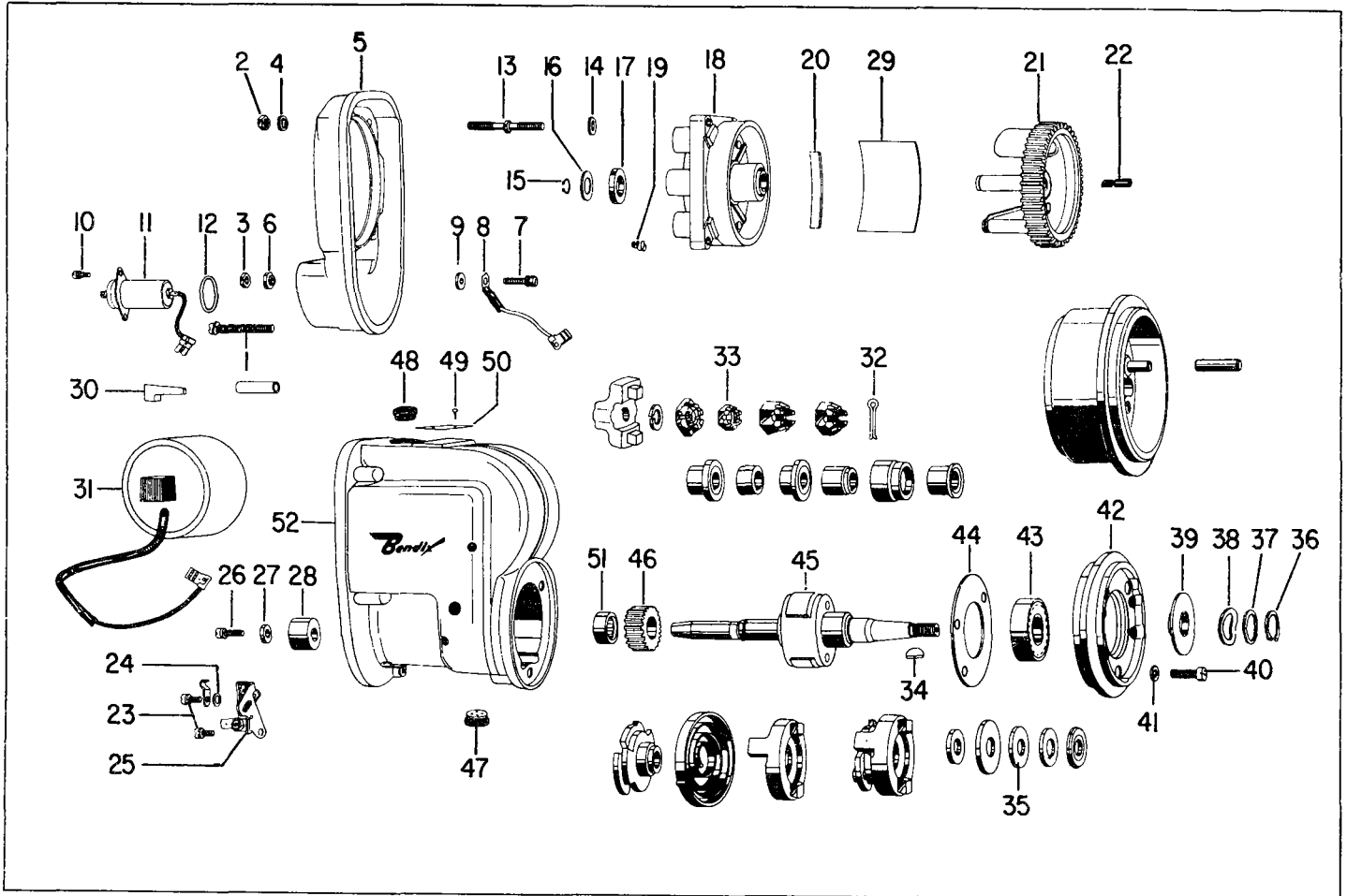


Figure 34. Magneto, 1200 Series, Bendix
 8-4



LYCOMING

TIGO-541

PARTS

CATALOG

VENDOR ACCESSORY

FUEL INJECTOR, BENDIX RSA-10DB2
 BENDIX P/N - 2524501-2
 AVCO LYCOMING P/N - LW-11508

REF. NO.	PART NUMBER	DESCRIPTION	QTY. PER ENG.	MODEL USAGE
	2524501-2	FUEL INJECTOR, Model RSA-10DB2, Bendix, Avco Lycoming P/N LW-11508	1	
1	132906	PLUG, Machine	1	
2	951787	PACKING, Preformed	1	
3	2523978	ADAPTER	1	
4	951790	PACKING, Preformed	1	
5	P61195	PLUG, Taper seat	1	
6	393647	PLUG, Taper seat	2	
7	383493	PLUG, Machine	1	
8	365533	GASKET	1	
9	2523976	ADAPTER	1	
10	2523906	STRAINER ASSEMBLY	1	
11	951790	PACKING, Preformed	1	
12	2520387	SPRING, Helical, extension	1	
13	901200	PIN, Cotter	1	
14	911244	WASHER, Flat	1	
15	P19821	WASHER, Spring	1	
16	2522021	PIN, Straight, headed	1	
17	901200	PIN, Cotter	1	
18	911242	WASHER, Flat	1	
19	177718	WASHER, Spring	1	
20	2522022	PIN, Straight headed	1	
21	367418	LINK	1	
22	367547	SCREW ASSEMBLY, Adjusting	1	
23	367544	LINK	1	
24	367988	LEVER, Mixture control	1	
25	187313	NUT, Self-locking	1	
26	363083	SCREW, Machine	1	
27	367962	SPACER	1	
28	188595	WASHER, Flat	1	
29	79216	SCREW, Machine	1	
30	188595	WASHER, Flat	1	
31	2523797	PLATE, Mixture control	1	
32	2523840	BUSHING, Mixture control stem	1	
33	338491	WASHER, "C"	1	
34	367694	HOLDER, Spring	1	
35	2523757	SPRING, Helical, compression	1	
	2523808	WASHER	1	
36	909281K35	PIN, Spring	1	
37	911255	WASHER, Flat	1	
38	2523539	BUSHING	1	
39	951401	PACKING, Preformed	1	
40	951390	PACKING, Preformed	1	
41	2522591	LEVER ASSEMBLY, Mixture control	1	
42	2537648	LEVER ASSEMBLY, Idle valve (not illustrated)	1	
43	79216	SCREW, Machine	2	
44	911242	WASHER, Flat	2	
45	P21818	SCREW, Machine	1	
46	P22198	WASHER, Lock	1	
47	909329	PIN, Spring	1	
48	2522326	PLATE	1	
49	2522327	BUSHING	1	
50	367757	WASHER, Flat	1	
51	951390	PACKING, Preformed	1	
52	951400	PACKING, Preformed	1	
53	2525197	VALVE, Mixture control	1	
54	951400	PACKING, Preformed	1	
55	2525494	PACKING, Preformed	1	

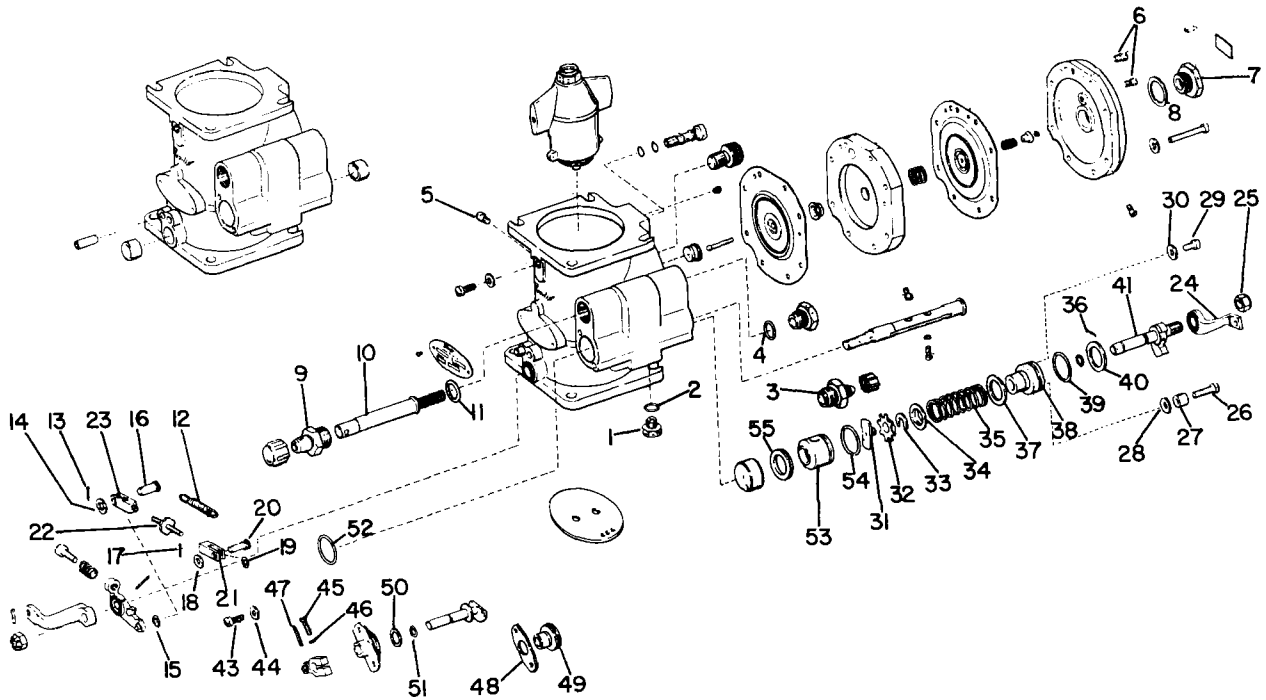


Figure 35. Fuel Injector, Bendix, RSA-10DB2



VENDOR ACCESSORY

FUEL INJECTOR, BENDIX RSA-10DB2 (CONT.)

BENDIX P/N - 2524501-2

AVCO LYCOMING P/N - LW-11508

REF. NO.	PART NUMBER	DESCRIPTION	QTY. PER ENG.	MODEL USAGE
	1 2 3 4 5			
56	2523981	VALVE, Lower idle	1	
57	362842	SCREW, Cap, socket head	8	
58	911242	WASHER, Flat	8	
59	2525035	COVER, Regulator	1	
60	2523794	NUT, Regulator stem	1	
61	2523769	RETAINER, Regulator stem	1	
62	2523687	SPRING, Helical compression	1	
63	2523957	DIAPHRAGM ASSEMBLY, Air	1	
64	2523688	SPRING, Helical compression	1	
65	2526138	BODY ASSEMBLY, Regulator seal	1	
66	2526090	BUSHING ASSEMBLY, Regulator seal	1	
67	2525312	DIAPHRAGM ASSEMBLY, Fuel	1	
68	2523770	VALVE ASSEMBLY, Regulator	1	
69	2525547	SEAT ASSEMBLY, Regulator	1	
70	P9201-75	METERING JET	1	
71	319S354	BOLT, Machine	1	
72	911244	WASHER, Flat	1	
73	2523959	BOLT, Special	1	
74	951390	PACKING, Preformed	2	
75	2524366	CONTROL ASSEMBLY, Automatic mixture	1	
76	2523910	VALVE, Throttle	1	
77	393849	SCREW, Machine	2	
78	901045	WASHER, Lock	2	
79	P19261	LEVER, Throttle	1	
80	900848K1	NUT, Castle	1	
81	900452K1	SCREW, Idle adjusting	1	
82	P60219	SPRING, Helical compression	1	
83	2523800	STOP, Throttle	1	
84	901209K1	PIN, Cotter	1	
85	909329	PIN, Spring	1	
86	367416	SHAFT ASSEMBLY, Throttle	1	
87	909198K1	PIN, Spring	1	
88	2537626	BODY ASSEMBLY, Main	1	
89	2521918	BEARING	2	
90	2529453	FITTING, Fuel inlet (not illustrated)	1	
91	15937	NUT, Fuel inlet fitting (not illustrated)	1	
92	367828	PLATE, Identification	1	
93	186739	SCREW, Self-tapping	2	

AVCO LYCOMING TIGO-541 PARTS CATALOG
VENDOR ACCESSORY

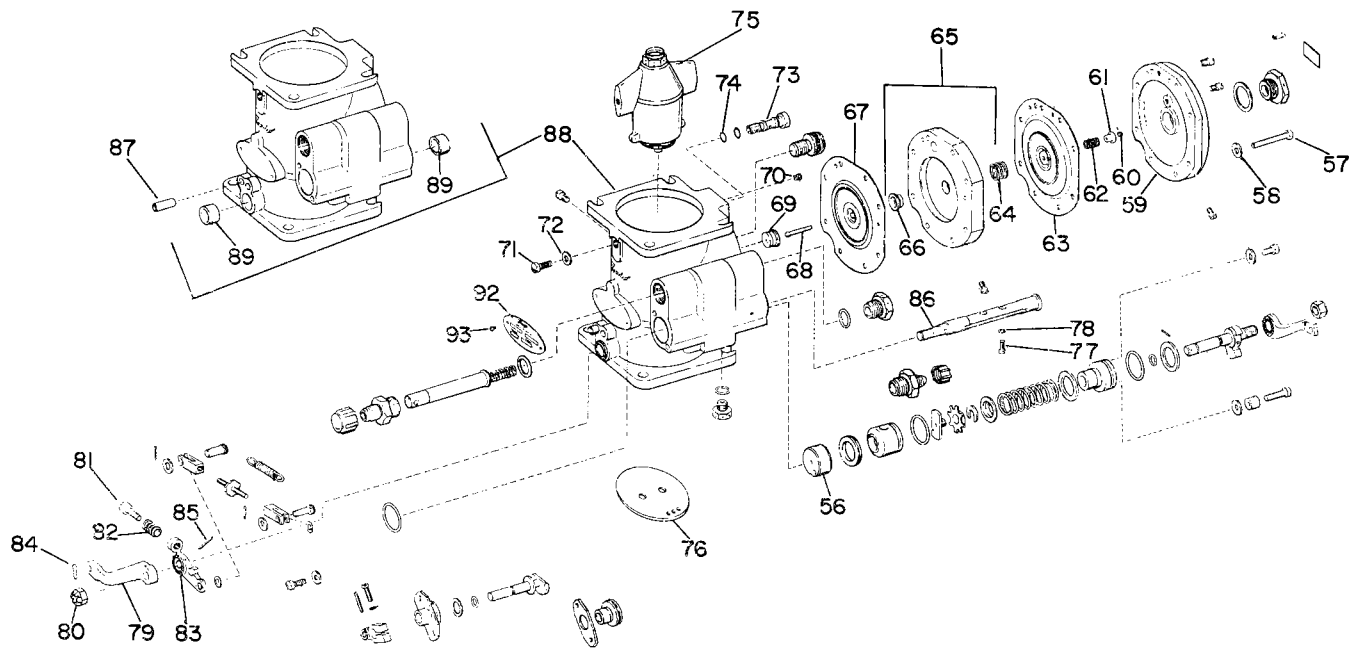


Figure 35. Fuel Injector, Bendix, RSA-10DB2

AVCO LYCOMING TIGO-541 PARTS CATALOG

VENDOR ACCESSORY

TURBOCHARGER, AIRESEARCH DIVISION T-18A21
 AVCO LYCOMING P/N - LW-13234

REF. NO.	PART NUMBER	12345	DESCRIPTION	QTY. PER ENG.	MODEL USAGE
	407800-3		TURBOCHARGER ASSEMBLY, T-18A21, AiResearch, Avco Lycoming P/N LW-13234	1	
	407813-10		CENTER HOUSING AND ROTATING ASSY.	1	
1	407812-2		CENTER HOUSING ASSEMBLY	1	
	407809		CENTER HOUSING	1	
2	407293-2		WHEEL ASSEMBLY	1	
3	406687-3		SHROUD, Wheel	1	
4	400408		RING, Retaining	3	
5	407134		BEARING	2	
6	407135		WASHER	2	
7	402588		BEARING, Inboard thrust	1	
8	406499-2		COLLAR, Thrust	1	
9	406967-1		SPACER, Thrust	1	
10	403818		RING, Piston	1	
11	400424-1		"O" RING	1	
12	407215-4		BACKPLATE ASSEMBLY	1	
13	407339		PLATE, Lock	4	
14	S100122		BOLT	4	
15	407869-3		IMPELLER	1	
16	400379		LOCKNUT, 3/8-24, NF-3	1	
17	403818-13		RING, Piston	1	
18	S456347		PIN, Spring	1	
	406385		BEARING, Outboard thrust	1	
	400438-1		DRIVE SCREW	3	
19	408083-1		TURBINE HOUSING	1	
20	407403		CLAMP	4	
21	404223		LOCKPLATE	4	
22	400132-301		BOLT, 5/16-18	8	
23	407333-32		COMPRESSOR HOUSING	1	
	400500-925		COUPLING, "V" band	1	
24	406886		NAMEPLATE	1	
25	S173639		DRIVE SCREW, .073 x 1/4 in.long	4	

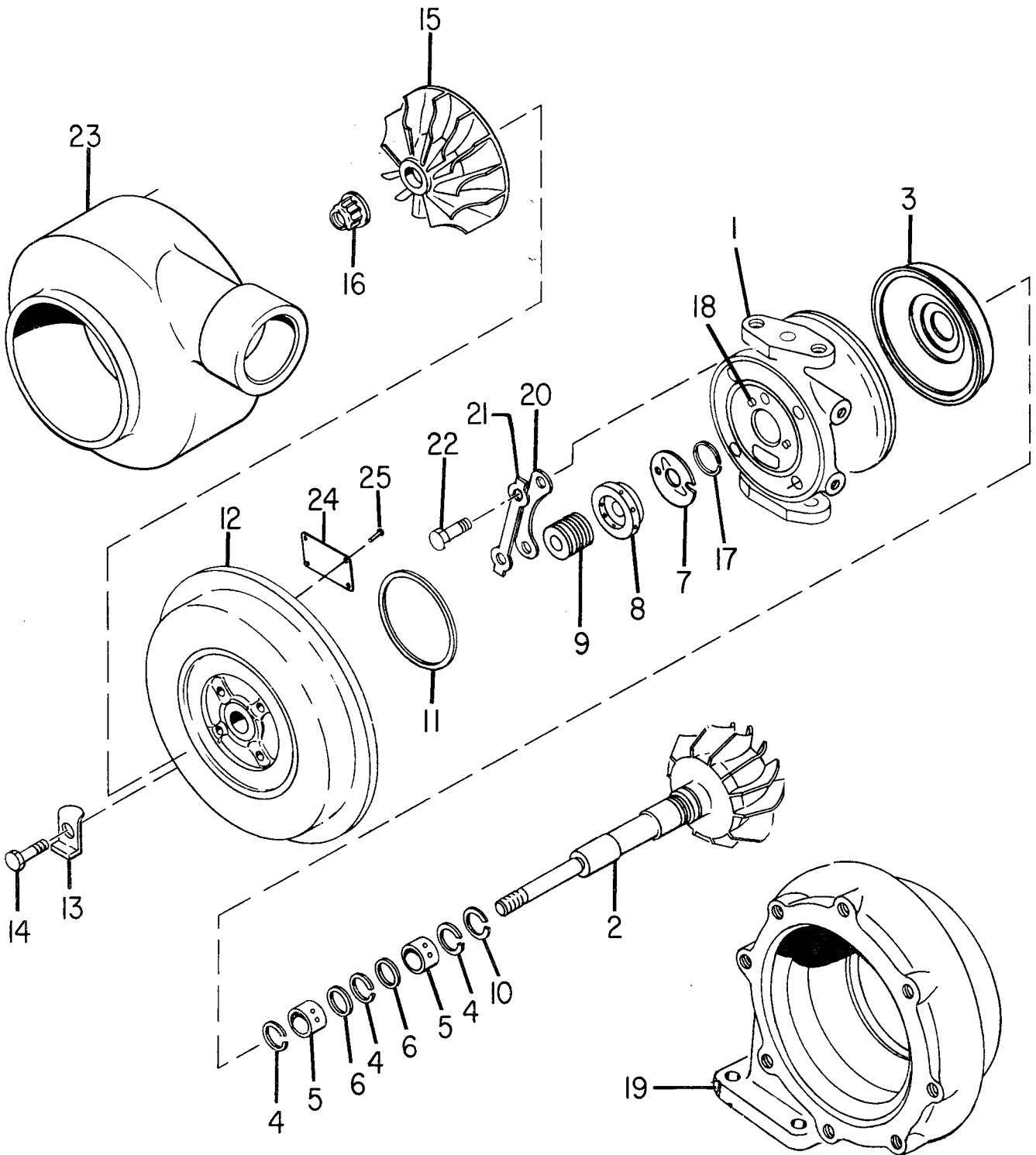


Figure 36. T18A21 Turbocharger

AVCO LYCOMING TIGO-541 PARTS CATALOG

VENDOR ACCESSORY

EXHAUST BYPASS VALVE, AIRESEARCH DIVISION
 AIRESEARCH P/N - 470818-5
 AVCO LYCOMING P/N - LW-10759

REF. NO.	PART NUMBER	DESCRIPTION	QTY. PER ENG.	MODEL USAGE
	470818-5	VALVE, Exhaust bypass, AiResearch, Avco Lycoming P/N LW-10759	1	
1	477379	SPRING	1	
2	477378	SPRING	1	
3	476770	RETAINER	1	
4	476769	PISTON	1	
5	476884-2	PACKING	1	
6	476762	EXPANDER	1	
7	476135	SCREW, Adjusting	1	
8	400545-5	"O" RING	1	
9	S125622	SCREW, Drive	4	
10	476961	NAMEPLATE	1	
11	476771-8	CYLINDER, Piston	1	
12	400146-204	NUT	1	
13	400140-200	LOCKWASHER	1	
14	477240	VALVE HOUSING ASSEMBLY	1	
15	400142-811	PIN, Flathead, 1/8 x 1/2 in. long	1	
16	400138-45	WASHER	3	
17	400143-96	PIN, Cotter	3	
18	476887	SHIELD, Heat	1	
19	476774	PLATE, Cylinder	1	
20	400140-200	LOCKWASHER	4	
21	S180024	BOLT, 1/4-20 x 1-1/4 in. long	4	
22	476773	GASKET	1	
23	477211	SHAFT	1	
24	400140-200	LOCKWASHER	3	
25	S180024	BOLT, 1/4-20 x 1-1/4 in. long	3	
26	477358-1	TURNBUCKLE	1	
27	400142-817	PIN	2	
28	477359-1	CLEVIS	1	
	477413	DAMPER, Spring	1	

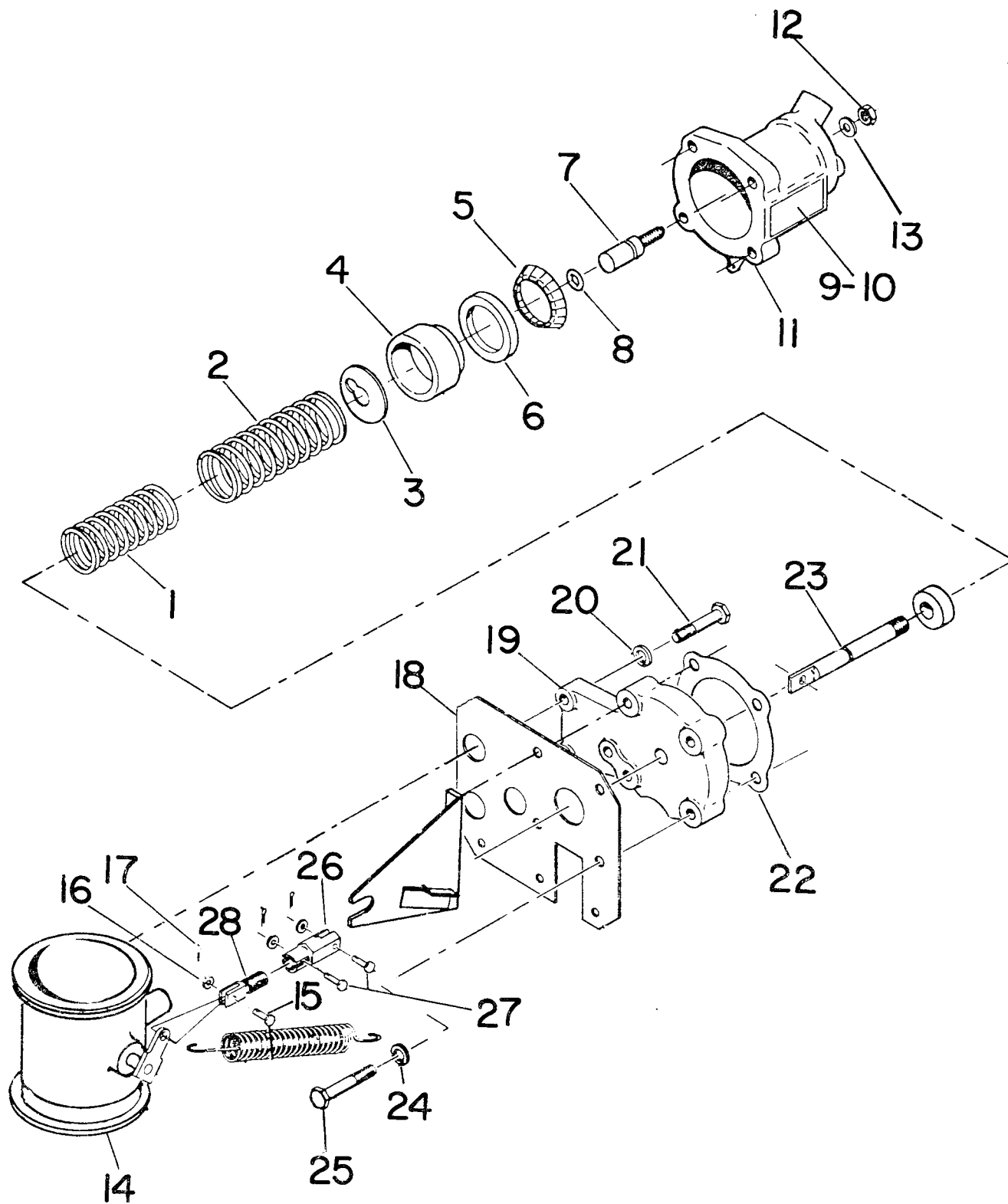


Figure 37. Exhaust Bypass Valve

AVCO LYCOMING TIGO-541 PARTS CATALOG

VENDOR ACCESSORY

VARIABLE PRESSURE CONTROLLER, AIRESEARCH DIVISION
 AIRESEARCH P/N - 470924-1
 AVCO LYCOMING P/N - LW-11950

REF. NO.	PART NUMBER	12345	DESCRIPTION	QTY. PER ENG.	MODEL USAGE
	470924-2		CONTROLLER, Absolute pressure, variable AiResearch, Avco Lycoming P/N LW-11950	1	
1	S941577-7		SCREW, No. 10-32 x 1-1/2 in. long	1	
2	S130246		SCREW, No. 10-24 x 5/8 in. long	4	
3	400140-100		LOCKWASHER, No. 10	4	
4	477003		BEARING, Needle	1	
5	477441		BEARING CARRIER ASSEMBLY	1	
6	477385		CAM	1	
7	S941231-9		PIN, Spring, 5/64 in. dia. x 3/4 in. long	1	
8	476909-2		BEARING, Cam	2	
9	477001		BRACKET, Cam	1	
10	400207-6		"O" RING	1	
11	477377		SPRING	1	
12	476999		RETAINER, Spring	1	
13	477593		SEAT, Poppet	1	
14	476648-1		POPPET	1	
15	403069-29		"O" RING	1	
16	477133		BELLOWS ASSEMBLY	1	
17	476644		CONTROLLER HOUSING	1	
18	403069-40		"O" RING	3	
19	477123		BELLOWS ASSEMBLY	1	
20	477398-1		SPRING	1	
21	476677		RETAINER, Spring	1	
22	S116120		LOCKWASHER, 5/16	1	
23	400377-5		SCREW, No. 4-40 x .31 in. long	3	
24	400386-304		NUT, 5/16-18 drilled	1	
25	S125622		DRIVE SCREW, No. 0 x .19 in. long	4	
26	476961		NAMEPLATE	1	
27	476649		SPRING	1	
28	477000		FOLLOWER, Cam	1	
29	477387-3		SHAFT, Cam	1	
30	477047		ARM, Cam	1	
31	400521		NUT, Flexlock, No. 10-32	1	
	475204-10		SHIM, .010 thick (assemble between cam bearing and cam bracket)	un	
	477049		LINK, Clevis, cam	1	
	400365		PIN, Groove, (cam bearing to cam bracket)	1	
	477432		PIN, Stop adjustment, no. 10-32 x .535 long	1	
	400520-3		SCREW, Set (Nylok) no. 10-32 x .188 in. long	1	

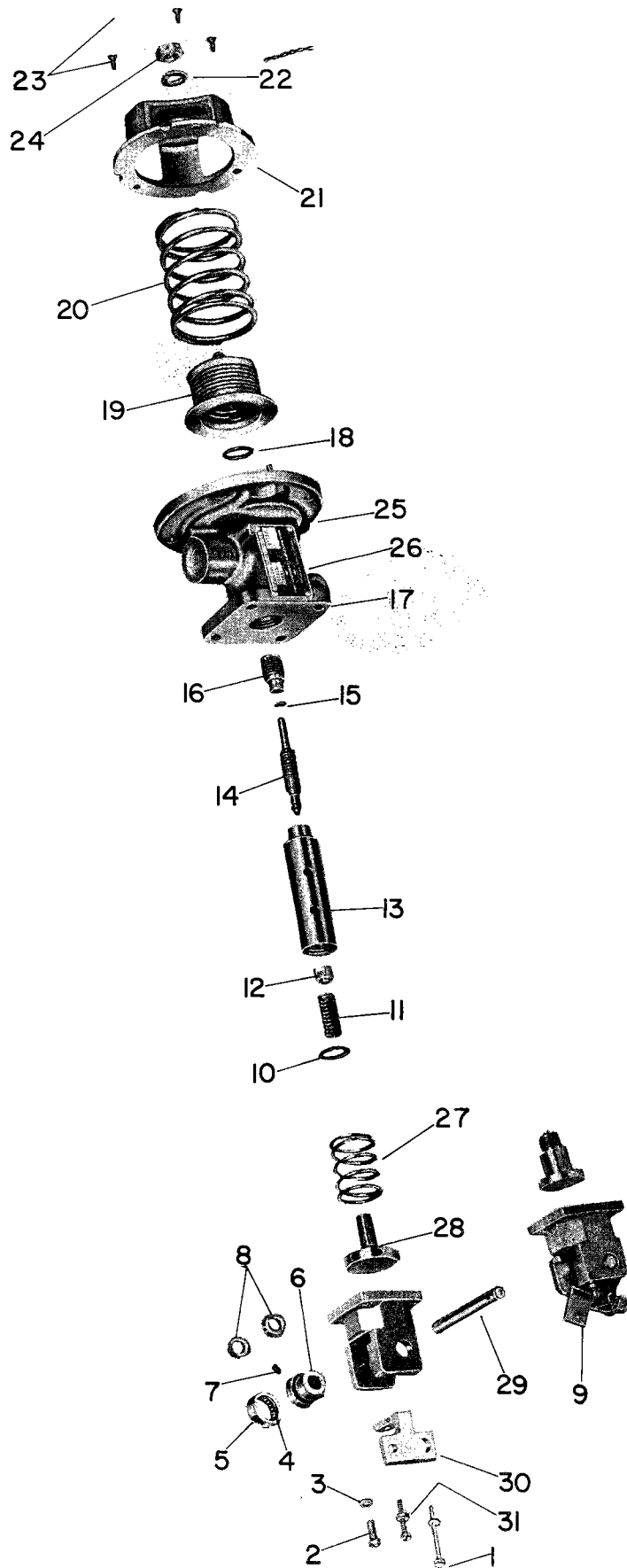


Figure 38. Variable Pressure Controller



SERVICE REPLACEMENT SET SECTION

Part No. Part Name

LW-11365 SEAL AND GASKET SET

TIGO-541-E1A

Consisting of:

1	MS29513-015	Ring - Oil Seal
1	AN4047-1	Gasket - Accessory Drive
1	AN12400-1	Ring - Oil Seal
1	MS9241-035	Seal - Oil
1	MS16625-1081	Ring - Internal Retaining
1	MS28775-120	Ring - Oil Seal
1	MS28775-121	Ring - Oil Seal
1	MS28775-143	Seal - Oil
1	MS28775-147	Ring - Oil Seal
3	MS29512-6	Seal - Oil
1	MS29513-133	"O" Ring
2	STD-208	Seal - Oil
1	STD-213	Seal - Oil
1	STD-294	Gasket
1	STD-547	Seal
1	STD-589	Gasket - Copper Asbestos
2	STD-761	Pin - Cotter
2	STD-1004	Ring - Oil Seal
1	STD-1006	Seal - "O" Ring
1	STD-1045	Gasket
1	STD-1272	Gasket - Oil Suction Screen
1	STD-1737	Ring - Retaining
1	STD-1800	Ring - Retaining
1	STD-1934	Seal - Oil
3	8313	Gasket - Vacuum Pump
1	60096	Gasket - Fuel Pump
24	70310	Seal - Shroud Tube
12	66732	Gasket - Valve Rocker Shaft Cover
1	70455	Gasket
1	70457	Gasket - Oil Filler Extension
6	71481	Ring - Oil Seal
6	71973	Gasket
1	72053	Gasket - Governor
3	72075	Seal
2	72078	Lockplate
6	72711	Ring - Seal, Intake Pipe
1	72741	Gasket - Timing Pin Hole
1	73032	Gasket - Air Inlet Housing
1	73314	Gasket - Density Controller
6	74906	Gasket - Shroud Tube Adapter
1	74944	Gasket - Turbo Controller Adapter
1	75371	Gasket - Turbo Oil Inlet
1	75585	Gasket - Oil Sump
2	75845	Gasket - V-Band
1	75890	Gasket - Fuel Drain Check Valve
6	LW-11602	Lockplate - Fuel Injector Nozzle
1	75957	Ring - Oil Seal
6	76036	Gasket - Rocker Box Cover
1	LW-12517	Gasket - Oil Filter Adapter
1	76546	Gasket - Propeller Control Access
1	76967	Lockplate
1	77707	Gasket - Crankcase Rear
1	LW-12575	Gasket - Oil Cooler Bypass Housing
1	77996	Lockplate
12	78056	Gasket - Exhaust Flange
2	78083	Gasket - V-Band
2	LW-12681	Gasket - Magneto
1	78592	Lockplate
1	LW-10122	Gasket - Turbo Oil Drive Adapter
1	LW-10264	Gasket - Alternator Adapter

SERVICE REPLACEMENT SET SECTION

Part No.	Part Name	
LW-11365	SEAL AND GASKET SET (CONT.)	TIGO-541-E1A
	Consisting of:	
1	LW-11738	Seal - "O" Ring
2	STD-1940	"O"-Ring
24	LW-11665	Thrust Button
6	LW-12081	Seal
1	LW-10455	Gasket - Tachometer Drive
1	LW-10727	Seal
2	LW-11105	Lockplate
6	75233	"O" Ring
1	LW-12122	Seal - Prop Shaft Oil
LW-14055	CYLINDER, PISTON AND RING ASSEMBLY	TIGO-541-E1A
	(Nitrided Cylinder Barrel, Chrome Plated Half-Wedge Rings)	
	Consisting of:	
2	MS10997-3	Key - Valve (Rotator Type)
1	MS13998-3	Cap - Valve Stem
2	STD-160	Washer
2	STD-1215	Bolt
8	STD-2059	Screw - Self Locking
2	60009	Key - Valve
4	70310	Seal - Shroud Tube
2	66732	Gasket - Valve Rocker Shaft Cover
1	LW-12321	Seat - Valve Spring Lower
1	LW-14078	Pin - Piston
1	71195	Box - Set Up
1	71481	Ring - Oil Seal, Cylinder Base
2	71549	Washer - Valve Rocker
2	72198	Plug - Piston Pin
2	72626	Shaft - Valve Rocker
1	72709	Screw .250-20 x .63 long
2	72710	Cover - Valve Rocker Shaft
1	73857	Ring - Piston Oil Regulating
2	74241	Ring - Compression
1	74906	Gasket - Shroud Tube Adapter
1	76036	Gasket - Rocker Box Cover
1	76038	Cover Assembly - Rocker Box
1	76093	Seat - Valve Spring Lower - Exhaust
2	76266	Rocker Assembly
2	LW-11798	Spring - Valve - Outer
2	LW-11799	Spring - Valve - Auxiliary
1	LW-13087	Valve - Intake (Hollow Stem)
1	LW-13561	Cylinder Assembly - Nitrided
1	LW-10076	Seat - Valve Spring (Rotator Type)
1	LW-10077	Seat - Valve Spring
1	LW-10545	Piston
1	LW-11082	Valve - Exhaust (Rotator Type)
LW-11500*	COUPLING AND SHAFT ASSY., Starter Slip	
	Consisting of:	
1	75510	Shaft
1	76842	Coupling
1	STD-1025	Key - Woodruff

* - This kit is supplied for customer convenience due to difficulty of assembly in the field.

SECTION 10
PARTS SUPERSEDURES

SECTION 1

Part No.	Superseded by	Name	Remarks
Reference Page 1-1			
LW-10768	LW-11737	Crankcase Assy.	Use newer prop oil supply tube and "o"-ring.
LW-11737	LW-11993	Crankcase Assy.	Change to straight main bearing dowels.
LW-11993	LW-13082	Crankcase Assy.	Employs stainless steel thrust bearing.
LW-13082	LW-13442	Crankcase Assy.	Change in prop shaft drive gear bearings.
LW-13442	LW-14052	Crankcase Assy.	Uses 38-13 stud for new turbo mounting bracket.
There are no supersedures on Pages 1-3, 1-5, 1-7.			
Reference Page 1-9			
74303	LW-11575	Bearing, Crankshaft	Change to straight main bearing dowels.
LW-10068	LW-12440	Camshaft Assy.	Incorporate carbureized oil pump dogs.
Reference Page 1-11			
75750	LW-12365	Prop Shaft and Gear Assy.	Uses inboard seal for prop. flange bearing.
LW-12365	LW-12477	Prop Shaft and Gear Assy.	Uses grease packed prop shaft thrust bearing.
LW-12477	LW-13081	Prop Shaft and Gear Assy.	To incorporate stainless steel thrust bearing instead of grease packed.
75621	LW-12519	Gear Assy., Prop Shaft Drive	Uses LW-12518 race when removing torquemeter and installing needle thrust bearing.
76441	LW-12518	Race, Needle Thrust Bearing	Replaces adapter when removing torquemeter and installing needle thrust bearing.
75502	LW-11737	Tube, Prop Oil Supply	Employs "o"-ring to eliminate oil leakage.
Reference Page 1-12			
LW-10422	LW-11785	Starter Drive Assy.	Employs washers to obtain backlash.
LW-11785	LW-11953	Starter Drive Assy.	Incorporates improved shaftgear in assembly.
75527	LW-12241	Shaftgear, Starter Drive	Newer, harder shaft assembly incorporated in LW-11953 starter drive assembly.
There are no supersedures on Page 1-13.			
Reference Page 1-14			
76905	LW-13440	Bearing, Thrust Needle	Incorporates large rollers.
77299	LW-13441	Seat, Thrust Bearing	Used with LW-13440 bearing.
LW-12451	LW-13439	Cover Assy.	Used with LW-13440 bearing.
75607	LW-13519	Shim	Used with LW-13440 bearing.
There are no supersedures on Page 1-15			

SECTION 10
 PARTS SUPERSEDURES

SECTION 1 (CONT.)

Part No.	Superseded by	Name	Remarks
Reference Page 1-17			
77517	78585	Shaft	Product improvement.
MS21261R505	STD-2057	Key	Eliminate interference with mating part.
STD-61	STD-1035	Nut	Product improvement.
77568	LW-10516	Pulley	Product improvement.
Reference Page 1-18			
77854	LW-12515	Gasket	New symmetrical gasket.
LW-11984	LW-13247	Housing Assy.	Incorporate large seat for oil cooler bypass valve.
76509	LW-12896	Seat	Used with LW-13230 bypass valve.
75944	LW-13230	Valve, Oil Cooler Bypass	Change to large valve seat.
Reference Page 1-19			
78200	LW-11678	Tach. Shaft Assy.	New assy. for improved lubrication.
78201	LW-11679	Adapter Assy.	New adapter drilled for improved lubrication.

SECTION 2

Reference Page 2-1			
77450	LW-13422	Connecting Rod Assy.	Uses improved bolt LW-12596.
75060	LW-12596	Bolt	Strengthened rod bolt.
LW-13444	LW-14078	Pin, Piston	Change to provide positive identification.
Reference Page 2-2			
LW-11607	LW-13263	Cylinder Assy.	To incorporate small intake valves.
LW-12216	LW-13263	Cylinder Assy.	To incorporate small intake valves.
LW-13263	LW-13561	Cylinder Assy.	Coil spring retention shroud tube.
72212	LW-12688	Seat, Intake Valve	Small intake valve.
75838	LW-11958	Guide, Exhaust Valve	Flangeless for angle head cylinder.
66713	LW-11956	Guide, Valve Intake	Flangeless for angle head cylinder.
68326	LW-11796	Spring, Valve, Outer	Retains pressure better.
68327	LW-10077	Seat, Valve Spring	New material.
68328	LW-11797	Spring, Valve Auxiliary	Retain tension.
68325	LW-13321	Seat, Valve Spring	Provides clearance with guide.
73115	LW-10076	Seat, Valve Spring	New material.
76347	LW-13087	Valve, Intake	Small diameter valve.
76351	LW-11798	Spring, Valve Outer	Retains tension better.

SECTION 10
PARTS SUPERSEDURES

SECTION 2 (CONT.)

Part No.	Superseded by	Name	Remarks
Reference Page 2-2 (Cont.)			
76352	LW-11799	Spring, Valve Auxiliary	Retains tension better.
76278	LW-13339	Shroud Tube Assy.	To prevent oil leakage.
LW-13077	LW-13565	Spring, Shroud Tube	New coil spring.
62922	70310	Seal, Shroud Tube	For new shroud tube.
66728	LW-13340	Washer	For new shroud tube.
77755	LW-13566	Adapter Shroud Tube	For new LW-13561 cylinder.
Reference Page 2-4			
76175	78692	Baffle Assy., Intercylinder	Product improvement.
Reference Page 2-6			
79039	LW-10042	Connector	Product improvement.
72376	LW-10045	Elbow	Product improvement.
75948	LW-10044	Tee	Product improvement.
LW-10038	LW-12876-4-066	Hose Assy.	Teflon.
74543	LW-12876-4-224	Hose Assy.	Teflon.
76517	LW-12798-4-204	Hose Assy.	Teflon.

SECTION 3

Reference Page 3-1

77899	LW-13024	Oil Pump Assy.	Use relief valve in cover assembly.
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Reference Page 3-3

LW-12263	LW-12262	Bolt Assy., Oil Filter Housing	Eliminate failure at roll pin
76531	LW-12517	Gasket	Prevents oil hole restriction.
76538	77607	Oil Relief Valve Sleeve	Product improvement.
76550	LW-12258	Housing Assy.	Eliminates oil leakage.
76650	LW-11198	Element	Product improvement.
77296	LW-12262	Bolt, Oil Filter Housing	Eliminates failure at roll pin.

SECTION 10
PARTS SUPERSEDURES

SECTION 4

Reference Page 4-1

77539 LW-11980 Nozzle Assy. Product improvement.

75954 LW-11602 Lockplate Eliminates loose nozzles.

Reference Page 4-3

LW-10989 LW-13429 Control Rod End Eliminates throttle linkage seizure.

LW-10990 LW-13429 Control Rod End Eliminates throttle linkage seizure.

Reference Page 4-5

75068 LW-13344 Plunger To provide improved fuel drain check valve seal.

75909 LW-13342 Housing Assy. To provide improved fuel drain check valve seal.

Reference Page 4-7

LW-12321 LW-13919 Fuel Pump Assy. To stabilize idle RPM fuel pressure.

SECTION 5

Part No.	Superseded by	Name	Remarks
Reference Page 5-1			
68874	LW-12136	Cushion, Magneto Drive	For improved starting with impulse magnetos.

There are no supersedures on Page 5-3.

Reference Page 5-5

77858 LW-14464 Coupling Assy. Alt. Drive Provides for spring installation.

There are no supersedures on Page 5-7.

SECTION 6

Reference Page 6-1

LW-11976 LW-13234 Turbocharger Employs oil squirt.

LW-10191 LW-11976 Turbocharger Incorporates stainless steel turbine housing.

78349 LW-13060 Blanket Used with stainless steel turbine housing.

74990 LW-12154 Hose Beaded hose to prevent clamp slippage.

Reference Page 6-3

LW-10063 LW-13649 Turbo and Compressor Bracket Provide common mounting bracket for turbo and compressor.

LW-11080 LW-13651 Bracket, Turbocharger Used with LW-13649 bracket.

Reference Page 6-5

75606 LW-12093-6 Coupling Product improvement.

LW-11018 LW-12125-3 Coupling Product improvement.

There are no supersedures on Page 6-7.