

**ILLUSTRATED PARTS CATALOG**  
**FOR**  
**IO-360, TSIO-360 & LTSIO-360**  
**SERIES**  
**AIRCRAFT ENGINES**

**NOTICE**

**Part numbers appearing herein are trademarks of  
Teledyne Continental Motors**

**Courtesy of Bomar Flying Service**  
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# CURRENT STATUS OF PAGES AS OF

## APRIL 1977

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PAGE	STATUS	PAGE	STATUS	PAGE	STATUS	PAGE	STATUS
i	APRIL 1977	3-8	APRIL 1977	6-1	APRIL 1977		
ii	APRIL 1977	3-9	APRIL 1977	6-2	APRIL 1977		
iii	APRIL 1977	3-10	APRIL 1977	6-3	APRIL 1977		
iv	APRIL 1977	3-11	APRIL 1977	6-4	APRIL 1977		
		3-12	APRIL 1977	6-5	APRIL 1977		
1-1	APRIL 1977	3-13	APRIL 1977	6-6	APRIL 1977		
1-2	AUGUST 1970	3-14	APRIL 1977	6-7	APRIL 1977		
1-3	JANUARY 1974	3-15	APRIL 1977	6-8	APRIL 1977		
1-4	JANUARY 1974	3-16	APRIL 1977				
1-5	JANUARY 1974	3-17	APRIL 1977				
1-6	JANUARY 1974	3-18	APRIL 1977	7-1	APRIL 1977		
		3-19	APRIL 1977	7-2	APRIL 1977		
2-1	APRIL 1977	3-20	APRIL 1977	7-3	APRIL 1977		
2-2	APRIL 1977	3-21	APRIL 1977	7-4	APRIL 1977		
2-3	APRIL 1977	3-22	APRIL 1977	7-5	APRIL 1977		
2-4	APRIL 1977	3-23	APRIL 1977	7-6	APRIL 1977		
2-5	APRIL 1977	3-24	APRIL 1977	7-7	APRIL 1977		
2-6	APRIL 1977	3-25	APRIL 1977	7-8	APRIL 1977		
2-7	APRIL 1977	3-26	APRIL 1977	7-9	APRIL 1977		
2-8	APRIL 1977	3-27	APRIL 1977	7-10	APRIL 1977		
2-9	APRIL 1977	3-28	APRIL 1977	7-11	APRIL 1977		
2-10	APRIL 1977	3-29	APRIL 1977				
2-11	APRIL 1977	3-30	APRIL 1977				
2-12	APRIL 1977	3-31	APRIL 1977				
2-13	APRIL 1977	3-32	APRIL 1977				
2-14	APRIL 1977	3-33	APRIL 1977				
2-15	APRIL 1977	3-34	APRIL 1977				
2-16	APRIL 1977	3-35	APRIL 1977				
2-17	APRIL 1977	3-36	APRIL 1977				
2-18	APRIL 1977	3-37	APRIL 1977				
2-19	APRIL 1977	3-38	APRIL 1977				
2-20	APRIL 1977	3-39	APRIL 1977				
2-21	APRIL 1977	3-40	APRIL 1977				
2-22	APRIL 1977	3-41	APRIL 1977				
2-23	APRIL 1977	3-42	APRIL 1977				
2-24	APRIL 1977	3-43	APRIL 1977				
2-25	APRIL 1977	3-44	APRIL 1977				
2-26	APRIL 1977	3-45	APRIL 1977				
2-27	APRIL 1977	3-46	APRIL 1977				
2-28	APRIL 1977	3-47	APRIL 1977				
		3-48	APRIL 1977				
		3-49	APRIL 1977				
3-1	APRIL 1977	3-50	APRIL 1977				
3-2	APRIL 1977	3-51	APRIL 1977				
3-3	APRIL 1977	4-1	APRIL 1977				
3-4	APRIL 1977	4-2	APRIL 1977				
3-5	APRIL 1977						
3-6	APRIL 1977	5-1	APRIL 1977				
3-7	APRIL 1977	5-2	BLANK				

# TABLE OF CONTENTS

## SECTION I

INTRODUCTION	1-1
ABBREVIATIONS AND SYMBOLS	1-2
ACCESSORY MANUFACTURERS	1-2
CUSTOMER SPECIFICATION TO SERIAL NUMBER CROSS REFERENCE	1-3

## SECTION II – GROUP ASSEMBLY PARTS LIST - IO-360

Figure 1 - Crankcase Studding Assembly	2-2
Figure 2 - Crankcase Attaching Parts	2-4
Figure 3 - Crankcase Associated Parts	2-6
Figure 4 - Crankshaft Group	2-8
Figure 5 - Camshaft Assembly	2-10
Figure 6 - Connecting Rod Assembly	2-11
Figure 7 - Piston and Pin Assembly	2-11
Figure 8 - Cylinder Assembly	2-12
Figure 9 - Crankcase Cover Assembly	2-14
Figure 10 - Alternator Assembly	2-16
Figure 11 - Oil Sump Assembly	2-17
Figure 12 - Starter and Starter Adapter Assembly	2-18
Figure 13 - Starter and Starter Adapter Assembly	2-20
Figure 14 - Induction System	2-22
Figure 15 - Fuel Injection System	2-24
Figure 16 - Ignition System	2-26
Figure 17 - Magneto Drive Assembly	2-28

## SECTION III – GROUP ASSEMBLY PARTS LIST - TSIO/LTSIO-360

Figure 18 - Crankcase Studding Assembly	3-2
Figure 19 - Crankcase Attaching Parts	3-4
Figure 20 - Crankcase Associated Parts	3-6
Figure 21 - Crankshaft Group	3-8
Figure 22 - Camshaft Group	3-10
Figure 23 - Connecting Rod Assembly	3-11
Figure 24 - Piston and Pin Assembly	3-11
Figure 25 - Cylinder Assembly	3-12
Figure 26 - Intercylinder Baffle Assembly	3-14
Figure 27 - Crankcase Cover Assembly	3-16
Figure 28 - Crankcase Cover Assembly	3-18
Figure 29 - Crankcase Cover Assembly	3-20
Figure 30 - Alternator Assembly	3-22
Figure 31 - Oil Sump Assembly	3-23
Figure 32 - Starter and Starter Adapter Assembly	3-24
Figure 33 - Starter and Starter Adapter Assembly	3-26
Figure 34 - Starter and Starter Adapter Assembly	3-28
Figure 35 - Starter and Starter Adapter Assembly	3-30
Figure 36 - Induction System	3-32
Figure 37 - Induction System	3-34
Figure 38 - Induction System	3-36
Figure 39 - Fuel Injection System	3-38
Figure 40 - Fuel Injection System	3-40
Figure 41 - Exhaust System	3-42
Figure 42 - Exhaust System	3-44
Figure 43 - Ignition System	3-46
Figure 44 - Kit, Freon Compressor	3-48
Figure 45 - Priming System	3-50
Figure 46 - Magneto Drive Assembly	3-52

SECTION IV	
OVERSIZE AND UNDERSIZE PARTS LIST . . . . .	4-1
SECTION V	
REPAIR PARTS SETS AND MATERIALS . . . . .	5-1
SECTION VI	
NUMERICAL PARTS LIST . . . . .	6-1
SECTION VII - CUSTOMER SPECIFICATIONS - IO-360/TSIO-360	
IO-360-A . . . . .	7-2
IO-360-C . . . . .	7-3
IO-360-D . . . . .	7-4
IO-360-G . . . . .	7-6
IO-360-H . . . . .	7-7
IO-360-J . . . . .	7-8
TSIO-360-A . . . . .	7-9
TSIO-360-B . . . . .	7-10
TSIO-360-C . . . . .	7-11

# SECTION I

## INTRODUCTION

1-1. In line with the Teledyne Continental Motors program of product improvement, this parts catalog is presented in looseleaf form. Changes will be issued as they occur to those pages which are affected only. In this manner, the parts catalogs will be kept current at all times with manufacturing and service requirements. Changes to this parts catalog will be sent to the purchaser on receipt of the registration card from the front of the manual.

1-2 Page ii of this publication depicts the current status of pages as of the date listed. Each page in the catalog is also dated. To be current, the date on the page should match the date listed for that page on the Status Page. With each change to the catalog issued, a change to the current Status Page will necessarily be issued.

1-3. In this edition, currently available parts are listed for IO-360 and TSIO-360 Series Engines. If accessories or parts attached to any engine installed in an aircraft manufactured in the United States under a production model number do not appear in this catalog, determine whether they are available from the aircraft manufacturer before placing an order with a Teledyne Continental Authorized Distributor.

1-4. Sections II & III contain 46 figures, in each of which one of the major assemblies or groups of the engine is illustrated in "exploded" form. Each figure has its own set of index numbers to indicate the sub-parts. The list of parts in the assembly or group appears on the same page with the illustration or on an adjacent page. The first column of each assembly group list contains the figure number (not repeated on all lines) and, following a dash, the index numbers of the sub-parts in numerical order. Do not order parts by index number. Use the part number, which appears in the second column. Use the name of the part which appears in the column under the title "DESCRIPTION".

1-5. Do not order any parts listed herein when "NO NUMBER" appears on the same line in the part number column or when "NOT SOLD" herein abbreviated as "NS" appears in the "QUANTITY PER ASSEMBLY" column, because these parts are not suitable for installation without factory equipment, or they are major parts of assemblies and are more economically supplied in the assembled condition, or they are assemblies which would have to be disassembled for installation. To replace any detail part "NOT SOLD" order the smallest assembly containing the part (listed above, with name beginning one column to left). To replace any assembly "NOT SOLD", order whatever subassemblies and detail parts (listed below it, with names indented) that are in need of replacement.

1-6. Quantities of parts, as listed in Sections II, & III, are for specific application in one assembly. Total quantities of all parts are listed in Section VI. Similar assemblies listed in Sections II & III are combined, and quantities of sub-parts are for one assembly.

1-7. Oversize and undersize parts are listed in Section IV. These parts must be ordered by the numbers listed herein, with correct descriptions, to avoid errors. Corresponding standard size part numbers in Section II & III are preceded by a symbol (+) to indicate the availability of the non-standard size. (Refer to list of abbreviations and symbols.)

1-8. Sets of parts listed in Section V are usually wanted in such groups of overhaul work and should be ordered by set part numbers.

1-9. Section VI contains a list of part numbers arranged in numerical order in the first column. If the number of any desired part is known the name may be located by referring to the figure and index number in Section II & III, which is listed opposite the part number in Section VI.

1-10. Section VII contains a parts listing of customer specifications of the basic engines of each model. Only the differences between the customer specification and the basic engine are shown. A specification number to serial number reference list is included to assist the mechanic in determining the engine spec on engines built prior to January 1972. On all engines shipped since that date, the specification number has been included on the engine data plate.

### NOTE

The aircraft manufacturer occasionally changes certain accessories per customer request.

# LIST OF ABBREVIATIONS AND SYMBOLS

SYMBOL	DEFINITION	SYMBOL	DEFINITION
AR	As Required	NS	Not Sold
dia.	Diameter	PD	Pitch Diameter (thread)
hd.	Head	RF	Reference
hex.	Hexagon(al)	NPT	National Pipe Tap (or thread)
exh.	Exhaust	NPTF	National Pipe Taper Thread (dryseal)
int.	Intake	US	Undersize
fil.	Fillister	No.	Number
ID	Inside Diameter	†	Oversize Parts Available
in.	Inch(es)	‡	Undersize Parts Available
OD	Outside Diameter	* * * *	End of Group of Attaching Parts
OP	Optional	\$	Parts Included in a Set
OS	Oversize		

## ACCESSORY MANUFACTURERS

ACCESSORY	MANUFACTURER	ADDRESS
Generator/Alternator	Ford	Ford Motor Company General Parts Division Ypsilanti, Michigan
	Prestolite	The Prestolite Company Division of Eltra Corporation 511 Hamilton Street Toledo, Ohio 43601
Starter	Delco-Remy	United Motors Service General Motors Bldg. Detroit, Michigan
	Prestolite	The Prestolite Company Division of Eltra Corporation 511 Hamilton Street Toledo, Ohio 43601
Magnetos	Scintilla	Scintilla Magneto Division, Bendix Aviation Corporation Sidney, New York 13838

# CUSTOMER SPECIFICATION TO SERIAL NUMBER CROSS REFERENCE

## IO-360-A

- SPEC. 1** 10000 thru 10006, 10008 thru 10012, 10014 thru 10021, 10023 thru 10381; 10420, 10468, 10477, 10478, 10488 thru 10490, 10518, 10519, 10522, 10523, 10526, 10528, 10531, 10535, 10541, 10549, 10552
- SPEC. 3** 10382 thru 10392, 10394 thru 10399, 10401, 10402, 10405 thru 10410, 10412, 10466
- SPEC. 5** 10400, 10413 thru 10417, 10419, 10421 thru 10425, 10427 thru 10437, 10439 thru 10441, 10443 thru 10465, 10467, 10469 thru 10476, 10479 thru 10485, 10487, 10491 thru 10511, 10513 thru 10517, 10521, 10524, 10527, 10529, 10530, 10532, 10536 thru 10540, 10542 thru 10548, 10550, 10551, 10553 thru 10560, 10563 thru 10565, 10568 thru 10570

## IO-360-C

- SPEC. 1** 50001 thru 50147, 50149 thru 50270, 50272 thru 50374, 50377 thru 50440, 50442 thru 50447, 50449, 50450, 50453 thru 50472, 50474 thru 50531, 50533, 50539 thru 50541, 50544, 50546, 50680, 50732, 50735, 50736, 50784 thru 50786, 50793, 50836, 50837, 50867, 51025
- SPEC. 3** 50532, 50534 thru 50538, 50542, 50543, 50545, 50547, 50548, 50550 thru 50678, 50681 thru 50728; 50733, 50791, 50835, 50960 thru 50965, 51019, 51247, 51302
- SPEC. 4** 50729 thru 50731, 50734, 50737 thru 50777, 50779 thru 50782, 50788, 50789, 50794 thru 50834, 50840 thru 50854, 50856 thru 50866, 50868 thru 50878, 50880, 50881, 50884 thru 50891, 50893 thru 50929, 50931 thru 50955, 50957 thru 50959, 50967, 50969 thru 51018, 51020 thru 51024, 51026 thru 51059, 51061 thru 51150
- SPEC. 6** 51151 thru 51174, 51176 thru 51246, 51248 thru 51263, 51265 thru 51301, 51303, 51305 thru 51348, 51350 thru 51384, 51386 thru 51441, 51443 thru 51530, 51535 thru 51538, 51540, 51541, 51543 thru 51558, 51560 thru 51562, 51564 thru 51581, 51583, 51585 thru 51591, 51593 thru 51598, 51601 thru 51681, 51683, 51684, 51687 thru 51692, 51696 thru 51786, 51788 thru 51801, 51803 thru 51805, 51808 thru 51823, 51825 thru 51835, 51837 thru 51857, 51859 thru 51891, 51893 thru 51897, 51899 thru 51903, 51909 thru 51912, 51914 thru 51937, 51939 thru 51952, 51956

## IO-360-D

- SPEC. 1** 55001 thru 55070, 55072 thru 55125, 55127 thru 55154, 55156 thru 55192, 55194 thru 55221, 55223 thru 55341, 55343 thru 55436, 55438 thru 55479, 55481, 55482, 55484 thru 55491, 55493 thru 55544, 55649, 55732, 55846, 55919, 55922, 55923, 55951, 55952, 56092, 56150
- SPEC. 5** 55545 thru 55581, 55583 thru 55599, 55640, 55642 thru 55644, 55646 thru 55648, 55650 thru 55652, 55655, 55656, 55658, 55660, 55661, 55666, 55667, 55673 thru 55680, 55682 thru 55685, 55725, 55726, 55729, 55730, 55831, 55841, 55843, 55844, 55890, 55891, 55905, 55953, 56002, 56151, 56152, 56658, 56723

**SPEC. 6** 55480, 55492, 55600 thru 55639, 55641, 55645, 55653, 55654, 55657, 55659, 55662 thru 55665, 55668 thru 55672, 55681, 55686 thru 55724, 55727, 55728, 55731, 55733 thru 55783, 55785 thru 55789, 55791 thru 55830, 55832 thru 55840, 55847 thru 55888, 55893 thru 55899, 55901 thru 55903, 55906 thru 55908, 55918, 55920, 55921, 55994, 55996 thru 56001, 56004, 56006, 56010, 56011, 56083 thru 56088, 56153, 56167, 56205, 56214, 56215, 56277, 56282, 56359, 56366, 56372, 56374, 56446, 56454 thru 56472, 56499 thru 56501, 56549 thru 56576, 56590 thru 56594, 56596 thru 56602, 56629 thru 56653, 56655 thru 56657, 56660, 56671 thru 56677, 56710, 56794, 56797 thru 56801, 56803, 56805, 56807, 56808, 56810 thru 56813, 56842, 56845 thru 56858, 56863 thru 56877, 56879 thru 56882, 56884, 56885, 57071 thru 57076, 57216, 57221, 57222, 57228 thru 57231, 57241 thru 57246, 57254, 57257, 57261, 57270, 57272, 57578, 57582 thru 57586, 57588, 57589, 57601, 57626 thru 57629, 57638 thru 57641, 57849, 57853 thru 57893, 57896 thru 57906, 57928, 57981, 57982, 57985, 57986, 57989, 57990, 57996, 58000, 58006 thru 58010, 58031 thru 58034, 58036 thru 58039, 58043, 58044, 58046, 58047, 58049 thru 58053, 58055 thru 58063, 58067, 58074 thru 58077, 58080 thru 58085

**SPEC. 7** 55911, 55915, 55924, 55926 thru 55932, 56003, 56005, 56007 thru 56009, 56079, 56100 thru 56103, 56107, 56108, 56229, 56230, 56391, 57972, 57984, 57987, 58035

**SPEC. 9** 55889, 55892, 55900, 55904, 55909, 55910, 55912 thru 55914, 55916, 55925, 55933 thru 55948, 55950, 55960 thru 55986, 55988, 55989, 55991 thru 55993, 56012 thru 56042, 56044 thru 56048, 56050 thru 56061, 56063 thru 56067, 56069, 56070, 56072 thru 56078, 56080 thru 56082, 56093, 56112 thru 56128, 56130 thru 56149, 56154 thru 56165, 56168 thru 56182, 56184 thru 56196, 56199 thru 56202, 56204, 56206, 56224 thru 56226, 56228, 56240 thru 56269, 56283 thru 56297, 56299 thru 56302, 56304 thru 56339, 56344 thru 56349, 56357, 56358, 56369, 56381, 56382, 56384, 56385, 56388 thru 56390, 56393, 56406 thru 56413, 56416 thru 56431, 56475, 56476, 56480, 56498, 56503 thru 56506, 56508 thru 56522, 56524 thru 56548, 56603 thru 56611, 56623, 56712, 56713, 56720, 56722, 56726, 56729, 56731, 56751

**SPEC. 11** 55949, 55954 thru 55959, 56089 thru 56091, 56094 thru 56099, 56129, 56166, 56197, 56198, 56203, 56207 thru 56213, 56231 thru 56239, 56270 thru 56273, 56275, 56340, 56342, 56343, 56350 thru 56356, 56380, 56394, 56432 thru 56437, 56439 thru 56442, 56450, 56477 thru 56479, 56481, 56682, 56683, 56685 thru 56692, 56704, 56705, 56719, 56724, 56725, 56727, 56732 thru 56740, 56742

**SPEC. 12** 56062, 56068, 56071, 56104 thru 56106, 56109 thru 56111, 56216 thru 56223, 56274, 56276 thru 56281, 56360, 56362 thru 56365, 56370, 56371, 56375, 56377 thru 56379, 56387, 56405, 56438, 56443 thru 56445, 56447 thru 56449, 56451, 56452, 56473, 56482 thru 56485, 56487, 56584 thru 56589, 56622, 56624, 57609

**SPEC. 15** 56721, 56730, 56859, 56860, 56895 thru 56907, 56915, 56919, 56925, 56926, 56928 thru 56950, 56953, 56960 thru 56963, 56970, 56972, 56973, 56976 thru 56978, 56980 thru 56983, 56985, 56994 thru 56997, 56999 thru 57010, 57016 thru 57018, 57020, 57028, 57029, 57032 thru 57035, 57037 thru 57059, 57062 thru 57064, 57067 thru 57070, 57077 thru 57089, 57091, 57092, 57094, 57111 thru 57121, 57126, 57168 thru 57171, 57174, 57175, 57178 thru 57202, 57213, 57215, 57218, 57220, 57223 thru 57227, 57232 thru 57240, 57255, 57256, 57259, 57260, 57263, 57265 thru 57269, 57271, 57275 thru 57280, 57287, 57288, 57291 thru 57299, 57301, 57303, 57318 thru 57326, 57332, 57334 thru 57362, 57366, 57368 thru 57370, 57372, 57373, 57399, 57410, 57411, 57414, 57415, 57418, 57421, 57422, 57424, 57427 thru 57429, 57438, 57442 thru 57460, 57462 thru 57471, 57474 thru 57482, 57484 thru 57505, 57507, 57523 thru 57525, 57528 thru 57531, 57536 thru 57538, 57540 thru 57542, 57546, 57547, 57551 thru 57561, 57563 thru 57567, 57569 thru 57572, 57575, 57577, 57579 thru 57581, 57587, 57590 thru 57592, 57594 thru 57596, 57600, 57602, 57605 thru 57608, 57611 thru 57625, 57630 thru 57637, 57642 thru 57658,



57660 thru 57668, 57671, 57674, 57677, 57678, 57681, 57684, 57685, 57687,  
57689 thru 57702, 57707, 57708, 57711 thru 57714, 57716 thru 57718, 57720 thru  
57745, 57747 thru 57783, 57785 thru 57796, 57798 thru 57808, 57810 thru 57826,  
57828, 57830, 57894

**SPEC. 16** 56361, 56367, 56368, 56376, 56383, 56386, 56392, 56486, 56488 thru 56497, 56507,  
56577 thru 56583, 56595, 56612 thru 56621, 56659, 56696, 56708, 56709, 57703 thru  
57706, 57709, 57710, 57715

**SPEC. 17** 56684, 56693, 56697 thru 56703, 56971, 56984, 56991, 56993, 57030, 57031, 57593,  
57597 thru 57599, 57603, 57604, 57610

**SPEC. 18** 56766 thru 56769, 56776, 56777, 56779 thru 56785, 56789, 56792, 56795, 56814 thru  
56819, 56824 thru 56830, 56839

**SPEC. 20** 56663 thru 56670, 56711, 56715 thru 56718, 56728, 56741, 56743 thru 56750,  
56752 thru 56755, 56759 thru 56765, 56772 thru 56775, 56778, 56788, 56793,  
56796, 56802, 56804, 56806, 56809, 56832, 56837, 56841, 56843, 56861, 56862,  
56878, 56883, 56886 thru 56894, 56908 thru 56914, 56918, 56920 thru 56924, 56927,  
56954 thru 56959, 56964, 56966, 56967, 56969, 56986 thru 56990, 56992, 57019,  
57021 thru 57027, 57151 thru 57165, 57167, 57172, 57173, 57203, 57206, 57211,  
57212, 57217, 57247 thru 57253, 57258, 57285, 57302, 57306 thru 57317, 57327 thru  
57331, 57333, 57389, 57395, 57405 thru 57409, 57412, 57413, 57417, 57430 thru  
57437, 57439 thru 57441, 57461, 57472, 57473, 57483, 57506, 57508 thru 57514,  
57516, 57518, 57521, 57522, 57526, 57527, 57532, 57534, 57535, 57539, 57543 thru  
57545, 57548 thru 57550, 57562, 57568, 57573, 57574, 57576, 57829, 57833, 57839  
thru 57848, 57851, 57852, 57909 thru 57922, 57931 thru 57938, 57961, 57963, 58048

**SPEC. 21** 56654, 56661, 56662, 56678 thru 56681, 56694, 56695, 56756 thru 56758, 56770, 56771,  
56791, 56833 thru 56836, 56916, 56917, 56974, 56979, 56998, 57127 thru 57129, 57784

**SPEC. 22** 57923 thru 57926

**SPEC. 24** 57090, 57093, 57095 thru 57101, 57103 thru 57110, 57122 thru 57125, 57135 thru 57150,  
57166, 57363 thru 57365, 57367, 57371, 57374, 57375, 57377 thru 57388, 57390 thru  
57394, 57396 thru 57398, 57400, 57669, 57670, 57672, 57673, 57675, 57679, 57680,  
57682, 57683, 57686, 57688, 57719, 57827, 57831

**SPEC. 26** 56951, 56952, 56965, 56968, 56975, 57011 thru 57015, 57036, 57060, 57061, 57065,  
57066, 57130 thru 57134, 57205, 57207 thru 57210, 57219, 57286, 57300, 57304,  
57305, 57376, 57401 thru 57404, 57419, 57420, 57423, 57425, 57426, 57515, 57517,  
57519, 57520, 57533, 57659

**SPEC. 30** 57939, 57999, 58001 thru 58005, 58011 thru 58013, 58016 thru 58026

**SPEC. 31** 57940 thru 57947, 57950, 57951, 57953 thru 57960, 57962, 57964 thru 57971, 57973,  
57974, 57976 thru 57980, 57991 thru 57995, 57997, 58014, 58015, 58027 thru 58030,  
58040, 58042, 58045, 58054, 58064 thru 58066, 58068 thru 58073, 58078, 58079

#### TSIO-360-A

**SPEC. 1** 184000 thru 184065

**SPEC. 2** 184066 thru 184077, 184079 thru 184082, 184084 thru 184139, 184141 thru 184228,  
184230 thru 184240, 184243 thru 184259

**SPEC. 3** 184260 thru 184527

**TSIO-360-B**

**SPEC. 1** 186000 thru 186016

**SPEC. 2** 186017 thru 186019, 186021, 186025

**TSIO-360-C**

**SPEC. 1** 221700 thru 221710, 221716 thru 221718, 221724 thru 221728, 221730 thru 221740, 221755 thru 221759, 221764, 221765, 221767, 221768, 221771 thru 221778, 221780 thru 221785, 221787, 221789 thru 221791, 221793 thru 221795, 221797 thru 221801, 221803, 221806, 221807, 221809, 221811 thru 221819

**SPEC. 2** 221711 thru 221715, 221719 thru 221723, 221729, 221741 thru 221754, 221760 thru 221763, 221766, 221769, 221770, 221779, 221786, 221788, 221792, 221796, 221802, 221804, 221805, 221808, 221810, 221820

**SECTION II**  
**GROUP ASSEMBLY PARTS LIST**  
**FOR IO-360 BASIC AIRCRAFT ENGINE**

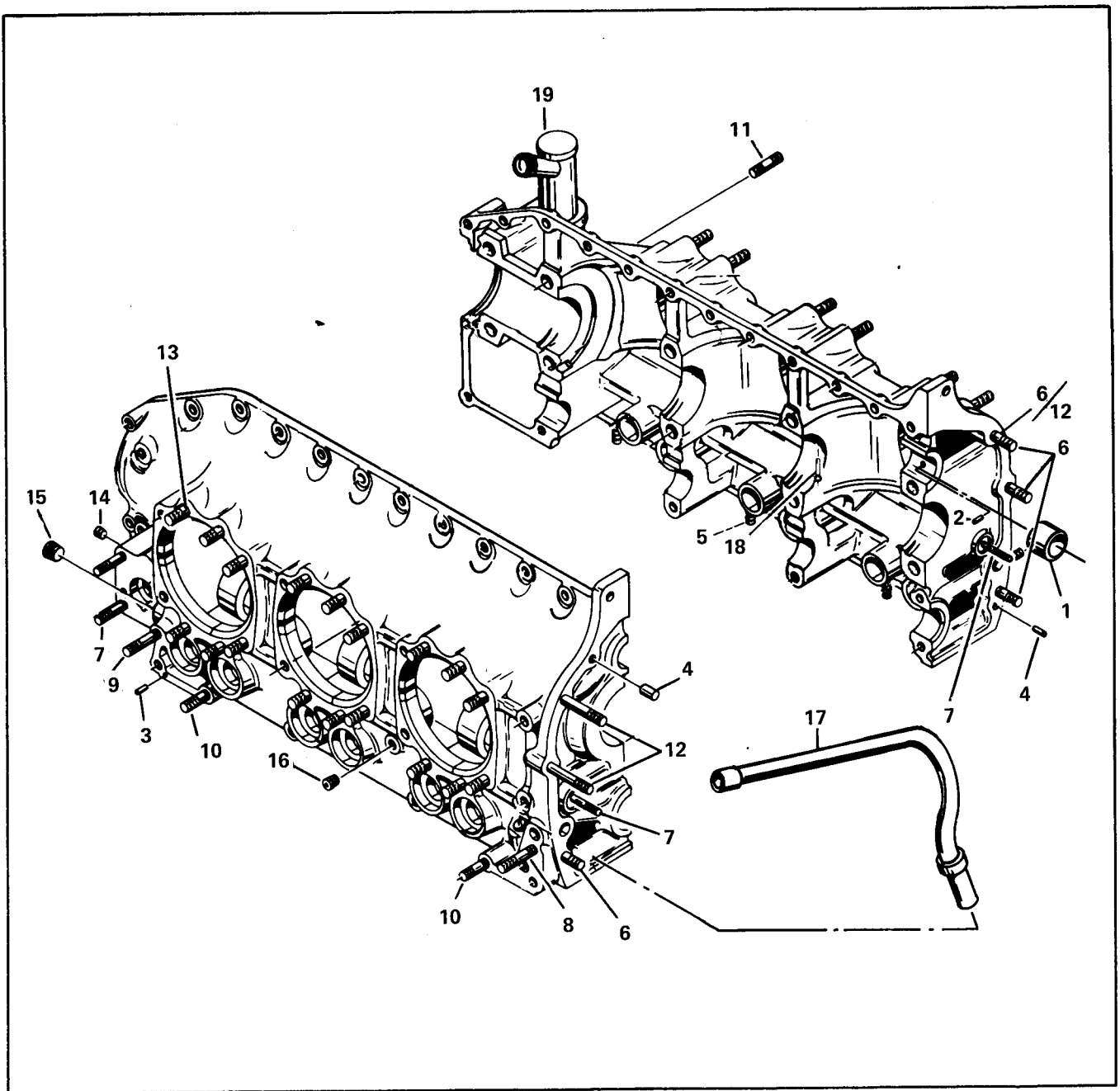


FIGURE 1. CRANKCASE STUDDING ASSEMBLY

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY									
			IO - 360									
			A	C	D	G	H	J	K			
1-	640475	Studding Assembly, Crankcase		1	1	1	1	1	1			
	640479	Studding Assembly, Crankcase	1									
-1	629718	Bushing, Starter	1	1	1	1	1	1	1			
-2	629720	Dowel	1	1	1	1	1	1	1			
-3	200138	Pin	1	1	1	1	1	1	1			
-4	21080	Dowel	1	1	1	1	1	1	1			
-5	401801	† Stud, 1/4 x 1-3/16 In. Long	14	14	14	14	14	14	14			
-6	401809	† Stud, 5/16 x 1-3/8 In. Long	4	3	3	3	3	3	3			
-7	401814	† Stud, 5/16 x 1-7/8	6	6	6	6	6	6	6			
-8	401933	† Stud, 3/8 x 2-5/8 In. Long	1	1	1	1	1	1	1			
-9	401871	† Stud, 3/8 x 2-1/4 In. Long	3	3	3	3	3	3	3			
-10	401945	† Stud, 3/8 x 1-5/8 In. Long	4	4	4	4	4	4	4			
-11	402151	† Stud, 5/16 x 1-1/4 In. Long	4	4	4	4	4	4	4			
-12	402439	† Stud, 5/16 x 2-5/8 In. Long	2	3	3	3	3	3	3			
-13	640017-1	Stud, 3/8 x 1-7/8 In. Long	36	36	36	36	36	36	36			
-14	2024	Plug, Pipe	1	1	1	1	1	1	1			
-15	AN932C4	Plug, Pipe	2	2	2	2	2	2	2			
-16	629518-1H	Plug, Pipe	1	1	1	1	1	1	1			
-17	629849	Housing Assembly, Oil Gauge Rod	1	1	1	1	1	1	1			
-18	629847	Nozzle Squirt		6	6	6	6	6	6			
-19	630204	Breather Assembly	1	1	1	1	1	1	1			

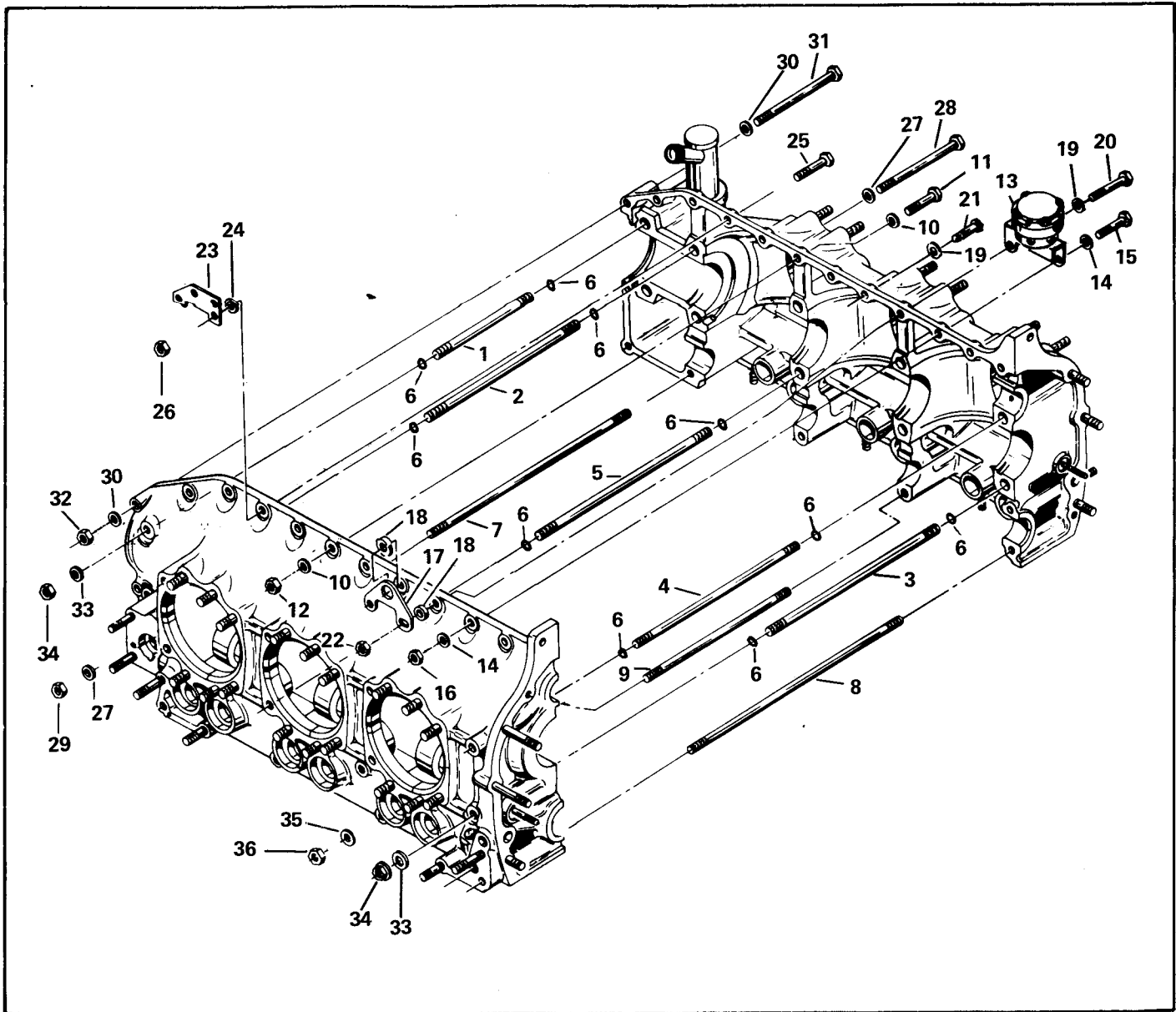


FIGURE 2. CRANKCASE ATTACHING PARTS

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY						
			IO - 360						
			A	C	D	G	H	J	K
2-	No Number	Crankcase Assembly Complete	ns	ns	ns	ns	ns	ns	ns
-1	641944-5.86	Bolt, 7/16 - 20 x 5-7/8 In. Lg. C/C Thru	2	2	2	2	2	2	2
-2	641944-9.25	Bolt, 7/16 - 20 x 9-1/4 In. Lg. C/C Thru	2	2	2	2	2	2	2
-3	641944-10.18	Bolt, 7/16 - 20 x 10-3/16 In. Lg. C/C Thru	1	1	1	1	1	1	1
-4	641944-10.55	Bolt, 7/16 - 20 x 10-35/64 In. Lg. C/C Thru	1	1	1	1	1	1	1
-5	641944-10.68	Bolt, 7/16 - 20 x 10-11/16 In. Lg. C/C Thru	4	4	4	4	4	4	4
-6	MS29513-010	O-Ring	20	20	20	20	20	20	20
-7	629758-12.90	Bolt, 3/8 - 24 x 12-29/32 In. Lg. C/C Thru	1	1	1	1	1	1	1
-8	629758-12.60	Bolt, 3/8 - 24 x 12-39/64 In. Lg. C/C Thru	1	1	1	1	1	1	1
-9	537466	Bolt, 3/8 - 24 x 8-13/16 In. Long	1	1	1	1	1	1	1
-10	20522	Washer, Plain	12	12	12	12	12	12	12
-11	AN4-13A	Bolt	6	6	6	6	6	6	6
-12	2437	Nut, Plain	6	6	6	6	6	6	6
-13	No Number	Manifold and Bracket Assembly	RF	RF	RF	RF	RF	RF	RF

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY									
			IO - 360									
			A	C	D	G	H	J	K			
2- ATTACHING PARTS												
-14	20522	. Washer, Plain	2	2	2	2	2	2	2			
-15	AN4-14A	. Screw, Hex Head 1/4 - 28 x 1-17/32 In. Lg.	1	1	1	1	1	1	1			
-16	2437	. Nut, Hex Head, 1/4 - 28	1	1	1	1	1	1	1			
* * * *												
-17	24879	. Eye, Lifting	1	1	1	1	1	1	1			
ATTACHING PARTS												
-18	25164	. Washer, Plain	2	2	2	2	2	2	2			
-19	20522	. Washer, Plain	2	2	2	2	2	2	2			
-20	AN4-15A	. Screw, Hex Head, 1/4 - 28 x 1-21/32 In. Lg.	1	1	1	1	1	1	1			
-21	24878	. Screw, Hex Head, 1/4 - 28 x 1-5/8 In. Lg.	1	1	1	1	1	1	1			
-22	2437	. Nut, Hex Head, 1/4 - 28	2	2	2	2	2	2	2			
* * * *												
-23	629738	. Bracket, Throttle Body	2	2	2	2	2	2	2			
ATTACHING PARTS												
-24	22139	. Washer, Plain	4	4	4	4	4	4	4			
-25	537728	. Screw, 1/4 - 28 x 1-25/32 In. Lg.	2	2	2	2	2	2	2			
-26	2437	. Nut	2	2	2	2	2	2	2			
* * * *												
-27	20522	. Washer, Plain	2	2	2	2	2	2	2			
-28	631823-5.19	. Bolt	1	1	1	1	1	1	1			
-29	2437	. Nut	1	1	1	1	1	1	1			
-30	20522	. Washer, Plain	4	4	4	4	4	4	4			
-31	629728	. Screw	2	2	2	2	2	2	2			
-32	2437	. Nut, Plain	2	2	2	2	2	2	2			
-33	20202	. Washer, Plain	4	4	4	4	4	4	4			
-34	531001	. Nut, Flanged	4	4	4	4	4	4	4			
-35	401507	. Washer, Plain	4	4	4	4	4	4	4			
-36	2441	. Nut, Plain	4	4	4	4	4	4	4			

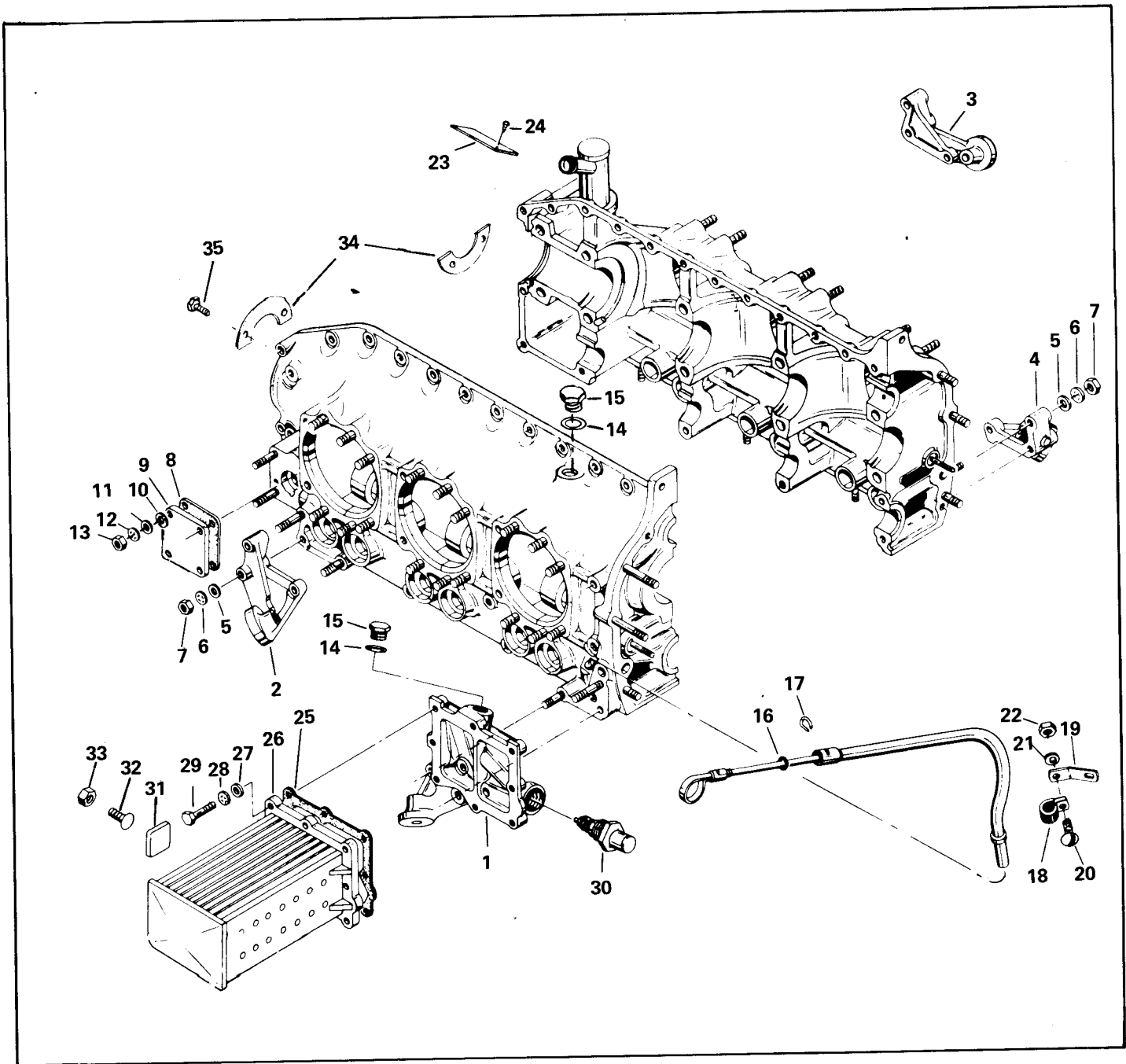


FIGURE 3. CRANKCASE ASSOCIATED PARTS

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY						
			IO - 360						
			A	C	D	G	H	J	K
3-1	629636	Bracket, Engine Mounting	1	1	1	1	1	1	1
-2	637826	Bracket, Engine Mounting	1	1	1	1	1	1	1
-3	637827	Bracket, Engine Mounting	1	1	1	1	1	1	1
-4	629666	Bracket, Engine Mounting	1	1	1	1	1	1	1
ATTACHING PARTS									
-5	539058	Washer, Plain	8	8	8	8	8	8	8
-6	401507	Washer, Plain	4	4	4	4	4	4	4
-7	2441	Nut, Plain, 3/8 - 24	12	12	12	12	12	12	12
* * * *									
-8	641651	\$ Gasket, Governor Pad	1	1	1	1	1	1	1



FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY										
			IO - 360										
			A	C	D	G	H	J	K				
3-9	639997	Cover, Governor Pad	1	1	1	1	1	1	1				
ATTACHING PARTS													
-10	22535	Spacer	8	8	8	8	8	8	8				
-11	2473	Washer, Plain	4	4	4	4	4	4	4				
-12	MS35338-45	Washer, Lock	4	4	4	4	4	4	4				
-13	2439	Nut, Plain	4	4	4	4	4	4	4				
* * * *													
-14	AN900-10	\$ Gasket	2	2	2	2	2	2	2				
-15	532432	Plug, Hex Head, 5/8 - 18	2	2	2	2	2	2	2				
	No Number	* Rod Assembly, Oil Gauge Comp.	1	1	1	1	1	1	1				
-16	AN123860	\$ O-Ring	1	1	1	1							
-16	AN123861	\$ O-Ring						1	1	1			
-17	537299	Ring, Oil Gauge Lock	1	1	1	1	1	1	1	1			
-18	630688	Clamp, Oil Gauge Housing	1	1	1	1	1	1	1	1			
-19	630689	Bracket, Oil Gauge Support	1	1	1								
-19	641124	Bracket, Oil Gauge Support					1						
-20	AN500D8-12	Screw, Fillister Head	1	1	1	1	1	1	1	1			
-21	AN960-8	Washer, Plain	1	1	1	1	1	1	1	1			
-22	MS21044N08	Nut, Self Locking	1	1	1	1	1	1	1	1			
-23	634913	** Plate, Identification	1										
-23	634915	** Plate, Identification		1									
-23	634916	** Plate, Identification			1								
-23	640192	** Plate, Identification				1							
-23	640191	** Plate, Identification					1						
-23	641705	** Plate, Identification							1				
-23	641976	** Plate, Identification										1	
ATTACHING PARTS													
-24	21007	Screw, Drive	6	6	6	6	6	6	6	6			
* * * *													
-25	632372	\$ Gasket, Oil Cooler	1	1	1	1	1	1	1	1			
-26	627392	Cooler Assembly, Oil	1										
-26	632886	Cooler Assembly, Oil		1	1	1	1	1	1	1			
ATTACHING PARTS													
-27	2472	Washer, Plain	8	8	8	8	8	8	8	8			
-28	MS35338-44	Washer, Lock	8	8	8	8	8	8	8	8			
-29	24835	Screw, 1/4 - 20 x 7/8 In. Lg.	8	8	8	8	8	8	8	8			
* * * *													
-30	639305	Valve, Temperature Control	1	1	1	1	1	1	1	1			
-31	632983	Shoe, Oil Cooler Bracket		1	1	1	1	1	1	1			
-32	632987-1.00	Bolt, Carriage		1	1	1	1	1	1	1			
-33	13XX18001	Nut, Hex		1	1	1	1	1	1	1			
* * * *													
-34	641361	Plate, Oil Seal Retainer										1	
-35	632321-38	Bolt										4	

NOTE (\*) To order, supply engine model and spec.

NOTE (\*\*) See Service Bulletin M75-12.

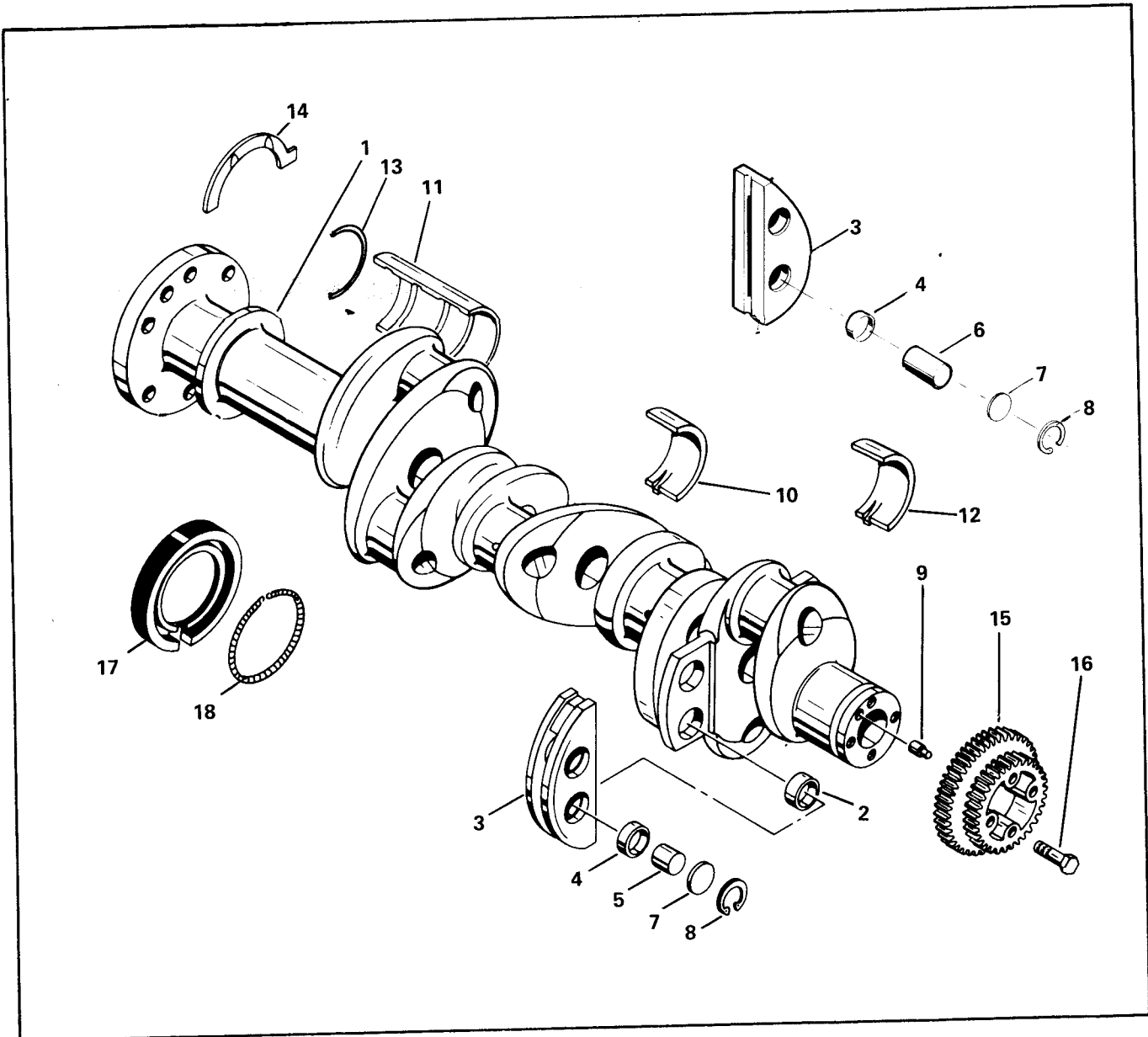


FIGURE 4. CRANKSHAFT GROUP

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY									
			IO - 360									
			A	C	D	G	H	J	K			
4-	639200 *	Crankshaft and Damper Assembly . . . . .	1	1	1							
	639786	Crankshaft and Damper Assembly . . . . .				1	1	1	1			
-1	No Number	. Crankshaft Assembly . . . . .	ns	ns	ns	ns	ns	ns	ns			
-2	639580 †*	. Bushing, Crankshaft Damper . . . . .	4	4	4	4	4	4	4			
	639199 *	. Counterweight Assembly . . . . .	2	2	2	2	2	2	2			
-3	No Number	. Counterweight Assembly . . . . .	ns	ns	ns	ns	ns	ns	ns			
-4	639198 *	. Bushing . . . . .	4	4	4	4	4	4	4			
-5	630261-41 *	. Pin, Counterweight . . . . .	4	4	4							
-5	630261-43	. Pin, Counterweight . . . . .				2	2	2	2			
-6	630261-44	. Pin, Counterweight . . . . .				2	2	2	2			
-7	633976	. Plate, Retaining . . . . .	8	8	8	8	8	8	8			
-8	629004	. Ring, Retaining . . . . .	8	8	8	8	8	8	8			
-9	630651 †	Dowel . . . . .	1	1	1	1	1	1	1			
-10	632857 \$†	Bearing, Rear and Intermediate . . . . .	6	6	6	6	6	6	6			
-11	632885 \$†	Bearing, Front . . . . .	2	2	2	2	2	2	2			
-12	639640 †	Bearing, Connecting Rod . . . . .	12	12	12	12	12	12	12			
-13	632879 \$†	Packing . . . . .	4	4	4	4	4	4	4			
-14	637579	Washer, Thrust . . . . .	4	4	4	4	4	4	4			
-15	630690	Gear, Crankshaft Cluster . . . . .	1	1	1	1	1	1	1			
ATTACHING PARTS												
-16	630692	Screw . . . . .	4	4	4	4	4	4	4			
* * * *												
-17	530917	Seal Assembly . . . . .	1	1	1	1	1	1	1			
-18	530974	. Spring . . . . .	1	1	1	1	1	1	1			

NOTE (\*) If old crankshaft and counterweight assembly, P/N 633527 is serviceable except for bushing or counterweight replacements, order crankshaft bushing P/N 626566 in place of 639580 (item 2); counterweight assembly number 629696 in place of 639199 (item 3); counterweight bushing P/N 626564 in place of 639198 (item 4) and counterweight pin P/N 630261-17 in place of 630261-41 (item 5).

CAUTION: These parts relationships must be maintained. Old and new parts cannot be intermixed. If there is doubt about the crankshaft identity, measure the inside diameter of the bushing hole in the blade on the crankshaft cheek. The hole in crankshaft 633527 should be 0.937/0.938. The hole in crankshaft 639200 should be 0.815/0.816.

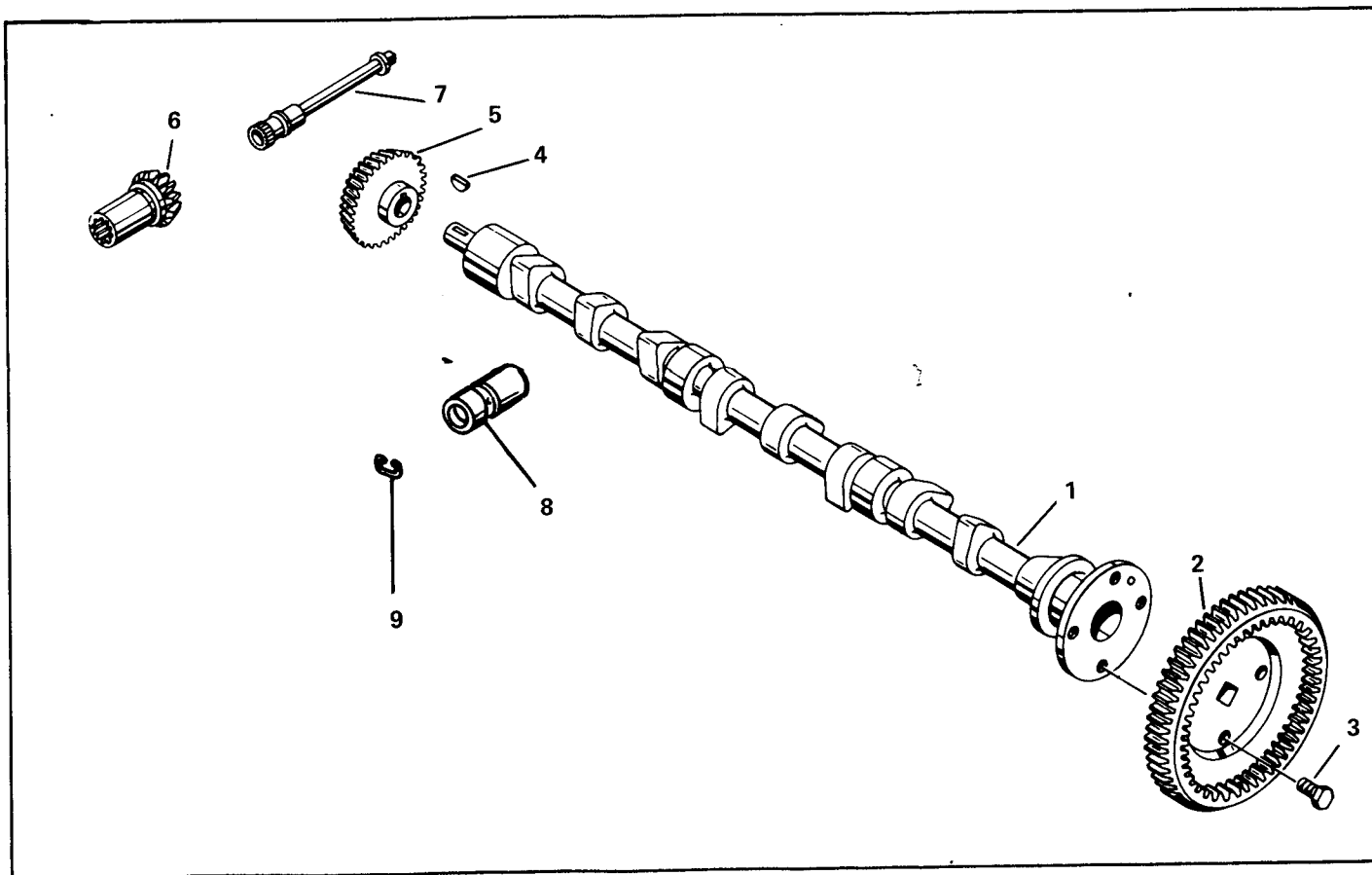


FIGURE 5. CAMSHAFT ASSEMBLY

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY						
			IO - 360						
			A	C	D	G	H	J	K
5-	No Number	Camshaft Assembly	ns	ns	ns	ns	ns	ns	ns
-1	629627 †	Camshaft	1						
-1	641060	Camshaft		1	1	1	1	1	1
-2	630562	Gear, Camshaft	1						
-2	632477	Gear, Camshaft		1	1	1	1	1	1
ATTACHING PARTS									
-3	630742	Screw, 5/16 - 24 x 3/8 In. Lg.	4	4	4	4	4	4	4
* * * *									
-4	MS35756-8	Key, Woodruff	1	1	1	1	1	1	1
-5	629588	Gear, Governor Drive	1	1	1	1	1	1	1
-6	629602	Gear, Governor Driven	1	1	1	1	1	1	1
-7	630265	Shaft, Fuel Pump Drive	1	1	1	1	1	1	1
-8	633106	Lifter Assy., Hydraulic Valve	12	12	12	12	12	12	12
-9	641862	Ring, Snap	1	1	1	1	1	1	1

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY									
			IO - 360									
			A	C	D	G	H	J	K			
6-	626168	Connecting Rod Assembly . . . . .	6	6	6	6	6	6	6			
-1	No Number	. Rod and Cap, Connecting . . . . .	ns	ns	ns	ns	ns	ns	ns			
-2	538684	. Bushing, Piston Pin . . . . .	1	1	1	1	1	1	1			
-3	530213	. Bolt, Connecting Rod . . . . .	2	2	2	2	2	2	2			
-4	626140	. Nut, Slotted, Special, 3/8 - 24 . . . . .	2	2	2	2	2	2	2			
-5	639292	Pin, Cotter . . . . .	12	12	12	12	12	12	12			

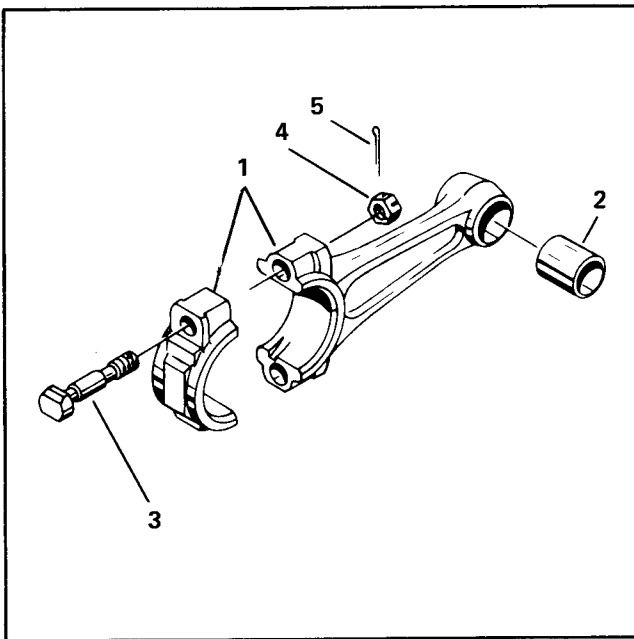


FIGURE 6. CONNECTING ROD ASSEMBLY

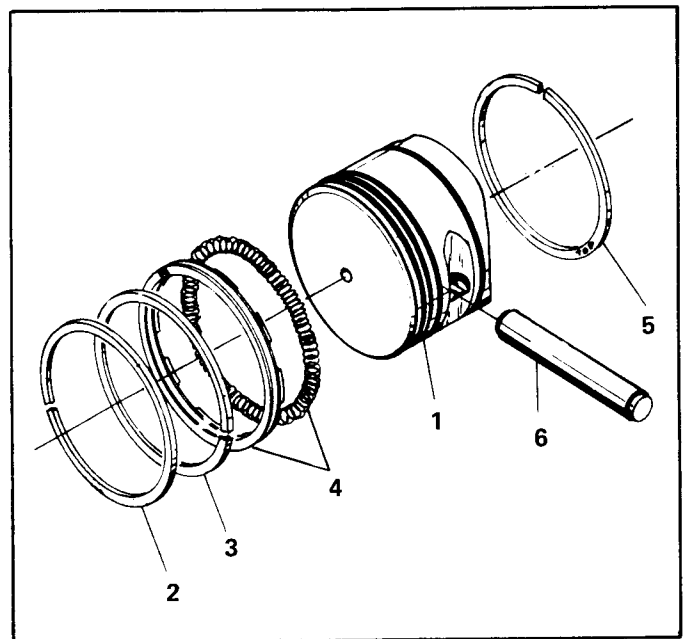


FIGURE 7. PISTON AND PIN ASSEMBLY

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY									
			IO - 360									
			A	C	D	G	H	J	K			
7-1	630687	† Piston, 8.5:1 Compression Ratio . . . . .	6	6	6	6	6	6	6			
-2	639570	† Ring, Top Groove . . . . .	6	6	6	6	6	6	6			
-3	639579	† Ring, Second Groove . . . . .	6	6	6	6	6	6	6			
-4	635964	† Ring, Oil Control . . . . .	6	6	6	6	6	6	6			
-5	630678	† Ring, Fourth Groove . . . . .	6	6	6	6	6	6	6			
-6	629690	Pin, Piston . . . . .	6	6	6	6	6	6	6			

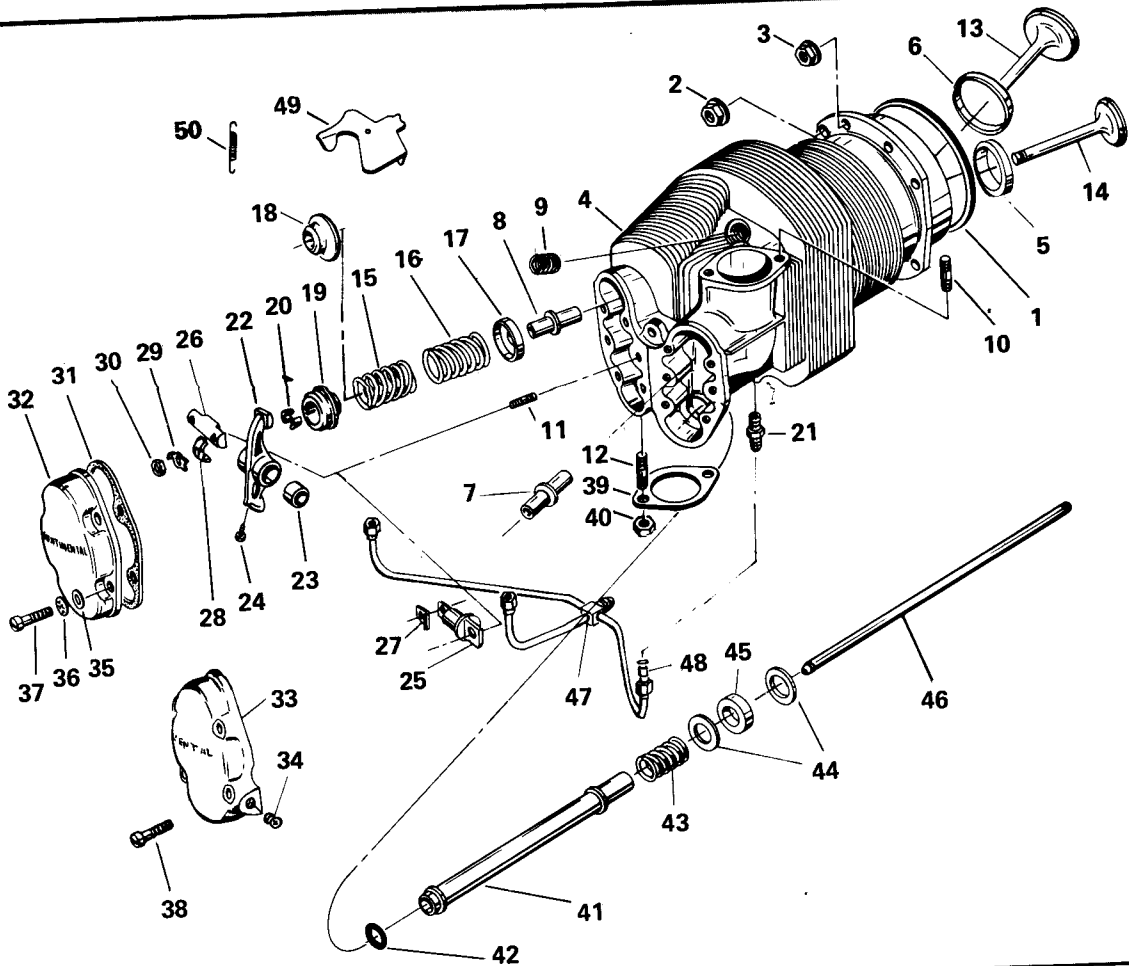


FIGURE 8. CYLINDER ASSEMBLY

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY						
			IO - 360						
			A	C	D	G	H	J	K
8-1	21477	Packing, Cylinder Base	6	6	6	6	6	6	6
	No Number	Cylinder Assembly Complete	ns	ns	ns	ns	ns	ns	ns
ATTACHING PARTS									
-2	531001	Nut, Flanged 7/16 - 20	12	12	12	12	12	12	12
-3	531003	Nut, Flanged 3/8 - 20	36	36	36	36	36	36	36
* * * *									
	641370A1	Cylinder and Valve Assembly	1	1	1	1	1	1	1
	641370	Cylinder Assembly	1	1	1	1	1	1	1
-4	No Number	Head and Barrel	ns	ns	ns	ns	ns	ns	ns
-5	635959	† Insert, Exhaust Valve Seat	1	1	1	1	1	1	1
-6	629702	† Insert, Intake Valve Seat	1	1	1	1	1	1	1
-7	630262	† Guide, Valve	1	1	1	1	1	1	1
-8	639282	† Guide, Valve	1	1	1	1	1	1	1
-9	520112	Insert, Spark Plug Hole	2	2	2	2	2	2	2
-10	401836	† Stud, 5/16 x 1-7/16 In. Long	2	2	2	2	2	2	2
-11	401801	† Stud, 1/4 x 1-3/16 In. Long	4	4	4	4	4	4	4
-12	402044	† Stud, 5/16 x 1-3/8 In. Long	2	2	2	2	2	2	2
-13	629707	Valve, Intake	1	1	1	1	1	1	1
-14	639283	Valve, Exhaust	1	1	1	1	1	1	1

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY									
			IO - 360									
			A	C	D	G	H	J	K			
8-15	625957	. . Spring, Inner . . . . .	2	2	2	2	2	2	2			
-16	625958	. . Spring, Outer . . . . .	2	2	2	2	2	2	2			
-17	24026	. . Retainer, Valve Spring . . . . .	2	2	2	2	2	2	2			
-18	627732	. . Seat, Valve Spring, Intake Valve . . . . .	1	1	1	1	1	1	1			
-19	631654	. . Roto Coil Assy., Exhaust Valve . . . . .	1	1	1	1	1	1	1			
-20	627731	. . Key, Valve Spring . . . . .	2	2	2	2	2	2	2			
-21	632068	. . Sleeve, Drain Connector . . . . .	1	1	1	1	1	1	1			
	630476	. . Rocker Arm Assembly . . . . .	2	2	2	2	2	2	2			
-22	No Number	. . Rocker Arm . . . . .	ns	ns	ns	ns	ns	ns	ns			
-23	627693	. . Bushing . . . . .	2	2	2	2	2	2	2			
-24	21007	. . Plug, Rocker Arm . . . . .	1	1	1	1	1	1	1			
-25	627694	* . Shaft, Valve Rocker . . . . .	2									
-26	631991	. Shaft, Valve Rocker . . . . .	2	2	2	2	2	2	2			
-27	628059	* . Retainer, Valve Rocker . . . . .	2									
-28	631996	. Retainer, Valve Rocker . . . . .	4	4	4	4	4	4	4			
ATTACHING PARTS												
-29	501867	. Washer, Tab . . . . .	4	4	4	4	4	4	4			
-30	2437	. Nut, Plain Hex . . . . .	4	4	4	4	4	4	4			
* * * *												
-31	632310	\$ . Gasket, Rocker Cover . . . . .	2	2	2	2	2	2	2			
-32	627593	** . Cover, Rocker . . . . .	2									
-33	627593	** . Cover, Rocker . . . . .		1	1	1	1	1	1			
	633019	** . Cover, Rocker, Cyl. No. 2 Int. Side . . . . .		1	1	1	1	1	1			
-33	No Number	. . Cover . . . . .	ns	ns	ns	ns	ns	ns	ns			
-34	MS122122	. . Insert Helical Coil . . . . .		1	1	1	1	1	1			
ATTACHING PARTS												
-35	632440	. Washer, Plain . . . . .	8	8	8	8	8	8	8			
-36	MS35338-44	. Washer, Lock . . . . .	8	8	8	8	8	8	8			
-37	535091	. Screw, Filister Head . . . . .	8									
-37	535091	. Screw, Filister Head . . . . .		4	4	4	4	4	4			
-38	AN500D416-20	. Screw . . . . .		4	4	4	4	4	4			
* * * *												
-39	630365	\$ Gasket, Exhaust Flange . . . . .	6	6	6	6	6	6	6			
-40	22022	Nut, Plain Brass . . . . .	12	12	12	12	12	12	12			
-41	632141	Housing, Push Rod . . . . .	12	12	12	12	12	12	12			
-42	630286	\$ Gasket . . . . .	12	12	12	12	12	12	12			
-43	632317	Spring . . . . .	12	12	12	12	12	12	12			
-44	629711	Washer, Push Rod Housing . . . . .	24	24	24	24	24	24	24			
-45	641607	\$ Seal, Push Rod Housing . . . . .	12	12	12	12	12	12	12			
-46	630393	Push Rod Assembly . . . . .	12	12	12	12	12	12	12			
-47	632137	Tube, Assembly, Cylinder Drain . . . . .	2	2	2	2	2	2	2			
-48	632248	. Seal . . . . .	3	3	3	3	3	3	3			
-49	630057	Baffle, Cylinder Head . . . . .	6	6	6	6	6	6	6			
-50	532377	Spring, Cylinder Baffle . . . . .	6	6	6	6	6	6	6			

NOTE (\*) Must be used with cast aluminum rocker box covers which were original equipment on early IO-360-A engines. See Service Bulletin M63-20 for correct installation.

NOTE (\*\*) The IO-360-A uses twelve (12) 627593 rocker covers per engine. All others use eleven (11) 627593 rocker covers per engine and one (1) 633019 rocker cover assembly which is used on the No. 2 cylinder intake side only.

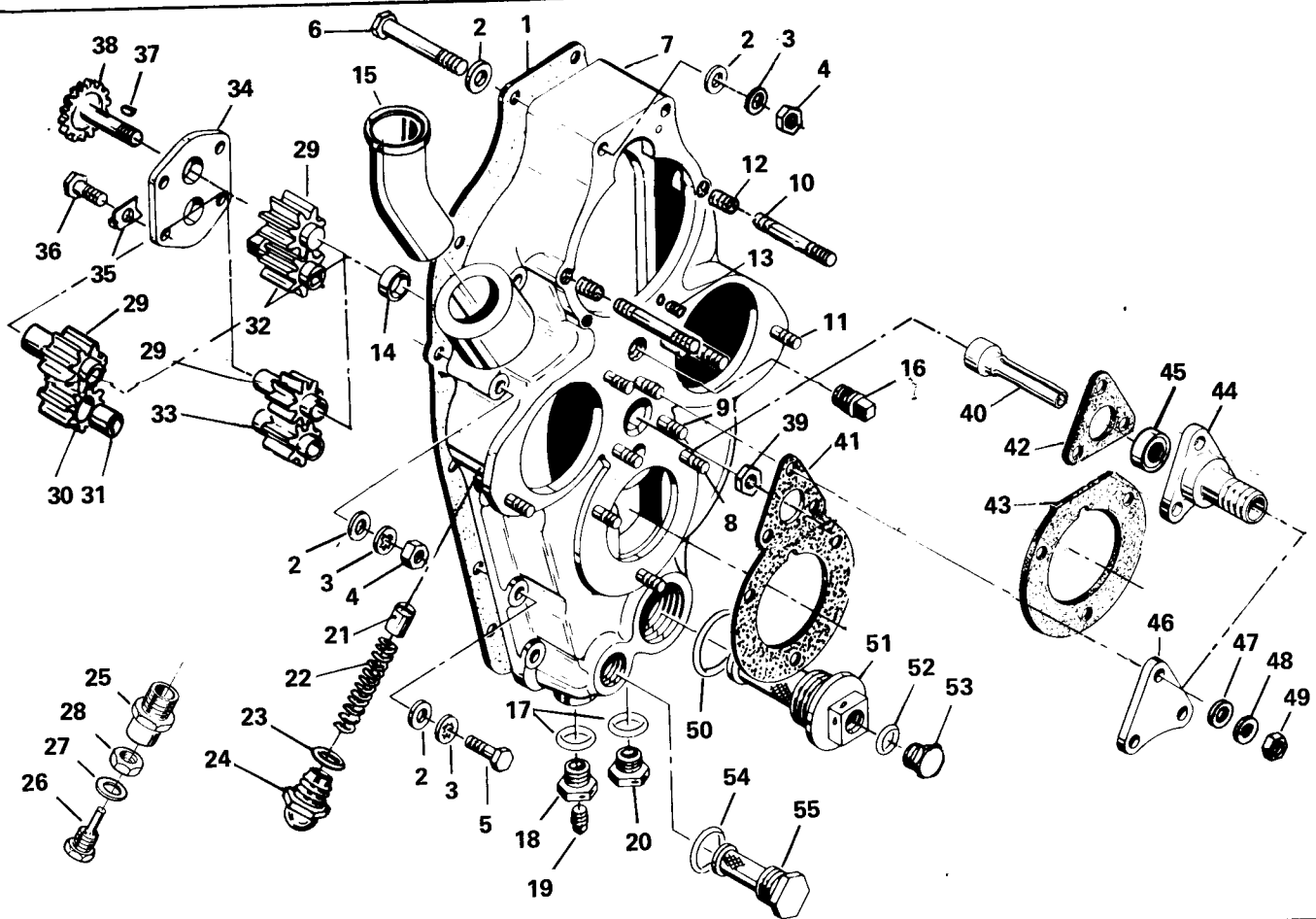


FIGURE 9. CRANKCASE COVER ASSEMBLY

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY IO - 360									
			A	C	D	G	H	J	K			
9- 1	530011 \$	Gasket, Crankcase, Cover-to-Crankcase .....	1	1	1	1	1	1	1			
	No Number	Crankcase Cover Assembly, Complete .....	ns	ns	ns	ns	ns	ns	ns			
		ATTACHING PARTS										
-2	2473	Washer, Plain .....	12	12	12	12	12	12	12			
-3	MS35338-45	Washer, Lock .....	12	12	12	12	12	12	12			
-4	2439	Nut, Plain, Hex Head, 5/16 - 24 .....	7	7	7	7	7	7	7			
-5	537961	Screw, Hex Head, 5/16 - 18 x 1 Inch Long .....	5	5	5	5	5	5	5			
-6	539916	Screw, Hex Head, 5/16 - 24 x 3-1/4 Inch Long .....	1	1	1	1	1	1	1			
		*****										
	632346	. Crankcase Cover Assembly .....	1		1	1						
	640849	. Crankcase Cover Assembly .....		1	1			1	1			
	641798	. Crankcase Cover Assembly .....									1	
	641801	. Crankcase Cover Assembly .....	ns	ns	ns	ns	ns	ns	ns	ns	ns	
-7	No Number	. Cover, Crankcase .....	3	3	3	3	3	3	3	3	3	
-8	401809 †	. Stud, 5/16 x 1-3/8 Inch Long .....	3	3	3	3	3	3	3	3	3	
-9	401963 †	. Stud, 1/4 x 1 Inch Long .....	3									
-10	401926 †	. Stud, 5/16 x 4 Inch Long .....	3	3	3	3	3	3	3	3	3	
-11	401885 †	. Stud, 5/16 x 1-5/16 Inch Long .....										
-12	MS122162	. Insert, Thread .....		2	2	2	2	2	2	2	2	
-13	MS122122	. Insert, Thread .....		1	1	1	1	1	1	1	1	
-14	627762	. Bushing, Bronze .....	2	2	2	2						
-14	627762	. Bushing, Bronze .....					1	1	1	1	1	
-15	632344	. Tube, Oil Filler Neck .....	1	1	1	1						
-15	632074	. Tube, Oil Filler Neck .....						1	1	1	1	
-16	629518-3H	. Plug, 3/6 NPTF .....	1	1	1	1	1	1	1	1	1	
-17	AN900-10 \$	. Gasket, Annular .....	2	2	2	2	2	2	2	2	2	
-18	630415	. Plug, Hex Head, 5/8 - 18 .....	1	1	1	1	1	1	1	1	1	
-19	629518-1H	. Plug, 1/8 NPTF .....	1	1	1	1	2	2	2	2	2	



FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY									
			IO - 360									
			A	C	D	G	H	J	K			
9-20	532432	. . Plug, Hex Head, 5/8 - 18 . . . . .	1	1	1	1						
-20	630415	. . Plug, Hex Head, 5/8 - 18 . . . . .					1	1	1			
-21	631687	* . Plunger, Oil Pressure Relief Valve . . . . .	1	1	1	1	1	1	1			
-22	637083	* . Spring, Oil Pressure Relief Valve . . . . .	1							1		
-22	539619	. Spring, Oil Pressure Relief Valve . . . . .		1	1	1	1	1	1			
-23	AN900-14	* . Gasket, Annular . . . . .	1	1	1	1	1	1	1	1		
-24	21113	* . Cap, Oil Pressure Relief Valve . . . . .	1	1	1				1			
-25	641074	** . Cap, Oil Pressure Relief Valve . . . . .				1	1			1		
-26	641075	** . Screw, Relief Valve Adjusting . . . . .				1	1			1		
-27	X1473	** . Washer, Plain . . . . .				1	1			1		
-28	632762	** . Nut, Elastic Stop . . . . .				1	1			1		
-29	631803	. Gear, Oil Pump Drive . . . . .	1									
-29	632497	. Gear, Oil Pump Drive . . . . .		1	1	1						
-29	633602	. Gear, Oil Pump Drive . . . . .						1	1	1		
	633610	. Gear, Oil Pump Driven . . . . .						1	1	1		
-30	No Number	. . Gear . . . . .					ns	ns	ns			
-31	633611	. . Bushing . . . . .					1	1	1			
-32	631804	. Gear, Oil Pump Drive . . . . .	1									
-33	632492	. Gear, Oil Pump Drive . . . . .		1	1	1						
-34	631801	. Cover, Oil Pump . . . . .	1									
-34	632470	. Cover, Oil Pump . . . . .		1	1	1						
-34	633612	. Cover, Oil Pump . . . . .					1	1	1			
ATTACHING PARTS												
-35	36025	. Washer, Tab . . . . .	4	4	4	4	4	4	4	4		
-36	22537	. Screw, Hex Head, 1/4 - 20 x 5/8 Inch Long . . . . .	4									
-36	626487	. Screw, Hex Head, 1/4 - 20 x 9/16 Inch Long . . . . .		4	4	4	4	4	4	4		
* * * *												
-37	MS35756-1	. Key, Woodruff . . . . .		1	1	1	1	1	1	1		
-38	632550	. Gear, Oil Pump Drive . . . . .	1	1	1	1						
-38	634010	. Gear, Oil Pump Drive . . . . .					1	1	1			
-39	632443-3	. Nut, Oil Pump Drive Gear . . . . .	1	1	1	1						
-40	641535-1RH	. Connector, Tach Drive . . . . .					1	1	1			
-41	36100	\$ . Gasket, Tach Drive Cover . . . . .	1									
-41	632560	\$ . Gasket, Generator & O/P Drive Gear . . . . .		1	1	1						
-42	641538	\$ . Gasket, Tach Drive . . . . .					1	1	1			
-43	352066	\$ . Gasket, Generator . . . . .					1	1	1			
	641531	. Adapter Assembly, Tach Drive . . . . .					1	1	1			
-44	No Number	. . Adapter, Tach Drive . . . . .					ns	ns	ns			
-45	641533	. Seal . . . . .					1	1	1			
-46	631302	. Cover, Tach Drive . . . . .	1									
-46	632475	. Cover, Oil Pump Gear . . . . .		1	1	1						
ATTACHING PARTS												
-47	20522	. Washer, Plain . . . . .	3	3	3	3	3	3	3	3		
-48	MS35338-44	. Washer, Lock . . . . .	3	3	3	3	3	3	3	3		
-49	2437	. Nut, Plain, 1/4 - 28 . . . . .	3	3	3	3	3	3	3	3		
* * * *												
-50	AN900-28	\$ . Gasket, Annular . . . . .	1	1	1	1	1	1	1	1		
-51	530003	. Oil Screen Assembly . . . . .	1	1	1	1	1	1	1	1		
-52	AN900-10	\$ . Gasket, Annular . . . . .	1	1	1	1	1	1	1	1		
-53	532432	. Plug, Hex Head, 5/8 - 18 . . . . .	1	1	1	1	1	1	1	1		
-54	AN900-16	\$ . Gasket, Annular . . . . .	1	1	1	1	1	1	1	1		
-55	641835	. Screen Assembly, Suction . . . . .	1	1	1	1	1					

NOTE (\*) These parts are located on the right side of the crankcase cover on the IO-360-A.

NOTE (\*\*) These parts are optional on the IO-360-A, C, D & H.

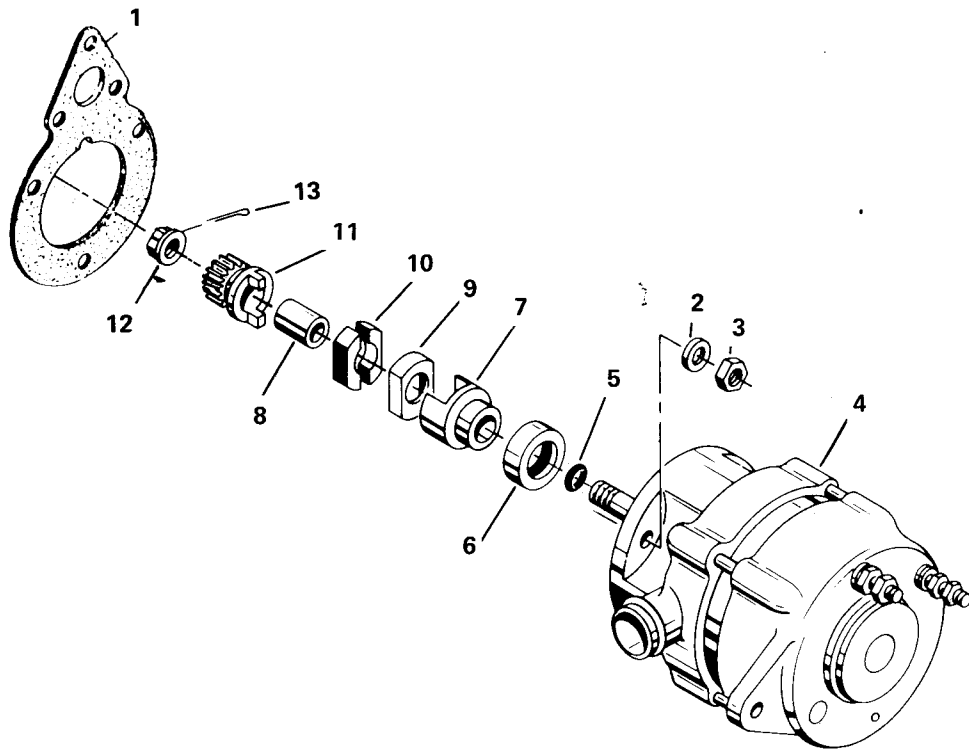


FIGURE 10. ALTERNATOR ASSEMBLY

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY							
			IO - 360							
			A	C	D	G	H	J	K	
10-1	36100	\$ Gasket, Alternator	RF							
-1	632560	\$ Gasket, Alternator		RF	RF	RF	RF	RF	RF	
	No Number	Alternator Assembly, 30 AMP 24 Volt	ns	ns	ns					
	No Number	Alternator Assembly 38 AMP 28 Volt				ns	ns			
	No Number	Alternator Assembly 60 AMP, 15 Volt						ns	ns	
ATTACHING PARTS										
-2	2473	Washer, Plain	3	3	3	3	3	3	3	
-3	21213	Nut, Elastic Stop	3	3	3	3	3	3	3	
* * * *										
-4	629820	. Alternator, 30 AMP 24 Volt	1	1	1					
-4	633962	. Alternator, 38 AMP 28 Volt				1	1			
-4	633661	. Alternator, 60 AMP 15 Volt						1	1	
-5	AN123864	. O-Ring	1	1	1					
-6	352068	. Seal, Oil	1	1	1					
-7	530406	. Hub, Alternator Coupling	1	1	1	1	1	1	1	
-8	530407	. Sleeve	1	1	1	1	1	1	1	
-9	352030	. Retainer	1	1	1	1	1	1	1	
-10	632050	. Bushing	2	2	2	2	2	2	2	
-11	531325	. Gear, Alternator Drive	1	1	1	1	1	1	1	
-12	530412	. Nut, Slotted	1	1	1	1	1	1	1	
-13	639292	. Pin, Cotter	1	1	1	1	1	1	1	

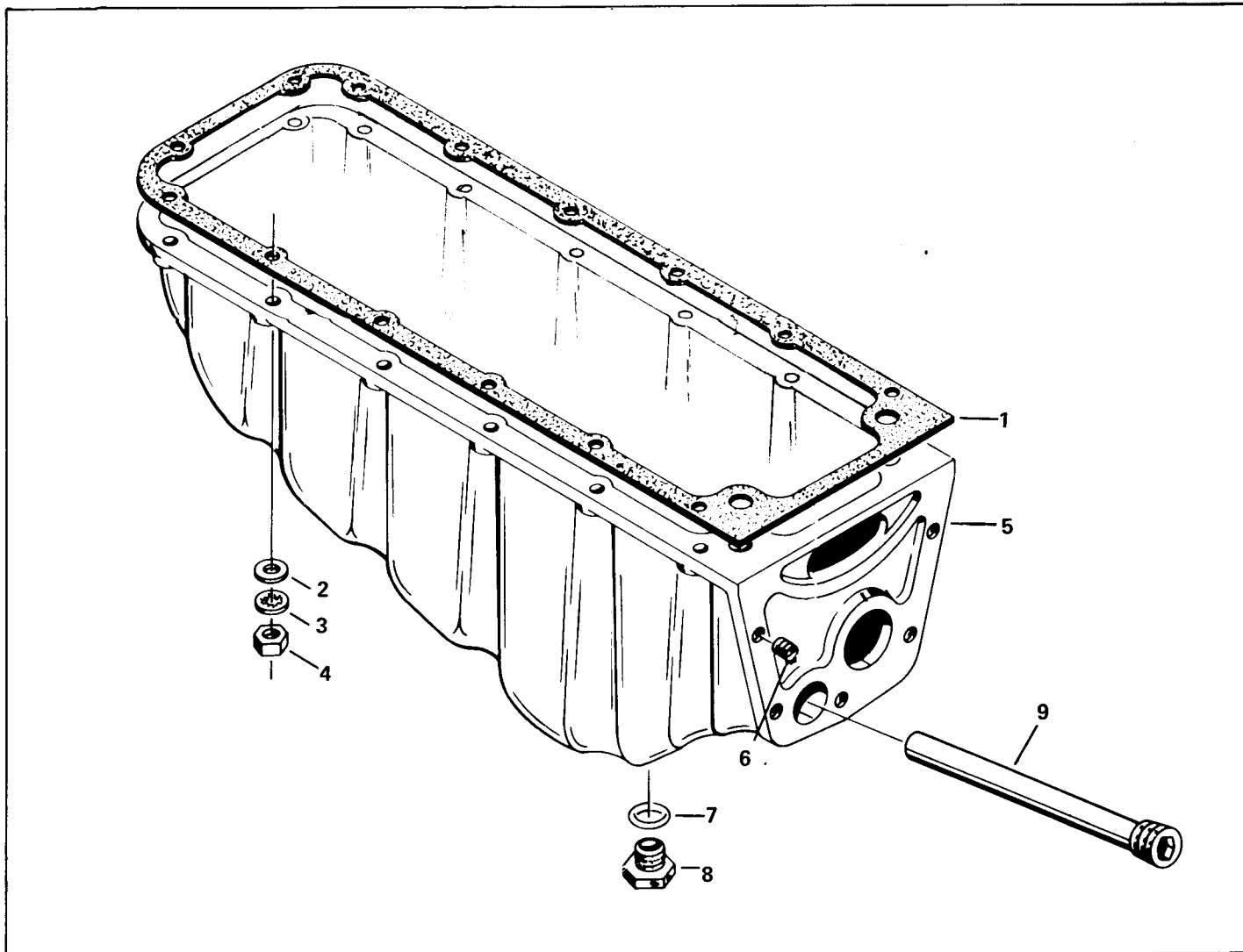


FIGURE 11. OIL SUMP ASSEMBLY

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY							
			IO - 360							
			A	C	D	G	H	J	K	
11-1	641870 \$	Gasket, Oil Sump . . . . .	1	1	1	1	1	1	1	
	No Number	Sump Assembly, Oil . . . . .	ns	ns	ns	ns	ns	ns	ns	
ATTACHING PARTS										
-2	20522	Washer, Plain . . . . .	14	14	14	14	14	14	14	
-3	MS35338-44	Washer, Lock . . . . .	14	14	14	14	14	14	14	
-4	2437	Nut, Plain, Hex, 1/4 - 28 . . . . .	14	14	14	14	14	14	14	
* * * *										
	629671A2	. Oil Sump Assembly . . . . .	1	1	1	1	1	1	1	
-5	No Number	. . Sump, Oil . . . . .	ns	ns	ns	ns	ns	ns	ns	
-6	MS122122	. . Insert, Thread . . . . .	5	5	5	5	5	5	5	
-7	AN900-10 \$	. . Gasket, Annular . . . . .	1	1	1	1	1	1	1	
-8	2265	. . Plug, Oil Drain, 5/8 - 18 . . . . .	1	1	1	1	1	1	1	
-9	626264	. Tube Assembly, Suction . . . . .	1	1	1	1	1	1	1	

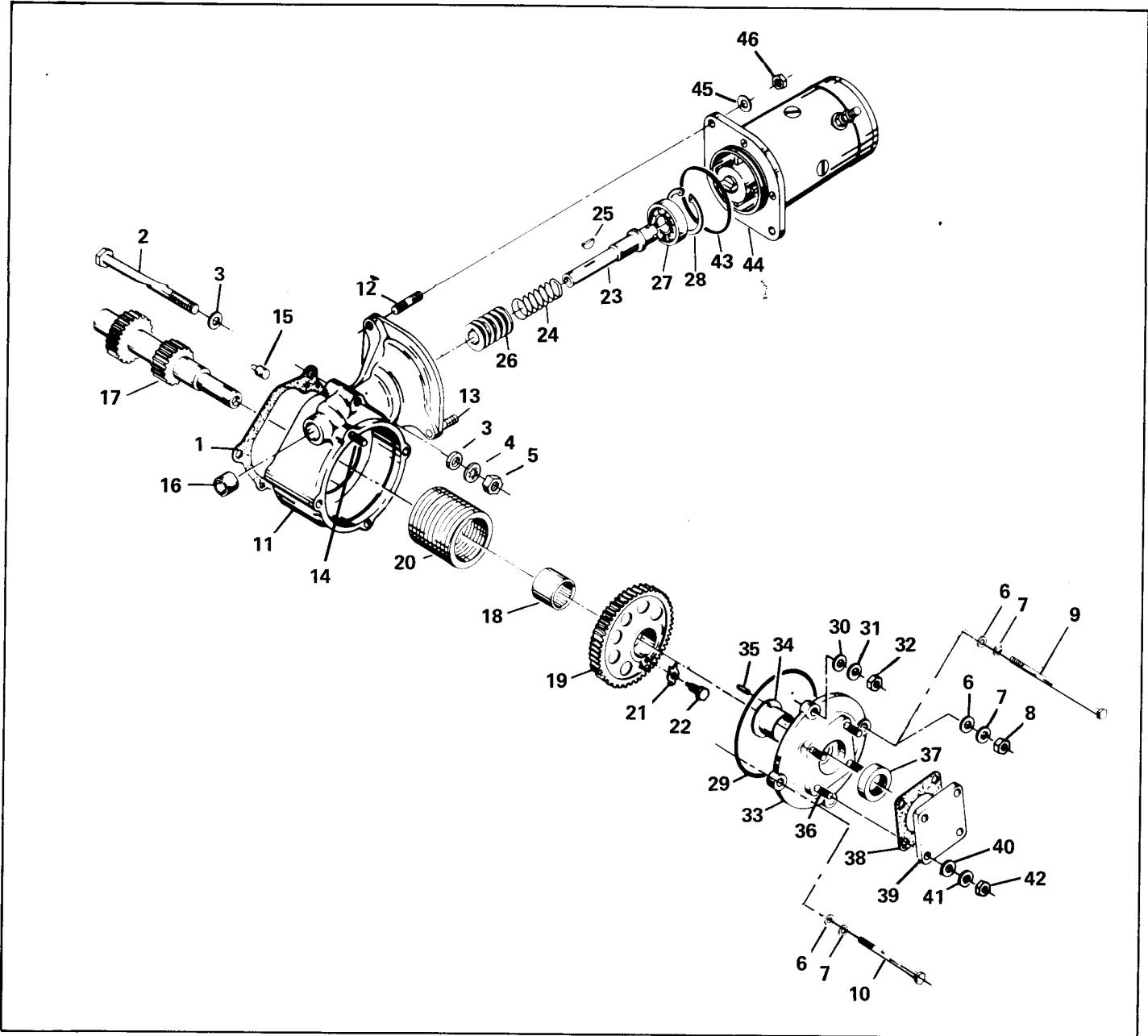


FIGURE 12. STARTER AND STARTER ADAPTER ASSEMBLY

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY									
			IO - 360									
			A	C	D	G	H	J	K			
12-1	627993	\$ Gasket, Starter Adapter	1		1		1	1	1			
	635048A1	Adapter Assembly, Starter, Complete	1		1		1	1	1			
		ATTACHING PARTS										
-2	628056	Bolt, Hex Head 5/16 - 24 x 5-13/32 In. Lg.	1		1		1	1	1			
-3	2473	Washer, Plain	2		2		2	2	2			
-4	MS35338-45	Washer, Lock	1		1		1	1	1			
-5	2439	Nut, Plain, 5/16 - 24	1		1		1	1	1			
-6	2473	Washer, Plain	3		3		3	3	3			
-7	MS35338-45	Washer, Lock	3		3		3	3	3			

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY									
			IO - 360									
			A	C	D	G	H	J	K			
12-8	2439	Nut, Plain, 5/16 - 24	3		3		3	3	3			
-9	627433	Bolt, 5/16 - 18 x 5-1/4 In. Lg.	2		2		2	2	2			
-10	538999	Bolt, 5/16 - 18 x 3-5/8 In. Lg.	1		1		1	1	1			
	635048	. Adapter Assembly, Starter	1		1		1	1	1			
-11	No Number	. . Adapter and Sleeve Assembly	ns		ns		ns	ns	ns			
-12	402127	† . . Stud, 3/8 - 1-17/32 In. Lg.	1		1		1	1	1			
-13	401861	† . . Stud, 3/8 x 1-3/4 In. Lg.	1		1		1	1	1			
-14	402151	† . . Stud, 5/16 x 1-1/4 In. Lg.	1		1		1	1	1			
-15	627882	. . Dowel, 5/16 x 33/64 In. Lg.	2		2		2	2	2			
-16	641368	. Bearing, Needle	1		1		1	1	1			
-17	627817	. Shaftgear, Starter	1		1		1	1	1			
-18	630680	. Bearing, Roller	1		1		1	1	1			
-19	627860	. Gear, Starter	1		1		1	1	1			
-20	539800	. Spring, Clutch	1		1		1	1	1			
ATTACHING PARTS												
-21	501867	. Washer, Tab	1		1		1	1	1			
-22	633845	. Screw, 1/4 - 20 x 11/32 In. Lg.	1		1		1	1	1			
* * * *												
-23	631252	. Shaft, Worm Drive	1		1		1	1	1			
-24	536552	. Spring, Worm Shaft	1		1		1	1	1			
-25	MS35756-8	. Key, Woodruff	1		1		1	1	1			
-26	539805	. Gear, Starter Worm	1		1		1	1	1			
-27	X13041	. Bearing, Ball	1		1		1	1	1			
-28	502287	. Ring, Retaining	1		1		1	1	1			
-29	AN123902 \$	. O-Ring	1		1		1	1	1			
	628071	. Cover Assembly, Starter Adapter	1		1		1	1	1			
ATTACHING PARTS												
-30	2473	. Washer, Plain	1		1		1	1	1			
-31	MS35338-45	. Washer, Lock	1		1		1	1	1			
-32	2439	. Nut, Plain	1		1		1	1	1			
* * * *												
-33	No Number	. . Cover, Starter Adapter	1		1		1	1	1			
-34	628125	. . Bushing	1		1		1	1	1			
-35	633280	. . Pin, Bushing	1		1		1	1	1			
-36	401963	† . . Stud, 1/4 x 1 In. Long	4		4		4	4	4			
-37	25102	\$ . . Seal, Oil	1		1		1	1	1			
-38	MS9134-01 \$	. Gasket, Accessory Pad Cover	1		1		1	1	1			
-39	640380	. Cover, Accessory Drive	1		1		1	1	1			
ATTACHING PARTS												
-40	2472	. Washer, Plain	4		4		4	4	4			
-41	MS35338-44	. Washer, Lock	4		4		4	4	4			
-42	2437	. Nut, Plain Hex, 1/4 - 28	4		4		4	4	4			
* * * *												
-43	MS9021-038 \$	O-Ring	1		1		1	1	1			
-44	637847	* Starter, 24 Volt	1		1		1		1			
-44	634592	* Starter, 12 Volt							1			
ATTACHING PARTS												
-45	539058	Washer, Plain	2		2		2	2	2			
-46	2441	Nut, Plain	2		2		2	2	2			

NOTE (\*) When replacing the Delco starter with the Prestolite, you will find it necessary to use two 402127 studs to the nearest oversize.

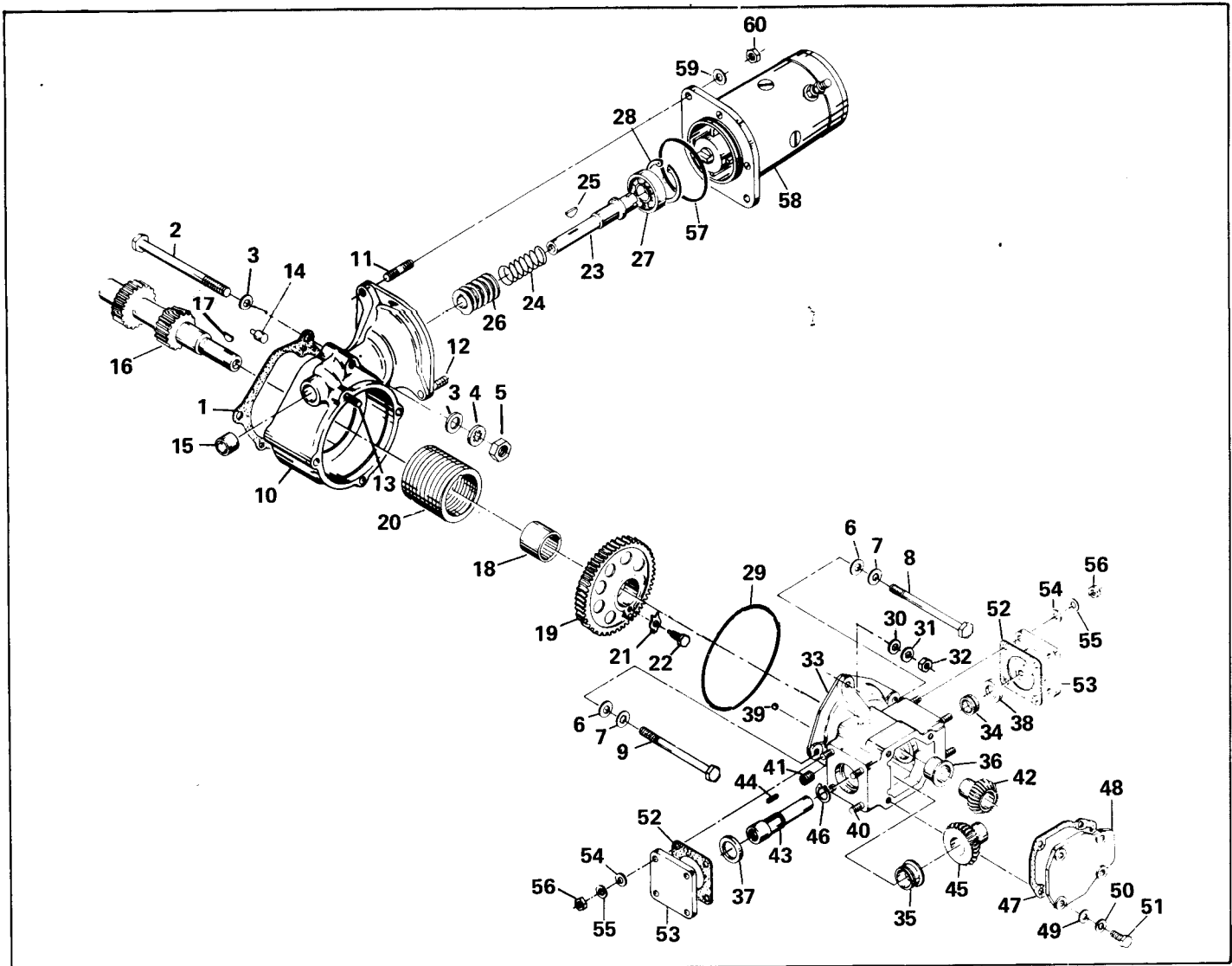


FIGURE 13. STARTER AND STARTER ADAPTER ASSEMBLY

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY						
			IO - 360						
			A	C	D	G	H	J	K
13- 1	627993 \$	Gasket .....		1		1			
	635048A3	Adapter, Assembly, Str. & Accessory Dr. Complete .....		1		1			
		ATTACHING PARTS							
-2	628056	Bolt, Hex Head 5/16 - 24 x 5-13/32 Inch Long .....		1		1			
-3	2473	Washer, Plain .....		2		2			
-4	MS35338-45	Washer, Lock .....		1		1			
-5	2439	Nut, Plain Hex 5/16 - 24 .....		1		1			
-6	2473	Washer, Plain .....		3		3			
-7	MS35338-45	Washer, Lock .....		3		3			
-8	627433	Bolt, Hex Head 5/16 - 18 x 5-1/4 Inch Long .....		2		2			
-9	538999	Bolt, Hex Head 5/16 x 3-5/8 Inch Long .....		1		1			
		* * * *							
	635048	. Adapter Assembly, Starter .....		1		1			
-10	No Number	. Adapter and Sleeve Assembly .....		ns		ns			
-11	402127	† . Stud, 3/8 - 1 - 17/32 Inch Long .....		1		1			
-12	401861	† . Stud, 3/8 x 1-3/4 Inch Long .....		1		1			
-13	402151	† . Stud, 5/16 x 1-1/4 Inch Long .....		1		1			
-14	627882	. Dowel, 5/16 x 33/64 Inch Long .....		2		2			
-15	641368	. Bearing, Needle .....		1		1			
-16	632615	. Shaftgear, Starter .....		1		1			

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY							
			IO - 360							
			A	C	D	G	H	J	K	
13-17	MS35756-8	. Key, Woodruff		1		1				
-18	630680	. Bearing, Roller		1		1				
-19	627860	. Gear, Starter, Wrom Wheel		1		1				
-20	539800	. Spring, Clutch		1		1				
ATTACHING PARTS										
-21	501867	. Washer, Tab		1		1				
-22	633845	. Screw, 1/4 - 20 x 11/32 Inch Long		1		1				
* * * *										
-23	631252	. Shaft, Worm Drive		1		1				
-24	536552	. Spring, Worm Shaft		1		1				
-25	MS35756-8	. Key, Woodruff		1		1				
-26	539805	. Gear, Starter Worm		1		1				
-27	X13041	. Bearing, Ball		1		1				
-28	502287	. Ring, Retaining		1		1				
-29	AN123902 \$	. O-Ring		1		1				
	632407	. Adapter Assembly, Accessory Drive		1		1				
ATTACHING PARTS										
-30	2473	. Washer, Plain		1		1				
-31	MS35338-45	. Washer, Lock		1		1				
-32	2439	. Nut, Plain, Hex		1		1				
* * * *										
-33	No Number	. Adapter Accessory Drive		ns		ns				
-34	632409	. Bushing, 25/32 I.D.		1		1				
-35	632410	. Bushing, 1-3/64 I.D.		1		1				
-36	632411	. Bushing, 7/8 I.D.		1		1				
-37	632412 \$	. Seal, Oil		1		1				
-38	25102 \$	. Seal, Oil		1		1				
-39	628249-5	. Ball, Carbon Steel		2		2				
-40	401870 †	. Stud, 1/4 x 1-1/8 Inch Long		8		8				
-41	402941	. Plug, 1/16 - 27 NPTF		1		1				
-42	632617	. Gear, Bevel, Accessory Drive		1		1				
-43	632613	. Shaftgear, Accessory Drive		1		1				
-44	MS20066-98	. Key, Machine, 1/2 Inch Long		1		1				
-45	632612	. Gear, Bevel, Accessory Driven		1		1				
-46	522247	. Ring, Retaining		1		1				
-47	633752	. Gasket, Cover Adapter		1		1				
-48	633751	. Cover, Adapter Accessory Drive		1		1				
ATTACHING PARTS										
-49	2472	. Washer, Plain		4		4				
-50	MS35338-44	. Washer, Lock		4		4				
-51	535631	. Screw, 1/4 - 20 x 1 Inch Long		4		4				
* * * *										
-52	MS9134-01 \$	. Gasket, Accessory Pad Cover		1		1				
-53	640380	. Cover, Accessory Drive		1		1				
ATTACHING PARTS										
-54	20522	. Washer, Plain		8		8				
-55	MS35338-44	. Washer, Lock		8		8				
-56	2437	. Nut, Plain, Hex 1/4 - 28		8		8				
* * * *										
-57	MS9021-038 \$	. O-Ring		1		1				
-58	637847 *	. Starter, 24 Volt		1		1				
ATTACHING PARTS										
-59	539058	. Washer, Plain		2		2				
-60	2441	. Nut, Plain		2		2				

NOTE (\*) When replacing the Delco starter with the Prestolite, you will find it necessary to use two 402127 studs to the nearest oversize.

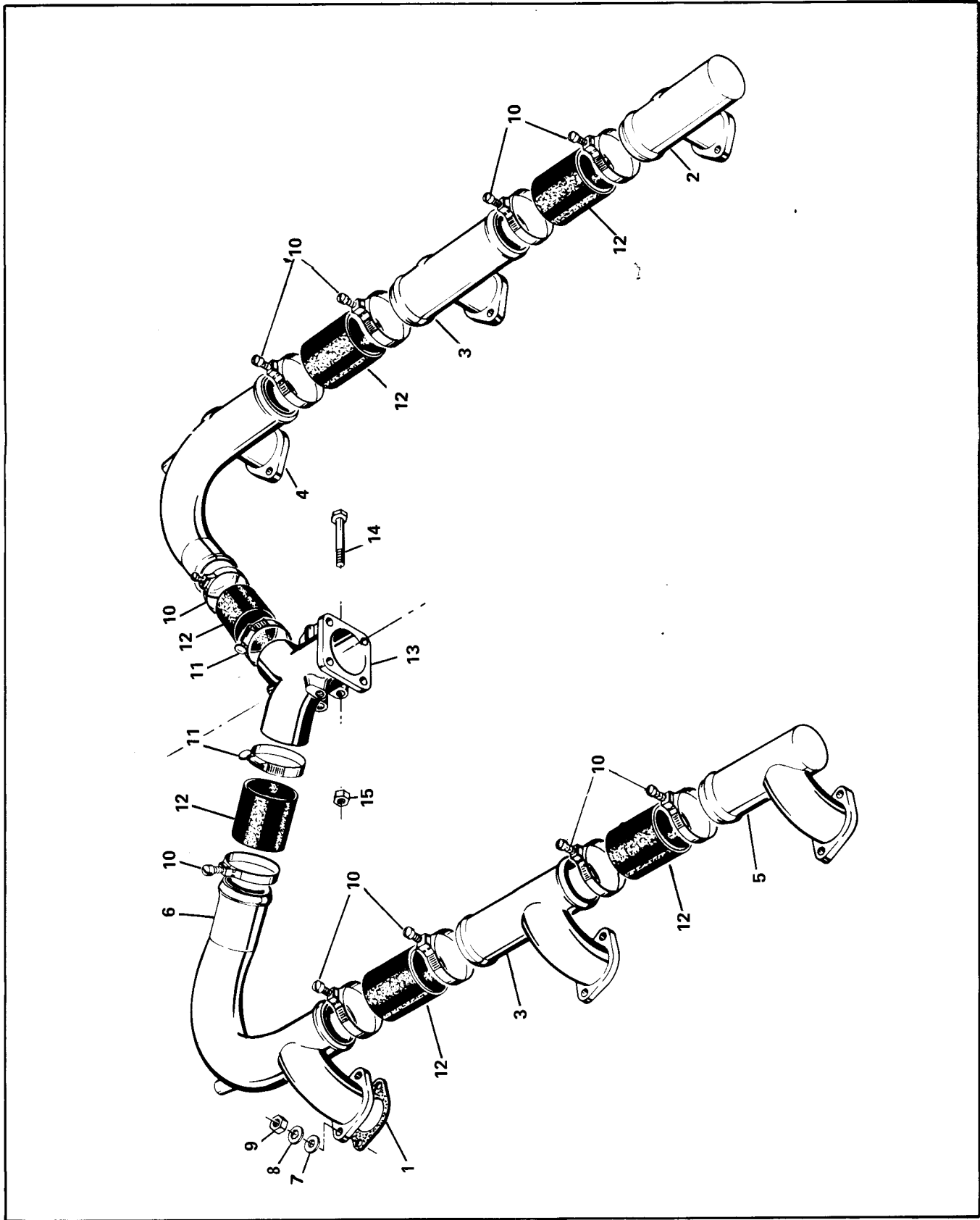


FIGURE 14. INDUCTION SYSTEM



FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY										
			IO - 360										
			A	C	D	G	H	J	K				
14-1	629925	\$ Gasket, Intake Manifold . . . . .	6	6	6	6	6	6	6				
-2	629873	Tube Assembly, Intake Man. No. 1 Cylinder . . . . .	1	1	1	1	1	1	1				
-3	629864	Tube Assembly, Intake Man. No. 3 & 4 Cylinder . . . . .	2	2	2	2	2	2	2				
-4	631874	Tube Assembly, Intake Man. No. 5 Cylinder . . . . .	1	1	1	1	1	1	1				
-5	629872	Tube Assembly, Intake Man. No. 2 Cylinder . . . . .	1	1	1	1	1	1	1				
-6	631875	Tube Assembly, Intake Man. No. 6 Cylinder . . . . .	1	1	1	1	1	1	1				
ATTACHING PARTS													
-7	AN960-516L	Washer, Plain . . . . .	12	12	12	12	12	12	12				
-8	MS35338-45	Washer, Lock . . . . .	12	12	12	12	12	12	12				
-9	2439	Nut, Plain 5/16 - 24 . . . . .	12	12	12	12	12	12	12				
* * * * *													
-10	36151E	Clamp, Hose . . . . .	10	10	10	10	10	10	10				
-11	AN737TW82	Clamp, Hose Throttle Body . . . . .	2	2	2	2	2	2	2				
-12	24827	\$ Hose, Tube Connector . . . . .	6	6	6	6	6	6	6				
-13	No Number	Air Throttle and Fuel Metering Assembly . . . . .	ns	ns	ns	ns	ns	ns	ns				
ATTACHING PARTS													
-14	537728	Screw, Hex Head 1/4 - 28 x 1-25/32 In. Lg. . . . .	2	2	2	2	2	2	2				
-15	2437	Nut, Plain Hex, 1/4 - 28 . . . . .	2	2	2	2	2	2	2				
* * * * *													

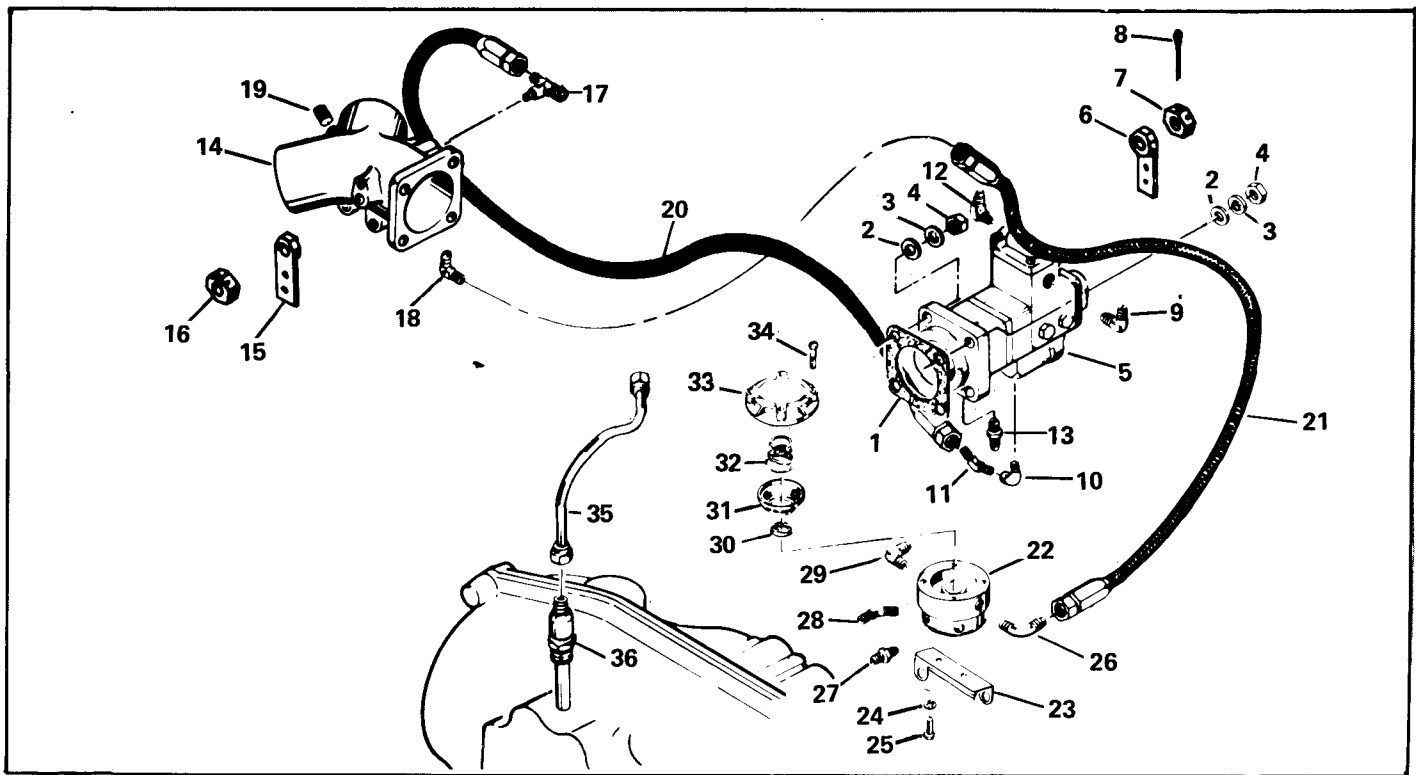


FIGURE 15. FUEL INJECTION SYSTEM

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY							
			IO - 360							
			A	C	D	G	H	J	K	
15-1	632945	\$ Gasket, Fuel Pump to C/C	1	1	1	1	1	1	1	
	639230A2	Fuel Injection Assembly	1							
	639231A2	Fuel Injection Assembly		1	1	1	1	1	1	
	638157-2A1	Fuel Pump Assembly	1	1	1	1	1	1	1	
ATTACHING PARTS										
-2	2473	Washer, Plain Hex	4	4	4	4	4	4	4	
-3	MS35338-45	Washer, Lock	4	4	4	4	4	4	4	
-4	2439	Nut, Plain Hex	4	4	4	4	4	4	4	
* * * *										
-5	No Number	Fuel Pump	ns	ns	ns	ns	ns	ns	ns	
-6	630146-4	Lever, Throttle Mixture Cont.	1	1	1	1	1	1	1	
-7	2457	Nut, 5/16 - 24, Castle	1	1	1	1	1	1	1	
-8	X604	Pin, Cotter	1	1	1	1	1	1	1	
-9	628475	Elbow, 90 Degree, F/P Inlet	1	1	1	1	1	1	1	
-10	627119	Elbow, 90 Degree, F/P Outlet	1	1	1	1	1	1	1	
-11	628436	Elbow, 45 Degree, F/P Outlet	1	1	1	1	1	1	1	
-12	628437	Elbow, 90 Degree, Vapor Return	1	1	1	1	1	1	1	
-13	628438	Fitting, Seal Drain	1	1	1	1	1	1	1	
	640563-2A1 *	Throttle and Control Assembly	1	1	1	1	1	1	1	
-14	No Number	Throttle Assembly	ns	ns	ns	ns	ns	ns	ns	
-15	630146-2	Lever, Throttle Mixture Control	1	1	1	1	1	1	1	
-16	MS21044N5	Nut, Self-Locking	1	1	1	1	1	1	1	
-17	639495	Fitting, Tee, Fuel Inlet	1	1	1	1	1	1	1	
-18	628437	Elbow, 90 Degree, Fuel Outlet	1	1	1	1	1	1	1	
-19	629518-1H	Plug	1	1	1	1	1	1	1	
-20	635158-16.00	Hose Assembly, Met. Unit-To-F/P	1	1	1	1	1	1	1	

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY										
			IO - 360										
			A	C	D	G	H	J	K				
15-21	635158-14.00	. Hose Assembly, Met. Unit-To-M/V	1	1	1	1	1	1	1				
	631351A5	. Valve Assembly Fuel Manifold	1										
	631351A7	. Valve Assembly Fuel Manifold		1	1	1	1	1	1				
-22	No Number	. Valve Assembly	ns	ns	ns	ns	ns	ns	ns				
-23	633954	. Bracket, Manifold Valve	1	1	1	1	1	1	1				
ATTACHING PARTS													
-24	MS35338-43	. Washer, Lock	2	2	2	2	2	2	2				
-25	AN500-10-5	. Screw	2	2	2	2	2	2	2				
* * * *													
-26	628437	. Elbow, 90 Degree, Fuel Inlet	1	1	1	1	1	1	1				
-27	AN780-2	. Nipple, Union	2	2	2	2	2	2	2				
-28	627331	. Elbow, 45 Degree	4	4	4	4	4	4	4				
-29	631720	. Elbow, 90 Degree, Pres. Conn.	1										
-29	629518-1H	. Plug, Pressure Conn.		1	1	1	1	1	1				
-30	631330	. Seal	1	1	1	1	1	1	1				
-31	626557	. Screen	1	1	1	1	1	1	1				
-32	630184	. Spring	1	1	1	1	1	1	1				
-33	626553	. Cover	1	1	1	1	1	1	1				
ATTACHING PARTS													
-34	AN500A8-10	. Screw	4	4	4	4	4	4	4				
* * * *													
-35	630657	. Tube Assembly, Fuel, Cylinder No. 1	1	1	1	1	1	1	1				
-35	630658	. Tube Assembly, Fuel, Cylinder No. 2	1	1	1	1	1	1	1				
-35	630659	. Tube Assembly, Fuel, Cylinder No. 3	1	1	1	1	1	1	1				
-35	630660	. Tube Assembly, Fuel, Cylinder No. 4	1	1	1	1	1	1	1				
-35	630661	. Tube Assembly, Fuel, Cylinder No. 5	1	1	1	1	1	1	1				
-35	630662	. Tube Assembly, Fuel, Cylinder No. 6	1	1	1	1	1	1	1				
-36	632147-10 @	. Nozzle Assembly	1	1	1	1	1	1	1				

NOTE (\*) For detail parts, see Fuel Injection System Overhaul Manual and Parts Catalog, Form No. X-30091.  
NOTE (@) Order nozzle size identified on hex of nozzle body.

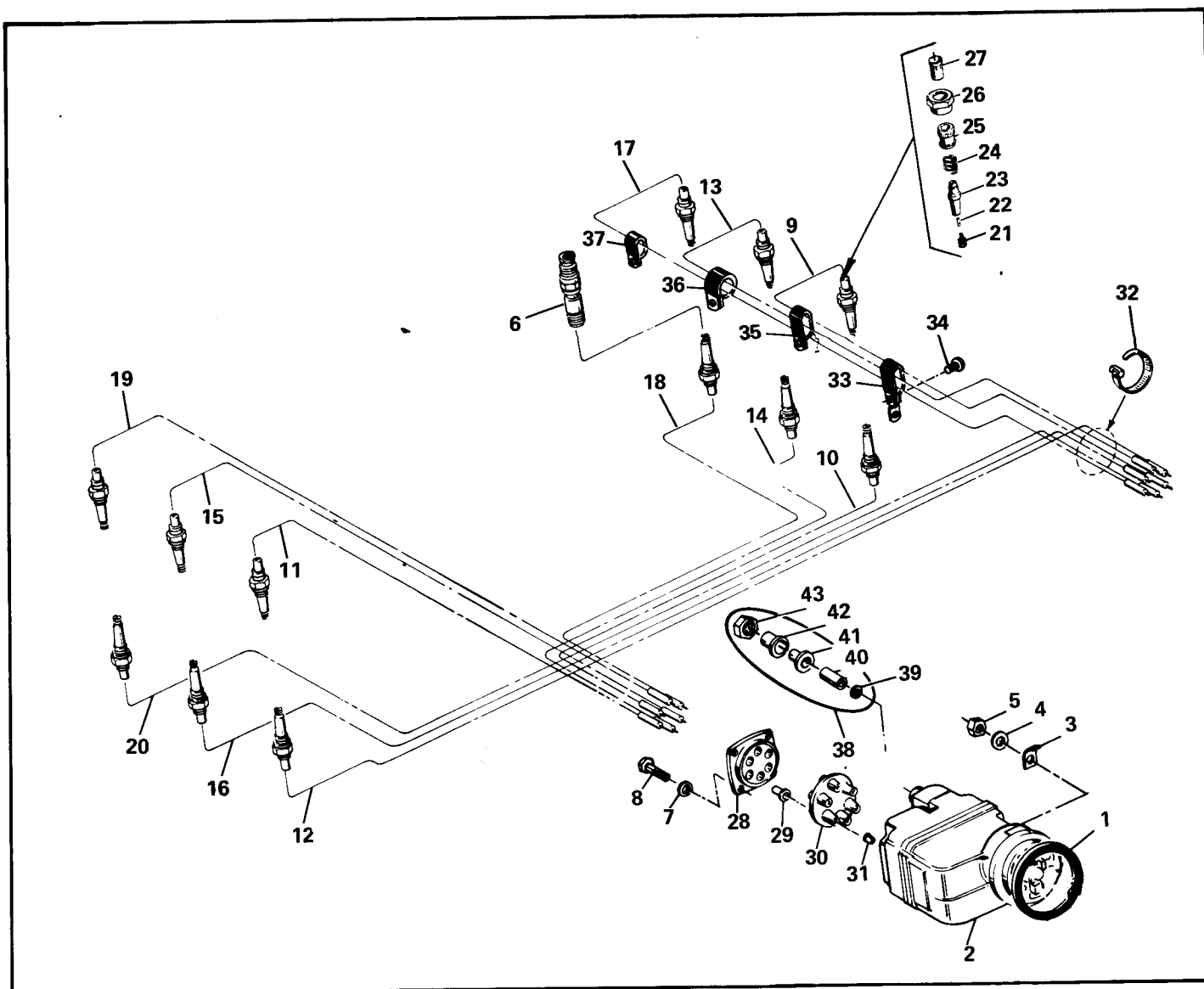


FIGURE 16. IGNITION SYSTEM

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY							
			IO - 360							
			A	C	D	G	H	J	K	
16-1	534750	\$ Gasket, Magneto	2	2	2	2	2	2	2	
-2	640838	Magneto, Bendix	2	2	2		2	2	2	
-2	640838	Magneto, Bendix 2-4-6 Side				1				
-2	640839	Magneto, Bendix 1-3-5 Side				1				
ATTACHING PARTS										
-3	630535	Washer, Magneto Holding	4	4	4	4	4	4	4	
-4	MS35338-45	Washer, Lock	4	4	4	4	4	4	4	
-5	2439	Nut, Plain Hex 5/16 - 24	4	4	4	4	4	4	4	
* * * *										
-6	632512	Spark Plug	12	12	12		12	12	12	
-6	630049	Spark Plug				12				
	636955	Harness Assembly Complete	1							
	636950	Harness Assembly Complete		1	1	1	1	1	1	

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY						
			IO - 360						
			A	C	D	G	H	J	K
16 ATTACHING PARTS									
-7	25321	Washer, Lock	8	8	8	8	8	8	8
-8	AN501-10-10	Screw	8	8	8	8	8	8	8
* * * *									
-9	637409-48	* Cable Assembly No. 1 Upper 27.81 In. Lg.	1						
-9	637409-48	* Cable Assembly No. 1 Upper 28.00 In. Lg.		1	1	1	1	1	1
-10	637409-48	* Cable Assembly No. 1 Lower 35.81 In. Lg.	1						
-10	637409-48	* Cable Assembly No. 1 Lower 33.50 In. Lg.		1	1	1	1	1	1
-11	637409-48	* Cable Assembly No. 2 Upper 32.81 In. Lg.	1						
-11	637409-48	* Cable Assembly No. 2 Upper 34.00 In. Lg.		1	1	1	1	1	1
-12	637409-48	* Cable Assembly No. 2 Lower 37.81 In. Lg.	1						
-12	637409-48	* Cable Assembly No. 2 Lower 32.38 In. Lg.		1	1	1	1	1	1
-13	637409-48	* Cable Assembly No. 3 Upper 33.81 In. Lg.	1						
-13	637409-48	* Cable Assembly No. 3 Upper 34.75 In. Lg.		1	1	1	1	1	1
-14	637409-48	* Cable Assembly No. 3 Lower 42.81 In. Lg.	1						
-14	637409-48	* Cable Assembly No. 3 Lower 44.50 In. Lg.		1	1	1	1	1	1
-15	637409-48	* Cable Assembly No. 4 Upper 37.81 In. Lg.	1						
-15	637409-48	* Cable Assembly No. 4 Upper 40.15 In. Lg.		1	1	1	1	1	1
-16	637409-48	* Cable Assembly No. 4 Lower 45.81 In. Lg.	1						
-16	637409-48	* Cable Assembly No. 4 Lower 46.63 In. Lg.		1	1	1	1	1	1
-17	637409-48	* Cable Assembly No. 5 Upper 39.31 In. Lg.	1						
-17	637409-48	* Cable Assembly No. 5 Upper 38.38 In. Lg.		1	1	1	1	1	1
-18	637409-48	* Cable Assembly No. 5 Lower 46.81 In. Lg.	1						
-18	637409-72	* Cable Assembly No. 5 Lower 50.75 In. Lg.		1	1	1	1	1	1
-19	637409-48	* Cable Assembly No. 6 Upper 42.31 In. Lg.	1						
-19	637409-40	* Cable Assembly No. 6 Upper 44.51 In. Lg.		1	1	1	1	1	1
-20	637409-72	* Cable Assembly No. 6 Lower 50.81 In. Lg.	1						
-20	637409-72	* Cable Assembly No. 6 Lower 55.00 In. Lg.		1	1	1	1	1	1
-21	629506	Spring, Spark Plug Terminal	1	1	1	1	1	1	1
-22	633089	** Terminal, Crimp Type	1	1	1	1	1	1	1
-23	629505	Sleeve, Spark Plug Terminal	1	1	1	1	1	1	1
-24	629504	Spring	1	1	1	1	1	1	1
-25	633096	** Ferrule	1	1	1	1	1	1	1
-26	629502	Nut, Spark Plug End	1	1	1	1	1	1	1
-27	633012	** Ferrule, Grounding	1	1	1	1	1	1	1
-28	633009	Plate, Cable Outlet	1	1	1	1	1	1	1
-29	629498	Ferrule, Cable	6	6	6	6	6	6	6
-30	629496	Grommet, Plate	1	1	1	1	1	1	1
-31	629495	Eyelet, Cable Contact	6	6	6	6	6	6	6
-32	629494	Strap	10	10	10	10	10	10	10
-33	635982-1	Clamp	2	2	2	2	2	2	2
-34	635360	Screw	2	2	2	2	2	2	2
-35	631739	Clamp	2	2	2	2	2	2	2
-36	631738-1	Clamp	2	2	2	2	2	2	2
-37	631737-1	Clamp	2	2	2	2	2	2	2
-38	352024	Kit, Ground Terminal	1	1	1	1	1	1	1
-39	25314	Washer, Plain	1	1	1	1	1	1	1
-40	530455	Sleeve, Insulating	1	1	1	1	1	1	1
-41	25316	Ferrule, Inner	1	1	1	1	1	1	1
-42	25317	Ferrule, Outer	1	1	1	1	1	1	1
-43	25318	Nut, Hex, Coupling	1	1	1	1	1	1	1

NOTE (\*) Service leads furnished in two lengths which are terminated on spark plug end only. Cut to size specified in description column.  
NOTE (\*\*) Service sleeves - Use Thomas and Betts Crimping Tool, No. WT-217.  
CAUTION: Each lead requires one (1) each 629498 ferrule and 629495 eyelet to complete a cable assembly.

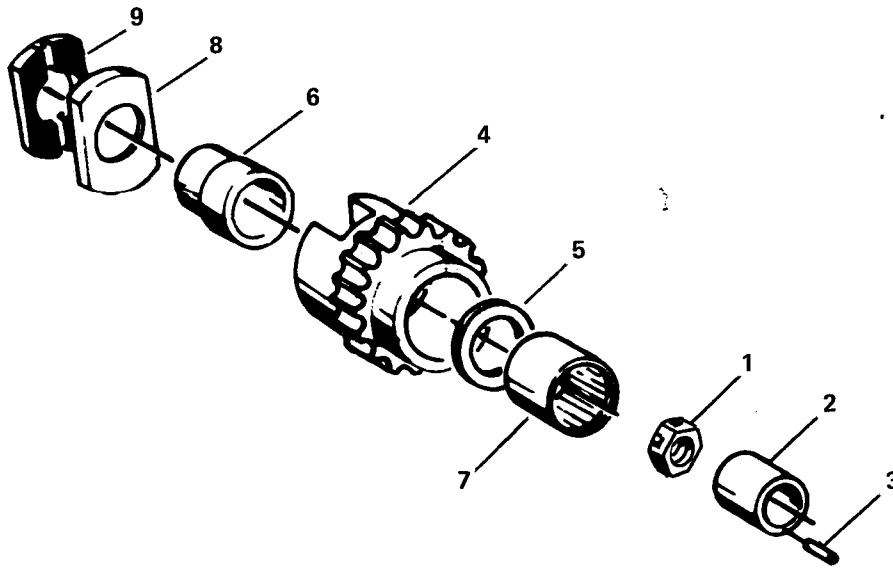


FIGURE 17. MAGNETO DRIVE ASSEMBLY

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY						
			IO - 360						
			A	C	D	G	H	J	K
17-	630529	Shaft Assembly, Mag Gear Supt. . . . .	2	2	2	2	2	2	2
ATTACHING PARTS									
-1	633840	Nut, Cone Lok . . . . .	2	2	2	2	2	2	2
* * * *									
-2	No Number	. Shaft, Magneto Gear Supt. . . . .	ns	ns	ns	ns	ns	ns	ns
-3	625495-7	. Pin, Roll . . . . .	1	1	1	1	1	1	1
	630525	Gear Assembly, Magneto . . . . .	2	2	2	2	2	2	2
-4	No Number	. Gear, Magneto Drive . . . . .	ns	ns	ns	ns	ns	ns	ns
-5	630523	. Washer, Thrust . . . . .	1	1	1	1	1	1	1
-6	531177	. Sleeve, Magneto Coupling . . . . .	1	1	1	1	1	1	1
-7	633609-18	. Bearing, Magneto Gear . . . . .	1	1	1	1	1	1	1
-8	531178	Retainer, Magneto Coupling . . . . .	2	2	2	2	2	2	2
-9	638172	Bushing, Magneto Coupling . . . . .	4	4	4	4	4	4	4

**SECTION III**  
**GROUP ASSEMBLY PARTS LIST FOR**  
**TSIO/LTSIO-360 BASIC AIRCRAFT ENGINE**

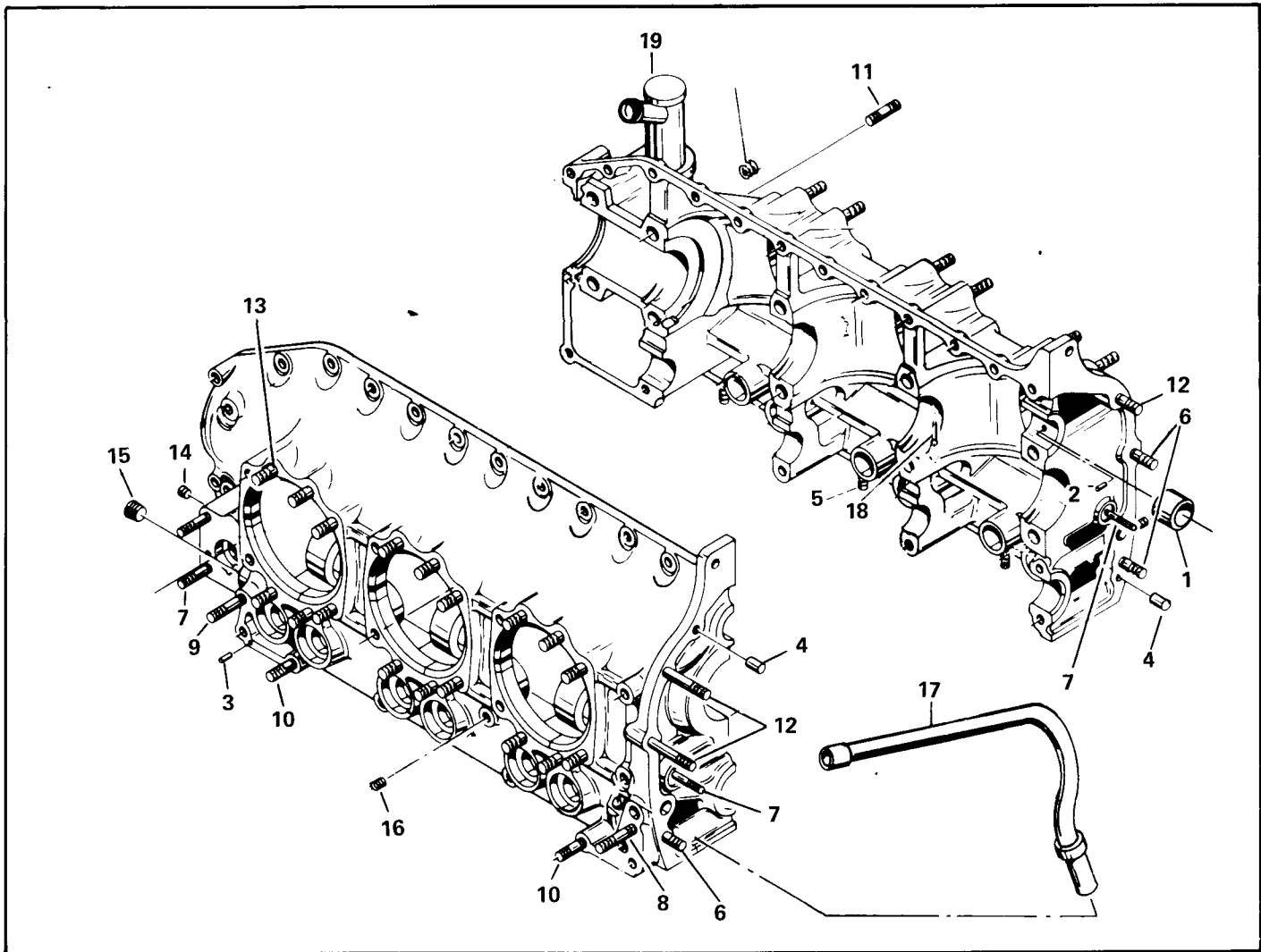


FIGURE 18. CRANKCASE STUDDING ASSEMBLY

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY								
			TSIO-360						LTSIO-360		
			A	B	C	D	E	F		E	
18-	640475	Studding Assembly, Crankcase	1	1	1	1					
	640857	Studding Assembly, Crankcase					1	1			
	640861	Studding Assembly, Crankcase								1	
-1	629718	. Bushing, Starter	1	1	1	1	1	1		1	
-2	629720	. Dowel	1	1	1	1	1	1		1	
-3	200138	. Pin	1	1	1	1					
-3	24846	. Pin					1	1		1	
-4	21080	. Dowel	1	1	1	1	1	1		1	
-5	401801	† . Stud, 1/4 x 1-3/16 In. Lg.	14	14	14	14	14	14		14	
-6	401809	† . Stud, 5/16 x 1-3/8 In. Lg.	3	3	3	3	3	3		3	
-7	401814	† . Stud, 5/16 x 1-7/8	6	6	6	6	6	6		6	
-8	401862	† . Stud, 3/8 x 2-7/8 In. Lg.					1	1		1	
-8	401933	† . Stud, 3/8 x 2-5/8 In. Lg.	1	1	1	1					



FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY									
			TSIO-360				LTSIO-360					
			A	B	C	D	E	F		E		
18-9	401871	† . Stud, 3/8 x 2-1/4 In. Lg. . . . .	3	3	3	3						
-9	401944	† . Stud, 3/8 x 2-7/16 In. Lg. . . . .						3	3			3
-10	402066	† . Stud, 3/8 x 1-7/8 In. Lg. . . . .						4	4			4
-10	401945	† . Stud, 3/8 x 1-5/8 In. Lg. . . . .	4	4	4	4						
-11	402151	† . Stud, 5/16 x 1-1/4 In. Lg. . . . .	4	4	4	4	4	4	4			4
-12	402439	† . Stud, 5/16 x 2-5/8 In. Lg. . . . .	3	3	3	3	3	3	3			3
-13	640017-1	. Stud, 3/8 x 1-7/8 In. Lg. . . . .	36	36	36	36	36	36	36			36
-14	2024	. Plug, Pipe . . . . .	1	1	1	1	1	1	1			1
-15	AN932C4	. Plug, Pipe . . . . .	2	2	2	2	2	2	2			2
-16	629518-1H	. Plug, Pipe . . . . .	1	1	1	1	1	1	1			1
-17	629849	. Housing Assembly, Oil Gauge Rod . . . . .	1	1	1	1						
-17	641034	. Housing Assembly, Oil Gauge Rod . . . . .						1	1			1
-18	629847	. Nozzle, Squirt . . . . .	6	6	6	6						
-18	633874	. Nozzle, Squirt . . . . .						6	6			6
-19	630204	. Breather Assembly . . . . .	1	1	1	1	1	1	1			1

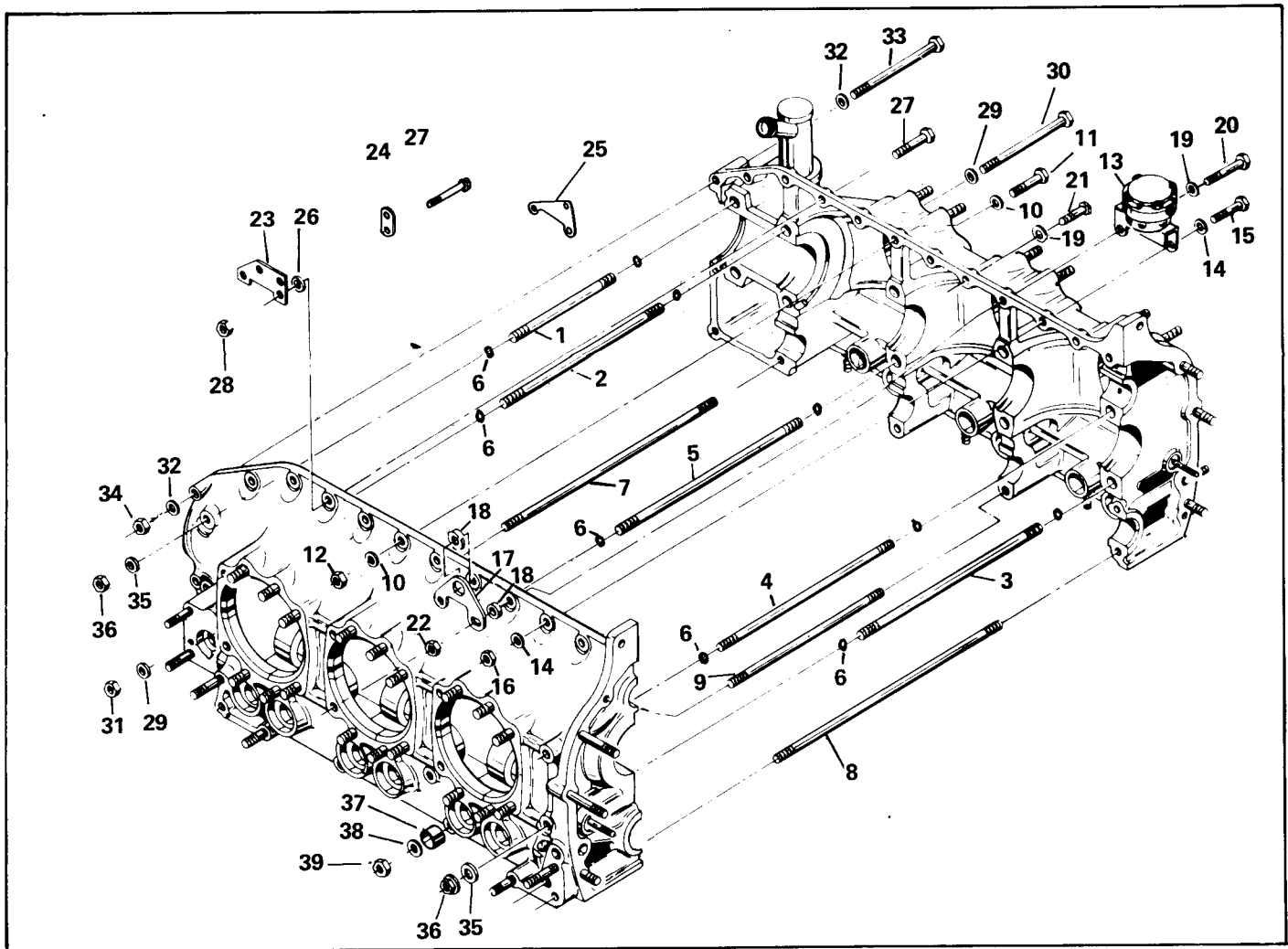


FIGURE 19. CRANKCASE ATTACHING PARTS

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY							
			TSIO-360						LTSIO-360	
			A	B	C	D	E	F		E
19-	No Number	Crankcase Assembly Complete	ns	ns	ns	ns	ns	ns		ns
-1	641944-5.86	. Bolt, 7/16 - 20 x 5-7/8 In. Lg. C/C Thru	2	2	2	2	2	2		2
-2	641944-9.25	. Bolt, 7/16 - 20 x 9-1/4 In. Lg. C/C Thru	2	2	2	2	2	2		2
-3	641944-10.18	. Bolt, 7/16 - 20 x 10-3/16 In. Lg. C/C Thru	1	1	1	1	1	1		1
-4	641944-10.55	. Bolt, 7/16 - 20 x 10-35/67 In. Lg. C/C Thru	1	1	1	1	1	1		1
-5	641944-10.68	. Bolt, 7/16 - 20 x 10-11/16 In. Lg. C/C Thru	4	4	4	4	4	4		4
-6	MS29513-010	\$. O-Ring	20	20	20	20	20	20		20
-7	629758-12.90	. Bolt, 3/8 - 24 x 12-29/32 In. Lg. C/C Thru	1	1	1	1				
-7	640962-1	. Bolt, Thru, 3/8 - 24 x 13.30 In. Lg.					1	1		1
-8	629758-12.60	. Bolt, 3/8 - 24 x 12-39/64 In. Lg. C/C Thru	1	1	1	1				
-8	640962-2	. Bolt, Thru, 3/8 - 24 x 13.00 In. Lg.					1	1		1
-9	537466	. Bolt, 3/8 - 24 x 8-13/16 In. Lg.					1			1
-9	537466-1	. Bolt, 3/8 - 24 x 9-13/16 In. Lg.	1	1	1	1		1		
-10	20522	. Washer, Plain	10	10	10	10	10	10		10
-11	AN4-13A	. Bolt	5	5	4	4	4	4		4
-11	21176	. Screw			1	1	1	1		1
-12	2437	. Nut, Plain, Hex	5	5	5	5	5	5		5
-13	No Number	. Manifold and Bracket Assembly	RF	RF	RF	RF	RF	RF		RF

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY							
			TSIO-360				LTSIO-360			
			A	B	C	D	E	F		E
19-		ATTACHING PARTS								
-14	20522	Washer, Plain	2	2	2	2	2	2		2
-15	AN4-14A	Screw, Hex Head 1/4 - 28 x 1-17/32 In. Lg.	1	1		1				
-15	AN4-13A	Screw, Hex Head 1/4 - 28 x 1-13/32 In. Lg.			1	1	1	1		1
-16	2437	Nut, Hex Head, 1/4 - 28	1	1	1	1	1	1		1
		* * * *								
-17	24879	Eye, Lifting	1	1						
-17	639279	Eye, Lifting			1	1	1	1		1
		ATTACHING PARTS								
-18	25164	Washer, Plain	2	2						
-19	20522	Washer, Plain	2	2	3	3	3	3		3
-20	AN4-15A	Screw, Hex Head, 1/4 - 28 x 1-21/32 In. Lg.			1	1				
-20	537728	Screw, Hex Head, 1/4 - 28 x 1-25/32 In. Lg.	1	1						
-20	AN4-14A	Screw, Hex Head, 1/4 - 28 x 1-17/32 In. Lg.					1	1		1
-21	537728	Screw, Hex Head, 1/4 - 28 x 1-25/32 In. Lg.	1	1						
-21	AN4-15A	Screw, Hex Head, 1/4 - 28 x 1-21/32 In. Lg.			1	1				
-21	AN4-14A	Screw, Hex Head, 1/4 - 28 x 1-17/32 In. Lg.					1	1		1
-22	2437	Nut, Hex Head, 1/4 - 28	2	2	2	2	2	2		2
		* * * *								
-23	629738	Bracket, Throttle Body	2	2			2	2		2
-24	640759	Bracket, Throttle Body			1	1				
-25	640758	Bracket, Throttle Body			1	1				
		ATTACHING PARTS								
-26	22139	Washer, Plain	4	4			4	4		4
-26	22139	Washer, Plain			6	6				
-27	537728	Screw, 1/4 - 28 x 1-25/32 In. Lg.	2	2			2	2		2
-27	AN4-17A	Screw, 1/4 - 28 x 1-29/32 In. Lg.			3	3				
-28	2437	Nut	2	2			2	2		2
-28	2437	Nut			3	3				
		* * * *								
-29	20522	Washer, Plain	2	2	2	2	2	2		2
-30	631823-5.19	Bolt	1	1	1	1	1	1		1
-31	2437	Nut	1	1	1	1	1	1		1
-32	20522	Washer, Plain	4	4	4	4	4	4		4
-33	629728	Screw	2	2	2	2	2	2		2
-34	2437	Nut, Plain	2	2	2	2	2	2		2
-35	20202	Washer, Plain	4	4	4	4	4	4		4
-36	531001	Nut, Flanged	4	4	4	4	4	4		4
-37	633795	Bushing	2	2	2	2	2	2		2
-38	401507	Washer, Plain	4	4	4	4	4	4		4
-39	2441	Nut, Plain	4	4	4	4	4	4		4

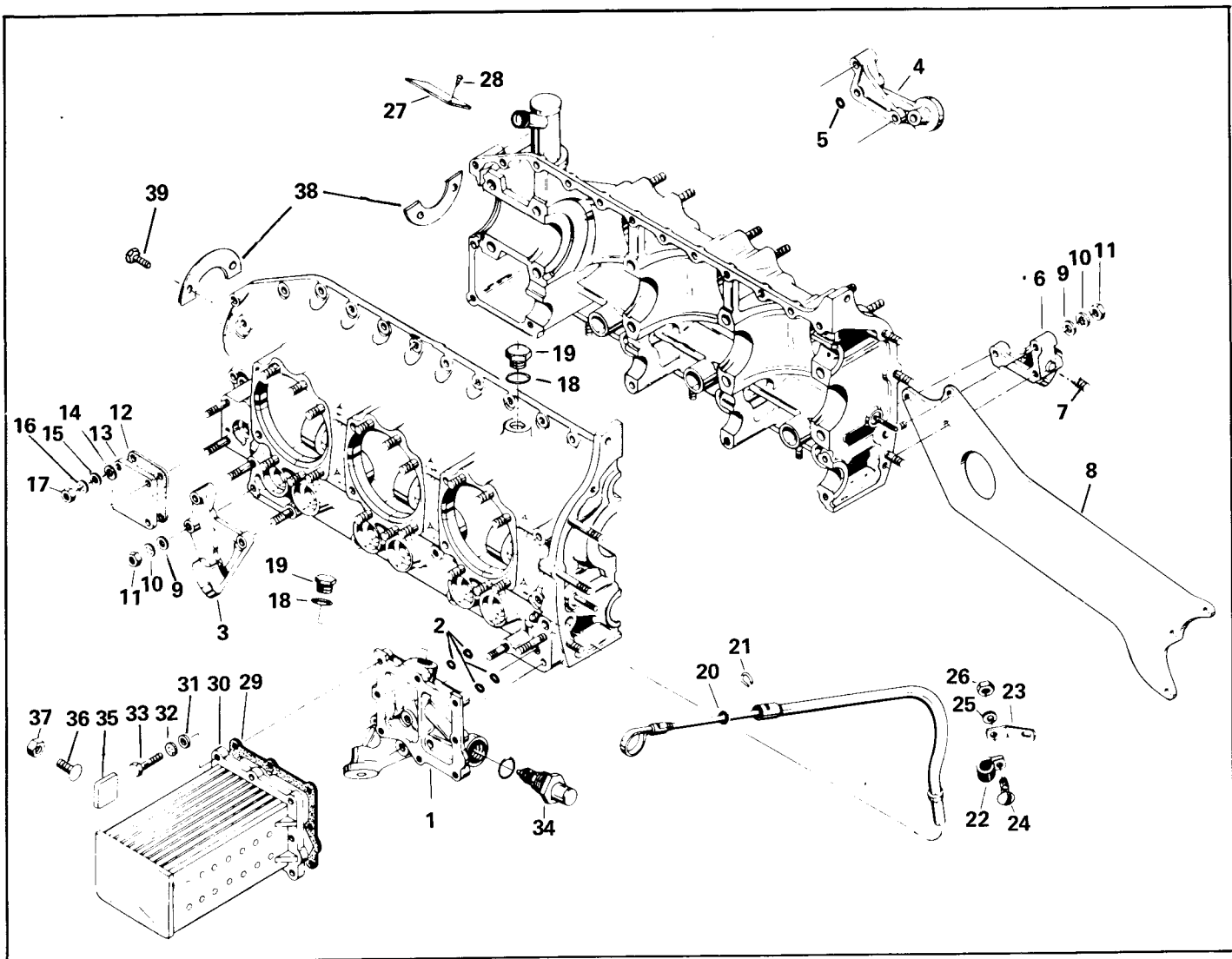


FIGURE 20. CRANKCASE ASSOCIATED PARTS

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY							
			TSIO-360				LTSIO-360			
			A	B	C	D	E	F		E
20-1	629636	Bracket, Engine Mounting	1	1	1	1				
-1	641895	*** Bracket, Engine Mounting					1	1		1
-2	629196	\$ O-Ring					4	4		4
-3	637826	Bracket, Engine Mounting	1	1	1	1				
-3	641894	****Bracket, Engine Mounting					1	1		1
-4	637827	Bracket, Engine Mounting	1	1	1	1				
-4	641896	****Bracket, Engine Mounting					1	1		1
-5	AN123862	\$ O-Ring					2	2		2
-6	629666	Bracket, Engine Mounting		1						
	633761A1	Bracket Assembly, Engine Mounting	1		1	1	1	1		1
-6	No Number	. Bracket	ns		ns	ns	ns	ns		ns
-7	MS21209C6-15	. Insert, Helical Coil	1		1	1	1	1		1
-8	640953	Bracket, Turbo Mounting					1			1
-8	641859	Bracket, Turbo Mounting						1		
ATTACHING PARTS										
-9	539058	Washer, Plain	8	8	8	8	6	6		6
-10	401507	Washer, Plain	4	4	4	4	4	4		4

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY								
			TSIO-360						LTSIO-360		
			A	B	C	D	E	F		E	
20-11	2441	Nut, Plain, 3/8 - 24 . . . . .	12	12	12	12	12	12			12
		* * * *									
-12	641651	\$ Gasket, Governor Pad . . . . .	1	1	1	1	1	1			1
-13	639997	Cover, Governor Pad . . . . .	1	1	1	1	1	1			1
		ATTACHING PARTS									
-14	22535	Spacer . . . . .	8	8	8	8	8	8			8
-15	2473	Washer, Plain . . . . .	4	4	4	4	4	4			4
-16	MS35338-45	Washer, Lock . . . . .	4	4	4	4	4	4			4
-17	2439	Nut, Plain . . . . .	4	4	4	4	4	4			4
		* * * *									
-18	AN900-10	\$ Gasket . . . . .	2	2	2	2	2	2			2
-19	532432	Plug, Hex Head, 5/8 - 18 . . . . .	2	2	2	2	2	2			2
	No Number	* Rod Assembly, Oil Gauge Comp. . . . .	1	1	1	1	1	1			1
-20	AN123860	\$ O-Ring . . . . .	1	1	1	1					1
-20	AN123861	\$ O-Ring . . . . .					1	1			1
-21	537299	Ring, Oil Gauge Lock . . . . .	1	1	1	1	1	1			1
-22	630688	Clamp, Oil Gauge Housing . . . . .	1	1	1	1	1	1			1
-23	630689	Bracket, Oil Gauge Support . . . . .	1	1	1						1
-23	641035	Bracket, Oil Gauge Support . . . . .					1	1			1
-23	641124	Bracket, Oil Gauge Support . . . . .				1					1
-24	AN500D8-12	Screw, Filister Head . . . . .	1	1	1	1	1	1			1
-25	AN960-8	Washer, Plain . . . . .	1	1	1	1	1	1			1
-26	MS21044N08	Nut, Self Locking . . . . .	1	1	1	1	1	1			1
-27	634973	** Plate, Identification . . . . .	1								
-27	634974	** Plate, Identification . . . . .		1							
-27	639284	** Plate, Identification . . . . .			1						
-27	640573	** Plate, Identification . . . . .				1					
-27	641059	** Plate, Identification . . . . .					1				
-27	641956	** Plate, Identification . . . . .						1			
-27	641058	** Plate, Identification . . . . .									1
		ATTACHING PARTS									
-28	21007	Screw, Drive . . . . .	6	6	6	6	6	6			6
		* * * *									
-29	632372	\$ Gasket, Oil Cooler . . . . .	1	1	1	1	1	1			1
-30	632886	Cooler Assembly, Oil . . . . .	1	1	1	1	1				1
-30	642063	Cooler Assembly, Oil . . . . .						1			
		ATTACHING PARTS									
-31	2472	Washer, Plain . . . . .	8	8	8	8	8	8			8
-32	MS35338-44	Washer, Lock . . . . .	8	8	8	8	8	8			8
-33	24835	Screw, 1/4 - 20 x 7/8 In. Long . . . . .	8	8	8	8	8	8			8
		* * * *									
-34	639305	Valve, Temperature Control . . . . .	1	1	1	1	1	1			1
-35	632983	Shoe, Oil Cooler Bracket . . . . .	1	1	1	1	1	1			1
-36	632987-1.00	Bolt, Carriage . . . . .	1	1	1	1	1	1			1
-37	13XX18001	Nut, Hex . . . . .	1	1	1	1	1	1			1
		* * * *									
-38	641361	Plate, Oil Seal Retainer . . . . .			1	1					
-39	632321-.38	Bolt . . . . .			4	4					
NOTE (*)	To order, supply engine model and spec.										
NOTE (**)	See Service Bulletin M75-12										
NOTE (***)	Earlier models used a 629636 bracket with a 640920 spacer.										
NOTE(****)	Earlier models used a 637826 and a 637827 bracket with a 640916 spacer.										

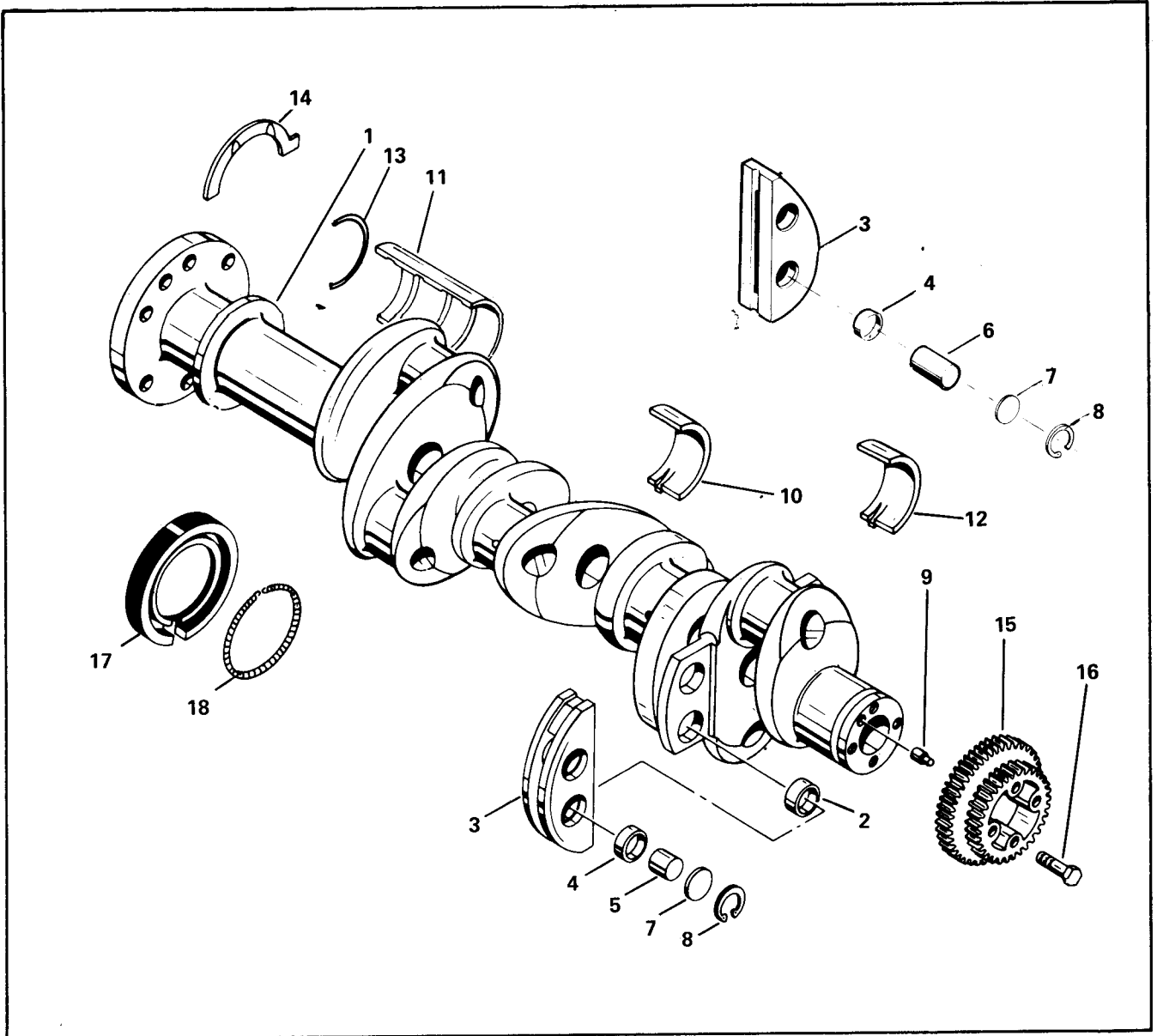


FIGURE 21. CRANKSHAFT GROUP

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY										
			TSIO-360				LTSIO-360						
			A	B	C	D	E	F		E			
21-	639200 *	Crankshaft and Damper Assembly	1	1									
	639786	Crankshaft and Damper Assembly			1	1	1	1					
	641382	Crankshaft and Damper Assembly											1
-1	No Number	. Crankshaft Assembly	ns	ns	ns	ns	ns	ns					ns
-2	639580 †*	. . Bushing, Crankshaft Damper	4	4	4	4	4	4					4
	639199 *	. Counterweight Assembly	2	2	2	2	2	2					2
-3	No Number	. . Counterweight Assembly	ns	ns	ns	ns	ns	ns					ns
-4	639198 *	. . Bushing	4	4	4	4	4	4					4
-5	630261-41 *	. Pin, Counterweight	4	4									
-5	630261-43	. Pin, Counterweight			2	2	2	2					2
-6	630261-44	. Pin, Counterweight			2	2	2	2					2
-7	633976	. Plate, Retaining	8	8	8	8	8	8					8
-8	629004	. Ring, Retaining	8	8	8	8	8	8					8
-9	630651 †	Dowel	1	1	1	1	1	1					1
-10	632857 \$†	Bearing, Rear and Intermediate	6	6	6	6	6	6					6
-11	632885 \$†	Bearing, Front	2	2	2	2	2	2					
-11	640999 \$†	Bearing, Front											2
-12	639640 †	Bearing, Connecting Rod	12	12	12	12	12	12					12
-13	632879 \$†	Packing	4	4	4	4	4	4					4
-14	637579	Washer, Thrust	4	4	4	4	4	4					4
-15	630690	Gear, Crankshaft Cluster	1	1	1	1	1	1					1
ATTACHING PARTS													
-16	630692	Screw	4	4	4	4	4	4					4
* * * *													
-17	530917	Seal Assembly	1	1	1	1	1	1					1
-18	530974	. Spring	1	1	1	1	1	1					1

NOTE (\*) If old crankshaft and counterweight assembly, P/N 633527 is serviceable except for bushing or counterweight replacements, order crankshaft bushing P/N 626566 in place of 639580 (item 2); counterweight assembly number 629696 in place of 639199 (item 3); counterweight bushing P/N 626564 in place of 639198 (item 4) and counterweight pin P/N 630261-17 in place of 630261-41 (item 5).

CAUTION: These parts relationships must be maintained. Old and new parts cannot be intermixed. If there is doubt about the crankshaft identity, measure the inside diameter of the bushing hole in the blade on the crankshaft cheek. The hole in crankshaft 633527 should be 0.937/0.938. The hole in crankshaft 639200 should be 0.815/0.816.

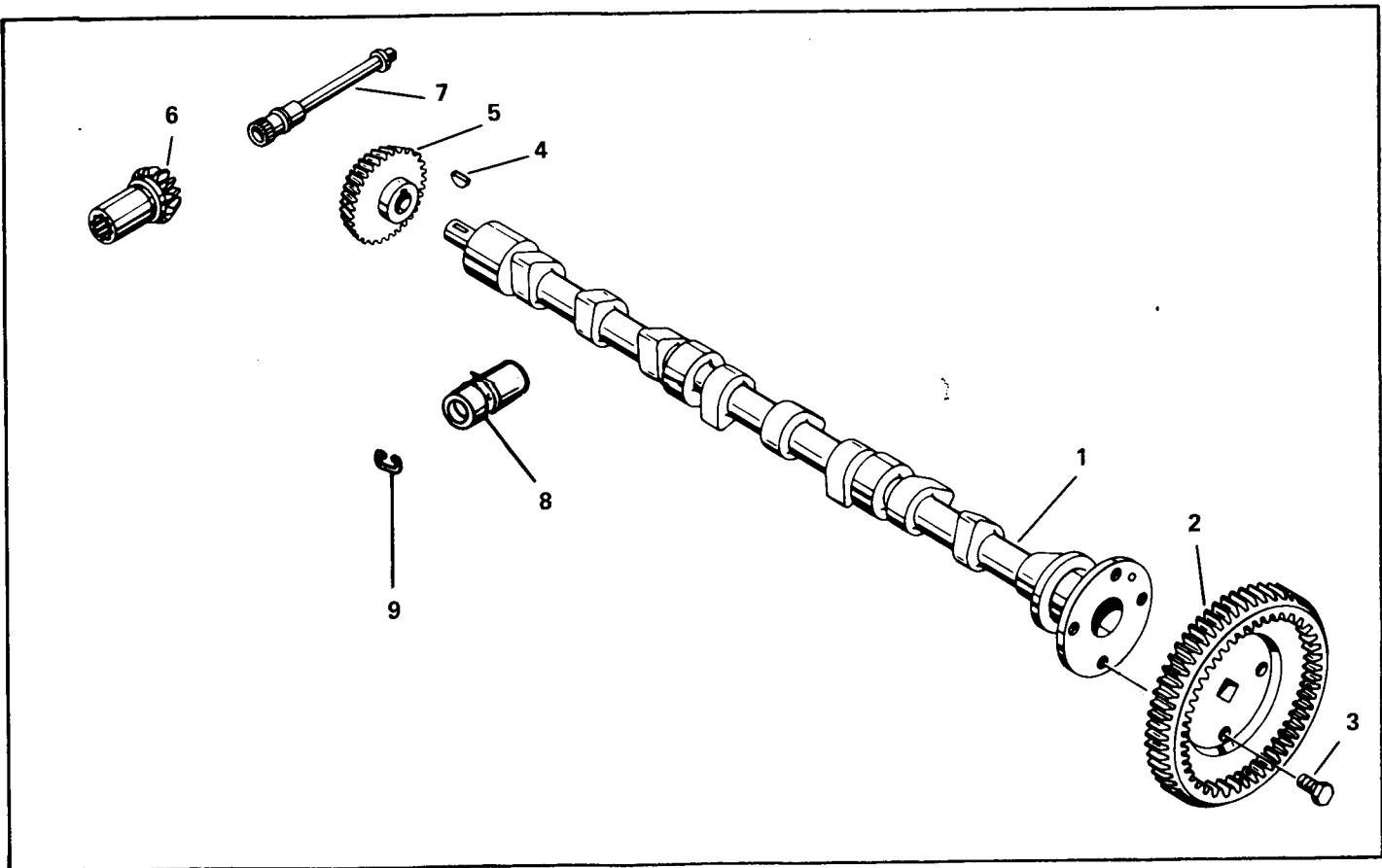


FIGURE 22. CAMSHAFT GROUP

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY								
			TSIO-360						LTSIO-360		
			A	B	C	D	E	F		E	
22-	No Number	Camshaft Assembly	ns	ns	ns	ns	ns	ns			ns
-1	641060	† . Camshaft	1	1	1	1	1	1			1
-1	640651	† . Camshaft									1
-2	632477	. Gear, Camshaft	1	1	1	1	1	1			1
ATTACHING PARTS											
-3	630742	. Screw, 5/16 - 24 x 3/8 In. Long	4	4	4	4	4	4			4
* * * *											
-4	633342-10	. Key, Woodruff	1	1	1	1	1	1			1
-5	629588	. Gear, Governor Drive	1	1	1	1	1	1			1
-6	629602	Gear, Governor Driven	1	1	1	1	1	1			1
-7	630265	Shaft, Fuel Pump Drive	1	1	1	1	1	1			1
-8	633106	Lifter Assembly, Hydraulic Valve	12	12	12	12	12	12			12
-9	641862	. Ring, Snap	1	1	1	1	1	1			1



FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY								
			TSIO-360						LTSIO-360		
			A	B	C	D	E	F		E	
23-	626168	Connecting Rod Assembly	6	6	6	6	6	6			6
-1	No Number	Rod and Cap, Connecting	ns	ns	ns	ns	ns	ns			ns
-2	538684	Bushing, Piston Pin	1	1	1	1	1	1			1
-3	530213	Bolt, Connecting Rod	2	2	2	2	2	2			2
-4	626140	Nut, Slotted, Special, 3/8 - 24	2	2	2	2	2	2			2
-5	639292	Pin, Cotter	12	12	12	12	12	12			12

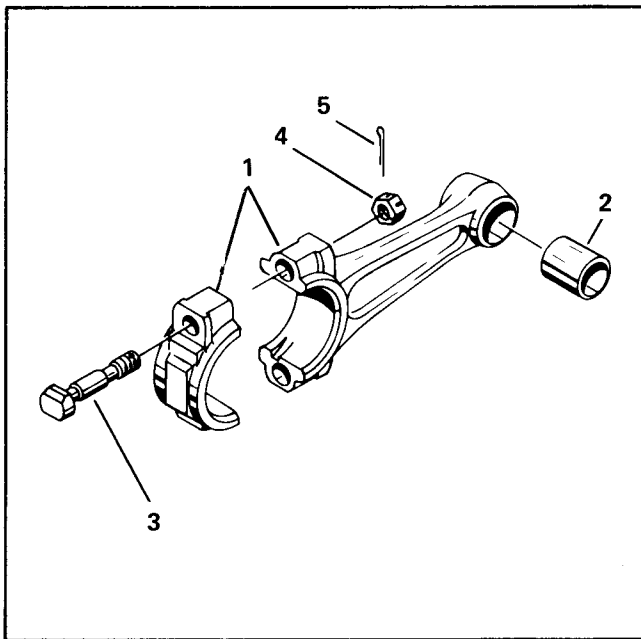


FIGURE 23. CONNECTING ROD ASSEMBLY

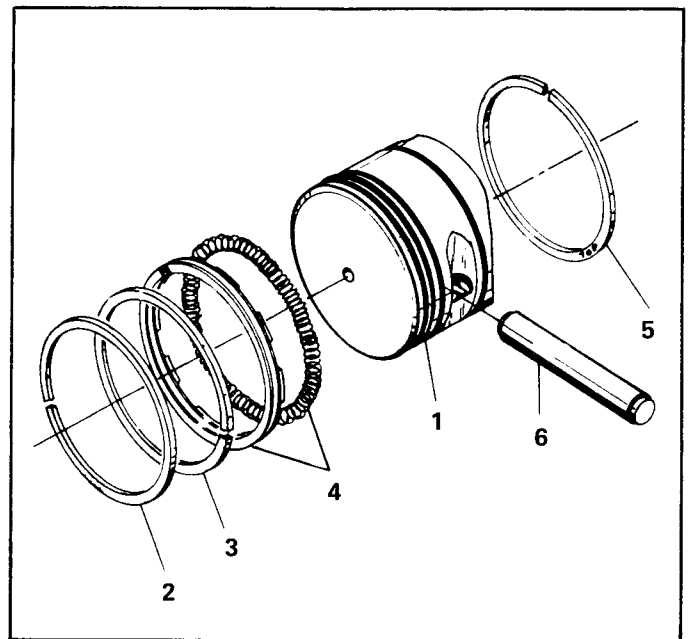


FIGURE 24. PISTON AND PIN ASSEMBLY

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY								
			TSIO-360						LTSIO-360		
			A	B	C	D	E	F		E	
24-1	633428	† Piston, 7.5:1 Compression Ratio	6	6	6	6	6	6			6
-2	639570	† Ring, Top Groove	6	6	6	6	6	6			6
-3	639579	† Ring, Second Groove	6	6	6	6	6	6			6
-4	635964	† Ring, Oil Control	6	6	6	6	6	6			6
-5	630678	† Ring, Fourth Groove	6	6	6	6	6	6			6
-6	629690	Pin, Piston	6	6	6	6	6	6			6

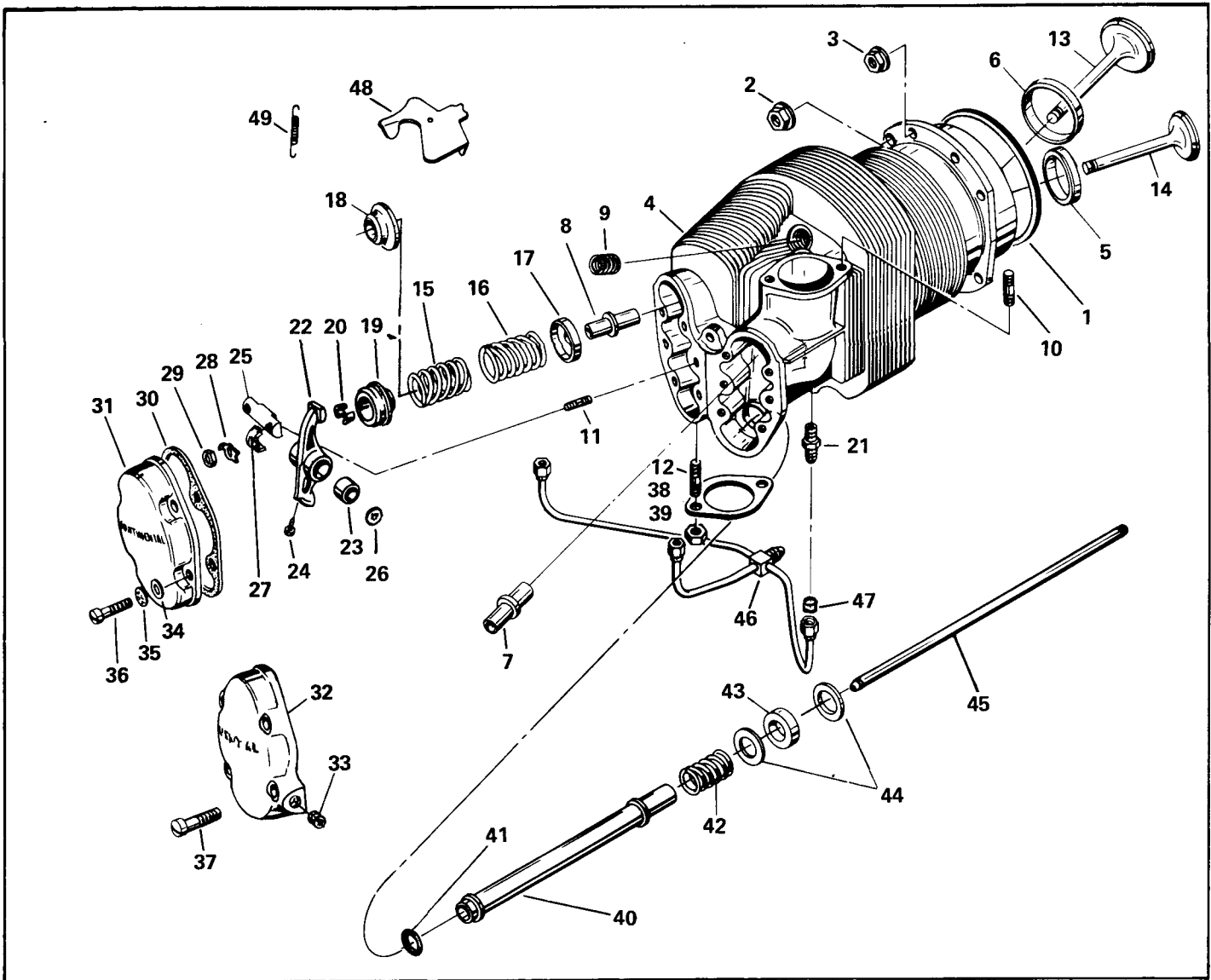


FIGURE 25. CYLINDER ASSEMBLY

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY								
			TSIO-360						LTSIO-360		
			A	B	C	D	E	F		E	
25-1	21477	Packing, Cylinder Base	6	6	6	6	6	6		6	
	No Number	Cylinder Assembly Complete	ns	ns	ns	ns	ns	ns		ns	
ATTACHING PARTS											
-2	531001	Nut, Flanged 7/16 - 20	12	12	12	12	12	12		12	
-3	531003	Nut, Flanged 3/8 - 20	36	36	36	36	36	36		36	
* * * * *											
	641370A1	Cylinder and Valve Assembly	1	1	1	1	1	1		1	
	641370	Cylinder Assembly	1	1	1	1	1	1		1	
-4	No Number	Head and Barrel	ns	ns	ns	ns	ns	ns		ns	
-5	635959	† Insert, Exhaust Valve Seat	1	1	1	1	1	1		1	
-6	629702	† Insert, Intake Valve Seat	1	1	1	1	1	1		1	
-7	630262	† Guide, Valve	1	1	1	1	1	1		1	
-8	639282	† Guide, Valve	1	1	1	1	1	1		1	
-9	520112	Insert, Spark Plug Hole	2	2	2	2	2	2		2	
-10	401836	† Stud, 5/16 x 1-7/16 In. Long	2	2	2	2	2	2		2	

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY								
			TSIO-360				LTSIO-360				
			A	B	C	D	E	F		E	
25-11	401801	† . . . Stud, 1/4 x 1-3/16 In. Long . . . . .	4	4	4	4	4	4			4
-12	402044	† . . . Stud, 5/16 x 1-3/8 In. Long . . . . .	2	2	2	2	2	2			2
-13	629707	. . . Valve, Intake . . . . .	1	1	1	1	1	1			1
-14	639283	. . . Valve, Exhaust . . . . .	1	1	1	1	1	1			1
-15	625957	. . . Spring, Inner . . . . .	2	2	2	2	2	2			2
-16	625958	. . . Spring, Outer . . . . .	2	2	2	2	2	2			2
-17	24026	. . . Retainer, Valve Spring . . . . .	2	2	2	2	2	2			2
-18	627732	. . . Seat, Valve Spring, Intake Valve . . . . .	1	1	1	1	1	1			1
-19	631654	. . . Roto Coil Assembly, Exhaust Valve . . . . .	1	1	1	1	1	1			1
-20	627731	. . . Key, Valve Spring . . . . .	2	2	2	2	2	2			2
-21	632068	. . . Sleeve, Drain Connector . . . . .	1	1	1	1	1	1			1
	630476	. . . Rocker Arm Assembly . . . . .	2	2							
	639648	. . . Rocker Arm Assembly . . . . .			2	2	2	2			2
-22	No Number	. . . Rocker Arm . . . . .	ns	ns	ns	ns	ns	ns			ns
-23	627693	. . . Bushing . . . . .	2	2	2	2	2	2			2
-24	21007	. . . Plug, Rocker Arm . . . . .	1	1	1	1	1	1			1
-25	631991	. . . Shaft, Valve Rocker . . . . .	2	2	2	2	2	2			2
-26	639650	† . . . Washer, Thrust . . . . .			4	4	4	4			4
-27	631996	. . . Retainer, Valve Rocker . . . . .	4	4	4	4	4	4			4
ATTACHING PARTS											
-28	501867	. . . Washer, Tab . . . . .	4	4	4	4	4	4			4
-29	2437	. . . Nut, Plain Hex . . . . .	4	4	4	4	4	4			4
* * * *											
-30	632310	\$ . . . Gasket, Rocker Cover . . . . .	2	2	2	2	2	2			2
-31	627593	** . . . Cover, Rocker . . . . .	1	1	1	1	1	1			1
	633019	** . . . Cover, Rocker, Cylinder No. 2 Int. Side . . . . .	1	1	1	1	1	1			1
-32	No Number	. . . Cover . . . . .	ns	ns	ns	ns	ns	ns			ns
-33	MS122122	. . . Insert Helical Coil . . . . .	1	1	1	1	1	1			1
ATTACHING PARTS											
-34	632440	. . . Washer, Plain . . . . .	8	8	8	8	8	8			8
-35	MS35338-44	. . . Washer, Lock . . . . .	8	8	8	8	8	8			8
-36	535091	. . . Screw, Filister Head . . . . .	4	4	4	4	4	4			4
-37	AN500D416-20	. . . Screw . . . . .	4	4	4	4	4	4			4
* * * *											
-38	630365	\$ . . . Gasket, Exhaust Flange . . . . .	6	6	6	6	6	6			6
-39	22022	. . . Nut, Plain Brass . . . . .	12	12	12	12	12	12			12
-40	632141	. . . Housing, Push Rod . . . . .	12	12	12	12	12	12			12
-41	630286	\$ . . . Gasket . . . . .	12	12	12	12	12	12			12
-42	632317	. . . Spring . . . . .	12	12	12	12	12	12			12
-43	629711	. . . Washer, Push Rod Housing . . . . .	24	24	24	24	24	24			24
-44	641607	\$ . . . Seal, Push Rod Housing . . . . .	12	12	12	12	12	12			12
-45	630393	. . . Push Rod Assembly . . . . .	12	12	12	12	12	12			12
-46	632137	. . . Tube Assembly, Cylinder Drain . . . . .	2	2	2	2	2	2			2
-47	632248	. . . Seal . . . . .	3	3	3	3	3	3			3
-48	630057	. . . Baffle, Cylinder Head . . . . .	6	6	6	6	6	6			6
-49	532377	. . . Spring, Cylinder Baffle . . . . .	6	6	6	6	6	6			6

NOTE (\*) Must be used with cast aluminum rocker box covers which were original equipment on early IO-360-A engines. See Service Bulletin M63-20 for correct installation.

NOTE (\*\*) The IO-360-A uses twelve (12) 627593 rocker covers per engine. All others use eleven (11) 627593 rocker covers per engine and one (1) 633019 rocker cover assembly which is used on the No. 2 cylinder intake side only.

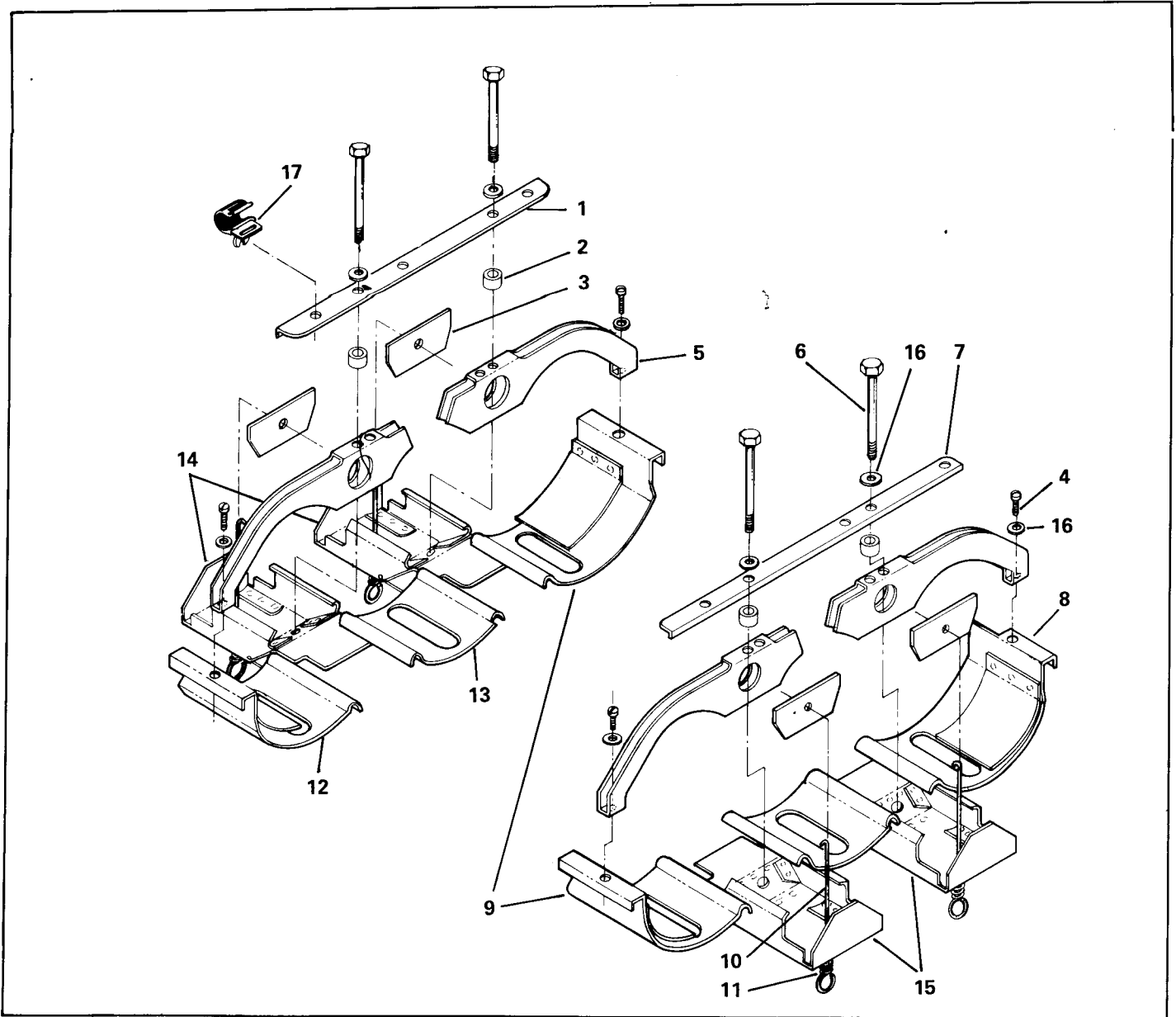


FIGURE 26. INTERCYLINDER BAFFLE ASSEMBLY

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY									
			TSIO-360				LTSIO-360					
			A	B	C	D	E	F		E		
26-1	641109	Bracket, Fuel Line Support					1	1				1
-2	641287	Spacer					4	4				4
-3	641166	Support, Intercylinder Baffle Outer					4	4				4
-4	AN520-10R8	Screw No. 10-32 UNF x 1/2 In. Long					4	4				4
-5	641341	Support, Intercylinder Baffle Inner					4	4				4
-6	641106	Bolt, No. 10-32 UNF x 8-1/2 In. Long					4	4				4
-7	641107	Bracket, Fuel Line Support					1	1				1
-8	641349	Baffle Assembly, No. 2 Cylinder					1	1				1
-9	641344	Baffle Assembly, No. 1 & 6 Cylinder					2	2				2
-10	641346	Baffle Fastener					4	4				4
-11	641347	Spring, Compression					4	4				4
-12	641343	Baffle Assembly, No. 5 Cylinder					1	1				1
-13	641332	Baffle, No. 3 and 4 Cylinder					2	2				2
-14	641330	Baffle Assembly, Intercylinder, 1-3-5 Side					2	2				2
-15	641322	Baffle Assembly, Intercylinder, 2-4-6 Side					2	2				2
-16	AN960-10L	Washer, Plain					8	8				8
-17	626577-2	Clamp					6	6				6

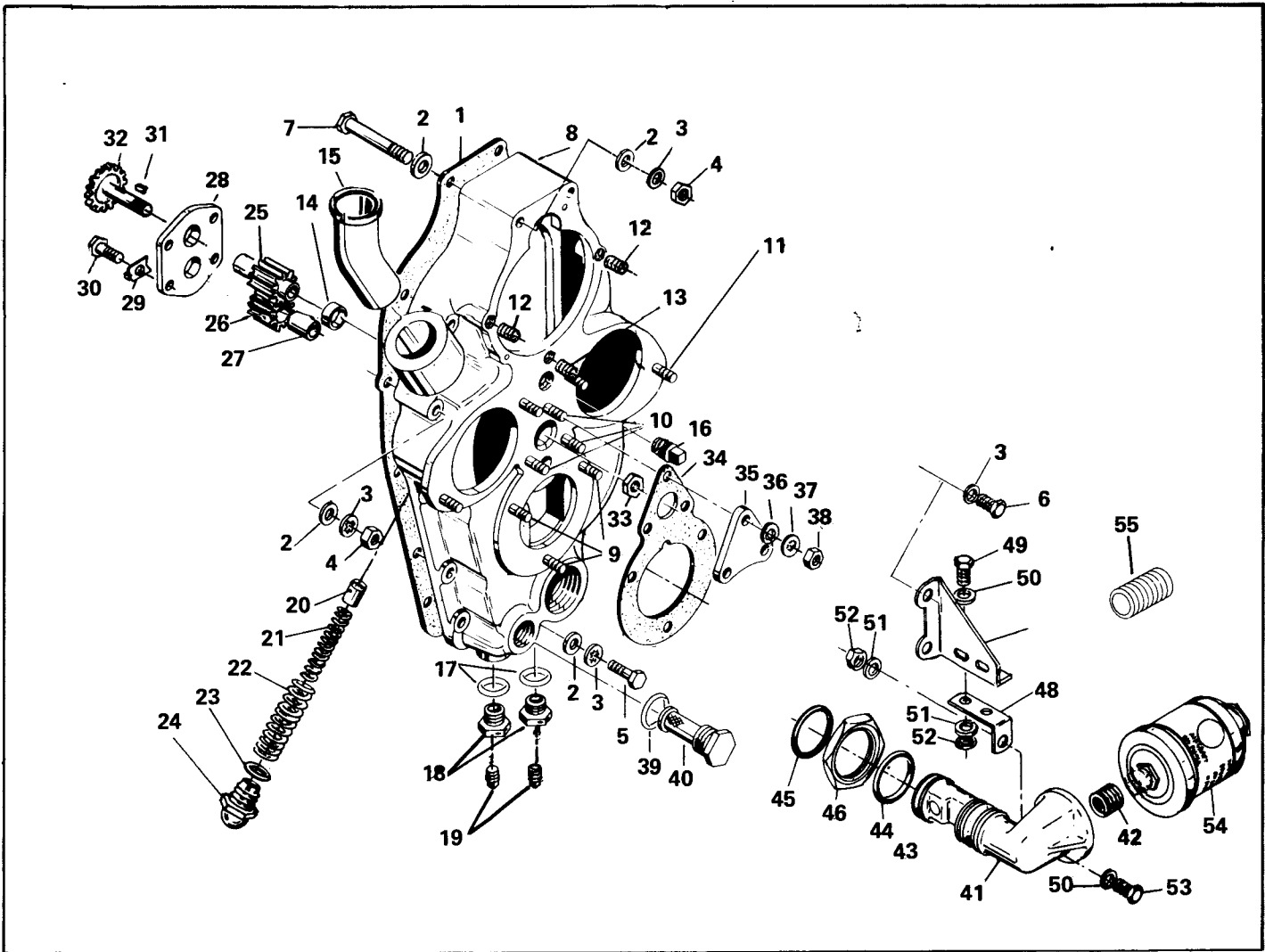


FIGURE 27. CRANKCASE COVER ASSEMBLY

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY							
			TSIO-360			LTSIO-360				
			A	B	C	D	E	F		E
27-1	530011	\$ Gasket, Crankcase Cover-to-C/C			1					
	No Number	Crankcase Cover Complete			ns					
		ATTACHING PARTS								
-2	2473	Washer, Plain			10					
-3	MS35338-45	Washer, Lock			12					
-4	2439	Nut, Plain, Hex			7					
-5	537961	Screw, 5/16 - 18 x 1.00 In. Long			3					
-6	537750	Screw, 5/16 - 18 x 1-1/8 In. Long			2					
-7	539916	Screw, 5/16 - 24 x 3-1/4 In. Long			1					
		* * * *								
	640616	Crankcase Cover Assembly			1					
-8	No Number	Cover			ns					
-9	401809	Stud, 5/16 x 1-3/8 In. Long			3					
-10	401963	Stud, 1/4 x 1.00 In. Long			3					
-11	401885	Stud, 5/16 x 1-5/16 In. Long			4					
-12	MS122162	Insert, Helical Coil			2					
-13	MS122122	Insert, Helical Coil			1					
-14	627762	Bushing, Bronze			1					

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY																	
			TSIO-360					LTSIO-360												
			A	B	C	D	E	F			E									
27-15	640216	. . Tube, Oil Filler Neck . . . . .			1															
-16	629518-3H	. . Plug, 3/8 NPTF . . . . .			1															
-17	AN900-10	\$ . . Gasket, Annular . . . . .			2															
-18	630415	. . Plug, Hex Head, 5/8 - 18 . . . . .			2															
-19	629518-1H	. . Plug, 1/8 NPTF . . . . .			2															
-20	631687	. . Plunger . . . . .			1															
-21	539619	. . Spring, Oil Pressure Relief Valve . . . . .			1															
-22	635002	. . Spring, Oil Pressure Relief Valve . . . . .			1															
-23	AN900-14	\$ . . Gasket, Annular . . . . .			1															
-24	21113	. . Cap, Oil Pressure Relief Valve . . . . .			1															
-25	633602	. . Gear, Oil Pump Drive . . . . .			1															
	633610	. . Gear, Oil Pump Driven . . . . .			1															
-26	No Number	. . Gear . . . . .			ns															
-27	633611	. . Bushing . . . . .			1															
-28	633612	. . Cover, Oil Pump . . . . .			1															
ATTACHING PARTS																				
-29	36025	. . Washer, Tab . . . . .			4															
-30	626487	. . Screw . . . . .			4															
* * * *																				
-31	633342-1	. . Key, Woodruff . . . . .			1															
-32	634010	. . Gear, Oil Pump Drive . . . . .			1															
-33	632443-3	. . Nut . . . . .			1															
-34	632560	\$ . . Gasket, Gen. and O/P Dr. Gear . . . . .			1															
-35	632475	. . Cover, Oil Pump Dr. Gear . . . . .			1															
ATTACHING PARTS																				
-36	20522	. . Washer, Plain . . . . .			3															
-37	MS35338-44	. . Washer, Lock . . . . .			3															
-38	2437	. . Nut . . . . .			3															
* * * *																				
-39	AN900-16	\$ . . Gasket, Annular . . . . .			1															
-40	641835	. . Screen Assembly, Oil Scavenge . . . . .			1															
	641734	* . . Adapter Assembly, Oil Filter . . . . .			1															
-41	No Number	. . Adapter . . . . .			ns															
-42	632373	. . Stud . . . . .			1															
-43	641614	. . Plug . . . . .			1															
-44	AN123883	\$ . . O-Ring . . . . .			1															
-45	MS9021-028	\$ . . O-Ring . . . . .			1															
-46	631904	. . Nut, Adapter . . . . .			1															
-47	633735	Bracket, Adapter . . . . .			1															
-48	633734	Bracket, Adapter . . . . .			1															
-49	AN501-10-7	Screw . . . . .			2															
-50	AN960-10L	Washer . . . . .			3															
-51	22910	Washer, Lock . . . . .			3															
-52	13XX1896	Nut, No. 10-32 . . . . .			3															
-53	25320	Screw . . . . .			1															
-54	641583	* Filter . . . . .			1															
-55	640703	* Stud . . . . .			1															

NOTE (\*) To install spin on filter (54), when using old adapter assembly 633324, it will be necessary to install stud (55) in filter base.

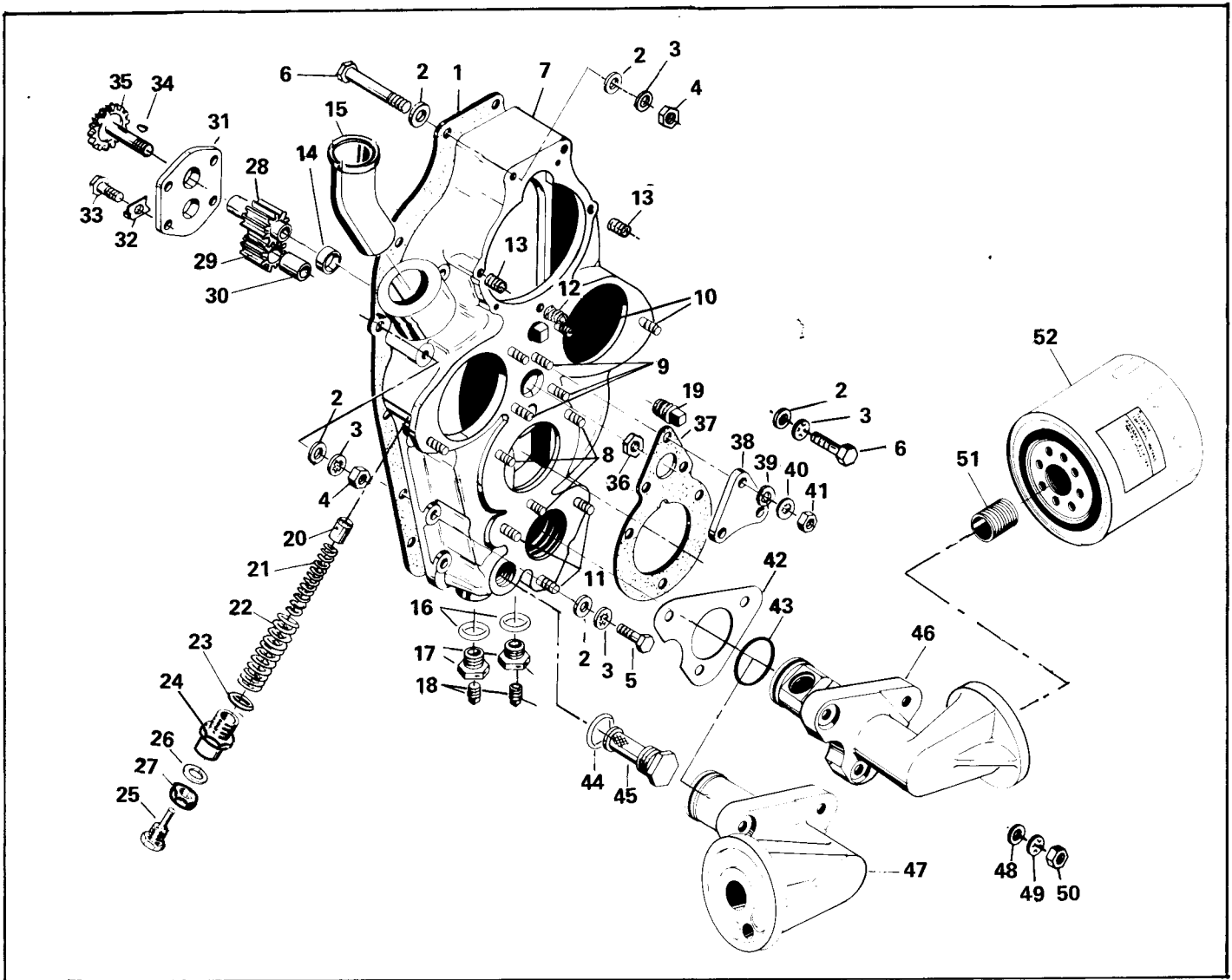


FIGURE 28. CRANKCASE COVER ASSEMBLY

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY									
			TSIO-360						LTSIO-360			
			A	B	C	D	E	F			E	
28-1	530011	\$ Gasket, Crankcase Cover to C/C	1	1	1	1						
	No Number	Crankcase Cover, Complete	ns	ns	ns	ns						
		ATTACHING PARTS										
-2	2473	Washer, Plain	10	10	10	10						
-3	MS35338-45	Washer, Lock	12	12	12	12						
-4	2439	Nut, Plain Hex	7	7	7	7						
-5	537961	Screw, 5/16 - 18 x 1.00 In. Long	5	5	5	5						
-6	539916	Screw, 5/16 - 24 x 3-1/4 In. Long	1	1	1	1						
		* * * *										
	640841	. Crankcase Cover Assembly	1	1								
	641803	. Crankcase Cover Assembly			1							
	641802	. Crankcase Cover Assembly				1						
-7	No Number	. Cover	ns	ns	ns	ns						
-8	401809	† . Stud, 5/16 x 1-1/8 In. Long	3	3	3	3						
-9	401963	† . Stud, 1/4 x 1.00 In. Long	3	3	3	3						
-10	401885	† . Stud, 5/16 x 1-5/16 In. Long	3	3	3	3						
-11	402067	† . Stud, 5/16 x 1-5/8 In. Long	3	3	3	3						



FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY							
			TSIO-360				LTSIO-360			
			A	B	C	D	E	F		E
28-12	MS122122	. . . Insert, Helical Coil . . . . .	1	1	1	1				
-13	MS122162	. . . Insert, Helical Coil . . . . .	2	2	2	2				
-14	627762	. . . Bushing, Bronze . . . . .	1	1	1	1				
-15	632344	. . . Tube, Oil Filler Neck . . . . .	1	1						
-15	640216	. . . Tube, Oil Filler Neck . . . . .			1					
-15	641159	. . . Tube, Oil Filler Neck . . . . .					1			
-16	AN900-10 \$	. . . Gasket, Annular . . . . .	2	2	2	2				
-17	630415	. . . Plug, 5/8 - 18 . . . . .	2	2	2	2				
-18	629518-1H	. . . Plug, Pipe 1/8 - 27 . . . . .	2	2	2	2				
-19	629518-3H	. . . Plug, Pipe, 3/8 - 18 . . . . .	1	1	1	1				
-20	631687	. . . Plunger, Oil Pressure Relief Valve . . . . .	1	1	1	1				
-21	635002	. . . Spring, Oil Pressure Relief Valve . . . . .	1	1	1	1				
-22	539619	. . . Spring, Oil Pressure Relief Valve . . . . .	1	1	1	1				
-23	AN900-10 \$	. . . Gasket, Annular . . . . .	1	1	1	1				
-24	21113	. . . Cap, Oil Pressure Relief Valve . . . . .	1	1						
-24	641074 *	. . . Cap, Oil Pressure Relief Valve . . . . .			1	1				
-25	641075 *	. . . Screw, Relief Valve Adj. . . . .			1	1				
-26	X1473 *	. . . Washer, Plain . . . . .			1	1				
-27	632762 *	. . . Nut, Elastic Stop . . . . .			1	1				
-28	633602	. . . Gear, Oil Pump Drive . . . . .	1	1	1	1				
	633610	. . . Gear, Oil Pump Driven . . . . .	1	1	1	1				
-29	No Number	. . . Gear . . . . .	ns	ns	ns	ns				
-30	633611	. . . Bushing . . . . .	1	1	1	1				
-31	633612	. . . Cover, Oil Pump . . . . .	1	1	1	1				
ATTACHING PARTS										
-32	36025	. . . Washer, Tab . . . . .	4	4	4	4				
-33	626487	. . . Screw, 1/4 - 20 x 9/16 In. Long . . . . .	4	4	4	4				
* * * *										
-34	633342-1	. . . Key, Woodruff . . . . .	1	1	1	1				
-35	634010	. . . Gear, Oil Pump Drive . . . . .	1	1	1	1				
-36	632443-3	. . . Nut, Oil Pump Drive Gear . . . . .	1	1	1	1				
-37	632560 \$	. . . Gasket, Alt. and O/P Dr. Gear . . . . .	1	1	1	1				
-38	632475	. . . Cover, Oil Pump Drive Gear . . . . .	1	1	1	1				
ATTACHING PARTS										
-39	20522	. . . Washer, Plain . . . . .	3	3	3	3				
-40	MS35338-44	. . . Washer, Lock . . . . .	3	3	3	3				
-41	2437	. . . Nut, Plain Hex . . . . .	3	3	3	3				
* * * *										
-42	640834 \$	. . . Gasket, Oil Filter Adpt. to Cover . . . . .	1	1	1	1				
-43	MS9021-028	. . . O-Ring, Oil Filter Adapter . . . . .	1	1	1	1				
-44	AN900-16 \$	. . . Gasket, Annular . . . . .	1	1	1	1				
-45	641835	. . . Screen Assembly, Scavenge Oil . . . . .	1	1	1	1				
-46	641574 **	. . . Adapter Assembly, Oil Filter . . . . .	1		1	1				
-47	641575 ***	. . . Adapter Assembly, Oil Filter . . . . .	1	1	1	1				
ATTACHING PARTS										
-48	AN960-516	. . . Washer, Plain . . . . .	3	3	3	3				
-49	MS35338-45	. . . Washer, Lock . . . . .	3	3	3	3				
-50	2439	. . . Nut, Plain, Hex . . . . .	3	3	3	3				
* * * *										
-51	632373	. . . Stud, Adapter . . . . .	1	1	1	1				
-52	641583	. . . Oil Filter . . . . .	1	1	1	1				

NOTE (\*) These parts are optional on the TSIO-360-A-B.

NOTE (\*\*) Used on front engine of Cessna T337.

NOTE (\*\*\*) Used on rear engine of Cessna T337.

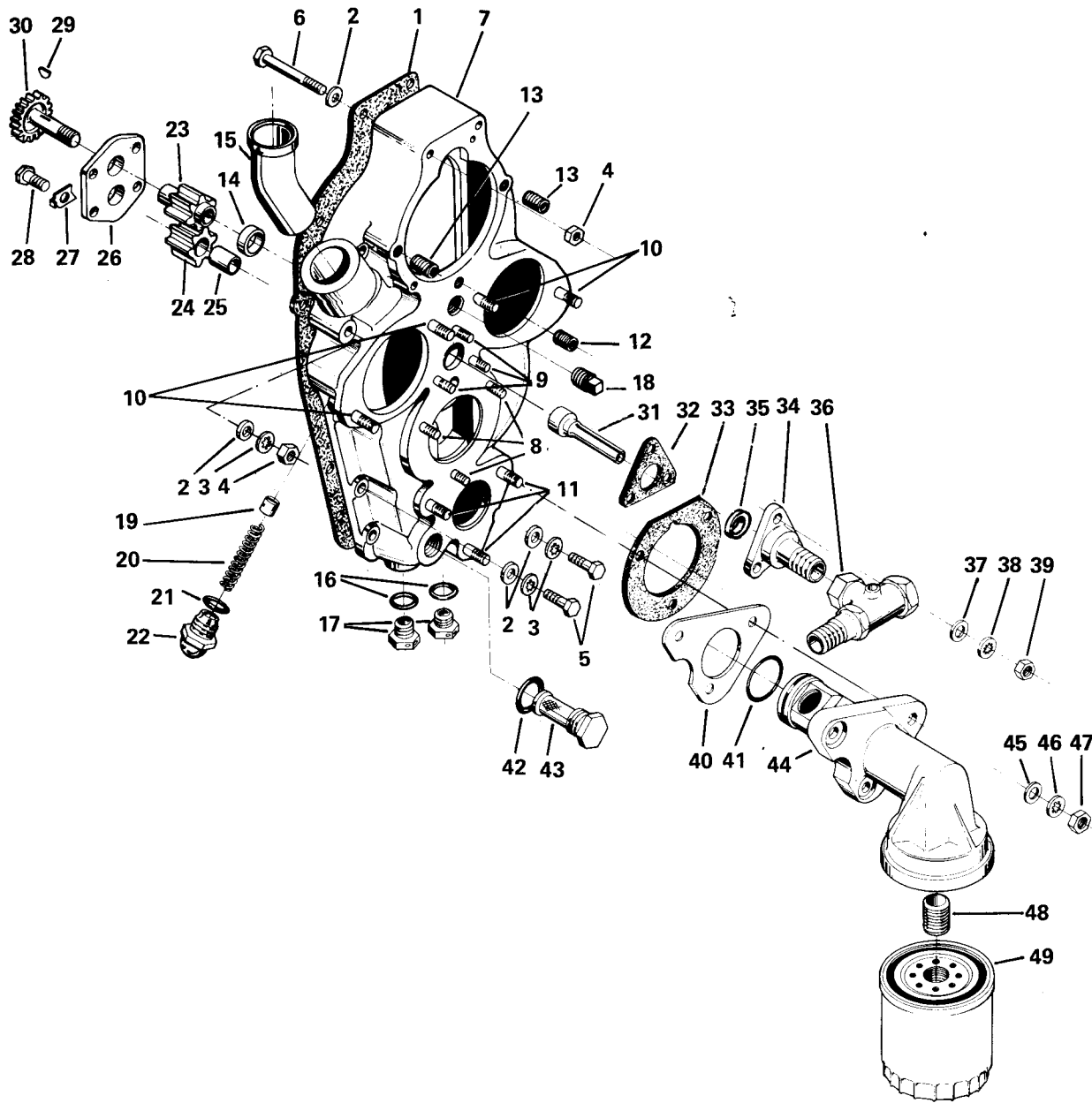


FIGURE 29. CRANKCASE COVER ASSEMBLY

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY							
			TSIO-360			LTSIO-360				
			A	B	C	D	E	F		E
29-1	530011	\$ Gasket Crankcase Cover to C/C					1	1		1
	No Number	Crankcase Cover Complete					ns	ns		ns
ATTACHING PARTS										
-2	2473	Washer, Plain					15	15		15
-3	MS35338-45	Washer, Lock					14	14		14
-4	2437	Nut, Plain					9	9		9
-5	537961	Screw, 5/16 - 18 x 1.00 In. Long					5	5		5
-6	539916	Screw, 5/16 - 24 x 3-1/4 In. Long					1	1		1
* * * *										
	640923	. Crankcase Cover					1	1		
	640924	. Crankcase Cover								1
-7	No Number	. . Cover					ns	ns		ns

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY										
			TSIO-360						LTSIO-360				
			A	B	C	D	E	F		E			
29-8	401809	† . . Stud, 5/16 x 1-1/8 In. Long . . . . .					3	3				3	
-9	401804	† . . Stud, 1/4 x 1-1/16 In. Long . . . . .					3	3				3	
-10	401885	† . . Stud, 5/16 x 1-5/16 In. Long . . . . .					4	4				4	
-11	402067	† . . Stud, 5/16 x 1-5/8 In. Long . . . . .					3	3				3	
-12	MS122122	. . Insert, Helical Coil . . . . .					1	1				1	
-13	MS122162	. . Insert, Helical Coil . . . . .					2	2				2	
-14	627762	. . Bushing, Bronze . . . . .					1	1				1	
-15	641033	. . Tube, Oil Filler Neck . . . . .					1	1				1	
-16	AN900-10	\$ . . Gasket, Annular . . . . .					2	2				2	
-17	532432	. . Plug, Hex Head 5/8 - 18 . . . . .					2	2				2	
-18	629518-3H	. . Plug, Pipe, 3/8 - 18 . . . . .					1	1				1	
-19	631687	. . Plunger, Oil Pressure Relief Valve . . . . .					1	1				1	
-20	627458	. . Spring, Oil Pressure Relief Valve . . . . .					1	1				1	
-21	AN900-14	\$ . . Gasket, Annular . . . . .					1	1				1	
-22	21113	. . Cap, Oil Pressure Relief Valve . . . . .					1	1				1	
-23	633602	. . Gear, Oil Pump Drive . . . . .					1	1				1	
	633610	. . Gear Assembly . . . . .					1	1				1	
-24	No Number	. . Gear . . . . .					ns	ns				ns	
-25	633611	. . Bushing . . . . .					1	1				1	
-26	633612	. . Cover, Oil Pump . . . . .					1	1				1	
ATTACHING PARTS													
-27	36025	. . Washer, Tab . . . . .					4	4				4	
-28	626487	. . Screw, 1/4 - 20 x 9/16 In. Long . . . . .					4	4				4	
* * * *													
-29	633342-1	. . Key, Woodruff . . . . .					1	1				1	
-30	634010	. . Gear, Oil Pump Drive . . . . .					1	1					
-30	640926	. . Gear, Oil Pump Drive . . . . .										1	
-31	641535-1RH	. . Conn., Tach Drive . . . . .					1	1					
-31	641535-2LH	. . Conn., Tach Drive . . . . .										1	
-32	641538	\$ . . Gasket, Tach Drive . . . . .					1	1				1	
-33	352066	\$ . . Gasket, Generator . . . . .					1	1				1	
-34	641531	. . Adapter Assembly, Tach Drive . . . . .					1	1				1	
	No Number	. . Adapter, Tach Drive . . . . .					ns	ns				ns	
-35	641533	. . Seal . . . . .					1	1				1	
-36	640925	. . Adapter, Tach Drive Reduction . . . . .					1	1				1	
ATTACHING PARTS													
-37	20522	. . Washer, Plain . . . . .					3	3				3	
-38	MS35338-44	. . Washer, Lock . . . . .					3	3				3	
-39	2437	. . Nut, Plain, Hex . . . . .					3	3				3	
* * * *													
-40	640834	\$ . . Gasket, Oil Filter Adapter to Cov. . . . .					1	1				1	
-41	MS9021-028	. . O-Ring, Oil Filter Adapter . . . . .					1	1				1	
-42	AN900-16	\$ . . Gasket, Annular . . . . .					1	1				1	
-43	641835	. . Screen Assembly, Scavenge Oil . . . . .					1	1				1	
-44	641576	. . Adapter Assembly, Oil Filter . . . . .					1	1				1	
ATTACHING PARTS													
-45	2473	. . Washer, Plain . . . . .					3	3				3	
-46	MS35338-45	. . Washer, Lock . . . . .					3	3				3	
-47	2439	. . Nut, Plain . . . . .					3	3				3	
* * * *													
-48	632373	. . Stud, Adapter . . . . .					1	1				1	
-49	641583	. . Oil Filter . . . . .					1	1				1	

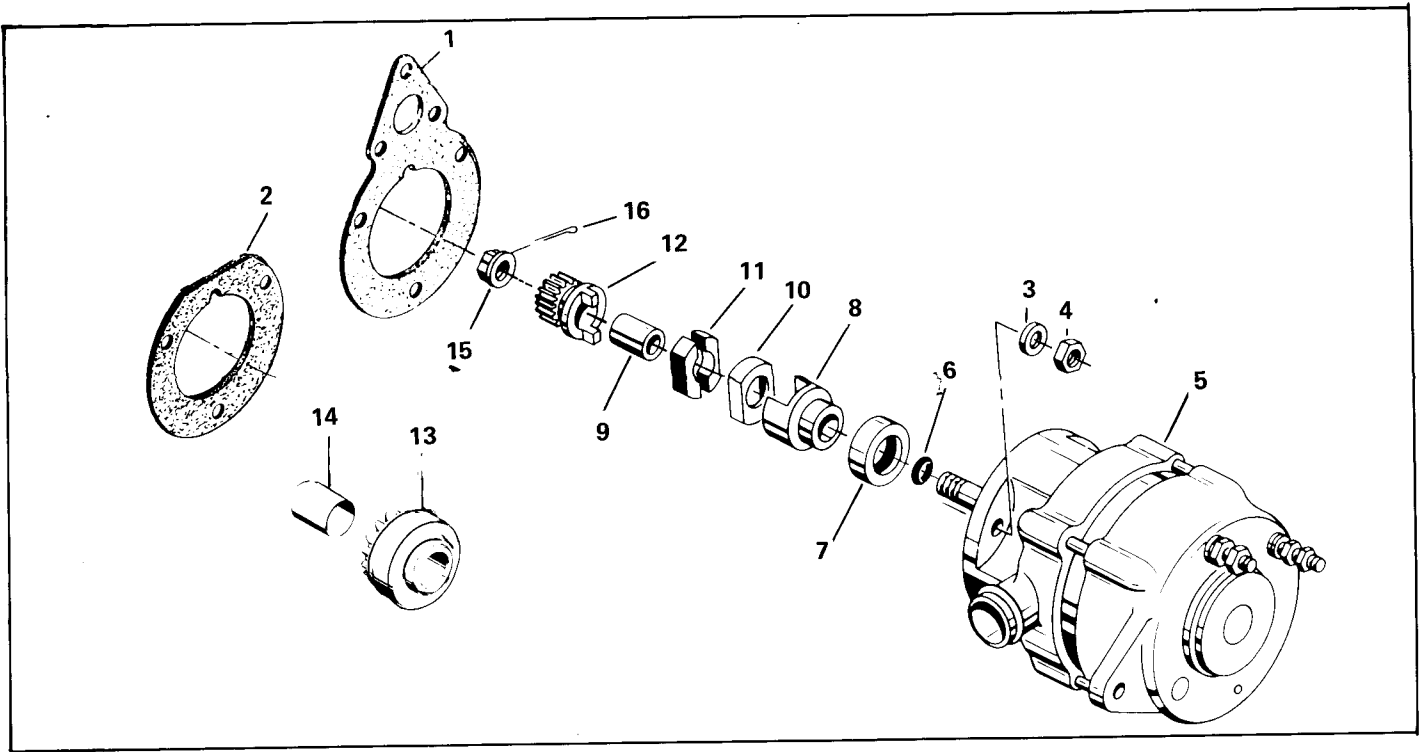


FIGURE 30. ALTERNATOR ASSEMBLY

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY								
			TSIO-360			LTSIO-360					
			A	B	C	D	E	F		E	
30-1	632560	\$ Gasket, Alternator	RF	RF	RF	RF					
-2	352066	Gasket, Alternator					RF	RF		RF	
	No Number	Alternator Assembly 38 AMP 28 Volt	ns	ns	ns	ns					
	No Number	Alternator Assembly 70 AMP 12 Volt					ns	ns		ns	
ATTACHING PARTS											
-3	2473	Washer, Plain	3	3	3	3	3	3		3	
-4	21213	Nut, Elastic Stop	3	3	3	3	3	3		3	
* * * *											
-5	633962	. Alternator, 38 AMP, 28 Volt	1	1	1	1					
-5	641669	. Alternator, 70 AMP 12 Volt					1	1		1	
-6	AN123864	. O-Ring					1	1		1	
-7	352068	. Seal-Oil					1	1		1	
-8	530406	. Hub, Alternator Coupling	1	1							
-9	530407	. Sleeve	1	1							
-10	352030	. Retainer	1	1							
-11	632050	. Bushing	2	2							
-12	531325	. Gear, Alternator Drive	1	1							
	635796	. Coupler, Assembly			1	1	1	1		1	
-13	No Number	. Coupler			ns	ns	ns	ns		ns	
-14	634598	. Sleeve			1	1	1	1		1	
-15	530412	. Nut, Slotted	1	1	1	1	1	1		1	
-16	639292	. Pin, Cotter	1	1	1	1	1	1		1	

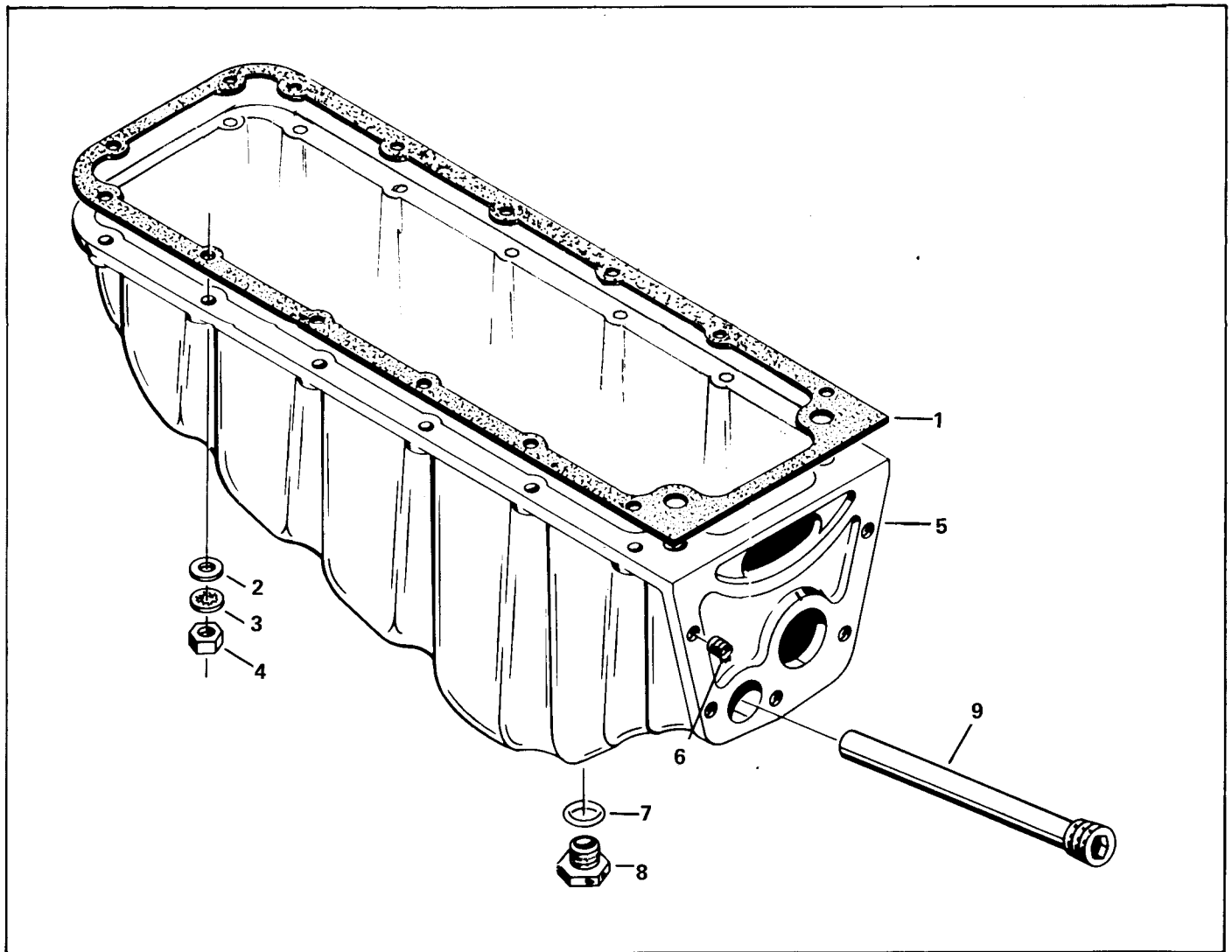


FIGURE 31. OIL SUMP ASSEMBLY

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY							
			TSIO-360						LTSIO-360	
			A	B	C	D	E	F		E
31-1	641870	\$ Gasket, Oil Sump	1	1	1	1	1	1		1
	No Number	Sump Assembly, Oil	ns	ns	ns	ns	ns	ns		ns
ATTACHING PARTS										
-2	20522	Washer, Plain	14	14	14	14	14	14		14
-3	MS35338-44	Washer, Lock	14	14	14	14	14	14		14
-4	2437	Nut, Plain, Hex, 1/4 - 28	14	14	14	14	14	14		14
* * * *										
	629671A2	. Oil Sump Assembly	1	1	1	1	1	1		1
-5	No Number	. . Sump, Oil	ns	ns	ns	ns	ns	ns		ns
-6	MS122122	. . Insert, Thread	5	5	5	5	5	5		5
-7	AN900-10	\$ . . Gasket, Annular	1	1	1	1	1	1		1
-8	2265	. . Plug, Oil Drain, 5/8 - 18	1	1	1	1	1	1		1
-9	626264	. Tube Assembly, Suction	1	1	1	1	1	1		1

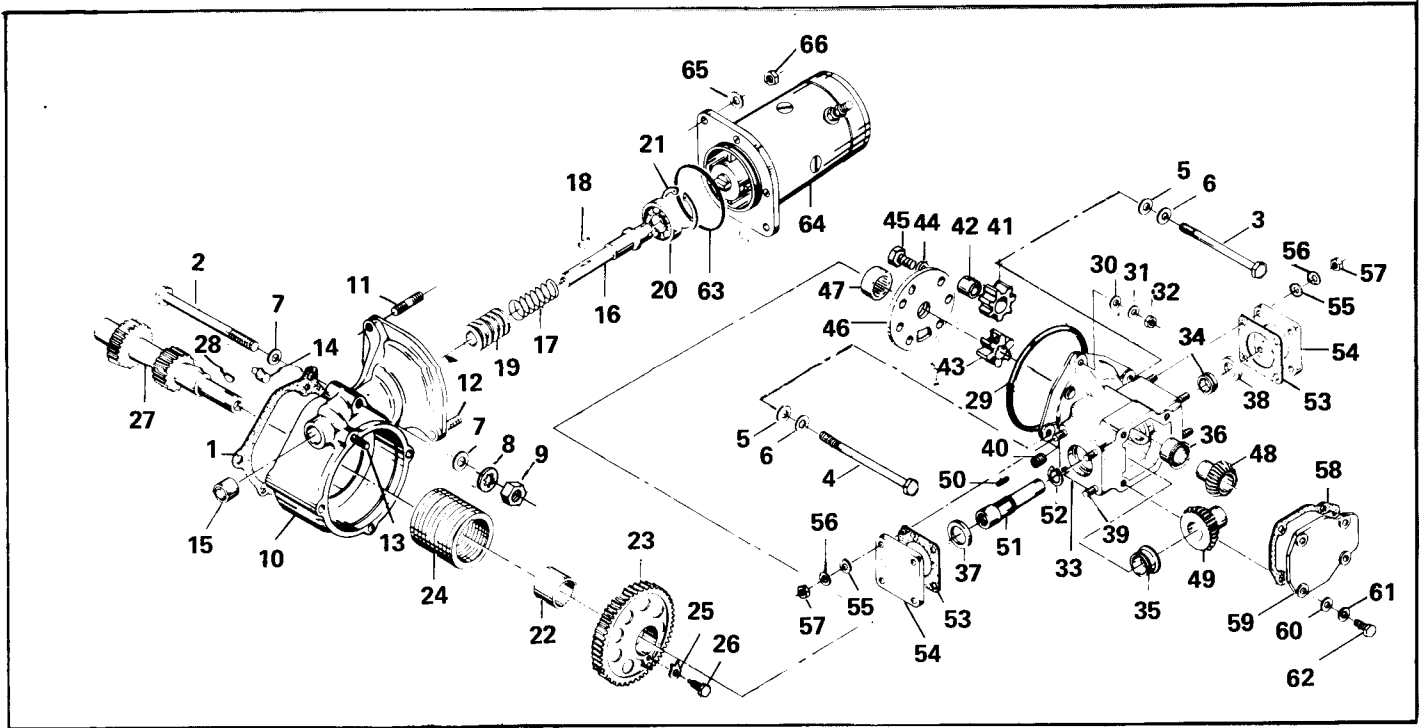


FIGURE 32. STARTER AND STARTER ADAPTER ASSEMBLY

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY											
			TSIO-360						LTSIO-360					
			A	B	C	D	E	F		E				
32- 1	627993 \$	Gasket . . . . .	1			1								
	635048A2	Adapter, Assembly, Str. & Acc. Drive . . . . .	1			1								
		ATTACHING PARTS												
-2	628056	Bolt, Hex Head, 5/16 x 5-13/32 Inch Long . . . . .	1			1								
-3	627433	Bolt, Hex Head, 5/16 - 18 x 5-1/4 Inch Long . . . . .	2			2								
-4	538999	Bolt, Hex Head, 5/16 - 18 x 3-5/8 Inch Long . . . . .	1			1								
-5	2473	Washer, Plain . . . . .	3			3								
-6	MS35338-45	Washer, Lock . . . . .	3			3								
-7	2473	Washer, Plain . . . . .	2			2								
-8	MS35338-45	Washer, Lock . . . . .	1			1								
-9	2439	Nut, Plain, Hex . . . . .	1			1								
		* * * *												
	635048	. Adapter Assembly, Starter . . . . .	1			1								
-10	No Number	. . Adapter and Sleeve Assembly . . . . .	ns			ns								
-11	402127	. . Stud, 3/8 x 1-17/32 Inch Long . . . . .	1			1								
-12	401861	. . Stud, 3/8 x 1-3/4 Inch Long . . . . .	1			1								
-13	402151	. . Stud, 5/16 x 1-1/4 Inch Long . . . . .	1			1								
-14	627882	. . Dowel, 5/16 x 33/64 Inch Long . . . . .	2			2								
-15	641368	. . Bearing, Needle . . . . .	1			1								
-16	631252	. . Shaft, Starter Worm . . . . .	1			1								
-17	536552	. . Spring, Worm Shaft . . . . .	1			1								
-18	633342-10	. . Key, Woodruff . . . . .	1			1								
-19	539805	. . Gear, Worm . . . . .	1			1								
-20	X13041	. . Bearing, Ball . . . . .	1			1								
-21	502287	. . Ring, Retaining . . . . .	1			1								
-22	630680	. . Bearing, Roller . . . . .	1			1								
-23	627860	. . Gear, Starter Worm Wheel . . . . .	1			1								
-24	539800	. . Spring, Clutch . . . . .	1			1								
		ATTACHING PARTS												
-25	501867	. . Washer, Tab . . . . .	1			1								
-26	633845	. . Screw, 1/4 - 20 x 11/32 Inch Long . . . . .	1			1								
-27	633547	. . Shaftgear, Starter . . . . .	1			1								
-28	633342-6	. . Key, Woodruff . . . . .	1			1								
-29	AN123902 \$	. . O-Ring . . . . .	1			1								
	633626A1	. . Adapter Assembly, Accessory Drive . . . . .	1			1								

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY								
			TSIO-360				LTSIO-360				
			A	B	C	D	E	F	G	H	I
32		ATTACHING PARTS									
-30	2473	Washer, Plain	1			1					
-31	MS35338-45	Washer, Lock	1			1					
-32	2439	Nut, Plain, Hex	1			1					
		* * * *									
-33	No Number	Adapter, Accessory Drive	ns			ns					
-34	632409	Bushing	1			1					
-35	632410	Bushing	1			1					
-36	633687	Bushing	1			1					
-37	632412	Seal, Oil	1			1					
-38	25102	Seal, Oil	1			1					
-39	401870	Stud, 1/4 x 1-1/8 Inch Long	8			8					
-40	402941	Plug, 1/16 - 27	2			2					
	633630	Gear Assembly, Scavenge Pump	1			1					
-41	No Number	Gear Scavenge Pump Driven	ns			ns					
-42	633632	Bushing, Scavenge Pump	1			1					
-43	633629	Gear, Scavenge Pump Drive	1			1					
	633628	Cover Assembly, Scavenge Pump	1			1					
		ATTACHING PARTS									
-44	20522	Washer, Plain	6			6					
-45	22537	Screw, 1/4 - 20 x 5/8 Inch Long	6			6					
		* * * *									
-46	No Number	Cover, Scavenge Pump	1			1					
-47	633609-7	Bearing, Needle	1			1					
-48	633627	Gear, Bevel Accessory Driver	1			1					
-49	633612	Gear, Bevel Accessory Driven	1			1					
-50	MS20066-98	Key, Machine	1			1					
-51	632613	Shaft Gear, Accessory Drive	1			1					
-52	532247	Ring, Retaining	1			1					
-53	MS9134-01	Gasket, Accessory Pad Cover	2			2					
-54	640380	Cover, Accessory Drive	2			2					
		ATTACHING PARTS									
-55	20522	Washer, Plain	8			8					
-56	MS35338-44	Washer, Lock	8			8					
-57	2437	Nut, Plain, Hex	8			8					
		* * * *									
-58	633752	Gasket, Cover Adapter	1			1					
-59	633751	Cover, Accessory Drive	1			1					
		ATTACHING PARTS									
-60	20522	Washer, Plain	4			4					
-61	MS35338-44	Washer, Lock	4			4					
-62	535631	Screw, 1/4 - 20 x 1 Inch Long	4			4					
		* * * *									
-63	MS9021-038	O-Ring	1			1					
-64	637847	Starter, 24 Volt	1			1					
		ATTACHING PARTS									
-65	539058	Washer, Plain	2			2					
-66	2441	Nut, Plain, Hex	2			2					

NOTE (\*) When replacing the Delco starter with the Prestolite, you will find it necessary to use two 402127 studs to the nearest oversize.

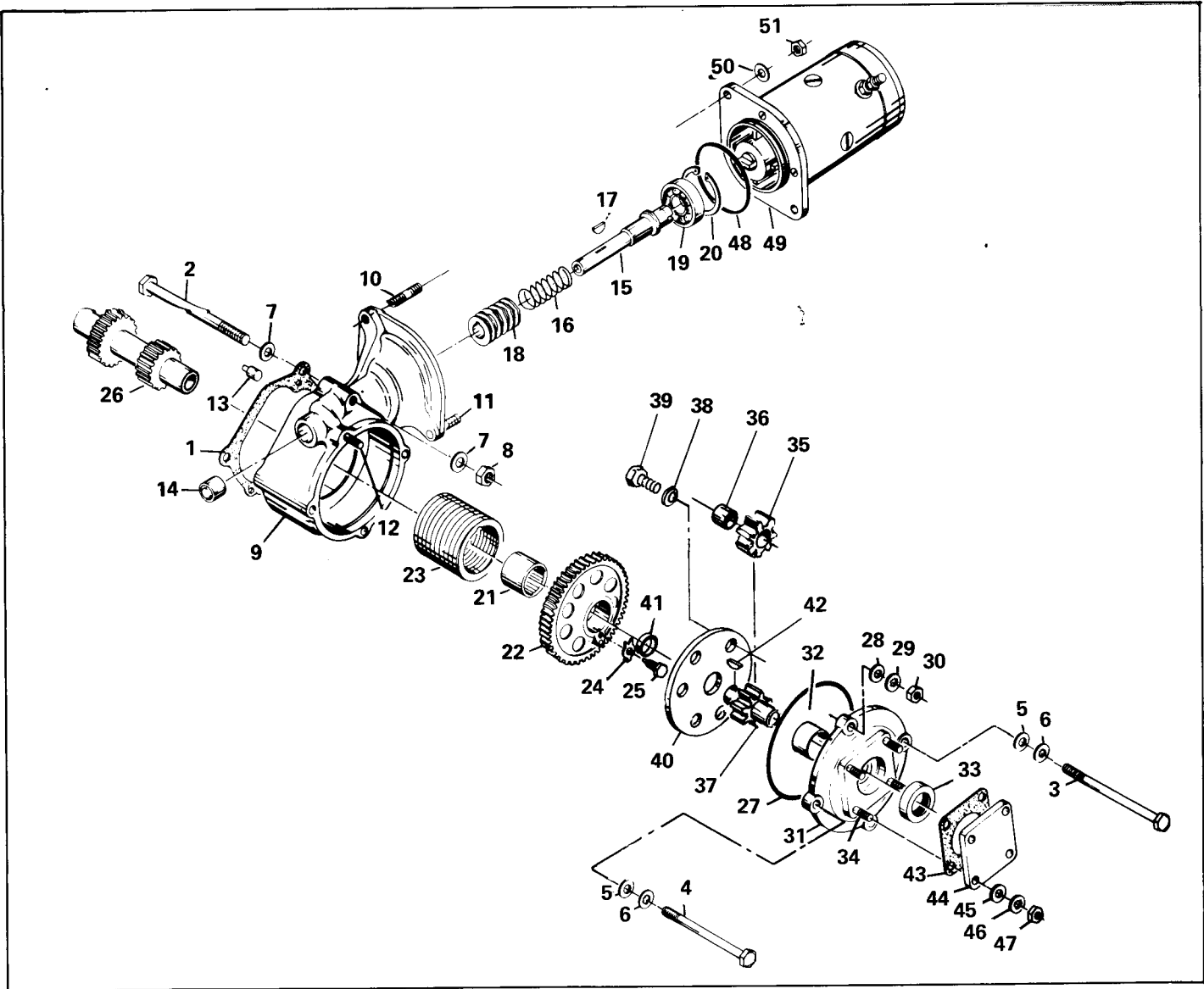


FIGURE 33. STARTER AND STARTER ADAPTER ASSEMBLY

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY							
			TSIO-360			LTSIO-360				
			A	B	C	D	E	F	E	
33-1	627993	\$ Gasket		1	1					
	635048A4	Adapter Assembly, Starter & Acc. Drive		1	1					
ATTACHING PARTS										
-2	628056	Bolt, Hex Head, 5/16 - 24 x 5-13/32 In. Lg.		1	1					
-3	627433	Bolt, Hex Head, 5/16 - 18 x 5-1/4 In. Lg.		2	2					
-4	538999	Bolt, Hex Head, 5/16 - 18 x 3-5/8 In. Lg.		1	1					
-5	2473	Washer, Plain		3	3					
-6	MS35338-45	Washer, Lock		3	3					
-7	2473	Washer, Plain		2	2					
-8	2439	Nut, Plain Hex		1	1					
* * * *										
	635048	. Adapter Assembly, Starter		1	1					
-9	No Number	. . Adapter, Starter		ns	ns					
-10	402127	† . . Stud, 3/8 x 1-13/32 In. Long		1	1					
-11	401861	† . . Stud, 3/8 x 1-3/4 In. Long		1	1					



FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY																	
			TSIO-360					LTSIO-360												
			A	B	C	D	E	F			E									
33-12	402151 †	. . Stud, 5/16 x 1-1/4 In. Long . . . . .		1	1															
-13	627882	. . Dowel, 5/16 x 33/64 In. Long . . . . .		2	2															
-14	641368	. Bearing, Needle . . . . .		1	1															
-15	631252	. Shaft, Starter Worm . . . . .		1	1															
-16	536552	. Spring, Starter . . . . .		1	1															
-17	633342-10	. Key, Woodruff . . . . .		1	1															
-18	539805	. Gear, Starter Worm . . . . .		1	1															
-19	X13041	. Bearing, Ball . . . . .		1	1															
-20	502287	. Ring, Retaining . . . . .		1	1															
-21	630680	. Bearing, Roller . . . . .		1	1															
-22	627860	. Gear, Starter Worm Wheel . . . . .		1	1															
-23	539800	. Spring, Clutch . . . . .		1	1															
ATTACHING PARTS																				
-24	501867	. Washer, Tab . . . . .		1	1															
-25	633845	. Screw, 1/4 - 20 x 11/32 In. Long . . . . .		1	1															
* * * *																				
-26	633542	. Shaft Gear, Starter . . . . .		1	1															
-27	AN123902 \$	. O-Ring . . . . .		1	1															
	633636	. Body Assembly, Acc. Dr. & Scavenge Pump . . . . .		1	1															
ATTACHING PARTS																				
-28	2473	. Washer, Plain . . . . .		1	1															
-29	MS35338-45	. Washer, Lock . . . . .		1	1															
-30	2439	. Nut, Plain, Hex . . . . .		1	1															
* * * *																				
-31	No Number	. . Body, Accessory Drive . . . . .		ns	ns															
-32	632409	. . Bushing . . . . .		1	1															
-33	25102 \$	. . Seal . . . . .		1	1															
-34	401870 †	. . Stud, 1/4 x 1-1/8 In. Long . . . . .		1	1															
	633630	. Gear Assembly, Scavenge Pump Driven . . . . .		1	1															
-35	No Number	. . Gear Scavenge Pump . . . . .		ns	ns															
-36	633632	. . Bushing, Gear . . . . .		1	1															
-37	633637	. Gear, Scavenge Pump Driven . . . . .		1	1															
	633848	. Cover Assembly, Scavenge Pump . . . . .		1	1															
ATTACHING PARTS																				
-38	20522	. Washer, Plain . . . . .		6	6															
-39	22537	. Screw . . . . .		6	6															
* * * *																				
-40	No Number	. . Cover, Scavenge Pump . . . . .		ns	ns															
-41	633856	. . Bushing, Scavenge Pump Cover . . . . .		1	1															
-42	633342	. Key, Woodruff . . . . .		1	1															
-43	MS9134-01	. Gasket, Accessory Drive . . . . .		1	1															
-44	640380	. Cover, Accessory Drive . . . . .		1	1															
ATTACHING PARTS																				
-45	20522	. Washer, Plain . . . . .		4	4															
-46	MS35338-44	. Washer, Lock . . . . .		4	4															
-47	2437	. Nut, 1/4 - 28 . . . . .		4	4															
* * * *																				
-48	MS9021-038 \$	O-Ring . . . . .		1	1															
-49	637847 *	Starter, 24 Volts . . . . .		1	1															
ATTACHING PARTS																				
-50	539058	Washer, Plain . . . . .		2	2															
-51	2441	Nut, Plain, Hex . . . . .		2	2															

NOTE (\*) When replacing the Delco starter with the Prestolite, you will find it necessary to use two 402127 studs to the nearest oversize.

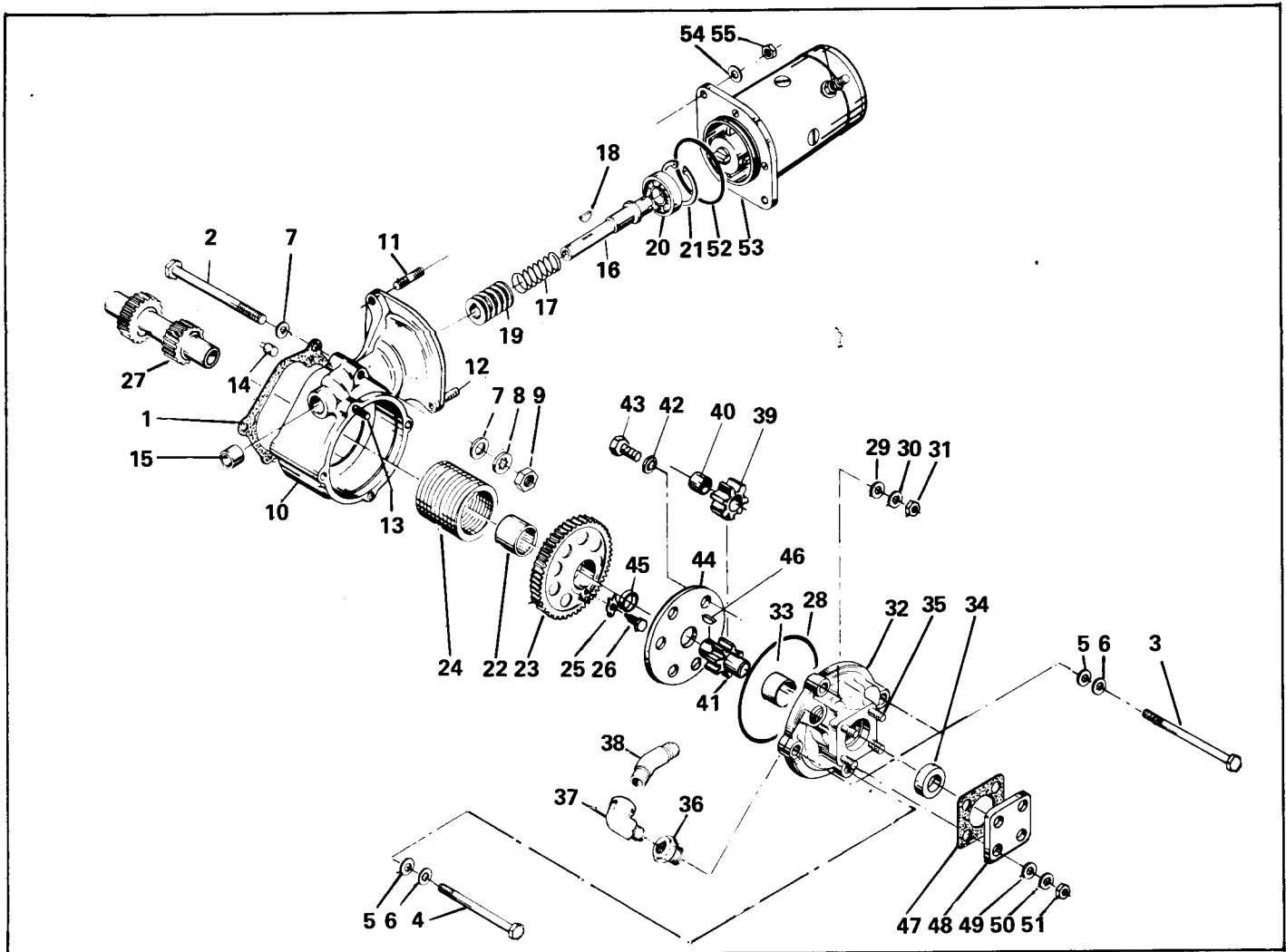


FIGURE 34. STARTER AND STARTER ADAPTER ASSEMBLY

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY											
			TSIO-360						LTSIO-360					
			A	B	C	D	E	F		E				
34-1	627993	\$ Gasket					1	1						
	635048A8	Adapter Assembly, Str. & Acc. Drive					1	1						
		ATTACHING PARTS												
-2	628056	Bolt, 5/16 - 24 x 5-13/32 In. Long					1	1						
-3	627433	Bolt, 5/16 - 18 x 5-1/4 In. Long					2	2						
-4	538999	Bolt, 5/16 - 18 x 3-5/8 In. Long					1	1						
-5	2473	Washer, Plain					3	3						
-6	MS35338-45	Washer, Lock					3	3						
-7	2473	Washer, Plain					2	2						
-8	MS35338-45	Washer, Lock					1	1						
-9	2439	Nut, Plain					1	1						
	635048	Adapter Assembly, Starter					1	1						
-10	No Number	Adapter, Starter					ns	ns						
-11	402127	† Stud, 3/8 x 1-17/32 In. Long					1	1						
-12	401861	† Stud, 3/8 x 1-3/4 In. Long					1	1						
-13	402151	† Stud, 5/16 x 1-1/4 In. Long					1	1						
-14	627882	Dowel, 5/16 x 33/64 In. Long					2	2						
-15	641368	Bearing, Needle					1	1						
-16	631252	Shaft, Starter, Worm					1	1						
-17	536552	Spring, Worm Shaft					1	1						

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY										
			TSIO-360				LTSIO-360						
			A	B	C	D	E	F		E			
34-18	633342-10	. Key, Woodruff					1	1					
-19	539805	. Gear, Starter Worm					1	1					
-20	X13041	. Bearing, Ball					1	1					
-21	502287	. Ring, Retaining					1	1					
-22	630680	. Bearing, Roller					1	1					
-23	627860	. Gear, Starter Worm Wheel					1	1					
-24	539800	. Spring, Clutch					1	1					
ATTACHING PARTS													
-25	501867	. Washer, Tab					1	1					
-26	633845	. Screw, 1/4 - 20 x 11/32 In. Long					1	1					
-27	633542	. Shaft Gear, Starter					1	1					
-28	AN123902 \$	. O-Ring					1	1					
	No Number	. Body Assembly, Accy. Drive & Scav. Pump					ns	ns					
ATTACHING PARTS													
-29	2473	. Washer, Plain					1	1					
-30	MS35338-45	. Washer, Lock					1	1					
-31	2439	. Nut, Plain, Hex					1	1					
* * * * *													
	633636	. . Body Assembly					1	1					
-32	No Number	. . Body					ns	ns					
-33	632409	. . Bushing					1	1					
-34	25102 \$	. . Seal, Oil					1	1					
-35	401870 †	. . Stud, 1/4 x 1-1/8 In. Long					4	4					
-36	AN912-5	. . Bushing, Reducer					1	1					
-37	632017	. . Elbow, 90 Degree Street					1	1					
-38	634536	. . Elbow, 45 Degree, 3/8 Tube					1	1					
	633630	. Gear Assembly, Scavenge Pump Driven					1	1					
-39	No Number	. . Gear					ns	ns					
-40	633632	. . Bushing					1	1					
-41	633637	. Gear, Scavenge Pump Drive					1	1					
	633848	. Cover Assembly, Scavenge Pump					1	1					
ATTACHING PARTS													
-42	20522	. Washer, Plain					6	6					
-43	22537	. Screw, 1/4 - 20 x 5/8 In. Long					6	6					
* * * * *													
-44	No Number	. . Cover					ns	ns					
-45	633856	. . Bushing					1	1					
-46	633342	. Key, Woodruff					1	1					
-47	MS9134-01 \$	. Gasket, Accessory Drive					1	1					
-48	640380	. Cover, Accessory Drive					1	1					
ATTACHING PARTS													
-49	20522	. Washer, Plain					4	4					
-50	MS35338-44	. Washer, Lock					4	4					
-51	2437	. Nut					4	4					
* * * * *													
-52	MS9021-038 \$	O-Ring					1	1					
-53	634592	Starter					1	1					
ATTACHING PARTS													
-54	539058	Washer, Plain					2	2					
-55	2441	Nut, Plain					2	2					

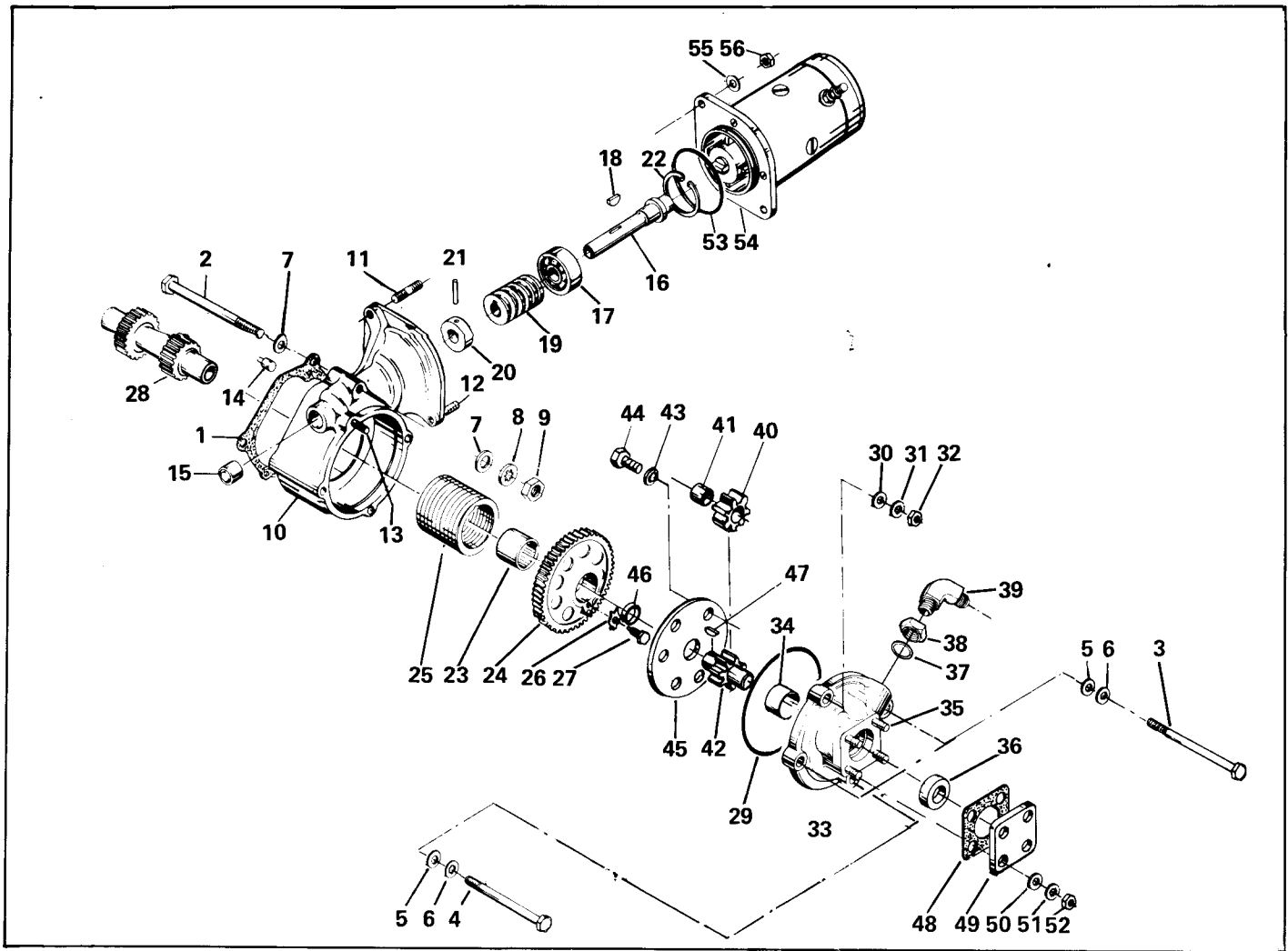


FIGURE 35. STARTER AND STARTER ADAPTER ASSEMBLY

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY						
			TSIO-360						LTSIO-360
			A	B	C	D	E	F	E
35-1	627993	\$ Gasket							1
	635048A7	Adapter, Assembly, Str. & Acc. Drive							1
		ATTACHING PARTS							
-2	628056	Bolt, 5/16 - 24 x 5-13/32 In. Lg.							1
-3	627433	Bolt, 5/16 - 18 x 5-1/4 In. Lg.							2
-4	538999	Bolt, 5/16 - 18 x 3-5/8 In. Lg.							1
-5	2473	Washer, Plain							3
-6	MS35338-45	Washer, Lock							3
-7	2473	Washer, Plain							2
-8	MS35338-45	Washer, Lock							1
-9	2439	Nut, Plain							1
		* * * *							
	635048	Adapter Assembly, Starter							1
-10	No Number	Adapter, Starter							ns
-11	402127	† Stud, 3/8 x 1-13/32 In. Lg.							1
-12	401861	† Stud, 3/8 x 1-3/4 In. Lg.							1
-13	402151	† Stud, 5/16 x 1-1/4 In. Lg.							1
-14	627882	Dowel, 5/16 x 33/64 In. Lg.							2
-15	641368	Bearing, Needle							1
	631254	Shaft Assembly, Starter Worm							1
-16	631253	Shaft, Starter Worm							1

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY																	
			TSIO-360					LTSIO-360												
			A	B	C	D	E	F			E									
35 17	X13041	. . Bearing, Ball . . . . .																		1
-18	MS35756-8	. . Key, Woodruff . . . . .																		1
-19	539793	. . Gear, Starter Worm . . . . .																		1
-20	628149	. . Bushing, Worm Shaft . . . . .																		1
-21	628155-1	. . Pin, Tubular . . . . .																		1
-22	502287	. Ring, Retaining . . . . .																		1
-23	630680	. Bearing, Roller . . . . .																		1
-24	627861	. Gear, Starter Worm Wheel . . . . .																		1
-25	539601	. Spring, Clutch . . . . .																		1
ATTACHING PARTS																				
-26	501867	. Washer, Tab . . . . .																		1
-27	633845	. Screw, 1/4 - 20 x 11/32 In. Lg. . . . .																		1
* * * *																				
-28	633542	. Shaft Gear, Starter . . . . .																		1
-29	AN123902 \$	. O-Ring . . . . .																		1
	No Number	. Body Assembly, Acc. Dr. & Scav. Pump . . . . .																		ns
ATTACHING PARTS																				
-30	2473	. Washer, Plain . . . . .																		1
-31	MS35338-45	. Washer, Lock . . . . .																		1
-32	2439	. Nut, Plain, Hex . . . . .																		1
* * * *																				
	641103	. . Body, Assembly . . . . .																		1
-33	No Number	. . . Body . . . . .																		ns
-34	632409	. . . Bushing . . . . .																		1
-35	401870 †	. . . Stud, 1/4 x 1-1/8 In. Lg. . . . .																		4
-36	25102 \$	. . Seal, Oil . . . . .																		1
-37	AN6227-9 \$	. . O-Ring . . . . .																		1
-38	AN924-6	. . Nut . . . . .																		1
-39	AN833-6	. . Elbow, 90 Degree . . . . .																		1
	633630	. Gear, Assembly, Scavenge Pump Drive . . . . .																		1
-40	No Number	. . Gear . . . . .																		ns
-41	633632	. . Bushing . . . . .																		1
-42	633637	. Gear, Scavenge Pump Drive . . . . .																		1
	641078	. Cover, Scavenge Pump . . . . .																		1
ATTACHING PARTS																				
-43	20522	. Washer, Plain . . . . .																		6
-44	22537	. Screw, 1/4 - 20 x 5/8 In. Lg. . . . .																		6
* * * *																				
-45	No Number	. . Cover . . . . .																		ns
-46	633856	. . Bushing . . . . .																		1
-47	633342	. Key, Woodruff . . . . .																		1
-48	MS9134-01 \$	. Gasket, Accessory Drive . . . . .																		1
-49	640380	. Cover, Accessory Drive . . . . .																		1
ATTACHING PARTS																				
-50	20522	. Washer, Plain . . . . .																		4
-51	MS35338-44	. Washer, Lock . . . . .																		4
-52	2437	. Nut, Plain . . . . .																		4
* * * *																				
-53	MS9021-038 \$	. O-Ring . . . . .																		1
-54	634592	. Starter . . . . .																		1
ATTACHING PARTS																				
-55	539058	. Washer . . . . .																		2
-56	2441	. Nut, Plain . . . . .																		2

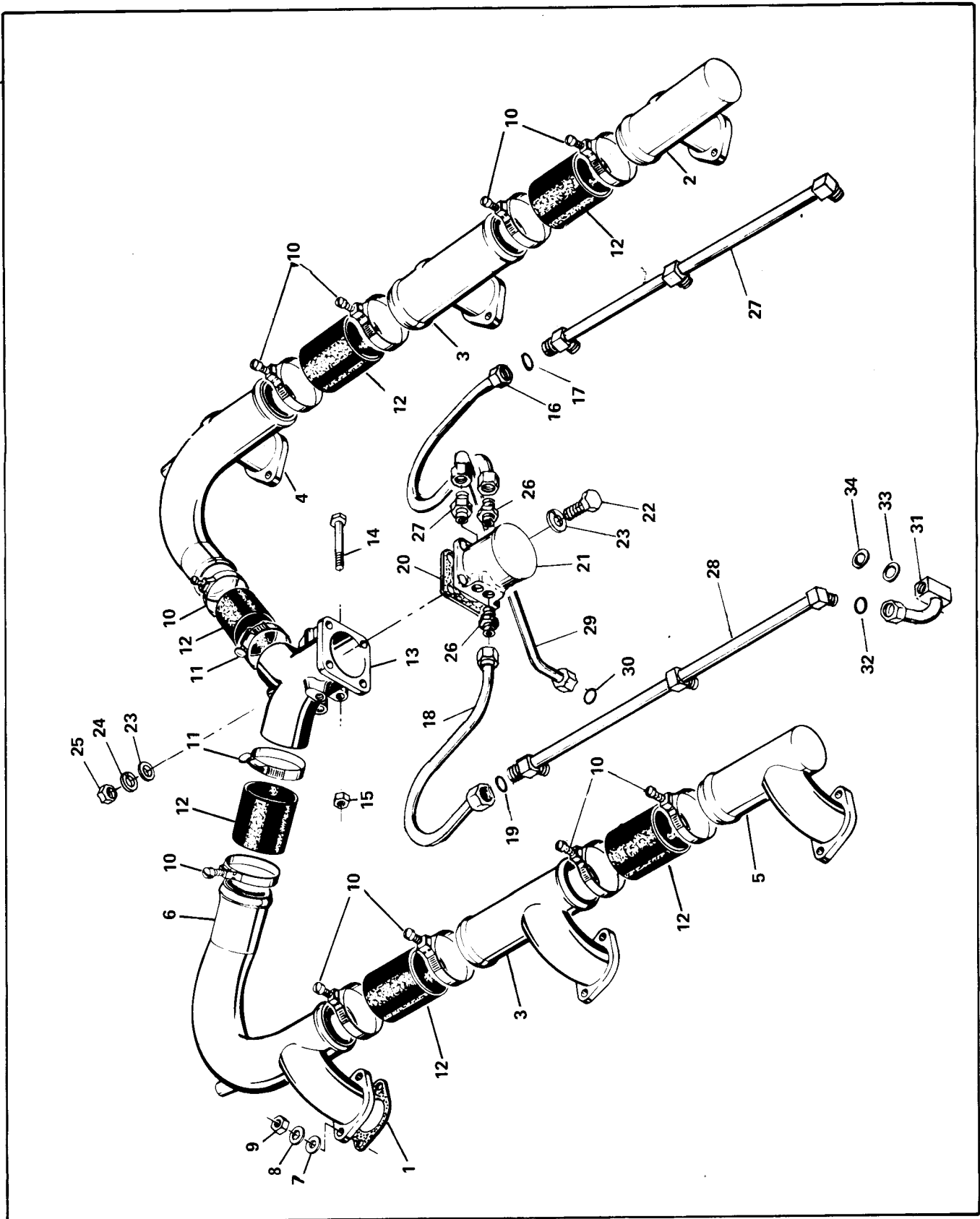


FIGURE 36. INDUCTION SYSTEM

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY																	
			TSIO-360					LTSIO-360												
			A	B	C	D	E	F			E									
36-1	629925	\$ Gasket, Intake Manifold	6	6																
-2	629873	Tube Assembly, Int. Man. No. 1 Cylinder	1	1																
-3	629864	Tube Assembly, Int. Man. No. 3 & 4 Cylinder	2	2																
-4	631874	Tube Assembly, Int. Man. No. 5 Cylinder	1	1																
-5	629872	Tube Assembly, Int. Man. No. 2 Cylinder	1	1																
-6	631875	Tube Assembly, Int. Man. No. 6 Cylinder	1	1																
ATTACHING PARTS																				
-7	2473	Washer, Plain	12	12																
-8	MS35338-45	Washer, Lock	12	12																
-9	2439	Nut, Plain 5/16 - 24	12	12																
* * * *																				
-10	36151E	Clamp, Hose	10	10																
-11	AN737TW82	Clamp, Hose Throttle Body	2	2																
-12	24827	\$ Hose, Tube Connector	6	6																
-13	No Number	Air Throttle and Fuel Met. Assembly	ns	ns																
ATTACHING PARTS																				
-14	537728	Screw, Hex Head 1/4 - 28 x 1-25/32 In. Lg.	2	2																
-15	2437	Nut, Plain Hex, 1/4 - 28	2	2																
* * * *																				
-16	633872	Tube Assembly, Air Manifold 1-3-5 Side	1	1																
-17	633958-5	. Seal	2	2																
-18	633871	Tube Assembly, Air Manifold 2-4-6 Side	1	1																
-19	633958-5	. Seal	2	2																
-20	630421	\$ Gasket, Adapter	1	1																
-21	633819	Adapter, Air Throttle	1	1																
ATTACHING PARTS																				
-22	13XX3103	Screw, 1/4 - 28	4	4																
-23	20522	Washer, Plain	8	8																
-24	MS35338-44	Washer, Lock	4	4																
-25	2437	Nut, Plain, Hex	4	4																
* * * *																				
-26	X12935	Fitting	2	2																
-27	X5147	Fitting	1	1																
-28	633485	Tube Assembly, Air Manif.	2	2																
-29	633869	Tube Assembly, Air Manifold-to-F/P	1	1																
-30	633958-3	. Seal	2	2																
-31	633901	Sleeve Assembly, Injection Nozzle	6	6																
-32	633958-3	. Seal	6	6																
-33	640612	Washer, Rubber	6	6																
-34	628556	Washer, Steel	6	6																

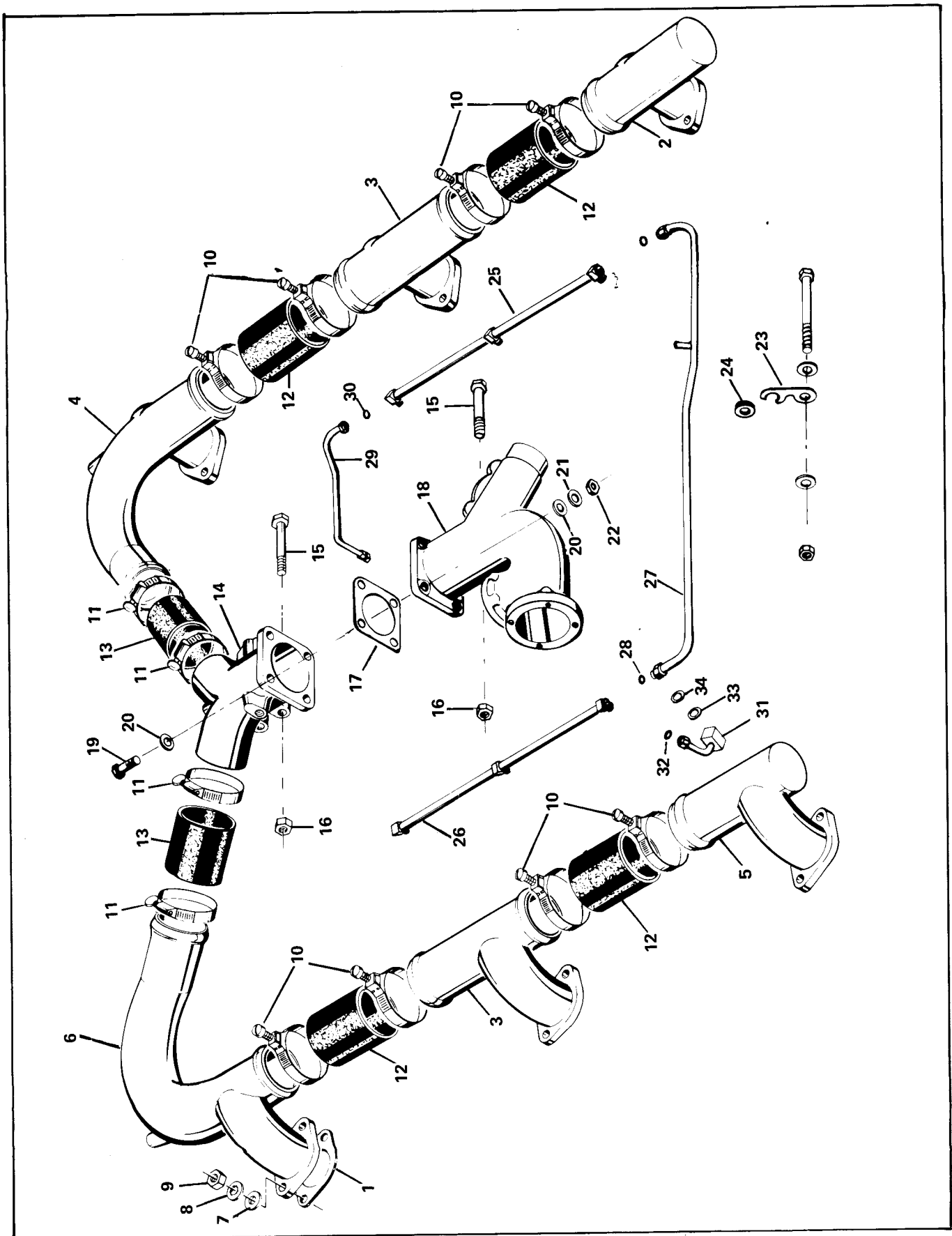


FIGURE 37. INDUCTION SYSTEM



FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY										
			TSIO-360				LTSIO-360						
			A	B	C	D	E	F		E			
37-1	629925	\$ Gasket, Intake Manifold			6	6							
-2	639413	Tube Assembly, Int. Man. No. 1 Cylinder			1	1							
-3	629864	Tube Assembly, Int. Man. No. 3 & 4 Cylinder			2	2							
-4	639203	Tube Assembly, Int. Man. No. 5 Cylinder			1	1							
-5	639413	Tube Assembly, Int. Man. No. 2 Cylinder			1	1							
-6	639202	Tube Assembly, Int. Man. No. 6 Cylinder			1	1							
ATTACHING PARTS													
-7	2473	Washer, Plain			12	12							
-8	MS35338-45	Washer, Lock			12	12							
-9	2439	Nut, Plain, Hex			12	12							
* * * *													
-10	36151E	Clamp, Hose			8	8							
-11	AN737TW91	Clamp, Hose, Throttle Body			4	4							
-12	24827	\$ Hose			4	4							
-13	639660-1	\$ Hose			2	2							
-14	No Number	Air Throttle and Fuel Met. Assembly			ns	ns							
ATTACHING PARTS													
-15	537728	Screw			2	2							
-16	2437	Nut, Plain, Hex			2	2							
* * * *													
-17	639207	\$ Gasket, Throttle Body to Adapter			1	1							
-18	639241	Adapter			1	1							
ATTACHING PARTS													
-19	AN101114	Bolt, 1/4 - 28 x 1 In. Long			4	4							
-20	20522	Washer, Plain			8	8							
-21	MS35338-44	Washer, Lock			4	4							
-22	2437	Nut, Plain			4	4							
* * * *													
-23	640110	Bracket, Air Manifold Tube Support			1	1							
-24	MS35489-11S	Grommet - Split			1	1							
-25	639361	Tube Assembly, Air Manifold 1-3-5 Side			1	1							
-26	633485	Tube Assembly, Air Manifold 2-4-6 Side			1	1							
-27	639362	Tube Assembly, Air Manifold Rear			1	1							
-28	633958-5	. Seal			2	2							
-29	639689	Tube Assembly, Fuel Pump			1	1							
-30	633958-3	. Seal			2	2							
-31	633901	Sleeve Assembly, Injector Nozzle			6	6							
-32	633958-3	. Seal			6	6							
-33	640612	Washer, Rubber			6	6							
-34	628556	Washer, Plain			6	6							

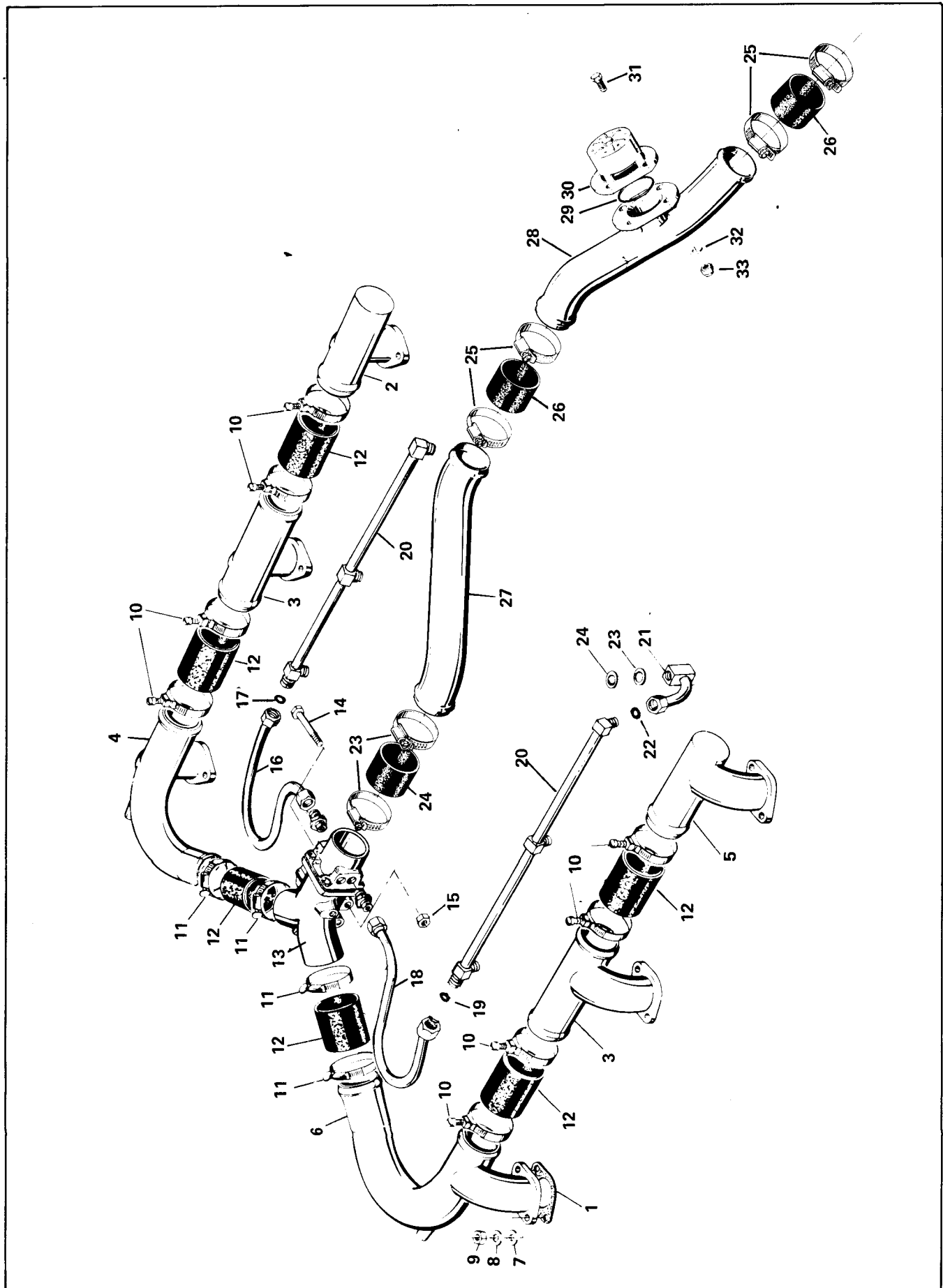


FIGURE 38. INDUCTION SYSTEM

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY									
			TSIO-360				LTSIO-360					
			A	B	C	D	E	F		E		
38-1	629925	\$Gasket, Intake Manifold					1	1				1
-2	629873	Tube Assembly, Int. Man. Cylinder No. 1					1	1				1
-3	629864	Tube Assembly, Int. Man. Cylinder No. 3 & 4					2	2				2
-4	631874	Tube Assembly, Int. Man. Cylinder No. 5					1	1				1
-5	629872	Tube Assembly, Int. Man. Cylinder No. 2					1	1				1
-6	631875	Tube Assembly, Int. Man. Cylinder No. 6					1	1				1
ATTACHING PARTS												
-7	2473	Washer, Plain						12	12			12
-8	MS35338-45	Washer, Lock						12	12			12
-9	2439	Nut, Plain						12	12			12
* * * *												
-10	36151E	Clamp, Hose						8	8			8
-11	AN737TW82	Clamp, Hose						4	4			4
-12	24827	\$Hose, Tube Connector						6	6			6
-13	No Number	Air Throttle and Fuel Met. Assembly						ns	ns			ns
ATTACHING PARTS												
-14	537728	Screw, 1/4 - 28 x 1-25/32 In. Long						2	2			2
-15	2437	Nut, Plain						2	2			2
* * * *												
-16	633872	Tube Assembly, Air Manifold 1-3-5 Side						1	1			1
-17	633958-5	. Seal						2	2			2
-18	633871	Tube Assembly, Air Manifold 2-4-6 Side						1	1			1
-19	633958-5	. Seal						2	2			2
-20	633485	Tube Assembly, Air Manifold						2	2			2
-21	633901	Sleeve Assembly, Injection Nozzle						6	6			6
-22	633958-3	. Seal						6	6			6
-23	640612	Washer, Rubber						6	6			6
-24	628556	Washer, Plain						6	6			6
-25	AN737TW91	Clamp						6	6			6
-26	639660-1	\$Hose, 2-1/4 ID x 2.00 In. Long						3	3			3
-27	640952	Tube						1	1			1
-28	641913	Tube Assembly							1			
-28	641288	Tube Assembly						1				1
-29	MS29513-138	\$O-Ring						1	1			1
-30	641404-1	Valve, Overboost						1	1			1
ATTACHING PARTS												
-31	AN3-6A	Bolt						4	4			4
-32	AN960-10L	Washer, Plain						4	4			4
-33	AN363-1032	Nut, Self Locking						4	4			4

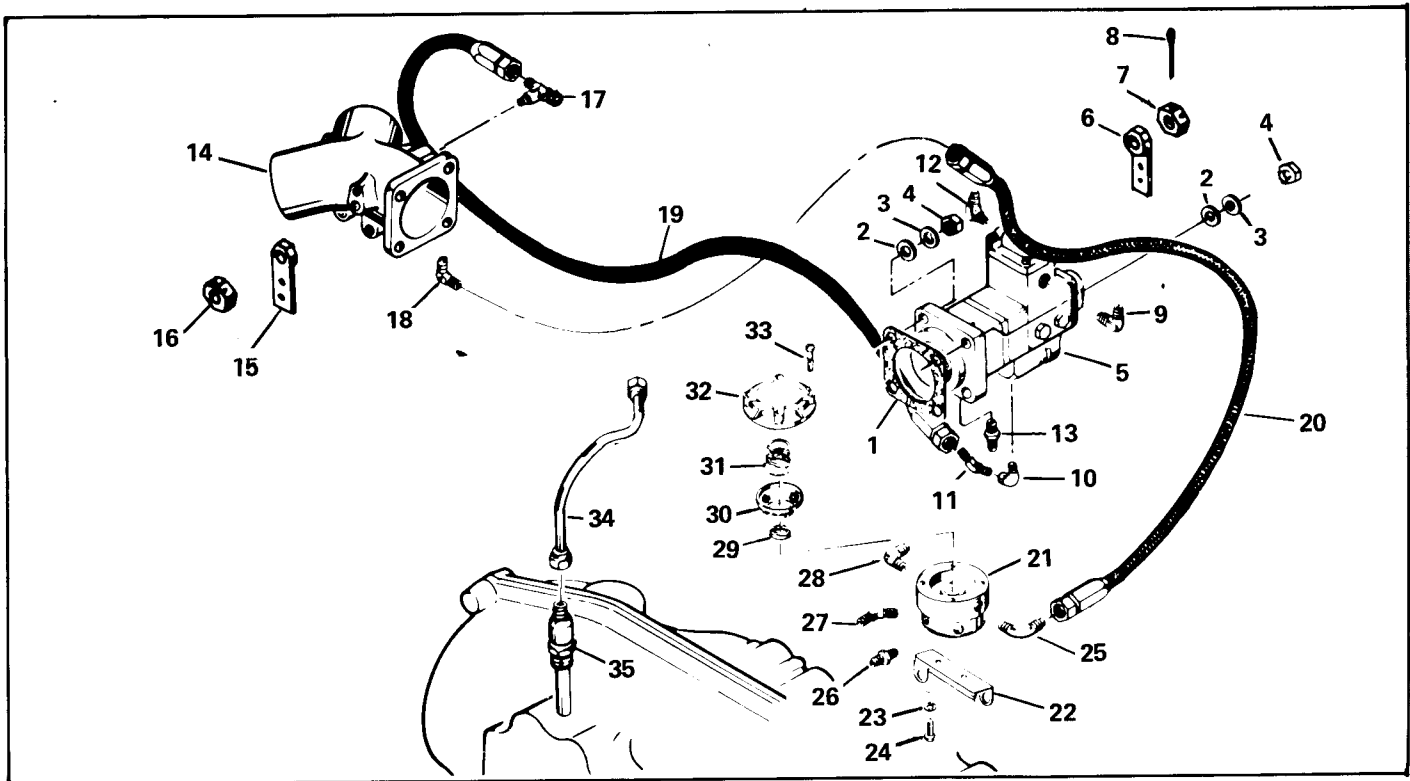


FIGURE 39. FUEL INJECTION SYSTEM

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY												
			TSIO-360						LTSIO-360						
			A	B	C	D	E	F			E				
39-1	632945	Gasket, Fuel Pump to C/C	1	1	1	1									
	635798A3	Fuel Injection Assembly	1	1											
	639289A6	Fuel Injection Assembly			1										
	639289A7	Fuel Injection Assembly				1									
	639508-4A2	Fuel Pump Assembly	1	1											
	639508-1A1	Fuel Pump Assembly			1	1									
		ATTACHING PARTS													
-2	2473	Washer, Plain, Hex	4	4	4	4									
-3	MS35338-45	Washer, Lock	4	4	4	4									
-4	2439	Nut, Plain, Hex	4	4	4	4									
		* * * *													
-5	No Number	Fuel Pump	ns	ns	ns	ns									
-6	630146-4	Lever, Throttle Mixture Control	1	1	1	1									
-7	2457	Nut, 5/16 - 24, Castle	1	1	1	1									
-8	X604	Pin, Cotter	1	1	1	1									
-9	628475	Elbow, 90 Degree, F/P Inlet	1	1	1	1									
-10	627119	Elbow, 90 Degree, F/P Outlet	1	1	1	1									
-11	628476	Elbow, 45 Degree, F/P Outlet	1	1	1	1									
-12	628437	Elbow, 90 Degree, Vapor Return	1	1	1	1									
-13	628438	Fitting, Seal Drain	1	1	1	1									
	640563-2A1	* Throttle and Control Assembly	1	1											
	640563-4A4	* Throttle and Control Assembly			1										
	640563-4A6	* Throttle and Control Assembly				1									
-14	No Number	Throttle Assembly	ns	ns	ns	ns									
-15	630146-2	Lever, Thr. Mixture Control	1	1											
-15	630146-16	Lever, Thr. Mixture Control			1	1									
-16	MS21044N5	Nut, Self-Locking	1	1	1	1									

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY									
			TSIO-360				LTSIO-360					
			A	B	C	D	E	F		E		
-17	639495	. . Fitting, Tee, Fuel Inlet . . . . .	1	1	1	1						
-18	628437	. . Elbow, 90 Degree, Fuel Outlet . . . . .	1	1	1	1						
-19	635158-16.00	. Hose Assembly, Met. Unit-to-F/P . . . . .	1	1	1	1						
-20	635158-16.00	. Hose Assembly, Met. Unit-to-M/F . . . . .	1	1								
-20	635158-22.00	. Hose Assembly, Met. Unit-to-M/F . . . . .			1	1						
	631351A7	. Valve Assembly Fuel Manifold . . . . .	1	1								
	641032-2-13	. Valve Assembly Fuel Manifold . . . . .			1	1						
-21	No Number	. . Valve Assembly . . . . .	ns	ns	ns	ns						
-22	633954	. . Bracket, Manifold Valve . . . . .	1	1	1	1						
ATTACHING PARTS												
-23	MS35338-43	. . Washer, Lock . . . . .	2	2	2	2						
-24	AN500-10-5	. . Screw . . . . .	2	2	2	2						
* * * *												
-25	628437	. . Elbow, 90 Degree, Fuel Inlet . . . . .	1	1	1	1						
-26	AN780-2	. . Nipple, Union . . . . .	2	2								
-27	627331	. . Elbow, 45 Degree . . . . .	4	4								
-28	631720	. . Elbow, 90 Degree, Pressure Conn. . . . .			1	1						
-28	629518-1H	. . Plug, Pressure Conn. . . . .	1	1								
-29	631330	. . Seal . . . . .	1	1	1	1						
-30	626557	. . Screen . . . . .	1	1	1	1						
-31	630184	. . Spring . . . . .	1	1	1	1						
-32	626553	. . Cover . . . . .	1	1								
-32	634325	. . Cover . . . . .			1	1						
ATTACHING PARTS												
-33	AN500A8-10	. . Screw . . . . .	4	4	4	4						
-34	633867	. Tube Assembly, Fuel, Cylinder No. 1 . . . . .	1	1								
-34	641411	. Tube Assembly, Fuel, Cylinder No. 1 . . . . .			1	1						
-34	633877	. Tube Assembly, Fuel, Cylinder No. 2 . . . . .	1	1								
-34	641412	. Tube Assembly, Fuel, Cylinder No. 2 . . . . .			1	1						
-34	633878	. Tube Assembly, Fuel, Cylinder No. 3 . . . . .	1	1								
-34	641095	. Tube Assembly, Fuel, Cylinder No. 3 . . . . .			1	1						
-34	633879	. Tube Assembly, Fuel, Cylinder No. 4 . . . . .	1	1								
-34	641413	. Tube Assembly, Fuel, Cylinder No. 4 . . . . .			1	1						
-34	633880	. Tube Assembly, Fuel, Cylinder No. 5 . . . . .	1	1								
-34	641414	. Tube Assembly, Fuel, Cylinder No. 5 . . . . .			1	1						
-34	633881	. Tube Assembly, Fuel, Cylinder No. 6 . . . . .	1	1								
-34	641415	. Tube Assembly, Fuel, Cylinder No. 6 . . . . .			1	1						
-35	633608-12	@. Nozzle Assembly . . . . .	1	1	1	1						

NOTE (\*) For detail parts, see Fuel Injection System Overhaul Manual and Parts Catalog, Form No. X-30091.  
NOTE (@) Order nozzle size identified on hex of nozzle body.

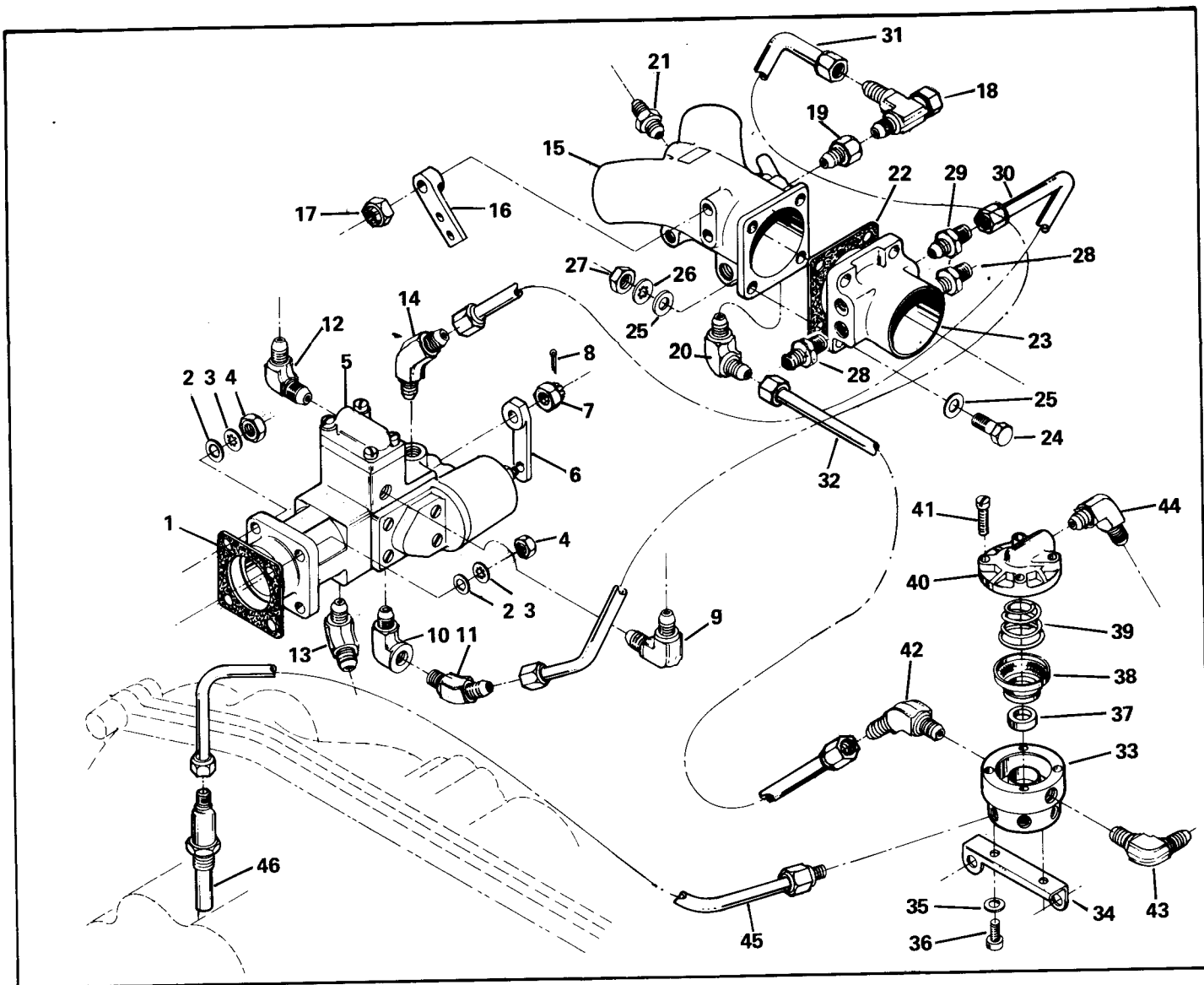


FIGURE 40. FUEL INJECTION SYSTEM

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY									
			TSIO-360				LTSIO-360					
			A	B	C	D	E	F		E		
40-1	632945 \$	Gasket, F/P to Crankcase .....					1	1				1
	639289A4	Fuel Injection Assembly .....					1	1				1
	639289A5	Fuel Injection Assembly .....										
	639508-2A1	Fuel Pump Assembly .....					1	1				1
	639508-3A1	Fuel Pump Assembly .....										
		ATTACHING PARTS										
-2	2473	Washer, Plain .....					4	4				4
-3	MS35338-45	Washer, Lock .....					4	4				4
-4	2439	Nut .....					4	4				4
		* * * * *										
-5	No Number	Fuel Pump .....					ns	ns				ns
-6	630146-19	Lever, Throttle Mixture Cont. ....					1	1				1
-7	2457	Nut, 5/16 -24 Castle .....					1	1				1
-8	X604	Pin, Cotter .....					1	1				1
-9	628475	Elbow, 90 Degree, F/P Inlet .....					1	1				1
-10	627119	Elbow, 90 Degree, F/P Outlet .....					1	1				1

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY												
			TSIO-360					LTSIO-360							
			A	B	C	D	E	F			E				
40-11	628436	. . Elbow, 45 Degree, F/P Outlet . . . . .					1	1						1	
-12	628437	. . Elbow, 90 Degree, Vapor Ret. . . . .					1	1							
-13	628436	. . Fitting, Seal Drain . . . . .					1	1						1	
-14	628436	. . Elbow, 45 Degree, S/C Pressure . . . . .					1	1						1	
	640563-2A5	. Throttle and Cont. Assembly . . . . .					1	1						1	
-15	No Number	. . Throttle Assembly . . . . .						ns		ns				ns	
-16	630146-2	. . Lever, Throttle Control . . . . .					1	1						1	
-17	MS21044N5	. . Nut, Self Lock . . . . .					1	1						1	
-18	636349	. . Tee, Fuel Inlet . . . . .					1	1						1	
-19	626900	. . Extension . . . . .					1	1						1	
-20	628437	. . Elbow, Fuel Outlet . . . . .					1	1						1	
-21	628438	. . Fitting . . . . .					1	1						1	
-22	35985	\$ . Gasket, Adapter . . . . .					1	1						1	
-23	633819	. . Adapter, Air Throttle . . . . .					1	1						1	
ATTACHING PARTS															
-24	AN101114	. . Screw, 1/4 - 28 x 1.00 In. Long . . . . .						4		4				4	
-25	20522	. . Washer, Plain . . . . .					8	8						8	
-26	MS35338-44	. . Washer, Lock . . . . .					4	4						4	
-27	2437	. . Nut, Plain . . . . .					4	4						4	
* * * *															
-28	X12935	. . Fitting . . . . .					2	2						2	
-29	628438	. . Fitting . . . . .					1	1						1	
-30	641082	. . Tube Assembly, F/P to Adapter . . . . .					1	1						1	
-31	641084	. . Tube Assembly, F/P to Met. Unit . . . . .					1	1						1	
-32	641085	. . Tube Assembly, Met. Unit to M/V . . . . .					1	1						1	
	641032-2-11	. . Valve Assembly, Fuel Manifold . . . . .					1	1						1	
-33	No Number	. . Valve Assembly . . . . .						ns		ns				ns	
-34	633954	. . Bracket, Manifold Valve . . . . .					1	1						1	
ATTACHING PARTS															
-35	MS35338-43	. . Washer, Lock . . . . .					2	2						2	
-36	AN500-10-5	. . Screw . . . . .					2	2						2	
* * * *															
-37	631330	. . Seal . . . . .					1	1						1	
-38	626557	. . Screen . . . . .					1	1						1	
-39	630184	. . Spring . . . . .					1	1						1	
-40	634325	. . Cover . . . . .					1	1						1	
ATTACHING PARTS															
-41	AN500A8-10	. . Screw . . . . .					4	4						4	
* * * *															
-42	628436	. . Elbow, 45 Degree, Fuel Inlet . . . . .					1	1						1	
-43	634628	. . Elbow, 90 Degree, Pressure Conn. . . . .					1	1						1	
-44	MS20823-2	. . Elbow, 45 Degree, Vent . . . . .					1	1						1	
-45	641093	. . Tube Assembly, Fuel, Cylinder No. 1 . . . . .					1	1						1	
-45	641094	. . Tube Assembly, Fuel, Cylinder No. 2 . . . . .					1	1						1	
-45	641095	. . Tube Assembly, Fuel, Cylinder No. 3 . . . . .					1	1						1	
-45	641096	. . Tube Assembly, Fuel, Cylinder No. 4 . . . . .					1	1						1	
-45	641097	. . Tube Assembly, Fuel, Cylinder No. 5 . . . . .					1	1						1	
-45	641098	. . Tube Assembly, Fuel, Cylinder No. 6 . . . . .					1	1						1	
-46	633608-12	*. Nozzle Assembly . . . . .					6	6						6	

NOTE (\*) Order nozzle size identified on hex of nozzle body.

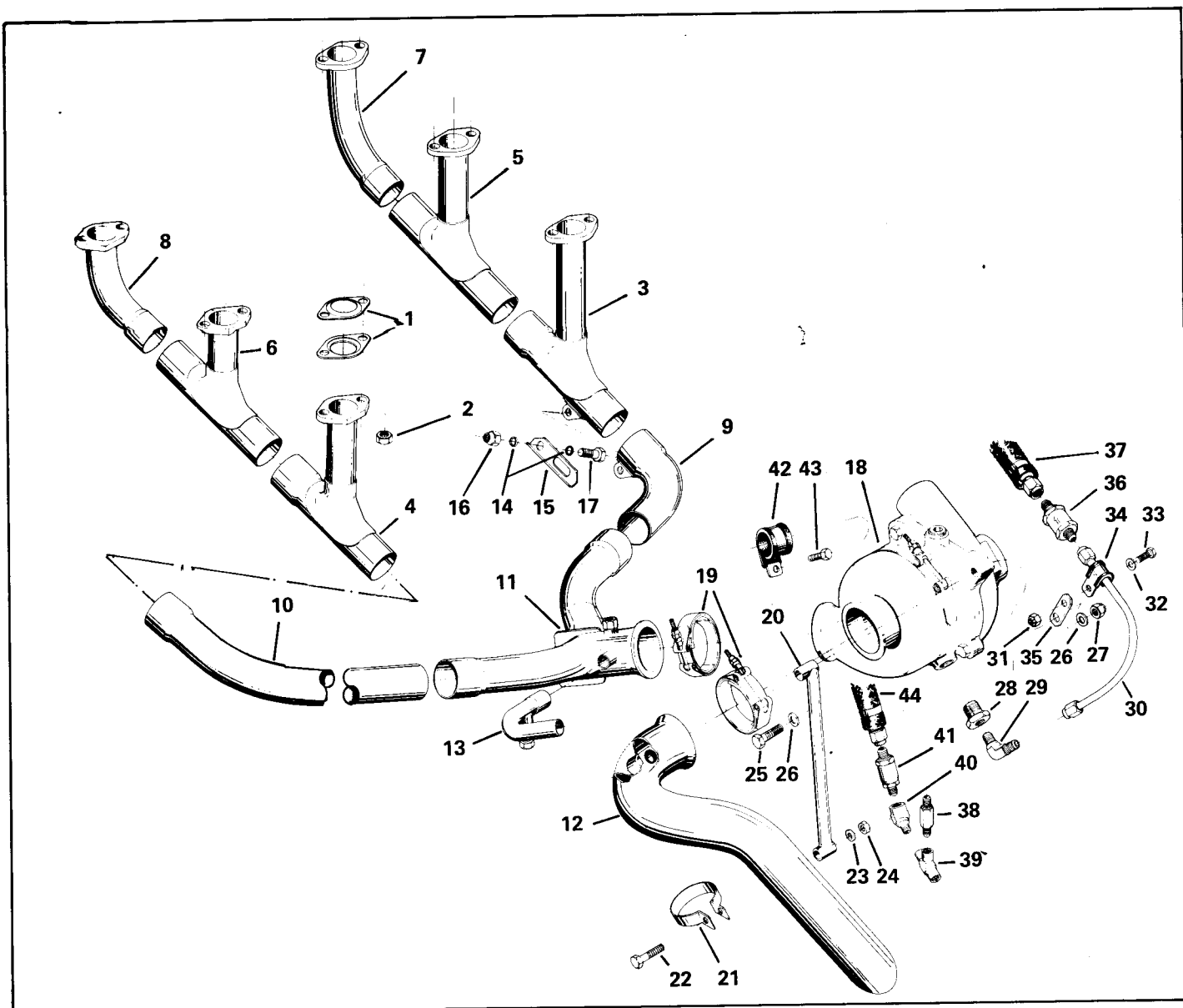


FIGURE 41. EXHAUST SYSTEM

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY							
			TSIO-360						LTSIO-360	
			A	B	C	D	E	F		E
41-1	630365	\$ Gasket					12			12
	No Number	Exhaust System, Complete					ns			ns
		ATTACHING PARTS								
-2	22022	Nut					12			12
		* * * *								
-3	640964-101	. Tee Assembly, Cylinder No.1					1			1
-4	640964-102	. Tee Assembly, Cylinder No.2					1			1
-5	640964-103	. Tee Assembly, Cylinder No.3					1			1
-6	640964-104	. Tee Assembly, Cylinder No.4					1			1
-7	640964-105	. Elbow Assembly, Cylinder No.5					1			1
-8	640964-106	. Elbow Assembly, Cylinder No.6					1			1
-9	640964-107	. Elbow Assembly, Right Hand					1			1
-10	640964-108	. Elbow Assembly, Left Hand					1			1
-11	640964-109	. "Y" Assembly					1			1



FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY							
			TSIO-360				LTSIO-360			
			A	B	C	D	E	F		E
41-12	640964-110	. Tail Pipe . . . . .					1			1
-13	640964-119	. Exhaust By-Pass Assembly . . . . .					1			1
-14	640964-410	. Bushing . . . . .					4			4
-15	640964-409	. Tie Rod . . . . .					2			2
ATTACHING PARTS										
-16	AN365-1032C	. Nut . . . . .					4			4
-17	AN3-4A	. Bolt . . . . .					4			4
* * * *										
-18	640955	Turbocharger . . . . .					1			1
ATTACHING PARTS										
-19	633358	Clamp, Turbo . . . . .					2			2
	Ref.	Screw (Part of Turbo) . . . . .					3			3
* * * *										
-20	641286	Support Assembly, Turbo . . . . .					1			1
ATTACHING PARTS										
-21	641285	Clamp . . . . .					1			1
-22	MS90726-38	Bolt . . . . .					1			1
-23	MS35338-45	Washer, Lock . . . . .					1			1
-24	2439	Nut . . . . .					1			1
-25	641385	Bolt . . . . .					1			1
-26	MS35338-44	Washer, Lock . . . . .					1			1
-27	MS35691-402	Nut . . . . .					1			1
* * * *										
-28	AN912-5	Bushing, Reducer . . . . .					1			1
-29	MS20822-6	Elbow, 90 Degree . . . . .					1			1
-30	641063	Tube, Assembly . . . . .					1			1
-31	MS21044N3	Nut, Self-Locking . . . . .					1			1
-32	AN960-10L	Washer, Plain . . . . .					2			2
-33	AN3-4A	Bolt . . . . .					1			1
-34	MS21919DG6	Clamp, Cushion . . . . .					1			1
-35	641067	Bracket . . . . .					1			1
-36	641068	Valve, Check . . . . .					1			1
-37	635218-6-15.00	Hose Assembly, Turbo to Scav. Pump . . . . .					1			1
-38	641161	Nipple, Special . . . . .					1			1
-39	AN917-1	Tee . . . . .					1			1
-40	AN915-1	Elbow, 45 Degree . . . . .					1			1
-41	642211 *	Valve, Check . . . . .					1			1
-42	MS21919G16	Clamp, Cushion . . . . .					1			1
-43	AN500-10-8	Screw . . . . .					1			1
-44	635218-6-36.00	Hose Assembly, Turbo to C/C . . . . .					1			1

NOTE (\*) Earlier models using 641961 check valve, must change hardware and hose.

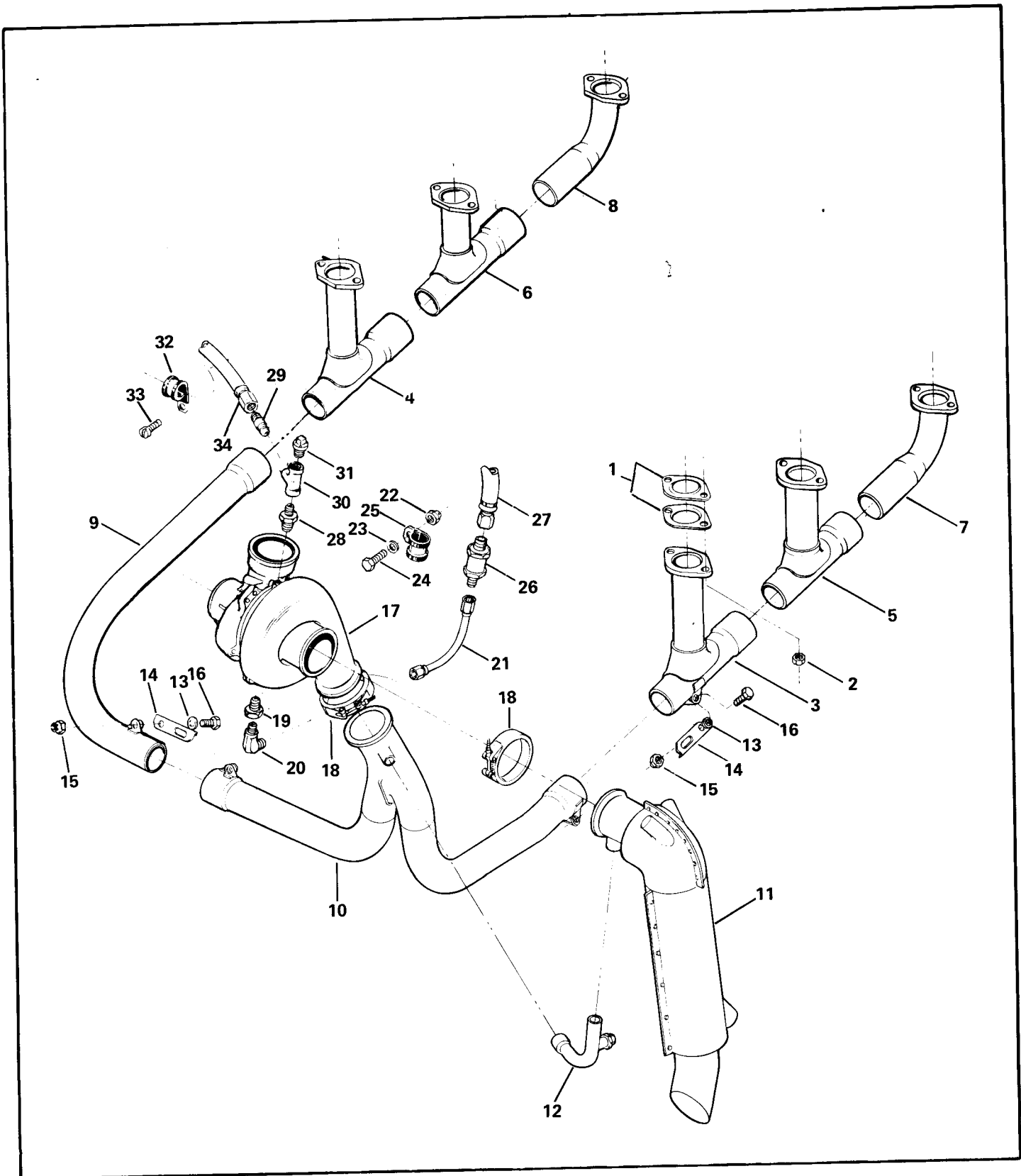


FIGURE 42. EXHAUST SYSTEM

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY										
			TSIO-360				LTSIO-360						
			A	B	C	D	E	F		E			
42-1	630365 \$ No Number	Gasket ..... Exhaust System, Complete .....							12 ns				
ATTACHING PARTS													
-2	22022	Nut ..... * * * *							12				
-3	640964-101	. Tee Assembly, Cylinder No.1 .....							1				
-4	640964-102	. Tee Assembly, Cylinder No.2 .....							1				
-5	640964-103	. Tee Assembly, Cylinder No.3 .....							1				
-6	640964-104	. Tee Assembly, Cylinder No.4 .....							1				
-7	640964-105	. Elbow Assembly, Cylinder No.5 .....							1				
-8	640964-106	. Elbow Assembly, Cylinder No.6 .....							1				
-9	641911-108	. Elbow Assembly, Left Hand .....							1				
-10	641911-109	. "Y" Assembly .....							1				
-11	641911-020	. Tail Pipe .....							1				
-12	641911-030	. Exhaust By-Pass Assembly .....							1				
-13	640964-410	. Bushing .....							6				
-14	640964-409	. Tie Rod .....							3				
ATTACHING PARTS													
-15	MS21044N3	. Nut, Self Locking .....							6				
-16	AN3-4A	. Bolt .....							6				
* * * *													
-17	640955	Turbocharger .....							1				
ATTACHING PARTS													
-18	633358	Clamp, Turbo .....							2				
	Ref.	Screw (Part of Turbo) .....							3				
* * * *													
-19	AN912-5	Bushing, Reducer .....							1				
-20	MS20822-6	Elbow, 90 Degree .....							1				
-21	641877	Tube, Assembly .....							1				
-22	MS21044N3	Nut, Self-Locking .....							1				
-23	AN960-10L	Washer, Plain .....							2				
-24	AN3-4A	Bolt .....							1				
-25	MS21919G16	Clamp, Cushion .....							1				
-26	641068	Valve, Check .....							1				
-27	64110046S-16.00	Hose Assembly, Turbo to Scav. Pump .....							1				
-28	632758	Nipple, Hex Fitting .....							1				
-29	AN816-6-2B	Nipple .....							1				
-30	AN917-1	Tee .....							1				
-31	MS21919G16	Clamp, Cushion .....							1				
-32	AN500-10-8	Screw .....							1				
-33	635218-6-30.00	Hose Assembly, Turbo to C/C .....							1				
	641912	Blanket, Turbo .....							1				
(NOT ILLUSTRATED)													

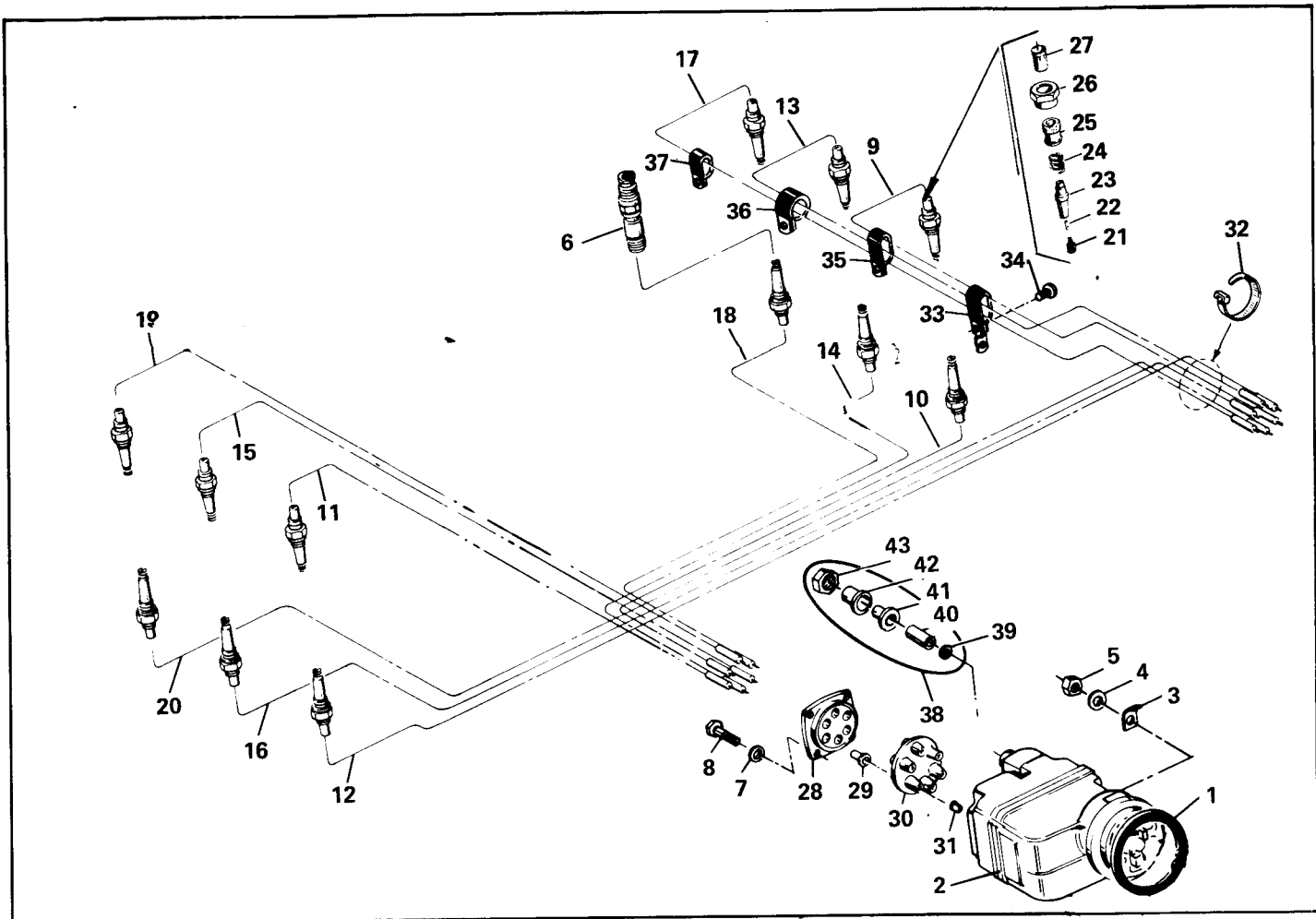


FIGURE 43. IGNITION SYSTEM

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY							
			TSIO-360			LTSIO-360				
			A	B	C	D	E	F		E
43-1	534750	\$ Gasket, Magneto	2	2	2	2	2	2		2
-2	640838	Magneto, Bendix	2	2						
-2	640838	Magneto, Bendix 2-4-6 Side			1	1				
-2	640839	Magneto, Bendix 1-3-5 Side			1	1				
-2	640896-1	Magneto, Bendix					2	2		
-2	640896-2	Magneto, Bendix								2
ATTACHING PARTS										
-3	630535	Washer, Magneto Holding	4	4	4	4	4	4		4
-4	MS35338-45	Washer, Lock	4	4	4	4	4	4		4
-5	2439	Nut, Plain, Hex 5/16 - 24	4	4	4	4	4	4		4
* * * *										
-6	632512	Spark Plug	12	12						
-6	630049	Spark Plug			12	12	12	12		12
	636950	Harness Assembly Complete	1	1	1	1				
	641108	Harness Assembly Complete					1	1		1
ATTACHING PARTS										
-7	25321	Washer, Lock	8	8	8	8	8	8		8
-8	AN501-10-10	Screw	8	8	8	8	8	8		8
* * * *										
-9	637409-48	* . Cable Asm. No. 1 Upper 28.00 In. Lg.	1	1	1	1				
-9	637409-48	* . Cable Asm. No. 1 Upper 27.31 In. Lg.						1	1	1

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY								
			TSIO-360				LTSIO-360				
			A	B	C	D	E	F		E	
43-10	637409-48	* . Cable Asm. No. 1 Lower 33.50 In. Lg. . . . .	1	1	1	1					
-10	637409-48	* . Cable Asm. No. 1 Lower 39.31 In. Lg. . . . .					1	1		1	
-11	637409-48	* . Cable Asm. No. 2 Upper 34.00 In. Lg. . . . .	1	1	1	1					
-11	637409-48	* . Cable Asm. No. 2 Upper 28.81 In. Lg. . . . .					1	1		1	
-12	637409-48	* . Cable Asm. No. 2 Lower 32.38 In. Lg. . . . .	1	1	1	1					
-12	637409-48	* . Cable Asm. No. 2 Lower 41.81 In. Lg. . . . .					1	1		1	
-13	637409-48	* . Cable Asm. No. 3 Upper 34.75 In. Lg. . . . .	1	1	1	1					
-13	637409-48	* . Cable Asm. No. 3 Upper 34.31 In. Lg. . . . .					1	1		1	
-14	637409-48	* . Cable Asm. No. 3 Lower 44.50 In. Lg. . . . .	1	1	1	1					
-14	637409-48	* . Cable Asm. No. 3 Lower 46.81 In. Lg. . . . .					1	1		1	
-15	637409-48	* . Cable Asm. No. 4 Upper 40.15 In. Lg. . . . .	1	1	1	1					
-15	637409-48	* . Cable Asm. No. 4 Upper 36.81 In. Lg. . . . .					1	1		1	
-16	637409-48	* . Cable Asm. No. 4 Lower 46.63 In. Lg. . . . .	1	1	1	1					
-16	637409-72	* . Cable Asm. No. 4 Lower 48.31 In. Lg. . . . .					1	1		1	
-17	637409-48	* . Cable Asm. No. 5 Upper 38.38 In. Lg. . . . .	1	1	1	1					
-17	637409-48	* . Cable Asm. No. 5 Upper 38.81 In. Lg. . . . .					1	1		1	
-18	637409-72	* . Cable Asm. No. 5 Lower 50.75 In. Lg. . . . .	1	1	1	1					
-18	637409-72	* . Cable Asm. No. 5 Lower 53.31 In. Lg. . . . .					1	1		1	
-19	637409-48	* . Cable Asm. No. 6 Upper 44.51 In. Lg. . . . .	1	1	1	1					
-19	637409-48	* . Cable Asm. No. 6 Upper 40.81 In. Lg. . . . .					1	1		1	
-20	637409-72	* . Cable Asm. No. 6 Lower 55.00 In. Lg. . . . .	1	1	1	1					
-20	637409-72	* . Cable Asm. No. 6 Lower 55.81 In. Lg. . . . .					1	1		1	
-21	629506	. . Spring, Sprak Plug Terminal . . . . .	1	1	1	1	1	1		1	
-22	633089	** . Terminal, Crimp Type . . . . .	1	1	1	1	1	1		1	
-23	629505	. . Sleeve, Spark Plug Terminal . . . . .	1	1	1	1	1	1		1	
-24	629504	. . Spring . . . . .	1	1	1	1	1	1		1	
-25	633096	** . Ferrule . . . . .	1	1	1	1	1	1		1	
-26	629502	. . Nut, Spark Plug End . . . . .	1	1	1	1	1	1		1	
-27	633012	** . Ferrule, Grounding . . . . .	1	1	1	1	1	1		1	
-28	633009	. . Plate, Cable Outlet . . . . .	1	1	1	1	1	1		1	
-29	629498	. . Ferrule, Cable . . . . .	6	6	6	6	6	6		6	
-30	629496	. . Grommet, Plate . . . . .	1	1	1	1	1	1		1	
-31	629495	. . Eyelet, Cable Contact . . . . .	6	6	6	6	6	6		6	
-32	629494	. . Strap . . . . .	10	10	10	10	10	10		10	
-33	635982-1	. . Clamp . . . . .	2	2	2	2	2	2		2	
-34	635360	. . Screw . . . . .	2	2	2	2	2	2		2	
-35	631739	. . Clamp . . . . .	2	2	2	2	2	2		2	
-36	631738-1	. . Clamp . . . . .	2	2	2	2	2	2		2	
-37	631737-1	. . Clamp . . . . .	2	2	2	2	2	2		2	
-38	352024	. . Kit, Ground Terminal . . . . .	1	1	1	1					
-38	628740	. . Kit, Ground Terminal . . . . .					1	1		1	
-39	25314	. . Washer, Plain . . . . .	1	1	1	1					
-39	629010	. . Washer, Plain . . . . .					1	1		1	
-40	530455	. . Sleeve, Insulating . . . . .	1	1	1	1					
-40	629009	. . Bushing, Insulating . . . . .					1	1		1	
-41	25316	. . Ferrule, Inner . . . . .	1	1	1	1					
-42	25317	. . Ferrule, Outer . . . . .	1	1	1	1					
-42	629008	. . Bushing, Shouldered . . . . .					1	1		1	
-43	25318	. . Nut, Hex, Coupling . . . . .	1	1	1	1					
-43	629011	. . Nut, Hex, Coupling . . . . .					1	1		1	

NOTE (\*) Service leads furnished in two lengths which are terminated on spark plug end only. Cut to size specified in description column.

NOTE (\*\*) Service sleeves - Use Thomas and Betts Crimping Tool, No. WT-217.

CAUTION: Each lead requires one (1) each 629498 ferrule and 629495 eyelet to complete a cable assembly.



FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY												
			TSIO-360					LTSIO-360							
			A	B	C	D	E	F			E				
ATTACHING PARTS															
44-14	2473	Washer, Plain									1				
-15	MS35338-45	Washer, Lock									1				
-16	2439	Nut, Plain									1				
* * * *															
-17	632409	Bushing									1				
-18	632410	Bushing									1				
-19	633687	Bushing									1				
-20	401870	† Stud, 1/4 x 1-1/8 Inch Long									8				
-21	401843	† Stud, 1/4 x 1-16/32 Inch Long									4				
-22	402941	Plug, Pipe									2				
-23	632412	Seal, Oil									1				
-24	25102	Seal, Oil									1				
-25	637459	Fitting, Elbow									1				
* * * *															
-26	633342-6	Key, Woodruff									1				
-27	640684	Gear, Bevel, Accessory Driver									1				
-28	MS20066-98	Key									1				
-29	632613	Shaft, Accessory Drive Gear									1				
-30	640802	Gear, Bevel, Accessory Driven									1				
-31	522247	Ring, Retaining									1				
-32	640815	Housing Assembly, Accessory Drive									1				
ATTACHING PARTS															
-33	AN960PD416L	Washer									4				
-34	2437	Nut									4				
-35	20522	Washer									4				
-36	MS9882-10	Nut									4				
* * * *															
-37	640809	Gear, Bevel, Accessory Driven									1				
-38	633609-9	Bearing									2				
-39	534938	Seal, Oil									1				
-40	641893	Sheave									1				
-41	20202	Washer									1				
-42	640816	Bolt, Hex									1				
-43	MS9134-01	Gasket, Accessory Pad									2				
-44	640380	Cover, Accessory Pad									2				
ATTACHING PARTS															
-45	20522	Washer, Plain									8				
-46	MS35338-44	Washer, Lock									8				
-47	2437	Nut, Plain									8				

NOTE ① The 641348A3 starter adapter also includes index numbers 1, 2, 7, 8, 9, 14 thru 26, 28 and 39 thru 43 of Figure 34.

NOTE: Belt and compressor are supplied by customer.

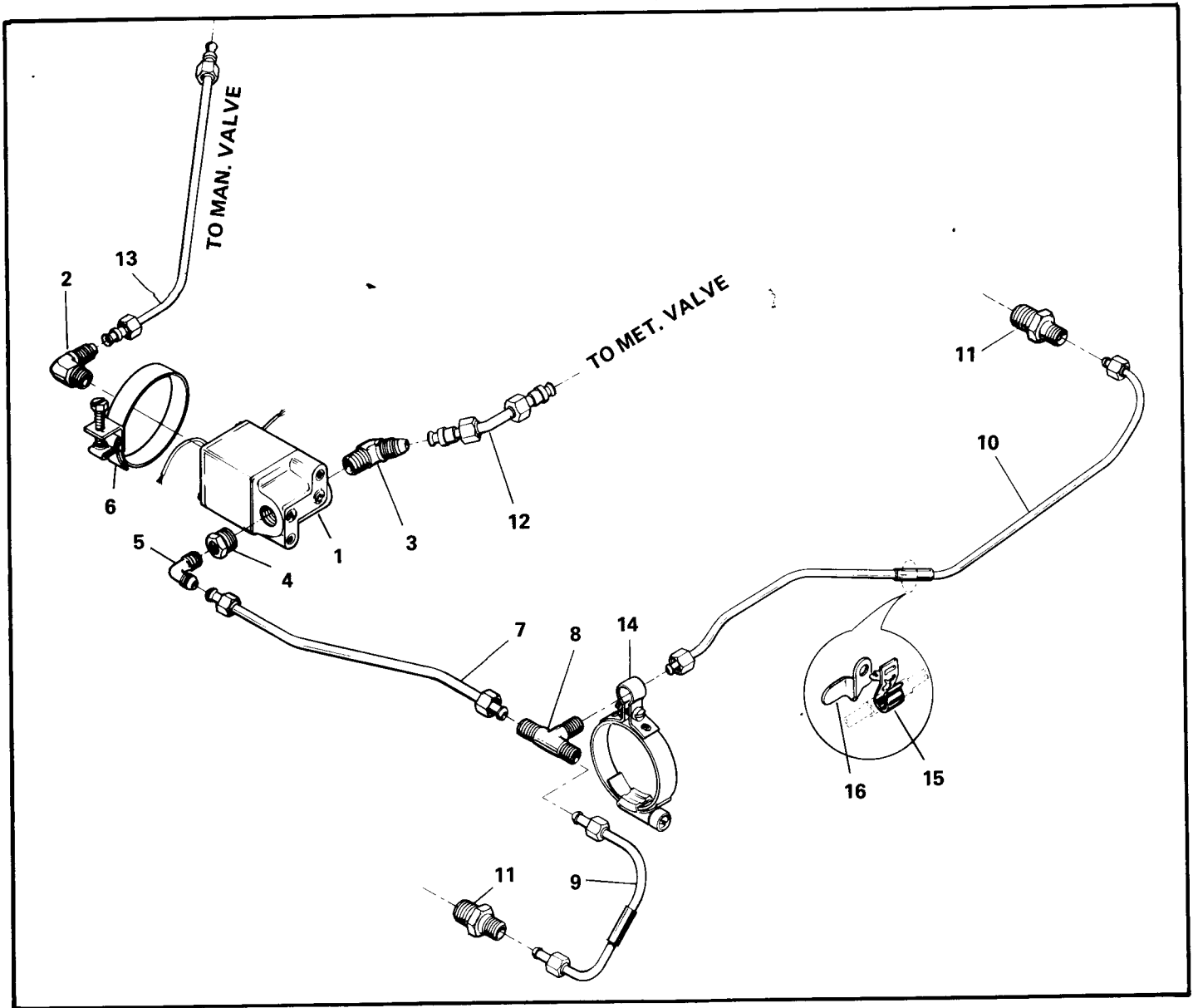


FIGURE 45 PRIMING SYSTEM (OPT.)



FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY								
			TSIO-360				LTSIO-360				
			A	B	C	D	E	F		E	
45-	EQ6532	Priming System, Kit. . . . .					Opt	Opt			Opt
	642199	. Diverter Assembly, Valve . . . . .					1	1			1
-1	633862	. . Valve, Gas Diverter. . . . .					1	1			1
-2	636596	. . Fitting, Elbow, 90 Degree . . . . .					1	1			1
-3	630089	. . Fitting, Elbow. . . . .					1	1			1
-4	X12143	. . Bushing . . . . .					1	1			1
-5	AN790-2	. . Elbow . . . . .					1	1			1
		ATTACHING PARTS									
-6	24609	. Clamp, Hose . . . . .					1	1			1
		* * * * *									
-7	642201	. Tube Assembly, Diverter Valve to Tee . . . . .					1	1			1
-8	AN795-2	. Tee, Union . . . . .					1	1			1
-9	642203	. Tube Assembly, Tee to Right Primer Nozzle . . . . .					1	1			1
-10	642202	. Tube Assembly, Tee to Left Primer Nozzle . . . . .					1	1			1
-11	AN4022-1	. Primer Nozzle . . . . .					2	2			2
-12	642204	. Tube Assembly, Metering Valve to Diverter Valve . . . . .					1	1			1
-13	642205	. Tube Assembly, Diverter Valve to Manifold Valve . . . . .					1	1			1
		ATTACHING PARTS									
-14	632689	. Clamp Assembly . . . . .					1	1			1
-15	626577-2	. Clamp . . . . .					1	1			1
-16	641559	. Bracket . . . . .					1	1			1
		* * * * *									
*	635013	. Spark Plug . . . . .					12	12			12

\* Not Illustrated

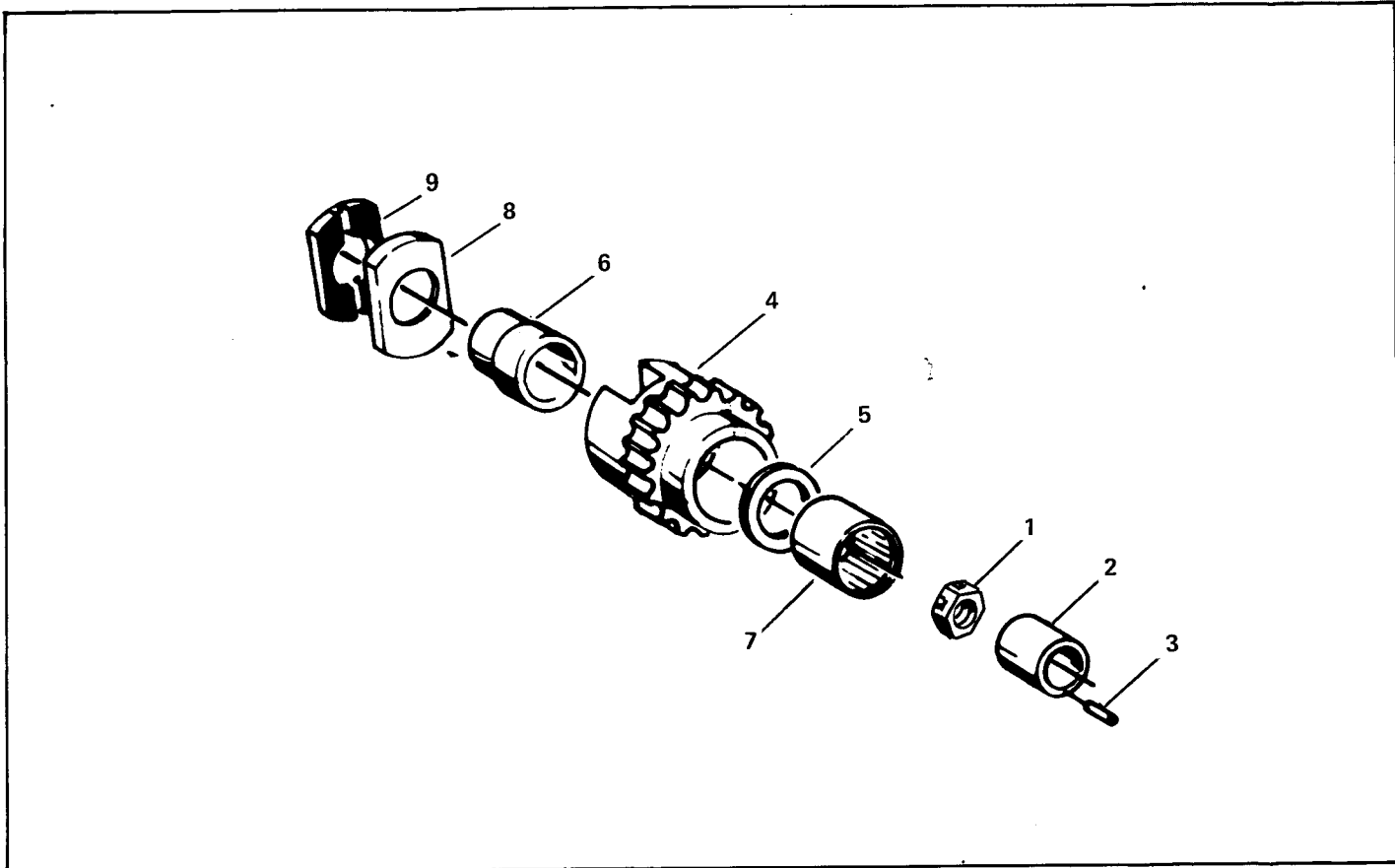


FIGURE 46 MAGNETO DRIVE ASSEMBLY

FIG. INDEX	PART NUMBER	DESCRIPTION	QUANTITY PER ASSEMBLY										
			TSIO-360						LTSIO-360				
			A	B	C	D	E	F		E			
46-	630529	Shaft Assembly, Magneto Gear Support . . . . .	2	2	2	2	2	2				2	
		ATTACHING PARTS											
-1	633840	Nut, Cone Lok . . . . .	2	2	2	2	2	2				2	
		* * * *											
-2	No Number	. Shaft, Magneto Gear Support . . . . .	ns	ns	ns	ns	ns	ns				ns	
-3	625495-7	. Pin, Roll . . . . .	1	1	1	1	1	1				1	
	630525	Gear Assembly, Magneto . . . . .	2	2	2	2	2	2				2	
-4	No Number	. Gear, Magneto Drive . . . . .	ns	ns	ns	ns	ns	ns				ns	
-5	630523	. Washer, Thrust . . . . .	1	1	1	1	1	1				1	
-6	531177	. Sleeve, Magneto Coupling . . . . .	1	1	1	1	1	1				1	
-7	633609-18	. Bearing, Magneto Gear . . . . .	1	1	1	1	1	1				1	
-8	531178	Retainer, Magneto Coupling . . . . .	2	2	2	2	2	2				2	
-9	638172	Bushing, Magneto Coupling . . . . .	4	4	4	4	4	4				4	

## SECTION IV

### OVERSIZE AND UNDERSIZE PARTS

PART NO.	NAME	DESCRIPTION	PART NO.	NAME	DESCRIPTION
401801P003	Stud	.003" OS on PD	401945P003	Stud	.003" OS on PD
401801P007	Stud	.007" OS on PD	401945P007	Stud	.007" OS on PD
401801P012	Stud	.012" OS on PD	401945P012	Stud	.012" OS on PD
401809P003	Stud	.003" OS on PD	401963P003	Stud	.003" OS on PD
401809P007	Stud	.007" OS on PD	401963P007	Stud	.007" OS on PD
401809P012	Stud	.012" OS on PD	401963P012	Stud	.012" OS on PD
401814P003	Stud	.003" OS on PD	402044P003	Stud	.003" OS on PD
401814P007	Stud	.007" OS on PD	402044P007	Stud	.007" OS on PD
401814P012	Stud	.012" OS on PD	402044P012	Stud	.012" OS on PD
401836P003	Stud	.003" OS on PD	402066P003	Stud	.003" OS on PD
401836P007	Stud	.007" OS on PD	402066P007	Stud	.007" OS on PD
401836P012	Stud	.012" OS on PD	402066P012	Stud	.012" OS on PD
401861P003	Stud	.003" OS on PD	402067P003	Stud	.003" OS on PD
401861P007	Stud	.007" OS on PD	402067P007	Stud	.007" OS on PD
401861P012	Stud	.012" OS on PD	402067P012	Stud	.012" OS on PD
401862P003	Stud	.003" OS on PD	402127P003	Stud	.003" OS on PD
401862P007	Stud	.007" OS on PD	402127P007	Stud	.007" OS on PD
401862P012	Stud	.012" OS on PD	402127P012	Stud	.012" OS on PD
401870P003	Stud	.003" OS on PD	402151P003	Stud	.003" OS on PD
401870P007	Stud	.007" OS on PD	402151P007	Stud	.007" OS on PD
401870P012	Stud	.012" OS on PD	402151P012	Stud	.012" OS on PD
401871P003	Stud	.003" OS on PD	402439P003	Stud	.003" OS on PD
401871P007	Stud	.007" OS on PD	402439P007	Stud	.007" OS on PD
401871P012	Stud	.012" OS on PD	402439P012	Stud	.012" OS on PD
401885P003	Stud	.003" OS on PD	539800M015	Spring	.015" US on ID
401885P007	Stud	.007" OS on PD			
401885P012	Stud	.012" OS on PD	629627P020	Camshaft	.020" OS on OD
401926P003	Stud	.003" OS on PD	629690P005	Pin - Piston	.005" OS on OD
401926P007	Stud	.007" OS on PD			
401926P012	Stud	.012" OS on PD	629702P005	Insert	.005" OS on OD
			629702P010	Insert	.010" OS on OD
401933P003	Stud	.003" OS on PD	629702P015	Insert	.015" OS on OD
401933P007	Stud	.007" OS on PD	629702P020	Insert	.020" OS on OD
401933P012	Stud	.012" OS on PD	629702P030	Insert	.030" OS on OD
401944P003	Stud	.003" OS on PD	630262P005	Guide - Valve	.005" OS on OD
401944P007	Stud	.007" OS on PD	630262P010	Guide - Valve	.010" OS on OD
401944P012	Stud	.012" OS on PD	630262P020	Guide - Valve	.020" OS on OD

PART NO.	NAME	DESCRIPTION	PART NO.	NAME	DESCRIPTION
630651P005	Dowel - C/shaft	.005" OS on OD	639570P005	Ring	.005" OS on OD
			639570P015	Ring	.015" OS on OD
630678P005	Ring - Piston	.005" OS on OD			
630678P015	Ring - Piston	.015" OS on OD	639570A3P005	Ring Set	.005" OS on OD
			639570A3P015	Ring Set	.015" OS on OD
630687P015	Piston	.015" OS on OD			
			639571P005	Ring - Piston	.005" OS on OD
632857M010	Bearing	.010" US on ID	639571P015	Ring - Piston	.015" OS on OD
632885M010	Bearing	.010" US on ID	639579P005	Ring - Piston	.005" OS on OD
			639579P015	Ring - Piston	.015" OS on OD
632885A1M010	Bearing	.010" US on ID			
			639580P0015	Bushing	.0015" OS on OD
633428P015	Piston	.015" OS on OD	639580P003	Bushing	.003" OS on OD
			639580P005	Bushing	.005" OS on OD
635959P005	Insert	.005" OS on OD			
635959P010	Insert	.010" OS on OD	636640M010	Bearing - C/rod	.010" US on ID
635959P015	Insert	.015" OS on OD			
635959P020	Insert	.020" OS on OD	639650P010	Washer - Thrust	.010" OS
635959P030	Insert	.030" OS on OD	639650P020	Washer - Thrust	.020" OS
			639650P030	Washer - Thrust	.030" OS
635964P005	Ring	.005" OS on OD			
635964P015	Ring	.015" OS on OD	639758P005	Ring - Piston	.005" OS on OD
			639758P015	Ring - Piston	.015" OS on OD
639282P005	Guide - Valve	.005" OS on OD			
639282P010	Guide - Valve	.010" OS on OD	640999M010	Bearing	.010" US on ID
639282P015	Guide - Valve	.015" OS on OD			
639282P020	Guide - Valve	.020" OS on OD	640999A1M010	Bearing Set	.010" US on ID

## SECTION V

### REPAIR PARTS AND MATERIALS

PART NUMBER	DESCRIPTION	SIZE	ENGINE
642188	Gasket Paste - TiteSeal, Lightweight	1 oz. tube	All
631348A2	Gasket Set - Complete Overhaul	Standard	All
639570A3	Ring Set - Single Piston	Standard	All
639570A3P005	Ring Set - Single Piston	.005" OS on OD	All
639570A3P015	Ring Set - Single Piston	.015" OS on OD	All
632885A1	Bearing Set - Crankshaft	Standard	* All
632885A1M010	Bearing Set - Crankshaft	.010" US on ID	* All
640999A1	Bearing Set - Crankshaft	Standard	LTSIO-360-E
640999A1M010	Bearing Set - Crankshaft	.010" US on ID	LTSIO-360-E
626531-1	Enamel - Gold, Engine	1 Quart	All
626531-2	Enamel - Gold, Engine	1 Gallon	All
535011S	Lockwire - 0.040 in. dia. steel	Order by 1 lb. Roll	All

\* All except LTSIO-360-E

## SECTION VI NUMERICAL PARTS LIST

PART NUMBER	FIGURE & INDEX	QTY PER ASSY	PART NUMBER	FIGURE & INDEX	QTY PER ASSY
AN101114	37-19	4	AN501-10-10	43-08	8
	40-24	4		16-08	8
AN123860	20-20	1	AN501-10-7	27-49	2
	3-16	1	AN520-10R8	26-04	4
AN123861	20-20	1	AN6227-9	35-37	1
AN123862	20-05	2	AN737TW82	36-11	2
AN123864	30-06	1		38-11	4
	10-05	1		14-11	2
AN123883	27-44	1	AN737TW91	37-11	4
AN123902	32-29	1		38-25	6
	33-27	1	AN780-2	15-27	2
	34-28	1		39-26	2
	35-29	1	AN816-6-2B	42-29	1
	12-29	1	AN833-6	35-39	1
	13-29	1	AN900-10	27-17	2
AN3-4A	41-17	4		9-17	2
	41-33	1		9-52	1
	42-16	6		31-07	1
	42-24	1		28-16	2
AN3-6A	38-31	4		28-23	1
AN363-1032	38-33	4		29-16	2
AN365-1032C	41-16	4		11-07	1
AN4-13A	19-11	5		20-18	2
	19-15	1		3-14	2
	2-11	6	AN900-14	9-23	1
AN4-14A	19-15	1		27-23	1
	19-20	1		29-21	1
	19-21	1	AN900-16	29-42	1
	2-15	1		27-39	1
AN4-15A	19-20	1		28-44	1
	19-21	1		9-54	1
	2-20	1	AN900-28	9-50	1
AN4-17A	19-27	3	AN912-5	41-28	1
AN500-10-5	39-24	2		42-19	1
	40-36	2		34-36	1
	15-25	2	AN915-1	41-40	1
AN500-10-8	41-43	1	AN917-1	41-39	1
	42-32	1		42-30	1
AN500A8-10	39-33	4	AN924-6	35-38	1
	40-41	4	AN932C4	18-15	2
	15-34	4		1-15	2
AN500D416-20	25-37	4	AN960-10L	38-32	4
	8-39	4		26-16	8
AN500D8-12	20-24	1		41-32	2
	3-20	1		42-23	2
				27-50	3
			AN960-516	29-45	3
				28-48	3

PART NUMBER	FIGURE & INDEX	QTY PER ASSY
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PART NUMBER	FIGURE & INDEX	QTY PER ASSY
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AN960-516L	14-07	12
AN960-8	20-25	1
	3-21	1
MS122122	25-33	1
	27-13	1
	8-35	1
	9-13	1
	31-06	5
	28-12	1
	29-12	1
	11-06	5
MS122162	27-12	2
	9-12	2
	28-13	2
	29-13	2
MS20066-98	32-50	1
	13-44	1
MS20822-6	41-29	1
	42-20	1
MS20823-2	40-44	1
MS21044N08	20-26	1
	3-22	1
MS21044N3	41-31	1
	42-15	6
	42-22	1
MS21044N5	39-16	1
	40-17	1
	15-16	1
MS21209C6-15	20-07	1
MS21919DG6	41-34	1
MS21919G16	41-42	1
	42-25	1
	42-31	1
MS29513-010	19-06	20
	2-06	20
MS29513-138	38-29	1
MS35338-43	39-23	2
	40-35	2
	15-24	2
MS35338-44	35-51	4
	36-24	4
	37-21	4
	40-26	4
	25-35	8
	8-37	8
	9-48	3
	41-26	1
	29-38	3
	31-03	14
	32-56	8
	32-61	4
	33-46	4

	34-50	4
	27-37	3
	28-40	3
	11-03	14
	12-41	4
	13-04	1
	13-07	3
	13-50	4
	13-55	8
	20-32	8
	3-28	8
MS35338-45	36-08	12
	37-08	12
	38-08	12
	39-03	4
	40-03	4
	27-03	12
	9-03	12
	41-23	1
	43-04	4
	29-46	3
	32-06	3
	32-08	1
	32-31	1
	33-06	3
	33-29	1
	34-06	3
	34-08	1
	34-30	1
	35-06	3
	35-08	1
	35-31	1
	28-03	12
	28-49	3
	29-03	14
	12-04	1
	12-07	3
	12-31	1
	13-31	1
	14-08	12
	15-03	4
	16-04	4
	20-16	4
	3-12	4
	37-24	1
MS35489-11S	41-27	1
MS35691-402	9-37	1
MS35756-1	35-18	1
MS35756-8	12-25	1
	13-17	1
	13-25	1
	5-04	1

PART NUMBER	FIGURE & INDEX	QTY PER ASSY
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PART NUMBER	FIGURE & INDEX	QTY PER ASSY
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MS9021-028	29-41	1		35-50	4
	27-45	1		36-23	8
	28-43	1		37-20	8
MS9021-038	35-53	1		40-25	8
	32-63	1		9-47	3
	33-48	1		29-37	3
	34-52	1		31-02	14
	12-43	1		32-44	6
	13-57	1		32-55	8
MS90726-38	41-22	1		32-60	4
MS9134-01	35-48	1		33-38	6
	32-53	2		33-45	4
	33-43	1		34-42	6
	34-47	1		34-49	4
	12-38	1		27-36	3
	13-52	1		28-39	3
X12935	36-26	2	21007	20-28	6
	40-28	2		3-24	6
X13041	12-27	1		25-24	1
	13-27	1		8-24	1
	32-20	1	21080	18-04	1
	33-19	1		1-04	1
	34-20	1	21113	9-24	1
	35-17	1		27-24	1
X1473	9-27	1		28-24	1
	28-26	1		29-22	1
X5147	36-27	1	21176	19-11	1
X604	15-08	1	21213	30-04	3
	39-08	1		10-03	3
	40-08	1	21477	25-01	6
13XX18001	20-37	1		8-01	6
	3-33	1	22022	41-02	12
13XX1896	27-52	3		25-39	12
13XX3103	36-22	4		8-41	12
200138	18-03	1	22022	42-02	12
	1-03	1	22139	19-26	4
20202	19-35	4		19-26	6
	2-33	4		2-24	4
2024	18-14	1	22535	20-14	8
	1-14	1		3-10	8
20522	11-02	14	22537	35-44	6
	13-54	8		9-36	4
	19-10	10		32-45	6
	19-14	2		33-39	6
	19-19	2		34-43	6
	19-29	2	2265	11-08	1
	19-32	4		31-08	1
	2-10	12	22910	27-51	3
	2-14	2	24026	25-17	2
	2-19	2		8-17	2
	2-27	2	2437	11-04	14
	2-30	4		12-42	4
	35-43	6		13-56	8



PART NUMBER	FIGURE & INDEX	QTY PER ASSY
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PART NUMBER	FIGURE & INDEX	QTY PER ASSY
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2437

14-15 2  
 19-12 5  
 19-16 1  
 19-22 2  
 19-28 2  
 19-28 3  
 19-31 1  
 19-34 2  
 2-12 6  
 2-16 1  
 2-22 2  
 2-26 2  
 2-29 1  
 2-32 2  
 35-52 4  
 36-15 2  
 36-25 4  
 37-16 2  
 37-22 4  
 38-15 2  
 40-27 4  
 25-29 4  
 8-31 4  
 9-49 3  
 31-04 14  
 32-09 1  
 32-57 8  
 33-47 4  
 34-51 4  
 27-38 3  
 28-41 3  
 29-04 9  
 12-05 1  
 12-08 3  
 12-32 1  
 13-05 1  
 13-32 1  
 14-09 12  
 15-04 4  
 16-05 4  
 20-17 4  
 3-13 4  
 32-32 1  
 36-09 12  
 37-09 12  
 38-09 12  
 39-04 4  
 40-04 4  
 27-04 7  
 09-04 7  
 41-24 1  
 43-05 4  
 29-39 3

2439

2441

2457

2472

2473

29-47 3  
 33-08 1  
 33-30 1  
 34-09 1  
 34-31 1  
 35-09 1  
 35-32 1  
 28-04 7  
 28-50 3  
 2-36 4  
 12-46 2  
 13-60 2  
 19-39 4  
 20-11 12  
 3-07 12  
 35-56 2  
 32-66 2  
 33-51 2  
 34-55 2  
 15-07 1  
 39-07 1  
 40-07 1  
 12-40 4  
 13-49 4  
 20-31 8  
 3-27 8  
 12-03 2  
 12-06 3  
 12-30 1  
 13-03 2  
 13-06 3  
 13-30 1  
 15-02 4  
 20-15 4  
 3-11 4  
 36-07 12  
 37-07 12  
 38-07 12  
 39-02 4  
 40-02 4  
 27-02 10  
 9-02 12  
 30-03 3  
 32-05 3  
 32-07 2  
 32-30 1  
 33-05 3  
 33-07 2  
 33-28 1  
 34-05 3  
 34-07 2  
 34-29 1

PART NUMBER	FIGURE & INDEX	QTY PER ASSY
2473	35-05	3
	35-07	2
	35-30	1
	28-02	10
	29-02	15
	10-02	3
24827	14-12	6
	36-12	6
	37-12	4
	38-12	6
24835	20-33	8
	3-29	8
24846	18-03	1
24878	2-21	1
24879	19-17	1
	2-17	1
25102	12-37	1
	13-38	1
	32-38	1
	33-33	1
	34-34	1
	35-36	1
25164	19-18	2
	2-18	2
25314	16-39	1
	43-39	1
25316	16-41	1
	43-41	1
25317	16-42	1
	43-42	1
25318	16-43	1
	43-43	1
25320	27-53	1
25321	16-07	8
	43-07	8
352024	16-38	1
	43-38	1
352030	10-09	1
	30-10	1
352066	9-43	1
	29-33	1
352068	10-06	1
	30-07	1
35985	40-22	1
36025	9-35	4
	27-29	4
	28-32	4
	29-27	4
36100	9-41	1
36151E	14-10	10
	36-10	10
	37-10	8
	38-10	8

PART NUMBER	FIGURE & INDEX	QTY PER ASSY
401507	19-38	4
	20-10	4
	2-35	4
	3-06	4
401801	18-05	14
	1-05	14
	25-11	4
	8-11	4
	29-09	3
	18-06	3
	1-06	4
	27-09	3
	9-08	3
	28-08	3
	29-08	3
401814	18-07	6
	1-07	6
401836	25-10	2
	8-10	2
401861	12-13	1
	13-12	1
	32-12	1
	33-11	1
	34-12	1
	35-12	1
401862	18-08	1
401870	13-40	8
	32-39	8
	33-34	1
	34-35	4
	35-35	4
401871	18-09	3
	1-09	3
401885	27-11	4
	9-11	3
	28-10	3
	29-10	4
401926	9-10	3
401933	18-08	1
	1-08	1
401944	18-09	3
401945	18-10	4
	1-10	4
401963	12-36	4
	27-10	3
	9-09	3
	28-09	3
402044	25-12	2
	8-12	2
402066	18-10	4
402067	28-11	3
	29-11	3

PART NUMBER	FIGURE & INDEX	QTY PER ASSY	
402127	12-12	1	
	13-11	1	
	32-11	1	
	33-10	1	
	34-11	1	
	35-11	1	
402151	12-14	1	
	13-13	1	
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	32-13	1	
	33-12	1	
	34-13	1	
	35-13	1	
	18-12	3	
	1-12	2	
402439	13-41	1	
	32-40	2	
501867	12-21	1	
	13-21	1	
	25-28	4	
	8-30	4	
	32-25	1	
	33-24	1	
	34-25	1	
	35-26	1	
	502287	12-28	1
		13-28	1
32-21		1	
33-20		1	
34-21		1	
35-22		1	
520112	25-09	2	
	8-09	2	
522247	13-46	1	
530003	9-51	1	
530011	27-01	1	
	9-01	1	
	28-01	1	
	29-01	1	
	23-03	2	
	10-07	1	
530213	30-08	1	
	10-08	1	
530406	30-09	1	
	10-12	1	
530407	30-15	1	
	16-40	1	
530412	43-40	1	
	21-17	1	
530455	4-17	1	
	21-18	1	
530917	4-18	1	
530974			

PART NUMBER	FIGURE & INDEX	QTY PER ASSY	
531001	19-36	4	
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	2-34	4	
	8-02	12	
531003	25-03	36	
	8-03	36	
531177	17-06	1	
	46-06	1	
531178	17-08	2	
	46-08	2	
531325	10-11	1	
	30-12	1	
532247	32-52	1	
532377	25-49	6	
	8-51	6	
532432	20-19	2	
	3-15	2	
	9-20	1	
	29-17	2	
	9-53	1	
534750	16-01	2	
	43-01	2	
535091	25-36	4	
	8-38	8	
	8-38	4	
535631	13-51	4	
	32-62	4	
536552	12-24	1	
	13-24	1	
	32-17	1	
	33-16	1	
	34-17	1	
	20-21	1	
	3-17	1	
537299	19-09	1	
	2-09	1	
537466	19-09	1	
	14-14	2	
537466-1	19-09	1	
	537728	14-14	2
	19-20	1	
	19-21	1	
	19-27	2	
	2-25	2	
537750	36-14	2	
	37-15	2	
537961	38-14	2	
	27-06	2	
538684	27-05	3	
	9-05	5	
538999	28-05	5	
	29-05	5	
	23-02	1	
	12-10	1	
	13-09	1	

PART NUMBER	FIGURE & INDEX	QTY PER ASSY
538999	32-04	1
	33-04	1
	34-04	1
	35-04	1
539058	12-45	2
	13-59	2
	20-09	8
	3-05	8
	35-55	2
	32-65	2
	33-50	2
	34-54	2
539601	35-25	1
539619	9-22	1
	27-21	1
	28-22	1
539793	35-19	1
539800	12-20	1
	13-20	1
	32-24	1
	33-23	1
	34-24	1
539805	12-26	1
	13-26	1
	32-19	1
	33-18	1
	34-19	1
539916	27-07	1
	9-06	1
	28-06	1
	29-06	1
629495	16-31	6
625495-7	46-03	1
	17-03	1
625957	25-15	2
	8-15	2
625958	25-16	2
	8-16	2
626140	23-04	2
626168	23-	6
626264	11-09	1
	31-09	1
626487	9-36	4
	27-30	4
	28-33	4
	29-28	4
626553	15-33	1
	39-32	1
626557	15-31	1
	39-30	1
	40-38	1
626577-2	26-17	6
626900	40-19	1

PART NUMBER	FIGURE & INDEX	QTY PER ASSY
627119	15-10	1
	39-10	1
	40-10	1
627331	15-28	4
	39-27	4
627392	3-26	1
627433	12-09	2
	13-08	2
	32-03	2
	33-03	2
	34-03	2
	35-03	2
627458	29-20	1
627593	25-31	1
	8-33	2
	8-33	1
627693	25-23	2
	8-23	2
627694	8-25	2
627731	25-20	2
	8-20	2
627732	25-18	1
	8-18	1
627762	27-14	1
	9-14	2
	9-14	1
	28-14	1
	29-14	1
627817	12-17	1
627860	12-19	1
	13-19	1
	32-23	1
	33-22	1
	34-23	1
627861	35-24	1
627882	12-15	2
	13-14	2
	32-14	2
	33-13	2
	34-14	2
	35-14	2
627993	12-01	1
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	32-01	1
	33-01	1
	34-01	1
	35-01	1
628056	12-02	1
	13-02	1
	32-02	1
	33-02	1
	34-02	1
	35-02	1

PART NUMBER	FIGURE & INDEX	QTY PER ASSY
628059	8-28	2
628071	12-	1
628125	12-34	1
628149	35-20	1
628155-1	35-21	1
628249-5	13-39	2
628436	15-11	1
	40-11	1
	40-13	1
	40-14	1
	40-42	1
628437	15-12	1
	15-18	1
	15-26	1
	39-12	1
	39-18	1
	39-25	1
	40-12	1
	40-20	1
628438	15-13	1
	39-13	1
	40-21	1
	40-29	1
628475	15-09	1
	39-09	1
	40-09	1
628476	39-11	1
628556	36-34	6
	37-34	6
	38-24	6
628740	43-38	1
629004	21-08	8
	4-08	8
629008	43-42	1
629009	43-40	1
629010	43-39	1
629011	43-34	1
629196	20-02	4
629494	16-32	10
	43-32	10
629495	43-31	6
629496	16-30	1
	43-30	1
629498	16-29	6
	43-29	6
629502	16-26	1
	43-26	1
629504	16-24	1
	43-24	1
629505	16-23	1
	43-23	1
629506	16-21	1
	43-21	1

PART NUMBER	FIGURE & INDEX	QTY PER ASSY
629518-1H	9-19	1
	39-28	1
	27-19	2
	28-18	2
	15-19	1
	15-29	1
	18-16	1
	1-16	1
629518-3H	27-16	1
	9-16	1
	28-19	1
	29-18	1
629588	22-05	1
	5-05	1
629602	22-06	1
	5-06	1
629627	5-01	1
629636	20-01	1
	3-01	1
629666	20-06	1
	3-04	1
629671A2	31-	1
	11-	1
629690	24-06	6
	7-06	6
629702	25-06	1
	8-06	1
629707	25-13	1
	8-13	1
629711	25-43	24
	8-45	24
629718	18-01	1
	1-01	1
629720	18-02	1
	1-02	1
629728	19-33	2
	2-31	2
629738	19-23	2
	2-23	2
629758-12.60	19-08	1
	2-08	1
629758-12.90	19-07	1
	2-07	1
629820	10-04	1
629847	18-18	6
629849	18-17	1
	1-17	1
629864	14-03	2
	36-03	2
	37-03	2
	38-03	2
629872	14-05	1
	36-05	1
	38-05	1

PART NUMBER	FIGURE & INDEX	QTY PER ASSY
629873	14-02	1
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	38-02	1
629925	14-01	6
	36-01	6
	37-01	6
	38-01	1
630049	16-06	12
	43-06	12
630057	25-48	6
	8-50	6
630146-16	39-15	1
630146-19	40-06	1
630146-2	39-15	1
	40-16	1
	15-15	1
630146-4	39-06	1
	15-06	1
630184	15-32	1
	39-31	1
	40-39	1
630204	18-19	1
	1-19	1
630261-41	21-05	4
	4-05	4
630261-43	21-05	2
	4-05	2
630261-44	21-06	2
	4-06	2
630262	8-07	1
	25-07	1
630265	22-07	1
	5-07	1
630286	25-41	12
	8-43	12
630365	41-01	12
	25-38	6
	8-40	6
	42-01	12
630393	25-45	12
	8-47	12
630415	9-18	1
	9-20	1
	27-18	2
	28-17	2
630421	36-20	1
630476	25-	2
	8-	2
630523	17-05	1
	46-05	1

PART NUMBER	FIGURE & INDEX	QTY PER ASSY
630525	17-	2
	46-	2
630529	17-	2
	46-	2
630535	16-03	4
	43-03	4
630562	5-02	1
630651	21-09	1
	4-09	1
630657	15-35	1
630658	15-35	1
630659	15-35	1
630660	15-35	1
630661	15-35	1
630662	15-35	1
630678	24-05	6
	7-05	6
630680	12-18	1
	32-22	1
	33-21	1
	34-22	1
	35-23	1
630687	7-01	6
630688	20-22	1
	3-18	1
630689	20-23	1
	3-19	1
630690	21-15	1
	4-15	1
630692	21-16	4
	4-16	4
630742	22-03	4
	5-03	4
630860	13-18	1
631252	12-23	1
	13-23	1
	32-16	1
	33-15	1
	34-16	1
631253	35-16	1
631254	35-	1
631302	9-46	1
631330	15-30	1
	39-29	1
	40-37	1
631351A5	15-	1
631351A7	39-	1
	15-	1
631654	25-19	1
	8-19	1

PART NUMBER	FIGURE & INDEX	QTY PER ASSY
631687	9-21	1
	27-20	1
	28-20	1
	29-19	1
631720	15-29	1
	39-28	1
631737-1	43-37	2
	16-37	2
631738-1	43-36	2
	16-36	2
631739	16-35	2
	43-35	2
631801	9-34	1
631803	9-29	1
631804	9-32	1
631823-5.19	19-30	1
	2-28	1
631874	14-04	1
	36-04	1
	38-04	1
631875	14-06	1
	36-06	1
	38-06	1
631904	27-46	1
631991	25-25	2
	8-26	2
631996	25-27	4
	8-29	4
632017	34-37	1
632050	10-10	2
	30-11	2
632068	25-21	1
	8-21	1
632074	9-15	1
632137	25-46	2
	8-48	2
632141	25-40	12
	8-42	12
632147-10	15-36	1
632248	25-47	3
	8-49	3
632310	25-30	2
	8-32	2
632317	25-42	12
	8-44	12
632321-.38	20-39	4
	3-35	4
632344	9-15	1
	28-15	1
632346	9-	1
632372	20-29	1
	3-25	1
632373	29-48	1
	27-42	1

PART NUMBER	FIGURE & INDEX	QTY PER ASSY
632373	28-51	1
632407	13-	1
632409	13-34	1
	32-34	1
	33-32	1
	34-33	1
	35-34	1
632410	13-35	1
	32-35	1
632411	13-36	1
632412	13-37	1
	32-37	1
632440	25-34	8
	8-36	8
632443-3	9-39	1
	27-33	1
	28-36	1
632470	9-34	1
632475	9-46	1
	27-35	1
	28-38	1
632477	22-02	1
	5-02	1
632492	9-33	1
632497	9-29	1
632512	16-06	12
	43-06	12
632550	9-38	1
632560	9-41	1
	27-34	1
	28-37	1
632612	13-45	1
632613	13-43	1
	32-15	1
632615	13-16	1
632617	13-42	1
632758	42-28	1
632762	9-28	1
	28-27	1
632857	21-10	6
	4-10	6
632879	21-13	4
	4-13	4
632885	21-11	2
	4-11	2
632886	20-30	1
	3-26	1
632945	15-01	1
	39-01	1
	40-01	1
632983	20-35	1
	3-31	1
632987-1.00	20-36	1
	3-32	1

PART NUMBER	FIGURE & INDEX	QTY PER ASSY
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PART NUMBER	FIGURE & INDEX	QTY PER ASSY
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633009	16-28	1
	43-28	1
633012	16-27	1
	43-27	1
633019	25-	1
	8-	1
633089	16-22	1
	43-22	1
633096	16-25	1
	43-25	1
633106	22-08	12
	5-08	12
633280	12-35	1
633342	35-47	1
	33-42	1
	34-46	1
633342-1	27-31	1
	28-34	1
	29-29	1
633342-10	32-18	1
	33-17	1
	34-18	1
	22-04	1
633342-6	32-28	1
633358	41-19	2
	42-18	2
633428	24-01	6
633485	36-28	2
	37-26	1
	38-20	2
633542	33-26	1
	34-27	1
	35-28	1
633547	32-27	1
633602	9-29	1
	27-25	1
	28-28	1
	29-23	1
633608-12	39-35	1
	40-46	6
633609-18	46-07	1
	17-07	1
633609-7	32-47	1
633610	27-	1
	9-	1
	28-	1
	29-	1
633611	9-31	1
	27-27	1
	28-30	1
	29-25	1
633612	9-34	1
	32-49	1

633612	27-28	1
	28-31	1
	29-26	1
633626A1	32-	1
633627	32-48	1
633628	32-	1
633629	32-43	1
633630	32-	1
	33-	1
	34-	1
	35-	1
633632	32-42	1
	33-36	1
	34-40	1
	35-41	1
633636	33-	1
	34-	1
633637	33-37	1
	34-41	1
	35-42	1
633661	10-04	1
633687	32-36	1
633734	27-48	1
633735	27-47	1
633751	13-48	1
	32-59	1
633752	13-47	1
	32-58	1
633761A1	20-	1
633795	19-37	2
633819	36-21	1
	40-23	1
633840	17-01	2
	46-01	2
633845	12-22	1
	13-22	1
	32-26	1
	33-25	1
	34-26	1
	35-27	1
633848	33-	1
	34-	1
633856	35-46	1
	33-41	1
	34-45	1
633867	39-34	1
633869	36-29	1
633871	36-18	1
	38-18	1
633872	36-16	1
633872	38-16	1
633874	18-18	6
633877	39-34	1



PART NUMBER	FIGURE & INDEX	QTY PER ASSY
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633878	39-34	1
633879	39-34	1
633880	39-34	1
633881	39-34	1
633901	36-31	6
	37-31	6
	38-21	6
633954	15-23	1
	39-22	1
	40-34	1
633958-3	36-30	2
	36-32	6
	37-30	2
	37-32	6
	38-22	6
633958-5	36-17	2
	36-19	2
	37-28	2
	38-17	2
	38-19	2
633962	10-04	1
	30-05	1
633976	21-07	8
	4-07	8
634010	9-38	1
	27-32	1
	28-35	1
	29-30	1
634325	39-32	1
	40-40	1
634536	34-38	1
634592	12-44	1
	35-54	1
	34-53	1
634598	30-14	1
634628	40-43	1
634913	3-23	1
634915	3-23	1
634916	3-23	1
634973	20-27	1
634974	20-27	1
635002	27-22	1
	28-21	1
635048	12-	1
	13-	1
	32-	1
	33-	1
	34-	1
	35-	1
635048A1	12-	1
635048A2	32-	1
635048A3	13-	1
635048A4	33-	1
635048A7	35-	1

PART NUMBER	FIGURE & INDEX	QTY PER ASSY
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635048A8	34-	1
635168-14.00	15-21	1
635168-16.00	39-19	1
	39-20	1
	15-20	1
635168-22.00	39-20	1
635218-6-15.00	41-37	1
635218-6-30.00	42-33	1
635218-6-36.00	41-44	1
635360	16-34	2
	43-34	2
635796	30-	1
635798A3	39-	1
635959	25-05	1
	8-05	1
635964	24-04	6
	7-04	6
635982-1	43-33	2
	16-33	2
636349	40-18	1
636950	16-	1
	43-	1
636955	16-	1
637083	9-22	1
637409-40	16-19	1
637409-48	43-09	1
	43-09	1
	43-10	1
	43-10	1
	43-11	1
	43-11	1
	43-12	1
	43-12	1
	43-13	1
	43-13	1
	43-14	1
	43-14	1
	43-15	1
	43-15	1
	43-16	1
	43-17	1
	43-17	1
	43-19	1
	43-19	1
	16-09	1
	16-09	1
	16-10	1
	16-10	1
	16-11	1
	16-11	1
	16-12	1
	16-12	1
	16-13	1
	16-13	1

PART NUMBER	FIGURE & INDEX	QTY PER ASSY
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PART NUMBER	FIGURE & INDEX	QTY PER ASSY
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637409-48	16-14	1
	16-14	1
	16-15	1
	16-15	1
	16-16	1
	16-16	1
	16-17	1
	16-17	1
	16-18	1
	16-19	1
637409-72	43-16	1
	43-18	1
	43-18	1
637409-72	43-20	1
	43-20	1
	16-18	1
	16-20	1
	16-20	1
637579	21-14	4
	4-14	4
637826	20-03	1
	3-02	1
637827	20-04	1
	3-03	1
637847	12-44	1
	13-58	1
	32-64	1
	33-49	1
638157-2A1	15-	1
638172	17-09	4
	46-09	4
639198	21-04	4
	4-04	4
639199	21-	2
	4-	2
639200	21-	1
	4-	1
639202	37-06	1
639203	37-04	1
639207	37-17	1
639230A2	15-	1
639231A2	15-	1
639241	37-18	1
639279	19-17	1
639282	25-08	1
	8-08	1
639283	25-14	1
	8-14	1
639284	20-27	1
639289A4	40-	1
639289A5	40-	1
639289A6	39-	1

639289A7	39-	1
639292	10-13	1
	23-05	12
	30-16	1
639305	20-34	1
	3-30	1
639361	37-25	1
639362	37-27	1
639413	37-02	1
	37-05	1
639495	15-17	1
	39-17	1
639508-1A1	39-	1
639508-2A1	40-	1
629508-3A1	40-	1
639508-4A2	39-	1
639570	24-02	6
	7-02	6
639579	24-03	6
	7-03	6
639580	21-02	4
	4-02	4
639640	21-12	12
	4-12	12
639648	25-	2
639650	25-26	4
639660-1	37-13	2
	38-26	3
639689	37-29	1
639786	21-	1
	4-	1
639997	20-13	1
	3-09	1
640017-1	18-13	36
	1-13	36
640110	37-23	1
640191	3-23	1
640192	3-23	1
640216	27-15	1
	28-15	1
640380	12-39	1
	13-53	1
	35-49	1
	32-54	2
	33-44	1
	34-48	1
640475	18-	1
640479	1-	1
640563-2A1	39-	1
	15-	1
640563-2A5	40-	1
640563-4A4	39-	1
640563-4A6	39-	1

PART NUMBER	FIGURE & INDEX	QTY PER ASSY
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PART NUMBER	FIGURE & INDEX	QTY PER ASSY
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640573	20-27	1*
640612	36-33	6
	37-33	6
	38-23	6
640616	27-	1
640651	22-01	1
640703	27-55	1
640758	19-25	1
640759	19-24	1
640834	29-40	1
	28-42	1
640838	16-02	2
	16-02	1
	43-02	2
	43-02	1
640839	16-02	1
	43-02	1
640841	28-	1
640849	9-	1
640857	18-	1
640861	18-	1
640896-1	43-02	2
640896-2	43-02	2
640923	29-	1
640924	29-	1
640925	29-36	1
640926	29-30	1
640952	38-27	1
640953	20-08	1
640955	41-18	1
	42-17	1
640962-1	19-07	1
640962-2	19-08	1
640964-101	41-03	1
	42-03	1
640964-102	41-04	1
	42-04	1
640964-103	41-05	1
	42-05	1
640964-104	41-06	1
	42-06	1
640964-105	41-07	1
	42-07	1
640964-106	41-08	1
	42-08	1
640964-107	41-09	1
640964-108	41-10	1
640964-109	41-11	1
640964-110	41-12	1
640964-119	41-13	1
640964-409	41-15	2
	42-14	3

640964-410	41-14	4
	42-13	6
640999	21-11	2
641032-2-11	40-	1
641032-2-13	39-	1
641033	29-15	1
641034	18-17	1
641035	20-23	1
641058	20-27	1
641059	20-27	1
641060	22-01	1
	5-01	1
641063	41-30	1
641067	41-35	1
641068	41-36	1
	42-26	1
641074	9-25	1
	28-24	1
641075	9-26	1
641075	28-25	1
641078	35-	1
641082	40-30	1
641084	40-31	1
641085	40-32	1
641093	40-45	1
641094	40-45	1
641095	39-34	1
	40-45	1
641096	40-45	1
641097	40-45	1
641098	40-45	1
64110046S-16.00	42-27	1
641103	35-	1
641106	26-06	4
641107	26-07	1
641108	43-	1
641109	26-01	1
641124	20-23	1
641159	28-15	1
641161	41-38	1
641166	26-03	4
641285	41-21	1
641286	41-20	1
641287	26-02	4
641288	38-28	1
641330	26-14	2
641332	26-13	2
	26-15	2
641341	26-05	4
641343	26-12	1
641344	26-09	2
641346	26-10	4
641347	26-11	4

PART NUMBER	FIGURE & INDEX	QTY PER ASSY
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PART NUMBER	FIGURE & INDEX	QTY PER ASSY
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641349	26-08	1
641361	20-38	1
	3-34	1
641368	12-16	1
	13-15	1
	32-15	1
	33-14	1
	34-15	1
	35-15	1
641370	25-	1
	8-	1
641370A1	25-	1
	8-	1
641382	21-	1
641385	41-25	1
641404-1	38-30	1
641411	39-34	1
641412	39-34	1
641413	39-34	1
641414	39-34	1
641415	39-34	1
641531	9-	1
	29-34	1
641533	9-45	1
	29-35	1
641535-1RH	9-40	1
	29-31	1
641535-2LH	29-31	1
641538	9-42	1
	29-32	1
641574	28-46	1
641575	28-47	1
641576	29-44	1
641583	29-49	1
	27-54	1
	28-52	1
641607	25-44	12
	8-46	12
641614	27-43	1
641651	20-12	1
	3-08	1
641669	30-05	1
641705	3-23	1
641734	27-	1
641798	9-	1
641801	9-	1
641802	28-	1
641803	28-	1
641835	29-43	1
	28-45	1
	9-55	1
	27-40	1

641859	20-08	1
641862	22-09	1
	5-09	1
641870	11-01	1
	31-01	1
641877	42-21	1
641894	20-03	1
641895	20-01	1
641896	20-04	1
641911-020	42-11	1
641911-030	42-12	1
641911-108	42-09	1
641911-109	42-10	1
641912	42-	1
641913	38-28	1
641944-10.18	19-03	1
	2-03	1
641944-10.55	19.04	1
	2-04	1
641944-10.68	19.05	4
	2-05	4
641944-5.86	19.01	2
	2-01	2
641944-9.25	19-02	2
	2-02	2
641956	20-27	1
641976	3-23	1
642063	20-30	1
642211	41-41	1

## **SECTION VII**

### **CUSTOMERS SPECIFICATIONS**

The following pages contain, in tabulated form, the various customer specifications of the basic IO-360/TSIO-360 aircraft engines.

If the customer specification number does not appear on the engine nameplate, check the serial number and locate the customer spec in the serial number to customer spec cross reference list in Section I. All engines manufactured after January 1973 have the customer spec number stamped on the nameplate.

In some instances, certain accessories are furnished by the aircraft manufacturer. If an accessory on the engine does not appear on the customer spec, determine whether it is available from the aircraft manufacturer.



CONTINENTAL MODEL IO-360-D

(SPECIFICATIONS NOT SHOWN SAME AS BASIC ENGINE)

Spec. Number	Alternator	Crankcase Cover Assembly	Tube - Oil Filler Neck	Cap - Oil Filler Neck	Oil Gauge Rod Assembly	Starter	Magneto	Throttle and Control Assembly	Fuel Injection Assembly (A)
5	633962								
6	633962	641798	632074	640620-6	632062-1A1				
7	633962						640839 640838		
8	633962								
9	634442								
11	634442								
12	633661	641798	632074	640620-6	632062-1A1	634592		640563-3A1	
15		641801							
16	633661	641798	632074	640620-6	632062-1A1	628482			
17	633661	641798	632074	640620-6	632062-1A1	628482			
18	634442								
19	634442								
20	633661	641798	632074	640620-6	632062-1A1				
21	633962	641798	632074	640620-6	632062-1A1				
23							640838		
25	634442						640839		
26	633962	641798	632074	640620-6	632062-1A1				

(A) See Service Bulletin M74-13

**CONTINENTAL MODEL IO-360-D**  
(SPECIFICATIONS NOT SHOWN SAME AS BASIC ENGINE)

Spec. Number	Alternator	Crankcase Cover Assembly	Tube - Oil Filler Neck	Cap - Oil Filler Neck	Oil Gauge Rod Assembly	Starter	Magnet	Throttle and Control Assembly	Oil Cooler	Fuel Injection Assembly (A)
30	633661			640620-6	632062-1A1	634592			627392	
31	633661	641798	632074	640620-6	632062-1A1	634592				
32	634442			640620-6	632062-1A1					
33	640622			640620-6	632062-1A1	634592			627392	639233A2

(A) See Service Bulletin M74-13



# CONTINENTAL MODEL IO-360-G

(SPECIFICATIONS NOT SHOWN SAME AS BASIC ENGINE)

Spec. Number	Crankcase Cover Assembly	Tube - Oil Filler Neck	Cap - Oil Filler Neck	632062- 1A1	Oil Gauge Rod Assembly	Fuel Injection Assembly (A)														
2	641801	632343	640620-1																	

(A) See Service Bulletin M74-13



# CONTINENTAL MODEL IO-360-H

(SPECIFICATIONS NOT SHOWN SAME AS BASIC ENGINE)

Spec. Number	Alternator	Crankcase Cover Assembly	Tube - Oil Filler Neck	Cap - Oil Filler Neck	Oil Gauge Rod Assembly	Starter	Oil Cooler	Fuel Injection Assembly <sup>(A)</sup>										
2	633661		640620-6	640620-6	632062-1A1	634592												
3	634442		640620-6	640620-6	632062-1A1		627392											
4	633661					634592												
5	633661		640620-6	640620-6	632062-1A1	634592	627392											
7	633661					634592												

<sup>(A)</sup> See Service Bulletin M74-13

**CONTINENTAL MODEL IO-360-J**

(SPECIFICATIONS NOT SHOWN SAME AS BASIC ENGINE)

Spec. Number	Alternator	Starter	Oil Cooler	Magneto	Oil Gauge Rod Assembly	Crankcase Cover Assembly	Fuel Injection Assembly <sup>(A)</sup>														
2	634442	637847	627392																		
3				640838	632062-23																
4			627392																		
5				640838	632062-23	641801															

<sup>(A)</sup> See Service Bulletin M74-13

### CONTINENTAL MODEL TSIO-360-A

(SPECIFICATIONS NOT SHOWN SAME AS BASIC ENGINE)

Spec. Number	Starter	Magneto	Fuel Injection Assembly (A)																			
2	634592	640839 640838																				
3		640839 640838																				

(A) See Service Bulletin M74-13

# CONTINENTAL MODEL TSIO-360-B

(SPECIFICATIONS NOT SHOWN SAME AS BASIC ENGINE)

Spec. Number	Starter	Magneto	Fuel Injection Assembly (A)																			
2	634592	640839 640838																				

(A) See Service Bulletin M74-13

**CONTINENTAL ODEL TSIO-360-C**  
 (SPECIFICATIONS NOT SHOWN SAME AS BASIC ENGINE)

Spec. Number	Adapter Assembly- Starter	Magneto	Oil Gauge Rod Assembly	Oil Filler Neck Assembly	Cap - Breather	Fuel Injection Assembly <sup>(A)</sup>															
2	635048A2 640838	640839 640838																			
3	635048A2	640839 640838		632343																	
4	635048A2	640839 640838			631862																
5	635048A2	640839 640838	632062- 19A1	632343																	
6	635048A2	640839 640838	632062- 19A1		631862																

<sup>(A)</sup> See Service Bulletin M74-13