

ILLUSTRATED PARTS CATALOG

Model 220/305 C.I.D.
Model 270/350 C.I.D.

MARCH, 1988

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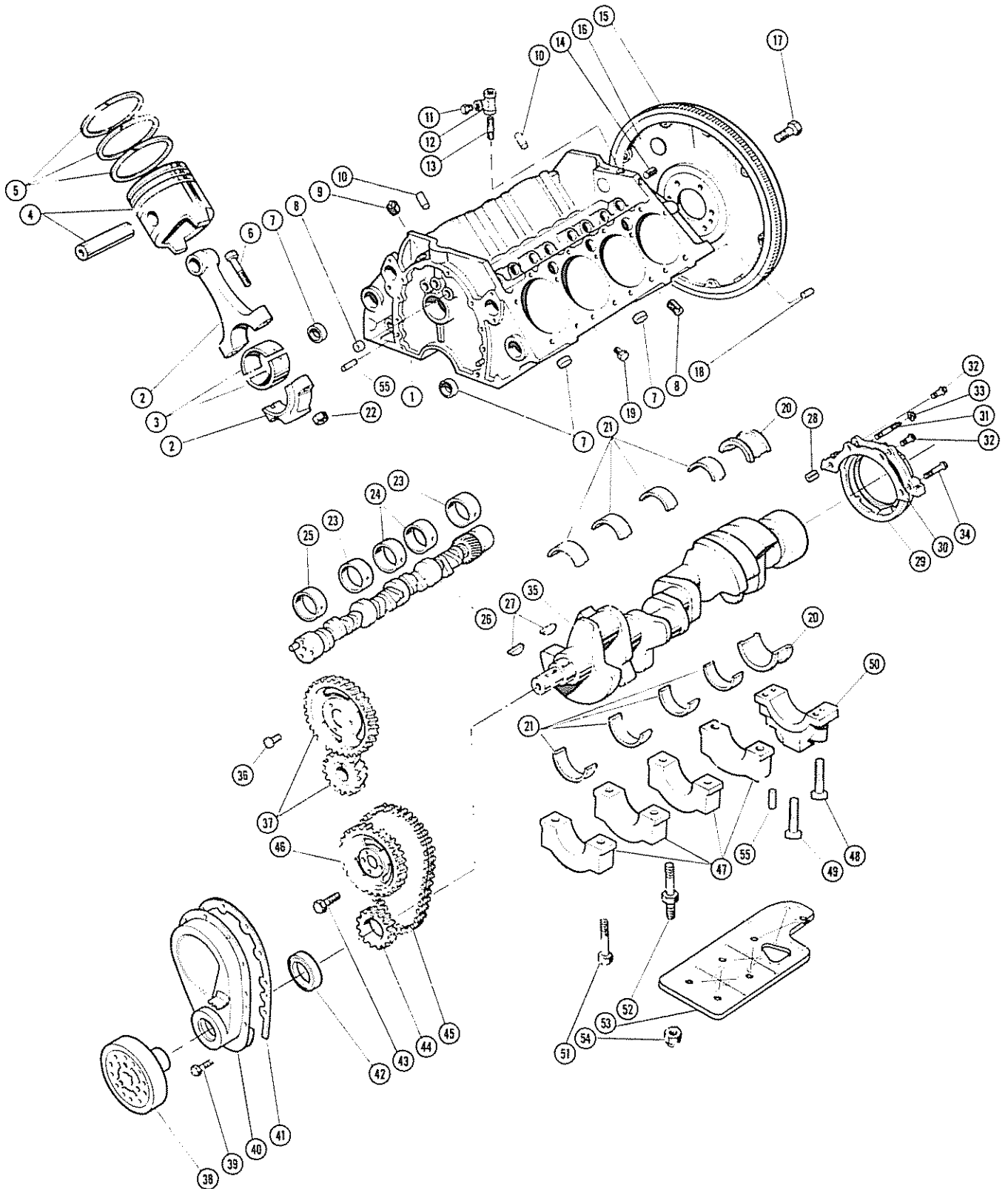
Engine rotation is identified as "RH" or "LH" with the Model No., and rotation is always as viewed from the fly-wheel end of the engine. In some instances, propeller shaft rotation may be opposite to that of the engine. Always refer to engine model number for engine rotation. Quantity usage of each part per engine is shown in the appropriate "RH" or "LH" column on each page.

Crusader Marine reserves the right to change at any time without notice engine design, materials, specifications, parts and part numbers. Crusader Marine warrants its replacement parts for 90 days from date of installation. Obligation is limited to exchange of like part and does not include labor for replacement or freight charges.

CRUSADER MARINE ENGINES
7100 E. 15 MILE ROAD - STERLING HEIGHTS, MICHIGAN 48077
TELEPHONE: (313) 264-1200 TELEX: 230435 TEECORP
FAX: (313) 264-2344

33615	Oil Pan Gasket Kit
21005	Intake Manifold Gasket Kit
22444	Overhaul Gasket Kit
22445	Valve Grind Gasket Kit
42005	Starter Brush Holder Kit
20280	4" Riser Kit (RWC) Factory & Field Installed (To be used with 96120 & 96121 Manifold)
21128	4" Riser Kit (RWC) Factory Installed (To be used with 97752 & 97753 Manifold)
21134	4" Riser Kit (RWC) Field Installed (To be used with 97752 & 97753 Manifold)
21097	8" Riser Kit (RWC) Factory & Field Installed (To be used with 96120 & 96121 Manifold)
21130	8" Riser Kit (RWC) Factory Installed (To be used with 97752 & 97753 Manifold)
21136	8" Riser Kit (RWC) Field Installed (To be used with 97752 & 97753 Manifold)
22298	12" Riser Kit (RWC) (FWC) Factory & Field Installed (To be used with 96120 & 96121 Manifold)
21132	12" Riser Kit (RWC) Factory Installed (To be used with 97752 & 97753 Manifold)
21138	12" Riser Kit (RWC) Field Installed (To be used with 97752 & 97753 Manifold)
22034	4" Riser Kit (FWC) Factory & Field Installed (To be used with 96120 & 96121 Manifold)
21129	4" Riser Kit (FWC) Factory Installed (To be used with 97752 & 97753 Manifold)
21135	4" Riser Kit (FWC) Field Installed (To be used with 97752 & 97753 Manifold)
22035	8" Riser Kit (FWC) Factory & Field Installed (To be used with 96120 & 96121 Manifold)

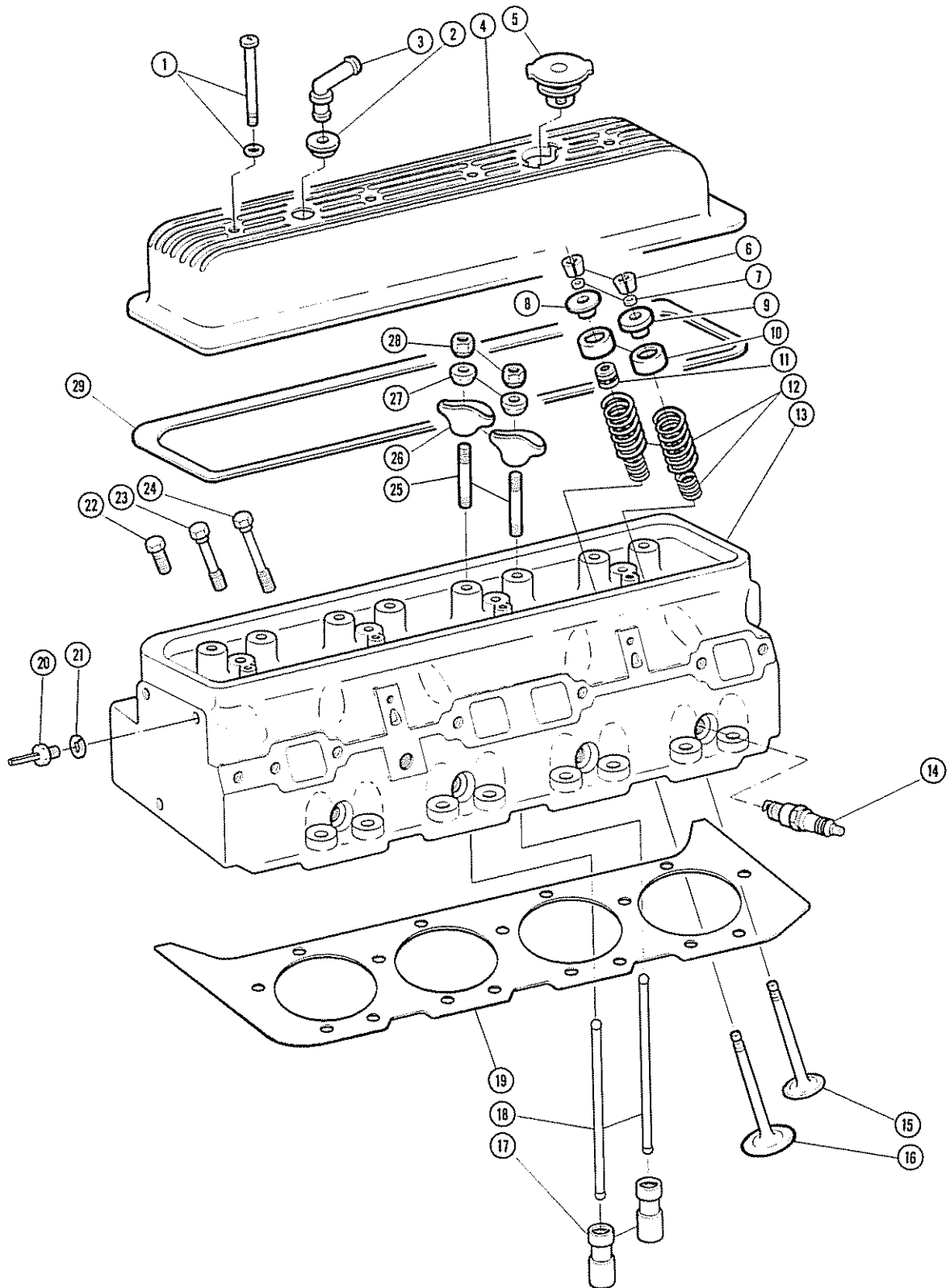
21131	8" Riser Kit (FWC) Factory Installed (To be used with 97752 & 97753 Manifold)
21137	8" Riser Kit (FWC) Field Installed (To be used with 97752 & 97753 Manifold)
21133	12" Riser Kit (FWC) Factory Installed (To be used with 97752 & 97753 Manifold)
21139	12" Riser Kit (FWC) Field Installed (To be used with 97752 & 97753 Manifold)
22369	Fresh Water Cooling Kit Factory Installed (To be used with 96120 & 96121 Manifold)
22589	Fresh Water Cooling Kit Factory Installed (To be used with 97752 & 97753 Manifold)
22362	Fresh Water Cooling Kit Field Installed (To be used with 96120 & 96121 Manifold)
22590	Fresh Water Cooling Kit Field Installed (To be used with 97752 & 97753 Manifold)
22095	Swivel Elbow Kit - 3" Outlet
22472	Swivel Elbow Kit - 4" Outlet
45334	Carburetor Overhaul Kit 4 BBL
45336	Carburetor Gasket Kit 4 BBL
22152	Noise Suppression Kit
N/A	Complete Engine Hose Kit
22104	On Board Kit with Delco Distributor
22414	On Board Kit with Mallory Distributor
22314	On Board Kit with Prestolite Distributor
22616	On Board Kit with Prestolite Breakerless Distributor
20310	Minor Repair Kit, Raw Water Pump
20311	Major Repair Kit, Raw Water Pump
1006138	Warner Gear Gasket & Seal Kit



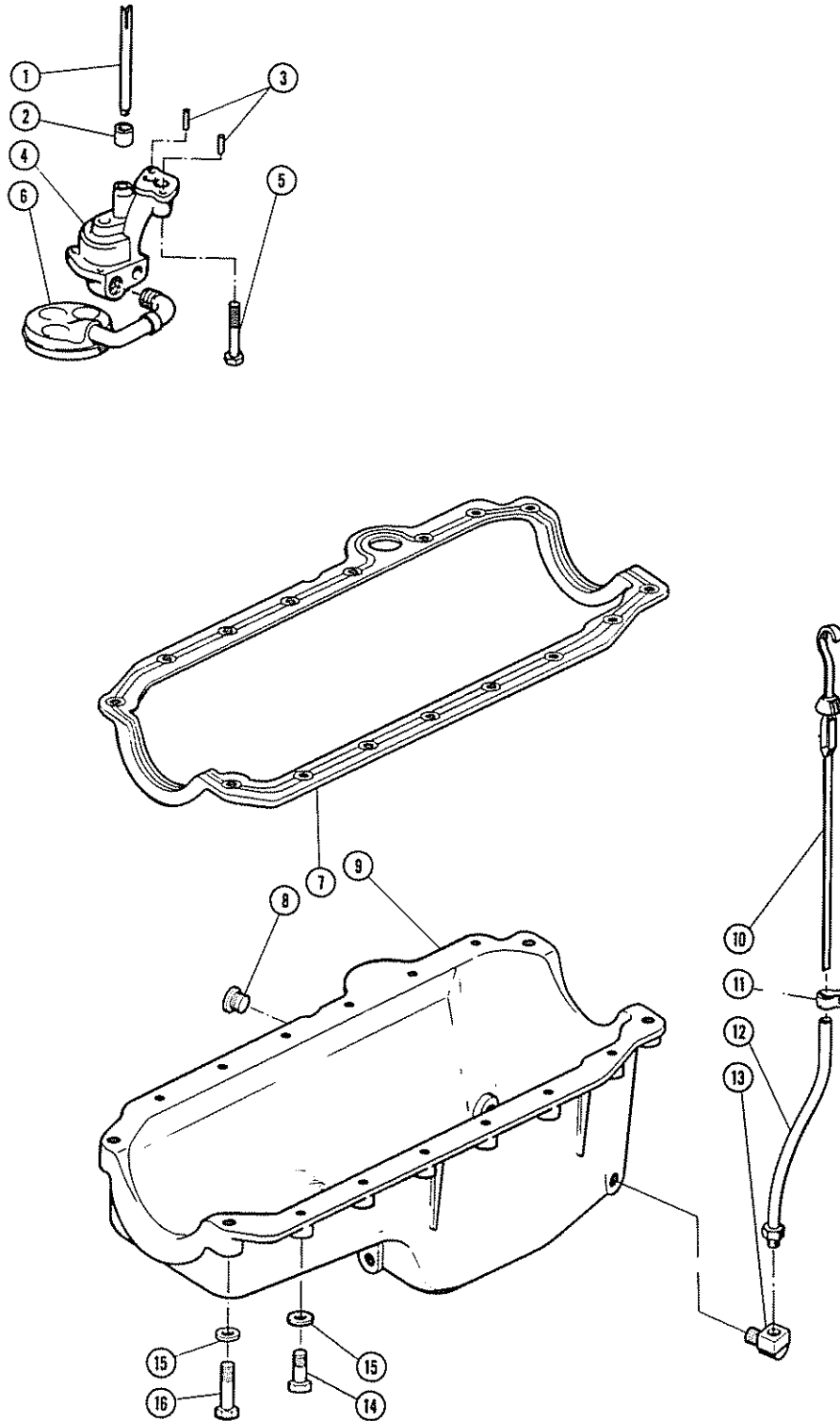
ITEM	PART NO.	DESCRIPTION	305 QTY. 350			
			RH	LH	RH	LH
1	33657	Production Block Assembly, 305 C.I.D. Auto Rotation	-	1	-	-
1	33658	Production Block Assembly, 305 C.I.D. Opposite Rotation	1	-	-	-
1	33659	Production Block Assembly, 350 C.I.D. Auto Rotation	-	-	-	1
1	33660	Production Block Assembly, 350 C.I.D. Opposite Rotation	-	-	1	-
2	20765	Connecting Rod Assembly	8	8	8	8
3	33115	Bearing, Connecting Rod (Std.)	8	8	8	8
3	33120	Bearing, Connecting Rod (.001 US)	8	8	8	8
3	33121	Bearing, Connecting Rod (.002 US)	8	8	8	8
3	33116	Bearing, Connecting Rod (.010 US)	8	8	8	8
3	33117	Bearing, Connecting Rod (.020 US)	8	8	8	8
4	33706	Piston & Pin Assembly (Std.)	8	8	-	-
4	33707	Piston & Pin Assembly (.010 O.S.)	8	8	-	-
4	33708	Piston & Pin Assembly (.030 O.S.)	8	8	-	-
4	33691	Piston & Pin Assembly (Std.)	-	-	8	8
4	33710	Piston & Pin Assembly (.010 O.S.)	-	-	8	8
4	33711	Piston & Pin Assembly (.030 O.S.)	-	-	8	8
5	33302	Ring Set (Std.)	8	8	-	-
5	33322	Ring Set (.030 O.S.)	8	8	-	-
5	12370	Ring Set (Std.)	-	-	8	8
5	12372	Ring Set (.030 O.S.)	-	-	8	8
6	33078	Bolt Connecting Rod	16	16	16	16
7	91330	Cup Plug Water Jacket	8	8	8	8
8	33089	Plug, Oil Galley Crossover	3	3	3	3
9	444776	Plug, Front, Lifter Oil Supply	2	2	2	2
10	585927	Pin, Cylinder Head Locating	4	4	4	4
11	127950	Plug 1/8 NPT	1	1	1	1
12	444222	Tee, 1/8 x 1/8 x 1/8 Pipe	1	1	1	1
13	105406	Pipe Nipple, 1/8 x 1 1/2 Galvanized	1	1	1	1
14	33089	Plug, 1/4" NPT	3	3	3	3
15	33264	Ring, Gear Flywheel	1	1	1	1
16	33643	Flywheel Assembly	1	1	1	1
17	838653	Bolt, Flywheel Special	6	6	6	6

ITEM	PART NO.	DESCRIPTION	305 QTY. 350			
			RH	LH	RH	LH
18	30152	Dowel, Flywheel Housing Locating	2	2	2	2
19	127951	Plug, Water Jacket Drain	2	2	2	2
20	33405	Bearing, Crankshaft Rear (Std.)	1	1	1	1
20	33168	Bearing, Crankshaft Rear (.001 US)	1	1	1	1
20	33169	Bearing, Crankshaft Rear (.002 US)	1	1	1	1
20	33170	Bearing, Crankshaft Rear (.010 US)	1	1	1	1
20	33171	Bearing, Crankshaft Rear (.020 US)	1	1	1	1
21	33404	Main Bearing #1, #2, #3, #4 (Std.) Upper & Lower	4	4	4	4
21	33164	Main Bearing #1, #2, #3, #4 (.001 US) Upper & Lower	4	4	4	4
21	33165	Main Bearing #1, #2, #3, #4 (.002 US) Upper & Lower	4	4	4	4
21	33166	Main Bearing #1, #2, #3, #4 (.010 US) Upper & Lower	4	4	4	4
21	33167	Main Bearing #1, #2, #3, #4 (.020 US) Upper & Lower	4	4	4	4
22	33079	Nut, Connecting Rod Bolt	16	16	16	16
23	33400	Bearing, Camshaft #2 & Rear	2	2	2	2
24	33401	Bearing, Camshaft #3 & #4	2	2	2	2
25	33399	Bearing, Camshaft #1	1	1	1	1
26	20570	Camshaft		1		1
26	20571	Camshaft	1		1	
27	106751	Key, Crank Gear & Damper	2	2	2	2
28	33685	Dowel Pin Locating Rear Main Seal	1	1	1	1
29	30596	Seal, Rear Main with Retainer	1		1	
29	30597	Seal, Rear Main with Retainer		1		1
30	33620	Gasket, Retainer Rear Main Seal	1	1	1	1
31	33686	Stud, Seal Retainer	1	1	1	1
32	33689	Bolt, Short Seal Retaining	2	2	2	2
33	33687	Nut, Seal Retainer	1	1	1	1
34	33688	Bolt, Long Seal Retaining	1	1	1	1
35	33702	Crankshaft	1	-	-	-
35	33703	Crankshaft	-	1	-	-
35	33704	Crankshaft	-	-	1	-
35	33705	Crankshaft	-	-	-	1
36	30166	Bolt, Camshaft Sprocket $\frac{5}{16}$ - 18 x $\frac{7}{8}$ " Hex HD (GR 5)		3		3

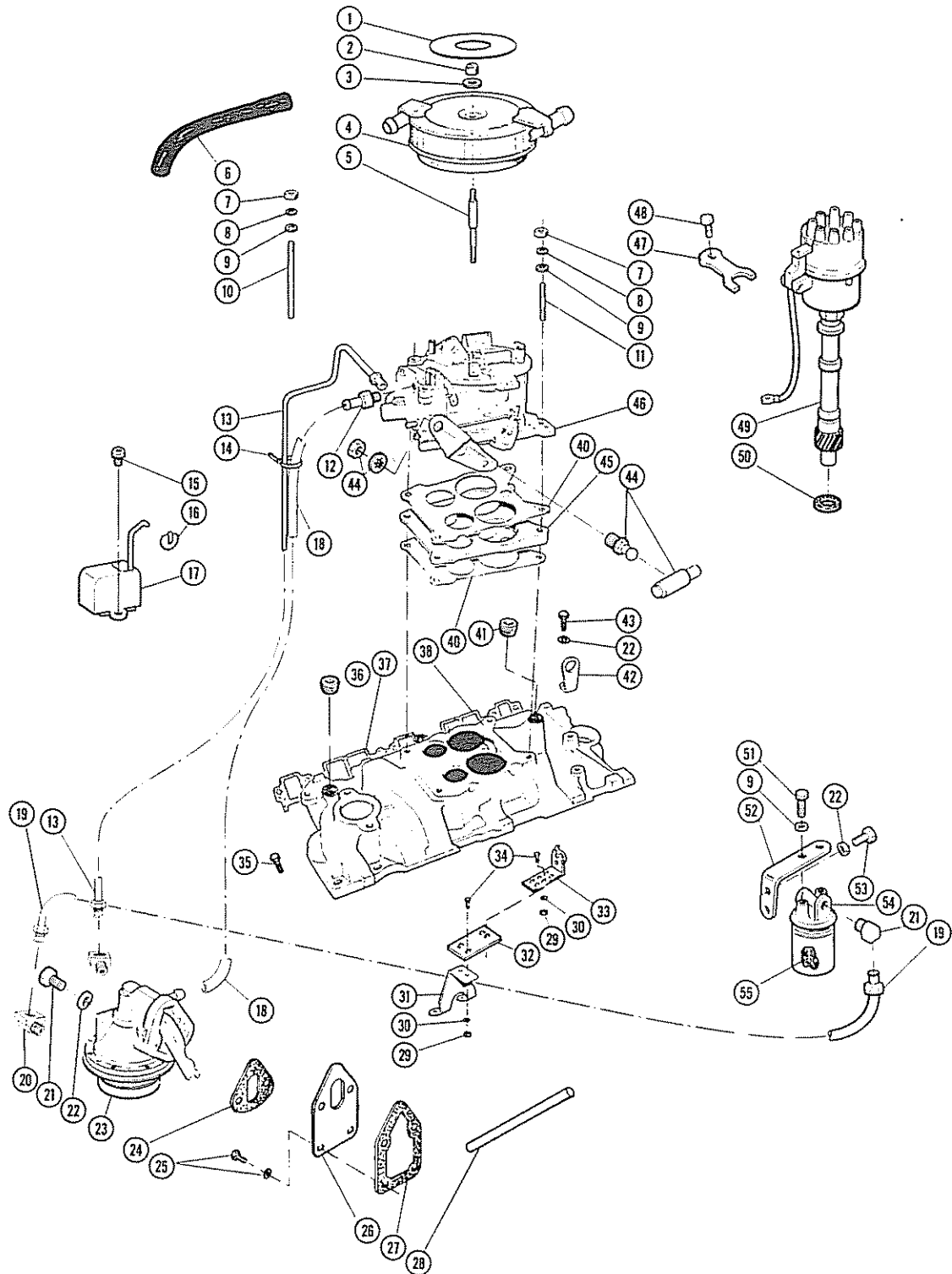
ITEM	PART NO.	DESCRIPTION	305 QTY. 350			
			RH	LH	RH	LH
37	30271	Gear, Camshaft & Crankshaft Matched Set	1		1	
38	33306	Harmonic Balancer	1	1	1	1
39	20790	Screw and Washer Assembly	10	10	10	10
40	33307	Cover, Front (Includes Seal & Timing Tab)	-	1	-	1
40	33308	Cover, Front (Includes Seal & Timing Tab)	1	-	1	-
41	20129	Gasket, Front Cover	1	1	1	1
42	33377	Seal, Oil-Front Cover	1	-	1	-
42	33381	Seal, Oil-Front Cover	-	1	-	1
43	33698	Bolt, Camshaft $\frac{5}{16}$ - 18 x $\frac{7}{8}$ " Torx HD T-40	3	-	3	-
44	33697	Sprocket Crankshaft	-	1	-	1
45	33699	Chain Timing	-	1	-	1
46	33696	Sprocket Camshaft	-	1	-	1
47	33093	Cap Main Bearing #1, #2, #3, #4	4	4	4	4
48	33083	Bolt, Main Bearing Cap	5	5	5	5
49	33232	Bolt, Oil Pump Attaching	1	1	1	1
50	NCSI	Cap Main Bearing Rear	1	1	1	1
51	33033	Bolt, Main Bearing Cap	3	3	3	3
52	33316	Stud, Main Bearing Cap	5	5	5	5
53	33317	Baffle Oil	1	1	1	1
54	33124	Nut, Oil Pan Baffle	3	3	3	3
55	30157	Dowel Pin, Oil Pump Locating	1	1	1	1
56	20045	Plug, Cupped Typ. $2\frac{1}{8}$ Diameter (Not shown)	1	1	1	1



ITEM	PART NO.	DESCRIPTION	305 QTY. 350			
			RH	LH	RH	LH
1	33648	Bolt and Sealing Washer Assembly	8	8	8	8
2	1104595	Grommet, Breather Vent	2	2	2	2
3	1104594	Elbow, Crankcase Vent	2	2	2	2
4	33647	Cover, Valve Rocker	2	2	2	2
5	20105	Oil Fill Cap	2	2	2	2
6	33201	Keeper, Valve Spring	16	16	16	16
7	20056	Seal, Valve Stem	16	16	16	16
8	33523	Cap, Intake Valve Spring	8	8	8	8
9	33333	Rotator, Exhaust Valve Only	8	8	8	8
10	33211	Shield, Valve Stem Oil	16	16	16	16
11	33677	Seal, Valve Stem Intake Only	8	8	8	8
12	33241	Spring & Damper Assembly	16	16	16	16
13	33692	Cylinder Head 305	2	2	-	-
13	33693	Cylinder Head 350			2	2
14	97782	Spark Plug	8	8	8	8
15	33469	Valve, Exhaust	8	8	8	8
16	33651	Valve, Inlet	8	8	8	8
17	30016	Lifter, Hydraulic	16	16	16	16
18	33552	Rod, Push	16	16	16	16
19	33345	Gasket, Cylinder Head	2	2	2	2
20	97661	Bolt, Hex Head Wire Clamp	2	2	2	2
21	103324	Washer, 3/8 Lock Medium	2	2	2	2
22	33527	Bolt, Cylinder Head Short	16	16	16	16
23	33526	Bolt, Cylinder Head Medium	4	4	4	4
24	33525	Bolt, Cylinder Head Long	14	14	14	14
25	33074	Stud, Valve Rocker Arm .003 O.S.	16	16	16	16
26	12155	Arm, Valve Rocker	16	16	16	16
27	20583	Ball, Valve Rocker Arm	16	16	16	16
28	20582	Nut, Valve Rocker Arm	16	16	16	16
29	97981	Gasket, Valve Cover	2	2	2	2
30	22575	Decal, Horsepower - 220 (Not shown)				
30	22574	Decal, Horsepower - 270 (Not shown)				
31	22483	Decal, "Crusader" - 220 (Not shown)				
31	22483	Decal, "Crusader" - 270 (Not shown)				



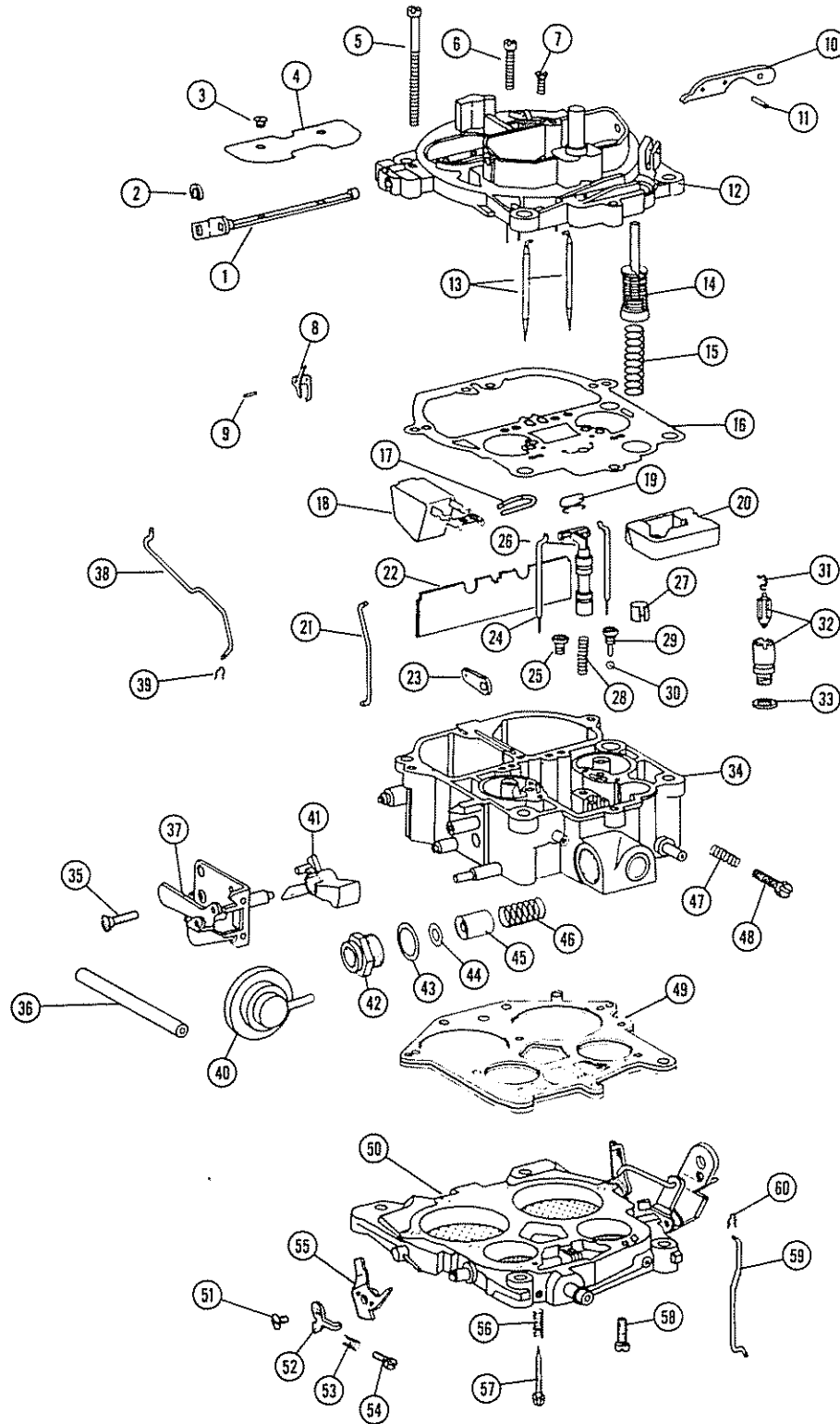
ITEM	PART NO.	DESCRIPTION	305 QTY. 350			
			RH	LH	RH	LH
1	12152	Shaft Extension	1	1	1	1
2	33131	Retainer Shaft	1	1	1	1
3	30157	Pin, Dowel, Pump Locating	1	1	1	1
4	33190	Pump Assembly, Oil	1	1	1	1
5	33232	Bolt, Oil Pump Attaching	1	1	1	1
6	20153	Oil Screen Assembly	1	1	1	1
7	33615	Gasket, Oil Pan	1	1	1	1
8	444868	Pipe Plug, 3/8" Hex Socket	1	1	1	1
9	97920	Oil Pan	1	1	1	1
10	21045	Gauge Assembly Oil Level	1	1	1	1
11	96566	Clamp Support Dipstick	1	1	1	1
12	97215	Dipstick Tube, 12° Installation	1	1	1	1
12	97488	Dipstick Tube, Alt. for 0° Oil Level Gauge (V-Drive Application Only)	1	1	1	1
13	137423	Elbow 90° Inverted Flare 3/8" Pipe x 1/2" Tube	1	1	1	1
14	179799	Bolt, Hex HD 1/4 - 20 x 1 1/4"	14	14	14	14
15	103319	Washer, Lock 1/4"	16	16	16	16
16	179801	Bolt, Hex HD 1/4 - 20 x 1 1/2"	4	4	4	4



ITEM	PART NO.	DESCRIPTION	305 QTY. 350			
			RH	LH	RH	LH
1	97916	Decal, Flame Arrestor	1	1	1	1
2	20231	Nut ¼-20 Elastic Stop	1	1	1	1
3	103339	Washer ¼" Flat	1	1	1	1
4	97595	Flame Arrestor Dual Vent	1	1	1	1
5	96926	Stud Carburetor ¼ - 20 x 3¾	1	1	1	1
6	20806	Heater Hose ⅝" x 12" Long	2	2	2	2
7	102634	Nut, Hex, ⅝-18	4	4	4	4
8	103320	Washer, Lock ⅝" Medium	5	5	5	5
9	103340	Washer, Flat ⅝"	4	4	4	4
10	96818	Stud Carburetor ⅝ - 18 x 4¼"	2	2	2	2
11	96817	12° Stud Carburetor ⅝ - 18 x 2¼"	2	2	2	2
11	96480	0° Stud Carburetor ⅝ - 18 x 1¼"	2	2	2	2
12	97829	Hose Adaptor	1	1	1	1
13	97987	Fuel Line, Pump to Carburetor	1	1	1	1
14	22410	Tie Wrap, Nylon, 5½" Long	2	2	2	2
15	273513	Screw and Washer Assembly	1	1	1	1
16	30123	Clip, Choke	1	1	1	1
17	33240	Choke	1	1	1	1
18	22401	Vent, Tygon Tubing ⅜" O.D. x ¼" I.D. 30" Long	1	1	1	1
19	97834	Fuel Line, Filter to Pump	1	1	1	1
20	30573	Elbow, Inverted Flare ⅜	1	1	1	1
21	179843	⅜ - 16 x 1½" Hex HD GR5	1	1	1	1
22	103321	Washer, Lock ⅜ Medium	2	2	2	2
23	97842	Fuel Pump Carter 305, 350	2	2	2	2
24	91340	Gasket-Fuel Pump Flange	1	1	1	1
25	20790	Screw - Lockwasher	4	4	4	4
26	91607	Plate, Fuel Pump Mounting	1	1	1	1
27	91341	Gasket, Fuel Pump Plate	1	1	1	1
28	30135	Rod, Fuel Pump Push	1	1	1	1
29	12034	Nut; #10-24 Zinc Plated	4	4	4	4
30	106497	Washer #10 Medium Lock	4	4	4	4
31	96683	Throttle Bracket	1	1	1	1

ITEM	PART NO.	DESCRIPTION	305 QTY. 350			
			RH	LH	RH	LH
32	97280	Plate, Throttle Control	1	1	1	1
33	21033	Clip, Shift Cable, Single Control	1	1	1	1
34	443874	Screw; 10 - 24 x 1¼ Hex HD Machine	4	4	4	4
35	179845	Bolt, Intake	4	4	4	4
36	444705	Pipe Plug, ½ NPT Hex Socket	1	1	1	1
37	21005	Gasket, Intake Manifold	1	1	1	1
38	33712	Intake Manifold	1	1	1	1
40	97033	Gasket; 4 BBL Carburetor Mounting	2	2	2	2
41	444868	Pipe Plug ¾ Hex Socket	1	1	1	1
42	96845	Strap, Lifting	2	2	2	2
43	179839	Bolt ¾ - 16 x 1" Hex HD (GR5)	4	4	4	4
44	21025	Ball Joint, Single Station	1	1	1	1
45	97122	Wedge Plate	1	1	1	1
46	45356	Carburetor, 4 BBL	1	1	1	1
47	20799	Clamp, Distributor, Hold Down	1	1	1	1
48	97948	Bolt, Distributor, Hold Down	1	1	1	1
49	37061	Distributor Assembly-Mallory	1	1	1	1
49	37067	Distributor, Breakerless Prestolite	1	1	1	1
50	33397	Gasket, Distributor Mounting	1	1	1	1
51	181339	Bolt ¾ - 24 x 1" Hex HD (GR5)	2	2	2	2
52	97259	Bracket, Fuel Filter	1	1	1	1
53	179837	Bolt ¾ - 16 x ¾" Hex HD (GR5)	1	1	1	1
54	97889	Fuel Filter Assembly	1	1	1	1
55	91606	Fuel Filter Element	1	1	1	1

NOTES

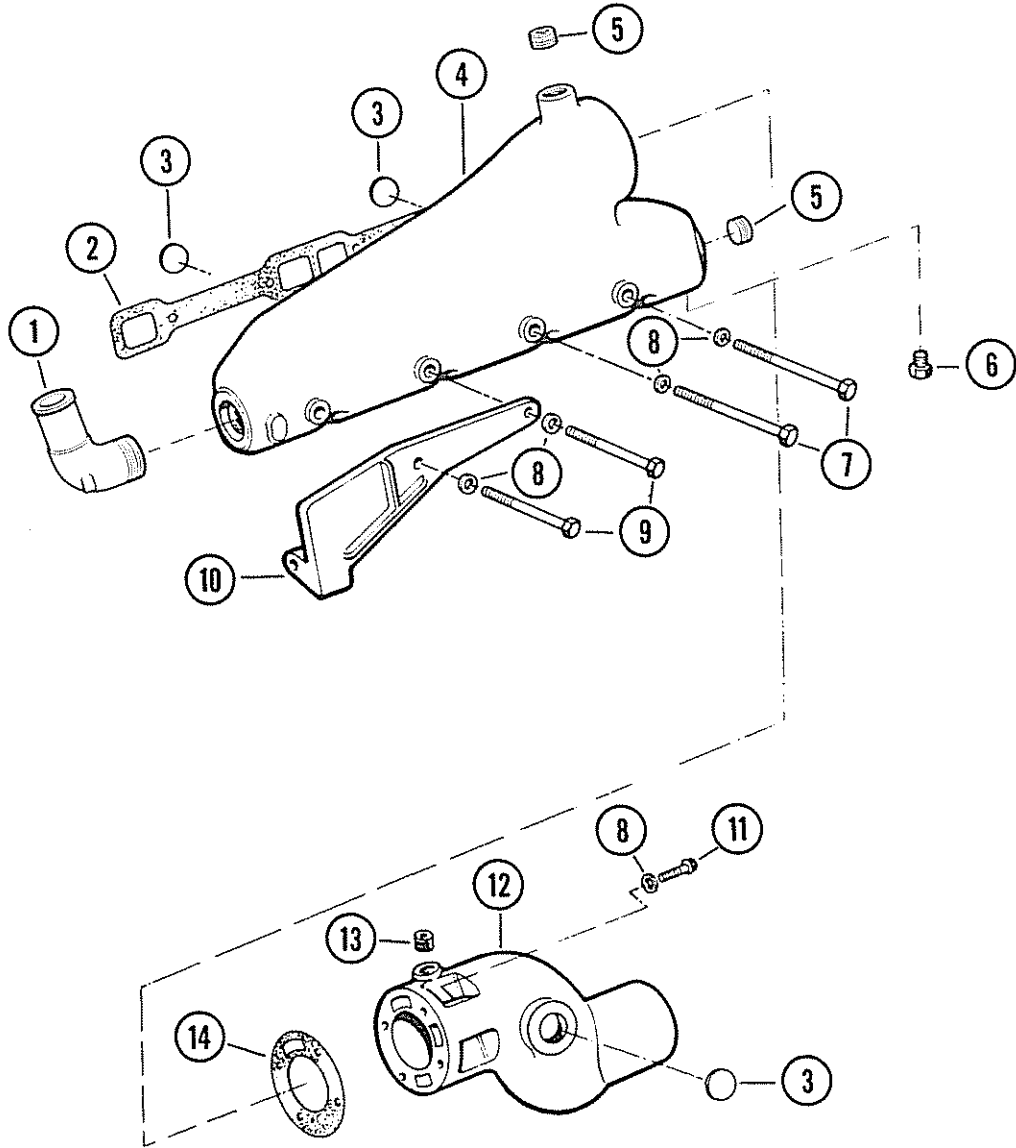


ITEM	PART NO.	DESCRIPTION	305 QTY. 350			
			RH	LH	RH	LH
1	45291	Choke Shaft and Lever Assembly	1	1	1	1
2	45287	Clip, Choke Rod (Horseshoe)	1	1	1	1
3	45293	Screw, Choke Valve	2	2	2	2
4	45292	Choke Valve	1	1	1	1
5	45275	Screw, Air Horn (Long)	2	2	2	2
6	45276	Screw, Air Horn (Intermediate)	5	5	5	5
7	45277	Screw, Air Horn (Short)	2	2	2	2
8	45280	Lever, Air Valve Lockout	1	1	1	1
9	45274	Roll Pin, Lever Hinge	1	1	1	1
10	45273	Lever, Pump Actuating	1	1	1	1
11	45274	Roll Pin, Lever Hinge	1	1	1	1
12	45271	Air Horn Assembly	1	1	1	1
13	45278	Metering Rod, Secondary	2	2	2	2
14	45319	Pump Assembly	1	1	1	1
15	45318	Spring, Pump Return	1	1	1	1
16	45272	Gasket, Air Horn	1	1	1	1
17	45304	Hinge Pin, Float Assembly	1	1	1	1
18	45303	Float Assembly	1	1	1	1
19	45309	Spring, Metering Rod, Primary	1	1	1	1
20	45316	Insert, Float Bowl	1	1	1	1
21	45295	Rod, Choke	1	1	1	1
22	45317	Baffle, Float Bowl	1	1	1	1
23	45294	Lever, Intermediate Choke	1	1	1	1
24	45308	Metering Rod Primary	1	1	1	1
25	45293	Jet Primary	2	2	2	2
26	45305	Primary Power Piston Assembly	1	1	1	1
27	45307	Retainer, Power Piston	1	1	1	1
28	45306	Spring, Power Piston	1	1	1	1
29	45299	Retainer, Pump Discharge Ball	1	1	1	1
30	45120	Ball, Pump Discharge	1	1	1	1
31	45301	Pull Clip, Float Needle	1	1	1	1
32	45300	Float Needle and Seat Assembly	1	1	1	1

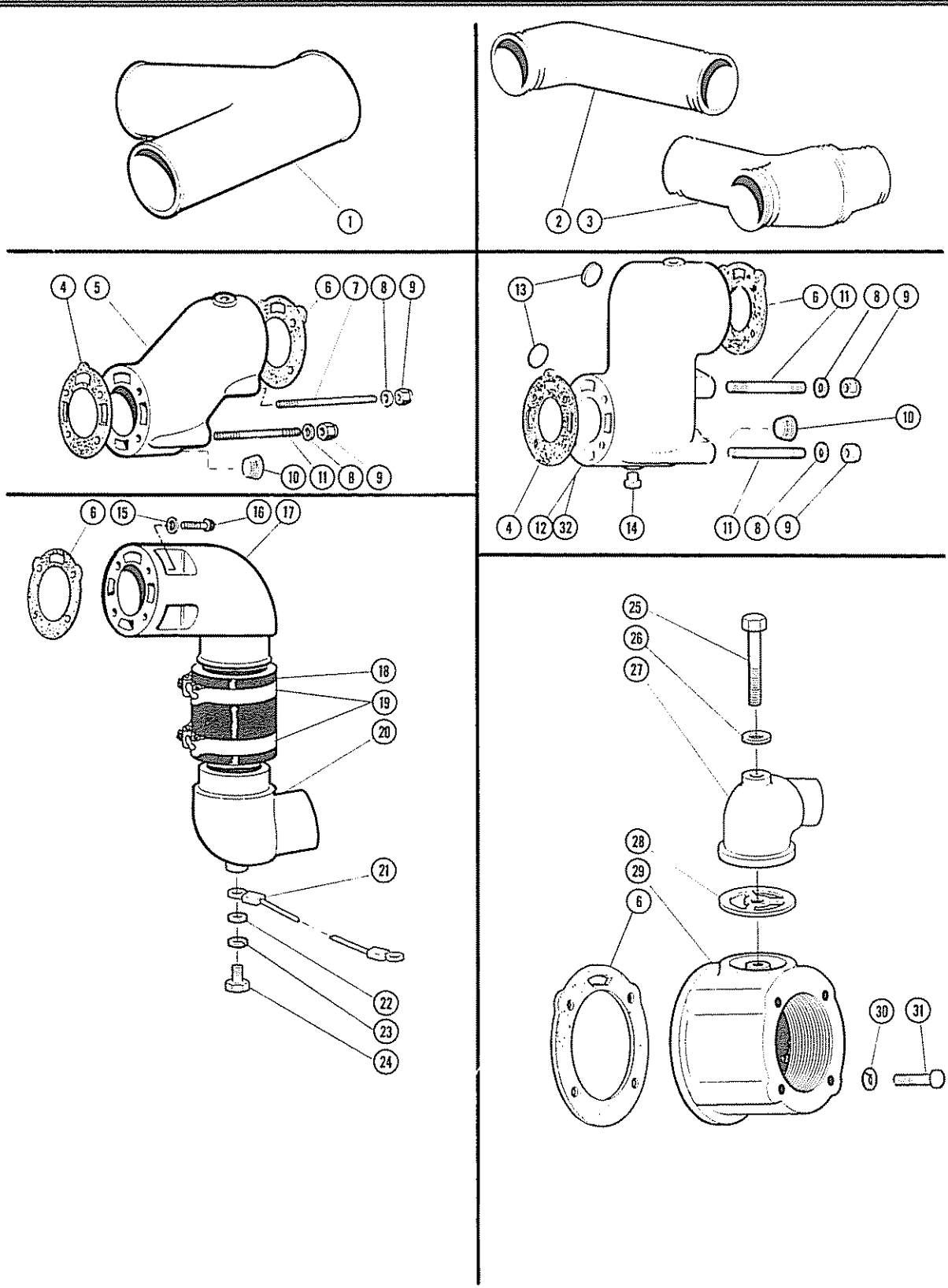
ITEM	PART NO.	DESCRIPTION	305 QTY. 350			
			RH	LH	RH	LH
33	45302	Gasket, Float Needle Seat	1	1	1	1
34	45297	Float Bowl Assembly	1	1	1	1
35	45288	Screw, Control Attaching	1	1	1	1
36	45290	Hose, Vacuum	1	1	1	1
37	45284	Vacuum Break Control Bracket Assembly	1	1	1	1
38	45286	Rod, Vacuum Break	1	1	1	1
39	45287	Clip, Vacuum Break Rod	1	1	1	1
40	45285	Vacuum Break Control Assembly	1	1	1	1
41	45289	Cam, Fast Idle	1	1	1	1
42	45310	5/16 Filter Nut, Fuel Inlet	1	1	1	1
42	45358	3/8 Filter Nut, Fuel Inlet	1	1	1	1
43	45311	Gasket, Filter Nut - Use #45359 Gasket, Fuel Filter (Part of Item 45)	1	1	1	1
44	45312	Filter, Fuel Inlet - Use #45357	1	1	1	1
46	45313	Spring, Fuel Filter	1	1	1	1
47	45314	Spring, Idle Stop Screw	1	1	1	1
48	45315	Screw, Idle Stop	1	1	1	1
49	45224	Gasket, Throttle Body	1	1	1	1
50	45323	Throttle Body Assembly	1	1	1	1
51	45339	Screw, Cam and Fast Idle Lever	1	1	1	1
52	45329	Lever, Fast Idle	1	1	1	1
53	45340	Spring, Fast Idle Screw	1	1	1	1
54	45339	Screw, Fast Idle Adjusting	1	1	1	1
55	45328	Lever, Cam	1	1	1	1
56	45327	Spring, Idle Needle	2	2	2	2
57	45326	Needle, Idle	2	2	2	2
58	45325	Screw, Throttle	3	3	3	3
59	45321	Rod, Pump	1	1	1	1
60	45320	Clip, Pump Rod (Hairpin)	1	1	1	1
61	45356	Carburetor Assembly	1	1	1	1
62	45279	Secondary Metering Rod Holder Kit	AR	AR	AR	AR
63	45282	Air Valve Spring and Cam Kit	AR	AR	AR	AR
64	45283	Choke Shaft, Lever and Valve Kit	AR	AR	AR	AR

ITEM	PART NO.	DESCRIPTION	305 QTY. 350			
			RH	LH	RH	LH
65	45336	Gasket Kit	AR	AR	AR	AR
66	45334	Major Overhaul Kit	AR	AR	AR	AR

ITEM	PART NO.	DESCRIPTION	305 QTY. 350			
			RH	LH	RH	LH
1	20271	Bolt, $\frac{3}{8}$ - 16 x 2 $\frac{3}{4}$ " Hex HD SSTL	4	4	4	4
2	116103	Washer, $\frac{3}{8}$ Copper Flat	4	4	4	4
3	96144	Elbow, Water Inlet, Exhaust Manifold	2	2	2	2
4	96216	Gasket, Water Inlet, Elbow	2	2	2	2
5	96339	Plug, $\frac{3}{4}$ Brass, Tapped Pipe	2	2	2	2
6	96306	Gasket, Exhaust Manifold	2	2	2	2
7	20244	Cup Plug 1 $\frac{1}{4}$ S.S.	6	6	6	6
8	96120	Exhaust Manifold Left	1	1	1	1
8	96121	Exhaust Manifold Right (Shown in Figure)	1	1	1	1
9	96331	Gasket, Drain Cover	2	2	2	2
10	96292	Cover, Drain	2	2	2	2
11	127951	Plug $\frac{1}{4}$ NPT	2	2	2	2
12	186289	Bolt $\frac{3}{8}$ - 16 x 5	6	6	6	6
13	103321	Washer, Lock $\frac{3}{8}$	8	8	8	8
14	187491	Bolt $\frac{3}{8}$ - 16 x 5 $\frac{1}{2}$	2	2	2	2
15	96422	Alternator Mounting Bracket	1	1	1	1
16	20257	Bolt Ferry Head Cap	8	8	8	8
17	444709	Plug $\frac{3}{4}$ NPT	2	2	2	2
18	96560	Elbow Assembly, 3" Outlet	2	2	2	2
18	97924	Elbow Assembly, 4"	2	2	2	2
19	96562	Gasket, Exhaust, 1-Hole	2	2	2	2



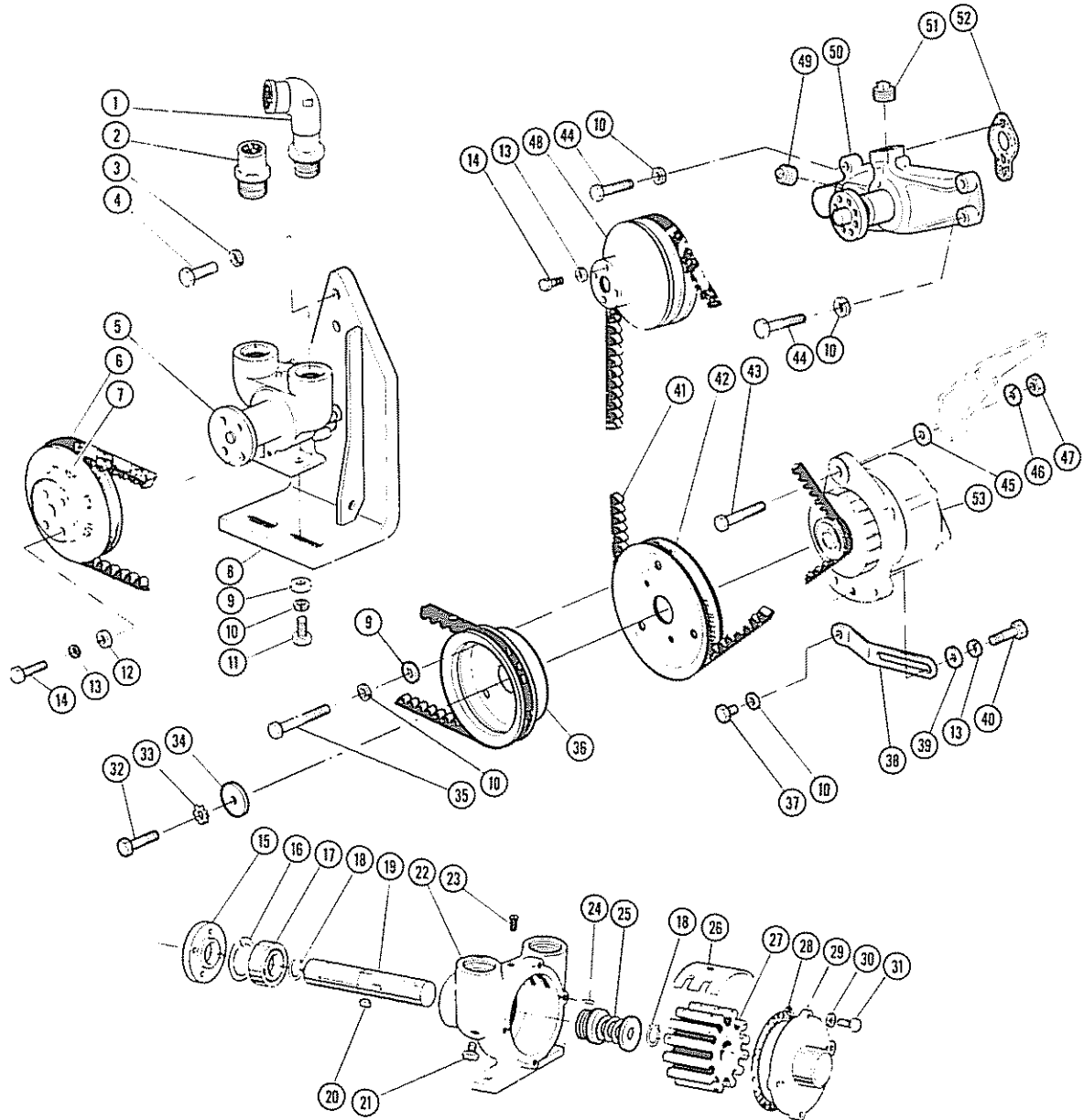
ITEM	PART NO.	DESCRIPTION	305 QTY. 350			
			RH	LH	RH	LH
1	97854	Elbow, Brass 90° Short, 1" Pipe	2	2	2	2
2	96306	Exhaust Manifold Gasket	2	2	2	2
3	20244	Plug, Cupped, 1¼" S.S.	4	4	4	4
4	97752	Exhaust Manifold R.H. with Boss	1	1	1	1
4	97753	Exhaust Manifold L.H. with Boss (Detailed in Figure)	1	1	1	1
5	103876	Pipe Plug, 1" Square Socket	4	4	4	4
6	127951	Pipe Plug, ¼" Hex Head, Brass	2	2	2	2
7	186289	Bolt, ¾" - 16 x 5"	6	6	6	6
8	103321	Washer, Lock ¾"	8	8	8	8
9	187491	Bolt, ¾" - 16 x 5½"	2	2	2	2
10	96422	Bracket, Alternator Mounting	1	1	1	1
11	20257	Bolt, Ferry Head	8	8	8	8
12	96560	Elbow Assembly, 3" Outlet	2	2	2	2
12	97924	Elbow Assembly, 4" Outlet	2	2	2	2
13	444709	Plug, ¾ NPT	2	2	2	2
14	96562	Gasket, Exhaust, 1-Hole	2	2	2	2



ITEM	PART NO.	DESCRIPTION	305 QTY. 350			
			RH	LH	RH	LH
1	91452	"Y" Connector 3" x 3" x 4"	1	1	1	1
2	96937	Crossover "Y" Connector	1	1	1	1
3	96936	Exhaust "Y"	1	1	1	1
4	96108	Gasket; Exhaust Elbow, 3 Hole	AR	AR	AR	AR
5	97772	Riser; Exhaust, 4"	2	2	2	2
6	96562	Gasket; Exhaust Elbow, 1 Hole	AR	AR	AR	AR
7	22033	Stud, 3/8 - 16 x 7 3/4 SSTL	4	4	4	4
8	116103	Washer; 3/8 Copper, Flat	8	8	8	8
9	20472	Elastic Stop Nut, Brass	8	8	8	8
10	113177	Pipe Plug; 3/4, Sq. HD, Brass	2	2	2	2
11	20471	Stud, 3/8 - 16 x 5 3/4" SSTL	8	8	8	8
12	97169	Riser; Exhaust, 8"				
13	20244	Core Plug, 1 1/4" SSTL (Cupped)	4	4	4	4
14	127951	Plug, 1/4 Hex HD Pipe Brass	2	2	2	2
15	103321	Washer, 3/8 Medium Lock	8	8	8	8
16	20257	Ferry Cap; 3/8 - 16 x 1 1/4", (12 Point)	8	8	8	8
17	97386	Elbow; Swivel, Upper	2	2	2	2
18	22221	Hose; Swivel Exhaust, 4 I.D. x 3" Long	2	2	2	2
19	96455	Clamp, Swivel Exhaust	4	4	4	4
20	97387	Elbow; Swivel, Lower, 3" Outlet	2	2	2	2
20	97624	Elbow; Swivel, Lower, 4" Outlet	2	2	2	2
21	97839	Wire Assembly, Ground	2	2	2	2
22	103339	Washer, 1/4 Flat	2	2	2	2
23	103319	Washer, 1/4 Lock	2	2	2	2
24	179791	Bolt, 1/4 - 20 x 1/2" Hex HD (GR5)	2	2	2	2
25	20271	Bolt, 3/8 - 16 x 2 3/4" Hex HD SSTL	2	2	2	2
26	116103	Washer; 3/8 Copper, Flat	2	2	2	2
27	96144	Elbow; Water Inlet, Exhaust Manifold	2	2	2	2
28	96216	Gasket; Water Inlet, Elbow, Exhaust Manifold	2	2	2	2
29	96169	Dry Exhaust Flange 2 1/2" x 8 NPT	2	2	2	2
30	103321	Washer, 3/8 Medium Lock	8	8	8	8
31	186283	Bolt, 3/8 - 16 x 3 1/2" Hex HD (GR5)	8	8	8	8

ITEM	PART NO.	DESCRIPTION	305 QTY. 350			
			RH	LH	RH	LH
32	11006	Riser, Exhaust, 12"	2	2	2	2

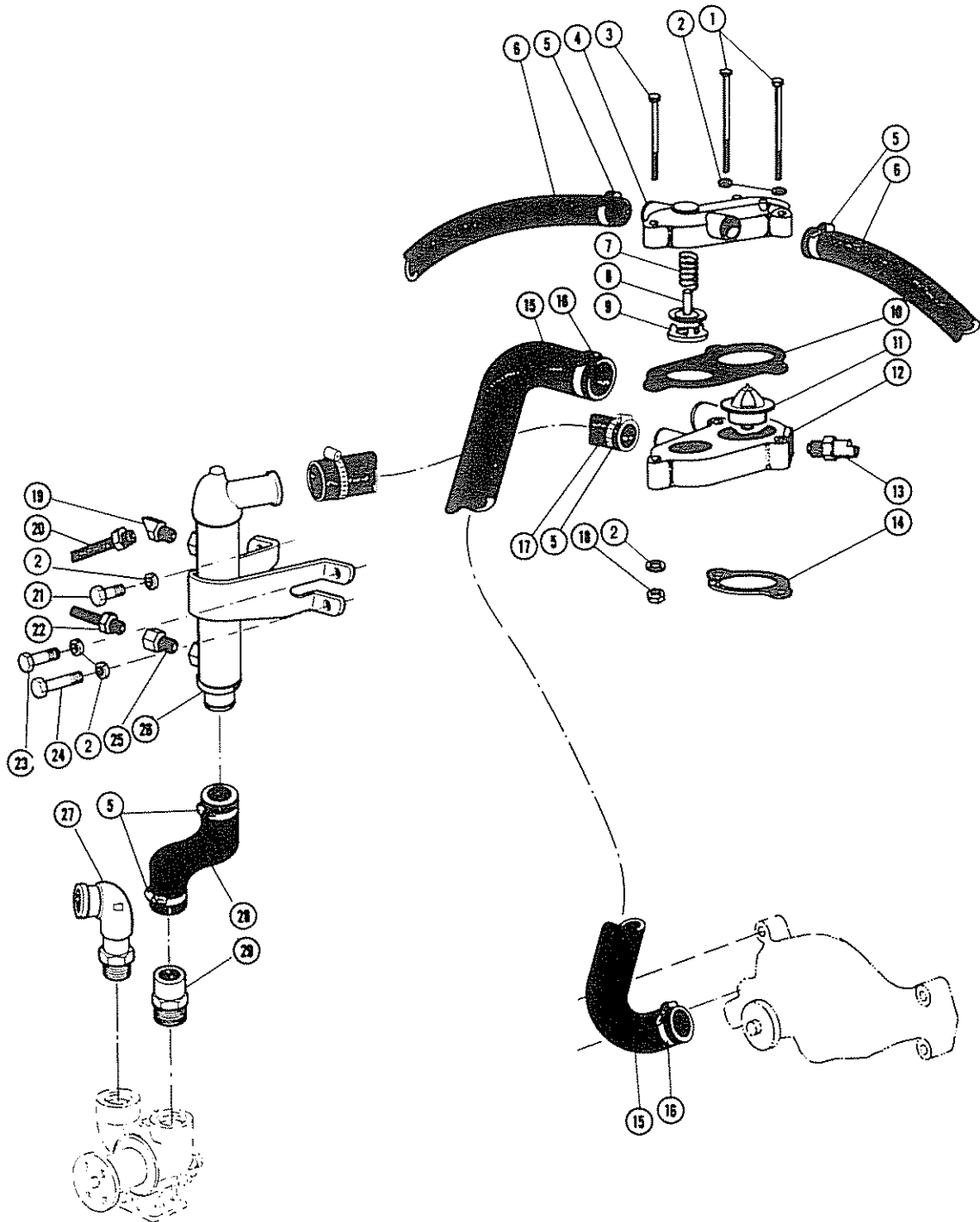
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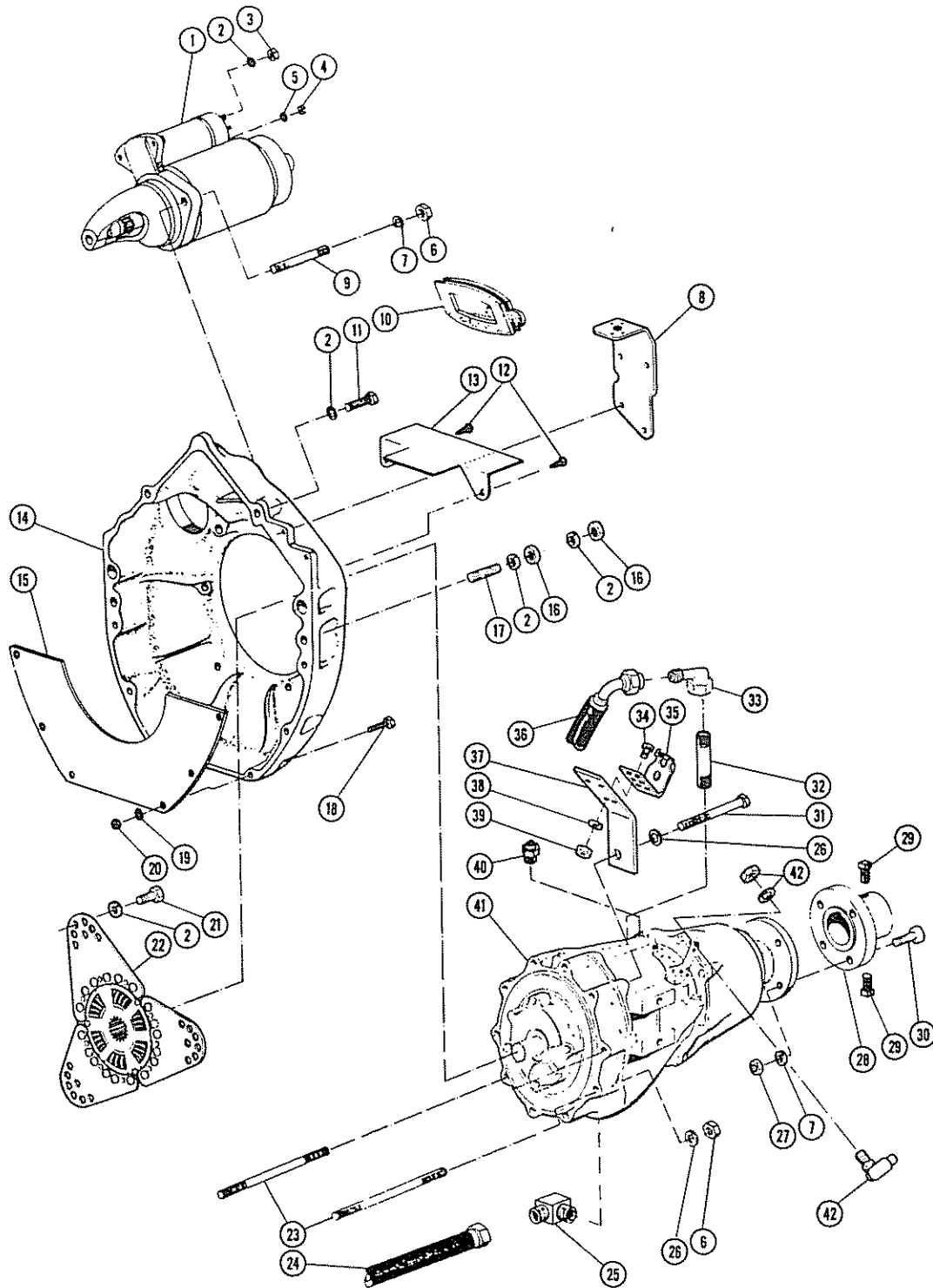
ITEM	PART NO.	DESCRIPTION	305 QTY. 350			
			RH	LH	RH	LH
1	97853	Elbow, 1" Pipe x 1¼" Hose 90° Brass	1	1	1	1
2	97852	Adapter, 1" Pipe x 1¼" Hose Brass	1	1	1	1
3	103322	Washer, 7/16" Lock	2	2	2	2
4	179860	Bolt, 7/16" - 14 x 1¼" Hex HD (GR5)	1	1	1	1
5	97179	Pump Assembly, Raw Water	1	1	1	1
6	97178	Belt Crankshaft to Raw Water Pump	1	1	1	1
7	97952	Pulley Raw Water Pump	1	1	1	1
8	96945	Bracket Raw Water Pump to Mount	1	1	1	1
9	20465	Washer, 3/8" x 7/8" Flat	2	2	2	2
10	103321	Washer, 3/8" Medium Lock	6	6	6	6
11	22249	Bolt, 3/8" - 16 x 1" SSTL Hex HD	2	2	2	2
12	103340	Washer, 5/16" Flat	4	4	4	4
13	103320	Washer, 5/16" Medium Lock	9	9	9	9
14	181336	Bolt, 5/16" - 24 x 3/4" Hex HD (GR5)	8	8	8	8
15	97176	Hub Water Pump	1	1	1	1
16	20294	Retaining Ring, Internal	1	1	1	1
17	20292	Ball Bearing	1	1	1	1
18	20293	Retaining Ring, External	2	2	2	2
19	20304	Shaft	2	2	2	2
20	20295	Shaft Key	1	1	1	1
21	127950	Plug, 1/8" Hex HD Brass Pipe	1	1	1	1
22	20307	Body Service Assembly	1	1	1	1
23	20298	Screw; Flat Head Machine Brass	1	1	1	1
24	20290	Dowel Pin	1	1	1	1
25	20309	Seal and Seat Assembly	1	1	1	1
26	20303	Cam	1	1	1	1
27	20300	Impeller	1	1	1	1
28	20302	Gasket	1	1	1	1
29	20308	Cover and Bushing Assembly	1	1	1	1
29	20296	Bushing Only	1	1	1	1
30	20305	Washer, Lock	4	4	4	4
31	20291	Bolt, Hex HD	4	4	4	4

ITEM	PART NO.	DESCRIPTION	305 QTY. 350			
			RH	LH	RH	LH
32	181408	Bolt $\frac{7}{16}$ - 20 x 2½" Hex HD GR5	1	1	1	1
33	136857	Washer Lock External Tooth $\frac{7}{16}$	1	1	1	1
34	33189	Washer Flat (Special)	1	1	1	1
35	181364	Bolt $\frac{3}{8}$ - 24 x 1"	3	3	3	3
36	97951	Pulley, Crankshaft Raw Water Pump Drive	1	1	1	1
37	179837	Bolt $\frac{3}{8}$ - 16 x ¾" Hex HD (GR5)	1	1	1	1
38	97061	Strap Alternator Adjusting	1	1	1	1
39	20523	Washer, $1\frac{1}{32}$ x $\frac{7}{8}$ Flat	1	1	1	1
40	179816	Bolt, $\frac{5}{16}$ - 18 x ¾" Hex HD (GR5)	1	1	1	1
41	96307	Alternator Belt	1	1	1	1
42	97955	Pulley Crankshaft Alte.	1	1	1	1
43	179893	Bolt, $\frac{1}{2}$ - 13 x 3" Hex HD (GR5)	1	1	1	1
44	179845	Bolt, $\frac{3}{8}$ - 16 x 1¾" Hex HD (GR5)	1	1	1	1
45	103343	Washer ½" Flat	1	1	1	1
46	103323	Washer ½" Lock	1	1	1	1
47	102637	Nut, ½ - 13 Hex	1	1	1	1
48	20114	Pulley Circulation Pump	1	1	1	1
49	444705	½" Pipe Plug Cast Iron	1	1	1	1
50	20318	Circulation Pump	1	1	1	1
51	113186	¾" Pipe Plug Cast Iron	1	1	1	1
52	91112	Gasket Circulation Pump to Block	2	2	2	2
53	39049	Alternator Assembly (51 Amp/ 12 Volt)	1	1	1	1

NOTES



ITEM	PART NO.	DESCRIPTION	305 QTY. 350			
			RH	LH	RH	LH
1	103321	Bolt, $\frac{3}{8}$ - 16 x 4" Hex HD (GR5)	2	2	2	2
2	103321	Washer, $\frac{3}{8}$ Lockwasher	6	6	6	6
3	186282	Bolt, $\frac{3}{8}$ - 16 x 3 $\frac{1}{4}$ " Hex HD (GR5)	1	1	1	1
4	97556	Housing, Thermostat (Upper)	1	1	1	1
5	20228	#20 Clamp Hose	8	8	8	8
6	23026	Hose, 1 $\frac{1}{4}$ x 16" Long	2	2	2	2
7	96686	Spring, Pressure Relief	1	1	1	1
8	96066	Valve, Pressure Relief	1	1	1	1
9	96065	Seat, Pressure Relief	1	1	1	1
10	97361	Gasket, Thermostat Cover	1	1	1	1
11	96319	Thermostat, 143°F (R.W.C.)	1	1	1	1
12	97557	Housing, Thermostat (Lower)	1	1	1	1
13	20326	Sender, Engine Water Temp. (Alarm)	1	1	1	1
14	96105	Gasket, Thermostat Housing to Intake	1	1	1	1
15	96296	Hose; 1 $\frac{3}{4}$ I.D. Formed	1	1	1	1
16	20420	#32 Clamp Hose	2	2	2	2
17	97902	Formed Hose	1	1	1	1
18	102635	Nut, $\frac{3}{8}$ x 16" Hex HD	1	1	1	1
19	137425	Elbow; $\frac{3}{8}$ " Pipe x $\frac{1}{2}$ " Tube, Inverted Flare 90°	1	1	1	1
20	22618	Hydraulic Hose, Top Cooler Gear Out	1	1	1	1
21	179837	Bolt; $\frac{3}{8}$ - 16 x $\frac{3}{4}$ " Hex HD (GR5)	1	1	1	1
22	22628	Hydraulic Hose, Bottom Cooler Gear In	1	1	1	1
23	179847	Bolt; $\frac{3}{8}$ - 16 x 2" Hex HD (GR5)	1	1	1	1
24	179850	Bolt; $\frac{3}{8}$ - 16 x 2 $\frac{3}{4}$ " Hex HD (GR5)	1	1	1	1
25	137409	Connector; $\frac{3}{8}$ " Pipe	1	1	1	1
26	97886	9" Oil Cooler (Raw Water Only)	1	1	1	1
27	97885	9" Oil Cooler (Fresh Water Only)	1	1	1	1
27	97853	Elbow; 1" Pipe x 1 $\frac{1}{4}$ Hose Brass, Long 90°	1	1	1	1
28	97310	Hose Formed 1 $\frac{1}{4}$ " I.D.	1	1	1	1
29	97852	Adapter, 1" Pipe x 1 $\frac{1}{4}$ " Hose, Brass	1	1	1	1

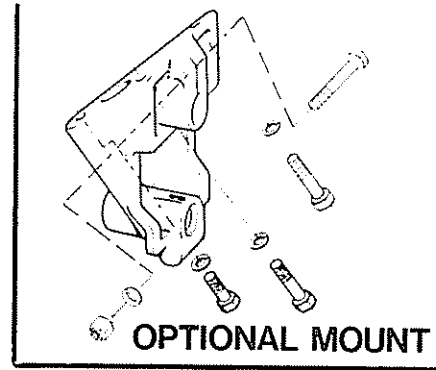
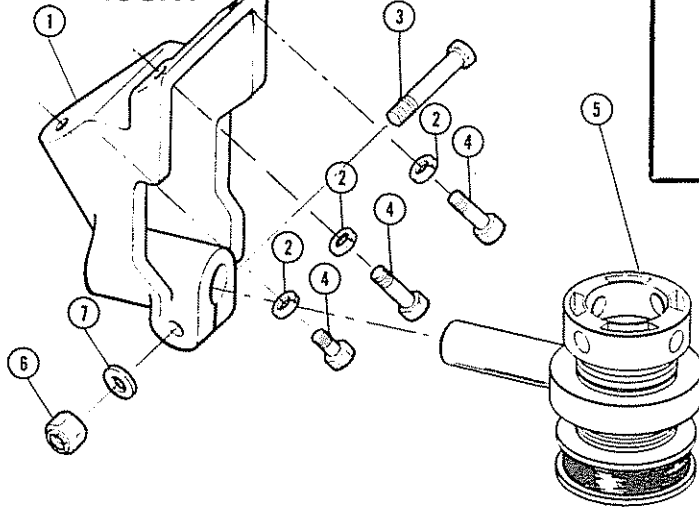


ITEM	PART NO.	DESCRIPTION	305 QTY. 350			
			RH	LH	RH	LH
1	42090	Starter Opposite Rotation (RH)	1	—	1	—
1	42091	Starter Auto Rotation (LH)	—	1	—	1
2	103321	Washer $\frac{3}{8}$ Medium Lock	AR	AR	AR	AR
3	21123	Nut, M-10 x 1.5; Hex Brass	1	1	1	1
4	21118	Nut, M-5 x 0.8	1	1	1	1
5	21119	Washer Lock M-5	1	1	1	1
6	102636	Nut, $\frac{7}{16}$ - 14 ($\frac{5}{8}$ Special)	1	1	1	1
7	103322	Washer, $\frac{7}{16}$ Lock	AR	AR	AR	AR
8	97478	Bracket, Electrical Mounting	1	1	1	1
9	96433	Stud, $\frac{7}{16}$ - 14 x $1\frac{5}{8}$	2	2	2	2
10	96350	Cover, Timing Hole	1	1	1	1
11	179841	Bolt, $\frac{3}{8}$ - 16 x $1\frac{1}{4}$ " Hex HD (GR 5)	2	2	2	2
12	97043	Screw, Drive	2	2	2	2
13	97880	Nameplate	1	1	1	1
14	96938	Housing Flywheel	1	1	1	1
15	97315	Cover, Flywheel Housing	1	1	1	1
16	102635	Nut, $\frac{3}{8}$ - 16, Hex	4	4	4	4
17	27322	Stud, $\frac{3}{8}$ - 16 x $2\frac{1}{2}$ "	2	2	2	2
18	179799	Bolt, $\frac{1}{4}$ - 20 x $1\frac{1}{4}$ " Hex HD (GR 5)	6	6	6	6
19	103319	Washer, $\frac{1}{4}$ Lock	6	6	6	6
20	109084	Nut, $\frac{1}{4}$ - 20 U.N.C. — 2B Hex	6	6	6	6
21	22030	Bolt, $\frac{3}{8}$ - 16 x 1", Shoulder, Hex HD (GR8)	3	3	3	3
22	97596	Damper Assembly	1	1	1	1
23	96541	Stud, $\frac{7}{16}$ - 14 x 4"	2	2	2	2
24	22618	Oil Cooler Line Trans Out	1	1	1	1
25	30526	Elbow, $\frac{3}{8}$ MP x $\frac{3}{4}$ ST; 90°	1	1	1	1
26	131718	Washer Lock $\frac{7}{16}$ Internal Tooth - Type A	6	6	6	6
27	272231	Nut, $\frac{7}{16}$ - 20 Hex $1\frac{1}{16}$ " Thick	4	4	4	4
28	91685	Coupling, Prop. — 1" Shaft x 4"	1	1	1	1
28	91686	Coupling, Prop. — $1\frac{1}{8}$ " Shaft x 4"	1	1	1	1
28	91687	Coupling, Prop. — $1\frac{1}{4}$ " Shaft x 4"	1	1	1	1
28	91688	Coupling, Prop. — $1\frac{3}{8}$ " Shaft x 4"	1	1	1	1

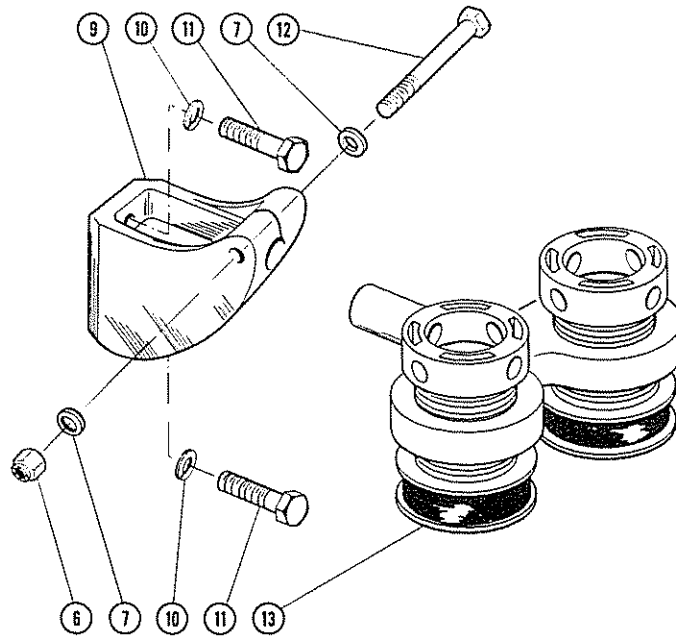
ITEM	PART NO.	DESCRIPTION	305 QTY. 350			
			RH	LH	RH	LH
28	91689	Coupling, Prop. — 1½" Shaft x 4"	1	1	1	1
28	91690	Coupling, Prop. — 1" Shaft x 5"	1	1	1	1
28	91691	Coupling, Prop. — 1⅞" Shaft x 5"	1	1	1	1
28	91692	Coupling, Prop. — 1¼" Shaft x 5"	1	1	1	1
28	91693	Coupling, Prop. — 1⅜" Shaft x 5"	1	1	1	1
28	91694	Coupling, Prop. — 1½" Shaft x 5"	1	1	1	1
28	91695	Coupling, Prop. — 1¾" Shaft x 5"	1	1	1	1
28	91696	Coupling, Prop. — 2" Shaft x 5"	1	1	1	1
29	200090	Set Screw, ⅜ - 16 x 1¼"	2	2	2	2
30	22136	Bolt, Coupling; ⅞ - 20 x 1¼" (Special)5" Coupling	4	4	4	4
30	22135	Bolt, Coupling; ⅞ - 24 x 1¼ - 4" Coupling	4	4	4	4
31	179872	Bolt, ⅞ - 14 x 3½ Hex HD (GR 5)	4	4	4	4
32	144603	Nipple, ⅜ x 3" Steel Pipe	1	1	1	1
33	30516	Elbow, 90° Female; ⅜" Pipe x ½" Tube	1	1	1	1
34	443874	Screw, #10 - 24 Hex HD; Machine	1	1	1	1
35	21033	Clip, Shift Cable (Single Control) - Illustrated	1	1	1	1
35	22230	Clip, Shift Cable (Dual Control)	1	1	1	1
36	22623	Oil Cooler Line Trans In	1	1	1	1
37	96341	Bracket, Shift Cable (Front Entry)	1	1	1	1
37	97471	Bracket, Shift Cable (Rear Entry)	1	1	1	1
38	106497	Washer #10 Medium Lock	1	1	1	1
39	120361	Nut #10 Hex	1	1	1	1
40	21088	Sender, Gear Oil Temp.	1	1	1	1
41	25471	Transmission Assembly, D.D. Model 71C	1	1	1	1
41	9001545	Transmission Assembly, 1.52 Model 71C	1	1	1	1
41	25514	Transmission Assembly, 1.88 Model 71C	1	1	1	1
41	9001541	Transmission Assembly, 1.91 Model 71C	1	1	1	1
41	1001512	Transmission Assembly, 2.57 Model 71C	1	1	1	1
41	1001513	Transmission Assembly, 2.91 Model 71C	1	1	1	1
41	9001571	Transmission Assembly, 2.10C Model 71C*	1	—	1	—
41	9001570	Transmission Assembly, 2.10 CR Model 71C*	—	1	—	1
41	25448	Transmission Assembly, D.D. 15° V-Drive	1	1	1	1

ITEM	PART NO.	DESCRIPTION	305 QTY. 350			
			RH	LH	RH	LH
41	25449	Transmission Assembly, 1.21, 15° V-Drive	1	1	1	1
41	25447	Transmission Assembly, 1.51, 15° V-Drive	1	1	1	1
41	25450	Transmission Assembly, 1.99, 15° V-Drive	1	1	1	1
41	25451	Transmission Assembly, 2.49, 15° V-Drive	1	1	1	1
42	21025	Ball Joint Single Station	1	1	1	1
		<p>* Note: Unless Specified All Transmissions will be Shipped for L.H. Engines. Rotation Must Be Specified for Transmissions with 2.10:1 Reduction They Are Not Bi-Rotational.</p>				

STANDARD MOUNT

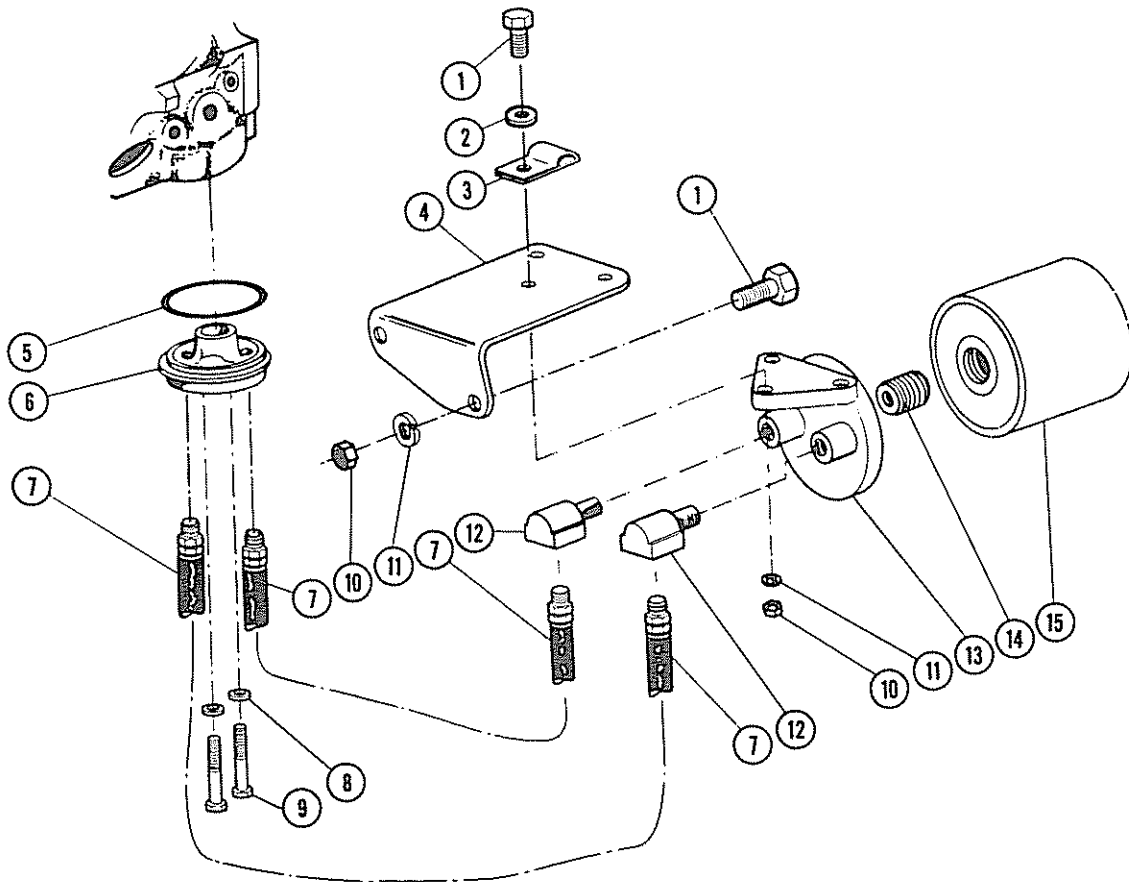


OPTIONAL MOUNT

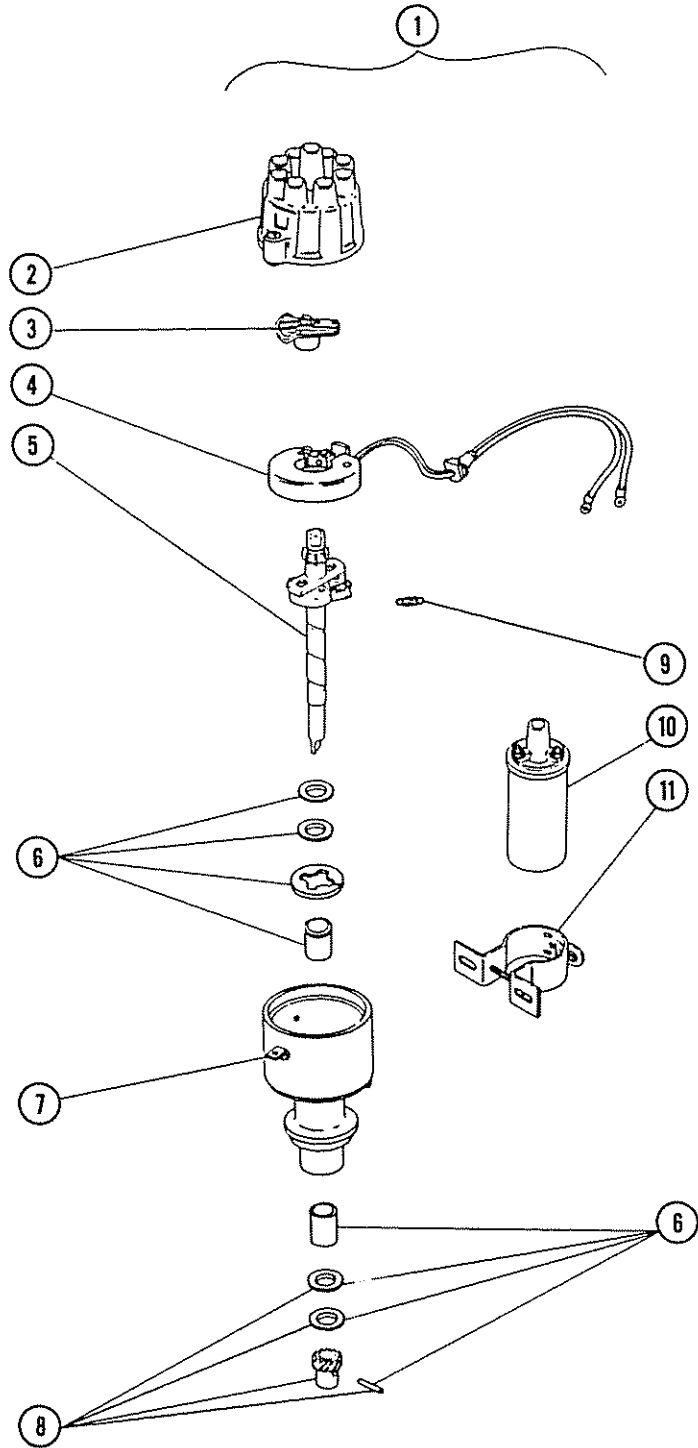


REAR ENGINE MOUNT

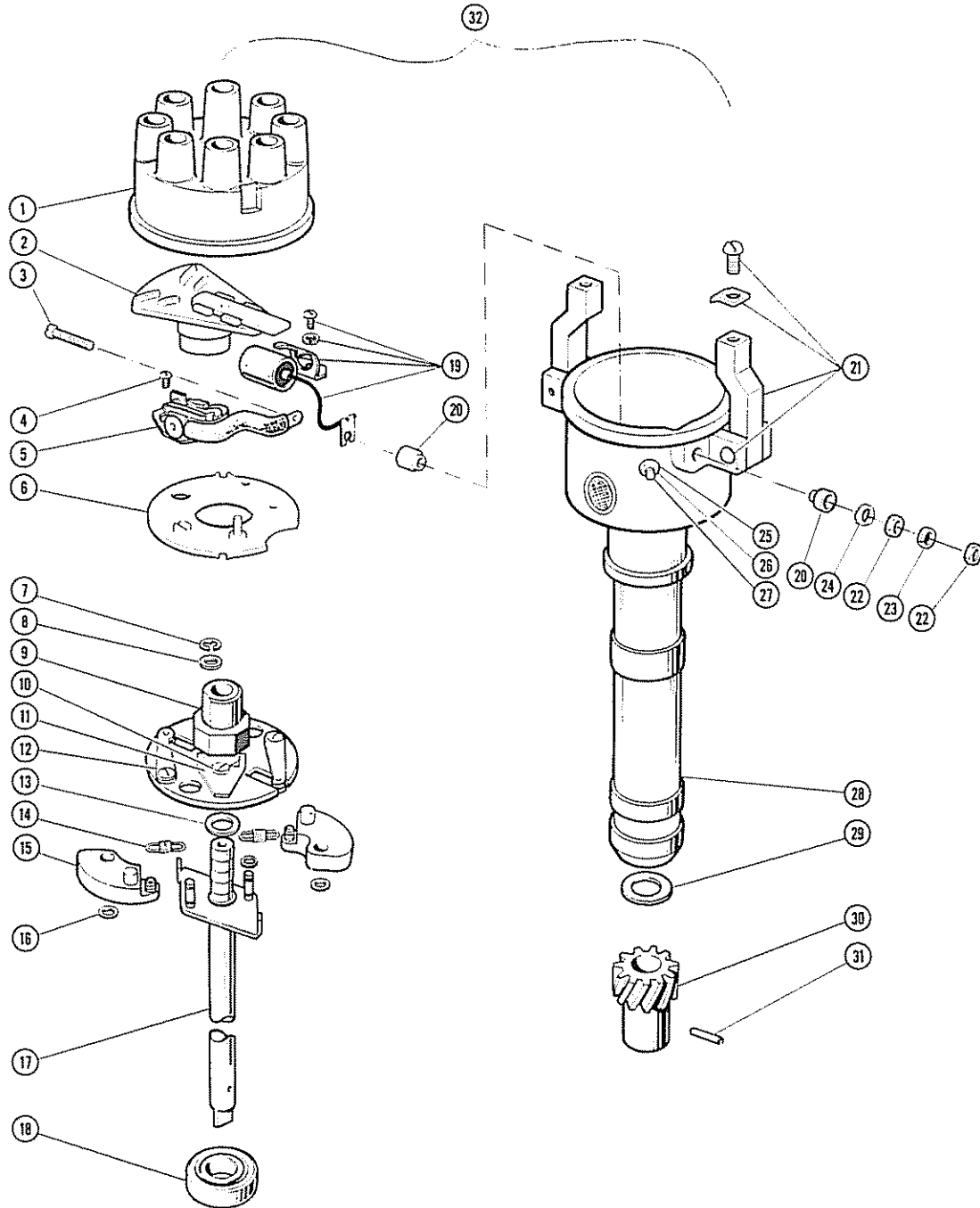
ITEM	PART NO.	DESCRIPTION	305 QTY. 350			
			RH	LH	RH	LH
1	97938	Mount, Engine Support (Std.) Single Hole 12° Installation	2	2	2	2
1	97901	Mount, Engine Support (Opt.) Dual Hole 0° Installation	AR	AR	AR	AR
2	103321	Washer, 3/8 Medium Lock	3	3	3	3
3	454916	Bolt, 3/8 - 24 x 2 1/4" Hex HD (GR5)	2	2	2	2
4	179841	Bolt, 3/8 - 16 x 1 1/4" Hex HD (GR5)	AR	AR	AR	AR
5	97926	Single Mount Assembly	2	2	2	2
6	22436	Elastic Stop Nut; 3/8 - 24	AR	AR	AR	AR
7	103341	Washer, 3/8 Flat	AR	AR	AR	AR
9	97917	Mount, Engine (Rear)	2	2	2	2
10	103322	Washer, 7/16 Lock	2	2	2	2
11	179860	Bolt, 7/16 - 14 x 1 1/4" Hex HD (GR5)	4	4	4	4
12	9423205	Bolt, 3/8 - 24 x 3 1/4" Hex HD (GR8)	2	2	2	2
13	97905	Dual Mount Assembly, 3.00 Long (Long Shaft)	1	1	1	1
13	97906	Dual Mount Assembly, 2.13 Long (Short Shaft)	1	1	1	1



ITEM	PART NO.	DESCRIPTION	305 QTY. 350			
			RH	LH	RH	LH
1	179820	Bolt, $\frac{5}{16}$ x 18 x $1\frac{1}{4}$ " Hex HD (GR5)	2	2	2	2
2	103340	Washer, $\frac{5}{16}$ Flat	1	1	1	1
3	96566	Clamp	1	1	1	1
4	97342	Bracket, Oil Filter Support	1	1	1	1
5	20156	Gasket, $\frac{1}{8}$ Sq. Ring	1	1	1	1
6	97667	Adapter, Remote Oil Filter	1	1	1	1
7	22626	Hose Assemble, 10 x 22" Filter to Block	2	2	2	2
8	22226	Washer, $\frac{5}{16}$ Copper Flat	2	2	2	2
9	179828	Bolt, $\frac{5}{16}$ x 18 x $2\frac{1}{2}$ Hex HD (GR5)	2	2	2	2
10	102634	Nut, $\frac{5}{16}$ - 18 Hex	5	5	5	5
11	103320	Washer, $\frac{5}{16}$ Medium Lock	5	5	5	5
12	30550	Elbow, $\frac{1}{2}$ " Pipe x $\frac{1}{2}$ " Tube, Inverted Flare, 90°	2	2	2	2
13	719571	Adapter, Remote Oil Filter	1	1	1	1
14	97292	Nipple, Filter Adapter	1	1	1	1
15	9002514	Oil Filter, PF2	1	1	1	1



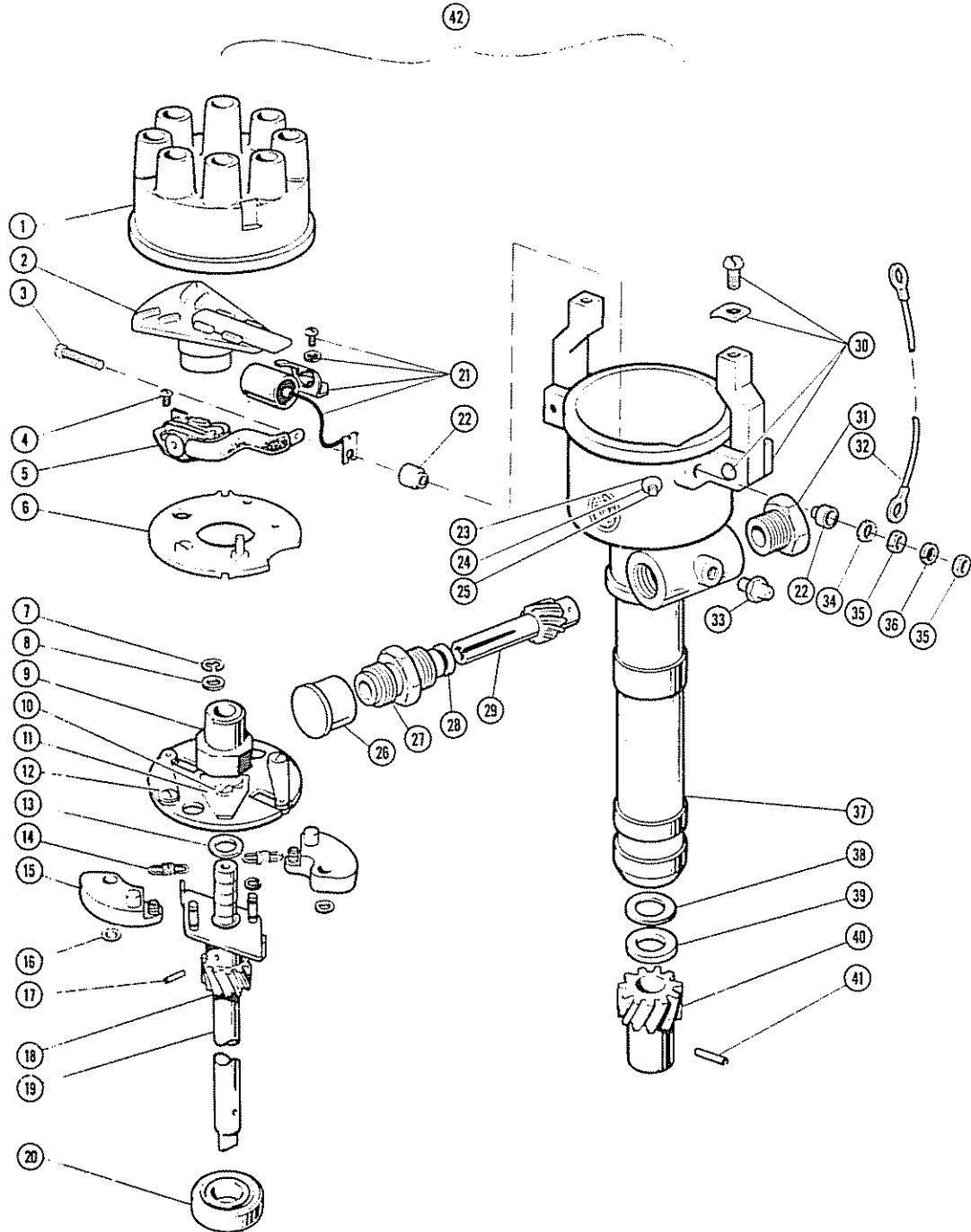
ITEM	PART NO.	DESCRIPTION	305 QTY. 350			
			RH	LH	RH	LH
1	37067	Distributor, Breakerless	1	1	1	1
2	41076	Cap, Distributor	1	1	1	1
3	41089	Rotor	1	1	1	1
4	N/A	Sensor, Circuit Board & Plate Assembly	1	1	1	1
5	N/A	Shaft and Cam	1	1	1	1
6	41071	Bearing, Package	1	1	1	1
7	N/A	Body	1	1	1	1
8	41054	Gear, Package	1	1	1	1
9	N/A	Spring	1	1	1	1
10	37068	Coil, High Output, B.I.D. with Bracket	1	1	1	1
11	41063	Bracket Ignition Coil	1	1	1	1



ITEM	PART NO.	DESCRIPTION	305 QTY. 350			
			RH	LH	RH	LH
1	20222	Distributor Cap	1	1	1	1
2	20223	Rotor	1	1	1	1
3	37029	Screw, Primary Terminal	1	1	1	1
4	N/A	Screw, Round HD	1	1	1	1
5	20117	Contact Set	1	1	1	1
6	37021	Armature Plate Assembly	1	1	1	1
7	37039	Clip	1	1	1	1
8	N/A	Washer	1	1	1	1
9	37052	Cam, Advance Plate Assembly	1	1	1	1
10	37060	Screw	1	1	1	1
11	37059	Clamp	1	1	1	1
12	37058	Advance Plate Assembly	1	1	1	1
13	N/A	Washer	1	1	1	1
14	37050	Spring Set (2 Pieces)	1	1	1	1
15	37020	Weight	2	2	2	2
16	37041	Shim (Weight)	2	2	2	2
17	37053	Shaft Assembly	1	1	1	1
18	37032	Bearing	1	1	1	1
19	12530	Condenser Assembly	1	1	1	1
20	37027	Insulator	2	2	2	2
21	37054	Clamp Set	2	2	2	2
22	37025	Nut, #8	2	2	2	2
23	N/A	Washer; #8, Lock	1	1	1	1
24	N/A	Washer; #8, External Tooth, Lock	1	1	1	1
25	106497	Washer; #10, Lock	2	2	2	2
26	120361	Nut, #10 - 24 Hex	2	2	2	2
27	N/A	Screw, #10 - 24 x 1/2" Round Head	2	2	2	2
28	N/A	Housing Assembly	1	1	1	1
29	N/A	Shim, Drive Gear	1	1	1	1
30	92137	Gear	1	1	1	1
31	N/A	Roll Pin, Drive Gear	1	1	1	1
32	37061	Distributor Assembly	1	1	1	1

ITEM	PART NO.	DESCRIPTION	305 QTY. 350			
			RH	LH	RH	LH
33	97454	Spark Plug Ignition Wire Set, Ignition Suppression	1	1	1	1
33	97423	Spark Plug Ignition Wire Set, Steel Core Wire	1	1	1	1

NOTES





MODEL 220-305 C.I.D.
MODEL 270-350 C.I.D.

MARINE ENGINESMALLORY MECHANICAL TACH. DRIVE DISTRIBUTOR ASSEMBLY—FIG. 13a

ITEM	PART NO.	DESCRIPTION	305 QTY. 350			
			RH	LH	RH	LH
1	20222	Distributor Cap	1	1	1	1
2	20223	Rotor	1	1	1	1
3	37029	Screw, Primary Terminal	1	1	1	1
4	N/A	Screw; Round Head, #6-32 UNC-2A x 1/8" Long	1	1	1	1
5	20117	Contact Set	1	1	1	1
6	37021	Plate, Circuit Breaker	1	1	1	1
7	37039	Clip; Retaining Ring	1	1	1	1
8	N/A	Washer, Flat	1	1	1	1
9	37052	Cam, Advance Plate Assembly	1	1	1	1
10	37060	Screw, Clamp	1	1	1	1
11	37059	Clamp, Cam	1	1	1	1
12	37058	Advance Plate Assembly	1	1	1	1
13	N/A	Washer	1	1	1	1
14	37050	Spring, Governor Weight (2 Pieces)	1	1	1	1
15	37020	Weight, Governor	2	2	2	2
16	37041	Shim Governor Weight	2	2	2	2
17	37030	Roll Pin, Tach Gear	1	1	1	1
18	37036	Gear, Tach Drive	1	1	1	1
19	37053	Shaft Assembly, Distributor	1	1	1	1
20	37032	Bearing, Ball	1	1	1	1
21	12530	Condenser Assembly	1	1	1	1
22	37027	Insulator, Primary Terminal	2	2	2	2
23	106497	Washer; #10, Lock	2	2	2	2
24	120361	Nut, #10 - 24 Hex	2	2	2	2
25	N/A	Screw, #10 - 24 x 1/2" Round Head	2	2	2	2
26	N/A	Cap, Dust	1	1	1	1
27	37034	Coupling, Tach Drive	1	1	1	1
28	37035	Washer, Tach Drive Shaft	1	1	1	1
29	37047	Tach Shaft & Gear Assembly	1	1	1	1
30	N/A	Clip, Distributor Cap	2	2	2	2
31	N/A	Plug, Tach Drive Unit	1	1	1	1
32	96856	Lead Wire, Distributor to Coil	1	1	1	1

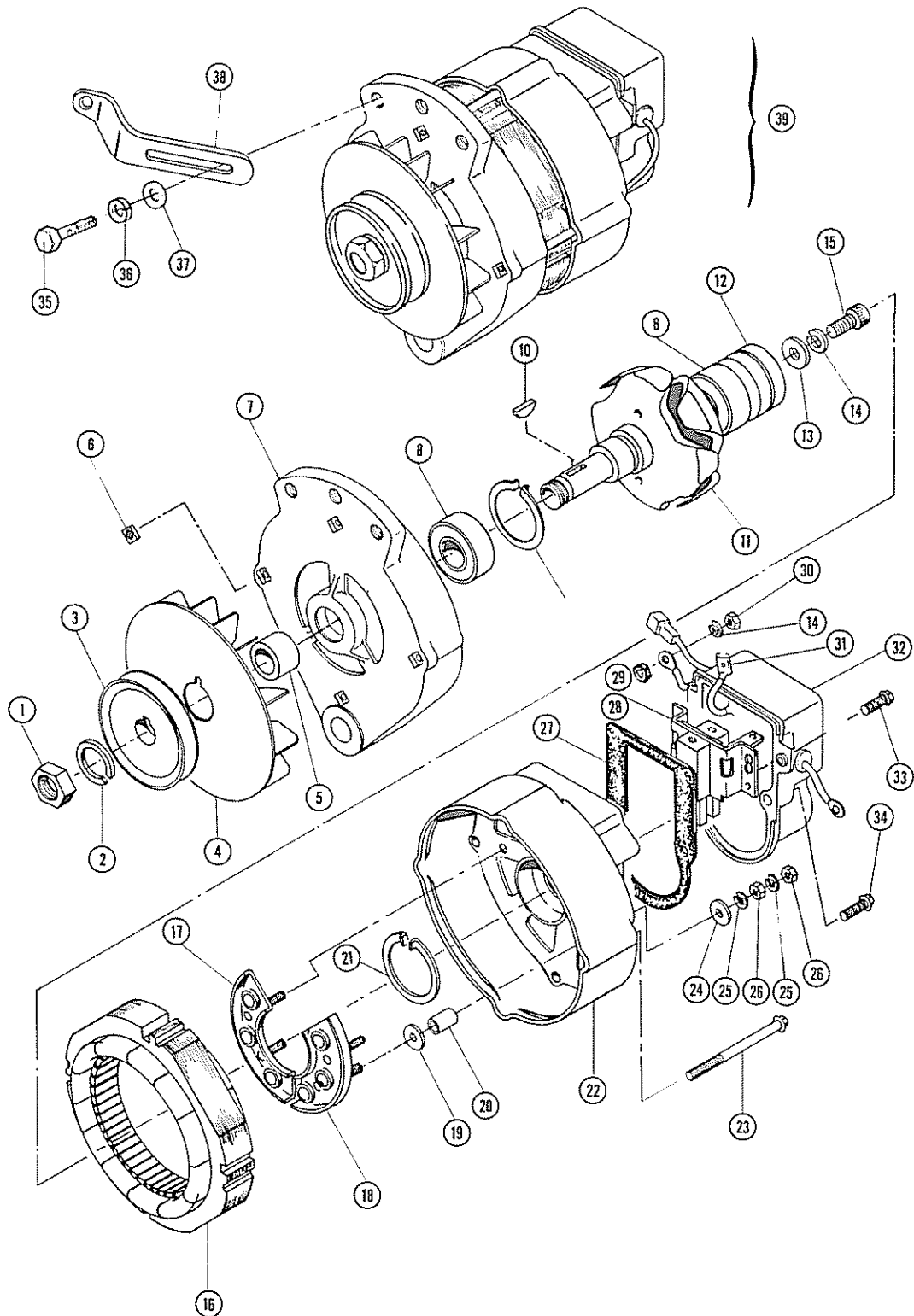


MARINE ENGINES SMALL ORY MECHANICAL TACH. DRIVE DISTRIBUTOR ASSEMBLY—FIG. 13a

MODEL 220-305 C.I.D.
 MODEL 270-350 C.I.D.

ITEM	PART NO.	DESCRIPTION	305 QTY. 350			
			RH	LH	RH	LH
33	37037	Fitting, Grease	1	1	1	1
34	N/A	Washer; #8, External Tooth Lock	1	1	1	1
35	37025	Nut; Hex, 8-32 UNC-2B	2	2	2	2
36	37026	Washer; Lock, #8 Nom Size	1	1	1	1
37	N/A	Housing Assembly, Distributor	1	1	1	1
38	N/A	Shim, Drive Gear	1	1	1	1
39	37043	Washer, Drive Gear	1	1	1	1
40	92137	Gear	1	1	1	1
41	N/A	Roll Pin, Drive Gear	1	1	1	1
42	96309	Distributor Assembly with Tach Drive	1	1	1	1

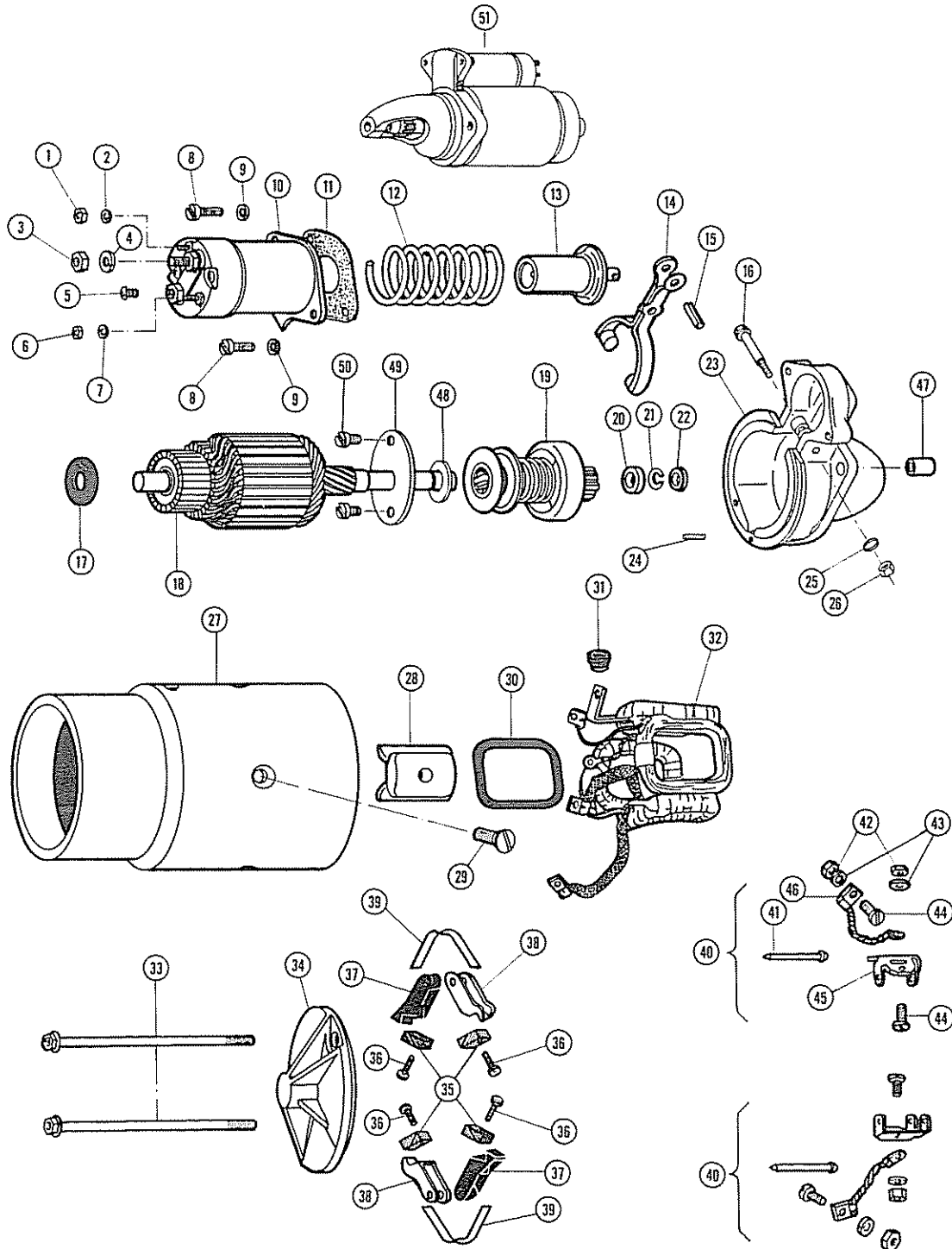
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ITEM	PART NO.	DESCRIPTION	305 QTY. 350			
			RH	LH	RH	LH
1	N/A	Nut, $\frac{5}{8}$ - 18 x $1\frac{5}{16}$ " Hex	1	1	1	1
2	N/A	Washer, $\frac{5}{8}$ " Lock	1	1	1	1
3	39039	Pulley, Alternator Drive	1	1	1	1
4	N/A	Fan, Alternator	1	1	1	1
5	N/A	Spacer, Fan & Pulley, $\frac{7}{16}$ "	1	1	1	1
6	N/A	Nut, Square #10 — 32	4	4	4	4
7	N/A	Housing, Front	1	1	1	1
8	39008	Bearing, Alternator Shaft	1	1	1	1
9	39009	Retainer, Front Bearing	1	1	1	1
10	N/A	Key, Woodruff #5	1	1	1	1
11	39011	Rotor Assembly	1	1	1	1
12	N/A	Ring Assembly, Slip	2	2	2	2
13	N/A	Washer #10 Flat	1	1	1	1
14	N/A	Washer #10 Lock	1	1	1	1
15	39013	Screw, #10 — 32 x $\frac{5}{8}$ "	1	1	1	1
16	39014	Stator Assembly	1	1	1	1
17	39015	Diode, Negative	1	1	1	1
18	39016	Diode, Positive	1	1	1	1
19	N/A	Washer, Fiber	2	2	2	2
20	N/A	Sleeve, Insulator (Nyl.)	2	2	2	2
21	N/A	Retainer, Rear	1	1	1	1
22	N/A	Housing, Rear	1	1	1	1
23	N/A	Bolt, #10 — 32 x $3\frac{1}{8}$ "	4	4	4	4
24	N/A	Washer, Fiber	2	2	2	2
25	N/A	Washer, $\frac{1}{4}$ " Lock	3	3	3	3
26	N/A	Nut, Hex $\frac{1}{4}$ " — 20	2	2	2	2
27	N/A	Gasket, Rear Housing	1	1	1	1
28	39022	Brush Assembly	1	1	1	1
29	N/A	Nut, #10 — 24 Lock	3	3	3	3
30	N/A	Nut, #10 — 24	3	3	3	3
31	N/A	Wire Assembly	1	1	1	1
32	39050	Regulator Assembly, Voltage	1	1	1	1

ITEM	PART NO.	DESCRIPTION	305 QTY. 350			
			RH	LH	RH	LH
33	N/A	Screw, #8 — 32 x 1/2"	2	2	2	2
34	N/A	Screw, #8 — 32 x 3/4"	2	2	2	2
35	179818	Bolt, 5/16 — 18 x 1" Hex HD	1	1	1	1
36	103320	Washer, 5/16 Lock	1	1	1	1
37	20523	Washer, Flat Special	1	1	1	1
38	97061	Strap, Alternator Adjusting	1	1	1	1
39	39049	Alternator Assembly, Integral Regulator	1	1	1	1

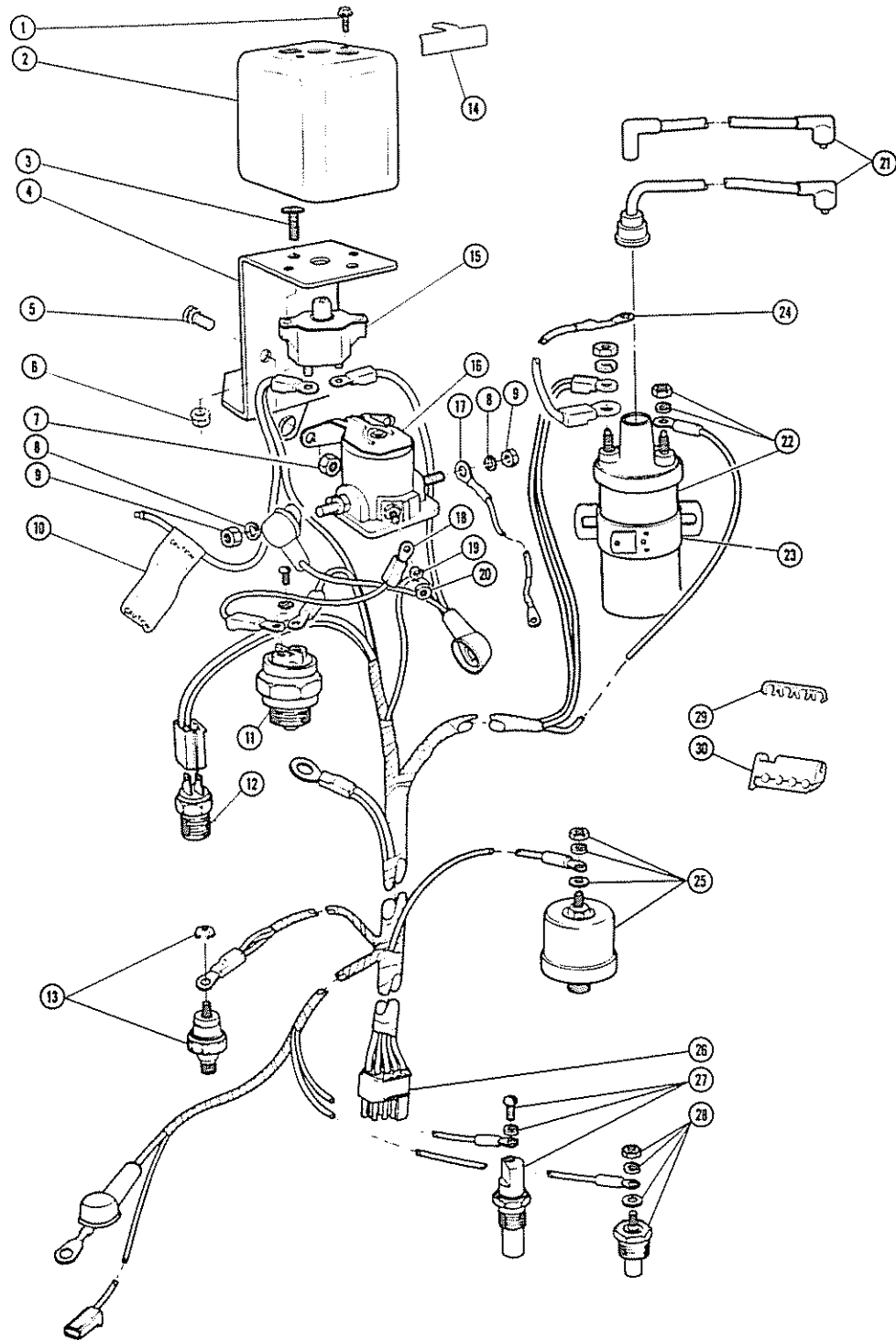
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ITEM	PART NO.	DESCRIPTION	305 QTY. 350			
			RH	LH	RH	LH
1	21118	Nut, M-5 x 0.8, Hex, Brass	1	1	1	1
2	455348	Washer #10	1	1	1	1
3	21123	Nut, M-10 x 1.5 Hex Brass	1	1	1	1
4	N/A	Washer $\frac{3}{8}$ Lock	1	1	1	1
5	N/A	Screw	1	1	1	1
6	21118	Nut, M-5 x 0.8, Hex, Brass	1	1	1	1
7	N/A	Washer #8	1	1	1	1
8	N/A	Screw	2	2	2	2
9	N/A	Washer	2	2	2	2
10	42094	Solenoid Assembly	1	1	1	1
11	42061	Gasket	1	1	1	1
12	42018	Spring	1	1	1	1
13	42019	Plunger	1	1	1	1
14	42020	Lever	1	1	1	1
15	N/A	Pin	1	1	1	1
16	42022	Bolt	1	1	1	1
17	42048	Washer	1	1	1	1
18	42080	Armature	—	1	—	1
18	42081	Armature	1	—	1	—
19	42036	Drive Assembly	—	1	—	1
19	42031	Drive Assembly	1	—	1	—
20	42012	Collar	1	1	1	1
21	42013	Ring	1	1	1	1
22	42014	Collar	1	1	1	1
23	42032	Housing	1	1	1	1
24	N/A	Pin	1	1	1	1
25	N/A	Washer	1	1	1	1
26	N/A	Nut	1	1	1	1
27	42000	Frame	1	1	1	1
28	N/A	Pole Shoe	4	4	4	4
29	N/A	Screw Pole Shoe	4	4	4	4
30	N/A	Insulator	4	4	4	4

ITEM	PART NO.	DESCRIPTION	305 QTY. 350			
			RH	LH	RH	LH
31	N/A	Grommet	1	1	1	1
32	N/A	Shunt Coil Assembly	1	1	1	1
32	42034	Field Coil Assembly	—	1	—	1
32	42028	Field Coil Assembly	1	—	1	—
33	N/A	Bolt	2	2	2	2
34	NSS	Commutator End Cap	—	—	—	—
35	42001	Brush	4	4	4	4
36	N/A	Screw	4	4	4	4
37	42002	Brush Holder Grounded	2	2	2	2
38	42003	Brush Holder Insulated	2	2	2	2
39	42004	Spring	2	2	2	2
40	42005	Brush Holder Support Kit	2	2	2	2
41	N/A	Pin	2	2	2	2
42	120361	Nut #10 - 24	2	2	2	2
43	N/A	Washer	2	2	2	2
44	N/A	Screw	2	2	2	2
45	NSS	Bracket	—	—	—	—
46	42006	Lead	2	2	2	2
47	42051	Bushing	1	1	1	1
48	N/A	Washer	1	1	1	1
49	N/A	Plate	1	1	1	1
50	N/A	Screws	2	2	2	2
51	42090	Starter Assembly R.H.	1	—	1	—
51	42091	Starter Assembly L.H.	—	1	—	1

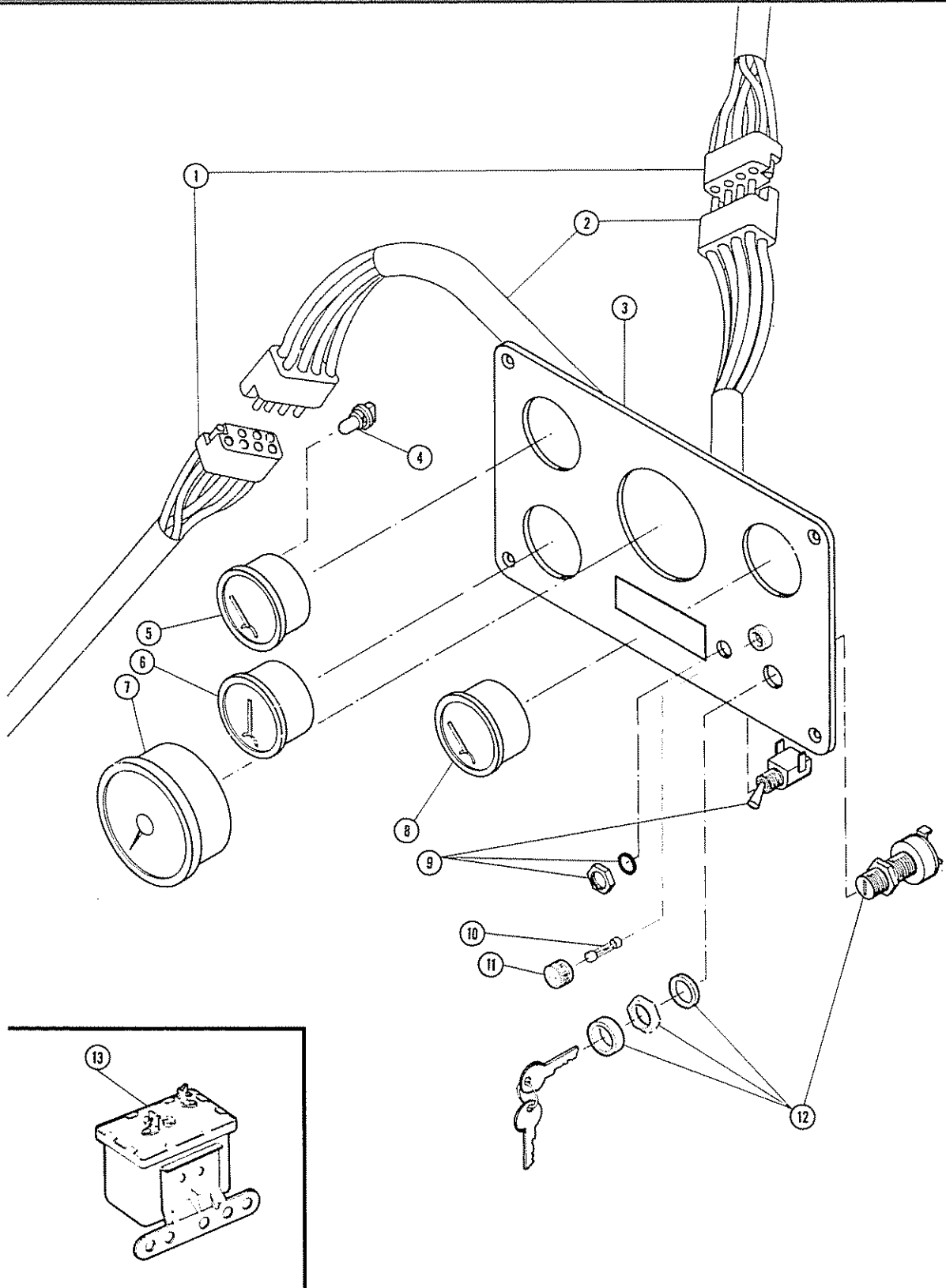
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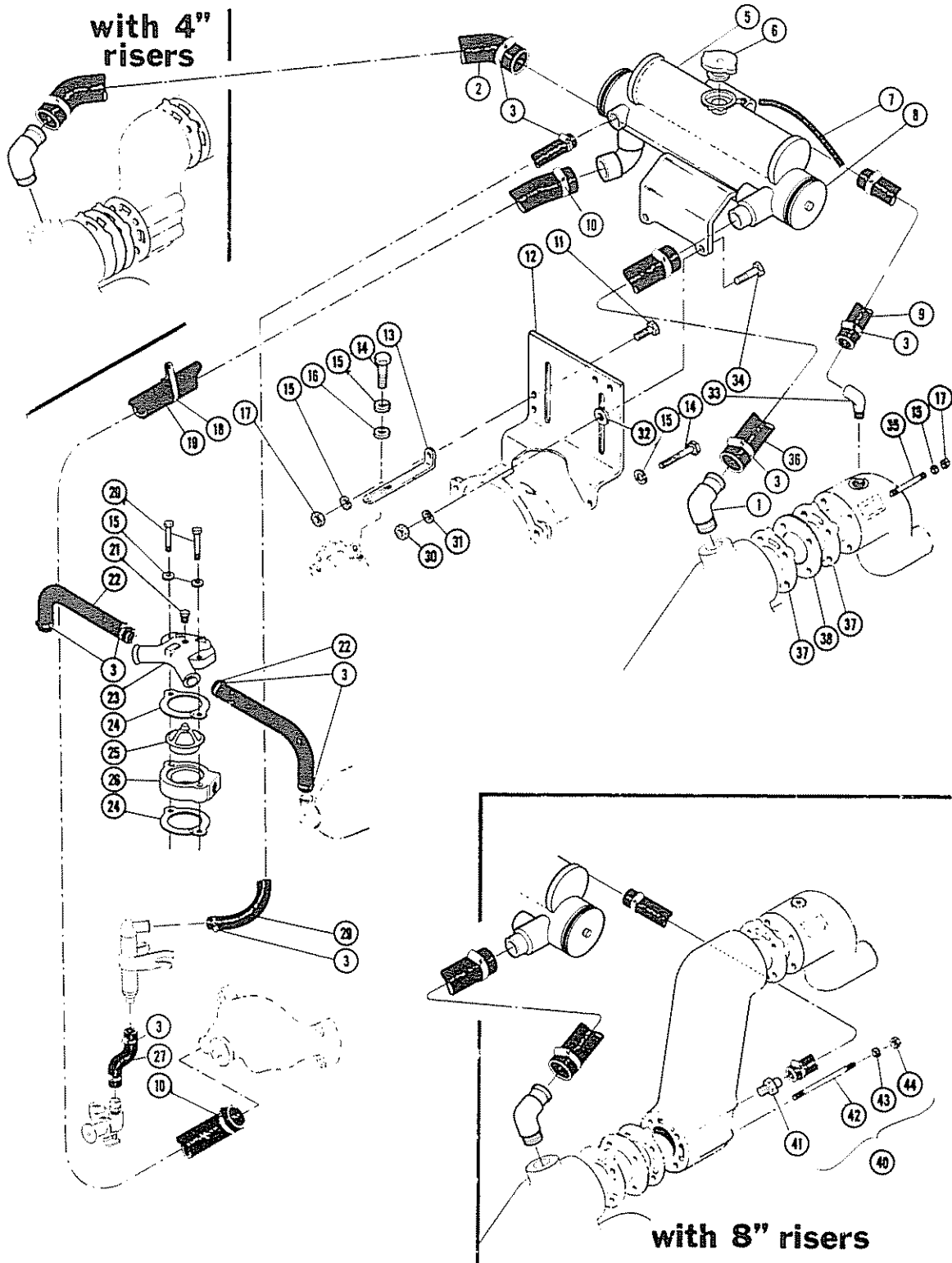
ITEM	PART NO.	DESCRIPTION	305 QTY. 350			
			RH	LH	RH	LH
1	22140	Screw, #10 - 24 x $\frac{3}{8}$ " Self Tapping	2	2	2	2
2	97474	Cover, Relay Bracket	1	1	1	1
3	22382	Screw, #10 - 24 x $\frac{7}{8}$ " Slotted Pan Head	2	2	2	2
4	97478	Bracket, Engine Relay	1	1	1	1
5	22383	Bolt, $\frac{1}{4}$ - 20 x $\frac{1}{2}$ " Hex HD Sems	2	2	2	2
6	22440	Nut, #10 - 24 Keps Plated Hex	2	2	2	2
7	109084	Nut, $\frac{1}{4}$ x 20 UNC-2B Hex	2	2	2	2
8	103320	Washer, $\frac{5}{16}$ Medium Lock	2	2	2	2
9	102634	Nut, $\frac{5}{16}$ - 18 Hex	2	2	2	2
10	97958	Decal, Caution Accessory Wire	1	1	1	1
11	20171	Switch, Neutral Safety	1	1	1	1
12	21088	Sender, Gear Oil Temp (Alarm)	1	1	1	1
13	97767	Sender, Engine Oil Pressure (Alarm)	1	1	1	1
14	22155	Decal, Circuit Breaker	1	1	1	1
15	97568	Circuit Breaker (50 Amp)	1	1	1	1
16	9006320	Relay, Starter Motor	1	1	1	1
17	97479	Wire Assembly, Solenoid to Relay	1	1	1	1
18	97480	Wire Assembly, Safety Switch to Relay	1	1	1	1
19	106497	Washer, #10 Medium Lock	1	1	1	1
20	112432	Nut, 10-32 Hex Brass	1	1	1	1
21	97454	Spark Plug Ignition Wire Set, Ignition Suppression	1	1	1	1
21	97423	Spark Plug Ignition Wire Set, Steel Core Wire	1	1	1	1
22	37068	Ignition Coil Assembly, High Output, B.I.D.	1	1	1	1
23	41063	Bracket, Ignition Coil	1	1	1	1
24	97990	Wire Assembly, Resistor to Coil	1	1	1	1
25	700425	Sender, Engine Oil Pressure (Single) Gauge	AR	AR	AR	AR
25	700403	Sender, Engine Oil Pressure (Dual) Gauge	AR	AR	AR	AR
26	97945	Wiring Harness, Universal	1	1	1	1
27	20326	Sender, Engine Water Temp. (Alarm)	1	1	1	1
28	700427	Sender, Engine Water Temp. (Single) Gauge	AR	AR	AR	AR
28	727046	Sender, Engine Water Temp. (Dual) Gauge	AR	AR	AR	AR
	22152	Noise Supression Kit				

ITEM	PART NO.	DESCRIPTION	305 QTY. 350			
			RH	LH	RH	LH
29	22300	Wire Separator Spark Plug 4	2	2	2	2
30	22222	Retainer Ignition Wire 4	2	2	2	2

NOTES



ITEM	PART NO.	DESCRIPTION	305 QTY. 350			
			RH	LH	RH	LH
1	97768	Extension Wire Harness 15 Ft.	1	1	1	1
1	97482	Extension Wire Harness 20 Ft.	1	1	1	1
1	97481	Extension Wire Harness 25 Ft.	1	1	1	1
1	97810	Extension Wire Harness 40 Ft.	1	1	1	1
2	22480	Panel Wire Harness	1	1	1	1
3	97490	Instrument Panel S/S Lower D/S Upper	1	1	1	1
3	97491	Instrument Panel D/S Lower	1	1	1	1
4	N/A	Light (G.E. 161)	4	4	4	4
5	22343	Temperature Gauge	1	1	1	1
6	22344	Voltmeter	1	1	1	1
7	22351	Tachometer	1	1	1	1
8	22342	Oil Gauge	1	1	1	1
9	22345	Switch	1	1	1	1
10	N/A	Fuse (20 Amp)	1	1	1	1
11	N/A	Protective Cap	1	1	1	1
12	22599	Key Switch With Keys	1	1	1	1
13	20640	Alarm Buzzer	1	1	1	1

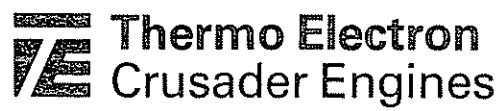


with 4" risers

with 8" risers

ITEM	PART NO.	DESCRIPTION	305 QTY. 350			
			RH	LH	RH	LH
1	97854	Elbow; 2" Pipe, Brass, Short 90°	2	2	2	2
2	22467	Hose; 1¼" I.D. x 20" Long Starboard Manifold to Heat Exchanger	1	1	1	1
3	20228	#20 Clamp, Hose	12	12	12	12
4	22466	Hose; 1 I.D. x 23", Exchanger Tee to Starboard Manifold (Not shown)	1	1	1	1
5	97913	Heat Exchanger	1	1	1	1
6	10080	Filler Cap, Heat Exchanger	1	1	1	1
7	23083	Hose, 5/16 x 27, Overflow	1	1	1	1
8	22164	End Plate Kit - Metal 5"	2	2	2	2
9	23035	Hose; 1" I.D. x 26", Exchanger Tee to Port Manifold	1	1	1	1
10	20420	#32 Clamp, Hose	2	2	2	2
11	179839	Bolt, 3/8 - 16 x 1" Hex HD (GR5)	1	1	1	1
12	97308	Bracket, Heat Exchanger Mounting	1	1	1	1
13	97309	Brace, Heat Exchanger Bracket	1	1	1	1
14	186628	Bolt, 3/8 - 16 x 1½" Hex Cap (GR8)	3	3	3	3
15	103321	Washer, 3/8 Medium Lock	16	16	16	16
16	103341	Washer, 3/8 Flat	3	3	3	3
17	102635	Nut, 3/8 - 16 Hex	9	9	9	9
18	22118	Clamp, 2" Hose Support	2	2	2	2
19	22470	Hose; 1 7/8 x 48" Heat Exchanger to Circulation Pump	1	1	1	1
20	179851	Bolt, 3/8 - 16 x 3" Hex HD (GR5)	2	2	2	2
21	127950	Plug, 1/8 Pipe Hex HD Brass	1	1	1	1
22	22471	Hose; 1¼" I.D.x14", Thermostat Housing to Exchanger Manifold	2	2	2	2
23	97851	Thermostat Housing	1	1	1	1
24	96105	Gasket, Thermostat Housing to Intake Manifold	2	2	2	2
25	97895	Thermostat, 160°F w/.156 Hole	1	1	1	1
26	97452	Spacer, Thermostat Housing	1	1	1	1
27	97310	Hose; Formed 1¼" I.D.	1	1	1	1
29	22257	Hose; 1¼" I.D. x 35" Oil Cooler to Heat Exchanger	1	1	1	1
30	102636	Nut, 7/16 - 14 (5/8 Special)	2	2	2	2
31	103322	Washer, 7/16 Lock	2	2	2	2
32	33189	Washer, 7/16 (Special)	2	2	2	2
33	727003	Elbow; 3/4" Pipe x 1" I.D. 90°	2	2		

ITEM	PART NO.	DESCRIPTION	305 QTY. 350			
			RH	LH	RH	LH
34	179862	Bolt, $\frac{7}{16}$ - 14 x 1 $\frac{1}{2}$ " Hex HD (GR5)	2	2	2	2
35	96369	Stud, $\frac{3}{8}$ - 16 x 3 $\frac{3}{4}$ "	8	8	8	8
36	22468	Hose; 1 $\frac{1}{4}$ " I.D. x 12 $\frac{1}{2}$ " Long Port Manifold to Exchanger	1	1	1	1
37	96108	Gasket; Exhaust Elbow; 3-Hole	4	4	4	4
38	97296	Shim, Water Block-Off	2	2	2	2
40	97997	Stud Package, 8" and 12" Risers (Kit) **	2	2	2	2
40	97996	Stud Package, 4" Riser (Kit) *	2	2	2	2
41	97911	Adapter 1" I.D. Hose x $\frac{3}{4}$ " NPT **	2	2	2	2
41	97911	Adapter 1" I.D. Hose x $\frac{3}{4}$ " NPT *	2	2	2	2
42	20471	Stud $\frac{3}{8}$ - 16 x 5 $\frac{3}{4}$ " SSTL *	4	4	4	4
42	22033	Stud $\frac{3}{8}$ - 16 x 7 $\frac{3}{4}$ " SSTL *	4	4	4	4
43	116103	Washer Flat $\frac{3}{8}$ Copper **	8	8	8	8
43	116103	Washer Flat $\frac{3}{8}$ Copper *	8	8	8	8
44	20472	Nut, Elastic Stop Brass **	8	8	8	8
44	20472	Nut, Elastic Stop Brass *	8	8	8	8
	10972	Zinc Anode (Not shown)				
	22590	Fresh Water Cooling Kit - Full System				
	22411	Tiewrap (Plastic)				
		* Indicates Items Included with 4" Riser Application				
		** Indicates Items Included with 8" & 12" Riser Application				



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