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KIT SUMMARY SHEET

33206 Oil Pan Gasket Kit

21006 Intake Manifold Gasket Kit

20190 Overhaul Gasket Kit

22029 Valve Grind Gasket Kit

42005 Starter Brush Holder Kit

20280 4" Riser Kit

21097 8" Riser Kit

22095 Swivel Elbow Kit

22099 Fresh Water Cooling Kit Full System

22043 Fresh Water Cooling Kit Half System Rear Mount

22064 Fresh Water Cooling Kit Half System Front Mount

45334 Carburetor Overhaul Kit 4 BBL

45346 Carburetor Overhaul Kit 2 BBL

45336 Carburetor Gasket Kit 4 BBL

45347 Carburetor Gasket Kit 2 BBL

22026 Remote Oil Filter Kit

22152 Noise Suppression Kit

ON BOARD KITS

22104 Delco Distributor

22105 Mallory Distributor

22137 Prestolite Distributor



NOTE: UNLESS OTHERWISE SPECIFIED ON ORDERS ALL ON-BOARD REPAIR KITS WILL BE SUPPLIED WITH STANDARD OIL FILTER CARTRIDGES. REMOTE OIL FILTER

CARTRIDGE IS PART NO. 9002514.

FIGURE 1

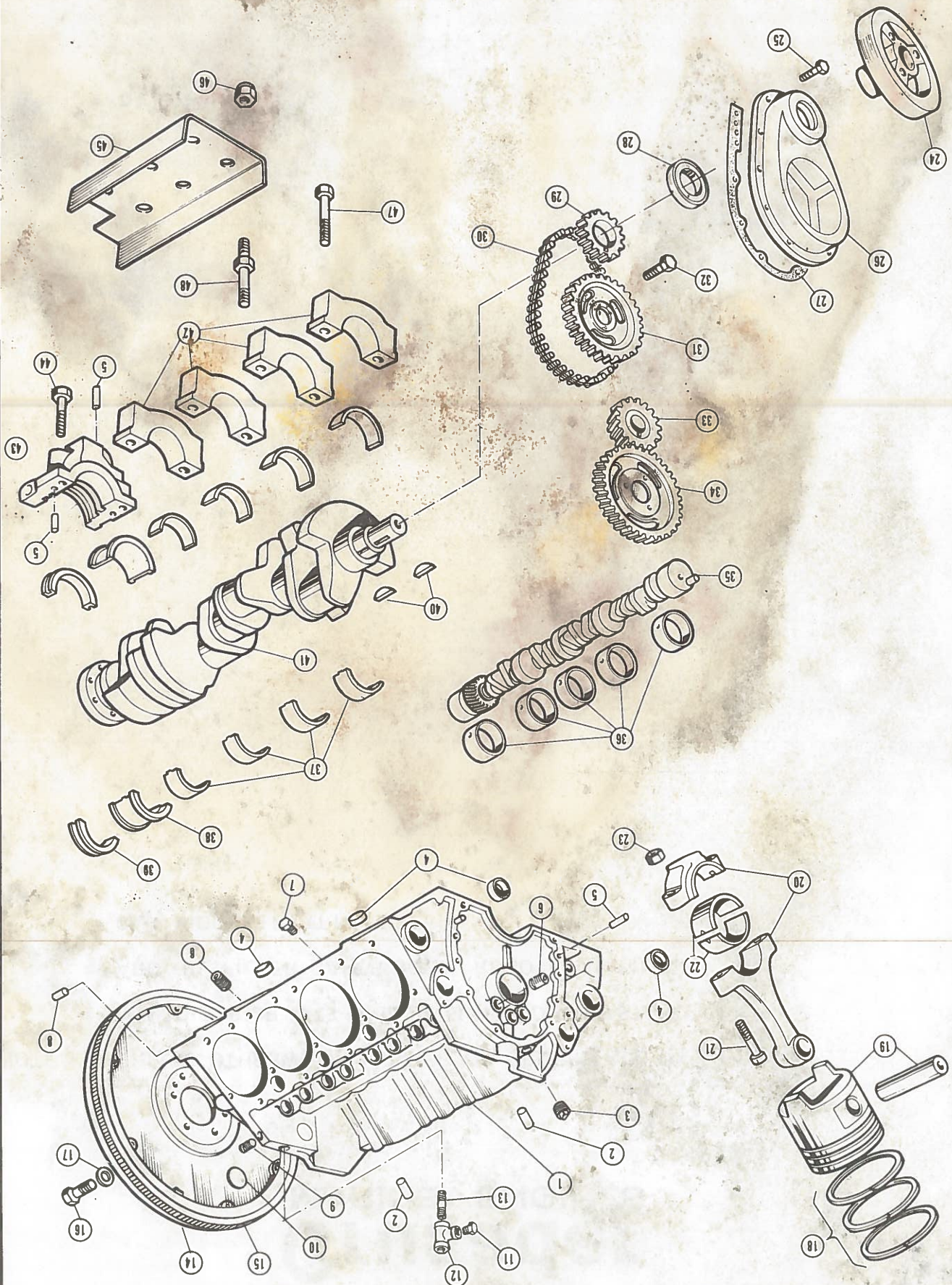


FIG. 1 BLOCK ASSEMBLY CYLINDER

QUANTITY		DESCRIPTION	
305		RH	
350		LH	

ITEM	PART NO.	DESCRIPTION		RH	LH	RH	LH
1	33300	BLOCK ASS'Y FITTED See Note 1	1	1			
1	33301	BLOCK ASS'Y FITTED See Note 1	1		1		1
1	33271	ENGINE ASS'Y COMPLETE See Note 2	1	1			
1	33270	ENGINE ASS'Y COMPLETE See Note 2	1				
1	33266	ENGINE ASS'Y COMPLETE See Note 2	1		1		
1	33267	ENGINE ASS'Y COMPLETE See Note 2	1				1
2	585927	PIN CYL. HEAD LOCATING	4	4	4		4
3	444776	PLUG, FRONT OIL PASSIVE	AR	AR	AR	AR	AR
4	91330	CUP PLUG WATER JACKET	8	8	8	8	8
5	30157	PIN, LOCATING OIL PUMP, FRONT COVER, BIG CAP	4	4	4	4	4
6	33089	PLUG, OIL GALLERY CROSSOVER	3	3	3	3	3
7	127951	PLUG, WATER JACKET DRAIN	2	2	2	2	2
8	30152	DOWEL FLYWHEEL HOUSING LOCATING	2	2	2	2	2
9	444776	PLUG OIL GALLERY REAR	3	3	3	3	3
10	20045	PLUG CAM BEARING HOLE	1	1	1	1	1
11	127950	PLUG 1/8 NPT	AR	AR	AR	AR	AR
12	444222	TEE 1/8 NPT	1	1	1	1	1
13	105406	NIPPLE 1/8 NPT	1	1	1	1	1
14	33183	FLYWHEEL ASS'Y See Note 3	1	1	1	1	1
15	33264	RING GEAR	1	1	1	1	1
16	838653	BOLT FLYWHEEL SPECIAL	6	6	6	6	6
17	136857	WASHER FLYWHEEL BOLT	6	6	6	6	6
18	33302	RING SET STD.	1	1	1	1	1
18	33322	RING SET (.030 OS)	AR	AR	AR	AR	AR
18	12370	RING SET STD.	1				1

FIG. 1 BLOCK ASSEMBLY CYLINDER

QUANTITY		DESCRIPTION	
305		RH	
350		LH	

ITEM	PART NO.	DESCRIPTION			
18	12372	RING SET (.030 05)			
19	33303	PISTON & PIN ASS'Y STD.			
19	33323	PISTON & PIN ASS'Y (.030 O.S.)			
19	33304	PISTON & PIN ASS'Y STD.			
19	33324	PISTON PIN ASS'Y (.030 05)			
20	20765	CONNECTING ROD ASS'Y			
21	33078	BOLT CONNECTING ROD			
22	33115	CONNECTING ROD BRG STD.			
22	33120	CONNECTING ROD BRG (.001 U.S.)			
22	33121	CONNECTING ROD BRG (.002 U.S.)			
22	33116	CONNECTING ROD BRG (.010 U.S.)			
22	33117	CONNECTING ROD BRG (.020 U.S.)			
23	33079	NUT CONNECTING ROD			
24	33306	TORSIONAL DAMPER ASS'Y			
25	20790	SCREW & WASHER ASS'Y, FRONT COVER			
26	33307	FRONT COVER ASS'Y			
26	33308	FRONT COVER ASS'Y INCLUDES SEAL			
27	20129	GASKET FRONT COVER			
28	20018	SEAL FRONT COVER			
29	20959	SPROCKET CRANKSHAFT STD			
29	20551	SPROCKET CRANKSHAFT ROLLER CHAIN			
30	20960	TIMING CHAIN STD			
30	12146	TIMING CHAIN ROLLER CHAIN			
31	20958	SPROCKET CAMSHAFT STD			
31	12144	SPROCKET CAMSHAFT ROLLER CHAIN			

FIG. 1 CYLINDER BLOCK ASSEMBLY

ITEM		PART NO.	DESCRIPTION		RH	LH	QUANTITY	
							305	350
32	30166	BOLT CAM GEAR OR SPROCKET			3	3	3	3
33	12187	GEAR CRANKSHAFT			1	1		
34	12189	GEAR CAMSHAFT			1	1		
35	20570	CAMSHAFT			1	1		
35	20571	CAMSHAFT			1	1		
36	33346	CAMSHAFT BEARING SET			1	1		
37	33109	MAIN BEARING, CRANKSHAFT STD			4	4		
37	33164	MAIN BEARING, CRANKSHAFT (.001US)			AR	AR		
37	33165	MAIN BEARING, CRANKSHAFT (.002US)			AR	AR		
37	33166	MAIN BEARING, CRANKSHAFT (.010US)			AR	AR		
37	33167	MAIN BEARING, CRANKSHAFT (.020US)			AR	AR		
38	33112	BEARING CRANKSHAFT REAR STD			1	1		
38	33168	BEARING CRANKSHAFT REAR (.001US)			AR	AR		
38	33169	BEARING CRANKSHAFT REAR (.002US)			AR	AR		
38	33170	BEARING CRANKSHAFT REAR (.010US)			AR	AR		
38	33171	BEARING CRANKSHAFT REAR (.020US)			AR	AR		
39	33208	SEAL, CRANKSHAFT REAR OIL			2	2		
39	33209	SEAL, CRANKSHAFT REAR OIL			2	2		
40	106751	KEY, CRANK GEAR & DAMPER			2	2		
41	33313	CRANKSHAFT ASSEMBLY			1	1		
41	33314	CRANKSHAFT ASSEMBLY			1	1		
42	33093	MAIN BRG CAP (NO 1-4)			4	4		
43	33315	MAIN BRG CAP REAR			1	1		
44	33083	BOLT			5	5		
45	33317	OIL BAFFLE			1	1		

ITEM		PART NO.	DESCRIPTION	RH	LH	QUANTITY
46	33124	NUT BAFFLE ASS'Y		5	5	5
47	33083	BOLT		5	5	5
48	33316	STUD		5	5	5
			NOTE: 1 Fitted Block Ass'y consists of:			
			Block Ass'y, Cam Brgs, Pistons			
			Wrist Pins, Rings & Main Brgs			
			NOTE: 2 Complete engine ass'y consists of:			
			Block Ass'y, Crankshaft, Camshaft			
			Main Brgs, Rod Brgs, Cam Brgs			
			Timing Gears, Front Cover, Oil Pan (stamped)			
			Cylinder Heads, Pushrods, Valve Lifters,			
			Valve Covers, Pistons, Rings, Wrist Pins,			
			Connecting Rods, Intake Manifold			
			and Flywheel			
			NOTE: 3 For Starter down order Flywheel			
			33138 12.75 DIA			

MARINE ENGINES		 Crusader		PARTS CATALOG	
QUANTITY					
305		350			
ITEM	PART NO.	DESCRIPTION		RH	LH
		NOTES			

FIGURE 2

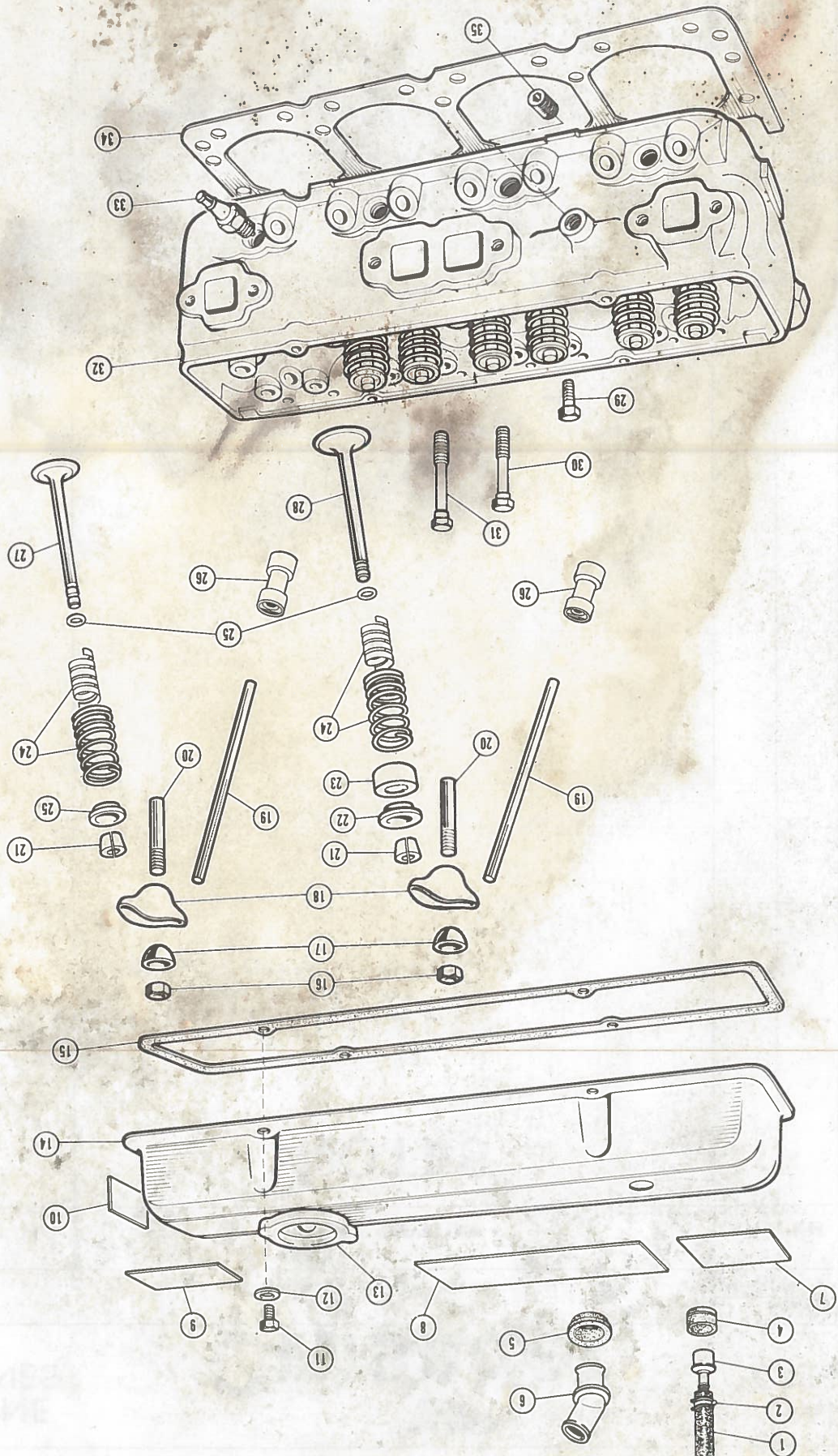


FIG. 2 CYLINDER HEAD ASSEMBLY

QUANTITY

305 350

ITEM	PART NO.	DESCRIPTION	QUANTITY			
			RH	LH	RH	LH
1	30112	HOSE, CRANK CASE VENT VALVE	1	1	1	1
2	33295	CLAMP, VENT HOSE	2	2	2	2
3	30110	CRANKCASE VENT VALVE	1	1	1	1
4	20598	GROMMET VENT VALVE	1	1	1	1
5	1104595	GROMMET BREATHER ELBOW	1	1	1	1
6	1104594	BREATHER ELBOW	1	1	1	1
7	20723	DECAL MODEL 220 See Note 1	2	2	2	2
8	22110	DECAL CRUSADER	2	2	2	2
9	96889	DECAL HYDRAULIC LIFTERS	1	1	1	1
10	97182	DECAL FIRING ORDER	1	1	1	1
11	33318	BOLT ROCKER COVER	8	8	8	8
12	33125	WASHER SPECIAL	8	8	8	8
13	20105	OIL FIL CAP	2	2	2	2
14	33243	ROCKER COVER ASSEMBLY W/CAP	2	2	2	2
15	91351	GASKET ROCKER COVER	2	2	2	2
16	20582	NUT, ROCKER STUD	16	16	16	16
17	20583	BALL, ROCKER PIVOT	16	16	16	16
18	12155	ROCKER ARM	16	16	16	16
19	12154	PUSH ROD	16	16	16	16
20	33074	STUD, ROCKER PIVOT, .003 OS	AR	AR	AR	AR
21	33075	STUD, ROCKER PIVOT, .013 OS	AR	AR	AR	AR
22	33201	KEY VALVE STEM	32	32	32	32
23	33333	EXHAUST VALVE ROTATOR ASS'Y	8	8	8	8
24	33211	SHIELD, VALVE STEM OIL	16	16	16	16
25	33241	VALVE SPRING, INLET W/DAMPER	8	8	8	8

FIG. 2

CYLINDER HEAD ASSEMBLY

ITEM	PART NO.	DESCRIPTION	QUANTITY	
			RH	LH

24	33312	VALVESPRING EXHAUST W/DAMPER	8	8
25	20056	SEAL, VALVE STEM OIL	16	16
26	30016	HYDRAULIC LIFTER ASS'Y	16	16

27	33325	VALVE INLET STD	8	8
27	33326	VALVE INLET STD	8	8
27	33327	VALVE INLET (.003 O.S.)	AR	AR
27	33328	VALVE INLET (.003 O.S.)	AR	AR
27	33329	VALVE INLET (.015 O.S.)	AR	AR
27	33330	VALVE INLET (.015 O.S.)	AR	AR
27	33331	VALVE INLET (.030 O.S.)	AR	AR
27	33332	VALVE INLET (.030 O.S.)	AR	AR
28	33334	VALVE EXHAUST STD Note 3	8	8
28	33335	VALVE EXHAUST STD	8	8
28	33336	VALVE EXHAUST (.003 O.S.)	AR	AR
28	33337	VALVE EXHAUST (.003 O.S.)	AR	AR
28	33338	VALVE EXHAUST (.015 O.S.)	AR	AR
28	33339	VALVE EXHAUST (.015 O.S.)	AR	AR
28	33340	VALVE EXHAUST (.030 O.S.)	AR	AR
28	33341	VALVE EXHAUST (.030 O.S.)	AR	AR
29	20123	BOLT SHORT	16	16
30	20124	BOLT MEDIUM	4	4
31	20122	BOLT LONG	14	14
32	33342	HEAD CYLINDER ASS'Y Note 2, 3	2	2
32	33343	HEAD CYLINDER ASS'Y Note 2, 3	2	2
33	33311	SPARK PLUG	8	8

FIG. 2 CYLINDER HEAD ASSEMBLY

QUANTITY

305

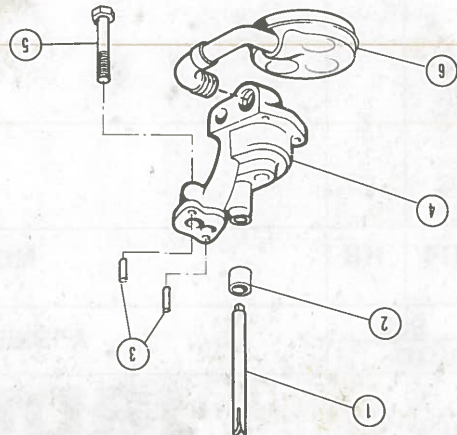
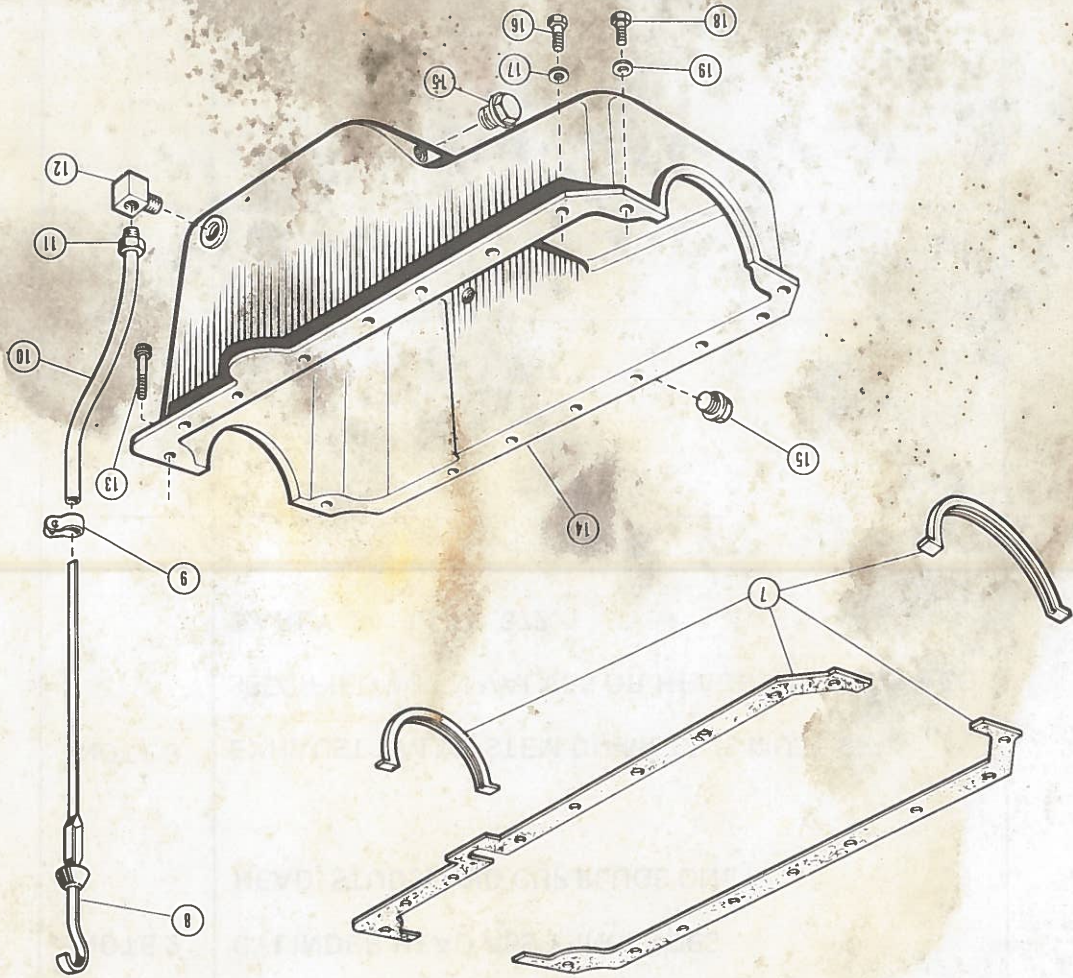
350

ITEM	PART NO.	DESCRIPTION	RH	LH	RH	LH
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34	33345	HEAD GASKET	2	2	2	2
35	444705	PLUG 1/2 NPT SOCKET HEAD	2	2	2	2

NOTE 1	MODEL DECALS ARE AS FOLLOWS	CH190 22123	CH220 20723	CH270 21060
NOTE 2	CYLINDER HEAD ASS'Y INCLUDES	HEAD, STUDS, AND CUP PLUGS ONLY		
NOTE 3	EXHAUST VALVE STEM DIAMETERS MUST BE	SPECIFIED WHEN VALVES OR HEADS ARE ORDERED		
	EARLY .341 LATE .372			

FIGURE 3



WITH CAST PAN

ITEM	PART NO.	DESCRIPTION	RH	LH	RH	LH
1	12152	SHAFT, DISTRIBUTOR TO PUMP	1	1	1	1
2	33131	RETAINER, SHAFT	1	1	1	1
3	30157	PIN, PUMP LOCATING	2	2	2	2
4	33190	OIL PUMP ASSEMBLY	1	1	1	1
5	33232	BOLT, OIL PUMP ATTACHING	1	1	1	1
6	20153	OIL SCREEN ASSEMBLY	1	1	1	1
7	33206	OIL PAN GASKET SET	1	1	1	1
8	21045	OIL LEVEL INDICATOR	1	1	1	1
9	96566	CLAMP INDICATOR TUBE	1	1	1	1
10	97215	TUBE, INDICATOR	1	1	1	1
11	142433	NUT, INDICATOR TUBE	1	1	1	1
12	137423	ELBOW	1	1	1	1
13	20987	BOLT SOCKET HD. 5/16 - 18 x 2"	2	2	2	2
14	96444	OIL PAN	1	1	1	1
15	444868	PLUG 3/8 NPT	AR	AR	AR	AR
16	179803	BOLT 1/4 - 20 x 1 3/4"	13	13	13	13
17	103319	WASHER 1/4" LOCK NOMINAL	13	13	13	13
18	179826	BOLT 5/16 - 18 x 2	2	2	2	2
19	103320	WASHER 5/16" LOCK NOMINAL	2	2	2	2

FIGURE 4

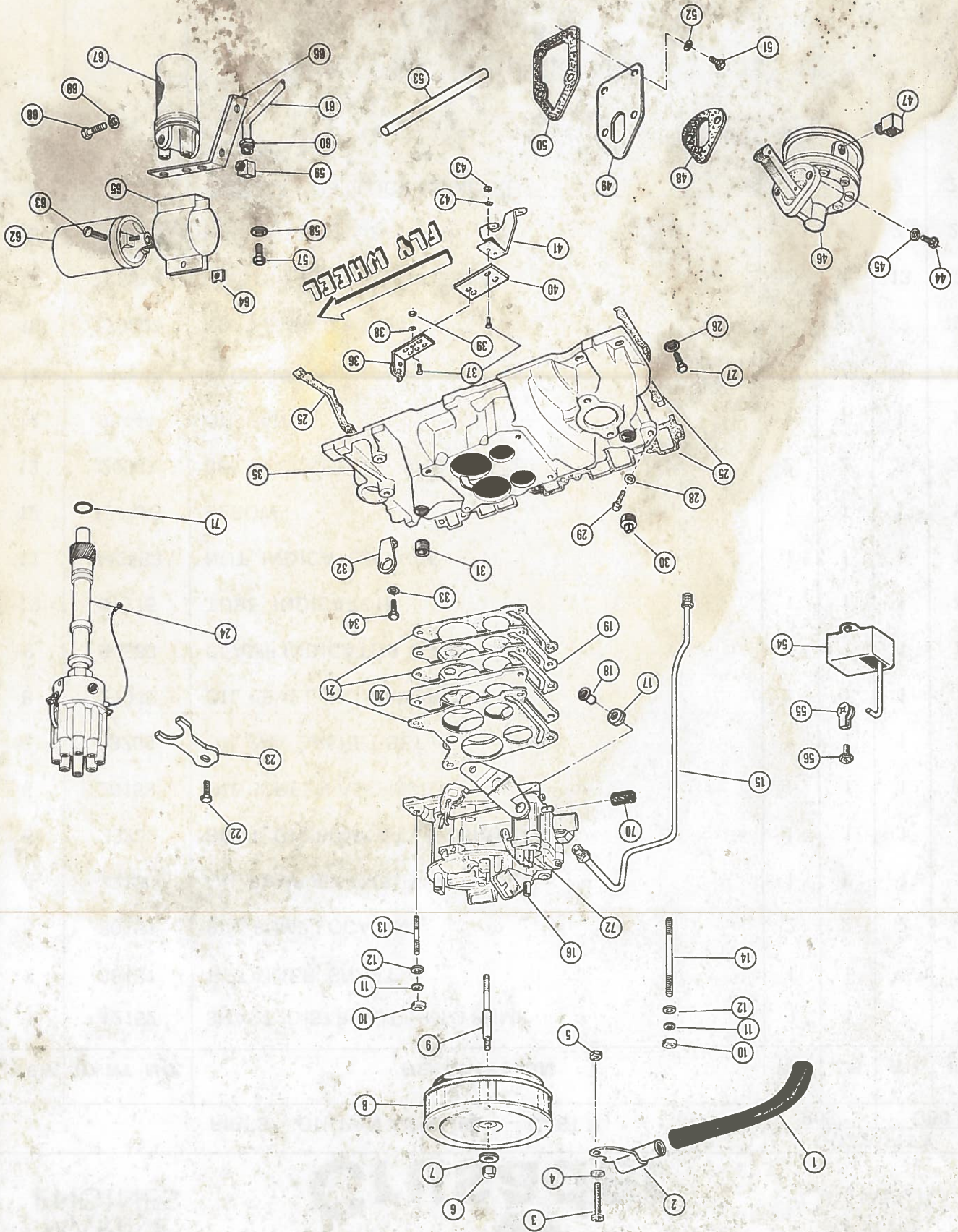


FIG. 4 INTAKE MANIFOLD ASSEMBLY STD.

ITEM		PART NO.	DESCRIPTION		RH	LH	QUANTITY	
							305	350
1		23091	HOSE CRANKCASE VENT		1	1	1	1
2		21064	VENT TUBE BRACKET		1	1	1	1
3		436673	SCREW 6-32 x 2"		1	1	1	1
4		131014	WASHER # 6		1	1	1	1
5		427254	NUT # 6-32		1	1	1	1
6		20231	NUT 1/4 - 20 SELF LOCKING		1	1	1	1
7		103339	WASHER 1/4 FLAT		1	1	1	1
8		97214	FLAME ARRESTOR ASS'Y 4BBL		1	1	1	1
8		97456	FLAME ARRESTOR ASS'Y 2BBL		1	1	1	1
9		96926	STUD SPECIAL NOTE 5		1	1	1	1
10		102634	NUT 5/16 - 18		4	4	4	4
11		103320	WASHER 5/16 LOCK		4	4	4	4
12		103340	WASHER 5/16 FLAT		4	4	4	4
13		96817	STUD SHORT		AR	AR	2	2
14		96818	STUD LONG		AR	AR	2	2
15		97459	FUEL LINE CH190		1	1	1	1
15		97378	FUEL LINE CH220,270		1	1	1	1
16		45344	CARBURETOR CH190 2BBL		1	1	1	1
16		96820	CARBURETOR CH220,270		1	1	1	1
17		20410	BUSHING THROTTLE ARM		1	1	1	1
18		20409	SLEEVE THROTTLE ARM		1	1	1	1
20		97122	8° WEDGE ADAPTER 4BBL		1	1	1	1
20		97455	8° WEDGE ADAPTER 2BBL CH190		1	1	1	1
20		97515	0° ADAPTER 2BBL CH190		1	1	1	1
21		97033	GASKET 4BBL	SEE NOTE 1	AR	AR	1	AR

FIG. 4 INTAKE MANIFOLD ASSEMBLY STD.

ITEM	PART NO.	DESCRIPTION	QUANTITY			
			RH	LH	RH	LH
21	91616	GASKET 2BBL CH190	1			
22	179837	BOLT DIST. CLAMP 3/8 - 16 x 3/4	1	1	1	1
23	20799	DIST. HOLD DOWN CLAMP	1	1	1	1
24	41050	DISTRIBUTOR See Note 2	1	1	1	1
25	21006	INTAKE MANIFOLD GASKET SET	1	1	1	1
26	103321	WASHER 3/8 LOCK	12	12	12	12
27	435611	BOLT LIFT EYE BRACKET	1	1	1	1
28	103321	WASHER 3/8 LOCK	12	12	12	12
29	435611	BOLT	8	8	8	8
30	444746	PLUG 1/2 NPT	1	1	1	1
31	444699	PLUG 3/8 NPT SOCKET HEAD	1	1	1	1
32	96845	LIFTING EYE	2	2	2	2
33	103321	WASHER	1	1	1	1
34	435611	BOLT	3	3	3	3
35	96315	INTAKE MANIFOLD (STD PROFILE)	1	1	1	1
36	21033	THROTTLE CABLE CLAMP	1	1	1	1
37	443874	SCREW # 10 - 24 x 1/2"	4	4	4	4
38	120217	WASHER # 10 LOCK	2	2	2	2
39	120361	NUT # 10 - 24	2	2	2	2
40	97280	SPACER	1	1	1	1
41	96683	THROTTLE CABLE BRACKET Note 4	1	1	1	1
42	120217	WASHER # 10 LOCK	2	2	2	2
43	120361	NUT # 10 - 24	2	2	2	2
44	20791	BOLT SPECIAL	2	2	2	2
45	NSS	WASHER - PART OF 20791				