
GM DIESEL

PARTS BOOK

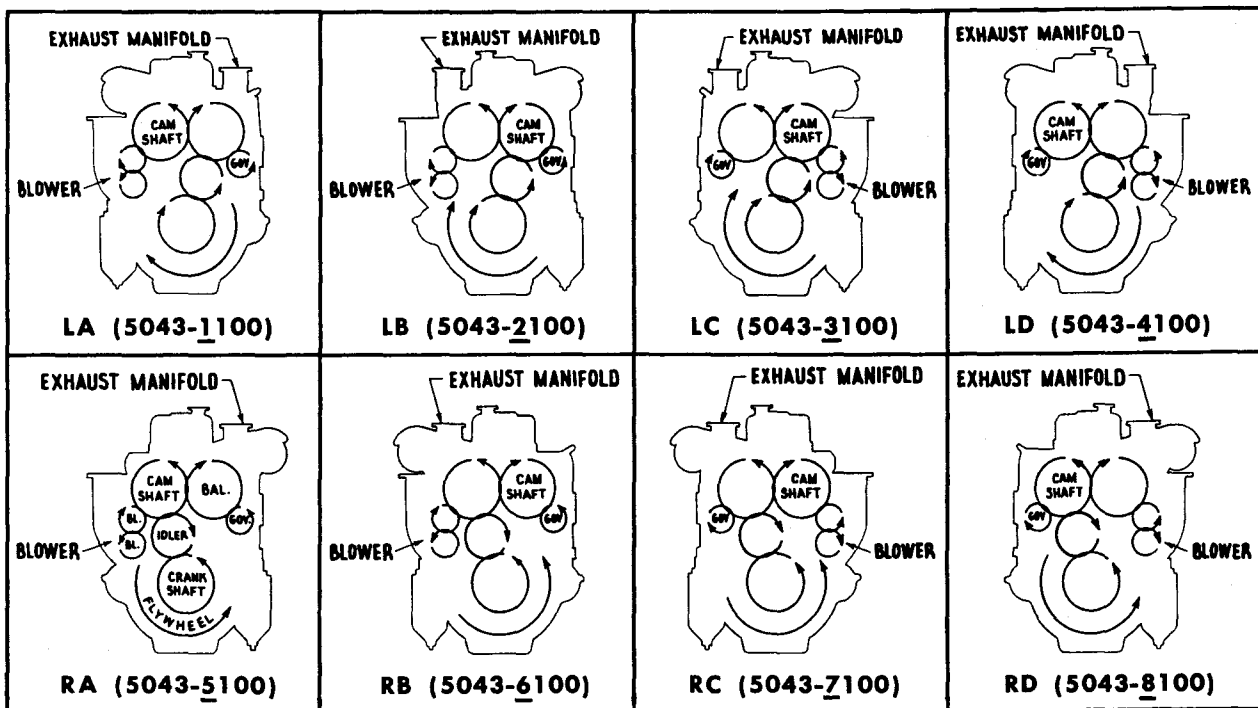
IN-LINE 53 ENGINES

**DETROIT DIESEL ENGINE DIVISION
GENERAL MOTORS CORPORATION
DETROIT, MICHIGAN**

GM DIESEL

UNIT No. _____ RATED HP _____ @ _____ CUSTOMER'S NAME _____
 MODEL No. _____ CONT. HP _____ @ _____ ADDRESS _____
 APPLICATION _____ MAX. NO LOAD RPM _____ ENGINE LOCATION _____

EQUIPMENT	TYPE	EQUIPMENT	TYPE	EQUIPMENT	TYPE
Engine Base		Water Bypass Tube		Accessory Drive	
Engine Lifter Brkt.		Thermostat		Battery Chrg. Generator	
Flywheel Housing		Water Filter		Starter	
Vibration Damper		Exhaust Manifold		Hyd. Starter Acces.	
Flywheel		Air Cleaner or Silencer		Starting Aid	
Flywheel Hsg. Adptr.		Fuel Pump		Air Heater	
Oil Pan		Injector		Marine Gear	
Oil Pump		Blower		Torque Converter	
Oil Distribution		Blower Drive Shaft		Torque Converter Lines	
Dipstick		Turbocharger		Gear Box	
Oil Filler Tube		Fuel Filter		Muffler & Conn.	
Oil Cooler		Fuel Lines		Engine Hood	
Oil Filter		Air Inlet Housing		Wiring Harness	
Oil Lines		Alarm or Shutoff		Instruments	
Ventilating System		Throttle Controls		Tach. Drive	
Crankshaft Cover		Injector Controls		Radiator	
Balance Wgt. Cover		Governor		Heat Ex. or Keel Cooling	
Fan		Engine Mounts		Raw Water Pump	
Crankshaft Pulley		Power Take-off		Bilge Pump	
Crankshaft Pulley Belt		Vacuum Pump		Power Generator	
Fan Shroud		Hydraulic Pump		Control Cabinet	
Water Connections		Air Compressor			
Water Pump Cover		Camshaft & Gear Train			
Water Manifold		Rocker Cover			



ALL ABOVE VIEWS FROM REAR OF ENGINE

GM DIESEL

Your Series 53 Diesel engine was manufactured by Detroit Diesel Engine Division. Material of the finest quality selected through years of research and experience has been combined with precision workmanship and careful inspection to provide you with many yours of dependable trouble-free operation.

This parts book has been prepared for you as an aid in determining parts which may be required in the maintenance of your engine. All parts listed herein are "Factory Engineered Parts" and are manufactured to the same precision standards as the original equipment.

For your own protection, always insist on GM Diesel "Factory Engineered Parts" for your engine.

HOW TO LOCATE PARTS

Parts may be readily located in this book by the following method. Refer to the Group Index on page 4 and determine the group in which the desired part appears and the page on which the group is shown. Numerous illustrations are included in this publication to further aid you in identifying parts.

The Alphabetical Index in the back of the book lists all major parts alphabetically, by noun name, and the page on which the part is shown. This may be used as an alternate to the above method.

HOW TO ORDER PARTS

All parts orders should be placed with your nearest GM Diesel distributor or dealer. Do not place orders directly with the factory.

Always give the model and unit number of your engine. This is stamped on the Option Plate on the rocker cover of your engine; if a type number is shown covering the equipment required, be sure to include this number on your order.

The Option Plate (shown here) on your engine is an exclusive GM Diesel feature. It lists any special equipment which may be on your engine and facilitates locating the required replacement part for your engine. Record the Engine Option Plate information on page 2 for handy reference. Your GM Diesel distributor or dealer has a record of this information and by furnishing him with the type number shown he can properly interpret your requirements.

OPTIONS		EQUIPMENT	
4D	DETROIT DIESEL ENGINE DIVISION	327	OIL FILLER CAP 18
000	DETROIT DIESEL ENGINE	195	FAN 290
MODEL	5044-7201	118	AIR CLEANER 149
UNIT NO	4D-000	141	THROTTLE CONTROLS 458
MAX. RPM NO LOAD	2800	468	POWER TAKE-OFF 180
RATED HP	AT	41	BATT. CHRG. GENERATOR 607
CONT. HP	AT	390	INSTRUMENTS 176
			REV.0 50,000,000

FLYWHEEL
VENTILATING SYSTEM
CRANKSHAFT PULLEY
AIR INLET HSG.
GOVERNOR VAR.
ROCKER COVER
STARTER

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ABBREVIATIONS

adj	adjustable	flex	flexible	mtg	mounting
adptr	adaptor	fig	figure	no	number
amp	ampere	fil	fillister	O.D.	outside diameter
AR	as required	gen	generator	O.S.	oversize
assy	assembly	G.M.	General Motors	press	pressure
batt	battery	gov	governor	pt	point
br	brass	hd	head	P.T.	pipe thread
brg	bearing	H.E.	heat exchanger	rad	radiator
brkt	bracket	hex	hexagon	rd	round
C.C.W.	counter clockwise	hsg	housing	red	reducing or reduction
chrg	charging	hyd	hydraulic	R.H.	right hand
conn	connection (s)	I.D.	inside diameter	sl	slotted
cvr	cover	inj	injector	sm	small
C.W.	clockwise	instr	instrument (s)	spd	speed
cyl	cylinder	int	internal	std	standard
dev	developed	inv	inverted	tach	tachometer
dia	diameter	L	length	tamp	temperature
dist	distribution	L.H.	left hand	U.S.	undersize
drv	drive, driving	limit	limiting	V	volt
drvn	driven	man	manifold	vari	variable
eng	engine	max	maximum	vent	ventilating
exh	exhaust	mech	mechanical	W	width
fl	flared or flat	mtd	mounted		

GM DIESEL

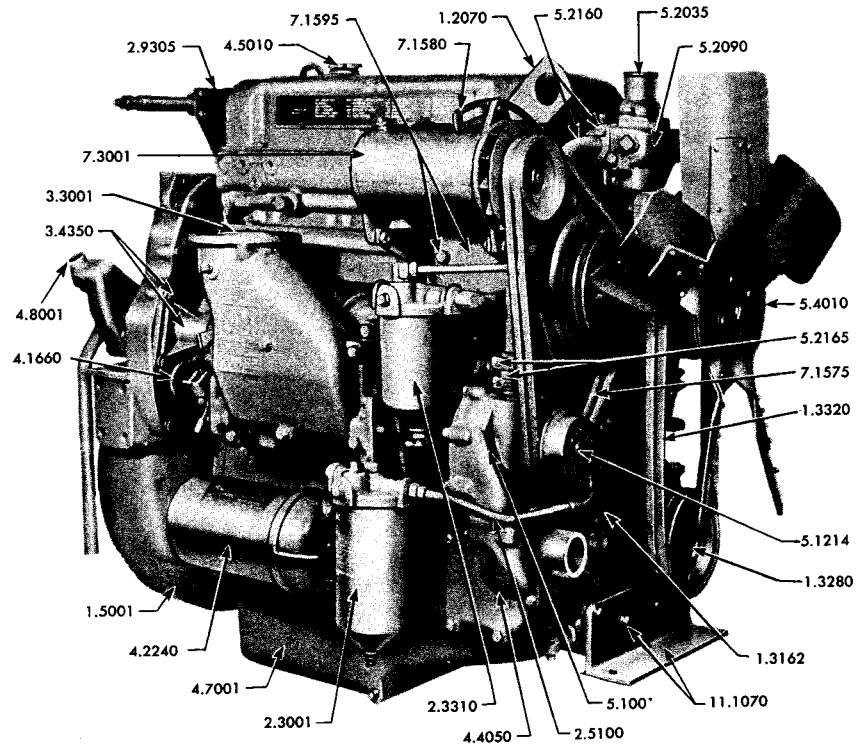


Fig. 1 - Typical Fan to Flywheel Engine

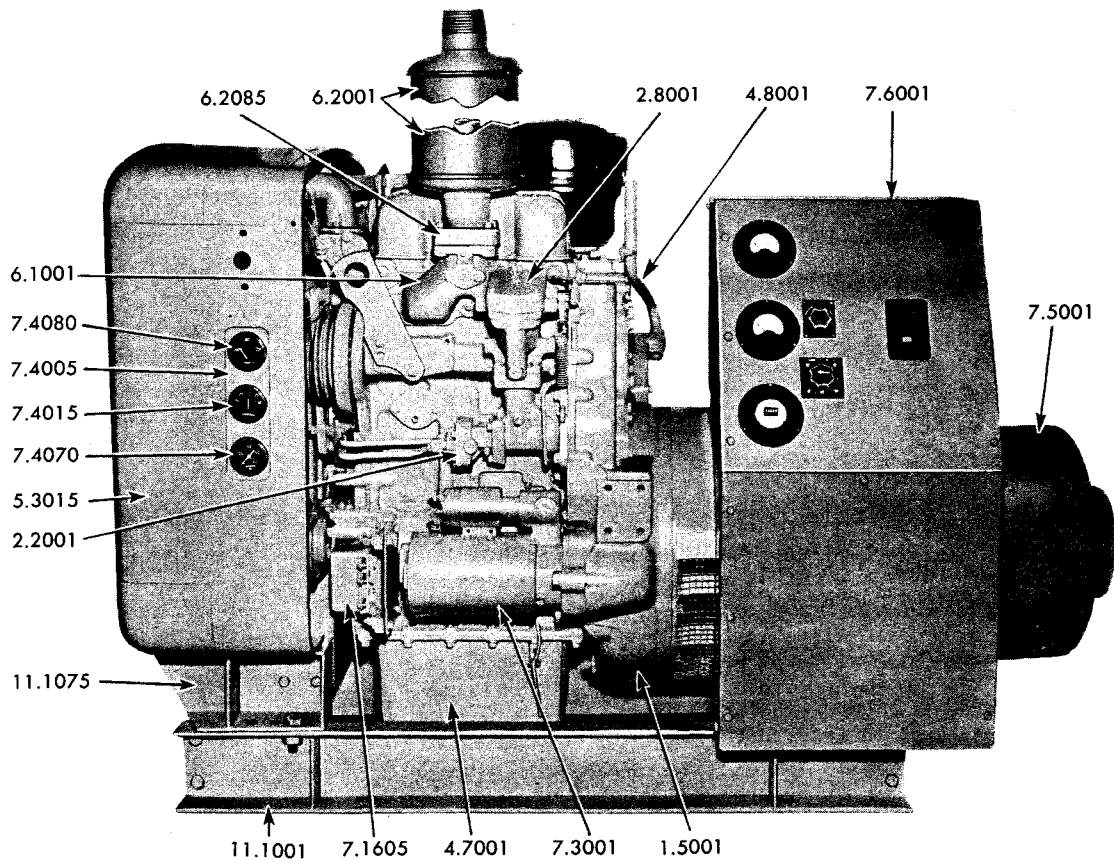


Fig. 2 - Typical Generator Set

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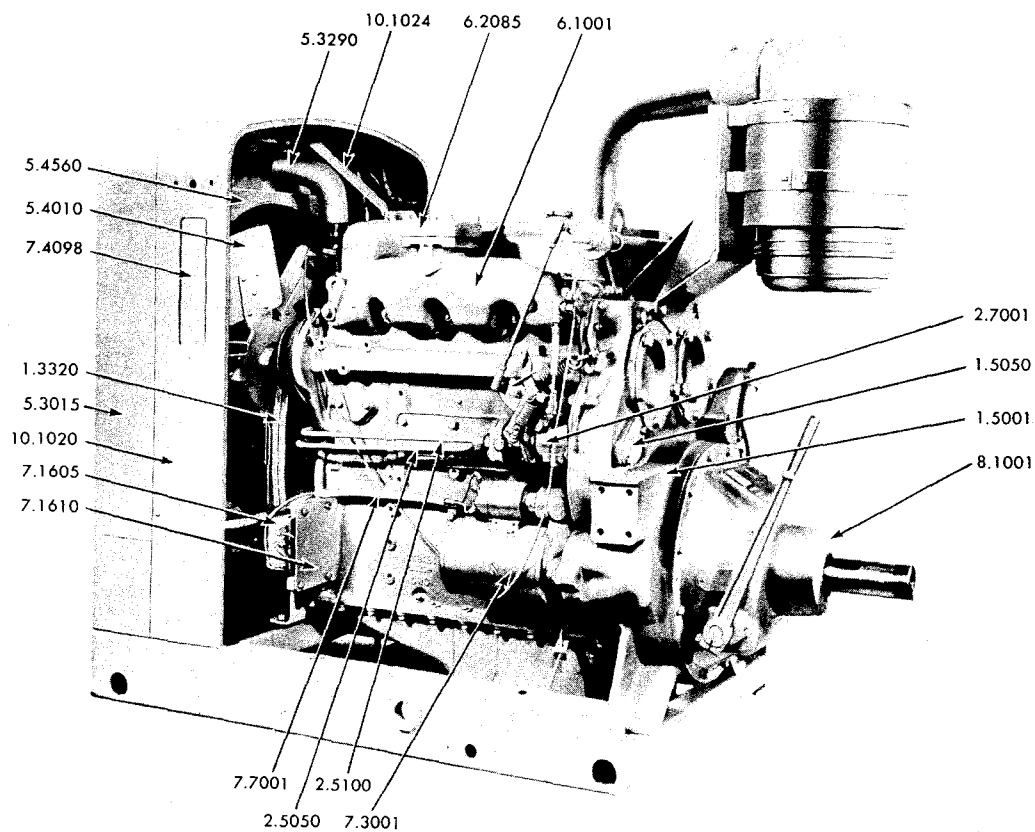


Fig. 3 - Typical Power Unit

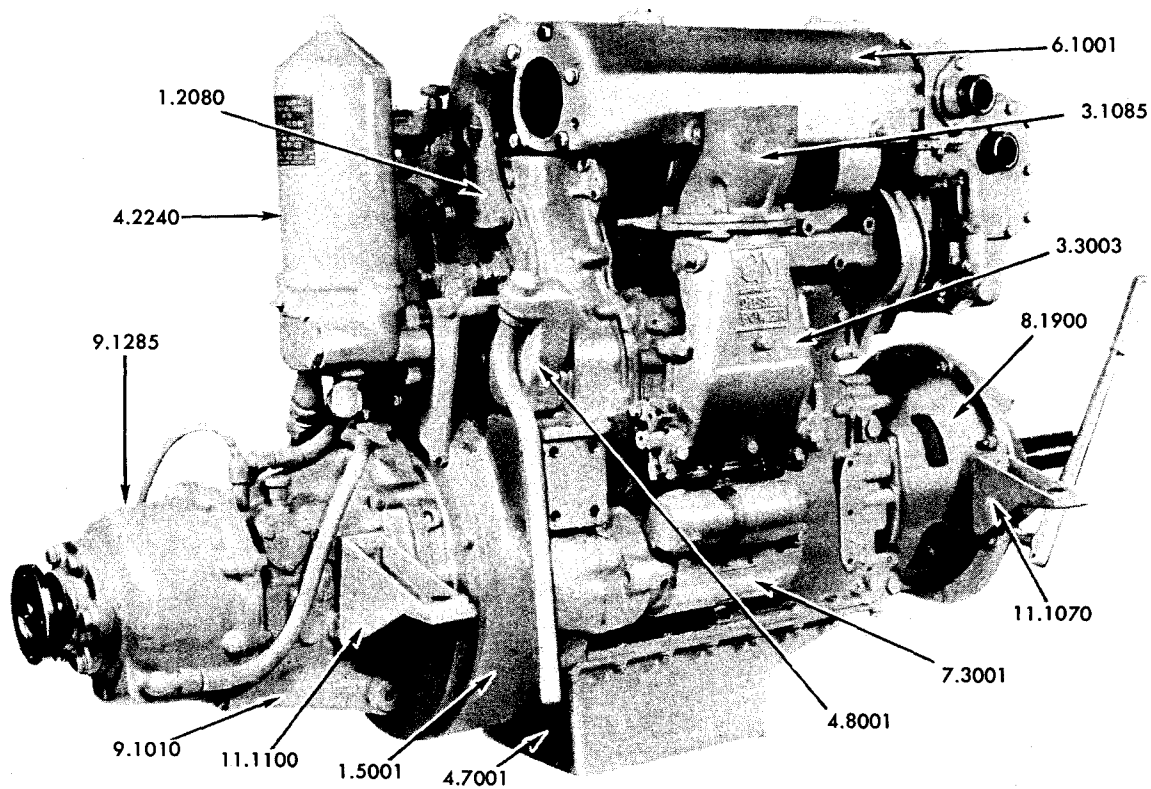


Fig. 4 - Typical Marine Engine

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FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
CYLINDER BLOCK						
5	1.1001	5196489	Block Assy., cylinder	1		
5	1.1001	5196490	Block Assy., cylinder		1	
5	1.1001	5196491	Block Assy., cylinder			1
-	-	5121316	Plug (5/8"x13/32") (holes opposite oil cooler)	2	2	2
-	-	103878	Plug, 1/4" pipe (dipstick hole)	1	1	1
-	-	444687	Plug, 1/8" pipe	4	6	6
-	-	5150131	Plug, 7/16" cup (oil holes)	3	2	2
5	1.1001	141245	Pin, 3/8"x1 1/8" dowel (front cover and flywheel housing)	4	4	4
-	-	134519	Draincock, 1/8"		1	2
-	-	5196575	Gasket Kit, engine overhaul	AR		
-	-	5196576	Gasket Kit, engine overhaul		AR	
-	-	5196577	Gasket Kit, engine overhaul			AR
5	1.1020	5121365	Plate Assy., cylinder block rear end (A & B engine)	1	1	
5	1.1020	5121366	Plate Assy., cylinder block rear end (C & D engine)	1	1	
5,17	1.1020	5121367	Plate Assy., cylinder block rear end (A & B engine)			1
5,17	1.1020	5121368	Plate Assy., cylinder block rear end (C & D engine)			1
-	-	179838	Bolt, 3/8"-16x7/8" hex. hd.	13	13	13
-	-	103321	Lockwasher, 3/8"	13	13	13
5	1.1030	5116354	Gasket, cylinder block end plate	1	1	1
5	1.1040	5116372	Cover, cylinder block hand hole	1		
5	1.1040	5116373	Cover, cylinder block hand hole		1	
5	1.1040	5116374	Cover, cylinder block hand hole			1
-	-	179837	Bolt, 3/8"-16x3/4" hex. hd.			6
5	1.1040	179839	Bolt, 3/8"-16x1" hex. hd.	4	6	
5	1.1040	103321	Lockwasher, 3/8"	4	6	6
5	1.1050	5116379	Gasket, cylinder block hand hole cover	1		
5,17	1.1050	5116380	Gasket, cylinder block hand hole cover		1	
5,17	1.1050	5116381	Gasket, cylinder block hand hole cover			1
5,17	1.1060	5150023	Cover, cylinder block water hole (plain)		1	1
5,17	1.1060	5123918	Cover, cylinder block water hole (tapped 1/8")		1	1
5,17	1.1060	5115097	Cover, cylinder block water hole (tapped 3/8")		1	1

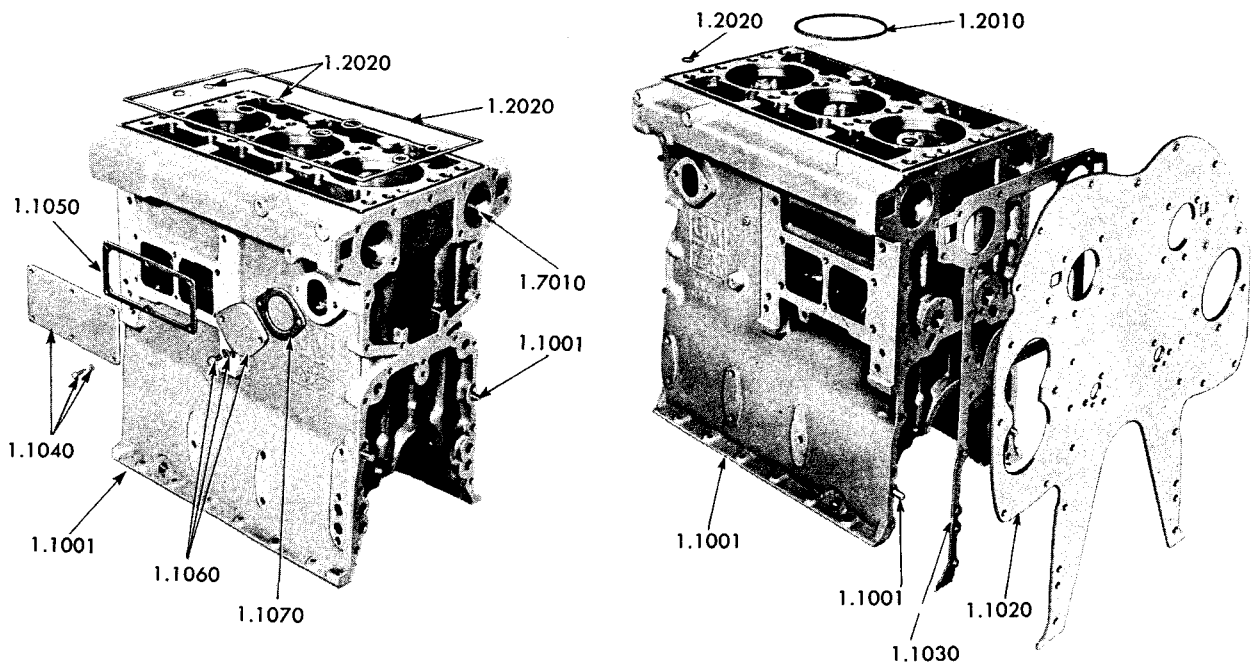


Fig. 5 - Cylinder Block

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FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
5,17	1.1060	5124685	Cover, cylinder block water hole (tapped 1/4")		1	1
5	1.1060	5189143	Cover, cylinder water hole (tapped 1/2")		1	1
5	1.1060	186618	Bolt, 5/16"-18x5/8" hex. hd.	2	2	2
5	1.1060	103320	Lockwasher, 5/16"	2	2	2
5	1.1070	5116357	Gasket, cylinder block water hole cover	1	1	1
AIR BOX DRAINS						
-	-	5154970	Tube Assy., air box drain (dev. L. 14 3/8")	1	1	1
-	-	5126681	Tube, air box drain (dev. L. 2 7/16")	1		
-	-	137420	Elbow, 3/16" inv. fl. tube 90°	1	1	1
-	-	5176668	Clip (at oil pan bolt)	1	1	1
CYLINDER HEAD						
6	1.2001	5196033	Head Assy., cylinder (2 valve)	1		
6	1.2001	5196034	Head Assy., cylinder (2 valve)		1	
6	1.2001	5197951	Head Assy., cylinder (4 valve)		1	
6	1.2001	5197950	Head Assy., cylinder (2 valve)			1
6	1.2001	5197960	Head Assy., cylinder (4 valve)			1
6	1.2001	444687	Plug, 1/8" pipe	1	1	1
6	1.2001	5125237	Plug, 1/4" pipe	5	6	6
6	1.2001	5154453	Plug, 3/8"-16 sl. hdls.	3	3	3
6	1.2001	5151449	Plug, 13/16" cup	3	3	3
-	-	5196302	Gasket Kit, cylinder head	AR		
-	-	5196578	Gasket Kit, cylinder head		AR	
-	-	5196579	Gasket Kit, cylinder head			AR

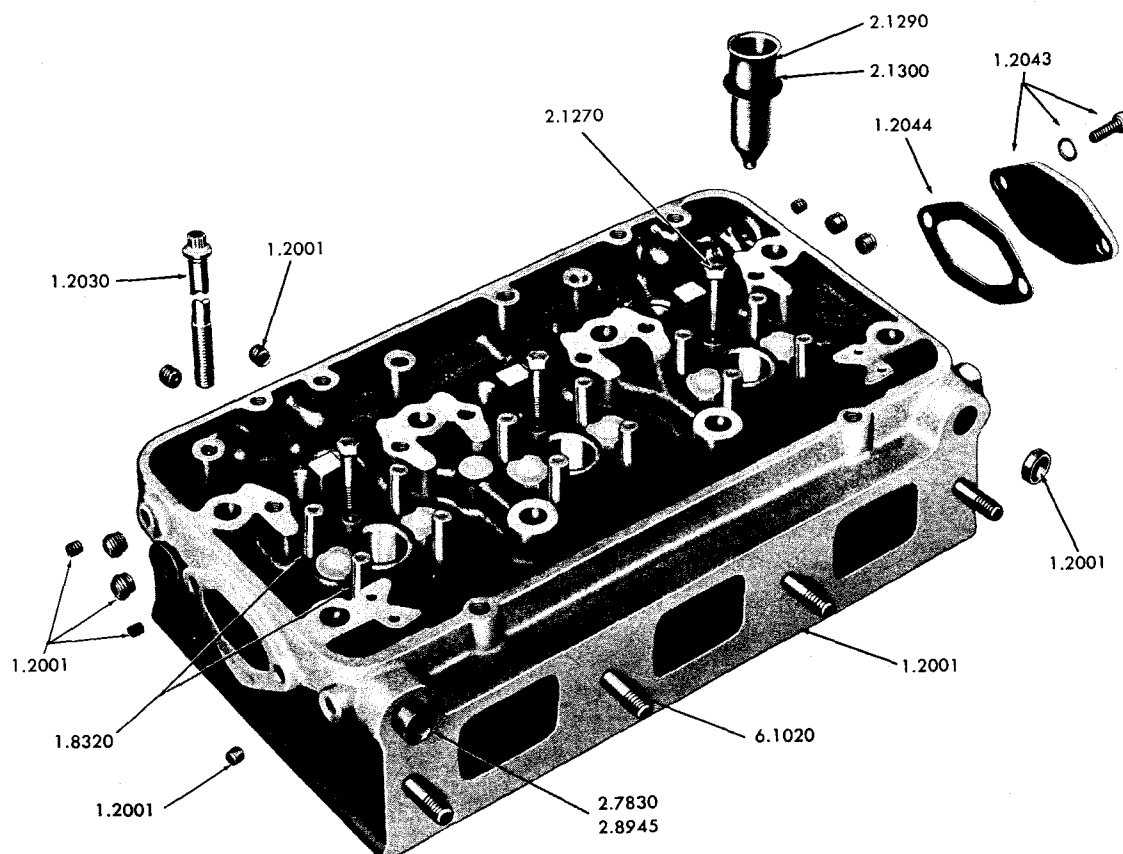


Fig. 6 - Cylinder Head

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FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
-	-	5119293	Nozzle, cylinder head water (4 valve head)		4	6
5	1.2010	5121254	Gasket, cylinder head compression	2	3	4
5	1.2020	5116291	Ring, cylinder head oil seal	1		
5	1.2020	5116292	Ring, cylinder head oil seal		1	
5	1.2020	5116293	Ring, cylinder head oil seal			1
5	1.2020	5116290	Ring, cylinder head water hole (end)	4	4	4
5	1.2020	5121207	Ring, cylinder head water hole (center)	2	4	6
5	1.2020	5116122	Ring, cylinder head oil hole	1	2	2
6	1.2030	5121263	Bolt, cylinder head (12 point head)	6	8	10
6	1.2043	5116241	Cover, cylinder head water hole	1	1	1
6	1.2043	5123168	Cover, cylinder head water hole (1/8" pipe tap)	1	1	1
6	1.2043	179838	Bolt, 3/8"-16x7/8" hex. hd.	2	2	2
6	1.2043	103321	Lockwasher, 3/8"	2	2	2
6	1.2044	5116242	Gasket, cylinder head water hole cover	1	1	1
ENGINE LIFTER BRACKET						
40,46	1.2070	5122872	Bracket, engine lifter - front (cylinder head, side)	1	1	1
-	-	5124753	Bracket, generator mounting and engine lifter - front	1	1	1
-	-	5124752	Bracket, generator mounting and engine lifter - front	1	1	1
-	-	5164294	Spacer, engine lifter bracket - front (1/8" thick)	2	2	2
17	1.2070	9409028	Bolt, 3/8"-16x1" hex. hd.	3	3	3
17	1.2070	186619	Bolt, 3/8"-16x1 1/8" hex. hd.	3	3	3
-	-	103321	Lockwasher, 3/8"	3	3	3
-	-	5119379	Bracket, engine lifter - rear (flywheel housing)	1	1	1
40,48	1.2080	5124985	Bracket, engine lifter - rear (cylinder head, end)	1	1	1
46,49	1.2080	5125227	Bracket, engine lifter - rear (cylinder head, side)	1	1	1
-	-	5113850	Spacer, engine lifter bracket - rear	1	1	1
-	-	9409028	Bolt, 3/8"-16x1" hex. hd.	2	2	2
-	-	179844	Bolt, 3/8"-16x1 5/8" hex. hd.	2	2	2
-	-	179884	Bolt, 1/2"-13x1 3/8" hex. hd.	2	2	2
CRANKSHAFT						
7	1.3001	5116446	Crankshaft Assy.	1		
7	1.3001	5116447	Crankshaft Assy.		1	
7	1.3001	5116448	Crankshaft Assy.			1
9	1.3040	5116224	Seal, crankshaft oil - front	1	1	1
10	1.3060	5116229	Seal, crankshaft oil - rear	1	1	1

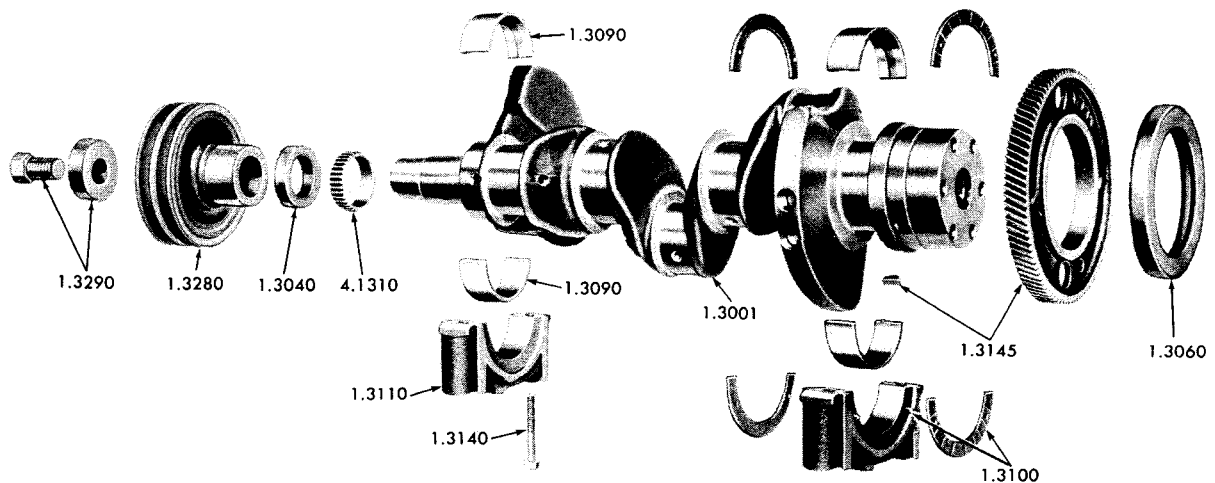


Fig. 7 - Crankshaft

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FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
7	1.3090	5195928	Shell Set, crankshaft main bearing (standard)	3	4	5
7	1.3090	5196660	Shell Set, crankshaft main bearing (.002" U.S.)	AR	AR	AR
7	1.3090	5196661	Shell Set, crankshaft main bearing (.010" U.S.)	AR	AR	AR
7	1.3090	5196662	Shell Set, crankshaft main bearing (.020" U.S.)	AR	AR	AR
7	1.3090	5196663	Shell Set, crankshaft main bearing (.030" U.S.)	AR	AR	AR
7	1.3100	5116197	Washer, crankshaft main bearing thrust	4	4	4
7	1.3100	5196755	Washer, crankshaft main bearing thrust (.005" O.S.)	AR	AR	AR
7	1.3100	5196756	Washer, crankshaft main bearing thrust (.010" O.S.)	AR	AR	AR
7	1.3100	141346	Pin, 3/16"x1/2" dowel	4	4	4
7	1.3140	5116199	Bolt, crankshaft main bearing cap	6	8	10
7	1.3145	5116195	Gear, crankshaft timing	1	1	1
7	1.3145	127559	Key, 1/4"x3/4" woodruff	1	1	1
CRANKSHAFT FRONT COVER						
8	1.3161	5119428	Cover Assy., engine front - upper	1	1	1
8	1.3161	5121373	Cover Assy., engine front - upper (reefer car)	1		
8	1.3161	186622	Bolt, 3/8"-16x1 1/4" hex. hd.	9	9	9
8	1.3161	186628	Bolt, 3/8"-16x1 1/2" hex. hd.	4	4	4
8	1.3161	103321	Lockwasher, 3/8"	13	13	13
9,17	1.3162	5197415	Cover Assy., engine front - lower (includes oil seal and oil pressure regulator)	1	1	1
9,17	1.3162	179860	Bolt, 7/16"-14x1 1/4" hex. hd.	2	2	2
9,17	1.3162	186283	Bolt, 3/8"-16x3 1/2" hex. hd.	4	4	4

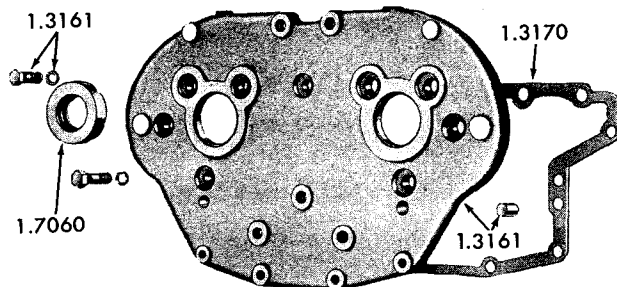


Fig. 8 - Engine Front Cover - Upper

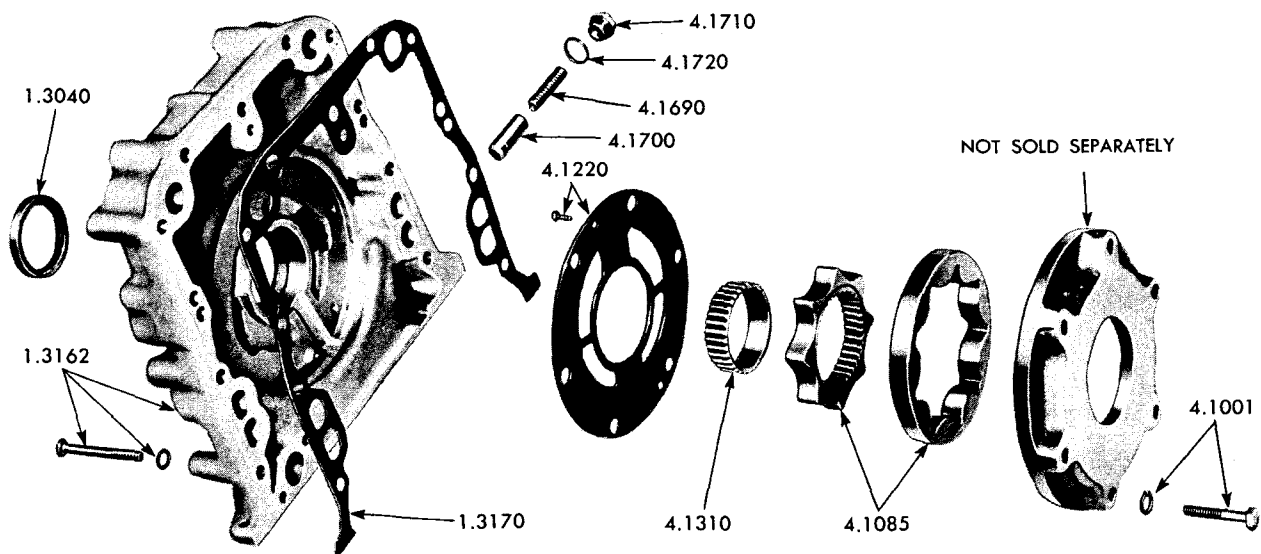


Fig. 9 - Engine Front Cover - Lower - and Oil Pump

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FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
9,17	1.3162	186282	Bolt, 3/8"-16x3 1/4" hex. hd.	11	11	11
9	1.3162	103321	Lockwasher, 3/8"	11	11	11
8	1.3170	5121082	Gasket, engine front cover - upper	1	1	1
9	1.3170	5116386	Gasket, engine front cover - lower	1	1	1
			1			
CRANKSHAFT PULLEY						
-	-	5125247	Pulley, crankshaft (5" dia., 1 groove)	1		
17	1.3280	5123551	Pulley, crankshaft (5 3/8" dia., 2 grooves, 3/8" wide)	1		
17	1.3280	5116484	Pulley, crankshaft (5 3/8" dia., 2 grooves, 1/2" wide)	1	1	1
17	1.3280	5119326	Pulley, crankshaft (5 3/8" dia., 2 grooves, 1/2" wide, cone drive, 4 holes tapped 3/8"-16)	1	1	1
17	1.3280	5126687	Pulley, crankshaft (5 3/8" dia., 2 grooves, 1/2" wide, cone drive, 4 holes tapped 5/16"-18)	1	1	1
17	1.3280	5129995	Pulley, crankshaft (5 3/8" dia., 2 grooves, 7 1/2" dia., 1 groove)		1	
17	1.3280	5126500	Pulley, crankshaft (6.14" dia., 2 grooves)	1	1	1
-	-	5180291	Retainer, crankshaft pulley	1	1	1
-	-	271632	Bolt, 3/4"-16x1 3/4" hex. hd. (except marine units)	1	1	1
-	-	5180629	Bolt, 3/4"-16x1 3/4" hex. hd. (marine units)		1	1
-	-	5119189	Cone, crankshaft pulley	2	2	2
CRANKSHAFT PULLEY BELT						
Sizes shown as outside length and top width of belt.						
1,17	1.3320	5119186	Belt Set, crankshaft pulley (2 belts) (42.5" L., .500" W.)	1	1	1
1,17	1.3320	5126763	Belt Set, crankshaft pulley (2 belts) (40" L., .500" W.)		1	1
1,17	1.3320	5119188	Belt Set, crankshaft pulley (2 belts) (39" L., .500" W.)	1	1	1
1,17	1.3320	5123089	Belt Set, crankshaft pulley (2 belts) (45 3/4" L., .380" W.)	1		
1,17	1.3320	5126764	Belt Set, crankshaft pulley (2 belts) (44 3/4" L., .500" W.)	1	1	1
-	-	5126447	Belt, crankshaft pulley (35" L., .500" W.)	1	1	1
-	-	5126761	Belt, crankshaft pulley (43.75" L., .500" W.)	1	1	1
-	-	5126767	Belt, crankshaft pulley (46.62" L., .500" W.)	1	1	1
-	-	5126765	Belt, crankshaft pulley (48" L., .500" W.)	1	1	1
-	-	5126768	Belt, crankshaft pulley (50.5" L., .500" W.)	1	1	1
-	-	5126253	Belt, crankshaft pulley (52" L., .500" W.)	1	1	1
FLYWHEEL						
The proper flywheel for your engine can be interpreted by the identifying type number on the option plate on your engine. Your GM Diesel dealer or distributor will interpret the flywheel type number into the part number.						
10	1.4001	-	Flywheel Assy. (includes ring gear)	1	1	1
10	1.4001	5126671	Plate, bolt	1	1	1
10	1.4001	9409129	Bolt, flywheel (1 3/4" L.)	6	6	6
10	1.4001	9409512	Bolt, flywheel (2" L.)	6	6	6
10	1.4001	9412018	Bolt, flywheel (2 1/4" L.)	6	6	6
10	1.4001	9412020	Bolt, flywheel (3" L.)	6	6	6
10	1.4040	906986	Bearing, clutch pilot	1	1	1
FLYWHEEL HOUSING						
The proper flywheel housing for your engine can be interpreted by your GM Diesel dealer or distributor. Furnish him with model and type number, if shown, on the option plate on your engine.						
17,40	1.5001	-	Housing, flywheel	1	1	1
10	1.5001	103879	Plug, 3/8" pipe	1	1	1
10	1.5001	103880	Plug, 1/2" pipe	1	1	1
-	-	9409126	Bolt, 5/16"-18x2 1/2" hex. hd.	2	2	2
-	-	9409079	Bolt, 3/8"-16x7/8" hex. hd.	1	1	1
-	-	179838	Bolt, 3/8"-16x7/8" hex. hd.	5	5	7

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FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
10	1.5001	179849	Bolt, 3/8"-16x2 1/2" hex. hd.	6	6	6
-	-	9414215	Bolt, 3/8"-16x2 1/2" hex. hd.	4	4	4
-	-	5121465	Bolt, 3/8"-24x3 11/16" hex. hd.	3	3	3
-	-	5123802	Shim, flywheel housing hub to end plate	AR	AR	AR
10	1.5010	5121334	Gasket, flywheel housing	1	1	1
10,32	1.5030	5122281	Cover, flywheel housing large hole	2	2	2
10	1.5030	179857	Bolt, 7/16"-14x7/8" hex. hd.	2	2	2
10	1.5030	122408	Bolt, 1/2"-13x1" hex. hd.	8	8	8
10	1.5030	103322	Lockwasher, 7/16"	2	2	2
10	1.5030	103323	Lockwasher, 1/2"	8	8	8
10	1.5040	5117061	Gasket, flywheel housing large hole cover	2	2	2
10	1.5040	5116411	Cover, flywheel housing small hole	1	1	1
10	1.5050	186625	Bolt, 5/16"-18x7/8" hex. hd.	2	2	2
10	1.5050	103320	Lockwasher, 5/16"	2	2	2
10	1.5060	5116391	Gasket, flywheel housing small hole cover	1	1	1

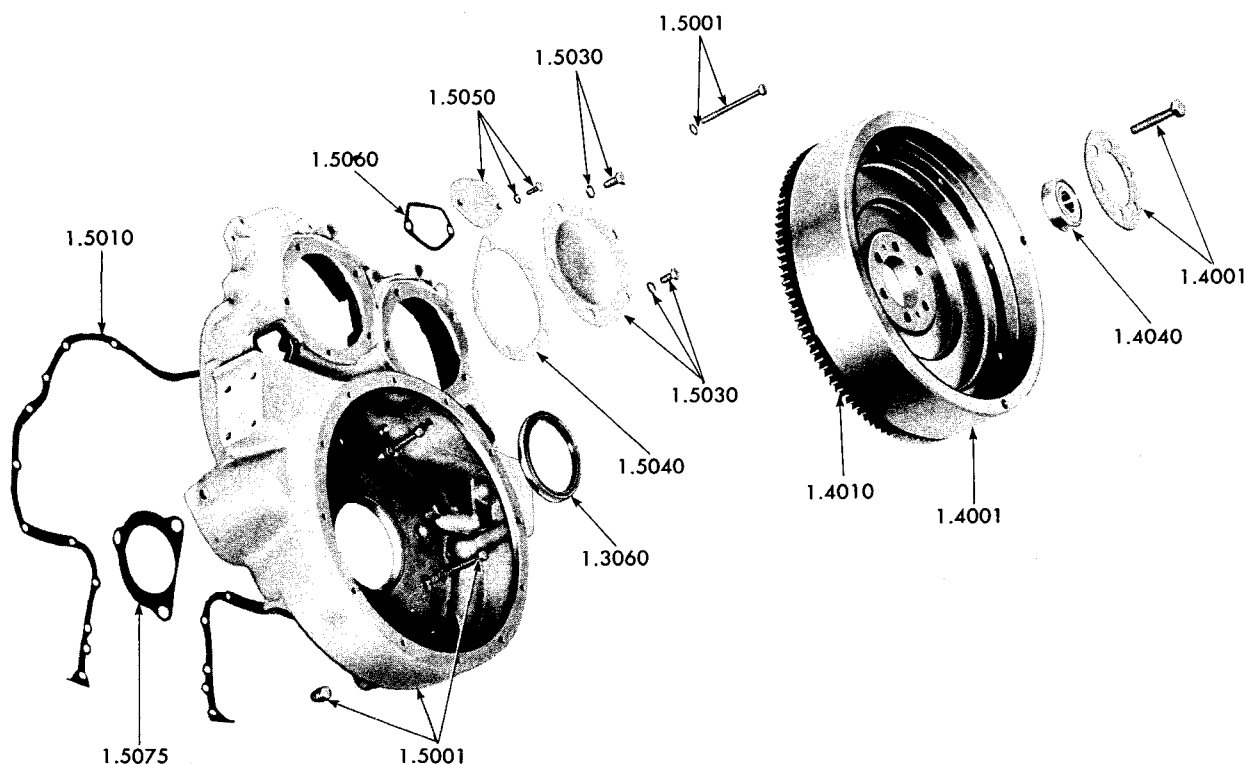


Fig. 10 - Flywheel and Flywheel Housing

FLYWHEEL HOUSING ADAPTOR						
-	-	5116113	Adaptor, flywheel housing (SAE #4 to #5)	1	1	
-	-	186622	Bolt, 3/8"-16x1 1/4" hex. hd.	12	12	
-	-	103321	Lockwasher, 3/8"	12	12	
CONNECTING ROD AND PISTON						
11	1.6001	5121262	Rod Assy., connecting (includes cap which is not sold separately, plus indented items)	2	3	4
11	1.6001	5197852	Bolt, connecting rod	4	6	8
11	1.6001	839103	Nut, connecting rod	4	6	8
-	-	5150140	Nozzle, connecting rod spray	2	3	4

GM DIESEL

FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
11	1.6100	5195929	Shell Set, connecting rod bearing (standard)	2	3	4
11	1.6100	5196664	Shell Set, connecting rod bearing (.002" U.S.)	AR	AR	AR
11	1.6100	5196665	Shell Set, connecting rod bearing (.010" U.S.)	AR	AR	AR
11	1.6100	5196666	Shell Set, connecting rod bearing (.020" U.S.)	AR	AR	AR
11	1.6100	5196667	Shell Set, connecting rod bearing (.030" U.S.)	AR	AR	AR
11	1.6110	5195931	Piston Assy. (17 to 1 comp. ratio)	2	3	4
11	1.6110	5197274	Piston Assy. (21 to 1 comp. ratio)		3	4
11	1.6115	5196833	Ring Set, piston (includes rings for one cylinder)	2	3	4

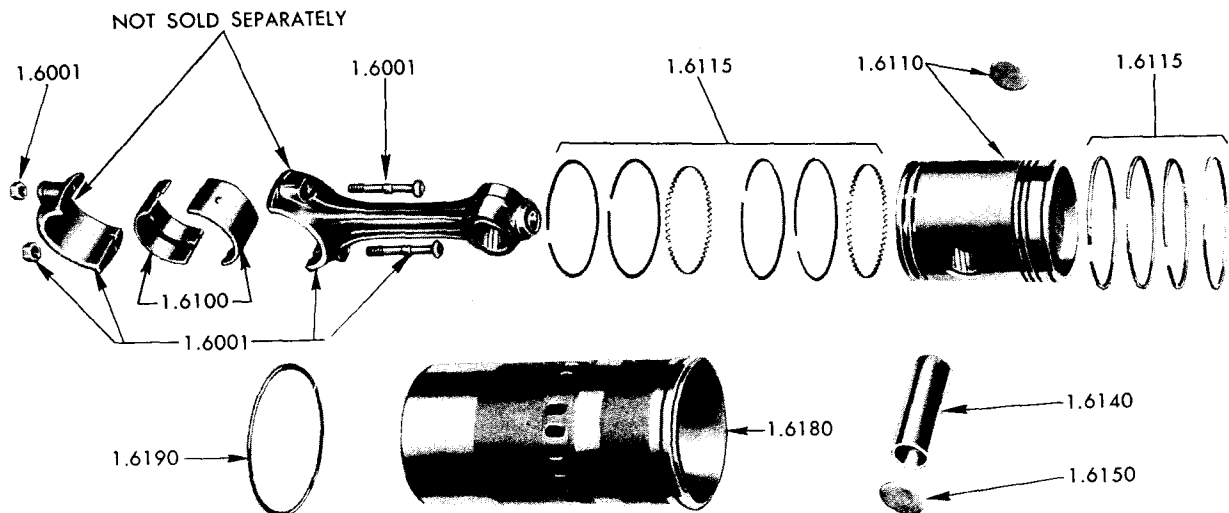


Fig. 11 - Connecting Rod and Piston

11	1.6140	5116189	Pin, piston	2	3	4
11	1.6150	5180250	Retainer, piston pin	4	6	8
11	1.6180	5121251	Liner, cylinder	2	3	4
-	-	5196834	Cylinder Kit (17 to 1 compression ratio)	AR	AR	AR
-	-	5197275	Cylinder Kit (21 to 1 compression ratio)		AR	AR
11	1.6190	5121256	Seal, cylinder liner (red)	2	3	4

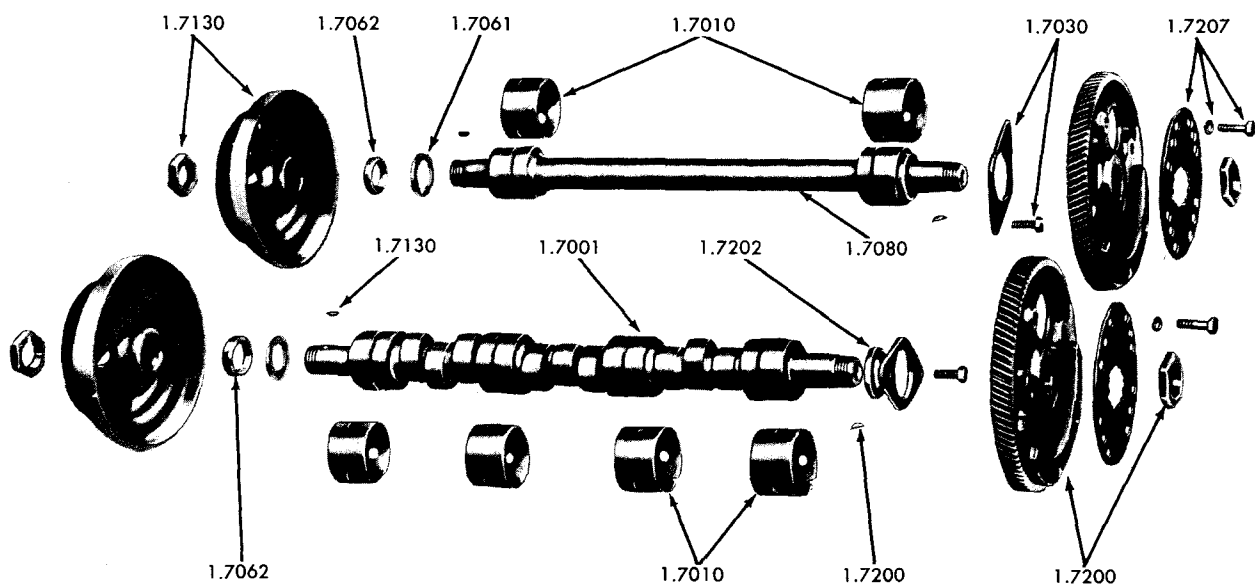


Fig. 12 - Cam and Balancer Shaft

GM DIESEL

FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
CAMSHAFT AND GEAR TRAIN						
12	1.7001	5121028	Camshaft Assy. (RA-RB-RC-RD engine)	1		
12	1.7001	5126929	Camshaft Assy. (RB-RC-LA-LD engine)		1	
12	1.7001	5126930	Camshaft Assy. (RA-RD-LB-LC engine)		1	
12	1.7001	5126932	Camshaft Assy. (RA-RB-RC-RD engine)			1
12	1.7001	5126931	Camshaft Assy. (LA-LB-LC-LD engine)			1
12	1.7010	5196011	Bearing Set, cam and balancer shaft (standard)	1 AR		
12	1.7010	5196089	Bearing Set, cam and balancer shaft (.010"U.S.)			
12	1.7010	5196090	Bearing Set, cam and balancer shaft (.020"U.S.)	1 AR		
12	1.7010	5196012	Bearing Set, cam and balancer shaft (standard)			
12	1.7010	5196092	Bearing Set, cam and balancer shaft (.010"U.S.)			1
12	1.7010	5196093	Bearing Set, cam and balancer shaft (.020"U.S.)			AR
12	1.7010	5196013	Bearing Set, cam and balancer shaft (standard)			AR
12	1.7010	5196088	Bearing Set, cam and balancer shaft (.010"U.S.)			
12	1.7010	5196091	Bearing Set, cam and balancer shaft (.020"U.S.)			
12	1.7030	5116198	Washer, cam and balancer shaft end bearing thrust	2	2	2
12	1.7030	9409028	Bolt, 3/8"-16x1" hex. hd.	4	4	4

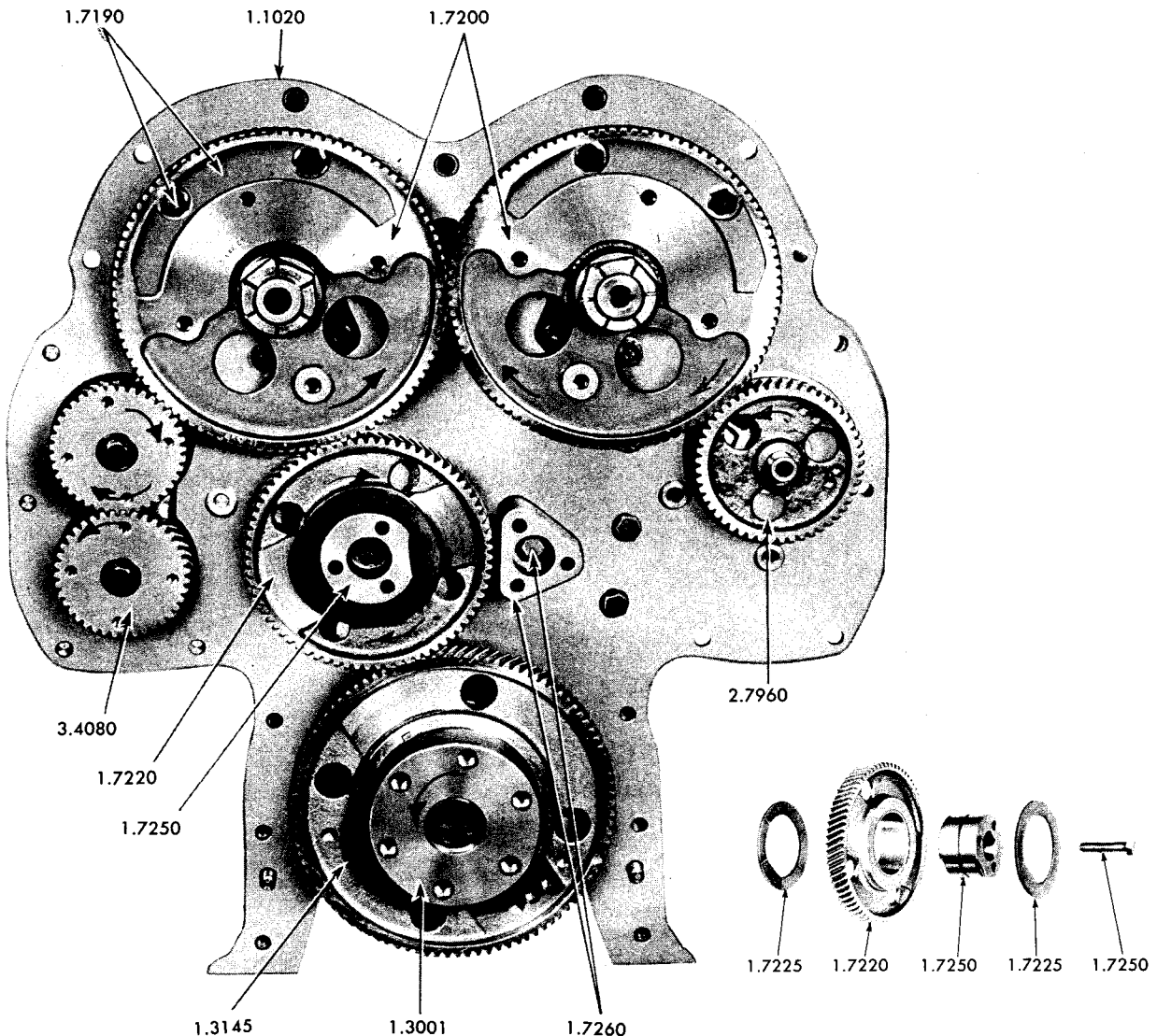


Fig. 13 - Gear Train

GM DIESEL

FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
8	1.7060	5116476	Seal, camshaft oil	2	2	2
12	1.7061	5127629	Slinger, cam and balancer shaft oil	2	2	2
12	1.7062	5121071	Spacer, camshaft oil seal	2	2	2
12	1.7080	5121072	Shaft, balancer	1		
12	1.7080	5121073	Shaft, balancer		1	
12	1.7080	5121074	Shaft, balancer			1
12	1.7130	5121107	Pulley, front balancer	2		
12,17	1.7130	5121108	Pulley, front balancer		2	
12,17	1.7130	5121095	Pulley, front balancer			2
-	-	218217	Key, 3/16"x5/8" woodruff	2	2	2
12	1.7130	5150087	Nut, 1 1/8"-18 hex.	2	2	2
13	1.7190	5119277	Weight, rear balancer		2	2
-	-	5119278	Weight, rear balancer (inner)			2
13	1.7190	9409079	Bolt, 3/8"-16x7/8" hex. hd. (rear weight)	4		
13	1.7190	9409028	Bolt, 3/8"-24x1" hex. hd.		4	
13	1.7190	9409215	Bolt, 3/8"-24x1/4" hex. hd.			4
12,13	1.7200	5134331	Gear, camshaft (LB-LC-RA-RD engine)	1	1	1
12,13	1.7200	5134332	Gear, camshaft (LA-LD-RB-RC engine)	1	1	1
12,13	1.7200	5134332	Gear, balancer shaft (LB-LC-RA-RD engine)	1	1	1
12,13	1.7200	5134331	Gear, balancer shaft (LA-LD-RB-RC engine)	1	1	1
12	1.7200	218217	Key, 3/16"x5/8" woodruff	2	2	2
12	1.7200	5150087	Nut, 1 1/8"-18 hex.	2	2	2
12	1.7207	5121077	Spacer, camshaft gear	1	1	1
12	1.7207	5172734	Retainer, cam and balancer shaft gear nut	2	2	2
12	1.7207	181360	Bolt, 3/8"-24x3/4" hex. hd.	8	8	8
12	1.7207	103321	Lockwasher, 3/8"	8	8	8
13	1.7220	5134391	Gear, idler (includes bearing)	1	1	1
13	1.7225	5132504	Washer, idler gear bearing thrust	2	2	2
13	1.7250	5124458	Hub, idler gear	1	1	1
13	1.7250	5157244	Bolt, idler gear hub	1	1	1
13	1.7260	5116220	Spacer, idler gear hole	1	1	1
13	1.7260	5157244	Bolt, idler gear hole spacer	1	1	1
ACCESSORY DRIVE						
14,15	1.7604	5117061	Gasket, accessory drive retainer	1	1	1
14	1.7605	5168696	Pulley, accessory drive (double groove)	1	1	1
14	1.7605	5164291	Pulley, accessory drive (single groove)	1	1	1
15	1.7605	124548	Key, 5/32"x3/4" woodruff	1	1	1
14	1.7605	106751	Key, 3/16"x3/4" woodruff	1	1	1
15	1.7605	100146	Bolt, 7/16"-14x1" hex. hd. (pulley to shaft) ✓	1	1	1
14	1.7605	451082	Nut, 3/4"-16 hex. lock	1	1	1
15	1.7605	5164292	Washer (single groove pulley)	1	1	1
-	-	103322	Lockwasher, 7/16"	1	1	1

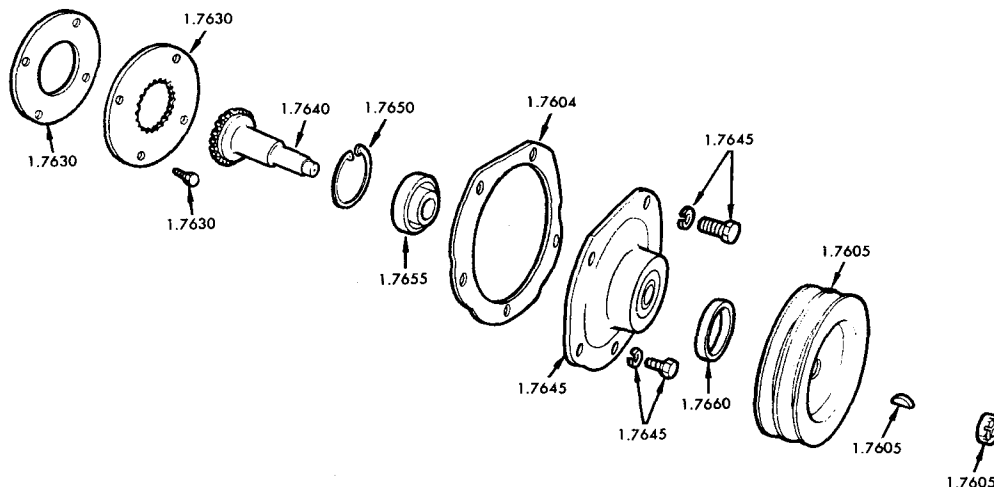


Fig. 14 - Accessory Drive

GM DIESEL

FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
15	1.7610	5164286	Hub, drive pulley	1	1	1
15	1.7610	5125492	Bolt (hub to gear)	4	4	4
-	-	103321	Lockwasher, 3/8"	4	4	4
15	1.7615	5123115	Retainer Assy., drive pulley hub oil seal (includes seal)	1	1	1
15	1.7620	5155445	Seal, drive pulley hub oil	1	1	1
14	1.7630	5153449	Plate, accessory drive	1	1	1
14	1.7630	5177026	Spacer, accessory drive plate	1	1	1
14	1.7630	5122921	Bolt, accessory drive plate	4	4	
14	1.7630	5125492	Bolt, accessory drive plate			3
-	-	9413533	Nut, 3/8"-24 hex. self locking			1
14	1.7630	5122922	Retainer, cam or balancer shaft gear	3	3	1
-	-	5122923	Stud, cam or balancer gear retainer			1
-	-	122236	Nut, 3/8"-24 hex.			1
14	1.7640	5168697	Shaft, accessory drive	1	1	1
14	1.7645	5123116	Retainer Assy., accessory drive bearing (includes lockring, brg. and seal)	1	1	1
14	1.7650	5155783	Lockring, accessory drive bearing	1	1	1
14	1.7655	954469	Bearing, accessory drive	1	1	1
14	1.7660	5155462	Seal, accessory drive bearing oil	1	1	1

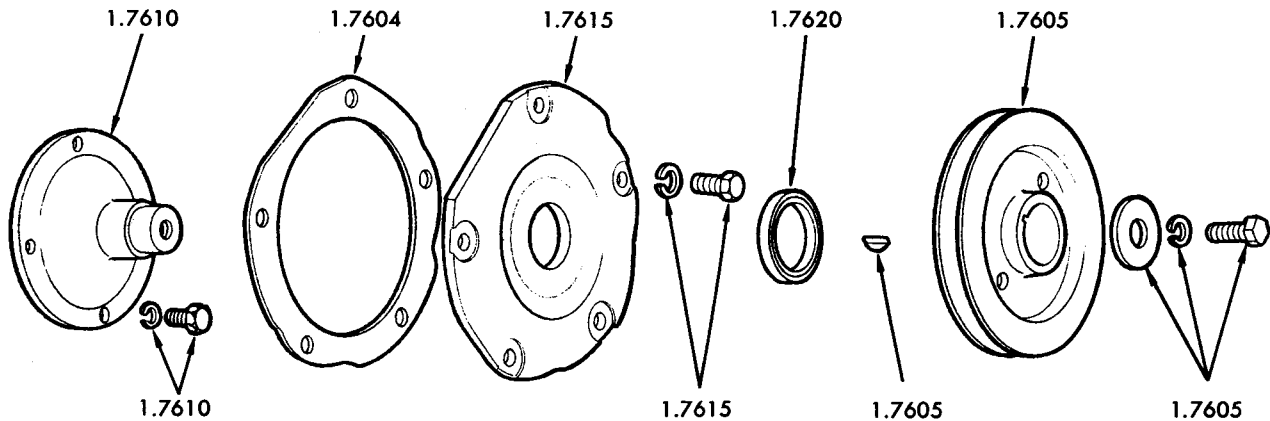


Fig. 15 - Accessory Drive

VALVE OPERATING MECHANISM							
16	1.8060	5119307	Arm Assy., exhaust valve rocker (2 valve)(item 1)(left)	} (includes indented items)	2	3	4
16	1.8060	5119308	Arm Assy., exhaust valve rocker (2 valve)(item 2)(right)		2	3	4
-	-	5126248	Arm Assy., exhaust valve rocker (4 valve)(right)			3	4
-	-	5126247	Arm Assy., exhaust valve rocker (4 valve)(left)			3	4
16	1.8080	5179954	Arm Assy., injector rocker		2	3	4
16	1.8130	5150312	Clevis, injector and exhaust valve rocker arm		6	9	12
16	1.8140	5123700	Bushing, injector and exhaust valve rocker arm clevis or bridge		6	AR	AR
16	1.8150	5150314	Pin, injector and exhaust valve rocker arm clevis		6	9	12
16	1.8150	5123711	Pin, exhaust valve rocker arm bridge			6	8
16	1.8160	5116072	Shaft, rocker arm		2	3	4
16	1.8170	5116128	Bracket, rocker shaft		4	6	8
16	1.8170	5119198	Bolt, rocker shaft bracket		4	6	8
16	1.8180	5128640	Rod, push		6	9	12
16	1.8180	5151601	Locknut, push rod		6	9	12
16	1.8190	5108918	Spring, push rod		6	9	12
16	1.8200	5108919	Seat, push rod spring - upper		6	9	12
16	1.8210	5123250	Seat, push rod spring - lower		6	9	12
16	1.8250	5150303	Retainer, push rod (snap ring)		6	9	12

GM DIESEL

FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
16	1.8260	5115087	Follower Assy., cam (includes roller set)	6	9	12
16	1.8300	5116125	Guide, cam follower	2	3	4
16	1.8300	443603	Bolt, 1/4"-20x3/4" hex. hd.	4	6	8
-	-	103319	Lockwasher, 1/4"	4	6	8
16	1.8310	5195948	Valve, exhaust (includes locks) (2 valve head)	4	6	8
16	1.8310	5196606	Valve, exhaust (includes locks) (4 valve head)		12	16
16	1.8320	5119992	Guide, exhaust valve (2 valve head)	4	6	8
16	1.8320	5116120	Guide, exhaust valve (4 valve head)		12	16
16	1.8330	5116196	Insert, exhaust valve (2 valve head)	4	6	8
16	1.8330	5196751	Insert, exhaust valve (2 valve head, .010" O.S. on O.D.)	AR	AR	AR
16	1.8330	5116361	Insert, exhaust valve (4 valve head)		12	16
16	1.8330	5196752	Insert, exhaust valve (4 valve head, .010" O.S. on O.D.)	AR	AR	AR
16	1.8340	5116140	Spring, exhaust valve (2 valve head)	4	6	8
16	1.8340	5123329	Spring, exhaust valve (4 valve head)		12	16
16	1.8343	5126154	Bridge, exhaust valve (4 valve head)		6	8
16	1.8350	5111338	Cap, exhaust valve spring (2 valve head)	4	6	8
16	1.8350	5123330	Cap, exhaust valve spring (4 valve head)		12	16
16	1.8360	5116243	Seat, exhaust valve spring (2 valve head)	4	6	8
16	1.8360	5111467	Seat, exhaust valve spring (4 valve head)		12	16
16	1.8370	5111337	Lock, exhaust valve spring (halves) (2 valve head)	8	12	16
16	1.8370	5116341	Lock, exhaust valve spring (halves) (4 valve head)		24	32

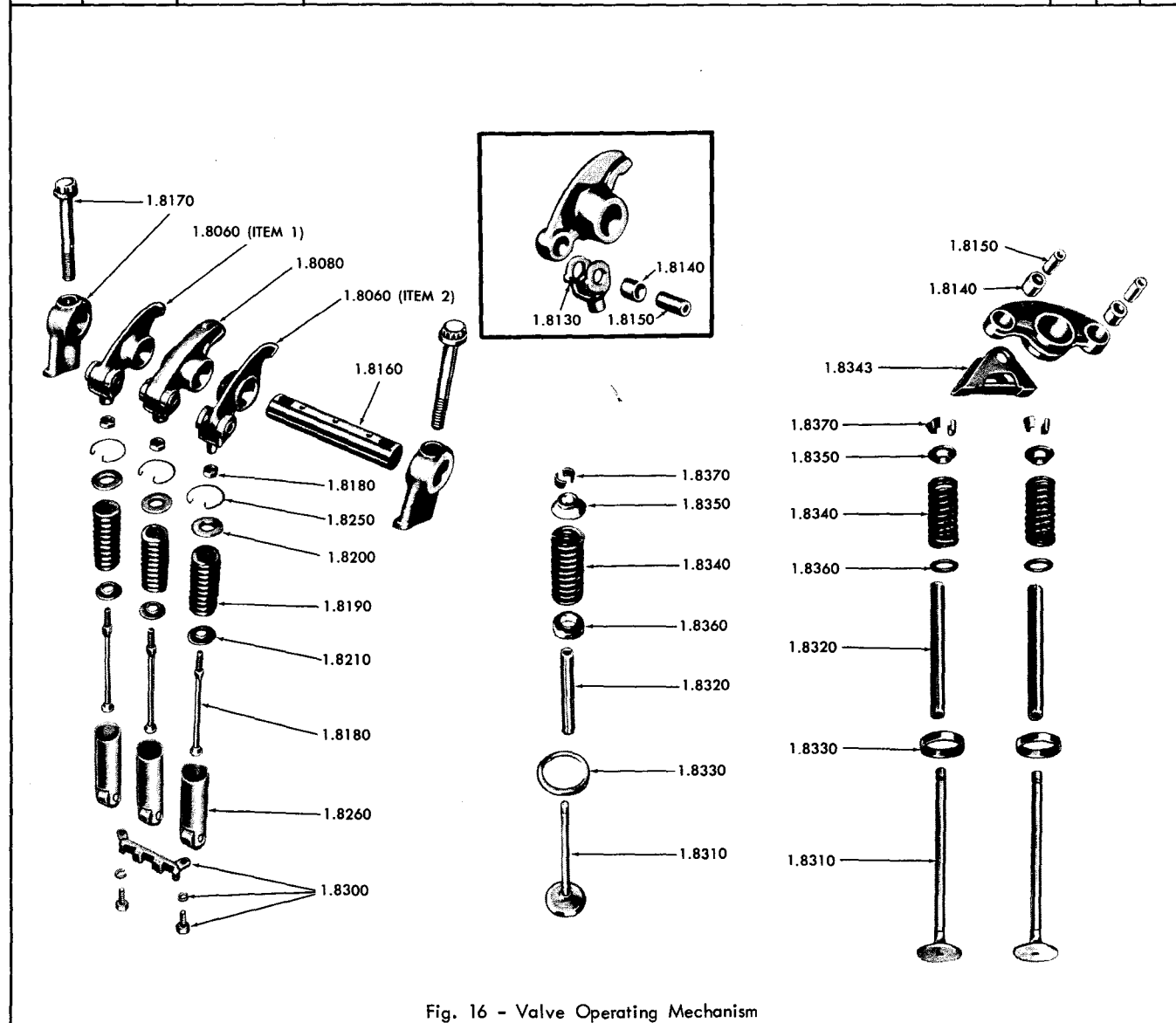


Fig. 16 - Valve Operating Mechanism

GM DIESEL

FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
			ROCKER COVER			
17	1.8450	5125349	Cover, rocker (plain)	1		
1	1.8450	5125348	Cover, rocker (oil filler hole)	1		
1	1.8450	5125350	Cover, rocker (breather hole)	1		
17	1.8450	5125356	Cover, rocker (plain)		1	
1	1.8450	5125355	Cover, rocker (oil filler hole)		1	
1	1.8450	5125354	Cover, rocker (breather hole)		1	
17	1.8450	5125353	Cover, rocker (plain)			1
1	1.8450	5125352	Cover, rocker (oil filler hole)			1
1	1.8450	5125357	Cover, rocker (breather hole)			1
-	-	5119456	Gasket, rocker cover	1		
-	-	5119457	Gasket, rocker cover		1	
-	-	5119458	Gasket, rocker cover			1
-	-	5100104	Screw Assy., rocker cover	4	4	6

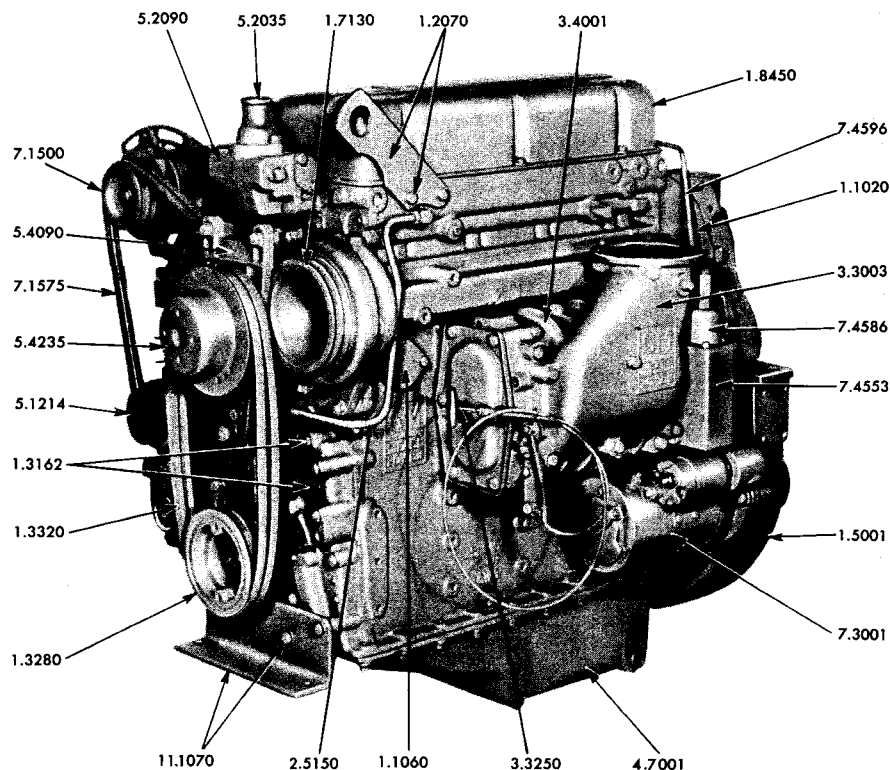


Fig. 17 - Typical Fan to Flywheel Unit

				QUANTITY PER		
				2-53	3-53	4-53
FUEL INJECTOR						
30	2.1001	5228535	Injector Assy. (35)	2		
30	2.1001	5228590	Injector Assy. (S40)	2	3	4
30	2.1001	5228580	Injector Assy. (S45)	2	3	4
30	2.1001	5228763	Injector Assy. (N40)		3	4
30	2.1001	5228773	Injector Assy. (N45)		3	4
-	-	5226414	Cap, injector shipping	AR	AR	AR
30	2.1270	5121259	Clamp, injector	2	3	4
30	2.1270	5150250	Washer, injector clamp	2	3	4
6,30	2.1270	179847	Bolt, injector clamp	2	3	4
6	2.1290	5150041	Tube, injector hole	2	3	4
6	2.1300	5160037	Ring, injector hole tube seal	2	3	4

GM DIESEL

FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
			FUEL PUMP			
2, 18	2.2001	5184531	Pump Assy., fuel (LC-LD-RC-RD engine) } (includes indented items)	1	1	1
2, 18	2.2001	5184532	Pump Assy., fuel (LA-LB-RA-RB engine) }	1	1	1
-	-	5118219	Bolt (with seal-washer)	3	3	3
18	2.2007	5150193	Gasket, fuel pump to governor	1	1	1
18	2.2070	5230007	Seal, fuel pump oil	2	2	2
18	2.2089	5181747	Shaft and Gear, fuel pump driven	1	1	1
18	2.2093	5181746	Shaft and Gear, fuel pump drive	1	1	1
18	2.2130	5174973	Valve, fuel pump	1	1	1
18	2.2130	103709	Pin, 5/32"x1" straight	1	1	1
18	2.2160	5184530	Spring, fuel pump valve retaining	1	1	1
18	2.2170	5174971	Plug, fuel pump valve	1	1	1
18	2.2180	5161003	Gasket, fuel pump valve plug	1	1	1
18	2.2220	5150199	Fork, fuel pump coupling (inclined Marine)	1	1	1
18	2.2230	5154216	Coupling, fuel pump drive (upright engine)	1	1	1
-	-	5121050	Plate, fuel pump mounting (inclined Marine)	1	1	1
-	-	179857	Bolt, 7/16"-14x7/8" hex. hd.	4	4	4
-	-	179882	Bolt, 1/2"-13x1 1/2" hex. hd.	1	1	1
-	-	5150568	Washer, 7/16" flat (copper)	4	4	4
-	-	103323	Lockwasher, 1/2"	1	1	1
-	-	5127266	Adaptor, fuel pump drive (inclined Marine)	1	1	1
-	-	9409035	Bolt, 1/4"-20x1" hex. hd.	2	2	2
-	-	5195078	Overhaul Kit, fuel pump (includes two oil seals, one each drive shaft, driven shaft, valve, valve pin, valve spring, valve plug gasket, pump to governor gasket and two shipping plugs)	AR	AR	AR

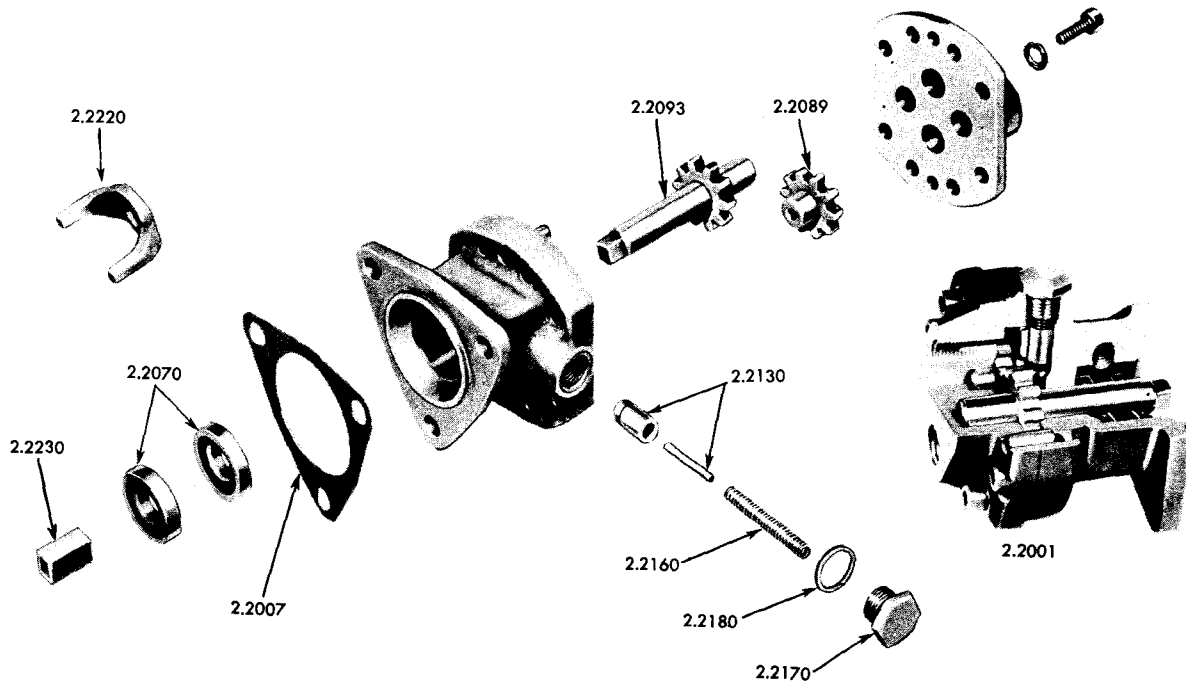


Fig. 18 - Fuel Pump

			FUEL FILTER			
1, 31	2.3001	5575568	Strainer Assy., fuel (includes indented items)	1	1	1
19	2.3010	5574961	Element, fuel strainer (includes gasket)	1	1	1
19	2.3050	5575792	Shell, fuel strainer	1	1	1

GM DIESEL

FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
19	2.3050	103647	Draincock, 1/4"	1	1	1
19	2.3090	5574161	Gasket, fuel strainer cover	1	1	1
19	2.3100	103878	Plug, 1/4" pipe	2	2	2
19	2.3120	5575059	Bolt, fuel strainer cover	1	1	1
19	2.3120	5574121	Ring, fuel strainer cover bolt retainer	1	1	1
19	2.3130	1503536	Gasket, fuel strainer cover bolt	1	1	1
31	2.3310	5573949	Filter Assy., fuel (4" element) (includes indented items)		1	1
1	2.3310	5574533	Filter Assy., fuel (8" element) (includes indented items)	1	1	1
20	2.3310	103878	Plug, 1/4" pipe	2	2	2
20	2.3320	5573261	Element, fuel filter (4", includes gasket)		1	1
20	2.3320	5574508	Element, fuel filter (8", includes gasket)	1	1	1
20	2.3380	5574125	Shell Assy., fuel filter (4")		1	1
20	2.3380	5575169	Shell Assy., fuel filter (8")	1	1	1
20	2.3400	5574161	Gasket, fuel filter cover shell	1	1	1
20	2.3410	5574118	Screw, fuel filter cover	1	1	1
20	2.3410	5574121	Snap Ring	1	1	1
20	2.3420	1503536	Gasket, fuel filter cover screw	1	1	1
20	2.3500	103647	Draincock, 1/4"	1	1	1

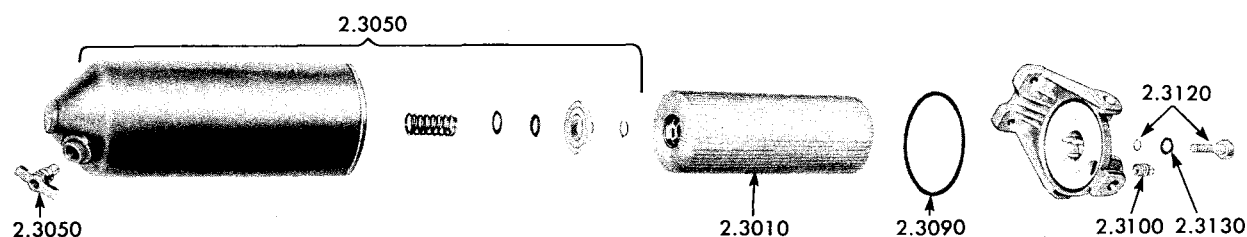


Fig. 19 - Fuel Strainer

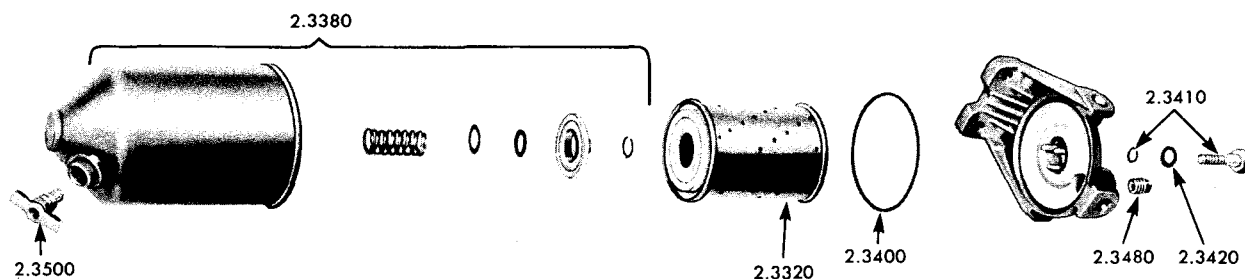


Fig. 20 - Fuel Filter

FUEL MANIFOLD CONNECTIONS						
30	2.4020	5116204	Pipe Assy., fuel (inlet and outlet)	4	6	8
30	2.4030	5152138	Connector, fuel pipe	4	6	8
30	2.4050	5152148	Washer, fuel pipe connector	4	6	8
FUEL LINES						
The part number of the fuel lines may be obtained from your GM Diesel dealer or distributor. Furnish him the model, unit number and type number (if shown) on the option plate on your engine.						
28	2.5050	-	Tube, strainer to fuel pump	1	1	1
-	-	143338	Elbow, 3/8" inv. fl. tube 45°	1	1	1
-	-	137423	Elbow, 3/8" inv. fl. tube 90°	1	1	1

GM DIESEL

FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
28,32	2.5100	-	Tube, fuel pump to filter	1	1	1
-	-	143388	Elbow, 3/8" inv. fl. tube 45°	1	1	1
-	-	137423	Elbow, 3/8" inv. fl. tube 90°	1	1	1
-	-	137407	Connector, 3/8" inv. fl. tube	1	1	1
17	2.5150	-	Tube, filter to manifold connection	1	1	1
-	-	137423	Elbow, 3/8" inv. fl. tube 90°	2	2	2
-	-	5116440	Elbow, restricted (except reefer units)	1	1	1
-	-	5124978	Elbow, restricted (reefer units)	1		
MECHANICAL GOVERNOR						
The variety of mechanical governors available makes it impractical to list governor assembly numbers. For complete interpretation of parts requirements, furnish your GM Diesel dealer or distributor the model, unit number and governor type number.						
31	2.7001	-	Governor Assy., mechanical	1	1	1
-	-	179822	Bolt, 5/16"-18x1 1/2" hex. hd.	2	2	2
-	-	186622	Bolt, 3/8"-16x1 1/4" hex. hd.	2	2	2
-	-	9414285	Bolt, 3/8"-24x7/8" 12 pt. hd.	3	3	3
-	-	5152148	Washer, 3/8" copper	AR	AR	AR
-	-	103341	Washer, 3/8" flat	2	2	2
-	-	103320	Lockwasher, 5/16"	2	2	2
-	-	5116336	Gasket, governor to engine	1	1	1
START OF GOVERNOR ASSEMBLY						
-	-	5126792	Screw, governor cover (1/4"-20x5/8")	1	1	1
22,23	2.7045	132259	Screw, 1/4"-20x5/8" fil. hd.	3	3	3
22,23	2.7045	103319	Lockwasher, 1/4"	4	4	4
23	2.7050	5126398	Cover Assy., governor (less shaft and levers) (A & B eng.) (limit. speed)	1	1	1
23	2.7050	5126397	Cover Assy., governor (less shaft and levers) (C & D eng.) (limit. speed)	1	1	1
22	2.7050	5126431	Cover Assy., governor (less shaft and levers) (A & B eng.) (variable and constant speed, closed linkage governor)	1	1	1
22	2.7050	5126430	Cover Assy., governor (less shaft and levers) (C & D eng.) (variable and constant speed, closed linkage governor)	1	1	1
22,23	2.7050	456540	Pin, 3/16"x5/8" roll	2	2	2
22,23	2.7051	5122742	Gasket, governor cover (closed linkage governor)	1	1	1
23	2.7095	5126402	Shaft Assy., governor throttle (limit. speed gov.) (includes pin)	1	1	1
22	2.7095	5126309	Shaft Assy., governor throttle (vari. and constant speed, closed linkage governor) (includes pin)	1	1	1
26	2.7095	5125453	Shaft Assy., governor throttle (C & D eng.) (vari. speed, open linkage governor) (includes pin)	1	1	1
26	2.7095	5125454	Shaft Assy., governor throttle (A & B eng.) (vari. speed, open linkage governor) (includes pin)	1	1	1
22,23	2.7095	455734	Pin, 1/8"x3/4" roll	1	1	1
-	-	5126404	Shaft Assy., gov. shutdown (includes pin) (limit. speed gov.)	1	1	1
-	-	453676	Pin, 1/8"x1" roll (gov. shutdown shaft)	1	1	1
-	-	5178581	Ring, retainer	1	1	1
23	2.7130	5174428	Pin, gov. throttle shaft fulcrum lever (closed linkage gov.)	1	1	1
22	2.7140	5179232	Seal Ring, gov. throttle shaft (closed linkage gov.)	1	1	1
23	2.7140	5182977	Seal Ring, gov. shutdown shaft (limit. speed gov.)	1	1	1
-	-	5151487	Washer, gov. shutdown shaft (limit. speed gov.)	2	2	2
-	-	5183042	Lever, gov. shutdown shaft (limit. speed gov.)	1	1	1
-	-	179796	Bolt, 1/4"-20x7/8" hex. hd.	1	1	1
-	-	103319	Lockwasher, 1/4"	1	1	1
22	2.7150	5150238	Washer, throttle shaft packing retainer (closed linkage gov.)	1	1	1
22	2.7150	5122732	Ring, throttle shaft packing retainer snap (closed linkage gov.)	1	1	1
22,23	2.7170	5126312	Lever, gov. cover throttle shaft (vari., limit. and constant, closed linkage governor)	1	1	1
22,23	2.7170	186647	Bolt, 1/4"-20x1" hex. hd.	1	1	1
22,23	2.7170	103319	Lockwasher, 1/4"	1	1	1
21	2.7230	5122757	Housing, governor control (A & B eng.) (closed linkage gov.)	1	1	1
21	2.7230	5122756	Housing, governor control (C & D eng.) (closed linkage gov.)	1	1	1

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FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
26	2.7230	5125675	Housing Assy., governor control (A & B eng.) (open linkage governor) (includes bearings and locknut)	1	1	1
26	2.7230	5125674	Housing Assy., governor control (C & D eng.) (open linkage governor) (includes bearings and locknut)	1	1	1
-	-	5116262	Adaptor, governor control housing (gov. link) (closed linkage gov.)	1	1	1
26	2.7230	5125052	Bearing, governor throttle control shaft (open linkage gov.)	2	2	2
-	-	113699	Bolt, 3/8"-24x1/2" hex. hd. (housing plug)	1	1	1
-	-	105451	Gasket, 3/8" (housing plug gasket)	1	1	1
-	-	5122753	Shaft Assy., gov. operating (A & B eng.)(closed linkage gov.)	1	1	1
-	-	5122752	Shaft Assy., gov. operating (C & D eng.)(closed linkage gov.)	1	1	1
-	-	5125190	Shaft Assy., gov. operating (C & D eng.)(open linkage gov.)	1	1	1
-	-	5125191	Shaft Assy., gov. operating (A & B eng.)(open linkage gov.)	1	1	1

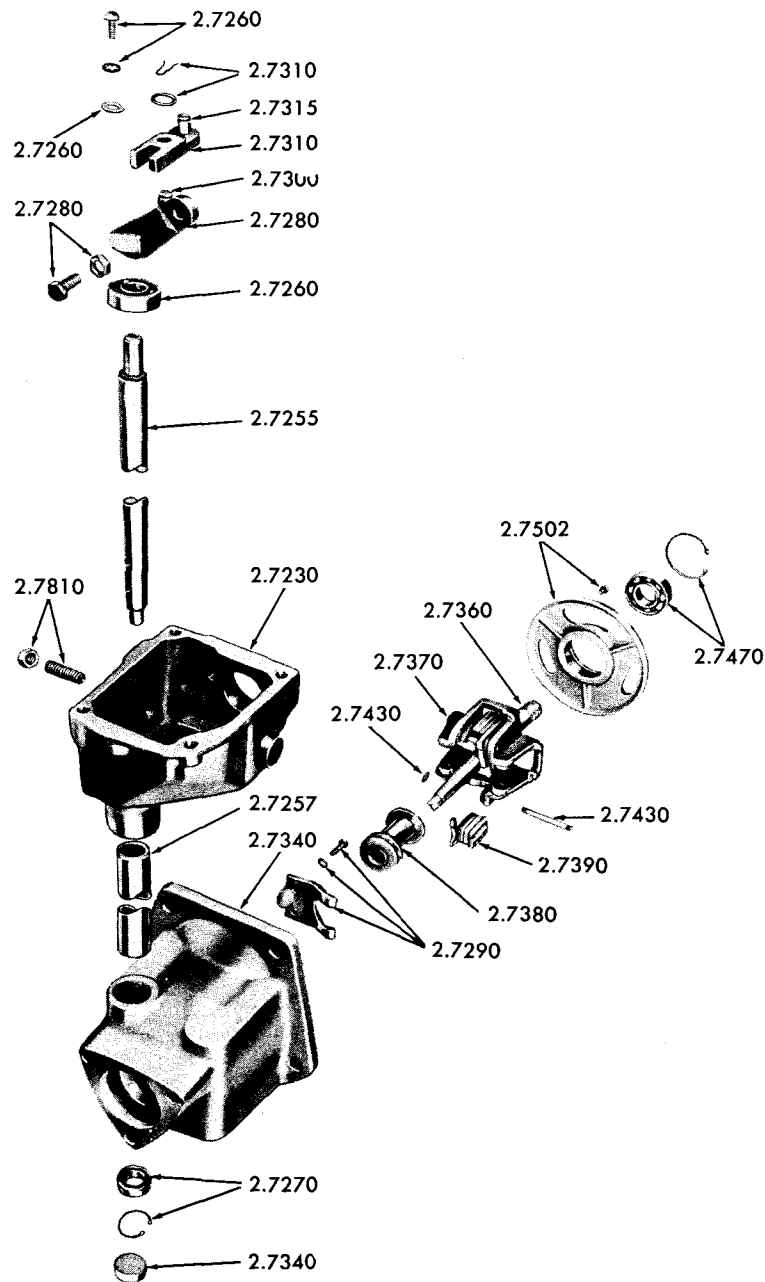


Fig. 21 - Mechanical Governor Housing Weights and Lever (Enclosed Linkage)

GM DIESEL

FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
21	2.7255	5122751	Shaft, gov. operating (closed linkage gov.)	1	1	1
26	2.7255	5123597	Shaft, gov. operating (open linkage gov.)	1	1	1
21, 26	2.7257	5122754	Tube, gov. operating shaft	1	1	1
21, 26	2.7260	457187	Bearing, gov. operating shaft (upper) (closed linkage gov.)	1	1	1
26	2.7260	9414422	Bearing, gov. operating shaft (upper) (open linkage gov.)	1	1	1
26	2.7260	5125154	Shield, gov. operating shaft (upper bearing) (open linkage gov.)	1	1	1
-	-	455297	Pin, 5/32"x7/8" roll	1	1	1
21	2.7260	113903	Screw, #10-24x7/16" rd. hd. sl.	1	1	1
21	2.7260	120391	Washer, #10 flat	1	1	1
21	2.7260	115545	Lockwasher, #10	1	1	1
21, 26	2.7270	2156235	Bearing, governor operating shaft lower	1	1	1

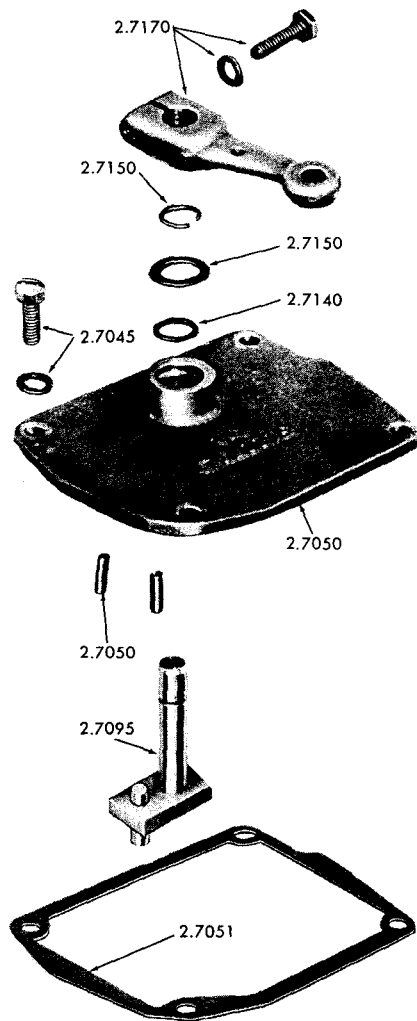


Fig. 22 - Variable Speed Governor Cover

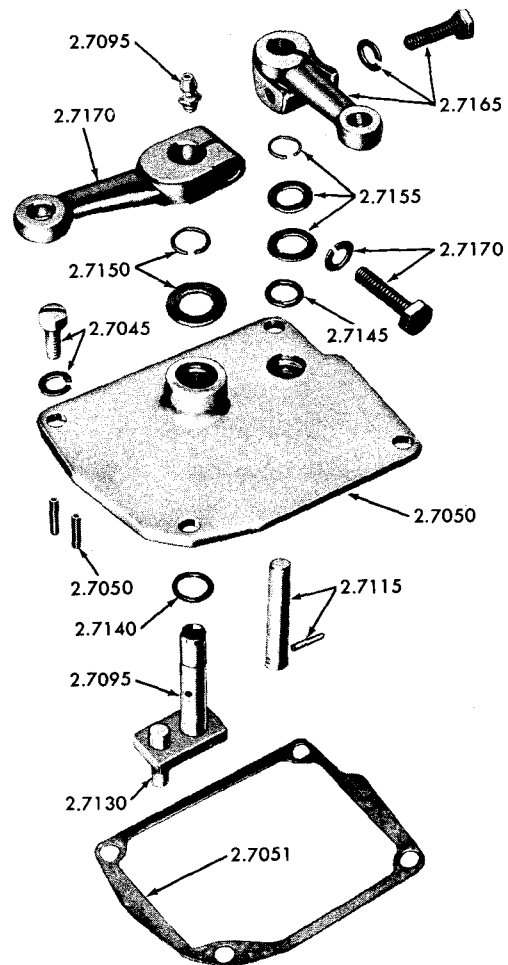


Fig. 23 - Limiting Speed Governor Cover

21, 26	2.7270	9413284	Snap Ring, gov. operating shaft lower bearing (in housing)	1	1	1
-	-	274844	Snap Ring, gov. operating shaft lower bearing (on shaft)	1	1	1
21	2.7280	5122750	Lever, gov. operating shaft lever (A & B eng.) (closed linkage gov.) ..	1	1	1
21	2.7280	5122749	Lever, gov. operating shaft (C & D eng.) (closed linkage gov.)	1	1	1
26	2.7280	5124395	Lever, gov. operating shaft (A & B eng.) (open linkage gov.)	1	1	1
26	2.7280	5124394	Lever, gov. operating shaft (C & D eng.) (open linkage gov.)	1	1	1
21	2.7280	5150898	Screw, operating shaft lever (gap adjusting) (closed linkage gov.)	1	1	1
21	2.7280	122161	Nut, 1/4"-28 hex. (gap adjusting locknut)	1	1	1
21	2.7290	5122741	Fork, governor operating shaft	1	1	1
21	2.7290	187837	Screw, #10-32x5/8"	1	1	1
21	2.7290	120217	Lockwasher, #10	1	1	1

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FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
21	2.7300	5122746	Pin, gov. operating shaft lever (closed linkage gov.)	1	1	1
26	2.7300	454297	Pin, gov. operating shaft lever (open linkage gov.)	1	1	1
21	2.7310	5126311	Lever, gov. differential (limit. speed gov.)	1	1	1
21	2.7310	5122743	Lever, gov. differential (vari. and constant speed) (closed linkage gov.) ..	1	1	1
21	2.7310	142583	Retainer, 3/16" spring (closed linkage gov.)	1	1	1
21	2.7310	5150941	Washer, gov. differential lever retainer (closed linkage gov.)	1	1	1
21	2.7315	5122745	Pin, governor differential lever (5/8" L.) (vari. and constant speed) (closed linkage governor)	1	1	1
21	2.7315	5126310	Pin, governor differential lever (7/8" L.) (limit. speed gov.)	1	1	1
21,26	2.7340	5129730	Housing Assy., gov. weight (includes plug and bushing) (C & D engine)	1	1	1
21	2.7340	5129731	Housing Assy., gov. weight (A & B engine)	1	1	1
-	-	5119127	Bushing, gov. weight housing	1	1	1
21,26	2.7340	5165289	Plug, cup (15/16" dia.)	2	2	2
-	-	5122740	Plug, cup (7/8" dia.)	1	1	1
21	2.7370	5196856	Carrier Assy., governor weight (vari. and constant speed gov.) (includes shaft and carrier)	1	1	1
27	2.7370	5196855	Carrier Assy., gov. weight (limit. speed)(includes shaft and carrier)	1	1	1
21,27	2.7380	5109544	Riser, governor	1	1	1
21	2.7390	5129721	Weight, governor (high speed) (limit. speed gov.)	2	2	2
21	2.7390	5122776	Weight, governor (low speed) (limit. speed gov.)	2	2	2

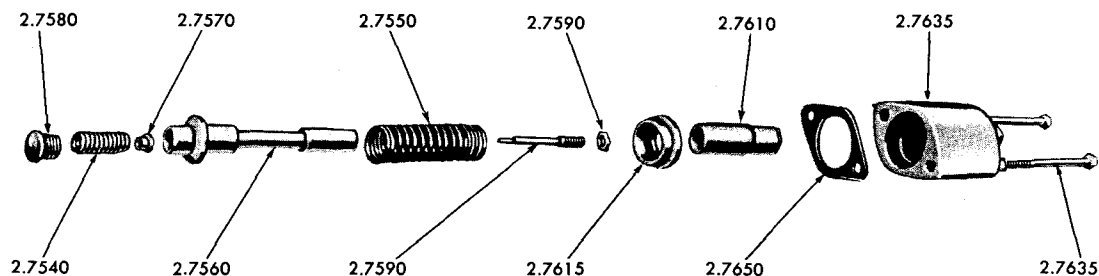


Fig. 24 - Limiting Speed Spring and Housing

21,27	2.7390	5122772	Weight, governor (vari. and constant speed gov., 2500 eng. R.P.M.)	2	2	2
21,27	2.7390	5122773	Weight, governor (vari. and constant speed gov., 3000 eng. R.P.M.)	2	2	2
-	-	5125339	Spacer, governor weight (vari. and constant speed gov.)	4	4	4
21	2.7430	5122785	Pin, gov. weight shaft (limit. speed gov.)	2	2	2
21,27	2.7430	5125044	Pin, gov. weight shaft (vari. and constant speed gov.)	2	2	2
21,27	2.7430	9411504	Snap Ring, gov. weight shaft pin	4	4	4
21,27	2.7470	907045	Bearing, gov. weight shaft	1	1	1
21,27	2.7470	9411502	Snap Ring, gov. weight shaft bearing	1	1	1
-	-	5122738	Spacer, governor weight shaft (between gear and bearing)	1	1	1
21,27	2.7502	5122783	Support, gov. weight shaft bearing	1	1	1
21,27	2.7502	110529	Screw, #10-24x1/4" fl. hd. sl. (support lock)	1	1	1
24	2.7540	5187304	Spring, gov. low speed (2 yellow stripes) (limit. speed gov.)	1	1	1
24	2.7550	5124415	Spring, gov. high speed (one white stripe) (limit. speed gov., except vehicle)	1	1	1
-	-	5126272	Spring, gov. high speed (one orange stripe) (limit. speed gov., vehicle) ..	1	1	1
24	2.7550	5129307	Spring, gov. high speed (3 full length red stripes) (constant speed gov.) ..	1	1	1
-	-	5126135	Plunger, gov. low speed spring (limit. speed gov., vehicle)	1	1	1
24	2.7560	5182555	Plunger, gov. low speed spring (limit. speed gov., except vehicle)	1	1	1
24	2.7560	5125418	Plunger, gov. low speed spring (constant speed gov.)	1	1	1
24	2.7570	5150892	Seat, gov. low speed spring (limit. speed gov.)	1	1	1
24	2.7580	5150899	Cap, gov. low speed spring (limit. speed gov.)	1	1	1
24	2.7590	5182556	Screw, gov. low speed spring adjusting (limit. speed gov., except vehicle) ..	1	1	1
-	-	5130034	Screw, gov. low speed spring adjusting (limit. speed gov., vehicle)	1	1	1
24	2.7590	122161	Nut, 1/4"-28 hex. (with adjusting screw)	1	1	1
-	-	5150947	Shim, gov. high speed spring (.010") (limit. speed gov., vehicle)	5	5	5
-	-	5151249	Shim, gov. high speed spring (.078") (limit. speed gov., vehicle)	1	1	1
-	-	5123922	Shim, gov. high speed spring (.010") (constant speed gov.)	10	10	10
-	-	5123923	Shim, gov. high speed spring (.100") (constant speed gov.)	4	4	4
24	2.7610	5182557	Retainer, gov. high speed spring (limit. speed gov., except vehicle)	1	1	1

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FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
-	-	5174436	Retainer, gov. high speed spring (limit. speed gov., vehicle)	1	1	1
-	-	5113867	Retainer, gov. high speed spring (constant speed gov.)	1	1	1
-	-	5125603	Piston, gov. speed control (constant speed gov.)	1	1	1
-	-	5125604	Spacer, gov. speed control piston (constant speed gov.)	1	1	1
-	-	6525121	Seal, gov. speed control piston (ring) (constant speed gov.)	1	1	1
24	2.7615	5186115	Locknut, gov. high speed spring retainer (limit. speed gov.)	1	1	1
-	-	5124551	Guide, gov. spring (constant speed gov.)	1	1	1
-	-	5125449	Cover, gov. high speed spring (constant speed gov.)	1	1	1
-	-	9414499	Screw, 5/16"-24x1 1/2" set (constant speed gov.)	1	1	1
-	-	5125450	Plug, gov. high speed spring cover (constant speed gov.)	1	1	1
-	-	5156768	Gasket, gov. high speed spring cover plug (constant speed gov.)	1	1	1
-	-	274386	Bolt, 5/16"-18x3 1/4" hex. hd.	2	2	2
-	-	103320	Lockwasher, 5/16"	2	2	2
-	-	5125419	Housing, gov. constant speed spring	1	1	1
24	2.7635	5182559	Housing, gov. limit. speed spring (except vehicle)	1	1	1
-	-	5126318	Housing, gov. limit. speed spring (vehicle)	1	1	1
24	2.7635	455520	Bolt, 5/16"-18x3 1/2" hex. hd. (limit. speed gov., except vehicle)	2	2	2
-	-	5153406	Bolt, gov. limit. speed spring housing (limit. speed gov., vehicle)	2	2	2
-	-	103320	Lockwasher, 5/16"	2	2	2
24	2.7650	5152944	Gasket, spring housing (limit. and constant speed gov.)	1	1	1

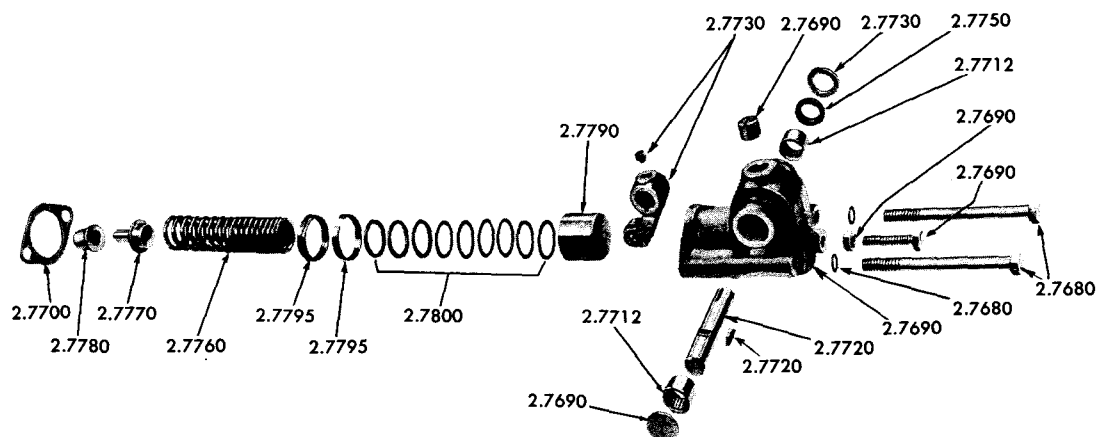


Fig. 25 - Variable Speed Governor Spring and Housing

-	-	5126842	Housing Assy., gov. vari. speed spring (roller) (A & B eng., closed linkage gov.)	(includes indented items)	1	1	1
-	-	5127655	Housing Assy., gov. vari. speed spring (A & B eng., closed linkage gov.)		1	1	1
-	-	5127654	Housing Assy., gov. vari. speed spring (C & D eng., closed linkage gov.)		1	1	1
-	-	5126841	Housing Assy., gov. vari. speed spring (roller) (C & D eng., closed linkage gov.)		1	1	1
25	2.7680	455520	Bolt, 5/16"-18x3 1/2" hex. hd.		2	2	2
25	2.7680	103320	Lockwasher, 5/16"		2	2	2
25	2.7690	5167552	Plug, 1/4" pipe		1	1	1
25	2.7690	5126789	Plug, 3/4" expansion		1	1	1
25	2.7690	5179613	Bolt (idle speed adjusting screw)		1	1	1
25	2.7690	123390	Nut, 1/4"-20 hex.		1	1	1
25	2.7700	5152944	Gasket, gov. vari. speed spring housing (closed linkage gov.)		1	1	1
25	2.7712	148402	Bearing, gov. vari. speed spring lever (closed linkage gov.)		2	2	2
25	2.7720	5173964	Shaft, gov. vari. speed spring (closed linkage gov.)		1	1	1
25	2.7720	103904	Key, 3/32"x1/2" woodruff		2	2	2
25	2.7730	5176629†	Lever, gov. vari. speed spring (pallet) (closed linkage gov.)		1	1	1
25	2.7730	5179102†	Lever Assy., gov. vari. speed spring (includes roller) (closed linkage governor)		1	1	1

† May be used optionally.

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FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
25	2.7730	5152932	Washer, spring lever	1	1	1
25	2.7730	223065	Screw, 5/16"-24x1/4" hex. socket hd. set	1	1	1
-	-	5179105	Bearing (roller type lever)	1	1	1
-	-	5179104	Pin (roller type lever)	1	1	1
-	-	5185305	Washer (roller type lever)	2	2	2
-	-	5193544	Lever Kit, roller (consists of plug, gasket, 2 bearings, lever assy., packing and retainer)	AR	AR	AR
25	2.7750	5176557	Packing, vari. speed gov. lever shaft (closed linkage gov.)	1	1	1
25	2.7760	5124416	Spring, gov. vari. speed (one brown stripe) (closed linkage gov.)	1	1	1
25	2.7770	5162661	Plunger, gov. vari. speed spring (closed linkage gov.)	1	1	1
25	2.7780	5130093	Guide, gov. vari. speed spring plunger (closed linkage gov.)	1	1	1

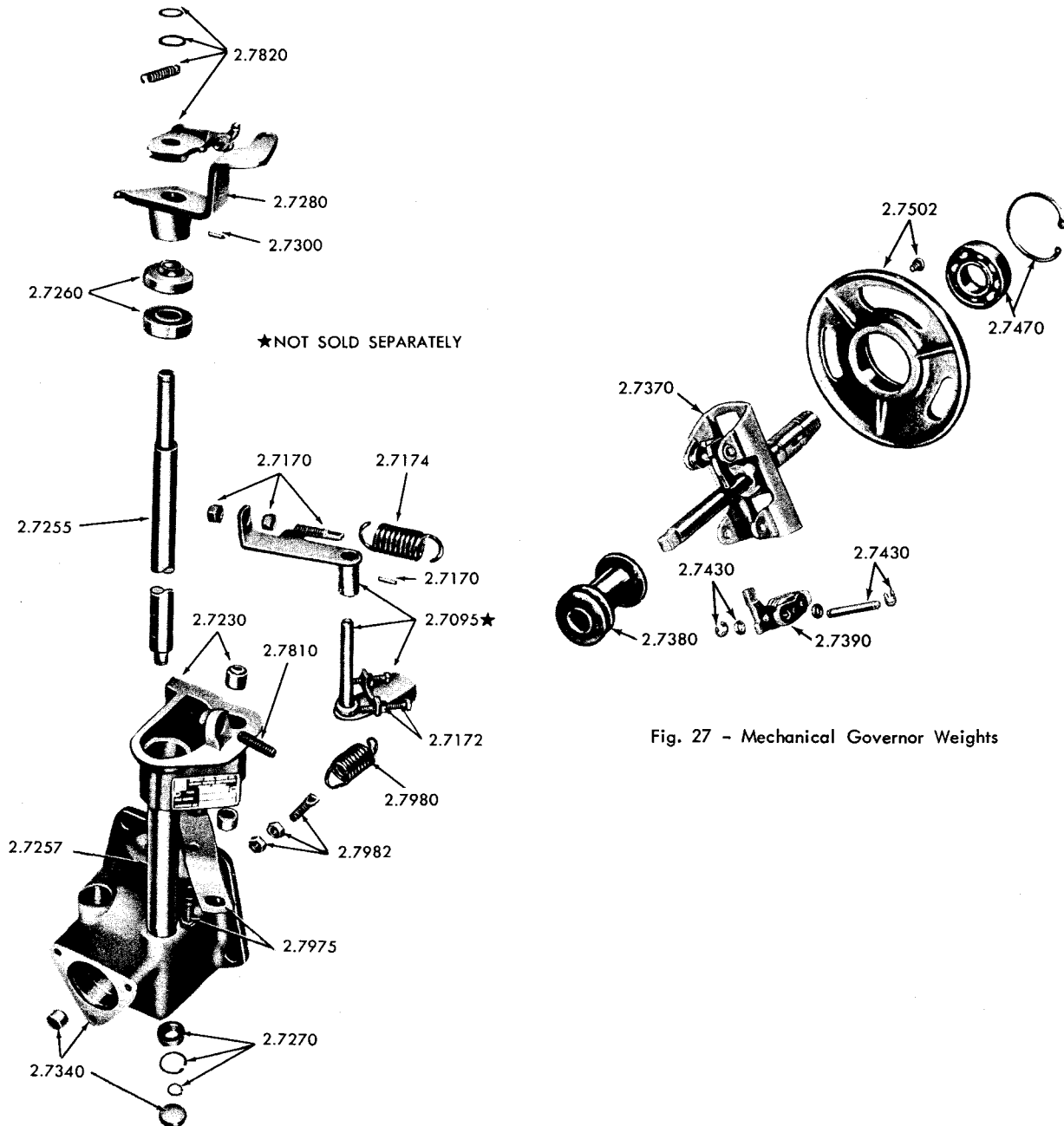


Fig. 26 - Mechanical Governor Housing and Levers (Open Linkage)

Fig. 27 - Mechanical Governor Weights

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FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
-	-	5130094	Bushing, governor vari. speed spring plunger guide (plastic)	1	1	1
25	2.7790	5152941	Retainer, vari. speed spring (closed linkage gov.)	1	1	1
25	2.7795	5171784	Stop, vari. speed spring retainer (with step) (closed linkage gov.)	1	1	1
25	2.7795	5174430	Stop, vari. speed spring retainer (with gap) (closed linkage gov.)	1	1	1
25	2.7800	5152962	Shim, vari. speed spring (.010") (closed linkage gov.)	AR	AR	AR
25	2.7800	5153904	Shim, vari. speed spring (.078") (closed linkage gov.)	AR	AR	AR
21,26	2.7810	5177083	Screw Assy., gov. buffer (with spring)	1	1	1
21	2.7810	122236	Nut, 3/8"-24 hex. (closed linkage gov.)	1	1	1
26	2.7820	5125278	Lever Assy., gov. to injector link (A & B eng.) (vari. speed, open linkage governor)	1	1	1
26	2.7820	5125277	Lever Assy., gov. to injector link (C & D eng.) (vari. speed, open linkage governor)	1	1	1
26	2.7820	5125107	Spring, gov. to injector link lever (vari. speed open linkage gov.)	1	1	1
26	2.7820	5122732	Ring, snap governor to injector link lever (variable speed, open linkage governor)	1	1	1
26	2.7820	5126243	Washer, spring governor to injector link lever (variable speed, open linkage governor)	1	1	1
END OF GOVERNOR ASSEMBLY						
-	-	5122797	Link, injector control tube to gov. (A & C eng.) (closed linkage gov.)	1	1	1
-	-	5122798	Link, injector control tube to gov. (B & D eng.) (closed linkage gov.)	1	1	1
30	2.7819	5125322	Link, injector control tube to gov. (A eng.) (open linkage gov.)	1	1	1
30	2.7819	5125323	Link, injector control tube to gov. (C eng.) (open linkage gov.)	1	1	1
-	-	5125689	Link, injector control tube to gov. (B eng.) (open linkage gov.)	1	1	1
-	-	5125688	Link, injector control tube to gov. (D eng.) (open linkage gov.)	1	1	1
30	2.7819	5150265	Pin, injector control tube link	1	1	1
30	2.7819	103361	Pin, 1/16"x1/2" cotter	2	2	2
-	-	5150941	Washer, injector control tube link	1	1	1
-	-	142583	Retainer, 13/64" spring	1	1	1
-	-	5125518	Joint, 1/4" ball (open linkage gov.)	1	1	1
-	-	5125571	Clip, shutdown cable (open linkage gov.)	1	1	1
-	-	122161	Nut, 1/4"-28 hex. (open linkage gov.)	2	2	2
6	2.7830	5116262	Adaptor, cylinder head gov. control link (closed linkage gov.)	1	1	1
6	2.7830	5121252	Adaptor, cylinder head gov. control link (open linkage gov.)	1	1	1
-	-	5121385	Boot, governor to injector link (open linkage gov.)	1	1	1
30	2.7834	5129705	Hose, 7/8" I.D. x3/4" L. (B & D eng.) (closed linkage gov.)	1	1	1
30	2.7834	5129707	Hose, 7/8" I.D. x1 1/4" L. (A & C eng.) (closed linkage gov.)	1	1	1
30	2.7834	111610	Clamp, 1 1/4" dia. hose	2	2	2
-	-	5129711	Spring, gov. throttle lever return (C & D eng.) (closed linkage gov.)	1	1	1
-	-	5129713	Spring, gov. throttle lever return (A & B eng.) (closed linkage gov.)	1	1	1
-	-	5125414	Valve, gov. dual speed control solenoid 12V.	1		
-	-	5124545	Valve, gov. dual speed control solenoid 220V. (1800-2000 RPM gov.)	1		
-	-	5125032	Valve, gov. dual speed control solenoid 220V. (1200-1800 RPM gov.)	1		
-	-	132908	Bolt, #10-32x1/2"	2		
-	-	120217	Lockwasher, #10	2		
-	-	120614	Nut, #10-32 hex.	2		
13	2.7860	5116025	Gear, governor drive (RA-RB-LC-LD eng.)	1	1	1
13	2.7960	5116026	Gear, governor drive (RC-RD-LA-LB eng.)	1	1	1
-	-	5122738	Spacer, gov. drive gear	1	1	1
-	-	124546	Key, 5/32"x5/8" woodruff	1	1	1
-	-	456884	Nut, 5/8"-18 hex. lock	1	1	1
-	-	5125407	Bracket, throttle control booster spring (L.H.) (open linkage gov.)	1	1	1
-	-	5125408	Bracket, throttle control booster spring (R.H.) (open linkage gov.)	1	1	1
-	-	122007	Bolt, 5/16"-18x3/4" hex. hd.	2	2	2
-	-	120214	Lockwasher, 5/16"	2	2	2
-	-	103089	Nut, 5/16"-18 hex.	2	2	2
-	-	5125426	Spring, throttle speed adjusting (open linkage gov.)	1	1	1
-	-	5124976	Bolt, throttle speed adjusting eye (open linkage gov.)	1	1	1
-	-	120393	Washer, 5/16" flat	2	2	2
-	-	122193	Nut, 5/16"-24 hex.	2	2	2
-	-	5129726	Tube Assy., governor lubrication	1	1	1
-	-	5166265	Elbow, governor lubrication tube	1	1	1
-	-	137405	Connector, 1/8" tube x1/8" pipe	1	1	1

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FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
HYDRAULIC GOVERNOR						
2	2.8001	5108290	Governor Assy., hydraulic (A & B eng.)	1	1	1
2	2.8001	5108291	Governor Assy., hydraulic (C & D eng.)	1	1	1
-	-	186624	Bolt, 5/16"-18x1/4" hex. hd.	4	4	4
-	-	103320	Lockwasher, 5/16"	4	4	4
-	-	3224773	Gasket, governor to drive	1	1	1
28	2.8450	5127117	Lever, governor speed adjusting terminal	1	1	1
-	-	181314	Bolt, 1/4"-28 x7/8" hex. hd.	1	1	1
28	2.8750	5124464	Drive Assy., governor (A & B eng.)]	1	1	1
28	2.8750	5124465	Drive Assy., governor (C & D eng.)] (includes indented items)	1	1	1
-	-	186612	Bolt, 3/8"-16x1 3/8" hex. hd.	2	2	2
-	-	9414285	Bolt, 3/8"-24x7/8" 12 pt. hd.	3	3	3
-	-	103341	Washer, 3/8" flat	2	2	2
-	-	116103	Washer, 3/8" flat (copper)	3	3	3
-	-	5116336	Gasket, drive to engine	1	1	1
29	2.8795	3224084	Shaft, governor driven	1	1	1
29	2.8800	5119065	Sleeve, governor driven shaft	1	1	1
29	2.8810	954498	Bearing, governor driven shaft	1	1	1
-	-	5169864	Screw, governor driven shaft bearing set	2	2	2
-	-	5169866	Gasket, governor driven shaft bearing set screw nut	2	2	2
-	-	274856	Nut, governor driven shaft bearing set screw	2	2	2
29	2.8815	5124433	Gear, governor drive bevel	1	1	1
29	2.8820	5124434	Shaft, governor drive	1	1	1
29	2.8830	903202	Bearing, governor drive thrust-inner	1	1	1
29	2.8830	903303	Bearing, governor drive thrust-outer	1	1	1
-	-	9416358	Ring, governor drive bearing retainer snap	1	1	1
-	-	5116025	Gear, governor drive (RA-RB-LC-LD eng.)	1	1	1
-	-	5116026	Gear, governor drive (RC-RD-LA-LB eng.)	1	1	1
-	-	5122738	Spacer, governor drive gear	1	1	1
-	-	124546	Key, 5/32"x5/8" woodruff	1	1	1
-	-	456884	Nut, 5/8"-18 hex. lock	1	1	1

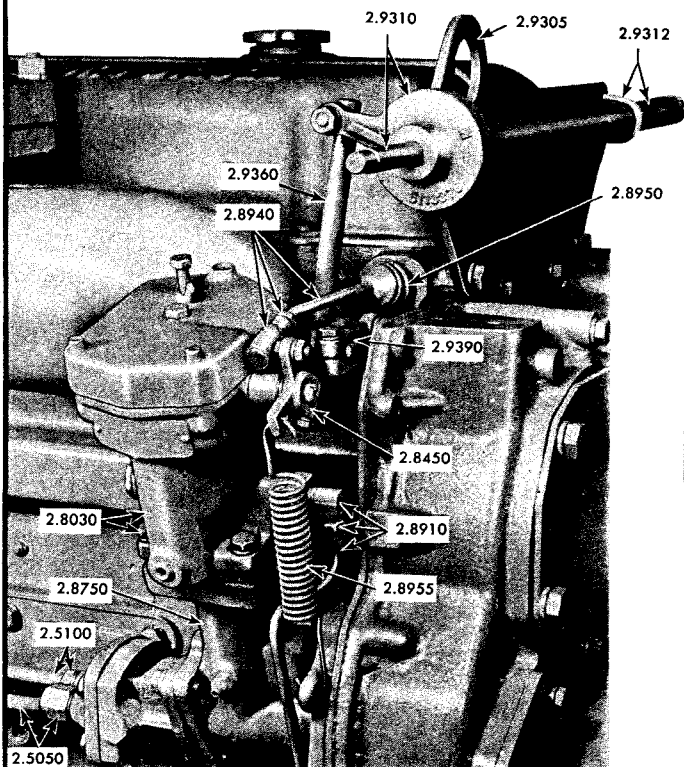


Fig. 28 - Hydraulic Governor

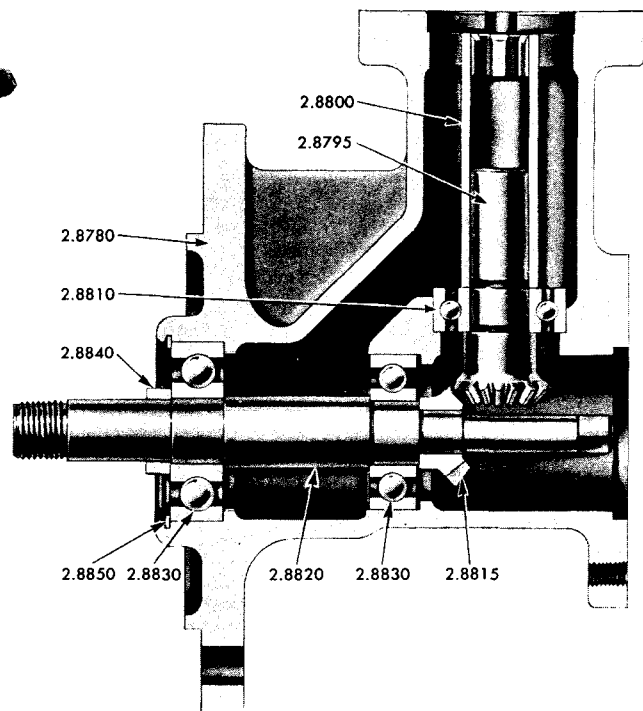


Fig. 29 - Hydraulic Governor Drive

GM DIESEL

FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
28	2.8910	5125398	Tube Assy., governor lube oil pressure (A & B eng.)	1	1	1
28	2.8910	5125397	Tube Assy., governor lube oil pressure (C & D eng.)	1	1	1
28	2.8910	137421	Elbow, 1/4" inv. fl. tube 90°	1	1	1
-	-	125859	Elbow, 1/4" inv. fl. tube 45°	1	1	1
28,30	2.8940	5128416	Link, injector control tube (A eng.)	1	1	1
28,30	2.8940	5128415	Link, injector control tube (C eng.)	1	1	1
28	2.8940	5128413	Link, injector control tube (D eng.)	1	1	1
-	-	5118491	Joint, 1/4" ball	1	1	1
-	-	103319	Lockwasher, 1/4"	1	1	1
-	-	122161	Nut, 1/4"-28 hex.	2	2	2
30	2.8940	5150265	Pin, injector control tube link	1	1	1
30	2.8940	103361	Pin, 1/16"x1/2" cotter	2	2	2
6	2.8945	5121252	Adaptor, cylinder head governor control link	1	1	1
30	2.8950	5121385	Boot, injector control tube link	1	1	1
28	2.8955	5124611	Spring, governor drive (fuel return)	1	1	1
INJECTOR CONTROLS						
30	2.9001	5195973	Tube Assy., injector control (A eng.)	1		
30	2.9001	5195967	Tube Assy., injector control (C eng.)	1		
30	2.9001	5195945	Tube Assy., injector control (D eng.)	1		
30	2.9001	5195974	Tube Assy., injector control (A eng.)		1	
30	2.9001	5195968	Tube Assy., injector control (C eng.)		1	
30	2.9001	5195971	Tube Assy., injector control (B eng.)		1	
30	2.9001	5195946	Tube Assy., injector control (D eng.)		1	
30	2.9001	5195975	Tube Assy., injector control (A eng.)			1
30	2.9001	5195969	Tube Assy., injector control (C eng.)			1
30	2.9001	5195972	Tube Assy., injector control (B eng.)			1
30	2.9001	5195947	Tube Assy., injector control (D eng.)			1
30	2.9003	5116264	Bracket, injector control tube	2	2	2
30	2.9003	186630	Bolt, 1/4"-20x5/8" hex. hd.	4	4	4
30	2.9003	103319	Lockwasher, 1/4"	4	4	4
30	2.9007	5150259	Pin, injector control tube end	1	1	1
30	2.9009	5116267	Lever, injector control tube	1	1	1

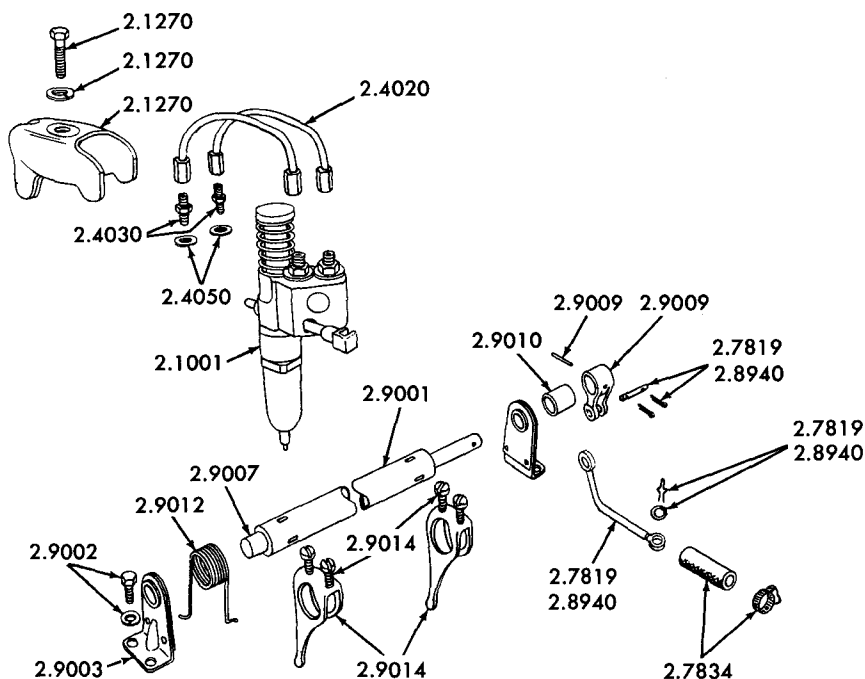


Fig. 30 - Injector and Injector Controls

GM DIESEL

FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
30	2.9009	142486	Pin, 1/8"x3/4" groove	1	1	1
30	2.9010	5116266	Spacer, injector control tube lever	1	1	1
30	2.9012	5116265	Spring, injector control tube	1	1	1
30	2.9014	5115322	Lever, injector control	2	3	4
30	2.9014	5176228	Screw, injector control lever adjusting	4	6	8
THROTTLE CONTROLS						
(Variable Speed Mechanical Governor)						
-	-	5113377	Disc, throttle control tube brake	1	1	1
-	-	5113378	Pad, throttle control tube brake disc	1	1	1
-	-	5125228	Bracket, throttle control support (to head)	1	1	1
-	-	5122898	Spacer, throttle control shaft bracket	1	1	1
-	-	179844	Bolt, 3/8"-16x1 5/8" hex. hd.	2	2	2
-	-	103321	Lockwasher, 3/8"	2	2	2
28	2.9305	5124865	Bracket, throttle control cross shaft support (engine lifter)	1		
28	2.9305	5124616	Bracket, throttle control cross shaft support (engine lifter)		1	1
-	-	179838	Bolt, 3/8"-16x7/8" hex. hd.	2	2	2
-	-	103321	Lockwasher, 3/8"	2	2	2
-	-	5152904	Gasket, throttle control cross shaft bracket	2	2	2
28	2.9310	5124863	Lever and Shaft Assy., throttle control cross shaft (length 14 15/16") ..	1	1	1
28	2.9310	5121163	Lever and Shaft Assy., throttle control cross shaft (length 7 1/8")		1	1
-	-	5113358	Spring, throttle control cross shaft	1	1	1
-	-	5113359	Spacer, throttle control cross shaft	1	1	1
-	-	122295	Nut, 1/2"-20 hex.	2	2	2
28	2.9312	5124862	Tube, throttle control cross shaft (9 15/32" long)	1	1	1
28	2.9312	5124262	Tube, throttle control cross shaft (16 7/8" long)		1	1
28	2.9312	5121166	Tube, throttle control cross shaft (22 25/32" long)		1	1
28	2.9312	5180116	Clamp, 1/4"-20 "U" bolt	2	2	2
-	-	103319	Lockwasher, 1/4"	4	4	4
-	-	123179	Nut, 1/4"-20 hex.	4	4	4
-	-	5113397	Bushing, throttle control cross shaft tube	2	2	2
-	-	5123878	Bracket, throttle booster spring (1 bolt) (C & D eng.)	1	1	1
-	-	5123879	Bracket, throttle booster spring (1 bolt) (A & B eng.)	1	1	1
-	-	5125014	Bracket, throttle booster spring (2 bolts) (C & D eng.)	1	1	1
-	-	5125015	Bracket, throttle booster spring (2 bolts) (A & B eng.)	1	1	1
-	-	179823	Bolt, 5/16"-18x5/8" hex. hd.	2	2	2
-	-	186612	Bolt, 3/8"-16x1 3/8" hex. hd.	1	1	1
-	-	186628	Bolt, 3/8"-16x1 1/2" hex. hd.	1	1	1
-	-	103341	Washer, 3/8" flat	1	1	1
-	-	103320	Lockwasher, 5/16"	2	2	2
-	-	123197	Nut, 5/16"-18 hex.	2	2	2
-	-	5123880	Lever, gov. speed control (C & D eng.)(with offset)(closed linkage gov.) ..		1	1
-	-	5123881	Lever, gov. speed control (A & B eng.)(with offset)(closed linkage gov.) ..		1	1
-	-	5124615	Lever, throttle booster (straight)	1	1	1
-	-	5125016	Bracket, throttle booster lever	1	1	1
-	-	179796	Bolt, 1/4"-20x7/8" hex.	1	1	1
-	-	103319	Lockwasher, 1/4"	1	1	1
-	-	123179	Nut, 1/4"-20 hex.	2	2	2
40	2.9347	5189821	Spring, throttle booster (8 3/8" long)	1	1	1
40	2.9347	5124418	Spring, throttle booster (5 9/16" long)	1	1	1
-	-	5123762	Eye, throttle booster adjusting	1	1	1
-	-	123179	Nut, 1/4"-20 hex.	2	2	2
-	-	5186749	Hanger, throttle booster spring (19/32" W.)	1	1	1
-	-	5171429	Hanger, throttle booster spring (13/32" W.)	1	1	1
-	-	5171045	Bolt, 5/16"-24x5/8" (1/8" head)	1	1	1
-	-	5125060	Shaft, throttle control to bellcrank (C & D eng., open linkage gov.)	1	1	1
-	-	5124837	Shaft, throttle control to bellcrank (C & D eng., closed linkage gov.)		1	1
-	-	5124614	Shaft, throttle control to bellcrank (A & B eng.)		1	1
-	-	5125684	Link, throttle control shaft (C & D eng.) (offset)	1	1	1
-	-	5125686	Link, throttle control shaft (C & D eng.) (straight)	1	1	1
-	-	5125687	Link, throttle control shaft (A & B eng.) (straight)	1	1	1
-	-	109408	Joint, 5/16"-24 ball	2	2	2
-	-	5184098	Lever, governor control	1	1	1

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FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
-	-	179796	Bolt, 1/4"-20x7/8" hex. hd.	1	1	1
-	-	103319	Lockwasher, 1/4"	1	1	1
32	2.9422	1990891	Wire Assy., governor control (48" long)	1	1	1
32	2.9422	1990892	Wire Assy., governor control (90" long)	1	1	1
-	-	3796374	Guide, governor control wire	1	1	1
-	-	5184255	Plate, governor control wire name	1	1	1
-	-	140855	Screw, #8-32x5/16" set	1	1	1
-	-	110730	Lockwasher, 3/8"	1	1	1
-	-	122236	Nut, 3/8"-24 hex.	1	1	1
-	-	5161464	Pin, governor control wire swivel	1	1	1
-	-	120393	Washer, 11/32" flat	1	1	1
-	-	142583	Retainer, 13/64" spring	1	1	1
-	-	100659	Screw, #10-32x3/8" fillister hd.	1	1	1
-	-	3250569	Clip, governor control wire (at flywheel housing)	1	1	1
-	-	5159738	Clip, governor control wire (intermediate)	1	1	1
-	-	5126279	Clip, governor control wire (open)	1	1	1
-	-	5125535	Support, governor control wire clip	1	1	1
-	-	120687	Bolt, #10-24x1/2" hex. hd.	1	1	1
-	-	123298	Bolt, 1/4"-28x3/8" hex. hd.	1	1	1
-	-	179833	Bolt, 3/8"-16x1/2" hex. hd.	1	1	1
-	-	120217	Lockwasher, #10	1	1	1
-	-	103319	Lockwasher, 1/4"	1	1	1
-	-	103321	Lockwasher, 3/8"	1	1	1
-	-	110633	Nut, #10-24 hex.	1	1	1
-	-	121902	Nut, 1/4"-28 hex.	1	1	1
THROTTLE CONTROLS						
(Limiting Speed Mechanical Governor)						
-	-	5113377	Disc, throttle control tube brake	1	1	1
-	-	5113378	Pad, throttle control tube brake disc	1	1	1
-	-	5125228	Bracket, throttle control shaft (to head)	1	1	1
-	-	5122898	Spacer, throttle control shaft bracket	1	1	1
-	-	179844	Bolt, 3/8"-16x1 5/8" hex. head	1	1	1
-	-	103321	Lockwasher, 3/8"	1	1	1
1,28	2.9305	5124865	Bracket, throttle control cross shaft support (eng. lifter)	1		
1,28	2.9305	5124616	Bracket, throttle control cross shaft support (eng. lifter)		1	1
-	-	179838	Bolt, 3/8"-16x7/8" hex. hd.	2	2	2
-	-	103321	Lockwasher, 3/8"	2	2	2
-	-	5152904	Gasket, throttle control cross shaft bracket	2	2	2
28	2.9310	5124863	Lever and Shaft Assy., throttle control cross shaft (length 14 15/16") ..	1	1	1
28	2.9310	5121163	Lever and Shaft Assy., throttle control cross shaft (length 7 1/8")		1	1
-	-	5113358	Spring, throttle control cross shaft	1	1	1
-	-	5113359	Spacer, throttle control cross shaft	1	1	1
-	-	122295	Nut, 1/2"-20 hex.	2	2	2
28	2.9312	5124862	Tube, throttle control cross shaft (9 1/2" long)	1	1	1
28	2.9312	5124262	Tube, throttle control cross shaft (16 7/8" long)		1	1
28	2.9312	5121166	Tube, throttle control cross shaft (22 3/4" long)		1	1
-	-	5180116	Clamp, 1/4"-20 "U" bolt	2	2	2
-	-	103319	Lockwasher, 1/4"	4	4	4
-	-	123179	Nut, 1/4"-20 hex.	4	4	4
-	-	5124943	Rod Assy., throttle control to bellcrank (A & B eng.)	1	1	1
-	-	5124942	Rod Assy., throttle control to bellcrank (C & D eng., offset rod)	1	1	1
-	-	5125262	Rod Assy., throttle control to bellcrank (C & D eng., straight rod)		1	1
-	-	103320	Lockwasher, 5/16"	2	2	2
-	-	121917	Nut, 5/16"-20 hex.	2	2	2
-	-	5184098	Lever, governor control	1	1	1
-	-	179796	Bolt, 1/4"-20x7/8" hex. head	1	1	1
-	-	103319	Lockwasher, 1/4"	1	1	1
THROTTLE CONTROLS						
(Hydraulic Governor)						
-	-	5113377	Disc, throttle control tube brake	1	1	1
-	-	5113378	Pad, throttle control tube brake disc	1	1	1

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FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
-	-	5173084	Control Assy., vernier throttle (4 7/16" shaft)	1	1	1
-	-	3292337	Control Assy., vernier throttle (5 7/16" shaft) } (includes indented items)	1	1	1
31	2.9135	3224408	Knob, vernier throttle control	1	1	1
31	2.9138	3291979	Spring, vernier throttle control lock	1	1	1
31	2.9138	112871	Screw, #6-32x5/16" round head slotted	2	2	2
31	2.9139	3224425	Worm, vernier throttle control	1	1	1
31	2.9140	5173080	Shaft, vernier throttle control (4 7/16" long)	1	1	1
31	2.9140	3224405	Shaft, vernier throttle control (5 7/16" long)	1	1	1
31	2.9141	3224410	Gear, vernier throttle control worm	1	1	1
-	-	106958	Key, 1/16"x1/2" woodruff	1	1	1
-	-	3224409	Bushing, vernier throttle control worm	1	1	1
-	-	106498	Lockwasher, #12	1	1	1
-	-	103089	Nut, #12-24 hex.	1	1	1
31	2.9145	3224407	Button, vernier throttle control lock	1	1	1
31	2.9146	3224406	Pin, vernier throttle control lock button	1	1	1
31	2.9147	3224413	Spring, vernier throttle control lock button pin	1	1	1
31	2.9149	3292336	Cover, vernier throttle control	1	1	1

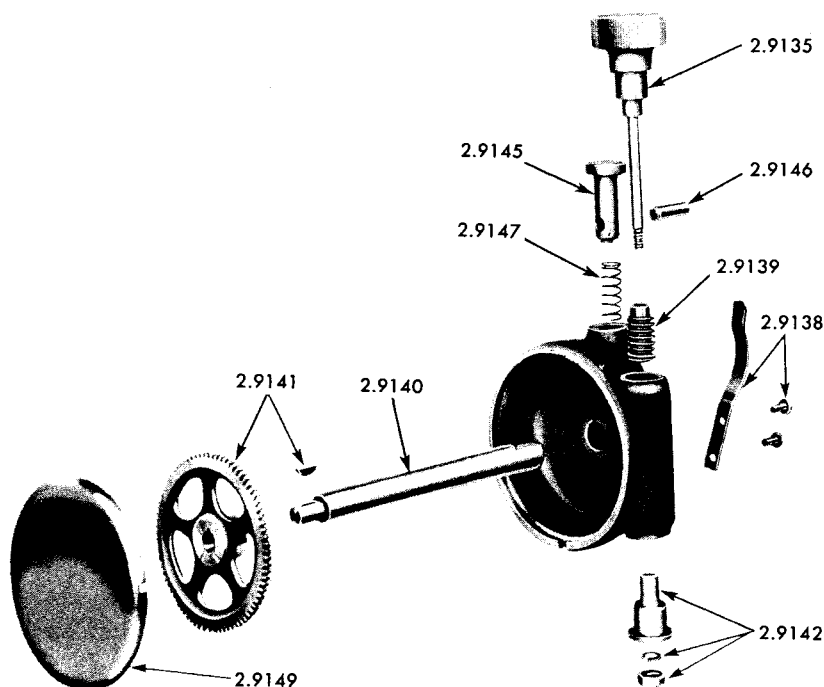


Fig. 31 - Vernier Throttle Control

-	-	5124829	Bracket Assy., throttle control knob shaft	1	1	1
-	-	3292280	Bracket Assy., throttle control knob shaft	1	1	1
-	-	3292274	Plate, throttle control indicator	1	1	1
-	-	179796	Bolt, 1/4"-20x7/8" hex. hd.	1	1	1
-	-	103319	Lockwasher, 1/4"	1	1	1
-	-	123179	Nut, 1/4"-20 hex.	1	1	1
-	-	5124502	Support, throttle control bracket	1	1	1
-	-	5124628	Bracket, throttle control support	1	1	1
-	-	179838	Bolt, 3/8"-16x7/8" hex. hd.	1	1	1
-	-	103321	Lockwasher, 3/8"	1	1	1
-	-	117062	Nut, 3/8"-16 hex.	1	1	1
-	-	5166494	Coupling, throttle control shaft	1	1	1
-	-	139009	Screw, 1/4"-28x1/4" set	1	1	1
-	-	5125228	Bracket, throttle control support (to head)	1	1	1
-	-	5122898	Spacer, throttle control shaft bracket	1	1	1
-	-	179844	Bolt, 3/8"-16x1 5/8" hex. hd.	1	1	1
-	-	103321	Lockwasher, 3/8"	1	1	1

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FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
-	-	3222760	Lever, throttle control rod - lower (on vernier control shaft)	1	1	1
-	-	106276	Bolt, 1/4"-28x1 1/4" hex. hd.	1	1	1
-	-	103319	Lockwasher, 1/4"	1	1	1
-	-	121902	Nut, 1/4"-28 hex.	1	1	1
28	2.9305	5124865	Bracket, throttle control cross shaft support (eng. lifter)	1		
28	2.9305	5124616	Bracket, throttle control cross shaft support (eng. lifter)		1	1
-	-	179838	Bolt, 3/8"-16x7/8" hex. hd.	2	2	2
-	-	103321	Lockwasher, 3/8"	2	2	2
-	-	5152904	Gasket, throttle control cross shaft bracket	2	2	2
28	2.9310	5124863	Lever and Shaft Assy., throttle control cross shaft (length 14 15/16") ..	1	1	1
28	2.9310	5121163	Lever and Shaft Assy., throttle control cross shaft (length 7 1/8")		1	1
28	2.9310	5124261	Lever and Shaft Assy., throttle control cross shaft (length 22 5/16") ..		1	1
-	-	5113358	Spring, throttle control cross shaft	1	1	1
-	-	5113359	Spacer, throttle control cross shaft	1	1	1
-	-	122295	Nut, 1/2"-20 hex.	2	2	2
28	2.9312	5124862	Tube, throttle control cross shaft (9 15/32" long)	1	1	1
28	2.9312	5124262	Tube, throttle control cross shaft (16 7/8" long)		1	1
28	2.9312	5121166	Tube, throttle control cross shaft (22 25/32" long)		1	1
28	2.9312	5180116	Clamp, 1/4"-20 "U" bolt	2	2	2
-	-	103319	Lockwasher, 1/4"	4	4	4
-	-	123179	Nut, 1/4"-20 hex.	4	4	4
28	2.9360	5124940	Shaft, throttle control (A & B eng.)	1	1	1
28	2.9360	5124941	Shaft, throttle control (C & D eng., 5 3/16" long)	1	1	1
28	2.9360	5125264	Shaft, throttle control (C & D eng., 7 1/2" long)		1	1
-	-	3224744	Link, throttle control shaft	1	1	1
-	-	114783	Pin, 1/4" clevis	2	2	2
-	-	103361	Pin, 1/16"x1/2" cotter	2	2	2
-	-	103320	Lockwasher, 5/16"	2	2	2
-	-	121917	Nut, 5/16"-24 hex.	1	1	1
-	-	122193	Nut, 5/16"-24 hex.	1	1	1
28	2.9390	5173081	Lever, governor control (2 11/16" long)	1	1	1
28	2.9390	5124504	Lever, governor control (2 1/4" long)		1	1
-	-	179796	Bolt, 1/4"-20x7/8" hex. hd.	1	1	1
-	-	106276	Bolt, 1/4"-28x1 1/8" hex. hd.	1	1	1
-	-	103319	Lockwasher, 1/4"	1	1	1
-	-	121902	Nut, 1/4"-28 hex.	1	1	1
AIR CLEANER						
53	3.1001	5119045	Air Cleaner Assy. (7")	1		
53	3.1001	5645456	Air Cleaner Assy. (9")	1		2
53	3.1001	5188190	Air Cleaner Assy. (10") (light duty)		1	
32	3.1001	5129859	Air Cleaner Assy. (10") (heavy duty)		1	
32	3.1001	5121347	Air Cleaner Assy. (11")			1
32	3.1001	5123925	Air Cleaner Assy. (12")			1
-	-	5168203	Gasket, air cleaner mounting	1		
-	-	5124405	Gasket, air cleaner mounting		1	1
-	-	5119144	Hood Assy. (2 1/4" dia. pipe)	1		
-	-	5183230	Hood Assy. (3 3/4" dia. pipe)		1	
-	-	5110226	Hood Assy. (4 1/2" dia. pipe)			1
32	3.1220	5119142	Strap, air cleaner mounting (7" cleaner)	2		
32	3.1220	5183229	Strap, air cleaner mounting (10" cleaner)		2	
32	3.1220	5124015	Strap, air cleaner mounting (11" cleaner)			2
32	3.1220	5185800	Strap, air cleaner mounting (12" cleaner)			2
AIR SILENCER						
46,48	3.2001	5116020	Silencer Assy., air		1	
46,48	3.2001	5116021	Silencer Assy., air			1
-	-	191249	Bolt, 3/8"-16x3 3/4" hex. hd.		4	4
-	-	103321	Lockwasher, 3/8"		4	4
-	-	5116430	Gasket, air silencer		1	
-	-	5116431	Gasket, air silencer			1

GM DIESEL

FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
			AIR INLET HOUSING			
32	3.3001	5123237	Housing Assy. (remote mounted air cleaner, shutdown on right)		1	
32	3.3001	5121181	Housing Assy. (remote mounted air cleaner, shutdown on left)		1	
1,32	3.3001	5124237	Housing Assy. (direct mounted air cleaner, shutdown on left)		1	
1,32	3.3001	5124800	Housing Assy. (direct mounted air cleaner, shutdown on right)		1	
17	3.3001	5124713	Housing Assy. (offset to right, shutdown on left)			1
17	3.3001	5121063	Housing Assy. (offset to right, shutdown on right)			1
1,32	3.3001	5121064	Housing Assy. (offset to left)			1
33	3.3001	5157244	Bolt, housing to blower		4	4

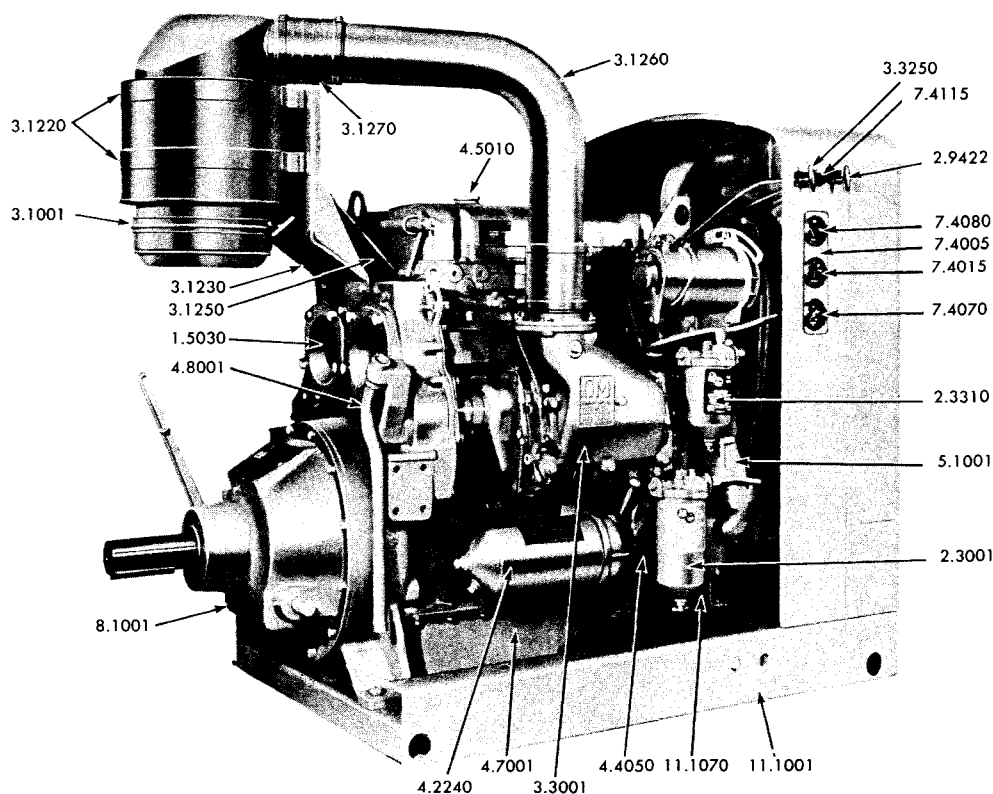


Fig. 32 - Typical Power-Base Unit

33	3.3001	179847	Bolt, 3/8"-16x2" hex. hd.		1	1
33	3.3001	179851	Bolt, 3/8"-16x3" hex. hd.		1	1
33	3.3001	103341	Washer, 3/8" flat		6	6
33	3.3001	103321	Lockwasher, 3/8"		6	6
3,33	3.3003	5116383	Housing, air inlet (for direct mounted cleaner)		1	
3,33	3.3003	5124054	Housing, air inlet (for remote mounted cleaner)		1	
17,33	3.3003	5116384	Housing, air inlet (offset to right)			1
33	3.3003	5116385	Housing, air inlet (offset to left)			1
33	3.3003	103878	Plug, 1/4" pipe		1	1
33	3.3040	5116456	Valve, air inlet housing shutdown		1	
33	3.3040	5116457	Valve, air inlet housing shutdown			1
33	3.3040	273436	Pin, 1/8"x5/8" groove		2	4
33	3.3050	5116444	Shaft, air inlet housing shutdown valve		1	
33	3.3050	5116445	Shaft, air inlet housing shutdown valve			1
33	3.3050	103341	Washer, 7/16" flat		1	1

GM DIESEL

FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
33	3.3050	273436	Pin, 1/8"x5/8" groove		1	1
33	3.3055	5182977	Seal Ring, air inlet housing shutdown valve shaft		2	2
33	3.3070	5111904	Spring, air inlet housing shutdown valve tension		1	1
33	3.3070	5114124	Spring, air inlet housing shutdown valve latch (L.H. helix)		1	1
33	3.3070	5112787	Spring, air inlet housing shutdown valve latch (R.H. helix)		1	1
33	3.3090	5114727	Latch, air inlet housing shutdown		1	1
33	3.3090	5113633	Spacer, air inlet housing shutdown latch		1	1
33	3.3090	121926	Bolt, 1/4"-20x1 1/2" hex. hd.		1	1
33	3.3090	120392	Washer, 1/4" flat		1	1
33	3.3090	120380	Lockwasher, 1/4"		1	1
33	3.3110	5114974	Handle, air inlet housing shutdown reset		1	1
33	3.3110	5122623	Cam, air inlet housing shutdown reset		1	1
17,32	3.3250	1990891	Wire Assy., air shutdown control (50" L.)		1	1
17,32	3.3250	1990892	Wire Assy., air shutdown control (90" L.)		1	1
-	-	3290569	Clip, air inlet housing shutdown control wire		1	1

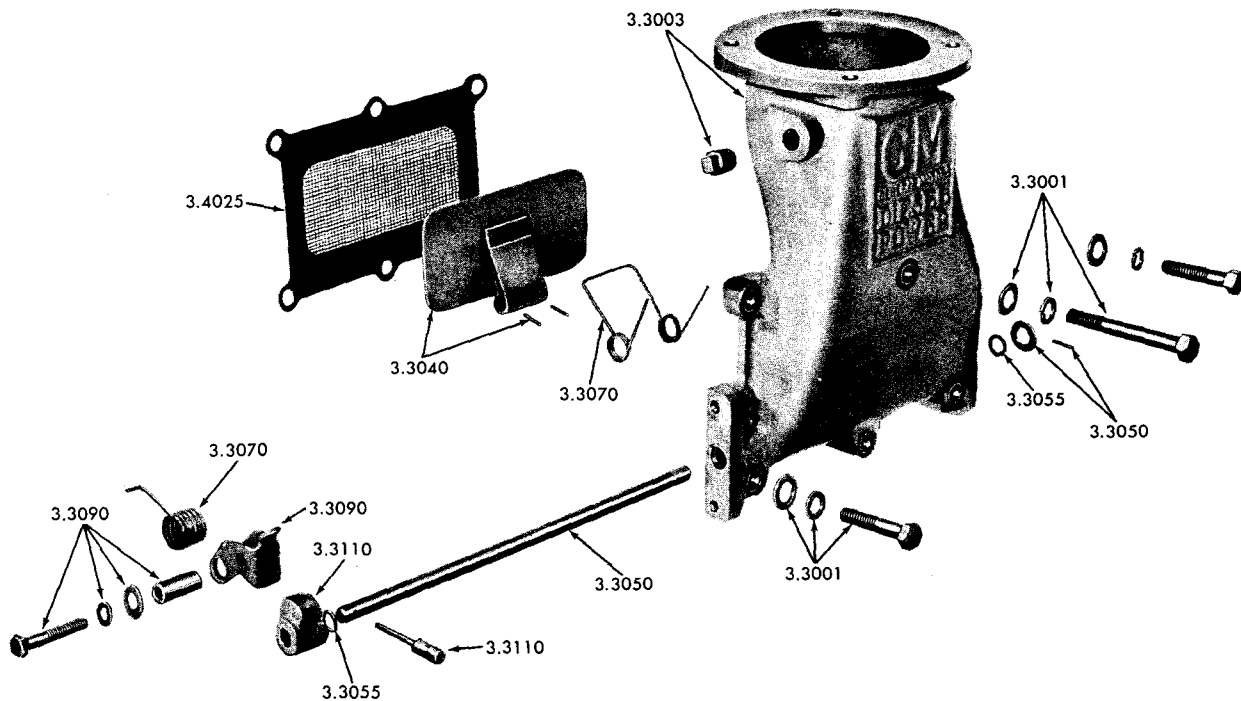


Fig. 33 - Air Inlet Housing

BLOWER						
-	-	5121362	Blower Assy. (RC eng.)	1		
-	-	5124936§	Blower Assy. (RA eng.)	1		
-	-	5124656	Blower Assy. (RA eng.)	1		
-	-	5124935§	Blower Assy. (RC eng.)	1		
17,53	3.4001	5119260	Blower Assy. (R.H. rot. eng.)		1	
17,53	3.4001	5119259	Blower Assy. (L.H. rot. eng.)		1	
17,53	3.4001	5119261	Blower Assy. (A & B eng.)			1
17,53	3.4001	5119262	Blower Assy. (C & D eng.)			1
34	3.4001	5121463	Bolt, blower (8")	2		
34	3.4001	186291	Bolt, 3/8"-24x8 1/4" hex. hd.	4		
34	3.4001	5121464	Bolt, blower (10")		2	
34	3.4001	5116150	Bolt, blower (10 1/2")		4	
34,35	3.4001	273163	Bolt, 7/16"-14x6 1/2" hex. hd.	4	4	4

§ Also includes automatic shutdown items.

GM DIESEL

FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
34,35	3.4001	5150238	Washer, blower bolt	4	4	4
34	3.4001	5119394	Plate, reinforcement (large)	2	2	2
34	3.4001	5119395	Plate, reinforcement (small)	2	2	2
34	3.4010	5116294	Gasket, blower to cylinder block	1		
34	3.4010	5116295	Gasket, blower to cylinder block		1	
35	3.4010	5116296	Gasket, blower to cylinder block			1
34	3.4010	5119433	Gasket, blower to end plate	1	1	
34	3.4020	5121376	Housing Assy., blower (C eng.)	1		
34	3.4020	5121327	Housing Assy., blower (A eng.)	1		
34	3.4020	5119391	Housing Assy., blower		1	
35	3.4020	5119392	Housing Assy., blower			1
-	-	141242	Pin, 3/8"x7/8" dowel	4	4	4
33	3.4025	5196053	Screen, blower air inlet		1	
33	3.4025	5196054	Screen, blower air inlet			1

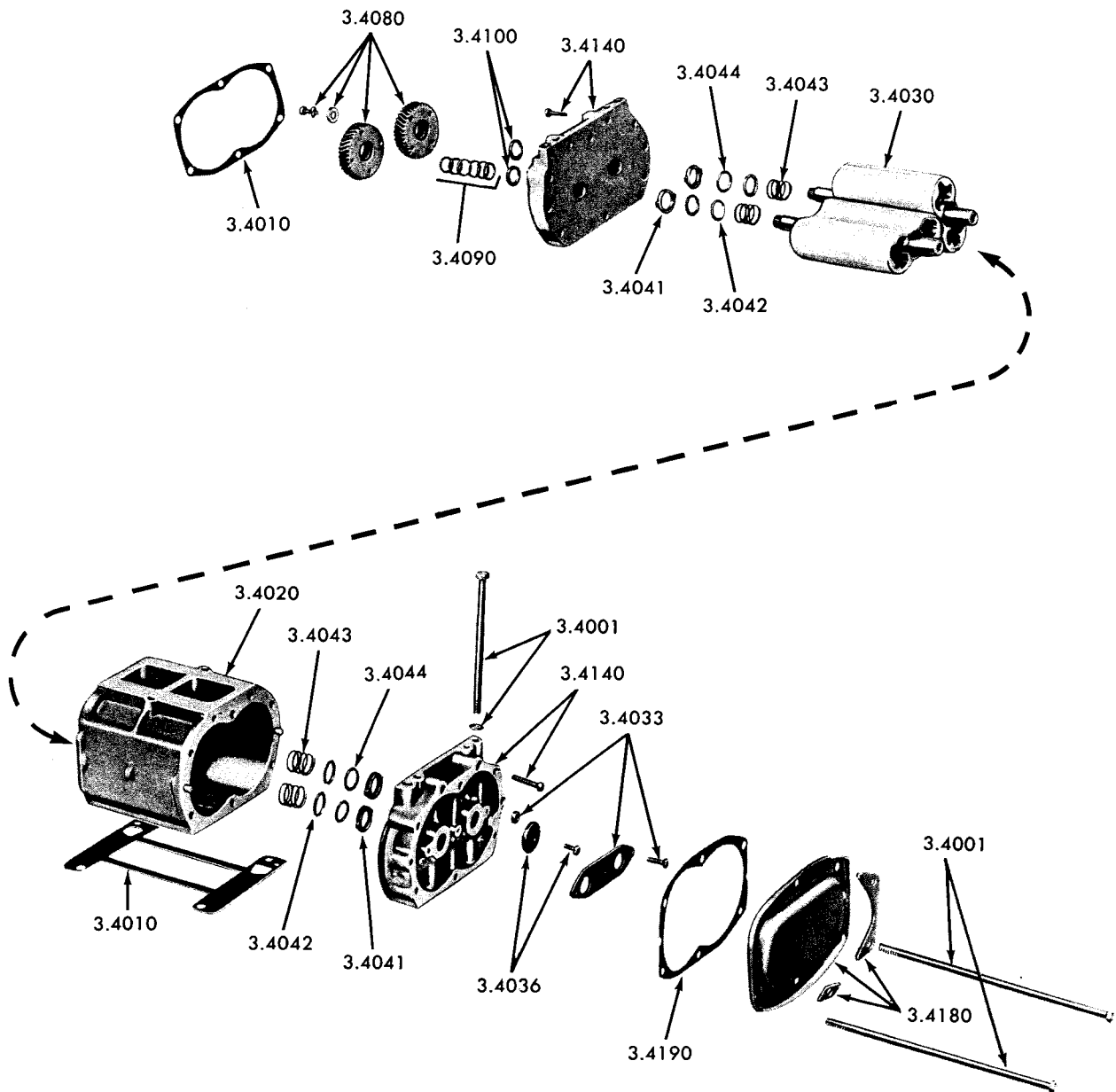


Fig. 34 - Blower (Typical 2 and 3 Cylinder Engines)

GM DIESEL

FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
34	3.4030	5127084	Rotor Assy., blower	2		
34	3.4030	5127085	Rotor Assy., blower		2	
35	3.4030	5127086	Rotor Assy., blower			2
34,35	3.4033	5116173	Plate, blower rotor thrust	1	1	1
35	3.4033	5116170	Spacer, blower rotor thrust plate	3	3	3
35	3.4033	9409062	Bolt, 1/4"-20x1" hex. hd.	3	3	3
35	3.4036	5127077	Washer, blower rotor shaft thrust	2	2	2
35	3.4036	9409034	Bolt, 3/8"-24x7/8" hex. hd.	2	2	2
35	3.4036	115548	Lockwasher, 5/16" int. tooth	2	2	2
35	3.4041	5116169	Seal, blower rotor retainer oil	4	4	4
35	3.4042	5180312	Retainer, blower rotor oil seal	4	4	4
35	3.4043	5180311	Spring, blower rotor oil seal	4	4	4
35	3.4044	5180314	Seal Ring, blower rotor	4	4	4
35	3.4080	5119194	Gear, blower rotor (R.H. helix)	1	1	
35	3.4080	5119195	Gear, blower rotor (L.H. helix)	1	1	
35	3.4080	5128599	Gear, blower rotor (R.H. helix)			1
35	3.4080	5128600	Gear, blower rotor (L.H. helix)			1
34,35	3.4080	9409018	Bolt, 5/16"-24x7/8" hex. hd.	2	2	1
35	3.4080	5121403	Washer, blower rotor gear (1" O.D.)	2	2	1
35	3.4080	5116316	Washer, blower rotor gear (1 1/4" O.D.)	2	2	1
35	3.4080	9409018	Bolt, 5/16"-24x7/8" hex. hd.	2	2	1
35	3.4080	103320	Lockwasher, 5/16"	2	2	1
35	3.4082	5180438	Pilot, blower drive gear			1
35	3.4082	9409018	Bolt, 5/16"-24x7/8" hex. hd.			1
35	3.4090	5116164	Shim, blower rotor (.002")	AR	AR	AR
35	3.4090	5116165	Shim, blower rotor (.003")	AR	AR	AR
35	3.4090	5116166	Shim, blower rotor (.004")	AR	AR	AR
34,35	3.4090	5116167	Shim, blower rotor (.005")	AR	AR	AR
34,35	3.4100	5116168	Spacer, blower rotor gear	2	2	2
34,35	3.4140	5119319	Plate, blower housing end	2	2	2
34	3.4140	117297	Screw, 5/16"-18x1 3/4" fil. hd.	4	4	
34,35	3.4140	444687	Plug, 1/8" pipe	2	2	2
34,35	3.4180	5119429	Cover, blower housing end plate (front)	1	1	1
35	3.4180	5119154	Cover, blower housing end plate (rear)			1
35	3.4180	179849	Bolt, 3/8"-16x2 1/2" hex. hd.			12
35	3.4180	103341	Washer, 3/8"			12
35	3.4180	103321	Lockwasher, 3/8"			12
34,35	3.4190	5119433	Gasket, blower housing end plate cover	1	1	2
35	3.4220	5180445	Seal, blower drive cover			1
35	3.4227	451220	Clamp, blower drive cover seal			1
35	3.4300	5116377	Gear, blower drive (RA-RB-LC-LD eng.)			1
35	3.4300	5116378	Gear, blower drive (LA-LB-RC-RD eng.)			1
35	3.4300	124546	Key, 5/32"x5/8" woodruff			1
35	3.4310	5119284	Hub, blower drive gear			1
35	3.4320	5119285	Washer, blower drive gear hub thrust			1
35	3.4320	9411765	Ring, blower drive gear hub thrust washer			1
35	3.4350	5119175	Support, blower drive gear hub			1
35	3.4350	181361	Bolt, 3/8"-24x7/8" hex. hd.			2
35	3.4350	186622	Bolt, 3/8"-16x1 1/4" hex. hd.			2
35	3.4350	103341	Washer, 3/8" flat			2
35	3.4350	116103	Washer, 3/8" copper			3
35	3.4350	103321	Lockwasher, 3/8"			2
35	3.4360	5116336	Gasket, blower drive gear hub support			1
35	3.4370	5119411	Coupling Assy., blower drive (includes support, cam, springs and seats)			1
35	3.4370	9409221	Bolt, 1/4"-28x1 5/8" hex. hd.			4
35	3.4380	5119412	Support, blower drive coupling			1
35	3.4390	5180323	Cam, blower drive coupling			1
35	3.4400	5196614	Spring Pack, blower drive coupling (includes springs & seats)			1
35	3.4420	5119466	Retainer, blower drive coupling			1
-	-	5152545	Valve, air shutdown	1		
-	-	132900	Screw, #10-32x3/8" rd. hd. sl.	2		
-	-	5121317	Shaft, air shutdown valve (5.9" L.)	1		
-	-	5124934	Shaft, air shutdown valve (7.2" L.)	1		

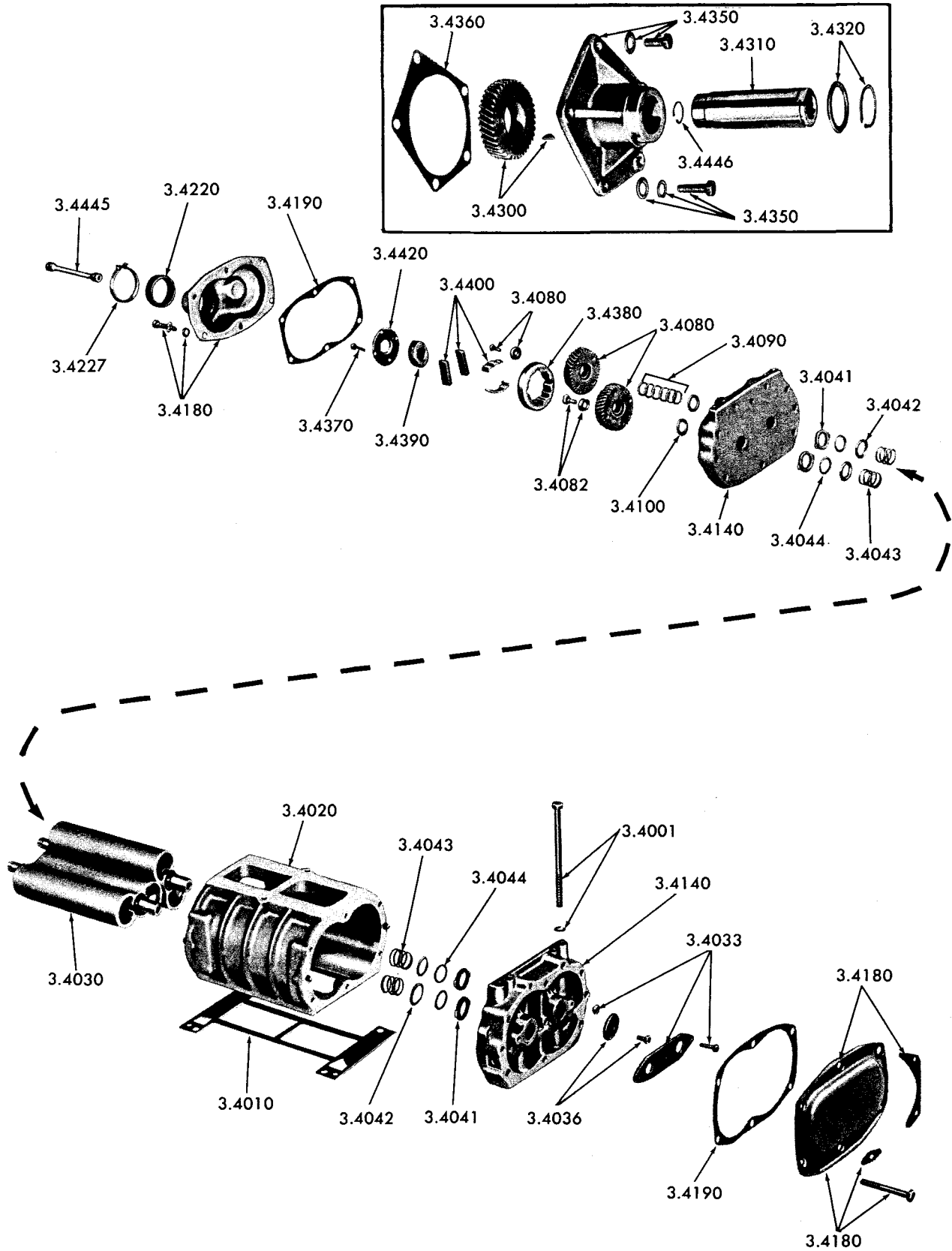


Fig. 35 - Blower (4 Cylinder Engine)

GM DIESEL

FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
-	-	5113633	Spacer, air shutdown valve shaft	1		
-	-	5176557	Seal, air shutdown valve shaft (1/2" I.D.)	2		
-	-	120394	Washer, 3/8" flat	1		
-	-	453676	Pin, 1/8"x1" roll (spring retainer)	1		
-	-	5122623	Cam, air shutdown shaft	1		
-	-	273436	Pin, 1/8"x11/16" retainer	1		
-	-	5121295	Spring, air shutdown valve (R.H. helix)	1		
-	-	5121296	Spring, air shutdown valve (L.H. helix)	1		
-	-	5119327	Spring, air shutdown latch (R.H. helix, 1" arm)	1		
-	-	5119328	Spring, air shutdown latch (L.H. helix, 1" arm)	1		
-	-	5114124	Spring, air shutdown latch (L.H. helix, 2" arm)	1		
-	-	5112787	Spring, air shutdown latch (R.H. helix, 2" arm)	1		
-	-	5112785	Latch, air shutdown valve	1		
-	-	121926	Bolt, 1/4"-20x1 1/2" hex. hd.	1		
-	-	120392	Washer, 1/4" flat	1		
-	-	120380	Lockwasher, 1/4"	1		
-	-	5114974	Handle Assy., air shutdown reset	1		
-	-	1990891	Wire Assy., air shutoff control (50" long)	1		
-	-	181309	Bolt, 1/4"-28x1/2" hex. hd.	1		
-	-	103319	Lockwasher, 1/4"	1		
-	-	121902	Nut, 1/4"-28 hex.	1		
BLOWER DRIVE SHAFT						
35	3.4445	5109771	Shaft, blower drive			1
35	3.4446	9414044	Ring, blower drive shaft snap			1
OIL PUMP						
-	-	5135032	Pump Assy., oil }	1		
-	-	5116110	Pump Assy., oil } (includes indented items)		1	
-	-	5121042	Pump Assy., oil }			1
9	4.1001	179822	Bolt, 5/16"-18x1 1/2" hex. hd.	6	6	6
9	4.1001	103320	Lockwasher, 5/16"	6	6	6
9	4.1085	5134968	Rotor Assy., oil pump }	1		
9	4.1085	5195714	Rotor Assy., oil pump } (includes inner and outer rotors; not sold separately)		1	
9	4.1085	5195957	Rotor Assy., oil pump }			1
9	4.1220	5195685	Cover, oil pump	1	1	1
9	4.1220	145067	Screw, #6x3/8" drive	2	2	2
9	4.1310	5135161	Gear, oil pump drive	1	1	1
OIL DISTRIBUTION SYSTEM						
36	4.1510	5121422	Tube Assy., oil pump inlet (A=5.27", B=5.28")	1		
36	4.1510	5121423	Tube Assy., oil pump inlet (A=5.27", B=10.68")		1	
36	4.1510	5121424	Tube Assy., oil pump inlet (A=5.27", B=16.08")			1
36	4.1510	5121425	Tube Assy., oil pump inlet (A=7.77", B=5.28")	1		
36	4.1510	5123937	Tube Assy., oil pump inlet (A=2.74", B=13.20")		1	
36	4.1510	5123476	Tube Assy., oil pump inlet (A=5.27", B=14.10")		1	
36	4.1510	5125948	Tube Assy., oil pump inlet (A=5.12", B=11.16")		1	
36	4.1510	5123367	Tube Assy., oil pump inlet (A=5.27", B=8.70")		1	1
36	4.1510	5123368	Tube Assy., oil pump inlet (A=5.27", B=19.50")			1
-	-	5125203	Tube Assy., oil pump inlet (A=2.18", B=28")			1
36	4.1510	5125949	Tube Assy., oil pump inlet (A=5.12", B=15.48")			1
-	-	5108387	Tube, oil pump inlet (cast iron) (inclined Marine)			1
-	-	5119425	Flange, oil pump inlet tube (to front cover)	1	1	1
-	-	5127175	Seal Ring, oil pump inlet tube flange	1	1	1
-	-	5175568	Gasket, oil pump inlet pipe	2	2	2
36	4.1530	5126456	Cover and Screen, oil pump inlet	1	1	1
40	4.1597	5118781	Hose (3/16" I.D. x11 3/16" flex.) (marine units)		1	1
-	-	1508350	Connector, 1/8" restricted (marine units)		1	1

GM DIESEL

FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
-	-	5119476	Tube Assy., blower drive bearing oil			1
-	-	137405	Connector, 1/4" inv. fl. tube			1
-	-	137421	Elbow, 1/4" inv. fl. tube 90°			1

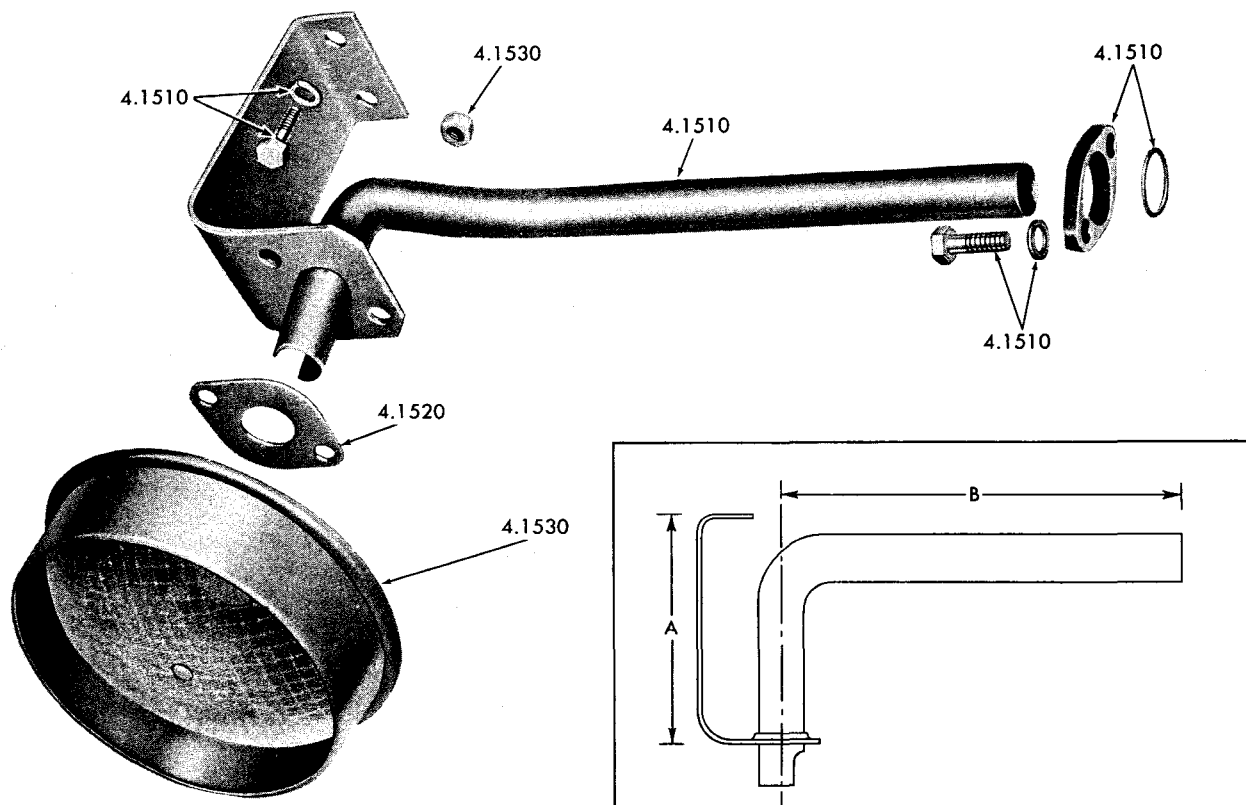


Fig. 36 - Oil Distribution System

OIL PRESSURE REGULATOR						
9	4.1690	5126436	Spring, oil pressure regulator	2	2	2
9	4.1700	5177777	Valve, oil pressure regulator	2	2	2
9	4.1710	5113657	Plug, oil pressure regulator	2	2	2
9	4.1720	5177773	Gasket, oil pressure regulator plug	2	2	2
OIL FILTER						
-	-	5121143	Filter Assy., oil (6" element, full flow)]	1	1	
-	-	5572941	Filter Assy., oil (8" element, by-pass)]	1		
1,40	4.2240	5126276	Filter Assy., oil (9" element, full flow)] (includes indented items)	1	1	1
-	-	5126275	Filter Assy., oil (9" element, full flow)]	1	1	1
-	-	5125025	Filter Assy., oil (6" element, full flow)]	1	1	
-	-	5181797	Filter Assy., oil (9" element, full flow)]			1
-	-	5121120	Filter Assy., oil (9" element, full flow)]		1	1
37	4.2240	186622	Bolt, 3/8"-16x1 1/4" hex. hd.	4	4	4
37	4.2240	103341	Washer, 3/8" flat	4	4	4
37	4.2240	103321	Lockwasher, 3/8"	4	4	4
37	4.2250	5574978	Element (6" full flow) (includes gasket)	1	1	
-	-	5572425	Element, oil filter (8" by-pass) (includes gasket)	1		
37	4.2250	5573014	Element (9" full flow) (includes gasket)		1	1
37	4.2280	5574906	Shell (6" element)	1	1	
37	4.2280	5574008	Shell (8" & 9" element)		1	1

GM DIESEL

FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
-	-	5571505	Cover, oil filter (8" element, by-pass)	1		
37	4.2300	5571024	Gasket, oil filter cover	1	1	1
37	4.2310	5575091	Spring, oil filter	1	1	1
-	-	1503518	Spring, oil filter (8" element)	1		
37	4.2310	5187308	Spring, oil filter (9" element, full flow)			1
-	-	122366	Nut, oil filter spring retainer	1	1	1
37	4.2315	5120602	Ring, spring retainer snap	1	1	1
37	4.2330	5574130	Gasket, oil filter cover nut	1	1	1
37	4.2330	5187310	Gasket, oil filter spring retainer	1	1	1
37	4.2330	5154538	Washer, oil filter spring	1	1	1
37	4.2350	5121205	Gasket, oil filter adaptor	1	1	1
37	4.2410	5116427	Stud, oil filter center (6" element)	1	1	
-	-	1595893	Stud, oil filter center (8" element)	1		
37	4.2410	5120740	Stud, oil filter center (9" element)		1	1
-	-	5575088	Valve, oil filter pressure regulator (full flow)	1	1	1
37	4.2486	5575087	Spring, oil filter pressure regulator (full flow)	1	1	1
37	4.2488	5126686	Plug, oil filter pressure regulator (full flow)	1	1	1
-	-	5575086	Gasket, oil filter pressure regulator plug (full flow)	1	1	1

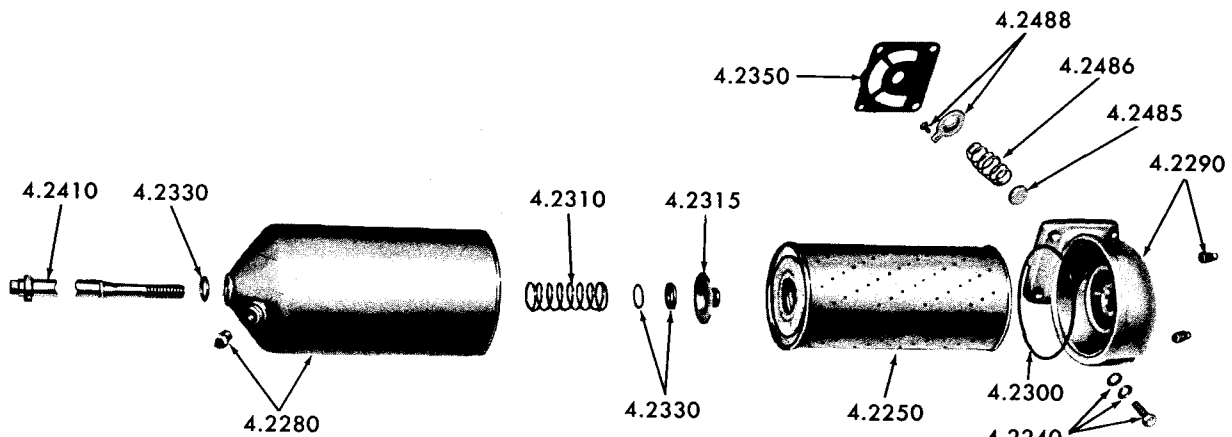


Fig. 37 - Oil Filter

OIL FILTER LINES						
-	-	5122415	Tube Assy., oil filter inlet (3/8" I.D. x12" flex.)	1		
40	4.3001	5122632	Tube, oil filter inlet ("D" eng.) (dev. L. 26")		1	
40	4.3001	5122678	Tube, oil filter inlet ("B" eng.) (dev. L. 30 1/2")		1	
-	-	137407	Connector, 3/8" inv. fl. tube	2		
-	-	140798	Elbow, 3/4" street 45°		1	
-	-	5176525	Connector, 3/4" tube sealastic		1	
-	-	5176528	Ring Seal, 3/4" tube sealastic		2	
-	-	5176526	Elbow, 3/4" tube sealastic 90°		1	
-	-	5176527	Nut, 3/4" tube sealastic		2	
-	-	3248643	Tube Assy., oil filter outlet (3/8" I.D. x18" flex.)	1		
40	4.3020	5122633	Tube, oil filter outlet ("D" eng.) (dev. L. 28")		1	
40	4.3020	5122679	Tube, oil filter outlet ("B" eng.) (dev. L. 27 3/8")		1	
-	-	137423	Elbow, 3/8" inv. fl. tube 90°	1		
-	-	143338	Elbow, 3/8" inv. fl. tube 45°	1		
-	-	140798	Elbow, 3/4" street 90°		1	
-	-	5176525	Connector, 3/4" tube sealastic		1	
-	-	5176528	Ring Seal, 3/4" tube sealastic		2	
-	-	5176526	Elbow, 3/4" tube sealastic 90°		2	
-	-	5176527	Nut, 3/4" tube sealastic		2	

GM DIESEL

FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
40	4.3025	5121499	Adaptor, oil filter tube		1	
-	-	186622	Bolt, 3/8"-16x1 1/4" hex. hd.		4	
-	-	103321	Lockwasher, 3/8"		4	
-	-	5121205	Gasket, oil filter tube adaptor	1		
40	4.3045	5151189	Clip, inlet and outlet tubes		2	
-	-	5575088	Valve, oil filter tube adaptor by-pass		1	1
-	-	5575680	Spring, oil filter tube adaptor by-pass valve		1	1
-	-	5574736	Retainer, oil filter tube adaptor by-pass valve spring		1	1
-	-	9406220	Screw, #8-32x5/16" rd. hd.		1	1
OIL COOLER						
The proper oil cooler housing or adaptor for your engine can be interpreted by your GM Diesel dealer or distributor. It is necessary to furnish the model, unit and type number shown on the option plate on your engine.						
38	4.4001	8501323	Core Assy., oil cooler (4 plate)	1		
38	4.4001	8501328	Core Assy., oil cooler (6 plate)		1	
38	4.4001	8501329	Core Assy., oil cooler (8 plate)			1
39	4.4001	5120895	Core Assy., oil cooler (marine gear)		1	1
38	4.4030	5150155	Gasket, oil cooler core inner	1	1	AR
39	4.4030	5120896	Gasket, marine gear oil cooler core		1	1
38	4.4040	5154215	Gasket, oil cooler core outer	1	1	AR
38,39	4.4050	-	Housing, oil cooler	1	1	1
39	4.4055	5116357	Gasket, oil cooler housing to block		1	1
-	-	5176362	Cover, oil cooler housing		1	1
-	-	455971	Bolt, 5/16"-18x5 1/2" hex. hd.		8	
-	-	446597	Bolt, 5/16"-18x6 1/2" hex. hd.		8	8
-	-	103320	Lockwasher, 5/16"		8	8
38	4.4110	-	Adaptor, oil cooler	1	1	1
38	4.4115	5152904	Gasket, oil cooler adaptor to block	2	3	3
38	4.4115	5119286	Gasket, oil cooler adaptor to block	1	1	1
39	4.4213	5185887	Hose, oil cooler water inlet (1 7/8"x1 1/2")		1	1
39	4.4214	5186841	Clamp, oil cooler water inlet hose (1 9/16"-2 1/2" dia.)		1	1
39,40	4.4330	5123316	Hose Assy., marine gear oil outlet (13/32"I.D.x34 5/8")		1	
39,40	4.4330	5123320	Hose Assy., marine gear oil outlet (13/32"I.D.x37 1/8")		1	1
39,40	4.4330	5123315	Hose Assy., marine gear oil outlet (13/32"I.D.x40 1/8")			1
39,40	4.4330	5123317	Hose Assy., marine gear oil outlet (13/32"I.D.x43 1/8")			1
39	4.4330	5184300	Elbow (3/4"-16x3/8"-16x90° flared)		1	1

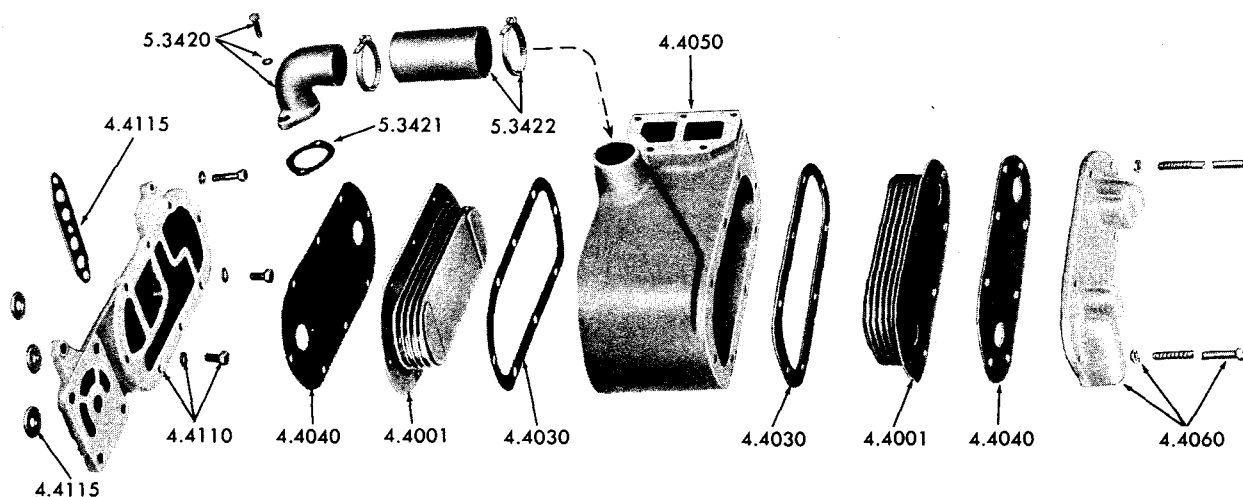


Fig. 38 - Typical Oil Cooler

GM DIESEL

FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
39	4.4330	120142	Elbow, 3/8" inv. fl. tube 90°		1	1
39	4.4330	120278	Nipple, 3/8"x2 1/2" pipe		1	1
39,40	4.4335	5123321	Hose Assy., marine gear oil inlet (13/32" I.D. x30 1/8")		1	
39,40	4.4335	5123320	Hose Assy., marine gear oil inlet (13/32" I.D. x37 1/8")		1	1
39,40	4.4335	5123315	Hose Assy., marine gear oil inlet (13/32" I.D. x40 1/8")		1	
39,40	4.4335	5123317	Hose Assy., marine gear oil inlet (13/32" I.D. x43 1/8")			1
39,40	4.4335	5123318	Hose Assy., marine gear oil inlet (13/32" I.D. x46 1/8")		1	
39,40	4.4335	5123319	Hose Assy., marine gear oil inlet (13/32" I.D. x52 5/8")			1
39	4.4335	5184300	Elbow (3/4"-16x3/8"-18 x 90° flared)		1	1
39	4.4335	144606	Nipple, 3/8"x1 1/2" pipe		1	1
39	4.4335	120142	Elbow, 3/8" inv. fl. 90°		1	1
-	-	5171509	Clip, marine gear to oil cooler hose		4	4

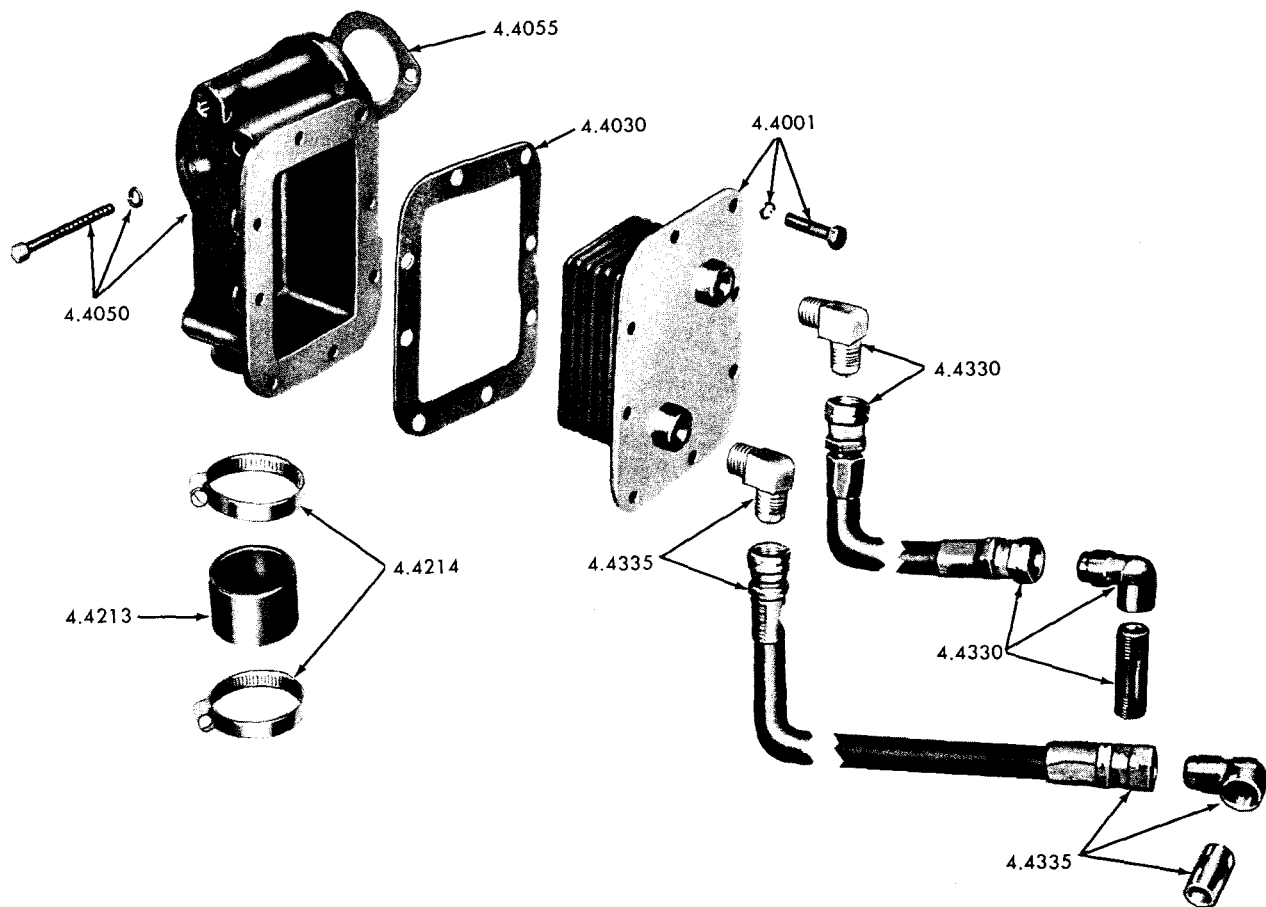


Fig. 39 - Marine Gear Oil Cooler

OIL FILLER TUBE						
32,43	4.5001	5121051	Tube, oil filler			1
-	-	5126588	Tube Assy., oil filler	1	1	1
40,49	4.5001	5123362	Elbow, oil filler tube		1	
-	-	186624	Bolt, 5/16"-18x1 1/4" hex. hd.		2	

GM DIESEL

FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
-	-	179857	Bolt, 7/16"-14x7/8" hex. hd.	1	1	1
-	-	179882	Bolt, 1/2"-13x1 1/8" hex. hd.	4	4	4
-	-	5189655	Cap Assy., oil filler tube (spring loaded)	1	1	1
43,49	4.5010	5121387	Cap Assy., oil filler tube (expansion, 1.50" dia.)	1	1	1
40,49	4.5010	5125995	Cap Assy., oil filler tube (expansion, 1.50" dia.) (includes drain clip)	1	1	1
43,49	4.5010	5120098	Cap Assy., oil filler tube (expansion, 1.75" dia.)	1	1	1
-	-	1543853	Cap Assy., oil filler (snap)	1	1	1
43	4.5020	5121058	Strainer, oil filler tube (1 7/8" dia.)	1	1	1
-	-	5121412	Strainer, oil filler tube (1 9/16" dia.)	1	1	1
-	-	5150147	Strainer, oil filler tube (2 7/32" dia.)	1	1	1
-	-	5117365	Chain, oil filler tube		1	
-	-	103373	Pin, 3/32"x3/4" cotter		1	
-	-	218322	Washer, #4 flat		1	

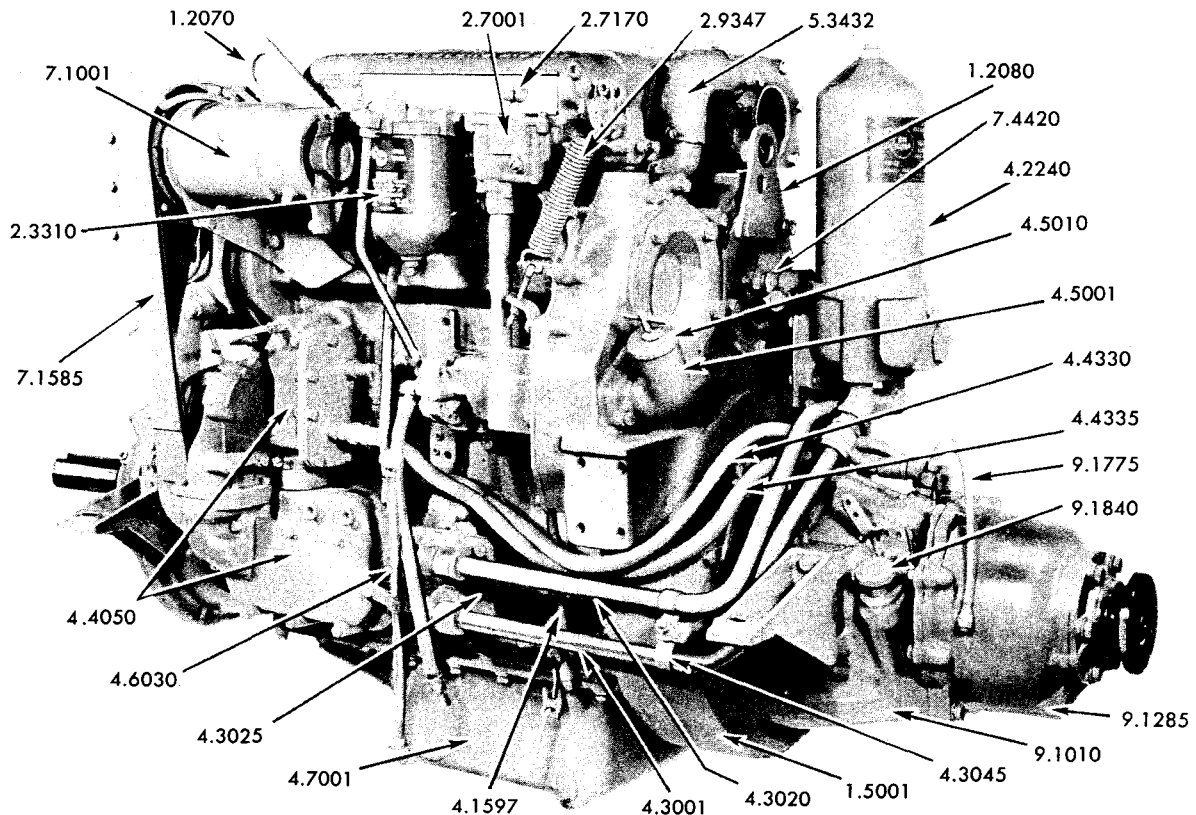


Fig. 40 - Oil Cooler and Lines

DIPSTICK						
41	4.6001	5121060	Dipstick (X-13 1/4", Y-12 13/16", Z-11 7/8")	1	1	1
41	4.6001	5185533	Dipstick (X-17 3/8", marked after installation)		1	1
41	4.6001	5123938	Dipstick (X-13 1/4", Y-12 7/32", Z-11 7/32")		1	
41	4.6001	5125241	Dipstick (X-18 21/32", Y-17 3/8", Z-16 13/32")			1
41	4.6001	5171148	Dipstick (X-19 7/8", Y-19 1/16", Z-18")		1	1
41	4.6001	5126565	Dipstick (X-15 5/8", unmarked) (inclined marine)			1
41	4.6020	137408	Connector, 7/16" inv. fl. tube	1	1	1
41	4.6020	5121062	Guide, dipstick (1 1/8" L.)	1	1	1
41	4.6030	5121061	Adaptor, dipstick (8 13/32" L.)	1	1	1
41	4.6030	5123372	Adaptor, dipstick (dev. L. 18")		1	1
41	4.6030	5125119	Adaptor, dipstick (dev. L. 14 3/4")		1	1
41	4.6030	5125970	Adaptor, dipstick (inclined marine)			1

GM DIESEL

FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
OIL PAN						
33,42	4.7001	5123542	Pan, oil (cast)	1		
33,42	4.7001	5119499	Pan, oil (reefer units)	1		
1,2,17	4.7001	5123543	Pan, oil (cast)		1	
42	4.7001	5123546	Pan, oil (cast, marine units)		1	
-	-	5123904	Pan, oil (cast, shallow, marine units)		1	
-	-	5126690	Pan, oil (stamped, shallow)		1	
42	4.7001	5121041	Pan, oil (cast, marine units)			1
-	-	5125798	Pan, oil (stamped, shallow, side drain)			1
-	-	5126689	Pan, oil (stamped, shallow, bottom drain)			1
-	-	5124566	Pan, oil upper			1
-	-	5125149	Pan, oil lower			1
42	4.7001	189700	Bolt, 5/16"-18x1 1/4" hex. hd. (with lockwasher)	16	20	24
-	-	186622	Bolt, 3/8"-16x1 1/4" hex. hd.			12
-	-	103321	Lockwasher, 3/8"			12
42	4.7030	5196058	Gasket Set, oil pan to block }	1		
42	4.7030	5196059	Gasket Set, oil pan to block } (cast iron pan)		1	
42	4.7030	5196060	Gasket Set, oil pan to block }			1
42	4.7030	5116256	Gasket, oil pan to block } (stamped pan)		1	
42	4.7030	5116257	Gasket, oil pan to block }			1
-	-	5125201	Gasket, oil pan lower		1	
42	4.7080	103878	Plug, 1/4" pipe			2
42	4.7080	103879	Plug, 3/8" pipe	1	1	1
42	4.7080	103869	Plug, 3/4" pipe	1	1	1
-	-	5177772	Plug, oil pan drain (18 MM)		1	1
-	-	5177773	Gasket, oil pan drain plug		1	1
-	-	5112605	Tube Assy., oil pan drain (1/2" I.D.x14" L. flex.)	1	1	1
-	-	5121189	Hose, oil pan drain (reefer units)	1		
-	-	5121023	Dipstick, oil level (with cap) (reefer units)	1		
-	-	5185996	Pipe Assy., oil pan drain (reefer units)	1		
-	-	5121190	Fitting, hose (reefer units)	2		
-	-	144094	Coupling, 1"x3/4" (reefer units)	1		

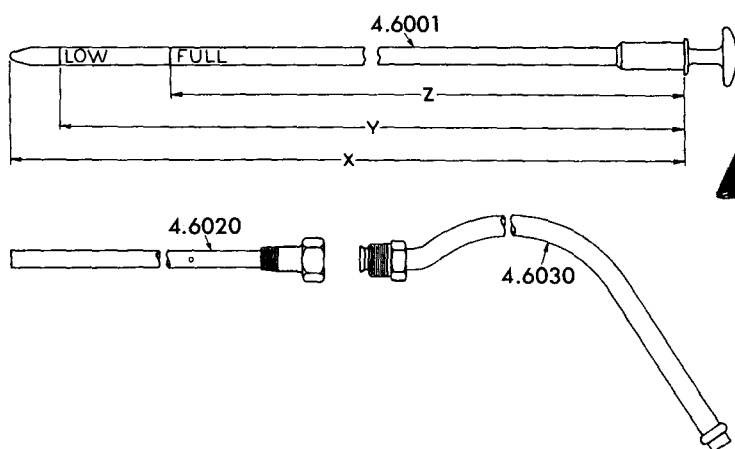


Fig. 41 - Dipstick

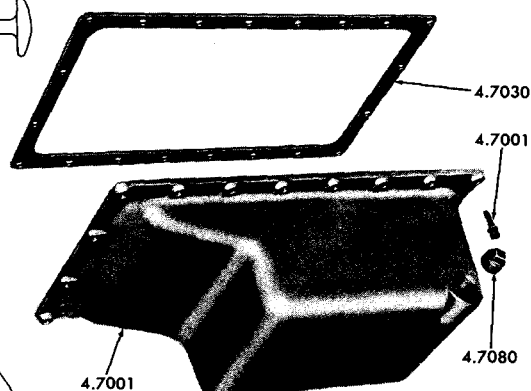


Fig. 42 - Oil Pan

VENTILATING SYSTEM						
The proper breather pipe for your engine can be interpreted by your GM Diesel dealer or distributor. Furnish him with the model number and type number if shown on the option plate on your engine.						
43,48	4.8001	-	Pipe Assy., breather	1	1	1

GM DIESEL

FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
43	4.8001	179828	Bolt, 5/16"-18x2 1/2" hex. hd.	2	2	2
43	4.8001	103320	Lockwasher, 5/16"	2	2	2
43	4.8001	5150829	Plug, 7/8" expansion	1	1	1
43	4.8020	5116391	Gasket, breather tube	1	1	1
43	4.8060	5163918	Filter, breather oil separator	1	1	1

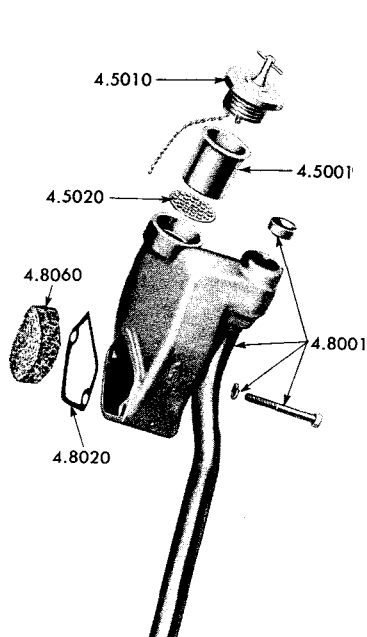


Fig. 43 - Breather and Oil Filler

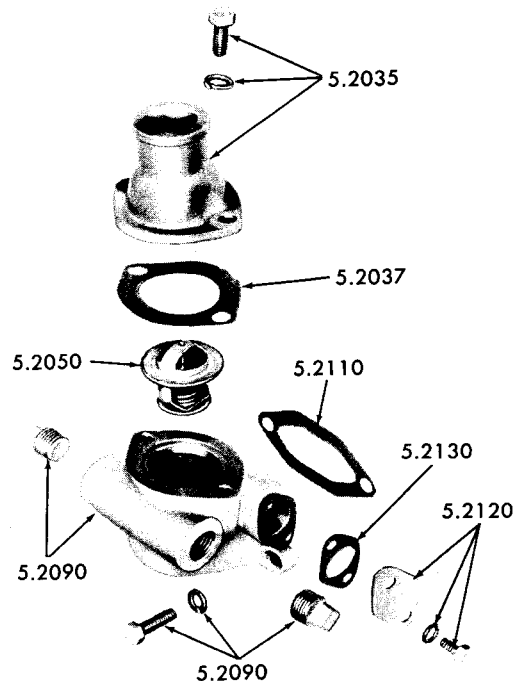


Fig. 44 - Thermostat

FRESH WATER PUMP							
32	5.1001	5195982	Pump Assy., fresh water (L.H. rotation)	}	1	1	1
32	5.1001	5195983	Pump Assy., fresh water (R.H. rotation)		1	1	1
-	-	5123801	Pump Assy., fresh water (R.H. rotation)		1		
45	5.1001	186625	Bolt, 5/16"-18x7/8" hex. hd.		5	5	5
45	5.1001	103320	Lockwasher, 5/16"		5	5	5
-	-	5123166	Tube, fresh water pump vent (1/4" O.D. x5 5/8" dev. L.) (marine units)			1	1
-	-	137421	Elbow, 1/4" tube 90°			2	2
-	-	137405	Connector, 1/4" inv. fl.			1	1
45	5.1010	5119460	Gasket, fresh water pump		1	1	1
45	5.1030	5119477	Nipple, 7/8"x1 5/8" pipe		1	1	1
45	5.1030	5119218	Plug, 7/8" cup		1	1	1
45	5.1030	444687	Plug, 1/8" pipe		1	1	1
45	5.1031	5119283	Cover, fresh water pump body		1	1	1
45	5.1031	189691	Bolt, 5/16"-18x5/8" hex. hd.		7	7	7
45	5.1032	5119282	Gasket, fresh water pump body cover		1	1	1
45	5.1050	904827	Shaft Assy., fresh water pump		1	1	1
45	5.1110	5125485	Impeller, fresh water pump (L.H. rotation)		1	1	1
45	5.1110	5125486	Impeller, fresh water pump (R.H. rotation)		1	1	1
45	5.1130	5121751	Seal, fresh water pump		1	1	1
44,49	5.1214	5119465	Pulley, fresh water pump (2 groove)		1	1	1
-	-	5123471	Pulley, fresh water pump (3 groove)		1		
WATER OUTLET ELBOW							
-	-	5125451	Elbow, water outlet (90°x2 1/2" L.) (horizontal outlet)		1		
-	-	5116081	Elbow, water outlet (90°x3" L.) (horizontal outlet)		1	1	1

GM DIESEL

FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
17,44	5.2035	5116409	Flange, water outlet (straight 2 1/2" L.) (vertical outlet)	1	1	1
17,44	5.2035	5119120	Flange, water outlet (straight 1 3/4" L.) (marine units)	1	1	1
44	5.2035	186622	Bolt, 3/8"-16x1 1/4" hex. hd.	2	2	2
44	5.2035	103321	Lockwasher, 3/8"	2	2	2
44	5.2037	5116092	Gasket, water outlet elbow	1	1	1
				1	1	
THERMOSTAT						
44	5.2050	5124872	Thermostat Assy. (inclined marine)		1	1
44	5.2050	3146695	Thermostat Assy.	1	1	1
17,44	5.2090	5123247	Housing, thermostat	1	1	1
44	5.2090	108608	Bolt, 3/8"-16x2 1/8" hex. hd.	2	2	2
44	5.2090	103321	Lockwasher, 3/8"	2	2	2
44	5.2090	103880	Plug, 1/2" pipe	2	2	2
44	5.2110	5116242	Gasket, thermostat housing	1	1	1
44,46	5.2120	5119426	Cover, thermostat housing	1	1	1
44	5.2130	5119427	Gasket, thermostat housing cover	1	1	1
-	-	5128002	Gasket, thermostat housing (housing to adaptor) (inclined marine)		1	1
-	-	5119208	Gasket, thermostat housing (adaptor to exhaust flange) (inclined marine)		1	1
WATER BY-PASS TUBE						
1	5.2160	5119479	Tube, water by-pass (dev. L. 14 7/16")	1	1	1
-	-	5121420	Tube Assy., water by-pass	1	1	1
-	-	5122563	Tube, water by-pass (1" O.D.x6 3/8" dev. L.) (heat exchanger cooling)..		1	1
-	-	5124774	Tube, water by-pass (7/8" O.D.x13 1/2" dev. L.)	1		
-	-	5123163	Tube, water by-pass (7/8" O.D.x21 3/8" dev. L.)		1	1
-	-	5125168	Tube Assy., water by-pass (D eng.) (heat exchanger cooling)	1		
-	-	5109049	Tube, water by-pass (dev. L. 10.75") (inclined marine)		1	1
-	-	5128698	Tube, water by-pass (dev. L. 37.36") (inclined marine)		1	1
46	5.2160	5181801	Elbow, 3/4" pipe x1" hose (heat exchanger cooling)	1	1	1

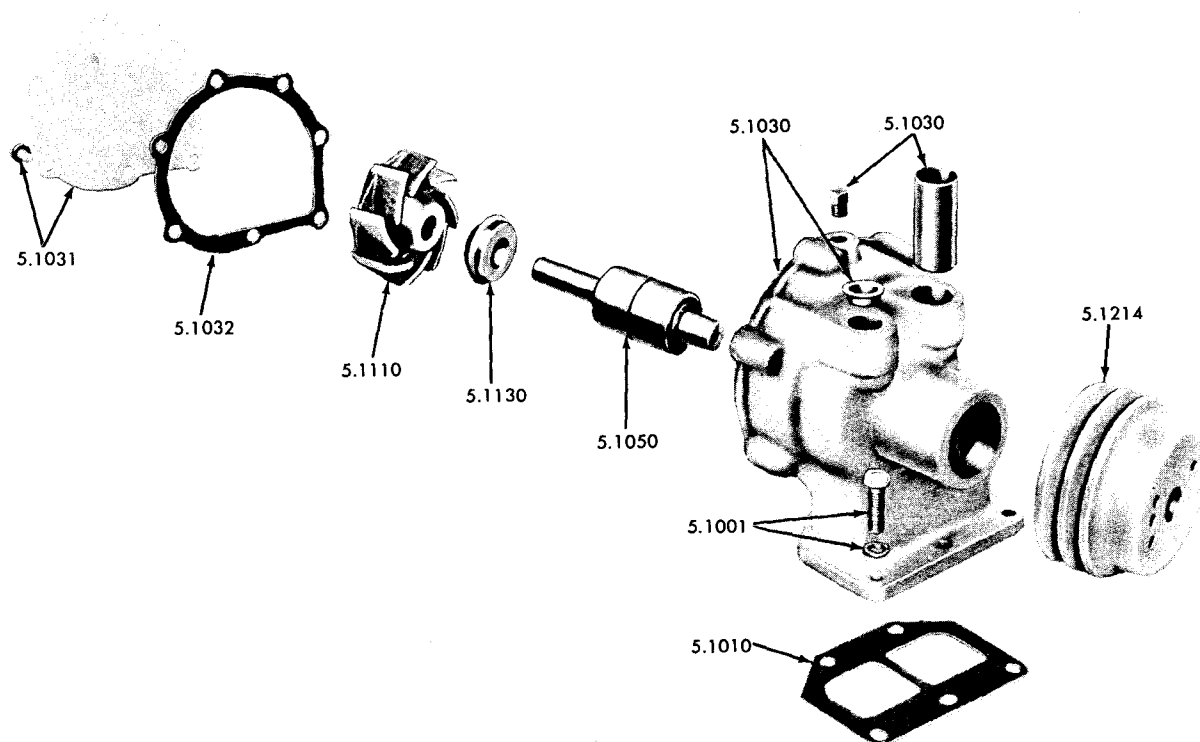


Fig. 45 - Fresh Water Pump

G M DIESEL

FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
-	-	5122564	Elbow, 1" hose (heat exchanger cooling)	1	1	1
1	5.2160	5119425	Flange, water by-pass tube (heat exchanger cooling)	1	1	1
-	-	5184301	Seal Ring, water by-pass tube flange	1	1	1
-	-	5124946	Cover, water by-pass tube (heat exchanger cooling)		1	1
1,46	5.2160	186625	Bolt, 5/16"-18x7/8" hex. hd.	2	AR	AR
-	-	179822	Bolt, 5/16"-18x1 1/2" hex. hd.	2		
-	-	103320	Lockwasher, 5/16"	AR	AR	AR
1	5.2165	5119251	Hose, water by-pass tube (7/8" I.D. x1 3/4")	1	1	1
-	-	5156170	Hose, water by-pass tube (1" I.D. x2 1/2")		1	1
-	-	5156170	Hose, water by-pass tube (1" I.D. x2 1/2") (heat exchanger cooling)		2	2
-	-	5186840	Clamp, 13/16"x1 1/2" dia. hose		AR	AR
1	5.2165	111610	Clamp, 1 1/4" dia. hose	2	2	2
-	-	5116357	Gasket, water by-pass tube cover (heat exchanger cooling)		1	1
-	-	5177001	Clip, water by-pass tube		1	1
-	-	179837	Bolt, 3/8"-16x3/4" hex. hd.		1	1
-	-	103321	Lockwasher, 3/8"		1	1
RADIATOR						
-	-	5119264	Radiator Assy.	1		
-	-	5124052	Radiator Assy.	1	1	
-	-	5119023	Radiator Assy.		1	1
-	-	5122879	Radiator Assy. (high ambient)			1
-	-	179837	Bolt, 3/8"-16x3/4" hex. hd.	2		
-	-	179839	Bolt, 3/8"-16x1" hex. hd.	1		
-	-	179848	Bolt, 3/8"-16x2 1/4" hex. hd.	1		
-	-	181360	Bolt, 3/8"-24x3/4" hex. hd.		8	8
-	-	103321	Lockwasher, 3/8"	4	8	8
-	-	103647	Draincock, 1/4"		1	1
-	-	5125690	Support, radiator shell (C eng.)	1		
-	-	5125691	Support, radiator shell (A eng.)	1		
-	-	5125763	Support, radiator shell (B & C eng.)		1	1
-	-	5126066	Support, radiator shell - upper (blower side) (C eng.)		1	1
-	-	5126063	Support, radiator shell - upper (exhaust side) (C eng.)		1	1
-	-	5126065	Support, radiator shell - upper (blower side) (A eng.)		1	1
-	-	5126064	Support, radiator shell - upper (exhaust side) (A eng.)		1	1
-	-	5126061	Support, radiator shell - lower (exhaust side)		1	1
-	-	5126062	Support, radiator shell - lower (blower side)		1	1
-	-	443603	Bolt, 1/4"-20x3/4" hex. hd. (to radiator shell)	2		
-	-	179816	Bolt, 5/16"-18x3/4" hex. hd. (to radiator shell)		4	4
-	-	179838	Bolt, 3/8"-16x7/8" hex. hd. (to cylinder head)		1	1
-	-	186622	Bolt, 3/8"-16x1 1/4" hex. hd. (engine lifter bracket)	1		
-	-	181360	Bolt, 3/8"-24x3/4" hex. hd. (to lifter bracket)		1	1
-	-	186627	Bolt, 3/8"-24x1" hex. hd. (to lifter bracket)		1	1
-	-	120392	Washer, 1/4" flat	2		
-	-	103319	Lockwasher, 1/4"	2		
-	-	103321	Lockwasher, 3/8"	1	2	2
-	-	123179	Nut, 1/4"-20 hex.	2		
-	-	117062	Nut, 3/8"-16 hex.	1		
-	-	117049	Nut, 3/8"-24 hex.		2	2
-	-	850802	Cap, radiator filler (pressure)	1		
-	-	846732	Gasket, radiator filler cap	1		
WATER CONNECTIONS (Radiator Units)						
-	-	5116083	Hose, radiator inlet (1 3/4" I.D. x4 7/8")	1		
-	-	5129251	Hose, radiator inlet (formed)	1	1	1
-	-	111622	Clamp, 2 1/8" dia. hose (radiator inlet hose)	2	2	2
-	-	5125809	Hose, radiator outlet (2" I.D. x4 1/8")	1		
-	-	5125061	Tube, radiator outlet		1	
-	-	5125238	Elbow, radiator outlet	1		
-	-	103647	Draincock, 1/4"	1		

GM DIESEL

FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
-	-	148344	Draincock, 5/16"	1		
-	-	5123914	Hose, radiator outlet (2" I.D. x1 3/4")		1	1
-	-	5163824	Hose, radiator outlet (2" I.D. x2")	AR	1	1
-	-	5110373	Hose, radiator outlet (2" I.D. x3")		1	1
-	-	5125809	Hose, radiator to cooler (2" I.D. x4 1/8")	1		
-	-	5111151	Hose, radiator outlet (2" I.D. x4 1/2")	1	1	1
-	-	111625	Clamp, 2 3/8" dia. hose (radiator outlet hose)	4	4	4
38	5.3420	5119026	Elbow, water inlet (cooler to block)	1	1	1
-	-	5116328	Elbow, water inlet (cooler to block)	1	1	1
-	-	5121184	Elbow, water inlet (cooler to block)	1	1	1
-	-	444692	Plug, 1/4" pipe	1	1	1
38	5.3420	179819	Bolt, 5/16"-18x1 1/8" hex. hd.	2	2	2
38	5.3420	103320	Lockwasher, 5/16"	2	2	2
38	5.3421	5116357	Gasket, oil cooler water outlet elbow	1	1	1
38	5.3422	5116093	Hose, oil cooler water outlet elbow (1 7/8" I.D. x4 1/4")	1	1	1
38	5.3422	111624	Clamp, oil cooler water outlet elbow hose (2 9/32" dia. hose)	2	2	2
WATER CONNECTIONS (Non-Radiator Units)						
-	-	5119120	Flange, thermostat housing water outlet	1	1	1
-	-	179839	Bolt, 3/8"-16x1" hex. hd.	2	2	2
-	-	103321	Lockwasher, 3/8"	2	2	2
-	-	5116092	Gasket, thermostat housing water outlet flange	1	1	1
-	-	5123692	Hose, heat exchanger fresh water inlet (1 3/4" I.D. x2" L.)	1		
-	-	3222709	Hose, heat exchanger fresh water inlet (1 3/4" I.D. x2 3/4" L.)	1		
-	-	5173020	Hose, heat exchanger fresh water inlet (1 7/8" I.D. x2" L.)	1	1	1
-	-	5186841	Clamp, 1 9/16"-2 1/2" dia. hose (heat exchanger fresh water inlet hose)	2	2	2
49	5.3312	5121203	Elbow, heat exchanger fresh water outlet		1	1
-	-	179826	Bolt, 5/16"-18x2" hex. hd.		2	2
-	-	103320	Lockwasher, 5/16"		2	2
-	-	5125005	Elbow, expansion tank water inlet	1		
-	-	179830	Bolt, 5/16"-18x3" hex. hd.	2		
-	-	103320	Lockwasher, 5/16"	2		
46	5.3314	5119058	Elbow, heat exchanger fresh water inlet		1	1
-	-	179826	Bolt, 5/16"-18x2" hex. hd.		2	2
-	-	103320	Lockwasher, 5/16"		2	2
-	-	5125010	Bracket, expansion tank inlet connection	1		
-	-	179816	Bolt, 5/16"-18x3/4" hex. hd.	2		
-	-	103320	Lockwasher, 5/16"	2		
-	-	5119206	Gasket, heat exchanger fresh water inlet elbow		1	1
-	-	5116357	Gasket, heat exchanger fresh water outlet elbow	1	1	1
-	-	5125011	Tube, heat exchanger to fresh water pump	1		
-	-	5163824	Hose, heat exchanger to fresh water pump (2" I.D. x2" L.)	1		
46, 49	5.3334	5121204	Hose, heat exchanger to fresh water pump (formed)	1	1	1
-	-	5186841	Clamp, 1 9/16"-2 1/2" dia. hose (heat exchanger to water pump hose)	AR	2	2
-	-	5125505	Elbow, oil cooler water inlet (cooler to block)	1		
38	5.3420	5119026	Elbow, oil cooler water inlet (cooler to block)	1	1	1
38	5.3420	179819	Bolt, 5/16"-18x1 1/8" hex. hd.	2	2	2
38	5.3420	103320	Lockwasher, 5/16"	2	2	2
38	5.3421	5116357	Gasket, oil cooler water outlet elbow	1	1	1
38	5.3422	5116093	Hose, oil cooler water outlet elbow (1 7/8" I.D. x4 1/4" L.)	1	1	1
38	5.3422	111624	Clamp, 2 9/32" dia. hose (oil cooler water outlet elbow hose)	2	2	2
48	5.3430	5119209	Elbow, exhaust manifold fresh water inlet	1	1	1
48	5.3430	186622	Bolt, 3/8"-16x1 1/4" hex. hd.	2	2	2
-	-	103321	Lockwasher, 3/8"	2	2	2
-	-	5116242	Gasket, exhaust manifold fresh water inlet	1	1	1
40, 48	5.3432	5122887	Hose, exhaust manifold fresh water inlet (formed)	1	1	1
48	5.3434	5186841	Clamp, 1 9/16"-2 1/2" dia. hose (exhaust manifold fresh water inlet hose)	2	2	2
46	5.3460	5121175	Flange, exhaust manifold water outlet	1	1	1
-	-	444052	Elbow, 1/8"x45° street	1	1	1
46	5.3460	444687	Plug, 1/8" pipe	1	1	1
46	5.3460	186626	Bolt, 3/8"-16x1 1/2" hex. hd.	5	5	5

GM DIESEL

FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
-	-	103321	Lockwasher, 3/8"	5	5	5
-	-	134519	Draincock, 1/8"	1	1	1
-	-	5119208	Gasket, exhaust manifold water outlet flange	1	1	1
-	-	5123164	Tube Assy., exhaust manifold water outlet flange vent (dev. L. 9 1/2") (heat exchanger cooling)	1		
-	-	5126316	Tube Assy., exhaust manifold water outlet flange vent (dev. L. 7.2") (B engine, keel cooling)		1	1
-	-	5126315	Tube Assy., exhaust manifold water outlet flange vent (dev. L. 7.2") (D engine, keel cooling)		1	1
-	-	134519	Draincock, 1/8"		1	1
-	-	137405	Connector, 1/4" inv. fl. tube	1	1	1
46	5.3465	444052	Elbow, 1/8" inv. fl. tube 45°		1	1
-	-	137421	Elbow, 1/4" inv. fl. tube 90°	1	1	1

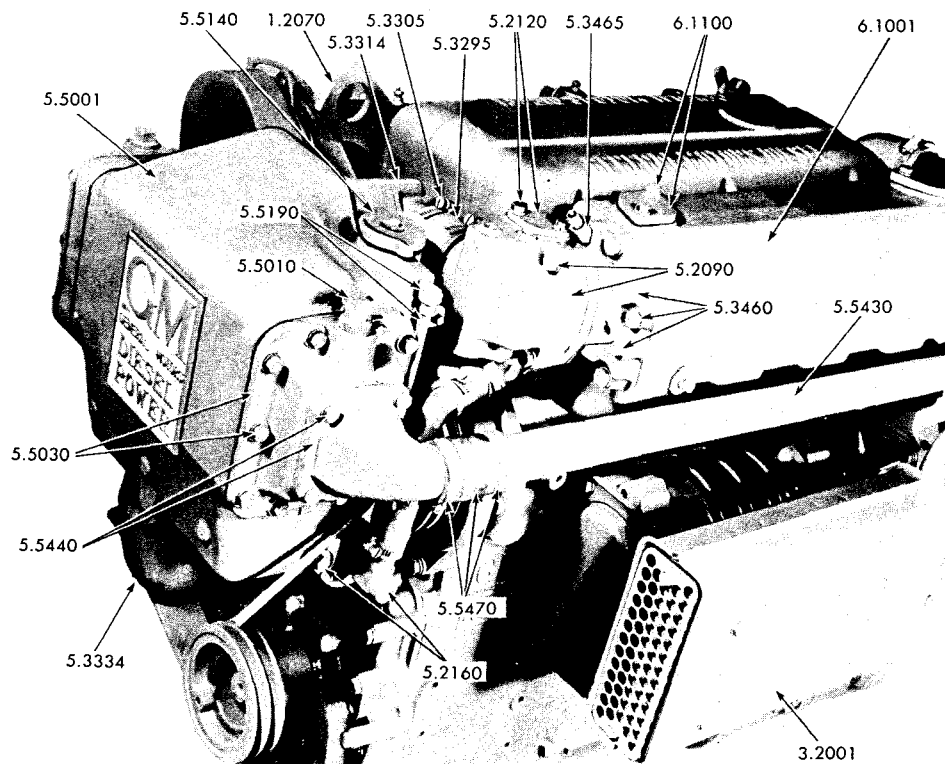


Fig. 46 - Heat Exchanger Cooling System

FAN						
47	5.4010	5128457	Blade, fan (blower, 14" - 4 blade)	1		
47	5.4010	5119009	Blade, fan (suction, 17" - 6 blade)	1		
47	5.4010	5119010	Blade, fan (blower, 17" - 6 blade)	1		
47	5.4010	5121176	Blade, fan (suction, 18" - 6 blade)		1	1
47	5.4010	5120005	Blade, fan (blower, 18" - 6 blade)		1	1
47	5.4010	5119012	Blade, fan (suction, 22" - 5 blade, 2 3/4" W.)		1	1
47	5.4010	5119013	Blade, fan (blower, 22" - 5 blade, 2 3/4" W.)		1	1
47	5.4010	5119011	Blade, fan (suction, 22" - 5 blade, 2" W.)		1	1
47	5.4010	5119014	Blade, fan (blower, 22" - 5 blade, 2" W.)		1	1
47	5.4010	5124701	Blade, fan (suction, 24" - 6 blade)		1	1
47	5.4010	186625	Bolt, 5/16"-18x7/8" hex. hd.	4	4	4
47	5.4010	103320	Lockwasher, 5/16"	4	4	4
47	5.4025	5126868	Support, fan mounting	1	1	1
47	5.4025	179839	Bolt, 3/8"-16x1" hex. hd.	4	4	4

GM DIESEL

FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
47	5.4025	103321	Lockwasher, 3/8"	4	4	4
17,47	5.4090	5116477	Bracket, fan shaft (10.85" high)	1	1	1
47	5.4090	5123197	Bracket, fan shaft (7.35" high)	1		
47	5.4090	186622	Bolt, 3/8"-16x1" hex. hd.	3	3	3
47	5.4090	103341	Washer, 3/8" flat	3	3	3
47	5.4090	103321	Lockwasher, 3/8"	3	3	3
47	5.4100	905619	Shaft, fan	1	1	1
17,47	5.4235	5116082	Pulley, fan (4.30" dia., 2 groove, 1/2" W.)	1	1	1
47	5.4235	5123552	Pulley, fan (4.30" dia., 2 groove, 3/8" W.)	1		
17,47	5.4235	5116483	Pulley, fan (5.38" dia.)		1	1
17,47	5.4235	5119191	Pulley, fan (6.34" dia.)		1	1

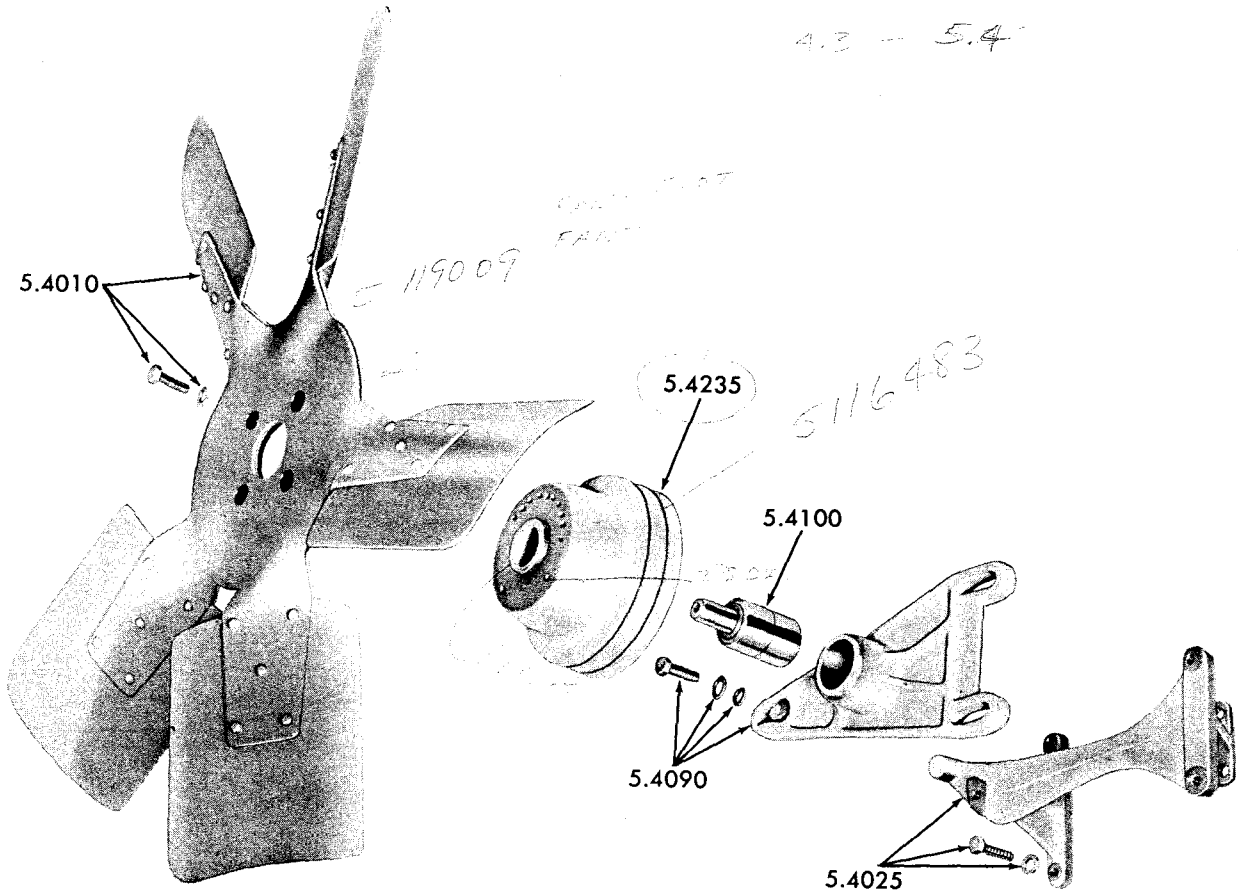


Fig. 47 - Fan

			HEAT EXCHANGER			
46,49	5.5001	5125066	Tank Assy., expansion	1	1	
-	-	5109157	Plug (cup) 1 1/4" dia.	1	1	
-	-	8509553	Core, heat exchanger	1	1	
-	-	8529617	Core Assy., heat exchanger (includes electrode)	1		
46	5.5010	8515850	Electrode Assy. (3 3/8" electrode)	1	1	
-	-	8517473	Electrode Assy. (1 1/4" electrode)	1		
-	-	5167766	Retainer, heat exchanger seal	1	1	
-	-	5167746	Seal, heat exchanger	2	2	
-	-	5167745	Gland, heat exchanger seal retainer	1	1	
46	5.5030	5167768	Cover, heat exchanger (inlet)	1	1	
-	-	5167741	Cover, heat exchanger (outlet)	1	1	
-	-	5121893	Cover, heat exchanger (inlet) (keel cooling)	1	1	
-	-	5186976	Cover, heat exchanger (blank) (keel cooling)	1	1	

GM DIESEL

FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
-	-	5125655	Cover, heat exchanger (rear) (keel cooling)			1
-	-	103647	Draincock, 1/4"		1	1
-	-	103877	Plug, 1/8" pipe		2	2
-	-	113177	Plug, 3/4" pipe (brass)		1	1
46	5.5030	179819	Bolt, 5/16"-18x1 1/8" hex. hd.		20	20
46	5.5030	179826	Bolt, 5/16"-18x2" hex. hd.		10	10
-	-	103320	Lockwasher, 5/16"		AR	AR
-	-	5167764	Gasket, heat exchanger		3	3
-	-	5119206	Gasket, heat exchanger (keel cooling)		1	1
-	-	5156147	Gasket, heat exchanger	2		
-	-	5119716	Tank, fresh water expansion	1		
-	-	5118060	Neck, expansion tank filler		1	1
-	-	5118061	Gasket, expansion tank filler neck		1	1
46	5.5140	850903	Cap, expansion tank (keel cooling)	1	1	1
46	5.5140	850795	Cap, expansion tank (7 lb. press.) (heat exchanger cooling)		1	1
-	-	5158825	Tube Assy., expansion tank overflow (dev. L. 4 1/4")	1		
46,48	5.5190	5122569	Tube Assy., expansion tank overflow (dev. L. 14")		1	1
46	5.5190	137422	Elbow, 5/16" inv. fl. tube 90°	1	1	1
46	5.5190	3290459	Clip, expansion tank overflow tube		1	1
-	-	5124998	Support, heat exchanger tank	1		
48	5.5377	5121043	Elbow, raw water pump inlet	1	1	1
48	5.5377	179830	Bolt, 5/16"-18x3" hex. hd.	2	2	2
-	-	103320	Lockwasher, 5/16"	2	2	2
-	-	5122648	Gasket, raw water inlet flange (at pump)	1	1	1
48	5.5380	5122645	Elbow, raw water pump outlet (D engine)	1	1	1
48	5.5380	5122644	Elbow, raw water pump outlet (B engine)		1	1
48	5.5380	179826	Bolt, 5/16"-18x2" hex. hd.	1	1	1
48	5.5380	179829	Bolt, 5/16"-18x2 3/4" hex. hd.	1	1	1
-	-	5122648	Gasket, raw water outlet flange (at pump)	1	1	1
-	-	5125223	Tube, heat exchanger raw water inlet (intermediate)	1		
46,48	5.5430	5122688	Tube, heat exchanger raw water inlet (intermediate)		1	
46,48	5.5430	5122689	Tube, heat exchanger raw water inlet (intermediate)			1
-	-	5126493	Elbow, heat exchanger raw water inlet	1		
46	5.5440	5122630	Elbow, heat exchanger raw water inlet		1	1

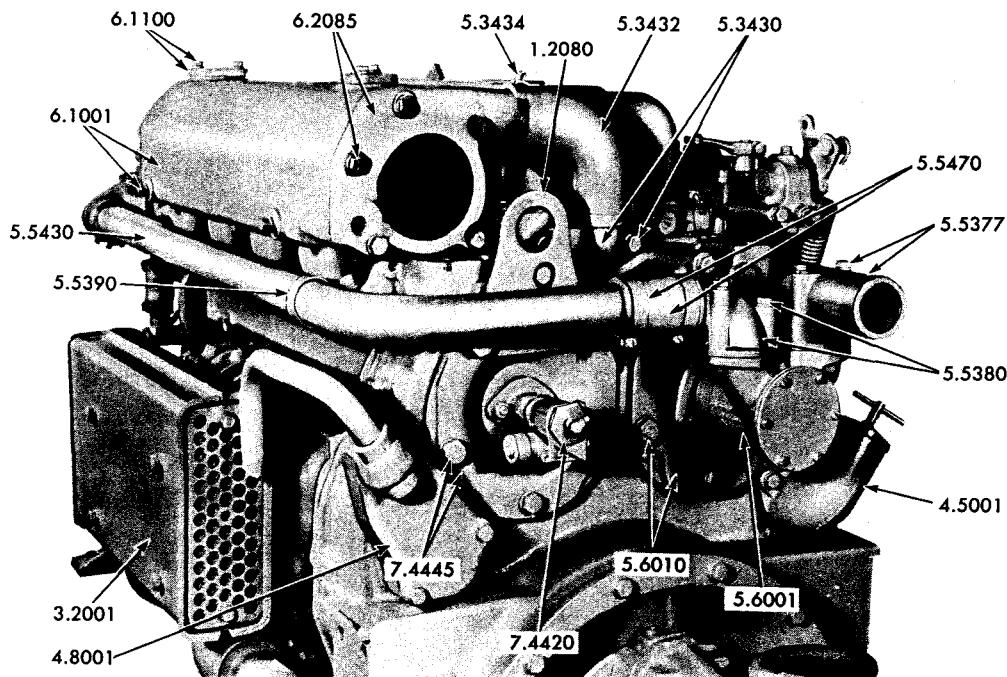


Fig. 48 - Raw Water Pump and Piping

GM DIESEL

FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
-	-	5150744	Stud (5/16"-18-24x1 1/4") (heat exchanger mounting bracket)	2		
46	5.5440	179819	Bolt, 5/16"-18x1 1/8" hex. hd.		4	4
-	-	103320	Lockwasher, 5/16"	2	4	4
-	-	121917	Nut, 5/16"-24 hex.	2		
-	-	5153902	Gasket, heat exchanger raw water inlet elbow	1		
-	-	5158747	Gasket, heat exchanger raw water inlet elbow		1	1
46,48	5.5470	5112181	Hose, heat exchanger raw water inlet	2	2	2
46,48	5.5470	5186841	Clamp, 1 9/16"-2 1/2" dia. hose	4	4	4
-	-	5170236	Flange, heat exchanger raw water outlet	1		
-	-	5122630	Elbow, heat exchanger raw water outlet		1	1
-	-	103175	Stud, 5/16"-18-24x1 1/2"	2		
-	-	179819	Bolt, 5/16"-18x1 1/8" hex. hd.		4	4
-	-	103320	Lockwasher, 5/16"	2	4	4
-	-	121917	Nut, 5/16"-24 hex.	2		
-	-	5153902	Gasket, heat exchanger raw water outlet flange	1		
-	-	5158747	Gasket, heat exchanger raw water outlet elbow		1	1

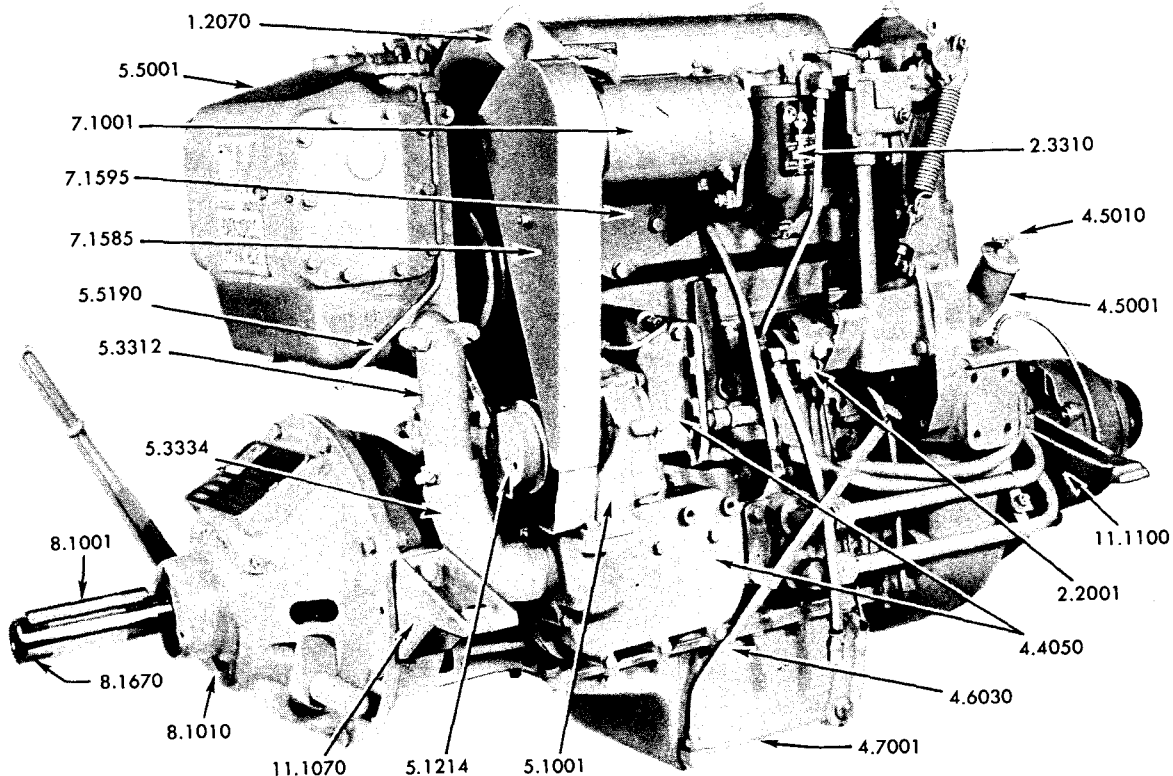


Fig. 49 - Typical Marine Unit

RAW WATER PUMP						
48	5.6001	5122509	Pump Assy., raw water (includes indented items)	1	1	1
-	-	179859	Bolt, 7/16"-14x1 1/8" hex. hd.	1	1	1
-	-	179884	Bolt, 1/2"-13x1 3/8" hex. hd.	4	4	4
-	-	103322	Lockwasher, 7/16"	1	1	1
-	-	103323	Lockwasher, 1/2"	4	4	4
48,50	5.6010	5196514	Adaptor, raw water pump drive	1	1	1
50	5.6012	5196513	Gasket, raw water pump adaptor	1	1	1
50	5.6020	5196517	Body, raw water pump	1	1	1
-	-	179816	Bolt, 5/16"-18x3/4" hex. hd.	3	3	3
-	-	120382	Lockwasher, 3/8"	3	3	3
50	5.6035	5196695	Cam Assy., raw water pump body offset	1	1	1

GM DIESEL

FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
50	5.6035	101706	Screw, #10-32x1/2" fil. hd.	1	1	1
50	5.6090	5196289	Cover, raw water pump (end)	1	1	1
50	5.6090	101075	Screw, #10-32x3/8" fil. hd.	6	6	6
50	5.6100	5193679	Gasket, raw water pump cover	1	1	1
50	5.6120	5196515	Shaft, raw water pump	1	1	1
50	5.6130	954806	Bearing, raw water pump	1	1	1
50	5.6140	5193591	Ring, raw water bearing retainer	1	1	1
50	5.6160	5195019	Seal, raw water pump bearing	1	1	1
50	5.6170	5193599	Seal Assy., raw water pump shaft	1	1	1
50	5.6173	5193597	Seat, raw water pump shaft seal (spacer)	1	1	1
50	5.6176	5193598	Ring, raw water pump shaft seal ("O" section)	1	1	1
50	5.6200	5196512	Slinger, raw water pump shaft	1	1	1
50	5.6230	5193602	Impeller, raw water pump	1	1	1
50	5.6320	5161021	Gear, raw water pump drive	1	1	1
-	-	5150059	Gasket, raw water pump	1	1	1
50	5.6410	5153449	Plate, raw water pump drive	1	1	1
-	-	5122921	Bolt, raw water pump drive plate	4	4	3
-	-	9413533	Nut, 3/8"-24 hex. self-locking			1
50	5.6413	5122922	Retainer, cam or balancer gear	1	1	1
-	-	5122923	Stud, cam or balancer gear retainer			1
-	-	122236	Nut, 3/8"-24 hex.			1
50	5.6420	3292492	Coupling, raw water pump drive	1	1	1
50	5.6450	5177026	Spacer, raw water pump drive	1	1	1

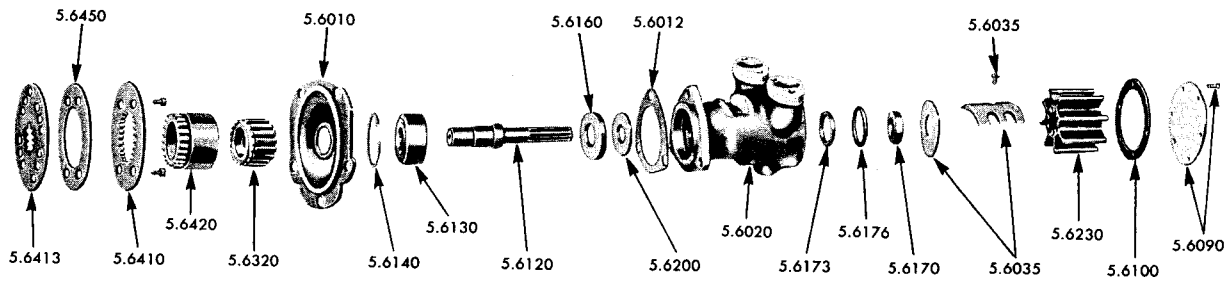


Fig. 50 - Raw Water Pump

WATER FILTER					
-	-	2338846	Filter Assy., water (15 gal. cooling system) } (includes indented items)	1	1
-	-	5188110	Filter Assy., water (30 gal. cooling system) }	1	1
-	-	186654	Bolt, 5/16"-24x1 1/8" hex.	2	2
-	-	121917	Nut, 5/16"-24 hex.	2	2
51	5.7020	5197804	Element, water filter (15 gal. size, with anti-freeze)	1	1
51	5.7020	5197642	Element, water filter (30 gal. size, with anti-freeze)	1	1
51	5.7020	5194586	Element, water filter (15 gal. size, with plain water)	AR	AR
51	5.7020	5194589	Element, water filter (30 gal. size, with plain water)	AR	AR
51	5.7035	5197437	Gasket, water filter cover (15 gal. cooling system)	1	1
51	5.7035	5197436	Gasket, water filter cover (30 gal. cooling system)	1	1
51	5.7045	2293822	Plate, water filter lower (15 gal. cooling system)	1	1
51	5.7045	2293484	Plate, water filter lower (30 gal. cooling system)	1	1
-	-	5126886	Bracket, water filter mounting	1	1
-	-	5164789	Spacer, water filter mounting bracket	1	1
-	-	186612	Bolt, 3/8"-16x1 3/8" hex. hd.	2	2
-	-	103321	Lockwasher, 3/8"	2	2
-	-	5118268	Hose, water filter inlet (flex. 5/8" I.D. x12 1/2")	1	1
-	-	3116561	Valve, water filter inlet hose shut-off	1	1
-	-	3133153	Connector, water filter inlet hose	1	1
-	-	9139801	Clamp, 9/16"-1 1/16" dia. hose	2	2
-	-	5115097	Cover, cylinder block water hole (3/8" pipe tap)	1	1
-	-	179816	Bolt, 5/16"-18x3/4" hex.	2	2
-	-	103320	Lockwasher, 5/16"	2	2

GM DIESEL

FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
EXHAUST MANIFOLD						
46,48	6.1001	5116077	Manifold, exhaust (water cooled, end outlet)	1		
2,52	6.1001	5123733	Manifold, exhaust (dry, vertical outlet) (use with mechanical shutdown) ..	1		
2,52	6.1001	5123734	Manifold, exhaust (dry, vertical outlet)	1		
46,48	6.1001	5116078	Manifold, exhaust (water cooled, end outlet)		1	
52	6.1001	5123709	Manifold, exhaust (dry, vertical outlet) (use with mechanical shutdown) ..		1	
52	6.1001	5123710	Manifold, exhaust (dry, vertical outlet)		1	
-	-	5125411	Manifold, exhaust (dry, horizontal outlet)		1	
46,48	6.1001	5116079	Manifold, exhaust (water cooled, end outlet)			1
52	6.1001	5124377	Manifold, exhaust (dry, vertical outlet)			1
52	6.1001	5124378	Manifold, exhaust (dry, vertical outlet)			1
-	-	5125431	Manifold, exhaust (dry, horizontal outlet)			1
52	6.1001	103877	Plug, 1/8" pipe	1	1	1
52	6.1001	5188273	Washer, exhaust manifold (dished)		4	5
52	6.1001	5164360	Washer, exhaust manifold (flat)	3		
52	6.1001	114544	Nut, exhaust manifold (7/16"-20 brass)	3	4	5
52	6.1010	5116306	Gasket, exhaust manifold to head	1		
52	6.1010	5116205	Gasket, exhaust manifold to head		1	
52	6.1010	5119006	Gasket, exhaust manifold to head			1
2,52	6.1020	5116127	Stud, exhaust manifold to head	3	4	5
46,52	6.1100	5121098	Plate, exhaust manifold cover	1	1	1
46,52	6.1100	186618	Bolt, 5/16"-18x5/8" hex. hd.	2	2	2
46,52	6.1100	103320	Lockwasher, 5/16"	2	2	2
52	6.1110	5113412	Gasket, exhaust manifold cover plate	1	1	1

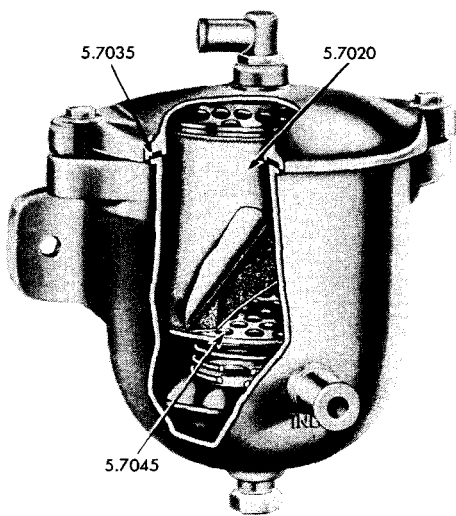


Fig. 51 - Water Filter

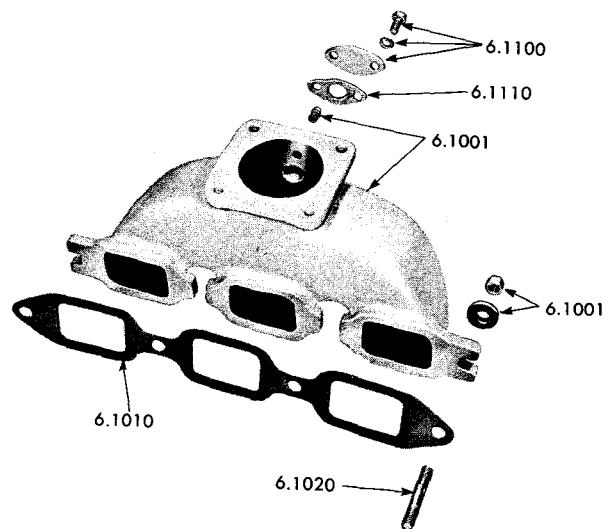


Fig. 52 - Exhaust Manifold

EXHAUST MUFFLER						
2	6.2001	5119172	Muffler, exhaust	1		
2	6.2001	5119173	Muffler, exhaust (2200 RPM max.)		1	1
2	6.2001	5124596	Muffler, exhaust (2200-2800 RPM)			1
-	-	5126440	Coupling, 3 1/2" to 3" red. pipe			1
-	-	219576	Nipple, 3"x4" pipe			1
2,3	6.2085	3291893	Flange, exhaust (2 1/2")	1		
2,3	6.2085	3222532	Flange, exhaust (3")		1	1
48	6.2085	5122517	Flange (water cooled) (R.H.)	1	1	1
48	6.2085	5122518	Flange (water cooled) (L.H.)	1	1	1

GM DIESEL

FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
-	-	148344	Draincock, 5/16"	1	1	1
48	6.2085	186289	Bolt, 3/8"-16x5" hex. hd.	5	5	5
-	-	103321	Lockwasher, 3/8"	5	5	5
-	-	103322	Lockwasher, 7/16"	4	4	4
-	-	122006	Nut, 3/8"-24 hex. brass	4		
-	-	114544	Nut, 7/16"-20 hex. brass	4	4	4
-	-	3291894	Gasket, exhaust outlet	1		
-	-	3221863	Gasket, exhaust outlet (3 1/4" I.D.)		1	1
-	-	5119208	Gasket, exhaust outlet (marine)		1	1
-	-	103198	Stud (3/8"-16-24x2 1/16")	4		
-	-	3222533	Stud (7/16"-14-20x2 1/2")		4	4

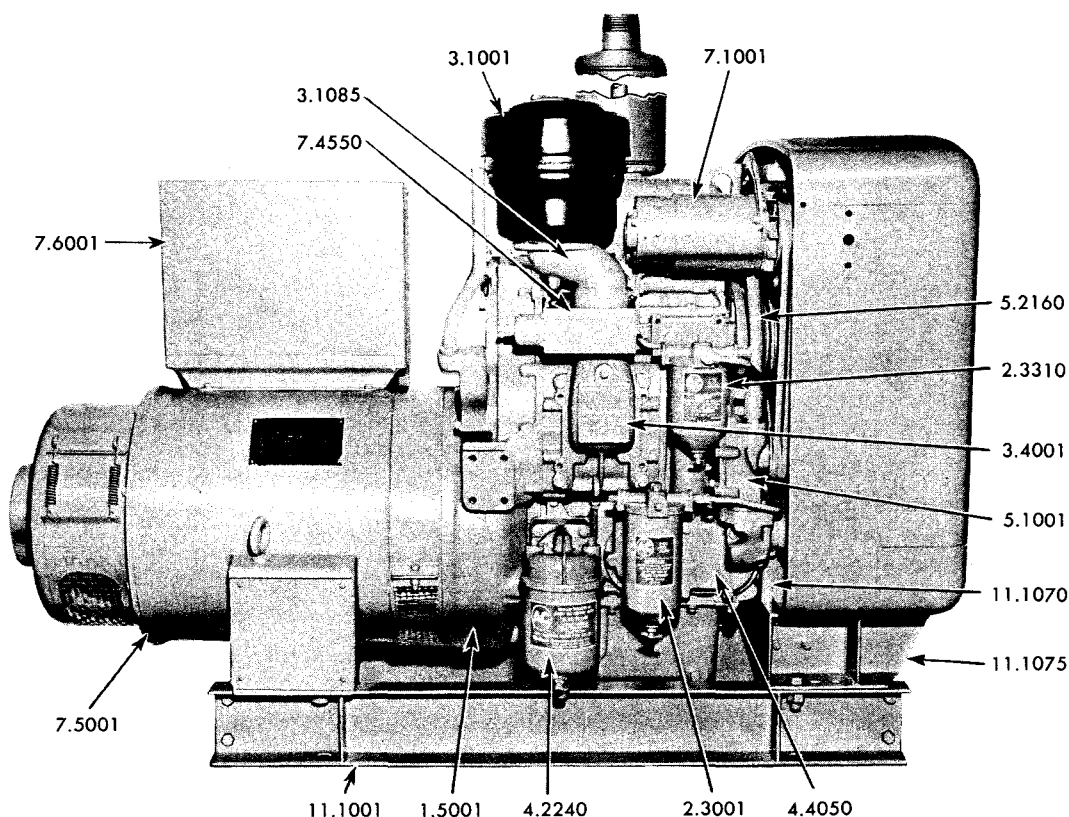


Fig. 53 - Typical Generator Set

BATTERY CHARGING GENERATOR						
Because of the variety of electrical equipment available, it is practical to list only the items shown below, which are most commonly used. In all cases it is advisable to furnish your GM Diesel dealer or distributor the model, unit, and identifying type number shown on the option plate on your engine.						
40,49	7.1001	-	Generator	1	1	1
-	-	1866400	Fan, generator	1	1	1
-	-	1877887	Baffle, generator fan	1	1	1
17	7.1500	5121246	Pulley, generator (3 3/4" dia.)	1	1	1
17	7.1500	5121811	Pulley, generator (2 5/8" dia.)	1	1	1
1,17	7.1575	5120937	Belt Set, generator and water pump drive (41.62" L., .406" W.)	1	1	1
-	-	5121847	Belt, generator and water pump drive (34" L., .406" W.)	1	1	1
1,17	7.1575	5125514	Belt Set, generator and water pump drive (44.18" L., .380" W.)	1	1	1

GM DIESEL

FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
1,17	7.1575	5114440	Belt Set, generator and water pump drive (43" L., 380" W.)	1	1	1
1	7.1580	5121069	Strap, generator adjusting (8.30" L.)	1	1	1
1	7.1580	5124895	Strap, generator adjusting (11.9" L.)	1	1	1
-	-	5125257	Strap, generator adjusting (8.50" L.)	1	1	1
-	-	5125837	Bracket, generator mounting (low mounted)	1	1	1
40,49	7.1595	5125258	Bracket, generator mounting (high mounted)	1	1	1
1,49	7.1595	5125259	Bracket, generator mounting (high mounted)	1	1	1
1	7.1595	179839	Bolt, 3/8"-16x1" hex. hd.	3	3	3
-	-	-	Regulator, voltage	1	1	1
STARTING MOTOR						
Owing to the variety of electrical equipment furnished, it is practical to list part numbers for attaching parts only. By furnishing your GM Diesel dealer or distributor with the type number on the option plate on your engine he can properly interpret your requirements.						
17,53	7.3001	-	Starting Motor Assy.	1	1	1
-	-	9418228	Bolt, 5/8"-11x1 3/4" (12 pt.)	3	3	3
-	-	103335	Lockwasher, 5/8"	3	3	3
INSTRUMENT PANEL						
-	-	1582505	Cluster Assy. (2' water temperature capillary) (includes indented items) ..	1	1	1
-	-	1586206	Cluster Assy. (includes indented items except water temperature gage) ..	1	1	1
-	-	1582507	Panel, instrument	1	1	1
2,32	7.4005	5123435	Panel, instrument (mounting in radiator shell)	1	1	1

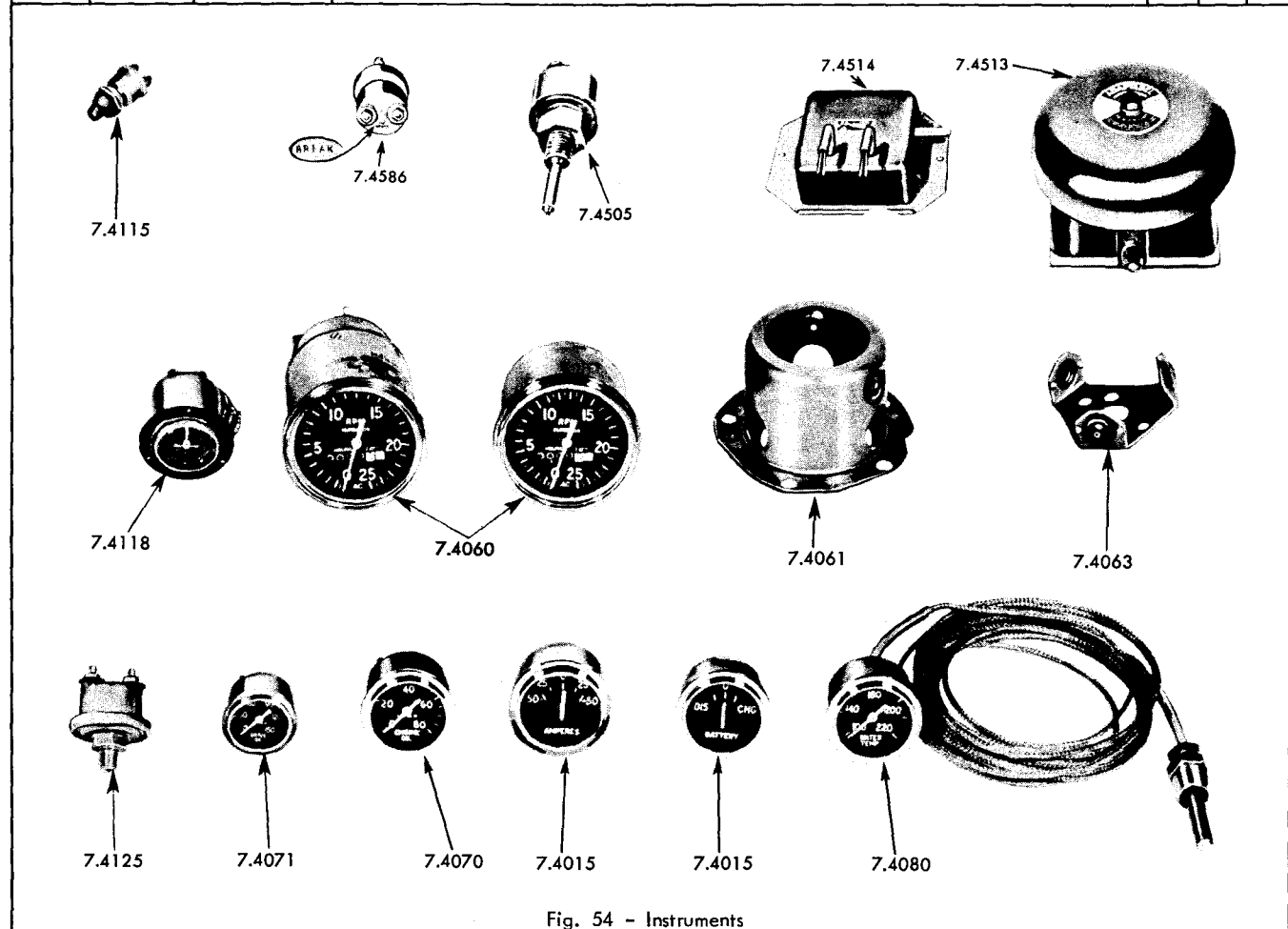


Fig. 54 - Instruments

GM DIESEL

FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
2,32	7.4015	1501170	Ammeter (50 amp.)	1	1	1
54	7.4015	1501406	Ammeter (50 amp.)	1	1	1
-	-	120217	Lockwasher, #10	AR	AR	AR
-	-	120614	Nut, #10-32 hex.	AR	AR	AR
-	-	857408	Clamp, ammeter	1	1	1
54	7.4060	1536865	Tachometer (C.W. rotation)	1	1	1
54	7.4061	5178019	Adaptor, tachometer mounting	1	1	1
54	7.4063	5186851	Retainer Assy., tachometer	1	1	1
54	7.4070	1507016	Gage, oil pressure	1	1	1
2,32	7.4070	1508352	Gage, oil pressure	1	1	1
54	7.4080	1513549	Gage, water temperature (2' capillary, armored)	1	1	1
2,32	7.4080	1513675	Gage, water temperature (2' capillary)	1	1	1
54	7.4080	1513716	Gage, water temperature (4' capillary)	1	1	1
54	7.4080	1513751	Gage, water temperature (5' capillary)	1	1	1
54	7.4080	1513752	Gage, water temperature (10' capillary)	1	1	1
54	7.4080	1513753	Gage, water temperature (15' capillary)	1	1	1
-	-	5114551	Tag, cable	AR	AR	AR
-	-	120217	Lockwasher, #10	AR	AR	AR
-	-	120214	Nut, #10-32 hex.	AR	AR	AR
-	-	1501207	Clamp, oil pressure and/or water temperature gage	2	2	2
32,55	7.4115	1996027	Switch, engine starting	1	1	1
-	-	1567238	Plate, starting switch name	1	1	1
TACHOMETER DRIVE						
55	7.4405	1536033	Shaft Assy., tachometer drive flexible (3 3/4'')	1	1	1
56	7.4420	1565192	Adaptor, tachometer drive cable (90° R.H., 1:500 ratio) (includes key) ..	1	1	1
40,56	7.4420	1566827	Adaptor, tachometer drive cable (90° L.H., 1:500 ratio) (includes key) ..		1	
40,56	7.4420	1565170	Adaptor, tachometer drive cable (90° R.H., 1:1 ratio) (includes key)		1	
40,56	7.4420	1565168	Adaptor, tachometer drive cable (90° L.H., 1:1 ratio) (includes key)			1
56	7.4420	1561509	Key (adaptor to tachometer)	1	1	1
56	7.4435	5119005	Shaft Assy., tachometer drive (2 13/16'' L.) (includes slinger)	1	1	1
56	7.4435	5155861	Shaft Assy., tachometer drive (2 5/8'' L.) (includes slinger)	1	1	1
56	7.4435	5124330	Shaft Assy., tachometer drive (2 7/8'' L.) (includes slinger)		1	1
56	7.4435	5125159	Shaft, tachometer drive (2 19/32'')		1	1
56	7.4440	5155818	Slinger, tachometer drive shaft oil	1	1	1
55	7.4445	3290413	Cover Assy., tachometer drive (cam or balance shaft) (includes seal) ...	1	1	1

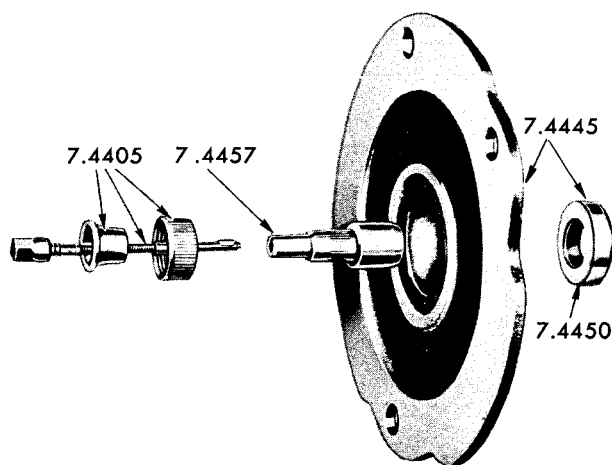


Fig. 55 - Tachometer Drive

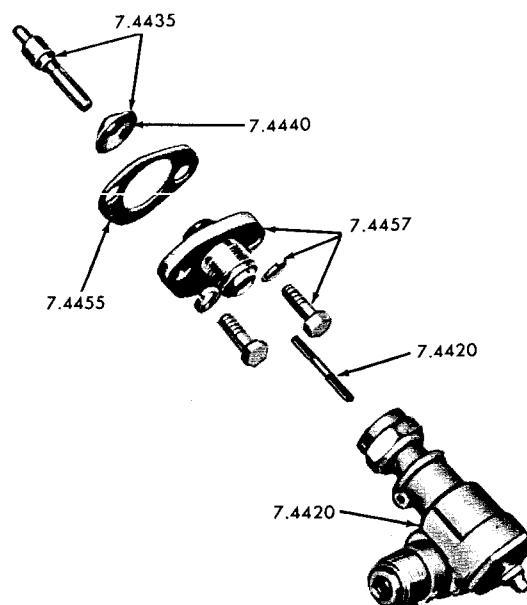


Fig. 56 - Tachometer Drive

GM DIESEL

FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
55	7.4445	5125153	Cover Assy., tachometer drive (cam or balance shaft, threaded hole) (includes seal)		1	1
48	7.4445	5123118	Cover Assy., tachometer drive (cam or balance shaft) (includes studs) ..	1	1	1
56	7.4445	5155854	Stud, tachometer drive cover	2	2	2
55	7.4450	3202615	Seal, tachometer drive cover oil	1	1	1
56	7.4455	5155816	Gasket, tachometer drive adaptor	1	1	1
56	7.4457	5119003	Adaptor	1	1	1
55	7.4457	5158289	Adaptor, tachometer drive (with cover 3290413) (2 5/16" L.)	1	1	1
56	7.4457	5155819	Adaptor, tachometer drive (with cover 5155857)	1	1	1
55	7.4457	5123917	Adaptor, tachometer drive (2 1/2" L.)		1	1

SHUT-OFF OR ALARM SYSTEM

54	7.4505	5173018	Alarmstat (thermo switch)	1	1	1
57	7.4505	5120976	Valve Assy. (200° water temperature)	1	1	1
-	-	5163830	Gasket (valve assy. to adaptor assy.)	1	1	1
57	7.4509	5123838	Adaptor Assy. (includes copper plug)	1	1	1
-	-	5113412	Gasket (adaptor assy. to exhaust manifold)	1	1	1
-	-	5124853	Lever & Pin Assy., air shut-off reset (R.H.)	1		
-	-	5124854	Lever & Pin Assy., air shut-off reset (L.H.)	1		
-	-	5168374	Nut, air shut-off valve control lever	1		
57	7.4538	5115836	Link, air shut-off solenoid control	1		
-	-	5124918	Link, air shut-off solenoid control		1	1
-	-	5124849	Spacer (3/8" I.D. x3/4") (air shut-off solenoid control link)	1		
-	-	5124916	Spacer (9/32"x5/16") (air shut-off solenoid control link)		1	1
57	7.4550	5124851	Housing, air shut-off control R.H.	1		
57	7.4550	5113159	Housing, air shut-off control R.H.		1	1
57	7.4550	5124850	Housing, air shut-off control L.H.	1		
57	7.4550	5113570	Housing, air shut-off control L.H.		1	1

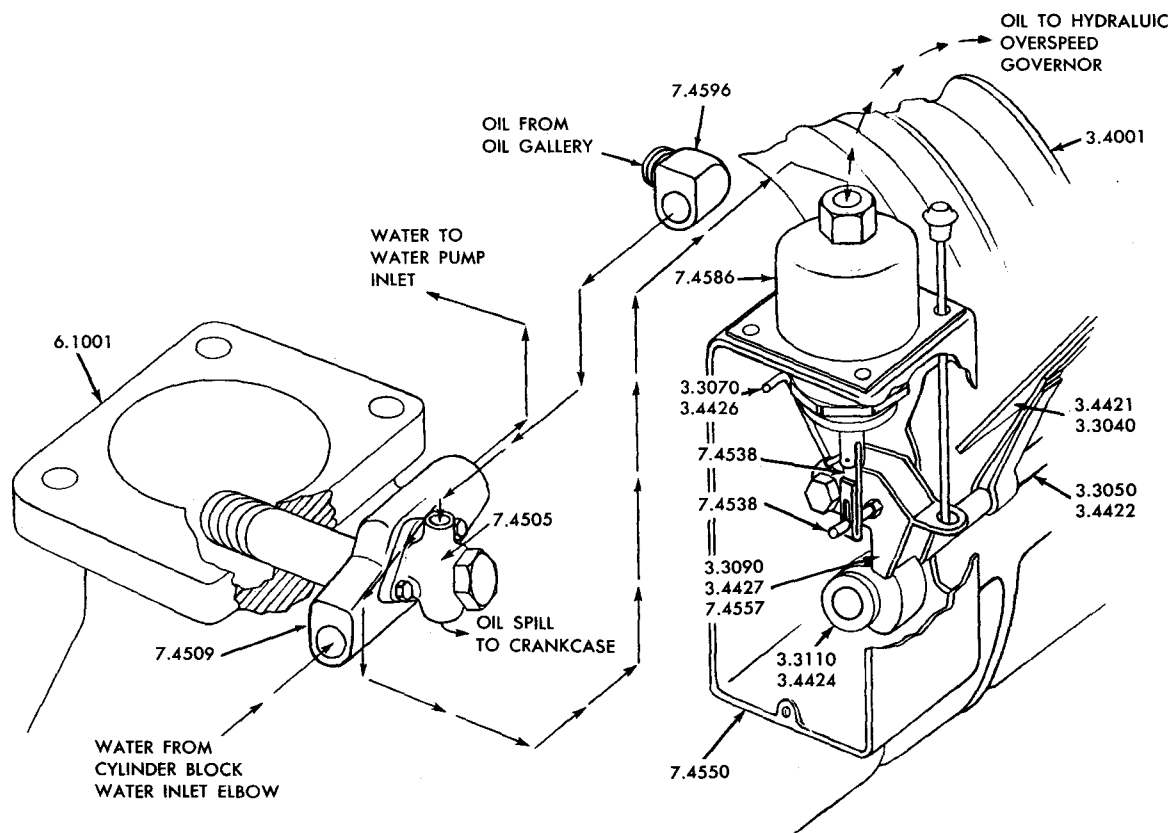


Fig. 57 - Shutdown System

GM DIESEL

FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
17	7.4553	5113160	Cover, air shut-off control housing	1	1	1
-	-	271169	Nut, #10-32 hex. (with lockwasher)	2	2	2
57	7.4557	5114727	Latch, air shut-off reset	1	1	1
-	-	5113633	Spacer (17/64"x7/8")	1	1	1
-	-	5115204	Bolt, latch	1	1	1
-	-	112526	Pin, 1/16"x3/8" cotter	1	1	1
-	-	5124852	Spring, reset latch	1	1	1
57	7.4586	5186528	Bellows Assy., oil pressure	1	1	1
-	-	132105	Screw, #10-32x3/8" fil. hd.	4	4	4
-	-	5115836	Link, bellows assy. to reset latch	1	1	1
-	-	271169	Nut, #10-32 hex. lock	3	3	3
-	-	5186592	Pin, clevis (bellows)	1	1	1
POWER GENERATOR						
Parts interpretation on power generator components should be obtained through your GM Diesel dealer or distributor. Provide him with the model, unit number and identifying type number as shown on the option plate on your set.						
2,53	7.5001	-	Generator Assy., power	1		
-	-	186628	Bolt, 3/8"-16x1 1/2" hex. hd.	12		
-	-	180179	Bolt, 1/2"-13x1 3/4" hex. hd.	4		
-	-	271632	Bolt, 3/4"-16x1 3/4" hex. hd.	2		
-	-	103321	Lockwasher, 3/8"	12		
-	-	120384	Lockwasher, 1/2"	4		
-	-	103326	Lockwasher, 3/4"	2		
-	-	117054	Nut, 3/4"-16 hex.	2		
CONTROL CABINET						
The variety of control cabinets available for generator sets makes it impractical to list part numbers. By furnishing your GM Diesel dealer or distributor with the model, unit and identifying type number shown on the option plate on your set he can properly interpret your requirements.						
2,53	7.6001	-	Cabinet Assy., control	1		
-	-	180016	Bolt, 1/4"-20x1 1/2" hex. hd.	3		
-	-	186647	Bolt, 1/4"-20x1" hex. hd.	1		
-	-	103319	Lockwasher, 1/4"	4		
-	-	123179	Nut, 1/4"-20 hex.	4		
WIRING HARNESS						
The proper wiring harness for your engine can be interpreted by your GM Diesel dealer or distributor. It is necessary to furnish the model number and type number (if shown) on the option plate on your engine.						
3	7.7001	-	Harness, engine wiring	1	1	1
CLUTCH AND/OR POWER TAKE-OFF						
3,49	8.1001	5119174	Power Take-off Assy. (SAE #5 housing, 8" clutch)	1	1	1
3,32	8.1001	5116493	Power Take-off Assy. (SAE #2 housing, 10" clutch)		1	1
-	-	5124845	Power Take-off Assy. (SAE #4 housing, 6 1/2" clutch)			
59	8.1001	5196448	Key, power take-off pulley (1/2"x1/2"x4 7/8")		1	1
59	8.1001	5192162	Key, power take-off pulley (5/8"x5/8"x4 1/4")		1	1
-	-	186624	Bolt, 5/16"-18x1 1/2" hex. hd. (to flywheel)	8	8	8
59	8.1001	186622	Bolt, 3/8"-16x1 1/4" hex. hd. (to flywheel housing)	12	12	12
59	8.1001	186628	Bolt, 3/8"-16x1 1/2" hex. hd. (to flywheel housing)		8	8

GM DIESEL

FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
-	-	179844	Bolt, 3/8"-16x1 5/8" hex. hd. (to power take-off adaptor)		8	8
-	-	103320	Lockwasher, 5/16"	8	8	8
-	-	103321	Lockwasher, 3/8"	12	12	12
-	-	5196591	Clutch Assy. (6 1/2")	1		
-	-	5196450	Clutch Assy. (8")		1	1
-	-	5196457	Clutch Assy. (10")		1	1
59	8.1017	5196449	Key (1/4"x1/4"x1 3/4")		1	1
59	8.1017	5193449	Key (3/8"x1/2"x1 7/8")		1	1
59	8.1018	5192358	Ring, clutch driving (8" clutch)		1	1
59	8.1018	5192180	Ring, clutch driving (10" clutch)		1	1
59	8.1030	5196593	Facing, clutch	1		
59	8.1030	5193426	Facing, clutch (3 segments) (8" clutch)		1	1
59	8.1030	5192182	Facing, clutch (3 segments) (10" clutch)		1	1
59	8.1080	5196592	Plate, clutch pressure (outer)	1		
59	8.1080	5196451	Plate, clutch pressure (outer) (8" clutch)		1	1
59	8.1080	5193415	Plate, clutch pressure (inner) (8" clutch)		1	1
59	8.1080	5194143	Plate, clutch pressure (outer) (10" clutch)		1	1
59	8.1080	5194294	Plate, clutch pressure (inner) (includes lock) (10" clutch)		1	1
59	8.1080	5196594	Plate, clutch pressure (inner)	1		

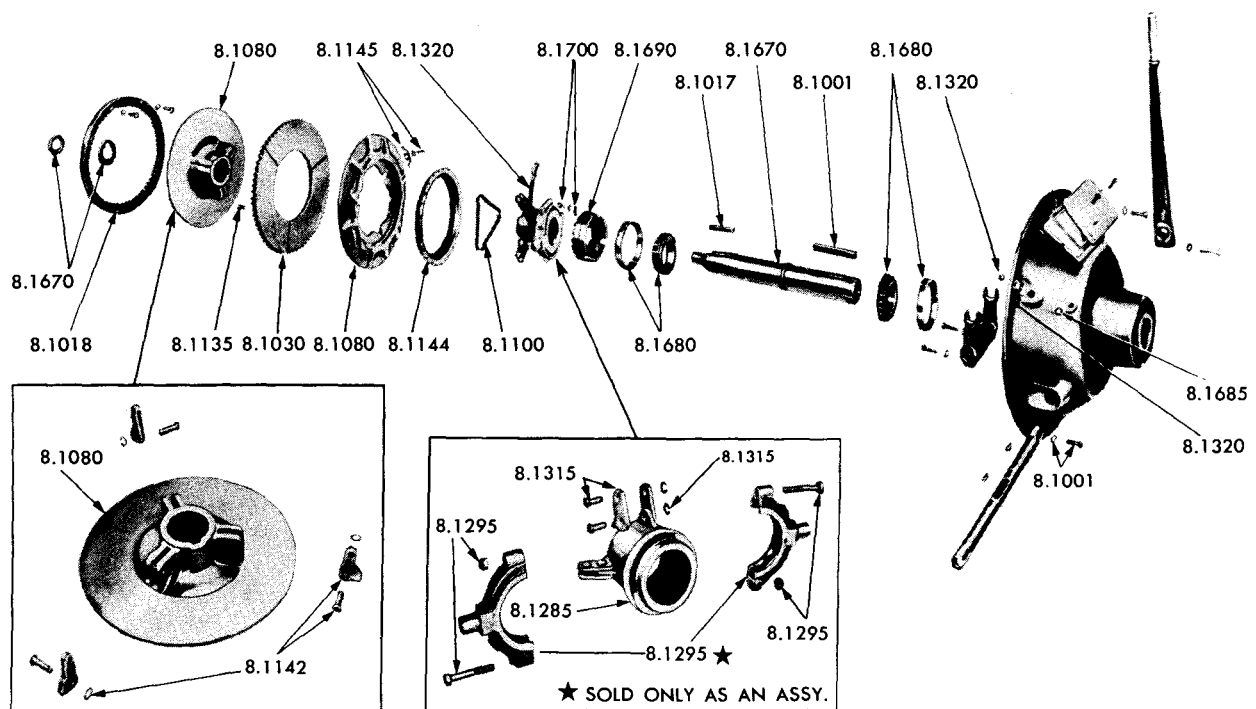


Fig. 58 - Power Take-Off

59	8.1100	5196599	Spring, clutch toggle lever	1		
59	8.1100	5194139	Spring, clutch toggle lever (8" clutch)		1	1
59	8.1100	5194138	Spring, clutch toggle lever (10" clutch)		1	1
59	8.1135	5193414	Spring, clutch pressure plate return (coil) (8" clutch)	3	3	3
59	8.1135	5193431	Spring, clutch pressure plate return (coil) (10" clutch)		3	3
59	8.1142	5196600	Lever, clutch release yoke	3		
59	8.1142	5194140	Lever, clutch release yoke		3	3
59	8.1142	5192175	Pin, clutch release yoke lever	3		
59	8.1142	5193422	Pin, clutch release yoke lever		3	3
59	8.1142	5192176	Ring, retaining (pin)	3		
59	8.1142	5192142	Ring, retaining (pin)		3	3
59	8.1144	5193424	Nut, clutch adjusting (8" clutch)		1	1
59	8.1144	5193430	Nut, clutch adjusting (10" clutch)		1	1
59	8.1145	5196871	Lock, clutch adjusting	1		
59	8.1145	5196866	Lock, clutch adjusting (8" clutch)		1	1

GM DIESEL

FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
59	8.1145	5196867	Lock, clutch adjusting (10" clutch)		1	1
59	8.1145	179789	Bolt, 1/4"-20x3/8" hex. hd.		1	1
59	8.1145	114604	Lockwasher, 1/4" ext. tooth	1	1	1
-	-	114351	Screw, 1/4"-20x3/8" fillister head	1		
59	8.1285	5196596	Sleeve, clutch release	1		
59	8.1285	5196453	Sleeve, clutch release (8" clutch)		1	1
59	8.1285	5193432	Sleeve, clutch release (10" clutch)		1	1
-	-	905263	Bearing, clutch release	1		
59	8.1295	5193262	Collar Assy., clutch release (8" clutch)		1	1
59	8.1295	5196716	Collar Assy., clutch release (10" clutch)		1	1
59	8.1295	5196597	Collar, clutch release	1		
59	8.1295	100018	Bolt, 5/16"-24x2" hex. hd.		2	2
59	8.1295	214279	Nut, 5/16"-24 elastic stop hex.		2	2
-	-	5196598	Snap Ring, clutch release bearing retaining (external)	1		
-	-	5193270	Snap Ring, clutch release bearing retaining (internal)	1		
58	8.1315	5196601	Link, clutch release yoke	6		
58	8.1315	5193421	Link, clutch release yoke		6	6
58	8.1315	5193420	Pin, clutch release yoke link		6	6
-	-	5192372	Ring, retaining	6		
58	8.1315	5192176	Ring, retaining		6	6
58	8.1320	443588	Fitting, 1/8" lube		1	1
59	8.1450	904750	Bearing, clutch pilot (front PTO)	1	1	1
58	8.1670	5196587	Shaft, clutch drive	1		
58	8.1670	5196446	Shaft, clutch drive (8" clutch)		1	1
58	8.1670	5196459	Shaft, clutch drive (10" clutch)		1	1
58	8.1670	5192491	Lockwasher, shaft (8" clutch)	1	1	1
58	8.1670	5192154	Lockwasher, shaft (10" clutch)		1	1
58	8.1670	5192490	Nut, shaft (8" clutch)	1	1	1
58	8.1670	5192153	Nut, shaft (10" clutch)		1	1
-	-	901785	Bearing, clutch drive shaft	1		
58	8.1680	432777	Cup, drive shaft bearing (8" clutch)		2	2
58	8.1680	142224	Cup, drive shaft bearing (10" clutch)		2	2
58	8.1680	443858	Cone, drive shaft bearing (8" clutch)		2	2
58	8.1680	441294	Cone, drive shaft bearing (10" clutch)		2	2
-	-	5196589	Ring, drive shaft bearing snap	1		
-	-	5196590	Ring, drive shaft bearing snap	1		
58	8.1690	5193251	Retainer, drive shaft bearing (8" clutch)		1	1
58	8.1690	5192149	Retainer, drive shaft bearing (10" clutch)		1	1
58	8.1700	3223379	Lock, drive shaft bearing retainer		1	1
58	8.1700	106973	Bolt, 5/16"-18x1/2" hex. hd.		1	1
4,59	8.1900	5119197	Housing Assy., power take-off adaptor (includes dowel) (8" clutch)		1	1
-	-	141245	Pin, 3/8"x1 1/8" dowel		2	2
59	8.1905	5119190	Adaptor, power take-off to clutch (8" clutch)		1	1
-	-	186619	Bolt, 3/8"-16x1 1/8" hex.		6	6
59	8.1907	5119189	Cone, power take-off adaptor (8" clutch)		2	2
59	8.1907	271632	Bolt, 3/4"-16x1 3/4" hex. hd.		1	1
59	8.1907	5180291	Washer (2.18" O.D.)		1	1

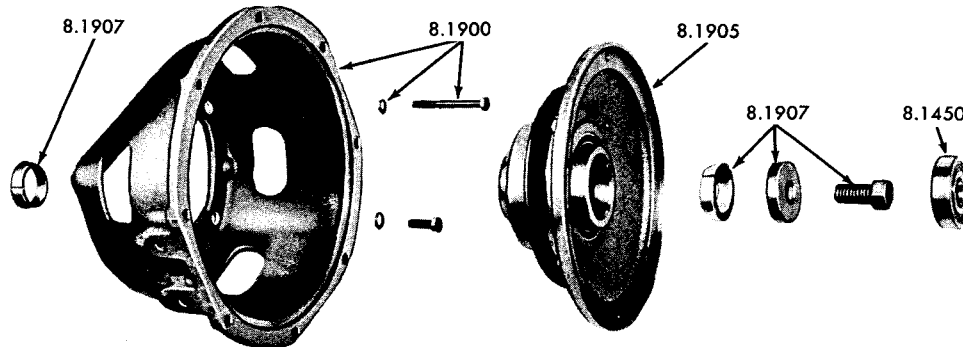


Fig. 59 - Front Power Take-Off Adaptor

GM DIESEL

FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
			TORQUE CONVERTER			
			The GM Torqmatic converter is offered in a wide variety of models to fit its many applications. While part numbers for these converters are not shown they may be interpreted by your GM Diesel dealer or distributor. It is necessary to furnish model number and type number from the option plate on your engine.			
-	-	-	Converter Assy., Torqmatic	1	1	
-	-	186622	Bolt, 3/8"-16x1 1/4" hex. hd. (to flywheel housing)	12	12	
-	-	9409231	Bolt, 3/8"-16x1 1/2" hex. lock (to crankshaft)	8	8	
-	-	103321	Lockwasher, 3/8"	12	12	
-	-	6759038	Gasket and Seal Kit, torque converter (includes gaskets, seals and snap rings for torque converter overhaul)	AR	AR	
			HYDRAULIC MARINE GEAR			
			Hydraulic marine gears are available in several ratios and modifications. By furnishing your GM Diesel dealer or distributor the model, unit and identifying type number shown on the option plate on your engine he can properly interpret your requirements.			
40	9.1001	-	Gear Assy., hydraulic marine (direct drive and 1.5:1, 2:1, 2.5:1, 3:1 red.) (includes indented items)	1	1	
-	-	179871	Bolt, 7/16"-14x3 1/4" hex. hd.	6	6	
-	-	103322	Lockwasher, 7/16"	6	6	
-	-	5128731	Coupling, marine gear drive	1	1	
-	-	9409011	Bolt, 5/16"-18x3/4" hex. hd.	8	8	
61	9.1007	455724	Bearing, marine gear housing adaptor	1	1	
61	9.1008	5196181	Gasket, marine gear housing adaptor	1	1	
61	9.1010	5196511	Bushing, marine gear housing	2	2	
-	-	5196739	Gasket Kit, hydraulic marine gear overhaul (includes necessary gaskets and snap rings for hydraulic marine gear overhaul)	AR	AR	
61	9.1026	5196192	Shaft, marine gear input	1	1	
61	9.1027	9413342	Bearing, marine gear input shaft	1	1	
61	9.1027	3709351	Ring, marine gear input shaft bearing snap (1 1/4" I.D.)	1	1	
61	9.1027	5196193	Ring, marine gear input shaft bearing snap (2 1/4" I.D.)	1	1	
61	9.1030	5196183	Piston, reverse clutch	1	1	
61	9.1035	5196188	Seal Ring, reverse clutch piston (3 1/2" dia.)	1	1	
61	9.1035	5196180	Seal Ring, reverse clutch piston (7 1/2" dia.)	1	1	
61	9.1045	5196185	Plate, reverse clutch (splined)	2	2	
61	9.1045	5196303	Plate, reverse clutch	1	1	
61	9.1055	5196186	Spring, reverse clutch release	12	12	
61	9.1060	5196184	Plate, reverse clutch reaction	1	1	
61	9.1060	5196187	Pin, reverse clutch reaction plate	3	3	
61	9.1080	5196210	Gear Assy., marine gear planetary (direct drive)	1	1	
61	9.1080	5196244	Gear Assy., marine gear planetary (1.5:1 red.)	1	1	
61	9.1080	5196245	Gear Assy., marine gear planetary (2:1 red.)	1	1	
61	9.1080	5196246	Gear Assy., marine gear planetary (2.5:1 and 3:1 red.)	1	1	
61	9.1085	5196211	Washer, planetary gear (1 3/4" O.D.)	1	1	
-	-	5196213	Washer, planetary gear (2 5/8" O.D.)	1	1	
-	-	9411322	Bearing, planetary gear (1.5:1 red.)	1	1	
-	-	5196226	Bearing, planetary gear (2.5:1 and 3:1 red.)	1	1	
-	-	5196254	Ring, planetary gear bearing snap (2 1/16" dia.)	1	1	
-	-	5196259	Ring, planetary gear bearing snap (1 27/64" dia.)	1	1	
61	9.1091	5196208	Gear, planetary ring	1	1	
61	9.1091	5196199	Ring, planetary ring gear snap	1	1	
61	9.1135	5196217	Valve Assy., selector (includes valve, spring, retainer, snap ring and seal ring)	1	1	
61	9.1137	5196218	Valve, selector	1	1	
61	9.1155	5196219	Spring, selector valve	1	1	
61	9.1155	5196220	Retainer, selector valve spring	1	1	

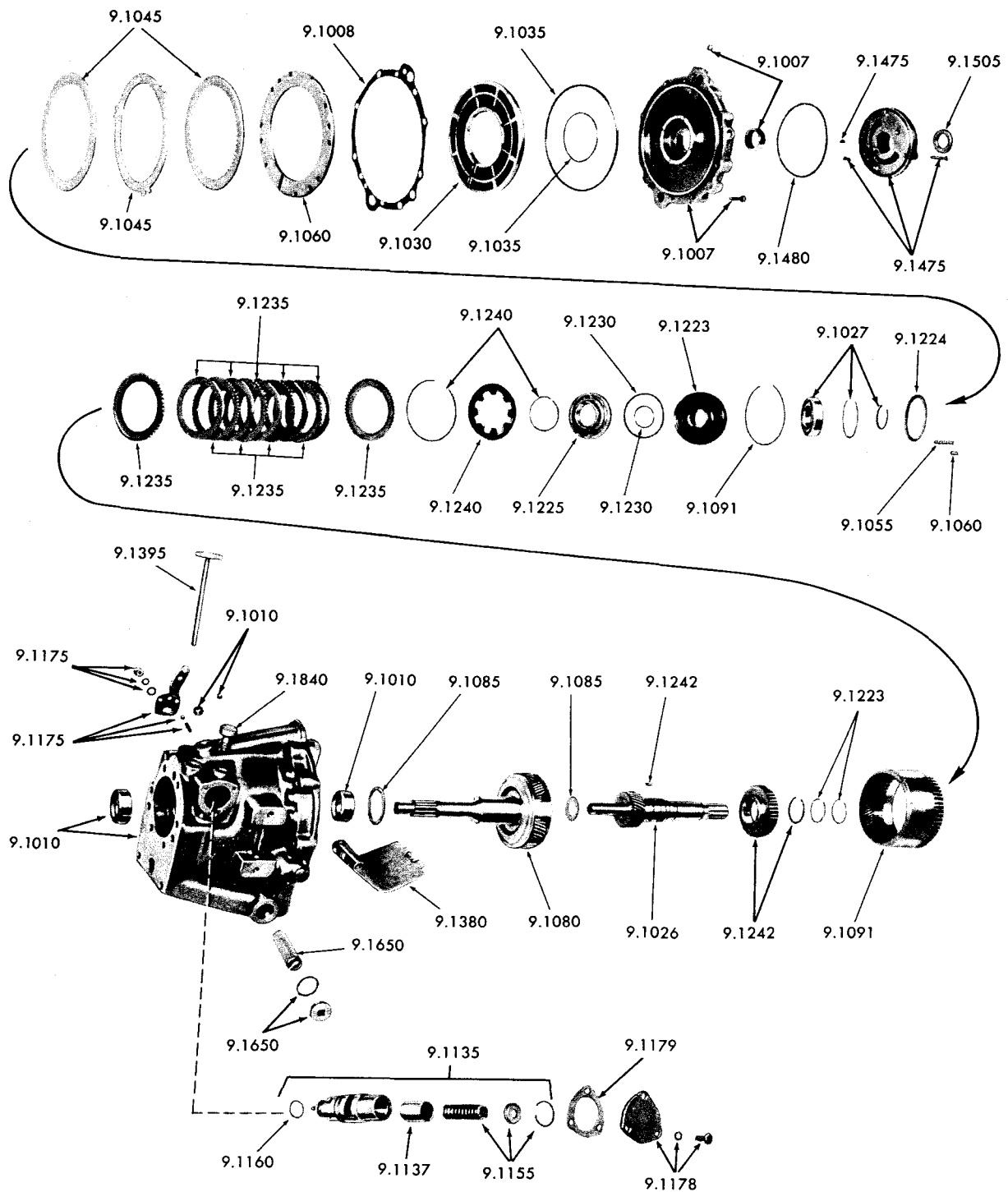


Fig. 60 - Hydraulic Marine Gear - Reverser

GM DIESEL

FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
60	9.1155	5196212	Ring, selector valve spring retainer snap	1	1	
60	9.1160	5196222	Seal, selector valve ring (oil)	1	1	
60	9.1175	5196223	Lever, selector valve	1	1	
60	9.1175	5196221	Spring, selector valve lever (detent)	1	1	
60	9.1175	104919	Ball, 5/16" dia. steel	1	1	
60	9.1175	103340	Washer, 5/16" flat	1	1	
60	9.1175	108579	Lockwasher, 5/16"	1	1	
60	9.1175	121917	Nut, 5/16"-24 hex.	1	1	
60	9.1178	5196224	Cover, selector valve	1	1	
60	9.1178	186630	Bolt, 1/4"-20x5/8" hex. hd.	3	3	
60	9.1178	103319	Lockwasher, 1/4"	3	3	
60	9.1179	5196225	Gasket, selector valve cover	1	1	
60	9.1223	5196194	Cylinder, forward clutch piston	1	1	
60	9.1223	5196198	Ring, forward clutch piston cylinder seal (on input shaft)	2	2	
60	9.1224	5196189	Washer, forward clutch cylinder thrust (.062" thick)(with direct drive, 2.5:1 & 3:1 red.)	1	1	
60	9.1224	5196189	Washer, forward clutch cylinder thrust (.062" thick) (with 1.5:1 and 2:1 red.)	AR	AR	
60	9.1224	5196190	Washer, forward clutch cylinder thrust (.086" thick) (with 1.5:1 and 2:1 red.)	AR	AR	
60	9.1225	5196196	Piston, forward clutch	1	1	
60	9.1230	5196195	Seal Ring, forward clutch piston (2.016" I.D.)	1	1	
60	9.1230	5196197	Seal Ring, forward clutch piston (4.120" I.D.)	1	1	
60	9.1235	5196202	Plate, forward clutch pressure (front)	1	1	
60	9.1235	5196205	Plate, forward clutch pressure (rear)	1	1	
60	9.1235	5197160	Plate, forward clutch (driven)	5	5	
60	9.1235	5196203	Plate, forward clutch (drive)	4	4	
60	9.1240	5196201	Spring, forward clutch release	1	1	
60	9.1240	5196200	Ring, forward clutch release spring snap (3" dia.)	1	1	
60	9.1240	5196209	Ring, forward clutch release spring snap (5 1/2" dia.)	1	1	
60	9.1242	5196206	Hub, forward clutch	1	1	
60	9.1242	5196207	Ring, forward clutch hub snap (1 21/32" dia.)	1	1	
60	9.1242	218211	Key, 1/4"x3/4" woodruff	1	1	
61	9.1282	5196250	Plate, reduction gear adaptor (1.5:1 red.)	1	1	
61	9.1282	5196247	Plate, reduction gear adaptor (2:1 red.)	1	1	
61	9.1282	5196248	Plate, reduction gear adaptor (2.5:1 and 2:1 red.)	1	1	
61	9.1282	5196261	Bolt (1" L.) (reduction gear adaptor plate)	6	6	
61	9.1282	5196262	Bolt (1 1/4" L.) (reduction gear adaptor plate)	6	6	
61	9.1282	114607	Lockwasher, 7/16"	6	6	
61	9.1283	5196260	Gasket, reduction gear adaptor plate	1	1	
4,61	9.1285	5196284	Housing, reduction gear (2.5:1 and 2:1 red.)	1	1	
-	-	5196251	Gear, reduction gear input (1.5:1 red.)	1	1	
-	-	5196256	Plate, reduction gear planetary ring gear (2.5:1 red.)	1	1	
-	-	5196255	Plate, reduction gear planetary ring gear (3:1 red.)	1	1	
4,61	9.1285	5196282	Housing, reduction gear (1.5:1 red.)	1	1	
4,61	9.1285	5196283	Housing, reduction gear (2:1 red.)	1	1	
61	9.1286	5196285	Gasket, reduction gear housing	1	1	
-	-	103891	Plug, 5/8" expansion	1	1	
61	9.1285	179840	Bolt, 3/8"-16x1 1/8" hex. hd.	6	6	
61	9.1285	179864	Bolt, 7/16"-14x3/4" hex. hd.	2	2	
61	9.1285	103321	Lockwasher, 3/8"	6	6	
61	9.1285	103322	Lockwasher, 7/16"	2	2	
61	9.1290	5196263	Gear, reduction gear sun (1.5:1 red.)	1	1	
61	9.1290	5196264	Gear, reduction gear sun (2:1 red.)	1	1	
61	9.1290	5196265	Gear, reduction gear sun (2.5:1 red.)	1	1	
61	9.1290	5196266	Gear, reduction gear sun (3:1 red.)	1	1	
61	9.1290	5196267	Ring, reduction gear sun gear snap (1 27/32" I.D.) (2:1 red.)	1	1	
61	9.1290	3709351	Ring, reduction gear sun gear snap (1 1/4" I.D.) (2.5:1 and 3:1 red.)	1	1	
61	9.1290	5196277	Pin, reduction gear sun gear (gear drive) (1.5:1 red.)	1	1	
61	9.1290	5196278	Pin, roll (1.5:1 red. gear)	1	1	
61	9.1292	5196268	Gear Assy., reduction gear planetary (1.5:1 red.)	1	1	
61	9.1292	5196269	Gear Assy., reduction gear planetary (2:1 red., L.H.)	1	1	
61	9.1292	5196288	Gear Assy., reduction gear planetary (2:1 red., R.H.)	1	1	
61	9.1292	5196270	Gear Assy., reduction gear planetary (2.5:1 red.)	1	1	

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FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
61	9.1292	5196271	Gear Assy., reduction gear planetary (3:1 red.)		1	1
61	9.1293	5196279	Washer, reduction gear planetary gear thrust (2:1 red.)		2	2
61	9.1298	5196252	Gear, reduction gear planetary ring (1.5:1, 2:1 and 3:1 red.)		1	1
61	9.1298	5196257	Gear, reduction gear planetary ring (2.5:1 red.)		1	1
61	9.1298	5196253	Ring, red. gear planetary ring gear snap (6 1/4" O.D.) (1.5:1, 2:1 and 3:1 red. gear)		1	1
61	9.1298	5196258	Ring, red. gear planetary ring gear snap (6 17/32" O.D.) (2.5:1 red. gear)		1	1
61	9.1340	5196276	Shaft, reduction gear drive (1.5:1 red.)		1	1
61	9.1340	5196273	Shaft Assy., reduction gear drive (includes bushing) (2:1 red.)		1	1
61	9.1340	5196274	Bushing, reduction gear drive shaft (2:1 red.)		1	1
61	9.1350	5196226	Bearing, reduction gear output shaft (direct drive)		1	1
61	9.1350	9413343	Bearing, reduction gear output shaft (1.5:1, 2:1, 2.5:1 and 3:1 red.) ..		1	1
61	9.1365	5196227	Cover, output shaft bearing (direct drive)		1	1
61	9.1365	5196286	Cover, reduction gear bearing (1.5:1, 2:1, 2.5:1 and 3:1 red.)		1	1
61	9.1365	179860	Bolt, 7/16"-14x1 1/4" hex. hd.		6	6
61	9.1365	103322	Lockwasher, 7/16"		6	6
61	9.1370	5196228	Gasket, output shaft bearing cover (direct drive)		1	1
61	9.1370	5196287	Gasket, reduction gear bearing cover (1.5:1, 2:1, 2.5:1 and 3:1 red.) ..		1	1
61	9.1375	5196229	Seal, reduction gear bearing cover oil		1	1

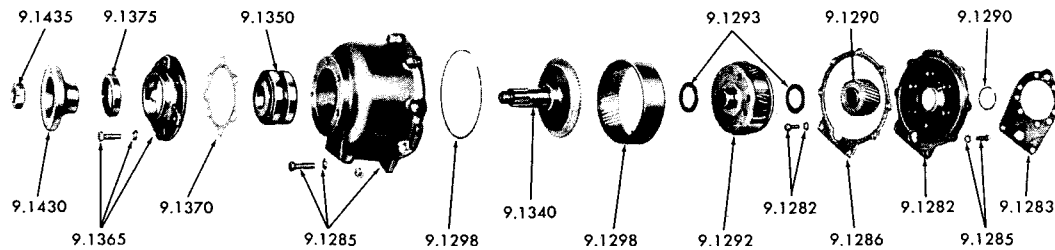


Fig. 61 - Typical Hydraulic Marine Gear Reducer (2:1 ratio shown)

60	9.1380	5196175	Baffle, marine gear oil		1	1
60	9.1395	5196176	Dipstick, marine gear (filler cap)		1	1
-	-	5196174	Tube, marine gear oil filler		1	1
61	9.1430	5196796	Flange, propeller drive		1	1
61	9.1435	5196805	Nut, propeller drive flange		1	1
-	-	5122654	Coupling, propeller drive shaft (1" bore, solid type)		1	1
-	-	5122655	Coupling, propeller drive shaft (1 1/8" bore, solid type)		1	1
-	-	5122656	Coupling, propeller drive shaft (1 1/4" bore, solid type)		1	1
-	-	5122657	Coupling, propeller drive shaft (1 3/8" bore, solid type)		1	1
-	-	5123209	Coupling, propeller drive shaft (1 1/2" bore, solid type)		1	1
-	-	5109351Δ	Coupling, propeller drive shaft (1" - 1 1/2" bore, split type)		1	1
60	9.1475	5196214	Pump Assy., hydraulic marine gear oil (includes screws and oil seal; gears and plate not sold separately)		1	1
60	9.1475	110533	Screw, #10-24x3/4" fil. hd. sl.		2	2
60	9.1475	186648	Bolt, 5/16"-18x1 7/8" hex. hd.		4	4
60	9.1475	218217	Key, 3/16"x5/8" woodruff		1	1
60	9.1480	5196216	Gasket, hydraulic marine gear oil pump		1	1
60	9.1505	5196215	Seal, hydraulic marine gear oil pump oil		1	1
60	9.1650	5196178	Strainer, marine gear oil		1	1
60	9.1650	120428	Gasket, 1" annular		1	1
60	9.1650	453006	Plug, 1" pipe		1	1
40	9.1775	5118781	Tube Assy., marine gear oil pressure (3/16" I.D. x11 3/16" flex.)		1	1
-	-	1508350	Fitting, restriction 1/8"		1	1
60	9.1840	5196177	Breather, marine gear		1	1
ENGINE HOOD						
-	-	5125457	Hood Assy., engine top (C engine)	1		
-	-	5125458	Hood Assy., engine top (A engine)	1		
-	-	5125340	Hood Assy., engine top (C engine)		1	
-	-	5125341	Hood Assy., engine top (A engine)		1	

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FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
-	-	5125342	Hood Assy., engine top (C engine)			1
-	-	5125343	Hood Assy., engine top (A engine)			1
-	-	181309	Bolt, 1/4"-28x1/2" hex. hd.	14	14	14
-	-	103319	Lockwasher, 1/4"	14	14	14
-	-	122161	Nut, 1/4"-28 hex.	14	14	14
-	-	5123403	Hood Assy., radiator	1		
-	-	5124396	Hood Assy., radiator		1	1
-	-	181360	Bolt, 3/8"-24x3/4" hex. hd.	8	6	6
-	-	186627	Bolt, 3/8"-24x1" hex. hd.		2	2
-	-	103321	Lockwasher, 3/8"	8	8	8
-	-	117049	Nut, 3/8"-24 hex.	8	8	8
-	-	5125456	Support, engine rear hood	1		
-	-	5125333	Support, engine rear hood		1	1
-	-	5121466	Bolt (3/8"-24x3 7/8") (engine rear hood support)	2		
-	-	179882	Bolt, 1/2"-13x1 1/8" hex. hd.		4	4
-	-	103323	Lockwasher, 1/2"		4	4
-	-	5125334	Panel, engine hood side		2	
-	-	5125335	Panel, engine hood side			2
ENGINE MOUNTING AND BASE						
The proper base for your engine can be interpreted by your nearest GM Diesel dealer or distributor. Furnish him the model number and the type number (if shown) on the option plate which is attached to the rocker cover.						
2,32	11.1001	-	Base	1	1	1
-	-	5167615	Washer, bevel	AR	AR	AR
1,17	11.1070	5116076	Support, engine front (front bracket 3 1/2" high)	1	1	1
32	11.1070	5116066	Support, engine front (front bracket 4 11/16" high) (used with base)		1	1
-	-	5125827	Support, engine front (automotive type clutch housing)		1	
-	-	5126044	Support, engine front (for use with elastic mounting)	1		
-	-	5123945	Support, engine front (pedestal type mounting)	1	1	1
-	-	5125510	Support, engine front (with SAE #3 flywheel housing)	1		
-	-	5125511	Support, engine front (with SAE #4 flywheel housing)	1		
-	-	5125509	Support, engine front (with SAE #4 flywheel housing)		1	1
4,49	11.1070	5119060	Support, engine front (bracket used with front PTO)		2	2
-	-	5119143	Support, engine front (cross member, used when front PTO is not used)		1	1
-	-	5125529	Pedestal, engine front R.H. (#2 flywheel housing 4" high)	1	1	1
-	-	5125530	Pedestal, engine front L.H. (#2 flywheel housing 4" high)	1	1	1
-	-	5123841	Pedestal, engine front R.H. (#3 flywheel housing 5" high)	1	1	1
-	-	5123842	Pedestal, engine front L.H. (#3 flywheel housing 5" high)	1	1	1
-	-	5123839	Pedestal, engine front R.H. (#4 flywheel housing 5 3/4" high)	1	1	1
-	-	5123840	Pedestal, engine front L.H. (#4 flywheel housing 5 3/4" high)	1	1	1
1,17	11.1070	186283	Bolt, 3/8"-16x3 1/2" hex. hd. (to front cover - lower)	AR	AR	AR
-	-	186285	Bolt, 3/8"-16x4" hex. hd. (to front cover - lower)	2	2	2
-	-	181361	Bolt, 3/8"-24x7/8" hex. hd. (pedestal to support)	8	8	8
-	-	179859	Bolt, 7/16"-14x1 1/8" hex. hd. (to front cover - lower)	4	4	4
-	-	179860	Bolt, 7/16"-14x1 1/4" hex. hd. (to front cover - lower)	AR	2	2
-	-	186725	Bolt, 1/2"-13x1 1/2" hex. hd. (to PTO adaptor)	4	4	4
-	-	181431	Bolt, 1/2"-20x1 1/2" hex. hd. (to base)		2	2
-	-	271585	Bolt, 5/8"-18x1 3/4" hex. hd. (housing to base)		2	2
-	-	103345	Washer, 5/8" flat		2	2
-	-	103321	Lockwasher, 3/8"	8	8	8
-	-	103322	Lockwasher, 7/16"	AR	AR	AR
-	-	103323	Lockwasher, 1/2"		2	2
-	-	103325	Lockwasher, 5/8"		2	2
-	-	117049	Nut, 3/8"-24 hex.	8	8	8
-	-	117051	Nut, 1/2"-20 hex.		2	2
-	-	117053	Nut, 5/8"-18 hex.		2	2
-	-	5125822	Nut (1/2"-13) anchor		1	
-	-	5118545	Mounting Assy., engine front support elastic	4		
-	-	181433	Bolt, 1/2"-20x1 3/4" hex. hd.	8		

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FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
-	-	223747	Bolt, 5/8"-18x4 1/4" hex. hd.	4		
-	-	5167615	Washer, bevel	8		
-	-	103345	Washer, 5/8" flat	8		
-	-	103323	Lockwasher, 1/2"	8		
-	-	122761	Nut, 1/2"-20 hex.	8		
-	-	456884	Nut, 5/8"-18 hex.	8		
-	-	5100035	Trunnion, engine front (2 5/8" I.D.)	1	1	
-	-	5124762	Trunnion, engine front (3" I.D.)		1	1
-	-	186283	Bolt, 3/8"-16x3 1/2" hex. hd.	4	4	
-	-	179860	Bolt, 7/16"-14x1 1/4" hex. hd.	2	2	
-	-	103322	Lockwasher, 7/16"	2	2	
-	-	5122409	Ring, front trunnion support (3 1/2" I.D.)	1	1	
-	-	5166864	Ring, front trunnion support (4 1/2" I.D.)		1	1
4,49	11.1100	5119099	Bracket, engine rear support	2	2	
-	-	106337	Bolt, 7/16"-14x1 3/8" hex. hd.	4	4	
-	-	103322	Lockwasher, 7/16"	4	4	
BILGE PUMP						
-	-	5169979	Pump Assy., bilge (includes indented items)	1	1	
62	12.2010	5192068	Body, bilge pump	1	1	
62	12.2010	5163834	Washer, bilge pump body (5/16" flat, brass)	6	6	
62	12.2010	123213	Nut, 5/16"-18 hex. (brass)	6	6	
62	12.2020	5190446	Stud, bilge pump body (5/16"-18x1 1/16")	6	6	
62	12.2030	5164528	Gasket Set, bilge pump body (includes one each .005" and .010" thick gasket)	1	1	
62	12.2040	5190464	Impeller and Shaft Assy., bilge pump (includes pin)	1	1	
62	12.2040	5190442	Pin, 3/16"x1 7/16"	1	1	
62	12.2050	5190429	Housing, bilge pump impeller	1	1	
-	-	134519	Draincock, 1/8"	1	1	
62	12.2060	5160375	Packing, bilge pump shaft	4	4	
-	-	5190476	Packing, bilge pump shaft	1	1	
62	12.2070	5190439	Gland, bilge pump shaft packing	1	1	
62	12.2070	5190452	Lock, bilge pump shaft packing gland	1	1	
-	-	122002	Nut, 5/16"-24 hex. (brass)	2	2	
-	-	5190444	Stud, bilge pump shaft packing gland (5/16"-24x1 1/8")	2	2	
62	12.2090	5164453	Bushing, bilge pump shaft	1	1	
62	12.2100	954143	Bearing, bilge pump shaft	1	1	
62	12.2110	5190443	Shim, bilge pump shaft bearing (.005")	1	1	
62	12.2120	5190440	Retainer, bilge pump shaft bearing	1	1	
62	12.2120	110570	Screw, #10-24x1/2" fil. hd. (brass)	4	4	
62	12.2130	5190441	Cup, bilge pump grease	1	1	
62	12.2140	5190447	Pulley Assy., bilge pump driven	1	1	
62	12.2140	5190450	Lock, bilge pump driven pulley	2	2	

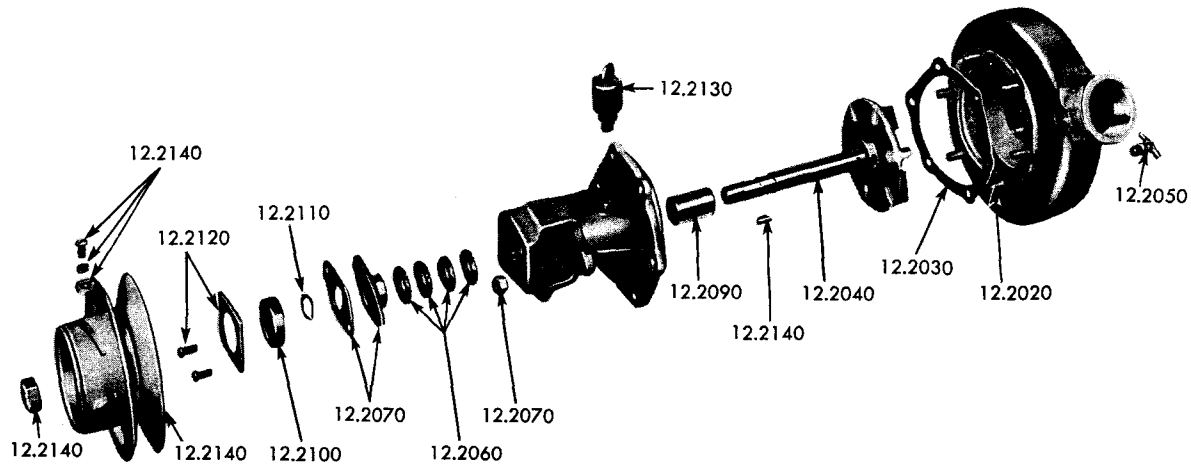


Fig. 62 - Bilge Pump

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FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
62	12.2140	124546	Key, 5/32"x5/8" woodruff		1	1
62	12.2140	114351	Screw, 1/4"-20x3/8" fil. hd.		2	2
62	12.2140	103319	Lockwasher, 1/4"		2	2
62	12.2140	117053	Nut, 5/8"-18 hex.		1	1
VACUUM PUMP						
The proper vacuum pump oil tube assemblies for your engine can be interpreted by your GM Diesel dealer or distributor. Furnish him the model and type number shown on the option plate.						
-	-	3813276	Pump Assy., vacuum (less pulley)		1	1
-	-	106337	Bolt, 7/16"-14x1 3/8" hex. hd.		4	4
-	-	103322	Lockwasher, 7/16"		4	4
-	-	5126187	Pulley, vacuum pump		1	1
-	-	5125658	Bracket, vacuum pump (R.H. side of engine)		1	1
-	-	5125659	Bracket, vacuum pump (L.H. side of engine)		1	1
-	-	186619	Bolt, 3/8"-16x1 1/8" hex. hd.		5	5
-	-	103321	Lockwasher, 3/8"		5	5
-	-	-	Tube Assy., vacuum pump oil supply		1	1
-	-	-	Tube Assy., vacuum pump oil drain		1	1
AIR COMPRESSOR						
When ordering air compressor parts always provide your GM Diesel dealer or distributor with the identifying type number on the option plate on your engine.						
-	-	5110404	Compressor Assy., air (7 1/4 CFM, mounted on right side)		1	1
-	-	5110405	Compressor Assy., air (7 1/4 CFM, mounted on left side)			1
-	-	2370584	Compressor Assy., air (12 CFM)		1	1
-	-	106337	Bolt, 7/16"-14x1 3/8" hex. hd. (to bracket)		4	4
-	-	103322	Lockwasher, 7/16"		4	4
-	-	2067767	Gasket, air compressor		1	1
-	-	5125658	Bracket, air compressor mounting (R.H. side of engine)		1	1
-	-	5125659	Bracket, air compressor mounting (L.H. side of engine)		1	1
-	-		Bolt, 3/8"-16x1 1/4" hex. hd. (bracket to block)		5	5
-	-	5124700	Pulley, air compressor		1	1
-	-	103385	Pin, 1/8"x1" cotter		1	1
-	-	5127905	Tube Assy., air compressor lube oil supply (compressor mounted on right side)		1	1
-	-	5125968	Tube Assy., air compressor lube oil supply (compressor mounted on left side)		1	1
-	-	3290442	Clip, air compressor lube oil supply tube		1	1
-	-	137421	Elbow, 1/4" inv. fl. tube 90° (in engine front cover - lower)		1	1
-	-	125859	Elbow, 1/4" inv. fl. tube 45° (in compressor)		1	1
-	-	5126727	Hose Assy., air compressor oil drain (cast oil pan)(3/4" I.D.x12" L.) ...		1	1
-	-	5118398	Hose Assy., air compressor oil drain (stamped oil pan)(5/8" I.D.x10" L.)		1	1
-	-	5121190	Fitting, air compressor oil drain tube (at mounting bracket)		1	1
-	-	5126728	Fitting, air compressor oil drain tube (in oil pan)		1	1
-	-	444894	Connector, 3/4" inv. fl. tube (in bracket and oil pan)		2	2
-	-	110289	Elbow, 3/4" fl. tube 90°		2	2
-	-	5126630	Tube Assy., air compressor water inlet (7 1/4 CFM, compressor mounted on right side)		1	1
-	-	5126631	Tube Assy., air compressor water inlet (7 1/4 CFM, compressor mounted on left side)		1	1
-	-	5127068	Tube Assy., air compressor water inlet (12 CFM compressor)		1	1
-	-	5176522	Elbow, 1/2" tube sealastic 90°		2	2
-	-	5176524	Seal Ring, 1/2" tube sealastic		4	4
-	-	5176523	Nut, 1/2" tube sealastic		4	4
-	-	5127105	Elbow, 1/2" tube sealastic 45°		1	1
-	-	5131285	Tube Assy., air compressor water outlet (7 1/4 CFM compressor)		1	1
-	-	5127067	Tube Assy., air compressor water outlet (12 CFM compressor)		1	1
-	-	5176521	Connector, 1/2" tube sealastic		1	1

GM DIESEL

FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
-	-	5127105	Elbow, 1/2" tube sealastic 45°		1	1
-	-	5167522	Elbow, 1/2" tube sealastic 90°		1	1
-	-	5110411	Strainer Assy., air compressor		1	1
-	-	5110410	Gasket, air compressor strainer		1	1
-	-	179827	Bolt, 5/16"-18x2 1/4" hex. hd.		2	2
-	-	103320	Lockwasher, 5/16"		2	2
HYDRAULIC PUMP						
63	12.5001	5184292	Pump Assy., hydraulic (driven off comshaft on A engine, balancer shaft on C engine, 13 GPM at 2200 RPM)	1	1	1
63	12.5001	5184293	Pump Assy., hydraulic (driven off camshaft on C engine, balancer shaft on A engine, 13 GPM at 2200 RPM)	1	1	1
-	-	5111826	Pump Assy., hydraulic (driven off camshaft on C engine, balancer shaft on A engine, 26.5 GPM at 1800 RPM)	1	1	1
63	12.5005	5168852	Gasket, hydraulic pump (between pump and adaptor, 13 GPM pump)	1	1	1
63	12.5005	5111828	Gasket, hydraulic pump (between pump and adaptor, 26.5 GPM pump) ...	1	1	1
63	12.5010	3292492	Coupling, hydraulic pump	1	1	1
63	12.5010	5153449	Plate, hydraulic pump drive	1	1	1
63	12.5010	5177026	Spacer, hydraulic pump drive	1	1	1
63	12.5015	5122921	Bolt, 3/8"-24x1 5/16" (hydraulic pump drive plate)	4	4	3
-	-	9543533	Nut, 3/8"-24 hex. self locking			1
-	-	5122922	Retainer, cam or balancer shaft gear	1	1	1
-	-	5122923	Stud, cam or balancer shaft gear retainer			1
-	-	122236	Nut, 3/8"-24 hex.			1
63	12.5020	5123814	Adaptor, hydraulic pump (13 GPM pump)	1	1	1
63	12.5020	5120828	Adaptor, hydraulic pump (26.5 GPM pump)	1	1	1
63	12.5020	179838	Bolt, 3/8"-16x7/8" hex. hd. (13 GPM pump)	6	6	6
63	12.5020	179839	Bolt, 3/8"-16x1" hex. hd. (26.5 GPM pump)	6	6	6
63	12.5020	103321	Lockwasher, 3/8"	6	6	6
63	12.5030	5168688	Gear, hydraulic pump drive (13 GPM pump)	1	1	1
63	12.5030	5111829	Gear, hydraulic pump drive (26.5 GPM pump)	1	1	1
-	-	103907	Key, 3/16"x7/8" woodruff	1	1	1

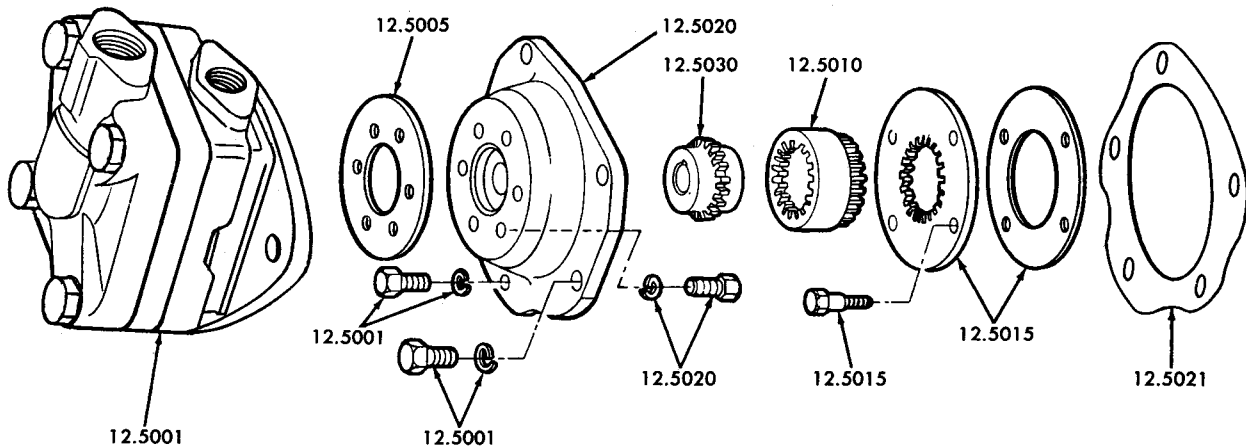


Fig. 63 - Hydraulic Pump

COLD WEATHER AIDS						
-	-	5193474	Starting Kit, cold weather (capsule type) (includes items below)	1	1	1
64	12.6305	5230535	Pump Assy., starting aid (includes indented items)	1	1	1
-	-	5230543	Seal Ring, starting kit pump plunger	2	2	2
64	12.6330	5152674	Knob, starting kit pump plunger	1	1	1
64	12.6330	122366	Nut, 5/8"-18 hex.	1	1	1
64	12.6340	5230544	Valve, starting kit pump inlet (1/2 lb.)	1	1	1
64	12.6345	5153358	Valve, starting kit pump outlet (30 lb.)	1	1	1

GM DIESEL

FIG. NO.	ITEM NO.	PART NUMBER	NAME AND DESCRIPTION	QUANTITY PER		
				2-53	3-53	4-53
-	-	5174649	Tube, starting pump to nozzle (1/8" dia. x7")	1	1	1
-	-	140323	Elbow, 1/8" ball sleeve tube 90°	2	2	2
-	-	104303	Elbow, 1/8" ball sleeve tube 90°	1	1	1
-	-	121322	Sleeve, 1/8" ball tube	3	3	3
-	-	121220	Nut, 1/8" ball sleeve tube	3	3	3
-	-	2185536	Nozzle, starting aid pump tube	1	1	1
64	12.6380	5186071	Puncturing Tool Assy., starting fluid capsule (includes indented items) ..	1	1	1
64	12.6385	5192816	Strainer Assy., starting fluid (includes next two items)	1	1	1
-	-	5192818	Strainer, fluid starting	1	1	1
-	-	142858	Screw, 1/4"-20x1/4" rd. hd. sl.	1	1	1
-	-	5192819	Gasket, starting fluid strainer assy.	1	1	1

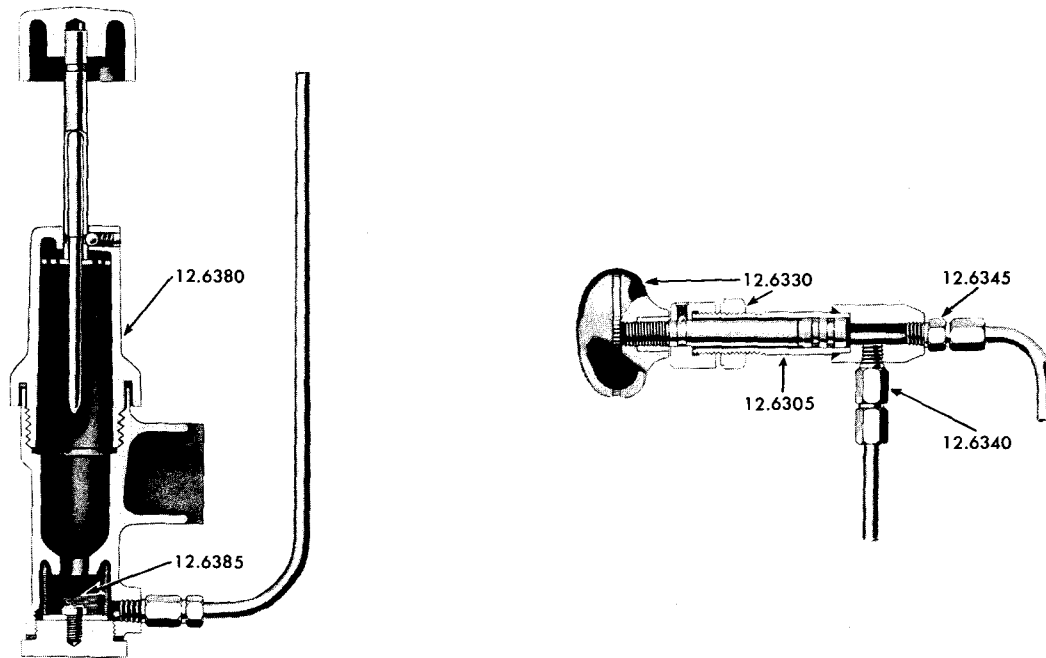


Fig. 64 - Cold Weather Starting Aid

HYDRAULIC STARTER						
-	-	6505066	Starter Assy., hydraulic (R engine)	1	1	1
-	-	6505068	Starter Assy., hydraulic (L engine)	1	1	1
-	-	271557	Bolt, 5/8"-11x1 3/8" hex. hd.	1	1	1
-	-	273666	Bolt, 5/8"-11x1 3/8" (12 point head)	1	1	1
-	-	103325	Lockwasher, 5/8"	2	2	2
-	-	5172492	Gasket, hydraulic starter	1	1	1
-	-	6505033	Reservoir Assy., hydraulic starter (includes indented items)	1	1	1
-	-	1553180	Cap, hydraulic starter reservoir	1	1	1
-	-	6505020	Filter, hydraulic starter reservoir	1	1	1
-	-	6505041	Accumulator Assy., hydraulic starter	1	1	1
-	-	6505012	Gage, hydraulic starter pressure	1	1	1
-	-	6505030	Pump Assy., hydraulic starter engine	1	1	1
-	-	6505002	Pump Assy., hydraulic starter hand	1	1	1
-	-	5110760	Primer, fuel	1	1	1
-	-	854453	Filter Assy., hydraulic starter (includes element)	1	1	1
-	-	854454	Element, hydraulic starter filter	1	1	1
SUPPLIES						
-	-	5194975	Paint, engine touch-up (1 gallon, Alpine green)	AR	AR	AR
-	-	5194974	Paint, engine touch-up (12 oz. spray can, Alpine green)	AR	AR	AR
-	-	5196925	Wire, injector spray tip cleaning (5' length) (.005" dia.)	AR	AR	AR

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