

# LISTER

Book 1444PL (HRWM)

## **HRWM** **2 and 3 CYLINDER** **DIESEL PROPULSION** **ENGINES**

### **PARTS LIST**

**R. A. LISTER & CO. LTD.**

**HAWKER SIDDELEY MARINE LTD**

GOODRIDGE AVENUE, BRISTOL ROAD,  
GLOUCESTER GL2 6XX, ENGLAND  
TEL: GLOUCESTER (0452) 21401  
TELEX: 43330 CABLES: 'POWER' GLOUCESTER



HAWKER SIDDELEY



**IMPORTANT**

**REPLACEMENT PARTS — DIRECTIONS FOR ORDERING**

1. This Parts List contains illustrations and a list of replacement parts for the engine, together with the more usual accessories and optional extras. The list is completed for engines in current production and, when compiled, contains no obsolescent or obsolete parts. No amendments will be forwarded for this Parts List.
2. A Specimen Order Form for replacement parts can be found on Page 3, and when ordering always quote 'Engine No.', 'Part No.', and 'Description of Part'. DO NOT quote the illustration number.
3. The Engine No. can be found on the plate on the Fuel Pump Housing Door and stamped on the Flywheel Rim. The normal rotation of the engine is anti-clockwise (ACW) when looking at the flywheel end. Clockwise (CW) rotation engines can be supplied.
4. Main bearings and big end bearings can be supplied undersize, and pistons and piston rings can be supplied oversize. Piston rings are only supplied in complete sets and pistons are supplied complete with piston rings and gudgeon pin.
5. Undersize and oversize measurements are 0.010", 0.020" and 0.040" and examples of ordering undersize and oversize parts are given below.
  - (a) Crankshaft Bearing ..... 352-50620/020
  - (b) Piston Ring Set ..... 572-50622/020
6. All parts included in an assembly are indented. When an individual item cannot be purchased by itself no part number is quoted.

**SPECIMEN ORDER FORM FOR REPLACEMENT PARTS**

TO ..... FROM

YOUR NORMAL SUPPLIER

ORDER No. .... DATE .....

LISTER ENGINE SERIAL NUMBER .....

Item No.	Description	Part No.	Quantity	Remarks
1	Exhaust Valve	351-50430	3	
2	Inlet Valve	301-50420	3	
3	Spring	351-21401	6	
4	Spring Carrier	351-50570	6	
5	Piston Ring—Set	572-50622	3	
6	Decarb. Joints	657-19714	1	

DESPATCH INSTRUCTIONS

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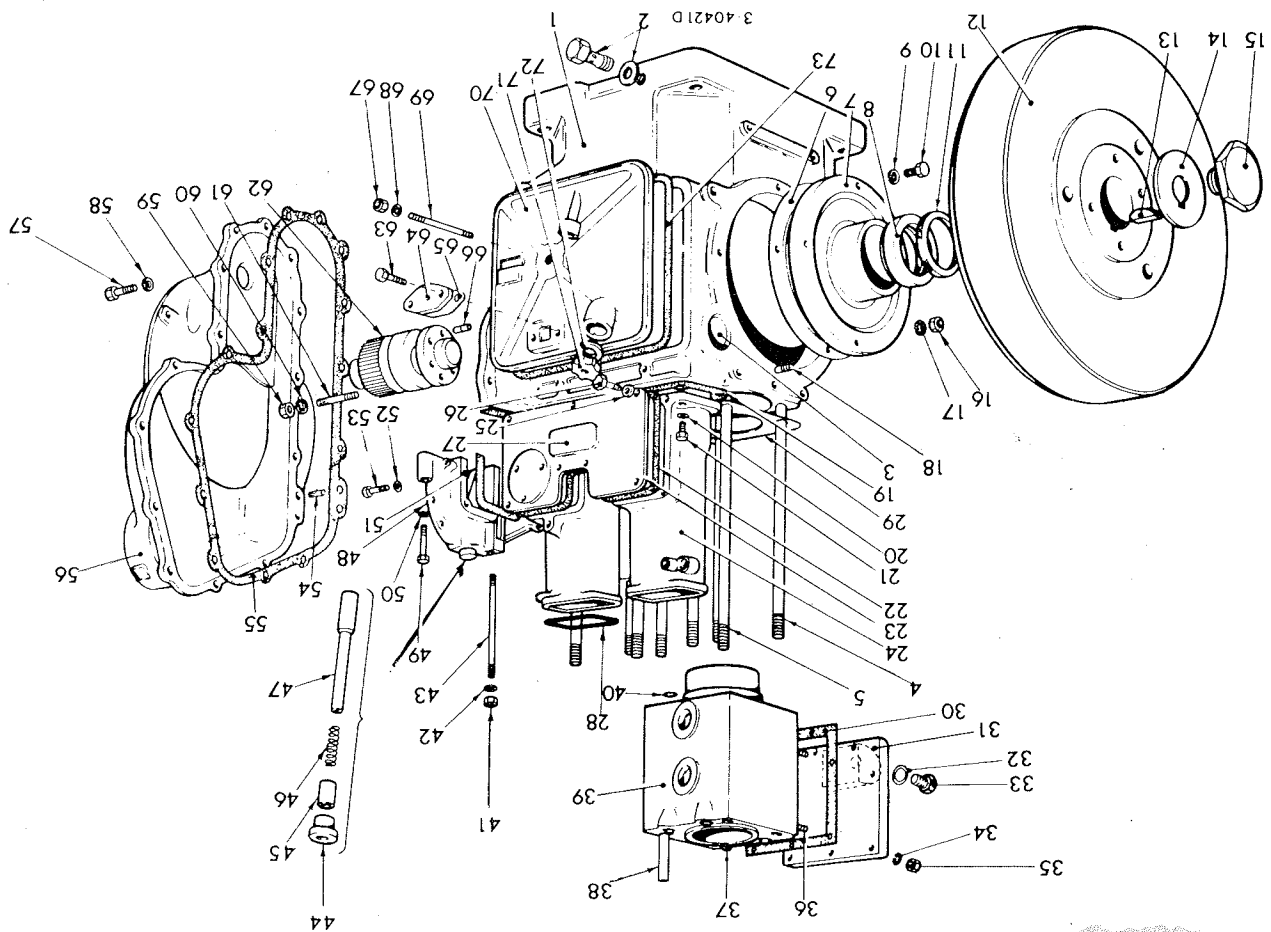


# PARTS LIST

## PLATE 1 CRANKCASE, FUEL PUMP HOUSING & CYLINDER

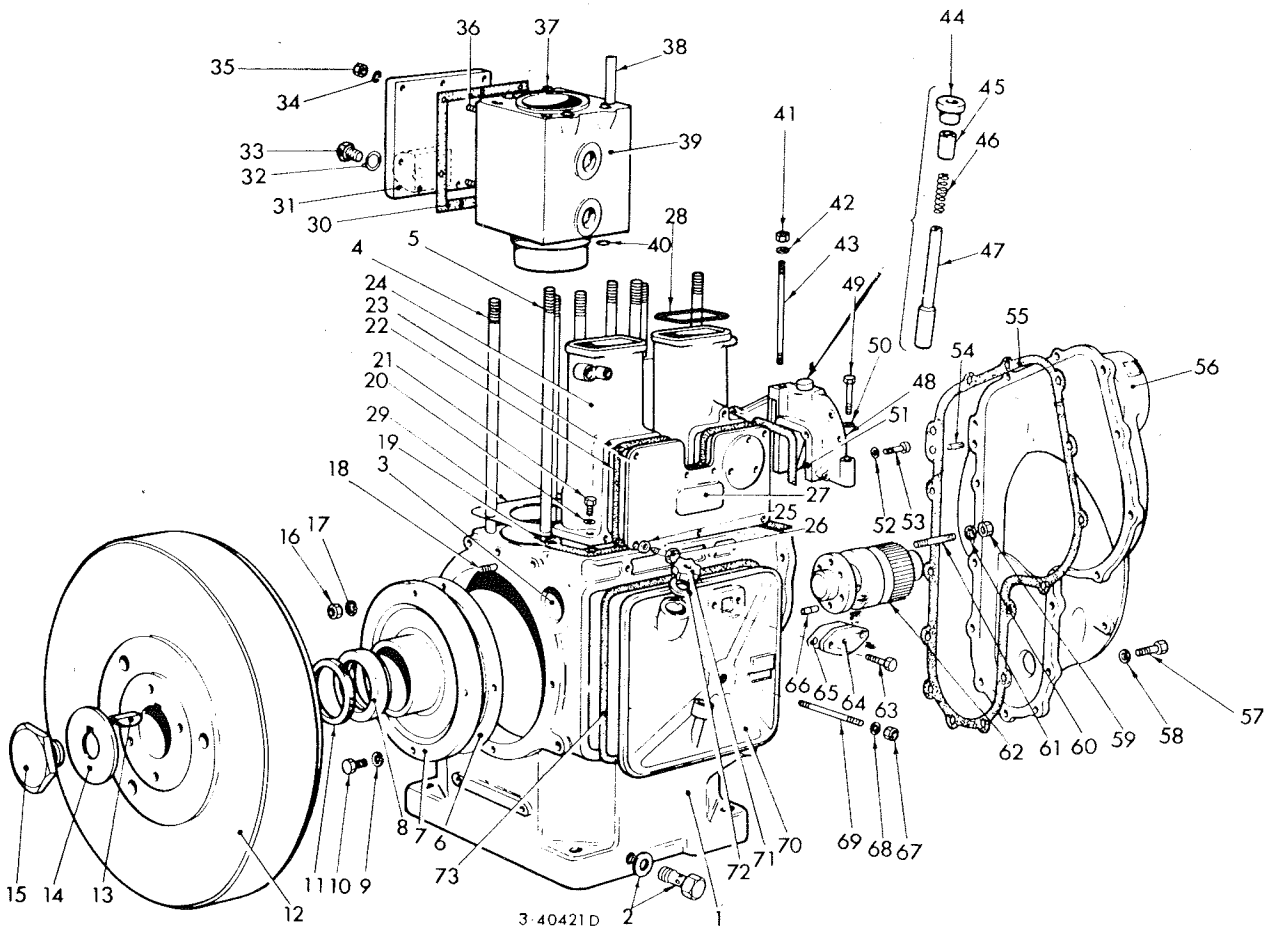
Illus No	Description	Part No.	No per eng 2cyl 3cyl
1	CRANKCASE ASSEMBLY Comprising	572-50240	1
1	CRANKCASE ASSEMBLY Comprising	572-50250	1
1	CRANKCASE	...	1
1	CRANKCASE	...	1
1	CRANKCASE	...	1
2	MAIN BEARING ASSEMBLY See Plate 2	352-50620	1
2	CAMSHAFT BUSH	202-12030	2
2	DRAIN PLUG—Taper Thread Swivel Union Plug 351-14961 & Joints 291-30630 used with Sump Pump as illustrated	027-00469	1
3	EXPANSION PLUG—Camshaft Bore	027-04208	1
4	CYLINDER HEAD STUD—Short	351-60570	4
4	CYLINDER HEAD STUD—Long	351-60560	4
5	EXPANSION PLUG—Oil Suction Hole	027-00757	2
5	SOCKET SETSCREW—5/16" UNF x 3/8"	270-00051	6
5	ENGINE INSTRUCTION TRANSFER	351-42440	1
5	LUBRICATING OIL TRANSFER	351-14680	1
6	MAIN BEARING HOUSING AND FLYWHEEL SHIM — Bearing Housing — 0.003"	351-11934	as reqd.
6	SHIM — Bearing Housing — 0.005"	351-11930	as reqd.
6	SHIM — Bearing Housing — 0.010"	351-11931	as reqd.
7	MAIN BEARING HOUSING	352-50610	1
7	OIL RETAINING RING—ACW	351-11520	1
8	— CW	351-12900	1
9	SPRING WASHER	027-00393	4
9	SETSCREW—5/8" UNF x 7/8"	270-00072	3
10	FELT WASHER—Oil Retaining Ring	351-11530	1
11	FLYWHEEL—Up to 1800 rev/min	351-40500	1
12	—Over 1800 rev/min	351-40502	1
13	KEY—Flywheel	291-21651	1
14	LOCKWASHER—Retaining Screw	351-11330	1
15	RETAINING SCREW—Flywheel	351-11280	1
16	NUT—3/8" UNF	270-00004	1
17	SPRING WASHER	027-00393	1
18	STUD—3/8" UNF x 1 3/8"	270-00111	1

PLATE 1 CRANKCASE, FUEL PUMP HOUSING & CYLINDER



CRANKCASE, FUEL PUMP HOUSING & CYLINDER

Illus. No.	Description	Part No.	No. per Eng. 2 cyl 3 cyl
19	JOINT-Fuel Pump Housing to Crankcase	352-11171	1
-	JOINT-Fuel Pump Housing to Crankcase	353-11170	-
-	SETSCREW-Fuel Pump Housing 5/16" UNF x 1 1/8"	270-00025	1
-	COPPER WASHER-Fuel Pump Housing	616-01608	2
20	SPRING/WASHER	027-00413	6
21	SETSCREW-Fuel Pump Housing	270-00061	7
22	JOINT-Fuel Pump Housing Door	352-15460	2
-	JOINT-Fuel Pump Housing Door	353-15460	1
23	DOOR-Fuel Pump Housing	352-15450	-
-	DOOR-Fuel Pump Housing	353-15450	1
24	FUEL PUMP HOUSING	352-10600	-
-	FUEL PUMP HOUSING	353-10600	1
25	WASHER	291-26090	-
26	SETSCREW - 1/4" UNF x 3/4"	270-00294	7
27	ENGINE NUMBER PLATE	027-04007	10
28	JOINT-Fuel Pump Housing to Cylinder Head	351-10480	1
-			1
-			3
<b>CYLINDER</b>			
29	JOINT-Cylinder to Crankcase	351-40081	2
30	JOINT-Cylinder Door	351-40070	2
31	CYLINDER DOOR-Water Inlet at Gear End -Water Inlet at F/Wheel End -For Cylinders not using above	352-40212	1
-			1
-			1
32	JOINT	352-40211	2
33	DRAIN PLUG-Cylinder Door	013-22350	1
34	SPRING WASHER	011-13693	2
35	NUT-Door Stud 5/16" UNF	027-00413	3
-	CYLINDER ASSEMBLY Comprising STUD-5/16" UNF x 1 1/4"	270-00003	14
36	FERRULE	270-00081	2
37	SLEEVE	351-40120	14
38	CYLINDER	351-40111	8
39	JOINT RING-Ferrule	351-60000	12
-	PLUG	351-40130	2
-	O'RING-Cylinder Sleeve	351-40190	8
40		354-54760	4
-			6
-			12

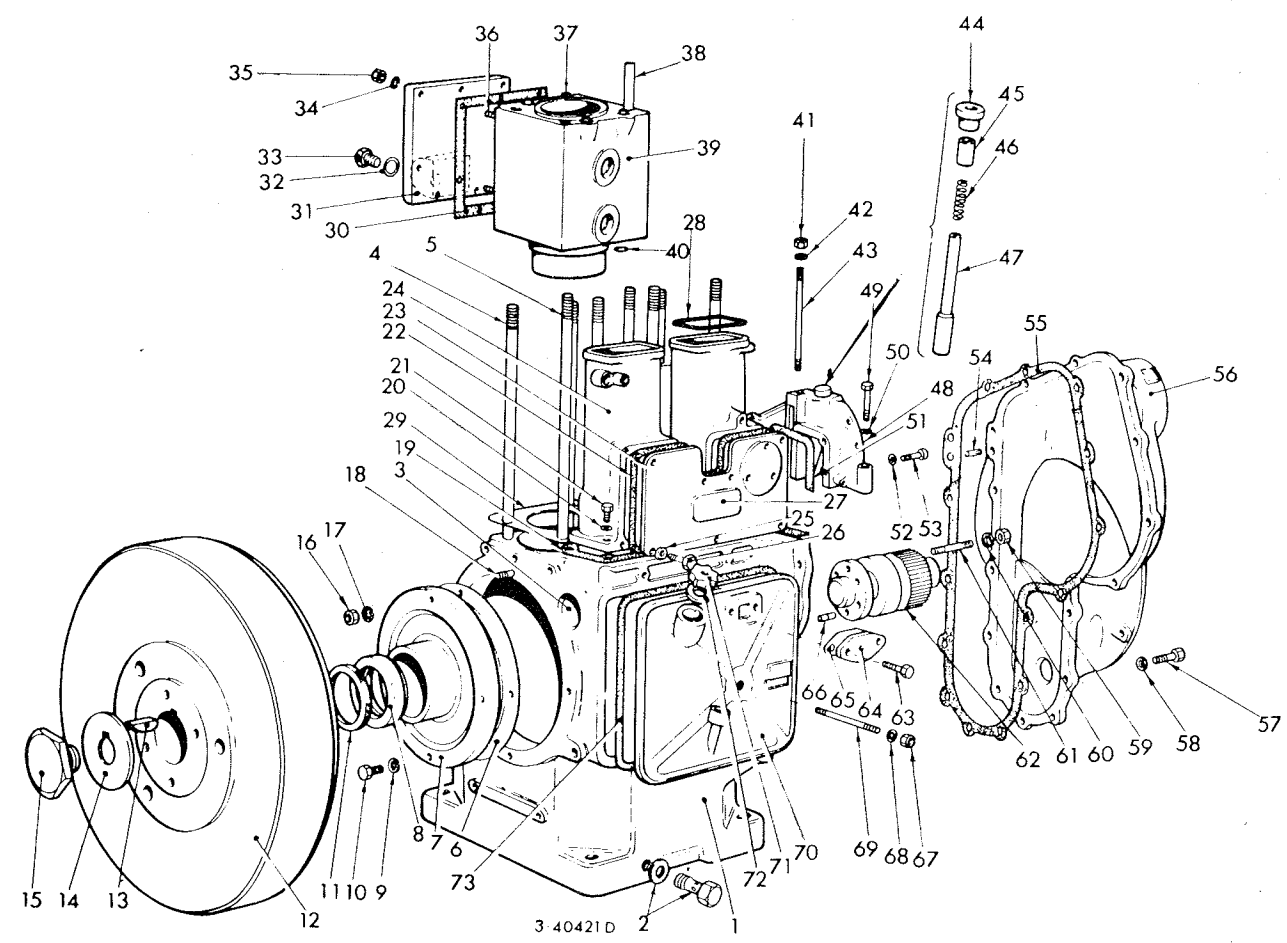


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**PLATE 1**  
**CRANKCASE, FUEL PUMP HOUSING & CYLINDER**

Illus. No. Description Part No. No. per Eng.  
2 cyl 3 cyl

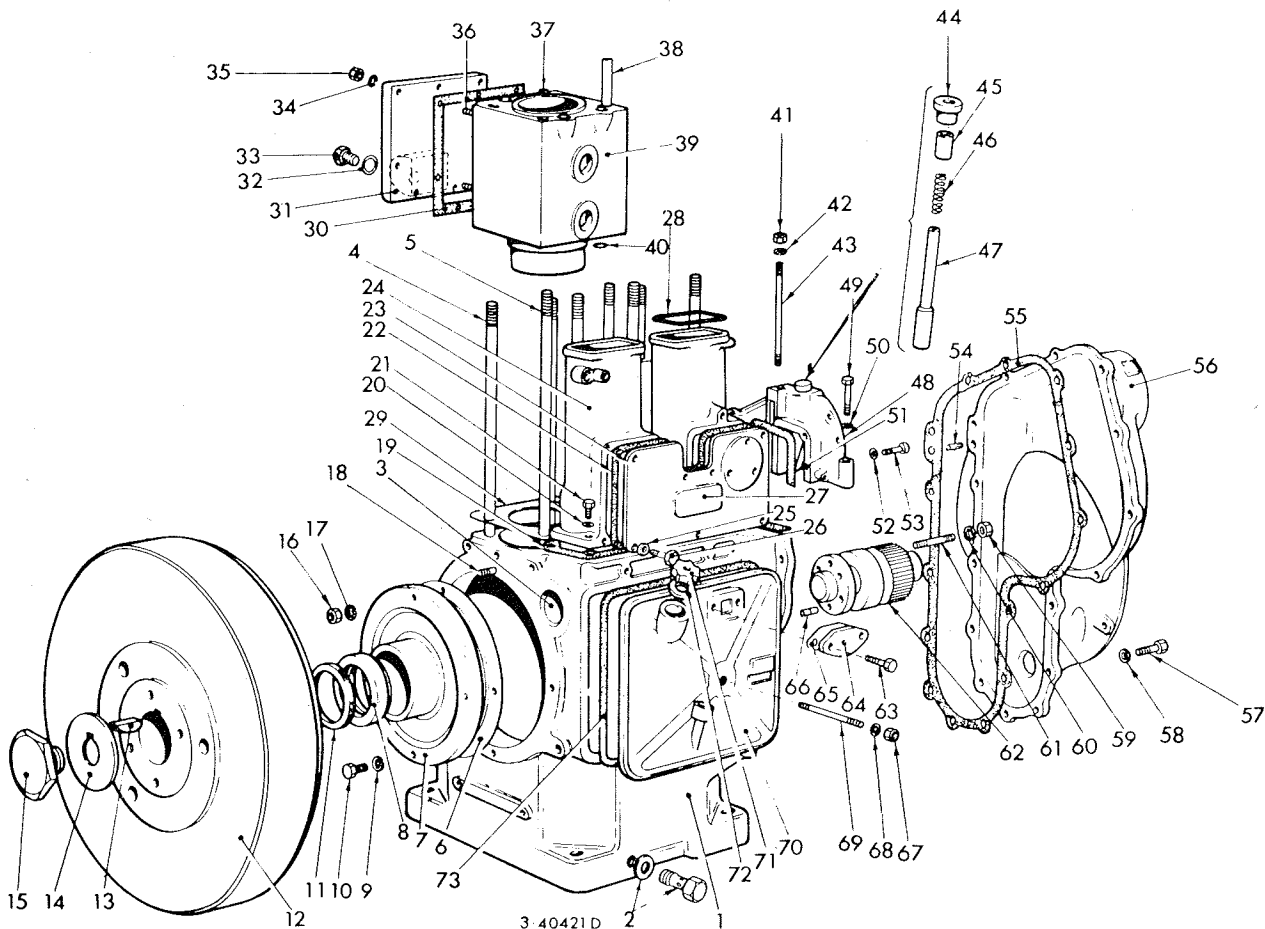
Illus. No.	Description	Part No.	No. per Eng. 2 cyl 3 cyl
41	END PLATE		
42	NUT 5/16" UNF ...	270-00003	1 1
42	SPRING WASHER ...	027-00413	1 1
43	STUD—End Plate ...	270-00088	1 1
44	END PLATE ASSEMBLY Comprising	572-10032	1 1
44	KNOB ...	351-11100	1 1
45	BUSH ...	351-11090	1 1
46	SPRING ...	351-11081	1 1
47	PLUNGER ...	351-11071	1 1
48	END PLATE ...	351-10890	1 1
49	STUD—5/16" UNF x 1 1/4" ...	270-00242	2 2
49	SETSCREW—End Plate 5/16" UNF x 2 1/4" ...	270-00066	1 1
50	SETSCREW—End Plate 5/16" UNF x 2" ...	270-00065	1 1
51	SPRING WASHER ...	027-00413	1 1
51	JOINT—End Plate to Fuel Pump Housing ...	351-11180	1 1
52	DOWEL—End Plate to Fuel Pump Housing ...	027-01434	1 1
52	SPRING WASHER ...	027-00451	4 4
53	SETSCREW—1/4" UNC x 1 1/2" ...	270-00293	4 4



**PLATE 1** **CRANKCASE, FUEL PUMP HOUSING & CYLINDER**

Illus. No. Description Part No. No. per Eng. 2 cyl. 3 cyl.

Illus. No.	Description	Part No.	No. per Eng. 2 cyl.	No. per Eng. 3 cyl.
54	CRANKCASE END COVER & CRANKSHAFT SPUR GEAR			
	DOWEL-Crankcase to End Cover ...	027-01496	2	2
55	JOINT-Adaptor Casing ...	351-12620	1	1
56	ADAPTOR-Reverse Gear ...	351-13481	1	1
	OIL RETURN TROUGH - LH	351-14090	1	1
	- RH	351-14100	1	1
	SETSCREW - 1/4" UNF x 5/8"	270-00023	2	2
	NUT ...	351-14120	2	2
	SPRING WASHER ...	027-00451	2	2
	PLAIN WASHER ...	027-00618	2	2
	SETSCREW - 5/16" UNF x 1"	270-00061	14	14
57	SPRING WASHER ...	027-00413	14	14
58	SPRING WASHER ...	270-00004	4	4
59	NUT -Spur Gear Stud 3/8" UNF	027-00393	4	4
60	SPRING WASHER ...	270-00396	4	4
61	STUD -Spur Gear 3/8" UNF x 1 7/8"	351-13980	1	1
62	CRANKSHAFT SPUR GEAR	270-00059	2	2
63	SETSCREW - 5/16" UNF x 5/8"	352-16640	1	1
64	COVER PLATE ...	351-12210	1	1
65	JOINT ...	027-01430	2	2
66	DOWEL -Spur Gear ...	351-17900	2	2
	RETAINING PLATE -Dowel	270-00046	2	2
67	NUT ...	616-01608	1	2
68	WASHER ...	270-00086	1	2
69	STUD -Crankcase Door ...	352-13450	1	1
70	CRANKCASE DOOR ...	353-13450	1	1
	CRANKCASE DOOR ...	027-03824	1	1
71	OIL FILLER CAP ...	303-00253	1	1
72	JOINT -Oil Filler Cap ...	352-11430	1	1
73	JOINT -Crankcase Door ...	353-11430	1	1



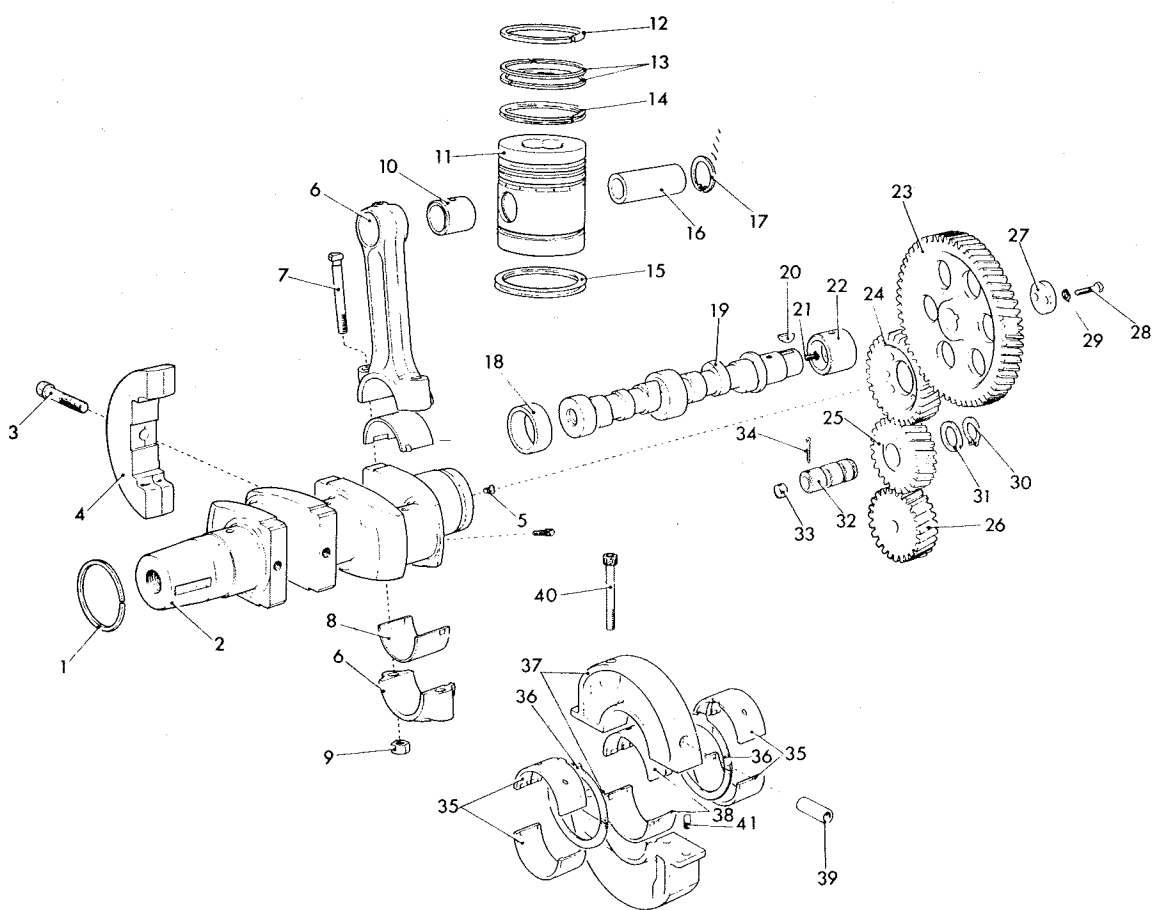
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PLATE 2 CRANKSHAFT, CAMSHAFT, CONNECTING ROD & PISTON

Illus. No. Description Part No. No. per Eng. 2 cyl 3 cyl

Illus. No.	Description	Part No.	No. per Eng. 2 cyl	No. per Eng. 3 cyl
<b>CRANKSHAFT</b>				
1	OIL THROWER—Flywheel End ...	351-11540	1	1
—	CRANKSHAFT ASSEMBLY Comprising ...	572-50220	1	—
—	CRANKSHAFT ASSEMBLY Comprising ...	572-50230	—	1
2	CRANKSHAFT ...	...	1	1
3	SCREW—Balance Weight — 1/2" UNF x 2 1/4" ...	270-00672	4	4
4	BALANCE WEIGHT ...	...	4	4
—	PLUG—Oil Hole — Socket Screw — 5/16 UNF x 3/8" ...	270-00051	2	3
—	CRANKSHAFT ASSEMBLY — Lloyds Tested	572-50221	1	—
—	CRANKSHAFT ASSEMBLY — Lloyds Tested	572-50231	—	1
5	Not fitted on marine propulsion engines	...	...	...
<b>CONNECTING ROD AND PISTONS</b>				
—	CONNECTING ROD ASSEMBLY Comprising ...	572-50360	2	3
6	CONNECTING ROD ...	351-50030	2	3
7	BOLT—Connecting Rod ...	351-50050	4	6
8	BEARING—Connecting Rod ...	572-50650	2	3
9	NUT—Connecting Rod ...	270-00006	4	6
10	BUSH—Connecting Rod ...	351-50060	2	3
—	PISTON ASSEMBLY Comprising ...	572-50122	2	3
11	PISTON ...	...	2	3
—	PISTON RING SET (5 Rings) ...	572-50622	2	3
12	PISTON RING—Taper ...	...	2	3
13	PISTON RING ...	...	4	6
14	PISTON RING—Conformable Top Scraper	...	2	3
15	PISTON RING—Bottom Scraper	...	2	3
16	GUDGEON PIN ...	...	2	3
17	CIRCLIP—Gudgeon Pin ...	351-50090	4	6



1014170

PLATE 2 CRANKSHAFT, CAMSHAFT, CONNECTING ROD & PISTON

Illus. No. Description Part No. No. per Eng. 2 cyl. 3 cyl.

CAMSHAFT AND GEAR TRAIN

18	BUSH—Camshaft ...	202-12030	2	3
19	CAMSHAFT—ACW ...	352-10162	1	—
—	—ACW ...	353-10161	—	1
—	—CW ...	352-12881	1	—
—	—CW ...	353-12881	—	1
20	KEY—Camshaft ...	027-00105	1	1
21	PLUG—Oil Holes ...	352-16720	1	1
22	BEARING—Camshaft ...	351-10172	1	1
—	GEAR TRAIN ASSEMBLY Comprising—Tachometer			

Fitted

23	GEAR WHEEL—Camshaft ...	572-10052	1	1
24	PINION—Crankshaft ...	351-10722	1	1
25	IDLER GEAR ...	351-10711	1	1
26	DRIVING GEAR—Pump ...	351-10670	1	1
—	GOVERNOR GEAR & HUB ASSEMBLY ...	351-10631	1	1
27	LOCATING PLATE—Camshaft Gearwheel ...	351-10730	1	1
28	SET SCREW—Camshaft Gearwheel	351-10180	1	1

—5/16" UNF x 3/4"

29	SPRING WASHER ...	270-00060	2	2
30	CIRCLIP—Idler Gear ...	027-00413	2	2
31	LOCATING WASHER—Idler Gear ...	201-11630	1	1
32	IDLER GEAR SHAFT ASSEMBLY Comprising	351-10690	1	1
33	SHAFT—Idler Gear ...	572-10900	1	1
34	PLUG—Idler Gear ...		1	1
34	SPLIT PIN ...	027-00121	1	1

CRANKSHAFT BEARINGS

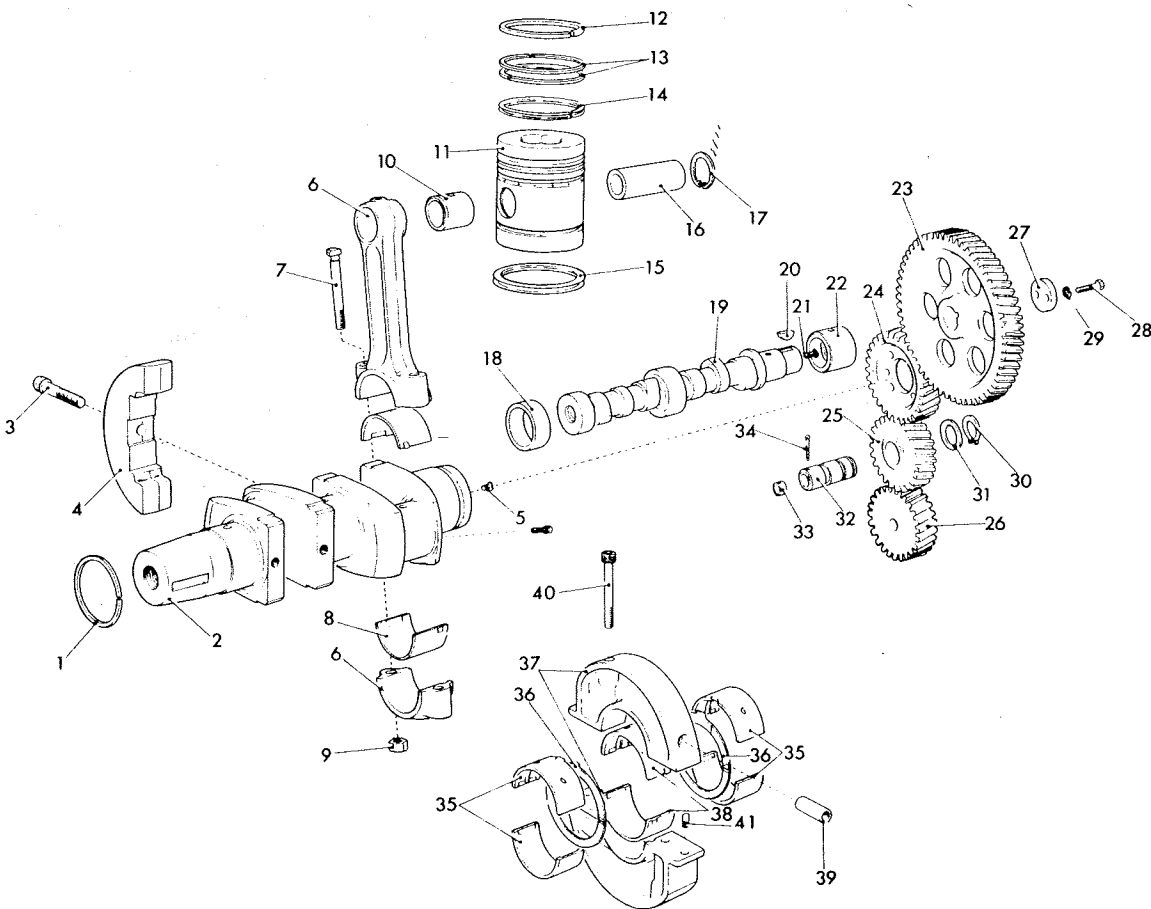
35	CRANKSHAFT BEARING ASSEMBLY ...	352-50620	2	2
36	THRUST WASHER—Crankshaft—In 2 Halves ...	351-50290	2	2
37	CENTRE BEARING HOUSING ...	352-50580	1	2
38	CRANKSHAFT CENTRE BEARING ...	351-50260	1	2
39	LOCATING DOWEL ...	352-11850	1	2
40	SOCKET CAP SCREW—3/8" UNF x 3 1/4" ...	270-00282	2	4
41	DOWEL ...	291-22470	2	4

*Цилиндр - насосный, X-мотор*

*Горел - насосная (система)*

*Шкив - вал, об, шпильки, пружина, муфта*

*Пруж - шпилька, газ, муфта*



101417F

PLATE 2 CRANKSHAFT, CAMSHAFT, CONNECTING ROD AND PISTON

# PLATE 3 CYLINDER HEAD & MANIFOLDS

Illus. No. Description Part No. No. per Eng.  
2 cyl. 3 cyl.

Illus. No.	Description	Part No.	No. per Eng. 2 cyl. 3 cyl.
1	CYLINDER HEAD ASSEMBLY Comprising CYLINDER HEAD ... ..	572-60040	2 3
2	O' RING-Fuel Injector Sleeve ... ..	351-40200	2 3
3	SLEEVE-Fuel Injector ... ..	351-40100	2 3
4	VALVE-Inlet ... ..	351-50420	2 3
5	VALVE-Exhaust ... ..	351-50430	2 3
6	STUD-Manifold 5/16" UNF x 3"	270-00123	2 3
7	STUD-Manifold 5/16" UNF x 1 3/4"	270-00084	4 6
8	VALVE GUIDE-Exhaust ... ..	291-50800	2 3
9	VALVE GUIDE-Inlet ... ..	351-10400	2 3
10	VALVE SPRING ... ..	351-21401	4 6
11	CARRIER-Valve Spring ... ..	351-50570	4 6
12	COTTER-Valve Spring ... ..	291-20661	4 6
13	EXPANSION PLUG-Cylinder Head	351-40190	2 3
14	EXPANSION PLUG-Cylinder Head	351-41510	1 2
15	GASKET-Cylinder Head ... ..	351-60020	2 3
16	SHIM-Cylinder Head 0.0035"	351-60030	As Reqd.
17	SHIM-Cylinder Head 0.010"	351-60031	As Reqd.
18	NUT-Cylinder Head-9/16" UNF ... ..	270-00007	4 6
19	BREATHER ASSEMBLY ... ..	351-40140	2 3
20	CLAMP-Injector ... ..	351-10580	2 3
21	VALVE ROCKER ASSEMBLY-Inlet Comprising ROCKER BRACKET-Inlet ... ..	572-50170	2 3
22	ROCKER BRACKET-Inlet ... ..	351-50140	2 3
23	DOWEL-Rocker Bracket ... ..	351-15030	2 3
24	ADJUSTING SCREW-Valve Rocker Lever ... ..	292-01670	2 3
25	VALVE ROCKER LEVER ASSEMBLY Comprising ... ..	572-50340	2 3
26	LEVER-Valve Rocker ... ..	201-11630	2 3
27	BUSH-Valve Rocker Lever ... ..	270-00003	2 3
28	CIRCLIP ... ..	351-36220	2 3
29	NUT-Adjusting Screw 5/16" UNF ... ..	572-50280	2 3
30	STUD ... ..	351-50150	2 3
31	VALVE ROCKER ASSEMBLY-Exhaust Comprising ... ..	351-50150	2 3
32	ROCKER BRACKET-Exhaust ... ..	351-10220	4 6
33	Plus all items included in Inlet Rocker Bracket Assembly, less Item 18	270-00081	4 6
34	NUT-Cylinder Head-Rocker Bracket Side		
35	STUD-Cylinder Head Cover ... ..		

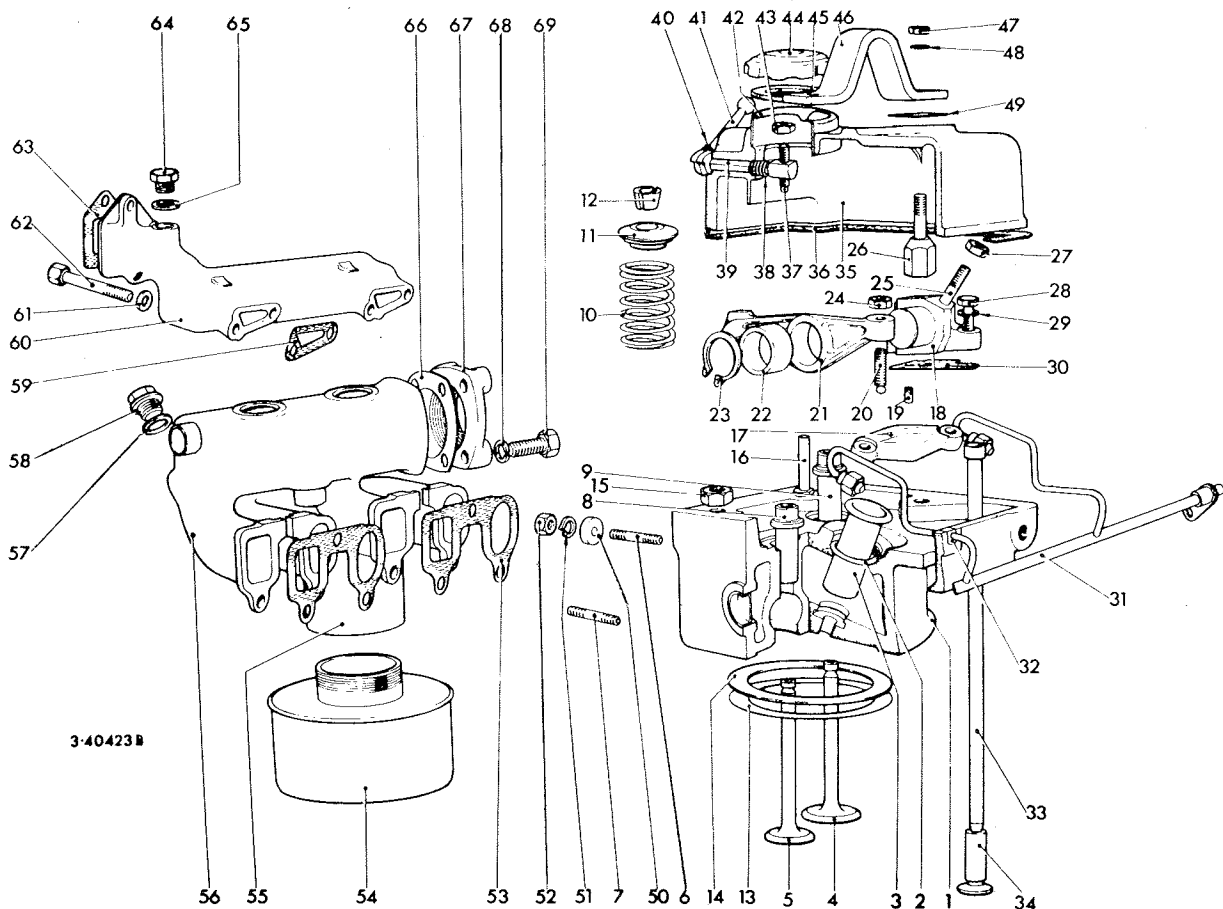


PLATE 3  
CYLINDER HEAD & MANIFOLDS

Illus. No.	Description	Part No.	No. per Eng. 2 cyl 3 cyl
<b>CYLINDER HEAD (Cont'd)</b>			
27	NUT—Injector Clamp Stud 5/16" UNF ...	270-00003	4 6
28	SETSCREW—Rocker Bracket 5/16" UNF x 1"	270-00061	4 6
29	PACKING WASHER—Joint Ring ...	396-44170	As Reqd.
30	SPRING WASHER ...	027-00413	4 6
31	JOINT—Rocker Bracket ...	351-10560	4 6
32	PIPE—Fuel Leak Off ...	352-36310	1 1
33	BUSH—Fuel Leak Off Pipe ...	201-11090	2 3
34	PUSH ROD—Valve ...	351-10310	4 6
—	TAPPET—Valve ...	351-10210	4 6
—	PLUG—Water Jacket ...	351-40260	2 3
<b>CYLINDER HEAD COVER</b>			
<b>CYLINDER HEAD COVER ASSEMBLY Comprising</b>			
35	CYLINDER HEAD COVER ...	572-11810	2 3
36	JOINT—Cylinder Head Cover ...	351-10490	2 3
37	SCREW—Decompressor ...	351-10510	2 3
38	SPRING—Decompressor ...	352-51550	2 3
39	SHAFT—Decompressor ...	201-12270	2 3
40	MILLS PIN—Decompressor ...	352-51521	2 3
41	LEVER—Decompressor ...	201-11730	2 3
42	OIL FILLER ...	351-13550	2 3
43	NUT—Decompressor 1/4" UNF ...	027-03821	2 3
44	OIL FILLER CAP ASSEMBLY Including	270-00002	2 3
45	JOINT—Oil Filler Cap ...	027-03824	2 3
46	WASHER ...	303-00253	2 3
47	LIFTING EYE ...	027-00184	2 3
48	NUT—Cylinder Head Cover 5/16" UNF ...	351-13581	1 1
49	COPPER WASHER ...	270-00003	4 6
—	JOINT—Lifting Eye ...	616-01608	4 6
—	STUD—Lifting Eye 5/16" UNF x 1 3/4" ...	351-13940	2 2
—	—	270-00084	2 2

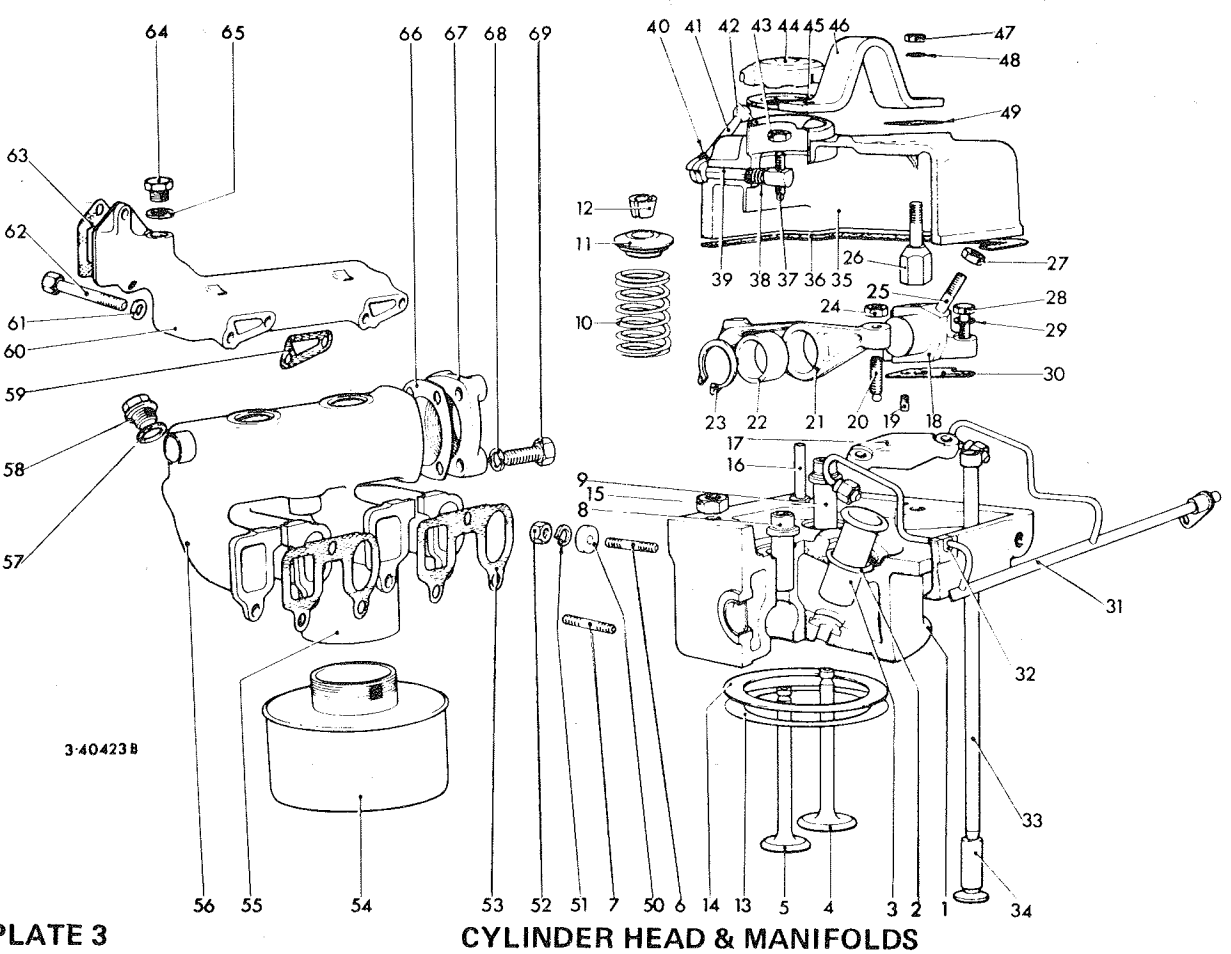


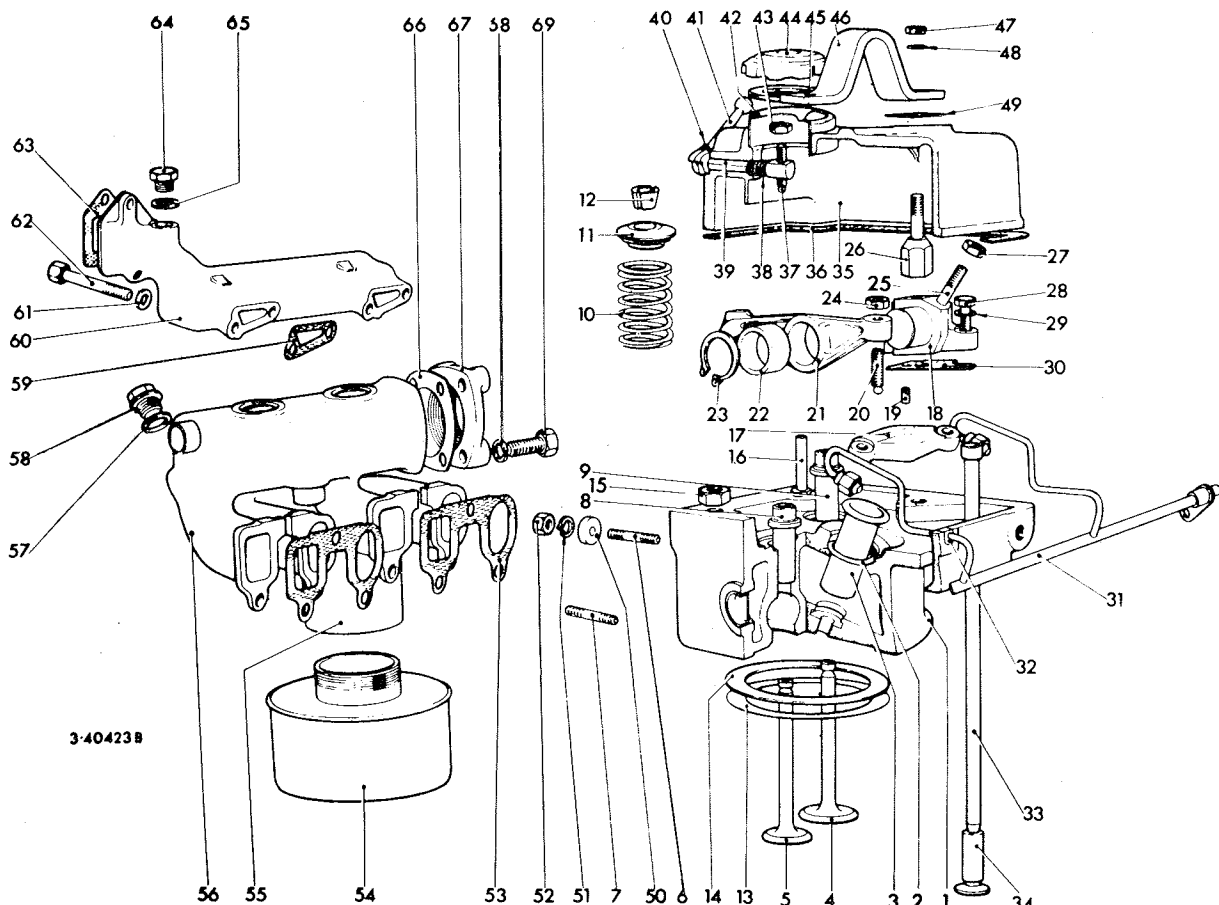
PLATE 3

CYLINDER HEAD & MANIFOLDS

Illus. No. Description Part No. No. per Eng. 2 cyl. 3 cyl.

MANIFOLD & AIR CLEANER

Illus. No.	Description	Part No.	No. per Eng. 2 cyl.	No. per Eng. 3 cyl.
50	CLAMP WASHER	351-11630	2	3
51	SPRING WASHER	027-00413	6	9
52	NUT—Brass 5/16" UNF	270-00014	6	9
53	JOINT—Inlet & Exhaust Manifold	352-40311	2	3
54	SILENCER—Air Inlet	389-03025	1	1
55	MANIFOLD—Air Inlet	352-40272	1	1
	—Air Inlet	353-40272	1	1
56	—Water Cooled Exhaust	352-40280	1	1
	—Water Cooled Exhaust	353-40280	1	1
57	JOINT—Plug	013-21778	2	3
58	PLUG—Manifold	007-00407	2	3
59	JOINT—Manifold to Cylinder Head	351-40170	2	3
60	MANIFOLD—Water Outlet	572-60060	1	1
	—Water Outlet	572-60070	1	1
	RESTRICTOR PLATE	352-60420	2	3
	RESTRICTOR PIPE	352-60460	1	1
	SPRING WASHER	027-00413	4	6
61	BOLT—5/16" UNF x 2 1/4"	270-00066	1	1
62	JOINT—Water Manifold to Thermostat Plug	351-42130	1	1
63	JOINT	027-01815	1	1
64	JOINT	291-30630	1	1
65	JOINT	292-21020	1	1
66	EXHAUST FLANGE	292-21010	1	1
67	SPRING WASHER	027-00413	4	4
68	BOLT—5/16" UNF x 1 1/2"	270-00063	4	4
69	EXPANSION PLUG—Exhaust Manifold	027-00768	2	4
	BLANKING PLUG—Air Inlet Manifold	027-01993	1	1
	MAINTENANCE TRANSFER	351-31730	1	1
	CONNECTION—1/2" Dia x 1" Pipe	027-06001	1	1
	CONNECTION—1/2" Dia x 4 1/2" Pipe	351-41250	1	1
	TEE PIECE—Bypass Pipe	352-40300	1	1
	CONNECTION—1 5/8" OD x 1 1/4" Hose	351-40810	2	2
	HOSE CLIP	027-04689	4	4
	CONNECTION—Tee Piece to Exhaust			
	Manifold Hose	351-40820	1	1
	HOSE CLIP	027-04687	2	2
	CONNECTION—Thermostat Pipe 1/2" dia x 1"	027-06001	1	1
	CONNECTION—1 1/8" OD x 1 5/16" Hose	351-40632	1	1
	HOSE CLIP	027-04687	2	2





MARINE ENGINE BEARER/STARTER MOTOR BRACKET

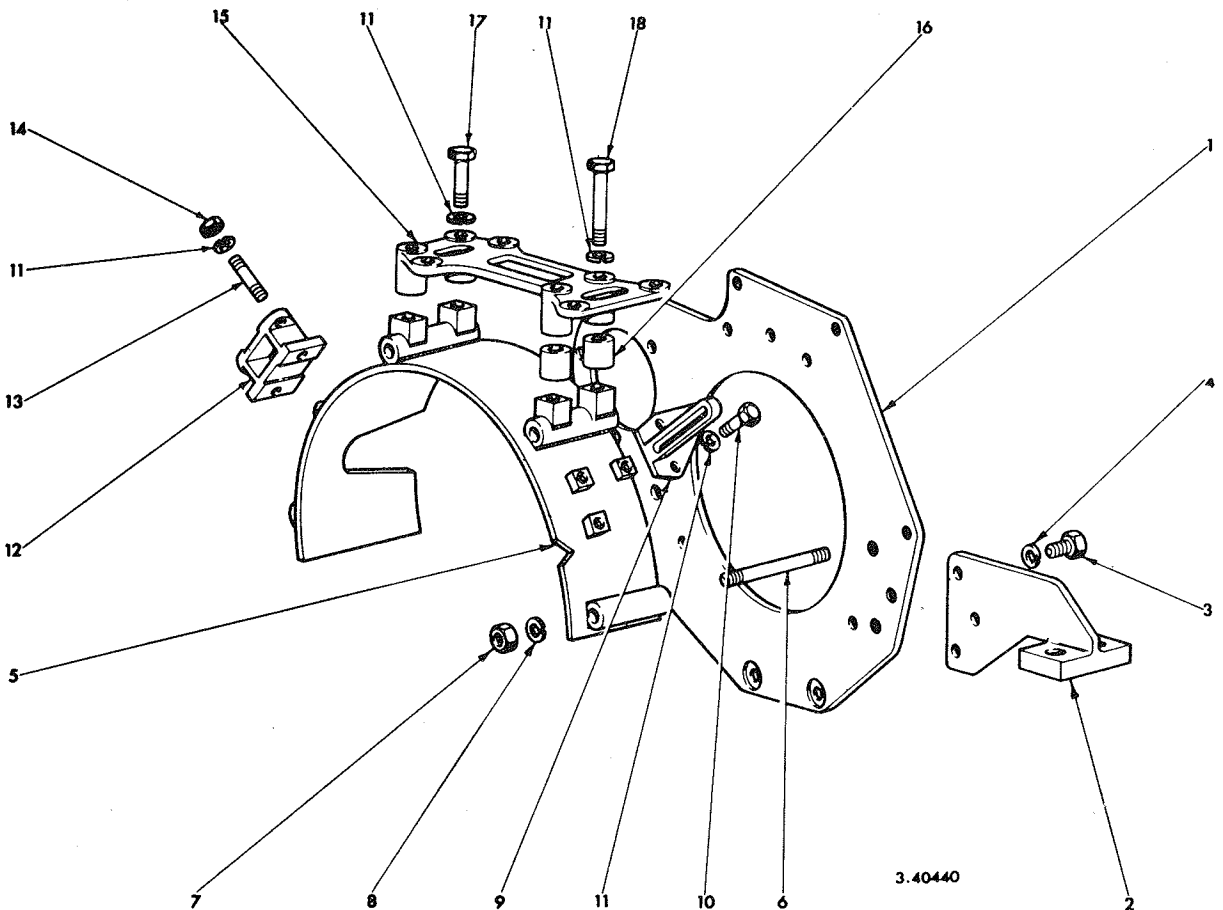
Illus No. Description Part No. No. per Eng. 2 CVI 3 CVI

MARINE ENGINE BEARER/STARTER MOTOR BRACKET

1	STARTER MOTOR BRACKET	...	...	351-40401	1	1
2	SETSCREW-Bracket 3/8" UNF x 1"	...	...	270-00073	4	4
3	Bracket 3/8" x 7/8"	...	...	270-00072	1	1
4	Bracket 3/8" UNF x 3/4"	...	...	270-00071	2	2
5	SPRING WASHER	...	...	027-00393	7	7
6	HIGH LEVEL BEARERS	...	...	351-13022	2	2
7	BOLT-High Level Bearers 7/16" UNF x 1"	...	...	270-00335	6	6
8	SPRING WASHER	...	...	027-00984	6	6
9	GUARD-Flywheel	...	...	351-40411	1	1
10	STUD-3/8" UNF x 5 1/4"	...	...	270-00461	5	5
11	NUT-3/8" UNF	...	...	270-00004	5	5
12	SPRING WASHER	...	...	027-00393	5	5
13	BRACKET-Jockey Pulley	...	...	351-40840	1	1
14	SETSCREW-Jockey Pulley Bracket 5/16" UNF x 5/8"	...	...	270-00059	3	3
15	SPRING WASHER	...	...	027-00413	9	9
16	BRACKET-Water Pump	...	...	351-44000	1	1
17	STUD-5/16" x 4 3/4"	...	...	270-00609	2	2
18	NUT-5/16" UNF	...	...	270-00003	2	2
19	SPRING WASHER	...	...	027-00413	2	2
20	HEAT EXCHANGER PLATFORM	...	...	351-40470	1	1
21	DISTANCE PIECE	...	...	351-40460	2	2
22	BOLT-5/16" UNF x 2 1/4"	...	...	270-00066	2	2
23	BOLT-5/16" UNF x 3"	...	...	270-00106	2	2

Governor Weights and Springs

REV/MIN RANGE	GOV. WEIGHT			WEIGHT SPRINGS		
	PART No.	IDENT. No.	No. PER SET	PART No.	COLOUR	No. PER SET
1000-1250	572-11393	22	2	203-10824	WHITE	2
1260-1350	572-11393	22	2	351-11510	YELLOW	2
1400-1700	572-11391	3	2	351-11510	YELLOW	2
1750-2000	572-11680	24	2	351-11510	YELLOW	2
2010-2200	572-11650	12	2	351-11510	YELLOW	2



3.40440

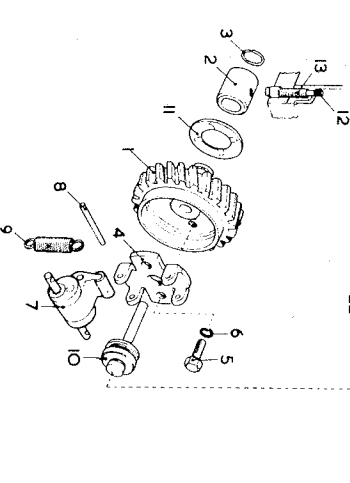
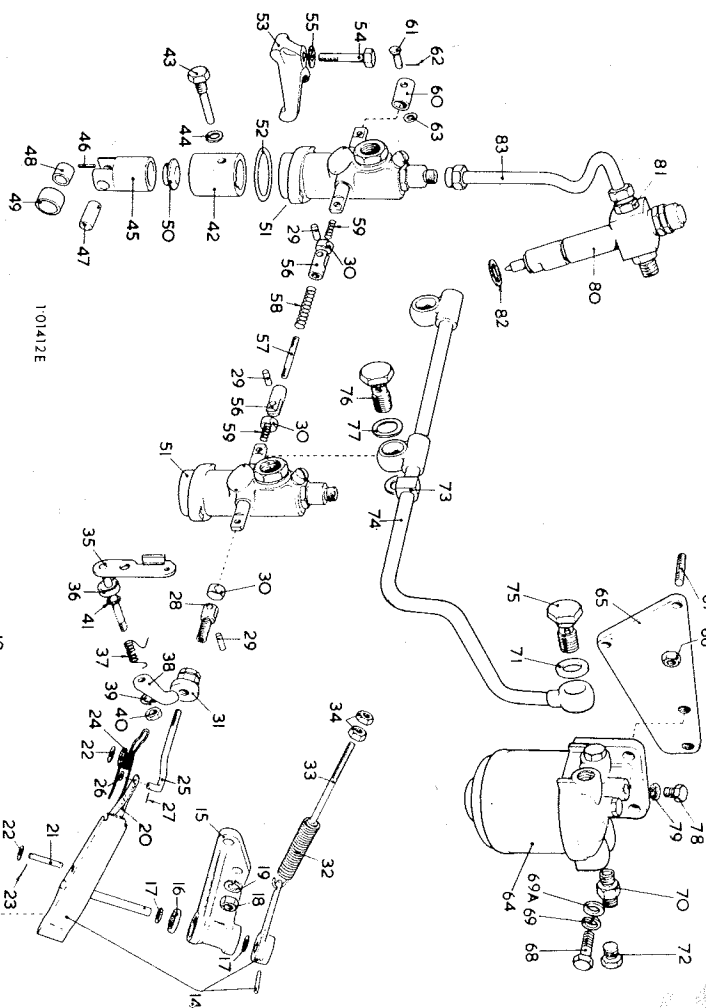
Illus. No.

Description

Part No.

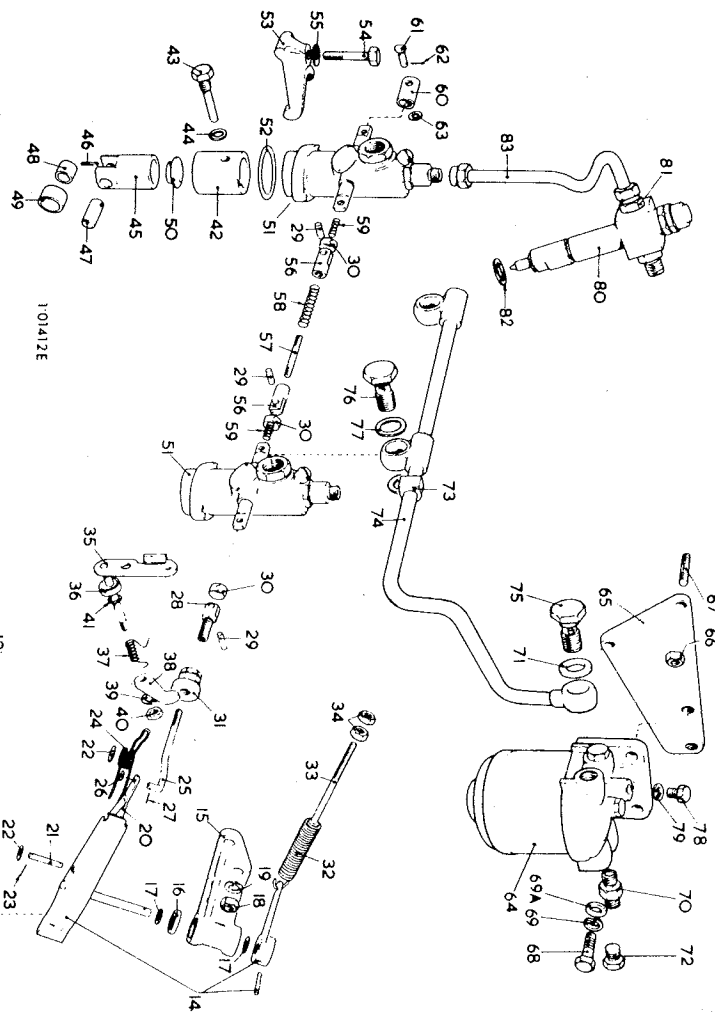
No. Per Eng.  
2 cyl 3 cyl

Illus. No.	Description	Part No.	No. Per Eng. 2 cyl 3 cyl
<b>GOVERNOR</b>			
1	GOVERNOR GEAR & HUB ASSEMBLY ...	351-10760	1 1
2	GOVERNOR BEARING ...	351-10842	1 1
3	RETAINING RING—Governor Bearing ...	351-10850	1 1
4	WEIGHT CARRIER ...	351-10750	1 1
5	BOLT—Weight Carrier—1/4" UNF x 1/2" ...	270-00054	2 2
6	SPRING WASHER—Weight Carrier ...	027-00451	2 2
8	GOVERNOR WEIGHT—See table on Page 24		
9	PIN—Governor Weight ...	201-10720	2 2
10	WEIGHT SPRING—See table on Page 24		
	THRUST BEARING & SHAFT ASSEMBLY		
	Comprising ...	572-10001	1 1
	SHAFT ...		1 1
	WASHER ...		1 1
	THRUST RACE ...		1 1
	THRUST CAP ...		1 1
	CIRCLIP—Thrust Cap ...		1 1
11	THRUST WASHER—Governor Gear ...	351-10740	1 1
12	LOCATING PLUNGER ...	351-10861	1 1
13	PLUNGER SPRING ...	351-12920	1 1
	GOVERNOR LEVER & BRACKET ASSEMBLY		
	Comprising ...	572-10890	1 1
14	GOVERNOR LEVER & SPRING LEVER		
	ASSEMBLY Comprising	572-10022	1 1
	GOVERNOR LEVER ASSEMBLY		
	SPRING LEVER ...		1 1
	TAPER PIN ...		1 1
	PAD ...		1 1
	SCREW—Hammer Drive ...		1 1
15	BRACKET—Governor Lever ...	351-10951	1 1
16	BALL BEARING ...	351-11480	2 2
17	DISTANCE WASHER ...	351-10990	2 2
18	NUT—Bracket—5/16" UNF ...	270-00003	2 2
19	SPRING WASHER ...	027-00413	2 2
20	LEVER—Spring Link ...	351-10960	1 1
21	PIN—Spring Link Lever ...	351-10970	1 1
22	WASHER—Pin ...	064-06612/005	4 4
23	SPLIT PIN ...	027-01986	2 2
24	SPRING—Spring Link Lever ...	351-10980	1 1



Illus. No. Description Part No. No. Per Eng.  
2 cyl 3 cyl

Illus. No.	Description	Part No.	No. Per Eng. 2 cyl 3 cyl
25	GOVERNOR (Cont)		
25	CONNECTING ROD ... ..	351-11020	1 1
26	WASHER—Connecting Rod ... ..	064-06612/005	1 1
27	SPLIT PIN ... ..	027-01986	1 1
28	FORK ... ..	572-11870	1 1
29	PIN—Fork ... ..	351-11472	3 5
30	SPRING CLIP ... ..	351-34990	3 5
31	OVERLOAD STOP ... ..	351-11062	1 1
32	SPEEDER SPRING ... ..	351-11011	1 1
33	ADJUSTING SCREW—1000—2200 rev/min	382-00243	1 1
34	LOCKNUT—3/16" UNF ... ..	270-00001	2 2
—	END PLATE ASSEMBLY Comprising	572-11821	1 1
—	END PLATE ASSEMBLY	572-10032	1 1
35	STOPPING LEVER ASSEMBLY	351-11111	1 1
36	DISTANCE PIECE ... ..	351-11140	1 1
—	STOPPING LEVER ASSEMBLY	027-02012	1 1
37	SPRING ... ..	351-11151	1 1
38	CONTROL LEVER ... ..	351-11160	1 1
39	SPRING WASHER ... ..	027-00451	1 1
40	NUT—1/4" UNF ... ..	270-00036	1 1
41	JOINT RING ... ..	201-13120	1 1
—	FUEL PUMP & TAPPET		
42	GUIDE—Pump Tappet ... ..	201-11471	2 3
43	LOCATING PIN—Tappet ... ..	201-11481	2 3
—	LOCATING PIN—Tappet (Fuel Lift Pump Fitted)	351-12130	2 3
44	WASHER—Locating Pin ... ..	616-01608	2 3
—	TAPPET ASSEMBLY Comprising	570-10030	2 3
45	TAPPET ... ..	201-11431	2 3
46	RETAINING PIN—Roller Pin ... ..	201-11460	2 3
47	ROLLER PIN—Tappet ... ..	201-11451	2 3
48	ROLLER BUSH—Tappet ... ..	291-22550	2 3
49	ROLLER—Tappet ... ..	291-22560	2 3
50	TAPPET CAP ... ..	201-11441	2 3
51	FUEL PUMP—Bryce FAOAB080P0454	351-51080	2 3
—	ELEMENT (1-312)	660-13630	2 3
52	DELIVERY VALVE & SEAT (1-342)	660-13640	2 3
—	SHIM—Fuel Pump—0.005" ... ..	201-11520	As Reqd.
—	—0.010" ... ..	201-11530	As Reqd.
53	CLAMP—Fuel Pump ... ..	201-11540	2 3



Illus. No. Description Part No. No. per Eng. 2 cyl 3 cyl

FUEL PUMP & TAPPET (Cont)

54	BOLT—Fuel Pump Clamp—5/16" UNF x 1 3/4"	270-00064	2	3
55	WASHER—Fuel Pump Clamp ...	201-11560	2	3
56	SHACKLE ...	202-12003	2	4
57	CONNECTING ROD—Fuel Pump	351-11040	1	2
58	EXTERNAL SPRING ...	351-11050	1	2
59	INTERNAL SPRING ...	202-12020	2	4
60	STOP SLEEVE ...	351-11291	1	1
61	PIN ...	202-13671	1	1
62	SPLIT PIN ...	027-01986	1	1
63	PLAIN WASHER ...	064-02580/004	1	1

FUEL FILTER & PIPES

64	FUEL FILTER Complete	354-28360	1	1
—	ELEMENT—Fuel Filter ...	351-29760	1	1
65	BRACKET—Fuel Filter ...	351-11271	1	1
66	NUT—Self Locking 1/4" UNF	270-00153	3	3
67	STUD—1/4" UNC x 1"	270-00654	3	3
68	SETSCREW—5/16" UNF x 3/4"	270-00060	2	2
69	SPRING WASHER ...	027-00413	2	2
69A	PLAIN WASHER ...	027-00082	2	2
70	INLET UNION—Filter ...	352-28760	1	1
71	JOINT ...	013-22350	5	5
72	BLANKING PLUG ...	354-28530	2	2
73	BUSH—Rubber ...	201-11271	1	1
74	FUEL PIPE—Filter to Pump	352-28720	1	1
75	FUEL PIPE—Filter to Pump	353-28720	—	—
76	PLUG—Swivel Union ...	354-28630	1	1
77	JOINT—Swivel Union ...	201-53400	2	3
78	VENT PLUG ...	201-12970	4	6
79	JOINT—Copper ...	352-28740	1	1
80	FUEL INJECTOR COMPLETE Comprising	354-26310	1	1
—	NOZZLE VALVE—HL176S27D525P2	351-40091	2	3
81	INLET UNION with Edge Filter	351-21451	2	3
—	JOINT—Inlet Union ...	572-10590	2	3
—	RUBBER PLUG—Fuel Injector Cap Nut	352-29960	2	3
82	JOINT ...	351-50800	2	3
—	JOINT ...	351-40230	2	3
83	FUEL PIPE—Pump to Injector	351-10590	2	3

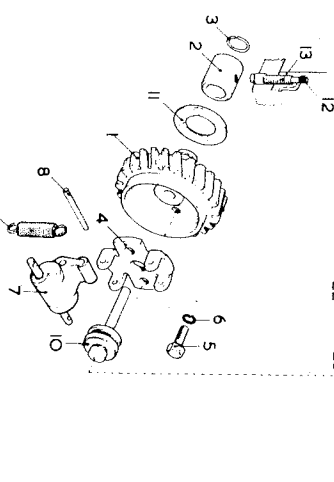
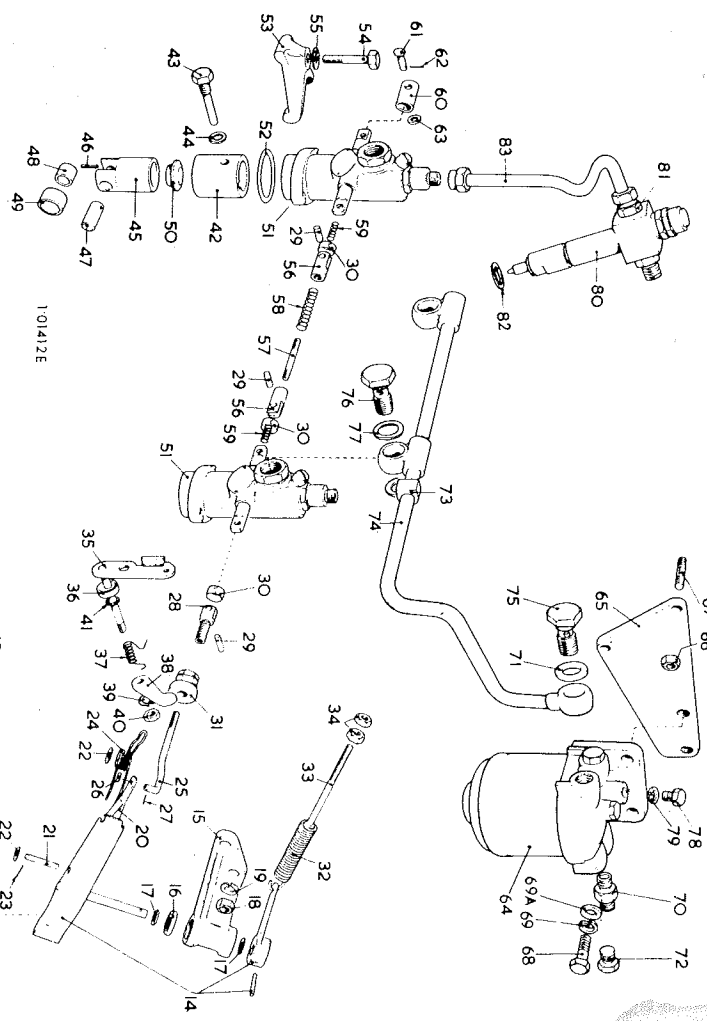
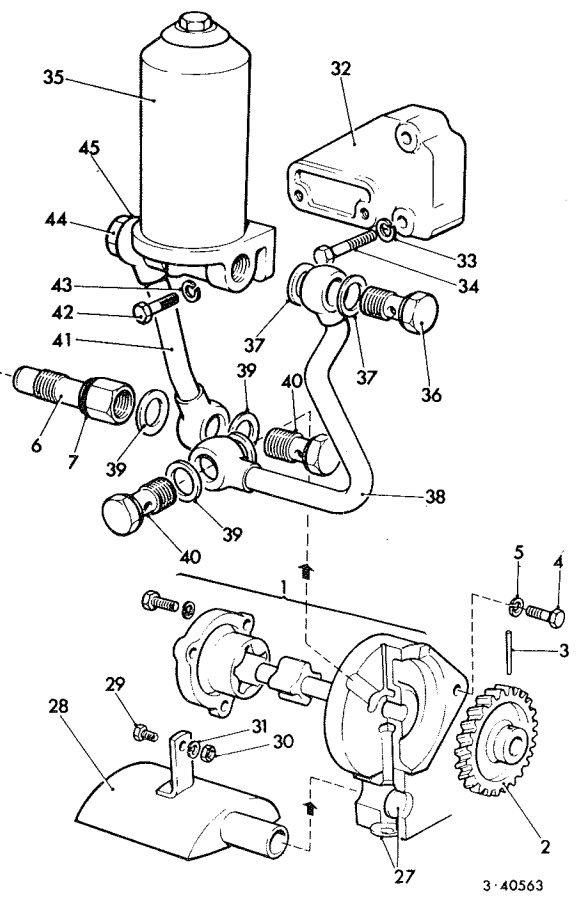


PLATE 5

GOVERNOR, FUEL PUMP & FUEL FILTER

Illus. No.	Description	Part No.	No. per Eng.
	<b>LUBRICATING OIL PUMP</b>		2 cyl. 3 cyl.
1	LUBRICATING OIL PUMP ASSEMBLY - ACW-	572-11740	1
2	Comprising ...	353-11820	1
3	LUBRICATING OIL PUMP	351-10631	1
	DRIVING GEAR ...	351-12981	1
	MILLS PIN-Driving Gear ...		
	<b>LUBRICATING OIL PUMP ASSEMBLY - CW-</b>		
	Comprising ...	572-11741	1
	LUBRICATING OIL PUMP - Plus		
	Items 2 & 3	353-11821	1
4	SETSCREW 5/16" UNF x 3/4"	270-00060	2
5	SPRING WASHER ...	027-00413	2
	<b>LUBRICATING OIL RELIEF VALVE &amp; PIPES</b>		
6	CONNECTOR-Oil Pipe ...	351-11781	1
7	'O' RING-Oil Pipe ...	354-31640	1
8	OIL PIPE-Inlet Connection to T Piece ...	352-11891	1
9	'O' RING-Oil Pipe ...	352-11911	1
10	RELIEF VALVE ASSEMBLY Comprising	572-11770	1
	RELIEF VALVE BODY ...	351-11791	1
	BALL-1/2" Dia. ...	007-00425	1
11	SPRING CARRIER ...	351-11800	1
12	SPRING ...	351-11810	1
13	SPRING CAP ...	201-12570	1
14	SPLIT PIN ...	027-02252	1
15	WASHER - to adjust Oil Pressure	064-06612/004	As Req'd.
16	OIL PIPE-Main Bearing Flywheel End ...	352-11870	1
17	OIL PIPE-Main Bearing Flywheel End ...	353-11870	1
18	OIL PIPE-Main Bearing Governor End ...	352-11880	1
19	PLUG-'T' Piece ...	351-12720	1
	OIL PIPE-'T' Piece ...	352-12730	1
	TUBING SLEEVE-Oil Pipe ) Use with	201-12990	1
	SLEEVE NUT-Oil Pipe ) 352-12730	201-13000	1
20	OIL PIPE-Between 'T' Pieces No. 1 & 3 Cyl	352-12740	1
21	OIL PIPE-Between 'T' Pieces No. 2 Cyl	352-12750	1
22	OIL PIPE-'T' Piece to Rocker Bracket.	351-53120	4
	OIL PIPE-Between 'T' Pieces	353-12950	1
23	'T' PIECE ...	201-11662	3
24	BUSH-Oil Pipe ...	201-12280	5



LUBRICATING OIL SYSTEM

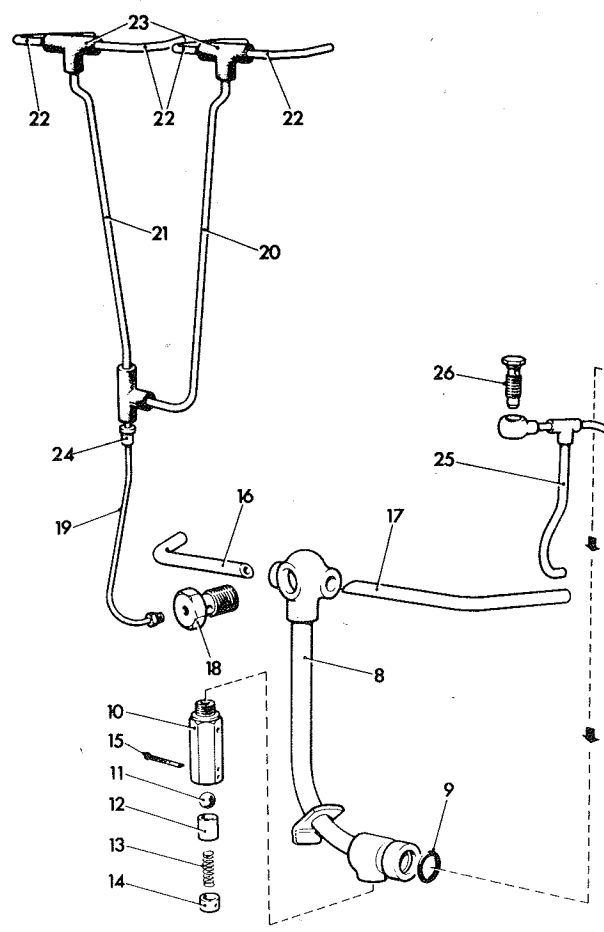


PLATE 6



Illus. No. Description Part No. No. per Eng. 2 cyl. 3 cyl.

LUBRICATING OIL RELIEF VALVE & PIPES (Cont)

25	OIL PIPE—Camshaft to Governor	351-11941	1	1
6	PLUG—Oil Pipe	351-10611	1	1
	LOCK WASHER—Use with 351-10611	351-15051	1	1
27	PLUG—Oil Pipe	023-02308	1	1
	EXPANSION PLUG	027-00757	2	2
	SOCKET SETSCREW—5/16" UNF x 3/8"	270-00051	6	6

LUBRICATING OIL STRAINER

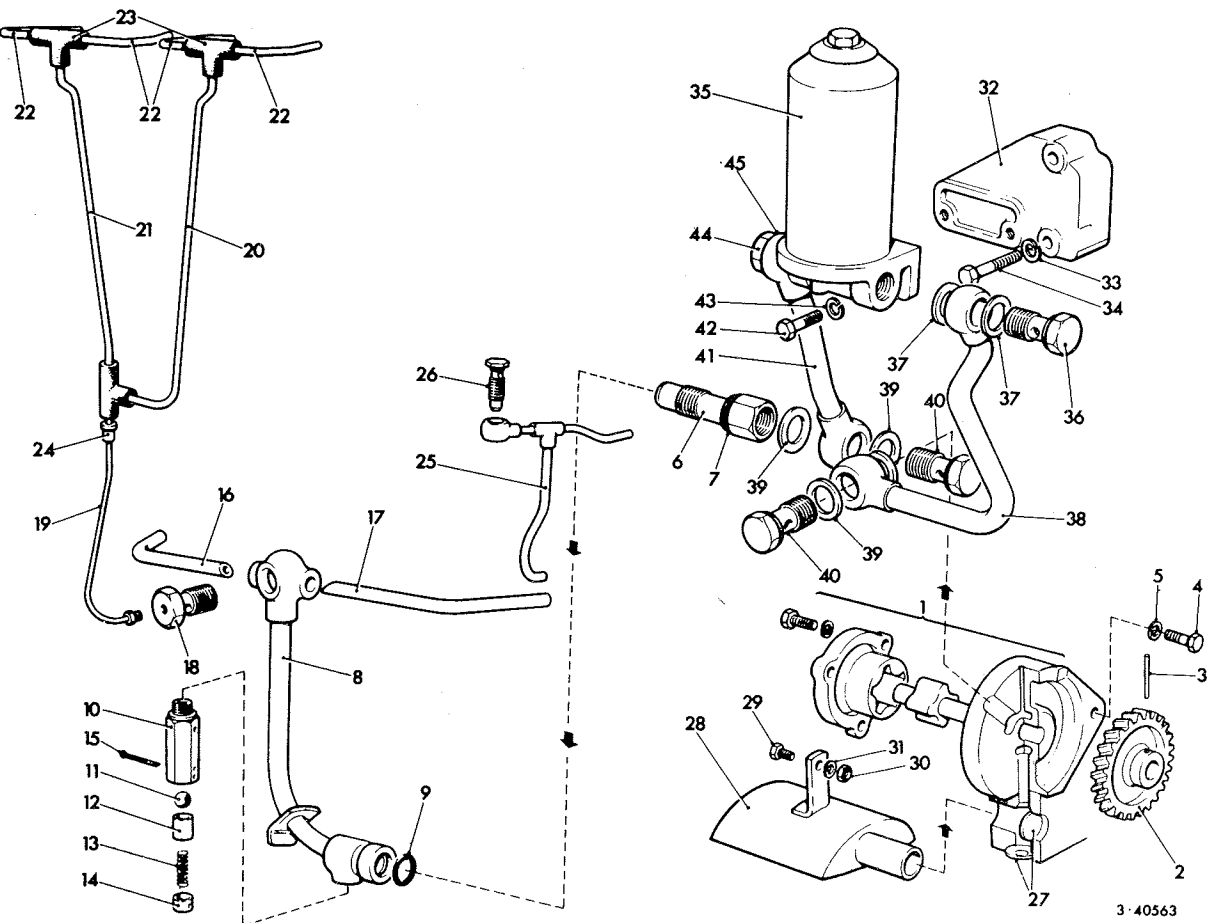
28	LUBRICATING OIL STRAINER Complete	351-10432	1	1
29	BOLT—5/16" UNF x 7/8"	270-00024	1	1
30	NUT—5/16" UNF	270-00003	1	1
31	SPRING WASHER	027-00413	1	1

LUBRICATING OIL FILTER

32	FILTER BRACKET	351-30510	1	1
33	SPRING WASHER	027-00393	2	2
34	BOLT—Bracket to Reverse Casing— 3/8" UNC x 1 3/4"	270-00578	2	2
35	FILTER—Purolator MF 2604	352-13100	1	1
	FILTER ELEMENT—MF 26 A	352-31720	1	1
	SET OF JOINTS—Filter	679-12190	1	1
36	PLUG—Swivel Union Pipe to Filter	023-04315	1	1
37	JOINT	013-21778	2	2
	DRAIN PLUG	011-13693	1	1
	JOINT	013-22350	1	1
38	OIL PIPE—Crankcase to Filter	351-30520	1	1
39	JOINT	013-21778	4	4
40	PLUG—Swivel Union Pipe to Crankcase	023-02308	2	2
41	OIL PIPE—Filter to Crankcase	351-30530	1	1
42	SETSCREW—Filter to Bracket—3/8" UNF x 7/8"	270-00072	2	2
43	SPRING WASHER	027-00393	2	2
44	PLUG—Swivel Union Pipe to Filter	023-02308	1	1
45	JOINT	013-21778	2	2

DIPSTICKS

	DIPSTICK—Fitted in Crankcase Door (No. 9)	572-10250	1	1
	'O' RING—Supplied with Dipstick	201-13120	1	1



3-40563

**PLATE 7 CENTRIFUGAL WATER PUMP & THERMOSTAT**

Illus. No. Description Part No. No. per Eng. 2 cyl. 3 cyl.

**CENTRIFUGAL PUMP**

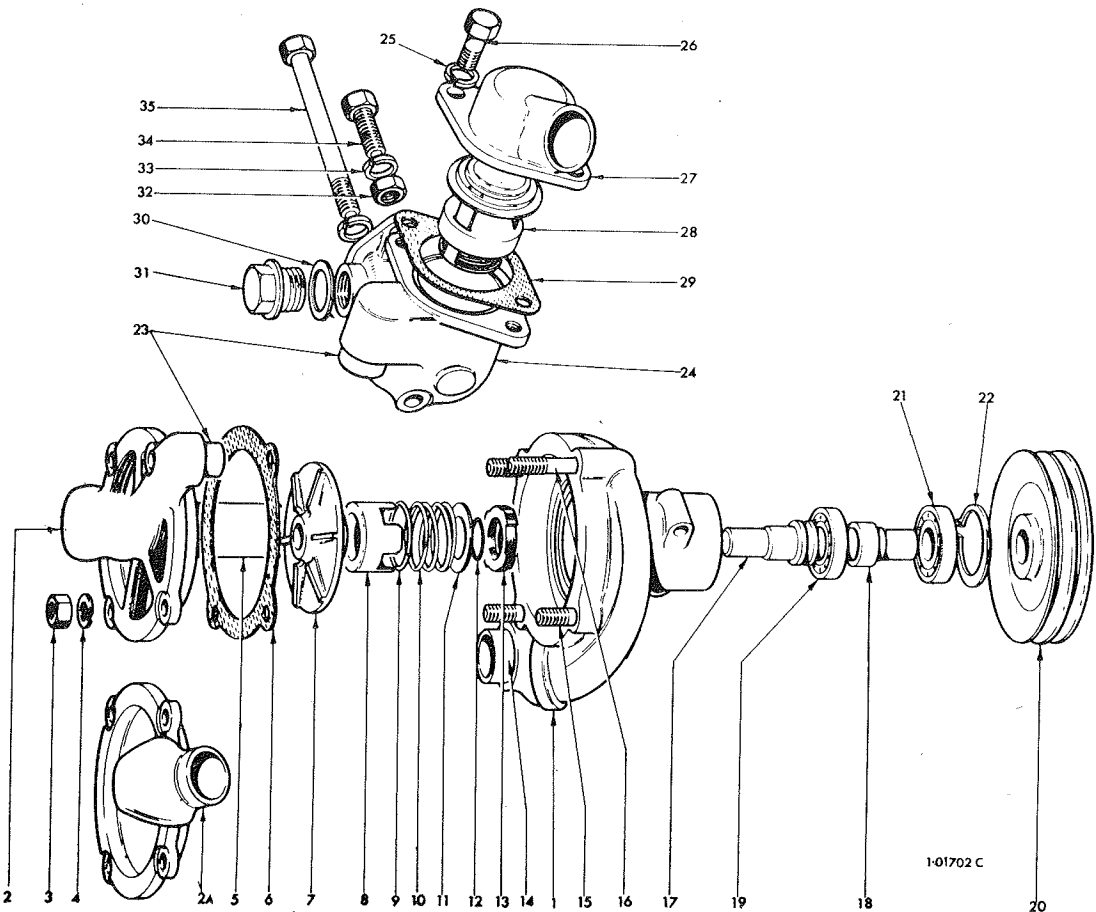
—	PEDESTAL—Water Pump	351-44000	1	1
—	STUD—Pedestal 5/16" UNF x 4 3/4"	270-00609	2	2
—	NUT—Pedestal 5/16" UNF	270-00003	2	2
—	SPRING WASHER	027-00413	2	2
—	DELIVERY HOSE	351-40722	1	1
—	CLIP—Hose	027-04231	2	2
—	WATER PUMP ASSEMBLY—Marine ACW			

1	Comprising	572-40130	1	1
1	PUMP BODY ASSEMBLY	351-43920	1	1
2A	PUMP COVER	351-40330	1	1

—	Plus Items 3 to 22			
—	WATER PUMP ASSEMBLY—Marine CW			

—	Comprising	572-40131	1	1
—	PUMP BODY ASSEMBLY	351-43930	1	1
2A	PUMP COVER	351-40330	1	1

3	Plus Items 3 to 22			
3	NUT—Cover—5/16" UNF	270-00003	4	4
4	SPRING WASHER	027-00413	4	4
5	Not listed separately			
6	JOINT—Cover	351-40340	1	1
—	IMPELLER ASSEMBLY Comprising	572-40022	1	1
7	IMPELLER	351-40382	1	1
8	CARBON DRIVER	291-38850	1	1
9	DISTANCE PIECE	291-30350	1	1
10	SPRING	291-21524	1	1
11	BACKING PLATE	291-38860	1	1
12	SEALING RING	291-25271	1	1
13	CARBON SEAL	291-21502	1	1
14	Not listed separately			
15	STUD—Cover 5/16" x 1" UNF	270-00131	4	4



1-01702 C

**PLATE 7 CENTRIFUGAL WATER PUMP & THERMOSTAT**

CENTRIFUGAL WATER PUMP & THERMOSTAT

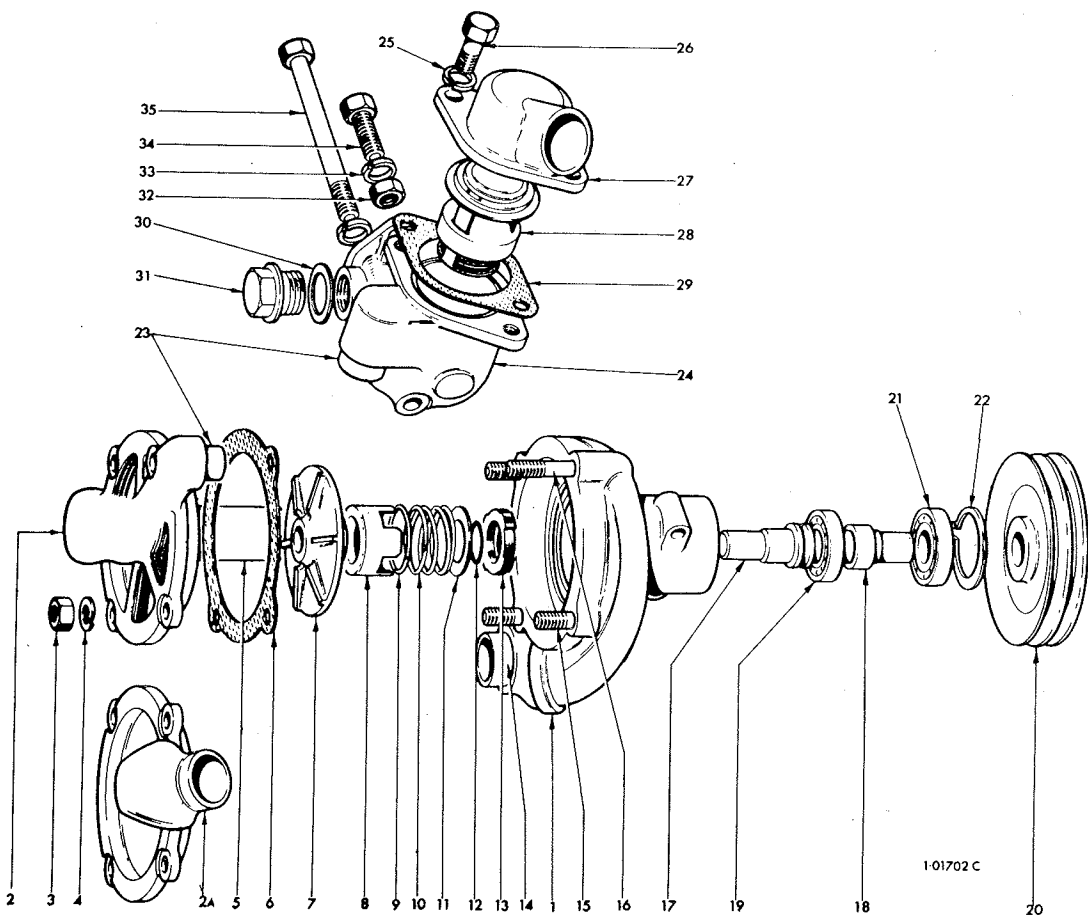
Illus. No. Description Part No. No. per Eng. 2 cyl. 3 cyl.

IMPELLER ASSEMBLY (Cont.)

16	Industrial Only	...	...	...
17	IMPELLER SPINDLE	351-43980	1	1
18	SPACER	351-43970	1	1
19	BEARING—Small	351-43940	1	1
20	PULLEY—Vee Belt Marine	351-41870	1	1
21	BEARING—Large	351-43950	1	1
22	CIRCLIP	351-43960	1	1
	VEE BELT—Marine	351-41910	2	2

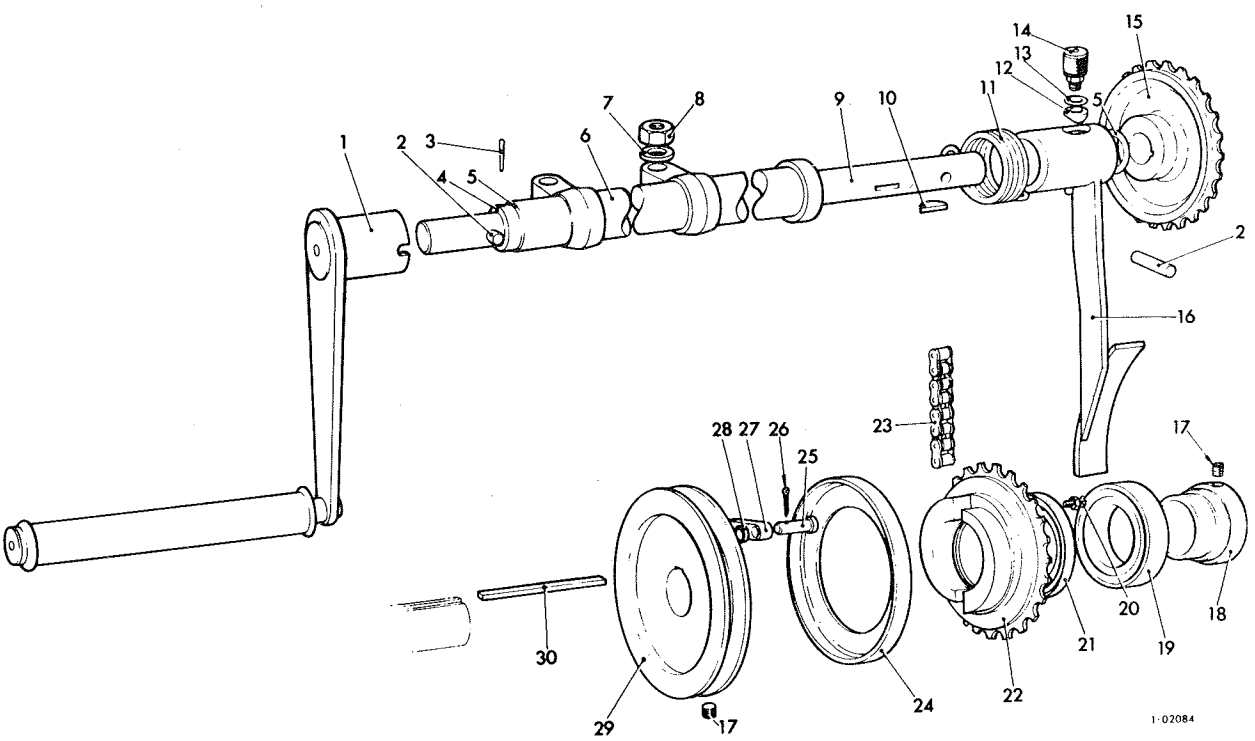
THERMOSTAT

	THERMOSTAT ASSEMBLY—Marine Comprising				
23	PIPE CONNECTION	027-04599	1	1	1
24	THERMOSTAT BODY	351-40512	1	1	1
25	SPRING WASHER	027-00413	2	2	2
26	SETSCREW—5/16" UNF x 3/4"	270-00060	2	2	2
27	INDUSTRIAL Cover Illustrated				
	THERMOSTAT COVER	351-40540	1	1	1
28	THERMOSTAT UNIT	354-44070	1	1	1
29	JOINT	291-27510	1	1	1
30	Not reqd. when water cooled exhaust manifold is fitted.				
31	NUT—5/16" UNF	270-00003	2	2	2
32	SPRING WASHER	027-00413	2	2	2
33	SETSCREW—5/16" UNF x 1 1/4"	270-00182	1	1	1
34	BOLT—5/16" UNF x 4"	270-00105	1	1	1
35	JOINT—Thermostat Body to Water Manifold	351-42130	1	1	1
	RUBBER HOSE—Pump to Engine 1 1/4" Bore x 3 1/2"	307-00649	1	1	1
	HOSE CLIP	027-04231	2	2	2



1-01702 C

Illus. No.	Description	Part No.	No. per eng 2 cyl 3 cyl
<b>RAISED HAND START</b>			
1	STARTING HANDLE ASSEMBLY ...	572-10110	1 1
2	PIN-Starting Handle ...	201-15710	2 2
3	TAPER PIN ...	027-01812	2 2
4	COLLAR-Locating Shaft ...	201-15670	1 1
5	SHIM... ..	201-15800	As Reqd.
-	SHAFT & TUBE ASSEMBLY-ACW	572-50410	1 -
-	-ACW	572-50420	1 -
-	-CW	572-50450	1 -
-	-CW	572-50460	1 -
6	TUBE ASSEMBLY ...	572-10090	1 -
-	-CW	572-10091	1 -
7	DISTANCE PIECE-Cylinder Head Nut	351-17910	1 1
8	NUT-Cylinder Head ...	351-13860	2 2
9	SHAFT ...	352-13820	1 -
-	SHAFT ...	353-13820	1 1
10	KEY-Sprocket ...	027-00103	1 1
11	SPRING-ACW ...	351-13890	1 1
-	-CW	351-13891	1 1
12	PAD-Grease Cup ...	351-13880	2 2
13	WASHER-Grease Cup ...	007-00420	2 2
14	GREASE CUP ...	027-00606	2 2
15	SPROCKET ...	351-13840	1 1
16	CHAIN TENSIONER ASSEMBLY-ACW	351-13930	1 1
-	-CW	351-13931	1 1
17	SOCKET SETSCREW-1/4" UNF x 3/8"	270-00211	2 2
18	COLLAR-Ratchet Bearing ...	201-15490	1 1
19	BALL BEARING-Ratchet ...	201-15830	1 1
20	GREASE NIPPLE ...	027-04541	1 1
21	PLATE-Ratchet Bearing	201-15500	1 1
22	RATCHET WHEEL & SPROCKET-ACW	351-13870	1 1
-	-CW	351-13871	1 1



1-02084

Description

Part No.

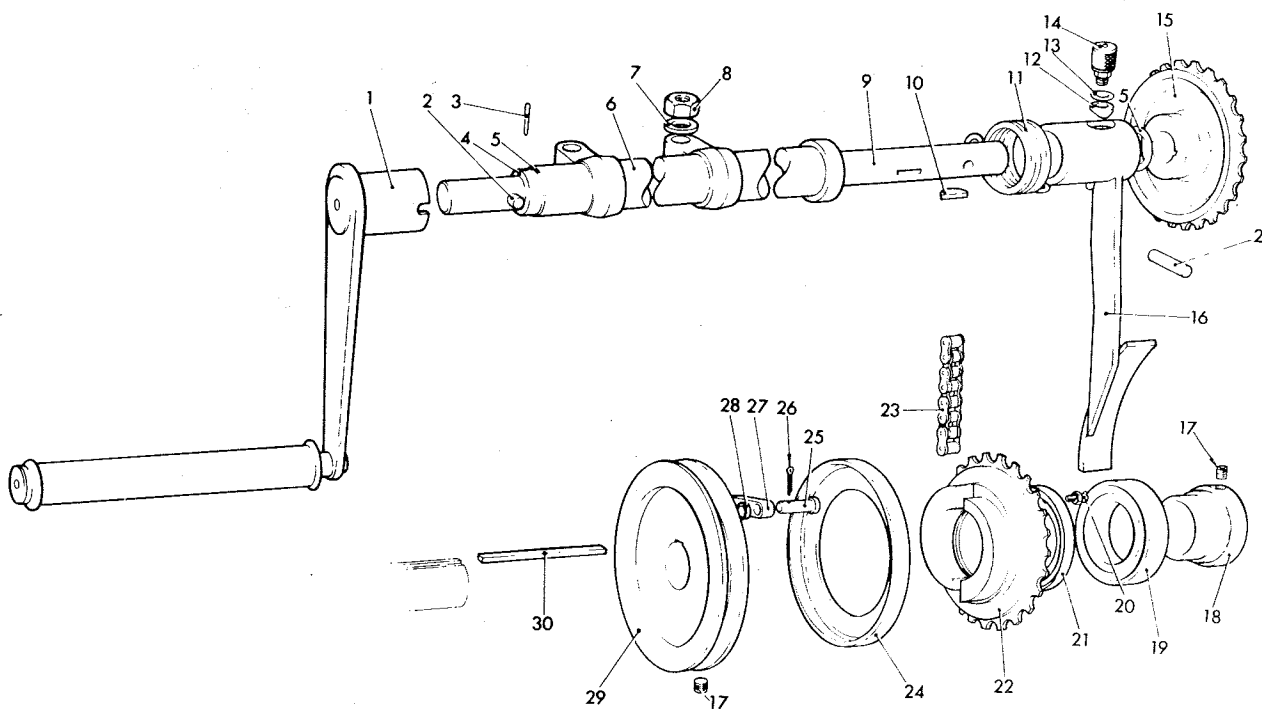
Illus. No.	Description	Part No.	No. per Eng.
3	RAISED HAND START (Cont.)		
3	CHAIN ... ..	351-13950	1 1
4	COVER—Ratchet ... ..	201-15560	1 1
5	PIN—Ratchet Pawl ... ..	201-15530	2 2
6	SPLIT PIN ... ..	027-02252	2 2
7	RATCHET PAWL ... ..	201-15520	2 2
8	SPACER—Ratchet Pawl ... ..	201-15540	2 2
9	DRIVING PULLEY—Dynamo ACW	351-41890	1 1
10	—Dynamo CW	351-41891	1 1
11	KEY ... ..	027-04318	1 1
12	GAS NIPPLE—Exhaust Pipe ... ..	027-00145	1 1
13	ELBOW—Exhaust Pipe Not Reqd when starting handle used at Flywheel end of engine only.	027-01624	1 1

**COUPLED DECOMPRESSORS**

DECOMPRESSOR LEVER ... ..	351-13550	2	3
SCREW—Decompressor Lever ... ..	064-06772/004	2	3
LOCK NUT ... ..	064-06649/003	2	3
CONNECTING ROD ASSEMBLY ... ..	352-16920	1	2

**SPANNERS**

SPECIAL FLAT SPANNER ... ..	027-04075	1	1
7/16" x 1/2" AF	027-03838	1	1
9/16" x 5/8" AF	027-03839	1	1
3/8" x 7/16" Whit.	027-00399	1	1
3/4" x 7/8" AF	027-04321	1	1
7/16" x 1/2" Whit.	027-00152	1	1
9/16" x 5/8" Whit.	027-00518	1	1



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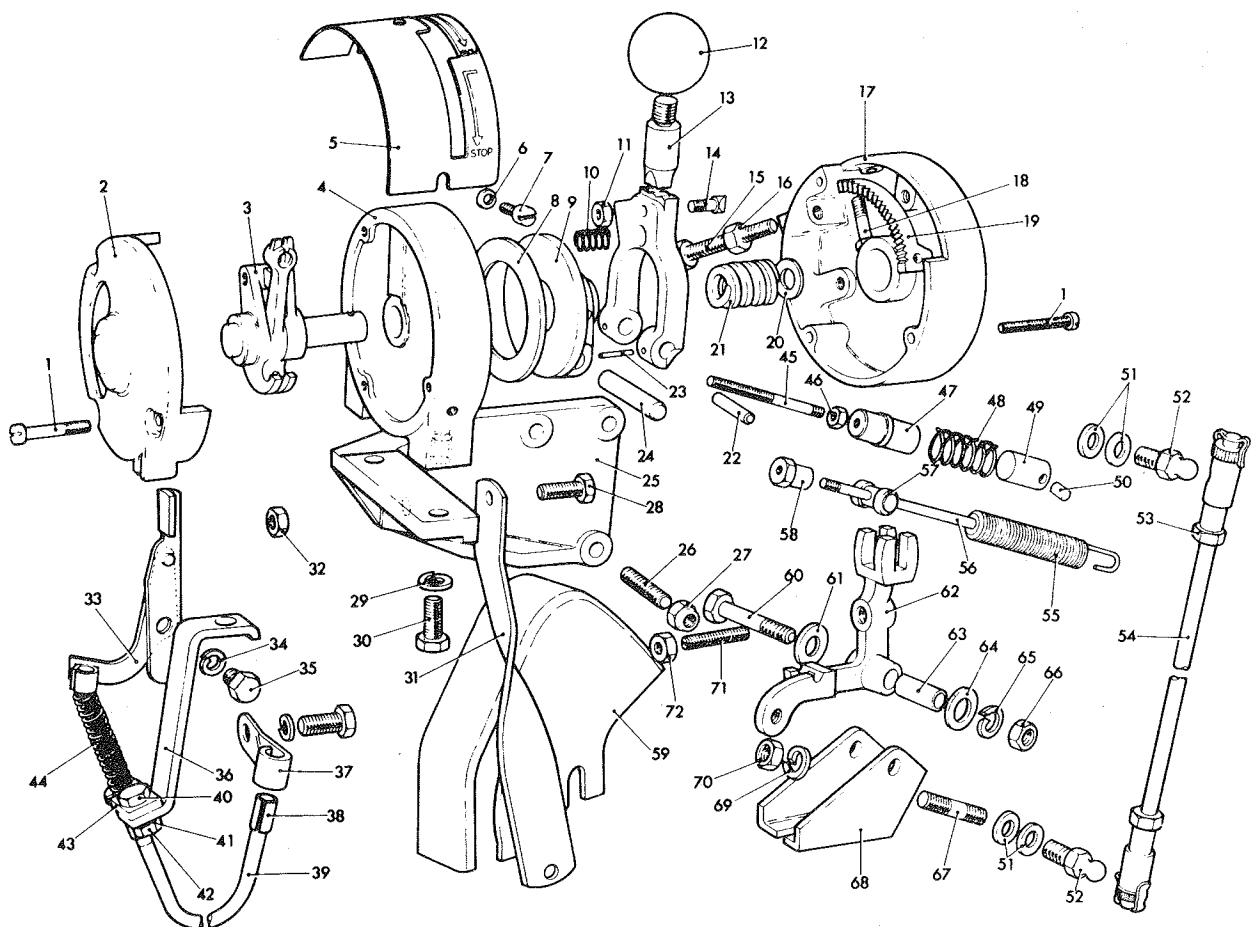
RAISED HAND START

PLATE 8



Illus. No. Description Part No. No. per Eng. 2 cyl. 3 cyl.

Illus. No.	Description	Part No.	No. per Eng. 2 cyl.	No. per Eng. 3 cyl.
1	CONTROL ASSEMBLY Comprising SETSCREW—Cheese Headed 3/16" UNC x 1 1/4" ...	572-10430	1	1
2	CONTROL COVER	270-00360	6	6
3	LEVER ASSEMBLY Comprising SPINDLE ... WASHER ...	351-15261	1	1
		572-10130	1	1
		351-15280	1	1
		351-15290	1	1
	SPEED CONTROL LEVER	351-15300	1	1
	STOPPING CONTROL LEVER	351-15310	1	1
	ACTUATING LEVER	351-15320	1	1
	LOCKING PIN	351-15330	1	1
4	BODY ...	351-15241	1	1
5	COVER PLATE ...	351-15271	1	1
6	WASHER—Cover Plate	064-06618/005	2	2
7	SETSCREW—Cheese Headed 3/16" UNC x 3/8" ...	270-00399	3	3
8	FRICTION DISC ...	351-15350	1	1
9	PRESSURE PLATE ...	351-15362	1	1
10	SPRING ...	351-15381	1	1
11	NUT—Detent Peg 3/16" UNF	270-00012	1	1
12	KNOB ...	291-30190	1	1
13	LEVER ...	351-15374	1	1
14	DETENT PEG ...	351-15390	1	1
15	BOLT—Lever Stop Adjustment 1/4" UNF x 2 1/4" Brass ...	270-00494	1	1
16	NUT—1/4" UNF Brass ...	270-00013	1	1
17	HAND LEVER COVER ...	351-15252	1	1
18	BOLT—Detent Plate 3/16" UNC x 7/8" Brass ...	270-00359	2	2
19	DETENT PLATE ...	351-15400	1	1
20	SHIM—Spring ...	351-15420	As Reqd.	
21	SPRING ...	351-15410	1	1
22	LOCKING PIN ...	351-15340	1	1
23	LOCKING PIN ...	351-18240	2	2
24	PIN ...	351-18231	1	1



3-40561

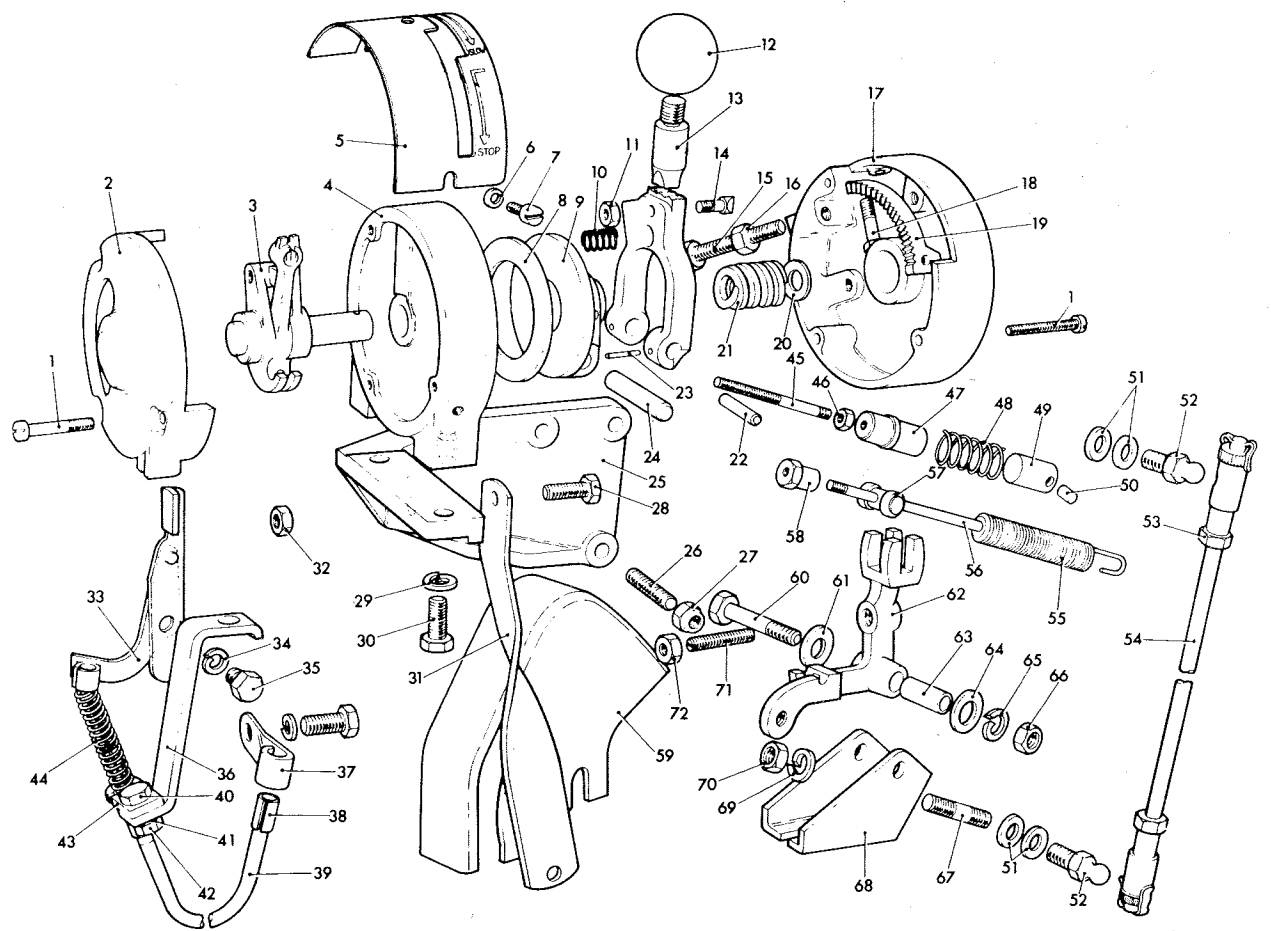
Plus. No.

Description

Part No.

No. per Eng.  
2 cyl/ 3 cyl

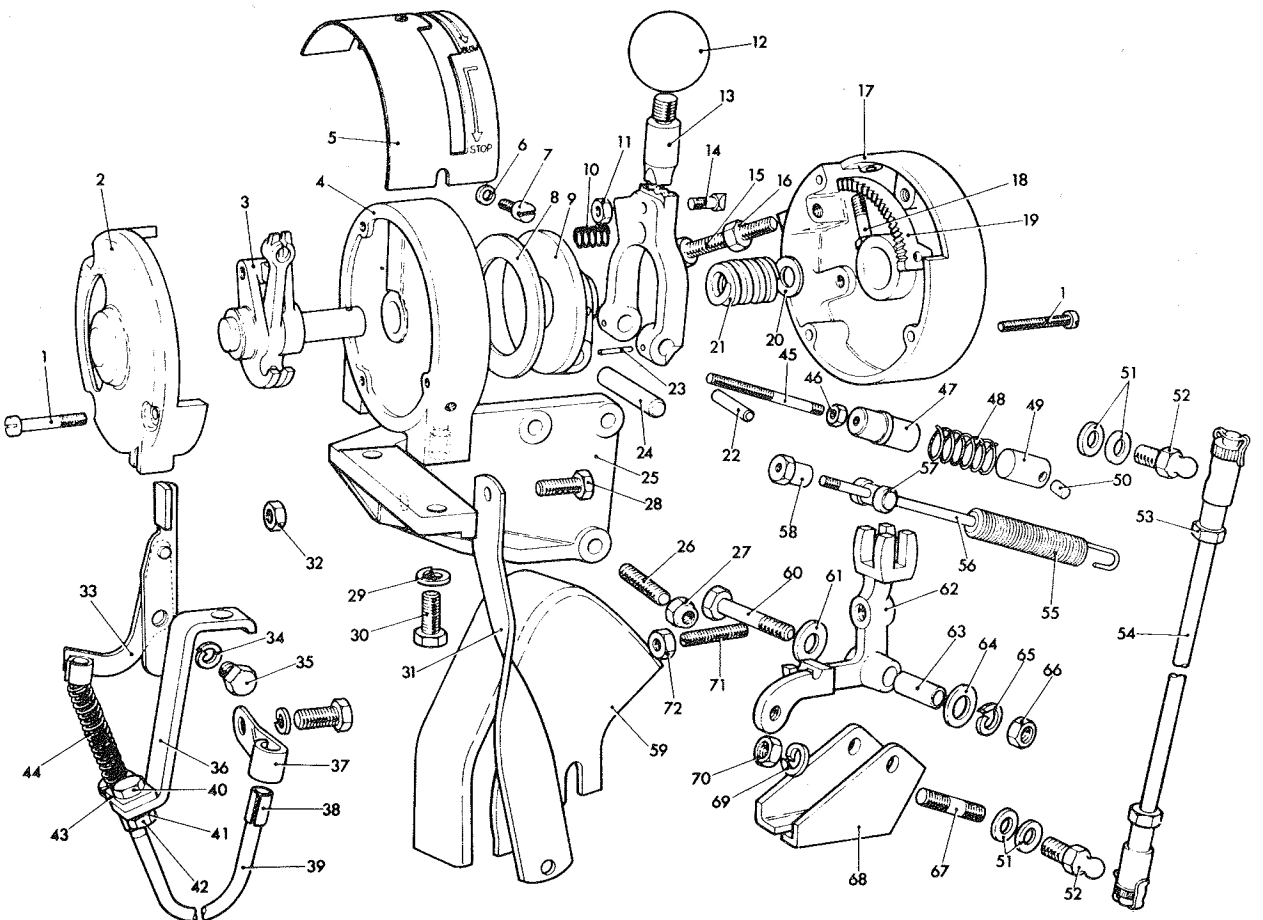
Plus. No.	Description	Part No.	No. per Eng. 2 cyl/ 3 cyl
27	MOUNTING BRACKET		
27	MOUNTING BRACKET—Control	351-16540	1 1
27	STUD—Bracket 1/4" UNC/UNF x 1 1/2"	270-00566	3 3
27	NUT—Self Locking 1/4" UNF	270-00153	3 3
27	SETSCREW—1/4" UNF x 3/4"	270-00055	1 1
29	SPRING WASHER—Bracket	027-00413	2 2
30	SETSCREW—Bracket 5/16" UNC x 3/4"	270-00231	2 2
31	BRACKET	382-05146	1 1
32	NUT—1/4" UNF	270-00002	1 1
	<b>STOPPING CONTROL</b>		
33	EXTENSION LEVER	351-16290	1 1
34	SPRING WASHER	027-00451	1 1
35	SETSCREW—Extension Lever 1/4" UNF x 1/2"	270-00054	1 1
36	BRACKET	351-22311	1 1
37	CLIP—Stopping Cable	351-19730	1 1
38	FELT—Clip	201-17170	1 1
39	CABLE—Stopping Control—3 ft. long —6 ft long	351-16350 351-16351	1 1 1 1
40	SETSCREW—5/16" UNF x 3/4"	270-00060	1 1
41	SPRING WASHER	027-00413	1 1
42	NUT—5/16" UNF	270-00003	1 1
43	BRACKET	351-22321	1 1
44	RETURN SPRING	351-24650	1 1
	SETSCREW—Cheese Headed 1/4" UNC x 5/8"	270-00053	1 1
	<b>IDLING CONTROL</b>		
45	CONNECTING ROD	351-51800	1 1
46	LOCKNUT	204-21500	1 1
47	ADJUSTING SLEEVE	204-21480	1 1
48	IDLING SPRING	204-21491	1 1
49	SHACKLE—Idling Control	204-12000	1 1
50	PIN—Shackle	204-13670	1 1



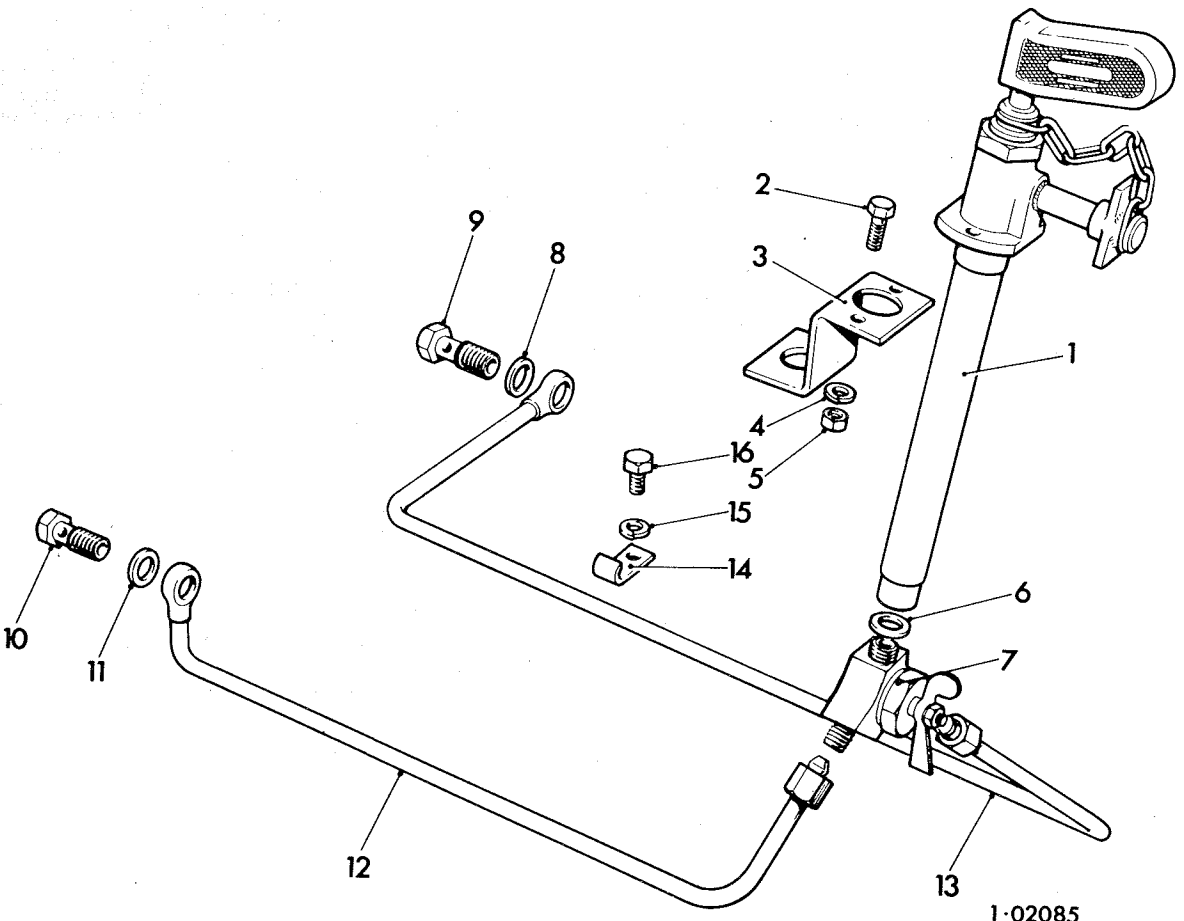
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Illus No.	Description	Part No.	No. per Eng. 2 Cyl 3 Cyl
51	COPPER WASHER—Ball Joint	616-01414	4
52	BALL JOINT	351-16500	2
53	LOCK NUT—Speed Control Rod	064-01014	2
54	ROD—Speed Control	351-16490	1
	CABLE—Speed Control 3 ft. long	351-16360	1
	6 ft long	351-16361	1
	not reqd if rods fitted		
55	SPEEDER SPRING	351-11013	1
	GOVERNOR WEIGHT —600—2000		
	rev/min (18)	572-11665	2
	—750—2200		
	rev/min (16)		
56	CONNECTING SPINDLE ASSEMBLY Comprising	572-11663	2
	SPINDLE ...	351-12490	1
	NUT ...	351-12500	1
	TRUNNION ASSEMBLY Comprising	351-35190	1
57	TRUNNION	572-10120	1
	ROLLER ...	351-15210	1
	WASHER ...	351-15220	2
58	ADJUSTING NUT	064-06618/001	2
59	GUARD ASSEMBLY	291-22310	1
60	BOLT—Operating Lever 5/16" UNF x 1 3/4" Brass	351-16150	1
61	PLAIN WASHER ...	270-00370	1
62	OPERATING LEVER	064-06612/008	2
63	DISTANCE PIECE	351-12542	1
64	PLAIN WASHER ...	351-16160	1
65	SPRING WASHER ...	064-06612/008	1
66	NUT—5/16" UNF Brass	027-00413	1
67	STUD—Bracket 5/16" UNF x 1 1/4"	270-00014	1
68	BRACKET ...	270-00242	1
69	SPRING WASHER	351-12511	1
70	NUT—5/16" UNF	027-00413	1
71	ADJUSTING SCREW	270-00003	1
72	LOCK NUT—Adjusting Screw 1/4" UNF	351-12560	2
		270-00002	2

NOTE: When Speed Control Lever is not engine mounted all connecting rods, ball cranks, levers etc., needed for connecting the Speed Control Lever to the Operating Lever Extension must be supplied by the customer.



Ins. No.	Description	Part No.	No. per eng 2 cvl 3 cvl
<b>SUMP PUMP</b>			
SUMP PUMP ASSEMBLY Comprising			
1	SUMP PUMP	572-50590	1 1
2	SETSCREW-1/4" UNF x 3/4"	291-30580	1 1
3	BRACKET-Sump Pump	270-00055	2 2
4	SPRING WASHER	351-18870	1 1
5	NUT-Brass 1/4" UNF	027-00451	2 2
6	COPPER WASHER	270-00013	2 2
7	THREE WAY TAP	013-22350	1 1
8	WASHER-Swivel Union	370-11280	1 1
9	PLUG-Swivel Union	291-30630	1 1
10	PLUG-Swivel Union	351-14961	1 1
11	WASHER-Swivel Union	351-14961	1 1
12	OIL PIPE-Reverse Gear to Pump Including -Engine Sump to Pump Including	291-30630 389-00292	2 2
13	-Engine Sump to Pump Including	352-30660	1 1
-	NIPPLE	389-00293	- 1
-	NUT	027-03730	1 1
-	SWIVEL UNION	027-03731	1 1
14	PIPE CLIP	351-14950	1 1
15	DOWEL	351-32850	1 1
16	SPRING WASHER	351-32840	1 1
16	SETSCREW-5/16" UNF x 1/2"	027-00413 270-00171	1 1



**HEAT EXCHANGER**

Description	Part No.	No. per eng	
		2 cyl	3 cyl
HEAT EXCHANGER PLATFORM	351-40470	1	1
DISTANCE PIECE	351-40460	2	2
BOLT-5/16" UNF x 2 1/4"	270-00066	2	2
BOLT-5/16" UNF x 3"	270-00106	2	2
SPRING WASHER	027-00413	4	4
HEAT EXCHANGER	351-40750	1	1
TUBE STACK-Heat Exchanger	CRD33029	1	1
END CAP	389-01415	2	2
'O' RING	354-53790	4	4
SETSCREW	027-00068	2	2
SETSCREW	027-01884	2	2
SPRING WASHER	027-00393	4	4
CONNECTION-Raw Water	351-40700	2	2
JOINT	291-30640	2	2
HOSE BEND	351-40710	1	1
HOSE CLIP	027-04687	2	2
BRACE-Heat Exchanger	352-41530	1	1
BOLT-3/8" UNC x 3/4"	270-00551	1	1
SPRING WASHER	027-00393	1	1
NUT-Cylinder Head	351-13860	1	1
NUT-Cylinder Head with Raised Hand Start	270-00550	1	1
SPRING WASHER	027-02061	1	1
BOLT-9/16" UNF x 5/8"	270-00502	1	1

**WATER PIPING**

INLET PIPE-Fresh Water to Heat Exchanger	351-40560	1	1
OUTLET PIPE-Fresh Water from Heat Exchanger	351-40600	1	1
JOINT-Pipes	351-40620	2	2
SETSCREW	027-01813	4	4
SPRING WASHER	027-00413	4	4
JUNCTION PIECE-Fresh Water	351-40551	1	1
CONNECTION-Hose 1 3/4" OD x 1 5/8"	351-40640	2	2
HOSE CLIP	027-04687	6	6
RUBBER HOSE-1 1/8" OD x 1 5/16"	351-40632	1	1
HOSE CLIP	027-04689	2	2
CONNECTION-Raw Water	351-40700	2	2
JOINT	291-30640	2	2
CONNECTION-Hose 1 1/8" OD x 2"	370-12300	2	2
HOSE CLIP	027-04687	4	4

**WATER PIPING**

Description	Part No.	No. per Eng.	
		2 cyl.	3 cyl.
<b>WATER PIPING (Cont.)</b>			
DELIVERY PIPE-ACW	352-41522	1	-
-ACW	353-41522	-	1
-CW	352-41523	1	-
-CW	353-41523	-	1
CONNECTION-Hose Bend	351-40710	1	1
HOSE CLIP	027-04689	2	2
CLIP-Delivery Pipe	351-22750	1	1
FELT-Clip	291-33900	1	1
HOSE-Heat Exchanger to Thermostat Cover	351-42940	1	1
HOSE CLIP	027-04687	2	2
<b>JOCKEY PULLEY</b>			
PULLEY BRACKET	351-40840	1	1
SETSCREW-5/16" UNF x 5/8"	270-00059	3	3
SPRING WASHER	027-00413	3	3
JOCKEY PULLEY	351-41950	1	1
SPINDLE	291-50651	1	1
BEARING	351-43940	2	2
CIRCLIP-Pulley	370-10410	1	1
CIRCLIP-Shaft	291-50660	1	1
BACKING WASHER	291-50670	1	1
NUT-Self Locking 1/2" UNF	270-00236	1	1
GREASER	027-00920	1	1
DRIVE BELT-Water Pump	356-19722	2	2
JOCKEY PULLEY ASSEMBLY	572-50581	1	1
DRIVING PULLEY	351-42460	1	1
KEY-Pulley	027-04318	1	1
SETSCREW-1/4" UNF x 3/8" Socket	270-00211	1	1
SPACER	396-18060	2	2



**JABSCO PUMP**

Description	Part No.	No per eng. 2Cyl 3Cyl
<b>JABSCO RAW WATER PUMP &amp; DRIVE</b>		
JABSCO PUMP	351-16382	1 1
IMPELLER—Jabco Pump	351-42410	1 1
JOINT—Jabco Pump	351-13710	1 1
SETSCREW—1/4" UNF x 5/8"	270-00023	4 4
SPRING WASHER	027-00451	4 4
HOUSING—Pump Drive	351-13630	1 1
WRAPPED BUSH—Housing	351-13730	2 2
JOINT—Housing	351-13700	1 1
SETSCREW—Housing 1/4" UNF x 5/8"	270-00023	3 3
SPRING WASHER	027-00451	3 3
PUMP GEARWHEEL	351-13610	1 1
DRIVING SHAFT—Pump	351-13640	1 1
PIN—Driving Shaft	351-13660	1 1
COUPLING—Pump Drive	351-13650	1 1
REPAIR KIT—Including Impeller	SK239	1 1
<b>JABSCO PUMP CONNECTIONS—Raw Water Cooling</b>		
CONNECTION—Inside Pump	351-40700	2 2
JOINT	291-30640	2 2
CONNECTION—Hose	370-12300	2 2
CONNECTION—Hose	027-04773	1 1
CLIP—Hose	027-04687	6 6
DELIVERY PIPE — CW	352-60490	1 1
— ACW	352-60500	1 1
CLIP—Delivery Pipe	351-27750	2 2
FELT—Clip	291-33900	2 2
PIPE—Water Inlet to Cylinder	307-00649	1 2
CLIP—Hose	027-04689	1 1
TEE PIECE	352-60440	1 1
CONNECTION—Hose	351-40810	1 1
CLIP—Hose Connection	027-04689	2 2
ELBOW	352-60450	1 1
PIPE—Tee Piece to Bypass Valve	352-60430	1 1
PIPE—Tee Piece to Bypass Valve	353-60430	1 1
HOSE—Elbow to Tee	027-06002	1 1
CONNECTION—Hose	027-04773	2 2
CLIP—Hose	027-04687	6 6

**THERMOSTAT**

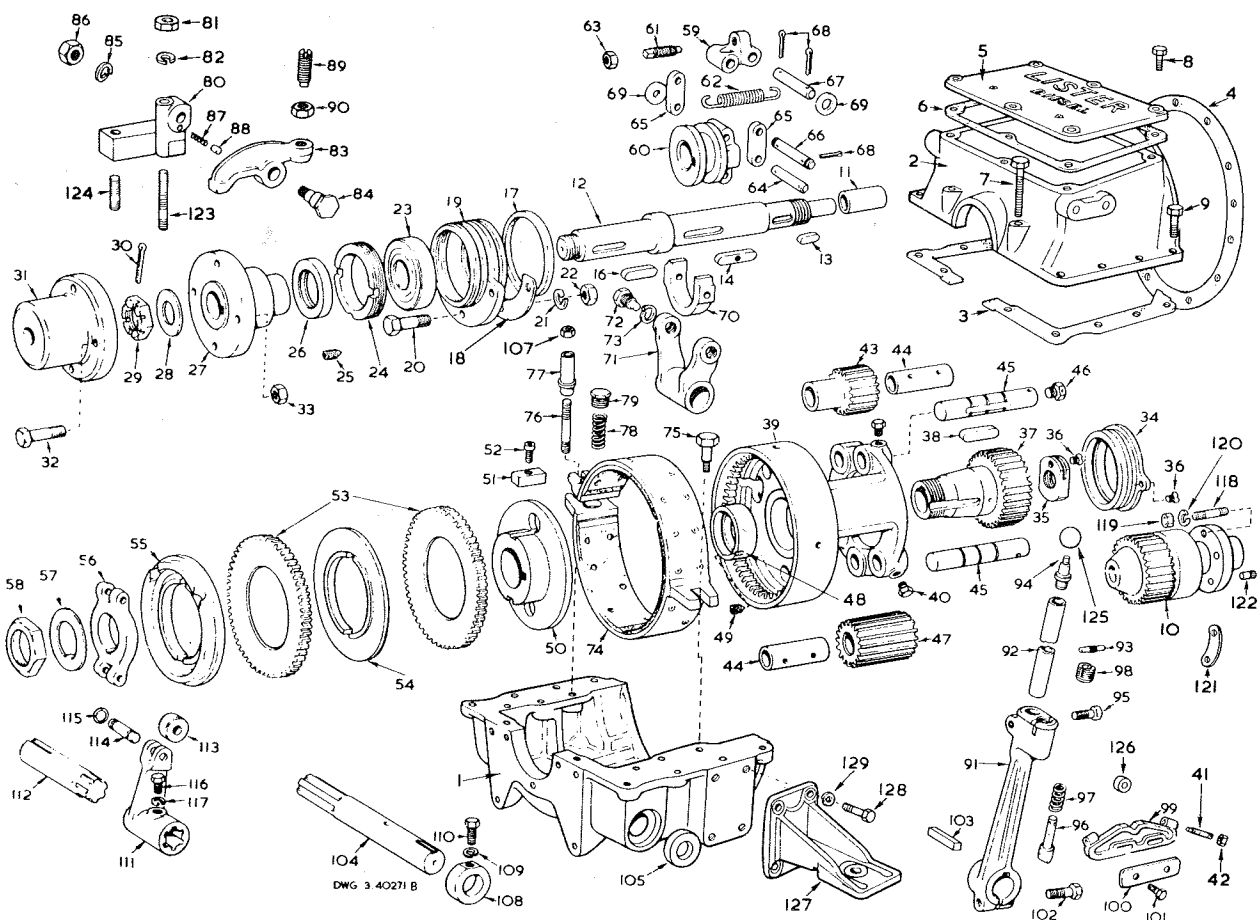
Description	Part No.	No. per Eng. 2 cyl. 3 cyl.
<b>THERMOSTAT—Raw Water Cooling</b>		
THERMOSTAT ASSEMBLY Comprising	572-60170	1 1
THERMOSTAT BODY	352-60390	1 1
THERMOSTAT UNIT	354-44071	1 1
CONNECTION—Bypass Hose	352-60380	1 1
BALL VALVE—Bypass	352-60370	1 1
SPRING—Bypass	352-60360	1 1
JOINT	352-60410	1 1
THERMOSTAT COVER	352-60400	1 1
SETSCREW—5/16" UNF x 3/4"	270-00060	1 1
SETSCREW—5/16" UNF x 2"	270-00065	1 1
SPRING WASHER	027-00413	2 2
JOINT—Body to Water Manifold	351-42130	1 1
SETSCREW—Body to Water Manifold	270-00182	1 1
5/16" UNF x 1 1/4"		
BOLT—Body to Water Manifold	270-00105	1 1
5/16" UNF x 4"		
SPRING WASHER	027-00413	2 2
NUT—5/16" UNF	270-00003	1 1
CONNECTION	351-40700	1 1
JOINT	291-30640	1 1

Ins. No. Description

Part No. No. per Set

**MARINE REVERSE GEAR**

1	REVERSE GEARBOX COMPLETE	572-51010	1
1	MARINE REVERSE GEAR CASE COMPLETE	351-14043	1
1	CASING—Bottom Half	351-13973	1
2	CASING—Top Half	351-13960	1
3	JOINT—Casing	351-14020	2
4	JOINT—Gear Case to Adaptor	351-14010	1
—	SETSCREW—Gear Case to Adaptor Case	270-00072	6
—	SETSCREW—Gear Case to Adaptor Case	270-00060	3
—	5/16" UNF x 3/4"	027-00393	6
—	SPRING WASHER	027-00413	5
—	BOLT—5/16" UNF x 1 1/8"	270-00025	2
—	NUT—5/16" UNF	270-00003	2
5	INSPECTION COVER	351-13991	1
6	JOINT—Inspection Cover	351-14000	1
7	BOLT—Top Half to Bottom Half Case	270-00310	2
—	3/8" UNC x 2 1/2"	027-00393	10
8	SPRING WASHER—Top Half to Bottom Half Case	270-00288	7
—	BOLT—Inspection Cover 3/8" UNC x 1"	027-00184	1
—	JOINT—Inspection Cover Bolt	352-13980	1
—	WARNING PLATE	291-30660	1
—	SCREW—Warning Plate	502-14042	1
9	BOLT—Top Half to Bottom Half Case	503-05873	1
—	3/8" UNC x 1"	503-04815	1
—	SETSCREW—Gearcase Sump Pump	503-04815	1
—	3/8" UNC x 1 1/4"	012-15483	1
10	PLAIN WASHER	502-14690	1
11	CRANKSHAFT SPUR GEAR	351-18320	1
12	BUSH—Crankshaft	027-00894	3
13	CLUTCH SHAFT	027-00393	3
14	KEY—Reverse Shaft Spur Gear		
15	KEY—Sliding Sleeve		
16	Not Used		
17	Key—Half Coupling		
18	JOINT RING—Ball Bearing Housing		
19	JOINT—Register Bracket		
20	HOUSING & REGISTER BRACKET		
21	SETSCREW—Bracket (Direct Drive Only)		
21	SPRING WASHER (Direct Drive Only)		



MARINE REVERSE GEAR—2G

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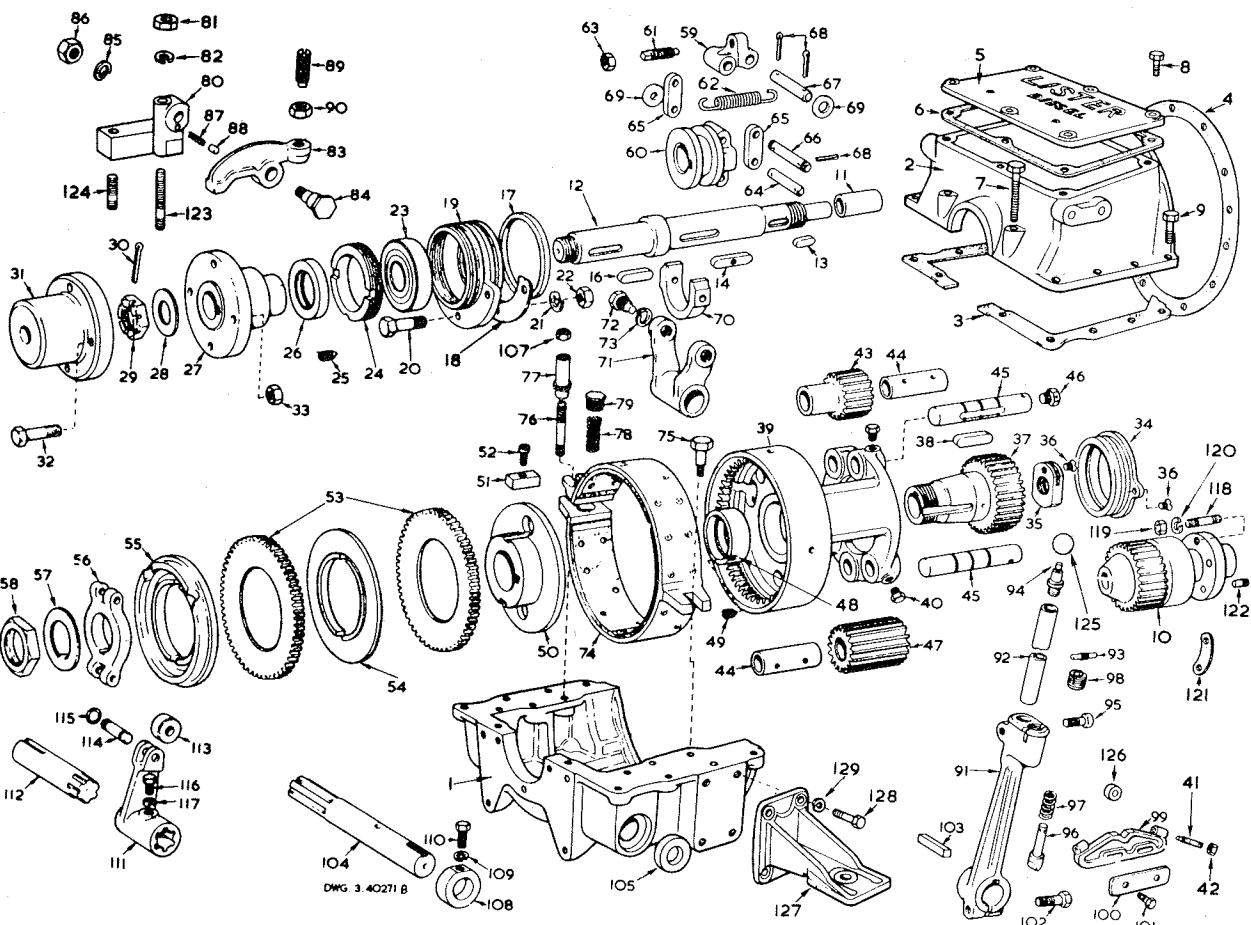
Description

Part No.

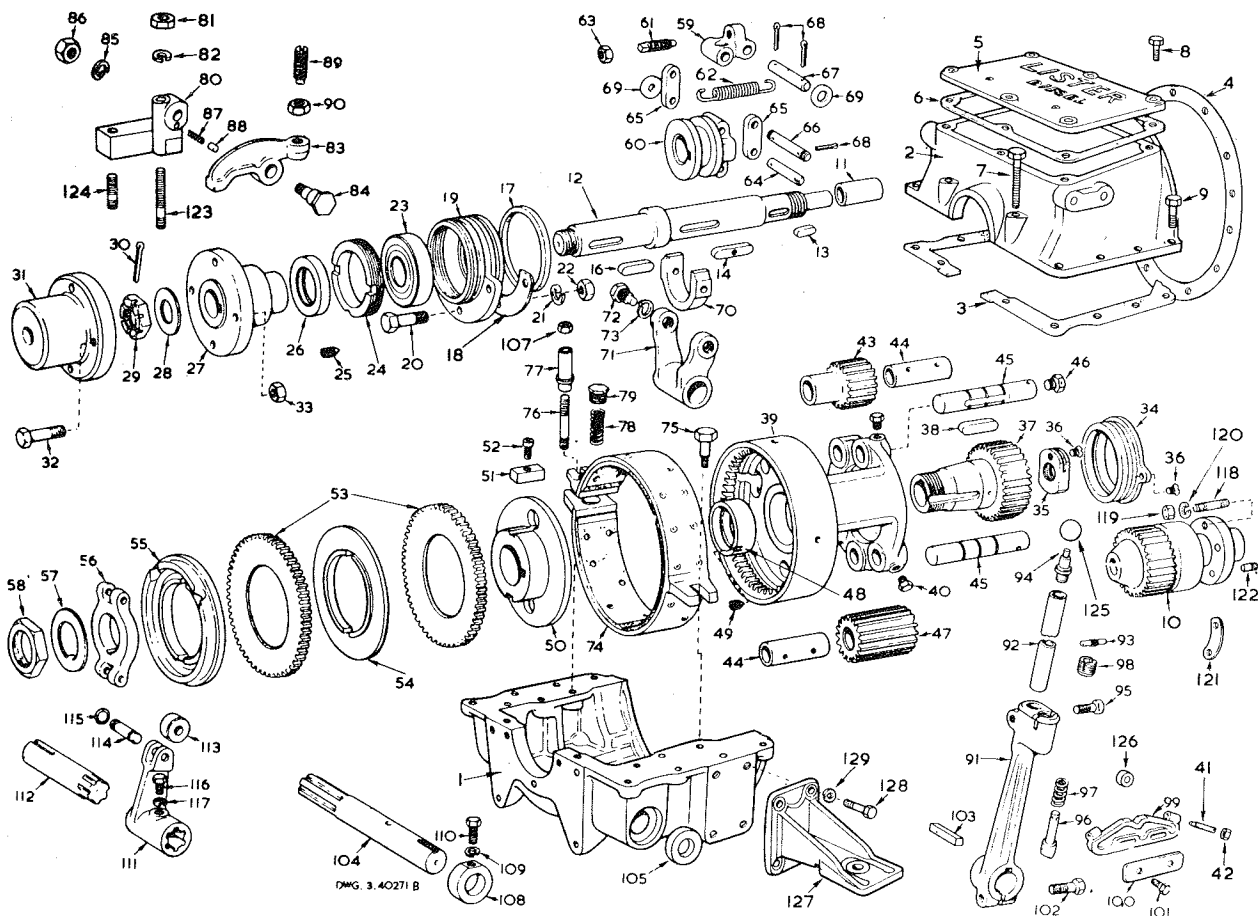
No. per set

MARINE REVERSE GEAR (Cont)

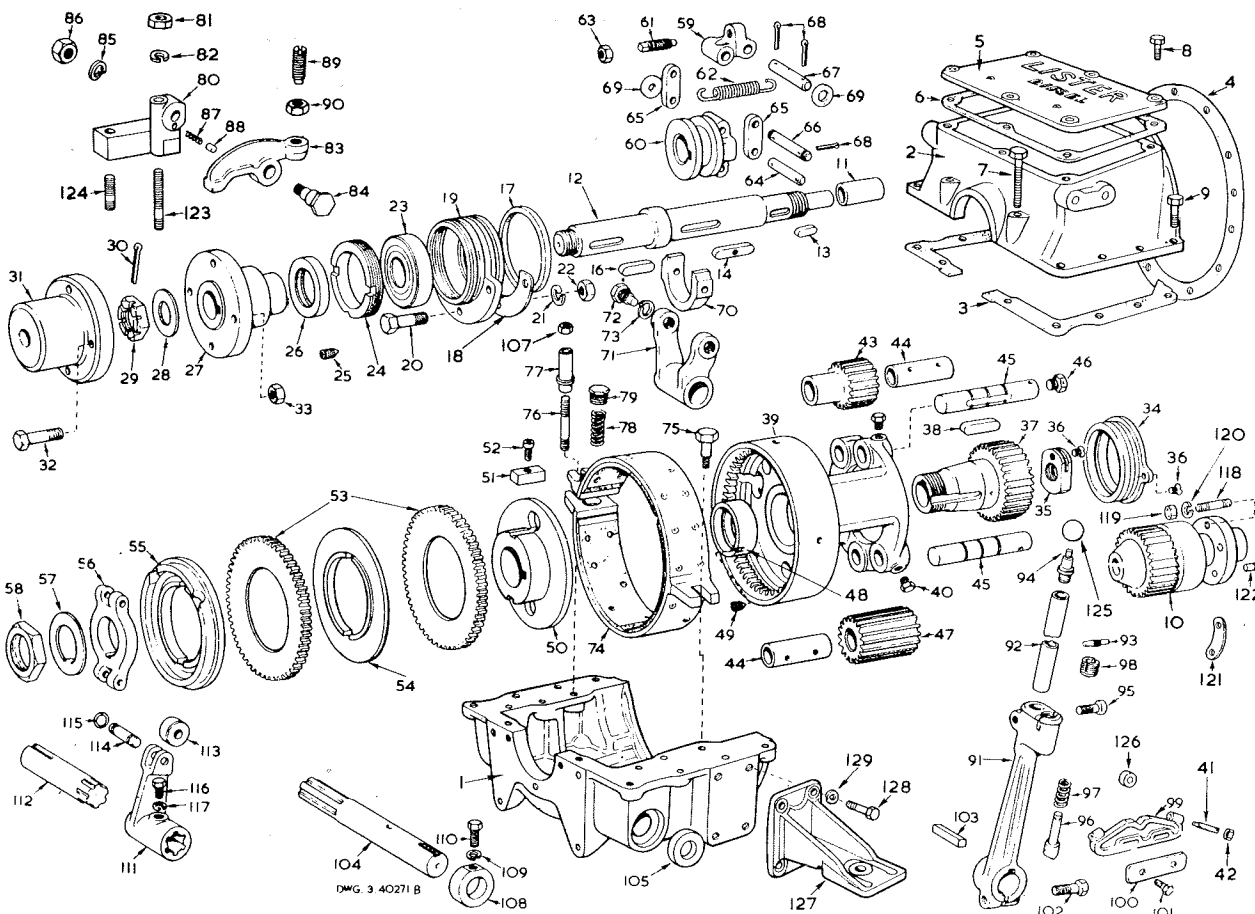
22	NUT—1/2" Whit	027-00004	3
23	BALL BEARING—R & M Double Purpose (Direct Drive Only)	503-06514	1
24	RING NUT—Ball Race	502-14380	1
25	GRUB SCREW—Ball Race Nut	503-05203	1
26	WESTON SEAL—Clutch Shaft	503-02754	1
27	HALF COUPLING (Direct Drive Only)	502-14351	1
28	WASHER—Retaining Coupling	503-05149	1
29	NUT—Retaining Coupling	502-14620	1
30	SPLIT PIN—Retaining Coupling	503-01865	1
31	TAIL SHAFT COUPLING (Direct Drive Only)	502-11861	1
32	BOLT—Half Coupling (Direct Drive Only)	502-19330	4
33	NUT—Half Coupling 1/2" BSF	503-05358	4
34	BUSH—Clutch Body	502-14020	1
35	NUT—Clutch Shaft	502-14061	1
36	SETSCREW—Clutch Body Bush	503-02640	2
37	COUNTERSUNK SCREW—Clutch Shaft Nut	503-02757	1
38	SPUR GEAR—Clutch Shaft	502-14460	1
39	KEY—Clutch Shaft Spur Gear	352-23860	1
40	CLUTCH BODY—Complete with 502-14030	502-13540	1
41	SCREW—Locating Spur Pinion Shaft	502-14521	4
42	STOP SCREW—Reverse Lever Locating Plate	291-30340	2
43	NUT—Stop Screw 7/16" UNF	270-00005	2
44	SPUR PINION (Stepped) Supplied with 502-14260	352-31780	2
45	BUSH—Spur Pinion—Only supplied with pinion	502-14260	4
46	SHAFT—Spur Pinion	502-14271	4
47	PLUG—Pinion Shaft Oil Hole	502-11181	4
48	SPUR PINION—Supplied with 502-14260	352-31790	2
49	BUSH—Clutch Body	502-14030	1
50	GRUB SCREW—Clutch Body Bush	503-04131	1
51	CLUTCH SPIDER	351-13510	1
52	KEY—Clutch Spider	502-14490	2
53	SOCKET SETSCREW—Clutch Spider Key	503-08995	2
54	CLUTCH PLATE—Large	351-13530	2
55	GRIPPING PLATE—Small	351-13500	1
56	TOGGLE LEVER PLATE	351-13520	1
57	LOCKING PLATE—Toggle Lever Nut	502-14160	1
58	NUT—Toggle Lever Plate	502-14440	1
59	TOGGLE LEVER	502-14430	1
60	SLIDING SLEEVE	502-14170	2
		502-14190	1



Part No.	Description	Part No.	No. per Set
61	SCREW—Toggle Lever ...	502-14410	2
62	SPRING—Toggle Lever ...	352-26900	2
63	LOCKNUT—Toggle Lever Screw ...	503-02466	2
64	LINK PIN—Toggle Lever ...	291-30730	2
65	LINK—Sliding Sleeve ...	502-14221	4
66	LINK PIN—Sliding Sleeve ...	502-14390	2
67	FULCRUM PIN—Toggle Lever ...	502-14180	2
68	SPLIT PIN ...	503-06612	14
69	WASHER—Link Pin ...	503-01704	10
70	FORK LEVER DIE—Sliding Sleeve ...	502-14211	1
71	FORK LEVER—Sliding Sleeve ...	502-11383	1
72	SCREW—Sliding Sleeve Die ...	502-11362	1
73	WASHER—Sliding Sleeve Die Screw ...	503-02577	1
74	BRAKE BAND Complete with LINING ...	352-13360	2
		352-13390	3
		031-32994	21
		351-16170	1
75	POSITION SCREW—Brake Band ...	270-00306	1
76	STUD—Brake Band 7/16" UNF/UNC x 4"	294-39850	1
77	SLEEVE—Brake Band Position Stud ...	027-00545	1
	PLAIN WASHER—Brake Band Position Stud ...	027-00984	1
	SPRING WASHER—Brake Band Position Stud ...	270-00005	1
	NUT—Position Stud 7/16" UNF ...	503-07951	1
78	SPRING—Brake Band ...	294-39860	1
79	SPRING CAP—Brake Band ...	502-14571	1
80	LEVER BRACKET—Brake Band ACW ...	502-14091	1
		270-00004	2
81	NUT—3/8" UNF ...	027-00393	2
82	SPRING WASHER ...	502-14561	1
83	LEVER—Brake Band ACW ...	502-14141	1
	—Brake Band CW ...	270-00161	1
	PLUG—3/8" UNF x 5/8" ...	007-00420	1
	JOINT—Plug ...	502-14110	1
84	FULCRUM PIN—Brake Band Lever ...	503-02565	1
85	SPRING WASHER—Fulcrum Pin ...	503-02469	1
86	LOCKNUT—Fulcrum Pin ...	502-11760	1
87	SPRING—Locking Plunger ...	502-11750	1
88	PLUNGER—Locking Plunger ...	502-14150	1
89	ADJUSTING SCREW—Brake Band Lever ...	503-02467	1
90	LOCKNUT—Brake Band Lever Adjusting Screw ...	572-11980	1
91	REVERSE LEVER ASSEMBLY ...	291-30520	1
92	REVERSE LEVER ...	502-11663	1
93	SOCKET—Reverse Lever ...	502-14680	1
	LOCATING PLUNGER PIN—Reverse Lever ...		1



Illus. No.	Description	Part No.	No. per set
<b>MARINE REVERSE GEAR (Cont)</b>			
94	ADAPTOR—Reverse Lever ... ..	291-30530	1
95	SOCKET SETSCREW—Reverse Lever Locating Plunger ... ..	503-05659	1
96	LOCATING PLUNGER—Reverse Lever ... ..	502-14670	1
97	PLUNGER SPRING—Reverse Spring ... ..	002-00452	1
98	GUIDE—Reverse Lever Locating Plunger ... ..	502-11970	1
99	LOCATING PLATE—Reverse Lever ... ..	291-30311	1
100	LOCK PLATE—Reverse Lever Locating Plate ... ..	024-05131	1
101	SETSCREW—Locating Plate 3/8" UNC x 1 1/4" ... ..	270-00349	2
102	SETSCREW—Reverse Lever ... ..	503-04485	1
103	KEY—Reverse Lever ... ..	294-03575	1
104	FORK LEVER CROSS SHAFT ... ..	502-11392	1
105	OIL SEAL—Fork Lever Cross Shaft ... ..	294-02660	2
106	Not Used		
107	NUT—Brake Band Position Stud 7/16" UNF ... ..	270-00005	1
108	COLLAR—Fork Lever Cross Shaft ... ..	502-11411	1
109	WASHER—Locating Screw ... ..	503-01673	2
110	LOCATING SCREW—Fork Lever Cross Shaft ... ..	502-11451	2
111	ROLLER LEVER—Brake Band ACW ... ..	502-11441	1
112	CROSS SHAFT—Roller Lever ... ..	502-11431	1
113	ROLLER—Brake Band Lever ... ..	502-11422	1
114	PIN—Brake Band Lever Roller ... ..	502-11460	1
115	SPLIT PIN—Brake Band Roller Pin ... ..	502-11472	1
116	LOCATING SCREW—Roller Lever Cross Shaft ... ..	503-06603	2
117	WASHER—Locating Screw ... ..	502-11451	1
118	STUD—Spur Gear 3/8" UNF ... ..	503-01673	1
119	NUT—Spur Gear 3/8" UNF ... ..	270-00396	4
120	SPRING WASHER—Spur Gear ... ..	270-00004	4
121	DOWEL RETAINING PLATE ... ..	027-00393	4
122	DOWEL ... ..	351-17900	1
123	BRACKET STUD—Brake Band Lever ... ..	027-01430	1
124	3/8" UNC/UNF x 3 3/4" ... ..	270-00248	1
	—Brake Band Lever		
	3/8" UNF/UNC x 1 3/4" ... ..	270-00249	1
125	KNOB—Reverse Lever ... ..	291-30190	1
126	DISTANCE PIECE ... ..	291-37450	2
127	BEARER—Reverse Gear ... ..	351-14031	2
128	BOLT—Reverse Gear Bearer 3/8" UNC x 1 1/4" ... ..	270-00349	8
129	SPRING WASHER—Reverse Gear Bearer ... ..	027-00393	8
	TRANSFER—"Ahead" ... ..	027-05496	1
	TRANSFER—"Astern" ... ..	027-05497	1



Illus. No.	Description	Part No.	No. per eng 2 cyl 3cyl
1	REDUCTION GEAR ASSEMBLY 2:1 3:1	291-40830	1 1
1	GEAR CASE ASSEMBLY 2:1 Comprising	571-10010	1 1
1	GEAR CASE	291-40840	1 1
1	END COVER	291-40821	1 1
2	GEAR CASE ASSEMBLY 3:1 Comprising	502-15041	1 1
1	GEAR CASE	291-37471	1 1
2	END COVER	291-37482	1 1
3	NUMBER PLATE	291-37490	1 1
4	DRIVE PIN	502-10310	1 1
5	JOINT-Drain Plug	503-01612	2 2
6	DRAIN PLUG	013-22350	1 1
7	STUD-Gear Case to Cover-3/8" BSF 2:1	503-05844	1 1
8	DOWEL-2:1	503-01802	4 4
9	PINION-2:1	503-01884	2 2
10	GEARWHEEL-2:1	503-04258	2 2
11	PINION KEY-2:1	503-03567	2 2
12	SECONDARY SHAFT BEARING-2:1	291-38480	1 1
13	JOINT-Gearcase-2:1	291-37560	1 1
14	STUD-Gearcase to Reverse Gear	291-38490	1 1
15	3/8" UNF/UNC x 5"-2:1	291-37540	1 1
16	3/8" UNF/UNC x 5 1/8"-3:1	503-04568	1 1
17	3/8" UNF/UNC x 5 1/4"-3:1	291-37570	1 1
18	3/8" UNF/UNC x 4 7/8"-2:1	503-02761	1 1
19	3/8" UNF/UNC x 5 1/4"-3:1	027-01904	1 1
20	3/8" UNF/UNC x 5 1/4"-3:1	502-15110	1 1
21	3/8" UNF/UNC x 5 1/4"-3:1	291-37590	1 1
22	3/8" UNF/UNC x 5 1/4"-3:1	270-00181	2 2
23	3/8" UNF/UNC x 5 1/4"-3:1	270-00371	2 2
24	3/8" UNF/UNC x 5 1/4"-3:1	291-37610	2 2
25	3/8" UNF/UNC x 5 1/4"-3:1	351-16220	2 2
26	3/8" UNF/UNC x 5 1/4"-3:1	503-02195	4 4
27	3/8" UNF/UNC x 5 1/4"-3:1	503-01848	6 6
28	3/8" UNF/UNC x 5 1/4"-3:1	503-03989	6 6
29	3/8" UNF/UNC x 5 1/4"-3:1	291-37510	1 1
30	3/8" UNF/UNC x 5 1/4"-3:1	502-15061	1 1
31	3/8" UNF/UNC x 5 1/4"-3:1	291-37530	1 1
32	3/8" UNF/UNC x 5 1/4"-3:1	503-02194	10 10
33	3/8" UNF/UNC x 5 1/4"-3:1	503-02195	4 4
34	3/8" UNF/UNC x 5 1/4"-3:1	503-02194	4 4
35	3/8" UNF/UNC x 5 1/4"-3:1	503-02194	14 14

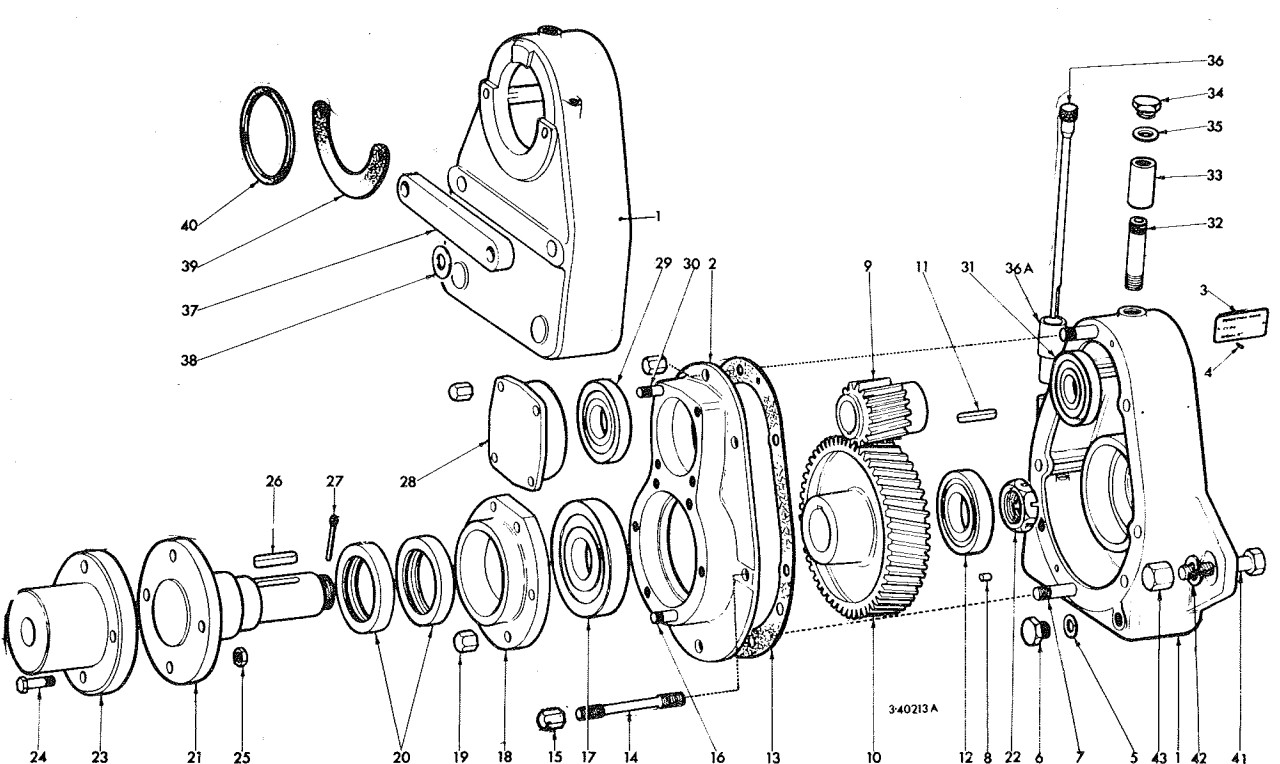


PLATE 12

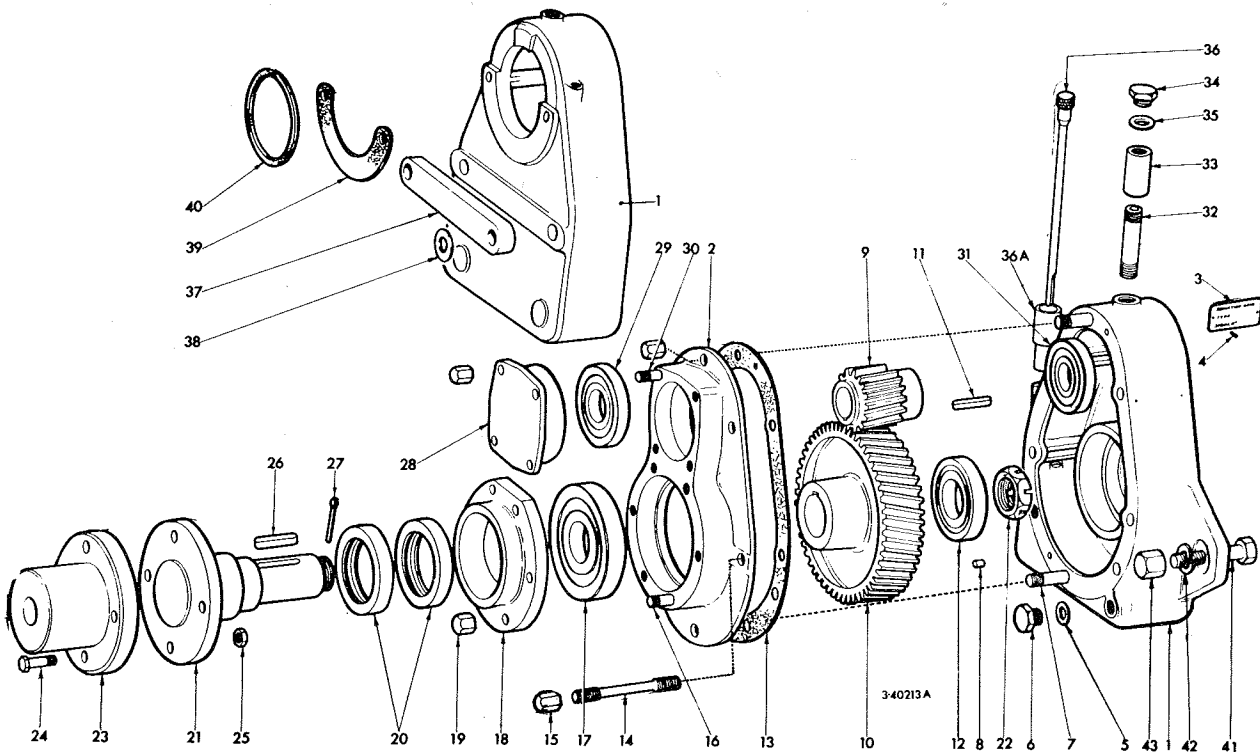
REDUCTION GEAR (MARINE)

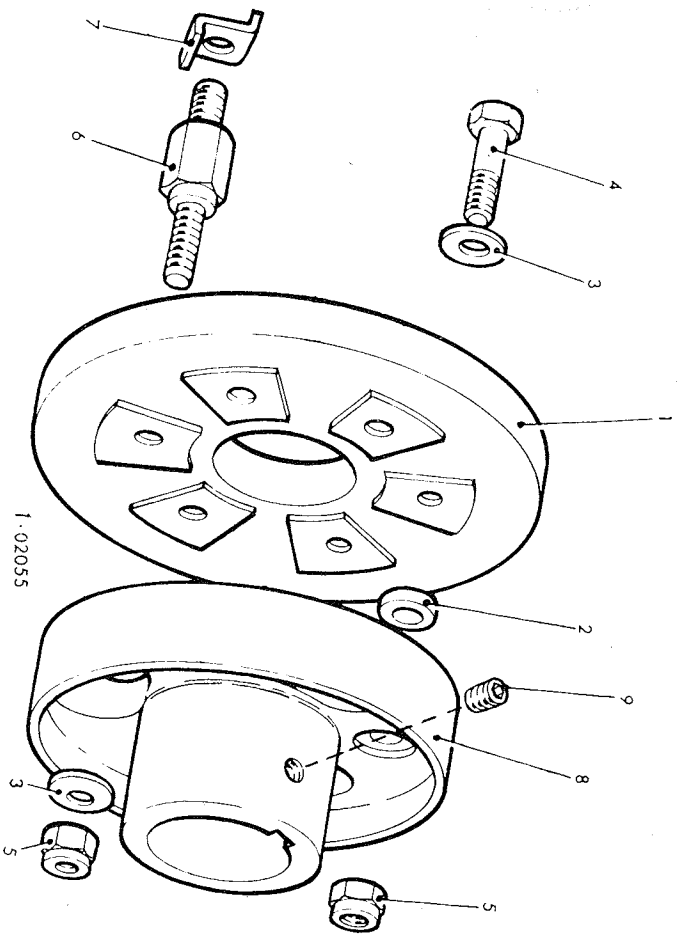
Illus. No. Description

Part No. No. per eng  
2 cvl 3cvl

REDUCTION GEAR (MARINE) (Cont)

20	OIL SEAL-2:1 ...	503-02202	2	2
-	-3:1 ...	291-37520	2	2
21	SECONDARY SHAFT-2:1	502-15081	1	1
-	-3:1 ...	291-37500	1	1
22	NUT-Secondary Shaft ...	502-15130	1	1
23	HALF COUPLING-Tailshaft ...	502-11861	1	1
24	BOLT-Coupling ...	502-11880	4	4
25	NUT-Coupling Bolt 1/2" BSF	503-05358	4	4
26	GEARWHEEL KEY-2:1	503-04568	1	1
-	-3:1 ...	291-37550	1	1
27	SPLIT PIN ...	503-02673	1	1
28	END COVER-Primary Shaft-2:1	502-15051	1	1
-	-3:1 ...	291-37600	1	1
29	ROLLER BEARING-2:1	503-04569	1	1
-	-3:1 ...	291-37580	1	1
30	STUD-Primary Cover Shaft-2:1	503-02508	4	4
-	-3:1 ...	503-06033	4	4
31	BEARING ...	503-02756	1	1
32	BREATHER PIPE ...	502-10320	1	1
33	SOCKET-Breather Pipe	503-01376	1	1
34	PLUG-Breather Pipe ...	503-05843	1	1
35	JOINT-Plug ...	013-21778	1	1
36	DIPSTICK-2:1 ...	572-11720	1	1
-	-3:1 ...	572-11730	1	1
36A	ADAPTOR-Dipstick	027-04344	1	1
37	DISTANCE PIECE ...	291-40850	1	1
38	SHIM ...	027-04871	2	2
39	JOINT-Paper ...	502-14690	1	1
40	SEALING RING-Rubber	502-11772	1	1
-	BOLT-7/16" UNF x 2"	270-00341	2	2
-	SPRING WASHER ...	027-00984	2	2
-	NUT-7/16" UNF ...	270-00005	2	2
-	COPPER WASHER ...	600-00106	4	4
-	DOME NUT-3/8" UNF	270-00207	4	4
-	STUD-3/8" UNF/UNC x 5 1/2"	270-00371	2	2
-	BOLT-3/8" UNF x 3 3/4"	270-00330	2	2
-	SPRING WASHER ...	027-00393	2	2

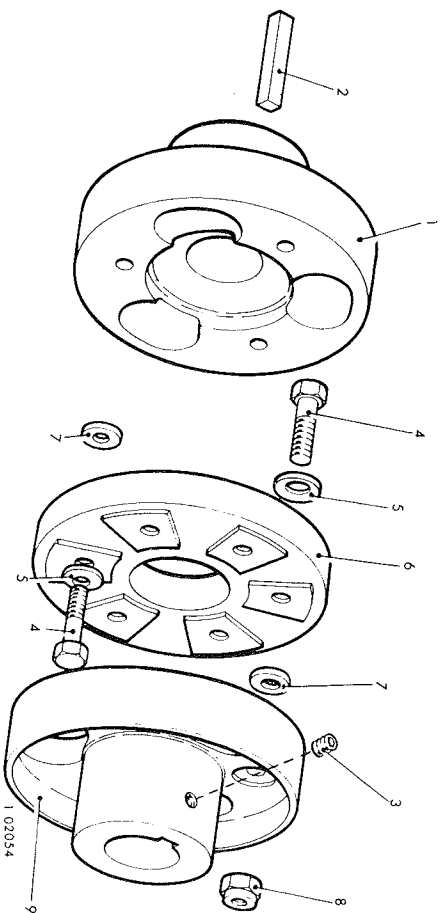




**PLATE 13**

**FLEXIBLE HALF COUPLING**

Illus No.	Description	Part No.	No. per eng 2 cyl 3 cyl
<b>FLEXIBLE HALF COUPLING</b>			
1	COUPLING DISC	010-08089	1 1
2	DISTANCE PIECE	010-08130	3 3
3	SPRING DISC WASHER	639-11070	6 6
4	COUPLING BOLT	291-31570	3 3
5	NUT—Self Locking 5/8" UNF	270-00150	6 6
6	COUPLING STUD	291-26500	3 3
7	LOCKWASHER	291-26510	3 3
8	HALF COUPLING—1" Rough Bore	010-08270	1 1
	—1 1/2" Rough Bore	010-08271	1 1
	—1 1/2" Finished Bore	023-02392	1 1
9	GRUBSCREW—1/2" BSW	013-08088	1 1



**PLATE 14**

**FLEXIBLE WHOLE COUPLING**

Illus No.	Description	Part No.	No. per eng 2 cyl 3 cyl
<b>FLEXIBLE WHOLE COUPLING</b>			
1	ENGINE HALF COUPLING	382-00396	1 1
	—1 1/2" Bore	389-00004	1 1
	—1 1/2" Bore with Raised Hand Start	390-00735	1 1
	—2" Finished Bore	027-03960	1 1
2	COUPLING KEY—1 1/2" Bore	027-04783	1 1
	—With Raised Hand Start	027-00403	1 1
3	GRUBSCREW—1 1/2" Bore	010-08088	1 1
	—2" Bore	013-08088	1 1
4	COUPLING BOLT—Standard	291-31570	6 6
	—With Raised Hand Start	010-08129	6 6
5	SPRING DISC WASHER	639-11070	6 6
6	COUPLING DISC	010-08089	1 1
7	DISTANCE PIECE	010-08130	6 6
8	COUPLING NUT—Self Locking 5/8" UNF	270-00150	6 6
	—With Raised Hand Start	027-04434	6 6
9	COUPLING—Driven Half	010-08270	1 1
	—1" Rough Bore	010-08271	1 1
	—1 1/2" Rough Bore	023-02392	1 1
	—1 1/2" Finished Bore		



**12 & 24V ALTERNATOR ELECTRIC STARTING (ACS)**

Description	Part No.	No. per eng 2 cyl 3 cyl
<b>ELECTRIC STARTING (ACS ALTERNATOR 12 or 24V)</b>		
STARTER MOTOR -12 Volt CW	351-36930	1 1
-24 Volt CW	351-31980	1 1
-12 Volt ACW	351-36920	1 1
-24 Volt ACW	351-36940	1 1
DISTANCE PIECE -Starter Motor	351-10880	1 1
STUD -Starter Motor 3/8" UNF x 2"	270-00434	3 3
NUT -Starter Motor 3/8" UNF	270-00004	3 3
SPRING WASHER	027-00393	3 3
<b>ACS ALTERNATOR -Marine</b>		
ALTERNATOR -12 Volt	352-35040	1 1
-24 Volt	352-35030	1 1
PULLEY -Alternator	352-44380	1 1
MOUNTING BRACKET -Alternator	352-44390	1 1
BOLT -Alternator 7/16" UNF x 4"	270-00674	1 1
SPRING WASHER	027-00984	1 1
NUT -Alternator 7/16" UNF	270-00005	1 1
SETSCREW -Mounting Bracket 5/16" UNF x 5/8"	270-00059	2 2
SPRING WASHER	027-00413	2 2
SCREW -Socket -Mounting Bracket 5/16" UNF x 9/16"	270-00438	1 1
DRIVING BELT	356-19722	1pr 1pr
ADJUSTING LINK	352-44400	1 1
BOLT -Adjusting Link 3/8" UNF x 1 1/2"	270-00075	1 1
PLAIN WASHER	027-00184	1 1
SPRING WASHER	027-00393	1 1
NUT -3/8" UNF	270-00004	1 1
BOLT -Tank Cooled 7/16" UNF x 4 1/4"	270-00624	1 1
DRIVING PULLEY	351-42460	1 1
KEY	027-04318	1 1
SETSCREW -Socket 1/4" UNF x 3/8"	270-00211	1 1
<b>FLYWHEELS</b>		
FLYWHEEL ASSEMBLY Comprising -Up to 1800 Flywheel	572-40040	1 1
Gear Ring	351-40500	1 1
FLYWHEEL ASSEMBLY Comprising -Over 1800 Flywheel	572-40042	1 1
Gear Ring	351-40502	1 1
	294-24730	1 1

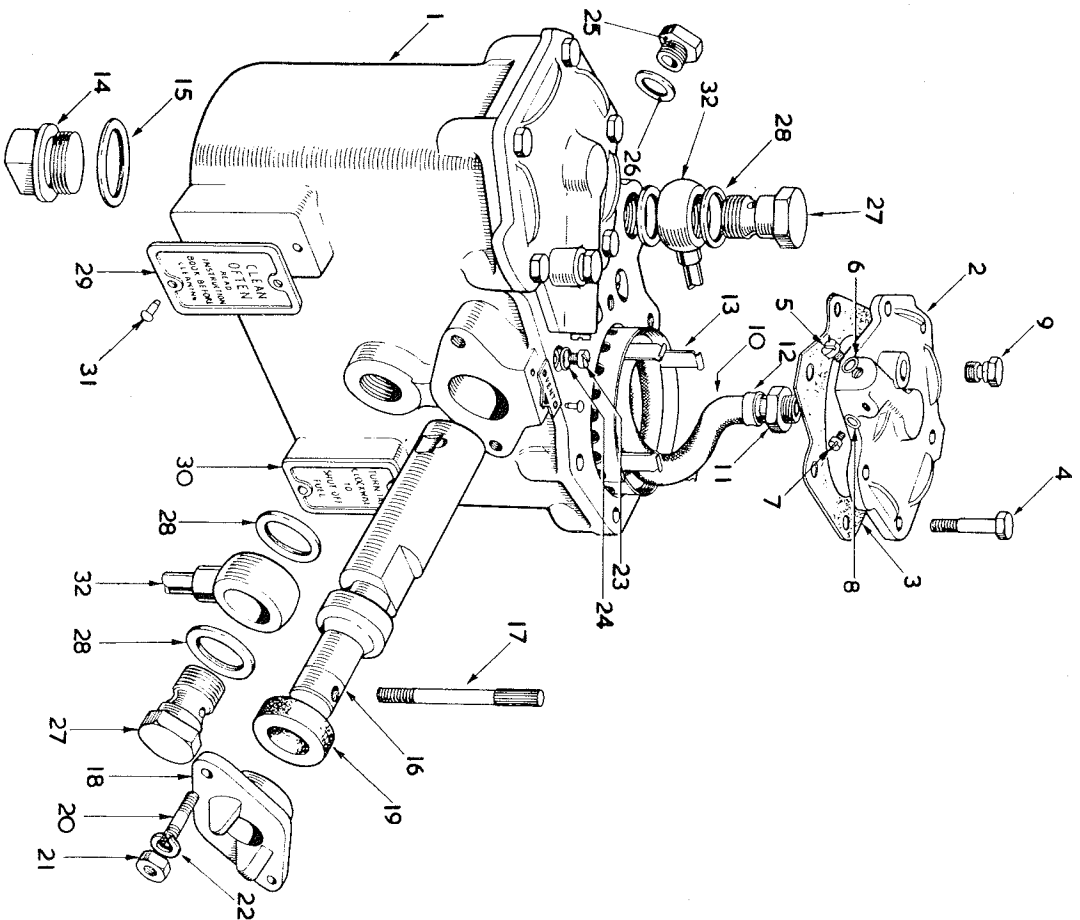
**12 & 24V ALTERNATOR ELECTRIC STARTING (ACS) (Cont)**

Description	Part No.	No. per eng 2 cyl 3 cyl
<b>CONTROLLER &amp; BATTERY</b>		
PUSH BUTTON -12 & 24 Volt	012-08364	1 1
AMMETER -12 Volt	064-22780	1 1
-24 Volt	012-08355	1 1
CONTROLLER -12 Volt	354-35050	1 1
-12 Volt with Screening	354-35051	1 1
-24 Volt	354-35060	1 1
-24 Volt with screening	354-35061	1 1
RESISTOR -24 Volt	064-17550/013	1 1
-12 Volt	064-17550/016	1 1
TOGGLE SWITCH -12 & 24 Volt	064-07876	1 1
BATTERY -4 for 24 volt	294-40020	2 2
LAMP -12 Volt	064-09681/001	1 1
-24 Volt	064-09681/002	1 1
LAMP HOLDER	064-12963	1 1
LENS -Red	064-20787/001	1 1
PUSH BUTTON -Oil Pressure Gauge	064-22987	1 1
LABEL	392-04006	1 1
TOGGLE SWITCH -Replaces 064-07876	064-10706	1 1
LABEL	382-04007	1 1
SOLENOID ASSEMBLY -12 Volt	642-00172	1 1
-24 Volt	642-00177	1 1
<b>CRANKSHAFT EXTENSION -FLYWHEEL END</b>		
<b>FOR HAND STARTING</b>		
CRANKSHAFT EXTENSION	351-12310	1 1
BOLT -5/8" UNF x 1 1/2"	270-00147	3 3
SPRING WASHER	027-00395	3 3
FOR POWER TAKE OFF		
CRANKSHAFT EXTENSION	291-31560	1 1
STUD -5/8" UNF x 2 1/2"	270-00170	3 3
NUT -5/8" UNF	270-00008	3 3
SPRING WASHER	027-00395	3 3

Illus. No. Description Part No. No. per eng  
2 cyl 3 cyl

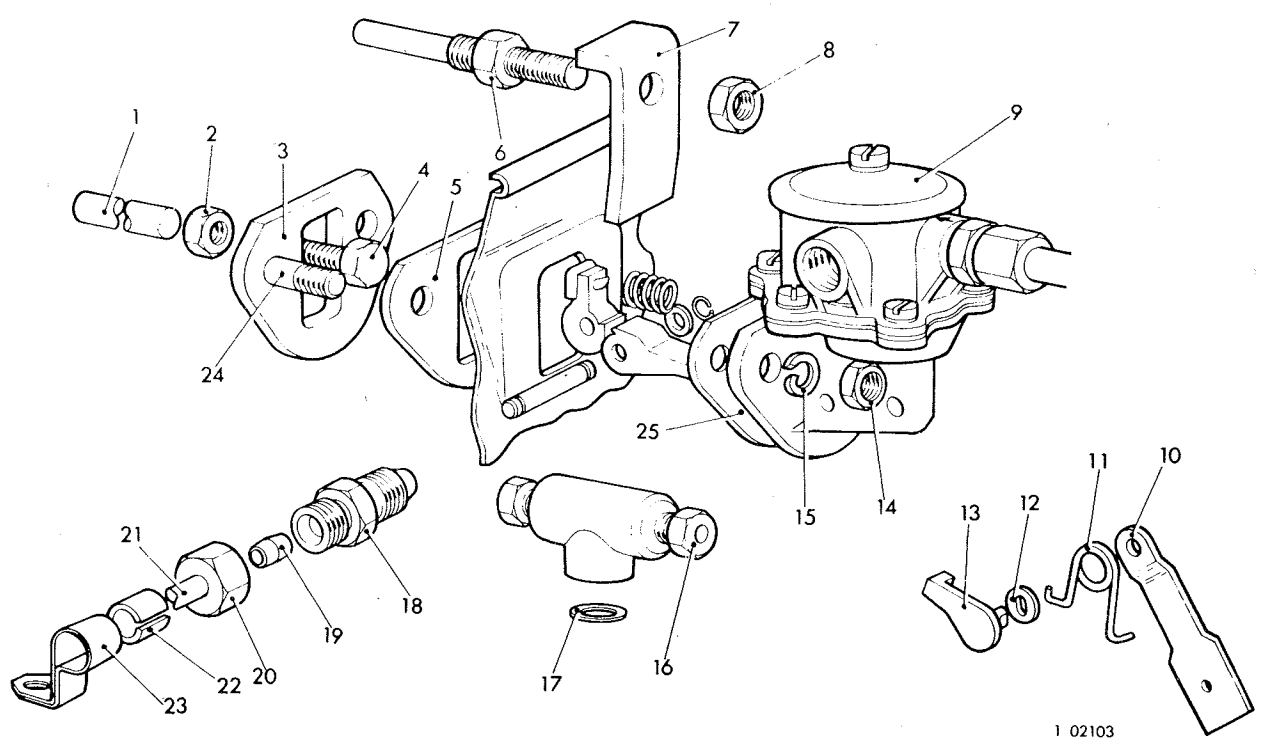
Illus. No.	Description	Part No.	No. per eng 2 cyl 3 cyl
<b>FUEL FILTER (DUPLIX)</b>			
1	FUEL FILTER (Duplex) Complete	573-10140	1 1
2	FILTER BODY	010-02321	1 1
3	COVER-Filter	010-02322	2 2
4	JOINT-Filter Cover	010-02328	2 2
5	SETSCREW-Filter Cover	027-00889	10 10
6	PLUG-Filter Cover	010-02336	2 2
7	JOINT-Filter Cover Plug	616-01608	2 2
8	PLUG-Filter Cover	010-02337	2 2
9	JOINT-Filter Cover Plug	616-01601	6 6
10	VENT PLUG	010-02089	2 2
11	FILTER WICK-Complete with NIPPLE	023-02288	2 2
12	CLIP		
13	CONTAINER-Filter Wick	575-10170	2 2
14	DRAIN PLUG-Filter	103-00137	2 2
15	JOINT-Filter Drain Plug	291-30640	2 2
16	VALVE SPINDLE-Filter	010-02324	1 1
17	HAND LEVER-Valve Spindle	010-02325	1 1
18	FILTER GLAND	010-02334	1 1
19	CORK WASHER-Filter Gland	010-02335	1 1
20	STUD-Filter Gland	027-01269	2 2
21	NUT-Filter Gland	027-00907	2 2
22	SPRING WASHER-Filter Gland	027-01306	2 2
23	PLUG-Filter Body	010-02336	3 3
24	JOINT-Filter Body Plug	616-01608	2 2
25	PLUG-Filter Body	011-13693	1 1
26	JOINT-Filter Body Plug	013-22350	1 1
27	SCREW-Swivel Union	023-00472	2 2
28	JOINT-Swivel Union	291-22650	4 4
29	INSTRUCTION PLATE-Cleaning	027-01613	1 1
30	-Vent	027-02279	1 1
31	DOWEL-Filter Instruction Plate	027-00707	1 1
32	SWIVEL UNION-Filter Outlet	023-00471	6 6

NOTE: Fuel Pipes are not supplied by Lister Marine



Illus. No.	Description	Part No.	No. per eng 2 cvl / 3 cvl
1	PUSH ROD ... ..	351-12170	1 1
2	LOCKNUT—Adjusting Screw 1/4" UNF	270-00002	1 1
3	BACKING PLATE ... ..	351-12160	1 1
4	ADJUSTING SCREW—Push Rod	351-12180	1 1
5	JOINT—Backing Plate ... ..	351-12190	1 1
6	LOCATING PIN—Fuel Pump Tappet	351-12130	2 3
7	CLAMP—Crankcase Door	351-12140	2 3
8	NUT—Clamp 5/16" UNF	270-00003	2 3
9	FUEL LIFT PUMP	351-12151	1 1
10	PRIMER ARM		
11	RETURN SPRING—Primer		
12	DISTANCE PIECE	662-10230	1 1
13	LEVER—Primer		
14	NUT—5/16" UNF	270-00003	2 2
15	SPRING WASHER	027-00413	2 2
16	TEE PIECE ... ..	201-17210	1 1
17	JOINT—Tee Piece	600-00106	As Reqd.
18	UNION	027-04492	2 2
19	OLIVE	351-21640	2 2
20	NUT—Union	351-21630	2 2
21	FUEL PIPE—Pump to Filter	352-28731	1 1
22	FUEL PIPE—Pump to Filter		
23	CLIP—Fuel Pipe	201-17170	1 1
24	STUD—5/16" UNF x 1 1/8"	351-15020	1 1
25	JOINT—Fuel Lift Pump	270-00098	2 2
—	VENT PIPE—Filter to Tee	351-12190	1 1
—	PLUG—Swivel Union	351-28750	1 1
—	REPAIR KIT	354-28410	1 1
—	REPAIR KIT	7950293	As Reqd.

—Tank to Lift Pump to suit installation



1 02103

**FUEL TANKS**

Description	Part No.	No. per eng. 2 cyl. 3 cyl.
<b>FUEL TANKS—6 &amp; 10 Gall</b>		
FUEL TANK—6 Gall	029-04219	1 1
—10 Gall	011-13787	1 1
PIPE—Tank Vent	011-13948	1 1
PLUG—1" BSP	003-00140	1 1
STRAINER—Gauze	011-13888	1 1
DIPSTICK	011-07117	1 1
TAP—Drain	012-21917	1 1
—½" Gas Wheel	010-07050	1 1
NIPPLE	010-07008	1 1
NUT	003-00286	1 1
PIPE—6 Gall only	027-00406	1 1
WASHER—Fuel Tap	007-00406	2 2
CONNECTION—10 Gall only	007-00427	1 1
PLUG—10 Gall only	003-00128	1 1
<b>FUEL TANK—25 Gall</b>		
FUEL TANK—25 Gall	501-00715	1 1
PIPE—Tank Vent	501-00706	1 1
FILLER CAP & CHAIN ASSEMBLY	501-00709	1 1
TAP—Drain	012-21917	1 1
WASHER—Fuel Tap	007-00406	2 2
PLUG	007-00407	1 1
GAUGE—Complete with Joint	501-00711	1 1
SETSCREW	027-00886	6 6
<b>SELF VENTING FUEL PUMPS</b>		
PIPE—Fuel Leak Off	352-36320	1 —
PIPE—Fuel Leak Off	353-36320	— 1
SCREW—Swivel Union & N.R.V.	570-10660	2 3
COPPER WASHER	352-29370	4 6

**GAUGES & PANELS**

Description	Part No.	No. per Eng. 2 cyl. 3 cyl.
<b>INSTRUMENTS &amp; GAUGES (Supplied Loose)</b>		
GAUGE—Oil Pressure	370-12970	1 1
PLUG—Swivel Union	842-00359	1 1
COPPER WASHER	606-00106	2 2
SWIVEL UNION	291-20920	1 1
TACHOMETER	382-04711	1 1
CABLE—Tachometer Drive (6'0")	291-36249	1 1
GAUGE—Temperature (6'0") Capillary	370-12990	1 1
AMMETER	064-22780	1 1
STARTER PUSH BUTTON	012-08364	1 1
PIPE—Oil Pressure Gauge (6'0")	027-05781	1 1
ADAPTOR—Oil Pressure Gauge	291-37920	1 1
NIPPLE	291-21161	1 1
NUT	291-21151	1 1
<b>ANGLE DRIVE &amp; DIRECT DRIVE</b>		
LOCATING PLATE ASSEMBLY	351-12060	1 1
END COVER	351-12090	1 1
END COVER—Electric Start	351-12091	1 1
HOUSING	351-13171	1 1
CLAMP RING	351-13180	1 1
BUSH	370-10670	1 1
OIL SEAL	352-32470	1 1
DRIVE SHAFT—Angle Drive	351-12031	1 1
—Direct Drive	370-10661	1 1
JOINT	351-13160	1 1
SCREW—Cheese Headed 0.190 UNF x 1 3/8"	270-00030	3 3
SPRING WASHER	064-02582/002	3 3
ANGLE DRIVE ASSEMBLY—CW	351-18450	1 1
—ACW	351-18451	1 1
JOINT—Angle Drive Housing	294-36420	1 1
SCREW	064-06772/011	3 3
SPRING WASHER	064-02582/001	3 3
'O' RING	616-01742	1 1
FLEXIBLE DRIVE ASSEMBLY—16"	351-18460	1 1
—11"	351-18461	1 1
SWIVEL UNION—Greaser	351-32420	1 1
PLUG—Greaser	351-32430	1 1

**GAUGES & PANELS**

Description	Part No.	No. per eng	
		2 cyl	3 cyl
<b>RUNNING HOUR RECORDERS</b>			
<b>RUNNING HOUR RECORDER</b>			
-1200 rev/min ACW	351-52510	1	1
-1500 rev/min ACW	351-52530	1	1
-1800 rev/min ACW	351-52550	1	1
-2000 rev/min ACW	351-52560	1	1
-1500 rev/min CW	351-52520	1	1
-1800 rev/min CW	351-52540	1	1
-2000 rev/min CW	351-52570	1	1
-2200 rev/min ACW	351-52580	1	1
-2200 rev/min CW	351-52590	1	1
HOUSING	352-17600	1	1
SETSCREW—Housing to Counter 1/4" UNF x 2"	270-00057	2	2
SPRING WASHER	027-00451	2	2
DRIVING SHAFT	352-17610	1	1
BUSH—Driving Shaft	370-10670	1	1
SCREW—Adaptor	352-17620	1	1
WASHER	027-00085	1	1
END COVER	351-12090	1	1
OIL SEAL	210-00659	1	1
JOINT	351-11420	1	1
CLAMP RING	351-13180	1	1
JOINT	351-13160	2	2
SETSCREW—0.190 UNF x 5/8"	270-00029	3	3
SPRING WASHER	027-00717	3	3
PLATE ASSEMBLY Comprising	351-12060	1	1
LOCATING PLATE	351-12070	1	1
DRIVING PEG	351-12080	1	1
DOWEL	027-01224	1	1
<b>TEMPERATURE GAUGE—Alternative Fitting to Oil Gauge</b>			
GAUGE—Temperature	370-12992	1	1
CLIP—Capillary	351-19940	1	1
BULB—Clip	382-00066	1	1
SETSCREW—1/4" UNC x 1/2"	270-00376	1	1
SPRING WASHER	027-00451	1	1

**GAUGES & PANELS (Cont)**

Description	Part No.	No. per Eng.	
		2 cyl	3 cyl
<b>REV/MIN INDICATOR &amp; HOUR RECORDER</b>			
<b>REV/MIN INDICATOR &amp; HOUR RECORDER</b>			
-1800 Rev/Min	382-04714	1	1
REV/MIN INDICATOR—0—3000	382-04711	1	1
ADHESIVE LABEL	027-06054	1	1
<b>TACHOMETER DRIVE</b>			
DRIVING GEAR	351-13590	1	1
DOWEL—Driving Gear	351-13670	1	1
SETSCREW—Driving Gear 5/16" UNF x 7/8"	270-00024	2	2
SPRING WASHER—Driving Gear	027-00413	2	2
HOUSING—Tachometer Drive	351-13620	1	1
WRAPPED BUSH—Housing	351-13730	2	2
JOINT—Housing	351-13690	1	1
SOCKET CAP SCREW—Housing No. 10 UNF x 1/2"	270-00299	3	3
SPRING WASHER	064-02582/002	3	3
GEAR/WHEEL—Tachometer	351-13600	1	1
RETAINING RING—Gearwheel	351-13680	1	1
BLANKING COVER—Tachometer Angle Drive			
(Used when Tachometer is not required)	351-21380	1	1
CIRCLIP	292-12000	1	1
ANGLE DRIVE ASSEMBLY—CW	351-18450	1	1
—ACW	351-18451	1	1
JOINT—Angle Drive	294-36420	1	1
BOLT—Angle Drive	351-13720	3	3
SPRING WASHER	064-02582/001	3	3
OIL FEED PIPE—Includes 2 Swivel Unions	351-18990	1	1
PLUG—Swivel Union	291-28350	2	2
JOINT—Swivel Union	600-00106	2	2
PLUG—Swivel Union	842-00359	4	4
TRANSFER COVER	351-15890	1	1
JOINT—Transfer Cover	351-13700	1	1
SETSCREW—Transfer Cover 1/4" UNF x 5/8"	270-00023	3	3
SPRING WASHER	027-00451	3	3

**GAUGES & PANELS (Cont)**

Description	Part No.	No. per eng
		2 cyl 3 cyl
<b>ENGINE TEMPERATURE/OIL PRESSURE GAUGES—</b>		
<b>Tachometer &amp; Running Hour Recorder</b>		
TEMPERATURE GAUGE	370-12992	1 1
CLIP—Gauge Capillary ...	351-19940	1 1
OIL PRESSURE GAUGE	370-12970	1 1
ADAPTOR—Oil Pressure Gauge	291-37920	1 1
PIPE—Oil Pressure Gauge	382-02446	1 1
PIPE—Oil Pressure Gauge	382-04844	1 1
OIL PIPE—Flexible	351-19910	1 1
OIL PIPE—Flexible	291-30120	1 1
UNION CONNECTOR	291-21141	1 1
CLIP—Oil Pipe	351-19920	1 1
FELT—Clip ...	201-17170	1 1
PLUG—Swivel Union	291-28350	1 1
PLUG—Swivel Union	842-00359	1 1
JOINT WASHER ...	600-00106	2 2

<b>BILGE PUMP</b>		
JABSCO PUMP	390-00649	1 1
DRIVING BELT	390-00648	1 1
PULLEY	389-01597	1 1
KEY	366-00201	1 1
SETSCREW—Socket 1/4" UNF x 3/8"	270-00211	1 1

**EXHAUST SILENCER**

Description	Part No.	No. per eng
		2 cyl 3 cyl
EXHAUST SILENCER—Dry ...	011-21561	1 1
EXHAUST PIPE—2" Dia. x 12" Long	011-21562	1 1
SOCKET—2" Pipe	027-02162	1 1
SOCKET—2" Pipe	027-00230	1 1
<b>WATER INJECTED EXHAUST &amp; SILENCER</b>		
SILENCER—McMurdo Aqualastic	389-02578	1 1
CONNECTION—Exhaust Pipe 2" x 4" Long B.S.P.	027-02311	1 1
PITCHER TEE—2"	390-01044	1 1
BUSH—2" B.S.P. x 1" B.S.P.	390-01046	1 1
PIPE ASSEMBLY	389-02298	1 1
NIPPLE	023-01769	1 1
NUT	023-01768	1 1
PIPE—Copper 3/4" O.D.	616-01680	2 2
Exhaust Pipe not supplied by R.A.L.		

**SPECIAL TOOLS**

ASSEMBLY TOOL—Crankshaft	317-00146	1 1
ASSEMBLY TOOL—Loading Oil Seal & End Cover		
to Engine		
SHANK—Valve Seating & Facing Cutter	317-00150	1 1
TOMMY BAR	317-00322	1 1
CLEANING TOOL—Cylinder Fin	317-00226	1 1
RECESS CUTTER—Inlet Valve Seating	367-16170	1 1
—Exhaust Valve Seating	317-00320	1 1
CUTTER—Valve Seating	317-00321	1 1
ASSEMBLY TOOL—Main Bearings	317-00031	1 1
PIPE—Injector Testing	317-00277	1 1
CLAMP—Piston Ring	317-00092	1 1
COMPRESSOR—Valve Spring	317-00130	1 1
DISC—Withdrawing Flywheel	317-00091	1 1
STUD	013-23088	1 1
NUT	317-00017	3 3
RING SPANNER	270-00008	3 3
RING SPANNER	027-04175	1 1
RING SPANNER	027-04177	1 1
SPANNER—Flywheel Nut	010-07094	1 1
ADAPTOR	317-00016	1 1

JOINTS LISTS—Overhaul— Includes appropriate Decarbonising list

JOINTS LISTS	ENGINE	HRW2	HRW3	Part No.	C	D
JOINTS LISTS	ENGINE	HRW2	HRW3	Part No.	C	D
		657-20775	657-20794	351-10560	4	6
		658-15431	658-15421	351-10510	2	3
		658-14333	658-14343	616-01608	5	7
				352-15460	1	—
				353-15460	—	1
				351-10480	2	3
				351-40230	2	3
				351-40081	2	3
				351-60020	2	3
				351-60030	2	3
				351-40200	2	3
				352-40311	2	3
				354-26310	1	1
				003-00309	1	1
				291-27510	1	1
				396-44170	8	12
				291-30630	1	1
				351-40170	2	3
				351-40130	8	12

Description	Part No.	J	K
'O' RING—Oil Pipe Connection	354-31640	1	1
—Dipstick	201-13120	1	1
—Oil Pipe	352-11911	1	1
—T Piece	351-10341	1	1
—T Piece	352-11840	2	3
JOINT—Lifting Eye	351-13940	2	2
—Oil Filler	303-00253	2	3
—Fuel Pump Housing to End Plate	351-11180	1	1
—Fuel Pump Housing to Crankcase	352-11171	1	1
—Fuel Pump Housing to Crankcase	353-11170	—	1
RING JOINT—Stopping Control	201-13120	1	1
JOINT—Crankcase Door	352-11430	1	—
—Crankcase Door	353-11430	—	1
—Oil Pump Plug	013-21778	8	8
WASHER—Fuel Pipe to Pump	201-12970	4	6
—Felt—Oil Retaining Ring	351-11530	1	1
RUBBER BUSH—Leak Off Pipe	201-11090	1	—
JOINT—Cylinder Block Door	351-40070	2	3
—Drain Plug	013-22350	8	8
COPPER WASHER	616-01608	9	12
'O' RING—Cylinder Block Sleeve	354-54760	8	12
JOINT—End Cover	351-12620	1	1
COPPER WASHER—Blank Plug	354-26310	1	1
JOINT—Jabcoo Pump	351-13710	1	1
—Housing	351-13700	1	1
COPPER WASHER	600-00106	6	6
JOINT WASHER—Union	291-30640	2	2
JOINT—Fresh Water Pipe	351-40620	2	2
—Water Pump Cover	351-40340	1	1
RUBBER JOINT	PP52-20	4	4
JOINT—Exhaust Flange	292-21020	1	1

Description	Part No.	List Nos. N & P
JINT—End Cover ...	351-12620	1
—Reverse Casing ...	351-14020	2
—Inspection Cover ...	351-14000	1
*SHER—Inspection Cover ...	600-00106	6
JOINT—Gear Case to Adaptor Case ...	351-14010	1
*NT RING—Bearing Housing	012-15483	1
JOINT—Register Bracket	502-14690	1
—Plug ...	007-00420	1
—Gearcase 2:1 only ...	502-15110	1
—Gearcase 3:1 only ...	291-37590	1
—Gearcase Drain Plug ...	013-22350	1

### MAINTENANCE

Date	Hours Run	Item	Work Carried Out