

# LW

## MARINE DIESEL ENGINE SPARE PARTS

### L. GARDNER & SONS LTD

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# GARDNER

ENGINE No ...../.....

POWER..... B.H.P.

AT.....REVS. PER MINUTE.

DATE .....

# GARDNER

## INTRODUCTION

This Illustrated Spare Parts Catalogue has been published to help the operator in the quick and accurate identification of spare parts.

To avoid errors and delay the following simple instructions must be observed:—

### ALWAYS QUOTE:

- 1) The part number and the quantity required.
- 2) The engine serial number for which the parts are required.

It is not necessary to give a description of the part.

The engine serial number is stamped on the top of the Crankcase alongside No. 1 Cylinder, on the Fuel Pump side.

The cylinder nearest to the chain case is No. 1 Cylinder.

## HOW TO ORDER A SPARE PART

The Index to the Sections and Illustrations on the opposite page, will give you a general description of the section and plate numbers on which the part required is illustrated. Now turn to the plate indicated, identify the part by the illustration, alongside which is given the illustration number. In the text immediately following the plate locate the illustration number, and in the adjacent column will be found the spare part number of the part required. Verify this spare part number with the description in the text.

Do not quote any other number appearing on the engine. You have all the necessary information to enable you to order.

The illustration number is only a key to the respective spare part number and must never be quoted when ordering parts.

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# GARDNER

## CYLINDER — PLATE 1

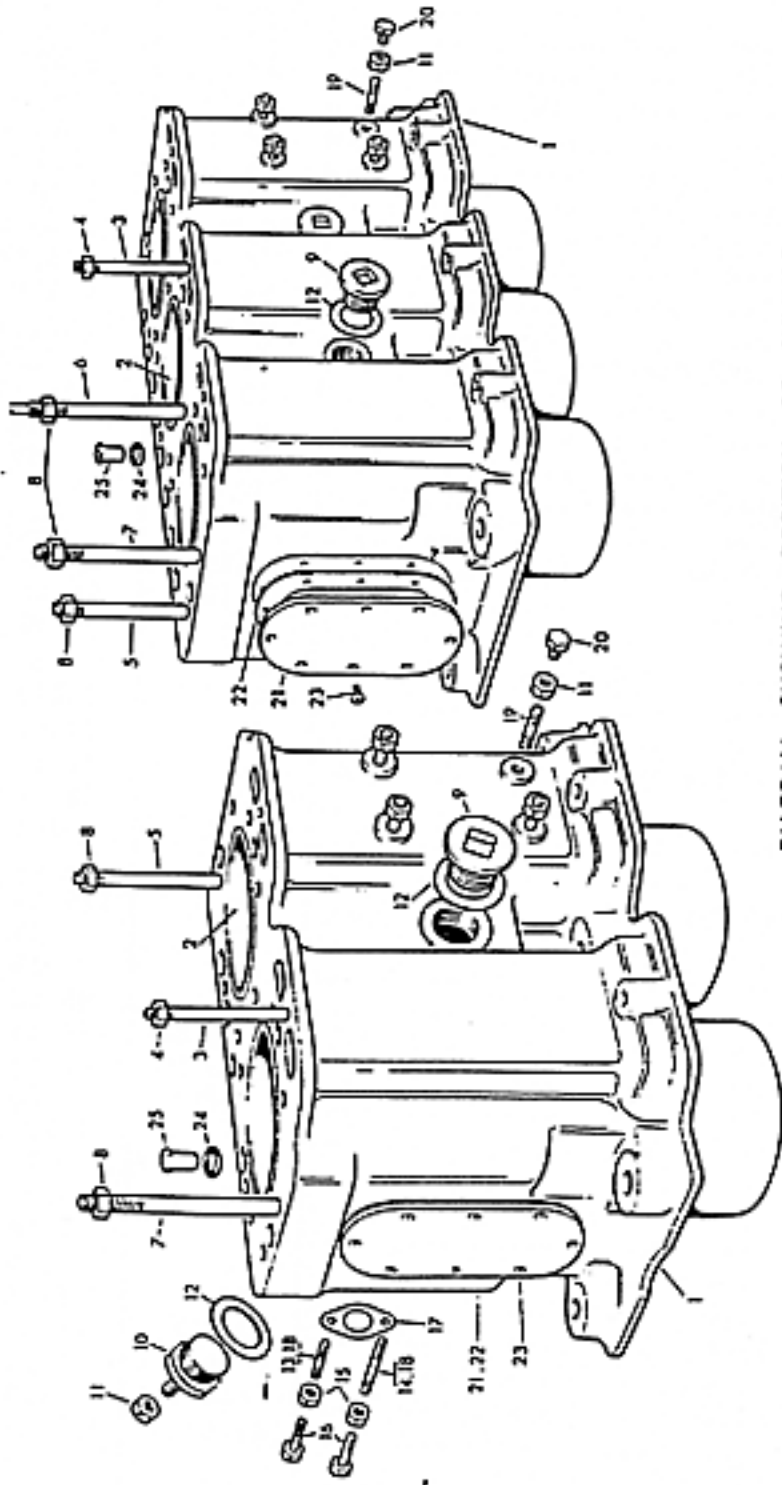
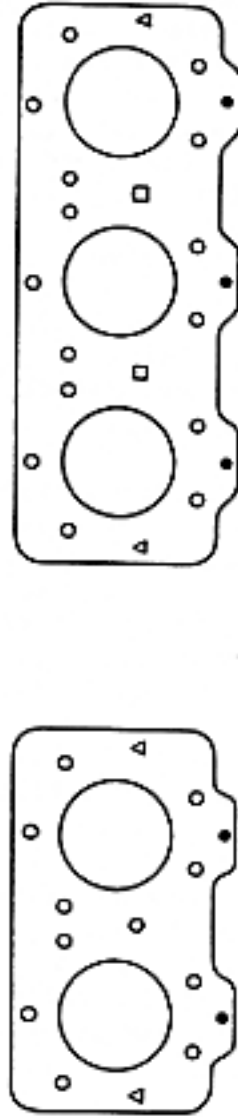


DIAGRAM SHOWING POSITION OF CYLINDER HEAD STUDS



Studs marked thus	•	Illustration N <sup>o</sup> 3
"	"	" 5
"	"	" 6
"	"	" 7

Plate No.	Illus. No.	Part No.	Description	
1	1	T00701	CYLINDER - 2 BLOCK, with L26007, J05135, ) E06089, J05132, J05134, C04474, J22360, ) 2LW C06316, E04948, E04949, K07698 )	Compares with LW/1/203
		T00702	CYLINDER - 3 BLOCK, with L26007, J05135, ) E06089, J05132, J05133, J05134, C04474, ) 3LW J22360, C06316, E04948, E04949, K07698 )	Compares with LW/1/118
		A26006	CYLINDER - 2 BLOCK, with L26007, J05135, ) 4LW E06089, J05132, J05134, C04474, J22360, ) Cyl. Nos. 1 & 2 C06316, E04948, E04949, K07698 )	Compares with LW/1/5
		A26007	CYLINDER - 2 BLOCK, with L26007, J05135, ( 4LW E06089, J05132, J05134, C04474, J22360, ( Cyl. Nos. 3 & 4 C06316, E04948, E04949, K07698 ( 5LW, 5LW20 ( Cyl. Nos. 4 & 5	Compares with LW/1/6
		A26008	CYLINDER - 3 BLOCK, with L26007, J05135, ) 5LW, 6LW E06089, J05132, J05133, J05134, C04474, ) 5LW20, 6LW20 J22360, C06316, E04948, E04949, K07698 ) Cyl. Nos. 1, 2 & 3	Compares with LW/1/7
		A26009	CYLINDER - 3 BLOCK, with L26007, J05135, ) 6LW, 6LW20 E06089, J05132, J05133, J05134, C04474, ) Cyl. Nos. 4, 5 & 6 J22360, C06316, E04948, E04949, K07698 )	Compares with LW/1/8
	2	L26008	Cylinder Liner (For Honing)	Was MA 119
		L26007	Cylinder Liner (For Fine Boring)	Was MA 120
	3	J05135	Cylinder Head Stud, 3/8" B.S.F. X 3.27/32" long	Was LW/1/11
	4	E06089	Nut, 3/8" B.S.F. X 3/8" X 5/16" Hex.	Was 126 NU
	5	J05132	Cylinder Head Stud, 1/2" B.S.F. X 4.9/16" long	Was MA 100
	6	J05133	Cylinder Head Stud, 1/2" B.S.F. X 5.1/4" long (Tapped for Cover Screw)	Was MA 101
	7	J05134	Cylinder Head Stud, 1/2" B.S.F. X 5.1/4" long	Was LW/1/134
	8	C04474	Nut, 1/2" B.S.F. X 1/2" X 7/16" Hex.	Was 132 NU
	9	J22360	Plug, Sq. Hole, 1.3/8" - 16 Thds.	Was 114 PL
	10	K03269	Plug, 1.3/8" - 16 Thds. X 5/16" B.S.F. ( To suit Engines ( with Centrifugal Type	Was 151 PL
	11	E03772	Nut, 5/16" B.S.F. X 1/4" X 1/4" Hex. ( Water Pump and ( Single Lever Control	Was 122 NU
	12	C06316	Packing, Circular, 1.3/4" O.D. X 1.11/32" I.D. X 1/32"	Was 164 PA
	13	E05617	Stud, 5/16" Wh. X 1.5/8" long )	Was 117 ST
	14	E09659	Stud, 5/16" Wh. X 2.1/8" long )	Was 119 ST
	15	E03945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex. ) Water Inlet Pipe ) or Connection ) to Cylinder	Was 106 NU
	16	J03032	Bolt, 5/16" Wh. X 1.3/8" long X 1/4" Hex. )	Was 112 BL
	17	J03009	Packing, Flange, 1.5/8" centres X 1.3/4" wide )	Was 107 PA
	18	C06723	Stud, 5/16" Wh. X 1.1/4" long ) Oil Cooler Supporting ) Bracket to Cylinder	Was 126 ST
	15	E03945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex. )	Was 106 NU

Plate No.	Illus. No.	Part No.	Description	
1	19	KD5848	Stud, 5/16" Wh. X 5/16" B.S.F. X 1.7/16" long	Was 475 ST
	11	ED3772	Nut, 5/16" B.S.F. X 1/4" X 1/4" Hex.	Was 122 NU
	20	EO9133	Setscrew, 5/16" Wh. X 13/32" long X 3/16" Hex.	Was 146 SS
	21	EO4948	Cylinder Water Door	Was Part of LW/1/15
	22	EO4949	Packing - Cylinder Water Door	Was LW/1/16
	23	KD7698	Setscrew, Countersunk Head, (Hexagon Socket), 1 B.A. X 3/8" Long	Was 479 SS
	24	EO3555	Joint Ring, 11/16" O.D. X 5/16" I.D. X 3/16" Sectional diam.	Was 100 RJ
	25	L20468	Cylinder Water Connection Tube	Was MA 1509 (Previously MA102)

# GARDNER

## CYLINDER HEAD — PLATE 2

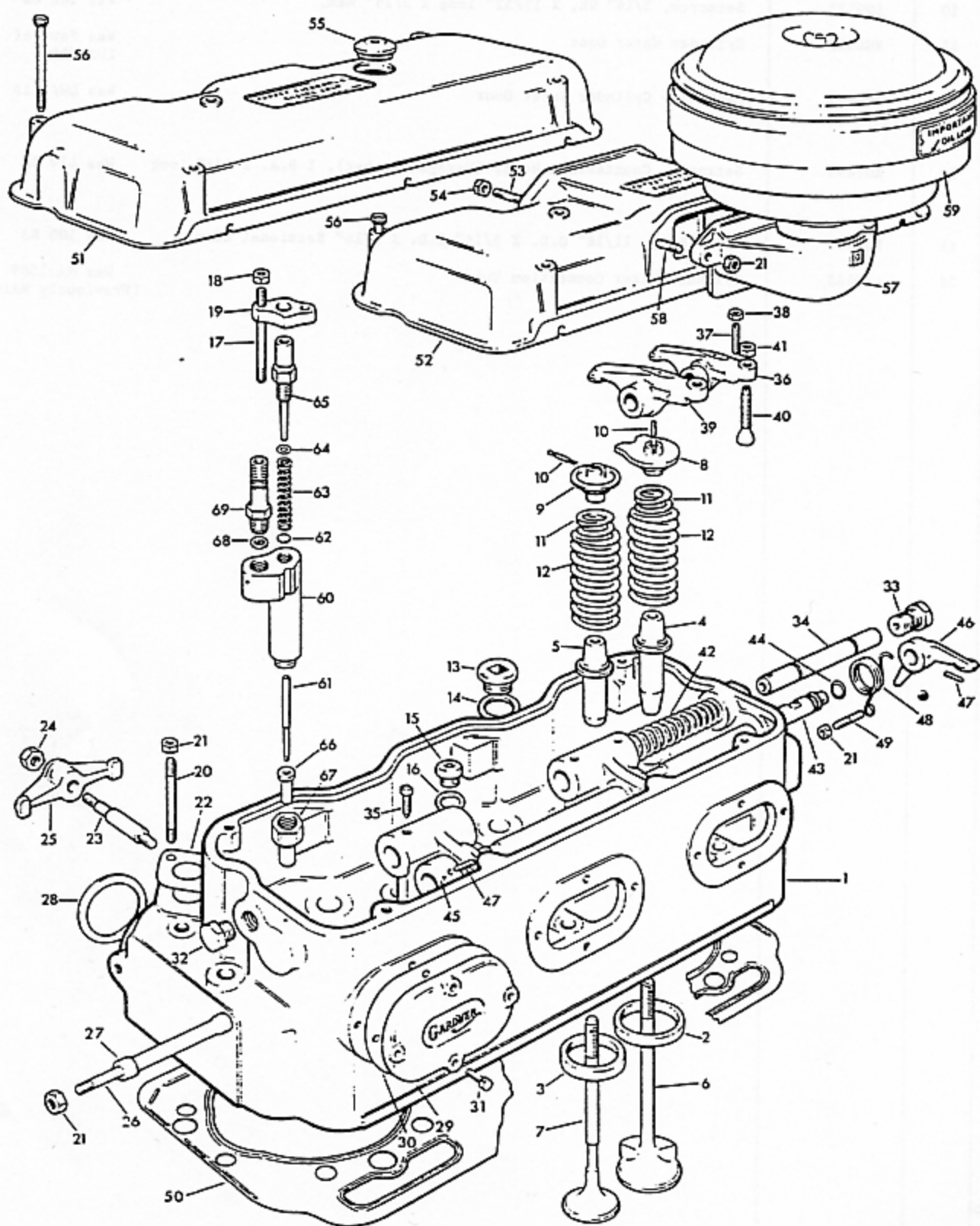






Plate No.	Illus. No.	Part No.	Description	
2	15	K07340	Plug, 3/8" Hex. Socket, 3/8" B.S.P.	Was 159 PL
	16	E09882	Packing, Circular, 7/8" O.D. X 5/8" I.D. X 1/32"	Was 151 PA
	17	K04213	Stud, 5/16" Wh. X 2.13/16" long	Was 391 ST
	18	J01377	Nut, 5/16" Wh. X 5/16" X 3/16" Hex.	Was 107 NU
	19	E34810	Plate - Sprayer Clamp	Was MA 106
	20	J09756	Stud, 5/16" Wh. X 2.5/8" long	Was 363 ST
	21	E03945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex.	Was 106 NU
	22	J03009	Packing, Flange, 1.5/8" centres X 1.3/4" wide	Was 107 PA
	23	E03359	Stud - Inlet and Exhaust Manifolds Clamp	Was MA 103
	24	C05539	Nut, 3/8" Wh. X 3/8" X 5/16" Hex.	Was 110 NU
	25	K05361	Inlet and Exhaust Manifolds Clamp	Was LW/1/306
	26	J06507	Stud, 5/16" Wh. X 10.5/8" long ( For Chain Starting Bracket at Chain Case End or for Water Header Tank Support	Was 296 ST
	21	E03945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex.	Was 106 NU
	27	J08658	Strut - Chain Starting Shaft Bracket - 7.1/2" long	Was LW/1/1003
		K36680	Strut - Chain Starting Shaft Bracket - 7.1/16" long	Was LW/1/1009
	28	E04762	Washer, 2.5/16" O.D. X 1.3/4" I.D. X 3/32" thick	Was 165 PA
	29	-	Door - Cylinder Head (with Countersunk Fixing Holes) (Superseded, will be replaced by K04898, K00933 and 4 off K00533)	Was MA 104
		K04898	Door - Cylinder Head	Was Part of MA 1273
		-	Door - Cylinder Head (with Countersunk Fixing Holes) (For Mounting Lubricating Oil Pressure Warning Switch) (Superseded, will be replaced by K07011, K00933 and 4 off K00533)	Was MA 997
		K07011	Door - Cylinder Head (For Mounting Lubricating Oil Pressure Warning Switch)	Was Part of MA 1276
	30	K00933	Packing - Cylinder Head Door (For replacements only - when Jointing Compound is NOT available)	Was MA 369
	31	L21221	Setscrew, Countersunk Head, 1/4" Wh. X 1/2" long	Was 165 SS
		K00833	Setscrew, 1/4" Wh. X 5/8" long X 3/16" Hex.	Was 259 SS
	32	K07638	Plug, 3/8" B.S.P. X 7/16" Hex. (Head Tapped 2 B.A.)	Was 162 PL

Plate No.	Illus. No.	Part No.	Description	
2	33	E05091	Connection Screw - Valve Levers Lubrication Pipe	Was 102 CS
	34	E04914	Shaft - Valve Levers	Was LW/1/65
	35	C04979	Setscrew, Sq. Head, Pointed, 1/4" - 28 Thds. X 1 1/32" long	Was 170 SS
	36	T01294	Lever - Inlet Valve, with J08141, E08470, E03583, E08175	Was MA 1494
	37	J08141	Setscrew, Headless, Bronze, O B.A. X 7/8" long	Was 177 SS
	38	E08470	Nut - Compression Relief Adjusting Screw	Was 104 NU
	39	T01295	Lever - Exhaust Valve, with K03583, E08175	Was MA 1495
	40	K03583	Adjuster - Valve Lever	Was MA 762
	41	E08175	Nut, 5/16" B.S.F. X 1/4" X 3/16" Hex.	Was 124 NU
	42	E03990	Spring - Compression - Valve Levers Spacing	Was 121 SP
	43	J08748	Shaft - Compression Relief - 2 Block	Was Part of LW/1/187
		J08747	Shaft - Compression Relief - 3 Block	Was Part of LW/1/188
	44	J09382	Sealing Ring - Compression Relief Shaft	Was 101 RJ
	45	E05041	Collar - Compression Relief	Was Part of LW/1/305
	46	J85850	Lever - Compression Relief Shaft	Was Part of LW/1/189
	47	K04970	Rollpin, 3/16" diam. X 1" long ( To suit Compression Relief Shaft, Collar and Lever drilled for Rollpin	Was MA 978
	-	J07743	Taper Pin ( To suit Compression Relief Shaft, Collar and Lever drilled for Taper Pin	Was 105 PT
2	48	J08586	Spring - Torsion - Compression Relief Shaft Lever	Was 148 SP
	49	J08587	Stop Peg - Compression Relief Shaft Lever	Was 117 PE
	21	E03945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex.	Was 106 NU
	50	H06835	Cylinder Head Joint Packing - 2 Block	Was LW/1/115
		H06836	Cylinder Head Joint Packing - 3 Block	Was LW/1/116
	51	H03395/03	Cylinder Head Cover - Ribbed - 2 Block - ) 2LW, 4LW Type B (Non-Air Duct Type) ) Cyl. Nos. 1 & 2	Was LW/1/219
		H03457/01	Cylinder Head Cover - Ribbed - 3 Block - ) 3LW, 5LW, 6LW Type B (Non-Air Duct Type) ) Cyl. Nos. 1, 2 & 3	Was Part of LW/1/220
		H03395/06	Cylinder Head Cover - Ribbed - 2 Block - ( 4LW Type B (Non-Air Duct Type) ( Cyl. Nos. 3 & 4 ( 5LW ( Cyl. Nos. 4 & 5	Was LW/1/221

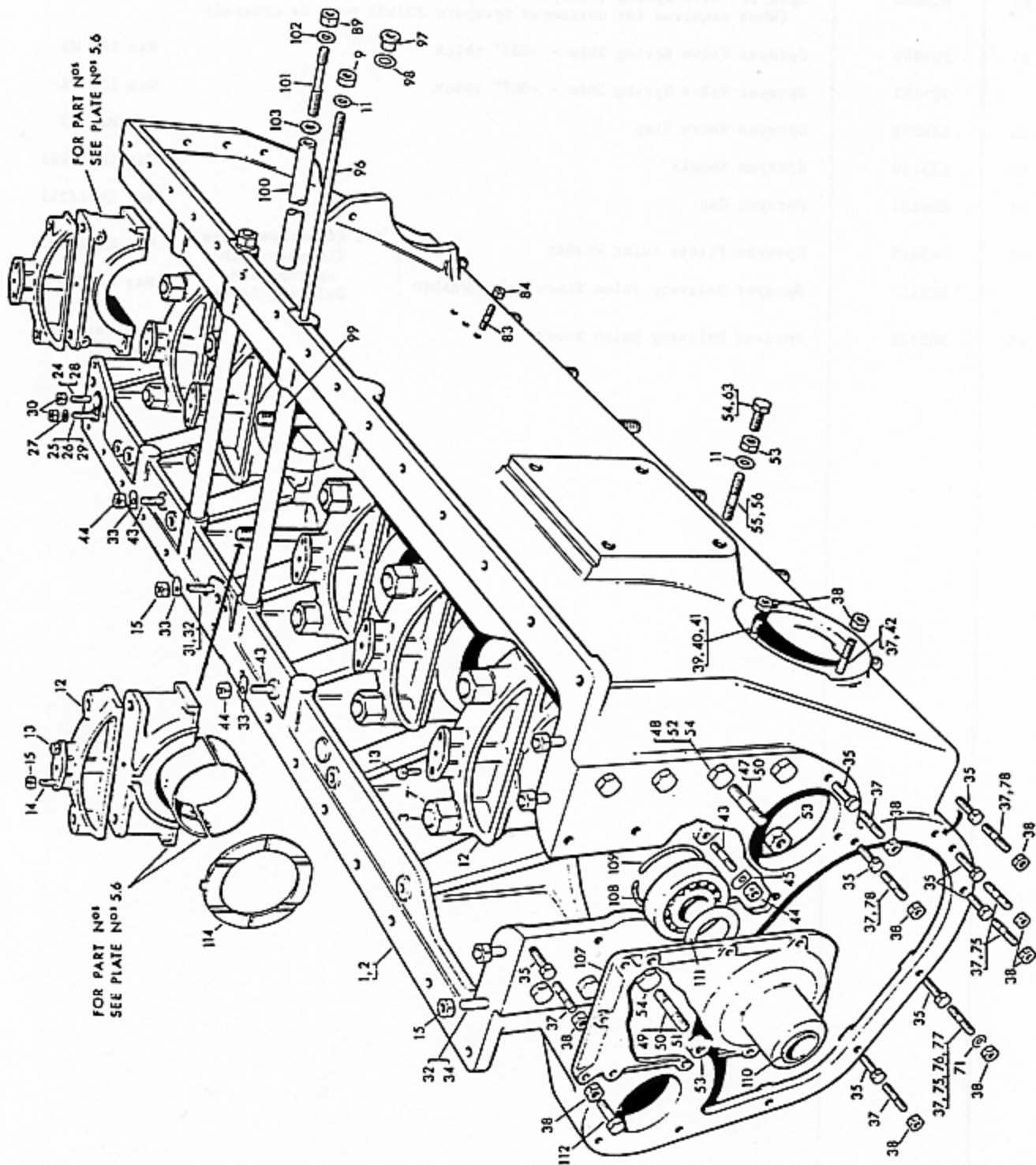
**CYLINDER HEAD**

Plate No.	Illus. No.	Part No.	Description		
2	51	H03457/04	Cylinder Head Cover - Ribbed - 3 Block - Type B (Non-Air Duct Type)	} 6LW Cyl. Nos. 4, 5 & 6	Was Part of LW/1/222
	52	H04349/01	Cylinder Head Cover - Ribbed - 2 Block - Type 3 (Air Duct Type), with J09591, E05632	} 2LW, 4LW Cyl. Nos. 1 & 2	Was LW/1/205
		H04350/01	Cylinder Head Cover - Ribbed - 3 Block - Type 3 (Air Duct Type), with J09591, E05632	} 3LW, 5LW, 6LW Cyl. Nos. 1, 2 & 3	Was Part of LW/1/206
		H04349/04	Cylinder Head Cover - Ribbed - 2 Block - Type 3 (Air Duct Type), with J09591, E05632	( 4LW ( Cyl. Nos. 3 & 4 ( 5LW ( Cyl. Nos. 4 & 5	Was LW/1/217
		H04350/04	Cylinder Head Cover - Ribbed - 3 Block - Type 3 (Air Duct Type), with J09591, E05632	} 6LW Cyl. Nos. 4, 5 & 6	Was Part of LW/1/218
	53	J09591	Stud, 1/4" Wh. X 1.13/16" long		Was 103 ST
	54	E05632	Nut, 1/4" Wh. X 1/4" X 3/16" Hex.		Was 105 NU
	55	E81230	Plug - Cylinder Head Cover Lifting Hole		Was MA 1206
	56	E08122	Screw - Cylinder Head Cover - 2.7/16" long		Was 197 SS
		E04911	Screw - Cylinder Head Cover - 4" long		Was 200 SS
	57	F01632	Adapter - Air Filter - Oil Bath Type - Type O		Was LW/1/140
	58	C06723	Stud, 5/16" Wh. X 1.1/4" long	} Adapter to Cylinder Head Cover	Was 126 ST
	21	E03945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex.		Was 106 NU
	59	A04659	AIR FILTER ASSEMBLY - OIL BATH TYPE		Was 129 AF

Plate No.	Illus. No.	Part No.	Description	
2	60	T26010	SPRAYER ASSEMBLY, Complete	Was LW/1/97
	61	E08133	Sprayer Valve	Was MA 111
	62	E09789	Sprayer Valve Spring Disc	Was MA 112
	63	L20235	Sprayer Valve Spring (Sprayers stamped K or E1 or EK) (When required for unstamped Sprayers J05683 must be ordered)	Was 104 SP
	64	J05869	Sprayer Valve Spring Shim - .003" thick	Was 124 WA
		J05683	Sprayer Valve Spring Shim - .007" thick	Was 102 WA
	65	L16092	Sprayer Valve Stop	Was MA 113
	66	L16159	Sprayer Nozzle	Was LW/1/103
	67	X06151	Sprayer Cap	Was LW/1/311
	68	S05258	Sprayer Filter Joint Washer	( NOT interchangeable - ( fit only with ( appropriate ( Delivery Stock
-	-	X05113	Sprayer Delivery Union Stock Joint Washer	Was MA 1158 Was MA 999
2	69	S05258	Sprayer Delivery Union Stock	Was Part of MA 1157

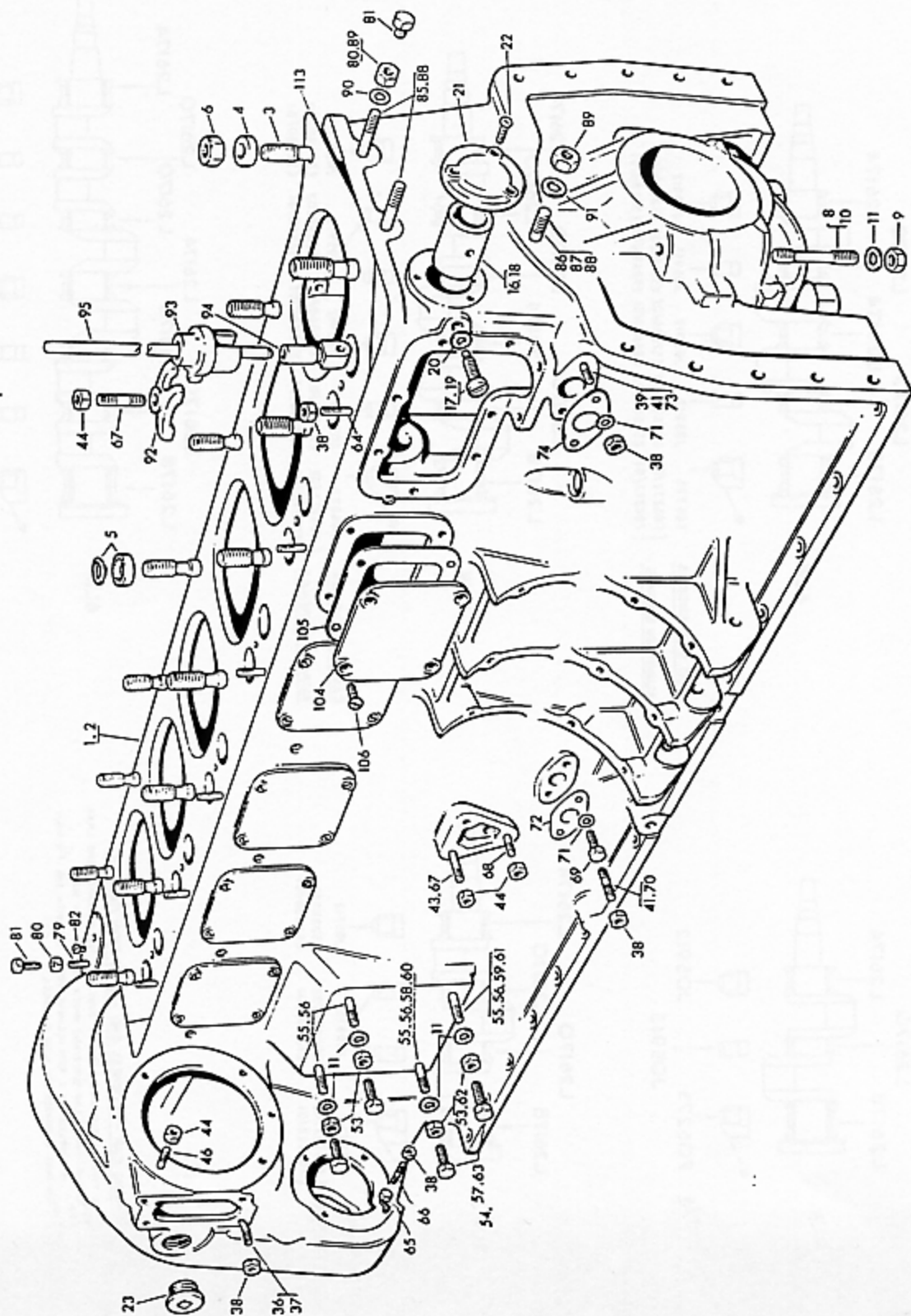
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## CRANKCASE — PLATE 3



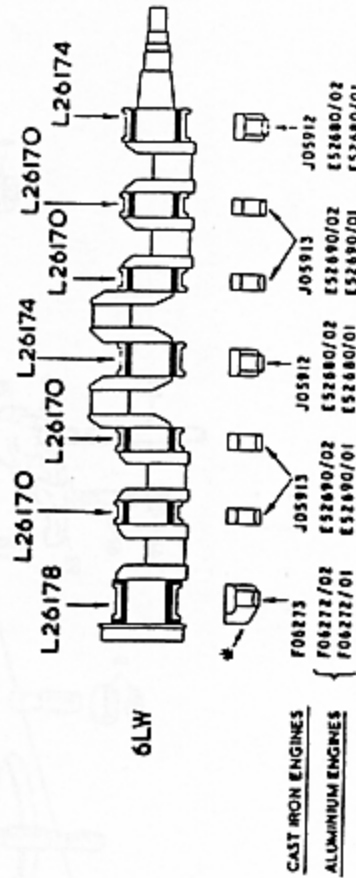
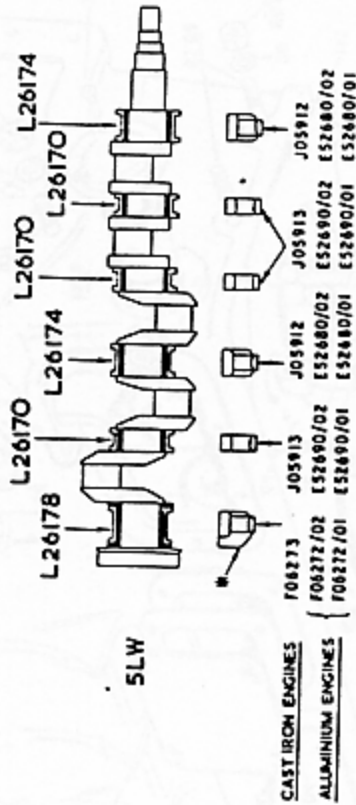
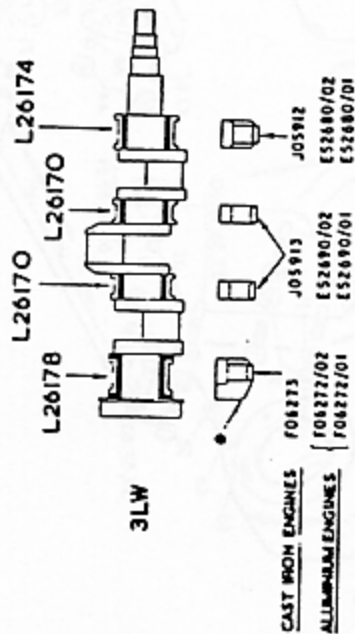
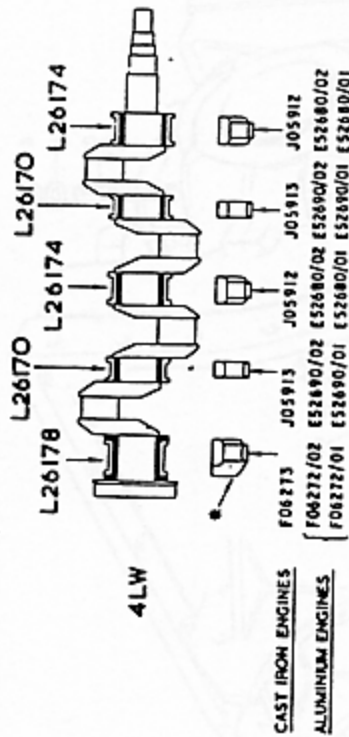
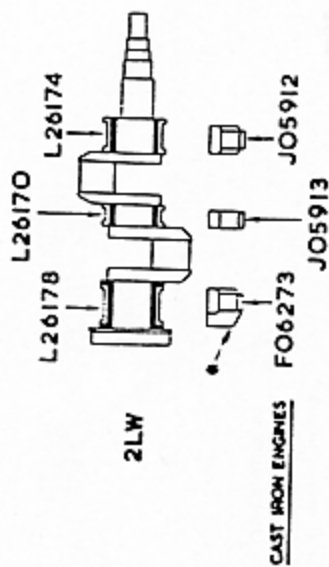
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## CRANKCASE — PLATE 4



## DISPOSITION OF MAIN BEARINGS AND CAPS — PLATE 5

### TO SUIT ENGINES WITH GUN METAL MAIN BEARINGS

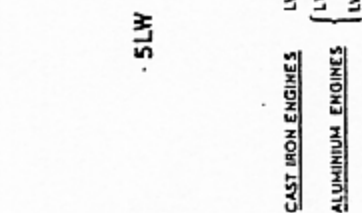
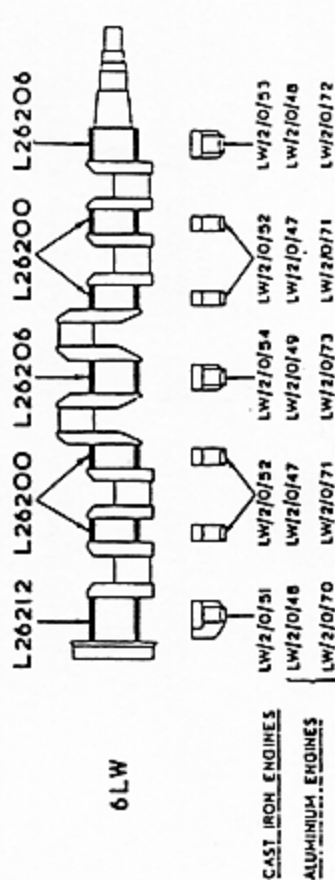
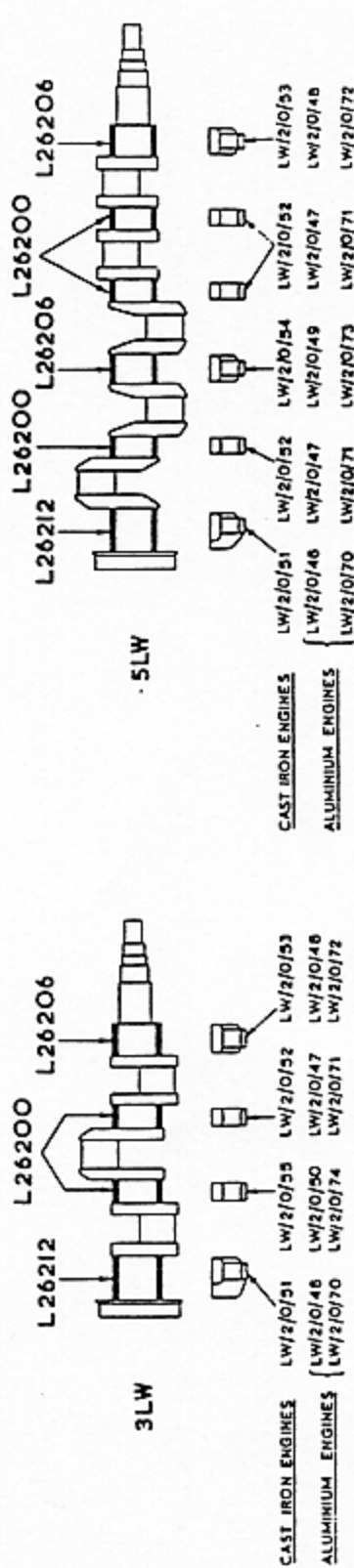
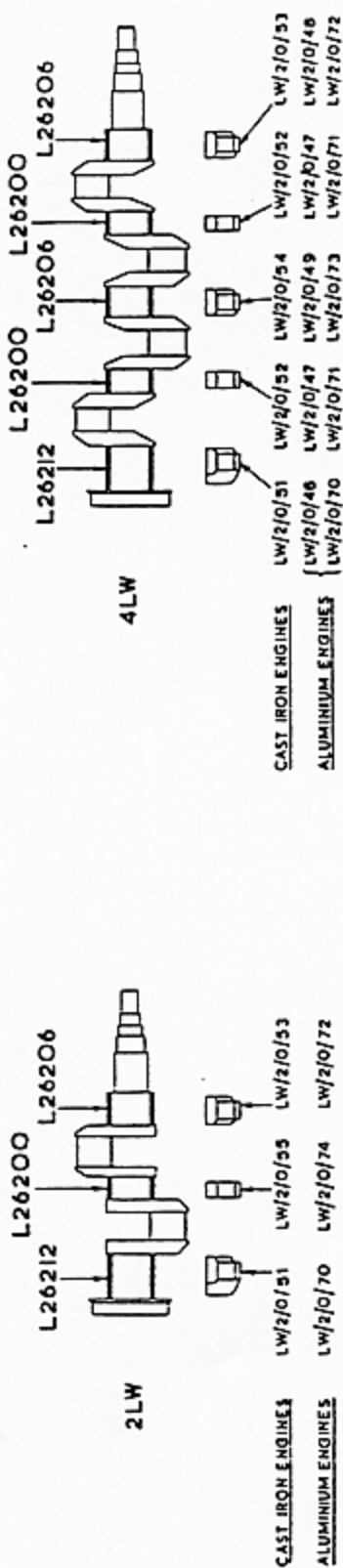


\* MAIN BEARING CAP - FLYWHEEL END - CAST IRON ENGINES  
FO6273 IS A TYPE 24 CAP WITH A 2" HIGH BOSS FOR THE FLYWHEEL END STOPS  
AND SUPERSEDES THE TYPE 2 CAP (W/27162) WHICH HAS 1 1/4" HIGH BOSS  
WHEN FO6273 IS SUPPLIED AS A REPLACEMENT FOR A CAP WITH THE 1 1/4" HIGH  
BOSS, 2 OFF STOP PART NO. 104795 ARE ALSO REQUIRED.

UNBored AND UNDERSIZE BEARINGS  
ARE LISTED IN THE FOLLOWING PAGES

## DISPOSITION OF MAIN BEARINGS AND CAPS — PLATE 6

### TO SUIT ENGINES WITH PRE-FINISHED THIN WALL MAIN BEARINGS



**6LW**

NOTE 1.  
LW ENGINES FISHED WITH PRE-FINISHED THIN WALL MAIN BEARINGS CAN BE IDENTIFIED BY THE "JELS/SQ IN" STAMPED ON THE LUBRICATING OIL RELIEF VALVE ASSEMBLY.

UNDERSIZE BEARINGS  
ARE LISTED IN THE ENGLISH NAME



Plate No.	Illus. No.	Part No.	Description
			<u>IMPORTANT CRANKCASE ASSEMBLIES</u>
			The only crankcases now available are ALUMINIUM with Thin Wall Main Bearings as shown below.
			For replacement of all CAST IRON crankcases, and for ALUMINIUM crankcases with GUN METAL Main Bearings, apply to the Spares Department at Head Office for full details, including any additional parts that may be required. Quote Engine Serial Number.
3,4	1,2	A04271	CRANKCASE ASSEMBLY - TYPE 3, Comprising ) ) ) Was LW/2/0/141 Crankcase, THIN WALL MAIN BEARINGS, ) ) ) 21W Caps, Thrust Washers, Bridges, Bushes, ) ) ) Studs, Nuts and Packings ) ) )
		A04265	CRANKCASE ASSEMBLY - TYPE 3, Comprising ) ) ) Was LW/2/0/137 Crankcase, THIN WALL MAIN BEARINGS, ) ) ) 31W Caps, Thrust Washers, Bridges, Bushes, ) ) ) Studs, Nuts and Packings ) ) )
		A03563	CRANKCASE ASSEMBLY - TYPE 3, Comprising ) ) ) Was LW/2/0/108 Crankcase, THIN WALL MAIN BEARINGS, ) ) ) 4LW Caps, Thrust Washers, Bridges, Bushes, ) ) ) Studs, Nuts and Packings ) ) )
		A03564	CRANKCASE ASSEMBLY - TYPE 3, Comprising ) ) ) Was LW/2/0/109 Crankcase, THIN WALL MAIN BEARINGS, ) ) ) 5LW, Caps, Thrust Washers, Bridges, Bushes, ) ) ) 5LW20 Studs, Nuts and Packings ) ) )
		A03565	CRANKCASE ASSEMBLY - TYPE 3, Comprising ) ) ) Was LW/2/0/110 Crankcase, THIN WALL MAIN BEARINGS, ) ) ) 6LW, Caps, Thrust Washers, Bridges, Bushes, ) ) ) 6LW20 Studs, Nuts and Packings ) ) )
			Aluminium Engines
			To suit STEEL Main Bearing Distribution Pipe
	3	J05258	Stud - Cylinder Foot and Main Bearing Cap, 18.1/4" long ) ) ) Was Part of (with thread for Crankcase 3/4" Wh. X 1.21/32" long) ) ) ) LW/2/0/9 (Oversize available on application)
		J05257	Stud - Cylinder Foot and Main Bearing Cap, Centre ) ) ) Was Part of 18.3/4" long (with thread for Crankcase 3/4" Wh. X ) ) ) LW/2/0/10 and 1.21/32" long) ) ) ) LW/2/0/11 (Oversize available on application)
4	4	J07198	Washer, Steel, 1.1/4" O.D. X ) ) ) When Chain Starting ) ) ) Was 139 WA 21/32" I.D. X 1/16" ) ) ) Flywheel ) ) ) is fitted
		E05304	Washer - Cylinder Foot Stud ) ) ) End Only ( When Chain Starting ) ) ) Was 143 WA ( is NOT fitted
	5	E09802	Washer - Cylinder Foot Stud - Upper, Centre ) ) ) ) ) Was LW/2/332 ) 4 to 6LW
		E09803	Washer - Cylinder Foot Stud - Lower, Centre ) ) )
	6	E05303	Nut, 5/8" B.S.F. X 5/8" X 9/16" Hex. ) ) ) Was 160 NU
3	7	K04742	Nut, 3/4" B.S.F. X 13/16" X 5/8" Hex. ) ) ) Was 296 NU

Plate No.	Illus. No.	Part No.	Description		
5	-	F06273	Cap - Main Bearing - Type 2A - Flywheel End	Cast Iron Engines	Was LW/2/0/63
	-	J05913	Cap - Main Bearing - Type 2 - Short	Cast Iron Engines	Was LW/2/634
	-	J05912	Cap - Main Bearing - Type 2 - Centre & Gear End	Cast Iron Engines	Was LW/2/635
	-	F06272/02	Cap - Main Bearing - Type 2A - Flywheel End	Cast Iron Engines	Was LW/2/0/62
	-	E52690/02	Cap - Main Bearing - Type 2 - Short	Without Dimple Impressions on Side Face	Was LW/2/14
	-	E52680/02	Cap - Main Bearing - Type 2 - Centre & Gear End	Aluminium Engines	Was LW/2/15
	-	F06272/01	Cap - Main Bearing - Type 2A - Flywheel End	Aluminium Engines	Was LW/2/0/67
	-	E52690/01	Cap - Main Bearing - Type 2 - Short	With Two Dimple Impressions Cast on Side Face	Was LW/2/0/68
	-	E52680/01	Cap - Main Bearing - Type 2 - Centre & Gear End	Aluminium Engines	Was LW/2/0/69
6	-	-	Cap - Main Bearing - Type 3 - Flywheel End	Cast Iron Engines	Was LW/2/0/51
	-	-	Cap - Main Bearing - Type 3 - Short	Cast Iron Engines	Was LW/2/0/52
	-	-	Cap - Main Bearing - Type 3 - Gear End	Cast Iron Engines	Was LW/2/0/53
	-	-	Cap - Main Bearing - Type 3 - Centre	Cast Iron Engines	Was LW/2/0/54
	-	-	Cap - Main Bearing - Type 3 - Locating	Cast Iron Engines	Was LW/2/0/55
	-	-	Cap - Main Bearing - Type 3 - Flywheel End	Without Dimple Impressions on Side Face	Was LW/2/0/46
	-	-	Cap - Main Bearing - Type 3 - Short	These Main Bearing Caps are only supplied complete with a Crankcase and not as separate items	Was LW/2/0/47
	-	-	Cap - Main Bearing - Type 3 - Gear End	Aluminium Engines	Was LW/2/0/48
	-	-	Cap - Main Bearing - Type 3 - Centre	Aluminium Engines	Was LW/2/0/49
	-	-	Cap - Main Bearing - Type 3 - Locating	Aluminium Engines	Was LW/2/0/50
	-	-	Cap - Main Bearing - Type 3 - Flywheel End	Aluminium Engines	Was LW/2/0/70
	-	-	Cap - Main Bearing - Type 3 - Short	Aluminium Engines	Was LW/2/0/71
	-	-	Cap - Main Bearing - Type 3 - Gear End	Aluminium Engines	Was LW/2/0/72
	-	-	Cap - Main Bearing - Type 3 - Centre	Aluminium Engines	Was LW/2/0/73
	-	-	Cap - Main Bearing - Type 3 - Locating	Aluminium Engines	Was LW/2/0/74

Plate No.	Illus. No.	Part No.	Description	
-	-	JD4298	Stud, 1/2" B.S.F. X 2.27/32" long	Was 196 ST
-	-	CD4474	Nut, 1/2" B.S.F. X 1/2" X 7/16" Hex.	Was 132 NU
-	-	J03458	Locking Plate, 17/32" diam. hole	Was 106 LP
4	8	KD4785	Stud, 1/2" B.S.F. X 3.9/16" long	Was 439 ST
	9	CD4474	Nut, 1/2" B.S.F. X 1/2" X 7/16" Hex.	Was 132 NU
	10	KD4595	Stud, 1/2" B.S.F. X 5.7/32" long	Was 423 ST
	11	SO5725/05	Washer, 1/2" diam. bore	Was 122 WA
3	12	E52710	Bridge - Main Bearing Cap (To suit Copper Main Bearing Distribution Pipe)	Was Part of LM/2/0/17
		K05793	Bridge - Main Bearing Cap (To suit Steel Main Bearing Distribution Pipe)	Was LM/2/0/79
	13	K00480	Setscrew, 3/8" B.S.F. X 7/8" long X 5/16" Hex.	Was 161 SS
	14	E05284	Stud, 3/8" B.S.F. X 1.5/16" long	Was 173 ST
	15	E04029	Nut, 3/8" B.S.F. X 5/16" X 5/16" Hex.	Was 125 NU
-	-	K05899	Locking Plate, 25/64" diam. hole (To suit Copper Main Bearing Distribution Pipe)	Was 126 LP
4	16	E09444	Bush - Valve Camshaft - Intermediate and Flywheel End	Was LM/2/53
	17	E05207	Locating Screw	Was 191 SS
	18	E07386	Bush - Valve Camshaft - Gear End	Was LM/2/55
	19	E05624	Locating Screw	Was 190 SS
	20	J05379	Washer - Valve Camshaft Bush Locating Screw	Was 101 WA
	21	E54770	Cover - Valve Camshaft Hole	Was MA 130
	22	L21208	Setscrew, Countersunk Head, 1 B.A. X 5/8" long (For Covers with Countersunk Holes)	Was 164 SS
	23	J22360	Plug, Sq. Hole, Cast Iron, 1.3/8" - 16 Thds. (Cast Iron Engines)	Was 114 PL
		E98890	Plug, Sq. Hole, Aluminium, 1.3/8" - 16 Thds. (Aluminium Engines)	Was 113 PL
3	24	J01353	Stud, 3/8" Wh. X 2.3/4" long	Was 152 ST
	25	J01352	Bolt, 3/8" Wh. X 2.1/2" long X 5/16" Hex.	Was 124 BL
	26	E06446	Bolt, 3/8" Wh. X 2.3/4" long X 5/16" Hex.	Was 229 BL
	27	SO5725/03	Washer, 3/8" diam. bore	Was 108 WA
	28	E09679	Stud, 3/8" Wh. X 3.15/16" long	Was 149 ST
	29	E05065	Bolt, 3/8" Wh. X 3.7/8" long X 5/16" Hex.	Was 125 BL

Plate No.	Illus. No.	Part No.	Description	
3	30	E00185	Nut, 3/8" Wh. X 5/16" X 5/16" Hex.	Was 113 NU
	31	E06451	Stud, 3/8" Wh. X 3/8" B.S.F. X 2" long )	Was 216 ST
	32	E06450	Stud, 3/8" Wh. X 3/8" B.S.F. X 1.5/8" long )	Was 168 ST
	15	E04029	Nut, 3/8" B.S.F. X 5/16" X 5/16" Hex. )	Was 125 NU
	33	X05899	Locking Plate, 25/64" diam. hole )	Was 126 LP
	34	J03407	Stud, 3/8" Wh. X 3/8" B.S.F. X 1.1/2" long (Cast Iron Engines)	Was 167 ST
	32	E06450	Stud, 3/8" Wh. X 3/8" B.S.F. X 1.5/8" long (Aluminium Engines)	Was 168 ST
	15	E04029	Nut, 3/8" B.S.F. X 5/16" X 5/16" Hex.	Was 125 NU
	35	E05577	Setcrew, 5/16" Wh. X 7/8" long ( Chain Fixed Jockey ) X 1/4" Hex. ( Mount and Chain Case ) ( Cover to Crankcase )	Cast Iron Engines Was 112 SS
4	36	C06723	Stud, 5/16" Wh. X 1.1/4" long ( Injection Control ) ( Plate to Crankcase )	Was 126 ST
3,4	37	E05616	Stud, 5/16" Wh. X 1.5/16" long ( Injection Control Plate, ) ( Chain Fixed Jockey Mount ) Alum. ( and Chain Case Cover ) Engines	Was 118 ST
	38	E03945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex.	Was 106 NU
3	37	E05616	Stud, 5/16" Wh. X 1.5/16" long ) Centrifugal Type Water	Was 118 ST
	38	E03945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex. ) Pump Spigot Plate to Crankcase	Was 106 NU
	39	E09714	Stud, 5/16" Wh. X 1.3/8" long ) Centrifugal (Cast Iron Eng.)Was 115 ST ) Type Water	
	40	E05617	Stud, 5/16" Wh. X 1.5/8" long ) Pump and (Aluminium Eng.)Was 117 ST ) Spigot Plate	
	38	E03945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex.) to Crankcase	Was 106 NU
	41	J03406	Stud, 5/16" Wh. X 1.9/16" long )	Was 130 ST
	42	J00056	Stud, 5/16" Wh. X 2.1/4" long ) Ram Type Water Pump ) to Crankcase	Was 300 ST
	38	E03945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex. )	Was 106 NU
	43	E05615	Stud, 3/8" Wh. X 1.5/8" long )	Was 145 ST
	44	C05539	Nut, 3/8" Wh. X 3/8" X 5/16" Hex. ) Centrifugal Type Water ) Pump Ball Bearing Bracket ) to Crankcase	Was 110 NU
	45	J09955	Locking Plate, 13/32" diam. hole )	Was 103 LP
4	46	E05615	Stud, 3/8" Wh. X 1.5/8" long ) Fuel Pump Cam Box to	Was 145 ST
	44	C05539	Nut, 3/8" Wh. X 3/8" X 5/16" Hex. ) Crankcase	Was 110 NU
3	47	J04864	Stud, 1/2" Wh. X 1.3/4" long (Cast Iron Engines) 2LW, 3LW	Was 297 ST

Plate No.	Illus. No.	Part No.	Description			
3	48	E06444	Setcrew, 1/2" Wh. X 1.25/32" long X 7/16" Hex. X 3/16" thick head	) Aluminium Engines	3LW	Was 124 SS
	49	C05573	Stud, 1/2" Wh. X 3.1/2" long			Was 299 ST
	50	C01032	Stud, 1/2" Wh. X 1.7/8" long			Was 191 ST
	48	E06444	Setcrew, 1/2" Wh. X 1.25/32" long X 7/16" Hex. X 3/16" thick head	) Aluminium Engines		Was 124 SS
	51	E01184	Stud, 1/2" Wh. X 2.5/8" long			Was 298 ST
	52	J07287	Setcrew, 1/2" Wh. X 2.1/2" long X 7/16" Hex. X 3/16" thick head	) Aluminium Engines		Was 261 SS
	53	C06333	Nut, 1/2" Wh. X 7/16" X 7/16" Hex.			Was 117 NU
	54	E05675	Setcrew, 1/2" Wh. X 19/32" long X 5/16" Hex. (Crankcase Forward Facing)			Was 154 SS
3,4	55	J04297	Stud - Engine Fixing - Chain Case End (Cast Iron Engines)	)		Was 193 ST
	56	E05462	Stud - Engine Fixing - Chain Case End (Aluminium Engines)	) 4 to 6LW		Was 197 ST
	53	C06333	Nut, 1/2" Wh. X 7/16" X 7/16" Hex.	)		Was 117 NU
	11	S05725/05	Washer, 1/2" diam. bore	)		Was 122 WA
4	57	J09860	Setcrew, 1/2" Wh. X 1.3/4" long X 7/16" Hex. (Cast Iron Engines)		4LW	Was 212 SS
	58	K00937	Stud, 1/2" Wh. X 5/8" Wh. X 2.3/4" long	) Cast Iron Engines		Was 455 ST
	59	K00938	Stud, 1/2" Wh. X 5/8" Wh. X 7.3/8" long	) Intermediate Lubricating Oil Filter		Was 456 ST
	60	J09364	Stud, 5/8" Wh. X 2.3/4" long	) Bracket to Crankcase	Aluminium Engines	Was 489 ST
	61	K00237	Stud, 5/8" Wh. X 7.3/8" long	)		Was 458 ST
	62	E01488	Nut, 5/8" Wh. X 1/2" X 1/2" Hex.	)		Was 119 NU
3,4	54	E05675	Setcrew, 1/2" Wh. X 19/32" long X 5/16" Hex.	) Cast Iron Engines		Was 154 SS
	63	J08898	Setcrew, 5/8" Wh. X 3/4" long X 7/16" Hex.	) Side Facings Aluminium Engines	Marine Auxiliary Engines	Was 155 SS
4	64	E09659	Stud, 5/16" Wh. X 2.1/8" long	) Cylinder to Crankcase		Was 119 ST
	38	E03945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex.	)		Was 106 NU
	65	J09901	Setcrew, 5/16" Wh. X 5/8" long X 1/4" Hex. (Cast Iron Engines)			Was 110 SS
	66	E03452	Stud, 5/16" Wh. X 1.1/8" long	(Aluminium Engines)		Was 120 ST

Plate No.	Illus. No.	Part No.	Description	
4	38	E03945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex.	Was 106 NU
	67	E05612	Stud, 3/8" Wh. X 2.1/8" long	Was 165 ST
	68	E05619	Stud, 3/8" Wh. X 1.7/8" long	Was 150 ST
	43	E05615	Stud, 3/8" Wh. X 1.5/8" long	Was 145 ST
	44	C05539	Nut, 3/8" Wh. X 3/8" X 5/16" Hex.	Was 110 NU
	69	J09009	Setcrew, 5/16" Wh. X 1" long	Was 113 SS
	41	J03406	Stud, 5/16" Wh. X 1.9/16" long	Was 130 ST
	70	E05614	Stud, 5/16" Wh. X 1.7/16" long	Was 116 ST
	38	E03945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex.	Was 106 NU
	71	S05725/02	Washer, 5/16" diam. bore	Was 105 WA
	72	K00792	Packing, Flange, 1.3/4" centres X 1.3/8" wide	Was 115 PA
	39	E09714	Stud, 5/16" Wh. X 1.3/8" long (Cast Iron Engines)	Was 115 ST
	41	J03406	Stud, 5/16" Wh. X 1.9/16" long (Aluminium Engines)	Was 130 ST
	73	C08613	Stud, 5/16" Wh. X 3.23/32" long (Oil Cooler Relief Valve Body to Crankcase)	Was 304 ST
	41	J03406	Stud, 5/16" Wh. X 1.9/16" long (Lubricating Oil Pipe - Pump to Filter)	Was 130 ST
	38	E03945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex.	Was 106 NU
	71	S05725/02	Washer, 5/16" diam. bore	Was 105 WA
	74	K00797	Packing, Flange, 1.7/8" centres X 1.9/16" wide	Was 125 PA
3	75	K01776	Stud, 5/16" Wh. X 3.3/16" long	Was 283 ST
	76	J06853	Stud, 5/16" Wh. X 4.7/8" long	Was 303 ST
	77	J09583	Stud, 5/16" Wh. X 3.5/16" long	Was 380 ST
	71	S05725/02	Washer, 5/16" diam. bore	Was 105 WA
	78	J06300	Stud, 5/16" Wh. X 4.1/8" long (Water and Bilge Pump Box to Crankcase)	Was 302 ST
	38	E03945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex.	Was 106 NU
4	79	E05611	Stud, 7/16" Wh. X 1.13/16" long	Was 181 ST
	80	E05349	Nut, 7/16" Wh. X 7/16" X 3/8" Hex.	Was 115 NU
	81	E05676	Setscrew, 7/16" Wh. X 17/32" long X 5/16" Hex.	Was 153 SS
	82	J04186	Setscrew, Cheese Head, 5/16" B.S.F. X 13/32" long	Was 227 SS
			For Facings on Crankcase (Aluminium) Engines	4 to 6LW

Plate No.	Illus. No.	Part No.	Description	
3	43	E05615	Stud, 3/8" Wh. X 1.5/8" long )	Was 145 ST
	44	C05539	Nut, 3/8" Wh. X 3/8" X 5/16" Hex. ) Lubricating Oil Pump ) Suction and Transfer Pipes	Was 110 NU
	33	K05899	Locking Plate, 25/64" diam. hole )	Was 126 LP
	83	J04623	Stud, 1/4" Wh. X 3/4" long ) Air Inlet Pipe )	Was 314 ST
	84	E05632	Nut, 1/4" Wh. X 1/4" X 3/16" Hex. ) Steady Bracket ) 4 to 6LW to Crankcase )	Was 105 NU
4	85	C06449	Stud, 7/16" Wh. X 2.7/16" long ) Electric Starter )	Was 185 ST
	80	E05349	Nut, 7/16" Wh. X 7/16" X 3/8" Hex. ) Bracket to ) 2LW, 3LW Crankcase )	Was 115 NU
	86	J09813	Stud, 7/16" Wh. X 7/16" B.S.F. X 1.13/16" long )	Was 180 ST
	87	E06288	Stud, 7/16" Wh. X 7/16" B.S.F. X 2" long )	Was 177 ST
	88	K02009	Stud, 7/16" Wh. X 7/16" B.S.F. X 2.3/8" long ) End Plate to ) Crankcase	Was 292 ST
	89	J08529	Nut, 7/16" B.S.F. X 7/16" X 3/8" Hex. )	Was 128 NU
	90	S05725/04	Washer, 7/16" diam. bore X .092" thick )	Was 109 WA
	91	S05726/04	Washer, 7/16" diam. bore X .048" thick )	Was 218 WA
	92	K73600	Valve Tappet Guide Clamp	Was LW/2/185
	67	E05612	Stud; 3/8" Wh. X 2.1/8" long	Was 165 ST
	44	C05539	Nut, 3/8" Wh. X 3/8" X 5/16" Hex.	Was 110 NU
	93	E04973	Valve Tappet Guide	Was LW/2/186
	94	E09392	Valve Tappet	Was MA 132
	95	T02696	Valve Lever Push Rod	Was LW/2/188
3	-	-	CRANKCASE CROSS BOLT ASSEMBLY, Comprising ) Cross Bolt, Tube, Bushes, Nuts and Washers ) Aluminium ) (Superseded, will be replaced by A02740 ) Engines ) in engine sets - 2 off) )	Was LW/2/0/13
	96	E05594	Crankcase Cross Bolt, 17.3/8" long )	Was 195 ST
	97	E05593	Crankcase Cross Bolt Tube End Bush (Aluminium Engines) )	Was 105 BU
	9	C04474	Nut, 1/2" B.S.F. X 1/2" X 7/16" Hex. )	Was 132 NU
	11	S05725/05	Washer, 1/2" diam. bore )	Was 122 WA
	98	J09894	Cross Bolt Tube Shim Washer, .004" thick )	Was 188 WA
	99	J04295	Crankcase Cross Bolt Tube, 9.7/8" long (Cast Iron Engines) )	Was Part of LW/2/452
		J03417	Crankcase Cross Bolt Tube, 9.1/4" long (Aluminium Engines) )	Was Part of LW/2/564

Plate No.	Illus. No.	Part No.	Description	
3	-	A02740	CRANKCASE CROSS STRUT ASSEMBLY, Comprising Cross Strut, Studs, Nuts and Washers	Was LW/2/0/15
	100	K04608	Crankcase Cross Strut	Was Part of LW/2/0/16
	101	K04609	Crankcase Cross Strut Stud, 5.13/32" long	6LW, also 4LW, 5LW with Type 3 Engines
	89	J08529	Nut, 7/16" B.S.F. X 7/16" X 3/8" Hex.	Crankcase Was 128 NU
	102	K04610	Washer, 1" O.D. X 29/64" I.D. X 3/32"	Was 187 WA
	103	K04613/01	Cross Strut Shim Washer, -.003" thick	Was 189 WA
		K04613/02	Cross Strut Shim Washer, -.005" thick	Was 190 WA
4	104	E53650	Door - Crankcase	Was Part of LW/2/115
	105	E05366	Packing - Crankcase Door	Was LW/2/116
	106	L21221	Setcrew, Countersunk Head, 1/4" Wh. X 1/2" long	Was 165 SS
3	107	-	Chain Case Splash Door ) (Superseded, will be ) replaced by K08058 ) and 3 off E05614 )	Was LW/2/0/80
		K08058	Chain Case Splash Door ) O/A width ) through Boss ) 1.7/32" )	Was LW/2/0/144
		F06766	Chain Case Splash Door ) ( Clockwise Rotation ) ( Engines looking on ) ( Flywheel End )	Was LW/2/1205
		F02663	Chain Case Splash Door ) ( Anti-Clockwise Rotation ) ( Engines looking on ) ( Flywheel End )	Was LW/2/1014
		F04452	Chain Case Splash Door ) ( Clockwise Rotation ) ( Engines looking on ) ( Flywheel End )	Was LW/2/1148
	108	L10622	Roller Bearing, 1.1/2" I.D. X 3.1/4" O.D. X 3/4" wide	Was 154 BE
	109	J02258	Bearing Retaining Ring	Was 102 RR
	110	J63920	Distance Collar ( For Engines with Splash Door ( O/A width through Boss 3.9/32"	Was LW/2/1017
	111	J08129	Sealing Ring Oil Shield ( For Engines with Splash Door ( O/A width through Boss 1.7/32"	Was LW/2/563
	35	E05577	Setcrew, 5/16" Wh. X ) 7/8" long X 1/4" Hex. )	(Cast Iron Engines) Was 112 SS
	37	E05616	Stud, 5/16" Wh. X 1.5/16" long )	Chain Case (Aluminium Engines) Was 113 ST
		E05614	Stud, 5/16" Wh. X 1.7/16" long )	Splash Door to Crankcase Was 116 ST
	38	E03945	Nut, 5/16" Wh. X 5/16" X ) 1/4" Hex. )	(Aluminium Engines) Was 106 NU



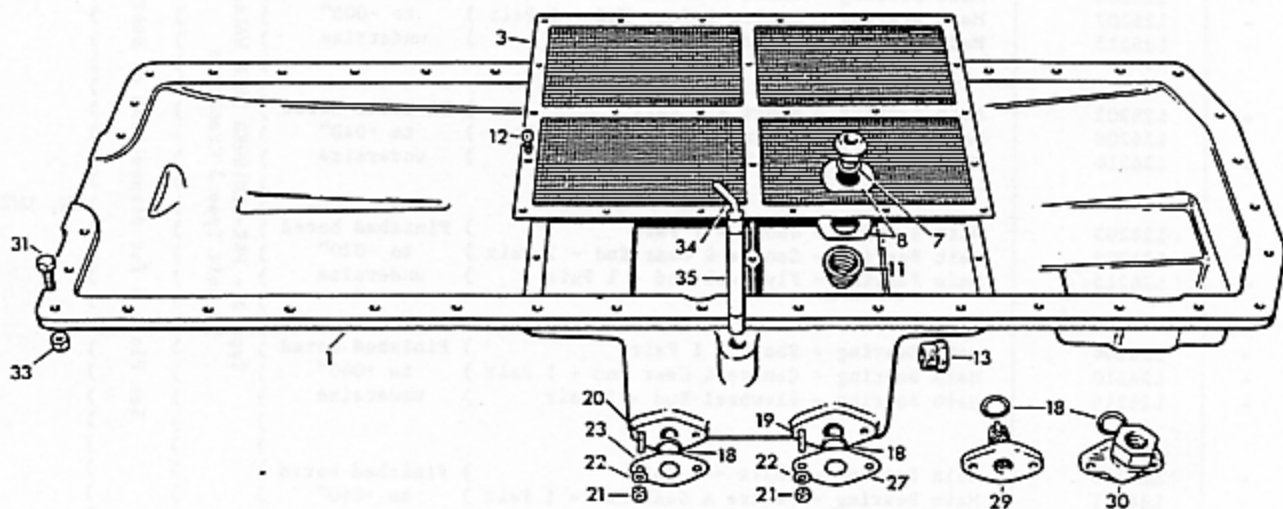
Plate No.	Illus. No.	Part No.	Description			
3	112	E03205	Bolt, 5/16" Wh. X 1.1/8" long X 1/4" Hex. )	Chain Case Splash Door to Sump	Was 109 BL	
	38	E03945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex. )		Was 106 NU	
	-	-	K05959	Setscrew, 5/16" B.S.F. X 1.1/4" long X 1/4" Hex. )	Chain Case	Was 443 SS
	-	-	E03772	Nut, 5/16" B.S.F. X 1/4" X 1/4" Hex. )	Splash Door to Sump (Replaces 5/16" Wh. Bolt and Nut)	Was 122 NU
	-	-	S05725/02	Washer, 5/16" diam. bore )		Was 105 WA
4	113	F02669	Packing - Cylinder to Crankcase (Paper)	2LW	Was LW/2/599	
		F01907	Packing - Cylinder to Crankcase (Paper)	3LW	Was LW/2/463	
		F01908	Packing - Cylinder to Crankcase (Paper)	4LW	Was LW/2/464	
		F01909	Packing - Cylinder to Crankcase (Paper)	5LW	Was LW/2/465	
		H02668	Packing - Cylinder to Crankcase (Paper)	6LW	Was LW/2/466	
		L26188	Shim - Cylinder to Crankcase - Metal, .010" thick )	3LW	Was LW/2/551	
	L26189	Shim - Cylinder to Crankcase - Metal, .020" thick )	Was LW/2/467			
	L26186	Shim - Cylinder to Crankcase - Metal, .010" thick )	4LW	Was LW/2/470		
	L26187	Shim - Cylinder to Crankcase - Metal, .020" thick )		Was LW/2/472		
	L26184	Shim - Cylinder to Crankcase - Metal, .010" thick )	5LW	Was LW/2/477		
	L26185	Shim - Cylinder to Crankcase - Metal, .020" thick )		Was LW/2/479		
	L26182	Shim - Cylinder to Crankcase - Metal, .010" thick )	6LW	Was LW/2/484		
	L26183	Shim - Cylinder to Crankcase - Metal, .020" thick )		Was LW/2/486		

Plate No.	Illus. No.	Part No.	Description	
5	-	L26170	Main Bearing - Short - 1 Pair	
	-	L26174	Main Bearing - Centre & Gear End - 1 Pair	
	-	L26178	Main Bearing - Flywheel End - 1 Pair	
	-	L26171	Main Bearing - Short - 1 Pair	
	-	L26175	Main Bearing - Centre & Gear End - 1 Pair	
	-	L26179	Main Bearing - Flywheel End - 1 Pair	
	-	L26172	Main Bearing - Short - 1 Pair	
	-	L26176	Main Bearing - Centre & Gear End - 1 Pair	
	-	L26180	Main Bearing - Flywheel End - 1 Pair	
	-	L26173	Main Bearing - Short - 1 Pair	
	-	L26177	Main Bearing - Centre & Gear End - 1 Pair	
	-	L26181	Main Bearing - Flywheel End - 1 Pair	
				) Finished ) to ) Standard ) Bore  ) Suitable for ) Line Boring ) to original ) Standard ) Size  ) Suitable for ) Line Boring ) for Journals ) of $\cdot 005''$ to ) $\cdot 030''$ undersize  ) Suitable for ) Line Boring ) for Journals ) of $\cdot 035''$ to ) $\cdot 090''$ undersize  Type 2 - CUIH METAL. To suit Type 2 Crankcase See Plate 5 for disposition of Bearings LW
				<b>NOTE:-</b> Main Bearings can also be supplied finished bored to a specified size of Crankshaft within the range of $\cdot 005''$ to $\cdot 090''$ , in steps of $\cdot 003''$ , i.e. $\cdot 005''$ , $\cdot 010''$ , $\cdot 015''$ , $\cdot 020''$ etc., See Below.
	-	L26194	Main Bearing - Short - 1 Pair - $\cdot 005''$ undersize	
	-	L26195	Main Bearing - Short - 1 Pair - $\cdot 010''$ undersize	
	-	L26196	Main Bearing - Short - 1 Pair - $\cdot 015''$ undersize	
	-	L26197	Main Bearing - Short - 1 Pair - $\cdot 020''$ undersize	
-	L26198	Main Bearing - Short - 1 Pair - $\cdot 025''$ undersize		
-	L26199	Main Bearing - Short - 1 Pair - $\cdot 030''$ undersize		
-	L26304	Main Bearing - Short - 1 Pair - $\cdot 040''$ undersize		
-	L26425	Main Bearing - Short - 1 Pair - $\cdot 050''$ undersize		
-	L26306	Main Bearing - Short - 1 Pair - $\cdot 060''$ undersize		
-	L26307	Main Bearing - Short - 1 Pair - $\cdot 070''$ undersize		
-	L26308	Main Bearing - Centre & Gear End - 1 Pair - $\cdot 005''$ undersize		
-	L26309	Main Bearing - Centre & Gear End - 1 Pair - $\cdot 010''$ undersize		
-	L26310	Main Bearing - Centre & Gear End - 1 Pair - $\cdot 015''$ undersize		
-	L26311	Main Bearing - Centre & Gear End - 1 Pair - $\cdot 020''$ undersize		
-	L26312	Main Bearing - Centre & Gear End - 1 Pair - $\cdot 025''$ undersize		
-	L26313	Main Bearing - Centre & Gear End - 1 Pair - $\cdot 030''$ undersize		
-	L26314	Main Bearing - Centre & Gear End - 1 Pair - $\cdot 040''$ undersize		
-	L26426	Main Bearing - Centre & Gear End - 1 Pair - $\cdot 050''$ undersize		
-	L26315	Main Bearing - Centre & Gear End - 1 Pair - $\cdot 060''$ undersize		
-	L26316	Main Bearing - Centre & Gear End - 1 Pair - $\cdot 070''$ undersize		
-	L26317	Main Bearing - Flywheel End - 1 Pair - $\cdot 005''$ undersize		
-	L26318	Main Bearing - Flywheel End - 1 Pair - $\cdot 010''$ undersize		
-	L26319	Main Bearing - Flywheel End - 1 Pair - $\cdot 015''$ undersize		
-	L26320	Main Bearing - Flywheel End - 1 Pair - $\cdot 020''$ undersize		
-	L26321	Main Bearing - Flywheel End - 1 Pair - $\cdot 025''$ undersize		
-	L26322	Main Bearing - Flywheel End - 1 Pair - $\cdot 030''$ undersize		
-	L26323	Main Bearing - Flywheel End - 1 Pair - $\cdot 040''$ undersize		
-	L26427	Main Bearing - Flywheel End - 1 Pair - $\cdot 050''$ undersize		
-	L26324	Main Bearing - Flywheel End - 1 Pair - $\cdot 060''$ undersize		
-	L26325	Main Bearing - Flywheel End - 1 Pair - $\cdot 070''$ undersize		
			Type 2 - CUIH METAL. To suit Type 2 Crankcase See Plate 5 for disposition of Bearings LW	
			<b>NOTE:-</b> These bearings were previously to Part Numbers LW/2/109, LW/2/111 and LW/2/112. (with suffix numbers for unbored and undersize bearings)	

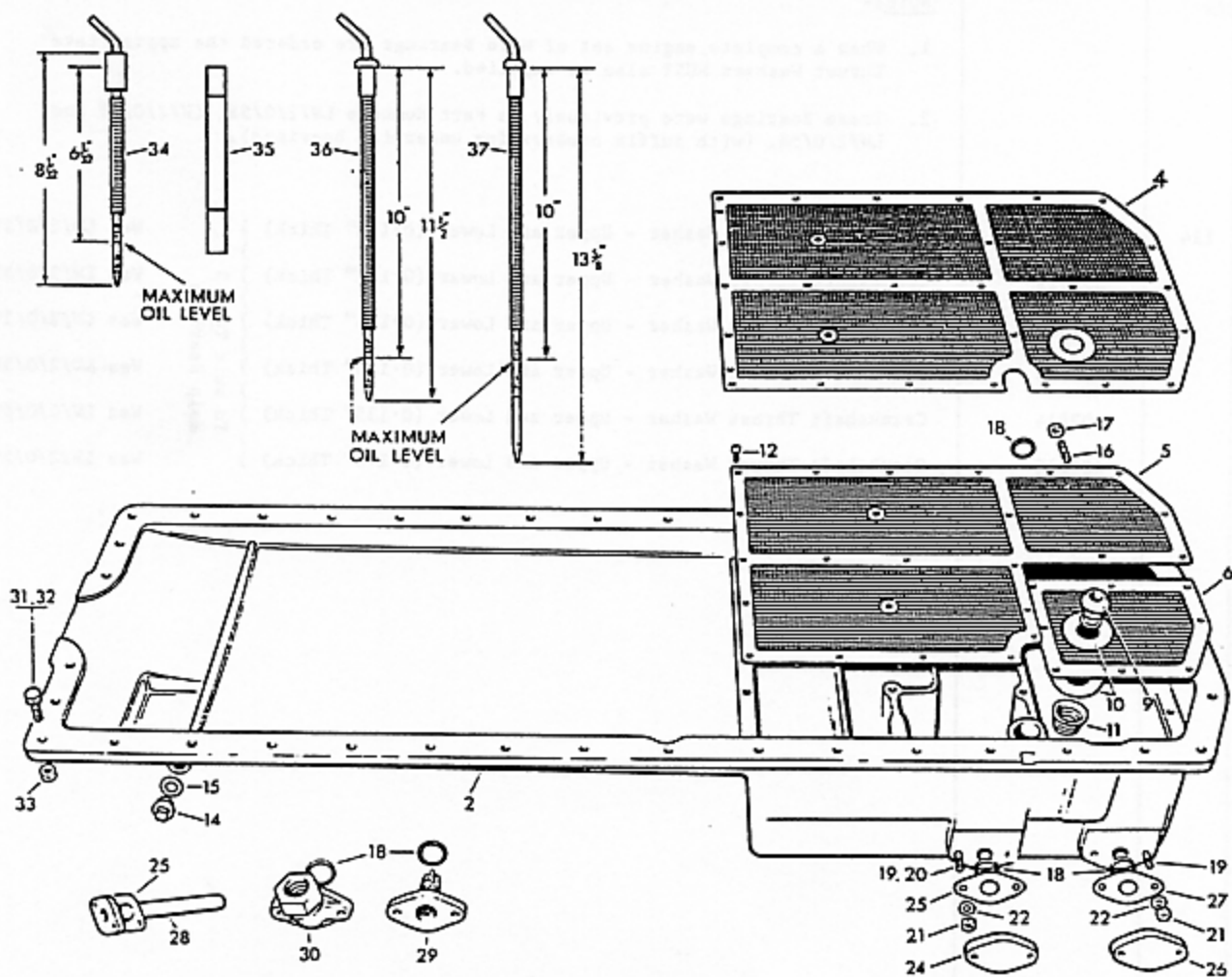
Plate No.	Illus. No.	Part No.	Description	
6	-	L26200	Main Bearing - Short - 1 Pair ) Finished to	
	-	L26206	Main Bearing - Centre & Gear End - 1 Pair ) Standard	
	-	L26212	Main Bearing - Flywheel End - 1 Pair ) Bore	
	-	L26201	Main Bearing - Short - 1 Pair ) Finished bored	
	-	L26207	Main Bearing - Centre & Gear End - 1 Pair ) to +005"	
	-	L26213	Main Bearing - Flywheel End - 1 Pair ) undersize	
	-	L26202	Main Bearing - Short - 1 Pair ) Finished bored	
	-	L26208	Main Bearing - Centre & Gear End - 1 Pair ) to +010"	
	-	L26214	Main Bearing - Flywheel End - 1 Pair ) undersize	
	-	L26203	Main Bearing - Short - 1 Pair ) Finished bored	
	-	L26209	Main Bearing - Centre & Gear End - 1 Pair ) to +020"	
	-	L26215	Main Bearing - Flywheel End - 1 Pair ) undersize	
	-	L26204	Main Bearing - Short - 1 Pair ) Finished bored	
	-	L26210	Main Bearing - Centre & Gear End - 1 Pair ) to +040"	
	-	L26216	Main Bearing - Flywheel End - 1 Pair ) undersize	
	-	L26205	Main Bearing - Short - 1 Pair ) Finished bored	
	-	L26211	Main Bearing - Centre & Gear End - 1 Pair ) to +060"	
	-	L26217	Main Bearing - Flywheel End - 1 Pair ) undersize	
				<p><u>NOTE:-</u></p> <p>1. When a complete engine set of Main Bearings are ordered the appropriate Thrust Washers MUST also be supplied.</p> <p>2. These Bearings were previously to Part Numbers LW/2/0/56, LW/2/0/57 and LW/2/0/58, (with suffix numbers for undersize bearings).</p>
	3	114	A03810	Crankshaft Thrust Washer - Upper and Lower (0-121" Thick) )
			A03811	Crankshaft Thrust Washer - Upper and Lower (0-123" Thick) )
A03812			Crankshaft Thrust Washer - Upper and Lower (0-125" Thick) )	
A03813			Crankshaft Thrust Washer - Upper and Lower (0-130" Thick) )	
A03814			Crankshaft Thrust Washer - Upper and Lower (0-135" Thick) )	
A03815			Crankshaft Thrust Washer - Upper and Lower (0-140" Thick) )	
			<p>To suit Type 3 Main Bearings ) Was LW/2/0/59</p> <p>) Was LW/2/0/59/1</p> <p>) Was LW/2/0/59/2</p> <p>) Was LW/2/0/59/3</p> <p>) Was LW/2/0/59/4</p> <p>) Was LW/2/0/59/5</p>	
			<p>See Plate 6 for disposition of Bearings ) LW, LW20</p>	

# GARDNER

## LUBRICATING OIL SUMP — PLATE 7



TYPE 2B (CENTRE TYPE SUMP)



TYPES 27.27F (REAR TYPE SUMP)

Plate No.	Illus. No.	Part No.	Description		
7	1	-	Lubricating Oil Sump - Type 2B, Cast Iron (NOT NOW AVAILABLE)	)	) Was LW/2/835
		A00639	Lubricating Oil Sump - Type 2B, Cast Iron, with Gauzes, Suction Pipe Bush, Spring, Plug, Setscrews, Washers and Packings	)	) To suit Engines with Copper Main Bearing Distribution Pipe )4LW
		-	Lubricating Oil Sump - Type 2B, Cast Iron (NOT NOW AVAILABLE)	)	) Was LW/2/836
		A03528	Lubricating Oil Sump - Type 2B, Cast Iron, with Gauzes, Suction Pipe Bush, Spring, Plug, Setscrews, Washers and Packings	)	) To suit Engines with Steel Main Bearing Distribution Pipe )5LW
		A00641	Lubricating Oil Sump - Type 2B, Cast Iron, with Gauzes, Suction Pipe Bush, Spring, Plug, Setscrews, Washers and Packings	)	) Was LW/2/0/94
		-	Lubricating Oil Sump - Type 2B, Light Alloy (NOT NOW AVAILABLE)	)	) To suit Engines with Copper Main Bearing Distribution Pipe )4LW
		A00638	Lubricating Oil Sump - Type 2B, Light Alloy, with Gauzes, Suction Pipe Bush, Spring, Plug, Setscrews, Washers and Packings	)	) Was LW/2/0/95
		-	Lubricating Oil Sump - Type 2B, Light Alloy (NOT NOW AVAILABLE)	)	) To suit Engines with Steel Main Bearing Distribution Pipe )4LW
		A03526	Lubricating Oil Sump - Type 2B, Light Alloy, with Gauzes, Suction Pipe Bush, Spring, Plug, Setscrews, Washers and Packings	)	) Was LW/2/832
		A00640	Lubricating Oil Sump - Type 2B, Light Alloy, with Gauzes, Suction Pipe Bush, Spring, Plug, Setscrews, Washers and Packings	)	) To suit Engines with Steel Main Bearing Distribution Pipe )5LW
		A00668	Lubricating Oil Sump - Type 27, Cast Iron, with Gauzes, Suction Pipe Bush, Spring, Plug, Setscrews, Washers and Packings	)	) Was LW/2/0/92
		A00670	Lubricating Oil Sump - Type 27, Cast Iron, with Gauzes, Suction Pipe Bush, Spring, Plug, Setscrews, Washers and Packings	)	) To suit Engines with Steel Main Bearing Distribution Pipe )4LW
		A00854	Lubricating Oil Sump - Type 27F, Cast Iron, with Gauzes, Suction Pipe Bush, Spring, Plug, Setscrews, Washers and Packings	)	) Was LW/2/0/93
		A00855	Lubricating Oil Sump - Type 27F, Cast Iron, with Gauzes, Suction Pipe Bush, Spring, Plug, Setscrews, Washers and Packings	)	) To suit Engines with Steel Main Bearing Distribution Pipe )5LW
		A00856	Lubricating Oil Sump - Type 27F, Cast Iron, with Gauzes, Suction Pipe Bush, Spring, Plug, Setscrews, Washers and Packings	)	) Was LW/2/834
-	Lubricating Oil Sump - Type 27, Light Alloy (In future use T05022 - Type 27B)	)	) To suit Engines with Steel Main Bearing Distribution Pipe )3LW		
2		A00668	Lubricating Oil Sump - Type 27, Cast Iron, with Gauzes, Suction Pipe Bush, Spring, Plug, Setscrews, Washers and Packings	)	) Was LW/2/1053
		A00670	Lubricating Oil Sump - Type 27, Cast Iron, with Gauzes, Suction Pipe Bush, Spring, Plug, Setscrews, Washers and Packings	)	) 2LW
		A00854	Lubricating Oil Sump - Type 27F, Cast Iron, with Gauzes, Suction Pipe Bush, Spring, Plug, Setscrews, Washers and Packings	)	) Was LW/2/1054
		A00855	Lubricating Oil Sump - Type 27F, Cast Iron, with Gauzes, Suction Pipe Bush, Spring, Plug, Setscrews, Washers and Packings	)	) 3LW
		A00856	Lubricating Oil Sump - Type 27F, Cast Iron, with Gauzes, Suction Pipe Bush, Spring, Plug, Setscrews, Washers and Packings	)	) Was LW/2/1106
		-	Lubricating Oil Sump - Type 27, Light Alloy (In future use T05022 - Type 27B)	)	) 4LW
		-	Lubricating Oil Sump - Type 27, Light Alloy (In future use T05022 - Type 27B)	)	) Was LW/2/1107
			) 5LW		
			) Was LW/2/1108		
			) 6LW		
			) Was LW/2/1049		
			) 3LW		











Plate No.	Illus. No.	Part No.	Description					
8	1	F02691	Valve Camshaft )	Drill for Camshaft Hub during assembly (P 7/16" Slocomb) Use Loctite, Part No. L21584 When Camshaft is required for Engines fitted with Bilge Pump or Oil Cooler Water Pump, Key Part No. E04002 MUST be specified in addition Marine Propelling and Auxiliary Engines with Rem or Centrifugal Type Water Pump (Except Radiator Cooled Auxiliary Engines)	2LW	Was Part of LW/2/1095		
		F02692	Valve Camshaft )		3LW	Was Part of LW/2/1096		
		F02693	Valve Camshaft )		4LW	Was Part of LW/2/1097		
		F02694	Valve Camshaft )		5LW	Was Part of LW/2/1098		
		F02695	Valve Camshaft )		6LW	Was Part of LW/2/1099		
		F04798	Valve Camshaft )		3LW	Was Part of LW/2/1128		
		F04449	Valve Camshaft )		4LW	Was Part of LW/2/1129		
		F04450	Valve Camshaft )		5LW	Was Part of LW/2/1130		
		F04451	Valve Camshaft )		6LW	Was Part of LW/2/1131		
	2	E04002	Feather Key, 1/4" X 7/32" X 1.1/8" long (When Bilge Pump or Oil Cooler Water Pump is fitted)		Was 128 KE			
	3	F02632	Valve Camshaft )	Radiator Cooled Marine Auxiliary Engines	2LW	Was Part of LW/2/607		
		F02633	Valve Camshaft )		3LW	Was Part of LW/2/317		
		F02634	Valve Camshaft )		4LW	Was Part of LW/2/318		
		F02635	Valve Camshaft )		5LW	Was Part of LW/2/319		
		F02636	Valve Camshaft )		6LW	Was Part of LW/2/320		
	4	E07814	Locking Plate, 17/32" diam. hole		Was 105 LP			
	5	J05825	Camshaft Collar Nut		Was 159 NU			
	6	E05690	Collar - Making-Up		Was 105 CR			
	7	E05198	Feather Key, 1/4" X 1/4" X 3.23/32" long (Use Loctite, Part No. L21584)		Was 113 KE			
	8	E05340	Valve Cam - Intermediate, with E05339 )	Anti-Clockwise Rotation Engines looking on Flywheel End	3 to 6LW	Was LW/2/192		
	9	A26112	Valve Cam - Flywheel End, with E05339, A26110 )		2 to 4LW	Was LW/2/0/146		
		A26113	Valve Cam - Flywheel End, with E05339, A26111 )		5LW, 6LW	Was LW/2/0/147		
	10	E06998	Valve Cam - Fuel Lift Pump Type, with E05339 )		4 to 6LW	Was LW/2/323		
	11	K02663	Valve Cam - Chain Case End, with E05339 )		2 to 6LW	Was LW/2/976		

**VALVE CAMSHAFT AND CHAIN DRIVE**

Plate No.	Illus. No.	Part No.	Description		
8	8	E08416	Valve Cam - Intermediate, with E05339 )	3 to 6LW	Was LW/2/1132
	9	A26126	Valve Cam - Flywheel End, with E05339, A26126 )	3LW, 4LW	Was LW/2/1241
		A26127	Valve Cam - Flywheel End, with E05339, A26125 )	5LW, 6LW	Was LW/2/1242
	10	E08417	Valve Cam - Fuel Lift Pump Type, with E05339 )	4 to 6LW	Was LW/2/1133
	11	K02664	Valve Cam - Chain Case End, with E05339 )	3 to 6LW	Was LW/2/1152
	12	E05339	Setscrew, Sq. Head, Pointed, 7/16" - 20 Thds. X 1/2" long		Was 175 SS
	13	E05478	Collar - Valve Camshaft Locating		Was LW/2/205
	14	A26110	Gears - Lubricating Oil Pump ) Driving and Driven ) Anti-Clockwise Rotation ) Engines looking )	2 to 4LW	Combination of LW/2/206 and LW/2/128
		A26111	Gears - Lubricating Oil Pump ) Driving and Driven ) on Flywheel End )	3LW, 6LW	Combination of LW/2/207 and LW/2/128
		A26124	Gears - Lubricating Oil Pump ) Driving and Driven ) Clockwise Rotation ) Engines looking )	3LW, 4LW	Combination of LW/2/1135 and LW/2/1146
		A26125	Gears - Lubricating Oil Pump ) Driving and Driven ) on Flywheel End )	5LW, 6LW	Combination of LW/2/1136 and LW/2/1147
	15	F02755	Valve Camshaft Chain Wheel and Gear Hub )	2LW	Was Part of LW/2/1042
		F02756	Valve Camshaft Chain Wheel and Gear Hub )	3LW, 4LW	Was Part of LW/2/1043
		F02690	Valve Camshaft Chain Wheel and Gear Hub )	5LW, 6LW	Was Part of LW/2/1044
	16	F04631	Valve Camshaft Chain Wheel and Gear Hub ) ( Centrifugal Type ( Water Pump ( (Except Radiator ( Cooled Engines)		Was Part of LW/2/1164
	-	A27114	VALVE CAMSHAFT HUB ASSEMBLY, Comprising Hub, Water Pump and Fuel Pump Camshaft Driving and Driven Gears, Studs and Nuts ) ) Radiator Cooled ) Marine Auxiliary ) Engines		Compares with LW/2/208
	17	E51960	Valve Camshaft Chain Wheel and Gear Hub )		Was Part of LW/2/209
	-	L21021	Woodruff Key ( To suit Gear Hub and Water Pump Driving ( Gear machined for Woodruff Key		Was 100 KE
3	18	E04259	Steady Peg, 3/16" diam. X 11/16" long		Was 102 PE
	19	C05816	Setscrew, Sq. Head, Pointed, 3/8" - 24 Thds. X 7/8" long		Was 174 SS

Plate No.	Illus. No.	Part No.	Description	
8	20	A26116	Gears - Centrifugal Type Water Pump ( Anti-Clockwise Rotation Driving and Driven ( Engines looking on Flywheel End	Combination of LW/2/0/60 and LW/7/98
		A26117	Gears - Centrifugal Type Water Pump ( Clockwise Rotation Driving and Driven ( Engines looking on Flywheel End	Combination of LW/2/0/61 and LW/7/99
	21	A27128	Gears - Fuel Pump Camshaft Driving and Driven, with E04259, K04557, E06089, J09950	Combination of LW/2/212 and LW/4/212
	22	K04557	Stud, 3/8" B.S.F. X 1.29/32" long	Was 424 ST
	23	E06089	Nut, 3/8" B.S.F. X 3/8" X 5/16" Hex.	Was 126 NU
	24	J09950	Washer, 3/8" diam. bore	Was 107 WA
	25	AD3132	Chain Wheel - Valve Camshaft, with K05486/01, K05486/02	Was LW/2/0/66
	26	K05486/01	Valve Camshaft Chain Wheel Shim Washer, .010" thick	Was 192 WA
		K05486/02	Valve Camshaft Chain Wheel Shim Washer, .020" thick	Was 193 WA
	27	L20502	Ball Journal Bearing	Was 104 BE
	28	L20408	Roller Chain - Triplex - 98 Pitches, with L20032	Was LW/2/576
	29	-	Timing Chain Spring Clip Fastener (In future use L20032)	Was MA 138
	30	L20032	Timing Chain Single Connecting Link and Clip	Was MA 139
	31	L20409	Roller Chain - Triplex - 98 Pitches, with L20037	Was LW/2/932
		L20407	Roller Chain - Triplex - 96 Pitches, with L20037	Was MA 689
	32	L20037	Timing Chain Riveted Joint Link	Was MA 370
-	-	L21584	Loctite "Nut Lock" ( To be used when assembling Camshaft Hub, Feather Key, Retaining Screw and Washer (on Camshaft, Per Assembly Instruction 00264	Was MA 1378

**DYNAMO CHAIN SPROCKET**

Plate No.	Illus. No.	Part No.	Description	
8	-	A00023	DYNAMO CHAIN SPROCKET SPINDLE ASSEMBLY, (20T), Comprising Mount, Sealing Ring, Spindle, Bearings, Sprocket, Shim Washers and Nut	Was LM/2/148
	-	A00022	DYNAMO CHAIN SPROCKET SPINDLE ASSEMBLY, (18T), Comprising Mount, Sealing Ring, Spindle, Bearings, Sprocket, Shim Washers and Nut	Was LM/2/595
	-	A02431	DYNAMO CHAIN SPROCKET SPINDLE ASSEMBLY, (15T), Comprising Mount, Sealing Ring, Spindle, Bearings, Sprocket, Shim Washers and Nut	Was LM/2/990
33		A00024	Spindle - Dynamo Chain Sprocket, with E52350, L21027, E05230	Was LM/2/149
	-	A02591	DYNAMO CHAIN SPROCKET SPINDLE ASSEMBLY, (20T), Comprising Mount, Sealing Ring, Spindle, Bearings, Sprocket, Shim Washers and Nut	Was LM/2/1170
	-	A01974	DYNAMO CHAIN SPROCKET SPINDLE ASSEMBLY, (18T), Comprising Mount, Sealing Ring, Spindle, Bearings, Sprocket, Shim Washers and Nut	Was LM/2/1149
	-	A02668	DYNAMO CHAIN SPROCKET SPINDLE ASSEMBLY, (15T), Comprising Mount, Sealing Ring, Spindle, Bearings, Sprocket, Shim Washers and Nut	Was LM/2/1176
33		A01975	Spindle - Dynamo Chain Sprocket, with E52350, L21027, E05230	Was LM/2/1150
	-	A02554	DYNAMO CHAIN SPROCKET SPINDLE ASSEMBLY, (18T), Comprising Mount, Sealing Ring, Spindle, Bearings, Sprocket, Shim Washers and Nut	Was LM/2/0/3
	-	A02555	DYNAMO CHAIN SPROCKET SPINDLE ASSEMBLY, (15T), Comprising Mount, Sealing Ring, Spindle, Bearings, Sprocket, Shim Washers and Nut	Was LM/2/0/4
33		A02556	Spindle - Dynamo Chain Sprocket, with E52350, L21027, E05230	Was LM/2/0/5
	-	A02589	DYNAMO CHAIN SPROCKET SPINDLE ASSEMBLY, (18T), Comprising Mount, Sealing Ring, Spindle, Bearings, Sprocket, Shim Washers and Nut	Was LM/2/1168
	-	A02669	DYNAMO CHAIN SPROCKET SPINDLE ASSEMBLY, (15T), Comprising Mount, Sealing Ring, Spindle, Bearings, Sprocket, Shim Washers and Nut	Was LM/2/1177
33		A02590	Spindle - Dynamo Chain Sprocket, with E52350, L21027, E05230	Was LM/2/1169
34		E52350	Bush - Dynamo Coupling	Was 106 BU
35		L21027	Woodruff Key	Was 107 KE
36		A02959	Sprocket - Dynamo Chain - 20 Teeth, with K04013/01, K04013/02, K04013/03	Was LM/2/152
		A02960	Sprocket - Dynamo Chain - 18 Teeth, with K04013/01, K04013/02, K04013/03	Was LM/2/336
		A02961	Sprocket - Dynamo Chain - 15 Teeth, with K04013/01, K04013/02, K04013/03	Was LM/2/991

Plate No.	Illus. No.	Part No.	Description	
8	37	K04013/01	Dynamo Chain Sprocket Shim Washer, .005" thick	Was 167 WA
		K04013/02	Dynamo Chain Sprocket Shim Washer, .013" thick	Was 168 WA
		K04013/03	Dynamo Chain Sprocket Shim Washer, .020" thick	Was 169 WA
	38	E05230	Nut - Dynamo Chain Sprocket Spindle	Was 138 SU
	39	L10504	Ball Journal Bearing	Was 106 BE
	40	J94240	Mount - Chain Sprocket Spindle Ball Bearing	Was Part of LW/2/552
	41	J05789	Sealing Ring - Chain Sprocket Spindle Ball Bearing Mount	Was 103 RS

**CHAIN ADJUSTER AND CHAIN FIXED JOCKEY**

Plate No.	Illus. No.	Part No.	Description	
8	-	A00063	CHAIN ADJUSTER ECCENTRIC ASSEMBLY - TYPE 2, Comprising Eccentric (1/2" Throw), Chain Wheel, Bearings, Bush, Collar and Nuts	Was LW/2/565
	-	-	CHAIN ADJUSTER ECCENTRIC ASSEMBLY - TYPE 3, Comprising Eccentric (7/8" Throw, 1" B.S.F. at Forward End), Chain Wheel, Bearings, Bush, Collar and Nuts (Superseded, will be replaced by T00013)	Was LW/2/998
	-	T00013	CHAIN ADJUSTER ECCENTRIC ASSEMBLY - TYPE 4, Comprising Eccentric (7/8" Throw, 1" - 16 Thds. at Forward End), Chain Wheel, Bearings, Bush, Clamp Plate, Locking Nut, Collar, Stud and Nuts	Was LW/2/0/135
	-	T01277	CHAIN FIXED JOCKEY ASSEMBLY, Comprising Shaft, Chain Wheel, Bearings, Collar and Nuts	Was LW/2/572
42		E05191	Eccentric - Chain Adjuster (1/2" Throw, 1" B.S.F. at Forward End) - Type 1	Was Part of LW/2/171
		-	Eccentric - Chain Adjuster (7/8" Throw, 1" B.S.F. at Forward End) - Type 2, with J02953, E05187 (Superseded, will be replaced by K06729, K06728, E05187)	Was LW/2/999
		K06729	Eccentric - Chain Adjuster (7/8" Throw, 1" - 16 Thds. at Forward End) - Type 3 (For superseded assembly LW/2/998 when used with K06728)	Was Part of MA 1232
43		K06729	Eccentric - Chain Adjuster (7/8" Throw, 1" - 16 Thds. at Forward End) - Type 3 (For T00013 when used with K06814, S05618/19)	Was Part of MA 1246
44		-	Shaft - Chain Fixed Jockey (1" B.S.F. at Forward End), with J02953, E08779, E05190, E05187 (Superseded, will be replaced by K06727, K06728, E08779, E05190, E05187)	Was LW/2/574
		K06727	Shaft - Chain Fixed Jockey (1" - 16 Thds. at Forward End)	Was Part of MA 1233
45		J09253	Nut, 1" B.S.F. X 37/64" X 7/8" Hex. (For Eccentrics and Shafts screwed 1" B.S.F.)	Was 136 NU
46		K06728	Nut, 1" - 16 Thds. X 37/64" X 7/8" Hex. (For Eccentrics and Shafts screwed 1" - 16 Thds.)	Was 331 NU
47		K06813	Clamp Plate - Chain Adjuster, with J07726, K04754, K06970	Was MA 1244
48		J07726	Stud, 3/8" B.S.F. X 1.31/32" long	Was 271 ST
49		K04754	Nut, 3/8" B.S.F. X 7/16" X 5/16" Hex.	Was 304 NU
50		K06970	Washer, .745" O.D. X .390" I.D. X .072"	Was 211 WA
51		K06814	Locking Nut - Chain Adjuster	Was MA 1245
52		S05618/19	Split Pin, 1/8" diam. X 2.1/4" long	Was 167 PS
53		E08779	Tab Washer, 1.1/32" diam. hole	Was 108 LP
54		E05190	Collar - Bearing Distance	Was 104 CR
55		E05187	Nut, 13/16" - 20 Thds. X 3/16" X 5/8" Hex.	Was 135 NU
56		E51890	Chain Wheel	Was MA 131
57		L20501	Ball Journal Bearing	Was 103 BE
58		J08527	Bush - Chain Adjuster (For Eccentrics without Clamp Plate)	Was 110 BU
59		K06815	Bush - Chain Adjuster (For Eccentrics with Clamp Plate)	Was 155 BU
60		J59840	Lever - Chain Adjuster Locking	Was LW/2/525
61		J85160	Mount - Chain Fixed Jockey	Was LW/2/573
62		J08883	Instruction Plate - Chain Adjuster (For Eccentrics without Clamp Plate)	Was LW/2/567

# GARDNER

## LUBRICATING OIL PUMP DRIVE, INJECTION CONTROL, CHAIN CASE COVER AND OIL FILLER — PLATE 9

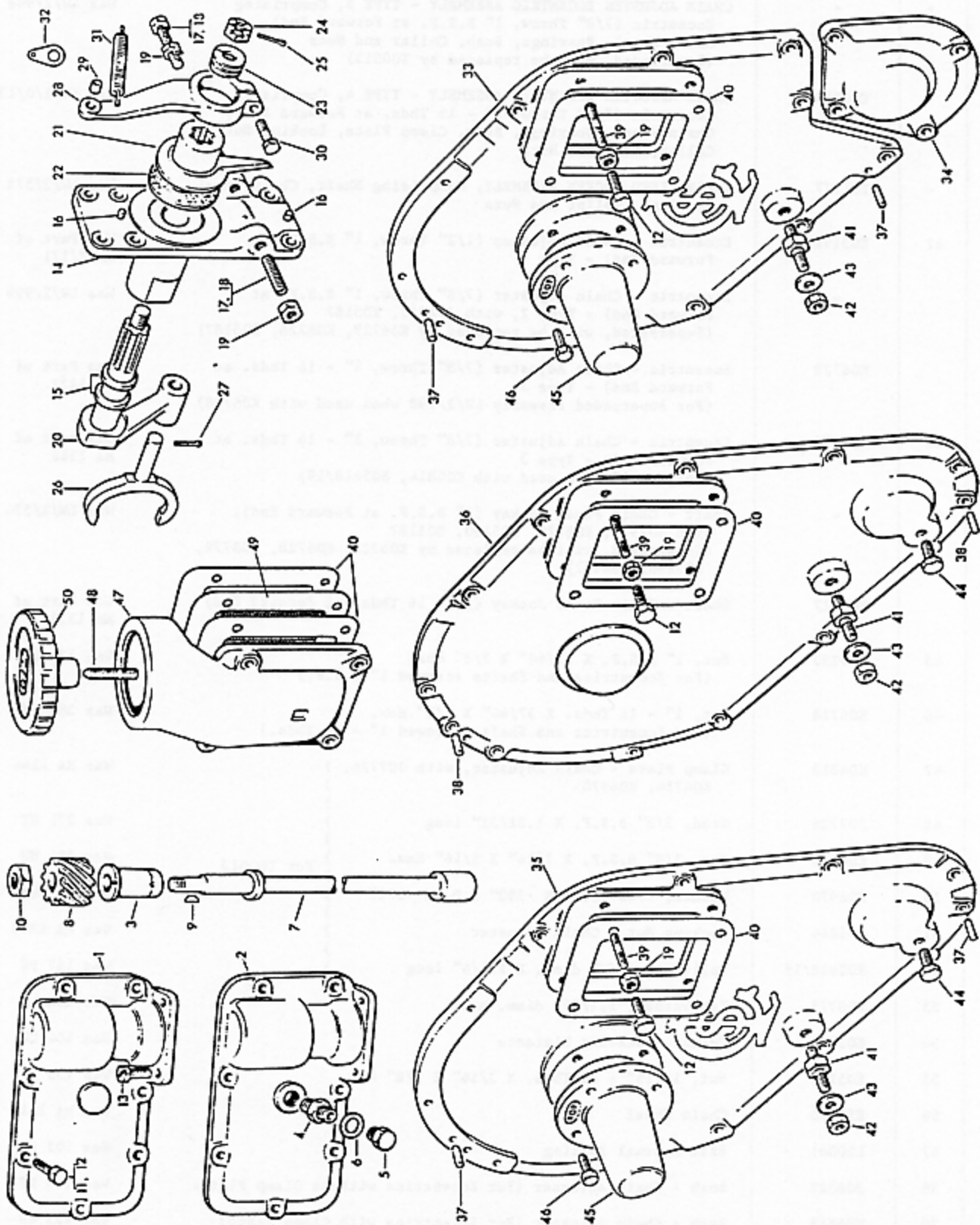




Plate No.	Illus. No.	Part No.	Description		
9	-	A26107	LUBRICATING OIL PUMP DRIVING GEAR COVER ASSEMBLY, Comprising Cover, Bush, Shaft, Gears - Driving and Driven and Nut	) ) )	Combination of LW/2/604 and LW/2/206
	1	A02164	Cover - Lubricating Oil Pump Driving Gear, with J06188	) ) )	2LW Was LW/2/605
	-	A26108	LUBRICATING OIL PUMP DRIVING GEAR COVER ASSEMBLY, Comprising Cover, Bush, Shaft, Gears - Driving and Driven and Nut	) ) )	3LW, 4LW Combination of LW/2/118 and LW/2/206
	-	A26109	LUBRICATING OIL PUMP DRIVING GEAR COVER ASSEMBLY, Comprising Cover, Bush, Shaft, Gears - Driving and Driven and Nut	) ) )	5LW, 6LW Combination of LW/2/594 and LW/2/207
	1	A02029	Cover - Lubricating Oil Pump Driving Gear, with J06188	) ) )	3 to 6LW Was LW/2/444
	-	A26119	LUBRICATING OIL PUMP DRIVING GEAR COVER ASSEMBLY, Comprising Cover, Bush, Shaft, Gears - Driving and Driven and Nut	) ) )	2LW Combination of LW/2/1199 and LW/2/206
	2	A03325	Cover - Lubricating Oil Pump Driving Gear, with J06188, E04115	) ) )	Was LW/2/1200
	-	A26120	LUBRICATING OIL PUMP DRIVING GEAR COVER ASSEMBLY, Comprising Cover, Bush, Shaft, Gears - Driving and Driven and Nut	) ) )	3LW, 4LW Combination of LW/2/1024 and LW/2/206
	-	A26121	LUBRICATING OIL PUMP DRIVING GEAR COVER ASSEMBLY, Comprising Cover, Bush, Shaft, Gears - Driving and Driven and Nut	) ) )	5LW, 6LW Combination of LW/2/1025 and LW/2/207
	2	A00820	Cover - Lubricating Oil Pump Driving Gear, with J06188, E04115	) ) )	3 to 6LW Was LW/2/1026
	3	J06188	Bush - Lubricating Oil Pump Driving Shaft	) ) )	Was LW/2/123
	-	A26122	LUBRICATING OIL PUMP DRIVING GEAR COVER ASSEMBLY, Comprising Cover, Bush, Shaft, Gears - Driving and Driven and Nut	) ) )	3LW, 4LW Was LW/2/1137 or LW/2/1138
	-	A26123	LUBRICATING OIL PUMP DRIVING GEAR COVER ASSEMBLY, Comprising Cover, Bush, Shaft, Gears - Driving and Driven and Nut	) ) )	5LW, 6LW Was LW/2/1201 or LW/2/1139
	2	A01971	Cover - Lubricating Oil Pump Driving Gear, with K01508, C03789, K00801	) ) )	3 to 6LW Was LW/2/1140 or LW/2/1141
	4	E04115	Union Stock, "M" 1/4" B.S.P. X 1/4" B.S.P.	) ) )	Was 100 SU
	5	C03789	Plug, 1/4" B.S.P. X 3/8" Hex.	) ) )	Was 103 PL
	6	K00801	Packing, Circular, 11/16" O.D. X 1/2" I.D. X 1/16"	) ) )	Was 146 PA
	7	J06185	Shaft - Lubricating Oil Pump Driving	) ) )	Was Part of LW/2/126
	8	A26110	Gears - Lubricating Oil Pump Driving and Driven	) ) )	2 to 6LW Anti-Clockwise Rotation Engines looking on Flywheel End
		A26111	Gears - Lubricating Oil Pump Driving and Driven	) ) )	5LW, 6LW Combination of LW/2/128 and LW/2/206

Plate No.	Illus. No.	Part No.	Description	
9	7	X01509	Shaft - Lubricating Oil Pump Driving )	Was Part of LW/2/1145
	8	A26124	Gears - Lubricating Oil Pump Driving ) and Driven )	Clockwise Rotation Engines looking on Flywheel End
		A26125	Gears - Lubricating Oil Pump Driving ) and Driven )	
				5LW, 6LW Combination of LW/2/1147 and LW/2/1136
	9	L21021	Woodruff Key	Was 100 KE
	10	E05060	Nut - Lubricating Oil Pump Driving Shaft	Was 131 NU
	11	L21224	Setscrew, Countersunk Head, 5/16" Wh. X 3/4" long	Was 168 SS
	12	E05577	Setscrew, 5/16" Wh. X 7/8" long X 1/4" Hex.	Was 112 SS
	13	E05578	Setscrew, 1/4" Wh. X 5/8" long X 3/16" Hex.	Was 106 SS

Plate No.	Illus. No.	Part No.	Description	
9	-	A00061	FUEL INJECTION CONTROL ASSEMBLY, Comprising Injection Control Plate, Yoke Lever, Yoke, Pointer, Connection Lever, Washers, Adjusting Screws and Nuts	Was LW/2/453
		A05111	FUEL INJECTION CONTROL ASSEMBLY, ) Comprising Injection Control ) Plate, Yoke Lever, Yoke, ) To suit Engines Pointer, Connection Lever, ) without Single Washers, Adjusting Screws ) Lever Control and Nuts )	Was LW/2/1245
		A05112	FUEL INJECTION CONTROL ASSEMBLY, ) Comprising Injection Control ) Plate, Yoke Lever, Yoke, ) To suit Engines Pointer, Connection Lever, ) with Single Washers, Adjusting Screws ) Lever Control and Nuts )	Was LW/2/1246
	14	A01613	Injection Control Plate, with J09391, C06927	Was LW/2/220
	15	J09391	Thrust Washer - Injection Control Yoke Lever	Was MA 135
	16	C06927	Steady Peg, 3/16" diam. X 9/16" long	Was 101 PE
	17	C07597	Setscrew, Headless, 5/16" Wh. X 1.1/4" long	Was 178 SS
		C09067	Setscrew, Headless, 5/16" Wh. X 1.1/2" long	Was 179 SS
	18	J09673	Setscrew, 5/16" Wh. X 1.1/2" long X 1/4" Hex.	Was 115 SS
		K00594	Setscrew, 5/16" Wh. X 1.3/4" long X 1/4" Hex.	Was 118 SS
	19	E03945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex.	Was 106 NU
	20	T01291	Lever, with Pointer - (Splined) - Injection Control Yoke, with E04998, J02328, J02529, S05618/11	Was MA 140
	21	-	Pointer - (Splined) - Injection Control (Not supplied as a separate item, specify T01291)	Was MA 141
	22	E04998	Friction Washer	Was 158 PA
	23	J02328	Spring - Injection Control Yoke Lever	Was 112 SP
	24	J02529	Castle Nut, 7/16" B.S.F.	Was 147 NU
	25	S05618/11	Split Pin, 3/32" diam. X 1" long	Was 114 PS
	26	K08104	Yoke - Injection Control	Was Part of MA 134
	27	S05618/10	Split Pin, 3/32" diam. X 7/8" long	Was 113 PS
	28	K00217	Injection Connection Lever - ( Anti-Clockwise Rotation Engines Cam Operated, with J00444, ( looking on Flywheel End. C05257 ( Clockwise Rotation Engines ( looking on Flywheel End with ( Ball Joint at Governor End of ( Injection Connecting Rod	Was MA 146

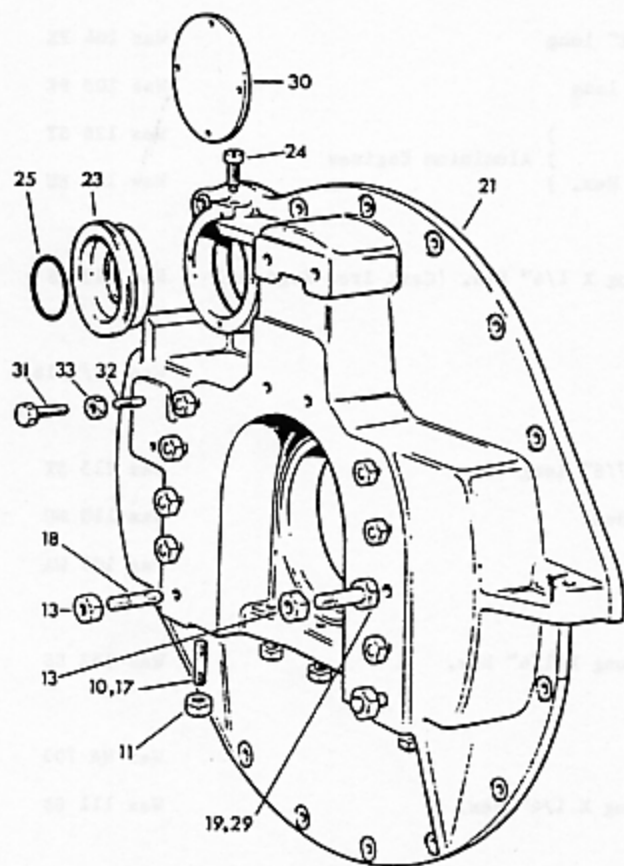
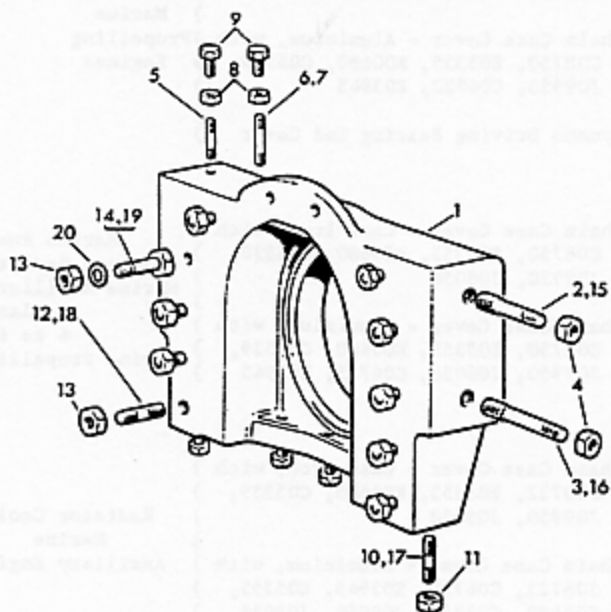
Plate No.	Illus. No.	Part No.	Description		
9	28	K01456	Injection Connection Lever ) To suit Engines ) - Cam Operated, with ) without Single ) J00444, C05257 ) Lever Control )	Clockwise Rotation ) Engines looking on ) Flywheel End with )	Was LW/2/1151
		K03298	Injection Connection Lever ) To suit Engines ) - Cam Operated, with ) with Single ) J00444, C05257 ) Lever Control )	Forked Eye at ) Governor End of ) Connecting Rod )	Was LW/2/1172
	29	J00444	Bush, 11/32" O.D. X 1/4" I.D. X 1/4" wide		Was 100 BU
	30	C05257	Bolt, 1/4" - 28 Thds. X 1" long X 3/16" Hex.		Was 107 BL
31	K07396	Spring - Tension - 3.5/16" O/A Length, for K00217	( To suit Engines ) ( without Friction ) ( Disc Speed ) ( Control or Fixed ) ( Speed Governor )	Anti-Clockwise ) Rotation Engines ) looking on ) Flywheel End )	Was 138 SP
					Was 138 SP
					Was 209 SP
32	J06976	Spring Tag, for K03299		Clockwise ) Rotation Engines ) looking on ) Flywheel End )	Was 101 TS

## CHAIN CASE COVER AND OIL FILLER

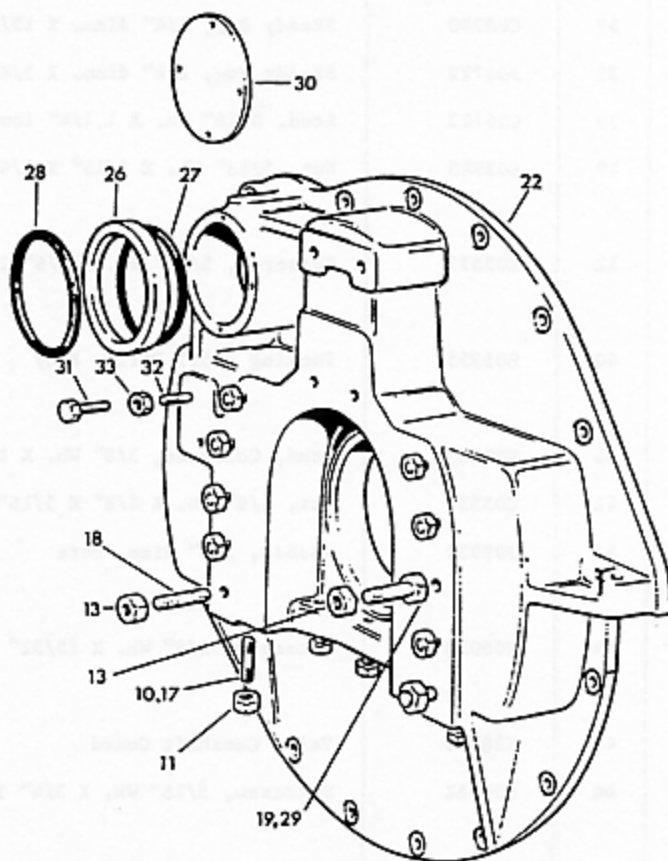
Plate No.	Illus. No.	Part No.	Description	
9	33	A00822	Chain Case Cover - Cast Iron, with ) C08750, E05355, K00680, C05539, ) J09950 )	Was LW/2/1031 2LW, 3LW
		A00821	Chain Case Cover - Aluminium, with ) C08750, E05355, K00680, C05539, ) J09950, C06723, E03945 )	Marine ) Propelling ) Engines ) 3LW ) Was LW/2/1030
	34	J46300	Dynamo Driving Bearing End Cover )	2LW, 3LW ) Was LW/2/1032
	35	A00824	Chain Case Cover - Cast Iron, with ) C08750, E05355, K00680, C05539, ) J09950, J08058 )	Marine Auxiliary ) (Except Radiator Cooled ) Marine Auxiliary Engines) ) also ) 4 to 6LW ) Marine Propelling Engines ) Was LW/2/1034
		A00823	Chain Case Cover - Aluminium, with ) C08750, E05355, K00680, C05539, ) J09950, J08058, C06723, E03945 )	Was LW/2/1033
	36	A00232	Chain Case Cover - Cast Iron, with ) J08722, E05355, K00680, C05539, ) J09950, J08058 )	Radiator Cooled ) Marine ) Auxiliary Engines ) Was LW/2/644
		A00231	Chain Case Cover - Aluminium, with ) J08722, C06723, E03945, E05355, ) K00680, C05539, J09950, J08058 )	Was LW/2/163
	37	C08750	Steady Peg, 1/4" diam. X 15/32" long	Was 104 PE
	38	J08722	Steady Peg, 1/4" diam. X 5/8" long	Was 105 PE
	39	C06723	Stud, 5/16" Wh. X 1.1/4" long )	Aluminium Engines ) Was 126 ST
	19	E03945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex. )	Was 106 NU
	12	E05577	Setscrew, 5/16" Wh. X 7/8" long X 1/4" Hex. (Cast Iron Engines)	Was 112 SS
	40	E05355	Packing - Oil Filler Body	Was LW/2/161
	41	K00680	Stud, Collared, 3/8" Wh. X 1.7/8" long	Was 215 ST
	42	C05539	Nut, 3/8" Wh. X 3/8" X 5/16" Hex.	Was 110 NU
	43	J09950	Washer, 3/8" diam. bore	Was 107 WA
	44	J08058	Setscrew, 3/8" Wh. X 15/32" long X 1/4" Hex.	Was 152 SS
	45	K28100	Valve Camshaft Guard	Was MA 703
	46	E04562	Setscrew, 5/16" Wh. X 3/4" long X 1/4" Hex.	Was 111 SS
	-	T01043	OIL FILLER ASSEMBLY, Comprising Body, Cover and Stud	Was LW/2/1115
	47	-	Oil Filler Body (Not supplied separately - specify T01043)	Was LW/2/1117
	48	E04658	Stud - Oil Filler Cover	Was 163 ST
	49	E05356	Gauze - Oil Filler	Was Part of ) LW/2/160 )
	40	E05355	Packing - Oil Filler Body	Was LW/2/161
	50	X51400	Cover - Oil Filler	Was LW/2/1118

# GARDNER

## CRANKCASE END PLATE — PLAIN AND FLANGED — PLATE 10



2LW, 3LW



4 to 6LW

Plate No.	Illus. No.	Part No.	Description	
10	1	A00831	Crankcase Plain End Plate - Cast Iron, ) with J06631, J06630, E01488, C02302, ) E09679, C05539, J03407, E04029, ) J09813, J08529 )	Marine Auxiliary Engines Was LW/2/1070
	2	J06631	Stud, 5/8" Wh. X 4.3/8" long	Was 312 ST
	3	J06630	Stud, 5/8" Wh. X 5.3/4" long	Was 311 ST
	4	E01488	Nut, 5/8" Wh. X 1/2" X 1/2" Hex.	Was 119 NU
	5	C02302	Stud, 3/8" Wh. X 1.5/16" long )	Was 166 ST
	6	E09679	Stud, 3/8" Wh. X 3.15/16" long )	Was 149 ST
	7	J07355	Stud, 3/8" Wh. X 6.3/16" long )	Was 202 ST
	8	C05539	Nut, 3/8" Wh. X 3/8" X 5/16" Hex. )	Was 110 NU
			) Required only ) ) when Electric ) ) or Air Starting ) 4 to 6LW ) is fitted )	
	9	J08058	Setscrew, 3/8" Wh. X 15/32" long X 1/4" Hex.	Was 152 SS
	10	J03407	Stud, 3/8" Wh. X 3/8" B.S.F. X 1.1/2" long	Was 167 ST
	11	E04029	Nut, 3/8" B.S.F. X 5/16" X 5/16" Hex.	Was 125 NU
	12	J09813	Stud, 7/16" Wh. X 7/16" B.S.F. X 1.13/16" long	Was 180 ST
	13	J08529	Nut, 7/16" B.S.F. X 7/16" X 3/8" Hex.	Was 128 NU
	14	J04552	Bolt, 7/16" B.S.F. X 1.3/8" long X 3/8" Hex.	Was 133 BL
	13	J08529	Nut, 7/16" B.S.F. X 7/16" X 3/8" Hex.	Was 128 NU
	1	T02503	Crankcase Plain End Plate - Aluminium, ) with J07286, J07285, E06450, E06288 )	Marine Auxiliary Engines Was LW/2/134(9)
-	-	C09431	Steady Peg, 7/16" diam. X 1" long (Aluminium End Plate to Crankcase - replacement End Plates, per Assembly Instruction 00283)	Was 130 PE
10	15	J07286	Stud, 5/8" Wh. X 3/4" Wh. X 4.15/16" long	Was 309 ST
	16	J07285	Stud, 5/8" Wh. X 3/4" Wh. X 6.5/16" long	Was 310 ST
	4	E01488	Nut, 5/8" Wh. X 1/2" X 1/2" Hex.	Was 119 NU
	5	C02302	Stud, 3/8" Wh. X 1.5/16" long )	Was 166 ST
	6	E09679	Stud, 3/8" Wh. X 3.15/16" long )	Was 149 ST
	7	J07355	Stud, 3/8" Wh. X 6.3/16" long )	Was 202 ST
	8	C05539	Nut, 3/8" Wh. X 3/8" X 5/16" Hex. )	Was 110 NU
			) Required only ) ) when Electric ) 4 to 6LW ) or Air Starting ) ) is fitted )	
	9	J08058	Setscrew, 3/8" Wh. X 15/32" long X 1/4" Hex.	Was 152 SS
	17	E06450	Stud, 3/8" Wh. X 3/8" B.S.F. X 1.5/8" long	Was 168 ST
	11	E04029	Nut, 3/8" B.S.F. X 5/16" X 5/16" Hex.	Was 125 NU

Plate No.	Illus. No.	Part No.	Description	
10	18	E06288	Stud, 7/16" Wh. X 7/16" B.S.F. X 2" long	Was 177 ST
	13	J08529	Nut, 7/16" B.S.F. X 7/16" X 3/8" Hex.	Was 128 NU
	19	E06289	Bolt, 7/16" B.S.F. X 1.3/4" long X 3/8" Hex.	Was 135 BL
		J07661	Bolt, 7/16" B.S.F. X 1/2" diam. X 1.3/4" long X 3/8" Hex.	Was 134 BL
	13	J08529	Nut, 7/16" B.S.F. X 7/16" X 3/8" Hex.	Was 128 NU
	20	S05726/04	Washer, 7/16" diam. bore	Was 218 WA
	21	A00833	Crankcase Flanged End Plate - Cast Iron, with J03047, E04029, E06288, J08529, J62900, E05624, J06970	) ) 2LW, 3LW Was LW/2/1074
	22	A00835	Crankcase Flanged End Plate - Cast Iron, with J03407, E04029, E06288, J08529, E09731, E09732	) ) When 6" diam. Electric Starter is fitted ) ) Marine Propelling Engines ) ) Was LW/2/1076
		A02622	Crankcase Flanged End Plate - Cast Iron, with J03407, E04029, E06288, J08529, K04446, E09732, K04123	) ) When 5" diam. Electric Starter is fitted with (5/8" or 9/16" wide Locating Ring ) ) Marine Propelling Engines ) ) Was LW/2/1175
		A03609	Crankcase Flanged End Plate - Cast Iron, with J03407, E04029, E06288, J08529, K63840, E09732, K04123	) ) When 5" diam. Electric Starter is fitted with (43/64" wide Locating Ring ) ) Marine Propelling Engines ) ) Was LW/2/1232
10	J03407	Stud, 3/8" Wh. X 3/8" B.S.F. X 1.1/2" long	Was 167 ST	
11	E04029	Nut, 3/8" B.S.F. X 5/16" X 5/16" Hex.	Was 125 NU	
18	E06288	Stud, 7/16" Wh. X 7/16" B.S.F. X 2" long	Was 177 ST	
13	J08529	Nut, 7/16" B.S.F. X 7/16" X 3/8" Hex.	Was 128 NU	
23	J62900	Ring - Starter Locating	) ) Was LW/2/662	
24	J08962	Screw - Starter Locating Ring	) ) 2LW, 3LW Was 190 SS	
25	J06970	Joint Ring, 2.3/8" O.D. X 2.1/8" I.D. X 1/8" Sectional diam.)	) ) Was 107 RJ	
26	E09731	Ring - Starter Locating, 9/16" wide (To suit 6" diam. Electric Starter)	) ) Was LW/2/1078	
	K04446	Ring - Starter Locating, 9/16" wide	) ) To suit 5" diam. Electric Starter	
	K63840	Ring - Starter Locating, 43/64" wide	) ) Was LW/2/1178	
			) ) Was LW/2/1230	
27	E09732	Joint Ring, 4.1/8" O.D. X 3.3/4" I.D. X 3/16" Sectional diam.)	) ) 4 to 6LW Was 108 RJ	
28	K04123	Joint Ring, 4.7/8" O.D. X 4.3/8" I.D. X 3/16"	) ) Was 123 RJ	
29	K01882	Bolt, 7/16" B.S.F. X 1.1/2" long X 3/8" Hex.	Was 194 BL	
13	J08529	Nut, 7/16" B.S.F. X 7/16" X 3/8" Hex.	Was 128 NU	

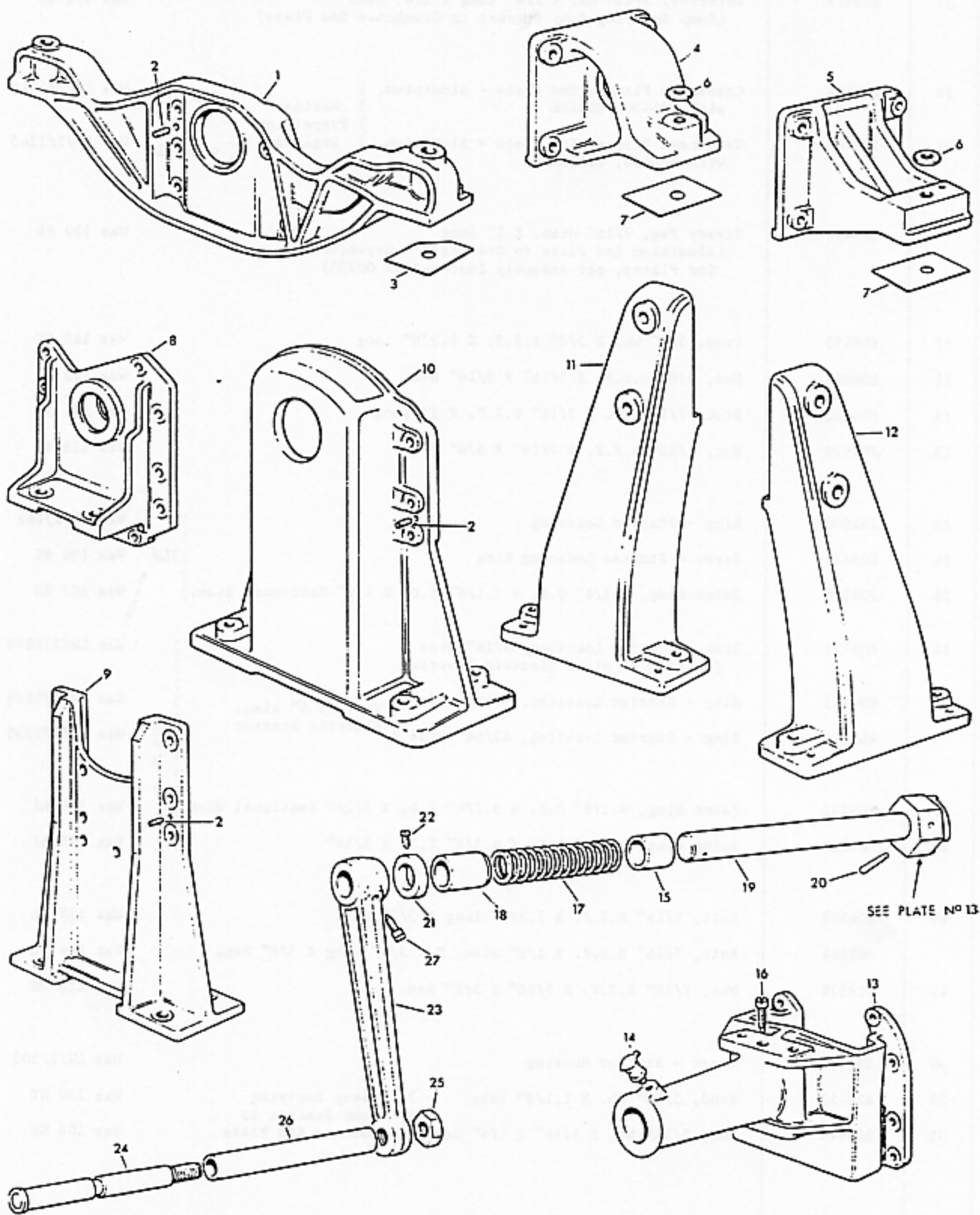


**CRANKCASE END PLATE - PLAIN AND FLANGED**

Plate No.	Illus. No.	Part No.	Description		
10	30	E06722	Cover - Starter Housing	Was LW/2/305	
	31	E05577	Setscrew, 5/16" Wh. X 7/8" long X 1/4" Hex. (Sump Emptying Pump Bracket to Crankcase End Plate)	Was 112 SS	
	21	A05104	Crankcase Flanged End Plate - Aluminium, ) with E06450, E06288 )	) 3LW ) Marine ) Propelling ) Engines ) 4 to 6LW	
22	T02506	Crankcase Flanged End Plate - Aluminium, ) with K06450, E06288 )	Was LW/2/1244		
-	-	C09431	Steady Peg, 7/16" diam. X 1" long (Aluminium End Plate to Crankcase - Replacement End Plates, per Assembly Instruction 00283)	Was 130 PE	
10	17	E06450	Stud, 3/8" Wh. X 3/8" B.S.F. X 1.5/8" long	Was 168 ST	
	11	E04029	Nut, 3/8" B.S.F. X 5/16" X 5/16" Hex.	Was 125 NU	
	18	E06288	Stud, 7/16" Wh. X 7/16" B.S.F. X 2" long	Was 177 ST	
	13	J08529	Nut, 7/16" B.S.F. X 7/16" X 3/8" Hex.	Was 128 NU	
	23	J62900	Ring - Starter Locating	) Was LW/2/662	
	24	E05624	Screw - Starter Locating Ring	) 3LW Was 190 SS	
	25	J06970	Joint Ring, 2.3/8" O.D. X 2.1/8" I.D. X 1/8" Sectional diam.)	) Was 107 RJ	
	26	E09731	Ring - Starter Locating, 9/16" wide (To suit 6" diam. Electric Starter)	) Was LW/2/1078	
		K04446	Ring - Starter Locating, 9/16" wide )	) To suit 5" diam. ) Electric Starter	
		K63840	Ring - Starter Locating, 43/64" wide )		) Was LW/2/1178
				) Was LW/2/1230	
		27	E09732	Joint Ring, 4.1/8" O.D. X 3.3/4" I.D. X 3/16" Sectional diam.)	) Was 108 RJ
		28	K04123	Joint Ring, 4.7/8" O.D. X 4.3/8" I.D. X 3/16"	) Was 123 RJ
	19	E06289	Bolt, 7/16" B.S.F. X 1.3/4" long X 3/8" Hex.	Was 135 BL	
		J07661	Bolt, 7/16" B.S.F. X 1/2" diam. X 1.3/4" long X 3/8" Hex.	Was 134 BL	
	13	J08529	Nut, 7/16" B.S.F. X 7/16" X 3/8" Hex.	Was 128 NU	
	30	E06722	Cover - Starter Housing	Was LW/2/305	
	32	E03452	Stud, 5/16" Wh. X 1.1/8" long )	) Sump Emptying ) Pump Bracket to	
	33	E03945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex. )		Was 120 ST
			Crankcase End Plate	Was 106 NU	

# GARDNER

## ENGINE SUPPORTING FEET, FRONT SUPPORT AND STARTING HANDLE — PLATE 11



**ENGINE SUPPORTING FEET, FRONT SUPPORT AND STARTING HANDLE**

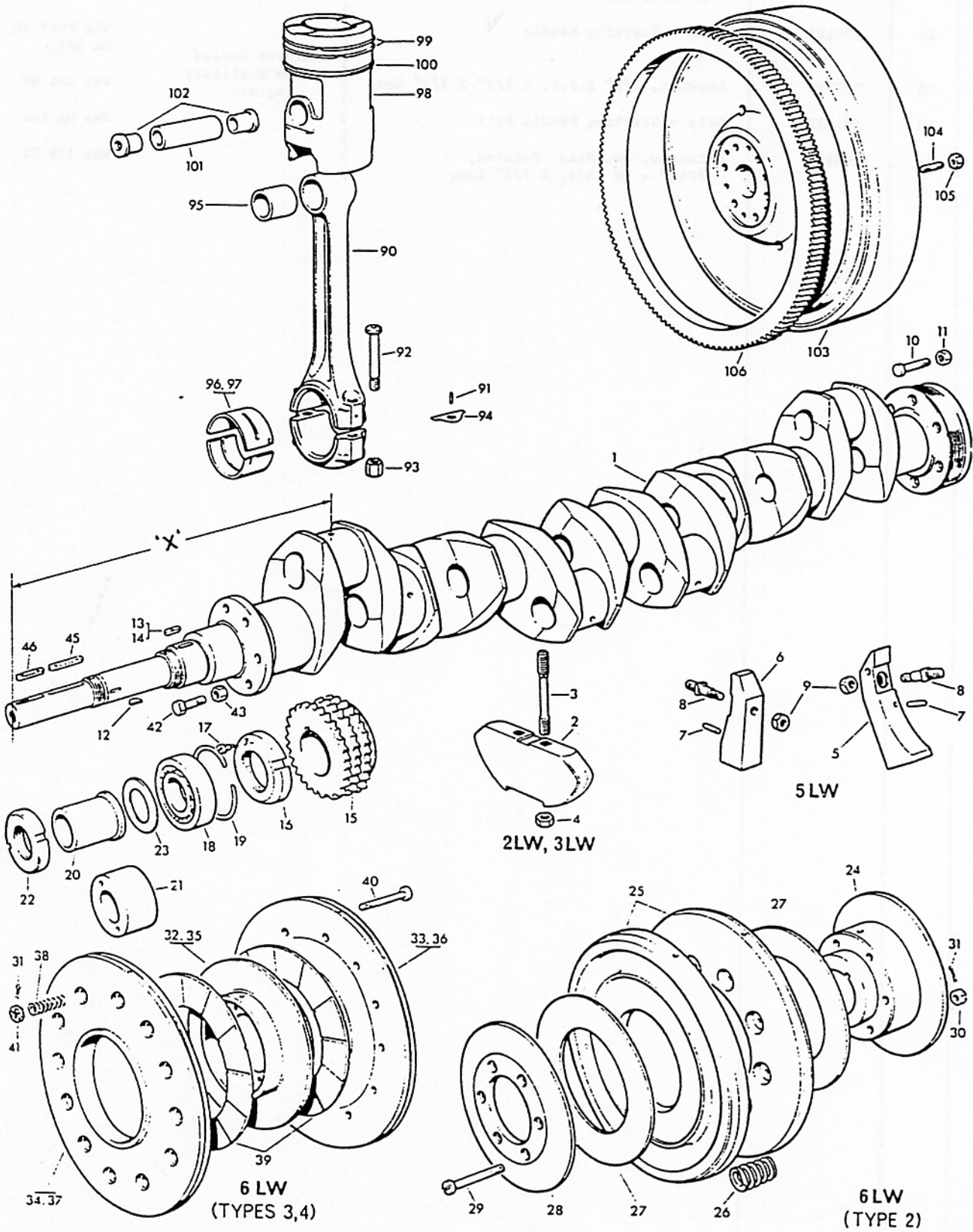
Plate No.	Illus. No.	Part No.	Description		
11	1	D13090	Engine Supporting Bracket	)	Was LW/2/1062
	2	C06873	Steady Peg, 3/8" diam. X 3/4" long	)	Was 123 PE
	3	J07259	Shim - Engine Supporting Bracket, 3.1/4" X 2.1/8" X .003"	)	Was LW/2/1119(1)
		J07260	Shim - Engine Supporting Bracket, 3.1/4" X 2.1/8" X .007"	)	2LW, 3LW Was LW/2/1119(2)
		J07261	Shim - Engine Supporting Bracket, 3.1/4" X 2.1/8" X .032"	)	Was LW/2/1119(3)
4		H05513	Engine Supporting Foot (Cast Iron Engines)	)	Was LW/2/1064
		H02082	Engine Supporting Foot (Aluminium Engines)	)	4 to 6LW Was Part of LW/2/1063
5		H05500	Engine Supporting Foot ) (Cast Iron Engines) ) Fuel ) To suit Engines	)	Was LW/2/1166
		H05438	Engine Supporting Foot ) Side ) Pump on Can Box (Aluminium Engines) )	)	4LW Was Part of LW/2/1165
6		E05845	Washer, 1.3/4" O.D. X 21/32" I.D. X 3/16"	)	Was 213 WA
7		J07253	Shim - Engine Supporting Foot, 4" X 2.1/8" X .003"	)	Was LW/2/1120(1)
		J07254	Shim - Engine Supporting Foot, 4" X 2.1/8" X .007"	)	4 to 6LW Was LW/2/1120(2)
		J07255	Shim - Engine Supporting Foot, 4" X 2.1/8" X .032"	)	Was LW/2/1120(3)
8		H03590	Engine Supporting Bracket - Chain Case End	)	Was LW/2/0/65
9		D14653	Engine Supporting Bracket - Chain Case End	)	Was LW/2/1171
10		H03506	Engine Supporting Bracket - Chain Case End	)	Was LW/2/1065
	2	C06873	Steady Peg, 3/8" diam. X 3/4" long	)	Was 123 PE
11		H03504	Engine Supporting Bracket - Flywheel End (Fuel Pump Side)	)	Was LW/2/1066
12		H03505	Engine Supporting Bracket - Flywheel End (Exhaust Side)	)	Was LW/2/1067
-	-	-	ENGINE FRONT SUPPORT ASSEMBLY ( Engine Serial Number ) ( MUST be quoted when ordering )	)	Was Basic No. LW/2/285
13	-	-	Engine Front Support ( Engine Serial Number ) ( MUST be quoted when ordering )	)	Was Basic No. LW/2/286
14		L21071	Lubricator, 1/8" B.S.P.	)	Was 100 LU
		L21051	Lubrication Nipple, 1/8" B.S.P. (Bent Nose 35°)	)	Was 101 LN
15		J04211	Bush - Fixed - Starting Handle Shaft (1.7/8" long)	)	Was 120 BU
16		J04191	Setscrew, Cheese Head, 5/16" Wh. X 13/16" long	)	Was 103 SS
17		J04331	Spring - Compression - Starting Handle Shaft (3.5/16" Free Length)	)	Was 131 SP
18		J04190	Bush - Floating - Starting Handle Shaft (2.1/4" long)	)	Was 121 BU
19	-	-	Shaft - Starting Handle ( Engine Serial Number ) ( MUST be quoted when ordering )	)	Was Basic No. LW/2/291
20		L21128	Taper Pin	)	Was 111 PT
21		E07889	Collar, 1.7/8" O.D. X 1.1/4" I.D. X 7/16" wide	)	Was 102 CR
22		E06863	Setscrew, Sq. Head, Pointed, 0 B.A. X 13/32" long	)	Was 193 SS

**ENGINE SUPPORTING FEET, FRONT SUPPORT  
AND STARTING HANDLE**

Plate No.	Illus. No.	Part No.	Description	
11	23	T01175	Starting Handle, with J04193, C07380, J04192, C08272	) Was MA 142
	24	J04193	Bolt - Starting Handle	) Was Part of MA 143
	25	C07380	Locknut, 1/2" B.S.P. X 1/2" X 3/4" Hex.	) Radiator Cooled Marine Auxiliary Engines Was 141 HU
	26	J04192	Grip - Starting Handle Bolt	) Was MA 144
	27	C08272	Setscrew, Sq. Head, Pointed, 7/16" - 10 Thds. X 7/8" long	) Was 176 SS

# GARDNER

## CRANKSHAFT, DAMPER, CONNECTING ROD, PISTON AND FLYWHEEL — PLATE 12



**CRANKSHAFT**

Plate No.	Illus. No.	Part No.	Description		
12	1	A00858	Crankshaft (Roller Bearing Type), with F02654, J06289, K04745, E05350, K04748, L21025, E05519, J06126, C03081	)	Was LW/3/1007
		A00859	Crankshaft (Roller Bearing Type), with F02654, J06289, F04745, E05350, K04748, L21025, E05519, J06126, C03081	)	Was LW/3/1008
		A00860	Crankshaft (Roller Bearing Type), with E05350, K04748, L21025, E05519, J06126, C03081	)	Was LW/3/1009
		A02820	Crankshaft (Roller Bearing Type), with K04816, K04815/01, E04259, J02135, K04744, E05350, K04748, L21025, E05519, J06126, C03081	)	Was LW/3/1119
		-	(To suit Crankshaft (Roller Bearing Type) (Damper (Superseded by A03064, T00765, ( with 6 off K04501, 6 off K04741) ( Taper ( Bore	)	Was LW/3/1011
		A03064	Crankshaft (Roller Bearing Type), (To suit with E05350, K04748, L21025, (Flange E05519, J06126, C03081 (Mounted (Damper	)	Was LW/3/1108
		A01976	Crankshaft (Roller Bearing Type), with F02654, J02135, K04745, E05350, K04748, L21025, E05519, J06126, C03081	)	Was LW/3/1084
		A01977	Crankshaft (Roller Bearing Type), with E05350, K04748, L21025, E05519, J06126, C03081	)	Was LW/3/1085
		A02821	Crankshaft (Roller Bearing Type), with K04816, K04815/01, E04259, J02135, K04746, E05350, K04748, L21025, E05519, J06126, C03081	)	Was LW/3/1120
		-	(To suit Crankshaft (Roller Bearing Type) (Damper (Superseded by A03065, T00765, ( with 6 off K04501, 6 off K04741) ( Taper ( Bore	)	Was LW/3/1087
		A03065	Crankshaft (Roller Bearing Type), (To suit with E05350, K04748, L21025, (Flange E05519, J06126, C03080 (Mounted (Damper	)	Was LW/3/1109
		A03066	Crankshaft (Roller Bearing Type), with F02654, J06289, K04745, E05350, K04748, L21025, E05519, J06126, C03081	)	Was LW/3/1121
		A03067	Crankshaft (Roller Bearing Type), with F02654, J06289, K04745, E05350, K04748, L21025, E05519, J06126, C03081	)	Was LW/3/1122
		A03068	Crankshaft (Roller Bearing Type), with E05350, K04748, L21025, E05519, J06126, C03081	)	Was LW/3/1123
		A03069	Crankshaft (Roller Bearing Type), with K04816, K04815/01, E04259, J02135, K04744, E05350, K04748, L21025, E05519, J06126, C03081	)	Was LW/3/1124
		A03070	Crankshaft (Roller Bearing Type), with E05350, K04748, L21025, E05519, J06126, C03081	)	Was LW/3/1125

"X" = 17.21/32" from End of Crankshaft at Chain Case End to Centre Line of No. 1 Crankpin  
 Anti-Clockwise Rotation Engines looking on Flywheel End  
 Clockwise Rotation Engines looking on Flywheel End  
 "X" = 20.13/32" from End of Crankshaft at Chain Case End to Centre Line of No. 1 Crankpin  
 Anti-Clockwise Rotation Engines looking on Flywheel End



## CRANKSHAFT

Plate No.	Illus. No.	Part No.	Description	
12	2	-	Balance Weight (Square Recesses) (Superseded, will be replaced by F02654 and 2 off J06289, K04745)	) Was LW/3/107
		F02654	Balance Weight	) Was LW/3/421
	3	-	Stud - Balance Weight (Superseded, will be replaced by J06289, K04745)	) 2LW, 3LW Was LW/3/345
		J06289	Stud - Balance Weight	) Was Part of LW/3/422
	4	K04745	Nut, 1/2" B.S.F. X 9/16" X 7/16" Hex.	) Was 294 NU
	5	-	Balance Weight (Square Recess) - Type 2 - Flywheel End, with E04259 (Superseded, will be replaced by K04816, E04259, J02135)	) Was LW/3/353
		K04816	Balance Weight - Type 2 - Flywheel End	) Was Part of LW/3/418
	6	-	Balance Weight (Square Recess) - Type 2 - Gear End, with E04259 (Superseded, will be replaced by K04815/01, E04259, J02135)	) Was LW/3/354
		K04815/01	Balance Weight - Type 2 - Gear End	) 5LW Was Part of LW/3/419
	7	E04259	Steady Peg, 3/16" diam. X 11/16" long	) Was 102 PE
	8	-	Stud - Balance Weight (Square Shoulder), with K04744 (Superseded, will be replaced by J02135, K04744 EXCEPT for Flywheel End Balance Weight when K04816, E04259 MUST also be supplied)	) Was LW/3/346
		J02135	Stud - Balance Weight	) Was Part of LW/3/420
	9	K04744	Nut, 7/16" B.S.F. X 1/2" X 3/8" Hex.	) Was 299 NU
	10	E05350	Bolt - Flywheel Coupling	) Was Part of LW/3/344
	11	K04748	Nut, 9/16" B.S.F. X 5/8" X 1/2" Hex.	) Was 295 NU
	12	L21025	Woodruff Key	) Was 105 KE
	13	E05519	Key - Chain Sprocket (2 to 5LW, also 6LW with Types 3 & 4 Damper)	) Was 119 KE
	14	E05193	Key - Chain Sprocket and Damper (6LW with Type 2 Damper)	) Was 121 KE
	15	E05194	Sprocket - Crankshaft Chain	) Was LW/3/9
	16	J06126	Nut - Chain Sprocket Retaining	) Was LW/3/10
	17	C03081	Setscrew, Cheese Head, 1 B.A. X 1/4" long	) Was 132 SS
	18	L20622	Roller Bearing, 1.1/2" I.D. X 3.1/4" O.D. X 3/4" wide	) Was 154 BE
	19	J02258	Bearing Retaining Ring	) Was 102 RR
	20	J63920	Distance Collar ( For Engines with Splash Door ( O/A width through Boss 3.9/32"	) Was LW/2/1017



Plate No.	Illus. No.	Part No.	Description		
12	21	K04004	Distance Piece, 2.1/2" O.D. X 1.1/2" I.D. X 1.1/16" wide	( For Engines with Splash Door ( O/A width through Boss 3.9/32" ( when Chain Starting is NOT fitted	Was LW/3/1097
	22	J06391	Nut, 1.1/2" - 12 Thds. X 2.3/4" O.D. X 1/2" thick		Was LW/3/1021
	23	J08129	Sealing Ring Oil Shield	( For Engines with Splash Door ( O/A width through Boss 1.7/32"	Was LW/2/563

Plate No.	Illus. No.	Part No.	Description	
12	-	A00073	DAMPER ASSEMBLY - TYPE 2 (TAPER BORE), Comprising Body, Rings, Flange, Friction Washers, Springs, Bolts and Nuts	Was LW/3/246
	24	J04819	Damper Body	Was LW/3/15
	25	E95690	Damper Ring	Was LW/3/16
	26	E09461	Damper Spring	Was 127 SP
	27	E05185	Damper Friction Washer	Was 175 PA
	28	E51860	Damper Flange	Was LW/3/19
	29	E05183	Damper Bolt	Was 144 BL
	30	E03405	Castle Nut, 7/16" B.S.F.	Was 148 NU
	31	S05618/11	Split Pin, 3/32" diam. X 1" long	Was 114 PS
	-	-	DAMPER ASSEMBLY - TYPE 3 (FLANGE MOUNTED), Hub Plate (3/16" thick), Inner and Outer Rings (1/8" deep recess) (Superseded, will be replaced by T00765)	Was LW/3/342
	32	F02389	Damper Hub Plate (3/16" thick) (Superseded, will be replaced by T00765)	Was MA 860
	33	A26211	Damper Ring - Inner (1/8" deep recess) (Superseded, will be replaced by T00765)	Was MA 861
	34	F02387	Damper Ring - Outer (1/8" deep recess) (Superseded, will be replaced by T00765)	6LW Was MA 862
	-	T00765	DAMPER ASSEMBLY - TYPE 4 (FLANGE MOUNTED), Comprising Hub Plate (1/8" thick), Inner and Outer Rings (3/32" deep recess), Friction Washers, Springs, Bolts and Nuts	Was LW/3/360
	35	F06102	Damper Hub Plate (1/8" thick)	Was MA 923
	36	A26213	Damper Ring - Inner (3/32" deep recess), with J05215, K04258, S05618/11	Was MA 924
	37	F06100	Damper Ring - Outer (3/32" deep recess)	Was MA 925
	38	K04259	Damper Spring	Was 222 SP
	39	K07265	Damper Friction Washer	Was 183 PA
	40	J05215	Damper Bolt	Was 158 BL
	41	K04258	Castle Nut, 7/16" B.S.F.	Was 275 NU
	31	S05618/11	Split Pin, 3/32" diam. X 1" long	Was 114 PS
	42	K04501	Bolt, 7/16" B.S.F. X 1.3/8" long X 3/8" Hex.	Was 311 BL
	43	K04741	Nut, 7/16" B.S.F. X 9/16" X 3/8" Hex.	Was 293 NU

Plain on Outside Diameter  
 IMPORTANT! - It is NOT permissible for Plain and Grooved Hub Plate of Rings to be mixed in any one Damper Assembly

## CRANKSHAFT FORWARD END DRIVE — PLATE 13

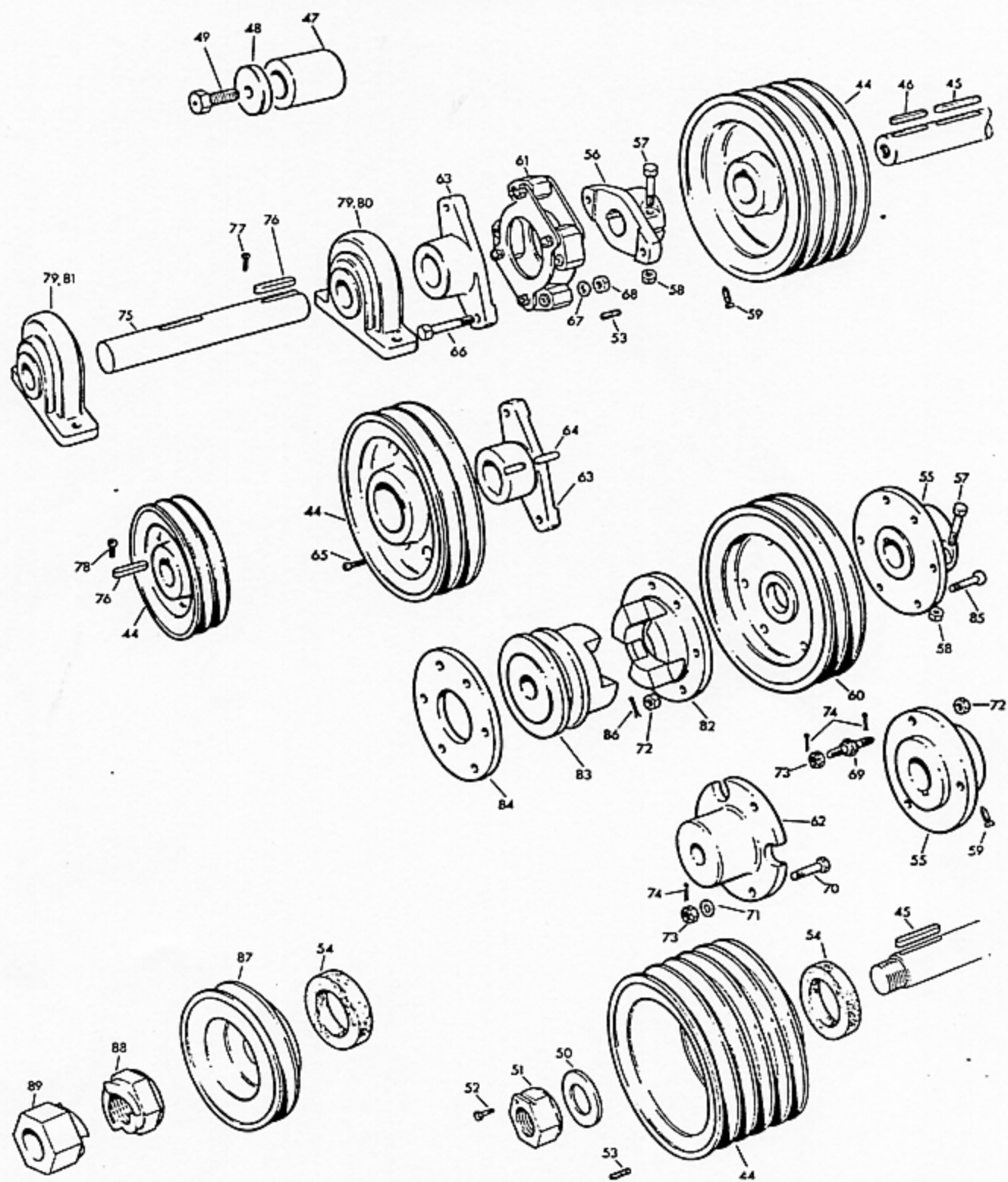


Plate No.	Illus. No.	Part No.	Description	
13	44	-	Pulley - 1 Groove )	Was LM/3/1099
		-	Pulley - 2 Groove )	Was LM/3/1100
		-	Pulley - 3 Groove )	Was LM/3/1101
		-	Pulley - 4 Groove ) Boss Mounting ) Engine Serial Number	MUST be quoted
		-	Pulley - 5 Groove )	when ordering
		-	Pulley - 6 Groove )	Was LM/3/1110
		-		Was LM/3/1111
12,13	45	E04985	Feather Key, 3/8" X 1/4" X 2.3/8" long	Was 118 KE
	46	J07047	Feather Key, 3/8" X 1/4" X 2" long	Was 127 KE
13	47	K02971	Distance Collar, 2" O.D. X 1.3/8" I.D. X 2.5/32" wide	Was 142 CR
	48	K02214	Washer, 2" O.D. X 41/64" I.D. X 3/8" thick	Was 144 WA
	49	K02213	Setscrew, 5/8" B.S.F. X 1.3/8" long X 1/2" Hex.	Was 269 SS
		K04219	Setscrew, 5/8" B.S.F. X 1" long X 1/2" Hex.	Was 395 SS
	50	J05028	Washer, 2.1/2" O.D. X 1.1/2" I.D. X 1/8" thick	Was 164 WA
		J07409	Washer, 2.3/8" O.D. X 1.1/2" I.D. X 1/8" thick	Was 120 WA
-	-	K07760	Nut, 1.1/2" - 12 Thds. X 29/32" X 1.1/4" Hex.	Was LM/3/417
13	51	-	Nut, 1.1/2" - 12 Thds. X 29/32" X 1.1/4" Hex. (Superseded, will be replaced by K07760)	Was LM/3/2006
	52	J07407	Bolt, 1/4" B.S.F. X 5/8" long X 3/16" Hex.	Was 252 BL
	53	E04682	Setscrew, Headless, 5/16" Wh. X 3/8" long	Was 263 SS
	54	J08218	Sealing Ring, 3.1/4" O.D. X 2.1/4" I.D. X 5/8" wide	Was 105 RS
	55	K00450	Coupling - Flanged - 1.3/8" Bore X 4.1/4" centres X 5" diam. flange (with 1.3/4" long Boss)	Was 138 COP
		J07061	Coupling - Flanged - 1.3/8" Bore X 4.1/4" centres X 5" diam. flange (with 1.3/8" long Boss)	Was 139 COP
		K02607	Coupling - Flanged - Split Boss Type - 1.3/8" Bore X 4.3/4" centres X 5.1/2" diam. flange	Was 107 COS
		K26020	Coupling - Flanged - Split Boss Type - 1.3/8" Bore X 5.1/4" centres X 7" diam. flange,	Was 111 COS
		K01403	Coupling - Flanged - Split Boss Type - 1.3/8" Bore X 6" centres X 6.3/4" diam. flange	Was 104 COS
	56	F05287	Coupling - Flanged - Split Boss Type - 1.3/8" Bore X 8.3/8" centres X 9.7/8" diam. oval flange	Was 110 COS
12,13	45	E04985	Feather Key, 3/8" X 1/4" X 2.3/8" long	Was 118 KE
	46	J07047	Feather Key, 3/8" X 1/4" X 2" long	Was 127 KE
13	57	K01405	Bolt, 9/16" B.S.F. X 2" long X 1/2" Hex. )	Was 197 BL
	58	K01406	Nut, 9/16" B.S.F. X 7/16" X 7/16" Hex. ) Split Boss Type	Was 202 NU
				Couplings
	53	E04682	Setscrew, Headless, 5/16" Wh. X 3/8" long	Was 263 SS
	59	E05930	Setscrew, Sq. Head, Pointed, 5/16" B.S.F. X 13/32" long	Was 171 SS
	60	-	Pulley - 1 Groove )	Was LM/3/1073
		-	Pulley - 2 Groove ) Plate Mounting ) Engine Serial Number	MUST be quoted
		-	Pulley - 3 Groove )	when ordering
		-		Was LM/3/1092
		-		Was LM/3/1098

## CRANKSHAFT FORWARD END DRIVE

Plate No.	Illus. No.	Part No.	Description	
13	61	-	Flexible Coupling - Less Bolts (Engine Serial Number MUST be quoted when ordering)	Was LW/3/1078
	62	J07060	Coupling - Flanged - 3/4" Pilot Bore X 4.1/4" centres X 5" diam. flange	Was 102 COP
		K01431	Coupling - Flanged - 1" Pilot Bore X 4.1/2" centres X 6" diam. flange	Was 140 COP
		K00434	Coupling - Flanged - 1.1/2" Bore X 4.1/4" centres X 5" diam. flange	Was 141 COP
	63	F06504	Coupling - Flanged - 15/16" Pilot Bore X 8.3/8" centres X 9.7/8" diam. oval flange	Was 162 COP
		F06436	Coupling - Flanged - 1.1/2" Bore X 8.3/8" centres X 9.7/8" diam. oval flange	Was 149 COP
		F05288	Coupling - Flanged - 1.3/4" Bore X 8.3/8" centres X 9.7/8" diam. oval flange	Was 145 COP
		F05728	Coupling - Flanged - 1.5/16" Bore X 8.3/8" centres X 9.7/8" diam. oval flange	Was 143 COP
		F06064	Coupling - Flanged - 1.3/8" Bore X 8.3/8" centres X 9.7/8" diam. oval flange	Was 144 COP
		F05599	Coupling - Flanged - 1.1/2" Bore X 8.3/8" centres X 9.7/8" diam. oval flange	Was 136 COP
		F06960	Coupling - Flanged - 1" Pilot Bore X 8.3/8" centres X 9.7/8" diam. oval flange	Was 142 COP
	64	K04215	Feather Key, 9/16" X 3/8" X 1.11/16" long	Was 170 KE
	65	K06844	Setscrew, Socket Head, 3/8" Wh. X 1/2" long	Was 462 SS
	66	K04572	Bolt, 5/8" B.S.F. X 3.1/2" long X 1/2" Hex.	Was 349 BL
	67	K04576	Tab Washer, 1.1/4" O.D. X 21/32" I.D.	Was 207 WA
	68	K01197	Nut, 5/8" B.S.F. X 3/4" X 1/2" Hex.	Was 177 NU
	69	J09849	Stud, Collared, 3/8" B.S.F. X 2.3/32" long	Was 307 ST
		K00449	Stud, Collared, 3/8" B.S.F. X 2.9/32" long	Was 452 ST
		J07062	Stud, Collared, 3/8" B.S.F. X 2.15/32" long	Was 308 ST
	70	J07063	Bolt, 3/8" B.S.F. X 1.1/2" long X 5/16" Hex.	Was 205 BL
	71	J07064	Washer, 3/4" O.D. X 25/64" I.D. X 1/8" thick	Was 140 WA
	72	E04029	Nut, 3/8" B.S.F. X 5/16" X 5/16" Hex.	Was 125 NU
	73	E03594	Castle Nut, 3/8" B.S.F.	Was 144 NU
	74	S05618/06	Split Pin, 5/64" diam. X 1" long	Was 105 PS
	75	-	Extension Shaft ( Engine Serial Number MUST ( be quoted when ordering	Was MA 973
	76	J07047	Feather Key, 3/8" X 1/4" X 2" long	Was 127 KE
		E04985	Feather Key, 3/8" X 1/4" X 2.3/8" long	Was 118 KE
		K04214	Feather Key, 3/8" X 1/4" X 2.1/2" long	Was 149 KE
		J04774	Feather Key, 3/8" X 1/4" X 2.5/8" long	Was 180 KE
		J05781	Feather Key, 3/8" X 1/4" X 3.1/8" long	Was 165 KE
		K01410	Feather Key, 3/8" X 1/4" X 4.1/4" long	Was 166 KE
		K01349	Feather Key, 3/8" X 1/4" X 4.1/2" long	Was 158 KE
		K03930	Feather Key, 3/8" X 1/4" X 5.1/4" long	Was 167 KE



Plate No.	Illus. No.	Part No.	Description	
13	88	E08757	Starting Dog - 2 Claw Type - On Crankshaft - 1.1/2" - 12 Thds. X 1.1/2" Hex. X 1.1/4" thick	) Was LW/3/75
		E08759	Starting Dog - 3 Claw Type - On Crankshaft - 1.1/4" - 12 Thds. X 1.1/2" Hex. X 1.1/4" thick	) Radiator ) Cooled ) Marine ) Auxiliary ) Engines
	89	E08756	Starting Dog - 2 Claw Type - On Starting Handle Shaft - 1.1/4" Bore X 1.1/2" Hex. X 1.7/8" thick	) Was LW/3/76
		E08758	Starting Dog - 3 Claw Type - On Starting Handle Shaft - 1.1/4" Bore X 1.1/2" Hex. X 1.7/8" thick	) Was LW/3/89



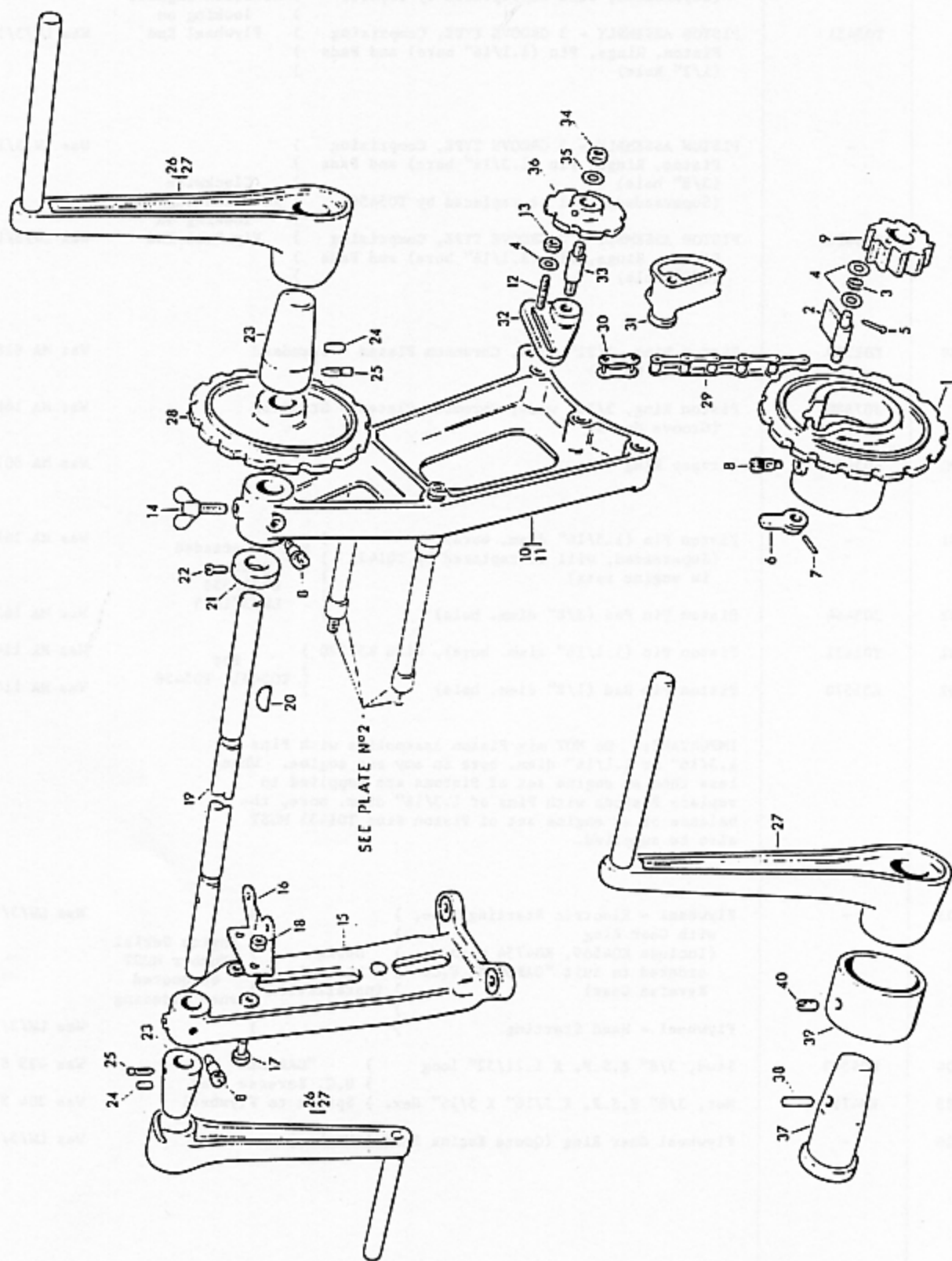


Plate No.	Illus. No.	Part No.	Description		
12	96	L26240	Big End Bearing - 1 Pair - Finished to Standard Bore	Was LW/3/24	
		L26241	Big End Bearing - 1 Pair - Suitable for boring to original standard and +005" undersize	Was LW/3/24/F1	
		L26242	Big End Bearing - 1 Pair - Suitable for boring for crankpins of +010" to +050" undersize	Was LW/3/24/F2	
		L26243	Big End Bearing - 1 Pair - Suitable for boring for crankpins of +055" to +095" undersize	Was LW/3/24/F3	
			NOTE:- Big End Bearings can also be supplied finished bored to a specified size of crankshaft within the range of +005" to +095" in steps of +005", i.e. +005", +010", +015", +020" etc., See Below		
		L26244	Big End Bearing - 1 Pair - +005" undersize		
		L26245	Big End Bearing - 1 Pair - +010" undersize		
		L26246	Big End Bearing - 1 Pair - +015" undersize		
		L26247	Big End Bearing - 1 Pair - +020" undersize		
		L26248	Big End Bearing - 1 Pair - +025" undersize		
		L26249	Big End Bearing - 1 Pair - +030" undersize		
		L26250	Big End Bearing - 1 Pair - +035" undersize		
		L26251	Big End Bearing - 1 Pair - +040" undersize		
		L26252	Big End Bearing - 1 Pair - +045" undersize		
		L26253	Big End Bearing - 1 Pair - +050" undersize		
		L26254	Big End Bearing - 1 Pair - +055" undersize		
		L26255	Big End Bearing - 1 Pair - +060" undersize		
		L26256	Big End Bearing - 1 Pair - +065" undersize		
		L26257	Big End Bearing - 1 Pair - +070" undersize		
		L26258	Big End Bearing - 1 Pair - +075" undersize		
L26259	Big End Bearing - 1 Pair - +080" undersize				
L26260	Big End Bearing - 1 Pair - +085" undersize				
L26261	Big End Bearing - 1 Pair - +090" undersize				
L26262	Big End Bearing - 1 Pair - +095" undersize				
			) To suit Type B Connecting Rod		
97		L26220	Big End Bearing - 1 Pair - Standard Bore	Was LW/3/349	
		L26221	Big End Bearing - 1 Pair - +005" undersize	Was LW/3/349/5	
		L26222	Big End Bearing - 1 Pair - +010" undersize	Was LW/3/349/10	
		L26224	Big End Bearing - 1 Pair - +020" undersize	Was LW/3/349/20	
		L26226	Big End Bearing - 1 Pair - +040" undersize	Was LW/3/349/40	
		L26228	Big End Bearing - 1 Pair - +060" undersize	Was LW/3/349/60	
					) THIN WALL BEARING (To suit Type B1 Connecting Rod)

Plate No.	Illus. No.	Part No.	Description	
12	98	-	PISTON ASSEMBLY - 3 GROOVE TYPE, Comprising ) Piston, Rings, Pin (1.3/16" bore) and Pads ) (3/8" hole) ) (Superseded, will be replaced by T05451) )	Was LM/3/338 Anti-Clockwise Rotation Engines looking on Flywheel End
		T05451	PISTON ASSEMBLY - 3 GROOVE TYPE, Comprising ) Piston, Rings, Pin (1.1/16" bore) and Pads ) (1/2" hole) )	Was LM/3/378
		-	PISTON ASSEMBLY - 3 GROOVE TYPE, Comprising ) Piston, Rings, Pin (1.3/16" bore) and Pads ) (3/8" hole) ) (Superseded, will be replaced by T05458) )	Was LM/3/1095 Clockwise Rotation Engines looking on Flywheel End
		T05458	PISTON ASSEMBLY - 3 GROOVE TYPE, Comprising ) Piston, Rings, Pin (1.1/16" bore) and Pads ) (1/2" hole) )	Was LM/3/1133
	99	K02369	Piston Ring, 3/32" wide, Chromium Plated - Standard (Groove No. 1)	Was MA 618
		J07880	Piston Ring, 3/32" wide, Chromium Plated - Standard (Groove No. 2)	Was MA 165
	100	K03406	Scraper Ring	Was MA 307
	101	-	Piston Pin (1.3/16" diam. bore) ) (Superseded, will be replaced by T01431 ) in engine sets) )	Was MA 161 For Superseded Pistons LM/3/338 LM/3/1095
	102	J05464	Piston Pin Pad (3/5" diam. hole)	Was MA 162
	101	T01431	Piston Pin (1.1/16" diam. bore), with K51570 )	Was MA 1141 For
	102	K51570	Piston Pin Pad (1/2" diam. hole)	Was MA 1142 T05451, T05458
			<p>IMPORTANT:- Do NOT mix Piston Assemblies with Pins of 1.3/16" or 1.1/16" diam. bore in any one engine. When less than an engine set of Pistons are supplied to replace Pistons with Pins of 1.3/16" diam. bore, the balance of an engine set of Piston Pins T01431 MUST also be supplied.</p>	
	103	-	Flywheel - Electric Starting Type, ) with Gear Ring ) (Include K04569, K04754 when ) ordered to suit "GARDNER" U.C. ) Reverse Gear) )	Was LM/3/1055 Design to suit Installation Engine Serial Number MUST be quoted when ordering
		-	Flywheel - Hand Starting )	Was LM/3/1059
	104	K04569	Stud, 3/8" B.S.F. X 1.21/32" long )	Was 425 ST "GARDNER" U.C. Reverse Gear
	105	K04754	Nut, 3/8" B.S.F. X 7/16" X 5/16" Hex. )	Was 304 NU Spigot to Flywheel
	106	-	Flywheel Gear Ring (Quote Engine Serial Number)	Was LM/3/44

# GARDNER

## CHAIN AND DIRECT HAND STARTING — PLATE 14



## CHAIN AND DIRECT HAND STARTING

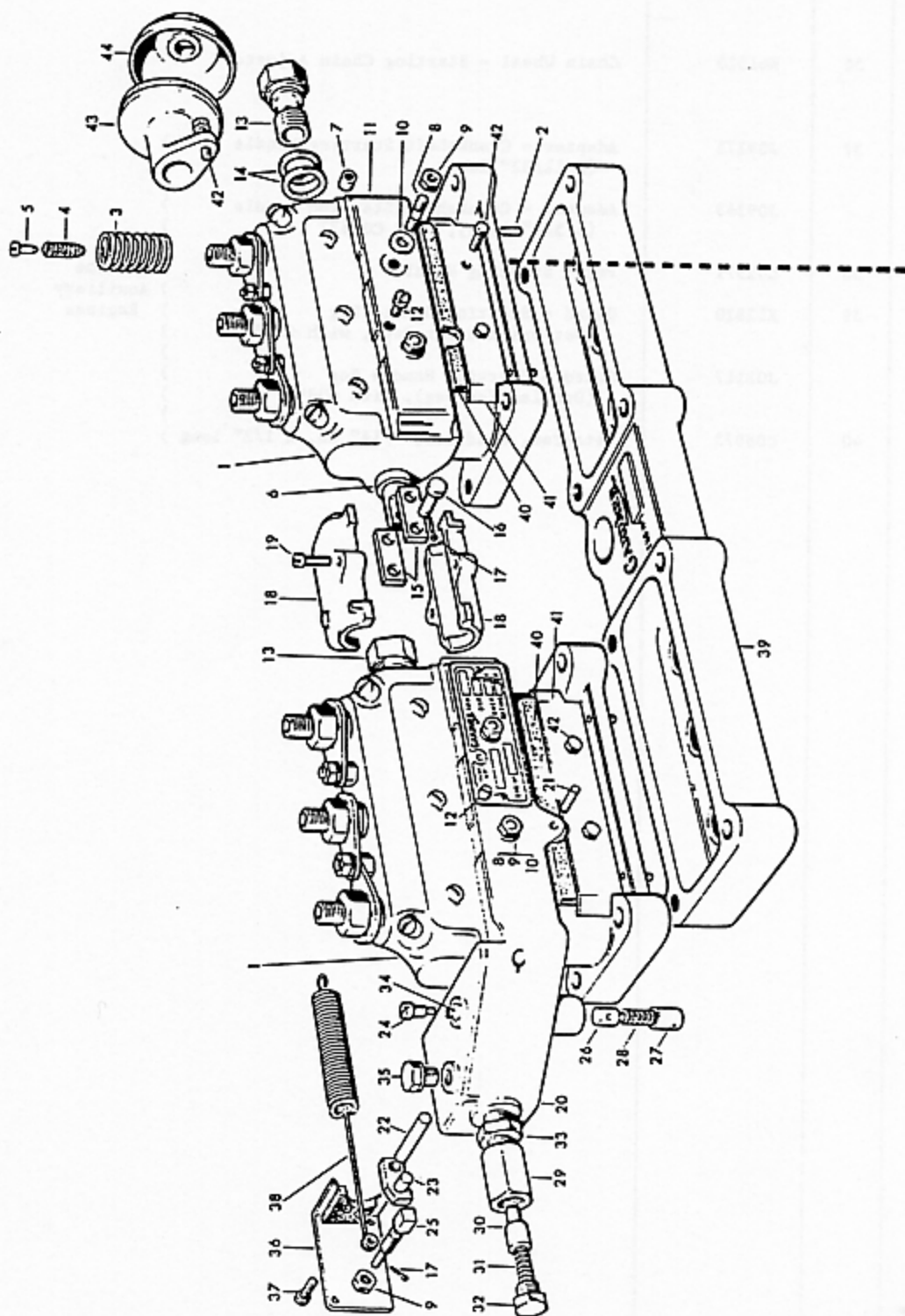
Plate No.	Illus. No.	Part No.	Description		
14	1	A00863	Chain Wheel - Lower, with A02722, L21404, S05725/02, S05618/04, J67580, K03863, L21041	) Anti-Clockwise Rotation Engines looking on Flywheel End Was LW/3/1012	
	2	A02722	Ratchet Pawl, with L21404, S05725/02, S05618/04, J67580, K03863		Was LW/3/1113
	1	A02187	Chain Wheel - Lower, with A02723, L21404, S05725/02, S05618/04, J67580, K03863, L21041	) Clockwise Rotation Engines looking on Flywheel End Was LW/3/1090	
	2	A02723	Ratchet Pawl, with L21404, S05725/02, S05618/04, J67580, K03863		Was LW/3/1114
	3	L21404	Spring Washer, Double Coil, 5/16" diam.	Was 141 VA	
	4	S05725/02	Washer, 5/16" diam. bore	Was 105 VA	
	5	S05618/04	Split Pin, 5/64" diam. X 5/8" long	Was 102 PS	
	6	J67580	Lever - Ratchet Pawl	Was Part of LW/3/1017	
	7	K03863	Rollpin, 1/8" diam. X 5/8" long (To suit Ratchet Pawl Lever drilled for Rollpin)	Was MA 910	
-	-	L21111	Taper Pin (To suit Ratchet Pawl Lever drilled for Taper Pin)	Was 100 PT	
14	8	L21101	Lubricator, 5/16" - 32 Thds. (To suit Wheels tapped 5/16" - 32 Thds.)	Was 103 LU	
		L21041	Lubrication Nipple (To suit Wheels tapped 1/8" B.S.P.)	-	
	9	J06390	Ratchet Wheel	Was LW/3/1020	
	10,11	D12107	Bracket - Chain Starting Shaft - Chain Case End, with L21041	Was Part of LW/3/1022 & LW/3/1103	
	12	E05616	Stud, 5/16" Wh. X 1.5/16" long	) To suit Starting Chain Adjuster Chain Wheel Was 118 ST	
	13	E03945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex.		Was 106 NU
	4	S05725/02	Washer, 5/16" diam. bore		Was 105 WA
	14	T02792	Binding Screw - Chain Starting Shaft	Was MA 687	
	15	D12339	Bracket - Chain Starting Shaft - Flywheel End, with L21041	Was Part of LW/3/1024	
	8	L21101	Lubricator, 5/16" - 32 Thds. (To suit Brackets tapped 5/16" - 32 Thds.)	Was 103 LU	
		L21041	Lubrication Nipple, 1/8" B.S.P.	-	
	16	J07187	Support - Chain Starting Shaft Bracket	Was LW/3/1025	
	17	K03323	Bolt, 3/8" Wh. X 1.15/16" long X 5/16" Hex.	Was 228 BL	
	18	E00185	Nut, 3/8" Wh. X 5/16" X 5/16" Hex.	Was 113 NU	

Plate No.	Illus. No.	Part No.	Description	
14	19	J06504	Shaft - Chain Starting )	Was Part of
			)	LW/3/1028
		J06505	Shaft - Chain Starting ) One Starting Handle at	Was Part of
			) Chain Case End ONLY	LW/3/1029
		J06506	Shaft - Chain Starting )	Was Part of
			)	LW/3/1030
		J07385	Shaft - Chain Starting )	Was Part of
			)	LW/3/1031
		J07386	Shaft - Chain Starting ) One Starting Handle at	Was Part of
			) Flywheel End ONLY	LW/3/1032
		J06680	Shaft - Chain Starting )	Was Part of
			)	LW/3/1033
		J07936	Shaft - Chain Starting )	Was Part of
			)	LW/3/1034
		J08619	Shaft - Chain Starting )	Was Part of
			)	LW/3/1035
		E08485	Shaft - Chain Starting ) One Starting Handle at	Was Part of
			) Each End	LW/3/1036
		E07162	Shaft - Chain Starting )	Was Part of
	)	LW/3/1037		
E08600	Shaft - Chain Starting )	Was Part of		
	)	LW/3/1038		
	20	L21027	Woodruff Key	Was 107 KE
	21	C07555	Collar - Upper Chain Wheel	Was 121 CR
	22	L21161	Setscrew, Cheese Head, 0 B.A. X 1/2" long	Was 266 SS
	23	A04667	Adapter - Chain Starting Handle, with E04347, C04980	Was MA 713
	24	E04347	Peg - Chain Starting Handle	Was 125 PE
	25	C04980	Setscrew, Sq. Head, Pointed, 3/8" - 24 Thds. X 9/16" long	Was 173 SS
	26	T01320	Starting Handle (with Grip 4.1/2" long) )	Was MA 778
		T01322	Starting Handle (with Grip 8" long) )	Was MA 709
	27	T01319	Starting Handle (with Grip 4.1/2" long) )	Was MA 779
		T01321	Starting Handle (with Grip 8" long) )	Was MA 710
	28	J06508	Chain Wheel - Upper	Was LW/3/1047
	29	L20400	Starting Chain - 61 Pitches, with L20031	Was LW/3/1049
		L20401	Starting Chain - 62 Pitches, with L20031	Was LW/3/1104
	30	L20031	Starting Chain Connecting Link	Was MA 915
	31	J68310	Guide - Starting Chain	Was LW/3/1050

Plate No.	Illus. No.	Part No.	Description	
14	32	K41510	Bracket - Starting Chain Adjuster	) Was Part of LW/3/1105
	33	K04153	Stud - Starting Chain Adjuster Bracket	) To suit Starting Chain Adjuster
	34	E04029	Nut, 3/8" B.S.F. X 5/16" X 5/16" Hex.	) Chain Wheel
	35	J09934	Washer, 1" O.D. X 13/32" I.D. X 1/16"	) Was 125 NU
	36	K41520	Chain Wheel - Starting Chain Adjuster	) Was 159 WA
	37	J09273	Adapter - Crankshaft Starting Handle (5.11/32" long)	) Was Part of LW/3/1060
		J09363	Adapter - Crankshaft Starting Handle (4.5/8" long), with C02571	) Was MA 1133
	38	C02571	Peg - Starting Handle	) Marine Auxiliary Engines
	39	K12820	Guard - Starting Handle Peg (Not drilled for Peg), with C08973	) Was 126 PE
		J02117	Guard - Starting Handle Peg (Drilled for Peg), with C08973	) Was MA 1026
	40	C08973	Setscrew, Headless, 7/16" Wh. X 1/2" long	) Was MA 1134
				) Was 262 SS

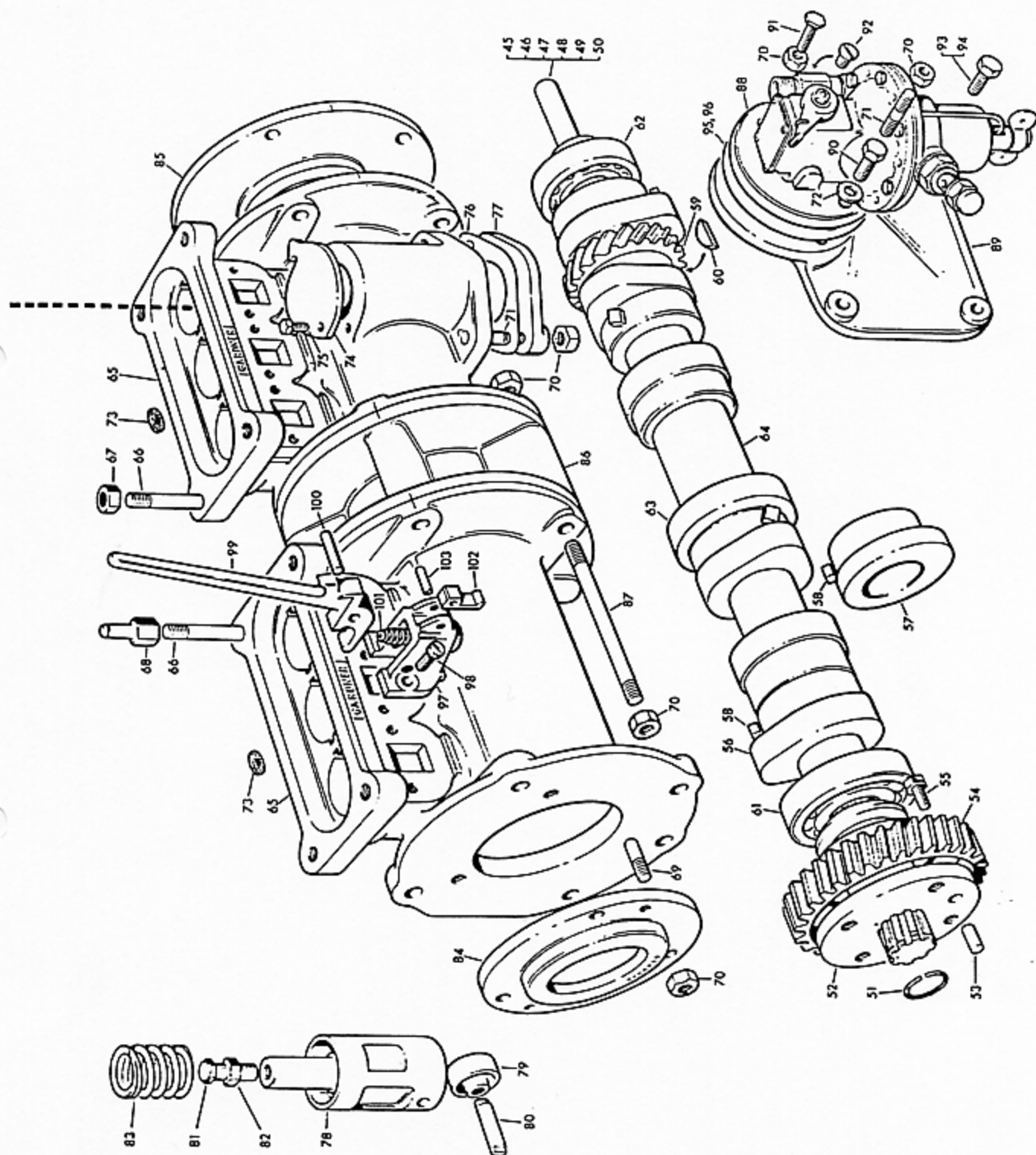
# GARDNER

## FUEL PUMP — PLATE 15



# GARDNER

## FUEL PUMP MOTION WORK AND FUEL LIFT PUMP — PLATE 16





## FUEL PUMP MOTION WORK AND FUEL LIFT PUMP

Plate No.	Illus. No.	Part No.	Description	
15,16, 17,18	-	-	FUEL PUMP, CAMBOX AND GOVERNOR ASSEMBLY - CAM OPERATED (Engine Serial Number MUST be quoted when ordering)	-
15,16, 17	-	-	FUEL PUMP, CAMBOX AND GOVERNOR ASSEMBLY - LOCAL CONTROL (Engine Serial Number MUST be quoted when ordering)	-
15	1	A00289	FUEL PUMP ASSEMBLY - 2 POINT, Comprising Fuel Pump, Felt, ) Clamp, Fuel Control Box Assembly, Insertion Plate, Studs, ) Nuts and Washers )	Was LW/4/166 2LW
		A00290	FUEL PUMP ASSEMBLY - 3 POINT, Comprising Fuel Pump, Felt, ) Clamp, Fuel Control Box Assembly, Insertion Plate, Studs, ) Nuts and Washers )	Was LW/4/167 3LW
		A00291	FUEL PUMP ASSEMBLY - 4 POINT, Comprising Fuel Pump, Felt, ) Clamp, Fuel Control Box Assembly, Insertion Plate, Studs, ) Nuts and Washers )	Was LW/4/168 4LW
		A00292	FUEL PUMP ASSEMBLY - 5 POINT, Comprising Fuel Pump, ) Connecting Link and Cover, Inspection Cover, Felts, ) Clamps, Fuel Control Box Assembly, Insertion Plate, ) Studs, Nuts and Washers )	Was LW/4/169 5LW
		A00293	FUEL PUMP ASSEMBLY - 6 POINT, Comprising Fuel Pump, ) Connecting Link and Cover, Inspection Cover, Felts, ) Clamps, Fuel Control Box Assembly, Insertion Plate, ) Studs, Nuts and Washers )	Was LW/4/170 6LW
	2	J04315	Steady Peg, 3/16" diam. X 1/2" long	Was 100 PE
	3	K06733	Spring - Compression - Fuel Pump Plunger	Was 120 SP
	4	J01178	Spring - Compression - Fuel Pump Delivery Valve	Was 107 SP
	5	J08217	Peg - Fuel Pump Delivery Valve Spring	Was MA 231
	6	J01156	Bush - Fuel Pump Control Rod - Standard	Was MA 214
		J01902	Bush - Fuel Pump Control Rod - .030" undersize	Was MA 215
	7	J00444	Bush, Plain, 11/32" O.D. X 1/4" I.D. X 1/4" wide	Was 100 BU
	8	E00659	Stud, 0 B.A. X 1.7/8" long	Was 101 ST
	9	C08926	Nut, 0 B.A. X 7/32" X 3/16" Hex.	Was 103 HU
	10	S05725/01	Washer, 1/4" diam. bore	Was 103 WA
	11	J93930	Cover - Fuel Pump Inspection - 2 Point	5LW Was Part of MA 228
		J93940	Cover - Fuel Pump Inspection - 3 Point	6LW Was Part of MA 229
	12	L21148	Setscrew, Cheese Head, 2 B.A. X 5/16" long	Was 129 SS
	13	L20265	Screw - Pump Pipe Connection	Was 114 CS (Previously 103CS)
	14	E06656	Packing, Circular, 1" O.D. X 23/32" I.D. X 1/32"	Was 153 PA
	15	E04448	Link - Slider Bar Connecting (2 per Engine)	) 5LW, Was MA 178
	16	E06056	Pin, Headed, 1/4" diam. X 27/32" long	) 6LW Was 124 PY

Plate No.	Illus. No.	Part No.	Description		
15	17	S05618/03	Split Pin, 5/64" diam. X 1/2" long	)	Was 101 PS
	18	F01862	Cover - Slider Bar Connecting Link, with J02985	)	Was MA 216
	19	J02985	Setscrew, Cheese Head, 1 B.A. X 3/4" long	)	Was 140 SS
	-	A00092	FUEL CONTROL BOX ASSEMBLY - 2 POINT, Comprising Fuel Control Box, Governor Bar Buffer, Fuel Control Trigger, Slider Bar Stop and Control Plunger	)	Was LM/4/200
	-	A00084	FUEL CONTROL BOX ASSEMBLY - 3 POINT, Comprising Fuel Control Box, Governor Bar Buffer, Fuel Control Trigger, Slider Bar Stop and Control Plunger	)	Was LM/4/11
	-	A00085	FUEL CONTROL BOX ASSEMBLY - 4 POINT, Comprising Fuel Control Box, Governor Bar Buffer, Fuel Control Trigger, Slider Bar Stop and Control Plunger	)	Was LM/4/12
	20	A00093	Fuel Control Box - 2 Point, with C06927, L21148, E00660, C05029, K01774	)	Was MA 179
		A00086	Fuel Control Box - 3 Point, with C06927, L21148, E00660, C05029, K01774	)	Was MA 180
		A00087	Fuel Control Box - 4 Point, with C06927, L21148, E00660, C05029, K01774	)	Was MA 181
	21	C06927	Steady Peg, 3/16" diam. X 9/16" long		Was 101 PE
	12	L21148	Setscrew, Cheese Head, 2 B.A. X 5/16" long		Was 119 SS
	22	E00660	Pin - Control Trigger		Was MA 182
	23	T02998	Control Trigger		Was LM/4/20
	24	C05029	Stop - Control Trigger		Was MA 206
	25	E04823	Stop - Slider Bar		Was Part of MA 183
	9	C08926	Nut, 0 B.A. X 7/32" X 3/16" Hex.		Was 103 NU
	17	S05618/03	Split Pin, 5/64" diam. X 1/2" long		Was 101 PS
	26	A04531	Control Plunger and Knob, with K03552		Was MA 184
	27	K03552	Rollpin - Control Plunger, 5/64" diam. X 3/8" long		Was MA 760
	28	J03520	Spring - Compression - Control Plunger		Was 108 SP
	29	T00260	Governor Bar Buffer Body, with J02487, J02489, J02488, J02570		Was MA 211
	30	J02487	Plunger - Governor Bar Buffer		Was MA 212
	31	J02489	Spring - Compression - Governor Bar Buffer		Was 106 SP
	32	J02488	Plug - Governor Bar Buffer		Was MA 213
	33	J02570	Locknut, 3/8" B.S.P. X 1/4" X 7/16" Hex.		Was 139 NU
	34	K01774	Disc, 7/16" diam.		Was MA 761
	35	J01443	Plug, 1/8" B.S.P. X 1/4" Hex.		Was 100 PL

Plate No.	Illus. No.	Part No.	Description			
15	36	T00643	Plate - Control Box Cover		Was MA 224	
	37	J08878	Setscrew, 2 B.A. X 1/2" long X 2 B.A. Hex.		Was 100 SS	
	38	J07008	Spring - Tension - Fuel Pump Slider Bar )	Marine Propelling Engines	2LW	Was 143 SP
		J08101	Spring - Tension - Fuel Pump Slider Bar )		4LW	Was 147 SP
		J08100	Spring - Tension - Fuel Pump Slider Bar )		3LW, 5LW, 6LW	Was 145 SP
	39	J09316	Spring - Tension - Fuel Pump Slider Bar )	Electric Lighting Engines	2LW	Was 141 SP
		J09317	Spring - Tension - Fuel Pump Slider Bar )		4LW	Was 139 SP
		J09315	Spring - Tension - Fuel Pump Slider Bar )		3LW, 5LW, 6LW	Was 140 SP
	-	-	A26300	Plate - Fuel Pump Insertion - 2 Point, with E04259	2LW	Was MA 197
			A26301	Plate - Fuel Pump Insertion - 3 Point, with E04259	3LW	Was MA 198
			A04637	Plate - Fuel Pump Insertion - 4 Point, with E04259	4LW	Was MA 199
			F01561	Plate - Fuel Pump Insertion - 5 Point	5LW	Was MA 200
			F01562	Plate - Fuel Pump Insertion - 6 Point	6LW	Was MA 201
			E04259	Steady Peg, 3/16" diam. X 11/16" long (Insertion Plate to Cam Box)	2 to 4LW	Was 102 PE
	15	40	J06294	Felt - Fuel Pump - 2 Point	2LW, 5LW	Was MA 218
J06295			Felt - Fuel Pump - 3 Point	3LW, 5LW, 6LW	Was MA 219	
J06296			Felt - Fuel Pump - 4 Point	4LW	Was MA 220	
41		J06297	Clamp - Fuel Pump Felt - 2 Point	2LW, 5LW	Was MA 221	
		J06298	Clamp - Fuel Pump Felt - 3 Point	3LW, 5LW, 6LW	Was MA 222	
		J06299	Clamp - Fuel Pump Felt - 4 Point	4LW	Was MA 223	
42		J06209	Setscrew, 0 B.A. X 5/8" long X 3/16" Hex.		Was 104 SS	
43		J62070	Mount, Large - Slider Bar Sleeve )	2LW, 3LW also 4 to 6LW with Dustproofed Fuel Pumps and Non-Enclosed Governor	Was MA 226	
42		J06209	Setscrew, 0 B.A. X 5/8" long X 3/16" Hex. )		Was 104 SS	
44		J06206	Sleeve - Slider Bar )		Was MA 227	
16		45, 46, 47	A00613	Fuel Pump Camshaft, with E05098, A04533, J06136	2LW	Was LM/4/227
			A00614	Fuel Pump Camshaft, with E05098, A04533, J06136	3LW	Was LM/4/118
	A00615		Fuel Pump Camshaft, with E05098, A04533, J06136	4LW	Was LM/4/119	
	A00616		Fuel Pump Camshaft, with E05098, A04533, J06136	5LW	Was LM/4/120	
	A00617		Fuel Pump Camshaft, with E05098, A04533, J06136	6LW	Was LM/4/121	

Plate No.	Illus. No.	Part No.	Description	
16	48, 49, 50	A01160	Fuel Pump Camshaft, with E05098, A04533, ) L21027, J06136 )	4LW Was LW/4/275
		A01161	Fuel Pump Camshaft, with E05098, A04533, ) L21027, J06136 ) Engines fitted with Lubricating )	5LW Was LW/4/276
		A01162	Fuel Pump Camshaft, with E05098, A04533, ) L21027, J06136 ) Oil Cooler Pump ) on Cam Box )	6LW Was LW/4/277
51	E05098	Fuel Pump Camshaft Gear Stop Ring	Was 100 RR	
52	A04533	Fuel Pump Camshaft Gear Body (less Ring and Screws), with J06136	Was LW/4/113	
53	J06136	Steady Peg, 5/16" diam. X 17/32" long	Was 110 FE	
54	A27128	Gears - Fuel Pump Camshaft Driven and Driving	Combination of LW/4/212 and LW/2/212	
55	J06135	Fuel Pump Camshaft Gear Ring Screw	Was LW/4/202	
56	E06784	Fuel Pump Cam, with C04630 (Superseded for 2LW and 3LW ONLY, will be replaced by K05523 and K05639 in engine sets)	Was MA 185	
		K05523	Fuel Pump Cam, with C04630 ( 2LW Cylinder No. 1 ( 3LW Cylinder No. 2	Was LW/4/300
		K05639	Fuel Pump Cam, with C04630 ( 2LW Cylinder No. 2 ( 3LW Cylinders Nos. 1 & 3	Was LW/4/301
57	E07543	Fuel Lift Pump Eccentric, with C04630	Was LW/4/105	
58	C04630	Setscrew, Sq. Head, Pointed, 5/16" - 28 Thds. X 7/16" long	Was 172 SS	
59	A27400	Gears - Lubricating Oil Cooler Pump Driving and Driven 4 to 6LW	Combination of LW/4/229 and LW/6/177	
60	L21027	Woodruff Key	Was 107 KE	
61	L20504	Ball Journal Bearing - Chain Case End	Was 106 BE	
62	L20503	Ball Journal Bearing - Governor End	Was 105 BE	
63	L20631	Ball Journal Bearing - Intermediate )	Was 134 BE	
64	E39410	Collar - Cam Distance ) 5LW, 6LW )	Was 110 CR	
65	A03267	Pump Can Box - 2 Point, with C06008, C05660, ) E04824, E03452, C06723, E03945, S05725/02, ) 2LW J05871 )	Was LW/4/305	
	A00273	Pump Can Box - 2 Point, with C06008, C05660, ) J05871 )	Was LW/4/47	
	A00301	Pump Can Box - 2 Point, with C06008, C05660, ) J05871, C06723, E03945, J09418 ) 5LW (To suit Engines fitted with Lubricating ) Cylinders Oil Cooler Pump) ) Nos. 4 & 5	Was LW/4/266	
	A03268	Pump Can Box - 3 Point, with C06008, C05660, ) E04824, E03452, C06723, E03945, S05725/02, ) 3LW J05871 )	Was LW/4/304	
	A00277	Pump Can Box - 3 Point, with C06008, C05660, ) E04824, E03452, C06723, E03945, S05725/02, ) J05871 ) (When Fuel Lift Pump is mounted on Cam Box) ) 5LW, 6LW	Was LW/4/99	
	A00274	Pump Can Box - 3 Point, with C06008, C05660, ) E04824, E03452, E03945, J05871 ) Nos. 1, 2 & 3 (When Fuel Lift Pump is mounted on ) Crankcase) )	Was LW/4/48	

Plate No.	Illus. No.	Part No.	Description	
16	65	A00275	Pump Cam Box - 3 Point, with C06008, C05660, J05871	Was LM/4/49
		A00302	Pump Cam Box - 3 Point, with C06008, C05660, J05871, C06723, E03945, J09418 (To suit Engines fitted with Lubricating Oil Cooler Pump)	6LW Cylinders Nos. 4, 5 & 6 Was LM/4/267
		A00276	Pump Cam Box - 4 Point, with C06008, C05660, E04824, E03452, E03945, J05871 (When Fuel Lift Pump is mounted on Crankcase)	Was LM/4/50
		A00278	Pump Cam Box - 4 Point, with C06008, C05660, E04824, E03452, C06723, E03945, S05725/02, J05871 (When Fuel Lift Pump is mounted on Cam Box)	4LW Was LM/4/116
		A00997	Pump Cam Box - 4 Point, with C06008, C05660, E04824, E03452, J05871, C06723, E03945, J09418 (To suit Engines fitted with Lubricating Oil Cooler Pump)	Was LM/4/265
	66	C06008	Stud, 7/16" Wh. X 2.5/8" long	Was 183 ST
	67	C05660	Nut, 7/16" Wh. X 3/8" X 3/8" Hex.	Was 116 NU
	68	E04824	Post - Fuel Control Spring	Was MA 186
	69	E03452	Stud, 5/16" Wh. X 1.1/8" long	Was 120 ST
	70	E03945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex.	Was 106 NU
	71	C06723	Stud, 5/16" Wh. X 1.1/4" long	Was 126 ST
	70	E03945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex.	Was 106 NU
	72	S05725/02	Washer, 5/16" diam. bore	Was 105 WA
	73	J05871	Sealing Felt - Cam Box and Governor Lubricating Pipe	Was 107 RS
	71	C06723	Stud, 5/16" Wh. X 1.1/4" long	Was 126 ST
	70	E03945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex.	Was 106 NU
	74	E36030	Cover - Pump Cam Box	Was MA 366
	75	J09668	Setcrew, 0 B.A. X 1/2" long X 3/16" Hex.	Was 208 SS
	76	J09418	Packing, Flange, 2.1/2" centres X 2.3/8" wide	Was 136 PA
	77	J94160	Flange, Blank, 2.1/2" centres X 2.3/8" wide (When Lubricating Oil Cooler Pump is NOT fitted)	Was 108 FL
	78	T02990	Tappet - Fuel Pump Ram - Standard, with K02568, E03562, E03564, E03606	Was MA 203
		A00090	Tappet - Fuel Pump Ram - .010" oversize, with K02568, E03562, E03564, E03606	Was MA 204
		A00091	Tappet - Fuel Pump Ram - .020" oversize, with K02568, E03562, E03564, E03606	Was MA 205
	79	K02568	Roller - Tappet	Was MA 190
	80	E03562	Pin - Tappet Roller	Was MA 191
	81	E03564	Screw - Tappet, with E03606	Was MA 192
	82	E03606	Nut, 3/8" - 24 Thds. X 1/4" X 5/16" Hex.	Was 127 NU

Plate No.	Illus. No.	Part No.	Description	
16	83	K06734	Spring - Compression - Fuel Pump Tappet	Was 129 SP
	84	E51010	Pump Cam Box End Plate - Chain Case End	Was MA 187
	85	E36040	Pump Cam Box End Plate - Governor End	Was MA 188
	86	F02560	Distance Piece - Pump Cam Box	Was MA 189
	87	E04358	Stud, 5/16" Wh. X 3.7/8" long	Was 137 ST
	70	E03945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex.	Was 106 NU
	88	A04750	Fuel Lift Pump	Was Part of MA 1406
	-	-	Fuel Lift Pump (In future use A04750)	Was LW/4/308
	A04755	Fuel Lift Pump (Crankcase Mounting)	Was Part of MA 1407	
	A04752	Fuel Lift Pump (Crankcase Mounting)	Was Part of LW/4/307	
	-	K07953	Pipe Connection, 3/8" O.D. Pipe (Fuel Lift Pump Inlet)	Was MA 1443
16	89	-	Door - Crankcase, with Fuel Lift Pump Facing, with E08742 (Superseded, will be replaced by K04896 and 3 off J06675)	Was LW/4/108
		K04896	Door - Crankcase, with Fuel Lift Pump Facing	Was Part of LW/4/298
	90	J09009	Setscrew, 5/16" Wh. X 1" long X 1/4" Hex.	Was 113 SS
	91	K02258	Setscrew, 5/16" Wh. X 1" long X 1/4" Hex. X 1/8" thick head	Was 258 SS
	70	E03945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex.	Was 106 NU
	72	S05725/02	Washer, 5/16" diam. bore	Was 105 WA
	92	L21222	Setscrew, Countersunk Head, 1/4" Wh. X 5/8" long	Was 166 SS
	93	J03806	Setscrew, Countersunk Head, 1/4" Wh. X 5/8" long X 3/16" Hex.	Was 293 SS
	94	J06675	Setscrew, 1/4" Wh. X 3/4" long X 3/16" Hex.	Was 107 SS
	95	J08017	Fuel Lift Pump Oil Baffle, Brass	Was MA 217
	-	E77070	Door - Pump Cam Box (NOT required when Fuel Lift Pump is mounted on Cam Box)	Was MA 207
16	96	E08742	Fuel Lift Pump Packing, Paper (For Fuel Lift Pump on Crankcase Door, also for Door on Cam Box)	Was MA 210

Plate No.	Illus. No.	Part No.	Description	
16	-	T00228	FUEL PUMP CHARGING LEVER ASSEMBLY, Comprising Bracket, Lever, Spring, Catch and Pins	Was MA 193
	97	J09172	Bracket - Fuel Pump Charging Lever	Was MA 194
	98	L21162	Set screw, Cheese Head, O B.A. X 5/8" long	Was 142 SS
	99	K03415	Lever - Fuel Pump Charging	Was MA 195
	100	E03597	Pin - Fuel Pump Charging Lever	Was 104 PH
	101	E03561	Spring - Compression - Fuel Pump Charging Lever	Was 109 SP
	102	E03560	Catch - Fuel Pump Charging Lever	Was Part of MA 196
	103	XD4972	Rollpin, 3/16" diam. X 3/4" long (To suit Catch drilled for Rollpin)	Was MA 977
-	-	E03598	Pin - Fuel Pump Charging Lever Catch (To suit Catch drilled for Plain Pin)	Was 100 PH

# GARDNER

## GOVERNOR — NON-ENCLOSED — PLATE 17

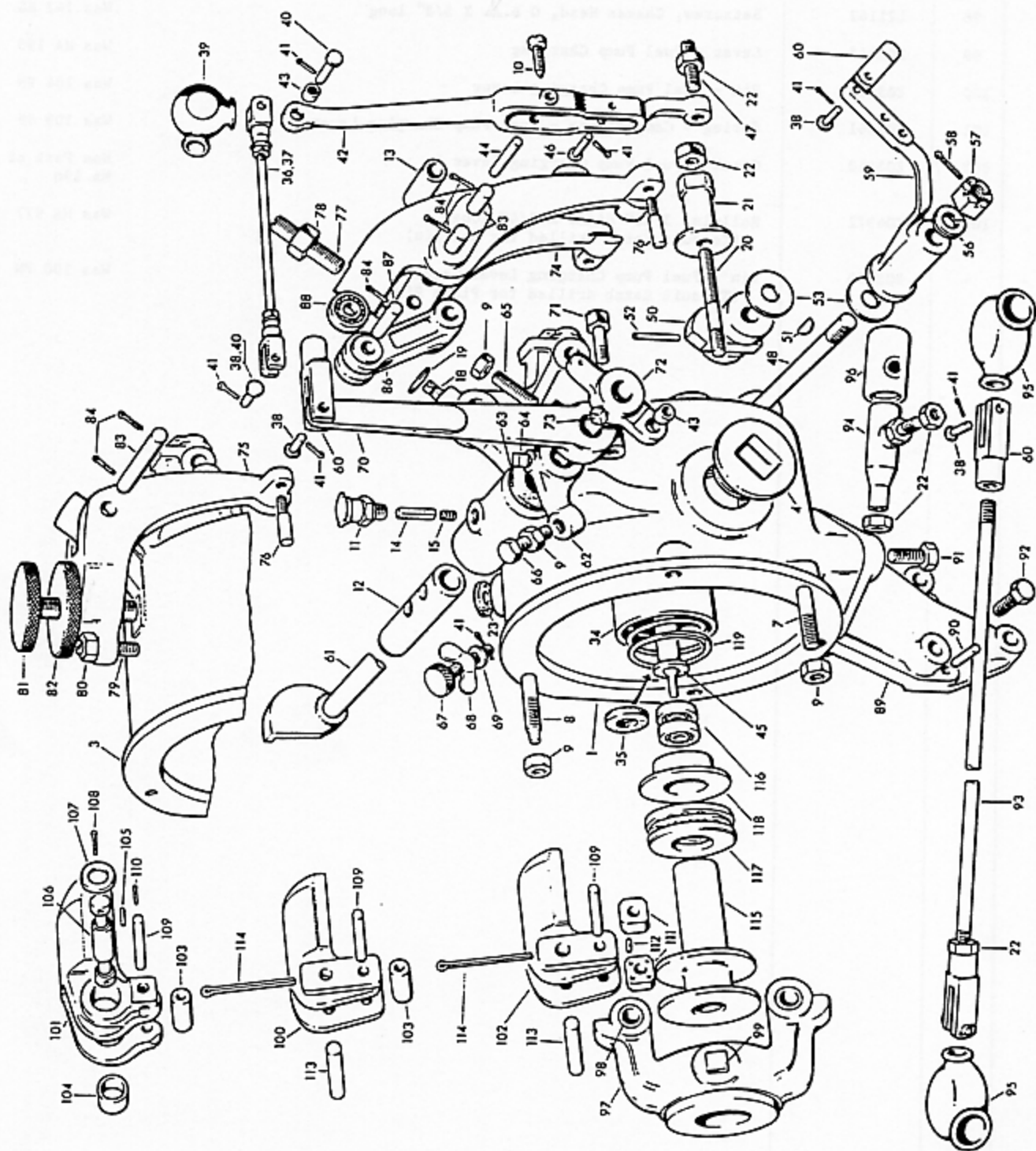








Plate No.	Illus. No.	Part No.	Description		
18	24	F04245	Governor Casing Cover - Rear	)	Was LX/5/3003
	25	E08122	Bolt, 1/4" Wh. X 2.7/16" long X 3/16" Hex.	)	4 to 6LW Was 197 SS
	26	F06600	Governor Casing Cover - Front	)	4LW Was LM/5/267
		F04244	Governor Casing Cover - Front	)	5LW, 6LW Was LX/5/3004
	27	J06153	Sealing Ring, 1.9/32" O.D. X 13/16" I.D. X 1/8" wide	)	Was 114 RS
	28	H04877	Governor Casing Cover - Upper	)	Was Part of LX/5/3005
	6	J01443	Plug, 1/8" B.S.P. X 1/4" Hex.	)	Was 100 PL
	29	J04054	Bolt, 1/4" B.S.F. X 13/16" long X 3/16" Hex. (For Front and Upper Covers)	)	4 to 6LW Was 156 BL
	30	K04570	Bolt, 1/4" B.S.F. X 13/16" long X 3/16" Hex. (Head Drilled) (For Upper Cover)	)	Was 309 BL
	31	A04644	Governor Casing Cover - Side, with J05311	)	Was LX/5/3006
	32	J05311	Steady Peg, 3/16" diam. X 11/32" long	)	Was 132 PE
	33	J08878	Set screw, 2 B.A. X 1/2" long X 2 B.A. Hex.	)	Was 100 SS
17, 18	34	E35780	Governor Spring Guide - Standard	)	Was MA 244
		E35780/01	Governor Spring Guide - .025" oversize	)	Was MA 245
		E35780/02	Governor Spring Guide - .075" oversize	)	Was MA 246
17	35	J09308	Sealing Ring - Governor Spring Guide (To suit Non-Enclosed Governor)	)	Was 100 RS
	36	A00162	Rod - Governor Connecting, with E06055, S05618/03 (Non-Dustproofed Fuel Pumps)	)	Was MA 250
17, 18	37	A01055	Rod - Governor Connecting, with C05406, E06055, S05618/03	)	Was MA 251
	38	C05406	Pin, Headed, 1/4" diam. X 5/8" long	)	Dustproofed Fuel Pumps Was 122 PN
17	39	K00584	Gaiter - Governor Lever Forked Eye (To suit Non-Enclosed Governor)	)	Was MA 276
17, 18	40	E06055	Pin, Headed, 1/4" diam. X 3/4" long	)	Was 123 PN
	41	S05618/03	Split Pin, 5/64" diam. X 1/2" long	)	Was 101 PS
	42	J97130	Lever - Governor, with J00444	)	Was MA 254
	43	J00444	Bush, Plain, 11/32" O.D. X 1/4" I.D. X 1/4" wide	)	Was 100 BU
	44	E03596	Pin - Governor Lever Pivot	)	Was 101 PN
	45	E08263	Governor Sleeve Push Rod	)	Was MA 255
	46	C07496	Pin - Governor Push Rod	)	Was 125 PN
	41	S05618/03	Split Pin, 5/64" diam. X 1/2" long	)	Was 101 PS
	47	E06358	Screw - Stopping Cam Tappet	)	Was 478 SS
	22	E03772	Nut, 5/16" B.S.F. X 1/4" X 1/4" Hex.	)	Was 122 NU
17	48	A00246	Spindle - Stopping Cam, with E35680, L21021, K04971, C07455, L21403, E03596, S05618/05 (To suit Non-Enclosed Governor)	)	Was MA 256

Plate No.	Illus. No.	Part No.	Description	
18	49	E03567	Spindle - Stopping Cam ( To suit Enclosed or (Non-Enclosed Governor	Was Part of MA 1290
17,18	50	E35680	Stopping Cam	Was MA 300
	51	L21021	Woodruff Key	Was 100 KE
	52	K04971	Rollpin, 5/32" diam. X 1.1/8" long ( To suit Stopping Cam and ( Spindle drilled for Rollpin	Was MA 976
-	-	L21122	Taper Pin ( To suit Stopping Cam and Spindle ( drilled for Taper Pin	Was 102 PT
17	53	C07455	Fibre Friction Washer, 1" O.D. X 1/2" I.D. X 1/16" (Non-Enclosed Governor)	Was 148 PA
18	54	K07015	Fibre Friction Washer, 1" O.D. X 9/16" I.D. X .060" )	Enclosed Governor
	55	K07016	Sealing Ring - Stopping Cam Spindle	
17,18	56	L21403	Spring Washer, Double Coil, 3/8" diam.	Was 117 WA
	57	E03594	Castle Nut, 3/8" B.S.F.	Was 144 NU
	58	S05618/05	Split Pin, 5/64" diam. X 3/4" long	Was 104 PS
	59	E60500	Lever - Stopping Cam	Was MA 258
	60	ED4311	Forked Eye, 5/16" B.S.F. X 1/4" bore	Was 101 EY
	38	C05406	Pin, Headed, 1/4" diam. X 5/8" long	Was 122 PN
	41	S05618/03	Split Pin, 5/64" diam. X 1/2" long	Was 101 PS
	61	J07706	Accelerator Cam (Spindle 4.11/32" long)	Was MA 257
	62	J14670	Remote Control Cam Stop, with ) Engines up to and including E05930, C09067, K00594, E03945 ) 1,390 R.P.M.	Was MA 1499
		L23050	Remote Control Cam Stop, with ) Engines at 1,400 R.P.M. E05930, C09067, K00594, E03945 ) and above	Was MA 1500
	63	K01167	Sealing Ring, 1.1/4" O.D. X 11/16" I.D. X 3/16" wide	Was 110 RS
	64	E05930	Set screw, Sq. Head, Pointed, 5/16" B.S.F. X 13/32" long	Was 171 SS
	65	C09067	Adjusting Screw, Plain	Was 179 SS
	66	K00594	Set screw, 5/16" Wh. X 1.3/4" long X 1/4" Hex.	Was 118 SS
	9	E03945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex.	Was 106 NU
	67	C05491	Adjusting Screw, Knurled Head, 5/16" Wh. X 2" long )	Was MA 719
	68	K04378	Wing Nut, 5/16" Wh. ) When Single	
	69	S05725/02	Washer, 5/16" diam. bore ) Lever Control	Was 105 WA
	41	S05618/03	Split Pin, 5/64" diam. X 1/2" long ) is fitted	
	70	J09675	Lever - Governor Control - 2.15/16" centres - 1/4" diam. hole, with C05257	Was MA 720
		K03026	Lever - Governor Control - 2.15/16" centres - 5/16" diam. hole, with C05257	Was MA 885

Plate No.	Illus. No.	Part No.	Description	
17, 18	70	E43100	Lever - Governor Control - 6" centres, with C05257	Was MA 117
	71	C05257	Bolt, 1/4" - 28 Thds. X 1" long X 3/16" Hex.	Was 107 BL
	60	E04311	Forked Eye, 5/16" B.S.F. X 1/4" bore	Was 101 EY
	38	C05406	Pin, Headed, 1/4" diam. X 5/8" long	Was 122 PN
	41	S05618/03	Split Pin, 5/64" diam. X 1/2" long	Was 101 PS
	72	E56610	Lever - Injection Control, ) Anti-Clockwise Rotation Engines with J00444, C04979 ) looking on Flywheel End	Was MA 261
			( To suit Engines with )	
		K01446	Lever - Injection Control, ( Forked Eye at Governor )	Was LW/5/1040
			with J00444, C04979 ( End of Injection ) Clockwise	
			( Connecting Rod ) Rotation	
			( To suit Engines with ) Engines	
		K03445	Lever - Injection Control, ( Ball Joint at Governor ) Flywheel End	Was LW/5/1045
			with C04979 ( End of Injection )	
			( Connecting Rod )	
	43	J00444	Bush, Plain, 11/32" O.D. X 1/4" I.D. X 1/4" wide	Was 100 BU
	73	C04979	Setscrew, Sq. Head, Pointed, 1/4" - 28 Thds. X 13/32" long	Was 170 SS
	74	E56630	Lever - Governor Spring - Cam Operated, with E04683/01	Was MA 262
17	75	J92760	Lever - Governor Spring - Local Control, with E04683/01, J04797, E05632	Was MA 615
17, 18	76	E04683/01	Stop Peg, 5/16" diam. X 1.9/16" long	Was 116 PE
	77	E08459	Adjusting Screw, Plain, 3/8" Wh.	Was 181 SS
	78	C05539	Nut, 3/8" Wh. X 3/8" X 5/16" Hex.	Was 110 NU
17	79	J04797	Adjusting Screw, Plain, 1/4" Wh. )	Was 270 SS
	80	E05632	Nut, 1/4" Wh. X 1/4" X 3/16" Hex. )	Was 105 NU
			) For J92760	
	81	J04593	Screw - Governor Adjusting, 1/2" B.S.F. )	Was MA 616
	82	J04594	Locknut - Governor Adjusting Screw )	Was MA 617
17, 18	83	J07715	Pin, Plain, 3/8" diam. X 2.19/32" long	Was 103 PN
	84	S05618/04	Split Pin, 5/64" diam. X 5/8" long	Was 102 PS
18	85	K05524	Pin, Plain, 3/8" diam. X 3.3/8" long ) (Governor Spring Lever Pivot - To suit ) 4 to 6LW Enclosed Governor) )	Was 160 PN
17, 18	86	J46540	Lever - Accelerator Cam Roller	Was MA 263
	87	E06695	Pin - Accelerator Cam Roller Lever	Was 103 PN
	84	S05618/04	Split Pin, 5/64" diam. X 5/8" long	Was 102 PS
	88	L20606	Ball Journal Bearing	Was 212 BE
	89	E76130	Steady - Governor Casing	Was Part of LW/5/139

Plate No.	Illus. No.	Part No.	Description		
17,18	89	E40230	Steady - Governor Casing	5LW, 6LW	Was Part of MA 260
	90	C08340	Steady Peg, 1/4" diam. X 3/4" long		Was 106 PE
	91	J09873	Setscrew, 3/8" Wh. X 7/8" long X 5/16" Hex.		Was 121 SS
17	92	E07382	Setscrew, 3/8" Wh. X 1" long X 5/16" Hex. (Governor Casing to Crankcase)	2LW, 3LW	Was 183 SS
	93	J06339	Rod - Injection Connecting - Cam Operated )	2LW	Was Part of LW/5/147
		J06340	Rod - Injection Connecting - Cam Operated )	3LW	Was Part of LW/5/95
17,18		J06341	Rod - Injection Connecting - Cam Operated )	4LW	Was Part of LW/5/96
		J06342	Rod - Injection Connecting - Cam Operated )	5LW	Was Part of LW/5/97
		J06343	Rod - Injection Connecting - Cam Operated )	6LW	Was Part of LW/5/98
17		K02297	Rod - Injection Connecting - Cam Operated )	3LW	Was LW/5/1041
17,18		K01457	Rod - Injection Connecting - Cam Operated )	4LW	Was LW/5/1042
		K01458	Rod - Injection Connecting - Cam Operated )	5LW	Was LW/5/1043
		K01459	Rod - Injection Connecting - Cam Operated )	6LW	Was LW/5/1044
17		K04175	Rod - Injection Connecting - Cam Operated )	3LW	Was LW/5/1046
17,18		K02783	Rod - Injection Connecting - Cam Operated )	4LW	Was LW/5/1047
		K04174	Rod - Injection Connecting - Cam Operated )	5LW	Was LW/5/1048
		K04173	Rod - Injection Connecting - Cam Operated )	6LW	Was LW/5/1049
	22	E03772	Nut, 5/16" B.S.F. X 1/4" X 1/4" Hex.		Was 122 NU
	60	E04311	Forked Eye, 5/16" B.S.F. X 1/4" bore		Was 101 EY
	38	C05406	Pin, Headed, 1/4" diam. X 5/8" long		Was 122 PN
	41	S05618/03	Split Pin, 5/64" diam. X 1/2" long		Was 101 PS
	94	S05761	BALL JOINT ASSEMBLY, 5/16" B.S.F., with E03772		Was MA 275
	95	K00585	Gaiter - Injection Connecting Rod Forked Eye		Was MA 277
	96	K03862	Gaiter - Injection Connecting Rod Ball Joint		Was MA 769
	-	A00672	GOVERNOR BODY ASSEMBLY, comprising ) Roller Body, Weights, Rollers and Pins ) Type	( Alternator Sets at 1,000 R.P.M. also ( Generator Sets up to and including 1,000 R.P.M.	Was LW/5/1026
	-	A00673	GOVERNOR BODY ASSEMBLY, comprising ) Roller ) Generator Body, Weights, Rollers and Pins ) Type ) Sets (Engines NOT exceeding 1,300 R.P.M.)		Was LW/5/1027

Plate No.	Illus. No.	Part No.	Description	
17,18	-	A00076	GOVERNOR BODY ASSEMBLY, ) Comprising Body, Weights, ) Trunnion Blocks, Springs ) and Pins )	Was LW/5/118 2 to 4LW
	-	A00079	GOVERNOR BODY ASSEMBLY, ) Comprising Body, Weights, ) Trunnion Blocks, Springs ) and Pins )	Was LW/5/126 5LW
	-	A00077	GOVERNOR BODY ASSEMBLY, ) Comprising Body, Weights, ) Trunnion Blocks and Pins )	Was LW/5/119 6LW
	97	J04590	Governor Body, with J01865, C05816	Was MA 240
	98	J01865	Bush - Governor Weight Pivot Pin	Was 102 BU
	99	C05816	Setscrew, Sq. Head, Pointed, 3/8" - 24 Thds. X 7/8" long	Was 174 SS
	100	A00698	Governor Weight, with E05877, ) K00077, K00078, K00084 ) (Supplied only in pairs) )	Was LW/5/1032 Roller Type ) Alternator and Generator Sets
	101	-	Governor Weight ) (Supplied only in pairs) ) (Superseded, will be replaced ) by A00872) )	Was LW/5/1018 Needle Roller Bearing Type ) Alternator Sets
	102	A00692	Governor Weight, with J06963, ) J06964, K00077, K00078, K00084 ) (Supplied only in pairs) )	Was MA 272 2 to 4LW
		A00693	Governor Weight, with J06963, ) J06964, K00077, K00078, K00084 ) (Supplied only in pairs) )	Was MA 273 5LW
		A00694	Governor Weight, with J06963, ) K00077, K00078, K00084 ) (Supplied only in pairs) )	Was MA 274 6LW
	103	E05877	Roller - Governor Weight	Was MA 241
	104	J04712	Bush - Governor Weight	Was 125 BU
	105	-	Needle Roller - Governor Weight - 52 per Engine Set ) (Supplied in sets only) ) (Superseded, will be replaced by A00872) )	Was LW/5/1020 Needle Roller Bearing Type Governor ) Alternator Sets
	106	-	Pin - Weight Pivot, with J04714, S05618/14 ) (Superseded, will be replaced by A00872) )	Was LW/5/1021
	107	J04714	Washer, 7/8" O.D. X 1/2" bore	Was 142 WA
	108	S05618/14	Split Pin, 1/8" diam. X 7/8" long	Was 122 PS
	109	K00078	Pin, Plain, 1/4" diam. X 2.5/16" long	Was 102 PN
	110	K03264	Split Pin, 1/5" diam. X 1" long	Was 161 PS
	111	J06963	Governor Trunnion Block (= 2 Pieces)	Was MA 269

Plate No.	Illus. No.	Part No.	Description		
17,18	112	J06964	Spring - Compression - Governor Trunnion Block	( 2 to 4LW - 6 per Engine ( 5LW - 4 per Engine ( 6LW - NOT fitted	Was 100 SP
	113	K00077	Pin - Weight Pivot, 3/8" diam. X 2.5/16" long		Was 106 PN
	109	K00078	Pin, Plain, 1/4" diam. X 2.5/16" long		Was 102 PN
	114	K00084	Split Cotter Pin, 1/8" diam. X 2" long		Was 127 PS
	115	A02008	Governor Sleeve, with L20601		Was MA 242
	116	L20601	Ball Journal Bearing		Was 132 BE
	117	L20543	Ball Thrust Washer		Was 173 BE
	118	E35790	Collar - Governor Spring		Was MA 243
	119	E07063	Governor Spring (Etched "0")		Was 124 SP
		E03558	Governor Spring (Etched "00")		Was 163 SP
		J03203	Governor Spring (Etched "000")		Was 164 SP
		J04752	Governor Spring (Etched "0000")		Was 165 SP



## LUBRICATING OIL PUMP — PLATE 19

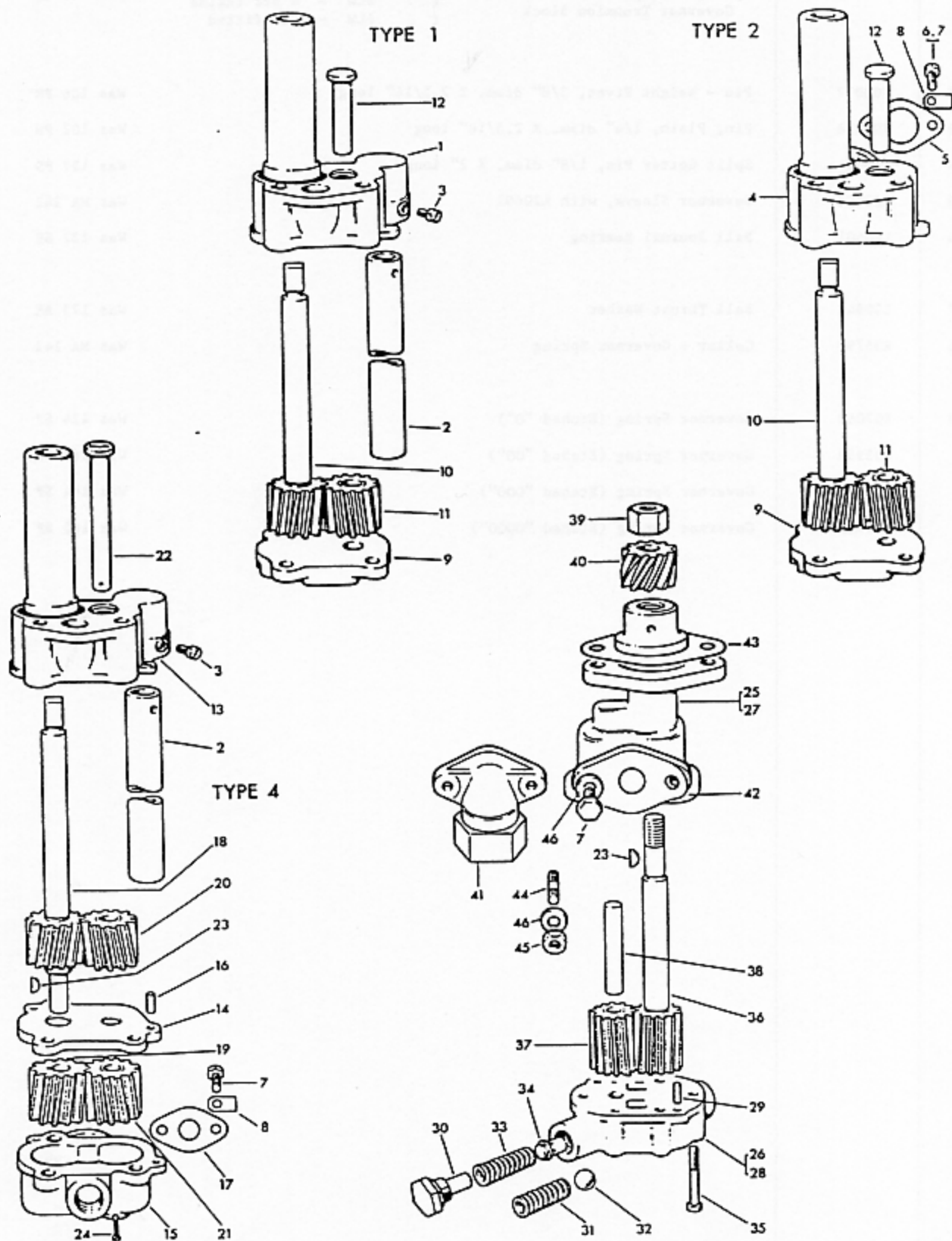


Plate No.	Illus. No.	Part No.	Description	
19	-	T02581	LUBRICATING OIL PUMP ASSEMBLY - TYPE 1, ) For Sumps Types (Suction Tube Standout 4.3/4"), ) 27, also 27F Comprising Body, Cover, Gears, ) without Spindles and Suction Tube ) Transfer Pump	Was LW/6/1
	1	-	Lubricating Oil Pump Body ) (NOT supplied as a separate item, specify T02581) )	Was LW/6/2
	2	E05490	Tube - Lubricating Oil Pump Suction ) For T02581	Was LW/6/4
	3	J00678	Setscrew, Cheese Head, 1 B.A. X 3/8" long )	Was 135 SS
	-	T02582	LUBRICATING OIL PUMP ASSEMBLY - TYPE 2, ) For ) Comprising Body, Cover, Gears, ) Sump ) Spindles and Packings ) Type 2B )	Was Part of LW/6/79
	4	-	Lubricating Oil Pump Body ) (NOT supplied as a separate item, ) specify T02582) )	Was LW/6/80
	5	K00787	Packing, Flange, 1.1/2" centres X 1.1/2" wide ) 4 to 6LW	Was 105 PA
	6	E05577	Setscrew, 5/16" Wh. X 7/8" long X 1/4" Hex. ) For T02582	Was 112 SS
	7	J09009	Setscrew, 5/16" Wh. X 1" long X 1/4" Hex. )	Was 113 SS
	8	J05653	Locking Plate, 11/32" diam. hole )	Was 101 LP
	9	-	Cover - Lubricating Oil Pump Body ) (NOT supplied as a separate item, specify T02581 or T02582)	Was LW/6/3
	10	A26118	Gear and Spindle, with Idler Gear - Lubricating Oil Pump (1" wide Gear)	Was LW/6/5
	11	-	Gear - Lubricating Oil Pump Idler (1" wide Gear) (NOT supplied as a separate item, specify A26118)	Was LW/6/6
	12	E05487	Spindle - Lubricating Oil Pump Idler Gear	Was LW/6/7
	-	T02585	LUBRICATING OIL PUMP ASSEMBLY - TYPE 4, ) For Sump ) (Suction Tube Standout 4.3/4"), ) Type 27F ) Comprising Upper and Lower Bodies, ) with ) Dividing Plate, Gears, Spindles and ) Transfer Pump ) Suction Tube )	Was Part of LW/6/1013
	13	-	Lubricating Oil Pump Body - Upper )	Was LW/6/1014
	14	-	Plate - Lubricating Oil Pump ) Not supplied as Body Dividing ) separate items, ) specify T02585 )	Was LW/6/1015
	15	-	Lubricating Oil Pump Body - Lower ) 4 to 6LW	Was LW/6/1016
	2	E05490	Tube - Lubricating Oil Pump Suction )	Was LW/6/4
	16	J02974	Steady Peg, 3/16" diam. X 1" long )	Was 103 PE
	3	J00678	Setscrew, Cheese Head, 1 B.A. X 3/8" long )	Was 135 SS
	17	K00792	Packing, Flange, 1.3/4" centres X 1.3/8" wide )	Was 115 PA
	7	J09009	Setscrew, 5/16" Wh. X 1" long X 1/4" Hex. )	Was 113 SS
	8	J05653	Locking Plate, 11/32" diam. hole )	Was 101 LP

Plate No.	Illus. No.	Part No.	Description	
19	18	A00878	Set of Gears, Gear and Spindle, Spindle and Woodruff Key (1" wide Gear)	Was LW/6/1018
	19	-	Gear - Keywayed - Lubricating Oil Pump Transfer (1.1/8" wide Gear)	Was LW/6/1019
	20	-	Gear - Bushed - Upper - Lubricating Oil Pump Idler (1" wide Gear)	Was LW/6/1020
	21	-	Gear - Bushed - Lower - Lubricating Oil Pump Idler (1.1/8" wide Gear)	Was LW/6/1021
	22	-	Spindle - Lubricating Oil Pump Idler Gear	Was LW/6/1022
	23	L21021	Woodruff Key	Was 100 KE
	24	S05618/12	Split Pin, 3/32" diam. X 1.1/4" long	Was 115 PS

Not supplied as separate items, specify A00878

4 to 6LM





Plate No.	Illus. No.	Part No.	Description	
20	-	T02911	LUBRICATING OIL DELIVERY FILTER ASSEMBLY - L.C. TYPE, Comprising Body, Cover, Element, Cap Nut, Stud and Packings	Was MA 878
	1	-	Lubricating Oil Delivery Filter Body - L.C. Type (NOT supplied as a separate item, specify T02911)	Was MA 879
	2	J00056	Stud, 5/16" Wh. X 2.1/4" long	Was 300 ST
	3	E03945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex.	Was 106 NU
	4	E49540	Plug, 3/4" B.S.P. X 7/16" Hex.	Was 116 PL
	5	K00804	Packing, Circular, 1.1/2" O.D. X 1" I.D. X 1/32"	Was 160 PA
	6	L20120	Plug, 1/2" B.S.P. X 9/16" Hex.	Previously 160 PL
	7	K00803	Packing, Circular, 1.1/16" O.D. X 25/32" I.D. X 1/32"	Was 154 PA
	8	J01443	Plug, 1/8" B.S.P. X 1/4" Hex.	Was 100 PL
	9	E03996	Packing, Circular, 17/32" O.D. X 3/8" I.D. X 1/32"	Was 142 PA
	10	K01711	Lubricating Oil Delivery Filter Centre Stud	Was 379 ST
	11	L21779	Element - Lubricating Oil Delivery Filter - L.C. Type, with J05255 (In Carton)	Was LW/6/252
	12	J45400	Cover - Lubricating Oil Delivery Filter - L.C. Type	Was Part of LW/6/118
	13	J05255	Packing, Circular, 3.3/4" O.D. X 3.1/4" I.D. X 1/8"	Was 171 PA
	14	J04543	Cap Nut, 7/16" Wh. X 3/8" Hex.	Was 155 NU
	15	J04867	Packing, Circular, 1" O.D. X 15/32" I.D. X 1/16"	Was 145 PA
	16	K00797	Packing, Flange, 1.7/8" centres X 1.9/16" wide	Was 125 PA
	17	K00787	Packing, Flange, 1.1/2" centres X 1.1/2" wide	Was 105 PA
	18	J09009	Setscrew, 5/16" Wh. X 1" long X 1/4" Hex.	Was 113 SS
	19	S05725/02	Washer, 5/16" diam. bore	Was 105 WA
	20	A02165	Bracket - Lubricating Oil Delivery Filter, with K00949, E03772	Was LW/6/168
	21	K00949	Stud, 5/16" Wh. X 5/16" B.S.F. X 1.3/16" long	Was 238 ST
	22	E03772	Nut, 5/16" B.S.F. X 1/4" X 1/4" Hex.	Was 122 NU
	-	A00098	LUBRICATING OIL RELIEF VALVE ASSEMBLY (On Filter T02911), Comprising Body, Valve, Spring, Adjuster, Adjuster Cap and Packings (Stamped 45 lb./sq.in.)	Was LW/6/102
	-	T03102	LUBRICATING OIL RELIEF VALVE ASSEMBLY (On Filter T02911), Comprising Body, Valve, Spring, Adjuster and Adjuster Cap (Stamped 35 lb./sq.in.)	Was Part of LX/6/3018
	23	J57780	Lubricating Oil Relief Valve Body, with K00787, K00792	Was Part of LW/6/94

Plate No.	Illus. No.	Part No.	Description	
20	24	J02273	Spring - Compression - Lubricating Oil Relief Valve, for A00098	Was 114 SP
		E09423	Spring - Compression - Lubricating Oil Relief Valve, for T03102	Was 153 SP
	25	E09420	Valve - Lubricating Oil Relief	Was MA 285
	26	E07405	Adjuster - Relief Valve	Was MA 284
	27	C05308	Nut, 1/2" B.S.P. X 5/8" Hex.	Was 140 NU
	28	E03862	Cap - Relief Valve Adjuster	Was MA 278
	17	K00787	Packing, Flange, 1.1/2" centres X 1.1/2" wide	Was 105 PA
	29	E05577	Setscrew, 5/16" Wh. X 7/8" long X 1/4" Hex.	Was 112 SS
	18	J09009	Setscrew, 5/16" Wh. X 1" long X 1/4" Hex.	Was 113 SS
	30	E05929	Bolt, 5/16" Wh. X 2.3/4" long X 1/4" Hex.	Was 206 BL
	31	J06198	Bolt, 5/16" Wh. X 2.15/16" long X 1/4" Hex.	Was 207 BL
	19	S05725/02	Washer, 5/16" diam. bore	Was 105 WA
	32	K00792	Packing, Flange, 1.3/4" centres X 1.3/8" wide	Was 115 PA
	33	J62490	Elbow - Cast Iron - Lubricating Oil Thermometer, with K07281, K00803 (When required to replace a Gun Metal Elbow, 2 off J09009 are also required - fixing Elbow to Relief Valve) (For Lubricating Oil Thermometer see Pipework - Lubrication)	Was Part of LW/6/1001
	6	K07281	Plug, 3/8" Hex. Socket, 1/2" B.S.P.	Was 160 PL
	7	K00803	Packing, Circular, 1.1/16" O.D. X 25/32" I.D. X 1/32"	Was 154 PA
	32	K00792	Packing, Flange, 1.3/4" centres X 1.3/8" wide	Was 115 PA
	29	E05577	Setscrew, 5/16" Wh. X 7/8" long X 1/4" Hex.	Was 112 SS
	18	J09009	Setscrew, 5/16" Wh. X 1" long X 1/4" Hex.	Was 113 SS
	19	S05725/02	Washer, 5/16" diam. bore	Was 105 WA
	-	T03099	OIL COOLER RELIEF VALVE ASSEMBLY (ON CRANKCASE), comprising Body, Valve, Spring, Adjuster, Stop, Locknut, Adjuster Cap, Stock, Plugs and Packings	Was Part of MA 575
	34	J06263	Oil Cooler Relief Valve Body	Was Part of MA 576
	35	J06192	Valve - Oil Cooler Relief	Was MA 577
	36	J06193	Spring - Compression - Oil Cooler Relief Valve	Was 165 SP
	37	J06195	Adjuster - Oil Cooler Relief Valve	Was MA 578
	38	J06194	Oil Cooler Relief Valve Stop	Was 124 PE
	39	E08175	Nut, 5/16" B.S.P. X 1/4" X 3/16" Hex.	Was 124 NU
	27	C05308	Nut, 1/2" B.S.P. X 5/8" Hex.	Was 140 NU
	40	J06196	Cap - Oil Cooler Relief Valve Adjuster	Was MA 579

Plate No.	Illus. No.	Part No.	Description	
20	41	K07281	Plug, 3/8" Hex. Socket, 1/2" B.S.P.	Was 160 PL
	7	K00803	Packing, Circular, 1.1/16" O.D. X 25/32" I.D. X 1/32"	Was 154 PA
	42	C03789	Plug, 1/4" B.S.P. X 3/8" Hex.	Was 103 PL
	43	K00801	Packing, Circular, 11/16" O.D. X 1/2" I.D. X 1/16"	Was 146 PA
	44	E04115	Union Stock, "H" 1/4" B.S.P. X 1/4" B.S.P.	Was 100 SU
	16	K00797	Packing, Flange, 1.7/8" centres X 1.9/16" wide	Was 125 PA
	17	K00787	Packing, Flange, 1.1/2" centres X 1.1/2" wide	Was 105 PA
	29	E05577	Setscrew, 5/16" Wh. X 7/8" long X 1/4" Hex.	Was 112 SS
	18	J09009	Setscrew, 5/16" Wh. X 1" long X 1/4" Hex.	Was 113 SS
	30	E05929	Bolt, 5/16" Wh. X 2.3/4" long X 1/4" Hex.	Was 206 BL
	31	J06198	Bolt, 5/16" Wh. X 2.15/16" long X 1/4" Hex.	Was 207 BL
	19	S05725/02	Washer, 5/16" diam. bore	Was 105 WA



## INTERMEDIATE LUBRICATING OIL FILTER

Plate No.	Illus. No.	Part No.	Description	
20	-	T02916	INTERMEDIATE LUBRICATING OIL FILTER ASSEMBLY, Comprising Body, Cover, Cage, Spring, Studs, Nuts and Packings	Was MA 296
	45	H03955	Intermediate Lubricating Oil Filter Body	Was Part of MA 297
	46	J03406	Stud, 5/16" Wh. X 1.9/16" long	Was 130 ST
	47	E05614	Stud, 5/16" Wh. X 1.7/16" long	Was 116 ST
	3	E03945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex.	Was 106 NU
	19	S05725/02	Washer, 5/16" diam. bore	Was 105 WA
	48	E05611	Stud, 7/16" Wh. X 1.13/16" long	Was 181 ST
	49	C05660	Nut, 7/16" Wh. X 3/8" X 3/8" Hex.	Was 116 NU
	50	E04441	Flange, Oval, 2.1/4" centres X 7/8" bore	Was 111 FL
	51	J76640	Elbow, Single Flange, 2.1/4" centres X 7/8" bore	Was 100 EL
	52	K00293	Packing, Flange, 2.1/4" centres X 1.7/8" wide	Was 134 PA
	53	K05193	Cage - Intermediate Lubricating Oil Filter	Was MA 294
	54	J05079	Spring - Compression - Intermediate Lubricating Oil Filter Cage	Was 132 SP
	55	K32400	Cover - Intermediate Lubricating Oil Filter	Was Part of MA 293
	56	K00805	Packing - Intermediate Lubricating Oil Filter Cover	Was 168 PA
	57	J08993	Bracket - Intermediate Lubricating Oil Filter	Was LW/6/261
	58	J08992	Collar, 1.1/4" O.D. X 15/32" I.D. X 1" wide	Was 157 CR
	59	J05994	Stud, 7/16" Wh. X 7/16" B.S.F. X 2.1/8" long	Was 454 ST
	49	C05660	Nut, 7/16" Wh. X 3/8" X 3/8" Hex.	Was 116 NU
	60	J08935	Bracket - Intermediate Lubricating Oil Filter	To suit 4LW Was LW/6/226
	61	J08224	Bracket - Intermediate Lubricating Oil Filter	Sump Type 2B 5LW, 6LW Was LW/6/225

# GARDNER

## FUEL FILTER — PLATE 21

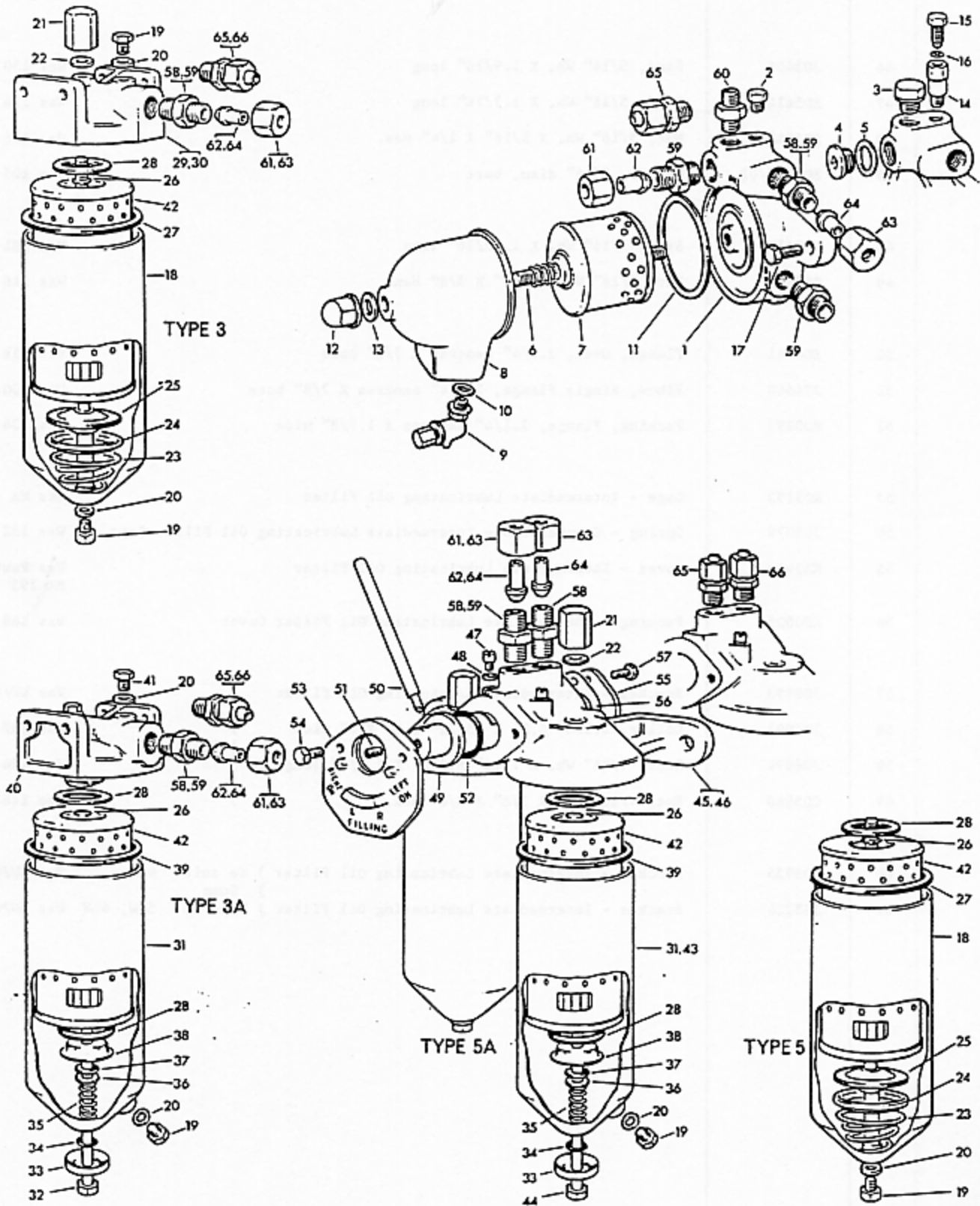


Plate No.	Illus. No.	Part No.	Description	
21	-	T02887	ENGINE-MOUNTED SECOND FUEL FILTER ASSEMBLY - TYPE 2A, Comprising Base, Cover, Element, Cover Stud, Cap Nut, Union Stocks and Packings	When Fuel Lift Pump is fitted Was GFF 2A/1
	-	T02885	ENGINE-MOUNTED SECOND FUEL FILTER ASSEMBLY - TYPE 2A, Comprising Base, Cover, Element, Cover Stud, Cap Nut, Union Stocks and Packings	When Fuel Lift Pump is NOT fitted -
	1	-	Fuel Filter Base - Type 2A (NOT supplied as a separate item, specify T02887 or T02885)	Was MA 287
	2	J01443	Plug, 1/8" B.S.P. X 1/4" Hex.	Was 100 PL
	3	C03789	Plug, 1/4" B.S.P. X 3/8" Hex.	Was 103 PL
	4	K07340	Plug, 3/8" Hex. Socket, 3/8" B.S.P.	Was 159 PL
	5	E09882	Packing, Circular, 7/8" O.D. X 5/8" I.D. X 1/32"	Was 151 PA
	6	E04038	Stud - Filter Cover	Was 144 ST
	7	L21765	Element - Second Fuel Filter - Type 2A, with E04114 (In Carton)	Was GFF 2A/2
	8	A04489	Cover - Filter, with C09356, E04114, C08737, J01443	Was MA 279
	9	J01443	Plug, 1/8" B.S.P. X 1/4" Hex.	Was 100 PL
	10	C09356	Packing, Circular, 5/8" O.D. X 3/8" I.D. X 1/32"	Was 143 PA
	11	E04114	Packing, Circular, 3" O.D. X 2 1/2" I.D. X 1/16"	Was 166 PA
	12	K07129	Cap Nut, 3/8" Wh. X 3/8" Hex.	Was 338 NU
	13	C08737	Packing, Circular, 11/16" O.D. X 13/32" I.D. X 1/32"	Was 144 PA
	14	T03098	Filter Vent Valve Body, with J05970	Was MA 282
	15	-	Valve - Filter Vent (NOT supplied as a separate item, specify T03098)	Was MA 283
	16	J05970	Packing, Circular, 11/32" O.D. X 3/32" I.D. X 1/16"	Was 139 PA
	17	E05572	Setscrew, 5/16" Wh. X 7/8" long X 1/4" Hex.	Was 112 SS
	-	-	SINGLE FIRST FUEL FILTER ASSEMBLY - TYPE 3 (Superseded, will be replaced by T01112 or T01113 or T01114)	Was GFF 3/1
	18	-	SUMP SUB-ASSEMBLY, Comprising Sump, Centre Spindle and Centre Stud (Superseded, will be replaced by A04618)	Was GFF 3/2
	19	L21758	Plug (Sump Drain also Air Vent)	Was GFF 3/3
	20	L21759	Gasket, for L21758	Was GFF 3/4
	21	L21760	Head Nut	Was GFF 3/5
	22	L21761	Gasket, for L21760	Was GFF 3/6
	23	L21766	Spring	Was GFF 3/7
	24	-	Centre Spindle Seal Support Plate	Was GFF 3/8
	25	-	Centre Spindle Seal	Was GFF 3/9
	26	L21754	Clirclip	Was GFF 3/25

To suit Superseded Type 3 Fuel Filter

Plate No.	Illus. No.	Part No.	Description	
21	27	L21762	Seal (Marked Brown-Blue) ) These items are )	Was GFF 3/11
	28	L21753	Seal, for S05516 ) NOT supplied )	Was GFF 3/24
	29	-	HEAD SUB-ASSEMBLY ) Superseded, will be )	Was GFF 3/13
	30	-	Filter Head ) replaced by T01112 )	Was GFF 3/14
			) or T01113 or T01114 )	
	-	T01112	SINGLE FIRST FUEL FILTER ASSEMBLY - TYPE 3A )	
			(With 2 Union Stocks E04043) )	
	-	T01113	SINGLE FIRST FUEL FILTER ASSEMBLY - TYPE 3A )	Compares with
			(With 2 Union Stocks J05283) )	GFF 3/15
	-	T01114	SINGLE FIRST FUEL FILTER ASSEMBLY - TYPE 3A )	
			(With Union Stock E04043 and J05283) )	
	31	L21745	Sump, with L21758, L21759, L21747, L21755 )	Was GFF 3/32
			IMPORTANT Items Illustration Numbers ) These items	
			32 to 38, 40, 41 and 44 ) are not	
			NOT NOW AVAILABLE ) supplied separately	
	39	L21755	Seal (Marked Brown-Green) )	Was GFF 3/26
	42	S05516	ELEMENT ASSEMBLY, with L21762, L21755 (In Carton)	Was GFF 3/10
	-	-	DUPLEX FIRST FUEL FILTER ASSEMBLY - TYPE 5 )	Was GFFD 5/1
			(Superseded, will be replaced by T01115 or T01116 )	
			or T01117 or T01118) )	
	18	-	SUMP SUB-ASSEMBLY, Comprising Sump, )These items are )	Was GFF 3/2
			Centre Spindle and Centre Stud ) not supplied )	
			(Superseded, will be replaced by A04618) ) separately	
	23	-	Spring )	Was GFF 3/7
	24	-	Centre Spindle Seal Support Plate )	Was GFF 3/8
	25	-	Centre Spindle Seal )	Was GFF 3/9
	27	L21762	Seal (Marked Brown-Blue) )	Was GFF 3/11
			(NOT supplied as a separate item) )	
	-	A04618	SUMP ASSEMBLY, Comprising Sump, Element Assembly, Guide, )	Was GFF 3/29
			Drain Plug, Centre Bolt, Spring, Seals, Nut and Washers )	
	-	L21764	Centre Bolt, for A04618 )	Was GFF 3/30
21	-	T01115	DUPLEX FIRST FUEL FILTER ASSEMBLY - TYPE 5A )	Was GFFD 5/8
			(With Union Stock E04043 and J05283) )	
	-	T01116	DUPLEX FIRST FUEL FILTER ASSEMBLY - TYPE 5A )	-
			(With 2 Union Stocks E04043) )	
	-	T01117	DUPLEX FIRST FUEL FILTER ASSEMBLY - TYPE 5A )	-
			(With 2 Union Stocks E04043) )	
	-	T01118	DUPLEX FIRST FUEL FILTER ASSEMBLY - TYPE 5A )	-
			(With Union Stock E04043 and J05283) )	
	43	A04618	SUMP ASSEMBLY, Comprising Sump, Element Assembly, Guide, )	Was GFF 3/29
			Drain Plug, Centre Bolt, Spring, Seals, Nut and Washers )	
	42	S05516	ELEMENT ASSEMBLY, with L21755, L21762 (In Carton)	Was GFF 3/10
	39	L21755	Seal (Marked Brown-Green)	Was GFF 3/26
	45, 46	D13639	Filter Head	Was Part of GFFD 5/2 and GFFD 5/3

Plate No.	Illus. No.	Part No.	Description	
21	47	K00632	Vent Screw, Cheese Head, 0 B.A. X 5/16" long	Was 489 SS
	48	K00633	Packing, Circular, 3/8" O.D. X 1/4" I.D. X 1/32"	Was 194 PA
	49	K64100	Filter Cock Plug	Was GFFD 5/5
	50	K00640	Filter Cock Plug Handle	Was GFFD 5/6
-	-	L21741	Filter Cock Plug Handle (with Stop)	-
-	-	L21487	Head Nut - with Rollpin (To suit Handle Stop)	-
21	51	J04347	Setscrew, Headless, 1/4" Wh. X 3/8" long	Was 238 SS
	52	K00631	Sealing Ring, for K64100	Was 105 RJ
	53	K64200	Filter Cock Plug Cover	Was GFFD 5/7
	54	J05618	Bolt, 5/16" B.S.F. X 7/8" long X 1/4" Hex.	Was 179 BL
	55	K64300	Flange, Blank, 1.7/8" centres X 1.3/4" wide	Was 143 FL
	56	K00644	Packing, Flange, 1.7/8" centres X 1.3/4" wide	Was 195 PA
	57	K00300	Setscrew, 1 B.A. X 9/16" long X 1 B.A. Hex.	Was 101 SS
	58	E04043	Reducing Union Stock, "M" 1/2" B.S.P. X 3/8" B.S.P.	Was 105 SU
	59	J05283	Union Stock, "M" 3/8" B.S.P. X 3/8" B.S.P.	Was 101 SU
	60	E04115	Union Stock, "M" 1/4" B.S.P. X 1/4" B.S.P.	Was 100 SU
	61	C02068	Union Nut, 3/8" B.S.P. X 7/16" Hex. )	Was 163 NU
	62	C02070	Union Tail ) 3/8" O.D. Pipe	Was 102 UT
	63	J00670	Union Nut, 1/2" B.S.P. X 9/16" Hex. )	Was 164 NU
	64	C02076	Union Tail ) 1/2" O.D. Pipe	Was 103 UT
	65	S05463/11	C.J. Union, "M" 3/8" B.S.P. X 3/8" O.D. Pipe	Was 103 CJ
	66	S05463/01	C.J. Union, "M" 3/8" B.S.P. X 1/2" O.D. Pipe	Was 115 CJ



**GARDNER**

WATER PUMP DRIVE - CENTRIFUGAL TYPE - PLATE 22A

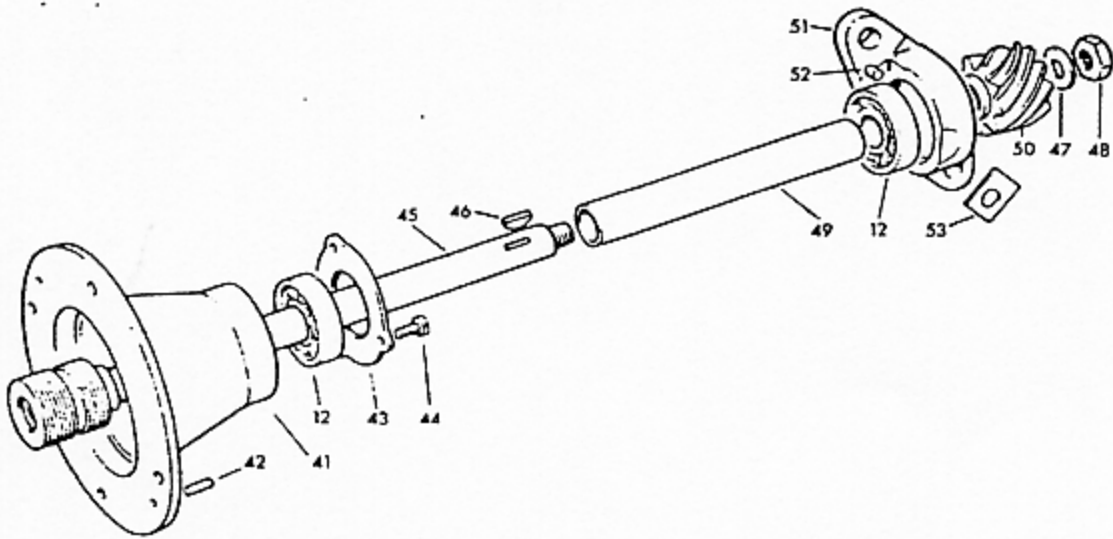


Plate No.	Illus. No.	Part No.	Description	
22	-	-	WATER PUMP ASSEMBLY - C.G. TYPE - GUN METAL, ) Comprising Body, Gland, Cover, Impeller ) Assembly, Bearing, Spring, Grease Cup, ) Drain Tap, Studs, Nuts and Packings )	The Carbon Gland Type Water Pump is superseded by the Unit Seal (H/C) Type with ALUMINIUM Body Was LW/7/90
	1	-	Water Pump Body - C.G. Type, Gun Metal	Was MA 1103
	2	K02698	Stud, 2 B.A. X 11/16" long	Was 315 ST
	3	K02699	Nut, 2 B.A. X 5/32" X 2 B.A. Hex.	Was 211 NU
	4	L20581	Ball Journal Bearing, 5/8" I.D. X 1.13/16" O.D. X 5/8" wide	Was 147 BE
	-	-	WATER PUMP ASSEMBLY - C.G. TYPE - ALUMINIUM, ) Comprising Body, Gland, Cover, Impeller ) Assembly, Bearing, Spring, Grease Cup, ) Drain Tap, Studs, Nuts and Packings )	The Carbon Gland Type Water Pump is superseded by the Unit Seal (H/C) Type Was LW/7/100
	5	-	Water Pump Body - C.G. Type, Aluminium	Was MA 1268
	6	K72800	Insert Ring ( To adapt Carbon Gland Type Water ) ( Pump Body to suit Unit Seal	Was MA 1353
	7	E04744	Stud, 2 B.A. X 11/16" long (Superseded, will be replaced by L21250)	Was 100 ST
	8	E00218	Nut, 2 B.A. X 5/32" X 2 B.A. Hex.	Was 101 NU
	9	L21250	Setscrew, 2 B.A. X 7/16" long X 2 B.A. Hex.	-
	10	-	Gland - Water Pump (Superseded, will be replaced by A04454)	Was MA 304
	11	K00617	Washer - Water Pump Gland	Was MA 313
	4	L20581	Ball Journal Bearing, 5/8" I.D. X 1.13/16" O.D. X 5/8" wide	Was 147 BE
	12	L20509	Ball Journal Bearing, 5/8" I.D. X 1.9/16" O.D. X 7/16" wide	Was 101 BE
	13	J05529	Plate - Water Pump Body Grease Retaining	Was MA 310
	14	-	WATER PUMP IMPELLER ASSEMBLY - C.G. TYPE, Comprising Spindle, ) Impeller, Grease Retaining Disc, Collar and Retaining Clips ) (Superseded, will be replaced by A04454)	Was MA 1270
	-	A04454	Water Pump Conversion Kit, with ) To convert Carbon Gland Type ) K72800, E05893, K07350, A04453 ) Pump to Unit Seal H/C	Was MA 1463
22	15	J08612	Disc - Water Pump Grease Retaining, 1.3/4" O.D. X 19/32" I.D. X 1/8"	Was 178 PA
	16	J06069	Collar - Water Pump Impeller Spring	Was MA 305
	17	J03068	Spring - Compression - Water Pump Impeller	Was 116 SP
	18	K03675	Retaining Clip	Was 106 RR
	19	J03066	Bush - Water Pump Spring Seating	) To suit Impeller ) Spindle Machined ) Was 108 BU
	20	J03067	Water Pump Split Cone Washer (= 2 Segments)	) for Cone Washer ) Was MA 307



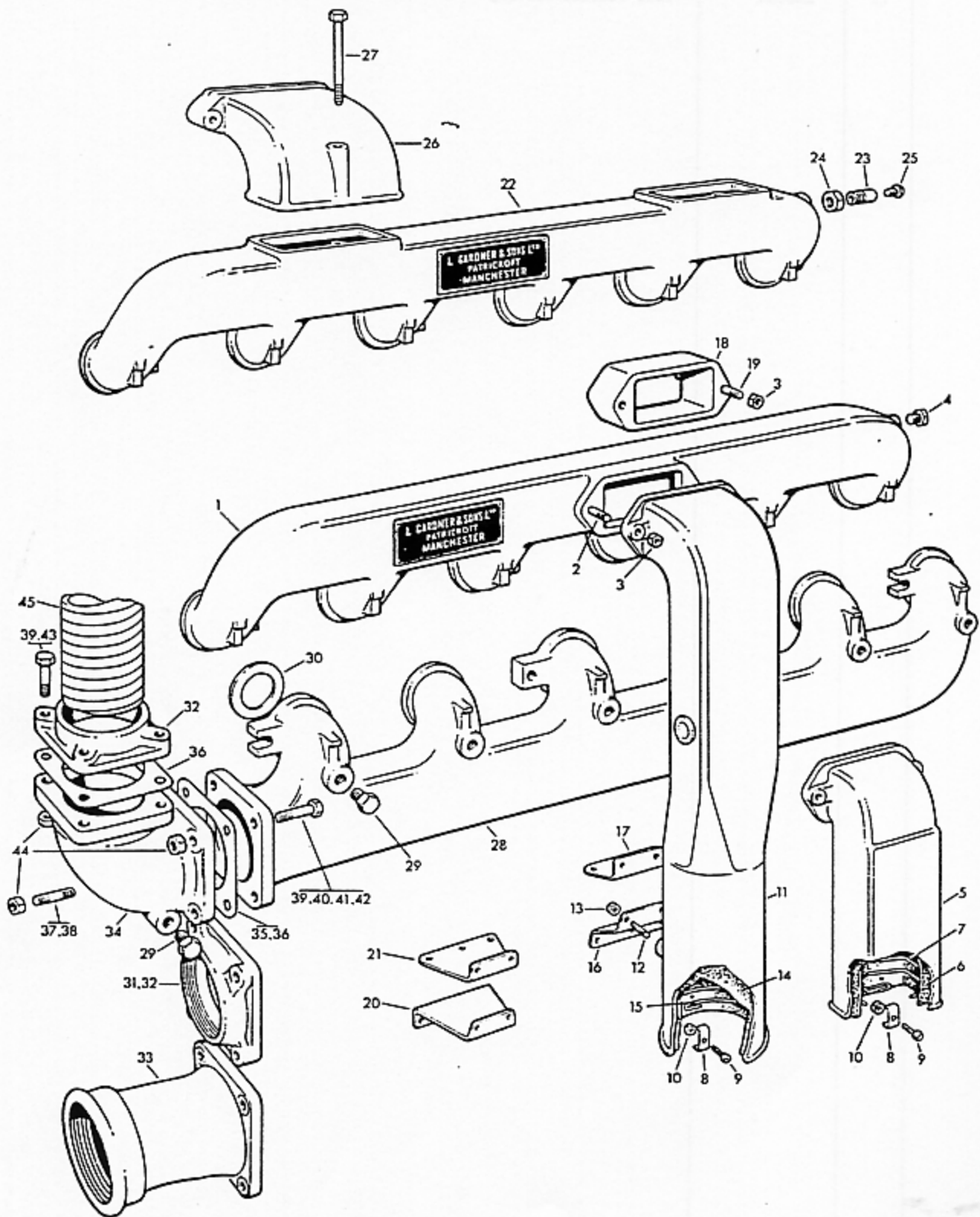
Plate No.	Illus. No.	Part No.	Description	
22	21	L20992	Grease Cup, 1/4" B.S.P.	Was 101 CU
	23	S05366	Drain Tap, 1/4" B.S.P.	Was 124 CK
	24	C08905	Packing, Flange, 2" centres X 1.5/8" wide	Was 129 PA
	25	E05893	Packing - Water Pump Body Cover	Was 174 PA
-	-	-	WATER PUMP ASSEMBLY - U.S. TYPE - ALUMINIUM, ) Comprising Body, Unit Seal, Cover, Impeller)The Unit Seal Type Assembly, Bearing, Grease Cup, Drain Tap, ) Water Pump is Screws and Packings )superseded by the Unit Seal (H/C) Type )	Was LW/7/108
26	-	-	Water Pump Body - U.S. Type, Aluminium )	Was MA 1395
	7	E04744	Stud, 2 B.A. X 11/16" long (Superseded, will be replaced by L21250)	Was 100 ST
	8	E00218	Nut, 2 B.A. X 5/32" X 2 B.A. Hex.	Was 101 NU
	9	L21250	Setscrew, 2 B.A. X 7/16" long X 2 B.A. Hex.	-
27		K07918	Unit Seal - Water Pump	Was MA 1462
28	-	-	WATER PUMP IMPELLER ASSEMBLY - U.S. TYPE, Comprising Spindle, Impeller, Grease Retaining Disc and Clips (Superseded, will be replaced by A04453)	Was MA 1352
-		T02731	WATER PUMP ASSEMBLY - U.S. H/C TYPE - ALUMINIUM, Comprising Body, Unit Seal and Ceramic Counterface, Cover, Impeller Assembly, Bearing, Grease Cup, Drain Tap and Screws	Was LW/7/114
29		A04370	Water Pump Body - U.S. H/C Type, Aluminium, with L21250, A04435, L20509, K07350, C08905, E05893	Was MA 1438
	9	L21250	Setscrew, 2 B.A. X 7/16" long X 2 B.A. Hex.	-
	30	A04435	Unit Seal and Ceramic Counterface - Water Pump	Was MA 1421
	12	L20509	Ball Journal Bearing, 5/8" I.D. X 1.9/16" O.D. X 7/16" wide	Was 101 BE
	31	K07350	Plate - Water Pump Body Grease Retaining	Was MA 1351
	32	A04453	WATER PUMP IMPELLER ASSEMBLY - U.S. H/C TYPE, Comprising Spindle, Impeller, Unit Seal and Ceramic Counterface, Grease Retaining Disc and Clips	Was MA 1461
	15	J08612	Disc - Water Pump Grease Retaining, 1.3/4" O.D. X 19/32" I.D. X 1/8"	Was 178 PA
	18	K03675	Retaining Clip	Was 106 BR
	21	L20992	Grease Cup, 1/4" B.S.P.	Was 101 CU
	23	S05366	Drain Tap, 1/4" B.S.P.	Was 124 CK
	24	C08905	Packing, Flange, 2" centres X 1.5/8" wide	Was 129 PA

Plate No.	Illus. No.	Part No.	Description	
22	33	-	Water Pump Cover - Gun Metal (Superseded, will be replaced by F02364)	Was LW/7/92
		F02364	Water Pump Cover - Aluminium	Was Part of LW/7/60
	25	E05893	Packing - Water Pump Body Cover	Was 174 PA
	34	C06545	Packing, Flange, 2.1/2" centres X 2.1/8" wide	Was 135 PA
	35	K02976	Packing, Flange, 1.3/4" centres X 1.7/16" wide	Was 214 PA
	36	J09902	Set screw, 5/16" Wh. X 1.1/8" long X 1/4" Hex.	Was 214 SS
	37	E53860	Flange, Oval, 2.1/2" centres X 1.1/2" bore	Was 195 FL
	38	K02108	Connection - Water Pump Inlet - Type 41, Cast Iron	Was Part of LW/8/334
		J66890	Connection - Water Pump Inlet - Type 41, Aluminium	Was Part of LW/8/285
	34	C06545	Packing, Flange, 2.1/2" centres X 2.1/8" wide	Was 135 PA
	23	S05366	Drain Tap, 1/4" B.S.P.	Was 124 CK
	39	E05471	Bolt, 3/8" Wh. X 1.3/8" long X 5/16" Hex.	Was 119 BL
	40	C05539	Nut, 3/8" Wh. X 3/8" X 5/16" Hex.	Was 110 NU
22A	-	A27501	WATER PUMP DRIVE ASSEMBLY, Comprising ) Spigot Plate, Cover, Driving Shaft, ) Driving and Driven Gears and Bearings )	Anti-Clockwise Rotation Engines looking on Flywheel End Compares with LW/7/17
22A	-	A26501	WATER PUMP DRIVE ASSEMBLY, Comprising ) Spigot Plate, Cover, Driving Shaft, ) Driving and Driven Gears and Bearings )	Clockwise Rotation Engines looking on Flywheel End Was LW/7/1001
	41	A00105	Water Pump Spigot Plate, with J04315, E56770, K03452	Was LW/7/18
	42	J04315	Steady Peg, 3/16" diam. X 1/2" long	Was 100 PE
	43	E56770	Cover - Water Pump Spigot Plate	Was KA 301
	44	K03452	Set screw, 1 B.A. X 1/2" long X 1 B.A. Hex.	Was 317 SS
	45	K07000	Shaft - Water Pump Driving	Was Part of LW/7/22
	46	L21022	Woodruff Key	Was 102 KE
	47	S05725/04	Washer, 7/16" diam. bore	Was 109 WA
	48	J08529	Nut, 7/16" B.S.F. X 7/16" X 3/8" Hex.	Was 128 NU
	49	E05665	Distance Piece - Ball Bearing	Was LW/7/27
	50	A26116	Gears - Water Pump ) Driving and Driven )	Anti-Clockwise Rotation Engines looking on Flywheel End Combination of LW/7/98 and LW/2/0/60
		A26117	Gears - Water Pump ) Driving and Driven )	Clockwise Rotation Engines looking on Flywheel End Combination of LW/7/99 and LW/2/0/61

Plate No.	Illus. No.	Part No.	Description	
22A	51	A04650	Bracket - Water Pump Ball Bearing, with C06927, J09955	Was MA 303
	52	C06927	Steady Peg, 3/16" diam. X 9/16" long	Was 101 PE
	53	J09955	Locking Plate, 13/32" diam. hole	Was 103 LP
	12	L20509	Ball Journal Bearing	Was 101 BE

# GARDNER

## AIR INLET AND EXHAUST MANIFOLD — PLATE 23



## AIR INLET MANIFOLD

Plate No.	Illus. No.	Part No.	Description		
23	1	T01331	Manifold - Air Inlet - Type J, with E09714, E03945, J01443	2LW Was LW/8/188	
		T01332	Manifold - Air Inlet - Type J, with E09714, E03945, J01443	3LW Was LW/8/189	
		T01333	Manifold - Air Inlet - Type J, with E09714, E03945	4LW Was LW/8/190	
		T01334	Manifold - Air Inlet - Type J, with E09714, E03945	5LW Was LW/8/191	
		T01335	Manifold - Air Inlet - Type J, with E09714, E03945	6LW Was LW/8/192	
		2	E09714	Stud, 5/16" Wh. X 1.3/8" long	Was 115 ST
		3	E03945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex.	Was 106 NU
		4	J01443	Plug, 1/8" B.S.P. X 1/4" Hex.	Was 100 PL
		5	A00882	Pipe - Air Inlet, with J03752, J03753, J07983, L21150, E00218	) Was LW/8/1062
		6	J03752	Lining - Air Inlet Pipe	) Was LW/8/1063
		7	J03753	Spring - Air Inlet Pipe Lining	) 2LW, 3LW Was LW/8/1064
		8	J07983	Retaining Tab - Air Inlet Pipe Lining	) Was MA 127
		9	L21150	Setscrew, Cheese Head, 2 B.A. X 1/2" long	) Was 253 SS
		10	E00218	Nut, 2 B.A. X 5/32" X 2 B.A. Hex.	) Was 101 NU
		11	T01512	Air Inlet Pipe and Silencer, with J04623, E05632, J04618, J04619, L21392, L21150, E00218	) Was LW/8/1067
		12	J04623	Stud, 1/4" Wh. X 3/4" long	) Was 314 ST
		13	E05632	Nut, 1/4" Wh. X 1/4" X 3/16" Hex.	) Was 105 NU
		14	J04618	Lining - Air Inlet Pipe	) 4 to 6LW Was LW/8/1071
		15	J04619	Spring - Air Inlet Pipe Lining	) Was LW/8/1072
		8	L21392	Retaining Tab - Air Inlet Pipe Lining	) Was MA 127
		9	L21150	Setscrew, Cheese Head, 2 B.A. X 1/2" long	) Was 253 SS
	10	E00218	Nut, 2 B.A. X 5/32" X 2 B.A. Hex.	) Was 101 NU	
	16	J04932	Air Inlet Pipe Steady Bracket	) 4LW, 5LW & 6LW Cast Iron Engines Was LW/8/1069	
	17	J04620	Air Inlet Pipe Steady Bracket (5LW Aluminium Engines)	Was LW/8/1070	
		K06408	Air Inlet Pipe Steady Bracket (4LW & 6LW Aluminium Engines)	Was LW/8/1134	
	18	K16050	Distance Piece - Air Inlet Manifold	) Was LW/8/1138	
	19	K01776	Stud, 5/16" Wh. X 3.3/16" long	) Was 283 ST	
	3	E03945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex.	) Was 106 NU	
	20	K01604	Air Inlet Pipe Steady Bracket (Cast Iron Engines)	) When Air Starter is fitted 4LW, 5LW Was LW/8/1139	
	21	K01603	Air Inlet Pipe Steady Bracket (Aluminium Engines)	) Was LW/8/1140	

## AIR INLET MANIFOLD

Plate No.	Illus. No.	Part No.	Description		
23	22	H03598	Manifold - Air Inlet - Type B, with K02072, K02073, K00290	2LW	Was LW/8/184
		H01308	Manifold - Air Inlet - Type B, with K02072, K02073, K00290	3LW	Was LW/8/38
		D08679	Manifold - Air Inlet - Type B, with K02072, K02073, K00290	4LW	Was LW/8/39
		D08677	Manifold - Air Inlet - Type B, with K02072, K02073, K00290	5LW	Was LW/8/40
		D08625	Manifold - Air Inlet - Type B, with K02072, K02073, K00290	6LW	Was LW/8/41
	23	K02072	Adapter, 1/8" B.S.P. X 3/8" diam.		Was 103 AD
	24	K02073	Locknut, 1/8" B.S.P. X 1/8" X 1/4" Hex.		Was 203 NU
	25	K00290	Set screw, 1/4" B.S.F. X 1/2" long X 3/16" Hex.		Was 256 SS
	26	J03721	Elbow - Air Inlet - Type B		Was LW/8/42
	27	E07825	Screw - Air Inlet Elbow		Was 198 SS

Plate No.	Illus. No.	Part No.	Description		
23	28	H03475	Manifold - Exhaust - Type 2, with C03789	2LW	Was Part of LW/8/185
		H03474	Manifold - Exhaust - Type 2, with C03789	3LW	Was Part of LW/8/187
		D13003	Manifold - Exhaust - Type 7, with C03789	4LW	Was Part of LW/8/165
		D12987	Manifold - Exhaust - Type 7, with C03789	5LW	Was Part of LW/8/166
		D12741	Manifold - Exhaust - Type 7, with C03789	6LW	Was Part of LW/8/167
	29	C03789	Plug, 1/4" B.S.P. X 3/8" Hex.		Was 103 PL
	30	L20442	Washer, 2.5/16" O.D. X 1.3/4" I.D. X 3/32" thick		-
	31	J05864	Flange - Exhaust Pipe - Rectangular, 2.5/8" O.D. Pipe X 2.3/8" centres X 3.3/8" centres		Was 120 FL
		E03700	Flange - Exhaust Pipe - Rectangular, 2.3/4" O.D. Pipe X 2.3/8" centres X 3.3/8" centres		Was 121 FL
		J06433	Flange - Exhaust Pipe - Rectangular, 3.1/8" O.D. Pipe X 2.3/8" centres X 3.3/8" centres		Was 123 FL
		J64320	Flange - Exhaust Pipe - Rectangular, 2.1/2" B.S.P. X 2.3/8" centres X 3.3/8" centres		Was 188 FL
	32	J64300	Flange - Exhaust Pipe - Square, 2.5/8" O.D. Pipe X 3.1/16" centres		Was 192 FL
		J06663	Flange - Exhaust Pipe - Square, 2.3/4" O.D. Pipe X 3.1/16" centres		Was 191 FL
		J06429	Flange - Exhaust Pipe - Square, 3.1/8" O.D. Pipe X 3.1/16" centres		Was 115 FL
		J85890	Flange - Exhaust Pipe - Square, 3.3/8" O.D. Pipe X 3.1/16" centres		Was 116 FL
		J64280	Flange - Exhaust Pipe - Square, 2.1/2" B.S.P. X 3.1/16" centres		Was 189 FL
		J64270	Flange - Exhaust Pipe - Square, 3" B.S.P. X 3.1/16" centres		Was 190 FL
	33	F02688	Adapter - Exhaust Pipe Flange, 3" B.S.P.	5LW	Was Part of LW/8/1075
		F03308	Adapter - Exhaust Pipe Flange, 3" B.S.P.	6LW	Was Part of LW/8/1076
	34	H03493	Elbow - Exhaust Manifold - Vertical Outlet	2 to 5LW	Was Part of LW/8/1080
		H03996	Elbow - Exhaust Manifold - Vertical Outlet	6LW	Was Part of LW/8/1081
		H03845	Elbow - Exhaust Manifold - Horizontal Outlet	2 to 5LW	Was Part of LW/8/1084
		H03997	Elbow - Exhaust Manifold - Horizontal Outlet	6LW	Was Part of LW/8/1085
	29	C03789	Plug, 1/4" B.S.P. X 3/8" Hex.		Was 103 PL
	35	K05612	Packing - Exhaust Pipe Flange - Rectangular, 2.3/8" centres X 3.3/8" centres		Was LW/8/17
	36	K05611	Packing - Exhaust Pipe Flange - Square, 3.1/16" centres		Was LW/8/175

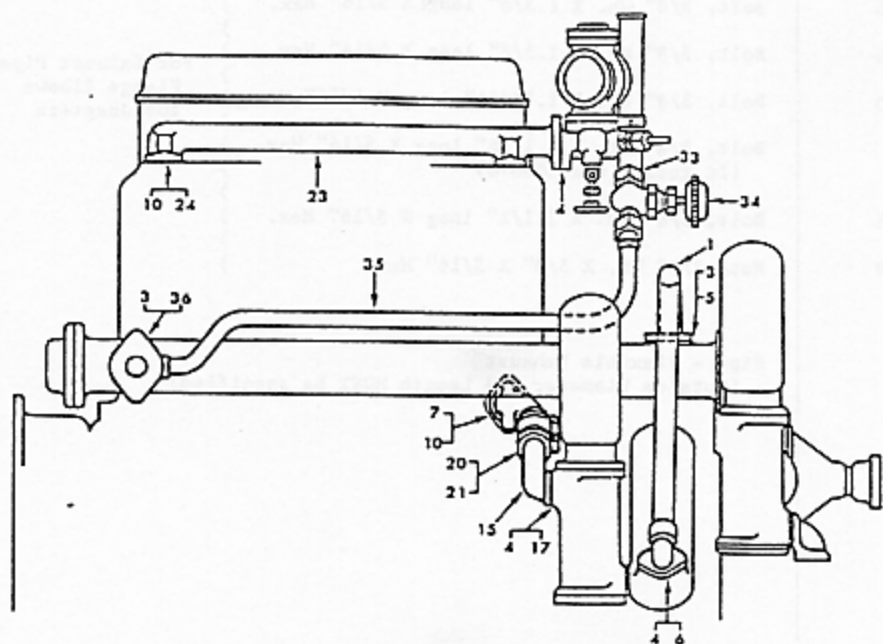
Plate No.	Illus. No.	Part No.	Description	
23	37	E05615	Stud, 3/8" Wh. X 1.5/8" long	Was 145 ST
	38	E05619	Stud, 3/8" Wh. X 1.7/8" long	Was 150 ST
	39	E05471	Bolt, 3/8" Wh. X 1.3/8" long X 5/16" Hex.	Was 119 BL
	40	E08696	Bolt, 3/8" Wh. X 1.5/8" long X 5/16" Hex.	Was 121 BL
	41	C06070	Bolt, 3/8" Wh. X 1.15/16" long X 5/16" Hex.	Was 228 BL
	42	-	Bolt, 3/8" Wh. X 2.1/16" long X 5/16" Hex. (In future use C06070)	Was 214 BL
	43	J01352	Bolt, 3/8" Wh. X 2.1/2" long X 5/16" Hex.	Was 124 BL
	44	C05539	Nut, 3/8" Wh. X 3/8" X 5/16" Hex.	Was 110 NU
	45	-	Pipe - Flexible Exhaust (Outside Diameter and Length MUST be specified)	Was 150 PF

For Exhaust Pipe  
Flange Elbows  
and Adapters

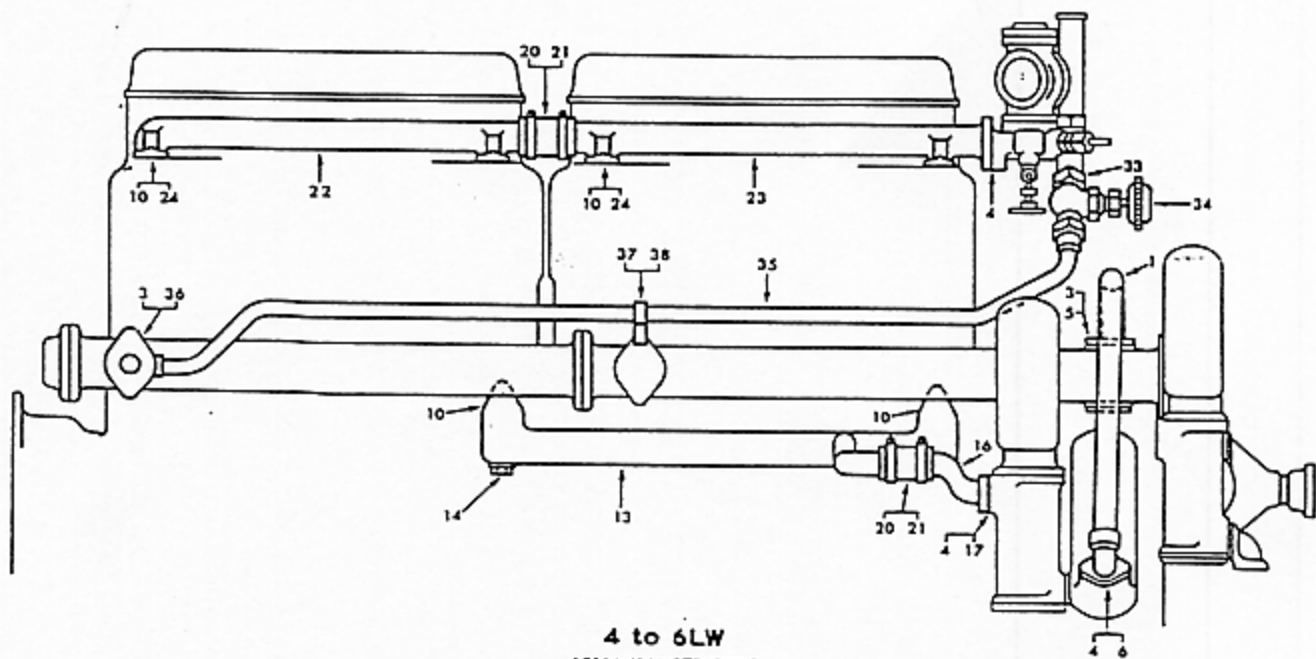


GARDNER

PIPEWORK — WATER — PLATE 24



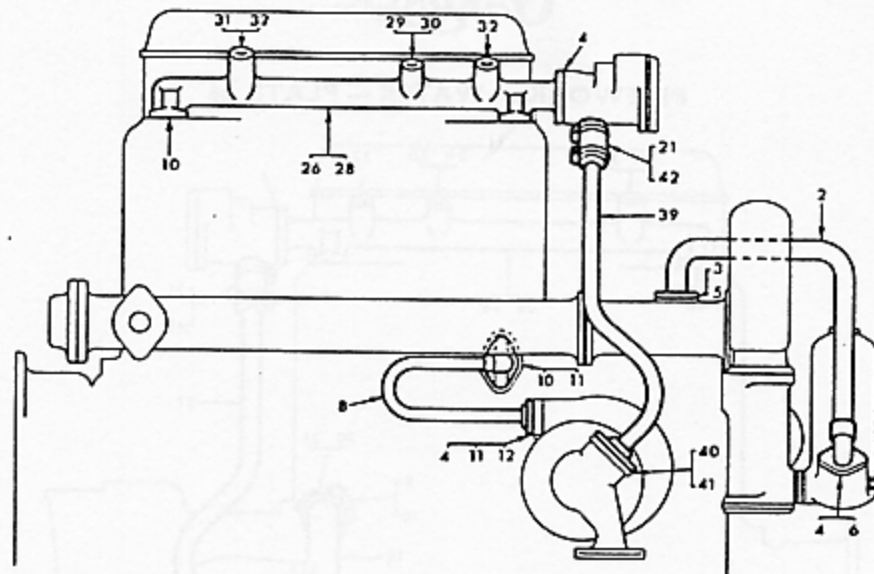
2LW, 3LW  
(3LW ILLUSTRATED)



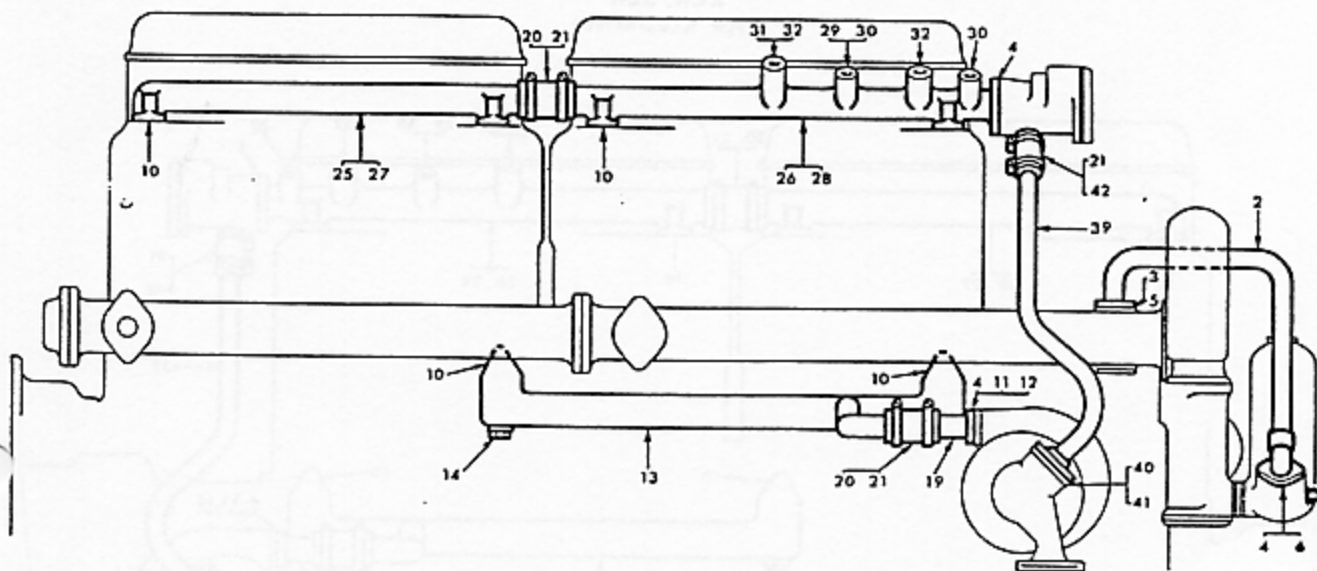
4 to 6LW  
(6LW ILLUSTRATED)

THIS ARRANGEMENT IS TO SUIT ENGINES WITH RAM TYPE ENGINE  
WATER CIRCULATING PUMP, WATER FLOW INDICATOR AND  
MANUAL TEMPERATURE CONTROL

## PIPEWORK — WATER — PLATE 25



2LW, 3LW  
(3LW ILLUSTRATED)

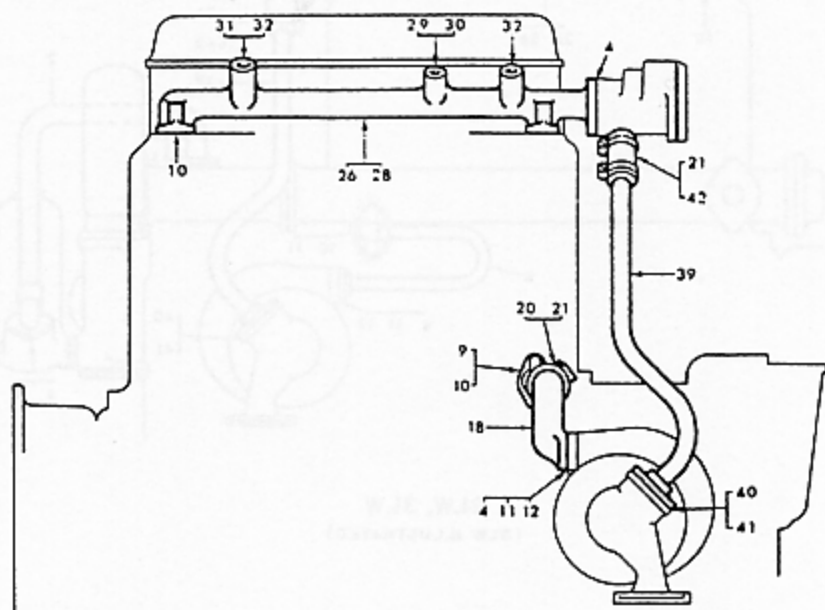


4 to 6LW  
(6LW ILLUSTRATED)

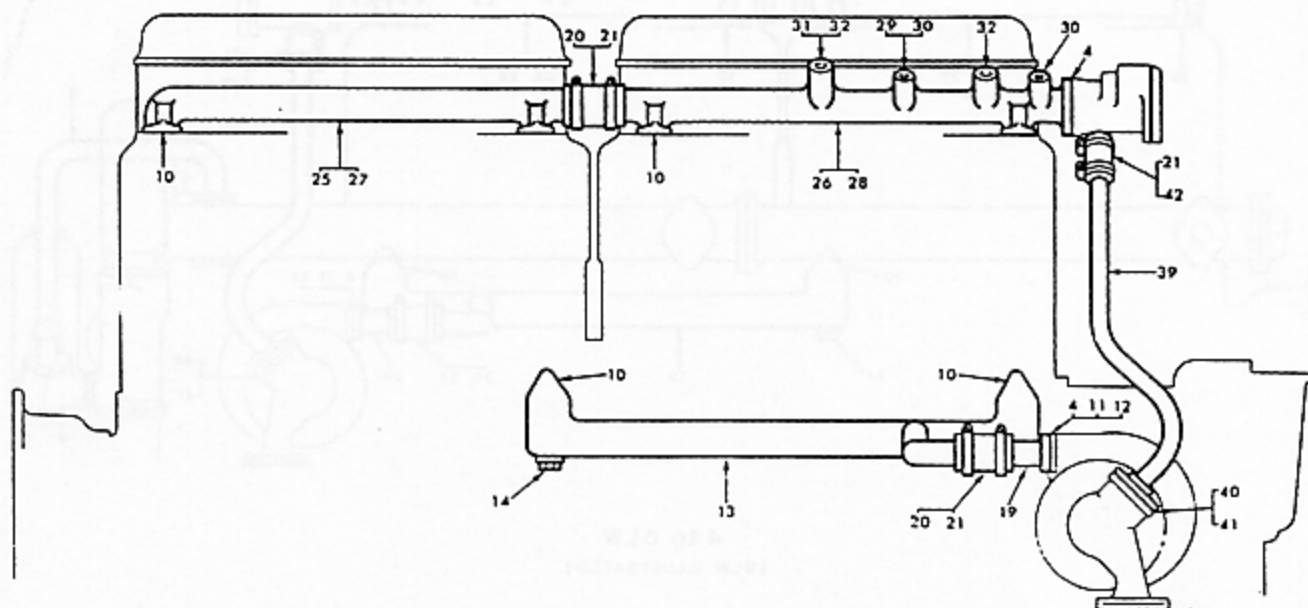
THIS ARRANGEMENT IS TO SUIT ENGINES WITH CENTRIFUGAL TYPE ENGINE  
WATER CIRCULATING PUMP, ENGINE MOUNTED LUBRICATING OIL COOLER,  
OIL COOLER WATER PUMP AND AUTOMATIC TEMPERATURE CONTROL

# GARDNER

## PIPEWORK — WATER — PLATE 26



2LW, 3LW  
(3LW ILLUSTRATED)



4 to 6LW  
(6LW ILLUSTRATED)

THIS ARRANGEMENT IS TO SUIT ENGINES WITH CENTRIFUGAL TYPE  
ENGINE WATER CIRCULATING PUMP AND AUTOMATIC  
TEMPERATURE CONTROL

Plate No.	Illus. No.	Part No.	Description	
24	1	T02045	Pipe - Oil Cooler Outlet to Engine ) To suit Engines with Water Pump Suction ) Ram Type Water Pump	Was Part of LW/8/1001
25	2	T02355	Pipe - Oil Cooler Outlet to Oil ) To suit Engines with Cooler Water Pump ) Centrifugal Type Water Pump	Was Part of LW/8/1096
24,25	3	E05622	Packing, Flange, 2.5/8" centres X 2.1/2" wide	Was 137 PA
	4	C08905	Packing, Flange, 2" centres X 1.5/8" wide	Was 129 PA
	5	K02359	Setscrew, 3/8" Wh. X 7/8" long X 5/16" Hex.	Was 282 SS
	6	J06515	Setscrew, 5/16" Wh. X 1" long X 1/4" Hex.	Was 275 SS
24	7	J64050	Connection - Cylinder Water Inlet ( To suit Engines with ) ( Ram Type Water Pump )	Was Part of LW/8/1004
25	8	T02087	(To suit Engines with Centrifugal ) Pipe - Water Inlet ( Type Water Pump and Engine ) ( Mounted Lubricating Oil Cooler )	Was LW/8/1097 2LW, 3LW
26	9	K00853	Connection - Cylinder Water Inlet - ) To suit Engines with ) Type 60, Cast Iron ) Centrifugal Type Water ) ) Pump and without )	Was Part of LW/8/272
		E75190	Connection - Cylinder Water Inlet - ) Engine Mounted ) Type 60, Aluminium ) Lubricating Oil Cooler )	Was Part of LW/8/45
24,25 26	10	J03009	Packing, Flange, 1.5/8" centres X 1.3/4" wide	Was 107 PA
	4	C08905	Packing, Flange, 2" centres X 1.5/8" wide	Was 129 PA
25,26	11	J03032	Bolt, 5/16" Wh. X 1.3/8" long X 1/4" Hex.	Was 112 BL
	12	E03945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex.	Was 106 NU
24,25 26	13	F04697	Pipe - Cylinder Water Inlet	Was Part of LW/8/303
		F04696	Pipe - Cylinder Water Inlet	Was Part of LW/8/304
	14	J09392	Plug, 1/4" B.S.P. X 3/8" Hex.	Was 102 PL
	10	J03009	Packing, Flange, 1.5/8" centres X 1.3/4" wide	Was 107 PA
24	15	J64060	Connection - Water Pump Delivery ) ) To suit 2LW,3LW ) Engines )	Was Part of LW/8/1002
	16	J63220	Connection - Water Pump Delivery ) with 4 to 6LW ) Ram Type ) ) Water Pump )	Was Part of LW/8/1003
	17	J03497	Setscrew, 5/16" Wh. X 7/8" long X 1/4" Hex. )	Was 272 SS
26	18	K00852	Connection - Water Pump Delivery - ) To suit Engines with ) Type 14, Cast Iron ) Centrifugal Type Water ) ) Pump and without ) 2LW, ) Engine Mounted ) 3LW	Was Part of LW/8/274
		E75180	Connection - Water Pump Delivery - ) Type 14, Aluminium ) Lubricating Oil Cooler )	Was Part of LW/8/46
25,26	19	J43320	Connection - Water Pump Delivery - ( To suit Engines Type 11 ( with Centrifugal Type ( Water Pump	Was Part of LW/8/1098

Plate No.	Illus. No.	Part No.	Description	
24, 25, 26	4	C08905	Packing, Flange, 2" centres X 1.5/8" wide	Was 129 PA
	20	E05253	Hose, 1.1/8" bore X 1.5/8" O.D. X 2.1/4" long	Was 103 HO
	21	L21605	Hose Clip	Was 102 CL
25, 26	11	J03032	Bolt, 5/16" Wh. X 1.3/8" long X 1/4" Hex.	Was 112 BL
	12	E03945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex.	Was 106 NU
24	22	A00430	Pipe - Water Outlet - Plain End - 2 Block, with J03009, J05194/03	) ) 4LM Was LW/8/1026 ) ) 5LM Was LW/8/1027 ) ) 6LM Was LW/8/1028
		A00431	Pipe - Water Outlet - Plain End - 2 Block, with J03009, J05194/04	
		A00432	Pipe - Water Outlet - Plain End - 3 Block, with J03009, J05194/04	
	23	A00428	Pipe - Water Outlet - Flanged End - 2 Block, with J03009, C08905, J05194/03	
		A00429	Pipe - Water Outlet - Flanged End - 3 Block, with J03009, C08905, J05194/06	) ) 3LM Was LW/8/1025
		A00433	Pipe - Water Outlet - Flanged End - 2 Block, with J03009, C08905, J05194/03	) ) 4LM Was LW/8/1029
		A00434	Pipe - Water Outlet - Flanged End - 3 Block, with J03009, C08905, J05194/04	) ) 5LM, 6LM Was LW/8/1030
	24	J05194/03	Choke - Water Outlet Pipe, 7/32" bore	) ) 2LM, 4LM Was NA 327 ) ) 3LM Was NA 330 ) ) 5LM, 6LM Was NA 328
		J05194/06	Choke - Water Outlet Pipe, 5/16" bore	
		J05194/04	Choke - Water Outlet Pipe, 17/64" bore	
25, 26	25	F02225	Pipe - Water Outlet - Plain End - 2 Block	) ) 4LM, 5LM Was Part of LW/8/1103 ) ) 6LM Was Part of LW/8/1104
		F02226	Pipe - Water Outlet - Plain End - 3 Block	
	26	F06774	Pipe - Water Outlet - Flanged End - 2 Block, with K07340, E09882, K07281, K00803	) ) 2LM Was Part of LW/8/1129 ) ) 3LM Was Part of LW/8/1130 ) ) 4LM Was Part of LW/8/1131 ) ) 5LM, 6LM Was Part of LW/8/1132 ) ) 4LM Was Part of LW/8/1136 ) ) 5LM, 6LM Was LW/8/1141
		F06775	Pipe - Water Outlet - Flanged End - 3 Block, with K07340, E09882, K07281, K00803	
		F06776	Pipe - Water Outlet - Flanged End - 2 Block, with K07340, E09882, K07281, K00803	
		F06777	Pipe - Water Outlet - Flanged End - 3 Block, with K07340, E09882, K07182, K00803	
		F06795	Pipe - Water Outlet - Flanged End - 2 Block, with K00803, K07340, E09882, K07281, K00803	
			Pipe - Water Outlet - Flanged End - 3 Block (NOT NOW AVAILABLE - Use F06777)	) ) Boss ) ) Reduced to clear ) ) Air Inlet ) ) Elbow

To suit Engines with Ron Type Water Pump

Pipes with Inclined Bosses

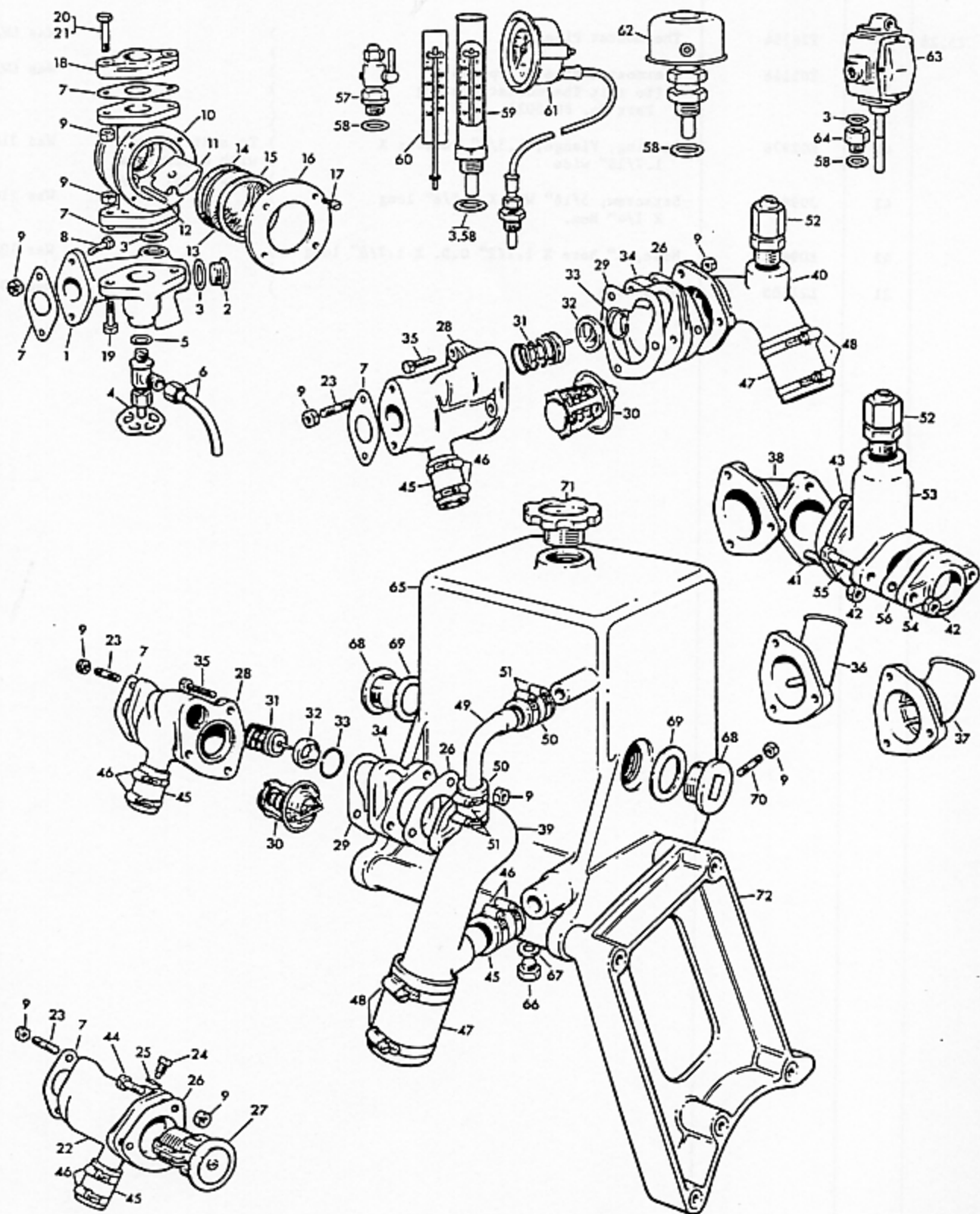
To suit Engines with Centrifugal Type Water Pump



Plate No.	Illus. No.	Part No.	Description		
24	37	K00834	Setscrew, 3/8" Wh. X 3/4" long X 5/16" long	) To suit Engines ) with Ram Type ) Water Pump	Was 120 SS
	38	K02517	Pipe Clip, 5/8" O.D. Pipe		Was MA 567
25, 26	39	T26794	Thermostat Pipe	)	Was LU/8/1106
		T02168	Thermostat Pipe - Type 33 (To suit Thermostat Housing Part No. F06502)		)
	40	K02976	Packing, Flange, 1.3/4" centres X 1.7/16" wide	) To suit Engines ) with Centrifugal ) Type Water Pump	Was 214 PA
	41	J09902	Setscrew, 5/16" Wh. X 1.1/8" long X 1/4" Hex.		Was 214 SS
	42	E09463	Hose, 1" Bore X 1.1/2" O.D. X 1.7/8" long	)	Was 102 HO
	21	L21605	Hose Clip	)	Was 102 CL

# GARDNER

## TEMPERATURE CONTROL, THERMOSTAT AND WATER HEADER TANK — PLATE 27





**TEMPERATURE CONTROL, THERMOSTAT  
AND WATER HEADER TANK**

Plate No.	Illus. No.	Part No.	Description	
27	1	A00879	Connection - Water Flow Indicator and Thermometer, with K00983, K00803, E01034, C08905	Was LW/8/1034
	2	K00983	Plug, 1/2" B.S.P. X 5/8" Hex.	Was 121 PL
	3	K00803	Packing, Circular, 1.1/16" O.D. X 25/32" I.D. X 1/32"	Was 154 PA
	4	S02591	Needle Valve, "M" 1/4" B.S.P.	Was Part of MA 652
	5	E01034	Packing, Circular, 7/8" O.D. X 1/2" I.D. X 1/16"	Was 181 PA
	6	T01890	Drip Pipe	Was MA 653
	7	C08905	Packing, Flange, 2" centres X 1.5/8" wide	Was 129 PA
	8	E05205	Bolt, 5/16" Wh. X 1.1/8" long X 1/4" Hex.	Was 109 BL
	9	E03945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex.	Was 106 NU
-		T01264	WATER FLOW INDICATOR ASSEMBLY, Comprising Body, Flap, Pin, Windows, Plates, Setscrews and Packings	) 2LW Was MA 1024
-		T01262	WATER FLOW INDICATOR ASSEMBLY, Comprising Body, Flap, Pin, Windows, Plates, Setscrews and Packings	) 3 to 6LW Was MA 647
10	-		Water Flow Indicator Body ( Not supplied as a separate item, specify T01264 or T01262	Was MA 648
11	J07238		Water Flow Indicator Flap	2LW Was MA 1025
	J05611		Water Flow Indicator Flap	3 to 6LW Was MA 649
12	J05612		Pin - Water Flow Indicator Flap	Was MA 650
13	J05613		Window - Water Flow Indicator	Was Part of MA 573
14	J05614		Packing, Circular, 2.3/32" O.D. X 1.3/4" I.D. X 1/16" )	Water Flow Indicator Was 210 PA
15	J05615		Packing, Circular, 2.1/8" O.D. X 1.3/4" I.D. X 1/32" )	Window Was 211 PA
16	J56100		Plate - Water Flow Indicator Window Retaining	Was MA 651
17	L21182		Setscrew, Cheese Head, 2 B.A. X 1/2" long	Was 271 SS
18	C88990		Flange, Oval, 2" centres X 1" bore	Was 110 FL
	K02373		Flange, Oval, 2" centres X 1" B.S.P.	Was 242 FL
19	E01377		Bolt, 5/16" Wh. X 1.1/4" long X 1/4" Hex.	Was 110 BL
20	J03032		Bolt, 5/16" Wh. X 1.3/8" long X 1/4" Hex.	Was 112 BL
21	E09612		Bolt, 5/16" Wh. X 1.3/4" long X 1/4" Hex.	Was 287 BL
9	E03945		Nut, 5/16" Wh. X 5/16" X 1/4" Hex.	Was 106 NU
7	C08905		Packing, Flange, 2" centres X 1.5/8" wide	Was 129 PA
22	-		Thermostat Unit Housing (Superseded, will be replaced by T00567, T02168)	) Was MA 315
23	E05614		Stud, 5/16" Wh. X 1.7/16" long X 1/4" Hex.	) To suit Engines with Centrifugal Type Water Pump Was 116 ST
9	E03945		Nut, 5/16" Wh. X 5/16" X 1/4" Hex.	) Was 106 NU
24	E09464		Screw - Thermostat Unit Locating	) Was 133 SS

**TEMPERATURE CONTROL, THERMOSTAT  
AND WATER HEADER TANK**

Plate No.	Illus. No.	Part No.	Description	
27	25	E09465	Packing, Circular, 3/8" O.D. X 7/32" I.D. X 1/16"	) Was 141 PA
	26	E09603	Packing - Thermostat Water Outlet Connection	) Was MA 316
	7	C08905	Packing, Flange, 2" centres X 1.5/8" wide	) Was 129 PA
	27	-	Thermostat "Drop-in" Unit - Type 59 (Superseded, will be replaced by T00567, T02165)	) Was MA 811
	-	T00567	THERMOSTAT ASSEMBLY, Comprising Housing, Units (Primary and Secondary), Retaining Piece and Ring, Cover, Studs, Nuts, Setscrews, Packings, Hose and Clips	) Compares with MA 1057(60)
	28	F06502	Thermostat Units Housing	) Was Part of MA 1067
	23	E05614	Stud, 5/16" Wh. X 1.7/16" long	) Was 116 ST
	9	E03945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex.	) Was 106 NU
	7	C08905	Packing, Flange, 2" centres X 1.5/8" wide	) Was 129 PA
	29	K05173	Packing - Thermostat Units Housing Cover	) Was MA 1078
	30	S05939/01	Thermostat Unit - Type 60 (Primary) (Superseded, will be replaced by L22740)	) Was MA 1488
		L22740	Thermostat Unit - Type 60 (Primary)	) -
	31	S05518	Thermostat Unit (Secondary)	) Was MA 1081
	32	K05473	Retaining Piece (Secondary Unit)	) Was MA 1083
	33	K05172	Retaining Ring	) Was 107 RR
	34	K54710	Thermostat Units Housing Cover	) Was Part of MA 1085
	29	K05173	Packing - Thermostat Units Housing Cover	) Was MA 1078
	26	E09603	Packing - Thermostat Water Outlet Connection	) Was MA 316
	35	K00594	Setscrew, 5/16" Wh. X 1.3/4" long X 1/4" Hex.	) Was 118 SS
	9	E03945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex.	) Was 106 NU
	36	K02342	Connection - Thermostat Water Outlet - Type 15	) Was Part of LW/8/363
		J51020	Connection - Thermostat Water Outlet - Type 15, Aluminium	) Was Part of LW/8/116
	37	K02352	Connection - Thermostat Water Outlet - Type 29, Cast Iron	) Was Part of LW/8/341
		J54860	Connection - Thermostat Water Outlet - Type 29, Aluminium	) Was Part of MA 1108
	38	K28470	Connection - Thermostat Water Outlet - Type 62	) Was Part of MA 1101
	39	F05436	Connection - Thermostat Water Outlet - Type 63	) Was Part of LW/8/1110
	40	-	Connection - Thermostat Water Outlet - Type 71 (Superseded, will be replaced by F05437, E09463, L21605, E09529, L21607, J05012, L21603)	) Was LW/8/1137
		F05437	Connection - Thermostat Water Outlet - Type 64	) Was Part of LX/8/4022

To suit Engines with Centrifugal Type Water Pump

**TEMPERATURE CONTROL, THERMOSTAT  
AND WATER HEADER TANK**

Plate No.	Illus. No.	Part No.	Description	
27	41	ED5615	Stud, 3/8" Wh. X 1.5/8" long	) For K28470
	42	CO5539	Nut, 3/8" Wh. X 3/8" X 5/16" Hex.	
	43	EO6522	Packing, Flange, 2.5/8" centres X 2.1/2" wide	
	26	EO9603	Packing - Thermostat Water Outlet Connection	
	44	EO4106	Bolt, 5/16" Wh. X 1" long X 1/4" Hex.	
	9	EO3945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex.	
	45	EO9463	Hose, 1" Bore X 1.1/2" O.D. X 1.7/8" long	
	46	L21605	Hose Clip	
	47	J02027	Hose, 1.1/2" Bore X 2" O.D. X 2.3/4" long	) For F05436
	48	L21607	Hose Clip	
	49	K36540	Pipe - Air Vent	
	50	J05012	Hose, 5/8" Bore X 1" O.D. X 1.7/16" long	
	51	L21603	Hose Clip	
	47	J02027	Hose, 1.1/2" Bore X 2" O.D. X 2.3/4" long	) For Superseded Part Number LW/8/1137
	48	L21607	Hose Clip	
-	-	K07281	Plug, 3/8" Hex. Socket, 1/2" B.S.P.	) For F05437
-	-	X00803	Packing, Circular, 1.1/16" O.D. X 25/32" I.D. X 1/32"	
-	-	EO9463	Hose, 1" Bore X 1.1/2" O.D. X 1.7/8" long	
-	-	L21605	Hose Clip	
-	-	EO9629	Hose, 1.5/8" Bore X 2.1/8" O.D. X 2.3/4" long	
-	-	L21607	Hose Clip	
-	-	K36540	Pipe - Air Vent	
-	-	J05012	Hose, 5/8" Bore X 1" O.D. X 1.7/16" long	
-	-	L21603	Hose Clip	
27	52	S05463/04	C.J. Union, "M" 3/4" B.S.P. X 5/8" O.D. Pipe	
	53	K28360	Air Separating Vessel	
	54	K20620	Flange, Oval, 3.1/8" centres X 1.1/2" bore	
	55	EO5471	Bolt, 3/8" Wh. X 1.3/8" long X 5/16" Hex.	
	42	CO5539	Nut, 3/8" Wh. X 3/8" X 5/16" Hex.	
	52	S05463/04	C.J. Union, "M" 3/4" B.S.P. X 5/8" O.D. Pipe	
	43	EO6522	Packing, Flange, 2.5/8" centres X 2.1/2" wide	
	56	CO6547	Packing, Flange, 3.1/5" centres X 3" wide	
	57	L20981	Air Vent Cock, "M" 3/8" B.S.P.	

To suit Engines with Centrifugal Type Water Pump

TEMPERATURE CONTROL, THERMOSTAT  
AND WATER HEADER TANK

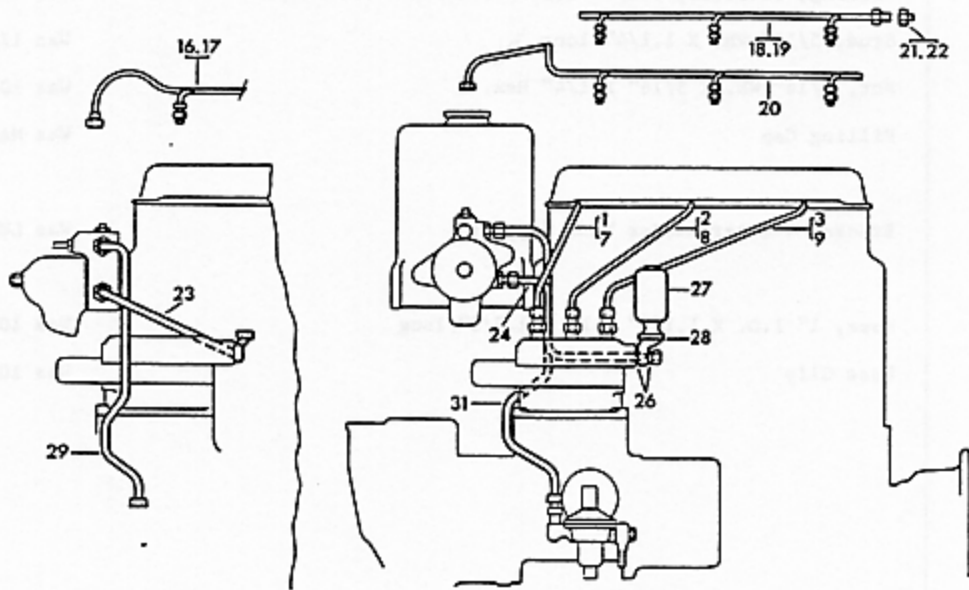
Plate No.	Illus. No.	Part No.	Description	
27	58	E09882	Packing, Circular, 7/8" O.D. X 5/8" I.D. X 1/32"	Was 151 PA
	59	-	Thermometer - Water Cooling - Pillar Type - 3/8" B.S.P., with E09882 (Superseded, will be replaced by S05390, K05275, E09882)	Was MA 783
	-	-	Thermometer - Water Cooling - Pillar Type - 1/2" B.S.P., with K00803 (Superseded, will be replaced by S05390, K00803)	Was MA 782
	-	S05390	Thermometer - Pillar Type - Dual Reading (FAH/CEN), 1/2" B.S.P.	Was Part of MA 1449
	58	E09882	Packing, Circular, 7/8" O.D. X 5/8" I.D. X 1/32"	Was 151 PA
	3	K00803	Packing, Circular, 1.1/16" O.D. X 25/32" I.D. X 1/32"	Was 154 PA
	61	-	Thermometer - Water Cooling - 1/2" B.S.P. (Superseded, will be replaced by appropriate S05884, with K08065, E09882)	Was MA 905
	-	-	Thermometer - Water Cooling - 3/8" B.S.P. (Superseded, will be replaced by appropriate S05884, with K08064)	Was MA 995
-	-	S05884/01	Temperature Gauge (Capillary Tube Length 6' - 0")	Was MA 1445  (52 mm diameter) When replacing a larger diameter gauge, also order Adapting Ring K08126 and Adapter K08064 or K08065
-	-	S05884/02	Temperature Gauge (Capillary Tube Length 10' - 0")	
-	-	S05884/03	Temperature Gauge (Capillary Tube Length 15' - 0")	
-	-	S05884/04	Temperature Gauge (Capillary Tube Length 20' - 0")	
-	-	S05884/05	Temperature Gauge (Capillary Tube Length 25' - 0")	
-	-	S05884/06	Temperature Gauge (Capillary Tube Length 30' - 0")	
-	-	S05884/07	Temperature Gauge (Capillary Tube Length 40' - 0")	
-	-	S05884/08	Temperature Gauge (Capillary Tube Length 45' - 0")	
-	-	K08064	Adapter, 3/8" B.S.P. "M" X 5/8" U.N.F. "F"	
-	-	K08065	Adapter, 1/2" B.S.P. "M" X 5/8" U.N.F. "F"	Was 149 AD
-	-	K08126	Adapter Ring, 2.5/8" O.D. X 2.1/16" I.D. X 1/32"	Was 223 WA
62	-	-	Warning Switch - Water Temperature (Engine Serial Number MUST be quoted when ordering)	Was MA 702
58	E09882	-	Packing, Circular, 7/8" O.D. X 5/8" I.D. X 1/32"	Was 151 PA
63	-	-	Thermal and Pressure Switch (Engine Serial Number MUST be quoted when ordering)	Was MA 1013
3	K00603	-	Packing, Circular, 1.1/16" O.D. X 25/32" I.D. X 1/32"	Was 154 PA
64	K05275	-	Adapter, 1/2" B.S.P. "F" X 3/8" B.S.P. "M"	Was 121 AD
58	E09882	-	Packing, Circular, 7/8" O.D. X 5/8" I.D. X 1/32"	Was 151 PA
65	T02982	-	WATER HEADER TANK - ENGINE MOUNTED, with C03789, K00801, E98890, C06316, A04005, E09463, L21605	Was LH/8/1107
66	C03789	-	Plug, 1/4" B.S.P. X 3/8" Hex.	Was 103 PL
67	K00801	-	Packing, Circular, 11/16" O.D. X 1/2" I.D. X 1/16"	Was 146 PA
68	E98890	-	Plug, Sq. Hole, 1.3/8" - 16 Thds.	Was 113 PL

TEMPERATURE CONTROL, THERMOSTAT  
AND WATER HEADER TANK

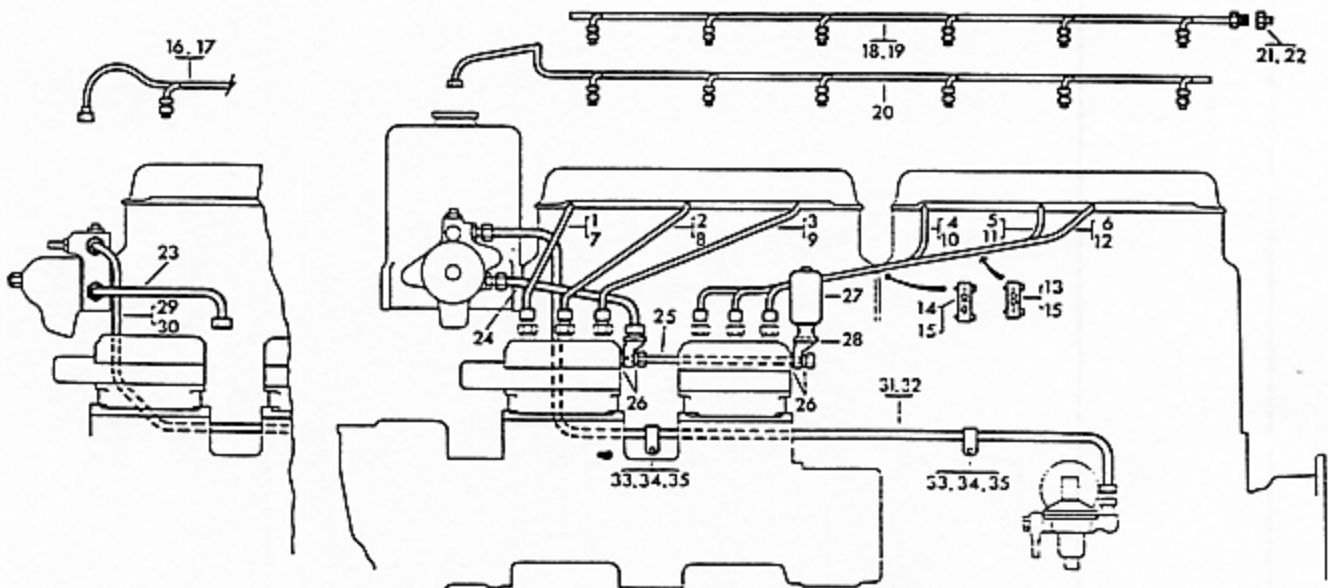
Plate No.	Illus. No.	Part No.	Description	
27	69	C06316	Packing, Circular, 1.3/4" O.D. X 1.11/32" I.D. X 1/32"	Was 164 PA
	70	C06723	Stud, 5/16" Wh. X 1.1/4" long	Was 126 ST
	9	E03945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex.	Was 106 NU
	71	A04005	Filling Cap	Was MA 790
	72	D14555	Bracket - Water Header Tank Support	Was LW/8/1109
-	-	E09463	Hose, 1" I.D. X 1.1/2" O.D. X 1.7/8" long	Was 102 HO
-	-	L21605	Hose Clip	Was 102 CL

# GARDNER

## PIPEWORK — FUEL — PLATE 28



**2LW, 3LW**  
(3LW ILLUSTRATED)



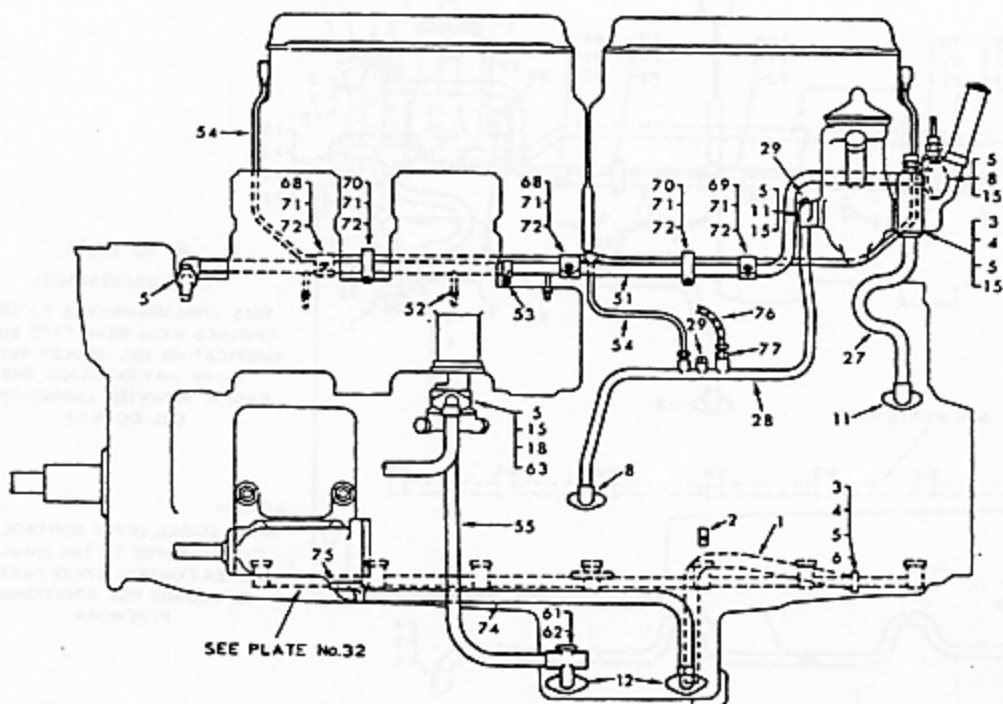
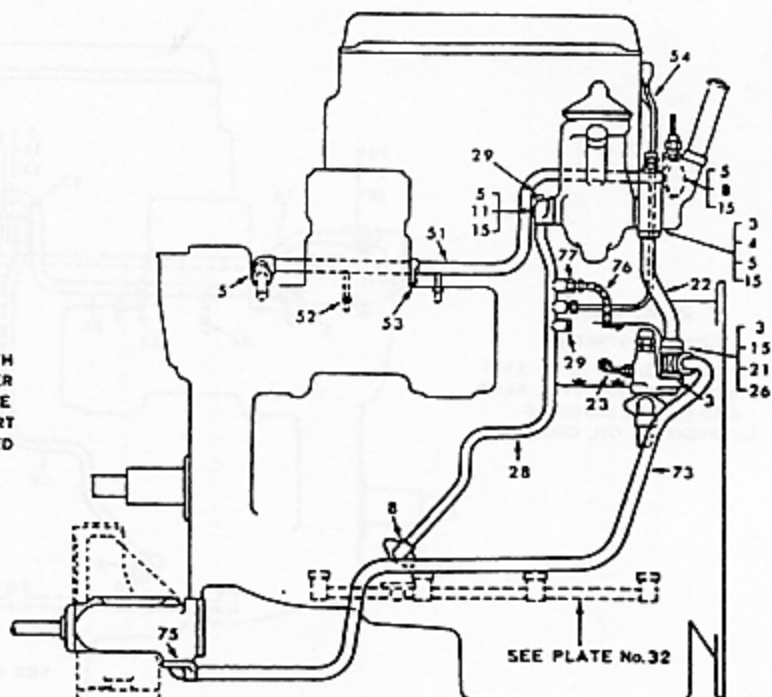
**4 to 6 LW**  
(6LW ILLUSTRATED)

## PIPEWORK — LUBRICATION — PLATE 29

### 2LW, 3LW

(3LW ILLUSTRATED)

THIS ARRANGEMENT IS TO SUIT ENGINES WITH REAR TYPE SUMP, LUBRICATING OIL COOLER RELIEF VALVE ON CRANKCASE, INTERMEDIATE LUBRICATING OIL FILTER ON ENGINE SUPPORT STAND AND REMOTE OR RADIATOR MOUNTED LUBRICATING OIL COOLER



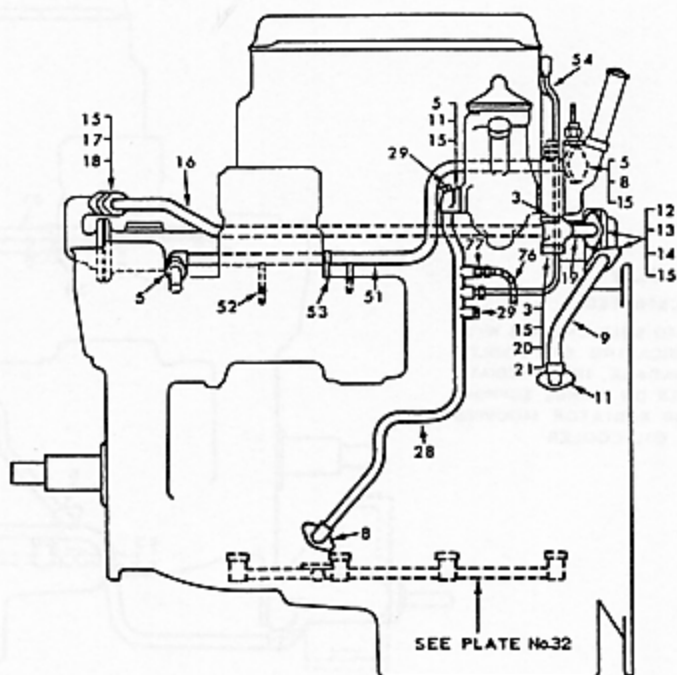
### 4 to 6LW

(6LW ILLUSTRATED)

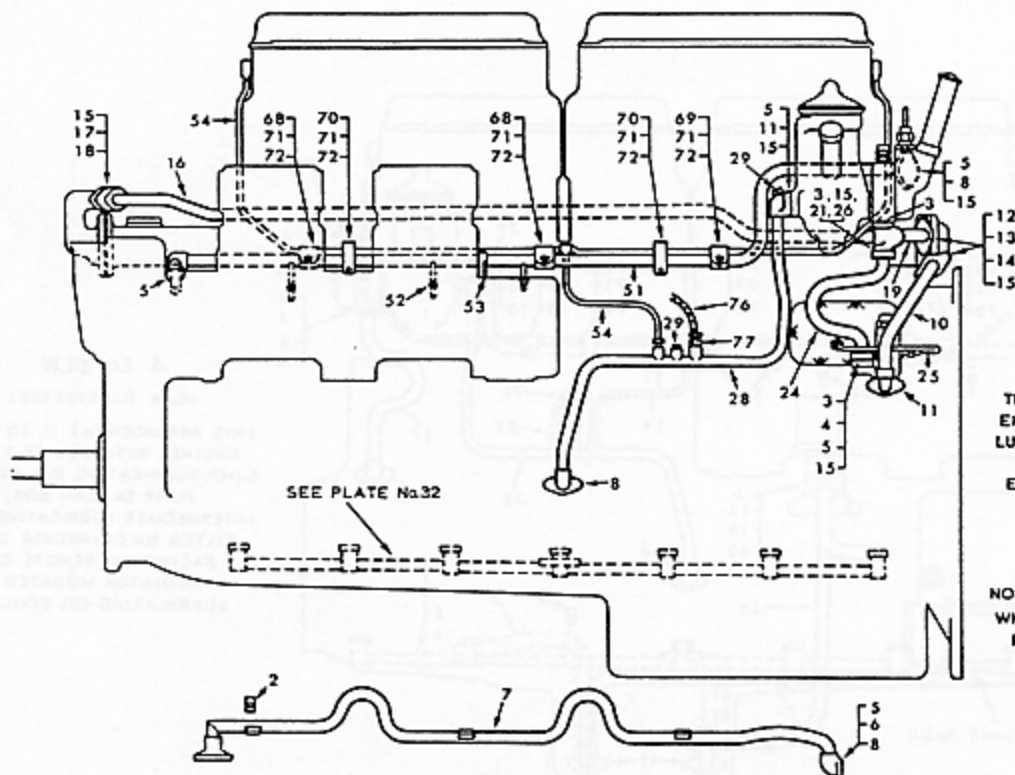
THIS ARRANGEMENT IS TO SUIT ENGINES WITH CENTRE TYPE SUMP, LUBRICATING OIL COOLER PUMP ON CAM BOX, INTERMEDIATE LUBRICATING OIL FILTER ON CRANKCASE SIDE FACING AND REMOTE OR RADIATOR MOUNTED LUBRICATING OIL COOLER

## PIPEWORK — LUBRICATION — PLATE 30

**2LW, 3LW**  
(3LW ILLUSTRATED)  
THIS ARRANGEMENT IS TO SUIT  
ENGINES WITH REAR TYPE SUMP  
AND ENGINE MOUNTED  
LUBRICATING OIL COOLER



TO SUIT ENGINES WITHOUT  
LUBRICATING OIL COOLER



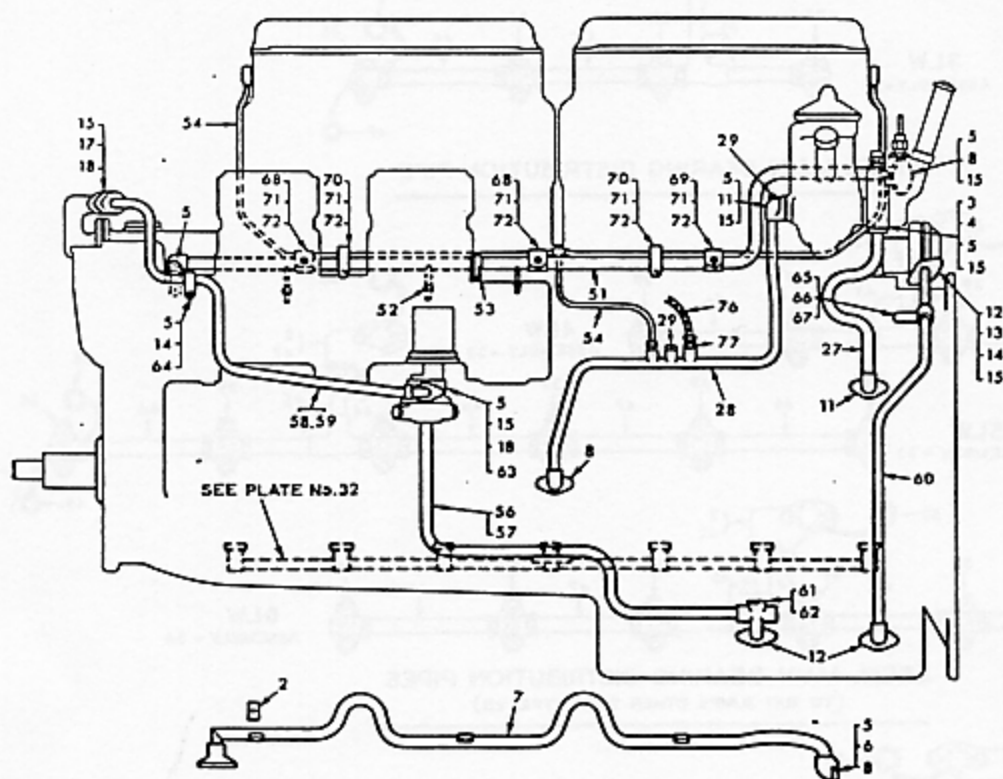
**4 to 6LW**  
(6LW ILLUSTRATED)  
THIS ARRANGEMENT IS TO SUIT  
ENGINES WITH REAR TYPE SUMP,  
LUBRICATING OIL COOLER RELIEF  
VALVE ON CRANKCASE AND  
ENGINE MOUNTED LUBRICATING  
OIL COOLER

NOTE :-  
WHEN SINGLE LEVER CONTROL IS  
FITTED, REFER TO THE SINGLE  
LEVER CONTROL SPARE PARTS  
CATALOGUE FOR ADDITIONAL  
PIPEWORK



# GARDNER

## PIPEWORK — LUBRICATION — PLATE 31

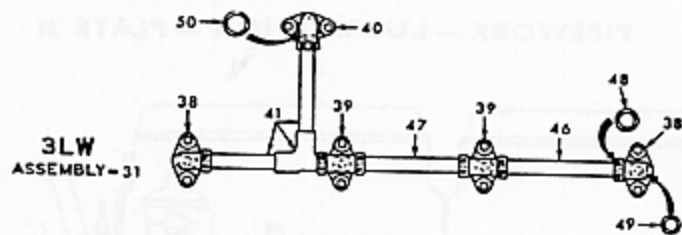


4 to 6LW  
(6LW ILLUSTRATED)

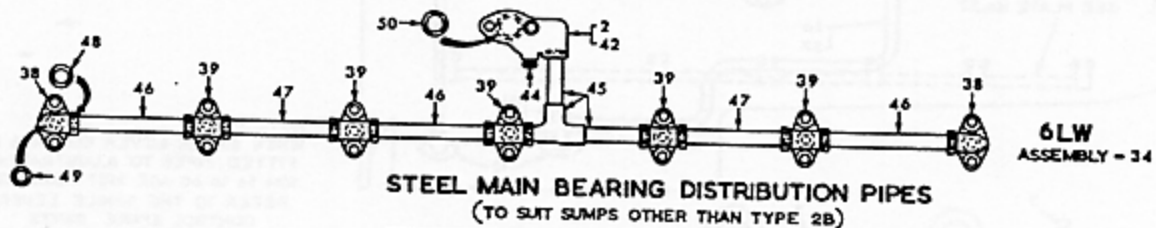
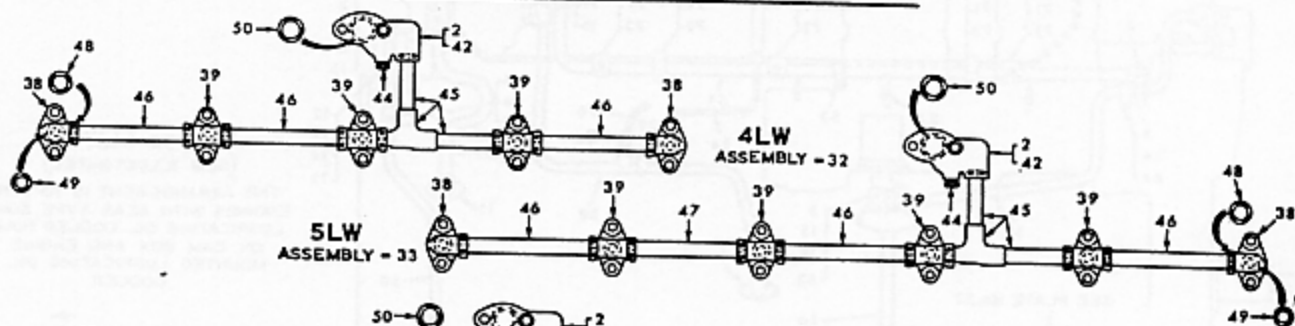
THIS ARRANGEMENT IS TO SUIT  
ENGINES WITH REAR TYPE SUMP,  
LUBRICATING OIL COOLER PUMP  
ON CAM BOX AND ENGINE  
MOUNTED LUBRICATING OIL  
COOLER

NOTE:-  
WHEN SINGLE LEVER CONTROL IS  
FITTED, PIPES TO ILLUSTRATION  
Nos. 56 to 60 ARE NOT REQUIRED.  
REFER TO THE SINGLE LEVER  
CONTROL SPARE PARTS  
CATALOGUE FOR ADDITIONAL  
PIPEWORK

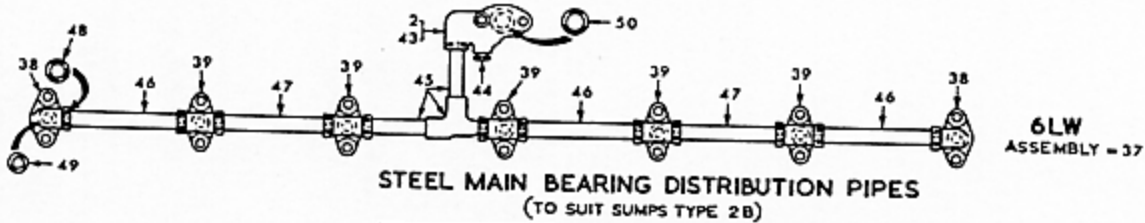
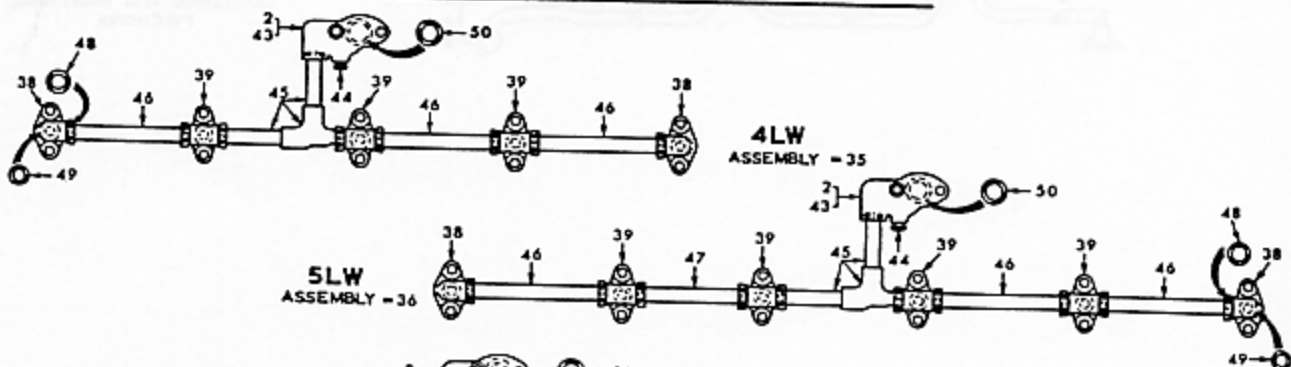
## PIPEWORK — LUBRICATION — PLATE 32



STEEL MAIN BEARING DISTRIBUTION PIPE



STEEL MAIN BEARING DISTRIBUTION PIPES  
(TO SUIT SUMPS OTHER THAN TYPE 2B)



STEEL MAIN BEARING DISTRIBUTION PIPES  
(TO SUIT SUMPS TYPE 2B)

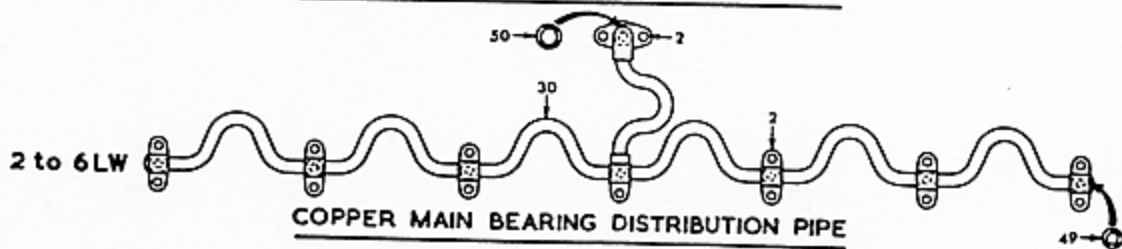




Plate No.	Illus. No.	Part No.	Description			
28	18	T10434	Sprayer Overflow Pipe )	) )	2LW Was LM/9/1068	
		T10435	Sprayer Overflow Pipe )		3LW Was LM/9/1069	
		T10436	Sprayer Overflow Pipe )		) To suit Engines with Chain Starting	4LW Was LM/9/1070
		T10437	Sprayer Overflow Pipe )			5LW Was LM/9/1071
		T10438	Sprayer Overflow Pipe )		) To suit Engines without Fuel Lift Pump	6LW Was LM/9/1072
19		T01681	Sprayer Overflow Pipe )	) )	2LW Was LM/9/182	
		T01682	Sprayer Overflow Pipe )		3LW Was LM/9/149	
		T01683	Sprayer Overflow Pipe )		) To suit Engines without Chain Starting	4LW Was LM/9/150
		T01684	Sprayer Overflow Pipe )			5LW Was LM/9/151
		T01685	Sprayer Overflow Pipe )		6LW Was LM/9/152	
20		T01670	Sprayer Overflow Pipe )	) )	2LW Was LM/9/1129	
		T01671	Sprayer Overflow Pipe )		) To suit Engines with Fuel Lift Pump	3LW Was LM/9/1130
		T01672	Sprayer Overflow Pipe )			4LW Was LM/9/1131
		T01673	Sprayer Overflow Pipe )		) Fuel Filter on Engine Mounted Water Header Tank	5LW Was LM/9/1132
		T01674	Sprayer Overflow Pipe )			6LW Was LM/9/1133
21		C08699	Union Nut, 1/4" B.S.P. X 5/16" Hex. )	) When Fuel Lift Pump is NOT fitted	Was 161 NU	
22		E04258	Union Tail, 5/16" O.D. Pipe )		Was 100 UT	
23		T01771	Fuel Pump Supply Pipe - Filter to Pump )	) )	2LW Was Part of LM/9/177	
		T01772	Fuel Pump Supply Pipe - Filter to Pump )		) Fuel Filter Mounted on Cylinder Head	3LW Was Part of LM/9/141
		T01773	Fuel Pump Supply Pipe - Filter to Pump )			4LW Was Part of LM/9/142
		T01774	Fuel Pump Supply Pipe - Filter to Pump )		5LW, 6LW Was LM/9/187	
24		T01668	Fuel Pump Supply Pipe - Filter to Pump )	) Fuel Filter on Engine Mounted Water Header Tank	2LW Was Part of LM/9/1139	
		T01669	Fuel Pump Supply Pipe - Filter to Pump )		3LW Was Part of LM/9/1140	
		T01667	Fuel Pump Supply Pipe - Filter to Pump )		4LW Was Part of LM/9/1141	
		T01666	Fuel Pump Supply Pipe - Filter to Pump )		5LW, 6LW Was LM/9/1144	
25		T01775	Fuel Pump Connecting Pipe	5LW Was Part of LM/9/184		
		T01776	Fuel Pump Connecting Pipe	6LW Was Part of LM/9/185		
26		E06656	Packing, Circular, 1" O.D. X 23/32" I.D. X 1/32"	Was 153 PA		
27		E68240	Fuel Pump Supply Pipe Air Vessel	Was Part of NA 339		
28		E02225	Packing, Circular, 1.1/4" O.D. X 13/16" I.D. X 1/32"	Was 157 PA		

Plate No.	Illus. No.	Part No.	Description		
28	29	T01930	Fuel Pipe - Fuel Lift Pump ) to Filter )	To suit Engines ) with Fuel Lift )	2LW Was LW/9/176
		T01931	Fuel Pipe - Fuel Lift Pump ) to Filter )	Pump Mounted ) on Can Box )	3 to 6LW Was LW/9/156
	30	T01932	Fuel Pipe - Fuel Lift Pump ) to Filter )	To suit Engines ) with Fuel Lift )	4LW Was LW/9/434
		T01933	Fuel Pipe - Fuel Lift Pump ) to Filter )	Pump Mounted ) on Crankcase )	5LW Was LW/9/435
		T01934	Fuel Pipe - Fuel Lift Pump ) to Filter )	)	6LW Was LW/9/155
	31	T01664	Fuel Pipe - Fuel Lift Pump ) to Filter )	To suit Engines ) with Fuel Lift )	2LW Was LW/9/1145
		T01665	Fuel Pipe - Fuel Lift Pump ) to Filter )	Pump Mounted ) on Can Box )	3 to 6LW Was LW/9/1146
	32	T01663	Fuel Pipe - Fuel Lift Pump ) to Filter )	)	4LW Was LW/9/1176
		T01662	Fuel Pipe - Fuel Lift Pump ) to Filter )	To suit Engines ) with Fuel Lift )	5LW Was LW/9/1177
		T01661	Fuel Pipe - Fuel Lift Pump ) to Filter )	Pump Mounted ) on Canbox )	6LW Was LW/9/1149
	33	L26064	Pipe Clip - 2 Pipes, 3/4" and 7/16" O.D.	)	Was Part of MA 381
	34	L21143	Setscrew, Cheese Head, 4 B.A. X 7/16" long	)	Was 126 SS
	35	L21521	Nut, 4 B.A.	)	Was 100 NU
-	-	L26036	Pipe Clip - 3 or 4 Pipes, 3/4", 7/16" and 1/4" O.D.	)	Was Part of MA 1054
-	-	L21152	Setscrew, Cheese Head, 2 B.A. X 3/4" long	)	4 to 6LW Was 387 SS
-	-	E00218	Nut, 2 B.A. X 5/32" X 2 B.A. Hex.	)	Was 101 NU

Plate No.	Illus. No.	Part No.	Description			
29	1	T02017	Pipe - Lubricating Oil Pump Section ( 4LW, 5LW with Copper Main Bearing Distribution Pipe )	To suit Centre Type Sump 23	Was Part of LW/9/249	
		T02018	Pipe - Lubricating Oil Pump Section ( 6LW, also 4LW, 5LW with Steel Main Bearing Distribution Pipe )		Was Part of LW/9/250	
	2	K05899	Locking Plate, 25/64" diam. hole		Was 126 LP	
	3	K00787	Packing, Flange, 1.1/2" centres X 1.1/2" wide		Was 105 PA	
	4	E05577	Setscrew, 5/16" Wh. X 7/8" long X 1/4" Hex.		Was 112 SS	
	5	J09009	Setscrew, 5/16" Wh. X 1" long X 1/4" Hex.		Was 113 SS	
30,31	7	T02024	Pipe - Lubricating Oil Transfer Pump Section )	To suit Rear Type Sump 27F	4LW Was Part of LW/9/420	
		T02025	Pipe - Lubricating Oil Transfer Pump Section )		5LW Was Part of LW/9/421	
		T26786	Pipe - Lubricating Oil Transfer Pump Section )		6LW Was Part of LW/9/422	
	2	K05899	Locking Plate, 25/64" diam. hole		Was 126 LP	
	8	K00792	Packing, Flange, 1.3/4" centres X 1.3/8" wide		Was 115 PA	
	5	J09009	Setscrew, 5/16" Wh. X 1" long X 1/4" Hex.		Was 113 SS	
	6	J05653	Locking Plate, 11/32" diam. hole		Was 101 LP	
	30	9	T02030	Pipe - Lubricating Oil - Crankcase to Oil Cooler Inlet )	To suit Engine Mounted Oil Cooler	2LW, 3LW Was Part of LW/9/1108
		10	T10408	Pipe - Lubricating Oil - Relief Valve on Crankcase to Oil Cooler Inlet (To suit Engines without Single Lever Control) )		Was Part of LW/9/1109
			T02266	Pipe - Lubricating Oil - Relief Valve on Crankcase to Oil Cooler Inlet (To suit Engines with Single Lever Control) )		4 to 6LW Was Part of LW/9/1160
11		K00797	Packing, Flange, 1.7/8" centres X 1.9/16" wide )	Was 125 PA		
12		J08215	Joint Ring, .984" I.D. X .139" Sectional diam. )	Was 109 RJ		
13		E09711	Bolt, 5/16" Wh. X 1.5/8" long X 1/4" Hex. )	Was 157 BL		
14		E03945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex. )	Was 106 NU		
15		S05725/02	Washer, 5/16" diam. bore )	Was 105 WA		
16		T01882	Pipe - Lubricating Oil - Oil Cooler Outlet to Relief Valve on Filter, Oil Cooler End Section )	2LW Was Part of LW/9/1004		
		T01883	Pipe - Lubricating Oil - Oil Cooler Outlet to Relief Valve on Filter, Oil Cooler End Section )	3LW Was Part of LW/9/1005		
		T01884	Pipe - Lubricating Oil - Oil Cooler Outlet to Relief Valve on Filter, Oil Cooler End Section )	4LW Was Part of LW/9/1006		
		T01885	Pipe - Lubricating Oil - Oil Cooler Outlet to Relief Valve on Filter, Oil Cooler End Section )	5LW Was Part of LW/9/1007		

Plate No.	Illus. No.	Part No.	Description			
30	16	T01886	Pipe - Lubricating Oil - Oil Cooler Outlet to Relief Valve on Filter, Oil Cooler End Section	)	) 6LW Was Part of LW/9/1008	
	17	K00793	Packing, Flange, 1.3/4" centres X 1.1/2" wide	)	) Was 117 PA	
	18	J09902	Setscrew, 5/16" Wh. X 1.1/8" long X 1/4" Hex.	)	) Was 214 SS	
	15	S05725/02	Washer, 5/16" diam. bore	)	) Was 105 WA	
	19	On application	Pipe - Lubricating Oil - Oil Cooler Outlet to Relief Valve on Filter, Relief Valve End Section	)	) 2LW Was Part of LW/9/1110	
		T01881	Pipe - Lubricating Oil - Oil Cooler Outlet to Relief Valve on Filter, Relief Valve End Section	)	) 3LW Was Part of LW/9/1112	
		T01881	Pipe - Lubricating Oil - Oil Cooler Outlet to Relief Valve on Filter, Relief Valve End Section (To suit Engines without Single Lever Control)	)	) Was Part of LW/9/1112	
		T02267	Pipe - Lubricating Oil - Oil Cooler Outlet to Relief Valve on Filter, Relief Valve End Section (To suit Engines with Single Lever Control)	)	) Was Part of LW/9/1161	
		20	E48390	Flange, Blank, 1.1/2" centres X 1.1/2" wide	)	) Was 194 FL
		21	E05929	Bolt, 5/16" Wh. X 2.3/4" long X 1/4" Hex.	)	) 2LW, 3LW Was 206 BL
		15	S05725/02	Washer, 5/16" diam. bore	)	) Was 105 WA
		3	K00787	Packing, Flange, 1.1/2" centres X 1.1/2" wide	)	) Was 105 PA
		12	J08215	Joint Ring, .984" I.D. X .139" Sectional diam.	)	) Was 109 RJ
		13	E09711	Bolt, 5/16" Wh. X 1.5/8" long X 1/4" Hex.	)	) Was 157 BL
		14	E03945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex.	) Flanged Joints	) Was 106 NU
		15	S05725/02	Washer, 5/16" diam. bore	)	) Was 105 WA
	29	22	On application	Pipe - Lubricating Oil - Relief Valve on Crankcase to Relief Valve on Filter	)	) 2LW Was Part of LW/9/1165
			T01748	Pipe - Lubricating Oil - Relief Valve on Crankcase to Relief Valve on Filter	) To suit Remote or Radiator Mounted Oil Cooler	) 3LW Was Part of LW/9/1166
		23	T02327	Pipe - Lubricating Oil - Relief Valve on Crankcase to Lubricating Oil Pump Driving Gear Cover	)	) 2LW, 3LW Was LW/9/1167
30	24	T01745	Pipe - Lubricating Oil - Relief Valve to Relief Valve on Filter	)	) Was LW/9/1013	
	25	T02048	Pipe - Lubricating Oil - Relief Valve on Crankcase to Lubricating Oil Pump Driving Gear Cover	) To suit Engine Mounted Oil Cooler	) 4 to 6LW Was LW/9/1014	
29,30	3	K00787	Packing, Flange, 1.1/2" centres X 1.1/2" wide	)	) Was 105 PA	
	21	E05929	Bolt, 5/16" Wh. X 2.3/4" X 1/4" Hex.	)	) Was 206 BL	
	26	J06198	Bolt, 5/16" Wh. X 2.15/16" long X 1/4" Hex.	)	) Was 207 BL	
	15	S05725/02	Washer, 5/16" diam. bore	)	) Was 105 WA	

Plate No.	Illus. No.	Part No.	Description		
29,30 31	27	T01743	Pipe - Lubricating Oil - Pump to Filter ) To suit Engines ) without Relief Valve	} 2LW	Was Part of LW/9/170
		T01744	Pipe - Lubricating Oil - Pump to Filter ) on Crankcase )		
	11	K00797	Packing, Flange, 1.7/8" centres X 1.9/16" wide		Was 125 PA
	3	K00787	Packing, Flange, 1.1/2" centres X 1.1/2" wide		Was 105 PA
	4	E05577	Setscrew, 5/16" Wh. X 7/8" long X 1/4" Hex.		Was 112 SS
	5	J09009	Setscrew, 5/16" Wh. X 1" long X 1/4" Hex.		Was 113 SS
	15	S05725/02	Washer, 5/16" diam. bore		Was 105 WA
	28	T02264	Pipe - Lubricating Oil - Filter to Crankcase		Was Part of LW/9/446
		T01721	Pipe - Lubricating Oil - Filter to Crankcase ( With 2 Saddle ) ( Bosses )	} 3LW	Was Part of LW/9/112
		T02333	Pipe - Lubricating Oil - Filter to Crankcase ( With 3 Saddle ) ( Bosses )		
		T01722	Pipe - Lubricating Oil - Filter to Crankcase ) Elbow in ) With 2 ) ) Upright ) Saddle Bosses ) ) position )	} 6LW	Was Part of LW/9/429
		T01723	Pipe - Lubricating Oil - Filter to Crankcase ) at ) With 3 ) ) Crankcase End ) Saddle Bosses )		
		T01733	Pipe - Lubricating Oil - Filter to Crankcase ) Elbow in horizontal ) ) position at Crankcase End )		
		T01725	Pipe - Lubricating Oil - Filter to Crankcase		Was Part of LW/9/332
		29	C03789	Plug, 1/4" B.S.P. X 3/8" Hex.	
	8	K00792	Packing, Flange, 1.3/4" centres X 1.3/8" wide		Was 115 PA
	11	K00797	Packing, Flange, 1.7/8" centres X 1.9/16" wide		Was 125 PA
	5	J09009	Setscrew, 5/16" Wh. X 1" long X 1/4" Hex.		Was 113 SS
	15	S05725/02	Washer, 5/16" diam. bore		Was 105 WA
32	30	T01966	Pipe - Lubricating Oil - Main Bearing Distribution ) )	} 2LW	Was Part of LW/9/370
		T01967	Pipe - Lubricating Oil - Main Bearing Distribution ) )		
		T01968	Pipe - Lubricating Oil - Main Bearing Distribution ) ) Copper Pipes	} 4LW	Was Part of LW/9/372
		T01969	Pipe - Lubricating Oil - Main Bearing Distribution ) )		
		T01970	Pipe - Lubricating Oil - Main Bearing Distribution ) )	} 6LW	Was Part of LW/9/374



Plate No.	Illus. No.	Part No.	Description			
32	31	A03533	Pipe - Lubricating Oil - Main Bearing Distribution, with A04578, A04660, A04525, T02320, K05262, K05263, K05337, E03555, J02953, K05899	To suit Sump other than Type 28	Was LM/9/439	
	32	A03537	Pipe - Lubricating Oil - Main Bearing Distribution, with A04578, A04660, A04730, J01443, T02098, K05262, K05337, E03555, J02953, K05899		3LW	Was LM/9/451
	33	A03538	Pipe - Lubricating Oil - Main Bearing Distribution, with A04578, A04660, A04730, J01443, T02098, K05262, K05263, K05337, E03555, J02953, K05899		4LW	Was LM/9/452
	34	A03539	Pipe - Lubricating Oil - Main Bearing Distribution, with A04578, A04660, A04730, J01443, T02098, K05262, K05263, K05337, E03555, J02953, K05899		5LW	Was LM/9/453
	35	A03534	Pipe - Lubricating Oil - Main Bearing Distribution, with A04578, A04660, A04729, J01443, T02098, K05262, K05337, E03555, J02953, K05899		6LW	Was LM/9/440
	36	A03535	Pipe - Lubricating Oil - Main Bearing Distribution, with A04578, A04660, A04729, J01443, T02098, K05262, K05263, K05337, E03555, J02953, K05899		To suit Sump Type 28	Was LM/9/441
	37	A03536	Pipe - Lubricating Oil - Main Bearing Distribution, with A04578, A04660, A04729, J01443, T02098, K05262, K05263, K05337, E03555, J02953, K05899		Steel Pipes	Was LM/9/442
	38	A04578	Pipe Connection - Chain Case and Flywheel End, with K05337, E03555			Was LX/9/3052
	39	A04660	Pipe Connection - Intermediate, with K05337, E03555	3 to 6LW	Was LX/9/3053	
	40	A04525	Pipe Connection - Crankcase End of Branch Pipe, with K05337, J02953		Was LX/9/3054	
	41	T02320	Tee Piece (with Pipes)	3LW	Was Part of LM/9/443	
	42	A04730	Pipe Connection - Crankcase End of Branch Pipe, with J01443, K05337, J02953, K05899	For A03537 to A03539	Was LM/9/454	
	43	A04729	Pipe Connection - Crankcase End of Branch Pipe, with J01443, K05337, J02953, K05899	For A03534 to A03536	Was LM/9/444	
	44	J01443	Plug, 1/8" B.S.P. X 1/4" Hex.		Was 100 PL	
	45	T02098	Tee Piece (with Pipes)		Was Part of LM/9/445	
	46	K05262	Pipe - Lubricating Oil (6.3/8" long)	3 to 6LW	Was Part of LX/9/3056	
	47	K05263	Pipe - Lubricating Oil (6" long)	3LW, 5LW, 6LW	Was Part of LX/9/3057	
	48	K05337	Joint Ring, .612" I.D. X .103" Sectional diam.		Was 127 RJ	

## PIPEWORK - LUBRICATION

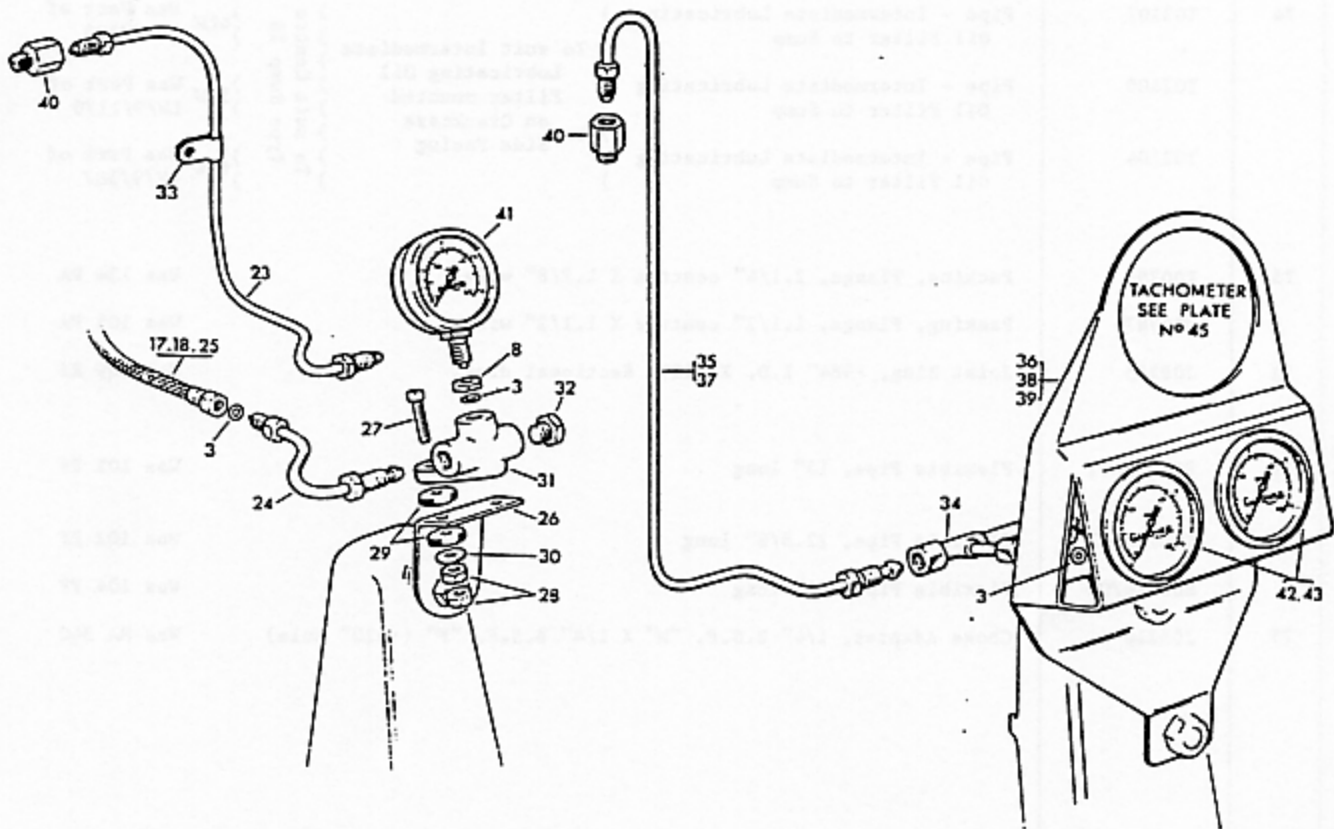
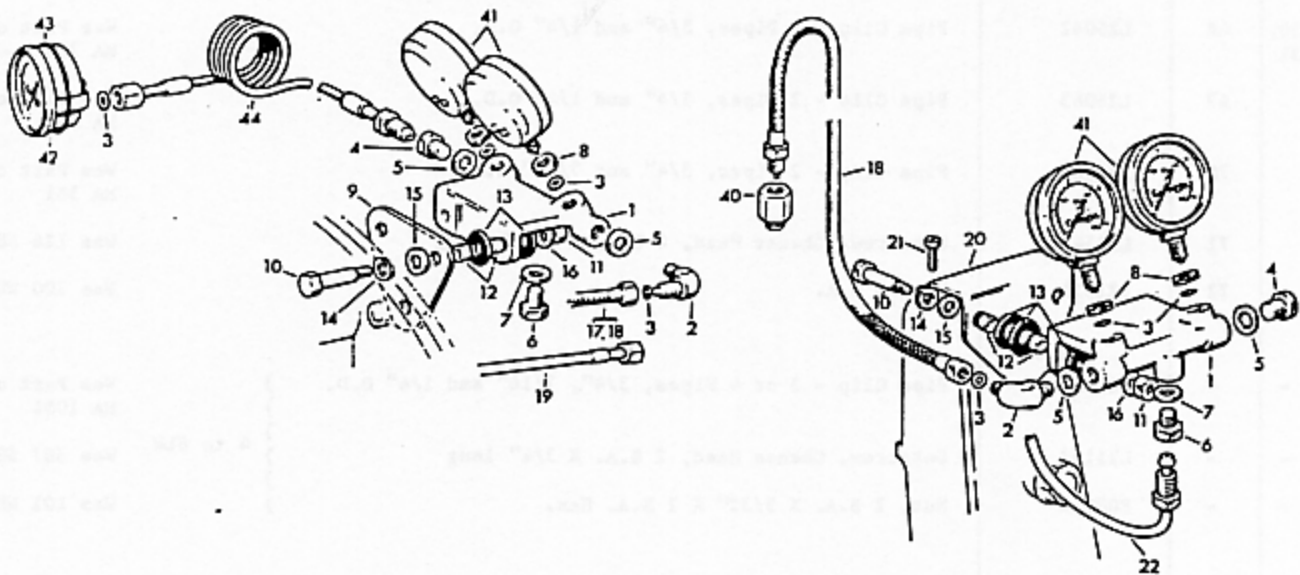
Plate No.	Illus. No.	Part No.	Description		
32	49	E03555	Joint Ring, 1 1/16" O.D. X 5/16" I.D. X 3/16" Sectional diam.		Was 100 RJ
	50	J02953	Joint Ring, 1.3/16" O.D. X 7/8" I.D. X 5/32" Sectional diam.		Was 102 RJ
	2	K05899	Locking Plate, 25/64" diam. hole		Was 126 LP
29, 30, 31	51	T01806	Pipe - Lubricating Oil - Governor and Gears	2LW	Was Part of LW/9/1015
		T01807	Pipe - Lubricating Oil - Governor and Gears	3LW	Was Part of LW/9/1016
		T01808	Pipe - Lubricating Oil - Governor and Gears	4LW	Was Part of LW/9/1174
		T01809	Pipe - Lubricating Oil - Governor and Gears	5LW	Was Part of LW/9/1175
		T01810	Pipe - Lubricating Oil - ( To suit Engines ) ( without Lubricating ) Governor and Gears ( Oil Cooler Pump ) ( Facing on Cam Box )	6LW	Was Part of LW/9/1019
		T01825	Pipe - Lubricating Oil - ( To suit Engines ) ( with Lubricating ) Governor and Gears ( Oil Cooler Pump ) ( Facing on Cam Box )		Was Part of LW/9/351
	8	K00792	Packing, Flange, 1.3/4" centres X 1.3/8" wide		Was 115 PA
	52	J05871	Sealing Felt - Cam Box and Governor Lubricating Pipe		Was 107 RS
	5	J09009	Setscrew, 5/16" Wh. X 1" long X 1/4" Hex.		Was 113 SS
	15	S05725/02	Washer, 5/16" diam. bore		Was 105 WA
53	K00253	Setscrew, 5/16" Wh. X 1/2" long X 1/4" Hex.		Was 109 SS	
54	T02001	Pipe - Lubricating Oil - Valve Levers	2LW	Was LW/9/174	
	T02002	Pipe - Lubricating Oil - Valve Levers	3LW	Was LW/9/138	
	T02003	Pipe - Lubricating Oil - Valve Levers	4LW	Was LW/9/432	
	T26789	Pipe - Lubricating Oil - Valve Levers	5LW	Was LW/9/433	
	T02005	Pipe - Lubricating Oil - Valve Levers	6LW	Was LW/9/97	
	-	K05553	Pipe Clip - 1/4" O.D. Pipe		Was MA 1053
29	55	T02127	Pipe - Foot Valve to Lubricating Oil ) Cooler Pump, with E03667, L20904 )	) 4LW	Was Part of LW/9/294
		T02129	Pipe - Foot Valve to Lubricating Oil ) Cooler Pump, with E03667, L20904 )	) 5LW	Was Part of LW/9/295
		T02124	Pipe - Foot Valve to Lubricating Oil ) Cooler Pump, with E03667, L20904 )	) 6LW	Was Part of LW/9/296
31	56	T02112	Pipe - Foot Valve to Lubricating Oil ) Cooler Pump )	) 4LW	Was Part of LW/9/1114
		T02119	Pipe - Foot Valve to Lubricating Oil ) Cooler Pump )	) 5LW	Was Part of LW/9/1115
		T02120	Pipe - Foot Valve to Lubricating Oil ) Cooler Pump )	) 6LW	Was Part of LW/9/1116

Plate No.	Illus. No.	Part No.	Description			
31	57	T02113	Pipe - Foot Valve to Lubricating Oil Cooler Pump	) To suit Engines with Oil Cooler Pump on Cam Box ) To suit Rear Type Sump 27F ) Clockwise ) Rotation ) Engines looking on ) Flywheel End )	) 4LW Was Part of LW/9/1120	
		On Application	Pipe - Foot Valve to Lubricating Oil Cooler Pump			) 5LW Was Part of LW/9/1121
		T02121	Pipe - Foot Valve to Lubricating Oil Cooler Pump			) 6LW Was Part of LW/9/1122
53		T02114	Pipe - Lubricating Oil - Oil Cooler Pump to Oil Cooler Inlet	) ) ) ) Anti- ) Clockwise ) Rotation ) Engines looking on ) Flywheel End )	) 4LW Was Part of LW/9/1117	
		T02082	Pipe - Lubricating Oil - Oil Cooler Pump to Oil Cooler Inlet			) 5LW Was Part of LW/9/1118
		T02083	Pipe - Lubricating Oil - Oil Cooler Pump to Oil Cooler Inlet			) 6LW Was Part of LW/9/1119
59		T02115	Pipe - Lubricating Oil - Oil Cooler Pump to Oil Cooler Inlet	) To suit Engine Mounted Oil Cooler ) To suit Engines with Oil Cooler Pump on Cam Box ) To suit Rear Type Sump 27F ) Clockwise ) Rotation ) Engines looking on ) Flywheel End )	) 4LW Was Part of LW/9/1123	
		T02084	Pipe - Lubricating Oil - Oil Cooler Pump to Oil Cooler Inlet			) 5LW Was Part of LW/9/1124
		T02085	Pipe - Lubricating Oil - Oil Cooler Pump to Oil Cooler Inlet			) 6LW Was Part of LW/9/1125
60		T02072	Pipe - Lubricating Oil - Oil Cooler Outlet to Sump	) ) ) ) )	) 4 to 6LW Was Part of LW/9/1126	
29,31	61	E03667	Plug - Lubricating Oil Foot Valve		Was MA 338	
	62	L20904	Ball Valve, 17/32" diam.		Was 104 BA	
	-	J01443	Plug, 1/8" B.S.P. X 1/4" Hex.	) To suit ) Elbow tapped ) for Plug	Was 100 PL	
	-	E03996	Packing, Circular, 17/32" O.D. X 3/8" I.D. X 1/32"	) ) ) ) )	Was 142 PA	
29,31	63	K00798	Packing, Flange, 2" centres X 1.1/2" wide		Was 128 PA	
31	17	K00793	Packing, Flange, 1.3/4" centres X 1.1/2" wide		Was 117 PA	
29,31	12	J08215	Joint Ring, .984" I.D. X .139" Sectional diam.		Was 109 RJ	
31	13	E09711	Bolt, 5/16" Wh. X 1.5/8" long X 1/4" Hex.	) Flanged Joint )	Was 157 BL	
	14	E03945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex.		Was 106 NU	
	15	S05725/02	Washer, 5/16" diam. bore		Was 105 WA	
	-	K00293	Packing, Flange, 2.1/4" centres X 1.7/8" wide		Was 134 PA	
29,31	18	J09902	Setscrew, 5/16" Wh. X 1.1/8" long X 1/4" Hex.		Was 214 SS	
	5	J09009	Setscrew, 5/16" Wh. X 1" long X 1/4" Hex.		Was 113 SS	
	15	S05725/02	Washer, 5/16" diam. bore		Was 105 WA	
31	64	K03209	Pipe Clip - 5/8" O.D. Pipe		Was MA 744	
	5	J09009	Setscrew, 5/16" Wh. X 1" long X 1/4" Hex.	) For K03209 )	Was 113 SS	
	14	E03945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex.		Was 106 NU	
	65	L26051	Pipe Clip - 5/8" O.D. Pipe		Was Part of MA 869	
	66	L21150	Setscrew, Cheese Head, 2 B.A. X 1/2" long		Was 253 SS	

Plate No.	Illus. No.	Part No.	Description		
31	67	E00218	Nut, 2 B.A. X 5/32" X 2 B.A. Hex.	Was 101 NU	
29,30,31	68	L26062	Pipe Clip - 2 Pipes, 3/4" and 1/4" O.D.	Was Part of MA 379	
	69	L26063	Pipe Clip - 2 Pipes, 3/4" and 1/4" O.D.	Was Part of MA 380	
	70	L26064	Pipe Clip - 2 Pipes, 3/4" and 7/16" O.D.	Was Part of MA 381	
	71	L21143	Setscrew, Cheese Head, 4 B.A. X 7/16" long	Was 126 SS	
	72	L21521	Nut, 4 B.A.	Was 100 NU	
-	-	L26036	Pipe Clip - 3 or 4 Pipes, 3/4", 7/16" and 1/4" O.D.	Was Part of MA 1054	
-	-	L21152	Setscrew, Cheese Head, 2 B.A. X 3/4" long	4 to 6LW Was 187 SS	
-	-	E00218	Nut, 2 B.A. X 5/32" X 2 B.A. Hex.	Was 101 NU	
29	73	On application	Pipe - Intermediate Lubricating ) Oil Filter to Relief Valve on ) Crankcase )	To suit Intermediate ) 2LW Lubricating Oil ) Filter mounted )	Was LW/9/1168
		On application	Pipe - Intermediate Lubricating ) Oil Filter to Relief Valve on ) Crankcase )	on Engine Front ) Support Stand ) 3LW	Was LW/9/1169
	74	T02107	Pipe - Intermediate Lubricating ) Oil Filter to Sump )	To suit Intermediate ) Lubricating Oil )	To suit Centre ) 4LW Type Sump 28 ) LW/9/305
		T02109	Pipe - Intermediate Lubricating ) Oil Filter to Sump )	Filter mounted ) on Crankcase )	5LW Was Part of LW/9/1170
		T02104	Pipe - Intermediate Lubricating ) Oil Filter to Sump )	Side Facing )	6LW Was Part of LW/9/307
	75	K00293	Packing, Flange, 2.1/4" centres X 1.7/8" wide	Was 134 PA	
	3	K00787	Packing, Flange, 1.1/2" centres X 1.1/2" wide	Was 105 PA	
	12	J08215	Joint Ring, .984" I.D. X .139" Sectional diam.	Was 109 RJ	
29,30,31	76	S03726/01	Flexible Pipe, 15" long	Was 101 PF	
		S03726/02	Flexible Pipe, 21.5/8" long	Was 102 PF	
		S03726/04	Flexible Pipe, 27" long	Was 104 PF	
	77	J05210	Choke Adapter, 1/4" B.S.P. "M" X 1/4" B.S.P. "F" (.020" hole)	Was MA 340	

# GARDNER

## PIPEWORK — LUBRICATION — PLATE 33



# GARDNER

## PIPEWORK — LUBRICATION — PLATE 34

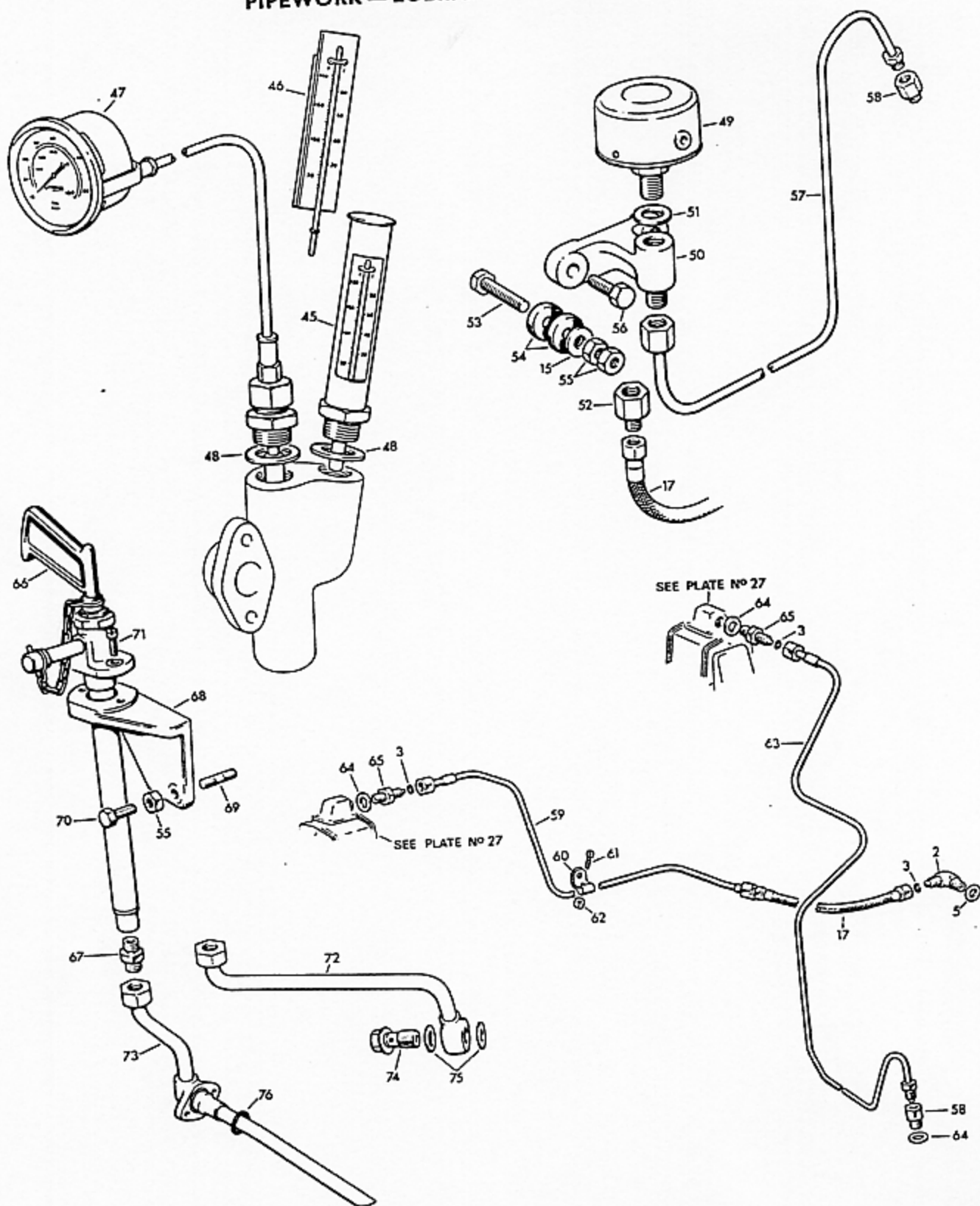




Plate No.	Illus. No.	Part No.	Description		
33	20	J07363	Bracket - Lubricating Oil Pressure Gauge Mount	)	Was Part of LW/9/1047
	21	L21156	Setscrew, Cheese Head, 1 B.A. X 1/2" long	)	5LW, 6LW Was 136 SS
	22	On Application	Pipe - Lubricating Oil - Pressure Gauge	)	5LW Was LW/9/1045
		On Application	Pipe - Lubricating Oil - Pressure Gauge	)	6LW Was LW/9/1046
	23	On Application	Pipe - Lubricating Oil - Pressure Gauge	)	2LW Was LW/9/1036
		On Application	Pipe - Lubricating Oil - Pressure Gauge	)	3LW Was LW/9/1037
		On Application	Pipe - Lubricating Oil - Pressure Gauge	)	4LW Was LW/9/1038
	24	T02172	Pipe - Lubricating Oil - Pressure Gauge	)	To suit Engines with Pump Side 2LW, 3LW also 4LW on Fuel
		T02173	Pipe - Lubricating Oil - Pressure Gauge	)	Flexible Pipe on Exhaust Side 4LW
	17	S03726/01	Flexible Pipe, 15" long	)	Was 101 PF
	18	S03726/02	Flexible Pipe, 22.5/8" long	)	Was 102 PF
	25	S03726/04	Flexible Pipe, 27" long	)	Was 104 PF
	26	K04844	Bracket - Lubricating Oil Pressure Gauge Mount	)	Was LW/9/1164
	27	L21165	Setscrew, Cheese Head, 0 B.A. X 1.1/4" long	)	Was 143 SS
	28	C08926	Nut, 0 B.A. X 7/32" X 3/16" Hex.	)	Was 103 NU
	29	K04874	Packing, Circular, Rubber, 3/4" O.D. X 1/4" I.D. X 3/16"	)	Was 268 PA
	30	S05725/01	Washer, 1/4" diam. bore	)	Was 103 WA
	31	-	Mount - Lubricating Oil Pressure Gauge (Tapped 7/16" deep for Pressure Gauge) (Superseded, will be replaced by K05942)	)	Was MA 656
		K05942	Mount - Lubricating Oil Pressure Gauge (Tapped 5/16" deep for Pressure Gauge)	)	Was Part of MA 1153
	32	C05498	Plug, 7/16" - 24 Thds. X 1/4" Hex.	)	Was 127 PL
	3	C06528	Packing, Circular, 5/16" O.D. X 1/8" I.D. X 1/16"	)	Was 140 PA
	8	C04748	Locknut, 1/8" B.S.P. X 1/8" X 1/4" Hex.	)	Was 220 NU
	33	K04165	Pipe Clip - 1/4" O.D. Pipe	)	Was MA 920
	34	T00479	Connection - Lubricating Oil Pressure Gauge Pipe (Dual Gauges)	)	5LW, 6LW Was LW/9/1173
	35	On Application	Pipe - Lubricating Oil - Pressure Gauge	)	5LW Was LW/9/1155
		On Application	Pipe - Lubricating Oil - Pressure Gauge	)	6LW Was LW/9/1156

Mounted on Supporting Foot Marine Auxiliary Engines

2 to 4LW



Plate No.	Illus. No.	Part No.	Description		
33	36	H03992	Bracket - Dual Pressure Gauges and Tachometer	Tachometer hole diam. = 3.15/16" To suit Engines with Relief Valve on Crankcase When Engine Mounted Tachometer is fitted Mounted on Supporting Foot Marine Auxiliary Engines	Was LW/9/1151
		H05921	Bracket - Dual Pressure Gauges, Starter Switch and Tachometer		5LW, 6LW Was LW/9/1152
	37	On Application	Pipe - Lubricating Oil Pressure Gauge		5LW Was LW/9/1157
		On Application	Pipe - Lubricating Oil Pressure Gauge		To suit Engines without Relief Valve on Crankcase 6LW Was LW/9/1158
	38	H03991	Bracket - Dual Pressure Gauges and Tachometer		Was LW/9/1153
		H04477	Bracket - Dual Pressure Gauges, Starter Switch and Tachometer		Was LW/9/1154
	39	H07030	Bracket - Dual Pressure Gauges and Tachometer		Was LW/9/1204
		H07158	Bracket - Dual Pressure Gauges, Starter Switch and Tachometer		Tachometer hole diam. = 4.9/32" Was LW/9/1205
	40	J05210	Choke Adapter, 1/4" B.S.P. "M" X 1/4" B.S.P. "F" (-.020" hole)		Was MA 340
	41	S05742	Pressure Gauge, 60 lb. (Graduated lb/kilos) (Use only with Mount tapped 5/16" deep)		Was Part of MA 1379
42	S05883	Pressure Gauge, 60 lb. (Graduated lb/kilos)	Was MA 1440		
3	C09115	Packing, Circular, 5/16" O.D. X 1/8" I.D. X 1/16"	Was 140 PA		
43	K00784	Joint Ring, 2-234" I.D. X .139" Sectional diam.	Was 114 RJ		
44	T04030	Pipe - Lubricating Oil - Pressure Gauge, Remote Mounted (15 ft.)	Was LW/9/1062		
	T04031	Pipe - Lubricating Oil - Pressure Gauge, Remote Mounted (30 ft.)			
	T04032	Pipe - Lubricating Oil - Pressure Gauge, Remote Mounted (45 ft.)			
	T04033	Pipe - Lubricating Oil - Pressure Gauge, Remote Mounted (60 ft.)			
	T04046	Pipe - Lubricating Oil - Pressure Gauge, Remote Mounted (20 ft.)			
	T04047	Pipe - Lubricating Oil - Pressure Gauge, Remote Mounted (25 ft.)			
	34	45	-	Thermometer - Lubricating Oil - Pillar Type (Marked 80°C/200°F) (Superseded, will be replaced by S05390)	Was MA 782
S05390			Thermometer - Lubricating Oil - Pillar Type (Marked 120°C/240°F)	Was Part of MA 1449	
47	S05884/01	Temperature Gauge (Capillary Tube Length 6' - 0")	(52 mm diameter) When replacing a larger diameter gauge, also order Adapting Ring K08126 and Adapter K08065	Was MA 1445	
	S05884/02	Temperature Gauge (Capillary Tube Length 10' - 0")			
	S05884/03	Temperature Gauge (Capillary Tube Length 15' - 0")			
	S05884/04	Temperature Gauge (Capillary Tube Length 20' - 0")			
	S05884/05	Temperature Gauge (Capillary Tube Length 25' - 0")			
	S05884/06	Temperature Gauge (Capillary Tube Length 30' - 0")			
	S05884/07	Temperature Gauge (Capillary Tube Length 40' - 0")			
	S05884/08	Temperature Gauge (Capillary Tube Length 45' - 0")			

Plate No.	Illus. No.	Part No.	Description	
-	-	K08065	Adapter, 1/2" B.S.P. "M" X 5/8" U.N.F. "F"	Was 149 AD
-	-	K08126	Adapter Ring, 2.5/8" O.D. X 2.1/16" I.D. X 1/32"	Was 223 WA
34	48	K00803	Packing, Circular, 1.1/16" O.D. X 25/32" I.D. X 1/32"	Was 154 PA
	49	-	Warning Switch - Lubricating Oil Pressure ( Engine Serial Number ( MUST be quoted ( when ordering	Was MA 701
	50	K51200	Bracket - Lubricating Oil Pressure Warning Switch	Was Part of MA 1100
		K10670	Bracket - Lubricating Oil Pressure Warning Switch (Dual)	Was Part of LM/9/409
	51	E01034	Packing, Circular, 7/8" O.D. X 1/2" I.D. X 1/16"	Was 181 PA
	52	K04869	Adapter, 1/8" B.S.P. "F" X 1/4" B.S.P. "M"	Was 116 AD
	53	J09875	Setcrew, 5/16" Wh. X 1.3/8" long X 1/4" Hex.	Was 114 SS
	54	K04868	Packing, Circular, Rubber, 3/4" O.D. X 11/32" I.D. X 3/16"	Was 267 PA
	15	S05725/02	Washer, 5/16" diam. bore	Was 105 WA
	55	E03945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex.	Was 106 NU
	56	E04562	Setcrew, 5/16" Wh. X 3/4" long X 1/4" Hex.	4 to 6LW Was 111 SS
	17	S03726/01	Pipe (Flexible) - Lubricating Oil Pressure Warning Switch	2LW, 3LW Was 101 PF
	57	On Application	Pipe - Lubricating Oil Pressure Warning Switch	2LW Was LM/9/395
		On Application	Pipe - Lubricating Oil Pressure Warning Switch	3LW Was LM/9/396
		T01843	Pipe - Lubricating Oil Pressure Warning Switch	4LW, 5LW Was LM/9/357
		T01844	Pipe - Lubricating Oil Pressure Warning Switch	6LW Was LM/9/358
	58	J05210	Choke Adapter, 1/4" B.S.P. "M" X 1/4" B.S.P. "F" (-020" hole)	Was MA 340
	17	S03726/01	Flexible Pipe, 15" long	Was 101 PF
	59	On Application	Pipe - Lubricating Oil - Flexible Pipe to Thermal and Pressure Switch	Was LM/9/1193
		On Application	Pipe - Lubricating Oil - Flexible Pipe to Thermal and Pressure Switch	Was LM/9/1194
	60	K05295	Pipe Clip - 1/4" O.D. Pipe	Was MA 1151
	61	L21143	Setcrew, Cheese Head, 4 B.A. X 7/16" long	) For Old Part ) Nos. LM/9/1193, ) LM/9/1194 Was 126 SS
	62	L21521	Nut, 4 B.A.	) Was 100 NU
	2	J74270	Elbow, 1/8" B.S.P. "M" X 1/8" B.S.P. "M"	) Was 113 EL
	3	C06528	Packing, Circular, 5/16" O.D. X 1/8" I.D. X 1/16"	) In Lubricating ) Oil Pressure ) Gauge Mount Was 140 PA
	5	C09356	Packing, Circular, 5/8" O.D. X 3/8" I.D. X 1/32"	) Was 143 PA
	63	T26796	Pipe - Lubricating Oil - Filter to Thermal and Pressure Switch	2LW Was LM/9/1206
		T02145	Pipe - Lubricating Oil - Filter to Thermal and Pressure Switch	3LW Was LM/9/1188
		T01757	Pipe - Lubricating Oil - Filter to Thermal and Pressure Switch	4LW Was LM/9/1192

Plate No.	Illus. No.	Part No.	Description		
34	63	T02274	Pipe - Lubricating Oil - Filter to Thermal and Pressure Switch	5LW	Was LW/9/1195
		T02265	Pipe - Lubricating Oil - Filter to Thermal and Pressure Switch	6LW	Was LW/9/1196
	58	J05210	Choke Adapter, 1/4" B.S.P. "M" X 1/4" B.S.P. "F" (-020" hole)	} In Filter Elbow	Was MA 340
	64	K00801	Packing, Circular, 11/16" O.D. X 1/2" I.D. X 1/16"		Was 146 PA
	65	K07627	Adapter, "M" 1/8" B.S.P. X 1/8" B.S.P.	} Thermal and Pressure Switch End	Was 146 AD
		K05276	Adapter, "M" 1/4" B.S.P. X 1/8" B.S.P.		Was 120 AD
	64	K00801	Packing, Circular, 11/16" O.D. X 1/2" I.D. X 1/16", for K05276		Was 146 PA
	3	C06528	Packing, Circular, 5/16" O.D. X 1/8" I.D. X 1/16"		Was 140 PA
	66	F20012	Lubricating Oil Sump Emptying Pump		Was MA 660
	67	J01787	Union Stock, "M" 1/2" B.S.P. X 1/4" B.S.P.		Was 114 SU
	68	J65090	Bracket - Lubricating Oil Sump Emptying Pump		Was LW/9/1052
	69	E03452	Stud, 5/16" Wh. X 1.1/8" long		Was 120 ST
	55	E03945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex.		Was 106 NU
	70	E05577	Setscrew, 5/16" Wh. X 7/8" long X 1/4" Hex.		Was 112 SS
	71	L21162	Setscrew, Cheese Head, 0 B.A. X 5/8" long		Was 142 SS
	72	On Application	Pipe - Lubricating Oil - Sump Emptying Pump Suction	} Pump Bracket Mounted } } on Crankcase Flanged } } End Plate } To suit } } Sump } 4 to 6LW	Was LW/9/1171
		On Application	Pipe - Lubricating Oil - Sump Emptying Pump Suction	} Pump Bracket Mounted } Type 2B } } on Engine Supporting } } } Foot } }	Was LW/9/1172
	73	T01979	Pipe - Lubricating Oil - Sump Emptying Pump Suction	} Pump Bracket Mounted } } on Crankcase Flanged } To suit } } End Plate } Sumps } } } Types } 2 to 6LW	Was LW/9/1059
		T01978	Pipe - Lubricating Oil - Sump Emptying Pump Suction	} Pump Bracket Mounted } 27, 27F } } on Engine Supporting } } } Foot } }	Was LW/9/1060
	74	J05610	Connection Screw - Sump Emptying Pump Pipe	} For Superseded Nos. LW/9/1171, LW/9/1172	Was 113 CS
	75	J06512	Packing, Circular, 1.1/2" O.D. X 1.1/16" I.D. X 1/32"		Was 244 PA
	-	J08324	Packing, Flange, 1.3/4" centres X 1.5/8" wide (To suit Pipe not recessed for Joint Ring)	} For T01978, T01979	Was 120 PA
34	76	J08215	Joint Ring, -984" I.D. X -139" Sectional diam.		Was 109 RJ

**GARDNER**

**ELECTRIC AND AIR STARTER — PLATE 35**

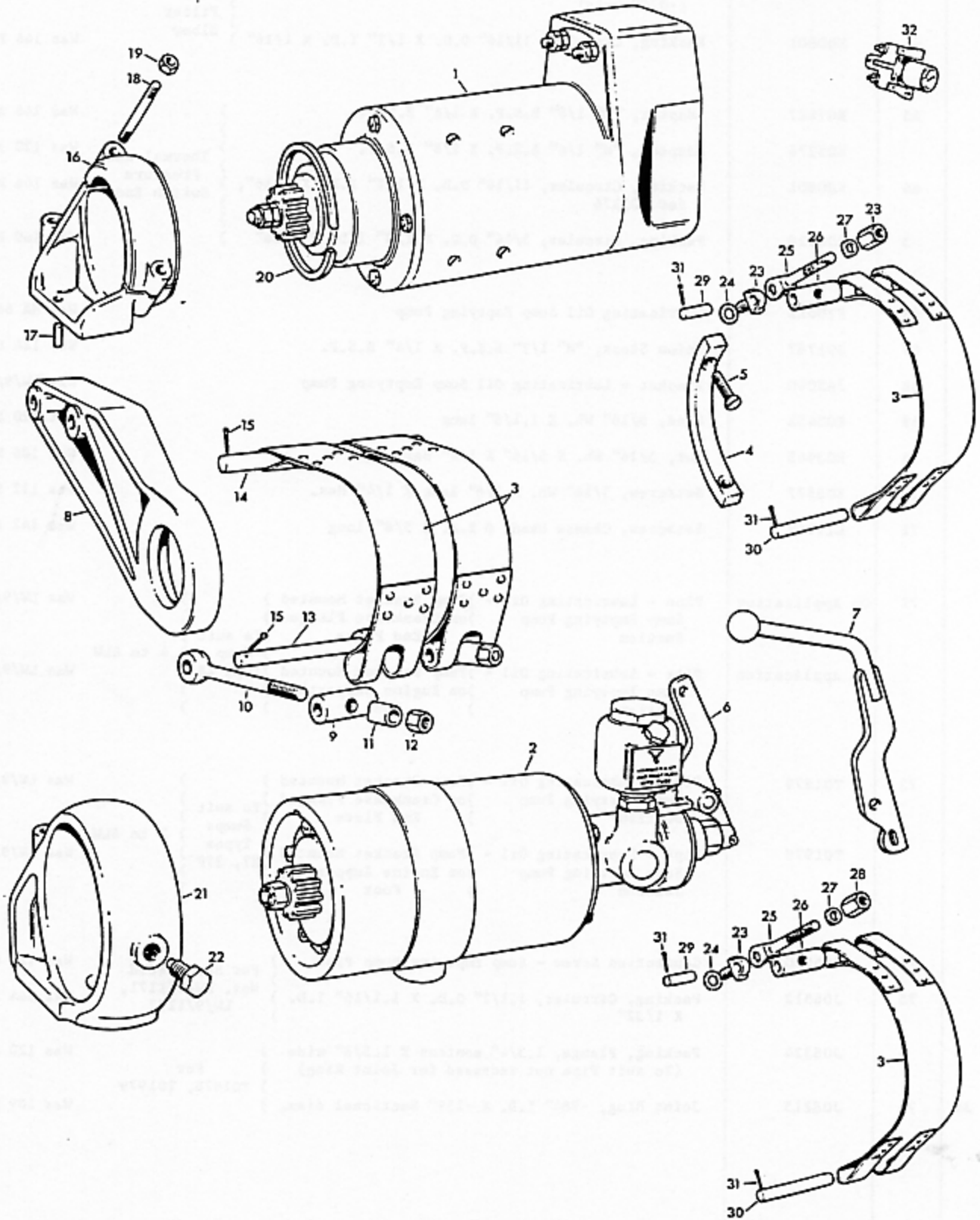
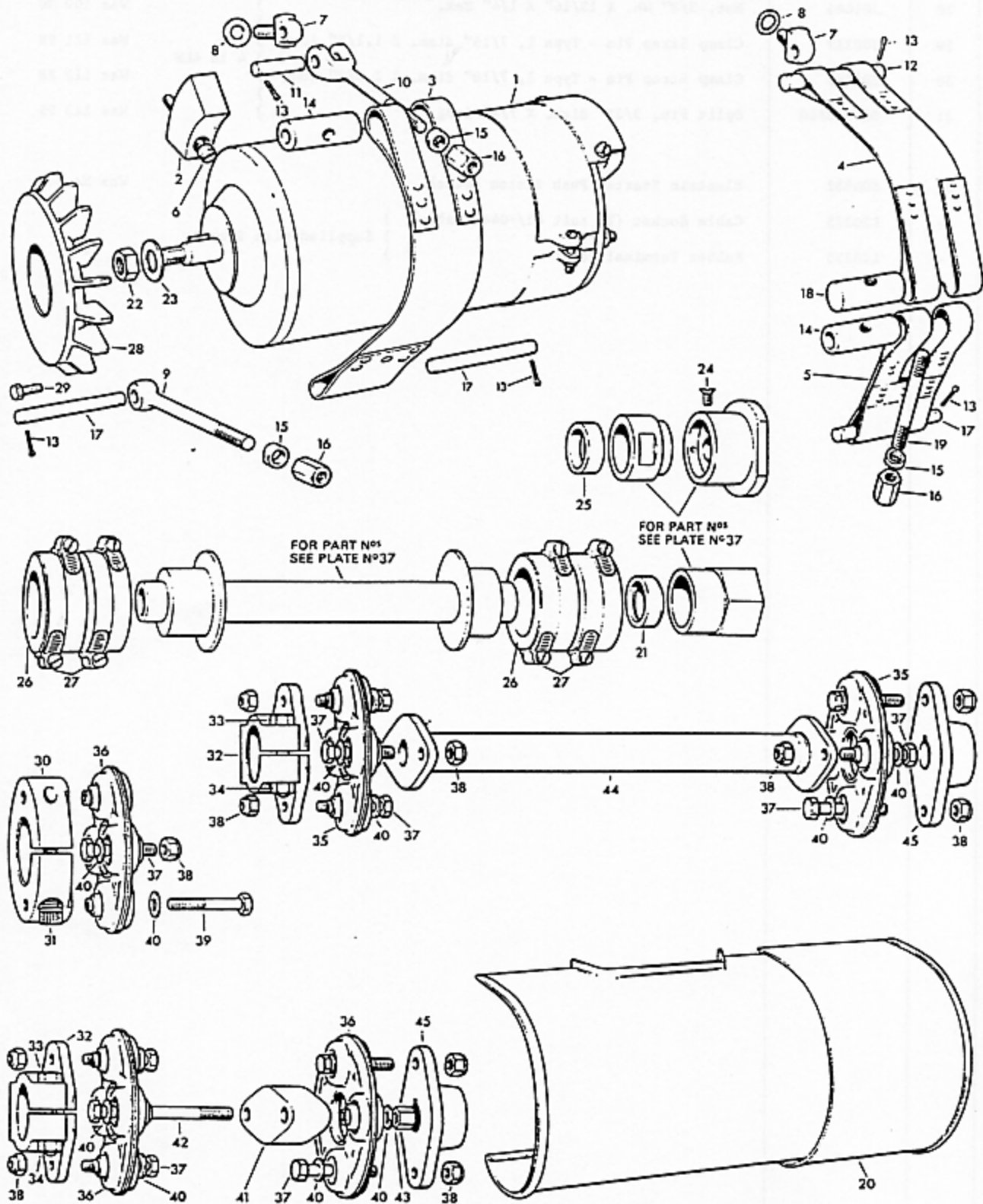




Plate No.	Illus. No.	Part No.	Description	
35	28	J01446	Nut, 3/8" Wh. X 13/16" X 1/4" Hex.	) Was 109 NU
	29	J00217	Clamp Strap Pin - Type 1, 7/16" diam. X 1.1/2" long	)
	30	E05285	Clamp Strap Pin - Type 1, 7/16" diam. X 2.5/8" long	) 4 to 6LW Was 111 PN
	31	S05618/10	Split Pin, 3/32" diam. X 7/8" long	) Was 113 PN
	32	S04952	Electric Starter Push Button Switch	) Was MA 349
-	-	L20325	Cable Socket (To suit 61/044" Cable)	)
-	-	L20335	Rubber Terminal Cover	) Supplied with Starter

## DYNAMO/ALTERNATOR AND DRIVE — PLATE 36



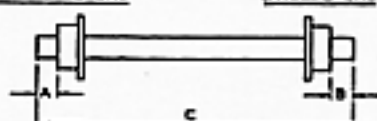
# GARDNER

## DYNAMO DRIVING SHAFTS, FLEXIBLE COUPLING BOSSES AND NUTS—PLATE 37

### DYNAMO DRIVING SHAFTS

CHAINCASE END

DYNAMO END



A	B	C	PART NO	A	B	C	PART NO	A	B	C	PART NO
$\frac{3}{4}$	$\frac{3}{4}$	$8\frac{1}{2}$	LW/10/348	$\frac{3}{8}$	$\frac{3}{8}$	$2\frac{1}{2}$	LW/10/168	$\frac{3}{8}$	$\frac{3}{8}$	$8\frac{1}{2}$	LW/10/183
$\frac{3}{8}$	$\frac{3}{8}$	$9\frac{1}{4}$	LW/10/482	.	.	$2\frac{1}{2}$	LW/10/171	.	$\frac{3}{4}$	$20\frac{1}{2}$	LW/10/537
.	$\frac{3}{8}$	$11\frac{1}{2}$	LW/10/40	.	$\frac{3}{8}$	$13$	LW/10/172	.	$\frac{3}{8}$	$20\frac{1}{2}$	LW/10/182
.	$\frac{3}{8}$	.	LW/10/184	.	$\frac{3}{8}$	$13\frac{1}{2}$	LW/10/540	.	$\frac{3}{8}$	$20\frac{1}{2}$	LW/10/328
$\frac{3}{8}$	$\frac{3}{8}$	$11\frac{1}{2}$	LW/10/485	.	$\frac{3}{8}$	$16\frac{1}{2}$	LW/10/175	.	.	$21\frac{1}{2}$	LW/10/282
.	.	.	LW/10/534	.	$\frac{3}{8}$	$16\frac{1}{2}$	LW/10/538	.	$\frac{3}{8}$	$21\frac{1}{2}$	LW/10/107
$\frac{7}{8}$	$\frac{7}{8}$	$22\frac{1}{2}$	LW/10/188	.	$\frac{3}{8}$	$17\frac{1}{2}$	LW/10/177	.	$\frac{3}{8}$	$25$	LW/10/538
.	$\frac{3}{4}$	$12\frac{1}{2}$	LX/10/3043	.	$\frac{3}{8}$	$17\frac{1}{2}$	LW/10/381	.	.	.	.

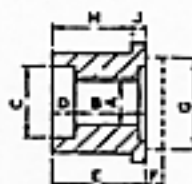
### DYNAMO FLEXIBLE COUPLING NUTS



A	B	C	D	E	F	G	PART NO
$\frac{3}{8}$ BSF	$1\frac{1}{8}$	$1\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$1\frac{1}{2}$	LW/10/242
.	.	.	.	.	.	$1\frac{1}{2}$	LW/10/408
$\frac{3}{8}$ BSF	$1\frac{1}{8}$	.	.	.	.	$\frac{5}{8}$	LW/10/337
.	$1\frac{1}{8}$	.	$\frac{3}{8}$	.	.	$1\frac{1}{2}$	LW/10/338
.	$1\frac{1}{8}$	.	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$1\frac{1}{2}$	LW/10/483
F-14	$1\frac{1}{8}$	.	$\frac{1}{2}$	.	$\frac{1}{8}$	$1\frac{1}{2}$	LW/10/54

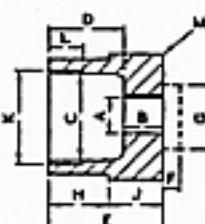
### DYNAMO FLEXIBLE COUPLING BOSSES

TYPE 1



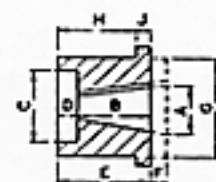
A	B	C	D	E	F	G	H	J	PART NO
5875	.	$1\frac{1}{8}$	$\frac{3}{8}$	$1\frac{1}{8}$	$\frac{3}{8}$	$1\frac{1}{2}$	1	$\frac{1}{8}$	LW/10/394
$\frac{3}{8}$	$\frac{3}{8}$	.	.	.	.	.	.	.	LW/10/320
$\frac{3}{4}$	.	.	$1\frac{1}{2}$	$1\frac{1}{8}$	$\frac{1}{2}$	$1\frac{3}{8}$	.	$\frac{3}{8}$	LW/10/403
7845	.	.	$\frac{3}{8}$	$\frac{3}{8}$	$\frac{1}{2}$	$1\frac{1}{8}$	$\frac{3}{8}$	$\frac{1}{2}$	LW/10/398
.	.	.	$\frac{3}{8}$	$1\frac{1}{8}$	.	.	$1\frac{3}{8}$	.	LW/10/406
.	.	$1\frac{1}{4}$	$1\frac{3}{2}$	.	$\frac{1}{2}$	$\frac{1}{2}$	.	.	LW/10/407
$1\frac{3}{2}$	$\frac{3}{8}$	$1\frac{1}{8}$	$\frac{3}{8}$	$1\frac{1}{4}$	.	.	$1\frac{1}{8}$	.	LW/10/50

TYPE 3



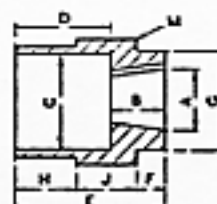
A	B	C	D	E	F	G	H	J	K	L	M	PART NO
$\frac{3}{8}$	$\frac{3}{8}$	$1\frac{1}{2}$	$1\frac{1}{2}$	$2\frac{3}{8}$	.	.	1	$1\frac{1}{2}$	.	.	$1\frac{1}{8}$ hex	LW/10/307
$\frac{3}{4}$	1	.	$1\frac{1}{2}$	$2\frac{3}{8}$	.	.	$1\frac{3}{8}$	.	.	.	.	LW/10/324
7505	$\frac{13}{32}$	.	$1\frac{1}{2}$	.	.	.	.	.	.	.	.	LW/10/568
7845	$\frac{3}{8}$	.	.	$1\frac{3}{2}$	$\frac{1}{8}$	$\frac{1}{8}$	.	$\frac{3}{2}$	$1\frac{1}{2}$ -12	$1\frac{1}{2}$	.	LW/10/488
.	.	$1\frac{1}{2}$	$1\frac{1}{2}$	$1\frac{1}{8}$	$\frac{3}{32}$	$\frac{1}{2}$	.	$\frac{1}{2}$	.	$\frac{3}{8}$	.	LW/10/481
.	.	$1\frac{1}{2}$	$1\frac{1}{2}$	$1\frac{1}{2}$	$\frac{1}{32}$	.	.	$\frac{3}{2}$	.	.	.	LW/10/518
.	.	.	$2\frac{1}{2}$	$2\frac{1}{2}$	.	.	.	$1\frac{1}{2}$	.	.	.	LW/10/521
.	.	$1\frac{1}{2}$	$1\frac{1}{2}$	.	.	.	$1\frac{1}{2}$	.	.	.	.	LW/10/547

TYPE 2



A	B	C	D	E	F	G	H	J	PART NO
9843	3343	$1\frac{1}{2}$	6407	$1\frac{3}{8}$	.	.	$1\frac{1}{2}$	$\frac{1}{8}$	LW/10/322

TYPE 4



A	B	C	D	E	F	G	H	J	M	PART NO
3842	$1\frac{1}{2}$	$1\frac{1}{2}$	$1\frac{1}{2}$	$2\frac{3}{8}$	$\frac{3}{8}$	$1\frac{1}{2}$	1	$1\frac{1}{4}$	$\frac{1}{8}$ hex	LX/10/3075
.	.	.	$2\frac{1}{2}$	$3\frac{3}{8}$	.	.	.	$1\frac{3}{4}$	.	LX/10/3076



## DYNAMO/ALTERNATOR AND DRIVE

Plate No.	Illus. No.	Part No.	Description	
36	1	-	DYNAMO/ALTERNATOR ( Quote Engine Serial Number and Type of Dynamo/Alternator	Was LW/10/28
	2	-	Dynamo/Alternator Adapting Segment )	Was LW/10/123
	3	-	Dynamo/Alternator Clamp Strap - One Piece )	Was LW/10/261
	4	-	Dynamo/Alternator Clamp Strap - Long )	Was LX/10/3003
	5	-	Dynamo/Alternator Clamp Strap - Short )	Was LX/10/3004
	6	K00306	Setscrew, Cheese Head, 5/16" Wh. X 1" long	Was 147 SS
		C02252	Setscrew, Cheese Head, 5/16" Wh. X 1.1/8" long	Was 148 SS
		K00307	Setscrew, Cheese Head, 5/16" Wh. X 1.1/4" long	Was 149 SS
		K07753	Capscrew, Socket Head, 5/16" Wh. X 1.1/2" long	Was 480 SS
		E05904	Setscrew, Cheese Head, 5/16" Wh. X 1.3/4" long	Was 151 SS
		L21223	Setscrew, Countersunk Head, 5/16" Wh. X 1/2" long	Was 167 SS
		L21225	Setscrew, Countersunk Head, 5/16" Wh. X 7/8" long	Was 169 SS
		L21226	Setscrew, Countersunk Head, 5/16" Wh. X 1" long	Was 203 SS
		L21227	Setscrew, Countersunk Head, 5/16" Wh. X 1.1/8" long	Was 389 SS
	7	J00713	Eye Bolt - Type 2, 29/64" Bore X 1.9/16" long	Was MA 351
	8	E09045	Eye Bolt Shim Washer, .010" thick	4 to 6LW Was 110 WA
	9	K00050	Eye Bolt - Type 1, 7/16" Bore X 4.1/4" long	Was MA 360
		E09367	Eye Bolt - Type 1, 7/16" Bore X 4.11/16" long	Was MA 357
	10	J02608	Forked Bolt - Type 2, 7/16" Bore X 5" long	Was MA 355
		J25690	Forked Bolt - Type 2, 7/16" Bore X 5.3/4" long	Was MA 354
		J03152	Forked Bolt - Type 2, 7/16" Bore X 6.1/2" long	Was MA 356
		K04730	Forked Bolt - Type 2, 7/16" Bore X 6.9/16" long	Was MA 921
	11	J00217	Clamp Strap Pin - Type 1, 7/16" diam. X 1.1/2" long	Was 111 PN
	12	E05285	Clamp Strap Pin - Type 1, 7/16" diam. X 2.5/8" long	Was 113 PN
	13	S05618/10	Split Pin, 3/32" diam. X 7/8" long	Was 113 PS
	14	J01445	Clamp Strap Pin - Type 2, 7/8" O.D. X 2.3/8" long	Was MA 353
	15	E08913	Collar, Concave, 5/8" O.D. X 13/32" I.D. X 5/16" long X 7/16" radius	Was MA 352
	16	J01446	Nut, 3/8" Wh. X 13/16" X 1/4" Hex.	Was 109 NU
	17	J06707	Clamp Strap Pin - Type 1, 7/16" diam. X 4.3/8" long	Was 114 PN
		-	Clamp Strap Pin - Type 1, 1/2" diam. X 4.5/8" long (Superseded, will be replaced by E06102)	Was 117 PN
		E06102	Clamp Strap Pin - Type 1, 1/2" diam. X 5" long	Was 131 PN
		E05226	Clamp Strap Pin - Type 1, 1/2" diam. X 8.3/8" long	Was 121 PN
		J06800	Clamp Strap Pin - Type 1 (with 3 Split Pin Holes), 1/2" diam. X 4.5/8" long	Was 118 PN
	13	S05618/10	Split Pin, 3/32" diam. X 7/8" long	Was 113 PS
	18	J01832	Clamp Strap Spindle, 7/8" O.D. X 2.1/4" long	Was MA 451

Plate No.	Illus. No.	Part No.	Description	
36	19	J07873	Stud, 3/8" Wh. X 3.1/4" long	Was 272 ST
	20	H06355	Dynamo Guard - 5.1/2" diam. Dynamo	) 2LW, 3LW
		F06884	Alternator Guard - 6.1/4" diam. Alternator	
				Was LW/10/555
37	-	E05832	Shaft - Dynamo Driving - 8.1/4" long, with K05638, K04311	Was LW/10/548
	-	K04514	Shaft - Dynamo Driving - 9.5/16" long, with E52370	Was LW/10/482
	-	E05464	Shaft - Dynamo Driving - 11.5/32" long, with E52370	Was LW/10/45
	-	J00651	Shaft - Dynamo Driving - 11.5/32" long, with E52370	Was LW/10/164
	-	K04756	Shaft - Dynamo Driving - 11.5/8" long, with E52370, K04311	Was LW/10/488
	-	E05629	Shaft - Dynamo Driving - 11.5/8" long, with K05638, K04311	Was LW/10/534
	-	E06271	Shaft - Dynamo Driving - 12.3/32" long, with E52370	Was LW/10/168
	-	K05635	Shaft - Dynamo Driving - 12.1/8" long, with K05638, K04311	Was LX/10/3043
	-	E05764	Shaft - Dynamo Driving - 12.9/32" long, with E52370	Was LW/10/169
	-	E07101	Shaft - Dynamo Driving - 12.29/32" long, with E52370	Was LW/10/171
	-	E06959	Shaft - Dynamo Driving - 13" long, with E52370	Was LW/10/172
	-	K05636	Shaft - Dynamo Driving - 13.1/4" long, with K05638, K04311	Was LW/10/540
	-	J01672	Shaft - Dynamo Driving - 16.7/16" long, with E52370	Was LW/10/175
	-	K05630	Shaft - Dynamo Driving - 16.7/8" long, with K05638, K04311	Was LW/10/536
	-	J01466	Shaft - Dynamo Driving - 17.1/16" long, with E52370	Was LW/10/177
	-	J03168	Shaft - Dynamo Driving - 17.7/16" long, with E52370	Was LW/10/281
	-	E06101	Shaft - Dynamo Driving - 18.7/16" long, with E52370	Was LW/10/183
	-	K05632	Shaft - Dynamo Driving - 20.1/2" long, with K05638, K04311	Was LW/10/537
	-	E06871	Shaft - Dynamo Driving - 20.11/16" long, with E52370	Was LW/10/192
	-	J02857	Shaft - Dynamo Driving - 20.3/4" long, with E52370	Was LW/10/328
	-	J05881	Shaft - Dynamo Driving - 21.1/4" long, with E52370	Was LW/10/282
	-	E05783	Shaft - Dynamo Driving - 21.15/32" long, with E52370	Was LW/10/197
	-	K05634	Shaft - Dynamo Driving - 23" long, with K05638, K04311	Was LW/10/538
	-	E52370	Collar - Dynamo Flexible Coupling ) (Knurled) ) Supplied only with appropriate Dynamo	Was LW/10/48
	-	K05638	Collar - Dynamo Flexible Coupling ) (Not Knurled) ) Driving Shaft	Was LW/10/539
36	21	K04311	Bush - Dynamo Driving Shaft	Was 146 BU
37	-	E05450	Boss - Dynamo Flexible Coupling - Type 1	Was LW/10/50
	-	E05762	Boss - Dynamo Flexible Coupling - Type 1	Was LW/10/220
	-	J08381	Boss - Dynamo Flexible Coupling - Type 1	Was LW/10/394
	-	K00051	Boss - Dynamo Flexible Coupling - Type 1	Was LW/10/396
	-	J27570	Boss - Dynamo Flexible Coupling - Type 1	Was LW/10/403
	-	J09108	Boss - Dynamo Flexible Coupling - Type 1	Was LW/10/406
	-	J09791	Boss - Dynamo Flexible Coupling - Type 1	Was LW/10/407

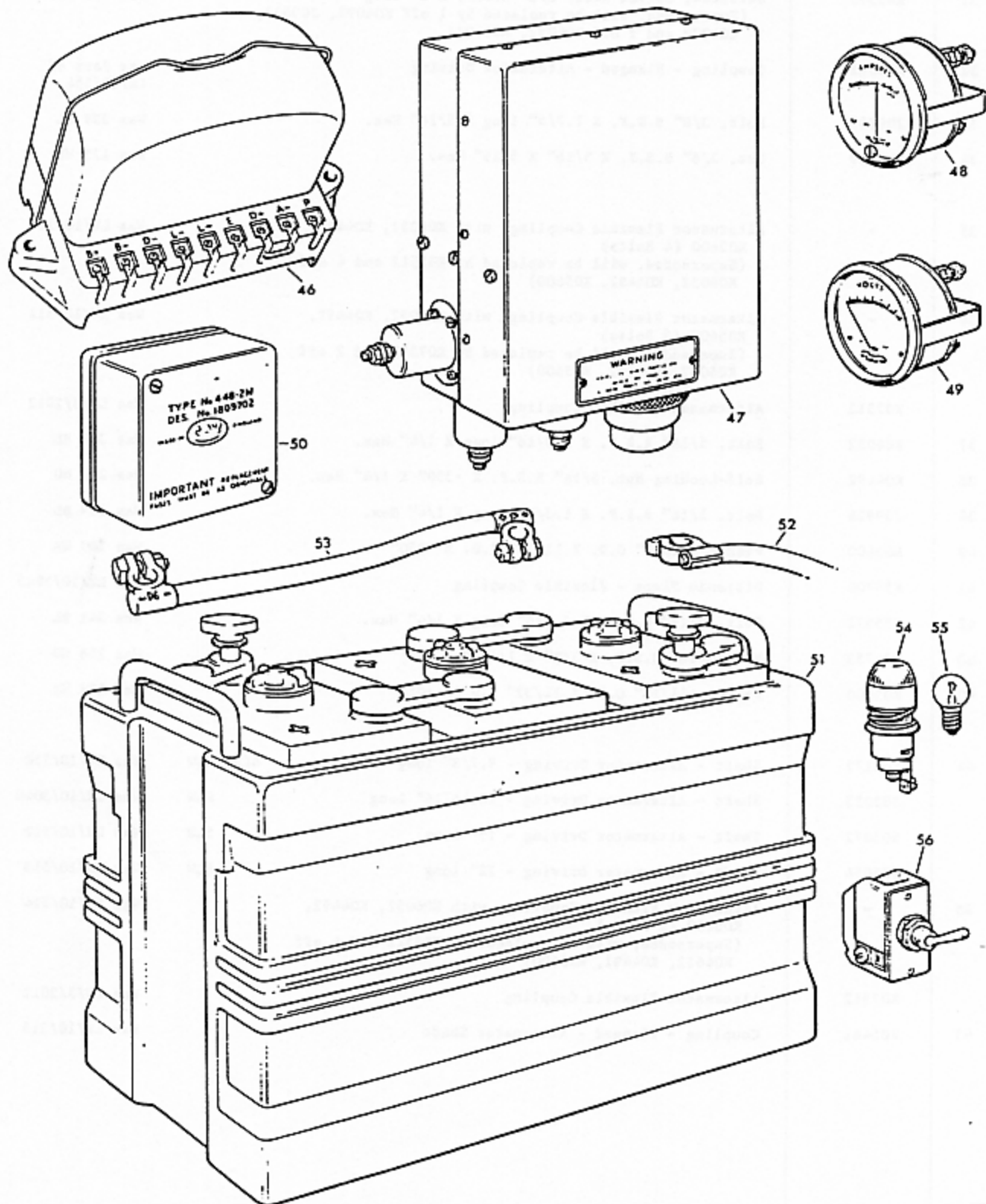
Plate No.	Illus. No.	Part No.	Description	
37	-	E05711	Boss - Dynamo Flexible Coupling - Type 2	Was LW/10/222
	-	K03301	Boss - Dynamo Flexible Coupling - Type 3	Was LW/10/466
	-	K03737	Boss - Dynamo Flexible Coupling - Type 3	Was LW/10/481
	-	K04921	Boss - Dynamo Flexible Coupling - Type 3	Was LW/10/507
	-	K05615	Boss - Dynamo Flexible Coupling - Type 3	Was LW/10/521
	-	K05620	Boss - Dynamo Flexible Coupling - Type 3	Was LW/10/519
	-	K05809	Boss - Dynamo Flexible Coupling - Type 3	Was LW/10/547
	-	K05619	Boss - Dynamo Flexible Coupling - Type 3	Was LW/10/524
	-	K06854	Boss - Dynamo Flexible Coupling - Type 3	Was LW/10/568
	-	K04297	Boss - Dynamo Flexible Coupling - Type 4	Was LX/10/3024
	-	K04298	Boss - Dynamo Flexible Coupling - Type 4	Was LX/10/3025
36	22	C07136	Nut, 5/8" B.S.F. X 1/2" X 1/2" Hex.	Was 187 NU
		K04305	Nut, 3/4" U.N.F. X 1/2" X 9/16" Hex.	Was 278 NU
	23	S05725/D7	Washer, 5/8" diam. bore	Was 104 WA
		K03741	Washer, 7/8" diam. bore	Was 183 WA
37	-	A26826	Nut - Dynamo Flexible Coupling - Type 2, with L21203, E52350	Was LW/10/54
	-	A26807	Nut - Dynamo Flexible Coupling - Type 2, with L21203, E52350	Was LW/10/236
	-	A26808	Nut - Dynamo Flexible Coupling - Type 2, with L21203, E52350	Was LW/10/237
	-	A26813	Nut - Dynamo Flexible Coupling - Type 2, with L21203, E52350	Was LW/10/242
	-	A26856	Nut - Dynamo Flexible Coupling - Type 2, with L21203, E52350	Was LW/10/409
	-	A26830	Nut - Dynamo Flexible Coupling - Type 2, with L21203, E52350	Was LW/10/463
36	24	L21203	Setscrew, Countersunk Head, 2 B.A. X 5/16" long	Was 158 SS
	25	E52350	Bush - Dynamo Flexible Coupling	Was 106 BU
	26	E05236	Coupling - Dynamo Flexible - 2.1/4" long	Was 109 HO
		E05763	Coupling - Dynamo Flexible - 2.15/16" long	Was 107 HO
		J02917	Coupling - Dynamo Flexible - 3.1/8" long	Was 113 HO
		E05709	Coupling - Dynamo Flexible - 3.3/16" long	Was 108 HO
		E05453	Coupling - Dynamo Flexible - 3.5/8" long	Was 112 HO
		E06870	Coupling - Dynamo Flexible - 4.3/16" long	Was 111 HO
	27	L21609	Clip - Dynamo Flexible Coupling	Was 114 CL
	28	J97920	Dynamo Fan, 5" diam. (Pressed on Dynamo Coupling Boss)	Was LW/10/464
		J06636	Dynamo Fan, 5" diam. (Bolted on Dynamo Coupling Boss)	Was MA 880
	29	J06637	Bolt, 1/4" - 26 Thds. X 7/8" long X 3/16" Hex., for J06636	Was 298 BL

## DYNAMO/ALTERNATOR AND DRIVE

Plate No.	Illus. No.	Part No.	Description	
36	30	-	Adapter - Alternator Flexible Coupling, with K05545 (Superseded, will be replaced by 1 off K06093, J09837, E04029 and 2 off K06052, K04492)	Was LW/10/510
	31	K05545	Setscrew, Socket Head, 3/8" B.S.F. X 2" long (Superseded, will be replaced by 1 off K06093, J09837, E04029 and 2 off K06052, K04492)	Was 435 SS
	32	K06093	Coupling - Flanged - Alternator Driving	Was Part of LW/10/554
	33	J09837	Bolt, 3/8" B.S.F. X 1.7/8" long X 5/16" Hex.	Was 329 BL
	34	E04029	Nut, 3/8" B.S.F. X 5/16" X 5/16" Hex.	Was 125 NU
	35	-	Alternator Flexible Coupling, with K06052, K04492, K05600 (4 Bolts) (Superseded, will be replaced by K07512 and 4 off K06052, K04492, K05600)	Was LW/10/524
	36	-	Alternator Flexible Coupling, with K06052, K04492, K05600 (2 Bolts) (Superseded, will be replaced by K07512 and 2 off K06052, K04492, K05600)	Was LW/10/511
		K07512	Alternator Flexible Coupling	Was LW/3/2012
	37	K06052	Bolt, 5/16" B.S.F. X 1.9/16" long X 1/4" Hex.	Was 343 BL
	38	K04492	Self-Locking Nut, 5/16" B.S.F. X .330" X 1/4" Hex.	Was 281 NU
	39	J09926	Bolt, 5/16" B.S.F. X 1.3/4" long X 1/4" Hex.	Was 159 BL
	40	K05600	Washer, 11/16" O.D. X 11/32" I.D. X .050"	Was 199 WA
	41	K55700	Distance Piece - Flexible Coupling	Was LX/10/3045
	42	K05571	Bolt, 5/16" B.S.F. X 3.1/4" long X 1/4" Hex.	Was 341 BL
	43	K04753	Nut, 5/16" B.S.F. X 3/8" X 1/4" Hex.	Was 298 NU
	40	K05600	Washer, 11/16" O.D. X 11/32" I.D. X .050"	Was 199 WA
	44	S05172	Shaft - Alternator Driving - 9.7/8" long	6LW, 5LW Was LW/10/550
		S05055	Shaft - Alternator Driving - 10.15/16" long	6LW Was LX/10/3040
		S05072	Shaft - Alternator Driving - 19" long	5LW Was LW/10/512
		S05056	Shaft - Alternator Driving - 22" long	6LW Was LW/10/513
	35	-	Alternator Flexible Coupling, with K06052, K04492, K05600 (4 Bolts) (Superseded, will be replaced by K07512 and 4 off K06052, K04492, K05600)	Was LW/10/514
		K07512	Alternator Flexible Coupling	Was LW/3/2012
	45	K05461	Coupling - Flanged - Alternator Shaft	Was LW/10/515

# GARDNER

## ELECTRICAL EQUIPMENT - PLATE 38

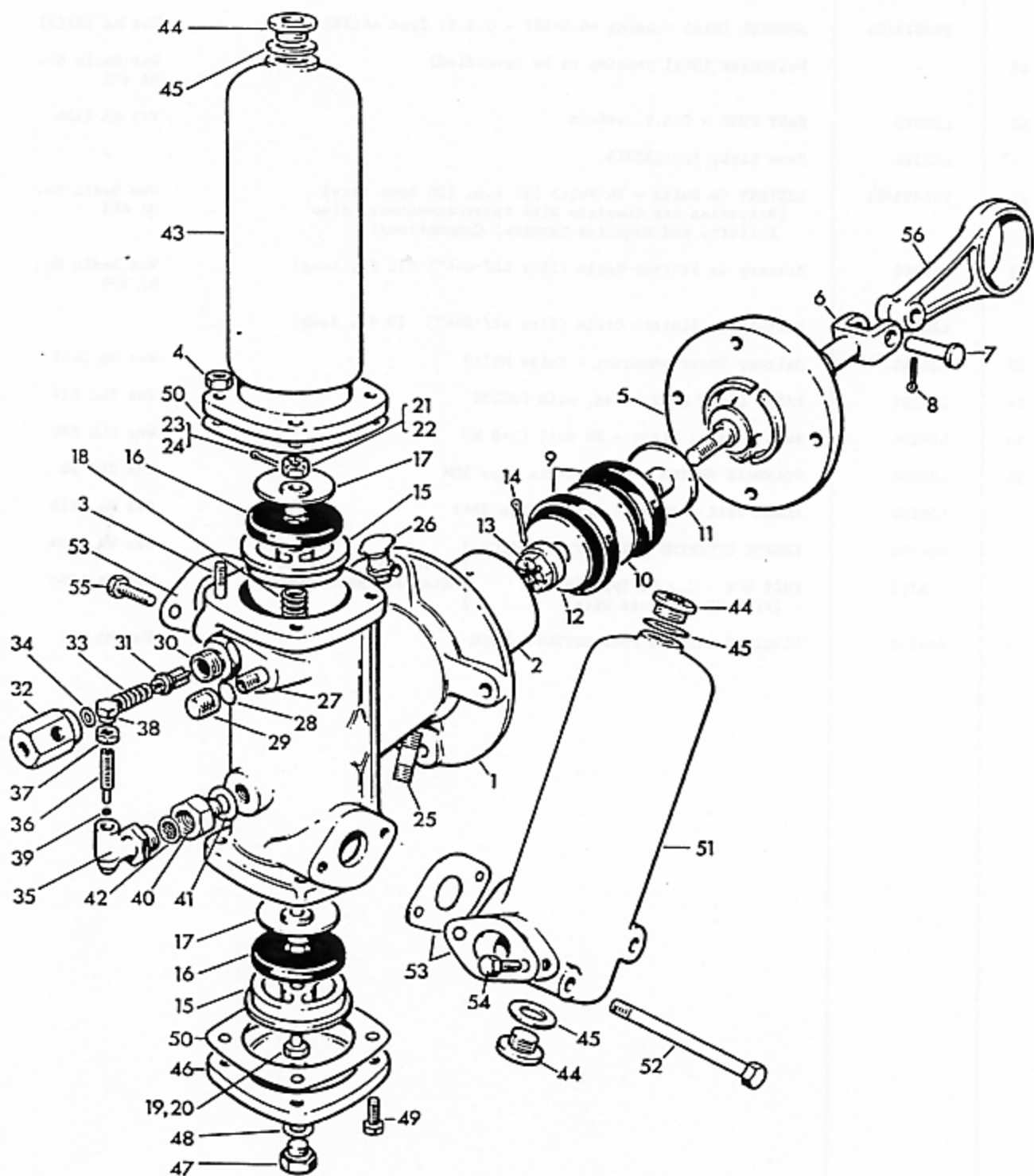


## ELECTRICAL EQUIPMENT

Plate No.	Illus. No.	Part No.	Description	
38	46	L20310	REGULATOR - C.A.V. Type 440/D/24/2	Was Basic No. MA 680
	47	F06849	SCREENED CONTROL BOX - C.A.V. Type 446	Was Basic No. MA 1040
	48	S02022/02	AMMETER (Dial reading 30-0-30) - C.A.V. Type A4138B	Was MA 681(7)
		S02022/04	AMMETER (Dial reading 60-0-60) - C.A.V. Type A4138E	Was MA 681(9)
	49	-	Voltmeter (Dial reading to be specified)	Was Basic No. MA 682
	50	L20315	FAST FUSE - C.A.V. 448-2M	Was MA 1254
-	-	L20320	Fuse Link, for L20315	-
38	51	S05858/01	BATTERY (4 Units = 24 Volt) 121 a.h. (20 hour rate) (Batteries are complete with Interconnectors, also Positive and Negative Terminal Connections)	Was Basic No. MA 683
	52	L20340	Battery to Starter Cable (Size 61/-044") (12 ft. long)	Was Basic No. MA 684
		L20341	Battery to Starter Cable (Size 61/-044") (9 ft. long)	
	53	L20345	Battery Interconnector - Exide MB210	Was MA 1417
	54	L20281	PANEL LIGHT UNIT - Red, with L20286	Was SLC 227
	55	L20286	Bulb - Panel Light - 24 Volt (2.8 W)	Was SLC 230
	56	L20296	SOLENOID SWITCH - Arcoelectric Type 30M	Was SLC 54
-	-	L20280	ALARM BELL - 24 Volt AC/DC (Type 396)	Was MA 1419
-	-	S04953	ENGINE STOPPING PUSH BUTTON SWITCH )	Was MA 1389
-	-	S05718	FUSE BOX - C.A.V. Type 1M ) To suit Solenoid (With 10 AMP Fuse Wire) ) Stopping Arrangement	Was MA 1390
-	-	S04952	ELECTRIC STARTER PUSH BUTTON SWITCH	Was MA 349

# GARDNER

## WATER PUMP AND DRIVE — RAM TYPE — PLATE 39



## WATER PUMP AND DRIVE-RAM TYPE

Plate No.	Illus. No.	Part No.	Description	
39	-	A00157	WATER PUMP ASSEMBLY - RAM TYPE - 1.3/4" BORE, Comprising Body, Liner, Guide, Ram, Cup Washers, Valves, Air Vessels, Studs, Nuts and Packings	Was LW/13/1001
	1	A00167	Water Pump Body	Was LW/13/1002
	2	J08319	Liner - Pump Body	Was LW/13/1003
	3	J03499	Stud, 5/16" Wh. X 1.1/8" long	Was 318 ST
	4	J06412	Nut, 5/16" Wh. X 5/16" X 1/4" Hex.	Was 214 NU
	5	F02628	Guide - Pump Ram	Was LW/13/1006
	6	E34230	Pump Ram	Was Part of MA 619
	7	C05242	Pin, Headed, 1/2" diam. X 1.31/32" long	Was 133 PH
	8	S05618/15	Split Pin, 1/8" diam. X 1" long	Was 120 PS
	9	C04951	Cup Washer	Was MA 620
	10	C49540	Washer - Cup Washer Spacing	Was 145 WA
	11	E03913	Bush - Cup Washer Clamp	Was 129 BU
	12	C49470	Washer - Cup Washer Clamp	Was 146 WA
	13	E72230	Nut - Pump Ram	Was 215 NU
	14	L21443	Split Pin, 3/32" diam. X 1.1/4" long	Was 116 PS
	15	E34180	Seat - Pump Valve	Was MA 621
	16	E03417	Pump Valve	Was MA 622
	17	C69930	Stop - Pump Valve	Was MA 623
	18	E02078	Spring - Compression - Pump Valve	Was 171 SP
	19	-	Bolt - Pump Valve Coupling (Superseded, will be replaced by K03895, K03890, L21442)	Was 212 BL
	20	K03895	Bolt - Pump Valve Coupling	Was Part of MA 781
	21	K00071	Nut, 5/16" Wh. X 9/32" X 3/16" Hex. }	Was 216 NU
	22	L21442	Split Pin, 5/64" diam. X 1" long }	Was 106 PS
	23	K03890	Castle Nut, 5/16" Wh. }	Was 243 NU
	24	L21442	Split Pin, 5/64" diam. X 3/4" long }	Was 164 PS
	25	E05327	Pipe - Pump Body Drain	Was LW/13/1023
	26	L21071	Lubricator, 1/8" B.S.P.	Was 100 LU
	27	E05327	Pipe - Pump Delivery Chamber Drain	Was Part of MA 624
	28	C08736	Packing, Circular, Blank, 15/32" diam. X 1/16"	Was 213 PA
	29	C03527	Cap Nut, 1/4" B.S.P.	Was 217 NU
	30	T03094	Seat - Safety Valve, with C08325, C08326, C09574, K00353	Was MA 625
	31	-	Safety Valve ) Not supplied as separate items,	Was MA 626
	32	-	Cover - Safety Valve ) specify T03094	Was MA 627
	33	C09574	Spring - Compression - Safety Valve	Was 172 SP
	34	K00353	Shim Washer, 15/32" O.D. X 5/16" I.D. X .022" thick	Was 152 WA
	35	T03101	Snifter Valve Body, with K00358, K00357, K00356, L20921	Was Part of MA 641

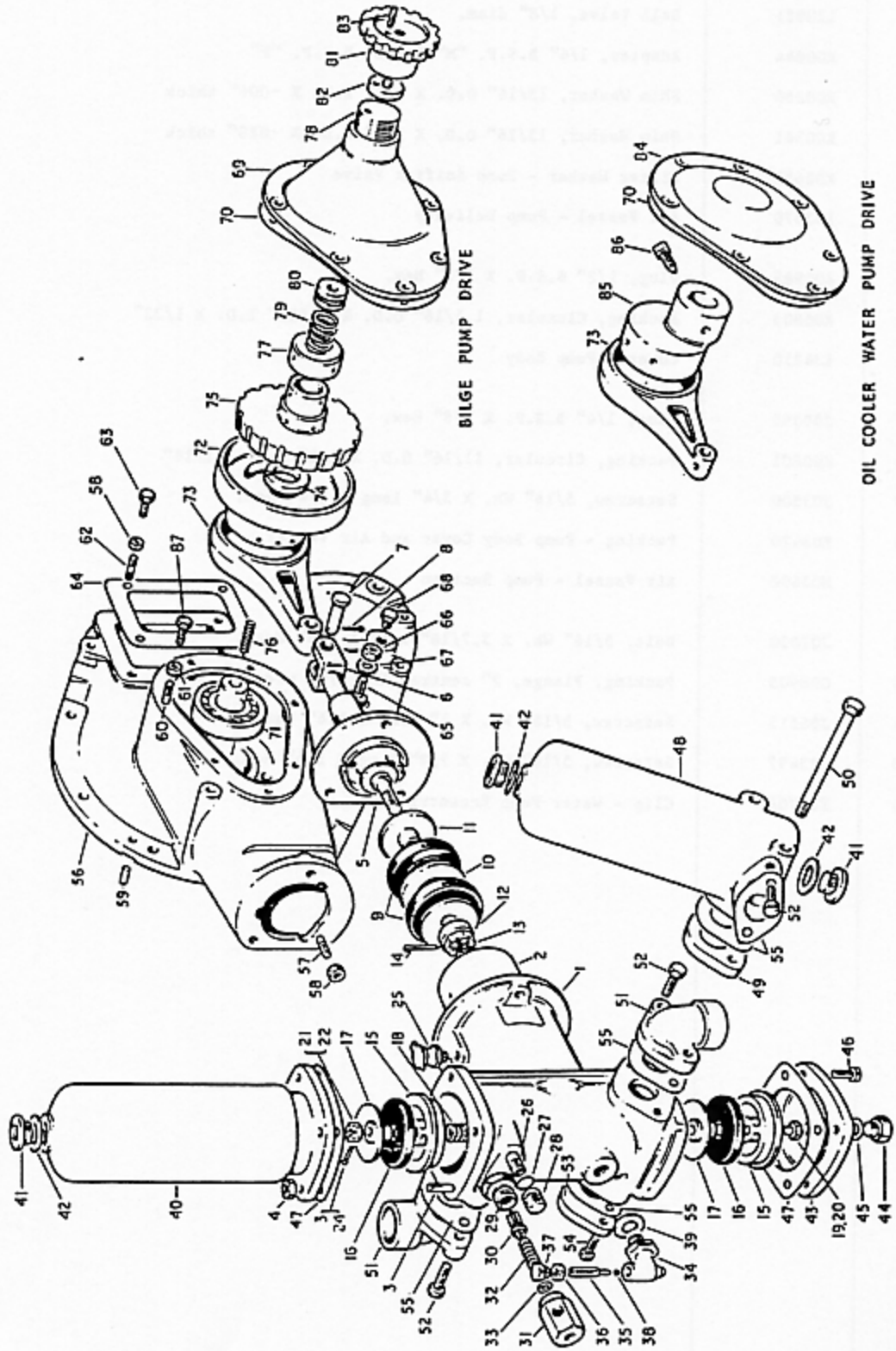


## WATER PUMP AND DRIVE-RAM TYPE

Plate No.	Illus. No.	Part No.	Description	
39	36	-	Screw - Snifter Valve (Not supplied as a separate item, specify T03101)	Was MA 642
	37	K00357	Nut, 1/4" - 40 Thds. X 5/32" X 3/16" Hex.	Was 219 NU
	38	K00356	Cap Nut, 1/4" - 40 Thds. X 3/16" Hex.	Was 218 NU
	39	L20921	Ball Valve, 1/8" diam.	Was 105 BA
	40	K00844	Adapter, 1/4" B.S.P. "M" X 3/8" B.S.P. "F"	Was 107 AD
	41	K00360	Shim Washer, 13/16" O.D. X 1/2" I.D. X .006" thick	Was 153 WA
		K00361	Shim Washer, 13/16" O.D. X 1/2" I.D. X .028" thick	Was 154 WA
	42	K02650	Filter Washer - Pump Snifter Valve	Was MA 614
	43	E43570	Air Vessel - Pump Delivery	Was Part of MA 628
	44	K00983	Plug, 1/2" B.S.P. X 5/8" Hex.	Was 121 PL
	45	K00803	Packing, Circular, 1.1/16" O.D. X 25/32" I.D. X 1/32"	Was 154 PA
	46	E34210	Cover - Pump Body	Was Part of MA 629
	47	J09392	Plug, 1/4" B.S.P. X 3/8" Hex.	Was 102 PL
	48	K00801	Packing, Circular, 11/16" O.D. X 1/2" I.D. X 1/16"	Was 146 PA
	49	J03500	Setscrew, 5/16" Wh. X 3/4" long X 1/4" Hex.	Was 273 SS
	50	E03420	Packing - Pump Body Cover and Air Vessel	Was MA 630
	51	H03608	Air Vessel - Pump Suction	Was Part of MA 704
	52	J07030	Bolt, 5/16" Wh. X 3.7/16" long X 1/4" Hex.	Was 213 BL
	53	C08905	Packing, Flange, 2" centres X 1.5/8" wide	Was 129 PA
	54	J06515	Setscrew, 5/16" Wh. X 1" long X 1/4" Hex.	Was 275 SS
	55	J03497	Setscrew, 5/16" Wh. X 7/8" long X 1/4" Hex.	Was 272 SS
	56	F02708	Clip - Water Pump Eccentric	Was LW/2/1046

# GARDNER

## OIL COOLER WATER PUMP AND DRIVE — BILGE PUMP AND DRIVE — RAM TYPE PLATE 40



## OIL COOLER WATER PUMP AND DRIVE, BILGE PUMP AND DRIVE-RAM TYPE

Plate No.	Illus. No.	Part No.	Description	
40	-	A02624	WATER PUMP ASSEMBLY - RAM TYPE - 2.3/16" BORE, Comprising Body, Liner, Guide, Ram, Cup Washers, Valves, Air Vessels, Studs, Nuts and Packings	Was LW/13/1103
	-	T02551	BILGE PUMP ASSEMBLY - RAM TYPE - 2.3/16" BORE, Comprising Body, Liner, Guide, Ram, Cup Washers, Valves, Air Vessel, Studs, Nuts and Packings	Was MA 646
	1	A01913	Water and Bilge Pump Body - 2.3/16" Bore, with K02003, J03499, J06412, E34180, L21071, E05327, C08736, C03527, E03420, K02246, J03497, C08905	Was MA 643
	2	K02003	Liner - Water and Bilge Pump Body	Was MA 644
	3	J03499	Stud, 5/16" Wh. X 1.1/8" long	Was 318 ST
	4	J06412	Nut, 5/16" Wh. X 5/16" X 1/4" Hex.	Was 214 NU
	5	E34220	Guide - Pump Ram	Was MA 631
	6	E34230	Pump Ram	Was Part of MA 619
	7	C05242	Pin, Headed, 1/2" diam. X 1.31/32" long	Was 133 PN
	8	S05618/15	Split Pin, 1/8" diam. X 1" long	Was 120 PS
	9	K02002	Cup Washer	Was MA 645
	10	C64370	Washer - Cup Washer Spacing	Was 148 WA
	11	E39120	Bush - Cup Washer Clamp	Was 130 BU
	12	C64380	Washer - Cup Washer Clamp	Was 147 WA
	13	E72230	Nut - Pump Ram	Was 215 NU
	14	L21443	Split Pin, 3/32" diam. X 1.1/4" long	Was 116 PS
	15	E34180	Seat - Pump Valve	Was MA 621
	16	E03417	Pump Valve	Was MA 622
	17	C69930	Stop - Pump Valve	Was MA 623
	18	E02078	Spring - Compression - Pump Valve	Was 171 SP
	19	-	Bolt - Pump Valve Coupling (Superseded, will be replaced by K03895, C03890, L21442)	Was 212 BL
	20	K03895	Bolt - Pump Valve Coupling	Was Part of MA 781
	21	K00071	Nut, 5/16" Wh. X 9/32" X 3/16" Hex. )	Was 216 NU
	23	L21442	Split Pin, 5/64" diam. X 1" long )	For Superseded Part No. 212 BL Was 106 PS
	22	K03890	Castle Nut, 5/16" Wh. )	Was 243 NU
	24	L21442	Split Pin, 5/64" diam. X 3/4" long )	For K03895 Was 164 PS
	25	L21071	Lubricator, 1/8" B.S.P.	Was 100 LU
	26	E05327	Pipe - Pump Delivery Chamber Drain	Was Part of MA 624
	27	C08736	Packing, Circular, Blank, 15/32" diam. X 1/16"	Was 213 PA
	28	C03527	Cap Nut, 1/4" B.S.P.	Was 217 NU
	29	T03094	Seat - Safety Valve, with C08325, C08326, C09574, K00353	Was MA 625
	30	-	Safety Valve )	Was MA 626
	31	-	Cover - Safety Valve )	Not supplied as separate items, specify T03094 Was MA 627
	32	C09574	Spring - Compression - Safety Valve	Was 172 SP
	33	K00353	Shim Washer, 15/32" O.D. X 5/16" I.D. X .022" thick	Was 152 WA

## OIL COOLER WATER PUMP AND DRIVE, BILGE PUMP AND DRIVE-RAM TYPE

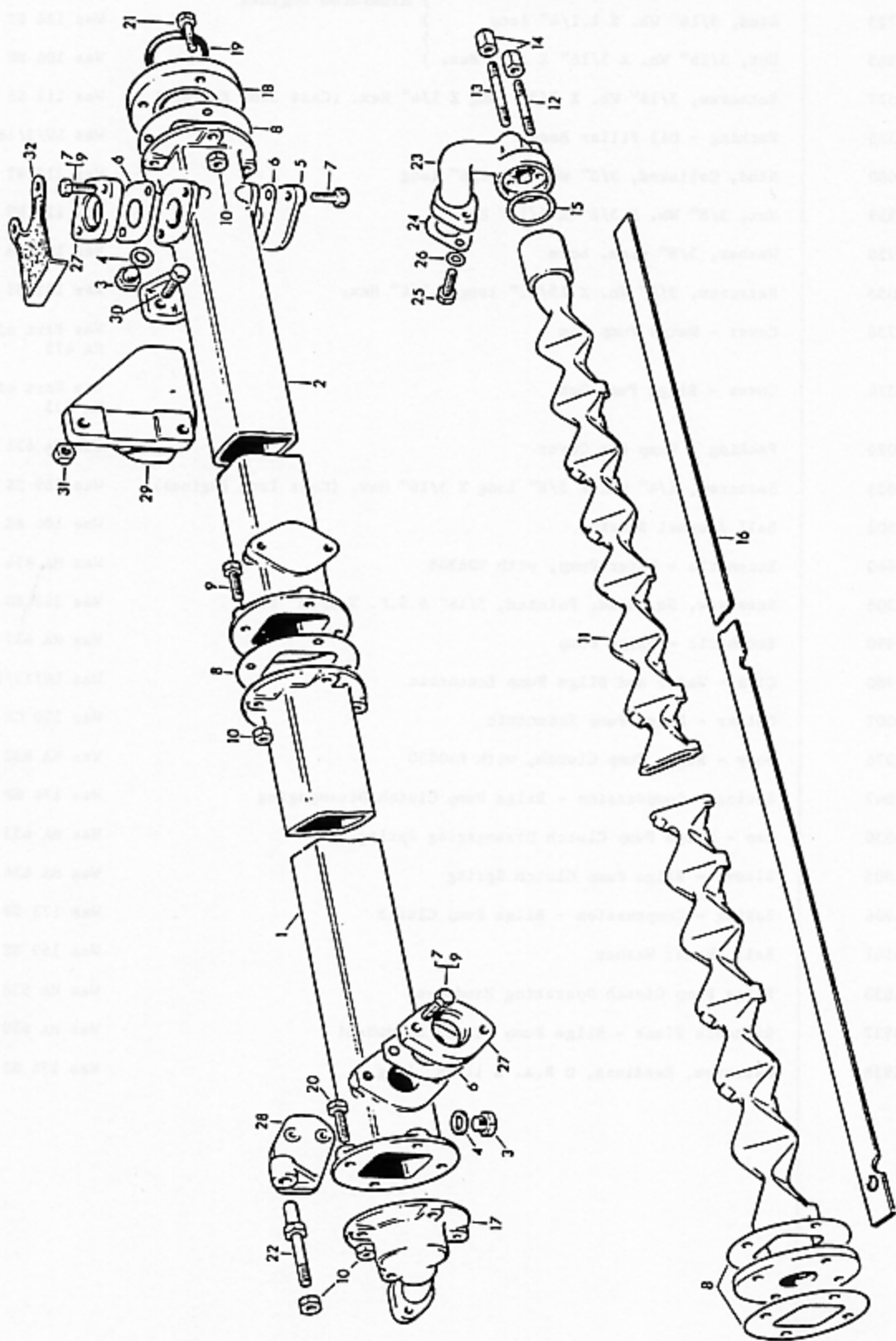
Plate No.	Illus. No.	Part No.	Description	
40	34	T03100	Snifter Valve Body, with K00358, K00357, K00356, L20921	Was Part of MA 640
	35	-	Screw - Snifter Valve (Not supplied as a separate item, specify T03100)	Was MA 642
	36	K00357	Nut, 1/4" - 40 Thds. X 5/32" X 3/16" Hex.	Was 219 NU
	37	K00356	Cap Nut, 1/4" - 40 Thds. X 3/16" Hex.	Was 218 NU
	38	L20921	Ball Valve, 1/8" diam.	Was 105 BA
	39	K00360	Shim Washer, 13/16" O.D. X 1/2" I.D. X .006" thick	Was 153 WA
		K00361	Shim Washer, 13/16" O.D. X 1/2" I.D. X .028" thick	Was 154 WA
	40	E43570	Air Vessel - Pump Delivery	Was Part of MA 628
	41	K00983	Plug, 1/2" B.S.P. X 5/8" Hex.	Was 121 PL
	42	K00803	Packing, Circular, 1.1/16" O.D. X 25/32" I.D. X 1/32"	Was 154 PA
	43	E34210	Cover - Pump Body	Was Part of MA 629
	44	J09392	Plug, 1/4" B.S.P. X 3/8" Hex.	Was 102 PL
	45	K00801	Packing, Circular, 11/16" O.D. X 1/2" I.D. X 1/16"	Was 146 PA
	46	J03500	Setscrew, 5/16" Wh. X 3/4" long X 1/4" Hex.	Was 273 SS
	47	E03420	Packing - Pump Body Cover and Air Vessel	Was MA 630
	48	H03608	Air Vessel - Water Pump Suction	Was Part of MA 704
	49	J84420	Distance Piece, Oval, 2" centres X 1" Bore	Was 144 FL
	50	J08443	Bolt, 5/16" Wh. X 3.13/16" long X 1/4" Hex.	Was 181 BL
	51	E40090	Elbow, Single Flange, 2" centres X 1" B.S.P. "F"	Was 111 EL
		E40100	Elbow, Single Flange, 2" centres X 1" Bore	Was 112 EL
	52	J06515	Setscrew, 5/16" Wh. X 1" long X 1/4" Hex.	Was 275 SS
	53	K02246	Flange, Blank, 2" centres X 1.5/8" wide	Was 193 FL
	54	J03497	Setscrew, 5/16" Wh. X 7/8" long X 1/4" Hex.	Was 272 SS
	55	C08905	Packing, Flange, 2" centres X 1.5/8" wide	Was 129 PA
	56	A00885	Water and Bilge Pump Box - ) Cast Iron, with E05614, ) E03945, C08750, K00680, ) 2LW, 3LW C05539, J09950, E09026 )	Was LW/13/1061
		A00884	Water and Bilge Pump Box - ) Marine Aluminium, with E05614, ) Propelling ) E03945, C08750, E06366, ) Engines ) E05632, C06723, E05355, ) 3LW K00680, C05539, J09950, ) E09026 )	Was LW/13/1060
		A00887	Water and Bilge Pump Box - Cast Iron, ( 2 to 6LW with E05614, E03945, C08750, E05355, ( Marine Auxiliary K00680, C05539, J09950, J08058, E09026 ( 4 to 6LW ( Marine Propelling	Was LW/13/1063
		A00886	Water and Bilge Pump Box - Aluminium, ) 3 to 6LW with E05614, E03945, C08750, E06366, ) Marine Auxiliary E05632, C06723, E05355, K00680, C05539, ) 4 to 6LW J09950, J08058, E09026 ) Marine Propelling	Was LW/13/1062
	57	E05614	Stud, 5/16" Wh. X 1.7/16" long	Was 116 ST
	58	E03945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex.	Was 106 NU
	59	C08750	Steady Peg, 1/4" diam. X 15/32" long	Was 104 PE

OIL COOLER WATER PUMP AND DRIVE,  
BILGE PUMP AND DRIVE-RAM TYPE

Plate No.	Illus. No.	Part No.	Description	
40	60	E06366	Stud, 1/4" Wh. X 7/8" long	Was 319 ST
	61	E05632	Nut, 1/4" Wh. X 1/4" X 3/16" Hex.	Was 105 NU
	62	C06723	Stud, 5/16" Wh. X 1.1/4" long	Was 126 ST
	58	E03945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex.	Was 106 NU
	63	E05577	Setscrew, 5/16" Wh. X 7/8" long X 1/4" Hex. (Cast Iron Engines)	Was 112 SS
	64	E05355	Packing - Oil Filler Body	Was LW/2/161
	65	K00680	Stud, Collared, 3/8" Wh. X 1.7/8" long	Was 215 ST
	66	C05539	Nut, 3/8" Wh. X 3/8" X 5/16" Hex.	Was 110 NU
	67	J09950	Washer, 3/8" diam. bore	Was 107 WA
	68	J08058	Setscrew, 3/8" Wh. X 15/32" long X 1/4" Hex.	Was 152 SS
	84	F01738	Cover - Water Pump Box	Was Part of MA 475
	69	F00374	Cover - Bilge Pump Box	Was Part of MA 635
	70	E09026	Packing - Pump Box Cover	Was MA 636
	87	K00833	Setscrew, 1/4" Wh. X 5/8" long X 3/16" Hex. (Cast Iron Engines)	Was 289 SS
	71	L20502	Ball Journal Bearing	Was 104 BE
	85	J24640	Eccentric - Water Pump, with E06308	Was MA 474
	86	E06308	Setscrew, Sq. Head, Pointed, 5/16" B.S.F. X 9/16" long	Was 249 SS
	72	E39990	Eccentric - Bilge Pump	Was MA 637
	73	J64980	Clip - Water and Bilge Pump Eccentric	Was LW/13/1073
	74	E04001	Collar - Bilge Pump Eccentric	Was 120 CR
	75	A02076	Body - Bilge Pump Clutch, with E40030	Was MA 632
	76	C07047	Spring - Compression - Bilge Pump Clutch Disengaging	Was 174 SP
	77	E40030	Cap - Bilge Pump Clutch Disengaging Spring	Was MA 633
	78	E04005	Sleeve - Bilge Pump Clutch Spring	Was MA 634
	79	E04006	Spring - Compression - Bilge Pump Clutch	Was 173 SP
	80	L20541	Ball Thrust Washer	Was 169 BE
	81	E61830	Bilge Pump Clutch Operating Handwheel	Was MA 638
	82	E08937	Distance Piece - Bilge Pump Clutch Handwheel	Was MA 639
	83	E08938	Setscrew, Headless, O B.A. X 11/16" long	Was 274 SS

**GARDNER**

LUBRICATING OIL COOLER — PLATE 41



## LUBRICATING OIL COOLER

Plate No.	Illus. No.	Part No.	Description		
41	-	T00576	LUBRICATING OIL COOLER ASSEMBLY - INDENTED TUBE - 3/8" GAP, Comprising Inner and Outer Pipes, Studs, Bolts, Nuts, Flanges and Packings	)	Was LW/14/1001
				)	2LW
	-	T00577	LUBRICATING OIL COOLER ASSEMBLY - INDENTED TUBE - 3/8" GAP, Comprising Inner and Outer Pipes, Studs, Bolts, Nuts, Flanges and Packings	)	Was LW/14/1002
				)	3LW
	-	T00578	LUBRICATING OIL COOLER ASSEMBLY - INDENTED TUBE - 1/8" GAP, Comprising Inner and Outer Pipes, Studs, Bolts, Nuts, Flanges and Packings	)	Was LW/14/1044
				)	4LW
	-	T00579	LUBRICATING OIL COOLER ASSEMBLY - INDENTED TUBE - 1/8" GAP, Comprising Inner and Outer Pipes, Studs, Bolts, Nuts, Flanges and Packings	)	Was LW/14/1045
				)	5LW
	-	T00580	LUBRICATING OIL COOLER ASSEMBLY - INDENTED TUBE - 1/8" GAP, Comprising Inner and Outer Pipes, Studs, Bolts, Nuts, Flanges and Packings	)	Was LW/14/1046
				)	6LW
	-	T00608	LUBRICATING OIL COOLER ASSEMBLY - INDENTED TUBE - 1/8" GAP, Comprising Inner and Outer Pipes, Studs, Bolts, Nuts, Flanges and Packings	)	Was LW/14/1055
				)	2LW
	-	T00610	LUBRICATING OIL COOLER ASSEMBLY - INDENTED TUBE - 1/8" GAP, Comprising Inner and Outer Pipes, Studs, Bolts, Nuts, Flanges and Packings	)	Was LW/14/1056
				)	3LW
	-	T00609	LUBRICATING OIL COOLER ASSEMBLY - INDENTED TUBE - 1/16" GAP, Comprising Inner and Outer Pipes, Studs, Bolts, Nuts, Flanges and Packings	)	Was LW/14/1057
				)	4LW
	-	T00606	LUBRICATING OIL COOLER ASSEMBLY - INDENTED TUBE - 1/16" GAP, Comprising Inner and Outer Pipes, Studs, Bolts, Nuts, Flanges and Packings	)	Was LW/14/1058
				)	5LW
	-	T00607	LUBRICATING OIL COOLER ASSEMBLY - INDENTED TUBE - 1/16" GAP, Comprising Inner and Outer Pipes, Studs, Bolts, Nuts, Flanges and Packings	)	Was LW/14/1059
				)	6LW
	1	F01102	Oil Cooler Pipe - Outer	(	2LW, 5LW Was Part of ( Flywheel End LW/14/1007
		F01101	Oil Cooler Pipe - Outer	(	3LW, 6LW Was Part of ( Flywheel End LW/14/1008
		F00853	Oil Cooler Pipe - Outer	(	4LW - Was Part of ( Flywheel End LW/14/1010
	2	F02671	Oil Cooler Pipe - Outer	(	2LW, 3LW Was Part of (Chain Case End LW/14/1006
		H01181	Oil Cooler Pipe - Outer	(	4 to 6LW Was Part of (Chain Case End LW/14/1009
	3	J09392	Plug, 1/4" B.S.P. X 3/8" Hex.		Was 102 PL
	4	X00801	Packing, Circular, 11/16" O.D. X 1/2" I.D. X 1/16"		Was 146 PA
	5	X00501	Flange, Blank, 2.5/8" centres X 2.1/2" wide		Was 180 PL
	6	E06522	Packing, Flange, 2.5/8" centres X 2.1/2" wide		Was 137 PA
	7	K02359	Setscrew, 3/8" Wh. X 7/8" long X 5/16" Hex.		Was 282 SS
	8	E05564	Packing, Circular, 4.1/8" O.D. X 2.1/4" X 3.3/8" centres	)	Was 212 PA
	9	K02360	Setscrew, 3/8" Wh. X 1.1/8" long X 5/16" Hex.	)	Joining Was 294 SS Outer Pipes
	10	K03891	Nut, 3/8" Wh. X 5/16" X 5/16" Hex.	)	Was 245 NU

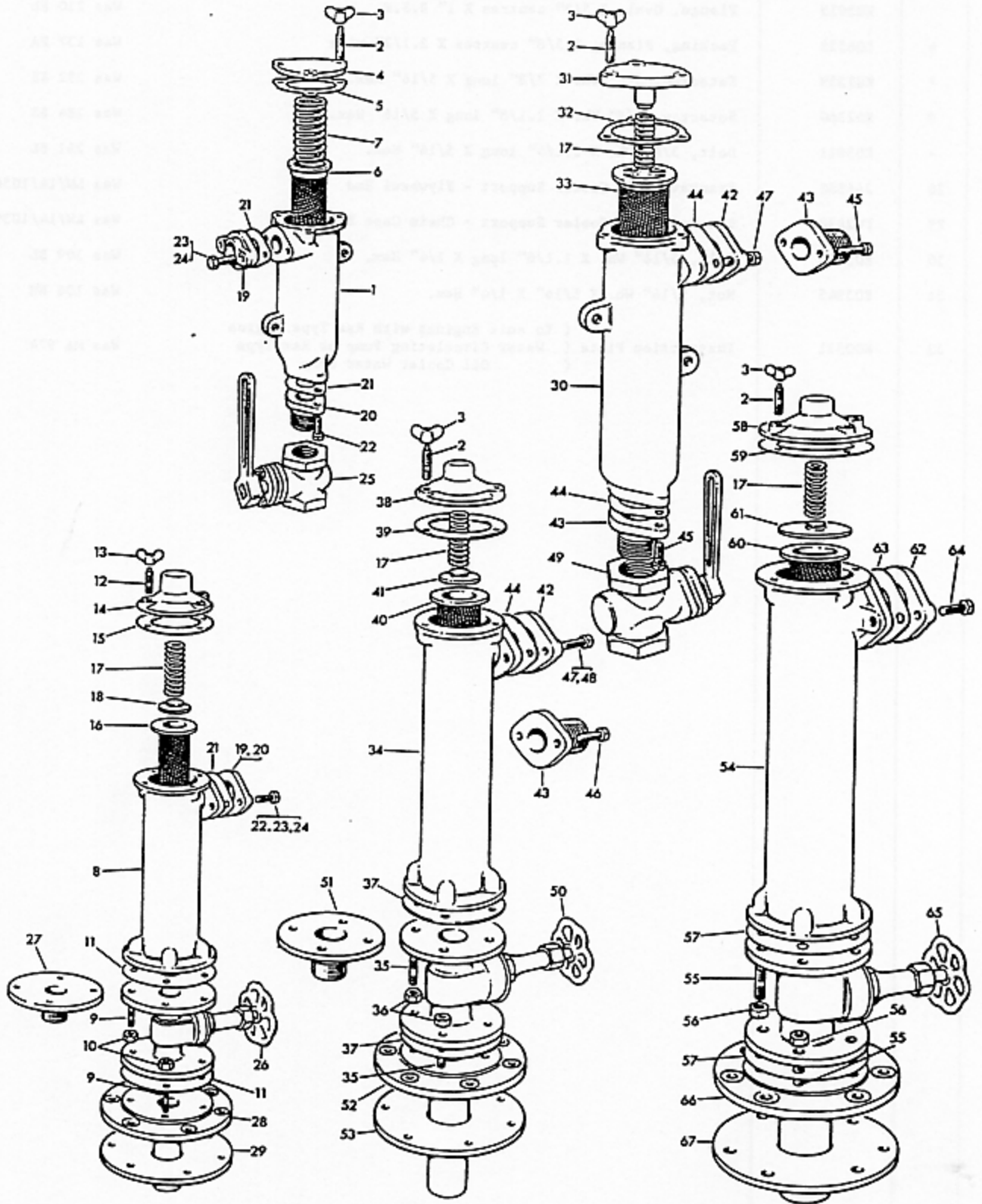
Plate No.	Illus. No.	Part No.	Description	
41	11	T03010	Oil Cooler Pipe - Inner - (Indented - 3/8" Gap)	} To suit Engines with Non Type Water Pump
		T03011	Oil Cooler Pipe - Inner - (Indented - 3/8" Gap)	
		T03012	Oil Cooler Pipe - Inner - (Indented - 1/8" Gap)	
		T03013	Oil Cooler Pipe - Inner - (Indented - 1/8" Gap)	
		T03014	Oil Cooler Pipe - Inner - (Indented - 1/8" Gap)	
		T03027	Oil Cooler Pipe - Inner - (Indented - 1/8" Gap)	
		T03029	Oil Cooler Pipe - Inner - (Indented - 1/8" Gap)	
		T03028	Oil Cooler Pipe - Inner - (Indented - 1/16" Gap)	
		T03025	Oil Cooler Pipe - Inner - (Indented - 1/16" Gap)	
		T03026	Oil Cooler Pipe - Inner - (Indented - 1/16" Gap)	
	12	E09659	Stud, 5/16" Wh. X 2.1/8" long	Was 119 ST
	13	E02156	Stud, 5/16" Wh. X 2.7/16" long	Was 136 ST
	14	J06255	Cap Nut, 5/16" Wh. X 5/8" X 1/4" Hex.	Was 205 NU
	15	J06257	Packing, Circular, 2" O.D. X 1.11/16" I.D. X 1/32"	Was 209 PA
	16	K01247	Oil Cooler Strip	Was LW/14/1050
		K01248	Oil Cooler Strip	Was LW/14/1051
		K01249	Oil Cooler Strip	Was LW/14/1052
		K01250	Oil Cooler Strip	Was LW/14/1053
		K01251	Oil Cooler Strip	Was LW/14/1054
	17	T27704	Outlet Connection - Oil Cooler - Flywheel End	Was Part of LW/14/1014
	16	J61300	Flange - Oil Cooler - Chain Case End	Was Part of LW/14/1033
	8	E05584	Packing, Circular, 4.1/8" O.D. X 2.1/4" X 3.3/8" centres	Was 212 PA
	19	J06128	Joint Ring, 2.7/16" O.D. X 1.15/16" I.D. X 1/4" Sectional diam.	Was 106 RJ
	20	K02358	Setcrew, 3/8" Wh. X 1.1/4" long X 5/16" Hex.	Was 338 SS
	21	K03892	Bolt, 3/8" Wh. X 1.3/8" long X 5/16" Hex.	Was 260 BL
	22	J06657	Oil Cooler Swivel Bolt	Was LW/14/1018
	10	K03891	Nut, 3/8" Wh. X 5/16" X 5/16" Hex.	Was 245 NU
	23	J62560	Connection - Oil Cooler Pipe - Chain Case End	Was Part of LW/14/1037
	15	J06257	Packing, Circular, 2" O.D. X 1.11/16" I.D. X 1/32"	Was 209 PA
	24	K00793	Packing, Flange, 1.3/4" centres X 1.1/2" wide	Was 117 PA
	25	J09902	Setcrew, 5/16" Wh. X 1.1/8" long X 1/4" Hex.	Was 214 SS
	26	S05725/02	Washer, 5/16" diam. bore	Was 105 WA



Plate No.	Illus. No.	Part No.	Description	
41	27	E22070	Flange, Oval, 2.5/8" centres X 1" bore	Was 169 FL
		K04248	Flange, Oval, 2.5/8" centres X 1.27/64" bore	Was 244 FL
		J73540	Flange, Oval, 2.5/8" centres X 1.1/2" bore	Was 196 FL
		K02915	Flange, Oval, 2.5/8" centres X 1" B.S.P.	Was 210 FL
	6	E06522	Packing, Flange, 2.5/8" centres X 2.1/2" wide	Was 137 PA
	7	K02359	Setscrew, 3/8" Wh. X 7/8" long X 5/16" Hex.	Was 282 SS
	9	K02360	Setscrew, 3/8" Wh. X 1.1/8" long X 5/16" Hex.	Was 284 SS
-	-	K03921	Bolt, 3/8" Wh. X 2.1/4" long X 5/16" Hex.	Was 261 BL
41	28	J66580	Bracket - Oil Cooler Support - Flywheel End	Was LW/14/1038
	29	F02638	Bracket - Oil Cooler Support - Chain Case End	Was LW/14/1039
	30	E05205	Bolt, 5/16" Wh. X 1.1/8" long X 1/4" Hex.	Was 109 BL
	31	E03945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex.	Was 106 NU
	32	X00371	Instruction Plate ( To suit Engines with Ram Type Engine ( Water Circulating Pump or Ram Type ( Oil Cooler Water Pump	Was HA 974

GARDNER

WATER STRAINER — PLATE 42



## WATER STRAINER

Plate No.	Illus. No.	Part No.	Description	
42	-	-	WATER STRAINER ASSEMBLY (Length of Body 7.3/4") - GUN METAL, Comprising Body, Cover, Cage, Spring, Studs, Nuts and Packings (Superseded, will be replaced by 1 off T02905, K47660)	Was MA 667
	1	-	Water Strainer Body (7.3/4" long) - Gun Metal (Superseded, will be replaced by 1 off T02905, K47660)	Was MA 668
	2	K02357	Stud - Strainer Cover	Was 322 ST
	3	K04378	Wing Nut, 5/16" Wh.	Was 181 HU
	4	K02468	Cover - Water Strainer - Gun Metal	Was Part of MA 669
	5	K00805	Packing - Water Strainer Cover	Was 168 PA
	6	L20498	Cage - Water Strainer	Was MA 424
	7	J05079	Spring - Compression - Water Strainer Cage	Was 132 SP
	-	T02905	WATER STRAINER ASSEMBLY (Length of Body 9") - GUN METAL, Comprising Body, Cover, Cage, Spring, Spring Retaining Plate, Studs, Nuts and Packings	Was MA 943
	8	A02823	Water Strainer Body (9" long) - Gun Metal, with K04762, J06531, K04761, K04765, E00545, K04764, C07865	Was MA 944
	9	K04762	Stud, 3/8" Wh. X 1.3/8" long	Was 435 ST
	10	J06531	Nut, 3/8" Wh. X 3/8" X 5/16" Hex.	Was 200 NU
	11	K04761	Packing, Circular, 4.1/2" O.D. X 1.1/2" I.D. X 1/32"	Was 258 PA
	12	K04765	Stud - Strainer Cover	Was 434 ST
	13	E00545	Wing Nut, 1/4" Wh.	Was 255 NU
	14	K47630	Cover - Water Strainer - Gun Metal	Was Part of MA 945
	15	K04764	Packing - Water Strainer Cover	Was 261 PA
	16	T25403	Cage - Water Strainer	Was MA 946
	17	C06037	Spring - Compression - Water Strainer Cage	Was 176 SP
	18	K47390	Plate - Spring Retaining	Was MA 947
	19	K47620	Flange, Oval, 2.1/4" centres X 1" bore	Was 198 FL
		E20970	Flange, Oval, 2.1/4" centres X 1" B.S.P. "F"	Was 199 FL
	20	E46480	Flange, Oval, 2.1/4" centres X 1" B.S.P. "M"	Was 197 FL
	21	C07865	Packing, Flange, 2.1/4" centres X 1.7/8" wide	Was 217 PA
	22	J03497	Setscrew, 5/16" Wh. X 7/5" long X 1/4" Hex.	Was 272 SS
	23	J06515	Setscrew, 5/16" Wh. X 1" long X 1/4" Hex.	Was 275 SS
	24	J03501	Setscrew, 5/16" Wh. X 1.1/4" long X 1/4" Hex.	Was 283 SS
	25	L20965	Plug Cock, "F" 1" B.S.P.	Was 111 CK

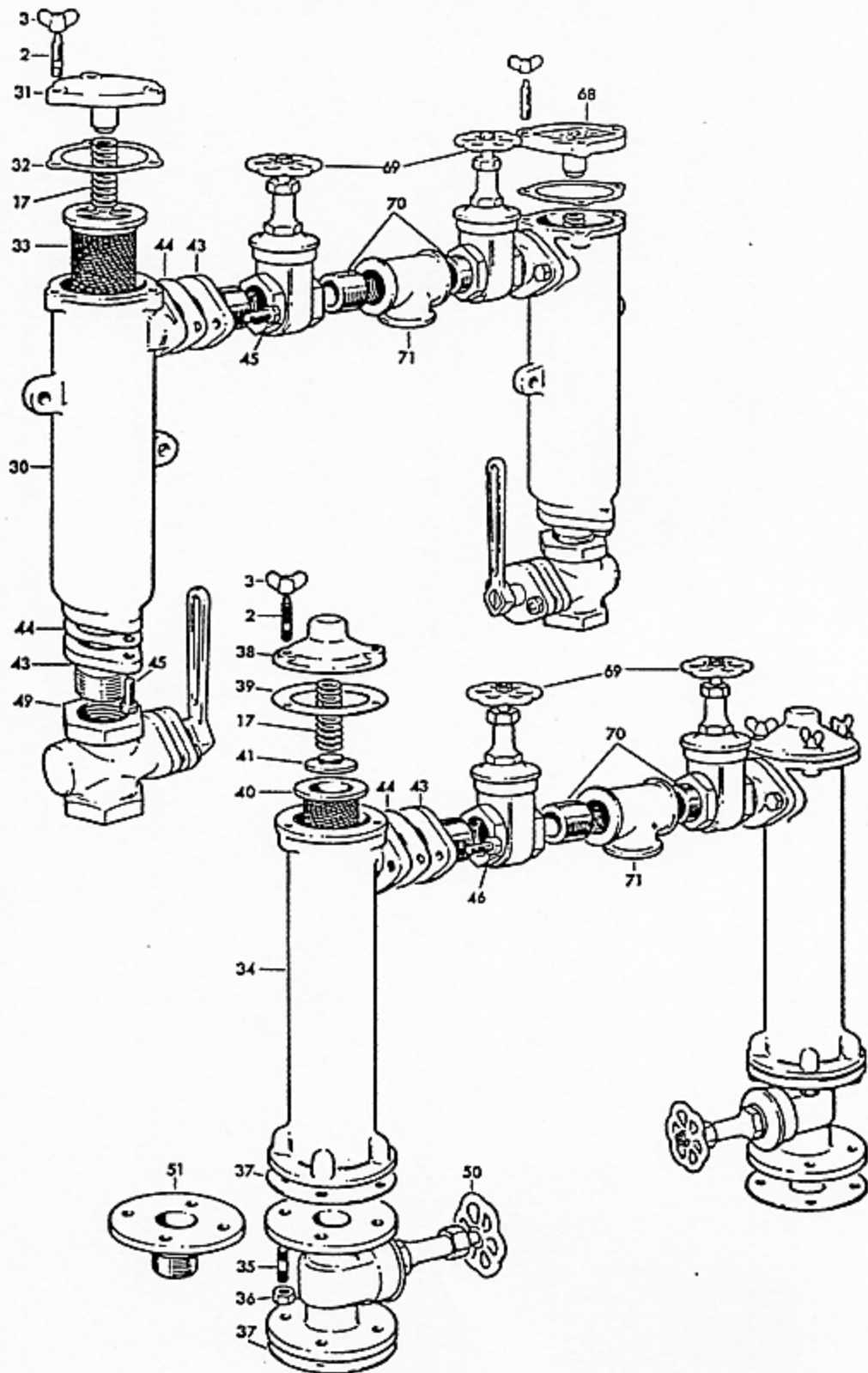
Plate No.	Illus. No.	Part No.	Description	
42	26	S05118	Gate Valve, 1" Bore X 3.1/4" centres	) Was Part of MA 937
	11	K04761	Packing, Circular, 4.1/2" O.D. X 1.1/2" I.D. X 1/32"	) Was 258 PA
	27	K47660	Flange, Circular, 1" B.S.P. "M" X 3.1/4" centres	) To suit Was 235 FL
	28	K47590	Skin Fitting, 1" Bore X 6.1/2" diam. flange )	) Water Strainer Was 118 SP
	9	K04762	Stud, 3/8" Wh. X 1.3/8" long )	) Body 9" long Was 435 ST
	20	J06531	Nut, 3/8" Wh. X 3/8" X 5/16" Hex. )	) To suit Wood Hull Was 200 NU
	29	K47600	Ring - Skin Fitting, 1.13/32" Bore X 6.1/2" O.D. )	) Was MA 939
-	-	-	WATER STRAINER ASSEMBLY (Length of Body 13.5/8") - GUN METAL, Comprising Body, Cover, Cage, Spring, Studs, Nuts and Packings (Superseded, will be replaced by 1 off T02907, K47060)	Was MA 670
30	-	-	Water Strainer Body (13.5/8" long) - Gun Metal (Superseded, will be replaced by 1 off T02907, K47060)	Was MA 671
	2	K02357	Stud - Strainer Cover )	) Was 322 ST
	3	K04378	Wing Nut, 5/16" Wh. )	) Was 181 NU
	31	K02436	Cover - Water Strainer - Gun Metal )	) To suit Water Strainer Body Was Part of MA 672
	32	J03410	Packing - Water Strainer Cover )	) 13.5/8" long Was 218 PA
	33	L22434	Cage - Water Strainer )	) Was MA 673
	17	C06037	Spring - Compression - Water Strainer Cage )	) Was 176 SP
-	T02907	-	WATER STRAINER ASSEMBLY (Length of Body 14") - GUN METAL, Comprising Body, Cover, Cage, Spring, Spring Retaining Plate, Studs, Nuts and Packings	Was MA 948
34	AD2825	-	Water Strainer Body (14" long) - Gun Metal, with K02357, K04378, K04710, K04708, K02099, K04707, C06547	Was MA 949
	35	K04708	Stud, 1/2" Wh. X 1.3/4" long )	) Was 436 ST
	36	K02099	Nut, 1/2" Wh. X 15/32" X 7/16" Hex. )	) Was 311 NU
	37	K04707	Packing, Circular, 5.1/4" O.D. X 2.1/4" I.D. X 1/32" )	) Was 260 PA
	2	K02357	Stud - Strainer Cover )	) Was 322 ST
	3	K04378	Wing Nut, 5/16" Wh. )	) To suit Water Strainer Body Was 181 NU
	38	K47090	Cover - Water Strainer - Gun Metal )	) 14" long Was Part of MA 950
	39	K04710	Packing - Water Strainer Cover )	) Was 262 PA
	40	T00274	Cage - Water Strainer )	) Was MA 951
	17	C06037	Spring - Compression - Water Strainer Cage )	) Was 176 SP
	41	K47110	Plate - Spring Retaining )	) Was MA 952
	42	J03202	Flange, Oval, 3.1/8" centres X 1" bore	Was 148 FL
		K20620	Flange, Oval, 3.1/8" centres X 1.1/2" bore	Was 138 FL
		J01807	Flange, Oval, 3.1/8" centres X 1.1/2" B.S.P. "F"	Was 220 FL

Plate No.	Illus. No.	Part No.	Description	
42	43	J71860	Flange, Oval, 3.1/8" centres X 1" B.S.P. "M"	Was 178 FL
		E46500	Flange, Oval, 3.1/8" centres X 1.1/2" B.S.P. "K"	Was 142 FL
	44	C06547	Packing, Flange, 3.1/8" centres X 3" wide	Was 138 PA
	45	K02359	Setscrew, 3/8" Wh. X 7/8" long X 5/16" Hex.	Was 282 SS
	46	J03503	Setscrew, 3/8" Wh. X 1" long X 5/16" Hex.	Was 407 SS
	47	K02360	Setscrew, 3/8" Wh. X 1.1/8" long X 5/16" Hex.	Was 284 SS
	48	K02358	Setscrew, 3/8" Wh. X 1.1/4" long X 5/16" Hex.	Was 338 SS
	49	On Application	Plug Cock, "F" 1.1/2" B.S.P.	Was 107 CK
	50	S05873	Gate Valve, 1.1/2" Bore X 3.7/8" centres	Was Part of MA 1441
	37	K04707	Packing, Circular, 5.1/4" O.D. X 2.1/4" I.D. X 1/32"	Was 260 PA
	51	K47060	Flange, Circular, 1.1/2" B.S.P. "M" X 3.7/8" centres	Was 234 FL
	52	K47040	Skin Fitting, 1.1/2" Bore X 7.3/4" diam. flange	To suit Water Strainer Body 14" long Was 119 SP
	35	K04708	Stud, 1/2" Wh. X 1.3/4" long	To suit Wood Hull Was 436 ST
	36	K02099	Nut, 1/2" Wh. X 15/32" X 7/16" Hex.	Was 311 NU
	53	K47050	Ring - Skin Fitting, 2.1/32" Bore X 7.7/8" O.D.	Was MA 940
-	T02909		WATER STRAINER ASSEMBLY (Length of Body 17") - GUN METAL, comprising Body, Cover, Cage, Spring, Spring Retaining Plate, Studs, Nuts and Packings	Was MA 953
	54	A02827	Water Strainer Body (17" long) - Gun Metal, with K04716, K04717, K04714, K02357, K04378, K04718, K04723	Was MA 954
	55	K04716	Stud, 5/8" Wh. X 1.7/8" long	Was 437 ST
	56	K04717	Nut, 5/8" Wh. X .562" X 5/8" Hex.	Was 310 NU
	57	K04714	Packing, Circular, 6" O.D. X 2.1/4" I.D. X 1/16"	Was 259 PA
	2	K02357	Stud - Strainer Cover	Was 322 ST
	3	K04378	Wing Nut, 5/16" Wh.	Was 181 NU
	58	K46690	Cover - Water Strainer - Gun Metal	Was Part of MA 955
	59	K04718	Packing - Water Strainer Cover	Was 263 PA
	60	T00273	Cage - Water Strainer	Was MA 956
	17	C06037	Spring - Compression - Water Strainer Cage	Was 176 SP
	61	K47190	Plate - Spring Retaining	Was MA 957
	62	K04818	Flange, Oval, 4" centres X 1.1/2" bore	Was 231 FL
	63	K04723	Packing, Flange, 4" centres X 3.3/4" wide	Was 257 PA
	64	X04724	Setscrew, 1/2" Wh. X 1.3/16" long X 7/16" Hex.	Was 406 SS
	65	S05874	Gate Valve, 2" Bore X 4.1/2" centres	Was Part of MA 1442
	57	K04714	Packing, Circular, 6" O.D. X 2.1/4" I.D. X 1/16"	Was 259 PA

Plate No.	Illus. No.	Part No.	Description	
42	66	F06051	Skin Fitting, 2" Bore X 9" diam. flange	Was 120 SF
	55	K04716	Stud, 5/8" Wh. X 1.7/8" long.	Was 437 ST
	56	K04717	Nut, 5/8" Wh. X .562" X 5/8" Hex.	Was 310 NU
	67	F06076	Ring - Skin Fitting, 2.17/32" Bore X 9" O.D.	Was MA 941
43	-	-	TWIN WATER STRAINER ASSEMBLY (Length of Bodies 13.5/8") - GUN METAL, Comprising Bodies, Covers, Cages, Springs, Valves, Tee ("F" 1.1/2" B.S.P. X 1.1/2" B.S.P. X 2.1/2" B.S.P.), Studs, Nuts, Setscrews and Packings (Superseded, will be replaced by 1 off T02908 and 2 off K47060)	Was MA 674
	-	-	WATER STRAINER ASSEMBLY (length of Body 13.5/8") - GUN METAL, Comprising Body, Cover (with Instruction Plate), Cage, Spring, Studs, Nuts and Packings (Superseded, will be replaced by 1 off T02907, K47060)	Was MA 675
	68	A04666	Cover - Water Strainer - Gun Metal (with Instruction Plate), with J03410	Was MA 676
	-	-	WATER STRAINER ASSEMBLY (Length of Body 13.5/8") - GUN METAL, Comprising Body, Cover, Cage, Spring, Studs, Nuts and Packings (Superseded, will be replaced by 1 off T02907, K47060)	Was MA 670
	30	-	Water Strainer Body (13.5/8" long) - Gun Metal (Superseded, will be replaced by 1 off T02907, K47060)	Was MA 671
	2	K02357	Stud - Strainer Cover	Was 322 ST
	3	K04378	Wing Nut, 5/16" Wh.	Was 181 NU
	31	K02436	Cover - Water Strainer - Gun Metal	Was Part of MA 672
	32	J03410	Packing - Water Strainer Cover	Was 218 PA
	33	L22434	Cage - Water Strainer	Was MA 673
	17	C06037	Spring - Compression - Water Strainer Cage	Was 176 SP
	-	T02908	TWIN WATER STRAINER ASSEMBLY (Length of Bodies 14") - GUN METAL, Comprising Bodies, Covers, Cages, Springs, Spring Retaining Plates, Valves	Was Part of MA 959 and MA 958
	-	T02907	WATER STRAINER ASSEMBLY (Length of Body 14") - GUN METAL, Comprising Body, Cover, Cage, Spring, Spring Retaining Plate, Studs, Nuts and Packings	Was MA 948
	34	A02825	Water Strainer Body (14" long) - Gun Metal, with K02357, K04378, K04710, K04708, K02099, K04707, C06547	Was MA 949
	35	K04708	Stud, 1/2" Wh. X 1.3/4" long	Was 436 ST
	36	K02099	Nut, 1/2" Wh. X 15/32" X 7/16" Hex.	Was 311 NU
	37	K04707	Packing, Circular, 5.1/4" O.D. X 2.1/4" I.D. X 1/32"	Was 260 PA
	2	K02357	Stud - Strainer Cover	Was 322 ST
	3	K04378	Wing Nut, 5/16" Wh.	Was 181 NU
	38	K47090	Cover - Water Strainer - Gun Metal	Was Part of MA 950
	39	K04710	Packing - Water Strainer Cover	Was 262 PA
	40	T00274	Cage - Water Strainer	Was MA 951

# GARDNER

## WATER STRAINER — PLATE 43



## WATER STRAINER

Plate No.	Illus. No.	Part No.	Description		
43	17	C06037	Spring - Compression - Water Strainer Cage )	To suit	Was 176 SP
	41	K47110	Plate - Spring Retaining )	Water Strainer Body 14" long	Was MA 952
	43	E46500	Flange, Oval, 3.1/8" centres X 1.1/2" B.S.P. "H"		Was 142 FL
	44	C06547	Packing, Flange, 3.1/8" centres X 3" wide		Was 138 PA
	45	KD2359	Set screw, 3/8" Wh. X 7/8" long X 5/16" Hex.		Was 282 SS
	46	J03503	Set screw, 3/8" Wh. X 1" long X 5/16" Hex.		Was 407 SS
	69	S05117/03	Gate Valve, 1.1/2" B.S.P. "F"		Was MA 677
	70	L21991	Nipple, Parallel, 1.1/2" B.S.P.		Was MA 678
	71	L21992	Tee, "F" 1.1/2" B.S.P. X 1.1/2" B.S.P. X 1.1/2" B.S.P.		Was MA 725
		J09275	Tee, Reducing, "F" 1.1/2" B.S.P. X 1.1/2" B.S.P. X 2.1/2" B.S.P.		Was MA 679
	49	On Application	Plug Cock, "F" 1.1/2" B.S.P.		Was 107 CK
	50	S05873	Gate Valve, 1.1/2" Bore X 3.7/8" centres )	To suit	Was Part of MA 1441
	37	KD4707	Packing, Circular, 5.1/4" O.D. X 2.1/4" I.D. X 1/32" )	Water	Was 260 PA
	51	K47060	Flange, Circular, "H" 1.1/2" B.S.P. X 3.7/8" centres )	Strainer Body 14" long	Was 234 FL



# GARDNER

WATER PUMP - REMOTE MOUNTED, AIR VESSEL, HEAT EXCHANGER,  
KEEL COOLER AND EXHAUST SILENCER - PLATE 44

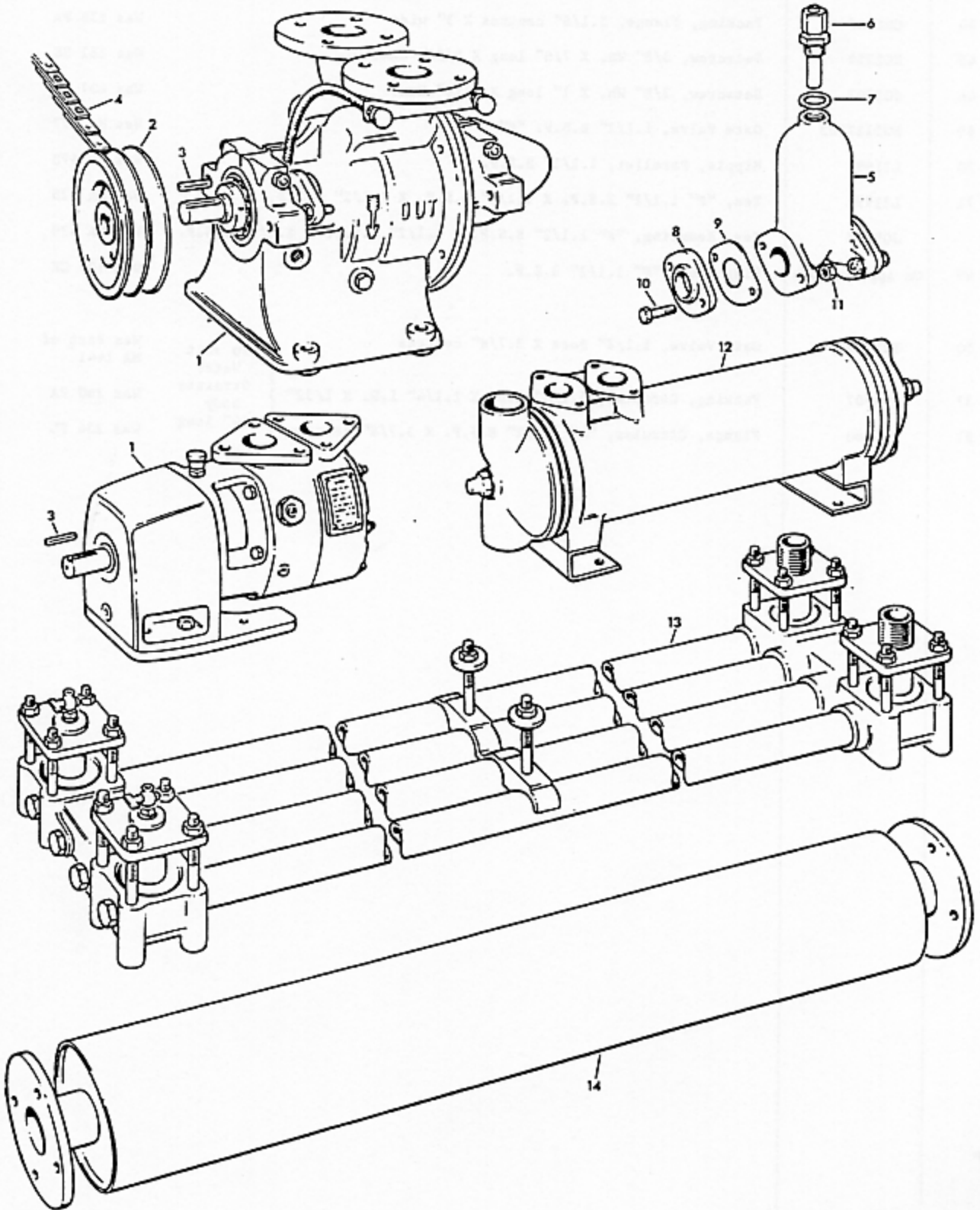
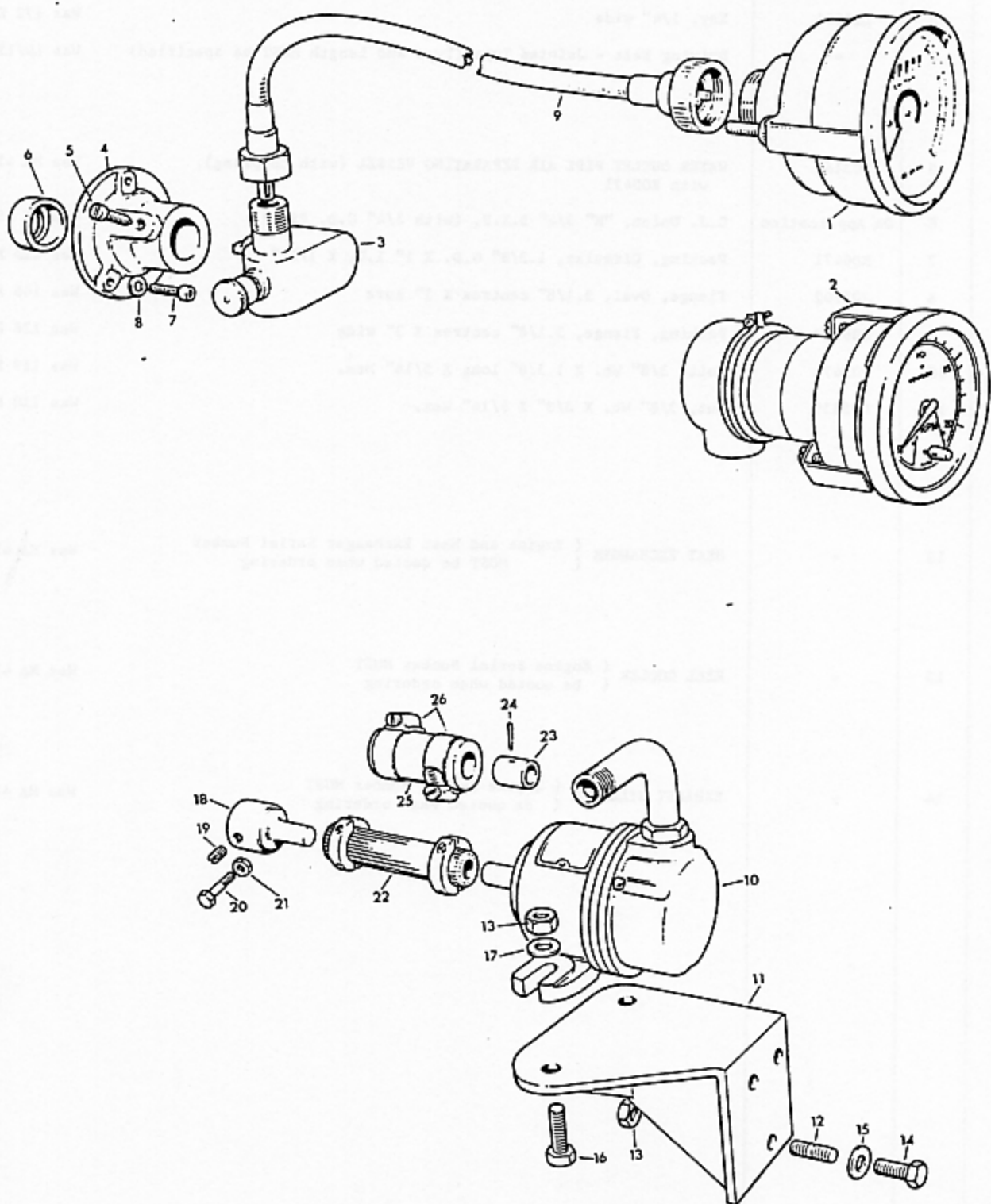


Plate No.	Illus. No.	Part No.	Description	
44	1	-	WATER PUMP - REMOTE MOUNTED ( Engine and Pump Serial Number ( MUST be quoted when ordering	Was MA 468
	2	-	Pulley - Water Pump Driven - ( Engine Serial Number 2 Groove ( MUST be quoted when ordering	Was MA 469
	3	L21541	Key, 1/4" wide	Was 172 KE
	4	-	Driving Belt - Jointed Type (Type and Length MUST be specified)	Was LM/15/1006
	5	703165	WATER OUTLET PIPE AIR SEPARATING VESSEL (with Coupling), with K00471	Was MA 459
	6	On Application	C.J. Union, "M" 3/4" B.S.P. (with 3/4" O.D. Pipe)	Was MA 685
	7	K00471	Packing, Circular, 1.3/8" O.D. X 1" I.D. X 1/32"	Was 225 PA
	8	J03202	Flange, Oval, 3.1/8" centres X 1" bore	Was 148 FL
	9	C06547	Packing, Flange, 3.1/8" centres X 3" wide	Was 138 PA
	10	E05471	Bolt, 3/8" Wh. X 1.3/8" long X 5/16" Hex.	Was 119 BL
	11	C05539	Nut, 3/8" Wh. X 3/8" X 5/16" Hex.	Was 110 NU
	12	-	HEAT EXCHANGER ( Engine and Heat Exchanger Serial Number ( MUST be quoted when ordering	Was MA 471
	13	-	KEEL COOLER ( Engine Serial Number MUST ( be quoted when ordering	Was MA 476
	14	-	EXHAUST SILENCER ( Engine Serial Number MUST ( be quoted when ordering	Was MA 421

**GARDNER**

**TACHOMETER, GENERATOR AND DRIVE — PLATE 45**



## TACHOMETER, GENERATOR AND DRIVE

Plate No.	Illus. No.	Part No.	Description	
45	1	-	Tachometer - Mechanical )	Was MA 792
	2	-	Tachometer - Electrical )	Was MA 793
	3	S03445	Tachometer Gear Box Unit (Engine Mounted) ) Anti-Clockwise (When supplying a replacement Gear Box ) Rotation Engines Unit to S03445 to replace S03046, supply ) looking on Valve Camshaft Hole Cover K06025) Flywheel End	Was LW/16/1004
		S03801	Tachometer Gear Box Unit ) Clockwise Rotation Engines (Engine Mounted) ) looking on Flywheel End	Was LW/16/1006
	4	K06025	Cover - Valve Camshaft Hole, 7/8" bore	Was LW/2/0/151 Previously Part of LW/2/0/81
	5	J02636	Setscrew, Cheese Head, 1 B.A. X 13/32" long	Was 265 SS
	6	K06026	Oil Seal, 1" O.D. X 1/4" wide	Was MA 1160
	7	K06038	Setscrew, Socket Head, 1 B.A. X 3/4" long	Was 444 SS
	8	L21392	Washer, 1 B.A. diam. bore	Was 127 WA
	9	-	Tachometer Flexible Drive Cable (Length of Cable to be specified)	Was 100 FC
	10	-	Generator (To suit Electrical Tachometer ) Engine Serial Number	Was MA 794
	11	-	Generator Bracket ) MUST be quoted when ordering	Was MA 839
	12	J02571	Stud, 5/16" Wh. X 1" long	Was 453 ST
	13	E03945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex.	Was 106 NU
	14	E05577	Setscrew, 5/16" Wh. X 7/8" long X 1/4" Hex.	Was 112 SS
	15	J03686	Packing, Circular, 11/16" O.D. X 5/16" I.D. X 1/16" )	Was 224 PA
	16	J09009	Setscrew, 5/16" Wh. X 1" long X 1/4" Hex.)	Was 113 SS
	13	E03945	Nut, 5/16" Wh. X 5/16" X 1/4" Hex. ) Generator to Bracket	Was 106 NU
	17	S05725/02	Washer, 5/16" diam. bore )	Was 105 WA
	18	J08890	Adapter - Dynamo Shaft, 1.5/8" long	Was 117 AD
		K00298	Adapter - Dynamo Shaft, 1.7/8" long	Was 118 AD
	19	On Application	Setscrew, Headless, 1/4" B.S.F. X 5/16" long, for J08890	Was 314 SS
	20	E07811	Bolt, 1 B.A. X 1.1/4" long X 1 B.A. Hex. )	Was 142 BL
	21	E03680	Nut, 1 B.A. ) For K00298	Was 102 NU
	22	L21622	Coupling - Generator Flexible (with Clamps), 3" long	Was MA 1001
		L21623	Coupling - Generator Flexible (with Clamps), 3.3/8" long	Was MA 1002
		L21624	Coupling - Generator Flexible (with Clamps), 4.1/8" long	Was MA 1003
	23	K02336	Bush, 19/32" O.D. X 25/64" I.D. X 23/32" wide	Was 142 BU
	24	L21111	Taper Pin, for K02336	Was 100 PT
	25	K02335	Coupling - Generator Flexible, 1.3/4" long	Was 125 HO
	26	L21602	Clip - Generator Flexible Coupling	Was 112 CL
-	-	F20010	Indicator - Electrical Tachometer	Was MA 1511
-	-	K06025	Cover - Valve Camshaft Hole, 7/8" bore	Was LW/2/0/151 Previously Part of LW/2/0/81
-	-	J02636	Setscrew, Cheese Head, 1 B.A. X 13/32" long	Was 265 SS
-	-	K06038	Setscrew, Socket Head, 1 B.A. X 3/4" long	Was 444 SS
-	-	L21392	Washer, 1 B.A. diam. bore	Was 127 WA
-	-	L21944	Generator - Electrical Tachometer	Was MA 1514
-	-	L27179	Drive Kit (For Electrical Tachometer Generator)	Was LW/2/0/150

Plate No.	Illus. No.	Part No.	Description	
-	-	L20841	Oil Can	Was 101 AT
-	-	L20845	Screwdriver	Was 102 AT
-	-	E06303	Sprayer Hole Cleaning Tool	Was 106 AT
-	-	E03986	Sprayer Valve Grinding Spindle	Was 109 AT
-	-	L21561	Sprayer Pricker	Was 110 AT
-	-	E03682	Sprayer Nozzle Drift	Was 111 AT
-	-	T02791	Sprayer Withdrawing Tool	) Was 112 AT )
-	-	E06745	Sprayer Withdrawing Bar	
-	-	L20855	Spanner, Double Ended, 3/16" Wh. X 1/4" Wh.	Was 119 AT
-	-	L20856	Spanner, Double Ended, 1/4" Wh. X 5/16" Wh.	Was 120 AT
-	-	L20857	Spanner, Double Ended, 3/8" Wh. X 7/16" Wh.	Was 121 AT
-	-	L20859	Spanner, Double Ended, 1/2" Wh. X 5/8" Wh.	Was 122 AT
-	-	L20872	Spanner, Single Ended, 5/8" Wh. Hex. Locknut	Was 128 AT
-	-	J09255	Spanner, Single Ended, 7/8" Wh. Hex. Locknut (Chain Adjuster)	Was 129 AT
-	-	K07188	Spanner, Tube, 1 B.A. Hex. X 0 B.A. Hex.	Was 210 AT
-	-	K07189	Spanner, Tube, 1/4" Wh. Hex. X 5/16" Wh. Hex.	Was 211 AT
-	-	K07190	Spanner, Tube, 3/8" Wh. Hex. X 7/16" Wh. Hex.	Was 212 AT
-	-	K07191	Spanner, Tube, 1/2" Wh. Hex. X 5/8" Wh. Hex.	Was 213 AT
-	-	E02718	Spanner, Tube, 1/4" Sq. X 3" long	Was 159 AT
-	-	C05501	Spanner, Tube, 5/16" Sq. X 3" long	Was 140 AT
-	-	K00747	Spanner, Ring, 9/16" Hex. (Cylinder Foot Stud)	Was 145 AT
-	-	E04469	Tommy Bar, 3/16" diam. X 3" long	Was 146 AT
-	-	E04470	Tommy Bar, 1/4" diam. X 4" long	Was 147 AT
-	-	E04471	Tommy Bar, 5/16" diam. X 4.1/2" long	Was 148 AT
-	-	E04472	Tommy Bar, 3/8" diam. X 6" long	Was 149 AT
-	-	T01289	Sprayer Clamp Key (for 3/16" Hex. Nut)	Was 215 AT
-	-	D13604	Spare Parts Locker, 17" X 8.1/8" X 6.1/2"	Was 161 AT
-	-	J07509	Setscrew, 7/16" B.S.F. X 3" long X 3/8" Hex. (Engine Jack Screw)	Was 241 SS
-	-	E81240	Lifting Eye, for Engine	Was 163 AT
-	-	K07031	Polythene Shroud (For Engine Lifting Eye)	Was 206 AT
-	-	S04414	Lifting Eye Adapter (When Engine Mounted Water Header Tank is fitted)	2LM, 3LM Was 188 AT
-	-	K07714	Protection Cap, 7/16" Bore (Cylinder Head Studs)	Was 101 CP
-	-	L20881	Allen Key, 3/16" across flats	} When Single Lever } Control is fitted
-	-	L20882	Allen Key, 7/32" across flats	
-	-	L22000	Fuel Pump Delivery Valve Washer	Was MA 430
-	-	S05516	FIRST FUEL FILTER ELEMENT ASSEMBLY - TYPE 3, with L21762, L21755 (In Carton)	Was GFF 3/10
-	-	E05311	Spring - Compression - Inner	} Inlet and Exhaust Valves
-	-	E05310	Spring - Compression - Outer	
-	-	J07008	Spring - Tension - Fuel Pump Slider Bar	2LM Was 143 SP

Plate No.	Illus. No.	Part No.	Description		
-	-	J08101	Spring - Tension - Fuel Pump Slider Bar	4LW	Was 147 SP
-	-	J08100	Spring - Tension - Fuel Pump Slider Bar	3LW, 5LW, 6LW	Was 145 SP
-	-	J09316	Spring - Tension - Fuel Pump Slider Bar	2LW	Was 141 SP
-	-	J09317	Spring - Tension - Fuel Pump Slider Bar	4LW	Was 139 SP
-	-	J09315	Spring - Tension - Fuel Pump Slider Bar	3LW, 5LW, 6LW	Was 140 SP
-	-	K06734	Spring - Tension - Fuel Pump Tappet		Was 129 SP
-	-	K06733	Spring - Compression - Fuel Pump Plunger		Was 120 SP
-	-	J01178	Spring - Compression - Fuel Pump Delivery Valve		Was 107 SP
-	-	L20037	Timing Chain Riveted Joint Link		Was MA 370
-	-	J05613	Water Flow Indicator Window		Was Part of MA 573
-	-	J05614	Packing, Circular, 2.3/32" O.D. X 1.3/4" I.D. X 1/16"	} Water Flow Indicator	Was 210 PA
-	-	J05615	Packing, Circular, 2.1/8" O.D. X 1.3/4" I.D. X 1/32"		Was 211 PA
-	-	C04951	Pump Cup Washer ( When Ram Type Engine Water ( Circulating Pump is fitted		Was MA 620
-	-	E03417	Water and Bilge Pump Valve		Was MA 622
-	-	K02002	Pump Cup Washer ( When 2.3/16" Bore Oil Cooler Water ( Pump or Bilge Pump is fitted		Was MA 645
-	-	A04932	Set of Decarbonising Packings	2LW, 4LW	Was <u>RD245</u> 2LW(DEC) & <u>RD245</u> 4LW(DEC)
-	-	A04933	Set of Decarbonising Packings	3LW, 6LW	Was <u>RD245</u> 3LW(DEC) & <u>RD245</u> 6LW(DEC)
-	-	A04934	Set of Decarbonising Packings	5LW	Was <u>RD245</u> 5LW(DEC)
-	-	A04912	Set of Joints and Packings	2LW, 4LW	Was <u>RD245</u> 2LW & <u>RD245</u> 4LW
-	-	A04914	Set of Joints and Packings	3LW, 6LW	Was <u>RD245</u> 3LW & <u>RD245</u> 6LW
-	-	A04913	Set of Joints and Packings	5LW	Was <u>RD245</u> 5LW
-	-	L30000	"GARDNER" Nameplate, with E00218, K02054		-
-	-	L21942	"GARDNER" Nameplate		-
-	-	E00218	Nut, 2 B.A. X 5/32" X 1 B.A. Hex.		Was 101 NU
-	-	K02054	Washer, 2 B.A. I.D. X 1/2" O.D.		Was 151 WA