

GARDNER ENGINES



SPARE PARTS CATALOGUE

Catalogue No. 516

PRICE
10/6
Per Each Extra Copy

NORRIS, HENTY & GARDNERS LTD.

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SPARE PARTS CATALOGUE FOR THE

GARDNER

COMPRESSION IGNITION OIL ENGINE

TYPE L2

(2 TO 6 CYLINDER ENGINES ONLY)

ENGINE NO. 212 / 63376 CODE WORD OF THE ENGINE H1707

POWER B.H.P. AT REVS. PER MINUTE. DATE 9-11-44

London Office: TERMINAL HOUSE, 52 GROSVENOR GARDENS, S.W.1.

Telegrams: "Nornodeste, Sowest, London." Telephone: Sloane 0039 (2 Lines)

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INTRODUCTION

IN order to obtain to its fullest advantage the excellent service offered by the Gardner Service Department, it is necessary to observe the following simple instructions. If these instructions be correctly carried out, errors and consequent delays will be avoided.

ALWAYS QUOTE :—

- (1) The number of the part.
- (2) The register number and the code word of the engine.

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

The register number of the engine is stamped on the top of the crankcase alongside No. 1 cylinder, on the motion work side.

The code word of the engine will be found on page 1 of this catalogue.

The cylinder nearest to the chaincase is No. 1 cylinder ; see also Plates Nos. 1, 2 and 3.

HOW TO ORDER A SPARE PART.

If you require a spare part for your engine, this is the way to order it. Turn to the index and to the Key Plates Nos. 1, 2 and 3 which will show you the general location of the part which you require. Now turn to the Plate indicated, identify the part by the illustration, underneath which is the sectional Part Number ; verify this number with the description given in the adjoining text. Do not quote any other number appearing on the engine. You have now all the necessary information to enable you to order. Here is an example of the way to do it :—

Example :—

Your engine, we will suppose, is a 4L2 number 49357, the code word is HIVER and you required some packings for the $\frac{3}{8}$ " Gas Plug fitted in the Cylinder Head, Part No. 2/23. Your telegram should then be composed in the following way :—

"Theorem Patricroft.

Send Twelve 2/23 HIVER 49357—SMITH, 47 High Street, Portsmouth."

Translated, this would read :—

"Norris, Henty & Gardners Ltd., Patricroft.

Send as soon as possible, twelve packings for Plug $\frac{3}{8}$ " Gas fitted in Cylinder Head for my 4L2 Engine number 49357—SMITH, 47 High Street, Portsmouth."

NOTE. —Do not omit the stroke from the section number of the part. This stroke, or solidus as it is called, is transmissible by telegram and is counted the same as one of the figures or digits.



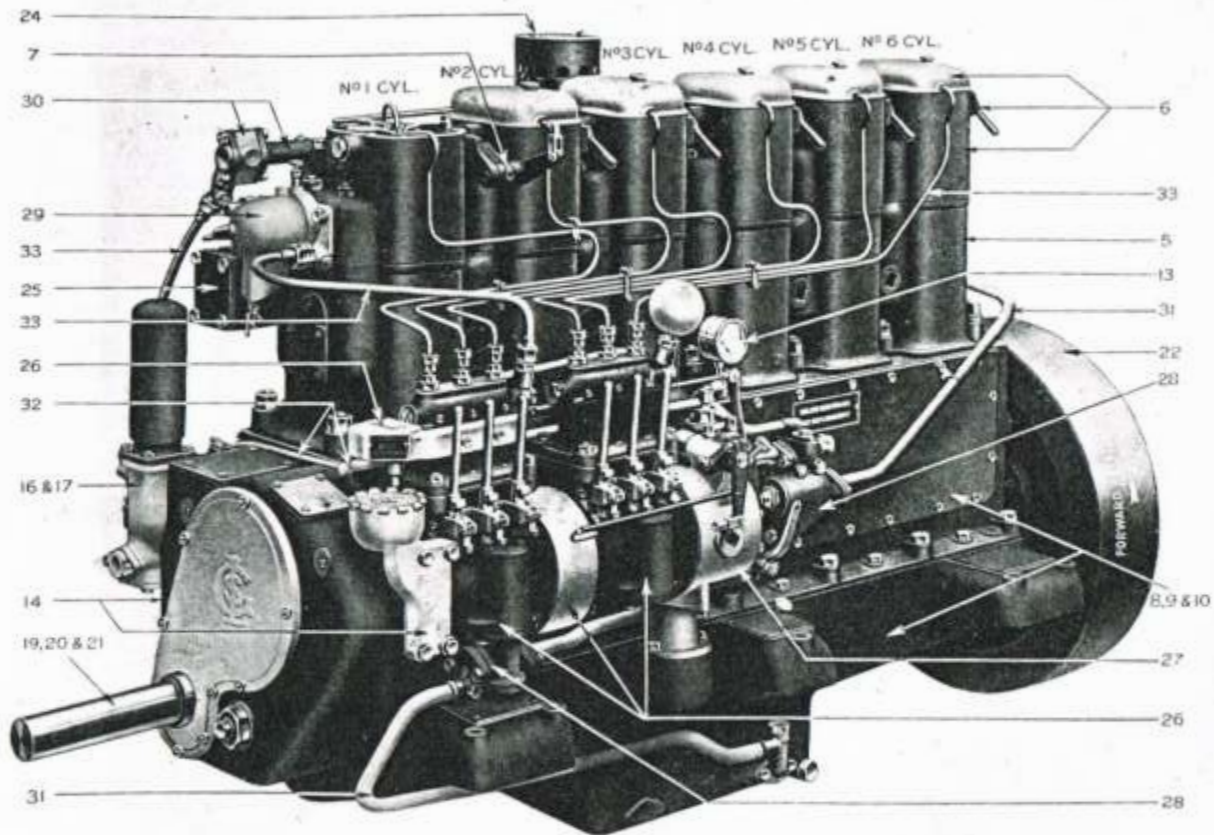
INDEX TO PLATES

Plate No.	Description	Plate No.	Description
1	Engine—Motion Work Side, i.e. near side.	19	Crankshaft, Damper and Direct Starting Details.
2	Engine—Exhaust Side, i.e. off side.	20	Chain Starting Details.
3	Engine—Cross Sections.	21	Chain Starting Details.
4, 4-1	Wiring Diagram—Electric Starter.	22	Flywheel.
5	Cylinder Block.	23	Connecting Rod and Piston
6	Cylinder Head, Sprayer and Compression Relief—Local Control.	24	Air Manifold.
7	Compression Relief—Remote Control.	25	Exhaust Manifold.
8	Crankcases, Lower—Types A and B, and Bearing Caps.	26	Fuel Pump and Fuel Pump Motion Work.
9	Crankcases, Lower—Types C, D and E, and Bearing Caps.	27	Governor.
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14	Chaincase and Oil Filler.	32	Lubricating Oil Pipes.
15	Chain Drive Details and Water Pump Gears.	33	Fuel and Water Temperature Control Pipes.
16	Water Pump—Centrifugal Type.	34	Fuel Tank and Silencers.
16-1	Water Pump—Centrifugal Type.	35	Electric Starting Details.
17-1	Water and Bilge Pump—Ram Type	36	Standard Spares and Accessories.
18	Bilge Pump Box and Drive.		

When ordering it is important to quote the Number of the Engine, and also the Number of the Part.

GARDNER

Plate 1

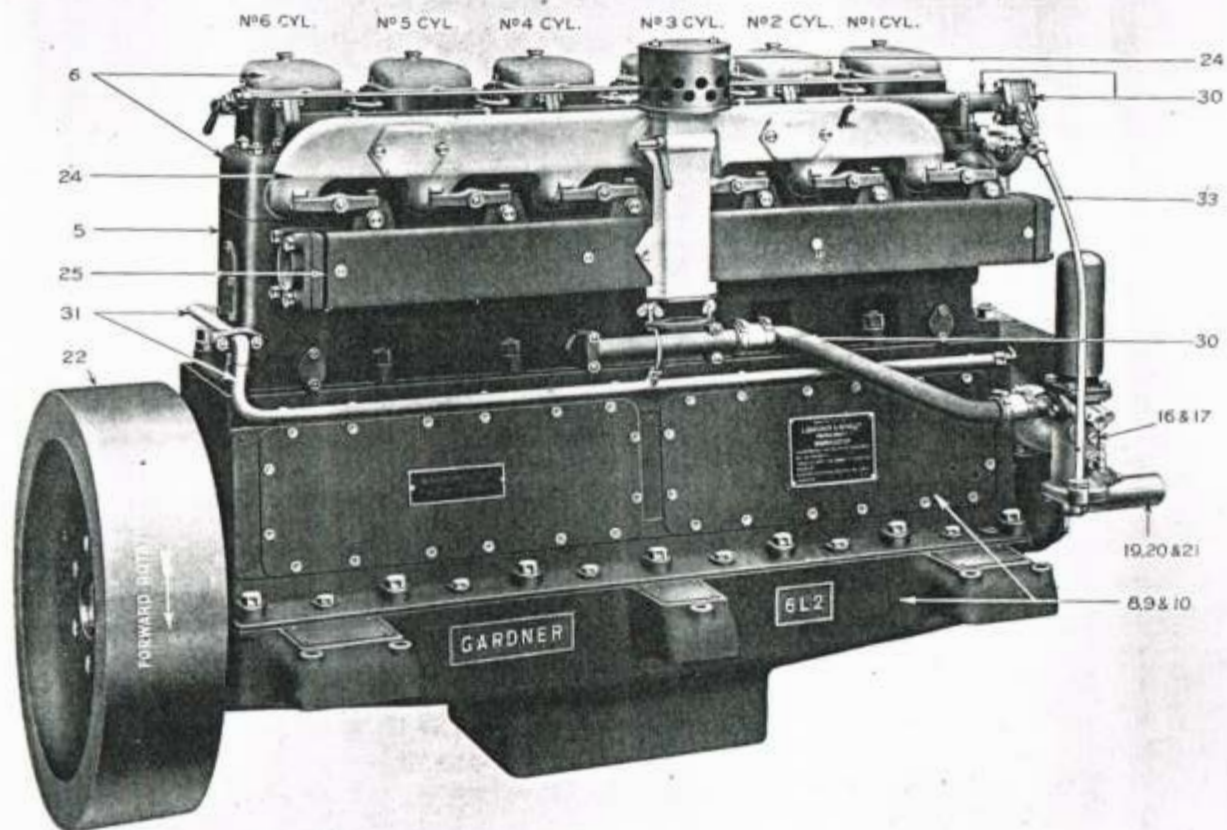


NOTE.—The numbers refer to Plates and not to Sections.

IMPORTANT.—This is a composite illustration embracing all states of design of the L2 Engine, and in no sense must it be regarded as standard.

GARDNER

Plate 2

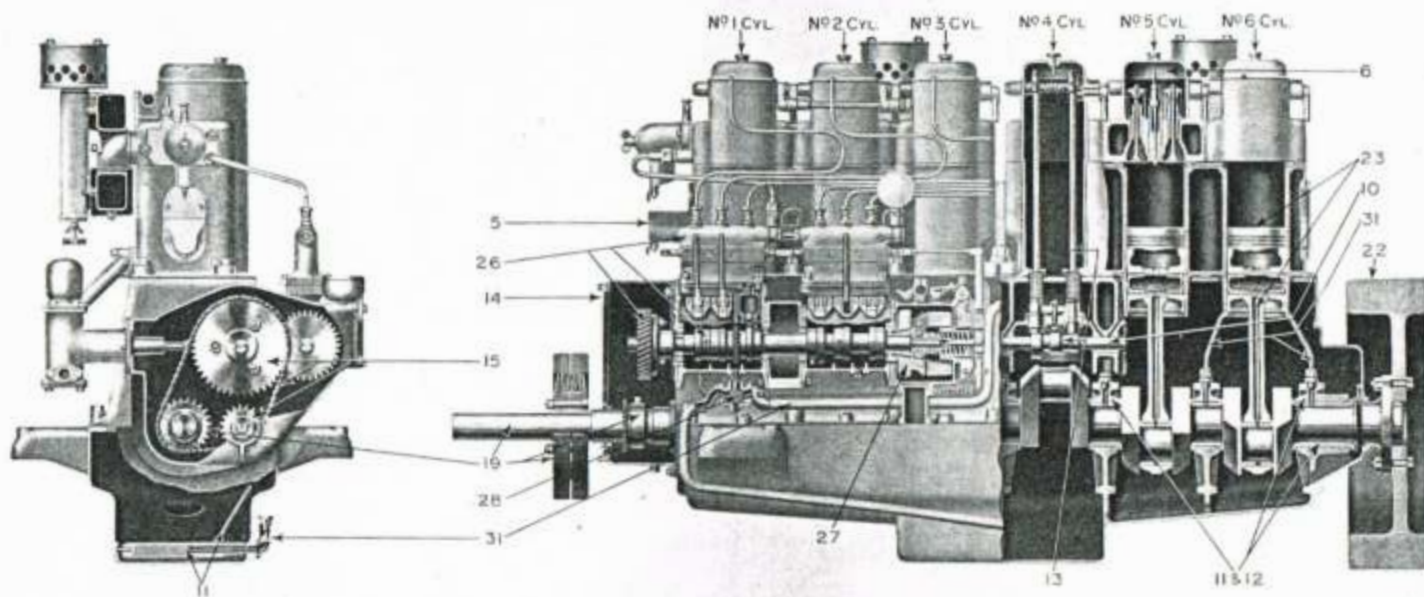


NOTE.—The numbers refer to Plates and not to Sections.

IMPORTANT.—This is a composite illustration embracing all states of design of the L2 Engine, and in no sense must it be regarded as standard.

GARDNER

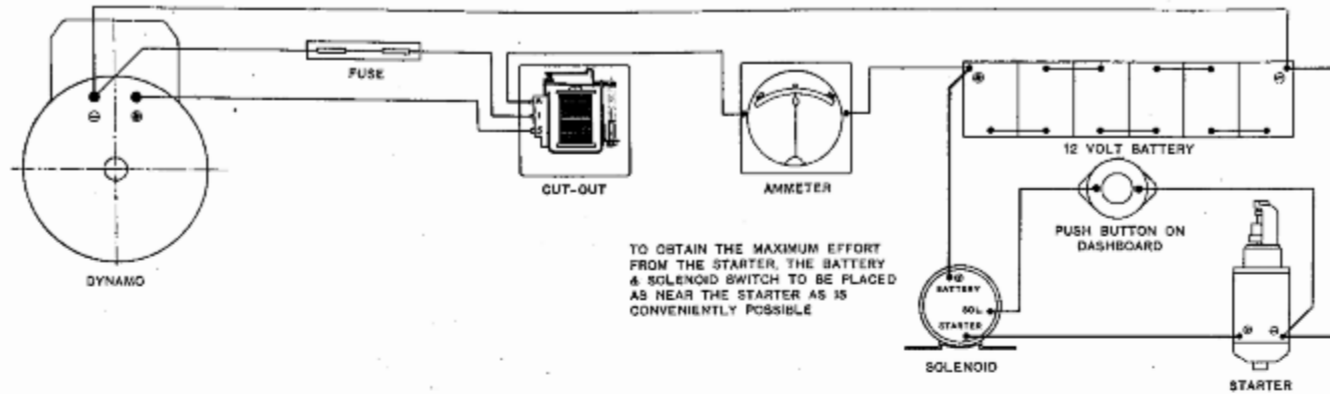
Plate 3



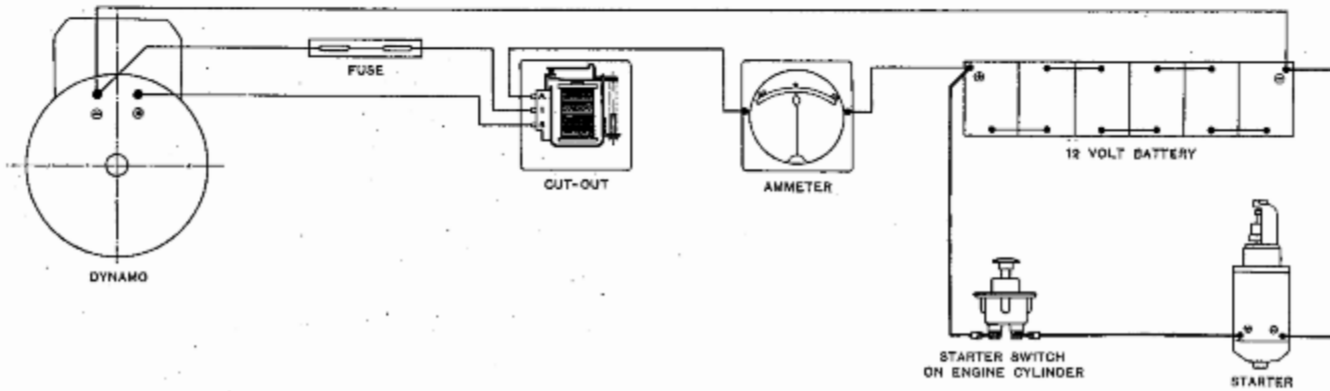
NOTE.—The numbers refer to Plates and not to Sections.

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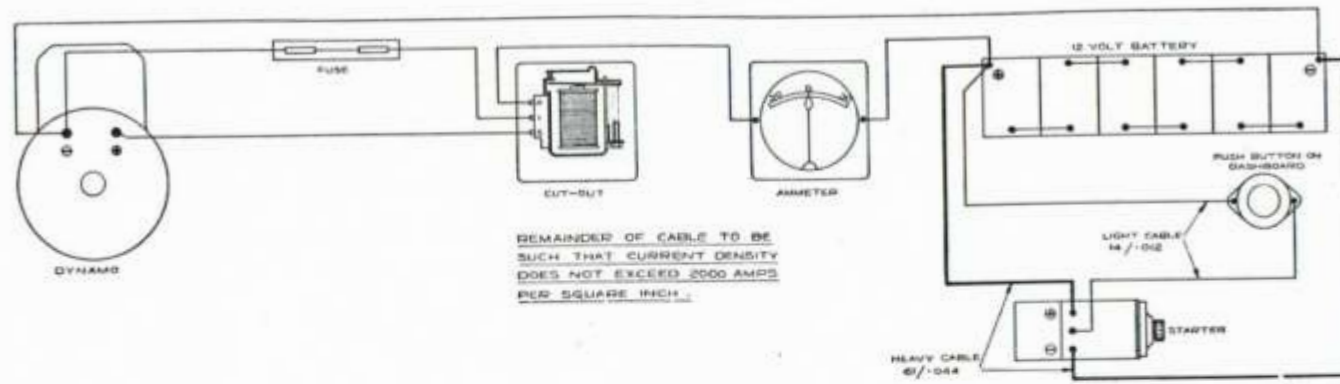
SOLENOID AND PUSH BUTTON SWITCH FOR REMOTE CONTROL BENDIX DRIVE STARTER



DIRECT PUSH SWITCH FOR LOCAL CONTROL BENDIX DRIVE STARTER

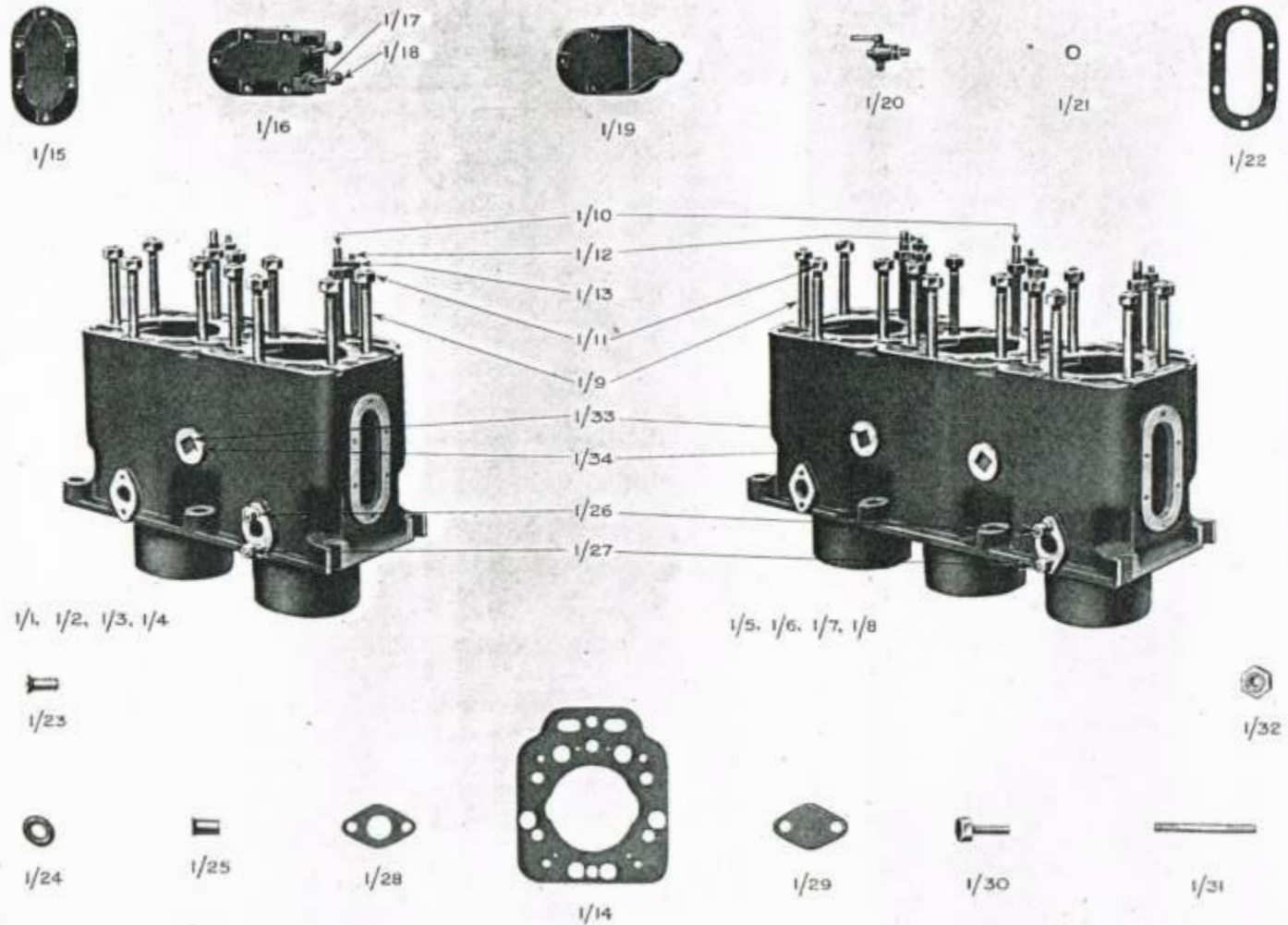


AXIAL DRIVE STARTER WITH PUSH BUTTON SWITCH



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CYLINDER BLOCK—Section 1—Plate 5





CYLINDER BLOCK—Section 1

Plate No.	Part No.	Description	Plate No.	Part No.	Description
5	1/1	2-Cylinder Block, fitted with 1/9, 1/10, 1/11, 1/12, 1/13, 1/15 and/or 1/19, 1/22, 1/23, 1/26, 1/27, 1/28, 1/33, 1/34	5	1/23	Setscrew, Countersunk Head, $\frac{1}{4}$ " Wh. \times $\frac{3}{8}$ " long, for 1/15, 1/16, 1/19
	1/2	2-Cylinder Block, fitted with 1/9, 1/10, 1/11, 1/12, 1/13, 1/15 and/or 1/19, 1/22, 1/23, 1/28, 1/31, 1/32, 1/33, 1/34		1/24	Joint Ring, Cylinder to Cylinder Head (same as 20/15)
	1/3	2-Cylinder Block, fitted with 1/9, 1/10, 1/11, 1/12, 1/13, 1/15 and/or 1/19, 1/22, 1/23, 1/28, 1/31, 1/32, 1/33, 1/34		1/25	Cylinder Water Connection Tube (same as 20/16)
	1/4	2-Cylinder Block, fitted with 1/9, 1/10, 1/11, 1/12, 1/13, 1/15 and/or 1/19, 1/22, 1/23, 1/28, 1/31, 1/32, 1/33, 1/34		1/26	Stud, $\frac{5}{16}$ " Wh. \times $1\frac{1}{4}$ " long, fitted with 1/27 for 15/2, 15/4
	1/5	3-Cylinder Block, fitted with 1/9, 1/10, 1/11, 1/12, 1/13, 1/15 and/or 1/19, 1/22, 1/23, 1/26, 1/27, 1/28, 1/33, 1/34		1/27	Nut, Hex., $\frac{5}{16}$ " Wh.
	1/6	3-Cylinder Block, fitted with 1/9, 1/10, 1/11, 1/12, 1/13, 1/15 and/or 1/19, 1/22, 1/23, 1/28, 1/31, 1/32, 1/33, 1/34		1/28	Packing for 1/29, 15/2, 15/4, 15/10
	1/7	3-Cylinder Block, fitted with 1/9, 1/10, 1/11, 1/12, 1/13, 1/15 and/or 1/19, 1/22, 1/23, 1/28, 1/31, 1/32, 1/33, 1/34		1/29	Flange, Blank, fitted with 1/28 for 1/1 to 1/8
	1/8	3-Cylinder Block, fitted with 1/9, 1/10, 1/11, 1/12, 1/13, 1/15 and/or 1/19, 1/22, 1/23, 1/28, 1/31, 1/32, 1/33, 1/34		1/30	Setscrew, Hex. Head, $\frac{5}{16}$ " Wh. \times $\frac{3}{4}$ " long, for 1/29
	1/9	Cylinder Head Stud, $\frac{3}{8}$ " B.S.F. \times $4\frac{1}{2}$ " long, fitted with 1/11		1/31	Stud, $\frac{5}{16}$ " Wh. \times 2" long, fitted with 1/32 for 15/10
	1/10	Cylinder Head Stud, $\frac{3}{8}$ " B.S.F. \times $6\frac{1}{16}$ " long, fitted with 1/11		1/32	Nut, Hex., $\frac{5}{16}$ " Wh. for 1/31
	1/11	Nut, Hex., $\frac{3}{8}$ " B.S.F. \times $\frac{1}{2}$ " Hex.		1/33	Plug, $1\frac{1}{2}$ "-16 Thds., fitted with 1/34
	1/12	Cylinder Head Stud, $\frac{3}{8}$ " B.S.F. \times $4\frac{1}{8}$ " long, fitted with 1/13		1/34	Packing
	1/13	Nut, Hex., $\frac{3}{8}$ " B.S.F.		1/35	2-CYLINDER BLOCK ASSEMBLY, Comprising 1/1, 1/9 to 1/18, 1/22 to 1/30, 1/33, 1/34
	1/14	Cylinder Head Joint Packing		1/36	2-CYLINDER BLOCK ASSEMBLY, Comprising 1/1, 1/9 to 1/14, 1/16 to 1/30, 1/33, 1/34
	1/15	Cylinder Water Door—Plain, fitted with 1/22		1/37	2-CYLINDER BLOCK ASSEMBLY, Comprising 1/2, 1/9 to 1/15, 1/22 to 1/25, 1/28 to 1/34
	1/16	Cylinder Water Door—with Facing, fitted with 1/17, 1/18, 1/22		1/38	2-CYLINDER BLOCK ASSEMBLY, Comprising 1/2, 1/9 to 1/15, 1/19 to 1/25, 1/28 to 1/34
	1/17	Lubricating Oil Strainer Stud, fitted with 1/18		1/39	2-CYLINDER BLOCK ASSEMBLY, Comprising 1/3, 1/9 to 1/15, 1/22 to 1/25, 1/28 to 1/34
	1/18	Nut, Hex., $\frac{5}{16}$ " Wh.		1/40	2-CYLINDER BLOCK ASSEMBLY, Comprising 1/4, 1/9 to 1/15, 1/22 to 1/25, 1/28 to 1/34
	1/19	Fuel Strainer Drip Tray, fitted with 1/22		1/41	3-CYLINDER BLOCK ASSEMBLY, Comprising 1/5, 1/9 to 1/15, 1/22 to 1/30, 1/33, 1/34
	1/20	Drain Tap, fitted with 1/21		1/42	3-CYLINDER BLOCK ASSEMBLY, Comprising 1/5, 1/9 to 1/15, 1/19 to 1/30, 1/33, 1/34
	1/21	Packing for 1/20		1/43	3-CYLINDER BLOCK ASSEMBLY, Comprising 1/6, 1/9 to 1/15, 1/22 to 1/25, 1/28 to 1/34
	1/22	Packing for 1/15, 1/16, 1/19			

When ordering it is important to quote the Number of the Engine, and also the Number of the Part.



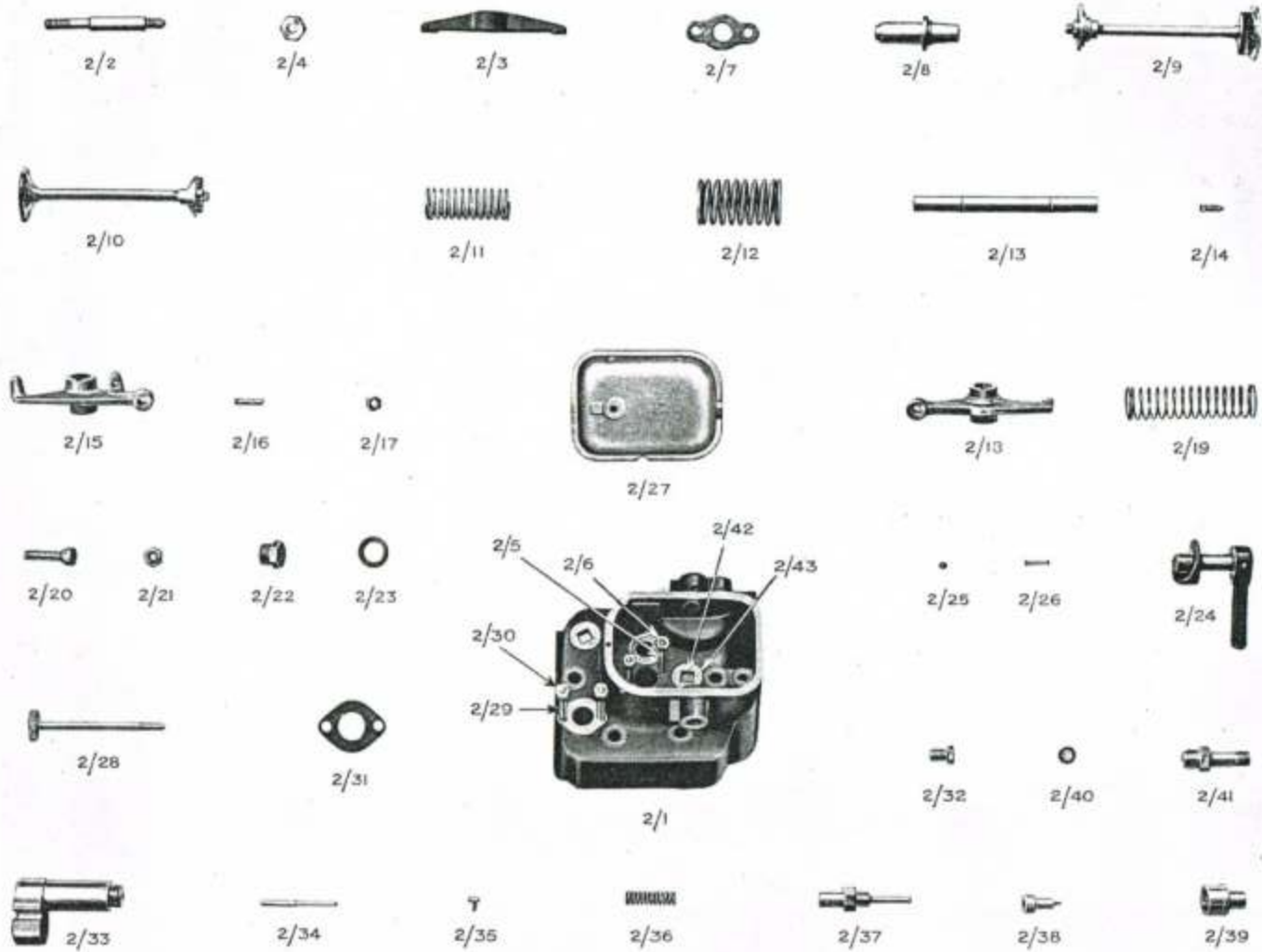
CYLINDER BLOCK—Section 1

Plate No.	Part No.	Description	Plate No.	Part No.	Description
5	1/44	3-CYLINDER BLOCK ASSEMBLY, Comprising 1/8, 1/9 to 1/15, 1/19 to 1/25, 1/28 to 1/34			
	1/45	3-CYLINDER BLOCK ASSEMBLY, Comprising 1/7, 1/9 to 1/15, 1/22 to 1/25, 1/28 to 1/34			
	1/46	3-CYLINDER BLOCK ASSEMBLY, Comprising 1/7, 1/9 to 1/15, 1/19 to 1/25, 1/28 to 1/34			
	1/47	3-CYLINDER BLOCK ASSEMBLY, Comprising 1/8 to 1/15, 1/22 to 1/25, 1/28 to 1/34			

When ordering it is important to quote the Number of the Engine, and also the Number of the Part.

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CYLINDER HEAD AND SPRAYER—Section 2—Plate 6



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CYLINDER HEAD AND SPRAYER —Section 2—Plate 7



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CYLINDER HEAD AND SPRAYER—Section 2

Plate No.	Part No.	Description	Plate No.	Part No.	Description	
6	2/1	Cylinder Head, fitted with 2/2, 2/4, 2/5, 2/6, 2/8, 2/29, 2/30, 2/31, 2/42, 2/43	6	2/35	Sprayer Valve Spring Collar (supplied only with 2/33, 2/34, 2/37)	
	2/2	Inlet and Exhaust Manifolds Stud, fitted with 2/4		2/36	Sprayer Valve Spring	
	2/3	Inlet and Exhaust Manifolds Clamp		2/37	Sprayer Valve Stop (supplied only with 2/33 to 2/35)	
	2/4	Nut, Hex., $\frac{3}{8}$ " Wh. for 2/2		2/38	Sprayer Nozzle	
	2/5	Stud, $\frac{1}{8}$ " Wh. \times $2\frac{1}{8}$ " long, fitted with 2/6 for 2/33		2/39	Sprayer Cap	
	2/6	Nut, Hex., $\frac{1}{4}$ " Wh. \times $\frac{1}{2}$ " Hex.		2/40	Sprayer Washer (same as 20/17)	
	2/7	Sprayer Clamp Plate		2/41	Sprayer Delivery Union Stock	
	2/8	Inlet and Exhaust Valve Guide		2/42	Plug, $1\frac{1}{2}$ "—16 thds., fitted with 2/43	
	2/9	Inlet Valve, fitted with Collar and Split Pin		2/43	Packing	
	2/10	Exhaust Valve, fitted with Collar and Split Pin		7	2/44	Compression Relief Gear, fitted with Cam 2/24, 2/45
	2/11	Inlet and Exhaust Valves Spring—Inner, supplied only with 2/12 (same as 20/22)			2/45	Taper Pin for 2/44
	2/12	Inlet and Exhaust Valves Spring—Outer, supplied only with 2/11 (same as 20/23)			2/46	Ball, $\frac{3}{16}$ " diam. for 2/44
	2/13	Valve Levers Shaft			2/47	Compression Relief Gear Ball Spring
	2/14	Setscrew, Sq. Head—Pointed, $\frac{1}{4}$ "—28 thds. \times $\frac{3}{16}$ " long for 2/13			2/48	Stud, $\frac{1}{16}$ " Wh. \times $1\frac{1}{2}$ " long, fitted with 2/49, for 2/50
	2/15	Inlet Valve Lever	2/49		Nut, Hex., $\frac{1}{16}$ " Wh. for 2/48	
	2/16	Setscrew, Headless, O.B.A. \times $\frac{1}{8}$ " long, fitted with 2/17 for 2/15	2/50		Compression Relief Quadrant Bracket, fitted with 2/51	
	2/17	Nut, Hex., O.B.A. for 2/16	2/51		Steady Peg, $\frac{3}{16}$ " diam. \times $\frac{1}{16}$ " long, for 2/50	
	2/18	Exhaust Valve Lever	2/52		Compression Relief Gear Quadrant, fitted with 2/53	
	2/19	Valve Levers Spacing Spring	2/53		Setscrew, Sq. Head—Pointed, $\frac{1}{4}$ "—28 thds. \times $\frac{1}{16}$ " long for 2/52	
	2/20	Valve Lever Adjuster, fitted with 2/21	2/54		Compression Relief Quadrant Spindle	
	2/21	Nut, Hex., $\frac{1}{16}$ " B.S.F. \times $\frac{1}{16}$ " Hex. for 2/20	2/55		Compression Relief Quadrant Shaft, $1\frac{1}{16}$ " long	
	2/22	Plug, Hex. Head, $\frac{3}{8}$ " Gas \times $\frac{1}{16}$ " Hex., fitted with 2/23, for 2/1	2/56		Compression Relief Quadrant Shaft, $1\frac{9}{16}$ " long	
	2/23	Packing for 2/22	2/57	Compression Relief Quadrant Shaft, $2\frac{7}{16}$ " long		
	2/24	Compression Relief Cam with Lever 10/27 or Gear 2/44 and Taper Pin	2/58	Compression Relief Remote Control Lever, fitted with 2/59		
	2/25	Ball, $\frac{3}{16}$ " diam. for 2/24	2/59	Bolt, Hex. Head, $\frac{1}{4}$ "—28 thds. \times 1 " long for 2/58		
	2/26	Compression Relief Cam Lever Spring	2/60	Washer, Steel, $\frac{3}{16}$ " bore, for 2/54, 2/55, 2/56, 2/57		
	2/27	Cylinder Head Cover with Steady Peg	2/61	Split Pin, $\frac{3}{16}$ " diam. \times 1 " long, for 2/54, 2/55, 2/56, 2/57		
	2/28	Cylinder Head Cover Screw	2/62	Forked Eye, fitted with 2/63, 2/64, for 2/58		
	2/29	Stud, $\frac{1}{8}$ " Wh. \times $2\frac{1}{8}$ " long, fitted with 2/30 for 15/14, 15/15, 15/16, 15/17	2/63	Split Pin, $\frac{1}{4}$ " diam. \times $\frac{1}{2}$ " long, for 2/64		
	2/30	Nut, Hex., $\frac{1}{8}$ " Wh. for 2/29	2/64	Pin, Headed, $\frac{1}{4}$ " diam. \times $\frac{1}{2}$ " long, fitted with 2/63, for 2/62		
	2/31	Packing for 15/14, 15/15, 15/16, 15/17	6	2/65	CYLINDER HEAD ASSEMBLY, Comprising 2/1 to 2/43, 10/80	
	2/32	Plug, Hex. Head, $\frac{1}{8}$ "—24 thds. \times $\frac{1}{4}$ " Hex., for End Lubrication Holes in 2/1		2/66	CYLINDER HEAD ASSEMBLY, without Sprayer Assembly Comprising 2/1 to 2/32, 2/42, 2/43, 10/80	
	2/33	Sprayer Body (supplied only with 2/34, 2/35, 2/37)	6 & 7	2/67	CYLINDER HEAD ASSEMBLY—REMOTE CONTROL TYPE, Comprising 2/1 to 2/24, 2/27 to 2/53, 2/60 to 2/64, 10/60. (NOTE:—Details 2/54 to 2/59 to be ordered separately to suit requirements.)	
	2/34	Sprayer Valve (supplied only with 2/33, 2/35, 2/37)				

When ordering it is important to quote the Number of the Engine, and also the Number of the Part.



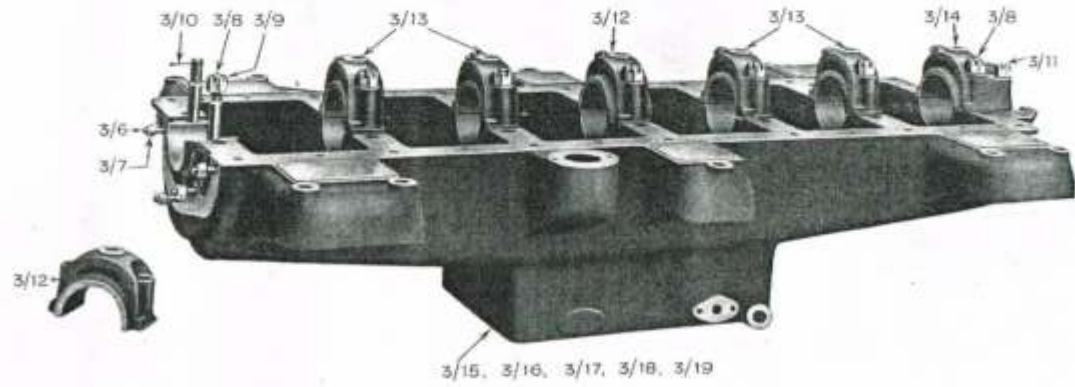
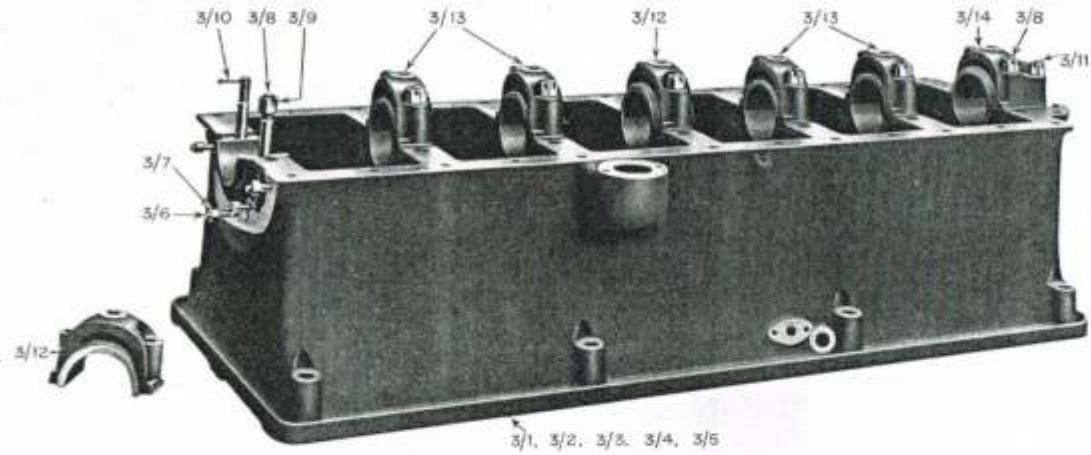
CYLINDER HEAD AND SPRAYER—Section 2

Plate No.	Part No.	Description	Plate No.	Part No.	Description
6 & 7	2/68	CYLINDER HEAD ASSEMBLY—REMOTE CONTROL TYPE, without Sprayer Assembly, Comprising 2/1 to 2/24, 2/27 to 2/32, 2/44 to 2/53, 2/60 to 2/64, 10/60. (NOTE:—Details 2/54 to 2/59 to be ordered separately to suit requirements.			
6	2/69	SPRAYER ASSEMBLY, Comprising 2/33 to 2/41. (same as 20/11)			

When ordering it is important to quote the Number of the Engine, and also the Number of the Part.

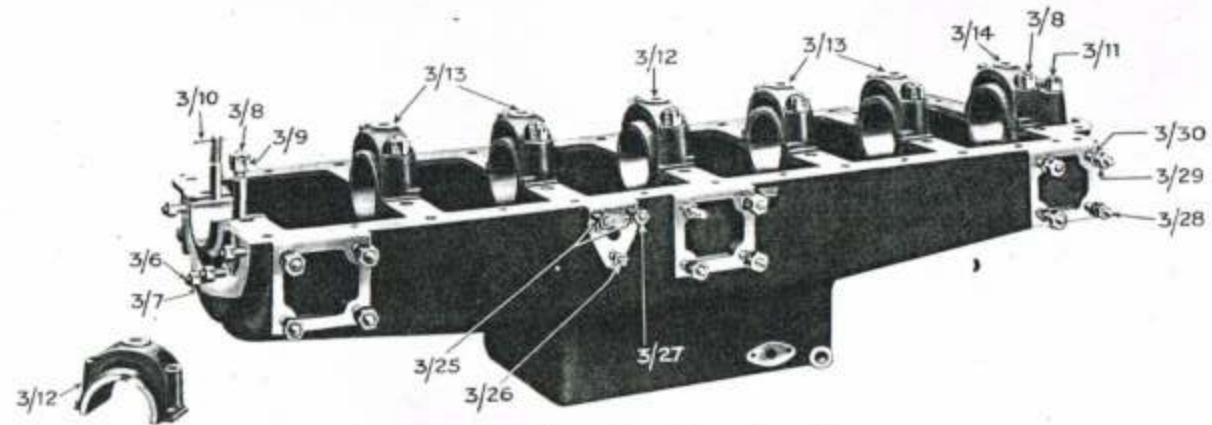
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CRANKCASE—Section 3—Plate 8

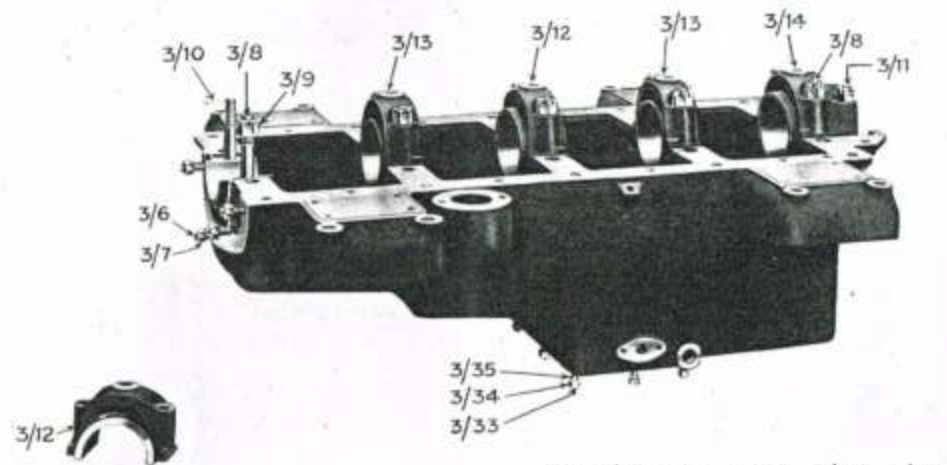


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CRANKCASE—Section 3—Plate 9



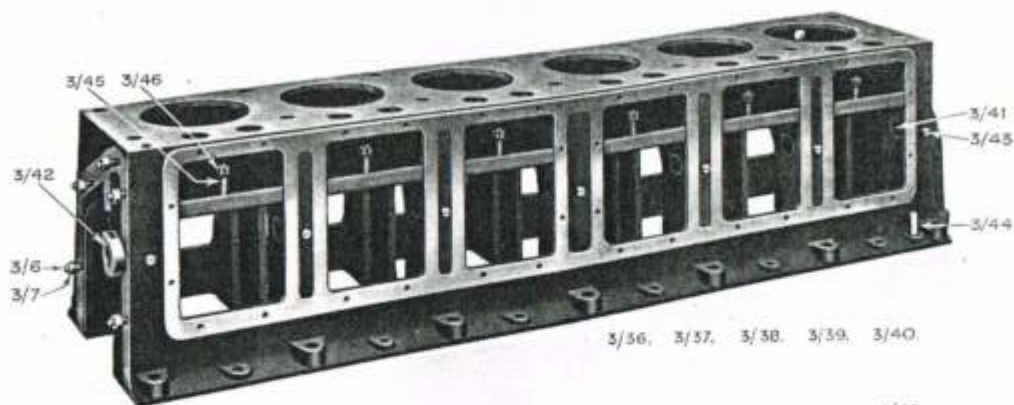
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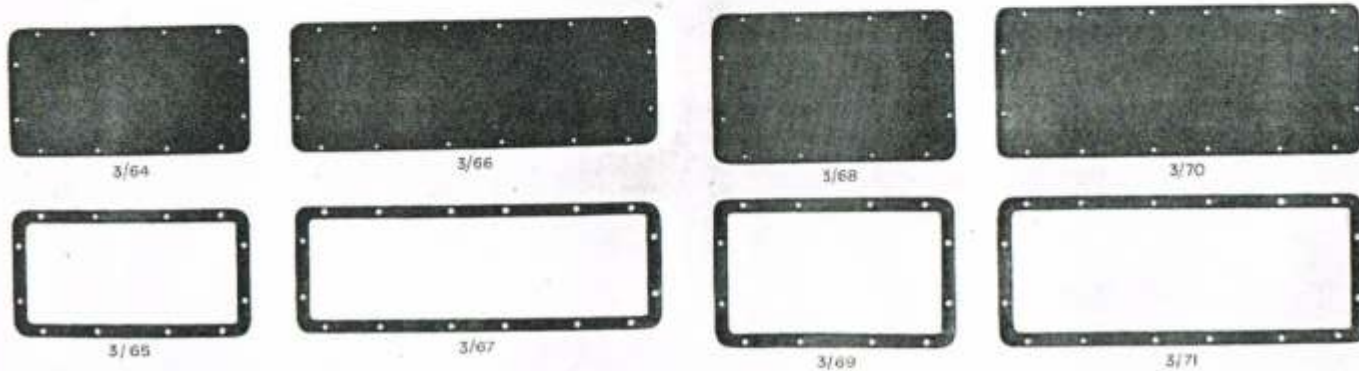
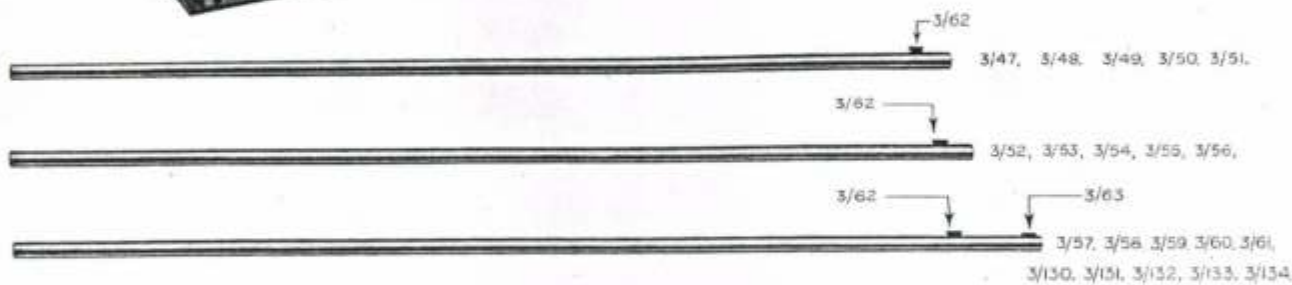
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CRANKCASE—Section 3—Plate 10



3/36, 3/37, 3/38, 3/39, 3/40



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CRANKCASE—Section 3—Plate 11



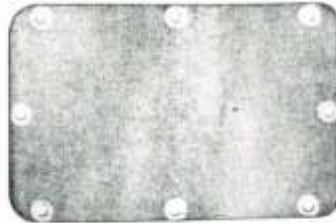
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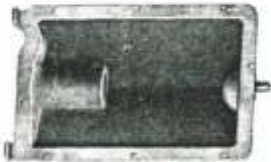
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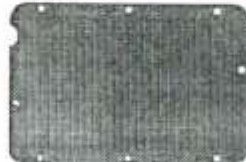
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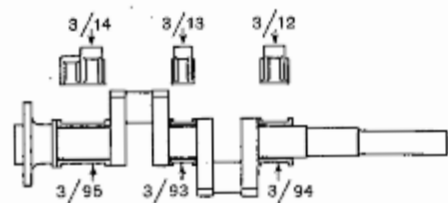


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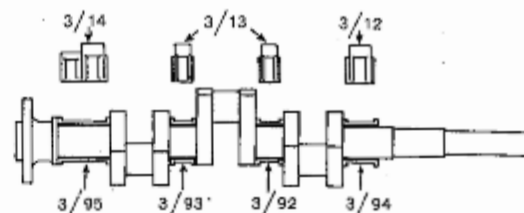
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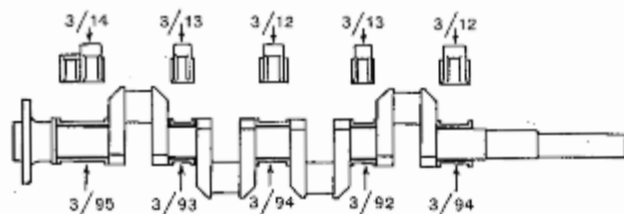
CRANKCASE—Section 3—Plate 12



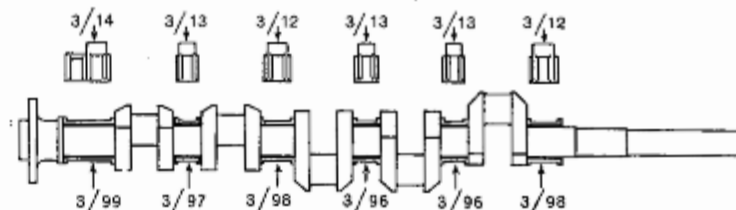
2L2



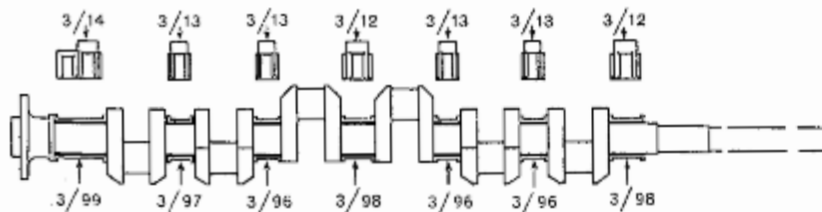
3L2



4L2



5L2



6L2

DISPOSITION OF MAIN BEARINGS AND CAPS
REFERRED TO IN SECTION 3

NOTE — THE LOCATION BEARINGS NUMBERS 3/93, 3/97 ARE
BABBITTED ON THE FLANGE, AND ONLY IN THIS RESPECT
DO THEY DIFFER FROM THE SHORT BEARINGS
NUMBERS 3/92, 3/96

GARDNER

CRANKCASE—Section 3—Plate 13



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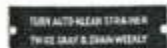
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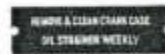
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3/118



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CRANKCASE—Section 3

Plate No.	Part No.	Description	Plate No.	Part No.	Description
8	3/1	Crankcase—Lower, Type A, fitted with 3/6 to 3/14, 3/72, 3/73, 3/74, 16/23	9	3/25	Stud, $\frac{3}{8}$ " B.S.F. \times $1\frac{1}{2}$ " long, fitted with 3/27 for 12/51
	3/2	Crankcase—Lower, Type A, fitted with details as for 3/1		3/26	Stud, $\frac{3}{8}$ " B.S.F. \times $1\frac{1}{2}$ " long, fitted with 3/27 for 12/51
	3/3	Crankcase—Lower, Type A, fitted with details as for 3/1		3/27	Nut, Hex., $\frac{3}{8}$ " B.S.F. \times $\frac{3}{8}$ " Hex.
	3/4	Crankcase—Lower, Type A, fitted with details as for 3/1		3/28	Stud, $\frac{7}{16}$ " B.S.F. \times $1\frac{1}{2}$ " long, fitted with 3/29, 3/30
	3/5	Crankcase—Lower, Type A, fitted with details as for 3/1		3/29	Nut, Hex., $\frac{7}{16}$ " B.S.F.
	3/6	Stud, $\frac{3}{8}$ " Wh. \times $1\frac{1}{8}$ " long, fitted with 3/7, for 4/1, 4/2		3/30	Spring Washer, $\frac{7}{16}$ " diam.
	3/7	Nut, Hex., $\frac{3}{8}$ " Wh., $\frac{3}{8}$ " Hex.		3/31	Crankcase—Lower, Type D, fitted with 3/6 to 3/14, 3/33, 3/34, 3/35, 3/75 to 3/78, 16/23
	3/8	Main Bearing Cap Stud, $\frac{3}{8}$ " B.S.F. \times $5\frac{1}{2}$ " long, fitted with 3/9, 3/10		3/32	Crankcase—Lower, Type E (Type D Less Feet), fitted with 3/6 to 3/14, 3/25 to 3/30, 3/33, 3/34, 3/35, 3/75 to 3/78, 16/23
	3/9	Castle Nut, $\frac{3}{8}$ " B.S.F.		3/33	Stud, $\frac{5}{16}$ " Wh. \times $1\frac{1}{4}$ " long, fitted with 3/34, 3/35
	3/10	Split Pin, $\frac{1}{8}$ " diam. \times $1\frac{1}{2}$ " long for 3/8, 3/11		3/34	Nut, Hex., $\frac{5}{16}$ " Wh., \times $1\frac{1}{4}$ " Hex.
	3/11	Main Bearing Cap Stud, $\frac{3}{8}$ " B.S.F. \times $4\frac{1}{2}$ " long, fitted with 3/9		3/35	Spring Washer, $\frac{5}{16}$ " diam.
8, 12	3/12	Main Bearing Cap—Gear End	10	3/36	Crankcase—Upper, fitted with 3/6, 3/7, 3/41 to 3/46..
	3/13	Main Bearing Cap—Short		3/37	Crankcase—Upper, fitted with details as for 3/36 ..
	3/14	Main Bearing Cap—Flywheel End		3/38	Crankcase—Upper, fitted with details as for 3/36 ..
				3/39	Crankcase—Upper, fitted with details as for 3/36 ..
8	3/15	Crankcase—Lower, Type B, fitted with 3/6 to 3/14, 3/77, 3/78, 16/23	3/40	Crankcase—Upper, fitted with details as for 3/36 ..	
	3/16	Crankcase—Lower, Type B, fitted with details as for 3/15	3/41	Valve Camshaft Bush—Intermediate	
	3/17	Crankcase—Lower, Type B, fitted with details as for 3/15	3/42	Valve Camshaft Bush—Gear End	
	3/18	Crankcase—Lower, Type B, fitted with details as for 3/15	3/43	Locating Screw for 3/41, 3/42	
	3/19	Crankcase—Lower, Type B, fitted with details as for 3/15	3/44	Steady Peg, $\frac{1}{2}$ " diam. \times $1\frac{1}{4}$ " long	
	9	3/20	Crankcase—Lower, Type C, fitted with 3/6 to 3/14, 3/25 to 3/30, 3/77, 3/78, 16/23	3/45	Stud, $\frac{3}{8}$ " Wh. \times $1\frac{1}{4}$ " long, fitted with 3/46
		3/21	Crankcase—Lower, Type C, fitted with details as for 3/20	3/46	Nut, Hex., $\frac{3}{8}$ " Wh., \times $\frac{3}{8}$ " Hex.
		3/22	Crankcase—Lower, Type C, fitted with details as for 3/20	3/47	Valve Camshaft, $22\frac{1}{16}$ " long, fitted with 3/62 ..
		3/23	Crankcase—Lower, Type C, fitted with details as for 3/20	3/48	Valve Camshaft, $30\frac{1}{16}$ " long, fitted with 3/62 ..
3/24		Crankcase—Lower, Type C, fitted with details as for 3/20	3/49	Valve Camshaft, $38\frac{1}{16}$ " long, fitted with 3/62 ..	
		3/50	Valve Camshaft, $45\frac{1}{16}$ " long, fitted with 3/62 ..		
		3/51	Valve Camshaft, $53\frac{1}{16}$ " long, fitted with 3/62 ..		
		3/52	Valve Camshaft, $24\frac{1}{16}$ " long, fitted with 3/62 ..		
		3/53	Valve Camshaft, $32\frac{1}{16}$ " long, fitted with 3/62 ..		
		3/54	Valve Camshaft, $40\frac{1}{16}$ " long, fitted with 3/62 ..		
		3/55	Valve Camshaft, $47\frac{1}{16}$ " long, fitted with 3/62 ..		
		3/56	Valve Camshaft, $55\frac{1}{16}$ " long, fitted with 3/62 ..		
		3/57	Valve Camshaft, $26\frac{7}{16}$ " long, fitted with 3/62, 3/63		
		3/58	Valve Camshaft, $33\frac{1}{16}$ " long, fitted with 3/62, 3/63		

When ordering it is important to quote the Number of the Engine, and also the Number of the Part.



CRANK CASE—Section 3

Plate No.	Part No.	Description	Plate No.	Part No.	Description	
10	3/59	Valve Camshaft, $42\frac{1}{16}$ " long, fitted with 3/62, 3/63	4L2 Forward Rotation	11, 12	3/92	Crankshaft Journal Bearing—Short, Upper and Lower Halves
	3/60	Valve Camshaft, $49\frac{3}{16}$ " long, fitted with 3/62, 3/63		5L2 Forward Rotation	3/93	Crankshaft Journal Bearing—Locating, Upper and Lower Halves
	3/61	Valve Camshaft, $57\frac{1}{16}$ " long, fitted with 3/62, 3/63		6L2 Forward Rotation	3/94	Crankshaft Journal Bearing—Centre and Gear End, Upper and Lower Halves
	3/62	Woodruff Key		3/95	Crankshaft Journal Bearing—Flywheel End, Upper and Lower Halves	
	3/63	Feather Key		3/96	Crankshaft Journal Bearing—Short, Upper and Lower Halves	
	3/64	Crankcase Door, $14\frac{1}{2}$ " x $7\frac{1}{2}$ ", fitted with 3/65		3/97	Crankshaft Journal Bearing—Locating, Upper and Lower Halves	
	3/65	Packing for 3/64		3/98	Crankshaft Journal Bearing—Centre and Gear End, Upper and Lower Halves	
	3/66	Crankcase Door, $21\frac{1}{2}$ " x $7\frac{1}{2}$ ", fitted with 3/67		3/99	Crankshaft Journal Bearing—Flywheel End, Upper and Lower Halves	
	3/67	Packing for 3/66				
	3/68	Crankcase Door, $14\frac{1}{2}$ " x $8\frac{1}{2}$ ", fitted with 3/69				
3/69	Packing for 3/68					
3/70	Crankcase Door, $21\frac{1}{2}$ " x $8\frac{1}{2}$ ", fitted with 3/71					
3/71	Packing for 3/70					
11	3/72	Drain Pipe, $5\frac{1}{16}$ " long, for 3/1 to 3/5	13	3/100	Setscrew, Hex. Head, $\frac{1}{2}$ " Wh. x $1\frac{1}{2}$ " long	
	3/73	Disc, Leather, $\frac{3}{4}$ " diam., for 3/72		3/101	Setscrew, Hex. Head, $\frac{3}{8}$ " Wh. x $1\frac{1}{4}$ " long	
	3/74	Screwed Cap for 3/72, fitted with 3/73		3/102	Setscrew, Hex. Head, $\frac{1}{2}$ " Wh. x $1\frac{1}{4}$ " long	
	3/75	Crankcase Sump Door, fitted with 3/76		3/103	Camshaft Hole Cover—Bored	
	3/76	Packing for 3/75		3/104	Setscrew, Cheese Head, 1 B.A. x $\frac{3}{8}$ " long, for 3/103	
	3/77	Plug, Hex. Head, $\frac{1}{2}$ " Gas x $\frac{5}{8}$ " Hex., with 3/78, for 3/15 to 3/24, 3/31, 3/32, 3/78		3/105	Camshaft Hole Cover—Plain	
	3/78	Packing for 3/77		3/106	Setscrew, Cheese Head, 1 B.A. x $\frac{7}{16}$ " long, for 3/105	
	3/79	Main Bearing Oil Pipe Stock		3/107	Setscrew, Hex. Head, $1\frac{1}{2}$ " Wh. x $\frac{3}{16}$ " long, for 3/64 to 3/71, 19/35	
	3/80	Cylinder Foot Stud, $15\frac{3}{16}$ " long, fitted with 3/83		3/108	"Maker's" Nameplate	
	3/81	Cylinder Foot Stud, $15\frac{3}{16}$ " long, fitted with 3/82, 3/83		3/109	Instruction Plate, "Auto Klean Strainer"	
	3/82	Cylinder Foot Stud Washer, for 3/81		3/110	Instruction Plate, "Crankcase Strainer"	
	3/83	Nut, Hex., $\frac{3}{4}$ " B.S.F. x $\frac{5}{8}$ " Hex., for 3/80, 3/81		3/111	Metallic Drive Screw, No. 6 x $\frac{3}{8}$ " long, for 3/108, 3/109, 3/110	
	3/84	Oil Level Dip Rod		3/112	Pressure Gauge, Engine Mounting	
	3/85	Lubricating Oil Suction Strainer Body, fitted with 3/86, 3/87, and/or 3/88		3/113	Pressure Gauge, Dashboard Mounting	
	3/86	Strainer Gauze		3/114	Packing, Leather, for 3/112, 3/113	
	3/87	Setscrew, Cheese Head—3 B.A. x $\frac{3}{8}$ " long, for 3/86		3/115	Nut, Hex., $\frac{1}{2}$ " Gas x $\frac{1}{4}$ " Hex., for 3/112, 3/113	
	3/88	Steady Screw for 3/85		3/116	Pressure Gauge Mount	
	3/89	Strainer Pipe		3/117	Setscrew, Cheese Head, 0 B.A. x $\frac{1}{2}$ " long, for 3/116	
	3/90	Split Pin, $\frac{3}{16}$ " diam. x $\frac{1}{4}$ " long, for 3/89		3/118	Valve Tappet Guide	
	3/91	Strainer Pipe Spring		3/119	Valve Tappet	
				3/120	Valve Tappet Spring Collar	
		3/121	Valve Tappet Spring			
		3/122	Valve Lever Push Rod			

2, 3 and 4L2
See Plate 12 for
disposition of Bearings

5 and 6L2
See Plate 12 for
disposition of Bearings

Fastening Crankcase
Upper to Lower

CANCELLED

When ordering it is important to quote the Number of the Engine, and also the Number of the Part.



CRANKCASE—Section 3

Plate No.	Part No.	Description	Plate No.	Part No.	Description
13	3/123	Valve Tappet Guide Clamp	8, 11 & 12	3/143	CRANKCASE—LOWER ASSEMBLY—TYPE A, } 6L2 Comprising 3/5, 3/96 to 3/99
	3/124	Valve Camshaft Locating Collar, fitted with 3/125		3/144	CRANKCASE—LOWER ASSEMBLY—TYPE B, } 2L2 Comprising 3/15, 3/93 to 3/95
	3/125	Setscrew, Sq. Head—Pointed, $\frac{1}{4}$ "—28 thds. $\times \frac{31}{32}$ " long, for 3/124			CRANKCASE—LOWER ASSEMBLY—TYPE B, } 3L2 Comprising 3/16, 3/92 to 3/95
	3/126	Valve Cam—Forward Rotation, fitted with 3/128			CRANKCASE—LOWER ASSEMBLY—TYPE B, } 4L2 Comprising 3/17, 3/92 to 3/95
	3/127	Valve Cam—Reverse Rotation, fitted with 3/128			3/147
3/128	Setscrew, Sq. Head—Pointed, $\frac{3}{8}$ "—24 thds. $\times \frac{1}{2}$ " long, for 3/126, 3/127	3/148	CRANKCASE—LOWER ASSEMBLY—TYPE B, } 6L2 Comprising 3/19, 3/96 to 3/99		
10	3/129	Splash Spring for 3/62 to 3/61, 3/130 to 3/134	9, 11 & 12	3/149	CRANKCASE—LOWER ASSEMBLY—TYPE C, } 2L2 Comprising 3/20, 3/93 to 3/95
	3/130	Valve Camshaft, $26\frac{7}{16}$ " long, fitted with } 2L2 3/62, 3/63 } Reverse Rotation		3/150	CRANKCASE—LOWER ASSEMBLY—TYPE C, } 3L2 Comprising 3/21, 3/92 to 3/95
	3/131	Valve Camshaft, $33\frac{1}{16}$ " long, fitted with } 3L2 3/62, 3/63 } Reverse Rotation			3/151
	3/132	Valve Camshaft, $42\frac{1}{16}$ " long, fitted with } 4L2 3/62, 3/63 } Reverse Rotation		3/152	
	3/133	Valve Camshaft, $49\frac{3}{16}$ " long, fitted with } 5L2 3/62, 3/63 } Reverse Rotation			3/153
	3/134	Valve Camshaft, $57\frac{1}{16}$ " long, fitted with } 6L2 3/62, 3/63 } Reverse Rotation		3/154	
	9	3/135			Crankcase—Lower, Type D, } 5L2 fitted with 3/6 to 3/14, 3/33 } to 3/35, 3/75 to 3/78, 16/23 }
3/136		Crankcase—Lower, Type D, } 6L2 fitted with details as for } 3/135 }	3/156	CRANKCASE—LOWER ASSEMBLY—TYPE D, } 6L2 Comprising 3/136, 3/96 to } 3/99 }	
3/137		Crankcase—Lower, Type E, } 5L2 fitted with 3/6 to 3/14, 3/25 } to 3/30, 3/33 to 3/35, 3/75 } to 3/78, 16/23 }		3/157	CRANKCASE—LOWER ASSEMBLY—TYPE E, } 4L2 Comprising 3/32, 3/92 to 3/95 }
3/138		Crankcase—Lower, Type E, } 6L2 fitted with details as for } 3/137 }	3/158		CRANKCASE—LOWER ASSEMBLY—TYPE E, } 5L2 Comprising 3/137, 3/96 to } 3/99 } CANCELLED
8, 11 & 12	3/139	CRANKCASE—LOWER ASSEMBLY—TYPE A, } 2L2 Comprising 3/1, 3/93 to 3/95 }		3/158	CRANKCASE—LOWER ASSEMBLY—TYPE E, } 5L2 Comprising 3/137, 3/96 to } 3/99 } CANCELLED
	3/140	CRANKCASE—LOWER ASSEMBLY—TYPE A, } 3L2 Comprising 3/2, 3/92 to 3/95 }			
	3/141	CRANKCASE—LOWER ASSEMBLY—TYPE A, } 4L2 Comprising 3/3, 3/92 to 3/95 }			
	3/142	CRANKCASE—LOWER ASSEMBLY—TYPE A, } 5L2 Comprising 3/4, 3/96 to 3/99 }			

When ordering it is important to quote the Number of the Engine, and also the Number of the Part.



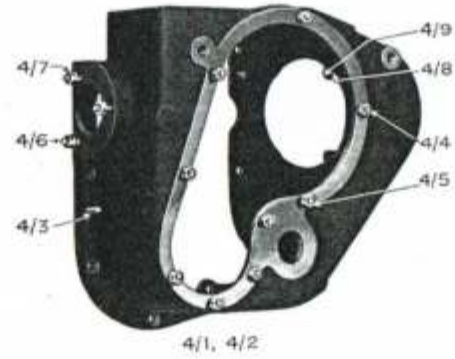
CRANKCASE—Section 3

Plate No.	Part No.	Description	Plate No.	Part No.	Description
9, 11 & 12	3/159	CRANKCASE—LOWER ASSEMBLY } —TYPE E, Comprising 3/138, } 3/96 to 3/99	10, 13 & 15	3/172	VALVE CAMSHAFT ASSEMBLY—53 $\frac{7}{16}$ " long, } Comprising 3/51, 3/124, 3/126 or 3/127, 4/27, } 4/35
		6L2 CANCELLED			6L2 Ram Pump— Duplex Chain
10, 13 & 15	3/160	VALVE CAMSHAFT ASSEMBLY—22 $\frac{11}{16}$ " long, } Comprising 3/47, 3/124, 3/126 or 3/127, 4/29, } 4/32 or 4/33, 4/34		3/173	VALVE CAMSHAFT ASSEMBLY—26 $\frac{7}{16}$ " long, } Comprising 3/57 or 3/130, 3/124, 3/126 or } 3/127, 4/27, 4/34
		2L2 Centrifugal Pump— Single Chain			2L2 Biler Pump— Single Chain
	3/161	VALVE CAMSHAFT ASSEMBLY—30 $\frac{1}{16}$ " long, } Comprising 3/48, 3/124, 3/126 or 3/127, 4/29, } 4/32 or 4/33, 4/34		3/174	VALVE CAMSHAFT ASSEMBLY—33 $\frac{11}{16}$ " long, } Comprising 3/58, or 3/131 3/124, 3/126 or } 3/127, 4/27, 4/34
		3L2 Centrifugal Pump— Single Chain			3L2 Biler Pump— Single Chain
	3/162	VALVE CAMSHAFT ASSEMBLY—38 $\frac{7}{16}$ " long, } Comprising 3/49, 3/124, 3/126 or 3/127, 4/29, } 4/32 or 4/33, 4/34		3/175	VALVE CAMSHAFT ASSEMBLY—42 $\frac{1}{16}$ " long, } Comprising 3/59 or 3/132, 3/124, 3/126 or } 3/127, 4/27, 4/34
		4L2 Centrifugal Pump— Single Chain			4L2 Biler Pump— Single Chain
	3/163	VALVE CAMSHAFT ASSEMBLY—45 $\frac{11}{16}$ " long, } Comprising 3/50, 3/124, 3/126 or 3/127, 4/29, } 4/32 or 4/33, 4/35		3/176	VALVE CAMSHAFT ASSEMBLY—49 $\frac{3}{16}$ " long, } Comprising 3/60 or 3/133, 3/124, 3/126 or } 3/127, 4/27, 4/35
		5L2 Centrifugal Pump— Duplex Chain			5L2 Biler Pump— Duplex Chain
	3/164	VALVE CAMSHAFT ASSEMBLY—53 $\frac{7}{16}$ " long, } Comprising 3/51, 3/124, 3/126 or 3/127, 4/29, } 4/32 or 4/33, 4/35		3/177	VALVE CAMSHAFT ASSEMBLY—57 $\frac{1}{16}$ " long, } Comprising 3/61 or 3/134, 3/124, 3/126 or } 3/127, 4/27, 4/35
		6L2 Centrifugal Pump— Duplex Chain			6L2 Biler Pump— Duplex Chain
	3/165	VALVE CAMSHAFT ASSEMBLY—22 $\frac{11}{16}$ " long, } Comprising 3/47, 3/124, 3/126 or 3/127, 4/29, } 4/32 or 4/33, 4/35			
		2L2 Centrifugal Pump— Duplex Chain			
	3/166	VALVE CAMSHAFT ASSEMBLY—30 $\frac{1}{16}$ " long, } Comprising 3/48, 3/124, 3/126 or 3/127, 4/29, } 4/32 or 4/33, 4/35			
		3L2 Centrifugal Pump— Duplex Chain			
	3/167	VALVE CAMSHAFT ASSEMBLY—38 $\frac{7}{16}$ " long, } Comprising 3/49, 3/124, 3/126 or 3/127, 4/29, } 4/32 or 4/33, 4/35			
		4L2 Centrifugal Pump— Duplex Chain			
	3/168	VALVE CAMSHAFT ASSEMBLY—22 $\frac{11}{16}$ " long, } Comprising 3/47, 3/124, 3/126 or 3/127, 4/27, } 4/34			
		2L2 Ram Pump— Single Chain			
	3/169	VALVE CAMSHAFT ASSEMBLY—30 $\frac{1}{16}$ " long, } Comprising 3/48, 3/124, 3/126 or 3/127, 4/27, } 4/34			
		3L2 Ram Pump— Single Chain			
	3/170	VALVE CAMSHAFT ASSEMBLY—38 $\frac{7}{16}$ " long, } Comprising 3/49, 3/124, 3/126 or 3/127, 4/27, } 4/34			
		4L2 Ram Pump— Single Chain			
	3/171	VALVE CAMSHAFT ASSEMBLY—45 $\frac{11}{16}$ " long, } Comprising 3/50, 3/124, 3/126 or 3/127, 4/27, } 4/35			
		5L2 Ram Pump— Duplex Chain			

When ordering it is important to quote the Number of the Engine, and also the Number of the Part.

GARDNER.

CHAIN CASE AND CHAIN DRIVE—Section 4—Plate 14



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CHAIN CASE AND CHAIN DRIVE—Section 4—Plate 15



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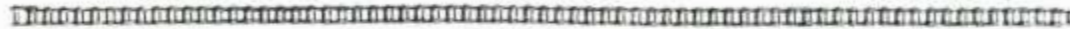
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CHAIN CASE AND CHAIN DRIVE—Section 4

Plate No.	Part No.	Description	Plate No.	Part No.	Description	
14	4/1	Chain Case—Centrifugal Pump Type, fitted with 4/3, 4/4, 4/5, 4/8, 4/9, 4/12, 4/15, 4/16, 4/17, 4/22	15	4/35	Valve Camshaft Chain Wheel—Duplex	
	4/2	Chain Case—Ram Pump Type, fitted with 4/3 to 4/9, 4/12, 4/15, 4/16, 4/17, 4/22		4/36	Stud, $\frac{3}{8}$ " B.S.F. \times $1\frac{1}{2}$ " long, fitted with 4/37, 4/38, 4/39 for 4/34, 4/35	
	4/3	Steady Peg, $\frac{1}{16}$ " diam. \times $\frac{1}{2}$ " long		4/37	Nut, Hex., $\frac{3}{8}$ " B.S.F., for 4/36	
	4/4	Stud, $\frac{3}{16}$ " Wh. \times $1\frac{3}{16}$ " long, fitted with 4/5		4/38	Washer, Steel, $\frac{3}{8}$ " diam., for 4/36	
	4/5	Nut, Hex., $\frac{3}{16}$ " Wh. \times $\frac{1}{4}$ " Hex.		4/39	Split Pin, $\frac{3}{16}$ " diam. \times $\frac{1}{2}$ " long, for 4/36	
	4/6	Stud, $\frac{3}{16}$ " Wh. \times $1\frac{1}{2}$ " long, fitted with 4/7, for 6/1, 6/6		4/40	Chain Adjuster Eccentric, fitted with 4/41 to 4/45	
	4/7	Nut, Hex., $\frac{3}{16}$ " Wh.		4/41	Castle Nut, $\frac{1}{2}$ " B.S.F., for 4/40	
	4/8	Stud, $\frac{3}{16}$ " Wh. \times $1\frac{1}{16}$ " long, fitted with 4/9		4/42	Washer, Steel, $\frac{1}{2}$ " diam., for 4/10	
	4/9	Nut, Hex., $\frac{3}{16}$ " Wh.		4/43	Split Pin, $\frac{3}{16}$ " diam. \times $1\frac{1}{2}$ " long, for 4/40	
	4/10	Chain Case Cover, fitted with 4/11, 4/12		4/44	Nut, Hex., 1" B.S.F., for 4/40	
	4/11	Steady Peg, $\frac{1}{4}$ " diam. \times $\frac{1}{16}$ " long		4/45	Washer, Steel, 1" diam., for 4/40	
	4/12	Packing for 4/10, 6/58		4/46	Chain Adjusting Wheel—Single	
	4/13	Chain Case Door, fitted with 4/15		4/47	Chain Adjusting Wheel—Duplex	
	4/14	Setscrew, Cheese Head, 0 B.A. \times $\frac{1}{2}$ " long, for 4/13		4/48	Ball Journal Bearing for 4/46, 4/47	
	4/15	Packing for 4/13		4/49	Roller Chain—Single	
	4/16	Plug, Hex. Head, $\frac{1}{4}$ " Gas \times $\frac{3}{8}$ " Hex., with 4/17 for 4/1, 4/2		4/50	Roller Chain—Duplex	
	4/17	Packing for 4/16		14	4/51	CHAIN CASE ASSEMBLY—CENTRIFUGAL PUMP TYPE, Comprising 4/1, 4/10, 4/13, 4/14, 4/18
	4/18	Setscrew, Cheese Head, $\frac{3}{8}$ " B.S.F. \times $\frac{3}{16}$ " long, for 4/1, 4/2		4/52	4/52	CHAIN CASE ASSEMBLY—RAM PUMP TYPE, Comprising 4/2, 4/10, 4/13, 4/14, 4/18
	4/19	Crankcase Oil Filler Body, fitted with 4/20, 4/22		4/53	4/53	CRANKCASE OIL FILLER ASSEMBLY, Comprising 4/19 to 4/23
	4/20	Filler Cover Stud		15	4/54	CHAIN ADJUSTER ASSEMBLY—SINGLE CHAIN, Comprising 4/40 to 4/46, 4/48
4/21	Filler Cover	4/55	CHAIN ADJUSTER ASSEMBLY—DUPLEX CHAIN, Comprising 4/40 to 4/45, 4/47, 4/48			
4/22	Packing for 4/19	4/56	VALVE CAMSHAFT GEAR AND CHAIN WHEEL ASSEMBLY, Comprising 4/27, 4/34		2L2, 3L2, 4L2 Ram Pump— Single Chain	
4/23	Filler Strainer, fitted with 4/22	4/57	VALVE CAMSHAFT GEAR AND CHAIN WHEEL ASSEMBLY, Comprising 4/27, 4/35			5L2, 6L2 Ram Pump— Duplex Chain
4/24	Setscrew, Hex. Head, $\frac{3}{16}$ " Wh. \times $1\frac{3}{8}$ " long, for 4/19	4/58	VALVE CAMSHAFT GEAR AND CHAIN WHEEL ASSEMBLY, Comprising 4/29, 4/32 or 4/33, 4/34		2L2, 3L2, 4L2 Cent. Pump— Single Chain	
4/25	Setscrew, Hex. Head, $\frac{3}{16}$ " Wh. \times $1\frac{1}{2}$ " long (head drilled), fitted with 4/26, for 4/19	4/59	VALVE CAMSHAFT GEAR AND CHAIN WHEEL ASSEMBLY, Comprising 4/29, 4/32 or 4/33, 4/35			5L2, 6L2 Cent. Pump— Duplex Chain
4/26	Split Pin, $\frac{1}{8}$ " diam. \times 1" long, in 4/25					
15	4/27	Valve Camshaft Gear—Ram Pump Type, fitted with 4/31, 4/36 to 4/39				
	4/28	Water Pump Eccentric Clip				
	4/29	Valve Camshaft Gear—Centrifugal Pump Type, fitted with 4/30, 4/31, 4/36 to 4/39				
	4/30	Woodruff Key for 4/32, 4/33				
	4/31	Setscrew, Sq. Head—Pointed, $\frac{3}{16}$ "—20 thds. \times $\frac{1}{2}$ " long, for 4/27, 4/29				
	4/32	Centrifugal Pump Driving Gear—Forward Rotation				
	4/33	Centrifugal Pump Driving Gear—Reverse Rotation				
	4/34	Valve Camshaft Chain Wheel—Single				

When ordering it is important to quote the Number of the Engine, and also the Number of the Part.

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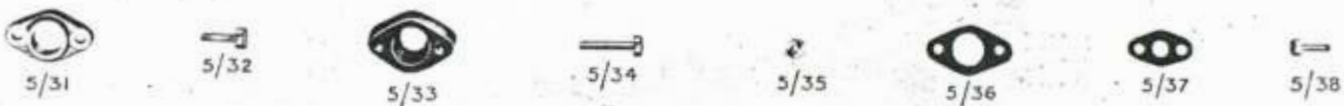
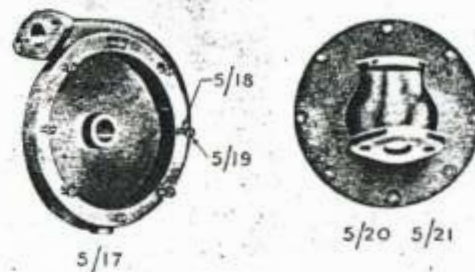
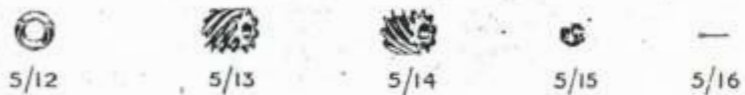
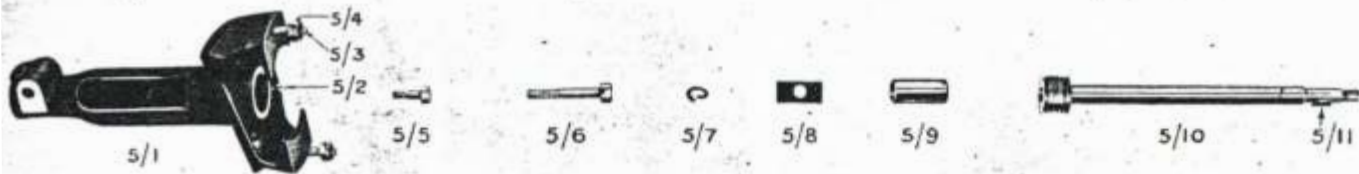
CHAIN CASE AND CHAIN DRIVE—Section 4

Plate No.	Part No.	Description	Plate No.	Part No.	Description

When ordering it is important to quote the Number of the Engine, and also the Number of the Part.

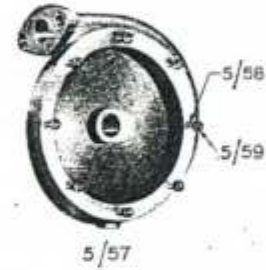
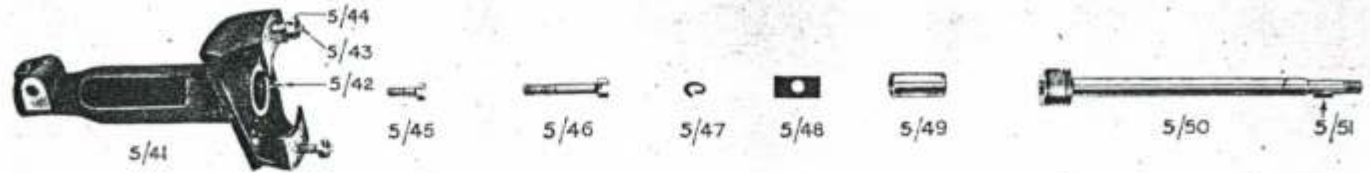
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CENTRIFUGAL PUMP AND DRIVE—Screwed Gland Type—Section 5—Plate 16



GARDNER

CENTRIFUGAL PUMP AND DRIVE—Spring Gland Type—Section 5—Plate 16-1





CENTRIFUGAL PUMP AND DRIVE—Screwed Gland Type—Section 5

Plate No.	Part No.	Description	Plate No.	Part No.	Description
16	5/1	Centrifugal Pump Bracket, fitted with 5/2, 5/3, 5/4, 5/9	16	5/38	Set screw, Hex. Head, $\frac{1}{4}$ " Wh. \times $\frac{3}{8}$ " long, for 17/30.
	5/2	Steady Peg, $\frac{1}{4}$ " diam. \times $\frac{11}{16}$ " long		5/39	CENTRIFUGAL WATER PUMP ASSEMBLY—SCREWED GLAND TYPE, Comprising 5/17 to 5/19, 5/20 or 5/21, 5/22 to 5/30, 5/36, 5/37
	5/3	Stud, $\frac{1}{8}$ " Wh. \times $1\frac{1}{4}$ " long, fitted with 5/4		5/40	CENTRIFUGAL WATER PUMP DRIVE ASSEMBLY—SCREWED GLAND TYPE, Comprising 5/1 to 5/4, 5/8 to 5/12, 5/13 or 5/14, 5/15, 5/16
	5/4	Nut, Hex., $\frac{1}{8}$ " Wh.			
	5/5	Set screw, Hex. Head, $\frac{1}{8}$ " Wh. \times $\frac{11}{16}$ " long, for 5/1			
	5/6	Bolt, Hex. Head, $\frac{3}{8}$ " B.S.F. \times $2\frac{3}{8}$ " long, for 5/1			
	5/7	Spring Washer, $\frac{3}{8}$ " diam., for 5/6			
	5/8	Centrifugal Pump Locking Plate			
	5/9	Pump Driving Shaft Bush			
	5/10	Pump Driving Shaft, fitted with 5/11, 5/15, 5/16			
	5/11	Woodruff Key, for 5/13, 5/14			
	5/12	Thrust Washer, for 5/10			
	5/13	Pump Driven Pinion—Forward Rotation			
	5/14	Pump Driven Pinion—Reverse Rotation			
	5/15	Castle Nut, $\frac{7}{8}$ " B.S.F., for 5/10			
	5/16	Split Pin, $\frac{3}{16}$ " diam. \times 1" long, for 5/10			
	5/17	Pump Body, fitted with 5/18, 5/19, 5/24, 5/25, 5/36			
	5/18	Stud, 2 B.A. \times $\frac{11}{16}$ " long, fitted with 5/19			
	5/19	Nut, Hex., 2 B.A.			
	5/20	Pump Body Cover—Plain, fitted with 5/36			
	5/21	Pump Body Cover—Drilled, fitted with 5/36, 5/37			
	5/22	Grease Cup, for 5/17			
	5/23	Packing for 5/24			
	5/24	Plug, Hex. Head, $\frac{1}{4}$ " Gas \times $\frac{5}{16}$ " Hex., fitted with 5/23 for 5/17			
	5/25	Pump Impeller Bush			
	5/26	Pump Impeller			
	5/27	Pump Gland Nut			
	5/28	Gland Nut Spring, fitted with 5/29			
	5/29	Set screw, Cheese Head, 2 B.A. \times $\frac{1}{16}$ " long, for 5/28			
	5/30	Gland Packing, Cork			
	5/31	Pipe Flange, 1" bore, fitted with 5/36			
	5/32	Set screw, Hex. Head, $\frac{1}{8}$ " Wh. \times $1\frac{1}{2}$ " long, fitted with 5/35 for 5/31			
	5/33	Pipe Flange, 1" Gas, fitted with 5/36			
	5/34	Set screw, Hex. Head, $\frac{1}{8}$ " Wh. \times $1\frac{3}{4}$ " long, fitted with 5/35 for 5/33			
	5/35	Nut, Hex., $\frac{1}{8}$ " Wh., for 5/32, 5/34			
	5/36	Packing, Flange, 2" centres \times $1\frac{1}{8}$ " wide, for 5/31, 5/33, 15/1, 15/3, 15/7			
	5/37	Packing, Flange, $1\frac{1}{2}$ " centres \times $1\frac{1}{8}$ " wide, for 5/21, 7/30			

When ordering it is important to quote the Number of the Engine, and also the Number of the Part.

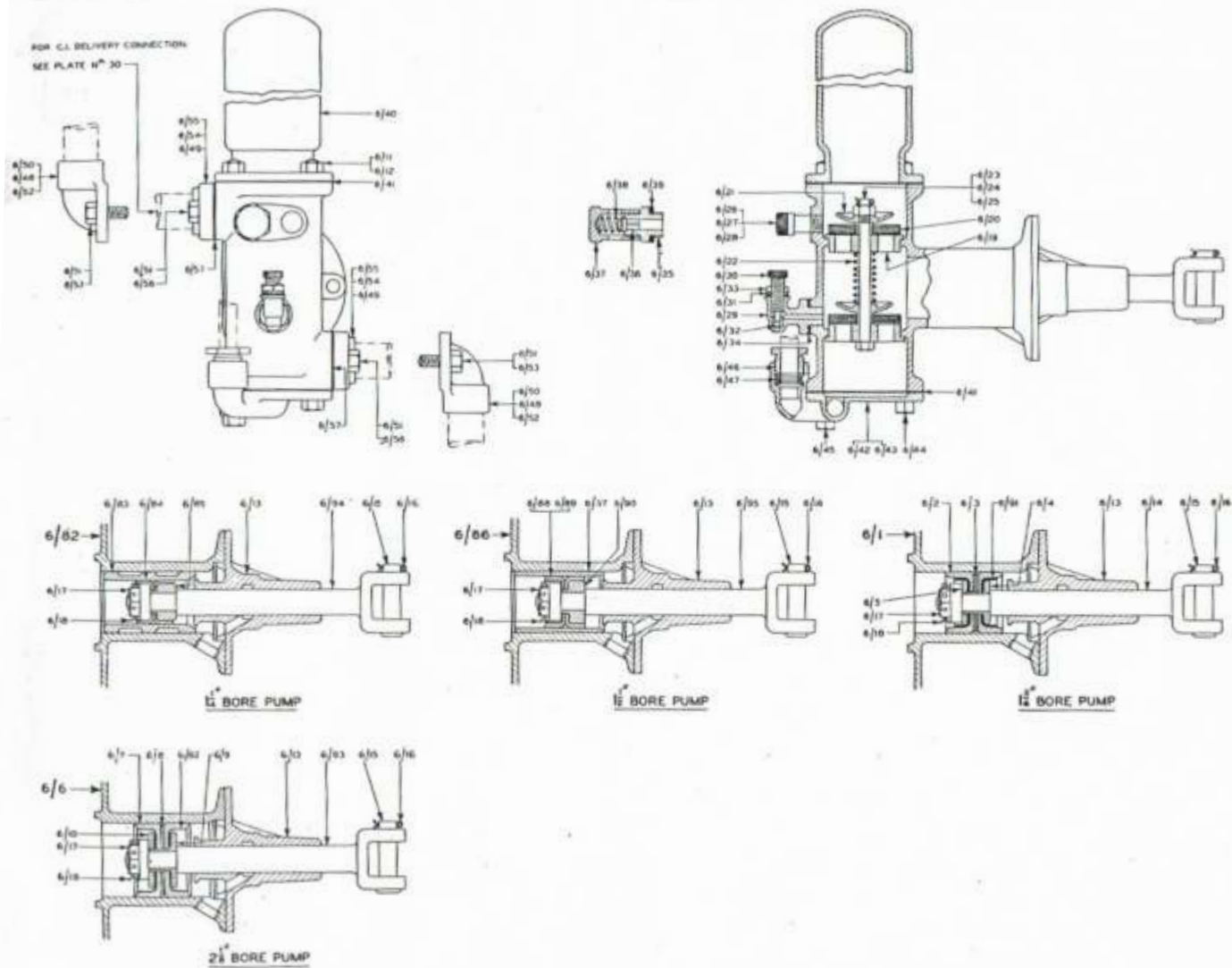


CENTRIFUGAL PUMP AND DRIVE—Spring Gland Type—Section 5

Plate No.	Part No.	Description	Plate No.	Part No.	Description
16-1	5/41	Centrifugal Pump Bracket, fitted with 5/42, 5/43, 5/44, 5/47, 5/49	16-1	5/77	Packing, Flange, 1 $\frac{1}{2}$ " Centres \times 1 $\frac{1}{2}$ " wide, for 5/61, 17/30
	5/42	Steady Peg, $\frac{1}{4}$ " diam. \times $\frac{1}{16}$ " long		5/78	Setscrew, Hex. Head, $\frac{1}{8}$ " Wh. \times $\frac{1}{2}$ " long, for 17/30
	5/43	Stud, $\frac{5}{16}$ " Wh. \times 1 $\frac{1}{4}$ " long, fitted with 5/44		5/79	CENTRIFUGAL WATER PUMP ASSEMBLY—SPRING GLAND TYPE, Comprising 5/57 to 5/59, 5/60 or 5/61, 5/62 to 5/70, 5/76, 5/77
	5/44	Nut, $\frac{5}{16}$ " Wh. \times $\frac{1}{4}$ " Hex.		5/80	CENTRIFUGAL WATER PUMP DRIVE ASSEMBLY—SPRING GLAND TYPE, Comprising 5/41 to 5/44, 5/47 to 5/52, 5/53 or 5/54, 5/55, 5/56
	5/45	Setscrew, Hex. Head, $\frac{5}{16}$ " Wh. \times $\frac{1}{16}$ " long, for 5/41			
	5/46	Bolt, Hex. Head, $\frac{3}{8}$ " B.S.F. \times 2 $\frac{1}{2}$ " long, for 5/41			
	5/47	Spring Washer, $\frac{5}{16}$ " diam. for 5/43, 5/45			
	5/48	Centrifugal Pump Locking Plate			
	5/49	Pump Driving Shaft Bush			
	5/50	Pump Driving Shaft, fitted with 5/51, 5/55, 5/56			
	5/51	Woodruff Key for 5/53, 5/54			
	5/52	Thrust Washer, for 5/50			
	5/53	Pump Driven Pinion—Forward Rotation			
	5/54	Pump Driven Pinion—Reverse Rotation			
	5/55	Castle Nut, $\frac{7}{16}$ " B.S.F., for 5/50			
	5/56	Split Pin, $\frac{3}{32}$ " diam. \times 1" long, for 5/50			
	5/57	Centrifugal Pump Body, fitted with 5/58, 5/59, 5/63, 5/64, 5/65, 5/76			
	5/58	Stud, 2 B.A. \times $\frac{1}{8}$ " long, fitted with 5/59			
	5/59	Nut, Hex., 2 B.A.			
	5/60	Pump Body Cover—Plain, fitted with 5/76			
	5/61	Pump Body Cover—Drilled, fitted with 5/76, 5/77			
	5/62	Grease Cup for 5/57			
	5/63	Drain Tap, fitted with 5/64 for 5/57			
	5/64	Packing for 5/63			
	5/65	Pump Impeller Bush			
	5/66	Pump Impeller			
	5/67	Pump Gland Collar, fitted with 5/68			
	5/68	Pump Gland Shroud, fitted with 5/67			
	5/69	Pump Gland Spring			
	5/70	Gland Packing, Cork			
	5/71	Pipe Flange, 1" Bore, fitted with 5/76			
	5/72	Setscrew, Hex. Head, $\frac{5}{16}$ " Wh. \times 1 $\frac{1}{2}$ " long, fitted with 5/75 for 5/71			
5/73	Pipe Flange, 1" Gas, fitted with 5/76				
5/74	Setscrew, Hex. Head, $\frac{5}{16}$ " Wh. \times 1 $\frac{1}{4}$ " long, fitted with 5/75 for 5/73				
5/75	Nut, Hex., $\frac{5}{16}$ " Wh. for 5/72, 5/74				
5/76	Packing, Flange, 2" Centres \times 1 $\frac{1}{2}$ " wide, for 5/71, 5/73, 15/1, 15/3, 15/7				

When ordering it is important to quote the Number of the Engine, and also the Number of the Part.

WATER AND BILGE PUMPS—RAM TYPE AND BILGE PUMP DRIVE—Section 6—Plate 17-1



GARDNER

WATER AND BILGE PUMPS—RAM TYPE AND BILGE PUMP DRIVE—Section 6—Plate 18



6/63



6/69



6/75



WATER AND BILGE PUMPS—RAM TYPE AND BILGE PUMP DRIVE—Section 6

Part No.	Description	Plate No.	Part No.	Description
7-1 6/1	Water Pump Body, fitted with 6/11, 6/12, 6/19, 6/26 to 6/28, 6/34, 6/41, 6/57	17-1	6/38	Safety Valve Spring
6/2	Cup Washer, fitted with 6/91 (same as 20/13)		6/39	Packing, 1" x 1/8" x 1/8"
6/3	Cup Washer Spacing Washer		6/40	Delivery Air Vessel, fitted with 6/41
6/4	Cup Washer Clamp Bush		6/41	Packing for Cover and Air Vessel
6/5	Ram Clamp Washer		6/42	Pump Cover—Temperature Control, fitted with 6/41, 6/47
6/6	Water Pump Body, fitted with 6/11, 6/12, 6/19, 6/26 to 6/28, 6/34, 6/41, 6/57		6/43	Pump Cover—Plain, fitted with 6/41
6/7	Cup Washer, fitted with 6/92 (same as 20/44)		6/44	Setscrew, Hex. Head, 1/8" Wh. x 1/2" long
6/8	Cup Washer Spacing Washer		6/45	Setscrew, Hex. Head, 1/8" Wh. x 1/4" long
6/9	Cup Washer Clamp Bush		6/46	Pipe Gland, fitted with 6/47
6/10	Ram Clamp Washer		6/47	Packing (1 set of 4)
6/11	Stud, 1/8" Wh. x 1 1/2" long, fitted with 6/12		6/48	Pipe Elbow, 1" Bore, fitted with 6/57
6/12	Nut, Hex., 1/8" Wh.		6/49	Pipe Flange, 1" Bore, fitted with 6/57
6/13	Ram Guide		6/50	Pipe Elbow—Brass, 1" Gas, fitted with 6/57
6/14	Pump Ram, fitted with 6/2 to 6/5, 6/15 to 6/18, 6/91		6/51	Setscrew, Hex. Head, 1/8" Wh. x 1/2" long
6/15	Ram Pin, fitted with 6/18	6/52	Pipe Elbow—Cast Iron, 1" Gas, fitted with 6/57	
6/16	Split Pin, 3/16" diam. x 1/2" long	6/53	Setscrew, Hex. Head, 1/8" Wh. x 1" long	
6/17	Water Pump Ram Nut	6/54	Pipe Flange—Cast Iron, 1" Gas, fitted with 6/57	
6/18	Split Pin, 3/16" diam. x 1 1/2" long	6/55	Pipe Flange—Brass, 1" Gas, fitted with 6/57	
6/19	Pump Valve Scat	6/56	Setscrew, Hex. Head, 1/8" Wh. x 1 1/2" long	
6/20	Pump Valve	6/57	Packing, Flange, 2" centres x 1 1/8" wide	
6/21	Pump Valve Stop	6/58	Bilge Pump Box, fitted with 6/59, 6/60, 6/62, 4/12	
6/22	Pump Valve Spring	6/59	Stud, 1/8" Wh. x 1 1/2" long, fitted with 6/60, for 6/1, 6/6	
6/23	Pump Valve Coupling Bolt, fitted with 6/24, 6/25	6/60	Nut, Hex., 1/8" Wh., for 6/59	
6/24	Nut, Hex., 1/8" Wh.	6/61	Bilge Pump Box Cover, fitted with 6/62	
6/25	Split Pin, 3/16" diam. x 3/4" long	6/62	Packing for 6/61	
6/26	Pump Body Drain Pipe, fitted with 6/27, 6/28	6/63	Setscrew, Hex. Head, 1/4" Wh. x 3/4" long, for 6/61	
6/27	Disc, Leather, 1 1/2" diam.	6/64	Ball Journal Bearing for 6/58	
6/28	Screwed Cap, fitted with 6/27	6/65	Eccentric	
6/29	Snifter Valve Body, fitted with 6/30 to 6/34	6/66	Eccentric Clip	
6/30	Snifter Valve Screw, fitted with 6/33	6/67	Eccentric Thrust Collar	
6/31	Packing, 1/2" x 1/2" x 1/2"	6/68	Clutch Body, fitted with 6/70	
6/32	Ball, 1/8" diam.	6/69	Clutch Disengaging Spring	
6/33	Nut, Hex., 1/2" Gas x 1/8" Hex.	6/70	Spring Cap	
6/34	Packing, 1" x 1/2" x 1/8"	6/71	Spring Sleeve	
6/35	Safety Valve Seat, supplied only with 6/36, 6/37, 6/39	6/72	Clutch Spring	
6/36	Safety Valve, supplied only with 6/35, 6/37, 6/39	6/73	Ball Thrust Washer for 6/71	
6/37	Safety Valve Body, supplied only with 6/35, 6/36, 6/39	6/74	Operating Handwheel	
		6/75	Setscrew, Hex. Head, 1/8" Wh. x 1/2" long, for 6/74	
		18		

When ordering it is important to quote the Number of the Engine, and also the Number of the Part.



WATER AND BILGE PUMPS—RAM TYPE AND BILGE PUMP DRIVE—Section 6

Plate No.	Part No.	Description	Plate No.	Part No.	Description		
17-1 & 18	6/76	WATER PUMP ASSEMBLY, Comprising 6/1 to 6/5, 6/11 to 6/42, 6/44 to 6/47, 6/57, 6/66	17-1 & 18	6/97	WATER PUMP ASSEMBLY, Comprising 6/11 to 6/13, 6/15 to 6/42, 6/44 to 6/47, 6/57, 6/66, 6/86 to 6/90, 6/95		
	6/77	WATER PUMP ASSEMBLY, Comprising 6/6 to 6/13, 6/15 to 6/42, 6/44 to 6/47, 6/57, 6/66, 6/93				1 1/2" Bore Pump	1 1/2" Bore Pump
	6/78	BILGE PUMP ASSEMBLY, Comprising 6/1 to 6/5, 6/11 to 6/41, 6/43, 6/44, 6/57, 6/66				2 1/2" Bore Pump	
	6/79	BILGE PUMP ASSEMBLY, Comprising 6/6 to 6/13, 6/15 to 6/41, 6/43, 6/44, 6/57, 6/66, 6/93				1 1/2" Bore Pump	
18	6/80	BILGE PUMP BOX AND DRIVE ASSEMBLY, Comprising 6/58 to 6/65, 6/67 to 6/75, 4/12	2 1/2" Bore Pump				
17-1	6/81	WATER AND BILGE PUMP SAFETY VALVE ASSEMBLY, Comprising 6/35 to 6/39					
	6/82	Water Pump Body, with Liner, fitted with 6/11, 6/12, 6/19, 6/26 to 6/28, 6/34, 6/41, 6/57, 6/83			1 1/2" Bore Pump		
	6/83	Water Pump Body Liner					
	6/84	Cup Washer (same as 20/50)					
	6/85	Cup Washer Clamp Bush					
	6/86	Water Pump Body, with Liner, fitted with 6/11, 6/12, 6/19, 6/26 to 6/28, 6/34, 6/41, 6/57, 6/87			1 1/2" Bore Pump		
	6/87	Water Pump Body Liner					
	6/88	Cup Washer, fitted with 6/89					
	6/89	Cup Washer Liner (same as 20/51)					
	6/90	Cup Washer Clamp Bush					
	6/91	Cup Washer Liner (same as 20/13)			1 1/2" Bore Pump		
	6/92	Cup Washer Liner (same as 20/44)			2 1/2" Bore Pump		
	6/93	Pump Ram, fitted with 6/7 to 6/10, 6/15 to 6/18			2 1/2" Bore Pump		
	6/94	Pump Ram, fitted with 6/15 to 6/18, 6/84, 6/85			1 1/2" Bore Pump		
	6/95	Pump Ram, fitted with 6/15 to 6/18, 6/88 to 6/90			1 1/2" Bore Pump		
17-1 & 18	6/96	WATER PUMP ASSEMBLY, Comprising 6/11 to 6/13, 6/15 to 6/42, 6/44 to 6/47, 6/57, 6/66, 6/82 to 6/85, 6/94			1 1/2" Bore Pump		

When ordering it is important to quote the Number of the Engine, and also the Number of the Part.

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CRANKSHAFT, DAMPER AND DIRECT STARTING—Section 7—Plate 19



7/1, 7/2, 7/3, 7/4, 7/5



7/6



7/7



7/8



7/9



7/10



7/11



7/12



7/13



7/15



7/16



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7/23



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7/22



7/24



7/25



7/26



7/27



7/28



7/29



CRANKSHAFT, DAMPER AND DIRECT HAND STARTING—Section 7

Plate No.	Part No.	Description	Plate No.	Part No.	Description
19	7/1	Crankshaft, fitted with 7/9 to 7/12	2L.2		
	7/2	Crankshaft, fitted with 7/9 to 7/12	3L.2		
	7/3	Crankshaft	4L.2		
	7/4	Crankshaft	5L.2		
	7/5	Crankshaft	6L.2		
	7/6	Crankshaft Chain Sprocket—Single, fitted with 7/8			
	7/7	Crankshaft Chain Sprocket—Duplex, fitted with 7/8			
	7/8	Setscrew, Sq. Head—Pointed, $\frac{1}{16}$ "—20 thds. $\times \frac{1}{8}$ " long, for 7/6, 7/7			
	7/9	Balance Weight			
	7/10	Balance Weight Stud, fitted with 7/11, 7/12			
	7/11	Castle Nut, $\frac{1}{2}$ " B.S.F., for 7/10			
	7/12	Split Pin, $\frac{3}{32}$ " diam. $\times 1\frac{1}{4}$ " long, for 7/10			
	7/13	Crankshaft Vibration Damper Ring, fitted with 7/14			
	7/14	Damper Ring Bush, fitted with 7/13			
	7/15	Damper Spring			
	7/16	Damper Flange—Inner			
	7/17	Damper Flange—Outer			
	7/18	Damper Friction Washer			
	7/19	Damper Bush			
	7/20	Damper Bolt, fitted with 7/21, 7/22			
	7/21	Castle Nut, $\frac{7}{16}$ " B.S.F., for 7/20			
	7/22	Split Pin, $\frac{3}{32}$ " diam. $\times 1\frac{1}{4}$ " long, for 7/20			
	7/23	Starting Handle—Anti-Clockwise Rotation			
	7/24	Starting Handle—Clockwise Rotation			
	7/25	Handle Peg			
	7/26	Handle Peg Guard, fitted with 7/27			
	7/27	Grub Screw, $\frac{7}{16}$ " Wh. $\times \frac{3}{16}$ " long, for 7/26			
	7/28	Starting Claw—On Crankshaft			
	7/29	Starting Claw—Loose			

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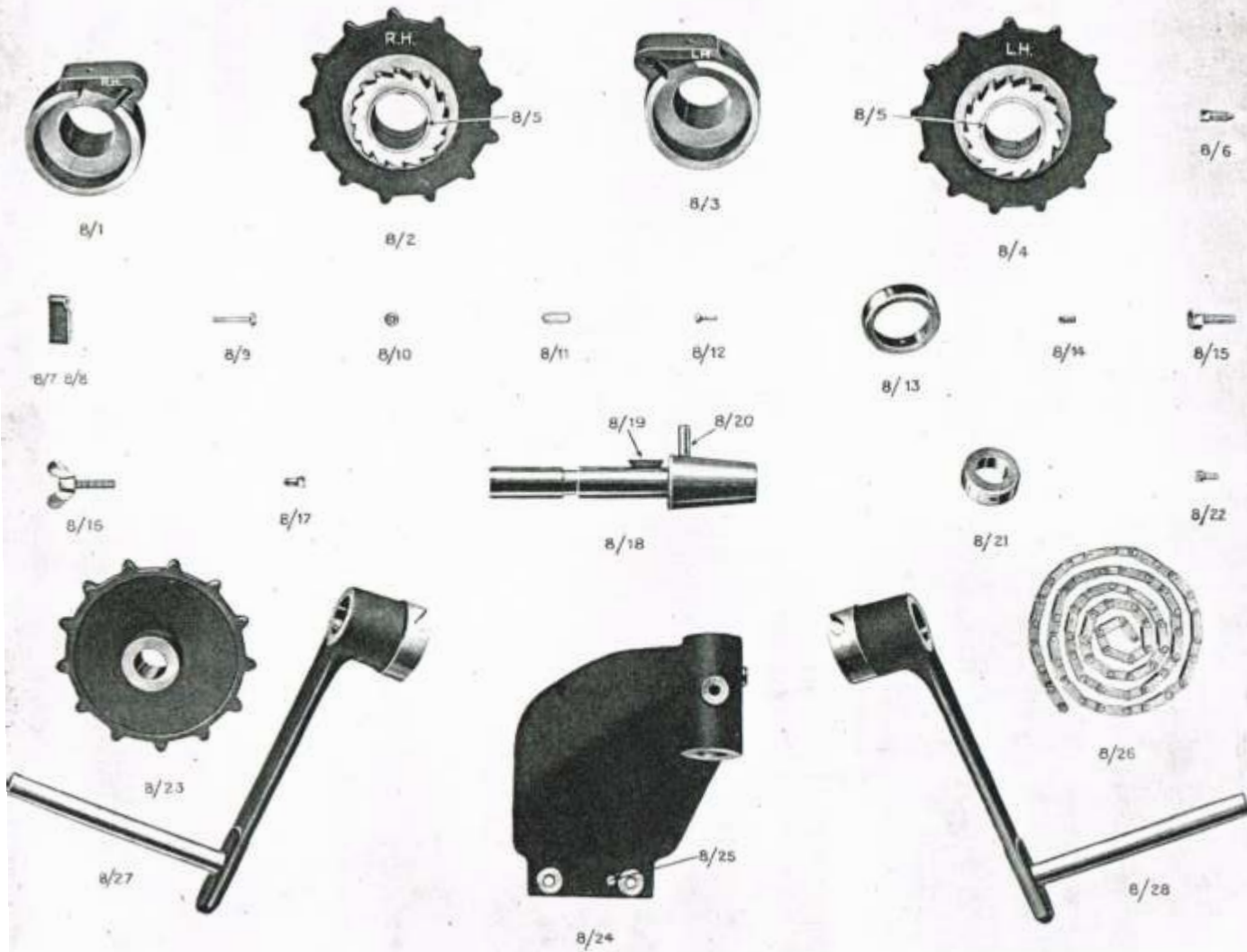


CRANKSHAFT, DAMPER AND DIRECT HAND STARTING—Section 7

Plate No.	Part No.	Description	Plate No.	Part No.	Description

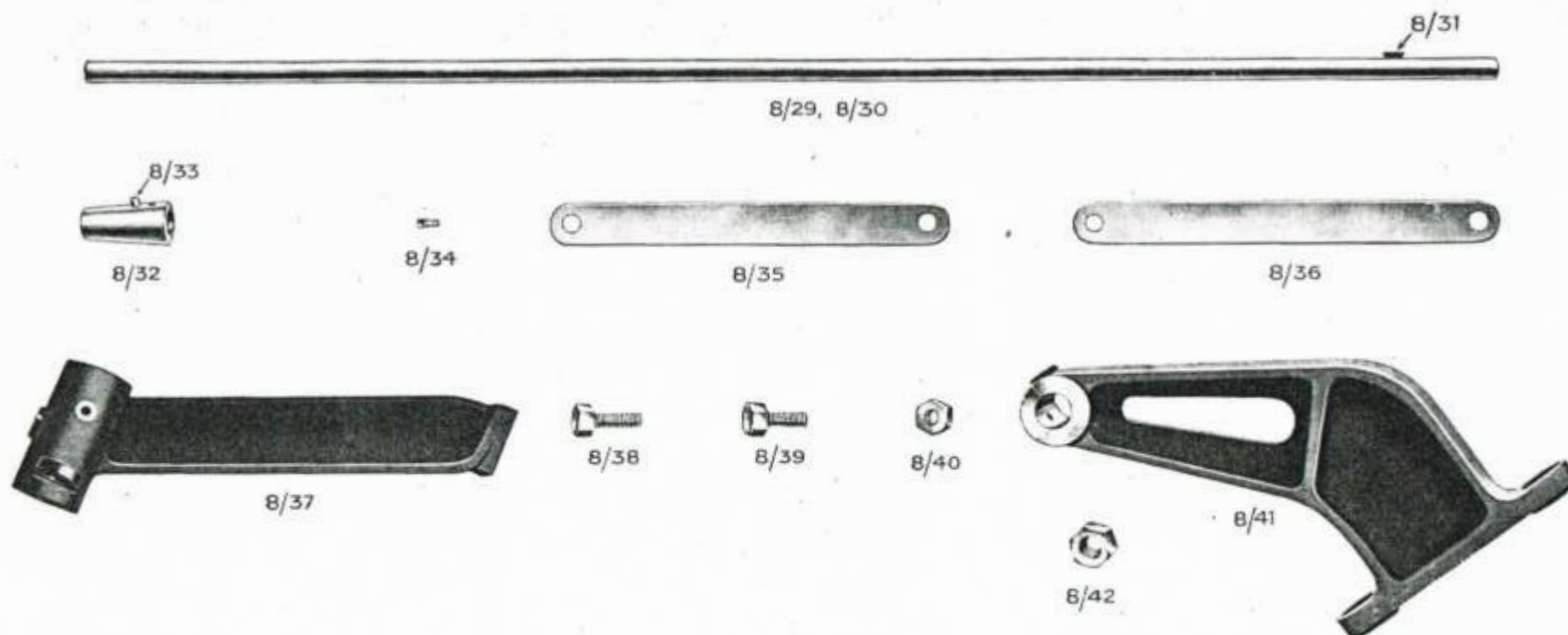
When ordering it is important to quote the Number of the Engine, and also the Number of the

CHAIN STARTING—Section 8—Plate 20



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CHAIN STARTING—Section 8—Plate 21





CHAIN STARTING—Section 8

Part No.	Part No.	Description	Plate No.	Part No.	Description		
20	8/1	Ratchet Box—Right Hand, fitted with 8/6, 8/7, 8/9 to 8/12		21	8/38	Setscrew, Hex. Head, $\frac{1}{8}$ " Wh. \times $1\frac{1}{4}$ " long, fitted with 8/40, for 8/35, 8/36, 8/37	
	8/2	Ratchet Box Chain Wheel—Right Hand, fitted with 8/5		8/39	Setscrew, Hex. Head, $\frac{1}{8}$ " Wh. \times $1\frac{1}{4}$ " long, fitted with 8/40, for 8/35, 8/36	5L2 6L2	
	8/3	Ratchet Box—Left Hand, fitted with 8/6, 8/8 to 8/12		8/40	Nut, Hex., $\frac{1}{8}$ " Wh. for 8/38, 8/39		
	8/4	Ratchet Box Chain Wheel—Left Hand, fitted with 8/5		8/41	Starting Shaft Bracket—Flywheel End, fitted with 8/17	5L2 6L2	
	8/5	Chain Wheel Bush		8/42	Nut, Hex., $\frac{1}{8}$ " B.S.F. \times $\frac{3}{8}$ " Hex., for 8/41		
	8/6	Setscrew, Sq. Head—Pointed, $\frac{1}{8}$ "—20 thds. \times $\frac{5}{8}$ " long, for 8/1, 8/3					
	8/7	Ratchet Pawl—Right Hand, fitted with 8/9, 8/10					
	8/8	Ratchet Pawl—Left Hand, fitted with 8/9, 8/10					
	8/9	Pawl Pivot Bolt, fitted with 8/10					
	8/10	Nut, Hex., 2 B.A.					
	8/11	Pawl Spring, fitted with 8/12					
	8/12	Setscrew, Cheese Head, 4 B.A. \times $\frac{1}{4}$ " long, for 8/11					
	8/13	Lower Chain Wheel Collar, fitted with 8/14		2L2			
	8/14	Grub Screw, 0 B.A. \times $\frac{1}{4}$ " long, for 8/13		3L2			
	8/15	Setscrew, Hex. Head, $\frac{3}{8}$ " B.S.F. \times $1\frac{1}{4}$ " long, for 8/24		4L2			
	8/16	Starting Shaft Binding Screw					
	8/17	Oiler					
	8/18	Starting Shaft, fitted with 8/19, 8/20					
	8/19	Woodruff Key, for 8/23		2L2			
	8/20	Handle Peg		3L2			
	8/21	Upper Chain Wheel Collar, fitted with 8/22		4L2			
	8/22	Setscrew, Cheese Head, 0 B.A. \times $\frac{3}{8}$ " long, for 8/21					
	8/23	Upper Chain Wheel		2L2			
	8/24	Starting Shaft Bracket, fitted with 8/17, 8/25		3L2			
	8/25	Steady Peg, $\frac{1}{8}$ " diam. \times $\frac{3}{4}$ " long, for 8/24		4L2			
	8/26	Starting Chain					
	8/27	Starting Handle—Anti-Clockwise Rotation					
	8/28	Starting Handle—Clockwise Rotation					
	21	8/29		Chain Starting Shaft, fitted with 8/31	5L2		
		8/30		Chain Starting Shaft, fitted with 8/31	6L2		
		8/31		Woodruff Key for 8/23			
		8/32		Starting Handle Adapter, fitted with 8/33, 8/34			
		8/33		Handle Peg			
		8/34		Setscrew, Sq. Head—Pointed, $\frac{3}{8}$ "—24 thds. \times $\frac{5}{8}$ " long, for 8/32	5L2 6L2		
		8/35		Shaft Bracket Strut—Short			
		8/36		Shaft Bracket Strut—Long			
		8/37		Shaft Bracket—Chain Case End, fitted with 8/17			

When ordering it is important to quote the Number of the Engine, and also the Number of the Part.



CHAIN STARTING — Section 8

Plate No.	Part No.	Description	Plate No.	Part No.	Description

When ordering it is important to quote the Number of the Engine, and also the Number of the Part.

GARDNER

FLYWHEEL, CONNECTING ROD AND PISTON—Section 9—Plate 22



9/1, 9/2, 9/3, 9/4



9/5, 9/6



9/7



9/8



9/9



9/10



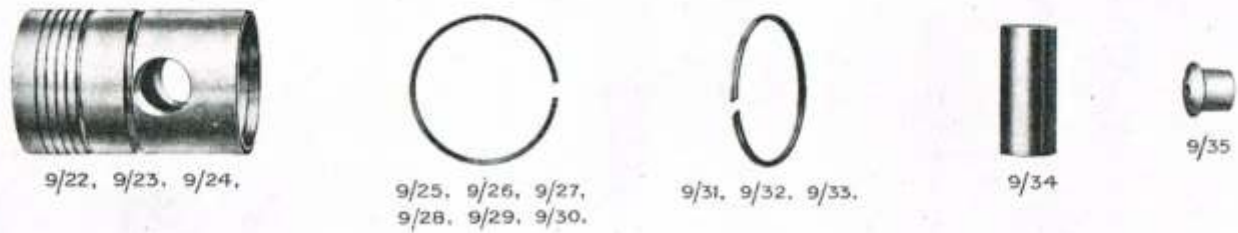
9/11



9/12

GARDNER

FLYWHEEL, CONNECTING ROD AND PISTON—Section 9—Plate 23





FLYWHEEL, CONNECTING ROD AND PISTON—Section 9

Plate No.	Part No.	Description	Plate No.	Part No.	Description
22	9/1	Flywheel—26" diam.			
	9/2	Flywheel—22" diam.			
	9/3	Flywheel—Electric Starting Type—22" diam. × 6" wide, fitted with 9/5 or 9/6			
	9/4	Flywheel—Electric Starting Type—22" diam. × 5" wide, fitted with 9/5 or 9/6			
	9/5	Gear Ring—Forward Rotation			
	9/6	Gear Ring—Reverse Rotation			
	9/7	Flywheel Coupling Stud, 3 $\frac{3}{8}$ " long, fitted with 9/11, 9/12			
	9/8	Flywheel Coupling Bolt, 3 $\frac{3}{8}$ " long, fitted with 9/11, 9/12			
	9/9	Flywheel Coupling Bolt, 2 $\frac{3}{8}$ " long, fitted with 9/11, 9/12			
	9/10	Flywheel Coupling Stud, 4" long, fitted with 9/11, 9/12			
	9/11	Nut, Hex., $\frac{3}{8}$ " B.S.F. × $\frac{1}{2}$ " Hex., for 9/7 to 9/10			
	9/12	Split Pin, $\frac{3}{16}$ " diam. × 1" long, for 9/7 to 9/10			
	23	9/13	CONNECTING ROD ASSEMBLY, Comprising 9/13 to 9/21		
9/14		Big End Bearing (1 Pair)			
9/15		Steady Peg, $\frac{1}{2}$ " diam. × $\frac{3}{4}$ " long, for 9/14			
9/16		Piston Pin Bush			
9/17		Connecting Rod Shim Plate			
9/18		Shim Plate Peg in 9/13			
9/19		Connecting Rod Bolt, fitted with 9/20, 9/21			
9/20		Castle Nut, $\frac{1}{2}$ " B.S.F., for 9/19			
9/21		Split Pin, $\frac{3}{16}$ " diam. × 1" long, for 9/19			
9/22		PISTON ASSEMBLY—STANDARD, Comprising 9/25, 9/28 or 9/31, 9/34, 9/35			
9/23		PISTON ASSEMBLY—030" OVERSIZE, Comprising 9/26, 9/29 or 9/32, 9/34, 9/35			
9/24		PISTON ASSEMBLY—060" OVERSIZE, Comprising 9/27, 9/30 or 9/33, 9/34, 9/35			} CANCELLED
9/25		Piston Ring—Standard (same as 20/10)			
9/26		Piston Ring—030" oversize			
9/27		Piston Ring—060" oversize			CANCELLED
9/28		Scraper Ring—Standard (same as 9/25)			
9/29		Scraper Ring—030" oversize (same as 9/26)			
9/30		Scraper Ring—060" oversize (same as 9/27)			CANCELLED
9/31		Scraper Ring—Slotted—Standard			
9/32		Scraper Ring—Slotted—030" oversize			
9/33		Scraper Ring—Slotted—060" oversize			CANCELLED
9/34		Piston Pin, fitted with 9/35			
9/35	Piston Pin Pad				

When ordering it is important to quote the Number of the Engine, and also the Number of the Part.



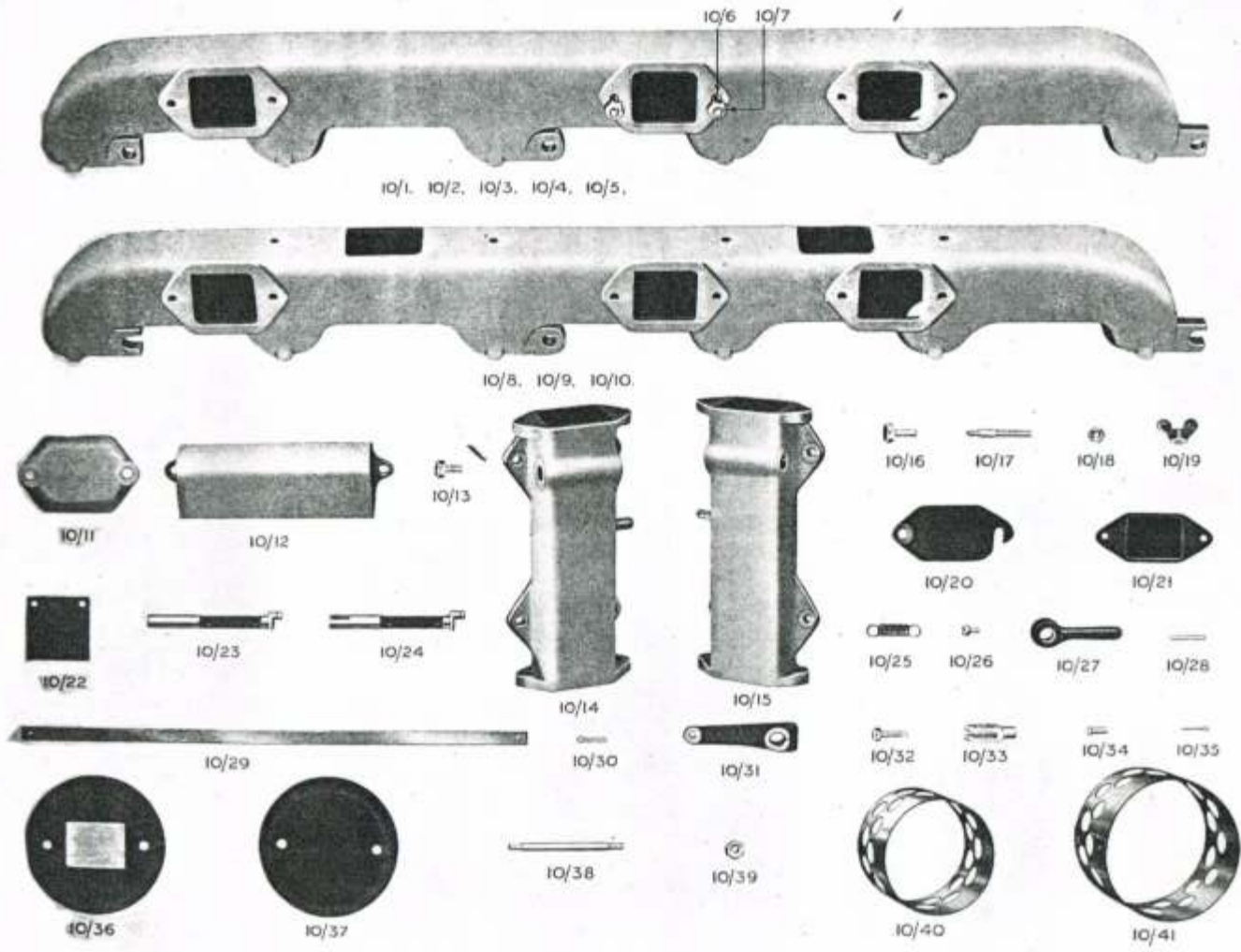
FLYWHEEL, CONNECTING ROD AND PISTON—Section 9

Plate No.	Part No.	Description	Plate No.	Part No.	Description

When ordering it is important to quote the Number of the Engine, and also the Number of the Part.

GARDNER

AIR INLET AND EXHAUST MANIFOLDS—Section 10—Plate 24



GARDNER

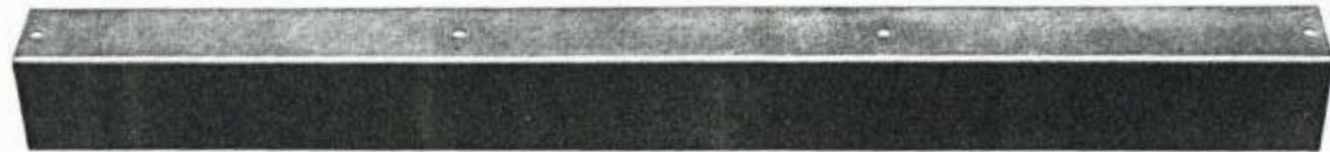
AIR INLET AND EXHAUST MANIFOLDS—Section 10—Plate 25



10/42



10/43 10/44 10/45 10/46 10/47



10/48 10/49 10/50 10/51 10/52



10/53



10/54



10/55



10/56



10/57



10/58



10/59



10/60



10/61 10/62 10/63 10/64 10/65



AIR INLET AND EXHAUST MANIFOLDS—Section 10

Plate No.	Part No.	Description	Plate No.	Part No.	Description	
24	10/1	Air Inlet Manifold—Muffle Type, fitted with 10/6, 10/7 .. 2L2	24	10/38	Air Muffle Stud, fitted with 10/39	
	10/2	Air Inlet Manifold—Muffle Type, fitted with 10/6, 10/7 .. 3L2		10/39	Nut, Hex., $\frac{3}{16}$ " Wh., for 10/38	
	10/3	Air Inlet Manifold—Muffle Type, fitted with 10/6, 10/7 .. 4L2		10/40	Air Muffle Sleeve—Inner	
	10/4	Air Inlet Manifold—Muffle Type, fitted with 10/6, 10/7 .. 5L2		10/41	Air Muffle Sleeve—Outer	
	10/5	Air Inlet Manifold—Muffle Type, fitted with 10/6, 10/7 .. 6L2		25	10/42	Exhaust Manifold Cover—Slotted 6L2
	10/6	Stud, $\frac{5}{16}$ " Wh. \times $1\frac{1}{2}$ " long, fitted with 10/7, for 10/14, and/or 10/15			10/43	Exhaust Manifold Cover—Slotted 2L2
	10/7	Nut, Hex., $\frac{3}{16}$ " Wh., for 10/6			10/44	Exhaust Manifold Cover—Slotted 3L2
	10/8	Air Inlet Manifold—Cover Type 4L2			10/45	Exhaust Manifold Cover—Slotted 4L2
	10/9	Air Inlet Manifold—Cover Type 5L2			10/46	Exhaust Manifold Cover—Slotted 5L2
	10/10	Air Inlet Manifold—Cover Type 6L2			10/47	Exhaust Manifold Cover—Slotted 6L2
	10/11	Manifold Door			10/48	Exhaust Manifold Cover—Plain 2L2
	10/12	Manifold Cover			10/49	Exhaust Manifold Cover—Plain 3L2
	10/13	Setscrew, Hex. Head, $\frac{3}{16}$ " Wh. \times $\frac{1}{2}$ " long, for 10/11, 10/12			10/50	Exhaust Manifold Cover—Plain 4L2
	10/14	Air Inlet Pipe—Right Hand, fitted with 10/17 to 10/19, 10/38, 10/39			10/51	Exhaust Manifold Cover—Plain 5L2
	10/15	Air Inlet Pipe—Left Hand, fitted with 10/17 to 10/19, 10/38, 10/39			10/52	Exhaust Manifold Cover—Plain 6L2
	10/16	Setscrew, Hex. Head, $\frac{3}{16}$ " Wh. \times $\frac{3}{8}$ " long, for 10/14, 10/15		10/53	Setscrew, Hex. Head, $\frac{3}{16}$ " Wh. \times $\frac{5}{16}$ " long, for 10/42 to 10/52	
	10/17	Heating Tray Stud, fitted with 10/18, 10/19		10/54	Flange Packing, for 10/56, 10/58	
	10/18	Nut, Hex., $\frac{3}{8}$ " Wh., for 10/17		10/55	Setscrew, Hex. Head, $\frac{3}{8}$ " Wh. \times $1\frac{1}{8}$ " long, for 10/56	
	10/19	Wing Nut, $\frac{3}{16}$ " Wh., for 10/17		10/56	Pipe Flange, fitted with 10/54	
	10/20	Air Inlet Pipe Blank Flange		10/57	Setscrew, Hex. Head, $\frac{3}{8}$ " Wh. \times $\frac{3}{8}$ " long, for 10/58	
	10/21	Heating Tray		10/58	Blank Flange, fitted with 10/54	
	10/22	Air Regulating Valve		10/59	Plug, Hex. Head, $\frac{1}{4}$ " Gas \times $\frac{3}{8}$ " Hex., for 10/61 to 10/65	
	10/23	Air Valve Spindle—Plain, fitted with 10/26 to 10/28		10/60	Washer, Copper and Asbestos, for 10/61 to 10/65 (same as 20/14)	
	10/24	Air Valve Spindle—Slotted, fitted with 10/26, 10/30		10/61	Exhaust Manifold, fitted with 10/54, 10/59, 10/60 .. 2L2	
	10/25	Air Valve Lever Spring		10/62	Exhaust Manifold, fitted with 10/54, 10/59, 10/60 .. 3L2	
	10/26	Setscrew, Cheese Head, 1 B.A. \times $\frac{5}{16}$ " long, for 10/22		10/63	Exhaust Manifold, fitted with 10/54, 10/59, 10/60 .. 4L2	
	10/27	Air Valve Lever		10/64	Exhaust Manifold, fitted with 10/54, 10/59, 10/60 .. 5L2	
	10/28	Taper Pin for 10/27		10/65	Exhaust Manifold, fitted with 10/54, 10/59, 10/60 .. 6L2	
	10/29	Air Valve Spindle Connecting Link, fitted with 10/30		24	10/66	INLET MANIFOLD ASSEMBLY—MUFFLE TYPE, Comprising 10/1, 10/6, 10/7, 10/72, 10/75 .. 2L2
	10/30	Split Pin, $\frac{1}{4}$ " diam. \times 1" long, for 10/29			10/67	INLET MANIFOLD ASSEMBLY—MUFFLE TYPE, Comprising 10/2, 10/6, 10/7, 10/72, 10/75 .. 3L2
	10/31	Air Valve Remote Control Lever, fitted with 10/32			10/68	INLET MANIFOLD ASSEMBLY—MUFFLE TYPE, Comprising 10/3, 10/6, 10/7, 10/72, 10/75 .. 4L2
	10/32	Bolt, Hex. Head, $\frac{1}{4}$ "—28 thds. \times 1" long, for 10/31			10/69	INLET MANIFOLD ASSEMBLY—MUFFLE TYPE, Comprising 10/4, 10/6, 10/7, 10/72, 10/75 .. 5L2
	10/33	Forked Eye, fitted with 10/34, 10/35, for 10/31			10/70	INLET MANIFOLD ASSEMBLY—MUFFLE TYPE, Comprising 10/5 to 10/7, 10/11, 10/13, 10/72, 10/75 .. 6L2
	10/34	Pin, Headed, $\frac{1}{4}$ " diam. \times $\frac{3}{8}$ " long, fitted with 10/35 for 10/33				
	10/35	Split Pin, $\frac{3}{16}$ " diam. \times $\frac{1}{2}$ " long, for 10/34				
	10/36	Air Muffle Base				
	10/37	Air Muffle Top				

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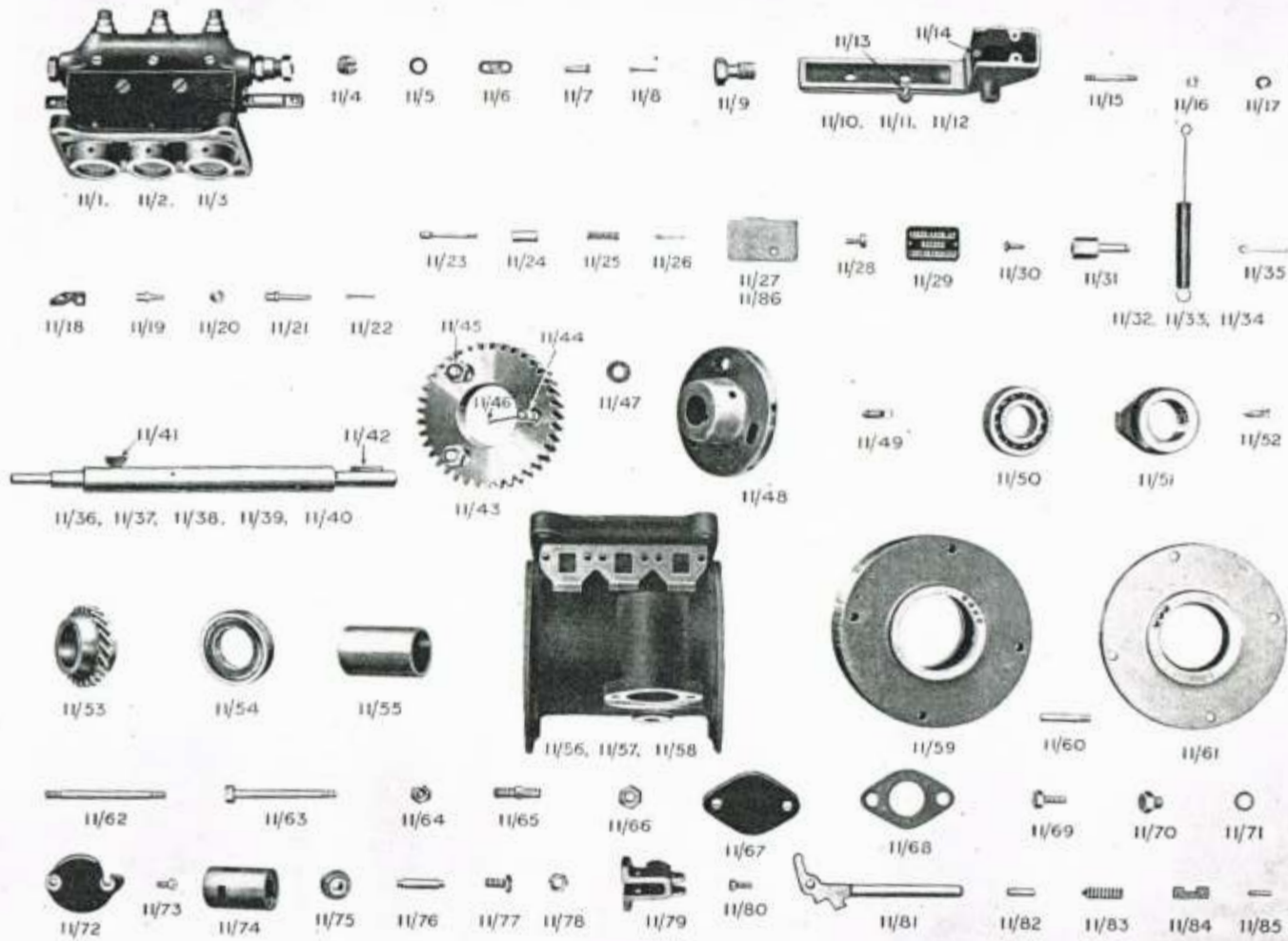
AIR INLET AND EXHAUST MANIFOLDS—Section 10

Plate No.	Part No.	Description	Plate No.	Part No.	Description		
24	10/71	INLET MANIFOLD ASSEMBLY—MUFFLE TYPE, Comprising 10/5 to 10/7, 10/11, 10/13, 10/73 to 10/75			6L2 Double Muffle Engines		
	10/72	AIR INLET PIPE ASSEMBLY, Comprising 10/14, 10/17 to 10/23, 10/25 to 10/28				2L2, 3L2, 4L2, 5L2, 6L2 Single Muffle Engines	
	10/73	AIR INLET PIPE ASSEMBLY—R.H., Comprising 10/14, 10/17 to 10/22, 10/24 to 10/26, 10/30 to 10/32				6L2 Double Muffle Engines	
	10/74	AIR INLET PIPE ASSEMBLY—L.H., Comprising 10/15, 10/17 to 10/22, 10/24 to 10/26, 10/30				6L2 Double Muffle Engines	
	10/75	AIR MUFFLE ASSEMBLY, Comprising 10/36 to 10/41					
	10/76	INLET MANIFOLD ASSEMBLY—COVER TYPE, Comprising 10/8, 10/11 to 10/13				4L2	
	10/77	INLET MANIFOLD ASSEMBLY—COVER TYPE, Comprising 10/9, 10/11 to 10/13				5L2	
	10/78	INLET MANIFOLD ASSEMBLY—COVER TYPE, Comprising 10/10 to 10/13				6L2	
	25	10/79				EXHAUST MANIFOLD ASSEMBLY, Comprising 10/43, 10/48, 10/53 to 10/61	2L2
		10/80				EXHAUST MANIFOLD ASSEMBLY, Comprising 10/44, 10/49, 10/53 to 10/60, 10/62	3L2
10/81		EXHAUST MANIFOLD ASSEMBLY, Comprising 10/45, 10/50, 10/53 to 10/60, 10/63	4L2				
10/82		EXHAUST MANIFOLD ASSEMBLY, Comprising 10/46, 10/51, 10/53 to 10/60, 10/64	5L2				
10/83		EXHAUST MANIFOLD ASSEMBLY, Comprising 10/47, 10/52 to 10/60, 10/65	6L2 Single Muffle Engines				
10/84		EXHAUST MANIFOLD ASSEMBLY, Comprising 10/42, 10/52 to 10/60, 10/65	6L2 Double Muffle Engines				
10/85		EXHAUST MANIFOLD ASSEMBLY, Comprising 10/54 to 10/60, 10/63	4L2				
10/86		EXHAUST MANIFOLD ASSEMBLY, Comprising 10/54 to 10/60, 10/64	5L2				
10/87		EXHAUST MANIFOLD ASSEMBLY, Comprising 10/54 to 10/60, 10/65	6L2				

When ordering it is important to quote the Number of the Engine, and also the Number of the Part.

GARDNER.

FUEL PUMP AND MOTION WORK—Section 11—Plate 26





FUEL PUMP AND MOTION WORK—Section 11

Plate No.	Part No.	Description	Plate No.	Part No.	Description
26	11/1	FUEL PUMP—2 POINT, fitted with 11/4, 11/5, 11/15 to 11/17, 11/89	26	11/32	Governor Lever Spring, for Electric Lighting Engines (same as 20/45)
	11/2	FUEL PUMP—3 POINT, fitted with 11/4, 11/5, 11/15 to 11/17, 11/90		11/33	Governor Lever Spring, for Electric Lighting Engines (same as 20/46)
	11/3	FUEL PUMP—4 POINT, fitted with 11/4, 11/5, 11/15 to 11/17, 11/91		11/34	Governor Lever Spring, for Electric Lighting Engines (same as 20/47)
	11/4	Pump Body Plug, fitted with 11/5		11/35	Split Pin, $\frac{3}{16}$ " diam. \times $1\frac{1}{2}$ " long, for 11/36 to 11/40
	11/5	Washer, Copper, for 11/4		11/36	Fuel Pump Camshaft, fitted with 11/35, 11/41, 11/42
	11/6	Pump Rack Connecting Link (1 Pair)		11/37	Fuel Pump Camshaft, fitted with 11/35, 11/41, 11/42
	11/7	Pin, Headed, $\frac{1}{2}$ " diam. \times $\frac{3}{8}$ " long, fitted with 11/8, for 11/6		11/38	Fuel Pump Camshaft, fitted with 11/35, 11/41, 11/42
	11/8	Split Pin, $\frac{3}{16}$ " diam. \times $\frac{1}{2}$ " long, for 11/7		11/39	Fuel Pump Camshaft, fitted with 11/35, 11/41, 11/42
	11/9	Pump Pipe Connection Screw, for 17/24 to 17/28		11/40	Fuel Pump Camshaft, fitted with 11/35, 11/41, 11/42
	11/10	Fuel Control Box—2 Point, fitted with 11/13, 11/14		11/41	Woodruff Key, for 11/53
	11/11	Fuel Control Box—3 Point, fitted with 11/13, 11/14		11/42	Feather Key, for 11/48
	11/12	Fuel Control Box—4 Point, fitted with 11/13, 11/14		11/43	Camshaft Driven Gear, fitted with 11/44 to 11/47
	11/13	Steady Peg, $\frac{3}{8}$ " diam. \times $\frac{1}{16}$ " long		11/44	Stud, $\frac{3}{8}$ " B.S.F. \times $1\frac{1}{8}$ " long, fitted with 11/45 to 11/47
	11/14	Control Trigger Pin		11/45	Nut, Hex., $\frac{3}{8}$ " B.S.F.
	11/15	Stud, 0 B.A. \times $1\frac{1}{2}$ " long, fitted with 11/16, 11/17, for 11/10 to 11/12		11/46	Split Pin, $\frac{3}{16}$ " diam. \times $\frac{1}{2}$ " long
	11/16	Nut, Hex., 0 B.A., for 11/15		11/47	Washer, $\frac{3}{8}$ " bore, for 11/44
	11/17	Spring Washer, 0 B.A., for 11/15		11/48	Camshaft Driven Gear Coupling, fitted with 11/49
	11/18	Control Trigger		11/49	Setscrew, Sq. Head—Pointed, $\frac{3}{16}$ "—24 thds. \times $\frac{3}{16}$ " long, for 11/48
	11/19	Control Shaft Stop, fitted with 11/20		11/50	Ball Journal Bearing, for 11/36 to 11/40
	11/20	Nut, Hex., 0 B.A., for 11/19		11/51	Fuel Pump Cam, fitted with 11/52
	11/21	Spring Post, fitted with 11/20, 11/22, for 11/32, 11/33, 11/34		11/52	Setscrew, Sq. Head—Pointed, $\frac{3}{16}$ "—28 thds. \times $\frac{7}{16}$ " long, for 11/51
	11/22	Split Pin, $\frac{3}{16}$ " diam. \times $\frac{1}{2}$ " long, for 11/21		11/53	Lubricating Pump Driving Gear
	11/23	Control Plunger, fitted with 11/24, 11/26		11/54	Ball Journal Bearing, for 11/39, 11/40
	11/24	Control Plunger Knob, fitted with 11/23, 11/26		11/55	Camshaft Distance Collar, for 11/39, 11/40
	11/25	Control Plunger Spring		11/56	Pump Cam Box—2 Point, fitted with 11/65, 11/66, 11/70 to 11/73
	11/26	Split Pin, $\frac{3}{16}$ " diam. \times $\frac{1}{2}$ " long, for 11/24		11/56	Pump Cam Box—2 Point, fitted with 11/65 to 11/73
	11/27	Control Box Cover—Plain, fitted with 11/28		11/57	Pump Cam Box—3 Point, fitted with 11/65, 11/66, 11/70 to 11/73
	11/28	Setscrew, Cheese Head, 2 B.A. \times $\frac{3}{8}$ " long, for 11/27, 11/86		11/57	Pump Cam Box—3 Point, fitted with 11/65 to 11/73
	11/29	Instruction Plate, "Start from Cold," fitted with 11/30		11/58	Pump Cam Box—4 Point, fitted with 11/65, 11/66, 11/70 to 11/73
	11/30	Metallic Drive Screw, for 11/29		11/59	Cam Box Distance Piece
	11/31	Fuel Control Spring Post		11/60	Spring Post for 12/21
		11/61	Cam Box End Plate		

When ordering it is important to quote the Number of the Engine, and also the Number of the Part.



FUEL PUMP AND MOTION WORK—Section 11

Plate No.	Part No.	Description	Plate No.	Part No.	Description
26	11/62	Stud, $\frac{5}{16}$ " Wh. \times 4" long, fitted with 11/64, for 11/56, 11/57, 11/59	26	11/90	FUEL CONTROL BOX ASSEMBLY—3 POINT, Comprising 11/11, 11/13, 11/14, 11/18, 11/19 or 11/21, 11/20, 11/22 to 11/26, 11/29, 11/30 (include 11/33 for Electric Lighting Engines)
	11/63	Bolt, Hex. Head, $\frac{5}{16}$ " Wh. \times 3 $\frac{1}{2}$ " long, fitted with 11/64, for 11/56, 11/57, 11/59		11/91	FUEL CONTROL BOX ASSEMBLY—4 POINT, Comprising 11/12 to 11/14, 11/18, 11/19 or 11/21, 11/20, 11/22 to 11/26, 11/29, 11/30 (include 11/34 for Electric Lighting Engines)
	11/64	Nut, Hex., $\frac{5}{16}$ " Wh., for 11/63, 11/63		11/92	CHARGING LEVER ASSEMBLY, Comprising 11/79 to 11/85
	11/65	Stud, $\frac{7}{16}$ " Wh. \times 1 $\frac{1}{8}$ " long, fitted with 11/66, for 11/1, 11/2, 11/3		11/93	FUEL PUMP CAMSHAFT ASSEMBLY, Comprising 11/35, 11/36, 11/41, 11/42, 11/51, 11/52, 11/53, 11/98 } 2L2
	11/66	Nut, Hex., $\frac{7}{16}$ " Wh. \times $\frac{3}{8}$ " Hex., for 11/65		11/94	FUEL PUMP CAMSHAFT ASSEMBLY, Comprising 11/35, 11/37, 11/41, 11/42, 11/51, 11/52, 11/53, 11/98 } 3L2
	11/67	Lubricating Pump Hole Cover, fitted with 11/68		11/95	FUEL PUMP CAMSHAFT ASSEMBLY, Comprising 11/35, 11/38, 11/41, 11/42, 11/51, 11/52, 11/53, 11/98 } 4L2
	11/68	Packing for 11/67		11/96	FUEL PUMP CAMSHAFT ASSEMBLY, Comprising 11/35, 11/39, 11/41, 11/42, 11/51, 11/52, 11/53, 11/98 } 5L2
	11/69	Setscrew, Hex. Head, $\frac{5}{16}$ " Wh. \times $\frac{3}{8}$ " long, for 11/67		11/97	FUEL PUMP CAMSHAFT ASSEMBLY, Comprising 11/35, 11/40 to 11/42, 11/51, 11/52, 11/53, 11/98 } 6L2
	11/70	Plug, Hex. Head, $\frac{1}{4}$ " Gas \times $\frac{3}{8}$ " Hex., fitted with 11/71, for 11/56, 11/57, 11/58		11/98	FUEL PUMP CAMSHAFT GEAR ASSEMBLY, Comprising 11/43 to 11/49
	11/71	Packing, Leather for 11/70	26, 27 & 28	11/99	FUEL PUMP CAM BOX AND GOVERNOR ASSEMBLY, Comprising 11/1, 11/89, 11/92, 11/93, 11/98, 12/69 or 12/70, 12/71, 13/52, 11/50, 11/56, 11/61, 11/69, 11/74, 12/50 or 12/51, 12/52, 12/53 (include 11/31 for Electric Lighting Engines) } 2L2
	11/72	Cam Box Cover, fitted with 11/73		11/100	FUEL PUMP CAM BOX AND GOVERNOR ASSEMBLY, Comprising 11/2, 11/90, 11/92, 11/94, 11/98, 12/69 or 12/70, 12/71, 13/52, 11/50, 11/57, 11/61, 11/69, 11/74, 12/50 or 12/51, 12/52, 12/53 (include 11/31 for Electric Lighting Engines) } 3L2
	11/73	Setscrew, Hex. Head, 0 B.A. \times $\frac{1}{2}$ " long, for 11/72		11/101	FUEL PUMP CAM BOX AND GOVERNOR ASSEMBLY, Comprising 11/3, 11/91, 11/92, 11/95, 11/98, 12/69 or 12/70, 12/71, 13/52, 11/50, 11/58, 11/61, 11/69, 11/74, 12/50 or 12/51, 12/52, 12/53 (include 11/31 for Electric Lighting Engines) } 4L2
	11/74	Fuel Pump Ram Tappet, fitted with 11/75 to 11/78			
	11/75	Tappet Roller			
	11/76	Tappet Roller Pin			
	11/77	Tappet Screw, fitted with 11/78			
	11/78	Nut, $\frac{3}{8}$ "—24 thds. \times $\frac{5}{16}$ " Hex., for 11/77			
	11/79	Charging Lever Bracket, fitted with 11/80			
	11/80	Setscrew, Cheese Head, 0 B.A. \times $\frac{5}{8}$ " long, for 11/79			
	11/81	Charging Lever			
	11/82	Charging Lever Pin			
	11/83	Charging Lever Spring			
	11/84	Charging Lever Catch			
	11/85	Charging Lever Catch Pin			
	11/86	Control Box Cover—Slotted, fitted with 11/28, CANCELLED for Electric Lighting Engines			
	11/87	FUEL PUMP—2 POINT, fitted with 11/4 to 11/8 } 5L2 For the Fuel Pump Spare Parts, see the Supplementary Catalogue			
	11/88	FUEL PUMP—3 POINT, fitted with 11/4 to 11/8 } 6L2			
	11/89	FUEL CONTROL BOX ASSEMBLY—2 POINT, Comprising 11/10, 11/13, 11/14, 11/18, 11/19 or 11/21, 11/20, 11/22 to 11/26, 11/29, 11/30 (include 11/32 for Electric Lighting Engines)			

When ordering it is important to quote the Number of the Engine, and also the Number of the Part.



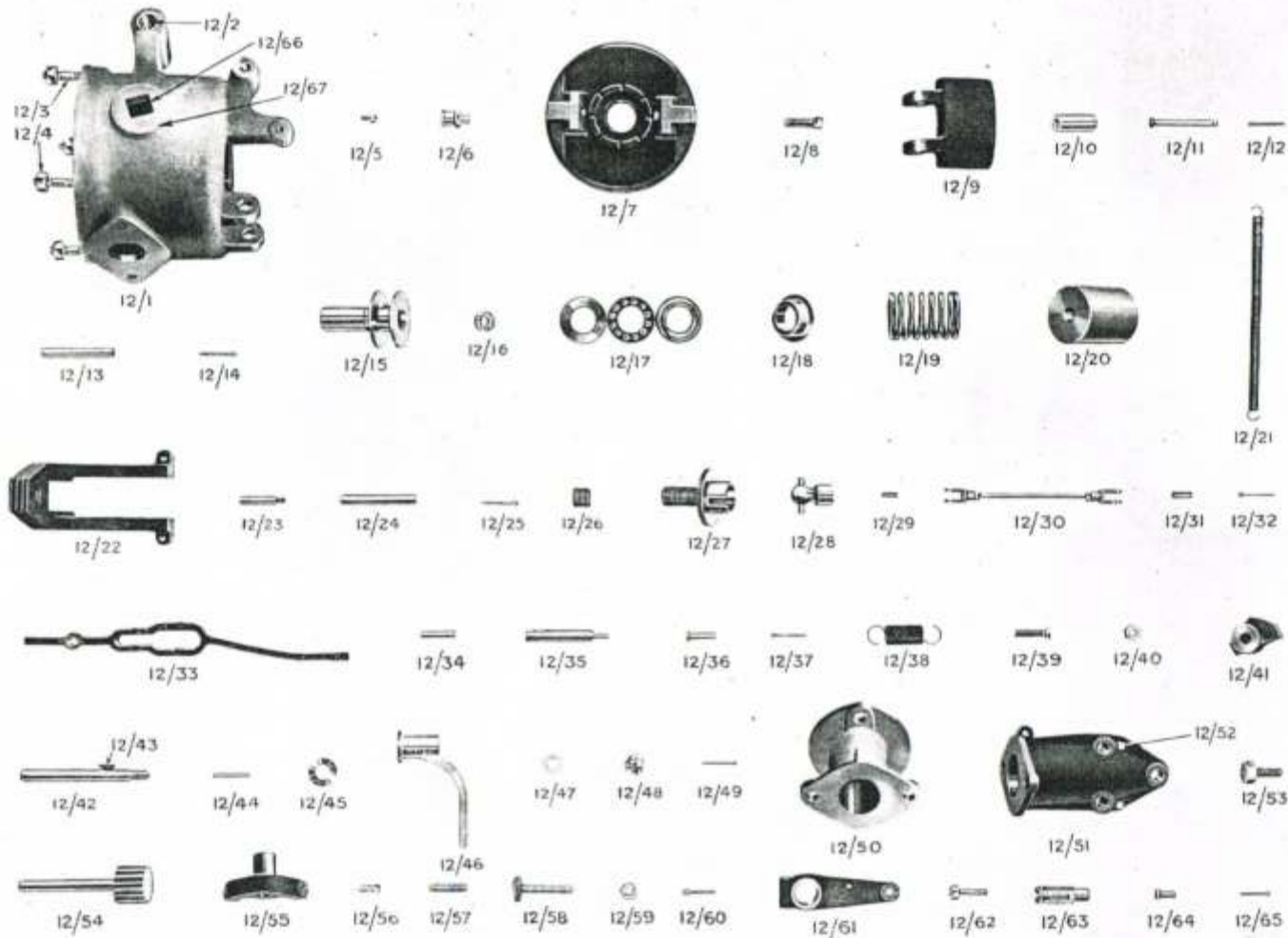
FUEL PUMP AND MOTION WORK—Section 11

Plate No.	Part No.	Description	Plate No.	Part No.	Description
26, 27 & 28	11/102	FUEL PUMP CAM BOX AND GOVERNOR ASSEMBLY, Comprising 11/2, 11/87, 11/90, 11/92, 11/96, 11/98, 12/69 or 12/70, 12/71, 13/53, 11/50, 11/54, 11/55, 11/56, 11/57, 11/59 to 11/64, 11/74, 12/50 or 12/51, 12/52, 12/53 (include 11/31 for Electric Lighting Engines)		5L2	
	11/103	FUEL PUMP CAM BOX AND GOVERNOR ASSEMBLY, Comprising 11/2, 11/88, 11/90, 11/92, 11/97, 11/98, 12/69 or 12/70, 12/71, 13/53, 11/50, 11/54, 11/55, 11/57, 11/59 to 11/64, 11/74, 12/50 or 12/51, 12/52, 12/53 (include 11/31 for Electric Lighting Engines)		6L2	

When ordering it is important to quote the Number of the Engine, and also the Number of the Part.

GARDNER

GOVERNOR — Section 12 — Plate 27





GOVERNOR—Section 12

Plate No.	Part No.	Description	Plate No.	Part No.	Description
27	12/1	Governor Casing, fitted with 12/2 to 12/5, 12/66, 12/67	27	12/39	Stopping Cam Tappet Screw, fitted with 12/40
	12/2	Remote Control Spindle Bush, for 12/54		12/40	Nut, $\frac{5}{16}$ " B.S.F. \times $\frac{1}{2}$ " Hex., for 12/39
	12/3	Stud, $\frac{1}{16}$ " Wh. \times $1\frac{1}{16}$ " long, fitted with 12/4, for 11/56, 11/57, 11/58		12/41	Stopping Cam, fitted with 12/42 to 12/44, 12/47 to 12/49
	12/4	Nut, Hex., $\frac{5}{16}$ " Wh., for 12/3		12/42	Stopping Cam Spindle, fitted with 12/41, 12/43, 12/44, 12/47 to 12/49
	12/5	Setscrew, Cheese Head—Pointed, 1 B.A. \times $\frac{5}{16}$ " long, for 12/34		12/43	Woodruff Key for 12/46
	12/6	Lubricator in 12/1		12/44	Taper Pin for 12/41
	12/7	Governor Body, fitted with 12/8		12/45	Fibre Friction Washer for 12/41
	12/8	Setscrew Sq. Head—Pointed, $\frac{3}{8}$ "—24 thds. \times $\frac{1}{4}$ " long, for 12/7		12/46	Stopping Cam Lever
	12/9	Governor Weight, fitted with 12/10 to 12/12 (in Pairs)		12/47	Spring Washer, $\frac{3}{8}$ " diam., for 12/46
	12/10	Governor Weight Roller		12/48	Castle Nut, $\frac{3}{8}$ " B.S.F., for 12/42
	12/11	Governor Weight Roller Pin, fitted with 12/12		12/49	Split Pin, $\frac{3}{16}$ " diam. \times 1" long, for 12/43
	12/12	Split Pin, $\frac{5}{16}$ " diam. \times $\frac{1}{2}$ " long, for 12/11		12/50	Governor Casing Steady for Crankcase A, B and D
	12/13	Governor Weight Pivot Pin, fitted with 12/14		12/51	Governor Casing Steady for Crankcase C and E, fitted with 12/52
	12/14	Split Pin, $\frac{3}{16}$ " diam. \times $\frac{3}{8}$ " long, for 12/13		12/52	Steady Peg, for 12/51
	12/15	Governor Sleeve, fitted with 12/16		12/53	Setscrew, Hex. Head, $\frac{3}{8}$ " Wh. \times 1" long, for 12/50, 12/51
	12/16	Ball Journal Bearing, in 12/15		12/54	Remote Control Pinion
	12/17	Ball Thrust Washer, on 12/15		12/55	Remote Control Pinion Stop, fitted with 12/56, 12/57, 12/59
	12/18	Governor Spring Collar		12/56	Setscrew, Sq. Head—Pointed, $\frac{1}{2}$ "—28 thds. \times $\frac{11}{16}$ " long, in 1/55
	12/19	Governor Spring		12/57	Adjusting Screw—Plain, fitted with 12/59, 12/60, for 12/55
	12/20	Governor Spring Guide		12/58	Adjusting Screw—Knurled, fitted with 12/59, for 12/55
	12/21	Remote Control Lever Spring, for 2L2, 3L2, 4L2, 6L2		12/59	Nut, $\frac{5}{16}$ " Wh. \times $\frac{1}{2}$ " Hex., for 12/57 and 12/60
	12/22	Governor Spring Lever, fitted with 12/23, 12/29		12/60	Split Pin, $\frac{3}{16}$ " diam. \times $\frac{1}{2}$ " long, for 12/57, 12/59
	12/23	Governor Spring Lever Stop Peg		12/61	Remote Control Lever, fitted with 12/62
	12/24	Spring Lever Pivot Pin, fitted with 12/25		12/62	Bolt, Hex. Head, $\frac{1}{2}$ "—28 thds. \times 1" long, for 12/61
	12/25	Split Pin, $\frac{3}{16}$ " diam. \times $\frac{3}{8}$ " long, for 12/24		12/63	Forked Eye, fitted with 12/64, 12/65, for 12/61
	12/26	Grub Screw, $\frac{3}{8}$ " Wh. \times $\frac{3}{4}$ " long, in 12/22		12/64	Pin, Headed, $\frac{1}{2}$ " diam. \times $\frac{3}{8}$ " long, fitted with 12/65, for 12/63
	12/27	Governor Adjusting Screw		12/65	Split Pin, $\frac{3}{16}$ " diam. \times $\frac{1}{2}$ " long, for 12/64
	12/28	Ball Joint for 12/27		12/66	Plug, $1\frac{1}{8}$ "—16 thds., fitted with 12/67, for 12/1
	12/29	Stop Peg for 12/22 CANCELLED		12/67	Packing for 12/66
	12/30	Governor Connecting Rod, fitted with 12/31, 12/32		12/68	Remote Control Lever Spring 5L2 only,
	12/31	Pin, Headed, $\frac{1}{4}$ " diam. \times $\frac{3}{8}$ " long, fitted with 12/32, for 12/30		12/69	GOVERNOR CASING ASSEMBLY—LOCAL CONTROL, Comprising 12/1 to 12/6, 12/20, 12/22 to 12/25, 12/27 12/29 to 12/37, 12/39 to 12/49, 12/66, 12/67 (include 12/58 for Engines NOT Electric Lighting)
	12/32	Split Pin, $\frac{3}{16}$ " diam. \times $\frac{1}{2}$ " long, for 12/31		12/70	GOVERNOR CASING ASSEMBLY—REMOTE CONTROL, Comprising 12/1 to 12/6, 12/20, 12/21 or 12/68, 12/22 to 12/26, 12/29 to 12/37, 12/39 to 12/49, 12/54 to 12/67 (include 12/38 for Engines NOT Electric Lighting)
	12/33	Governor Lever		12/71	GOVERNOR BODY ASSEMBLY, Comprising 12/7 to 12/19
	12/34	Governor Lever Pivot Pin			
12/35	Governor Sleeve Push Rod				
12/36	Governor Push Rod Pin, fitted with 12/37				
12/37	Split Pin, $\frac{3}{16}$ " diam. \times $\frac{1}{2}$ " long, for 12/36				
12/38	Governor Lever Spring. Not fitted on Electric Lighting Engines (same as 20/21)				

When ordering it is important to quote the Number of the Engine, and also the Number of the Part.

LUBRICATING PUMP AND DELIVERY STRAINER—Section 13—Plate 28



13/1 13/2



13/3



13/4



13/5



13/6 13/7



13/9 13/10



13/11 13/12



13/13



13/14



13/15



13/16



13/17



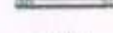
13/18



13/19



13/20



13/21



13/22



13/23



13/24



13/25



13/26



13/27



13/28



13/29



13/30



13/31



13/32



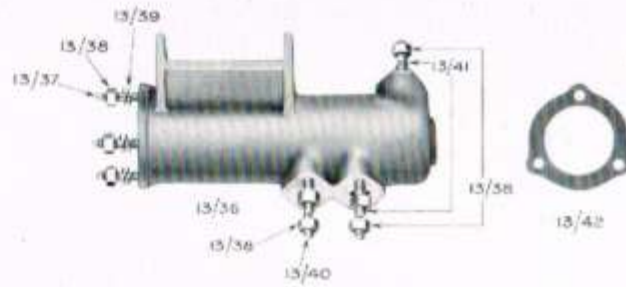
13/33



13/34



13/35



13/43



13/44



13/45



13/46



13/47



13/48



13/49



13/50



13/51



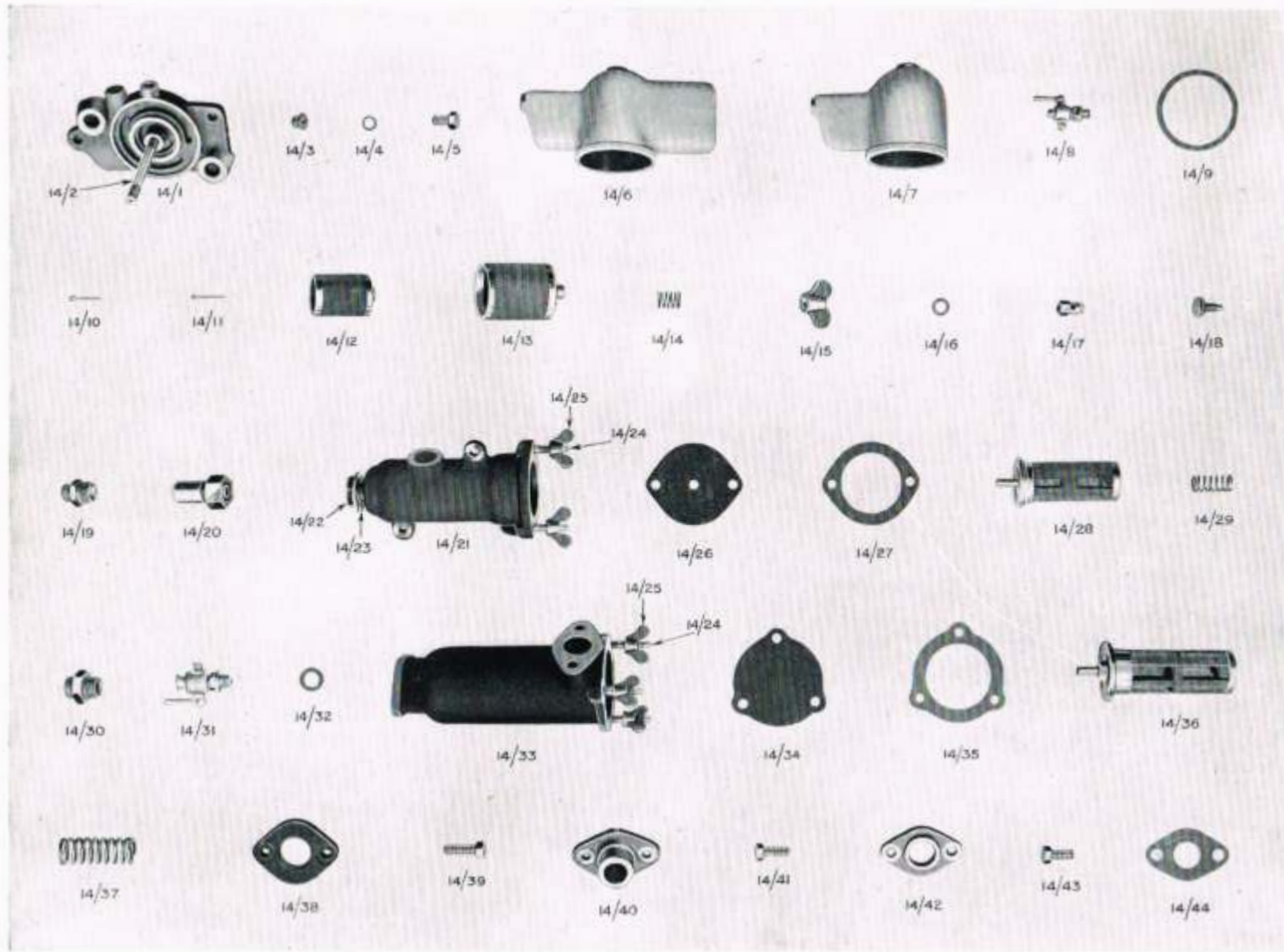
LUBRICATING PUMP AND DELIVERY STRAINER—Section 13

Plate No.	Part No.	Description	Plate No.	Part No.	Description
28	13/1	Lubricating Pump Body, fitted with 13/3, 13/4, 13/11, 13/17	28	13/33	Setscrew, Hex. Head, $\frac{5}{16}$ " Wh. \times $\frac{3}{8}$ " long, for 13/19, 13/48
	13/2	Lubricating Pump Body, fitted with 13/3, 13/4, 13/12, 13/17		13/34	Packing, Flange, $2\frac{1}{4}$ " centres \times $1\frac{1}{2}$ " wide, for 13/19
	13/3	Pump Body Cover, fitted with 13/4, 13/11 or 13/12		13/35	Setscrew, Hex. Head, $\frac{5}{16}$ " Wh. \times $\frac{3}{8}$ " long, for 13/19
	13/4	Setscrew, Cheese Head, 2 B.A. \times $\frac{3}{8}$ " long, for 13/3		13/36	"Gardner" Oil Strainer Body, fitted with 13/31, 13/32, 13/37 to 13/42, 13/44 to 13/47, 13/49
	13/5	Setscrew, Hex. Head, $\frac{5}{16}$ " Wh. \times $\frac{3}{8}$ " long, for 13/1, 13/2		13/37	Stud, $\frac{5}{16}$ " Wh. \times $1\frac{1}{16}$ " long, fitted with 13/38, 13/39
	13/6	Pump Gear and Spindle, fitted with 13/8, 13/15, 13/16		13/38	Nut, Hex., $\frac{5}{16}$ " Wh.
	13/7	Pump Gear and Spindle, fitted with 13/8, 13/15, 13/16		13/39	Spring Washer, $\frac{5}{16}$ " diam.
	13/8	Woodruff Key for 13/14		13/40	Stud, $\frac{5}{16}$ " Wh. \times $1\frac{1}{16}$ " long, fitted with 13/38
	13/9	Pump Idler Gear		13/41	Stud, $\frac{5}{16}$ " Wh. \times $1\frac{1}{8}$ " long, fitted with 13/38
	13/10	Pump Idler Gear		13/42	Strainer Cage Packing
	13/11	Pump Idler Gear Spindle		13/43	Strainer Cage, fitted with 13/42
	13/12	Pump Idler Gear Spindle		13/44	Plug, $1\frac{1}{8}$ "—16 thds., fitted with 13/45, for 13/36
	13/13	Thrust Washer for 13/6, 13/7		13/45	Packing for 13/44
	13/14	Pump Driven Pinion		13/46	Plug, Sq. Head, $\frac{1}{2}$ " Gas, fitted with 13/47, for 13/36
	13/15	Castle Nut, $\frac{1}{2}$ " B.S.F., for 13/6, 13/7		13/47	Packing for 13/46
	13/16	Split Pin, $\frac{3}{32}$ " diam. \times $1\frac{1}{2}$ " long, for 13/6, 13/7		13/48	Relief Valve Body, fitted with 13/32, 13/49
	13/17	Packing, Flange, 2" centres \times $1\frac{1}{2}$ " wide, for 13/1, 13/2		13/49	Packing, Flange, $1\frac{1}{8}$ " centres \times $1\frac{1}{2}$ " wide, for 13/48
	13/18	Setscrew, Hex. Head, $\frac{5}{16}$ " Wh. \times 1" long, for 13/1, 13/2		13/50	Stud, $\frac{3}{8}$ " Wh. \times $4\frac{1}{8}$ " long, fitted with 13/51, for 13/36
	13/19	"Auto Klean" Oil Strainer Body, fitted with 13/23, 13/24, 13/31, 13/32, 13/34		13/51	Nut, Hex., $\frac{3}{8}$ " Wh.
	13/20	Nut, $\frac{5}{16}$ "—28 thds. \times $1\frac{1}{2}$ " Hex., for 13/21		13/52	LUBRICATING OIL PUMP ASSEMBLY, Comprising 13/1, 13/3, 13/4, 13/6, 13/8, 13/9, 13/11, 13/13 to 13/18
	13/21	Strainer Body Stud, fitted with 13/20, 13/22		13/53	LUBRICATING OIL PUMP ASSEMBLY, Comprising 13/2 to 13/4, 13/7, 13/8, 13/10, 13/12 to 13/18
	13/22	Nut, Hex., $\frac{5}{16}$ " Wh., for 13/21		13/54	"AUTO KLEAN" OIL STRAINER ASSEMBLY, Comprising 13/19, 13/23 to 13/35
	13/23	Plug, Hex. Head, $\frac{1}{2}$ " Gas \times $\frac{3}{8}$ " Hex., fitted with 13/24 for 13/19		13/55	"GARDNER" OIL STRAINER ASSEMBLY, Comprising 13/31, 13/32, 13/36 to 13/47, 13/49
	13/24	Packing, Leather, for 13/23		13/56	"GARDNER" OIL STRAINER ASSEMBLY, Comprising 13/55, 13/57
	13/25	"Auto Klean" Oil Strainer		13/57	LUBRICATING OIL RELIEF VALVE ASSEMBLY, Comprising 13/26 to 13/30, 13/32, 13/48, 13/49
	13/26	Relief Valve Piston			
	13/27	Relief Valve Spring (same as 20/20)			
	13/28	Relief Valve Adjuster, fitted with 13/29			
	13/29	Locknut, $\frac{1}{2}$ " Gas \times $\frac{3}{8}$ " Hex., for 13/28			
	13/30	Relief Valve Adjuster Cap			
	13/31	Packing, Flange, 2" centres \times $1\frac{1}{2}$ " wide, for 13/19, 13/36			
	13/32	Packing, Flange, $1\frac{1}{2}$ " centres \times $1\frac{1}{8}$ " wide, for 13/19, 13/36, 13/48			

When ordering it is important to quote the Number of the Engine, and also the Number of the Part.

GARDNER

FUEL AND WATER STRAINERS—Section 14—Plate 29





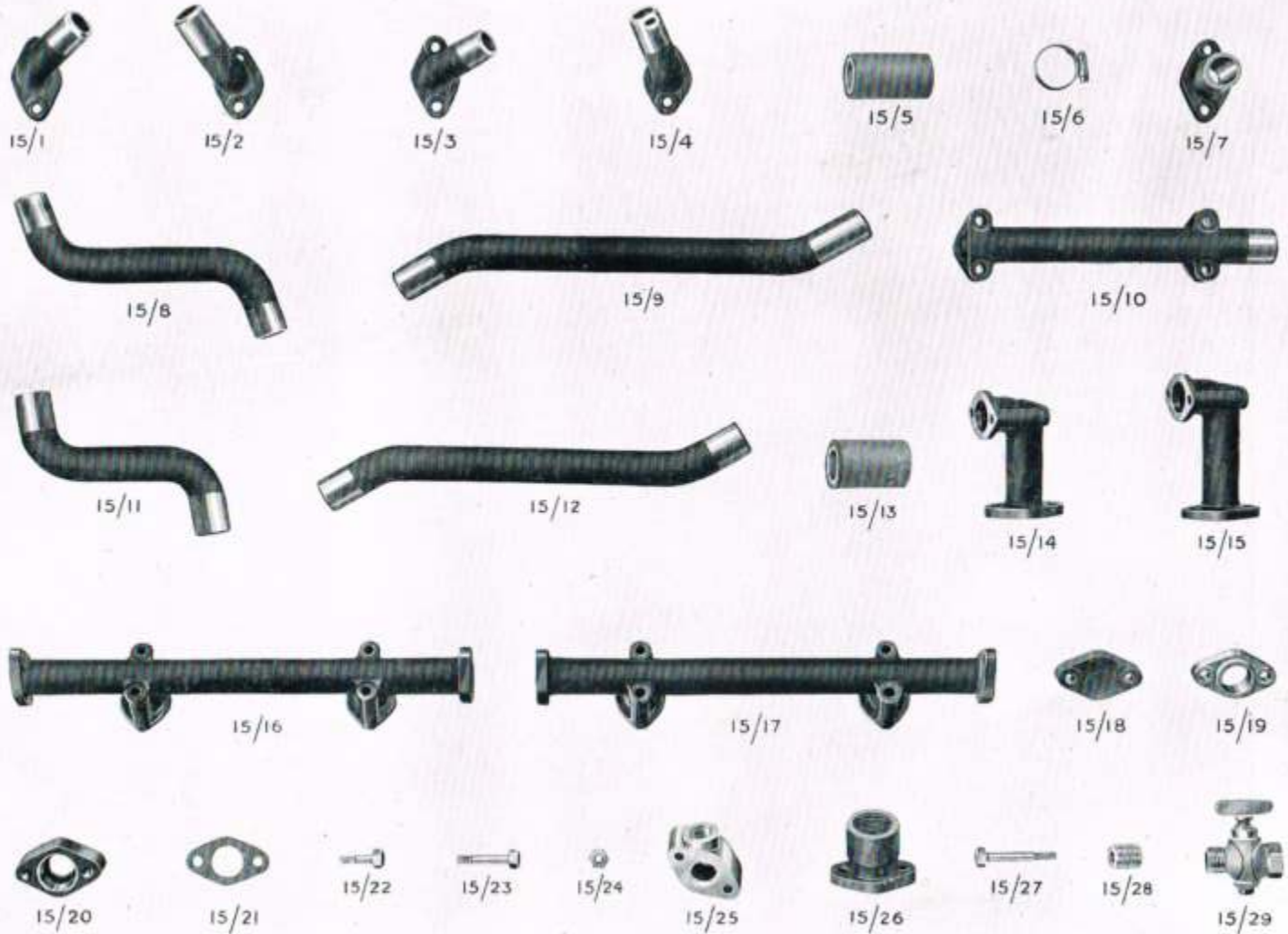
FUEL AND WATER STRAINERS—Section 14

Plate No.	Part No.	Description	Plate No.	Part No.	Description
29	14/1	Fuel Strainer Base, fitted with 14/2, 14/3, 14/4, 14/9 to 14/11, 14/15, 14/16	29	14/39	Setscrew, Hex. Head, $\frac{5}{16}$ " Wh. \times $1\frac{1}{2}$ " long, for 14/38
	14/2	Stud, $\frac{3}{8}$ " Wh. \times $4\frac{3}{8}$ " long, fitted with 14/10, 14/11, 14/15, 14/16		14/40	Pipe Flange—Brass, 1" Gas, fitted with 14/44, for 14/33
	14/3	Plug, Hex. Head, $\frac{1}{2}$ " Gas, fitted with 14/4, for 14/1		14/41	Setscrew, Hex. head, $\frac{5}{16}$ " Wh. \times 1" long, for 14/40
	14/4	Packing for 14/3, 14/8		14/42	Pipe Flange—Brass, 1" bore, fitted with 14/44 for 14/33
	14/5	Setscrew, Hex. Head, $\frac{5}{16}$ " Wh. \times $\frac{3}{4}$ " long, for 14/1		14/43	Setscrew, Hex. Head, $\frac{5}{16}$ " Wh. \times $\frac{3}{4}$ " long, for 14/42
	14/6	Strainer Cover, fitted with 14/9 CANCELLED		14/44	Packing, Flange, $2\frac{1}{2}$ " Centres \times $1\frac{1}{2}$ " wide, for 14/38, 14/40, 14/42
	14/7	Strainer Cover, fitted with 14/9		14/45	FUEL STRAINER ASSEMBLY, Comprising 14/1 to 14/4, 14/7 to 14/19
	14/8	Pet Cock, $\frac{1}{2}$ " Gas, fitted with 14/4, for 14/6, 14/7, 14/26		14/46	FUEL STRAINER ASSEMBLY, Comprising 14/4, 14/8, 14/21 to 14/32
	14/9	Strainer Cover Packing		14/47	WATER STRAINER ASSEMBLY, Comprising 14/24, 14/25, 14/33 to 14/37, 14/39, 14/44 } As for Cast Iron Flanges
	14/10	Split Pin, $\frac{3}{16}$ " diam. \times $\frac{3}{4}$ " long, for 14/2.		14/48	WATER STRAINER ASSEMBLY, Comprising 14/24, 14/25, 14/33 to 14/37, 14/40 to 14/44 } As for Gun Metal Flanges
	14/11	Split Pin, $\frac{5}{16}$ " diam. \times 1" long, for 14/2			
	14/12	Strainer Cage—Inner			
	14/13	Strainer Cage—Outer			
	14/14	Strainer Cage Spring			
	14/15	Wing Nut, $\frac{3}{8}$ " Wh., fitted with 14/16, 14/2			
	14/16	Packing for 14/15			
	14/17	Strainer Vent Valve Body, fitted with 14/18			
	14/18	Strainer Vent Valve, fitted with 14/17			
	14/19	Reducing Union Stock, $\frac{1}{2}$ " Gas \times $\frac{3}{8}$ " Gas, for 14/1			
	14/20	Union Nut and Tail, for 14/1, 14/21			
	14/21	Fuel Strainer Body, fitted with 14/22 to 14/25, 14/27			
	14/22	Strainer Body Plug, fitted with 14/23			
	14/23	Packing for 14/22			
	14/24	Strainer Cover Stud, fitted with 14/25, for 14/21, 14/33			
	14/25	Wing Nut, $\frac{5}{16}$ " Wh., for 14/24			
	14/26	Strainer Cover, fitted with 14/27			
	14/27	Strainer Cover Packing			
	14/28	Strainer Cage			
	14/29	Strainer Cage Spring			
	14/30	Union Stock, $\frac{1}{2}$ " Gas \times $\frac{1}{2}$ " Gas, for 14/21			
	14/31	Drain Cock, fitted with 14/32, for 14/21			
	14/32	Packing for 14/31			
	14/33	Water Strainer Body, fitted with 14/24, 14/25, 14/35, 14/44			
	14/34	Strainer Cover, fitted with 14/35			
	14/35	Strainer Cover Packing			
	14/36	Strainer Cage			
	14/37	Strainer Cage Spring			
	14/38	Pipe Flange—Cast Iron, 1" Gas, fitted with 14/44, for 14/33			

When ordering it is important to quote the Number of the Engine, and also the Number of the Part.

GARDNER

WATER PIPES—Section 15—Plate 30





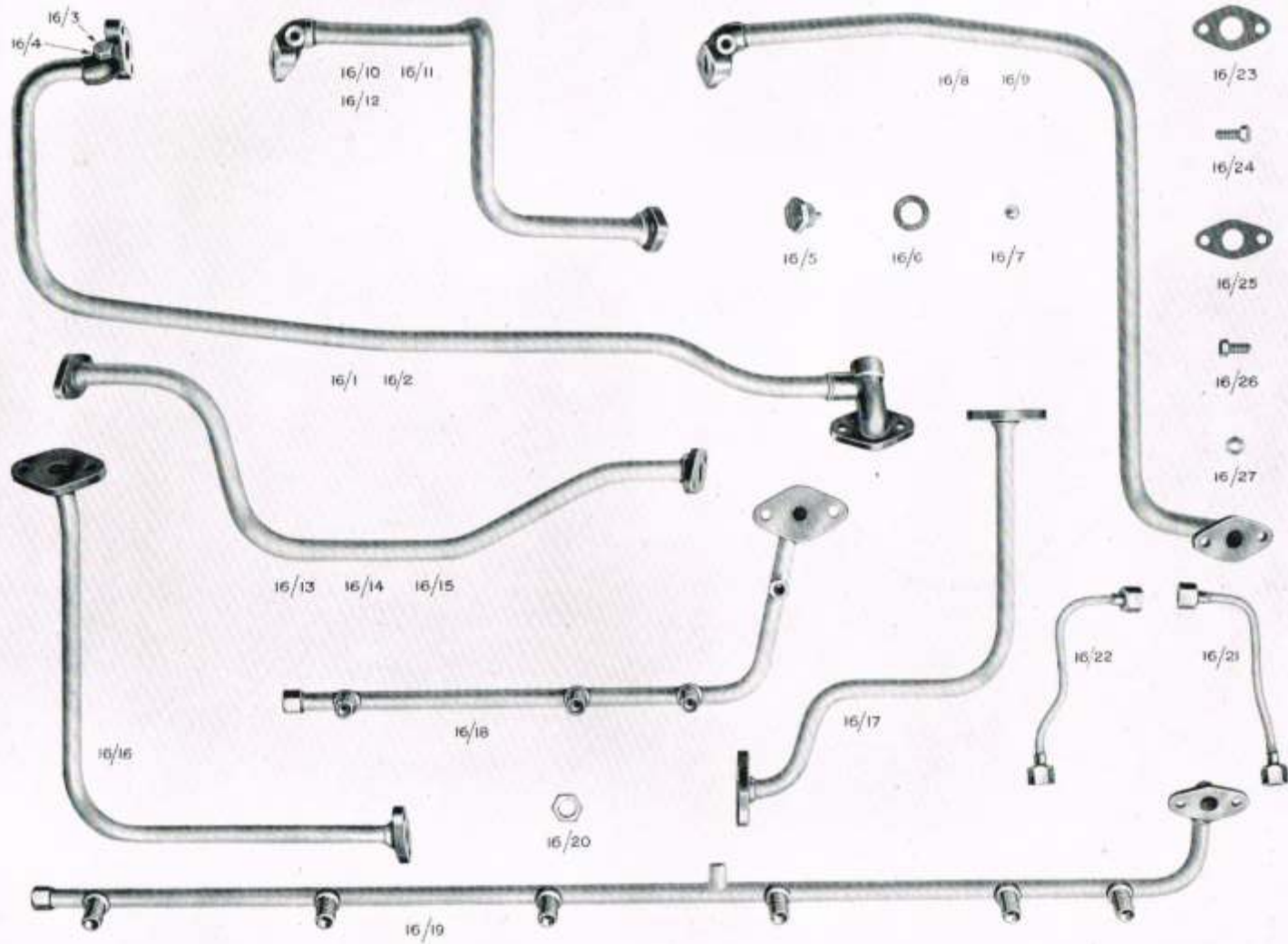
WATER PIPES—Section 15

Plate No.	Part No.	Description	Plate No.	Part No.	Description
30	15/1	Ram Pump Water Delivery Connection, fitted with 5/36 or 6/57			
	15/2	Ram Pump Cylinder Water Inlet Pipe, fitted with 1/28			
	15/3	Centrifugal Pump Water Delivery Connection, fitted with 5/36 or 5/76, or 6/57	2L2		
	15/4	Centrifugal Pump Cylinder Water Inlet Pipe, fitted with 1/28	3L2		
	15/5	Rubber Hose, for 15/1 to 15/4			
	15/6	Hose Clip			
	15/7	Water Pump Delivery Connection, fitted with 5/36 or 6/57	4L2, 5L2, 6L2		
	15/8	Ram Pump Water Inlet Pipe Bend	4L2		
	15/9	Ram Pump Water Inlet Pipe Bend	5L2, 6L2		
	15/10	Cylinder Water Inlet Pipe, fitted with 1/28	4L2, 5L2, 6L2		
	15/11	Centrifugal Pump Water Inlet Pipe Bend	4L2		
	15/12	Centrifugal Pump Water Inlet Pipe Bend	5L2, 6L2		
	15/13	Rubber Hose, for 15/7 to 15/12			
	15/14	Water Outlet Elbow, fitted with 2/31, 15/21	3L2		
	15/15	Water Outlet Elbow, fitted with 2/31, 15/21	5L2		
	15/16	Water Outlet Pipe, 7½" centres, fitted with 2/31, 15/21			
	15/17	Water Outlet Pipe, 8½" centres, fitted with 2/31, 15/21			
	15/18	Flange—Blank, fitted with 15/21, for 15/16, 15/17			
	15/19	Pipe Flange—Brass, 1" bore, fitted with 15/21, for 15/16, 15/17, 15/25			
	15/20	Pipe Flange—Cast Iron, 1" Gas, fitted with 15/21, for 15/16, 15/17, 15/25			
	15/21	Packing, Flange, 2" centres × 1½" wide, for 15/14 to 15/20, 15/25, 15/26			
	15/22	Bolt, ⅜" Wh. × 1⅝" long × ¼" Hex., fitted with 15/24, for 15/14 to 15/19			
	15/23	Bolt, Hex. Head, ⅜" Wh. × 1¾" long, fitted with 15/24, for 15/20			
	15/24	Nut, Hex., ⅜" Wh., for 15/22, 15/23, 15/27			
	15/25	Temperature Control Tee, fitted with 15/21			
	15/26	Adapter—Flanged, 1" Gas, fitted with 15/21			
	15/27	Bolt, Hex. Head, ⅜" Wh. × 2¾" long, fitted with 15/24, for 15/19, 15/25, 15/26			
	15/28	Nipple—Screwed, ½" Gas, for 15/25, 15/29			
	15/29	Union Cock, ½" Gas			

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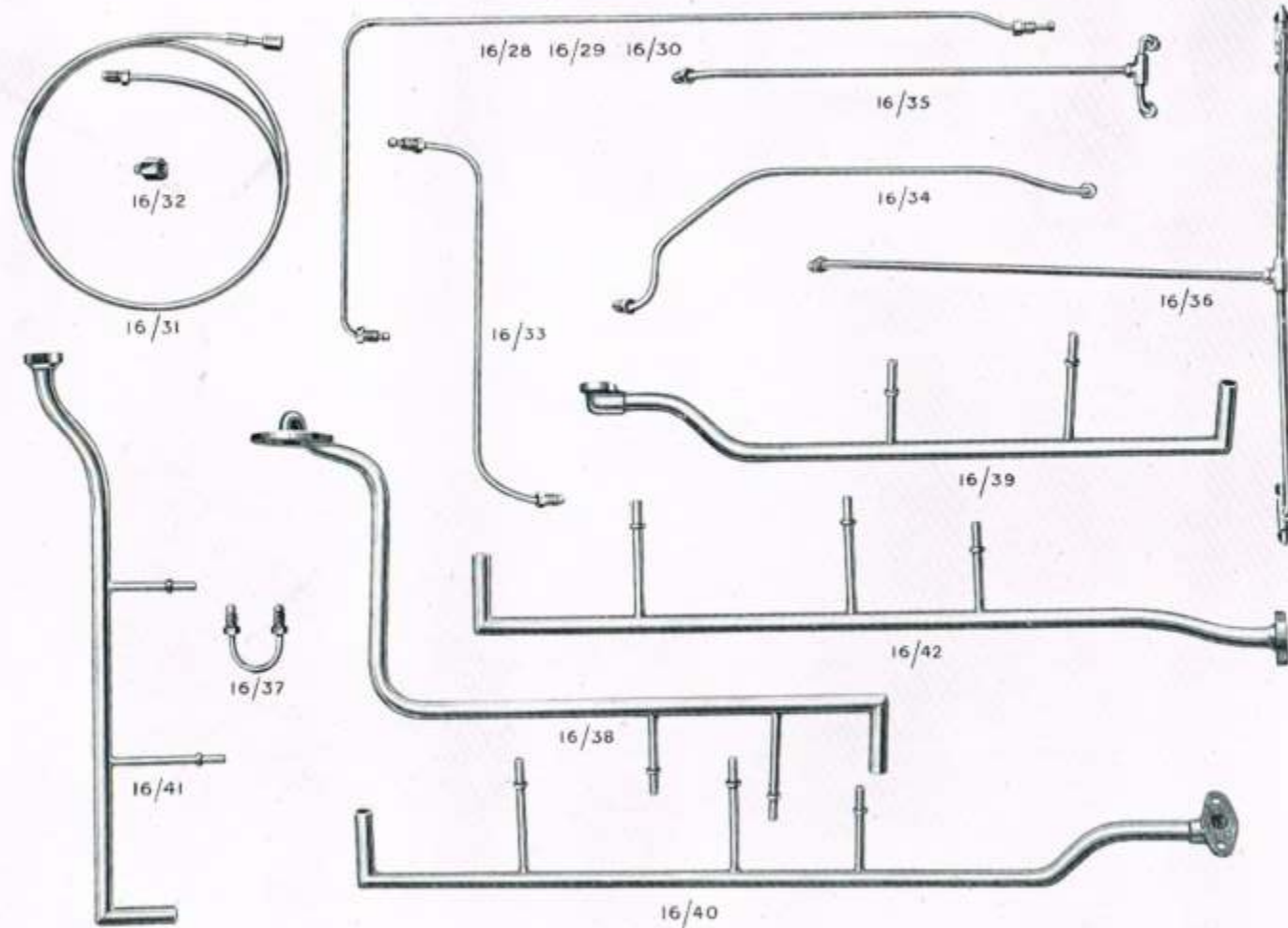
GARDNER.

PIPE WORK—LUBRICATION—Section 16—Plate 31



GARDNER.

PIPE WORK—LUBRICATION—Section 16—Plate 32





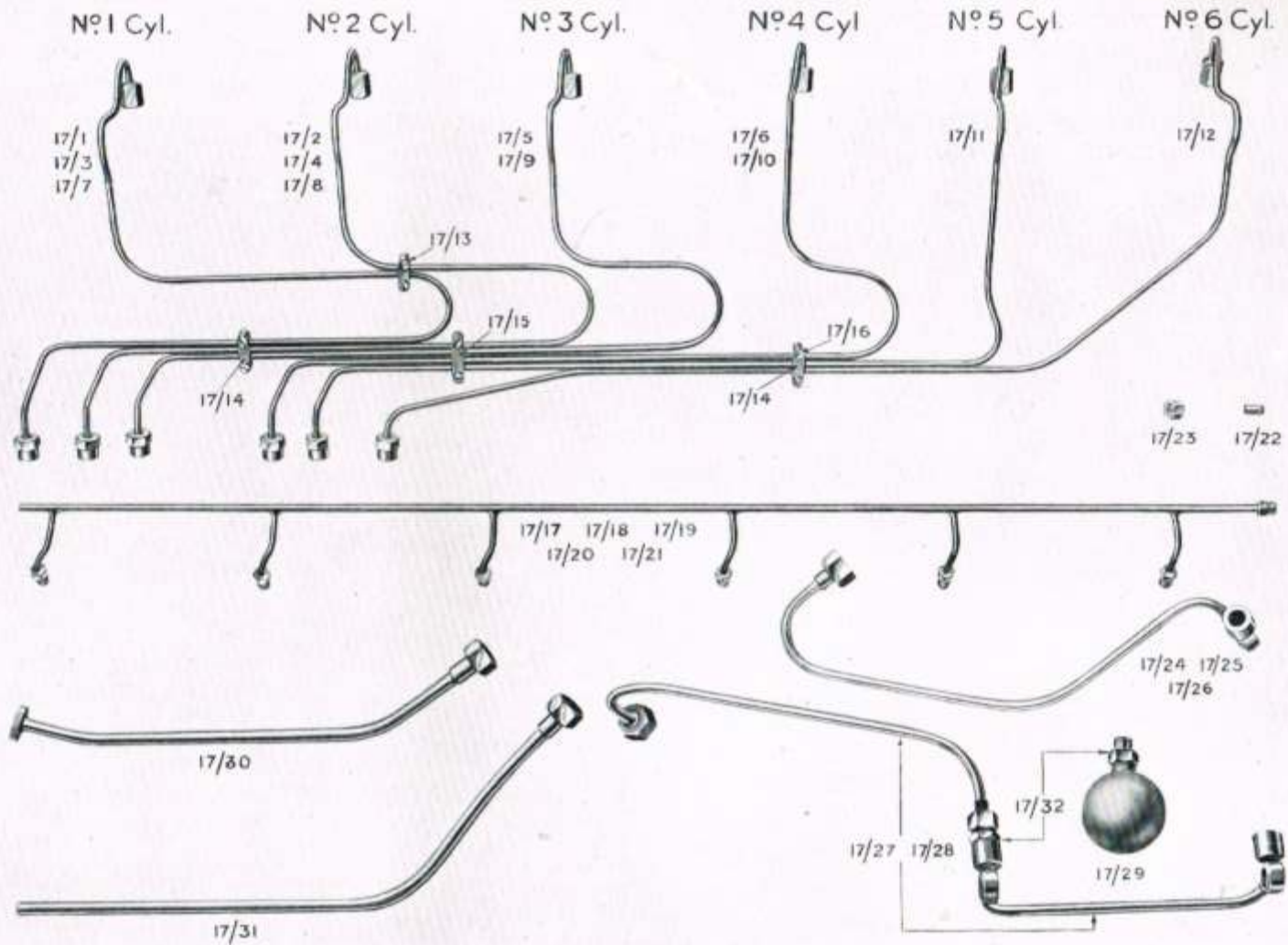
PIPE WORK—LUBRICATION—Section 16

Plate No.	Part No.	Description	Plate No.	Part No.	Description		
31	16/1	Pipe, Foot Valve to Pump—Forward Rotation, fitted with 16/3 to 16/7, 16/23, 13/17	31	16/22	Pipe, Branch to Main Bearings—All Bearings except Flywheel End		
	16/2	Pipe, Foot Valve to Pump—Reverse Rotation, fitted with 16/3 to 16/7, 16/23, 13/17		16/23	Packing, Flange, 2" centres × 1½" wide, for 16/1, 16/2 (Foot Valve End)		
	16/3	Plug, Hex. Head, ½" Gas × ⅝" Hex., fitted with 16/4, in 16/1, 16/2		16/24	Setscrew, Hex. Head, ⅝" Wh. × ⅝" long, for 16/1, 16/2 (Foot Valve End)		
	16/4	Packing for 16/3		16/25	Packing, Flange, 1½" centres × 1½" wide, for 16/16, 16/17, 16/19		
	16/5	Foot Valve Body Plug, fitted with 16/6		16/26	Bolt, Hex. Head, ⅝" Wh. × 1" long, fitted with 16/27, joining pipes 16/16, 16/17, 16/19		
	16/6	Packing for 16/5		16/27	Nut, Hex., ⅝" Wh., for 16/26		
	16/7	Ball, Steel, ⅜" diam. in 16/5		32	16/28	Pipe—To Pressure Gauge, Engine Mounting	2L2
	16/8	Pipe, Pump to "A.K." Strainer—Forward Rotation, fitted with 13/17, 13/31			16/29	Pipe—To Pressure Gauge, Engine Mounting	3L2
	16/9	Pipe, Pump to "A.K." Strainer—Reverse Rotation, fitted with 13/17, 13/31			16/30	Pipe—To Pressure Gauge, Engine Mounting	4L2 5L2 6L2
	16/10	Pipe, Pump to "A.K." Strainer—Forward Rotation, fitted with 13/17, 13/31			16/31	Pipe—To Pressure Gauge, Dashboard Mounting	
	16/11	Pipe, Pump to "A.K." Strainer—Reverse Rotation, fitted with 13/17, 13/31			16/32	Adapter, ½" Gas × ¼" Gas, for 16/31	
	16/12	Pipe, Pump to "Gardner" Strainer—Reverse Rotation, fitted with 13/17, 13/31			16/33	Pipe—Distribution to Valve Levers	2L2
	16/13	Pipe, Pump to "A.K." Strainer—Forward Rotation, fitted with 13/17, 13/31			16/34	Pipe—Distribution to Valve Levers	3L2
	16/14	Pipe, Pump to "A.K." Strainer—Reverse Rotation, fitted with 13/17, 13/31			16/35	Pipe—Distribution to Valve Levers	4L2, 5L2
	16/15	Pipe, Pump to "Gardner" Strainer—Reverse Rotation, fitted with 13/17, 13/31			16/36	Pipe—Distribution to Valve Levers	6L2
	16/16	Pipe, "A.K." Strainer to Distribution Pipe, fitted with 13/34, 16/25			16/37	Pipe—"U" Pipe to Valve Levers	
	16/17	Pipe, "Gardner" Strainer to Distribution Pipe, fitted with 13/49, 16/25		16/38	Pipe—"A.K." Strainer to Governor and Gears, fitted with 13/32	2L2	
	16/18	Pipe, "A.K." Strainer to Main Bearings, fitted with 13/34, 16/20		16/39	Pipe—"A.K." Strainer to Governor and Gears, fitted with 13/32	3L2 4L2	
	16/19	Pipe, Distribution to Main Bearings, fitted with 16/20, 16/25		16/40	Pipe—"A.K." Strainer to Governor and Gears, fitted with 13/32	5L2 6L2	
	16/20	Nut, ½" Gas × ⅝" Hex., for 16/18, 16/19		16/41	Pipe—"Gardner" Strainer to Governor and Gears, fitted with 13/32	3L2 4L2	
	16/21	Pipe, Branch to Main Bearings, Flywheel End		16/42	Pipe—"Gardner" Strainer to Governor and Gears, fitted with 13/32	5L2 6L2	

When ordering it is important to quote the Number of the Engine, and also the Number of the Part.

GARDNER

FUEL PIPES AND WATER TEMPERATURE CONTROL PIPES—Section 17—Plate 33





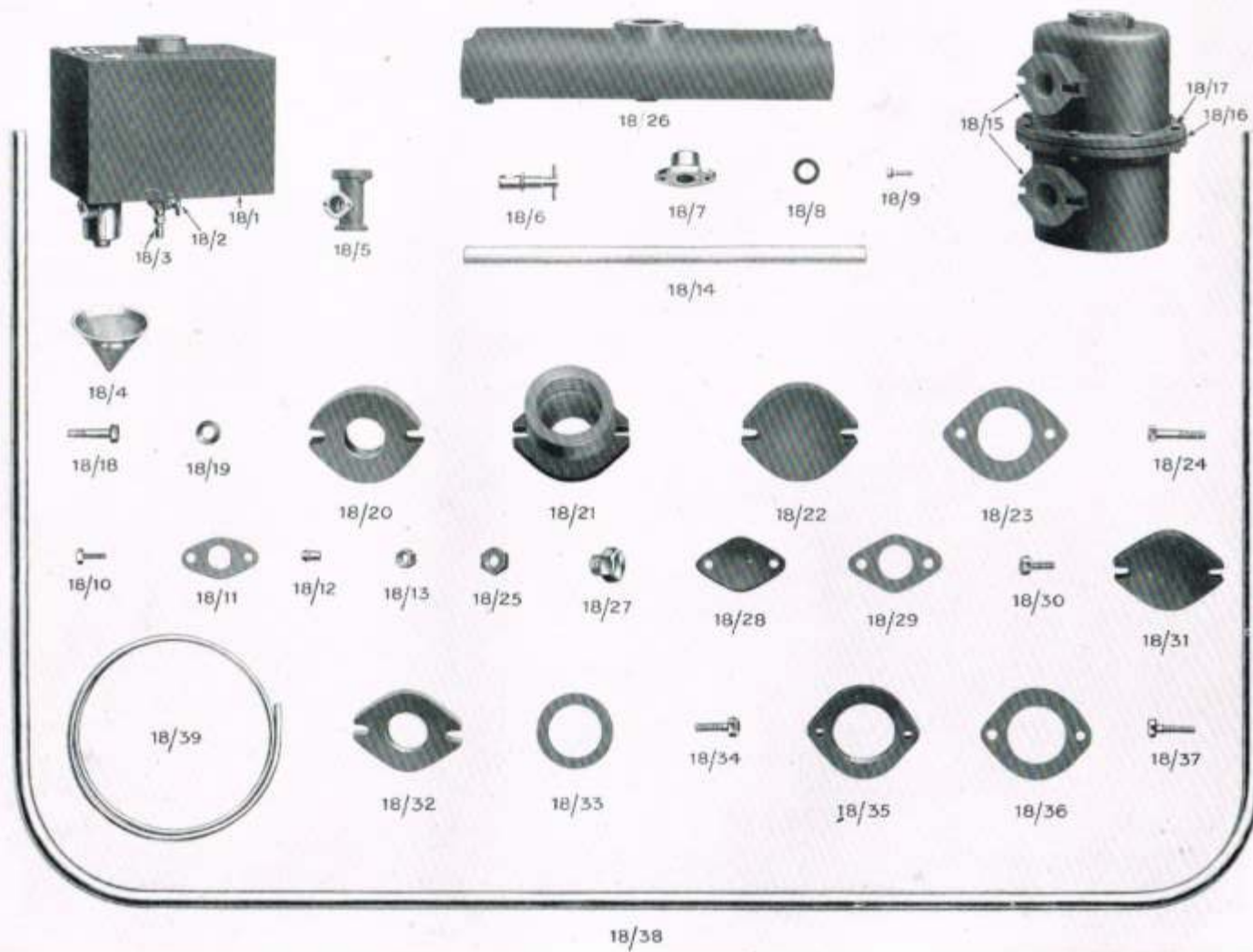
FUEL PIPES AND WATER TEMPERATURE CONTROL PIPES—Section 17

Plate No.	Part No.	Description	Plate No.	Part No.	Description
33	17/1	Sprayer Pipe—No. 1 Cylinder		2L2	
	17/2	Sprayer Pipe—No. 2 Cylinder		2L2	
	17/3	Sprayer Pipe—No. 1 Cylinder		3L2, 4L2	
	17/4	Sprayer Pipe—No. 2 Cylinder		3L2, 4L2	
	17/5	Sprayer Pipe—No. 3 Cylinder		3L2, 4L2	
	17/6	Sprayer Pipe—No. 4 Cylinder		4L2	
	17/7	Sprayer Pipe—No. 1 Cylinder		5L2, 6L2	
	17/8	Sprayer Pipe—No. 2 Cylinder		5L2, 6L2	
	17/9	Sprayer Pipe—No. 3 Cylinder		5L2, 6L2	
	17/10	Sprayer Pipe—No. 4 Cylinder		5L2, 6L2	
	17/11	Sprayer Pipe—No. 5 Cylinder		5L2, 6L2	
	17/12	Sprayer Pipe—No. 6 Cylinder		6L2	
	17/13	Sprayer Pipe Clip—2 Pipes, fitted with 17/16			
	17/14	Sprayer Pipe Clip—3 Pipes, fitted with 17/16			
	17/15	Sprayer Pipe Clip—4 Pipes, fitted with 17/16			
	17/16	Setcrew, Cheese Head, 1 B.A. $\times \frac{1}{16}$ " long, for 17/13, 17/14, 17/15			
	17/17	Sprayer Overflow Pipe		2L2	
	17/18	Sprayer Overflow Pipe		3L2	
	17/19	Sprayer Overflow Pipe		4L2	
	17/20	Sprayer Overflow Pipe		5L2	
	17/21	Sprayer Overflow Pipe		6L2	
	17/22	Union Tail, fitted with 17/23, for 17/17 to 17/21			
	17/23	Union Nut, fitted with 17/22			
	17/24	Fuel Pump Supply Pipe, fitted with 17/32		2L2	
	17/25	Fuel Pump Supply Pipe, fitted with 17/32		3L2	
	17/26	Fuel Pump Supply Pipe, fitted with 17/32		4L2	
	17/27	Fuel Pump Supply Pipe, fitted with 17/32		5L2	
	17/28	Fuel Pump Supply Pipe, fitted with 17/32		6L2	
	17/29	Fuel Pump Supply Pipe Air Vessel, fitted with 17/32			
	17/30	Water Temperature Control Pipe—Centrifugal Pump, fitted with 5/37 or 5/77			
	17/31	Water Temperature Control Pipe—Ram Pump			
	17/32	Packing, Fibre, for 17/24 to 17/29			
	17/33	Set of Sprayer Pipes, fitted with 17/13, 17/16		2L2	
	17/34	Set of Sprayer Pipes, fitted with 17/13, 17/14, 17/16		3L2	
	17/35	Set of Sprayer Pipes, fitted with 17/14, 17/16		4L2	
	17/36	Set of Sprayer Pipes, fitted with 17/13 to 17/16		5L2	
	17/37	Set of Sprayer Pipes, fitted with 17/13 to 17/16		6L2	

When ordering it is important to quote the Number of the Engine, and also the Number of the Part.

GARDNER

FUEL TANKS AND EXHAUST SILENCERS—Section 18—Plate 34



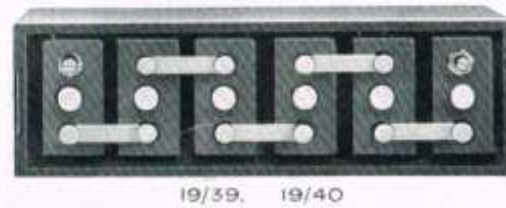
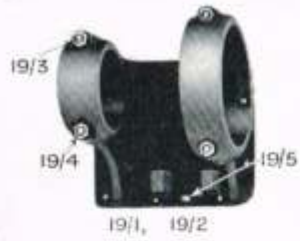


FUEL TANK AND EXHAUST SILENCERS—Section 18

Plate No.	Part No.	Description	Plate No.	Part No.	Description
34	18/1	Fuel Tank, fitted with 18/2, 18/4, 18/11	34	18/35	Flange, 3" Gas, fitted with 18/36, for 18/26
	18/2	Union Tap, $\frac{1}{2}$ " Gas		18/36	Packing, Flange, $4\frac{1}{4}$ " centres \times 5" wide, for 18/35
	18/3	Union Nut, Tail and Coupling for 18/2		18/37	Set screw, Hex. Head, $\frac{1}{2}$ " Wh. \times 2" long, for 18/35
	18/4	Tank Filling Strainer		18/38	Pipe, Copper, $\frac{3}{8}$ " outside diam. \times 8 feet long (Fuel Supply)
	18/5	Tank Level Body, fitted with 18/8, 18/11		18/39	Pipe, Copper, $\frac{5}{16}$ " outside diam. \times 6 feet long (Sprayer Overflow)
	18/6	Tank Level Cock		18/40	FUEL TANK ASSEMBLY, Comprising 18/1, 18/2, 18/4 to 18/11, 18/14
	18/7	Tank Level Gland, fitted with 18/8		18/41	FUEL TANK LEVEL GAUGE ASSEMBLY, Comprising 18/5 to 18/9, 18/11
	18/8	Packing, Cork, for 18/5, 18/7			
	18/9	Set screw, Cheese Head, 2 B.A. \times $\frac{3}{8}$ " long, for 18/7			
	18/10	Set screw, Hex. Head, $\frac{1}{4}$ " Wh. \times $\frac{3}{8}$ " long, for 18/5			
	18/11	Packing, Flange, Fibre, 2" centres \times $1\frac{1}{2}$ " wide, for 18/1, 18/5			
	18/12	Union Tail, fitted with 18/13			
	18/13	Union Nut, fitted with 18/12, for 18/1			
	18/14	Tank Level Glass			
	18/15	Exhaust Silencer—Stationary Type, fitted with 18/16, 18/17, 18/23			
	18/16	Packing, Asbestos Cord, $\frac{5}{16}$ " diam., for 18/15			
	18/17	Bolt and Nut, Sq. Head, $\frac{3}{8}$ " Wh. \times $1\frac{1}{2}$ " long, for 18/15			
	18/18	Bolt, Sq. Head, $\frac{1}{2}$ " Wh. \times $2\frac{1}{4}$ " long, fitted with 18/19, 18/26, for 18/21			
	18/19	Washer, Steel, $\frac{1}{2}$ " bore, for 18/18, 18/24			
	18/20	Pipe Flange, 2" Gas, fitted with 18/23, for 18/15			
	18/21	Pipe Connection, 3" Gas, fitted with 18/23, for 18/15			
	18/22	Flange, Slotted, Blank, fitted with 18/23, for 18/15			
	18/23	Packing for 18/20, 18/21, 18/22			
	18/24	Bolt, Sq. Head, $\frac{1}{2}$ " Wh. \times $2\frac{3}{4}$ " long, fitted with 18/19, 18/25, for 18/20, 18/22			
	18/25	Nut, Hex., for 18/18 18/24			
	18/26	Exhaust Silencer—Marine Type, fitted with 18/27, 18/29, 18/33, 18/36			
	18/27	Plug, Hex. Head, $\frac{1}{4}$ " Gas \times $\frac{3}{8}$ " Hex., for 18/26			
	18/28	Flange, Blank, $2\frac{1}{4}$ " centres \times $1\frac{1}{2}$ " wide, fitted with 18/29, for 18/36			
	18/29	Packing, Flange, $2\frac{3}{4}$ " centres \times $1\frac{1}{2}$ " wide, for 18/28			
	18/30	Set screw, Hex. Head, $\frac{3}{16}$ " Wh. \times 1" long, for 18/28			
	18/31	Flange, Blank, $4\frac{1}{4}$ " centres \times $4\frac{1}{2}$ " wide, fitted with 18/33, for 18/26			
	18/32	Flange, 2" Gas, fitted with 18/33, for 18/26			
	18/33	Packing, Flange, Circular, for 18/31, 18/32			
	18/34	Set screw, Hex. Head, $\frac{1}{2}$ " Wh. \times $1\frac{1}{2}$ " long, for 18/31, 18/32			

When ordering it is important to quote the Number of the Engine, and also the Number of the Part.

ELECTRIC STARTING — Section 19 — Plate 35





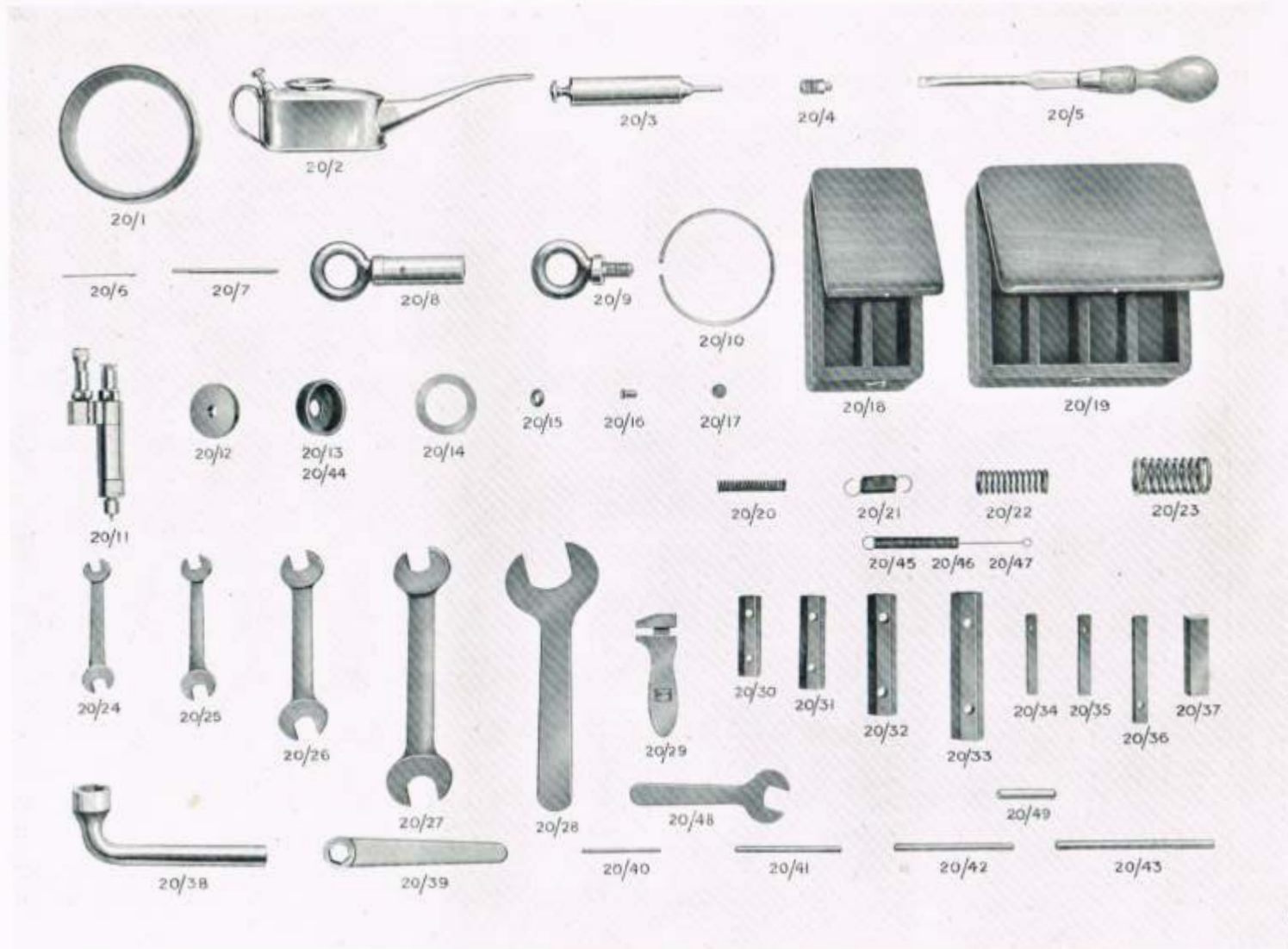
ELECTRIC STARTING—Section 19

Plate No.	Part No.	Description	Plate No.	Part No.	Description	
35	19/1	Electric Starter Bracket, fitted with 19/3 to 19/6	35	19/37	Bolt, Sq. Head., $\frac{3}{8}$ " Wh. \times $1\frac{1}{4}$ " long, fitted with 19/38, for 19/24, 19/25	
	19/2	Electric Starter Bracket, fitted with 19/3 to 19/6		19/38	Nut, Hex., $\frac{3}{8}$ " Wh., for 19/37	
	19/3	Stud, $\frac{3}{8}$ " Wh. \times $3\frac{1}{2}$ " long, fitted with 19/4		19/39	Battery, in case, 12 volt, 105 A.H. 2L2, 3L2	
	19/4	Nut, Hex., $\frac{3}{8}$ " Wh.		19/40	Battery, in case, 12 volt, 143 A.H. 4L2, 5L2, 6L2	
	19/5	Steady Peg, $\frac{3}{16}$ " diam. \times $\frac{3}{4}$ " long				
	19/6	Packing for 19/1, 19/2				
	19/7	Setscrew, Hex. Head, $\frac{1}{4}$ " Wh. \times $\frac{3}{8}$ " long, for 19/1, 19/2				
	19/8	Stud, $\frac{1}{4}$ " Wh. \times 1" long, fitted with 19/9, for 19/1, 19/2				
	19/9	Nut, Hex., $\frac{1}{4}$ " Wh., for 19/8				
	19/10	Stud, $\frac{3}{8}$ " Wh. \times $1\frac{1}{16}$ " long, fitted with 19/11, for 19/1, 19/2				
	19/11	Nut, Hex., $\frac{3}{8}$ " Wh., for 19/10				
	19/12	Starter Switch—Direct Type				
	19/13	Starter Switch Bracket, fitted with 19/14				
	19/14	Setscrew, Countersunk Head, $\frac{1}{4}$ " B.S.F. \times $\frac{3}{4}$ " long, for 19/12				
	19/15	Stud, $\frac{5}{16}$ "—22 thds. \times $\frac{7}{8}$ " long, fitted with 19/16, for 19/13				
	19/16	Nut, Hex., $\frac{5}{16}$ "—22 thds. \times $\frac{1}{4}$ " Hex., for 19/15				
	19/17	Starter Switch—Solenoid Type				
	19/18	Starter Solenoid, fitted with 19/19				
	19/19	Setscrew, Cheese Head, 1 B.A. \times $\frac{1}{2}$ " long, for 19/18				
	19/20	Starter—Forward Rotation Engine 2L2, 3L2				
	19/21	Starter—Reverse Rotation Engine 2L2, 3L2				
	19/22	Starter—Forward Rotation Engine 4L2, 5L2, 6L2				
	19/23	Starter—Reverse Rotation Engine 4L2, 5L2, 6L2				
	19/24	Starting Dynamo and Cradle—Forward Rotation Engine				
	19/25	Starting Dynamo and Cradle—Reverse Rotation Engine				
	19/26	Dynamo Cut-Out				
	19/27	Fuse Box				
	19/28	Dynamo Bracket, fitted with 19/29, 19/37, 19/38 (for Conic Reverse Gear Mounting)				
	19/29	Steady Peg, $\frac{3}{16}$ " diam. \times $1\frac{1}{16}$ " long				
	19/30	Dynamo Driving Pulley, $4\frac{1}{4}$ " effective diam., fitted with 19/31 (for Conic Reverse Gear Mounting)				
	19/31	Setscrew, Sq. Head—Pointed, $\frac{1}{4}$ "—28 thds. \times $\frac{11}{16}$ " long, for 19/30				
	19/32	Dynamo Driven Pulley, 3" effective diam.				
	19/33	Ammeter, Double Reading				
	19/34	Whittle Belt, $\frac{1}{2}$ " wide				
	19/35	Crankcase Door, $6\frac{1}{2}$ " \times $7\frac{1}{2}$ " wide, fitted with 19/36		} 2L2, 4L2, 5L2 (Electric Starting Engines only)		
	19/36	Packing for 19/35				

When ordering it is important to quote the Number of the Engine, and also the Number of the Part.

GARDNER

STANDARD SPARES, ACCESSORIES AND SPANNERS—Section 20—Plate 36





STANDARD SPARES, ACCESSORIES AND SPANNERS—Section 20

Plate No.	Part No.	Description	Plate No.	Part No.	Description	
36	20/1	Piston Entering Guide	36	20/38	Spanner, Box, Bent, $\frac{1}{2}$ " Hex. (Main Bearing Cap Stud)	
	20/2	Oil Can		20/39	Spanner, Ring, $\frac{3}{8}$ " Hex. (Connecting Rod Bolt)	
	20/3	Sprayer Cleaning Squirt		20/40	Tommy Bar, $\frac{3}{8}$ " diam.	
	20/4	Squirt Nozzle		20/41	Tommy Bar, $\frac{1}{2}$ " diam.	
	20/5	Screwdriver		20/42	Tommy Bar, $\frac{5}{16}$ " diam.	
	20/6	Sprayer Pricker		20/43	Tommy Bar, $\frac{3}{8}$ " diam.	
	20/7	Sprayer Valve Grinding Spindle		20/44	Water Pump (Ram Type) and Bilge Pump Cup Washer with Liner (same as 6/7)	
	20/8	Lifting Eye for Engine		20/45	Governor Lever Spring, for Electric Lighting Engines (same as 11/32)	2L2
	20/9	Lifting Eye Bolt for Flywheel				
	20/10	Piston Ring—Standard (same as 9/25)		20/46	Governor Lever Spring, for Electric Lighting Engines (same as 11/33)	3L2 5L2 6L2
	20/11	Sprayer Assembly (same as 2/69)				
	20/12	Water Pump (Ram Type) and Bilge Pump Valve (same as 6/20)		20/47	Governor Lever Spring, for Electric Lighting Engines (same as 11/34)	4L2
	20/13	Water Pump (Ram Type) and Bilge Pump Cup Washer with Liner (same as 6/2)				
	20/14	Washer, Copper and Asbestos, for 10/61 to 10/65 (same as 10/60)		20/48	Spanner, Single Ended, $\frac{1}{2}$ " Hex. Locknut (Sprayer Cap)	
	20/15	Joint Ring—Cylinder to Cylinder Head (same as 1/24)		20/49	Sprayer Nozzle Drift	
	20/16	Cylinder Water Connection Tube (same as 1/25)		20/50	Water Pump (Ram Type) and Bilge Pump Cup Washer (same as 6/84)	
	20/17	Sprayer Washer (same as 2/40)		20/51	Water Pump (Ram Type) and Bilge Pump Cup Washer with Liner (same as 6/88)	
	20/18	Spares Box for Two Sprayers				
	20/19	Spares Box for Four Sprayers		CANCELLED		
	20/20	Lubricating Oil Relief Valve Spring (same as 13/27)				
	20/21	Governor Lever Spring (same as 12/38). Not fitted on Electric Lighting Engines				
	20/22	Inlet and Exhaust Valve Spring—Inner (same as 2/11)				
	20/23	Inlet and Exhaust Valve Spring—Outer (same as 2/12)				
	20/24	Spanner, Double Ended, $\frac{3}{16}$ " \times $\frac{1}{4}$ "				
	20/25	Spanner, Double Ended, $\frac{1}{4}$ " \times $\frac{5}{16}$ "				
	20/26	Spanner, Double Ended, $\frac{3}{8}$ " \times $\frac{7}{16}$ "				
	20/27	Spanner, Double Ended, $\frac{1}{2}$ " \times $\frac{5}{8}$ "				
	20/28	Spanner, Single Ended, 1" Hex. Locknut				
	20/29	Spanner, Adjustable, 4"				
	20/30	Spanner, Tube, $\frac{5}{16}$ " Hex.				
	20/31	Spanner, Tube, $\frac{3}{8}$ " Hex.				
	20/32	Spanner, Tube, $\frac{1}{2}$ " Hex.				
	20/33	Spanner, Tube, $\frac{1}{2}$ " Hex.				
	20/34	Spanner, Tube, $\frac{1}{4}$ " Sq.				
	20/35	Spanner, Tube, $\frac{5}{16}$ " Sq.				
	20/36	Spanner, Tube, $\frac{3}{8}$ " Sq.				
	20/37	Spanner, Bar, $\frac{3}{4}$ " Sq.				

When ordering it is important to quote the Number of the Engine, and also the Number of the Part.