



Supersedes Manual Pages D226/850
thru D226/859 issued April, 1961.

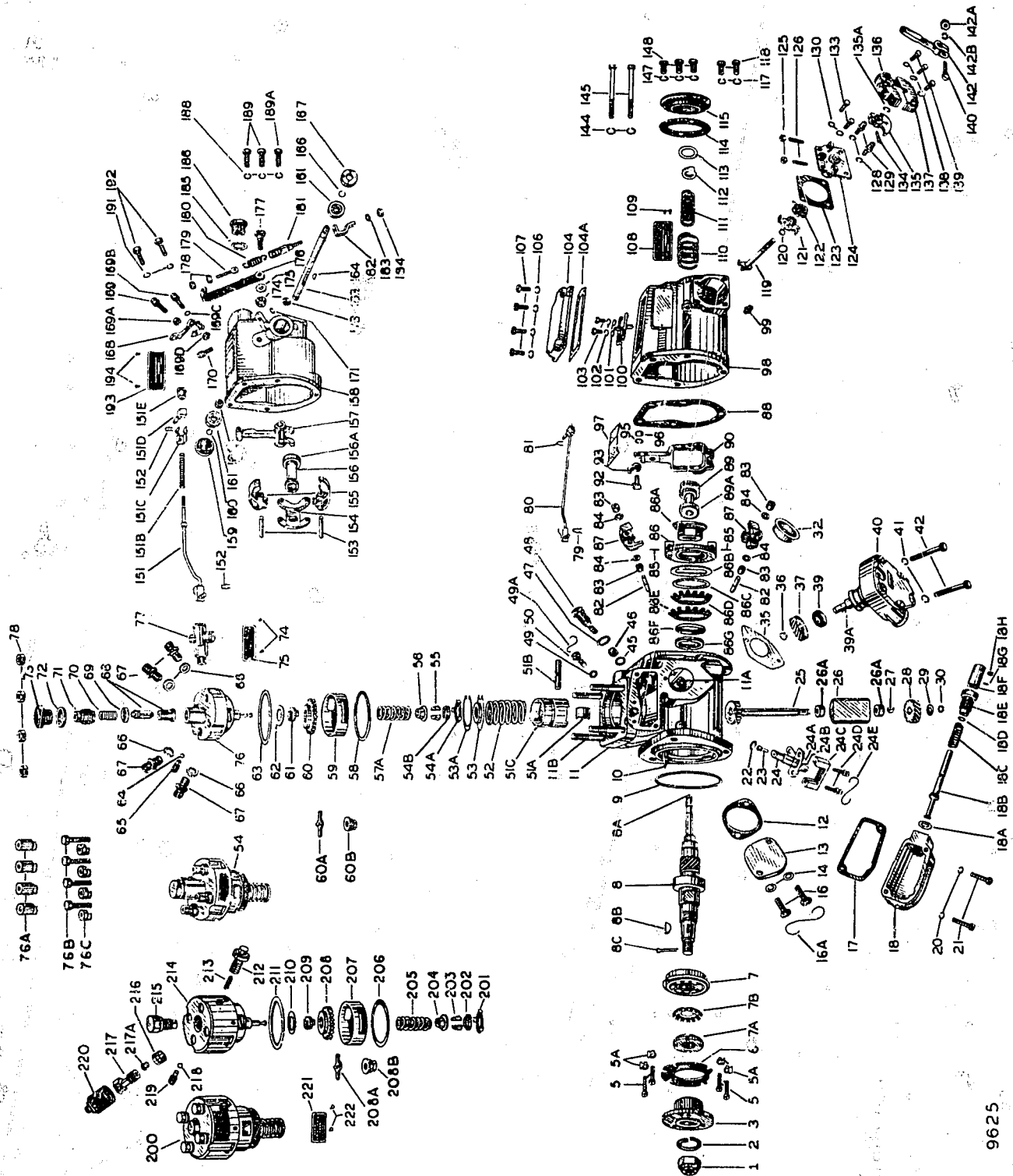
AMERICAN BOSCH
SERVICE PARTS LIST
For
FUEL INJECTION PUMPS

PSB 4A 65-100 EH 1

And

PSB 4A 65-100 WH 1





9625

PSB 4A 65-100 EH 1

NOTE: This pump is equipped with an internal spring type governor with friction clutch.

The part or parts affected by this reissue is indicated by a vertical line in the margin of the page.

Illustration Number	Part Number	Quantity Used	Description of Part
1	NT 909	1	NUT, hub — camshaft (Tighten to a torque of 45-55 ft. lbs.)
2	NMS 423/1X	1	WASHER, lock — hub screw
3	HB 9019	1	HUB, drive-Tapered
5	SC 1555	4	SCREW, fastening — ball bearing retaining plate
5A	WA 901	4	WASHER, lock — fastening screw
6	PL 907	1	PLATE, retaining — ball bearing
7	BB 1054	1	BEARING, ball — camshaft
7A	NT 905	1	NUT, round — camshaft ball bearing
7B	WA 1720	1	WASHER, lock — camshaft ball bearing
8	SH 9056A	1	CAMSHAFT — includes part 8A — Tapered Drive End
8A	SC 1149	1	SCREW AND LOCKWASHER — camshaft
8B	NKE 5/2X	1	KEY, Woodruff — camshaft
8C	PN 4-32BL	1	PIN, cotter — camshaft nut
9	GA 76200	1	GASKET, rubber ring
10	PO 765	1	POINTER, timing
11	HG 9023A	1	HOUSING, pump — includes parts 10, 11A and 11B
11A	BG 7649	1	BUSHING, camshaft
11B	SD 903	4	STUD, housing
12	GA 904	1	GASKET, quill shaft pad
13	CV 9047	1	PAD, quill shaft — pump housing
14	GA 7616	2	GASKET, fastening screw
16	SC 1119	2	SCREW, fastening — quill shaft pad
16A	WI 901	as required	WIRE LOCKING — quill shaft fastening screws
17	GA 9026	1	GASKET, timing window cover assembly
18	CV 9018	1	COVER, timing window
18A	GA 1036	1	GASKET, shut-off rod
***	RD 908A	1	SHUT-OFF ROD ASSEMBLY — includes parts 18B through 18H
18B	RD 903	1	ROD, shut-off
18C	SP 904	1	SPRING, shut-off rod
18D	GA 1019	1	GASKET, shut-off rod
18E	SC 904	1	SCREW, bearing
18F	FI 902	1	FITTING, shut-off
18G	PN 1026	1	PIN, shut-off rod
18H	SC 325-4BL	1	SCREW, set
20	WA 6-8BL	2	WASHER, lock — fastening screw
21	SC 27-20BL	2	SCREW, fastening — timing window assembly
22	GA 1014	1	GASKET, ring — control unit assembly
23	PN 9023	1	PIN, plunger sleeve
24	CU 9011A	1	CONTROL UNIT ASSEMBLY — includes parts 24A and 24B for left hand mounted pump — type designation stamped 11
24	CU 9010A	1	CONTROL UNIT ASSEMBLY — includes part 24A and 24B for right hand mounted pump — type designation stamped 10
24A	NT 4-6	1	NUT, hex — control unit
24B	WA 1648	1	WASHER, tab — control unit hex nut
24C	RN 9011	1	RETAINER, control unit
24D	SC 1700	2	SCREW WITH LOCKWASHER, fastening — control unit assembly
24E	WI 901	1	WIRE, locking — control unit fastening screw
***	SH 9071A	1	QUILL SHAFT ASSEMBLY, includes parts 25 thru 30
25	SH 909A	1	SHAFT, quill — with gear
26	BG 9032	1	BUSHING, quill shaft
26A	SR 9012	2	SPACER, quill shaft
27	KY 1006	1	KEY, Woodruff — quill shaft
28	GE 908	1	GEAR, camshaft driven
29	WMS 2157/4C0X	as required	WASHER, plain — .002" thick — to eliminate shaft play
	WMS 2157/1X	as required	WASHER, plain — .004" thick — to eliminate shaft play
	WMS 2157/2X	as required	WASHER, plain — .008" thick — to eliminate shaft play
	WMS 2157/3X	as required	WASHER, plain — .020" thick — to eliminate shaft play
30	RG 1014	1	RING, spring — quill shaft
32	PG 902	1	PLUG, closing
35	GA 903	1	GASKET, supply pump
36	RG 1014	1	RING, spring — supply pump shaft
37	GE 908	1	GEAR, drive — supply pump shaft
39	PK 7910	1	SEAL, oil — supply pump shaft
39A	KY 901	1	KEY, supply pump shaft
40	SGB 15 B1	1	SUPPLY PUMP ASSEMBLY — for parts see Fuel Supply Pump Section — for clockwise rotation pumps
40	SGB 15 B2	1	SUPPLY PUMP ASSEMBLY — for parts see Fuel Supply Pump Section for counterclockwise rotation pumps

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*** Not Shown Assembled

Illustration Number	Part Number	Quantity Used	Description of Part
41	WA 6-8 BL	2	WASHER, lock — fastening screw
42	SC 1516	2	SCREW, fastening — supply pump assembly
45	GA 1012	1	GASKET, ring — filter screw
46	FE 901	1	FILTER, screen
47	GA 7965	1	GASKET, filter screw
48	SC 903	1	SCREW, filter
49	GA 7616	1	GASKET, fastening screw
49A	WI 1073	as required	WIRE, locking — fastening
50	SC 1140	1	SCREW, locating — quill shaft bushing
***	TP 903A	1	TAPPET ASSEMBLY — includes parts 51A to 51C
51A	RL 903A	1	ROLLER ASSEMBLY, tappet
51B	PN 9013	1	PIN, tappet roller — diameter .3745 inch
51C	GU 9011A	1	GUIDE ASSEMBLY, tappet
52	SP 903	1	SPRING, plunger — outer
53	GU 9013	1	SEAT, spring — upper
53A	RG 903	1	RING, spring — upper spring seat
54	per requirement	1	HYDRAULIC HEAD ASSEMBLY — complete — includes parts 22, 45, 54A through 76A — for part number see name-plate
54A	RG 902	1	RING, retaining — button
54B	BO 901	1	BUTTON, plunger
55	HP 9015	1	LOCK, plunger — 2 piece
56	GU 909	1	SEAT, plunger spring — lower
57A	SP 901	1	SPRING, inner — plunger
58	GA 1009	1	GASKET, ring — head assembly
59	RN 9014	1	COVER, gear retainer — for left hand mounted pumps
59	RN 9015	1	COVER, gear retainer — for right hand mounted pumps
60	GE 909	1	GEAR, plunger drive — for clockwise rotation — left hand mounted pumps
60	GE 9010	1	GEAR, plunger drive for counterclockwise rotation — left hand mounted pumps
60	GE 901	1	GEAR, plunger drive — for clockwise rotation — right hand mounted pumps
60	GE 903	1	GEAR, plunger drive — for counterclockwise rotation — right hand mounted pumps
61	GU 903	1	GUIDE, plunger
62	WA 1362	1	WASHER, thrust — plunger drive gear
63	GA 1119	1	GASKET, ring — head assembly
64	BB 1024	1	BALL, sealing — set screw
65	SC 1352	1	SCREW, set — sealing ball
66	GA 9010	4	GASKET, discharge fittings
67	FI 901	4	FITTING, discharge — No notch on hex — Use with gasket (GA 9010)
67	FI 9012	4	FITTING, discharge — Notch on hex — Do not use gasket
68	VA 907A	1	DELIVERY VALVE ASSEMBLY — for plunger dia. of 6.5mm and 7.0mm
68	VA 908A	1	DELIVERY VALVE ASSEMBLY — for plunger dia. of 7.5mm to 9.0mm inclusive
68	VA 9010A	1	DELIVERY VALVE ASSEMBLY — for plunger dia. of 9.5mm and 10.0mm
69	GA 905	1	GASKET, delivery valve holder
70	SP 9015	1	SPRING, delivery valve
71	HP 9011	1	HOLDER, delivery valve
72	GA 906	1	GASKET, cap screw
73	SC 9018A	1	SCREW, cap — delivery valve
74	SC 150-2	2	SCREW, fastening — part number plate
75	NP 902	1	PLATE, part number — hydraulic head
76	Per Pump Specification		SEE NOTE 3
76A	SV 907	4	SLEEVE stud — hydraulic head — used with round head only
76B	SC 1862	4	SCREW, cap fastening hydraulic head — use with round heads only in place of studs
76C	SV 9018	4	SLEEVE, cap screw — hydraulic head — use with SC 1862 only
77	as per order	1	OVERFLOW VALVE ASSEMBLY — for parts see Safety Valve Section — for type designation see stamping on head of screw
78	NT 1127	4	NUT, fastening — hydraulic head assembly
79	PN 1122	1	HAIRPIN — control rod
80	RD 9032-1A	1	ROD, control — left hand mounted pumps
80	RD 9032-2A	1	ROD, control — right hand mounted pumps

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*** Not Shown Assembled



Illustration Number	Part Number	Quantity Used	Description of Part
81	PN 1122	1	HAIRPIN, control rod — governor end
***	WT 9013A	1	WEIGHT AND SPIDER ASSEMBLY — friction clutch includes parts 82 through 87 — See Note 1
82	PN 905A	2	PIN, weight
83	BG 903	4	BUSHING, weight
84	WA 1448-1	as required	WASHER, plain — weight pin — .036" thick
84	WA 1448-2	as required	WASHER, plain — weight pin — .038" thick
84	WA 1448-3	as required	WASHER, plain — weight pin — .040" thick
84	WA 1448-4	as required	WASHER, plain — weight pin — .044" thick
84	WA 1448-5	as required	WASHER, plain — weight pin — .048" thick
85	PN 1105	2	PIN, roll
86	HP 9014	1	SPIDER, weight
86A	HB 909	1	HUB, friction drive
86B	RN 9013	1	RETAINER, hub
86C	SR 794-1	as required	SPACER, adjusting — spider — .035" thick
86C	SR 794-2	as required	SPACER, adjusting — spider — .049" thick
86C	SR 794-3	as required	SPACER, adjusting — spider — .065" thick
86C	SR 794-4	as required	SPACER, adjusting — spider — .020" thick
86C	SR 794-5	as required	SPACER, adjusting — spider — .015" thick
86C	SR 794-6	as required	SPACER, adjusting — spider — .010" thick
86C	SR 794-7	as required	SPACER, adjusting — spider — .005" thick
86D	DC 796	1	DISC, spring — inner
86E	DC 797	1	DISC, spring — outer
86F	WA 7918	1	WASHER, lock — nut
86G	NT 795	1	NUT, adjusting — hub
87	WT 9016A	2	WEIGHT — includes part 83
88	GA 907	1	GASKET, governor housing
89	SV 901A	1	SLEEVE ASSEMBLY — includes part 89A — See Note 2
89A	BB 7910	1	BALL THRUST BEARING — sleeve assembly
90	LE 9025-1A	1	FULCRUM LEVER ASSEMBLY — 5% governor regulation — pivot pins assembled in lower holes
90	LE 9025-2A	1	FULCRUM LEVER ASSEMBLY — 10% governor regulation — pivot pins assembled in upper holes
92	SC 1136	1	SCREW, square head — cam
93	CA 793	1	CAM, torque
95	WA 6-8 BL	1	WASHER, lock — cam screw
96	NT 8-8 BL	1	NUT, cam screw
97	BA 904	1	PLATE, oil baffle
98	HG 9036	1	HOUSING, governor
99	PN 901A	1	PIN, pivot — fulcrum lever
100	PL 904	1	PLATE, stop
101	WA 1143	2	WASHER, plain — fastening screw
102	WA 6-8 BL	2	WASHER, lock — fastening screw
103	SC 1404	2	SCREW, fastening — stop plate
104	CV 9032C	1	COVER, top — governor housing
104A	GA 908	1	GASKET, top cover
106	WA 6-8 BL	4	WASHER, lock — fastening screw
107	SC 1110	4	SCREW, fastening — top cover
108	NP 904	1	PLATE, name
109	SC 150-2	2	SCREW, fastening — name plate
110	per requirement	1	SPRING, governor — outer — for spring see specific pump type
111	per requirement	1	SPRING, governor — inner — for spring see specific pump type
112	SR 799/1	as required	SPACER, governor spring — inner — .020" thick
112	SR 799/2	as required	SPACER, governor spring — inner — .042" thick
112	SR 799/3	as required	SPACER, governor spring — inner — .058" thick
112	SR 799/4	as required	SPACER, governor spring — inner — .083" thick
112	SR 799/5	as required	SPACER, governor spring — inner — .177" thick
112	SR 799/6	as required	SPACER, governor spring — inner — .276" thick
113	SR 7914/1	as required	SPACER, governor spring — outer — .020" thick
113	SR 7914/2	as required	SPACER, governor spring — outer — .042" thick
113	SR 7914/3	as required	SPACER, governor spring — outer — .058" thick
113	SR 7914/4	as required	SPACER, governor spring — outer — .083" thick
113	SR 7914/5	as required	SPACER, governor spring — outer — .156" thick
114	GA 902	1	GASKET, end cap
115	CP 901C	1	CAP, end — governor housing
117	WA 6-8 BL	2	WASHER, lock — fastening screw
118	SC 1140	2	SCREW, fastening — end cap
119	SH 901A	1	SHAFT ASSEMBLY, operating
120	GA 76195	1	GASKET, ring — shaft assembly
121	PL 902A	1	PLATE ASSEMBLY, spring
122	SP 9016	1	SPRING, operating lever
123	GA 901	1	GASKET, shaft bearing plate
124	BG 904	1	PLATE, shaft bearing
125	NT 6-8 BL	2	NUT, hex — stop screw
126	SC 350-16 BL	2	SCREW, stop — stop lever
128	WA 6-8 BL	2	WASHER, lock — stud

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*** Not Shown Assembled



Illustration Number	Part Number	Quantity Used	Description of Part
129	SD 902	2	STUD, fastening — shaft bearing plate — lower
130	GA 7616	2	GASKET, fastening screw — upper
133	SC 1356	2	SCREW, fastening — shaft bearing plate — upper
134	SC 901	1	SCREW, clamping — stop lever
135	BL 901	1	LEVER, stop — operating shaft
135A	SP 1066	1	RING, snap — shaft assembly
136	CV 7945	1	COVER, stop lever — upper
137	CV 7946	1	COVER, stop lever — lower
138	WA 22-6 BL	3	WASHER, lock — fastening screw
139	SC 1354	3	SCREW, fastening — stop lever covers
***	LE 79117A	1	LEVER ASSEMBLY, operating — includes illustrated parts 140, 142, 142A and 142B
140	SC 7961	1	SCREW, fastening — operating lever
142	LE 79116	1	LEVER, operating
142A	NI 8-8 BL	1	NUT, hex — fastening screw
142B	WA 6-8 BL	1	WASHER, lock — fastening screw
144	WA 6-8 BL	2	WASHER, lock — fastening screw
145	SC 1738	2	SCREW, fastening — governor housing — long
147	WA 6-8 BL	3	WASHER, lock — fastening screw
148	SC 1140	3	SCREW, fastening — governor housing — short
200	per requirement	1	HYDRAULIC HEAD ASSEMBLY — complete — includes parts 22, 45, 201 thru 216, 218, 219, 221 and 222. For part number see nameplate
201	RG 902	1	RING, button retaining
202	BO 901	1	BUTTON, plunger
203	HP 9015	2	LOCK, plunger
204	GU 909	1	SEAT, plunger spring — lower
205	SP 901	1	SPRING, plunger — inner
206	GA 1009	1	GASKET, ring — head assembly
207	RN 9014	1	COVER, gear retainer — for L.H. mounted pump
207	RN 9015	1	COVER, gear retainer — for R.H. mounted pump
208	GE 909	1	GEAR, plunger drive — for clockwise rotation left hand mounted pump
208	GE 903	1	GEAR, plunger drive — for counterclockwise rotation right hand mounted pump
208	GE 9010	1	GEAR, plunger drive — for counterclockwise rotation left hand mounted pump
208	GE 901	1	GEAR, plunger drive — for clockwise rotation right hand mounted pump
209	GU 903	1	GUIDE, plunger
210	WA 1362	1	WASHER, thrust — plunger drive gear
211	GA 1119	1	GASKET, ring — head assembly
212	SC 9035	1	SCREW, delivery valve
213	SP 9036	1	SPRING, delivery valve
214	Per Pump Specification		SEE NOTE 3
215	SC 9036	1	SCREW, cap — plunger bore
216	SV 9019	4	SLEEVE — cap retaining
217	FI 9022	4	FITTING — discharge — must be purchased separately
217A	SV 7922	4	SLEEVE — discharge fitting — must be purchased separately
218	BB 1070	4	BALL, sealing
219	SC 1867	4	SCREW, set — sealing ball
220	CP 904	4	CAP, protection — discharge fitting — must be purchased separately
221	NP 906	1	NAME PLATE
222	SC 150-2	2	SCREW, fastening — name plate

NOTE: 1 Each weight to be shimmed to permit .001" to .004" movement when assembled to the spider and without interference between the weight finger and the spider.

Check friction clutch slippage for 3.0 to 5.25 foot pounds. Replacement of spring discs (86D and 86E) or friction drive hub (86A) requires that the clutch slippage be adjusted for 4.0 to 5.0 foot pounds. Always apply lubricating oil to the face of the friction drive hub (86A) at point of contact with the fingers of the spring discs (86D) and (86E) prior to checking clutch slippage.

NOTE: 2 IMPORTANT—Check governor sleeve for a minimum travel of 16mm (.630") from the location of the weights completely collapsed to the position of completely expanded.

NOTE: 3 When replacing head, order a complete new or rebuilt Hydraulic Head Assembly.

*** Not Shown Assembled



PSB 4A 65-100 WH 1

NOTE: This pump is equipped with an external spring type governor.

Illustration Number	Part Number	Quantity Used	Description of Part
1	NT 909	1	NUT, hub — camshaft (Tighten to a torque of 45-55 ft lbs.)
2	NMS 423/1X	1	WASHER, lock — hub screw
3	HB 9019	1	HUB, drive — tapered
5	SC 1555	4	SCREW, fastening — ball bearing retaining plate
5A	WA 901	4	WASHER, lock — fastening screw
6	PL 907	1	PLATE, retaining — ball bearing
7	BB 1054	1	BALL BEARING — camshaft
7A	NT 905	1	NUT, round — camshaft ball bearing
7B	WA 1720	1	WASHER, lock — camshaft ball bearing
8	SH 9057A	1	CAMSHAFT — includes part 8A — tapered at drive end
8A	SC 1149	1	SCREW AND LOCKWASHER — camshaft
8B	NKE 5/2X	1	KEY, Woodruff — camshaft
8C	FN 4-32 BL	1	PIN, cotter — camshaft nut
9	GA 76200	1	GASKET, rubber ring
10	PO 765	1	POINTER, timing
11	HG 9023A	1	HOUSING, pump — includes parts 10, 11A and 11B
11A	BG 7649	1	BUSHING, camshaft
11B	SD 903	4	STUD, housing
12	GA 904	1	GASKET, quill shaft pad
13	CV 9047	1	PAD, quill shaft — pump housing
14	GA 7616	2	GASKET, fastening screw
16	SC 1119	2	SCREW, fastening — quill shaft pad
16A	WI 901	1	WIRE, locking — quill shaft fastening screws
17	GA 9026	1	GASKET, timing window cover
18	CV 9014C	1	COVER, timing window
20	WA 6-8 BL	2	WASHER, lock — fastening screw
21	SC 1140	2	SCREW, fastening — timing window cover
22	GA 1014	1	GASKET, ring — control unit assembly
23	PN 9023	1	PIN, plunger sleeve
24	CU 9010A	1	CONTROL UNIT ASSEMBLY — includes parts 24A and 24B — for left hand mounted pumps — type designation stamped 10
24	CU 9011A	1	CONTROL UNIT ASSEMBLY — includes parts 24A and 24B — for right hand mounted pumps — type designation stamped 11
24A	NT 4-6	1	NUT, hex — control unit
24B	WA 1648	1	WASHER, tab — control unit hex nut
24C	RN 9011	1	RETAINER, control unit
24D	SC 1700	2	SCREW, fastening — with lockwasher — control unit assembly
24E	WI 901	1	WIRE, locking — control unit fastening screw
***	SH 9071A	1	QUILL SHAFT ASSEMBLY — includes parts 25 thru 30
25	SH 909A	1	SHAFT, quill — with gear
26	BG 9032	1	BUSHING, quill shaft
26A	SR 9012	2	SPACER — quill shaft
27	KY 1006	1	KEY, Woodruff — quill shaft
28	GE 908	1	GEAR — camshaft driven
29	WMS 2157/400X	as required	WASHER, plain — .002" thick — to eliminate shaft play
	WMS 2157/1X	as required	WASHER, plain — .004" thick — to eliminate shaft play
	WMS 2157/2X	as required	WASHER, plain — .008" thick — to eliminate shaft play
	WMS 2157/3X	as required	WASHER, plain — .020" thick — to eliminate shaft play
30	RG 1014	1	RING, spring — quill shaft
32	PG 902	1	PLUG, closing
35	GA 903	1	GASKET, supply pump
36	RG 1014	1	RING, spring supply pump shaft
37	GE 908	1	GEAR, drive — supply pump shaft
39	PK 7910	1	SEAL, oil — supply pump shaft
39A	KY 901	1	KEY, supply pump shaft
40	SGB 15 B1	1	SUPPLY PUMP ASSEMBLY — for parts see Fuel Supply Pump Section for clockwise rotation pumps
40	SGB 15 B2	1	SUPPLY PUMP ASSEMBLY — for parts see Fuel Supply Pump Section for counterclockwise rotation pumps
41	WA 6-8 BL	2	WASHER, lock — fastening screw
42	SC 1516	2	SCREW, fastening — supply pump assembly
45	GA 1012	1	GASKET, ring — filter screw
46	FE 901	1	FILTER, screen
47	GA 7965	1	GASKET, filter screw
48	SC 903	1	SCREW, filter
49	GA 7616	1	GASKET, fastening screw

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*** Not Shown Assembled

Illustration Number	Part Number	Quantity Used	Description of Part
49A	WI 1073	as required	WIRE, locking — fastening screw
50	SC 1140	1	SCREW, locating — quill shaft bushing
***	TP 903A	1	TAPPET ASSEMBLY, includes parts 51A to 51C
51A	RL 903A	1	ROLLER ASSEMBLY, tappet
51B	PN 9013	1	PIN, tappet roller — diameter .3745 inch
51C	GU 9011A	1	GUIDE ASSEMBLY, tappet
52	SP 903	1	SPRING, plunger — outer
53	GU 9013	1	SEAT, spring — upper
53A	RG 903	1	RING, spring — upper spring seat
54	per requirement	1	HYDRAULIC HEAD ASSEMBLY — complete — includes parts 22, 45, 54A through 76A — for part number see name-plate
54A	RG 902	1	RING, retaining — button
54B	BO 901	1	BUTTON, plunger
55	HP 9015	1	LOCK, plunger — 2 piece
56	GU 909	1	SEAT, plunger spring — lower
57A	SP 901	1	SPRING, inner — plunger
58	GA 1009	1	GASKET, ring — head assembly
59	RN 9015	1	COVER, gear retainer — right hand mounted pump
	RN 9014	1	COVER, gear retainer — left hand mounted pump
60	GE 909	1	GEAR, plunger drive — for clockwise rotation — left hand mounted pumps
	GE 6010	1	GEAR, plunger drive — for counter clockwise rotation — left hand mounted pumps
	GE 901	1	GEAR, plunger drive — for clockwise rotation — right hand mounted pumps
	GE 903	1	GEAR, plunger drive — for counterclockwise rotation — right hand mounted pumps
61	GU 903	1	GUIDE, plunger
62	WA 1352	1	WASHER, thrust — plunger drive gear
63	GA 1113	1	GASKET, ring — head assembly
64	BB 1024	1	BALL, sealing — set screw
65	SC 1352	1	SCREW, set — sealing ball
66	GA 9010	4	GASKET, discharge fitting
67	FI 901	4	FITTING, discharge — No notch on hex — Use with gasket (GA9010)
67	FI 9012	4	FITTING, discharge — Notch on hex — Do not use gasket
68	VA 907A	1	DELIVERY VALVE ASSEMBLY — for plunger dia. of 6.5mm and 7.0mm
68	VA 908A	1	DELIVERY VALVE ASSEMBLY — for plunger dia. of 7.5mm to 9.0mm inclusive
68	VA 9010A	1	DELIVERY VALVE ASSEMBLY — for plunger dia. of 9.5mm and 10.0mm
69	GA 905	1	GASKET, delivery valve holder
70	SP 9015	1	SPRING, delivery valve
71	HP 9011	1	HOLDER, delivery valve
72	GA 906	1	GASKET, cap screw
73	SC 9018A	1	SCREW, cap — delivery valve
74	SC 150-2	2	SCREW, fastening — part number plate
75	NP 902	1	PLATE, part number — hydraulic head
76	Per Pump Specification		SEE NOTE
76A	SV 907	4	SLEEVE, stud — hydraulic head — stud used with round head only
76B	SC 1862	4	SCREW, cap fastening — hydraulic head — use with round heads only in place of studs
76C	SV 9018	4	SLEEVE, cap screw — hydraulic head — use with SC 1862 only
77	as per order	1	OVERFLOW VALVE ASSEMBLY — for parts see Safety Valve Section — for type designation see stamping on head screw
78	NT 1127	4	NUT, fastening — hydraulic head assembly
88	GA 907	1	GASKET, governor housing
151	RD 2024-1A	1	CONTROL ROD — for left hand mounted pumps — includes parts 151B through 151E and one of 152
151	RD 2024-2A	1	CONTROL ROD — for right hand mounted pumps — includes parts 151B through 151E and one of 152
151B	SP 9014	1	SPRING, control rod
151C	RN 908	1	CLIP, retainer — hexagon nut

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*** Not Shown Assembled



Illustration Number	Part Number	Quantity Used	Description of Part
151D	PN 9017	1	PIN, control rod
151E	NT 1158	1	NUT, hexagon
152	PN 1122	2	HAIRPIN, control rod — governor and control unit end
***	WT 907A	1	WEIGHT ASSEMBLY — includes parts 153 to 155
153	AP 10416	2	PIN, weight
154	HP 908	1	SPIDER, weight
155	CP 15258	2	WEIGHT
156	SV 904A	1	SLEEVE ASSEMBLY — includes part 156A
156A	BB 1026	1	BALL THRUST BEARING — sleeve assembly
157	LE 9010	1	LEVER, fulcrum
158	HG 9012	1	HOUSING, governor
159	PG 901	1	PLUG, closing
160	SP 1067	1	RING, spring — fulcrum lever shaft
161	BB 1025	2	BALL BEARING — fulcrum lever shaft
162	SR 903	1	SPACER — fulcrum lever shaft
163	SH 9016	1	SHAFT, fulcrum lever
164	KY 11-3	1	KEY, Woodruff — fulcrum lever shaft
166	RG 1016	1	RING, spring — fulcrum lever shaft
167	PK 901	1	SEAL, oil — fulcrum lever shaft
168	PL 9014	1	PLATE, stop
169	SC 9015	1	SCREW, stop — operating lever — idle
169A	NT 8-8 BL	1	NUT, hexagon — stop screw
169B	SC 9015	1	SCREW, stop — shut-off screw — use spacers to provide a clearance of .040" to .080" between shut-off screw at shut-off position
169C	SR 1033-1	as required	SPACER, stop screw — .062" thick
	SR 1033-2	as required	SPACER, stop screw — .125" thick
	SR 1033-3	as required	SPACER, stop screw — .188" thick
	SR 1033-4	as required	SPACER, stop screw — .031" thick
169D	NT 8-8 BL	1	NUT, hexagon — stop screw
170	SC 9015	1	SCREW, stop — full load
171	WA 6-8 BL	1	WASHER, lock — stop screw
173	NT 8-8 BL	1	NUT, jam — stop screw
174	NT 1180	1	NUT, elastic — pivot screw
175	WA 1303	1	WASHER, plain — pivot screw
176	LE 9016A	1	LEVER, operating
177	SC 9012	1	SCREW, pivot — operating lever
178	NT 1142	2	NUT, hex — spring adjusting screw
179	SC 907	1	SCREW, spring adjusting
180	SP 9013	1	SPRING, extension — operating lever
181	SC 9011	1	SCREW, shut-off — operating lever
182	PL 9012	1	PLATE, shut-off
183	WA 22-8 BL	1	LOCKWASHER — stop nut
184	NT 6-8 BL	1	NUT, hex — shut-off screw
185	WA 1071	1	WASHER, closing plug
186	PG 903	1	PLUG, closing — governor housing
188	WA 6-8 BL	3	WASHER, lock — fastening screw
189	SC 1140	2	SCREW, fastening — governor housing
189A	SC 1110	1	SCREW, fastening — governor housing — lower
191	WA 6-8 BL	2	WASHER, lock — fastening screw
192	SC 1110	2	SCREW, fastening — stop plate and governor
193	NP 904	1	Plate, name
194	SC 150-2	2	SCREW, fastening — name plate
200	per requirement	1	HYDRAULIC HEAD ASSEMBLY — complete — includes parts 22, 45, 201 thru 216, 218, 219, 221, and 222. For part number see nameplate
201	RG 902	1	RING, button retaining
202	BO 901	1	BUTTON, plunger
203	HP 9015	2	LOCK, plunger
204	GU 909	1	SEAT, plunger spring — lower
205	SP 901	1	SPRING, plunger — inner
206	GA 1009	1	GASKET, ring — head assembly
207	RN 9014	1	COVER, gear retainer — for L.H. mounted pump
207	RN 9015	1	COVER, gear retainer — for R.H. mounted pump
208	GE 909	1	GEAR, plunger drive — for clockwise rotation left hand mounted pump
208	GE 903	1	GEAR, plunger drive — for counterclockwise rotation right hand mounted pump
208	GE 9010	1	GEAR, plunger drive — for counterclockwise rotation left hand mounted pump
208	GE 901	1	GEAR, plunger drive — for clockwise rotation right hand mounted pump
209	GU 903	1	GUIDE, plunger

- continued -

*** Not Shown Assembled

Illustration Number	Part Number	Quantity Used	Description of Part
210	WA 1362	1	WASHER, thrust — plunger drive gear
211	GA 1119	1	GASKET, ring — head assembly
212	3C 9035	1	SCREW, delivery valve
213	SP 9036	1	SPRING, delivery valve
214	Per Pump Specification		SEE NOTE
215	SC 9036	1	SCREW, cap — plunger bore
216	SV 9019	4	SLEEVE — cap retaining
217	FI 9022	4	FITTING — discharge — must be purchased separately
217A	SV 7922	4	SLEEVE — discharge fitting -- must be purchased separately
218	BB 1070	4	BALL, sealing
219	SC 1867	4	SCREW, set — sealing ball
220	CP 904	4	CAP, protection — discharge fitting — must be purchased separately
221	NP 906	1	NAME PLATE
222	SC 150-2	2	SCREW, fastening — name plate

Parts designated by illustration numbers 18A through 18H, 79 through 87 and 89 through 148 are not used in this assembly.

NOTE: When replacing head, order a complete new or rebuilt Hydraulic Head Assembly.