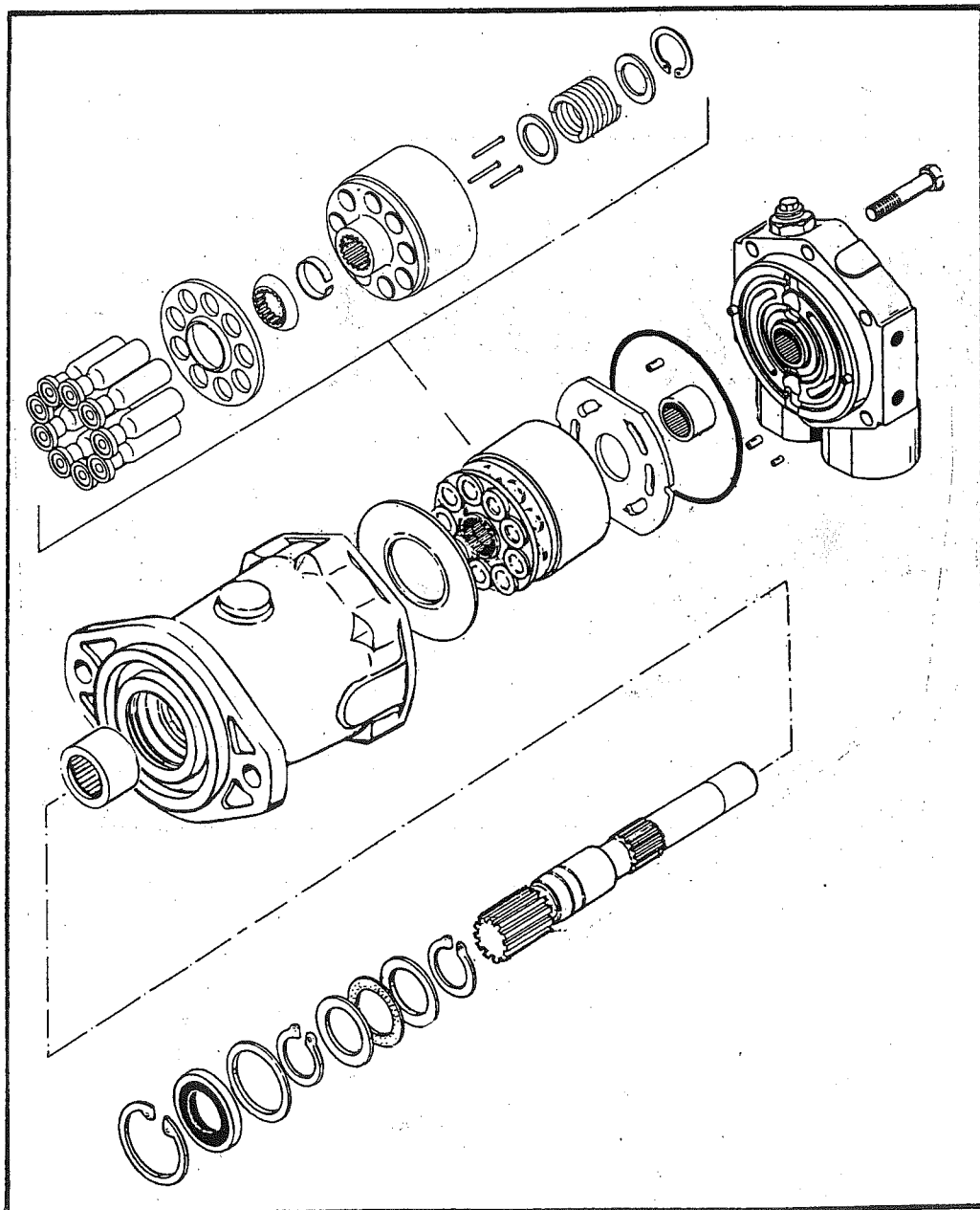


# PA 6000/M and 7000 T

## Spare parts

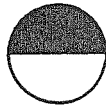
For machines with piston hydraulics  
and proportional controls



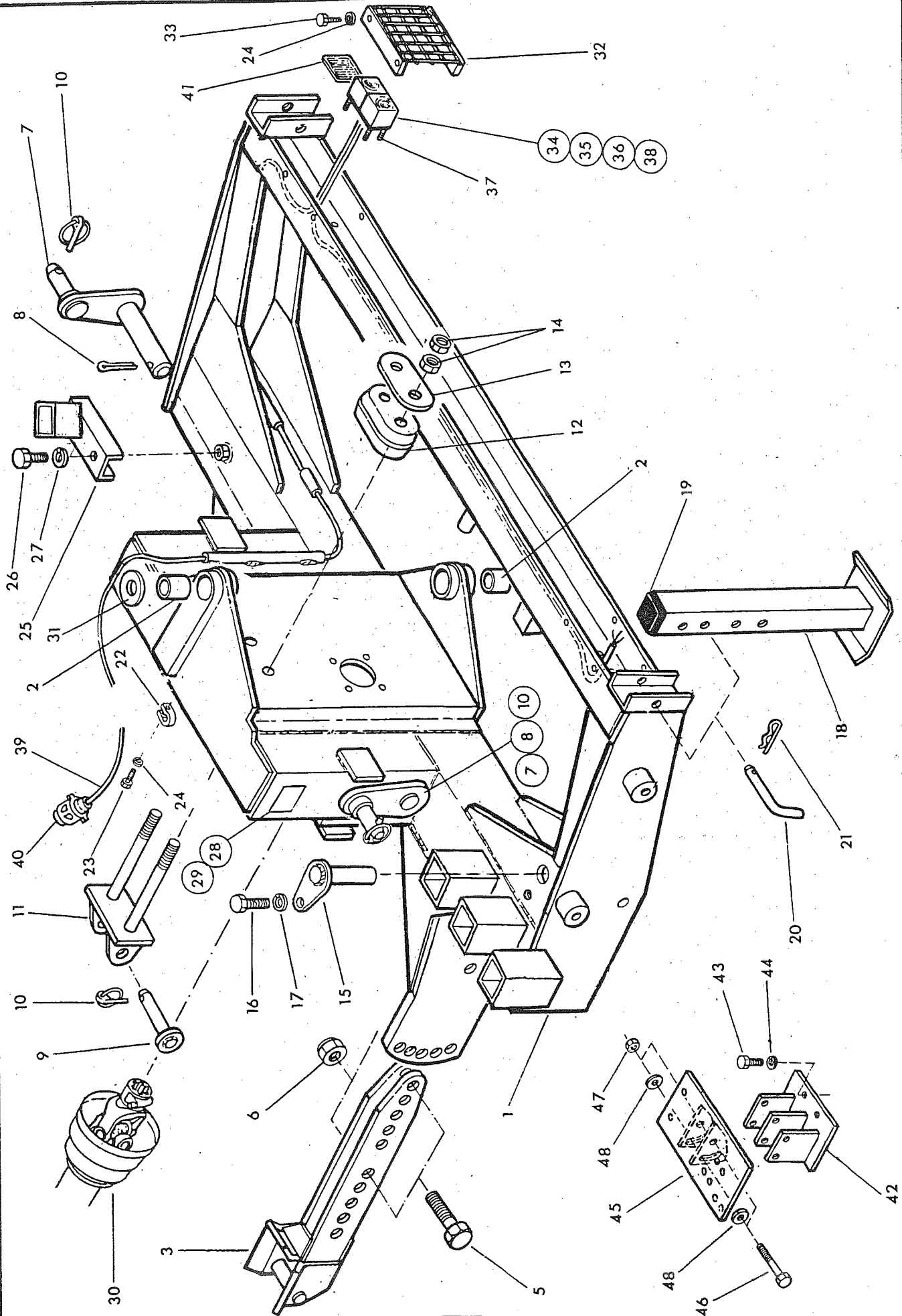
## LIST OF CONTENTS

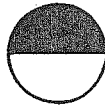
MAIN FRAME, PILLAR AND ARMS	Page 1
HYDRAULIC INSTALLATIONS	Page 17
CONTROL VALVES	Page 27
GENERAL HYDRAULICS	Page 49
HYDRAULIC RAMS	Page 65
STICKERS	Page 73

# MAIN FRAME



# RECOGNIZING





REF	PART NO.	QTY	DESCRIPTION
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**MAINFRAME ASSEMBLY**

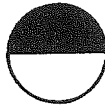
1	42000.02	1	Mainframe - R.Hand	
	42000.01	1	Mainframe - L.Hand - not illus	
2	75 60 050	2	Bush	
3	75 60 387	1	Mounting arm	
4	75 60 386	1	Mounting arm - not illus	
5	92 13 159	4	Bolt M24 x 75 long	
6	91 43 009	4	Self locking nut M24	
7	75 60 374	2	Lift link pin	
8	95 01 509	2	Split pin dia 10 x 50 long	
9	75 60 144	1	Top link pin	
10	04 31 217	3	Linch pin	
11	75 60 398	1	Top hitch bracket	
12*	75 60 141	1	Rubber damper	
13	75 60 130	1	Reaction plate	
14	91 13 009	4	Plain nut dia 24	
15	75 60 057	1	Slew ram base pin	
16	93 13 055	1	Setscrew M10 x 25	
17	91 00 205	1	Spring washer dia 10	
18	42025.01	3	Stand leg	
19	71 91 108	3	Plastic bung	
20	71 92 023	3	Leg pin	
21	04 31 105	3	Spring cotter	
22	84 02 148	1	Cable clamp	
23	92 13 063	1	Setscrew M6 x 30	
24	91 00 203	9	Spring washer dia 6	
25	42821.01	1	Parking cradle socket - midcut only	
26	93 13 077	1	Setscrew M16 x 35	
27	91 00 207	1	Spring washer dia 16	
28	13 35 246	1	Serial No. plate	
29	71 03 230	4	Pop rivet dia 1/8"	
30	76 50 250	1	P.T.O. shaft	
31	75 60 056	1	Thrust washer	
32	75 60 353	2	Light guard	
33	93 13 023	8	Setscrew M6 x 12	
34	75 60 086	2	Rear light	
35	75 60 087	2	Stop/tail bulb	
36	75 60 088	2	Flasher bulb	
37	93 00 142	8	Self tapping screw M5 x 12	
38	75 60 098	8	Connector	
39	75 60 090	1	Cable	
40	75 60 089	1	Plug	
41	75 60 093	2	Reflector -self adhesive	
42	41589.01	1	Control mounting bracket	
43	93 13 045	2	Setscrew M10 x 20	Cable controlled m/c's only
44	91 00 205	2	Spring washer dia 10	
45	75 50 289	1	Valve mounting plate	
46	92 13 225	2	Bolt M10 x 110 long	
47	91 43 005	2	Self locking nut M10	
48	91 00 105	2	Plain washer dia 10	

**\* Assembly Note**

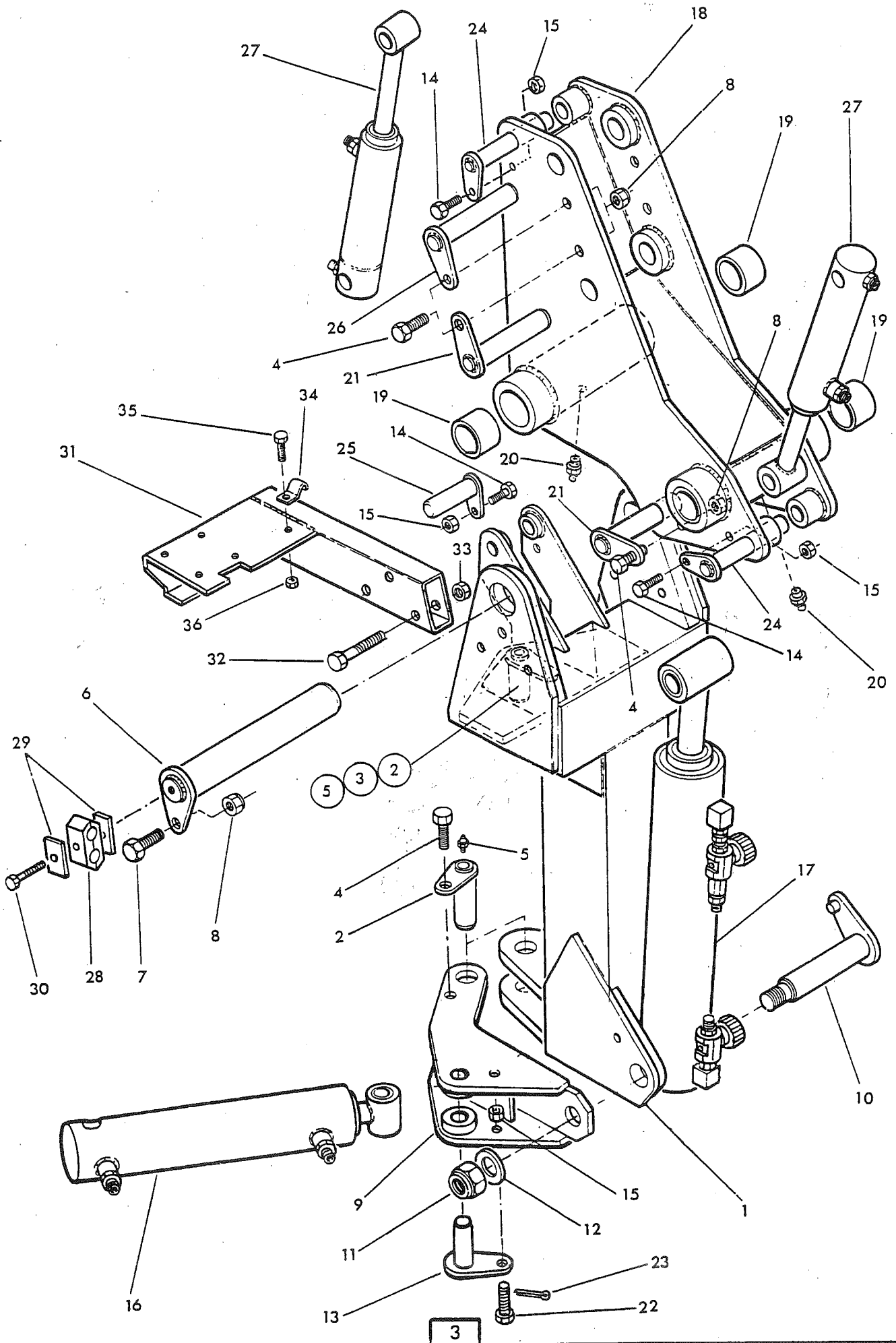
Nuts must be tightened until the rubber damper is compressed to 120mm thick.

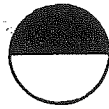


PILLAR AND ROCKER



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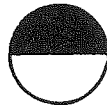


REF	PART NO.	QTY	DESCRIPTION
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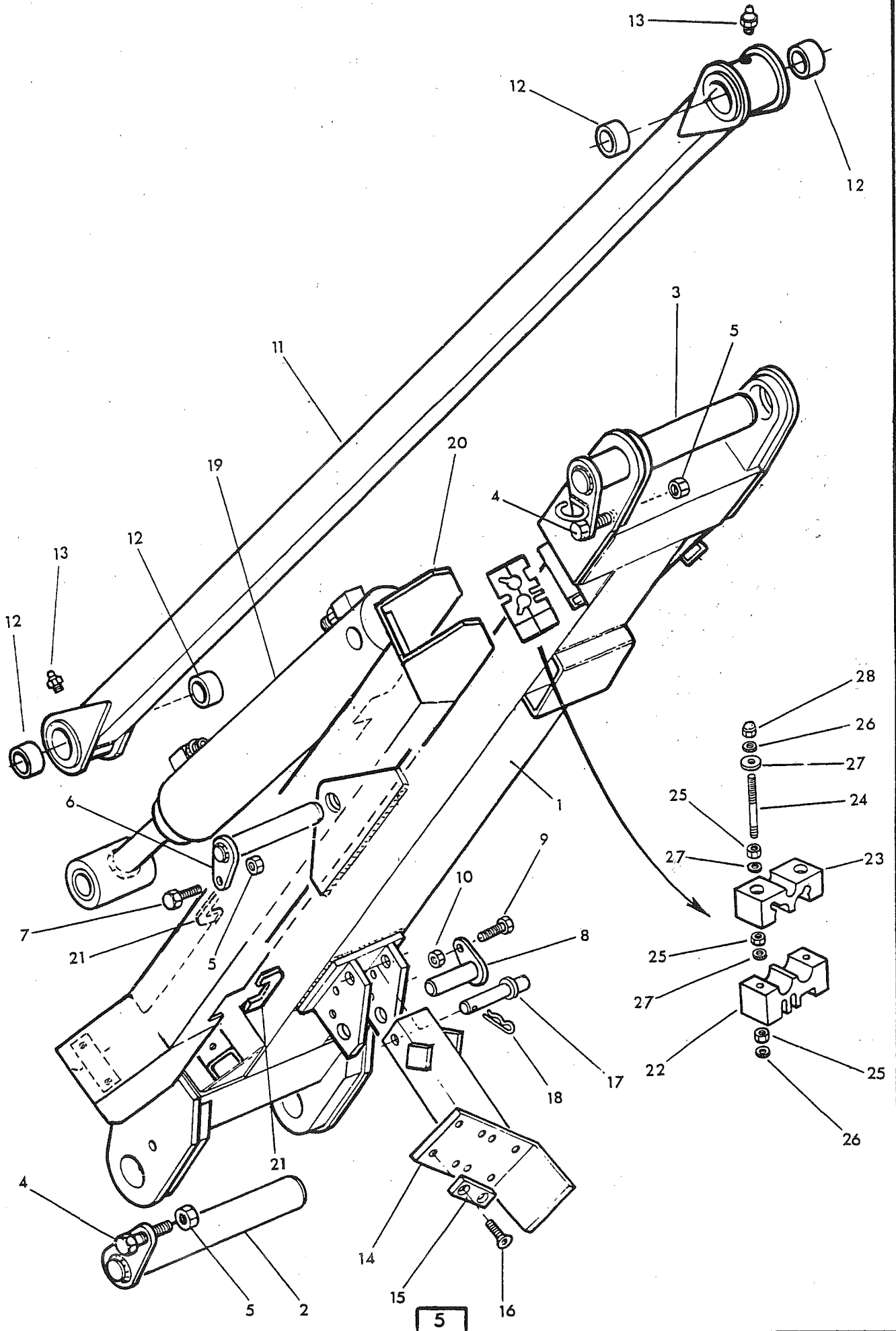
### PILLAR AND ROCKER

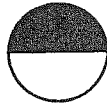
1	42001.01	1	Pillar	
2	75 60 058	2	Pivot pin - pillar	
3	93 13 097	1	Setscrew M16 x 45	
4	93 13 087	4	Setscrew M16 x 40	
5	09 01 124	2	Greaser 1/8 BSP 67 deg	
6	75 60 059	1	Pivot pin - rocker	
7	92 13 137	1	Setscrew M16 x 65	
8	91 43 007	6	Self locking nut M16	
9	42023.01	1	Slew ram bracket	
10	75 60 375	1	Pivot pin - lift base	
11	91 00 023	1	Self locking nut M30	
12	75 60 070	1	Special washer dia 30	
13	75 60 154	1	Pivot pin - slew rod	
14	93 13 065	3	Setscrew M10 x 30	
15	91 43 005	4	Self locking nut M10	
16	75 60 346	1	Slew ram assembly	
17	76 60 260	1	Lift ram assembly	
18	75 60 326	1	Rocker	
19	75 60 050	4	Bush	
20	09 01 121	2	Greaser 1/8 BSP straight	
21	75 60 061	2	Pivot pin - lift rod and reach rod	
22	42269.02	1	Special setscrew M10 x 35	
23	95 01 255	1	Split pin dia 4 x 25	
24	75 60 063	2	Pivot pin - comp ram rods	} AHC only
25	41691.02	1	Pivot pin - lift comp base	
26	75 60 061	1	Pivot pin - tension link	
27	76 50 260	2	Compensator ram assembly - AHC only	
28	71 93 063	1	Hose clamp	} Gear hydraulic m/c's only
29	06.418.05	2	Clamp plate	
30	92 13 165	1	Bolt M10 x 80	
31	42122.02	1	Valve mounting bracket R.H.	} Electric machines only
	42122.01	1	Valve mounting bracket L.H.	
32	92 13 207	3	Bolt M16 x 100	
33	91 43 007	3	Self locking nut M16	
34	71 09 151	1	Cable clamp	
35	93 13 034	1	Setscrew M8 x 16	
36	91 43 004	1	Self locking nut M8	

MAIN ARM



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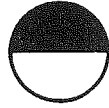
**WILSON**

REF PART NO. QTY DESCRIPTION

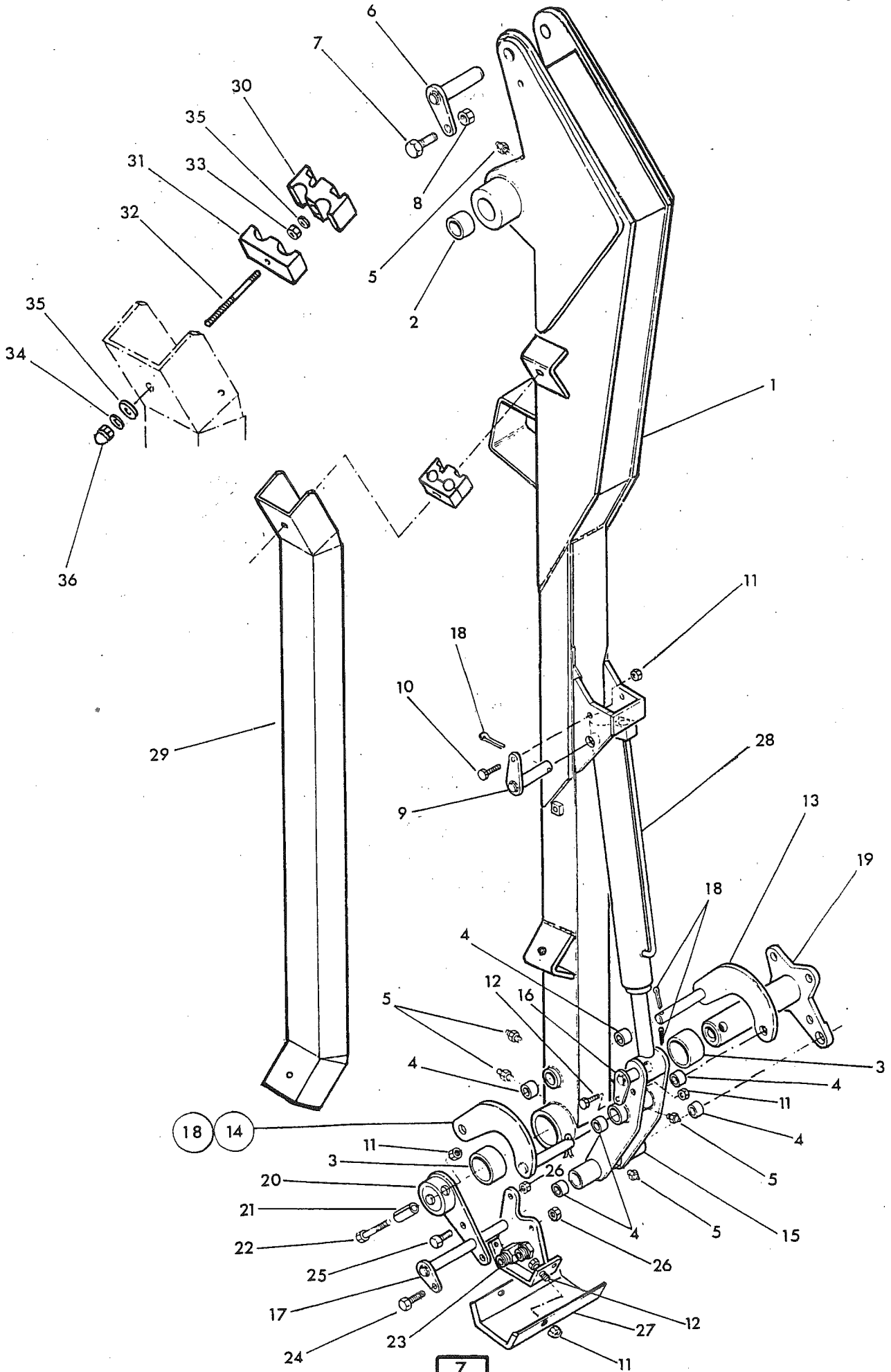
**MAIN ARM AND FITTINGS**

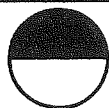
1	76 60 250	1	Main arm	
2	75 60 059	1	Pivot pin - main arm	
3	75 60 060	1	Pivot pin - dipper	
4	92 13 137	2	Bolt M16 x 65	
5	91 43 007	3	Self locking nut M16	
6	75 60 061	1	Pivot pin - reach ram base	
7	93 13 077	1	Setscrew M16 x 35	
8	75 60 064	1	Pivot pin comp. ram base	} AHC only
9	93 13 065	1	Bolt M10 x 30	
10	91 43 005	1	Self locking nut M10	
11	75 60 445	1	Tension link	
12	71 15 208	4	Bush	
13	09 01 121	2	Greaser 1/8 BSP - straight	
14	76 60 276	1	Parking cradle - R.Hand	} Midcut only
	76 60 275	1	Parking cradle - L.Hand	
15	10 75 041	4	Cradle pad	
16	10 75 047	8	Countersunk rivet	
17	42892.01	1	Cradle pin	
18	04 31 105	1	Spring cotter	
19		1	Reach ram assembly	
20	42190.01	1	Hose cover	
21	41741.01	2	Edge strip	
22	42024.02	2	Hose clamp lower	
23	42024.03	2	Hose clamp upper	
24	42198.01	4	Stud M10 x 135	
25	91 13 005	12	Plain nut M10	
26	91 00 405	8	External serrated washer dia 10	
27	91 00 105	12	Plain washer dia 10	
28	91 00 025	4	Special nut M10	

DIPPER - Std arm



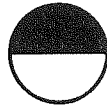
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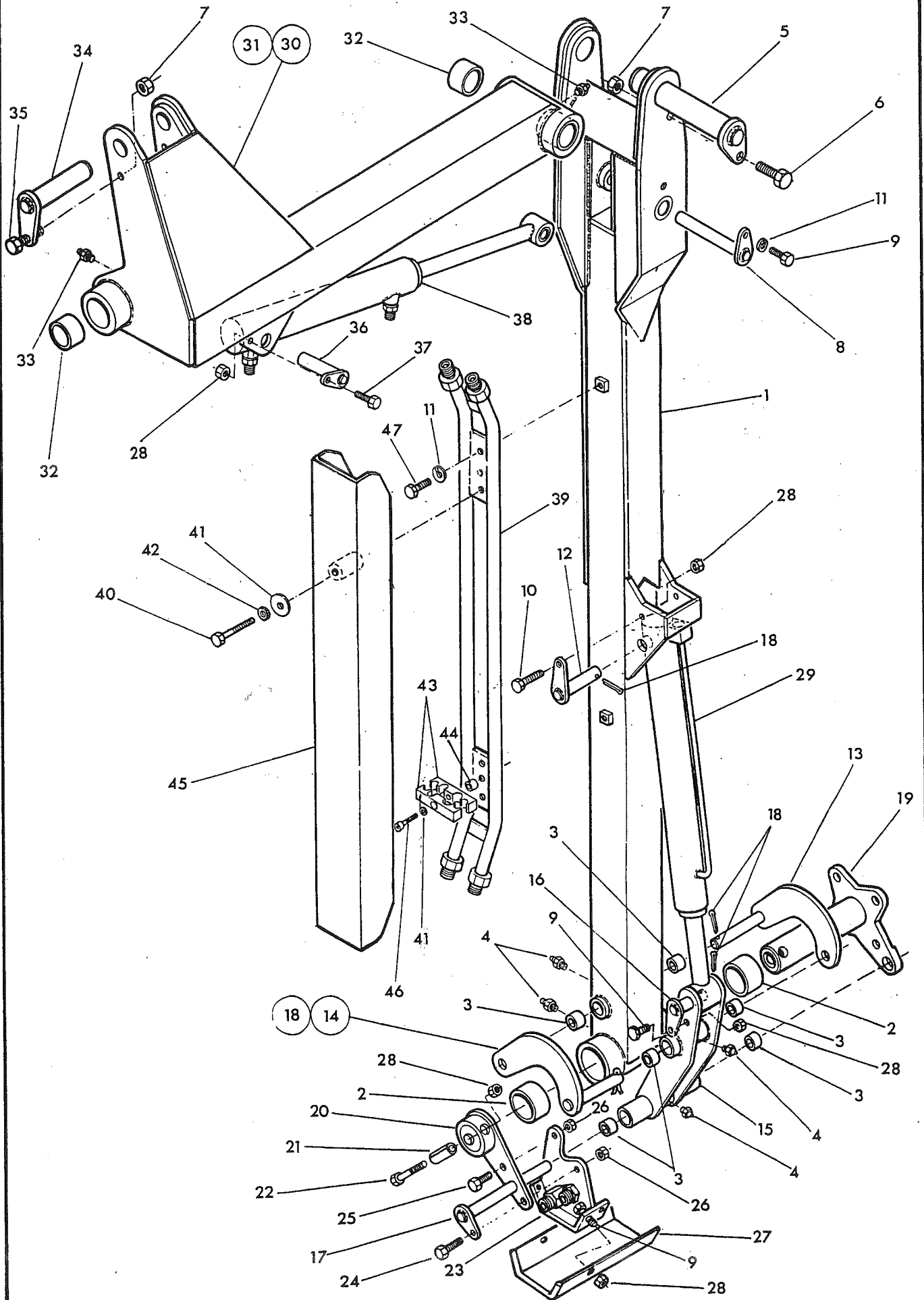


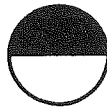
REF	PART NO.	QTY	DESCRIPTION
<b>DIPPER ARM AND FITTINGS</b>			
1	42004.02	1	Dipper arm
2	75 60 050	2	Bush dia 50
3	71 36 035	2	Nylon head bush
4	41690.01	6	Bush 1" dia
5	09 01 121	5	Greaser 1/8 BSP straight
6	75 60 083	1	Pivot pin - tension link
7	93 13 097	1	Bolt M16 x 45
8	91 43 007	1	Self locking nut M16
9	41691.02	1	Pivot pin - Angle base
10	93 13 075	1	Setscrew M10 x 35
11	91 43 005	5	Self locking nut M10
12	93 13 045	3	Setscrew M10 x 20
13	74 50 251	1	Radius arm front
14	74 50 250	1	Radius arm rear
15	74 50 252	1	Slave link
16	41693.01	1	Pivot pin - Angle rod
17	71 92 009	1	Pivot pin - Slave link
18	95 01 406	5	Split pin dia 5 x 40
19	71 92 308	1	Head pivot tube
20	71 92 316	1	Jaw plate
21	04 23 548	1	Spring dowel 5/8" dia x 3" long
22	92 13 185	1	Bolt M10 x 90
23	75 50 307	1	Hose junction bracket
24	02 11 146	1	Bolt 5/8 UNF x 1 3/4" long
25	02 11 126	1	Bolt 5/8 UNF x 1 1/2" long
26	01 41 006	2	Self locking nut 5/8 UNF
27	71 98 333	1	Hose tray
28	76 50 255	1	Angle ram assembly
29	41665.09	1	Hose cover
30	06.430.18	1	Hose clamp lower
31	06.430.17	1	Hose clamp upper
32	42198.02	2	Stud M10
33	91 13 005	2	Plain nut M10
34	91 00 405	2	External serrated washer dia 10
35	91 00 105	4	Plain washer dia 10
36	91 00 025	2	Special nut M10

DIPPER - midcut



McCOMEL

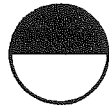


**McCOWEL**

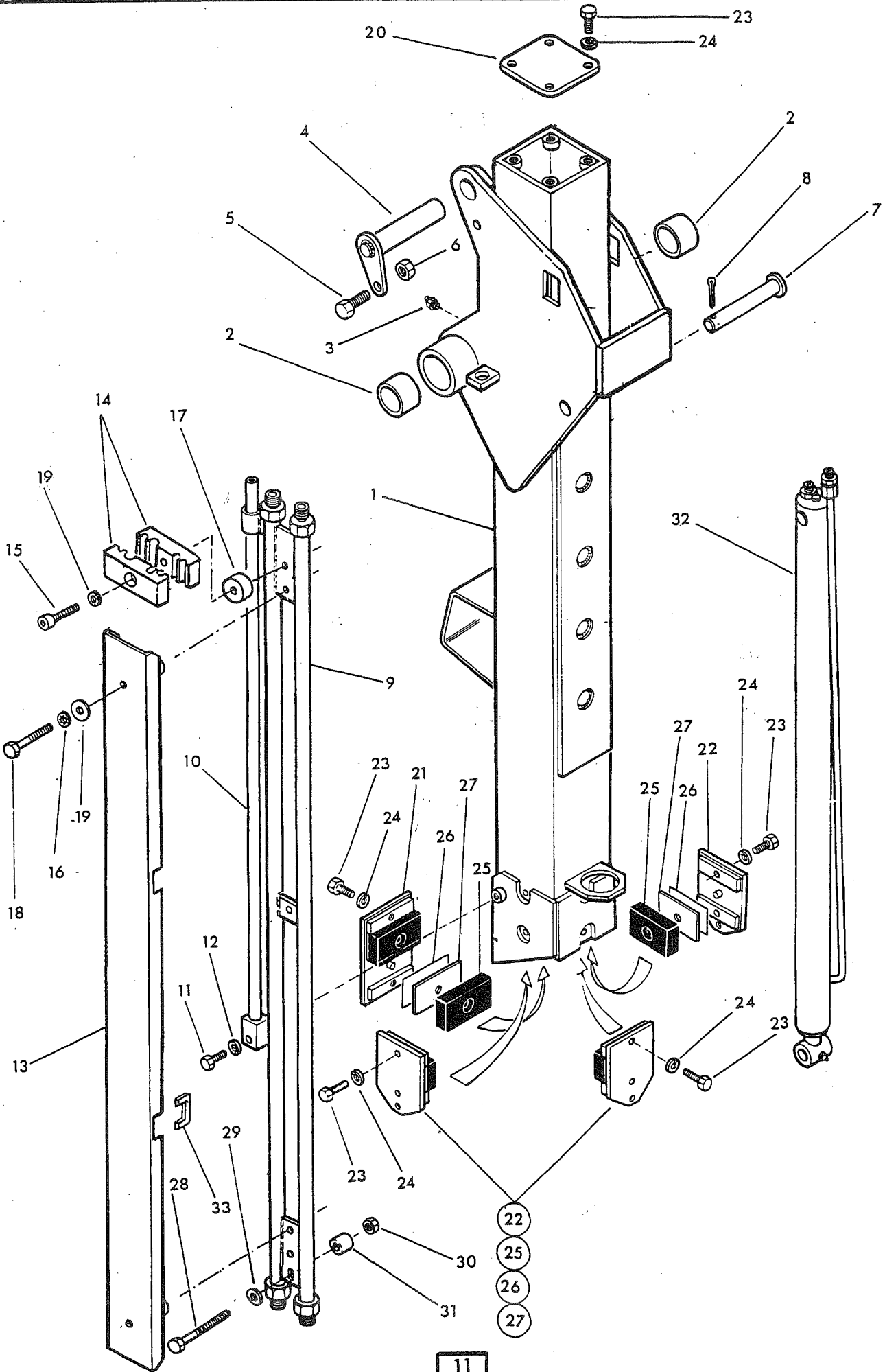
REF.	PART NO.	QTY	DESCRIPTION
<b>MIDCUT -DIPPER ARM AND FITTINGS</b>			
1	76 60 251	1	Dipper arm
2	71 36 035	1	Nylon head bush
3	41690.01	6	Bush
4	09 01 121	4	Greaser
5	75 80 023	1	Pivot pin -dipper
6	92 13 107	1	Bolt M16 x 50
7	91 43 007	2	Self locking nut M16
8	75 60 063	1	Pivot pin -breakaway rod
9	93 13 045	4	Setscrew M10 x 20
10	93 13 075	1	Setscrew M10 x 35
11	91 00 205	3	Spring washer M10
12	41691.02	1	Pivot pin -angle ram base
13	74 50 251	1	Radius arm front
14	74 50 250	1	Radius arm rear
15	74 50 252	1	Slave link
16	41693.01	1	Pivot pin -angle ram rod
17	71 92 009	1	Pivot pin -slave link
18	95 01 406	4	Split pin dia 5 x 40
19	71 92 308	1	Head pivot tube
20	71 92 316	1	Jaw plate
21	04 23 548	1	Spring dowel 5/8" dia x 3" long
22	92 13 185	1	Bolt M10 x 90
23	75 50 307	1	Hose junction bracket
24	02 11 146	1	Bolt 5/8 UNF x 1 3/4" long
25	02 11 126	1	Bolt 5/8 UNF x 1 1/2" long
26	01 41 006	2	Self locking nut 5/8 UNF
27	71 98 333	1	Hose tray
28	91 43 005	7	Self locking nut M10
29	76 50 255	1	Angling ram assembly
30	75 80 318	1	Forward extension 1.25m R.Hand
31	75 80 319	1	Forward extension 1.25m L.Hand
32	75 60 050	4	Bush
33	09 01 121	2	Greaser 1/8 BSP straight
34	75 60 083	1	Pivot pin - tension link
35	93 13 077	1	Bolt M16 x 35
36	75 60 064	1	Pivot pin -breakaway base
37	92 13 065	1	Bolt M10 x 30
38	75 50 288	1	Breakaway ram assembly
39	42263.02	1	Rigid pipe assembly
40	92 13 135	2	Bolt M10 x 65
41	91 00 105	4	Plain washer dia 10
42	91 00 405	2	Shakeproof washer dia 10
43	42024.04	4	Clamp
44	42215.01	2	Spacer
45	42205.04	1	Hose cover
46	93 43 105	2	Capscrew M10 x 50
47	93 13 055	2	Setscrew M10 x 25

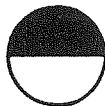


TELE DIPPER SOCKET

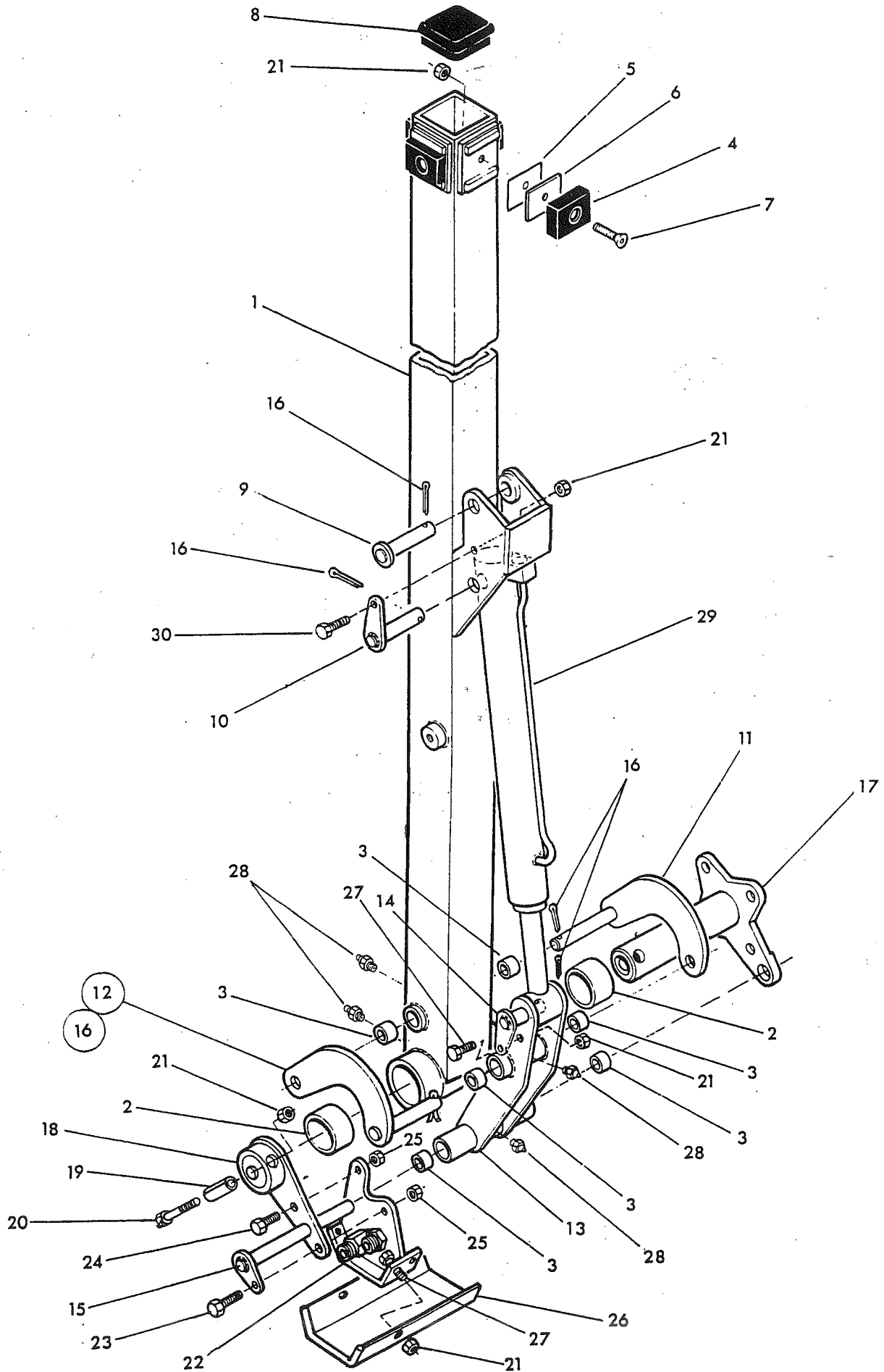
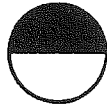


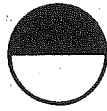
McCONNELL



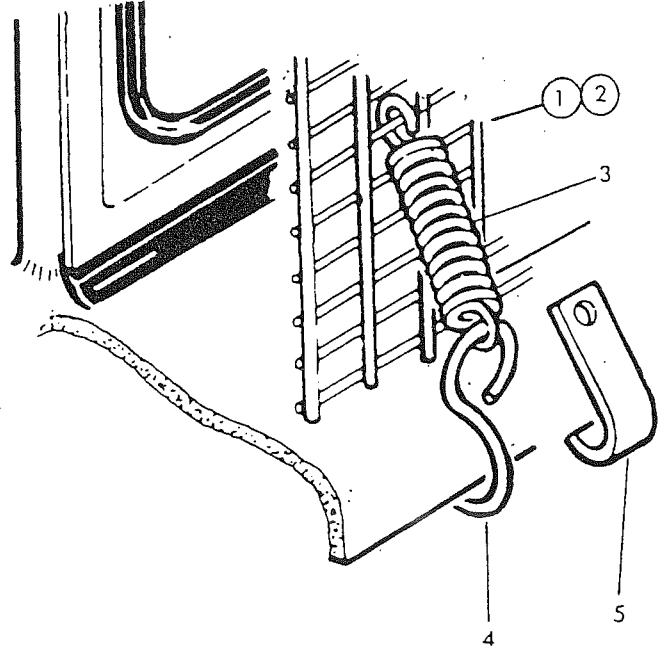
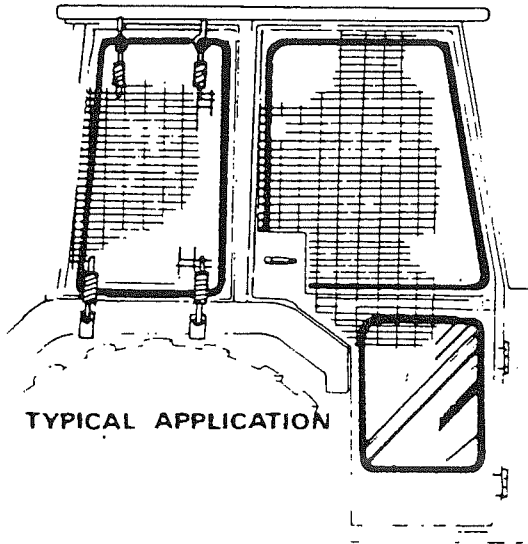
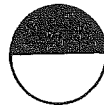


REF	PART NO.	QTY	DESCRIPTION
<b>DIPPER SOCKET AND FITTINGS</b>			
1	75 70 308	1	Tele dipper socket
2	75 60 050	2	Bush
3	09 01 121	1	Greaser
4	75 60 061	1	Pivot pin - tension link
5	93 13 077	1	Bolt M16 x 35
6	91 43 007	1	Self locking nut M16
7	75 70 006	1	Pivot pin - tele ram base
8	95 01 406	1	Split pin dia 5 x 40
9	42211.01	1	Rigid pipe assembly
10	75 70 316	1	Guide rod
11	92 13 106	1	Bolt M12 x 50
12	91 00 206	1	Spring washer dia 12
13	42205.01	1	Pipe cover
14	42024.04	6	Hose clamp
15	93 43 105	2	Capscrew M10 x 50
16	91 00 405	3	External shakeproof washer dia 10
17	42215.01	3	Spacer
18	92 13 135	2	Bolt M10 x 65
19	91 00 105	4	Plain washer dia 10
20	71 36 069	1	Cover plate
21	71 36 315	1	Wear pad carrier - lower
22	71 36 314	3	Wear pad carrier sides and top
23	03 11 065	12	Setscrew 1/2 UNF x 3/4" long
24	01 00 205	12	Spring washer dia 1/2
25	71 36 001	5	Wear pad
26	71 36 058	as reqd	Shim
27	71 36 059	as reqd	Shim
28	92 17 406	1	Bolt M12 x 200
29	91 00 106	1	Plain washer dia 12
30	91 43 006	1	Self locking nut M12
31	71 97 009	1	Spacer
32	75 70 318	1	Tele ram
33	41741.01	1	Edge strip





REF	PART NO.	QTY	DESCRIPTION
<b>DIPPER SLIDER AND FITTINGS - continued</b>			
1	76 70 250	1	Tele dipper
2	71 36 035	2	Nylon head bush
3	41690.01	6	Bush
4	71 36 001	4	Wear pad
5	71 36 058	as reqd	Shim
6	71 36 059	as reqd	Shim
7	93 53 075	4	Socket hd c/sunk screw M10 x 35
8	71 36 148	1	Plastic bung
9	42038.01	1	Pivot pin - tele rod
10	41691.02	1	Pivot pin - angle base
11	74 50 251	1	Radius arm front
12	74 50 250	1	Radius arm rear
13	74 50 252	1	Slave link
14	41693.01	1	Pivot pin - angle rod
15	71 92 009	1	Pivot pin - slave link
16	95 01 406	5	Split pin dia 5 x 40
17	71 92 308	1	Head pivot tube
18	71 92 316	1	Jaw plate
19	04 23 548	1	Spring dowel 5/8 dia x 3" long
20	92 13 185	1	Bolt M10 x 90
21	91 43 005	5	Self locking nut M10
22	75 50 307	1	Hose junction bracket
23	02 11 146	1	Bolt 5/8 UNF x 1 3/4" long
24	02 11 126	1	Bolt 5/8 UNF x 1 1/2" long
25	01 41 006	2	Self locking nut 5/8 UNF
26	71 98 333	1	Hose tray
27	93 13 045	4	Setscrew M10 x 20
28	09 01 121	4	Greaser 1/8 BSP straight
29	76 50 255	1	Angling ram assembly



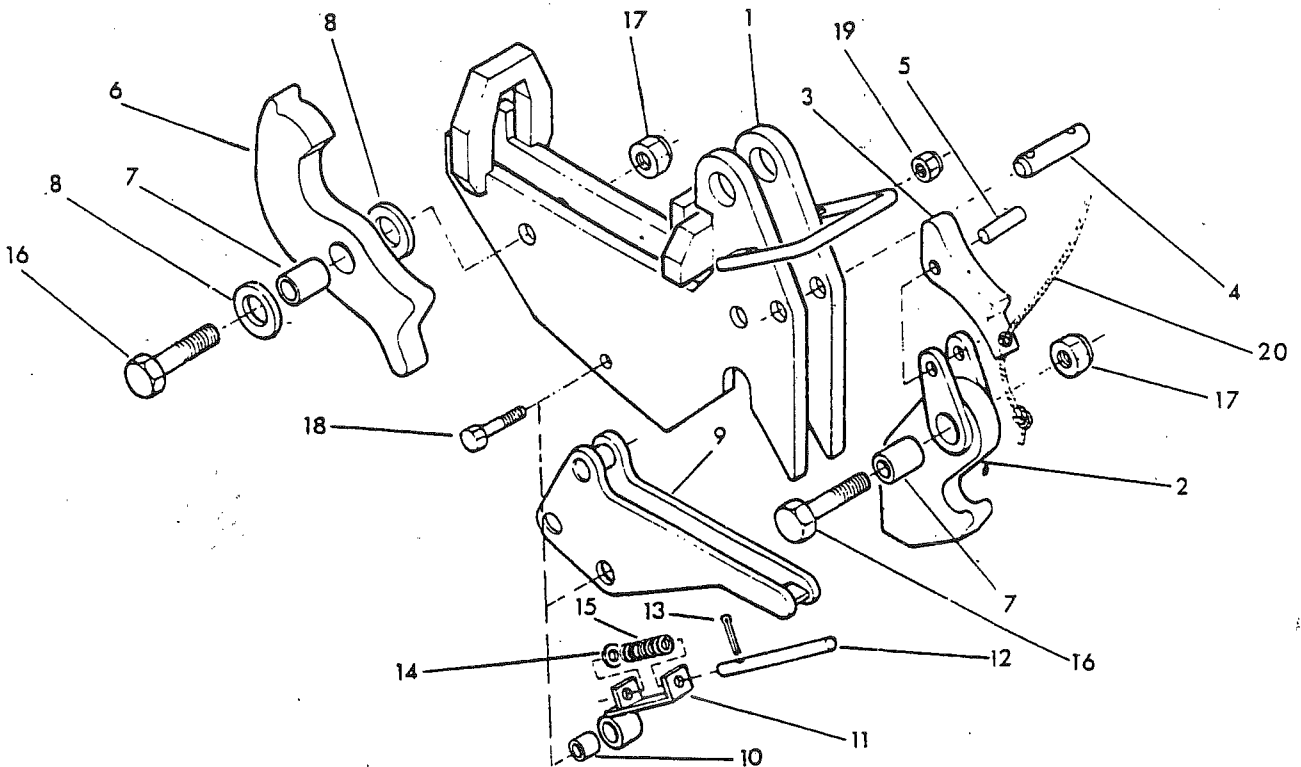
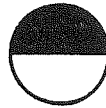
Ref. Part No.

Qty. Description

**73-13-324**

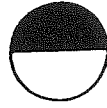
**CAB GUARD KIT**

1	73-13-049	1	Guard panel - large
2	73-13-050	1	Guard panel - small
3	60-01-064	12	Spring
4	60-01-065	6	Hook
5	73-13-051	6	Hook

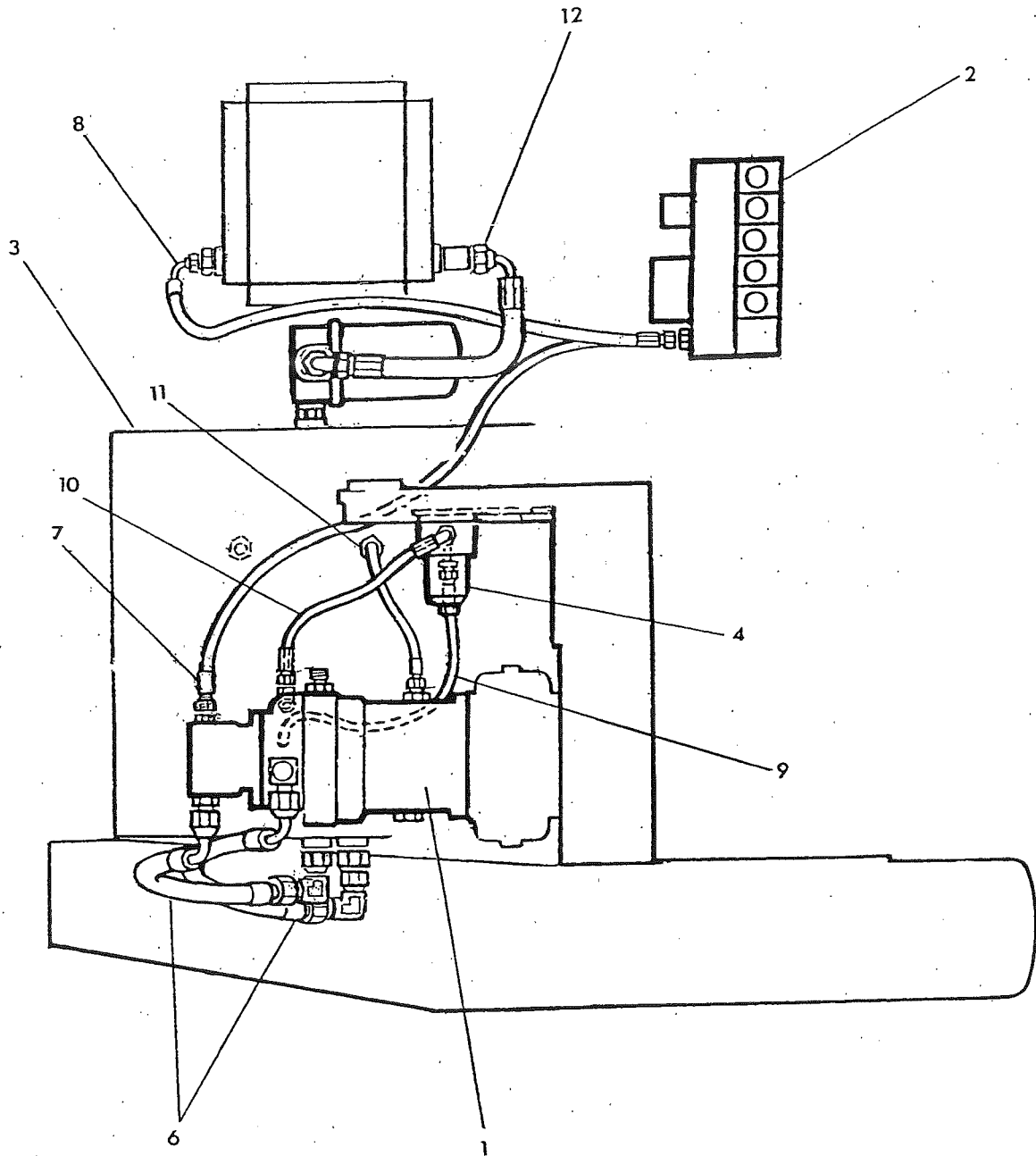


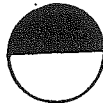
Ref.	Part No.	Qty.	Description
	<b>20-20-999</b>		<b>CATCH ASSEMBLY</b>
1	20-20-901	1	Catch body
2	20-20-902	1	Hitch hook
3	20-20-903	1	Hook release
4	20-20-904	1	Locking pin
5	20-20-906	1	Pivot - hook release
6	20-20-907	1	Plate latch
7	20-20-908	2	Pivot sleeve
8	20-20-909	2	Spacer - plate latch
9	20-20-910	1	Catch lock
10	20-20-911	1	Sleeve - spring rocker
11	20-20-912	1	Spring rocker
12	20-20-913	1	Spring shaft
13	95-01-325	1	Split pin
14	91-00-105	1	Plain washer
15	20-20-914	1	Spring
16	92-13-188	2	Bolt
17	91-43-008	2	Self locking nut
18	92-13-166	1	Bolt
19	91-43-006	1	Self locking nut
20	20-20-915	1	Release cord

**HOSE INSTALLATION -**  
**Primary circuits - all models**



**McCOMEL**





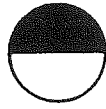
REF PART NO. QTY DESCRIPTION

**HOSE INSTALLATION FOR PRIMARY  
CIRCUIT - ALL MODELS**

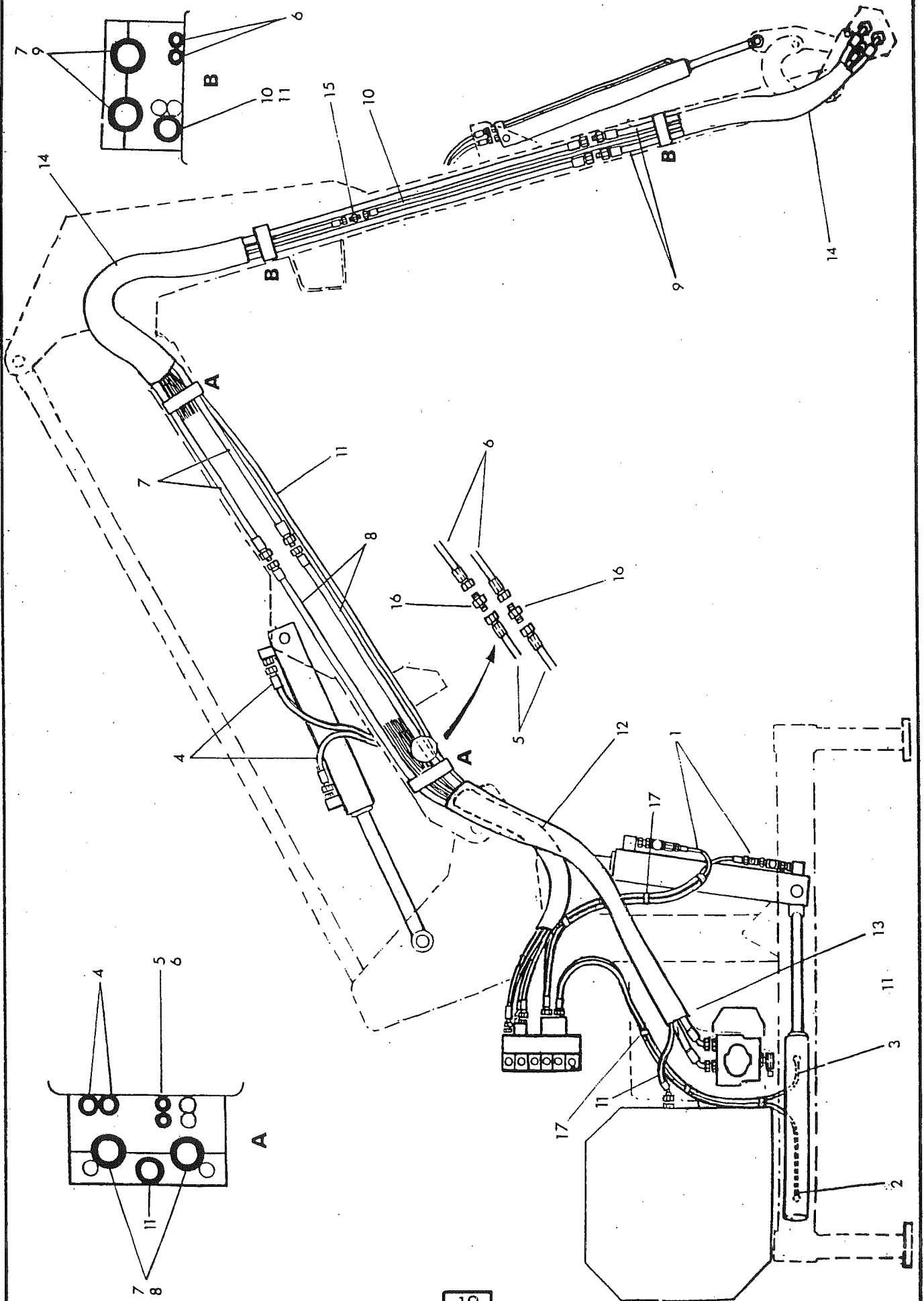
1			Pump
2			Control valve
3			Hydraulic tank
4			Charge filter
5			Cooler
6	10.012.10	2	Hose 1" BSP x 500 long - Suction
7	10.006.20	1	Hose 1/2 BSP x 1000 long press valve
8	10.006.30	1	Hose 1/2 BSP x 2000 long Valve - cooler inlet
9	10.006.09	1	Hose 1/2 BSP x 450 long Pump charge filter
10	10.004.11	1	Hose 3/8 BSP x 550 long Charge filter- pump
11	10.005.07	1	Hose 1/2 BSP x 350 long pump - Hydraulic tank
12	10.012.12	1	Hose 1" BSP x 600 long cooler outlet filter

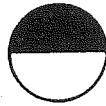


**HOSE INSTALLATION -**  
Service circuits - Std arm



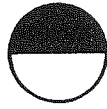
**McCOMBI**



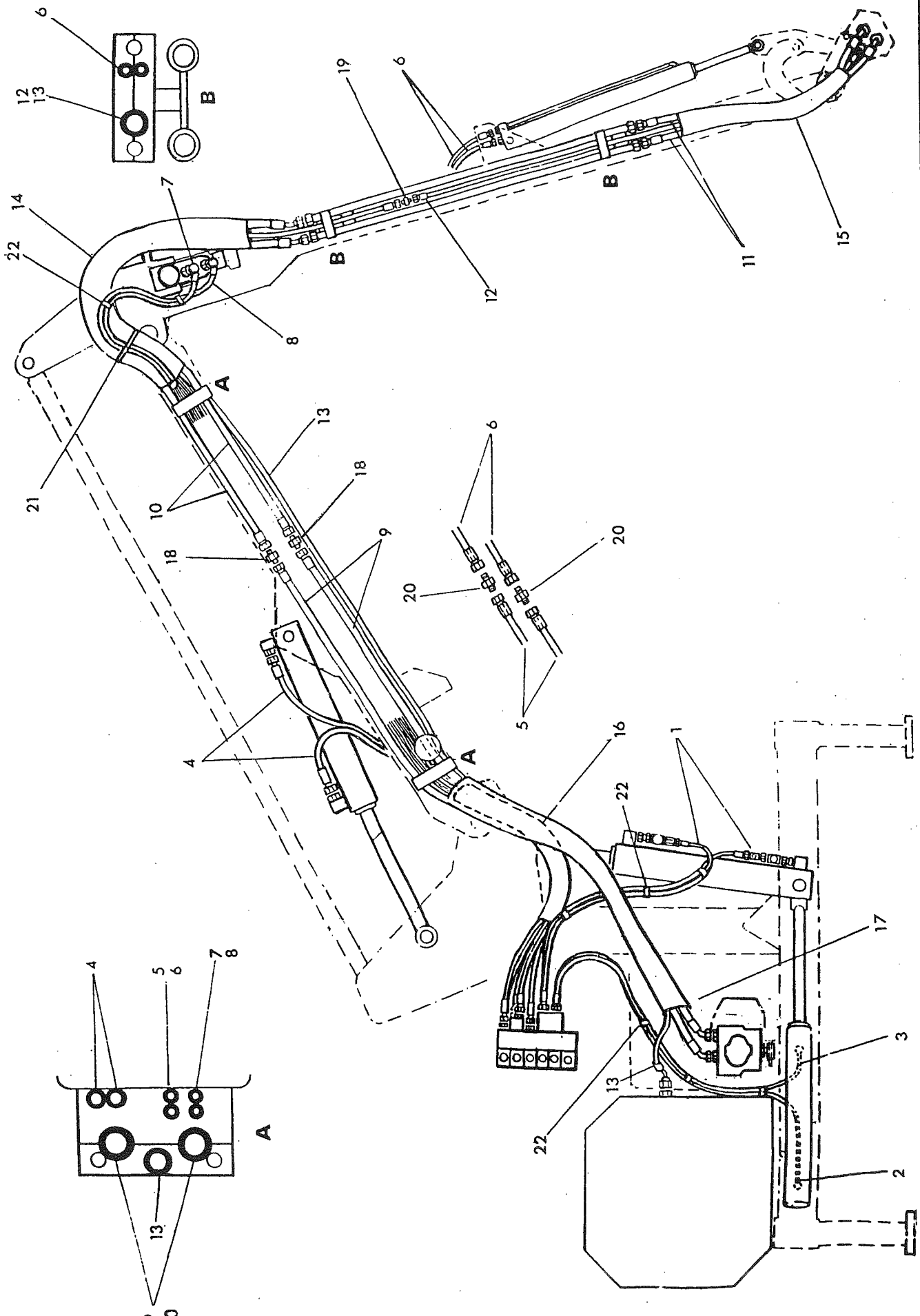


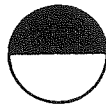
REF	PART N <sup>o</sup> .	QTY	DESCRIPTION
<b>HOSE INSTALLATION SERVICE CIRCUITS 6000</b>			
1	10.003.22	2	Hose 3/8 BSP x 1200 long Lift
2	10.002.26	1	Hose 1/4 BSP x 1600 long Slew base
3	10.002.24	1	Hose 1/4 BSP x 1400 long Slew gland
4	10.003.29	2	Hose 3/8 BSP x 1900 long Reach
5	10.001.23	2	Hose 1/4 BSP x 1300 long valve-angle union
6	10.001.43	2	Hose 1/4 BSP x 3300 long Union-angle
7	42248.37	2	Hose 1" BSP x 2700 long dipper pivot
8	41350.35	2	Hose 1" BSP x 2500 long pump
9	41349.22	2	Hose 1" BSP x 1200 long junction bracket
10	10.008.35	1	Hose 5/8 BSP x 2500 long drain
11	10.007.49	1	Hose 5/8 BSP x 3900 long drain
12	75 50 065	1	Hose sleeve x 20" long
13	75 50 025	1	Hose sleeve x 53" long
14	75 50 063	2	Hose sleeve x 30" long
15	85 81 318	1	Union 5/8 BSP MM
16	85 81 169	1	Union 1/4 BSP MMM
17	71 35 084	6	Hose tie

**HOSE INSTALLATION -**  
**Service circuits - Midcut**



**McCONNELL**



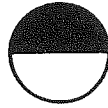


REF	PART NO.	QTY	DESCRIPTION
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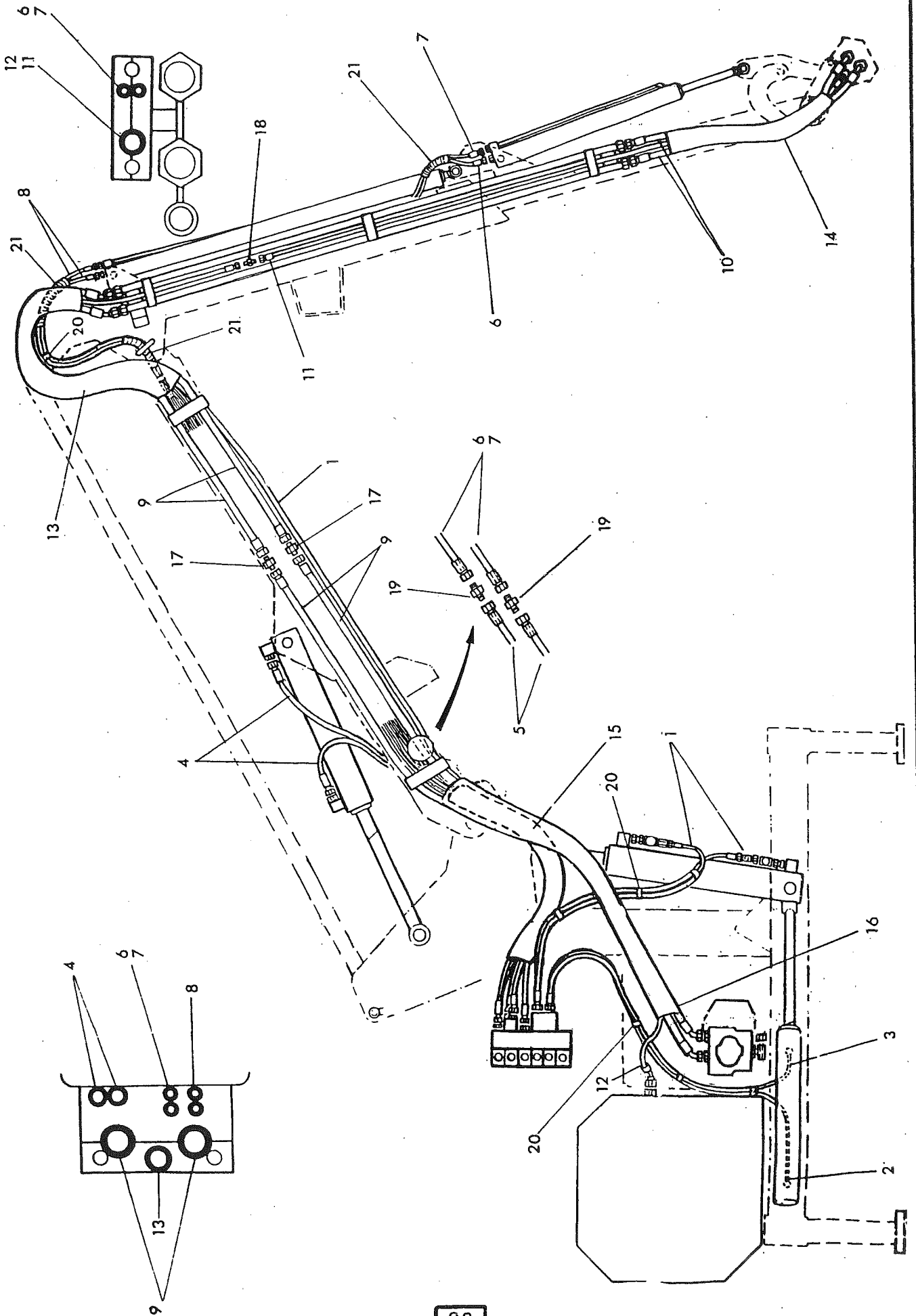
**HOSE INSTALLATION SERVICE  
CIRCUITS 6000M**

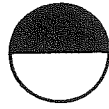
1	10.003.22	2	Hose 3/8 BSP x 1200 long Lift
2	10.002.26	1	Hose 1/4 BSP x 1600 long Slew base
3	10.002.24	1	Hose 1/4 BSP x 1400 long Slew gland
4	10.003.29	2	Hose 3/8 BSP x 1900 long Reach
5	10.001.23	2	Hose 1/4 BSP x 1300 long valve-angle union
6	10.001.55	2	Hose 1/4 BSP x 4500 long Union-angle
7	10.002.48	1	Hose 1/4 BSP x 3800 long midcut base
8	10.002.52	1	Hose 1/4 BSP x 4200 long midcut gland
9	41350.35	2	Hose 1" BSP x 2500 long pump union
10	41350.38	2	Hose 1" BSP x 2800 long dipper pivot
11	85 01 226	2	Hose 1" BSP x 34" long pipes -bracket
12	10.008.35	1	Hose 5/8 BSP x 2500 long drain
13	10.007.61	1	Hose 5/8 BSP x 5100 long drain
14	75 50 026	1	Hose sleeve x 66" long
15	75 50 063	1	Hose sleeve x 30" long
16	75 50 065	1	Hose sleeve x 20" long
17	75 50 025	1	Hose sleeve x 53" long
18	05.434.01	2	Union 1" BSP MM
19	85 81 318	1	Union 5/8 BSP MM
20	85 81 169	1	Union 1/4 BSP MMM
21	71 96 045	1	Hose tie
22	71 35 084	8	Hose tie

**HOSE INSTALLATION -**  
Service circuits - Tele



**McCOMMEL**

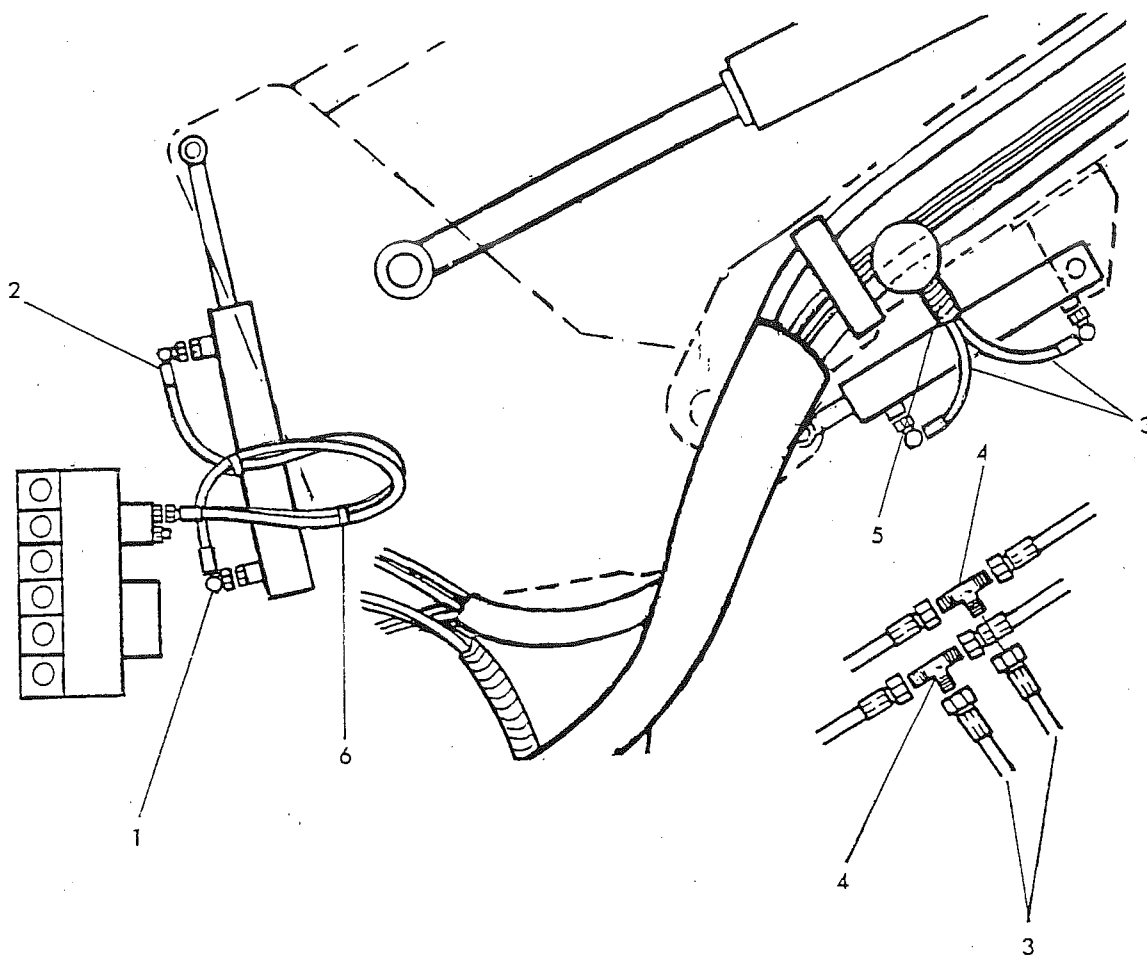
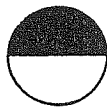


**McCOWELL**

REF PART NO. QTY DESCRIPTION

**HOSE INSTALLATION SERVICE  
CIRCUITS 7000T**

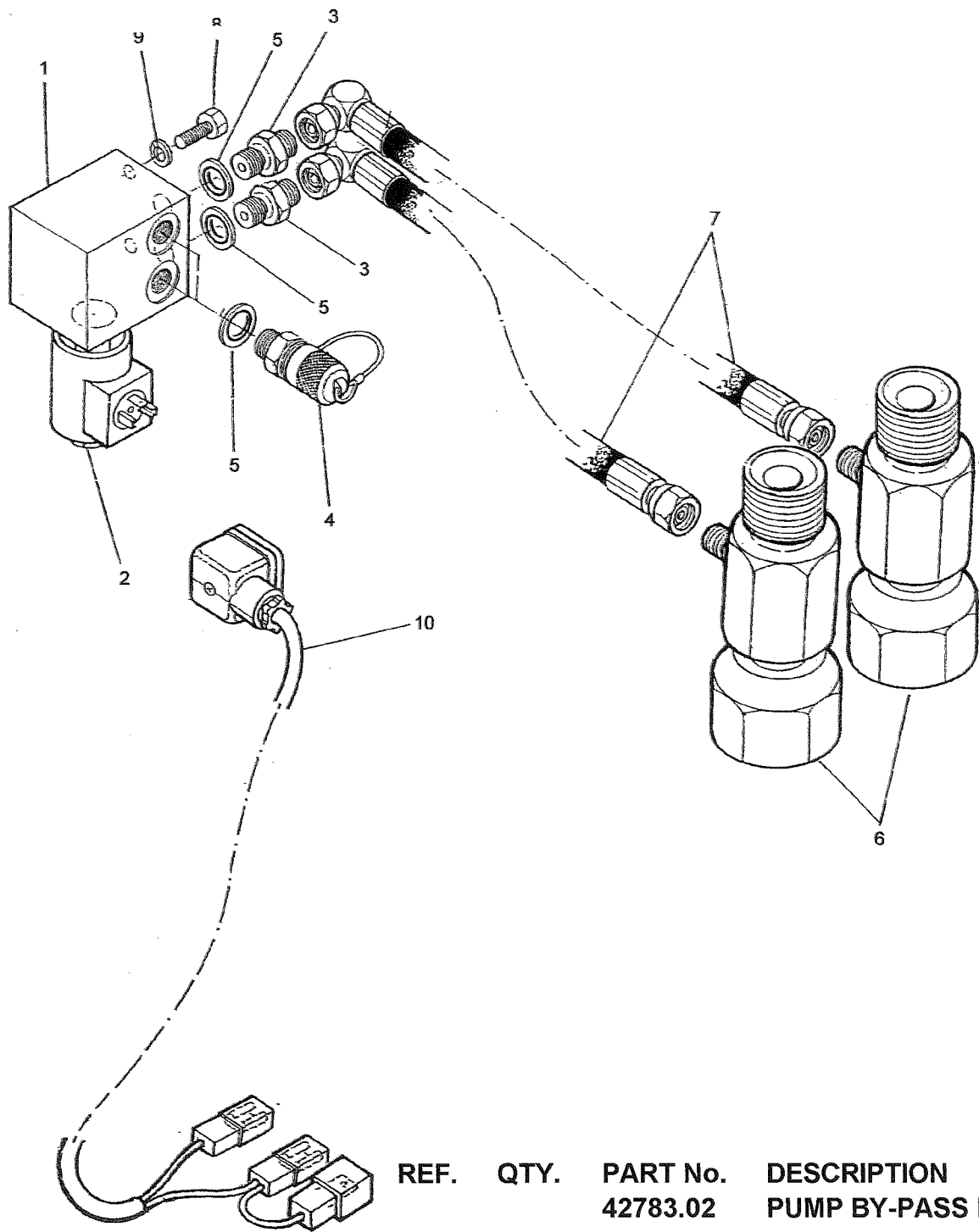
1	10.003.22	2	Hose 3/8 BSP x 1200 long Lift
2	10.002.26	1	Hose 1/4 BSP x 1600 long Slew base
3	10.002.24	1	Hose 1/4 BSP x 1400 long Slew gland
4	10.003.29	2	Hose 3/8 BSP x 1900 long Reach
5	10.001.23	2	Hose 1/4 BSP x 1300 long valve-angle union
6	10.017.58	1	Hose 1/4 BSP x 4800 long Union-angle base
7	10.001.58	1	Hose 1/4 BSP x 4800 long union-angle gland
8	10.001.48	2	Hose 1/4 BSP x 3800 long Tele
9	41350.35	4	Hose 1" BSP x 2500 long pump rigid pipes
10	85 01 226	2	Hose 1" BSP x 34" long pipes bracket
11	10.008.35	1	Hose 5/8 BSP x 2500 long drain
12	10.007.65	1	Hose 5/8 BSP x 5500 long drain
13	75 50 026	1	Hose sleeve x 66" long
14	75 50 063	1	Hose sleeve x 30" long
15	75 50 065	1	Hose sleeve x 20" long
16	75 50 025	1	Hose sleeve x 53" long
17	05.434.01	2	Union 1" BSP MM
18	85 81 318	1	Union 5/8 BSP MM
19	85 81 169	1	Union 1/4 BSP MMM
20	71 35 084	8	Hose tie
21		3	Hose armour coil 3/8 dia x 6" wrapped length



REF	PART NO.	QTY	DESCRIPTION
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**HOSE INSTALLATION - AHC VARIATIONS**

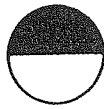
1	10.002.15	1	Hose 1/4 BSP x 750 lg Lift comp base
2	10.002.18	1	Hose 1/4 BSP x 900 lg Lift comp gland.
3	10.002.12	2	Hose 1/4 BSP x 600 lg Reach comp
4	85 81 320	2	Tee 1/4 BSP MMM
5		1	Hose armour coil 3/8 dia x 6" wrapped length
6	71 35 084	2	Hose tie



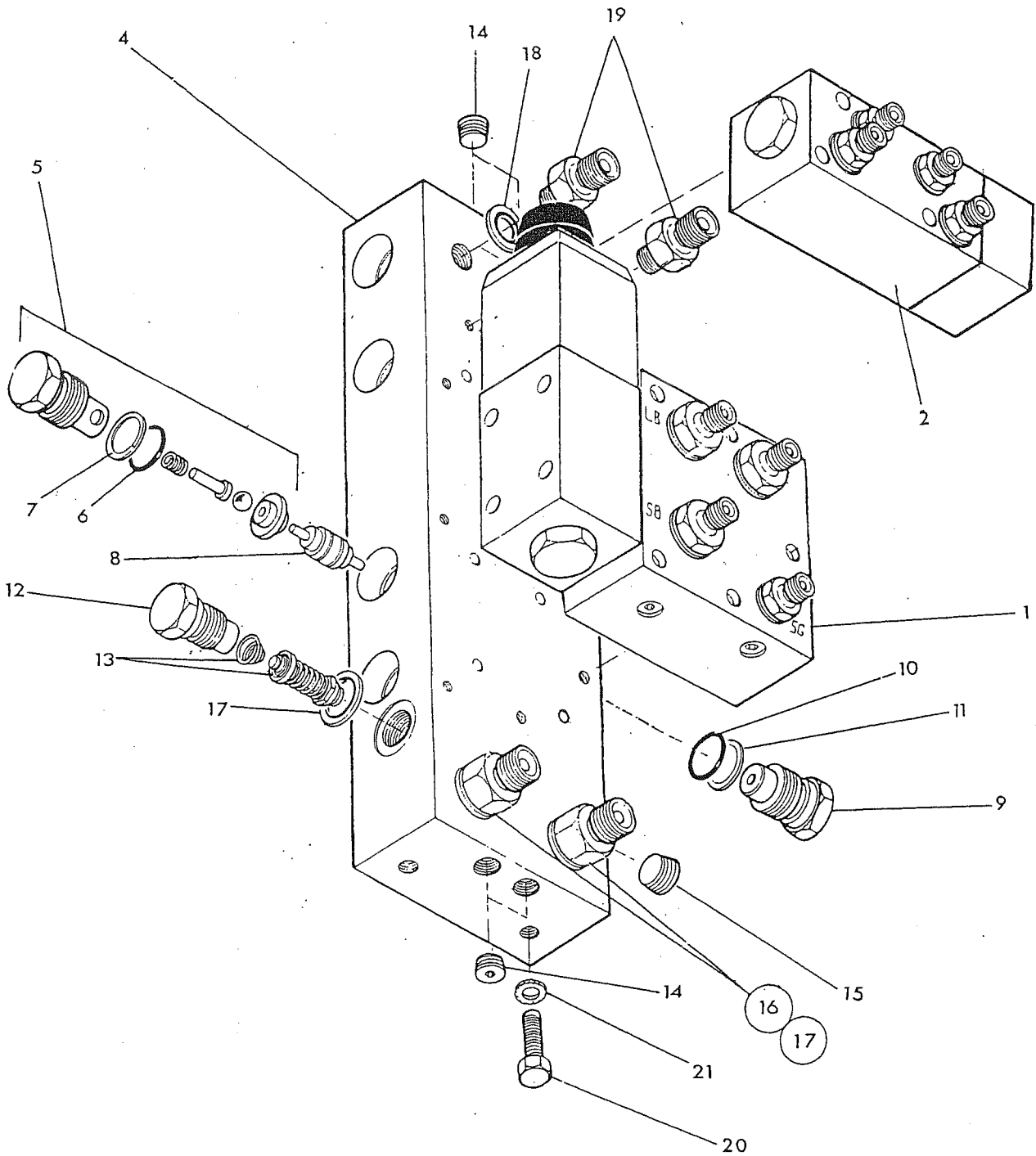
REF.	QTY.	PART No.	DESCRIPTION
		<b>42783.02</b>	<b>PUMP BY-PASS KIT</b>
1	1	8132270	Valve Block
2	1	8130192	Solenoid Valve
3	2	8581169	Union
4	2	8130008	Test Point Union
5	4	8650102	Bonded Seal
6	2	04.056.33	Tee
7	2	10.002.08	Hose
8	2	9313034	Setscrew
9	2	9100204	Spring Washer
10	1	8402375	Loom

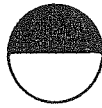


CONTROL VALVE -- std arm



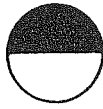
McCONNELL



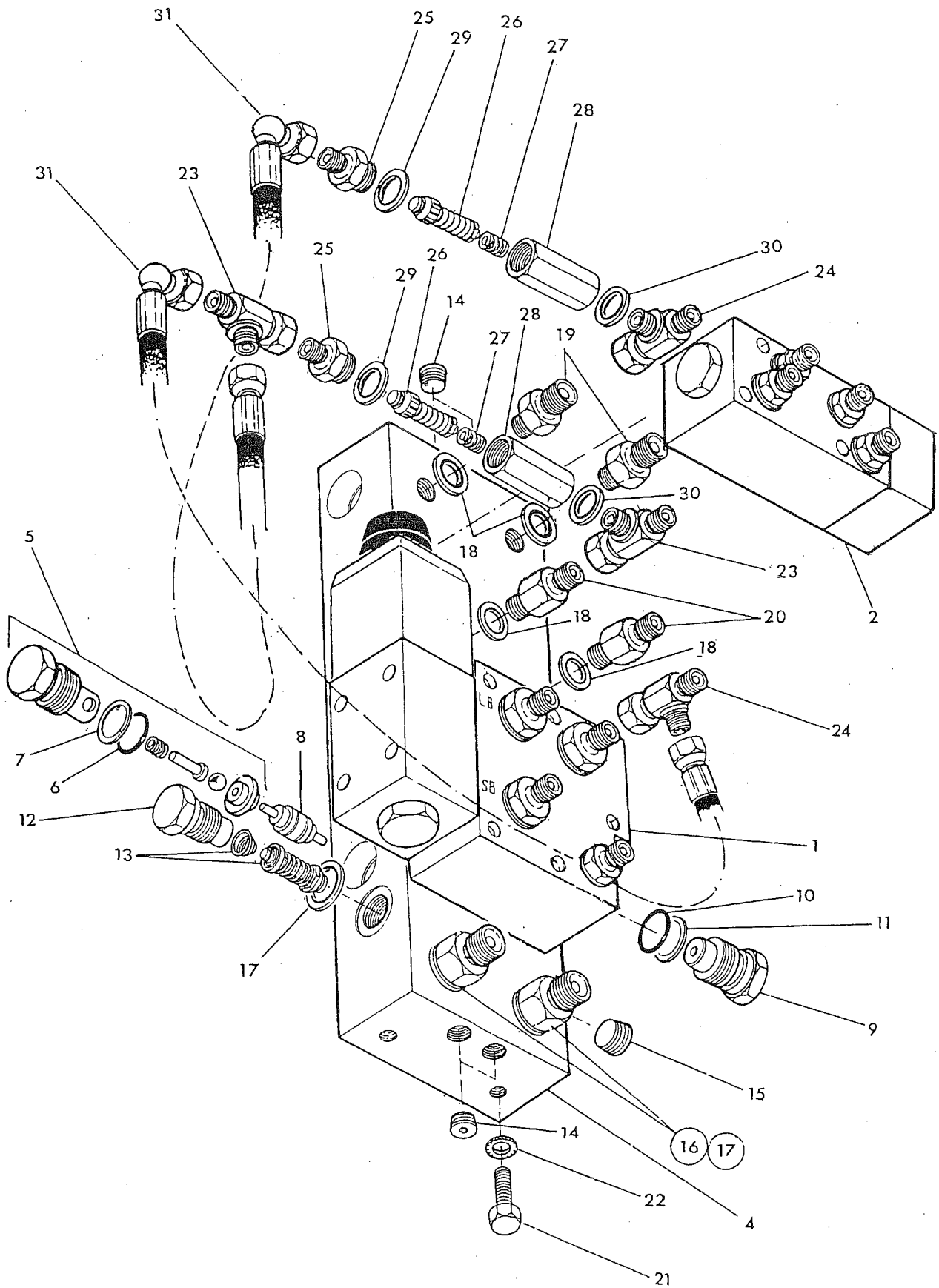


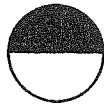
Ref	Part No	Qty	Description
			<b>STD. ARM CONTROL VALVE</b>
	81 30 622	1	Solenoid/manifold assy - non AHC compr:
	82 30 620	1	Solenoid/manifold assy - non AHC with angle float compr:
	81 30 623	1	Solenoid/manifold assy - AHC compr:
	81 30 621	1	Solenoid/manifold assy - AHC with angle float compr:
1		1	Slew circuit valve
2		1	Hose plate or AHC vale or float valves
3		5	Solenoids - not illust.
4	81 32 268	1	Manifold block
5	81 30 090	7	Check valve assembly
6	87 00 644	1	Check valve 'O' ring
7	87 09 644	1	Check valve anti extrusion ring
8	81 30 087	4	Actuator
9	81 30 078	1	Check valve blank
10	87 00 644	1	'O' ring
11	87 09 644	1	Anti extrusion ring
12	81 30 032	1	Relief valve cap
13	81 30 029	1	Relief valve c/w spring - 175 bar
14	85 82 042	3	Taper plug 1/4 BSPT
15	85 82 043	2	Taper plug 3/8 BSPT
16	60 00 112	2	Union 3/8 BSP - 1/2 BSP MM
17	86 50 103	3	Bonded seal 3/8 BSP
18	86 50 102	2	Bonded seal 1/4 BSP
19	85 81 115	2	Union 1/4 BSP - 3/8 BSP MM
20	93 13 055	2	Setscrew M10 x 25
21	91 00 305	2	Internal shakeproof washer dia 10
	86 99 197		<b>SEAL KIT</b>

CONTROL VALVE - midcut

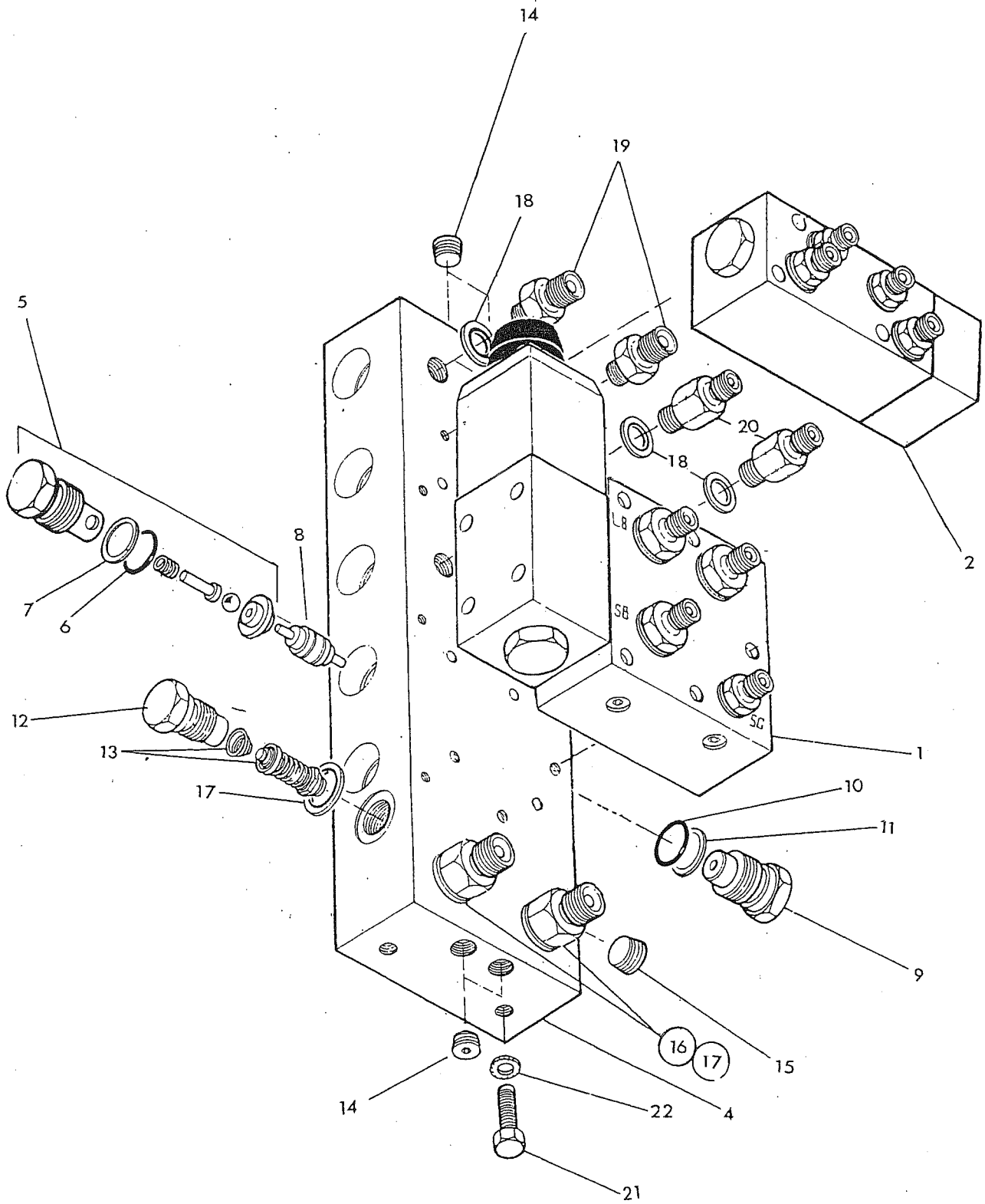
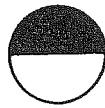


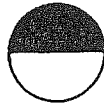
McCOMB





Ref	Part No	Qty	Description
<b>MIDCUT ARM CONTROL VALVE</b>			
	81 30 626	1	Solenoid/manifold assy - non AHC compr:
	81 30 624	1	Solenoid/manifold assy - non AHC with angle float compr:
	81 30 627	1	Solenoid/manifold assy - AHC compr:
	81 30 625	1	Solenoid/manifold assy - AHC with angle float compr:
1		1	Slew circuit valve
2		1	Hose plate or AHC valve or float valves
3		6	Solenoids - not illust.
4	81 32 269	1	Manifold block
5	81 30 090	7	Check valve assembly
6	87 00 644	1	Check valve 'O' ring
7	87 09 644	1	Check valve anti extrusion ring
8	81 30 087	4	Actuator
9	81 30 078	1	check valve blank
10	87 00 644	1	'O' ring
11	87 09 644	1	Anti extrusion ring
12	81 30 032	1	Relief valve cap
13	81 30 029	1	Relief valve c/w spring - 175 bar
14	85 82 042	3	Taper plug 1/4 BSPT
15	85 82 043	2	Taper plug 3/8 BSPT
16	60 00 112	2	Union 3/8 BSP - 1/2 BSP MM
17	86 50 103	3	Bonded seal 3/8 BSP
18	86 50 102	4	Bonded seal 1/4 BSP
19	85 81 115	2	Union 1/4 BSP - 3/8 BSP MM
20	85 81 279	2	Extended union 1/4 BSP MM
21	93 13 055	2	Setscrew M10 x 25
22	91 00 305	2	Internal shakesproof washer dia 10
	81 30 644	1	Midcut service relief valve kit compr:
23	85 81 254	2	'T' piece 1/4 BSP MFM
24	04.056.16	1	'T' piece 3/8 BSP F - 1/4 BSP MM
25	81 30 083	2	Relief valve body
26	81 30 029	2	Relief valve - 190 bar
27	81 16 011	2	Spring
28	81 30 156	2	Relief valve housing
29	86 50 104	2	Bonded seal 1/2 BSP
30	86 50 102	2	Bonded seal 1/4 BSP
31	85 35 102	2	Hose 1/4 BSP x 12" long
<b>86 99 197 SEAL KIT</b>			





Ref Part No Qty Description

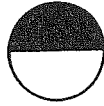
**TELE ARM CONTROL VALVE**

	81 30 626	1	Solenoid/manifold assy - non AHC compr:
	81 30 624	1	Solenoid/manifold assy - non AHC with angle float compr:
	81 30 627	1	Solenoid/manifold assy - AHC compr:
	81 30 625	1	Solenoid/manifold assy - AHC with angle float compr:
1		1	Slew circuit valve
2		1	Hose plate or AHC calve or float valves
3		6	Solenoids - not illust.
4	81 32 269	1	Manifold block
5	81 30 090	7	Check valve assembly
6	87 00 644	1	Check valve 'O' ring
7	87 09 644	1	Check valve anti extrusion ring
8	81 30 087	4	Actuator
9	81 30 078	1	check valve blank
10	87 00 644	1	'O' ring
11	87 09 644	1	Anti extrusion ring
12	81 30 032	1	Relief valve cap
13	81 30 029	1	Relief valve c/w spring - 175 bar
14	85 82 042	3	Taper plug 1/4 BSPT
15	85 82 043	2	Taper plug 3/8 BSPT
16	60 00 112	2	Union 3/8 BSP - 1/2 BSP MM
17	86 50 103	3	Bonded seal 3/8 BSP
18	86 50 102	4	Bonded seal 1/4 BSP
19	85 81 115	2	Union 1/4 BSP - 3/8 BSP MM
20	85 81 279	2	Extended union 1/4 BSP MM
21	93 13 055	2	Setscrew M10 x 25
22	91 00 305	2	Internal shakesproof washer dia 10

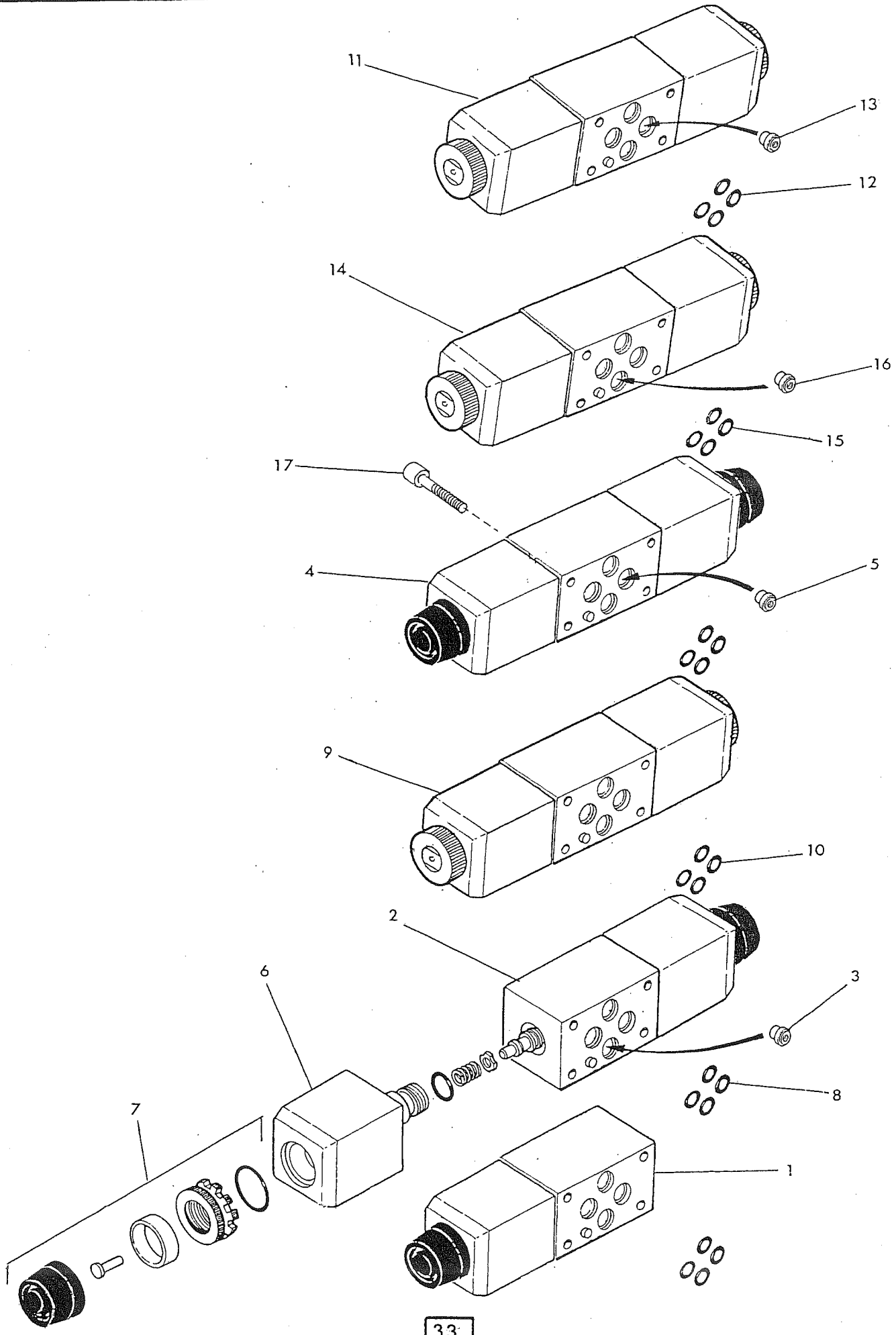
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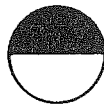
**SEAL KIT**

SOLENOIDS



McCOMB





Ref	Part No	Qty	Description
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**SERVICE SOLENOIDS**

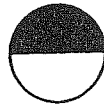
1	81 30 456	1	Single solenoid - standard "cut off"
2	81 30 629	1	Double solenoid - standard - "slew"
3	42989.05	1	Restrictor plug
4	81.30.629	1	Double solenoid - standard - "tele"/ "midcut" if fitted
5	42989.05	1	Restrictor plug

Items 6, 7 and 8 are common to all standard solenoid valves.

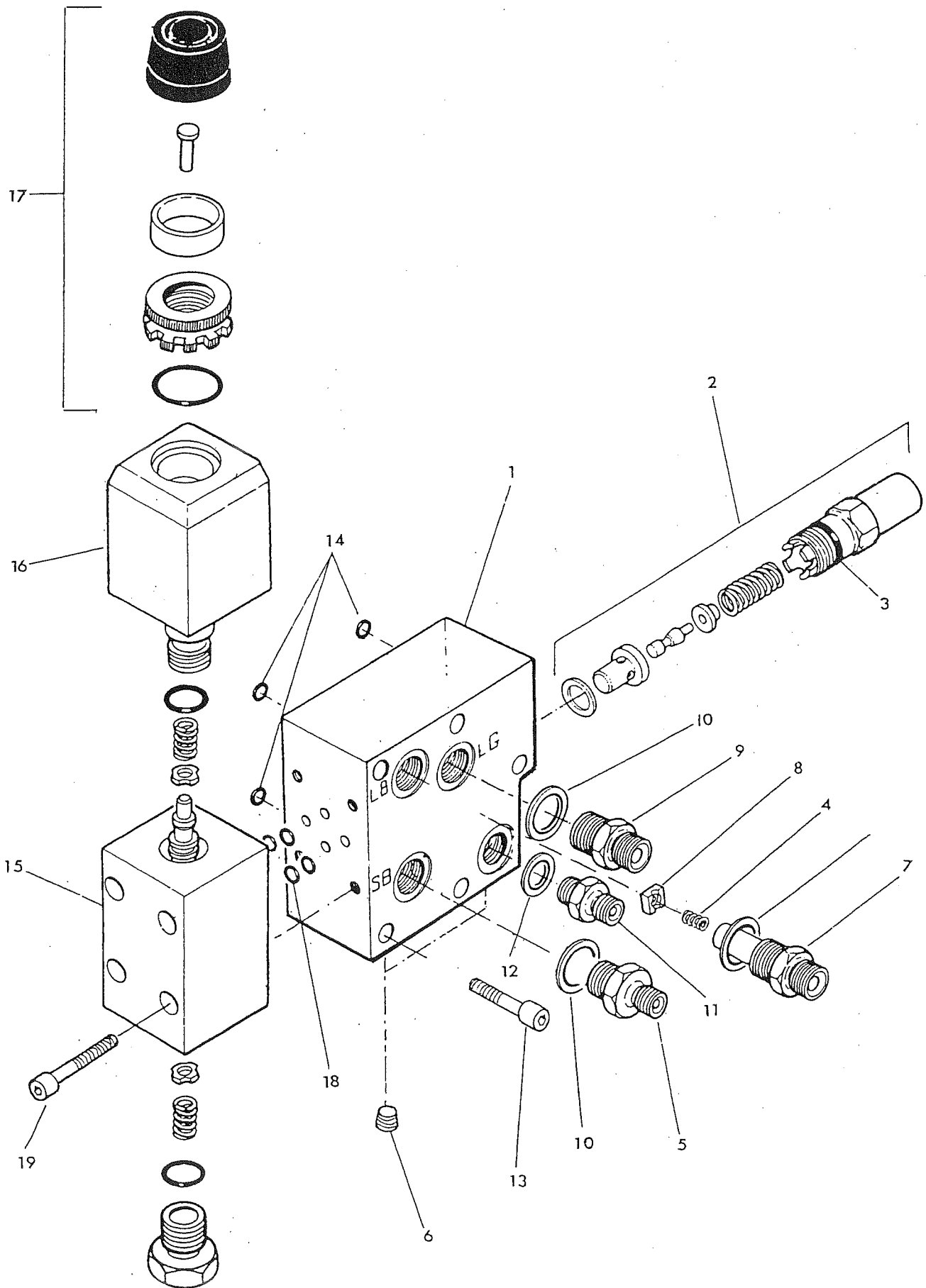
6	81 30 175	1	Coil
7	81 30 176	1	Manual override kit
8	86 00 107	4	'O' ring
9	41784.31	1	Double solenoid - proportional "lift"
10	86 00 107	4	'O' ring
11	41784.31	1	Double solenoid - proportional "reach"
12	86 00 107	4	'O' ring
13	42989.09	1	Restrictor plug
14	41784.31	1	Double solenoid proportional - "angle"
15	86 00 107	4	'O' ring
16	42989.07	1	Restrictor plug
17	92 43 062	24	Capscrew - socket headed M5 x 30

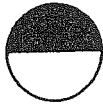


# SLEW VALVE

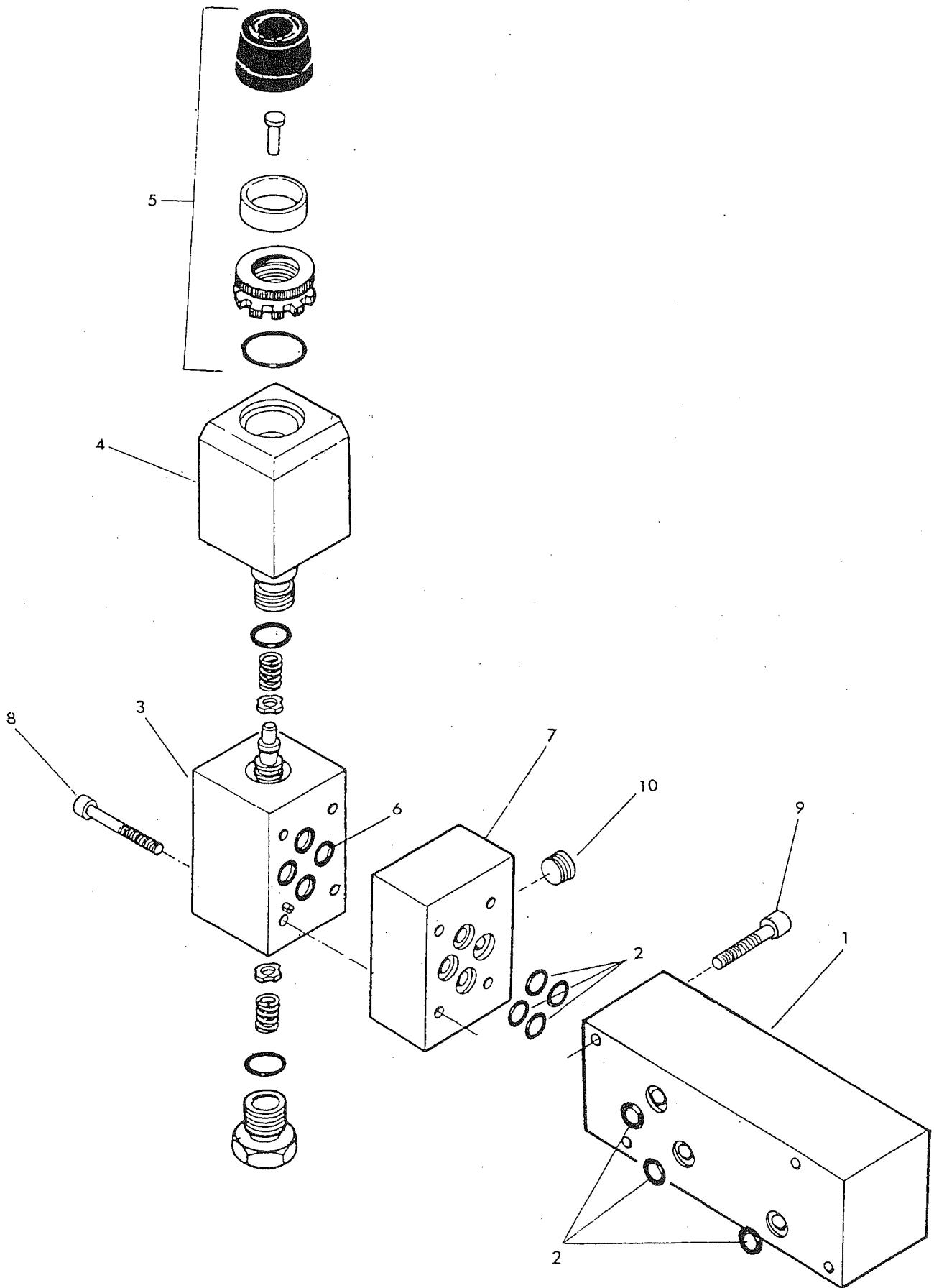
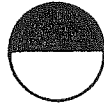


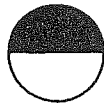
# McCONNELL





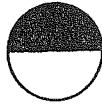
Ref	Part No	Qty	Description
<b>SLEW VALVE ASSEMBLY</b>			
1	81 30 348	1	Valve block
2	81 30 145	1	Relief valve assembly - 210 bar
3	86 00 113	1	Relief valve 'O' ring
4	81 16 011	1	Spring
5	85 81 115	1	Adaptor 3/8 BSP - 1/4 BSP MM
6	85 82 041	4	Plug
7	85 81 345	1	Special union 3/8 BSP MM
8	81 23 046	1	Restrictor disc
9	60 00 113	1	Union 3/8 BSP MM
10	86 50 103	3	Bonded seal 3/8 BSP
11	85 81 169	1	Union 1/4 BSP MM
12	86 50 102	1	Bonded seal 1/4 BSP
13	92 43 062	5	Capscrew socket head M5 x 30
14	87 00 511	3	'O' ring
15	81 30 457	1	Single solenoid valve incl:
16	81 30 175	1	Coil
17	81 30 176	1	Manual override kit
18	86 00 107	4	'O' ring
19	92 43 082	4	Capscrew - socket headed M5 x 40
<b>SOLENOID SEAL KIT</b>			
86 99 224			



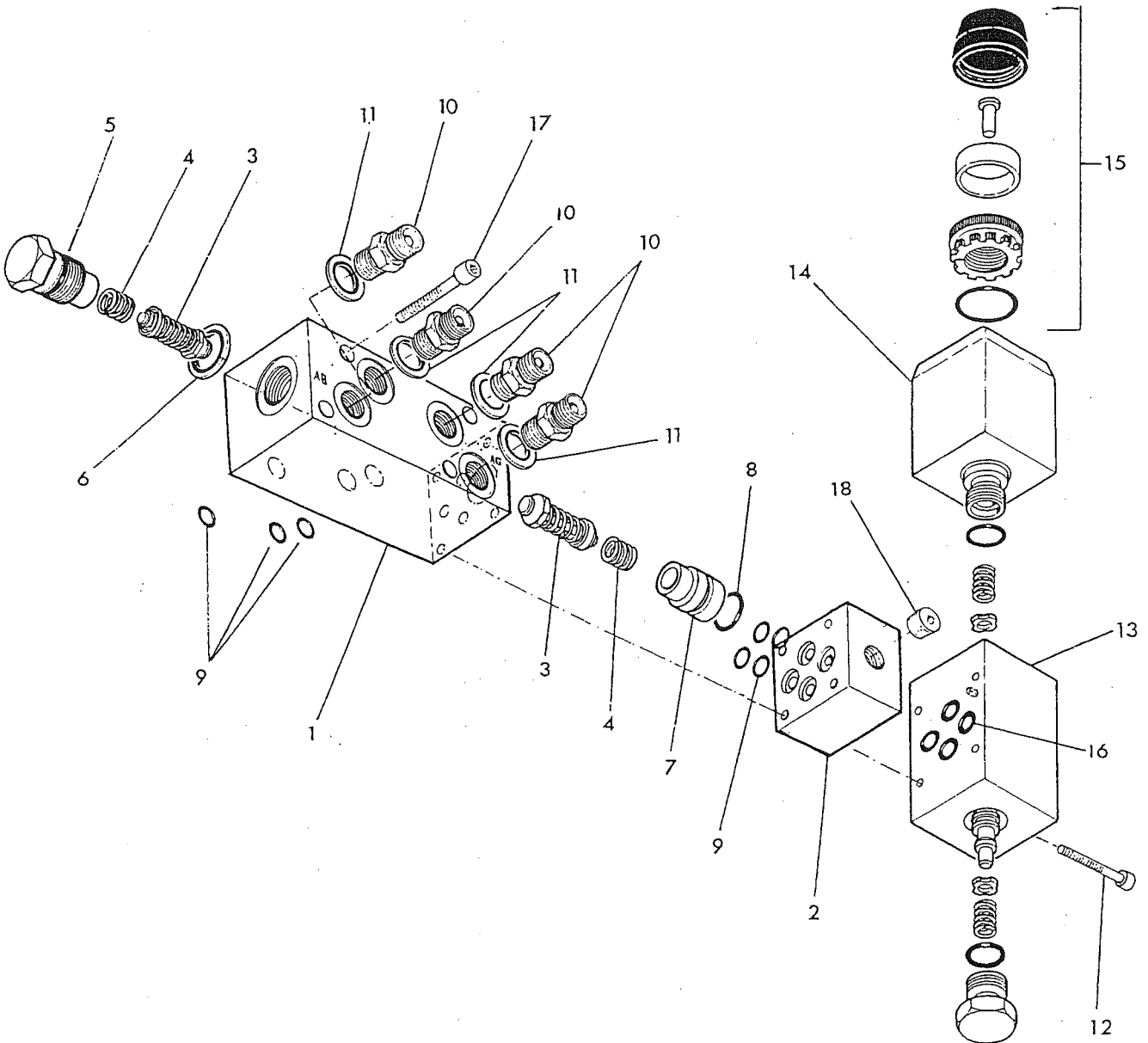


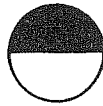
Ref	Part No	Qty	Description
			ANGLE FLOAT VALVE - for non AHC models
1	81 30 323	1	Float valve block
2	87 00 511	7	'O' ring
3	81 30 457	1	Angle float solenoid incl:
4	81 30 175	2	Coil
5	81 30 176	1	Manual override kit
6	86 00 107	4	'O' ring
7	81 26 280	1	Bridging plate
8	92 43 102	4	Capscrew - socket head M5 x 50
9	92 43 082	4	Capscrew - socket head M5 x 40
10	85 82 041	1	Plug 1/8 BSP
	86 99 224		SOLENOID SEAL KIT

COMPENSATOR VALVE / ANGLE  
FLOAT-AHC Models



McCOMB



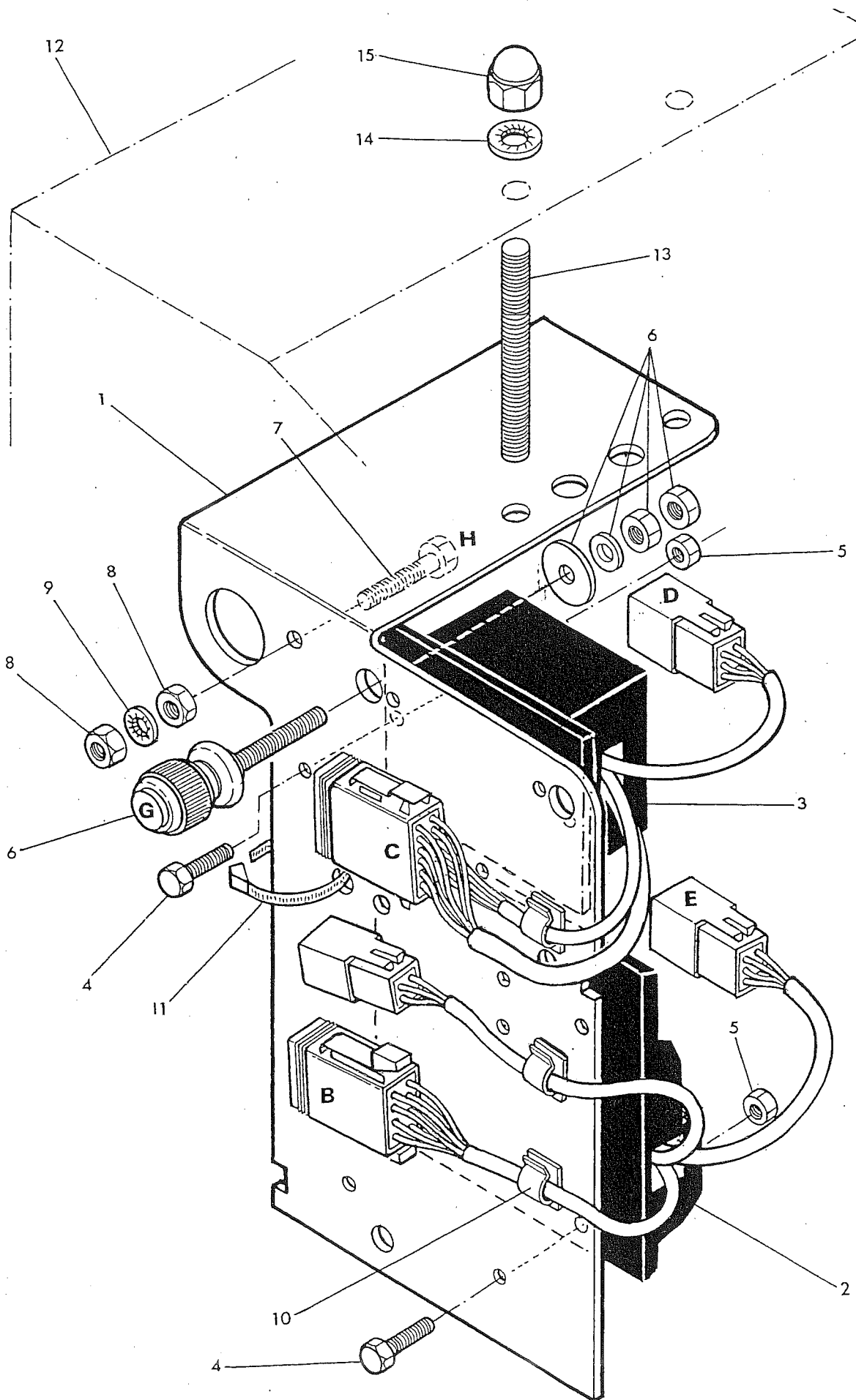
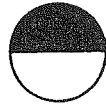


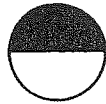
HEAD COMPENSATOR/ANGLE FLOAT VALVE -  
for AHC models

1	81 30 361	1	Valve block
2	81 26 280	1	Bridging plate
3	81 30 124	2	Relief valve - 140 bar
4	81 16 011	2	Spring
5	81 30 032	1	Relief valve cap
6	86 50 103	1	Bonded seal 3/8 BSP
7	81 30 140	1	Valve plug
8	86 00 109	1	'O' ring
9	87 00 511	7	'O' ring
10	85 81 169	4	Adaptor 1/4 BSP MM
11	86 50 102	4	Bonded seal 1/4 BSP
12	92 43 102	4	Capscrew socket head M5 x 50
13	81 30 457	1	Single solenoid valve compr:
14	81 30 175	1	Coil
15	81 30 176	1	Manual override kit
16	86 00 107	4	'O' ring
17	92 43 082	4	Capscrew - socket head M5 x 40
18	85 82 041	1	Plug 1/8

86 99 224

SOLENOID SEAL KIT

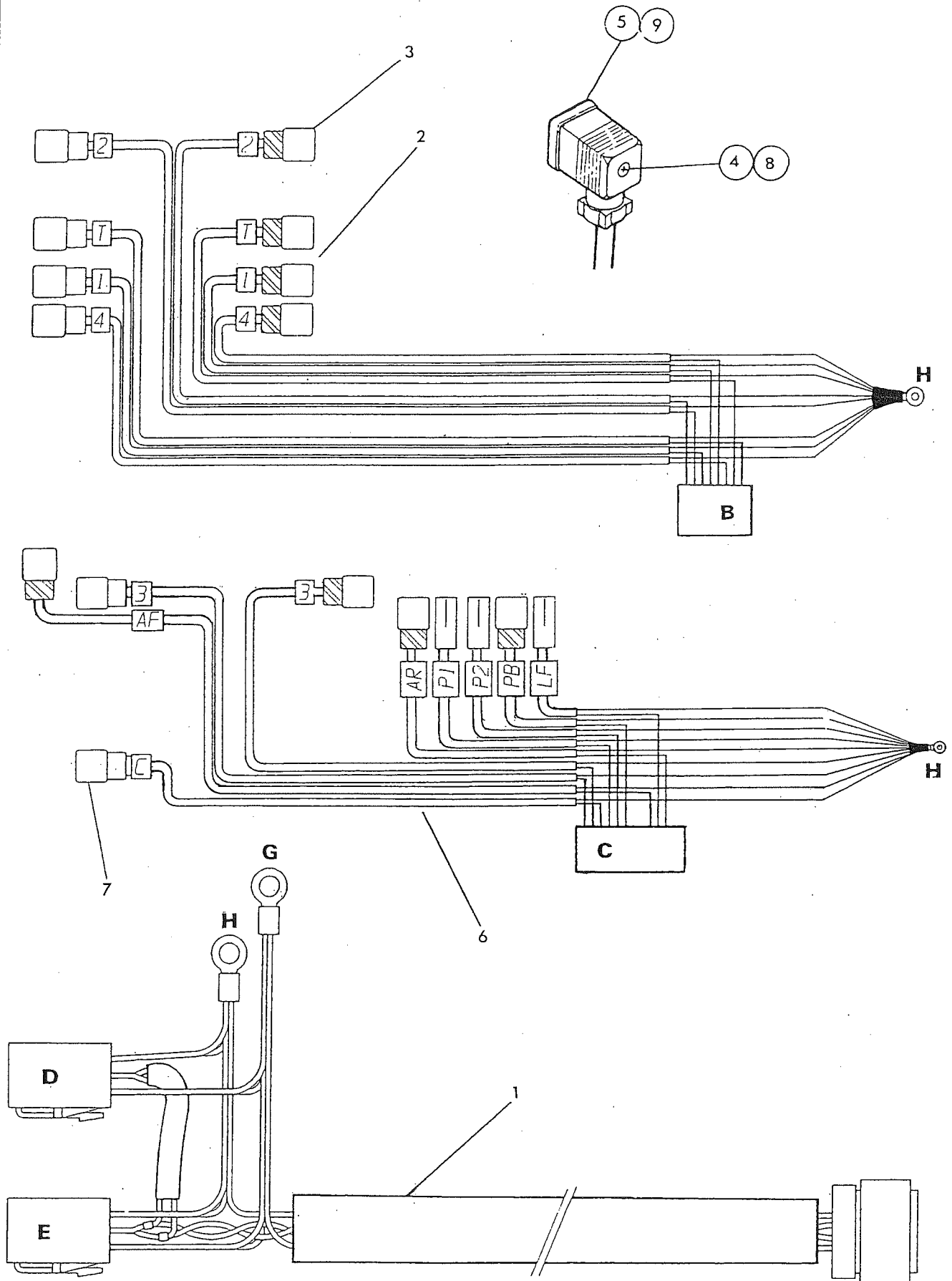
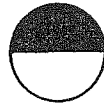


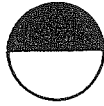


**CONTROL PLATE ASSEMBLY AND  
VALVE COVER**

1	43081.01	1	Control plate
2	43060.32	1	Control box incl. connectors - large
3	43060.33	1	Control box incl. connector - small
4	93 00 132	6	Screw M4 x 12
5	05.948.33	6	Self locking nut M4
6	84 02 227	1	Power terminal - insulated
7	93 13 043	1	Setscrew M6 x 20
8	91 13 003	2	Plain nut M6
9	91 00 303	1	Internal shakeproof washer dia 6
10	43357.01	3	Cable clip-self adhesive
11	71 35 084	2	Cable tie
12	42221.02	1	Solenoid cover
13	42198.03	2	Stud M10 x 80
14	91 00 305	2	Internal serrated washer - dia 10
15	91 00 025	2	Dome nut M10

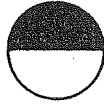




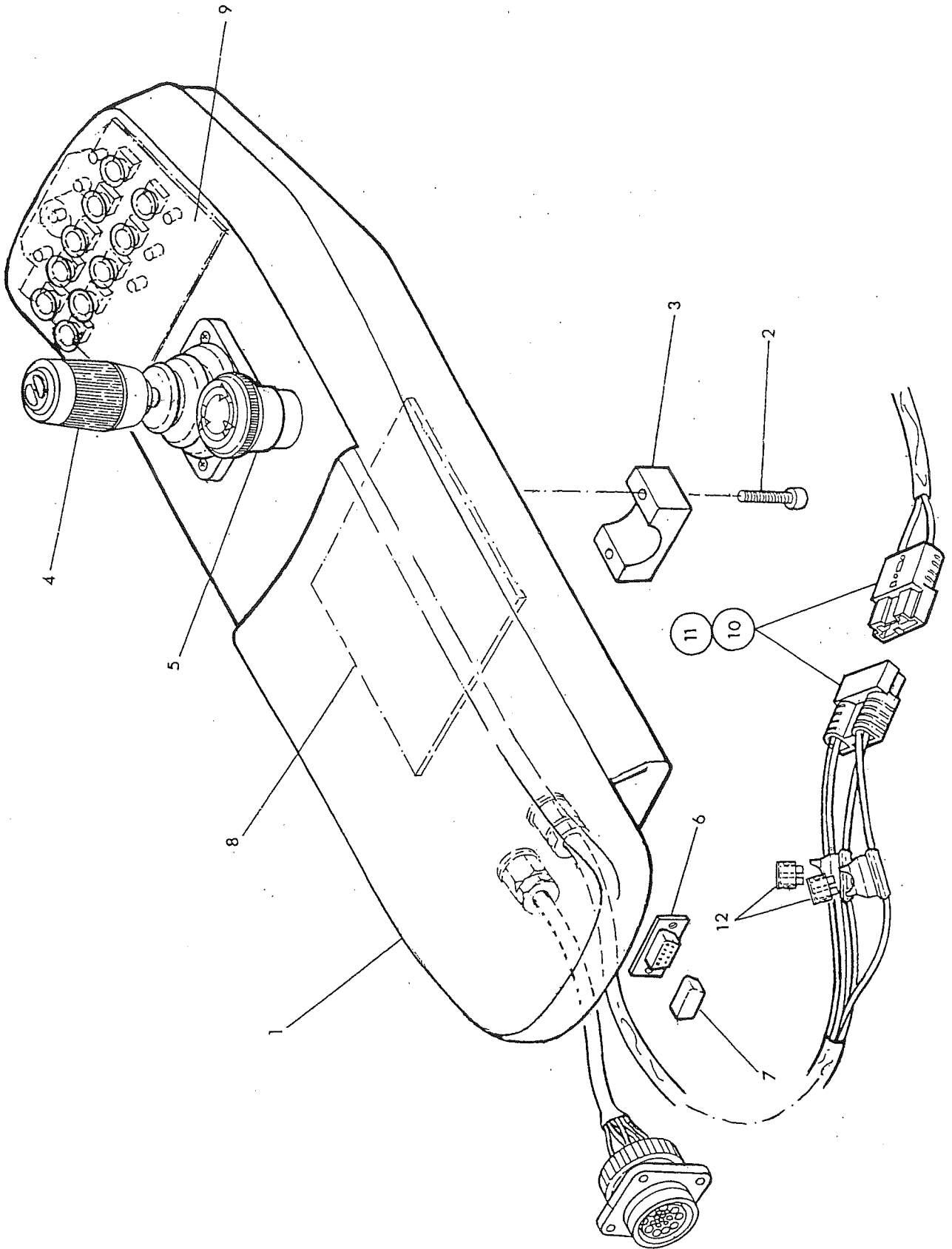


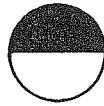
Ref	Part No	Qty	Description
<b>CONTROL LOOMS</b>			
1	43177.12	1	Control loom
2	43177.10	1	Service loom incl. connectors - lift, reach, tele and slew
3	07.835.04	8	Plug incl. screw & gasket
4	07.835.03	1	Screw
5	07.835.02	1	Gasket
6	43177.11	1	Service loom incl. connectors - angle and auxiliaries
7	07.835.04	6	Plug incl. screw & gasket
8	07.835.03	1	Screw
9	07.835.02	1	Gasket

CONTROL ASSEMBLY

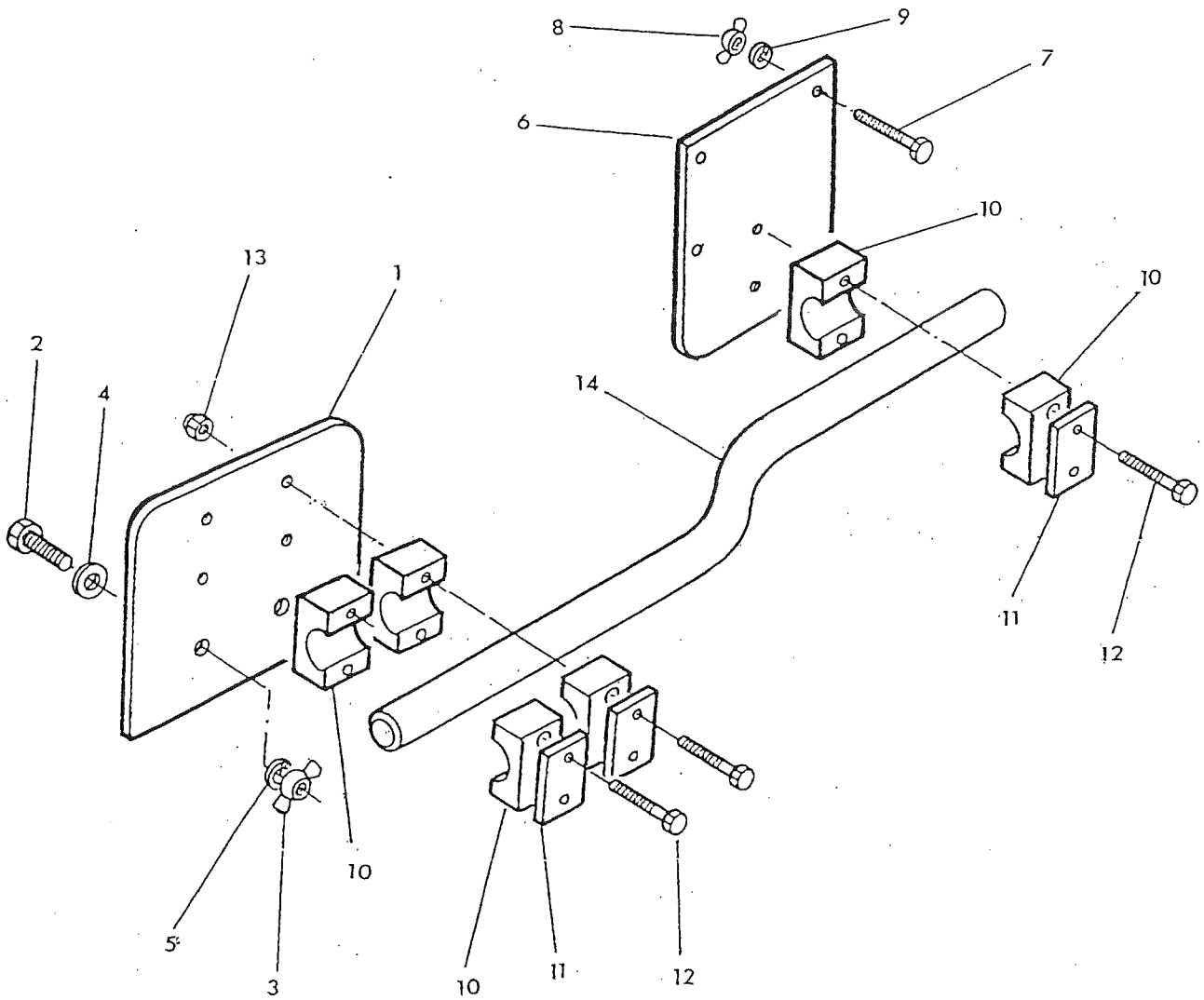
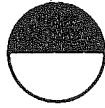


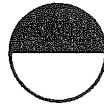
McCOMB





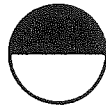
Ref	Part No	Qty	Description
			ARMREST CONTROL ASSEMBLY AND POWER LOOM
1	43022.32	1	Box incl. screws
2	93 43 053	6	Capscrew M6 x 25
3	30.209.71	3	Clamp
4	43022.33	1	Joystick control
5	41786.33	1	Power on/off switch
6	43022.39	1	Diagnostic connection
7	43022.36	1	Connection cover
8	43022.35	1	Main printed circuit board
9	43022.37	1	Switch printed circuit board
10	84 02 230	2	Contact housing
11	84 02 229	4	Contacts
12	43034.02	2	Fuse 30amp



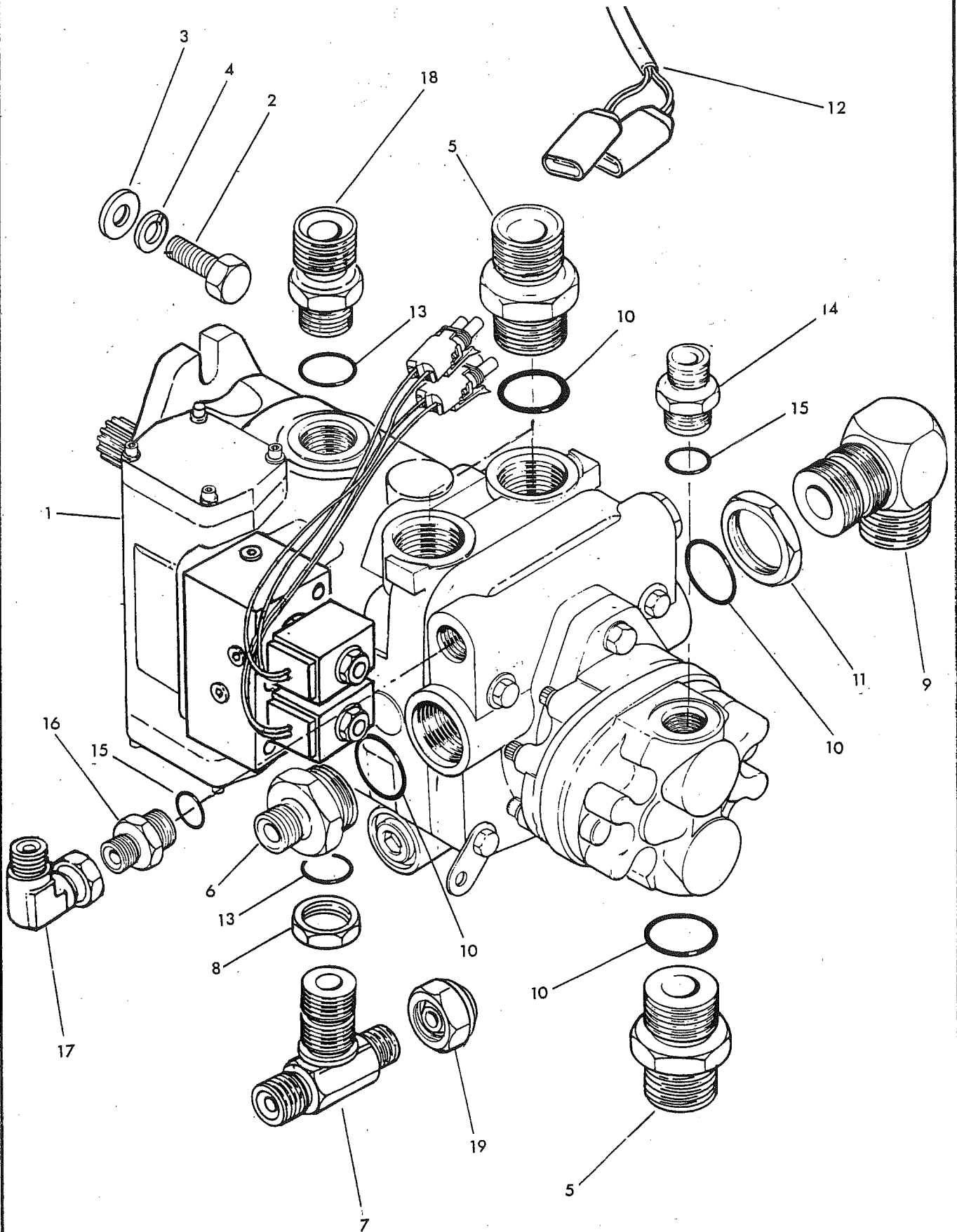


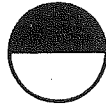
Ref	Part No	Qty	Description
	<b>73 13 275</b>		<b>CAB MOUNTING KIT</b>
1	08.317.01	1	Control mounting bracket
2	93 13 054	2	Setscrew M8 x 25
3	91.93 004	2	Wingnut M8
4	91 00 104	2	Plain washer dia 8
5	91 00 204	2	Spring washer dia 8
6	41.046.01	1	Rotor control valve mounting plate
7	92 13 113	3	Bolt M6 x 55
8	05.948.37	3	Wingnut M6
9	91 00 203	3	Spring washer dia 6
10	30.209.71	6	Clamp
11	30.209.33	3	Cover plate
12	30.068.88	6	Bolt M6 x 45
13	91 63 003	4	Self locking nut M6
14	42312.01	1	Mounting bar

PUMP



McCOMEL

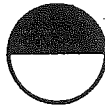




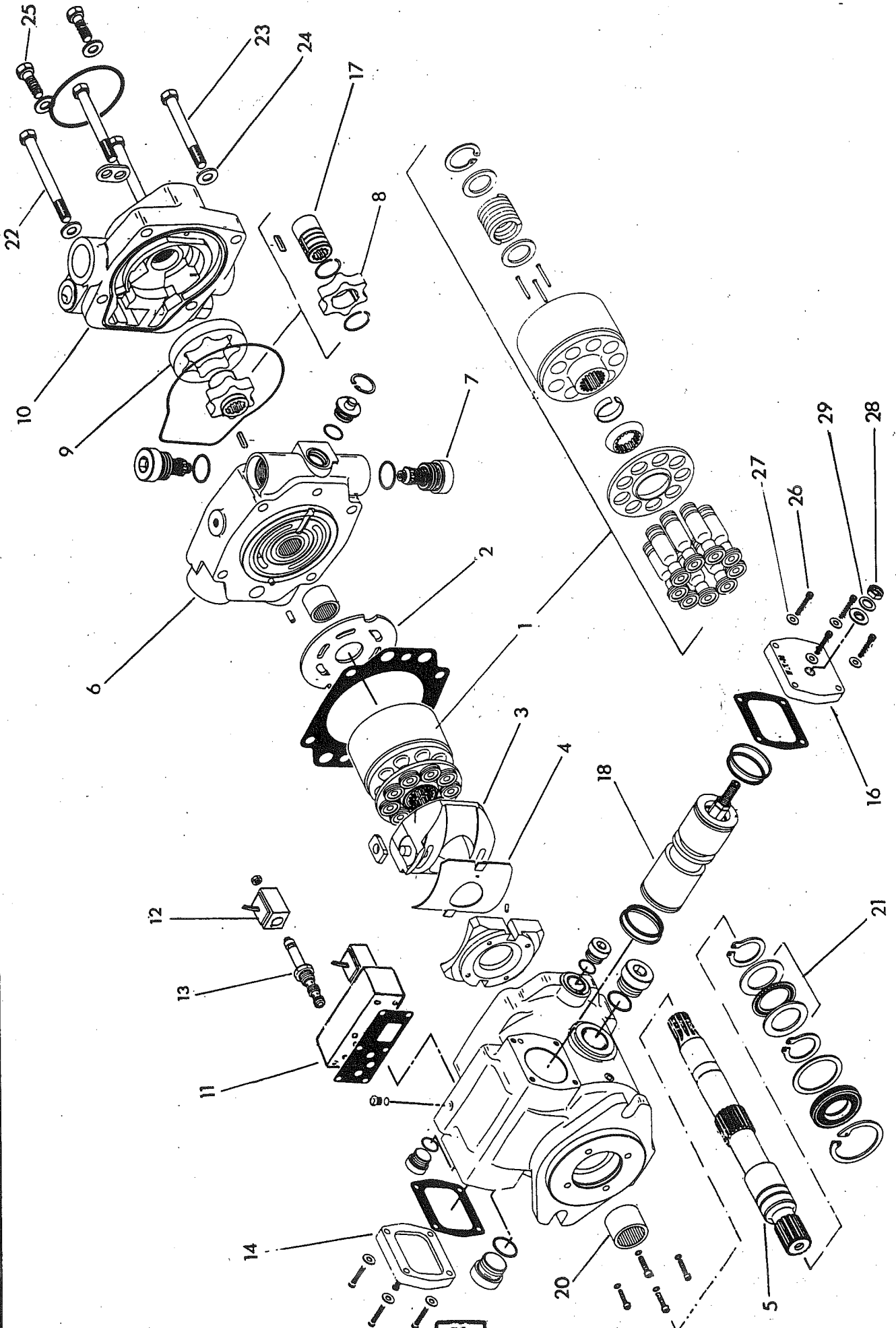
REF	PART NO.	QTY	DESCRIPTION
			<b>PUMP ASSY</b>
1	82 01 698	1	Pump incl.
	82 01 699		Large pump
	82 01 163	1	Auxiliary gear pump
2	05.839.01	2	Special bolt M14 x 35
3	91 00 020	2	Plain washer dia 14
4	05.282.08	2	Spring washer dia 14
5	85 81 256	3	Adaptor 1 5/16 JIC - 1 BSP MM
6	85 81 321	1	Adaptor 1 5/16 JIC - 1/2 BSP MM
7	85 81 350	1	Tee 1 1/16 UNF - 1/2 BSP 5/8 BSP
8	05.948.38	1	1 1/16 UNF thin locknut
9	85 81 335	1	Elbow 90 deg 1 5/16 JIC - 1" BSP
10	86 00 916	5	'O' ring
11	75 50 047	1	Nut thin 1 5/16 UNF
12	84 02 348	1	Rotor loom
13	86 00 912	2	'O' ring 1 1/16
14	85 81 226	1	Adaptor 7/8 JIC - 1/2 BSP MM
15	86 00 910	2	'O' ring 7/8
16	520 622	1	Adaptor 7/8 JIC - 3/8 BSP MM
17	85 81 117	1	Elbow 90 deg 3/8 BSP
18	08.955.24	1	Adaptor 1 1/16 UNF - 1" BSP MM
19	G381 2119	1	Blanking cap 5/8 BSP

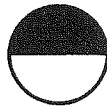


PUMP ASSY



McCOMB





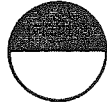
REF.	PART NO.	QTY	DESCRIPTION
<b>PISTON PUMP ASSEMBLY</b>			
1	82 01 169	1	Rotating kit
2	82 01 170	1	Valve plate
3	82 01 171	1	Cam plate
4	82 01 172	1	Cam bushing
5	82 01 173	1	Shaft
6	82 01 174	1	Back plate assembly
7	82 01 175	1	Relief valve
8	82 01 176	1	Gerotor - inner ring
9	82 01 177	1	Gerotor - outer ring
10	82 01 178	1	Charge assembly
11	82 01 192	1	Pump/rotor control incl:-
12	82 01 197	2	Coil
13	82 01 198	2	Cartridge
14	82 01 181	1	Coverplate
15	82 01 182	2	Gasket
16	82 01 183	1	Coverplate
17	82 01 185	1	Coupler
18	82 01 180	1	Servo piston assembly
19	82 01 187	1	Gasket
20	83 01 038	1	Needle bearing
21	83 01 039	1	Thrust washer
22	02 12 323	3	Bolt
23	02 12 283	3	Bolt
24	01 00 103	8	Washer
25	03 11 103	2	Setscrew
26	03 42 080	8	Capscrew
27	01 00 100	8	Washer
28	01 12 003	1	Nut
29	01 00 103	1	Washer
86	99 239		<b>SEAL KIT</b>

### SERVICE NOTE

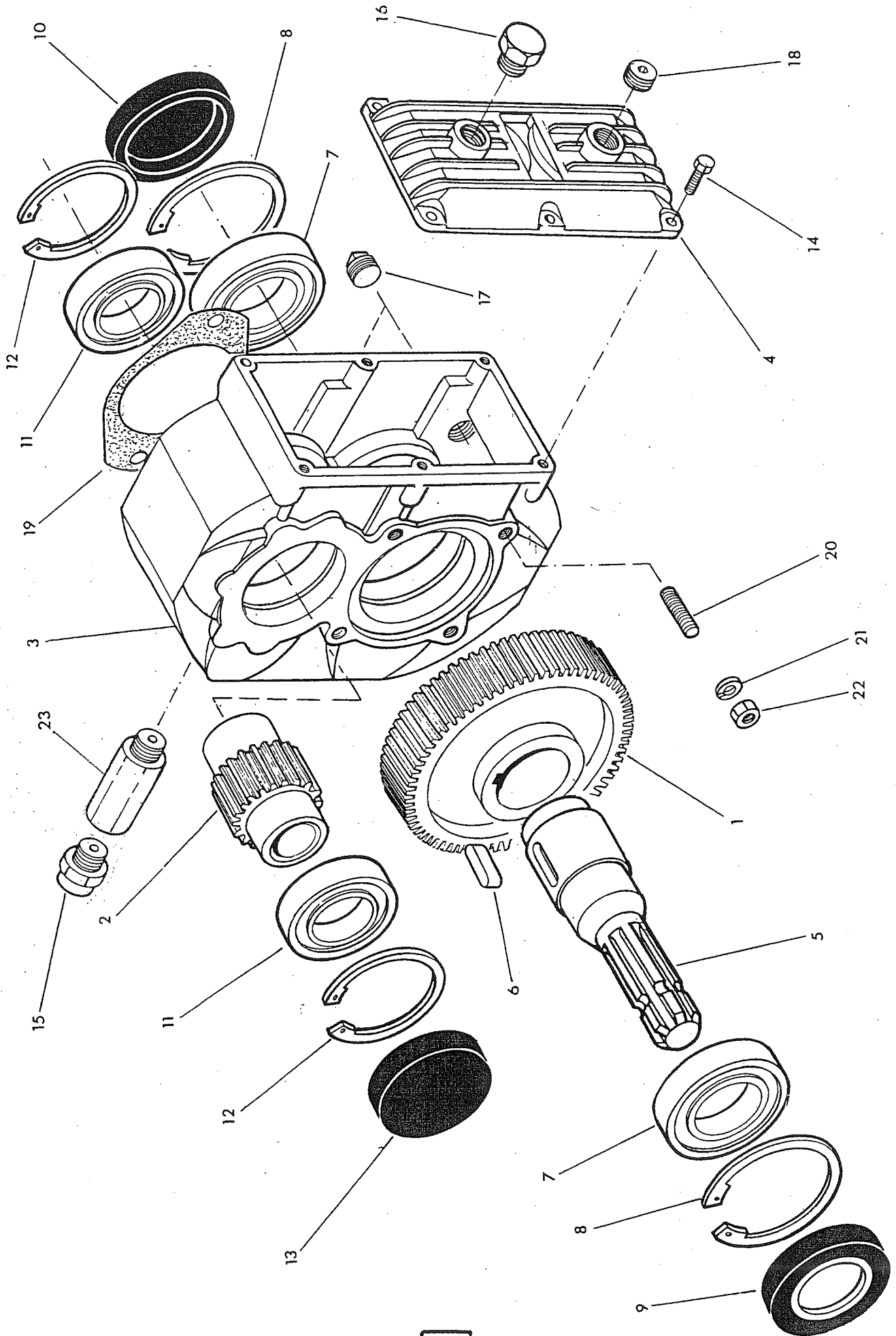
Piston pumps are manufactured to very fine tolerances. With the exception of replacing item 7 any service work must be carried out by qualified specialist technicians working in a clean, dust free environment.

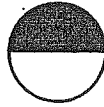
If in any doubt contact McConnel Service department for advice.

GEARBOX

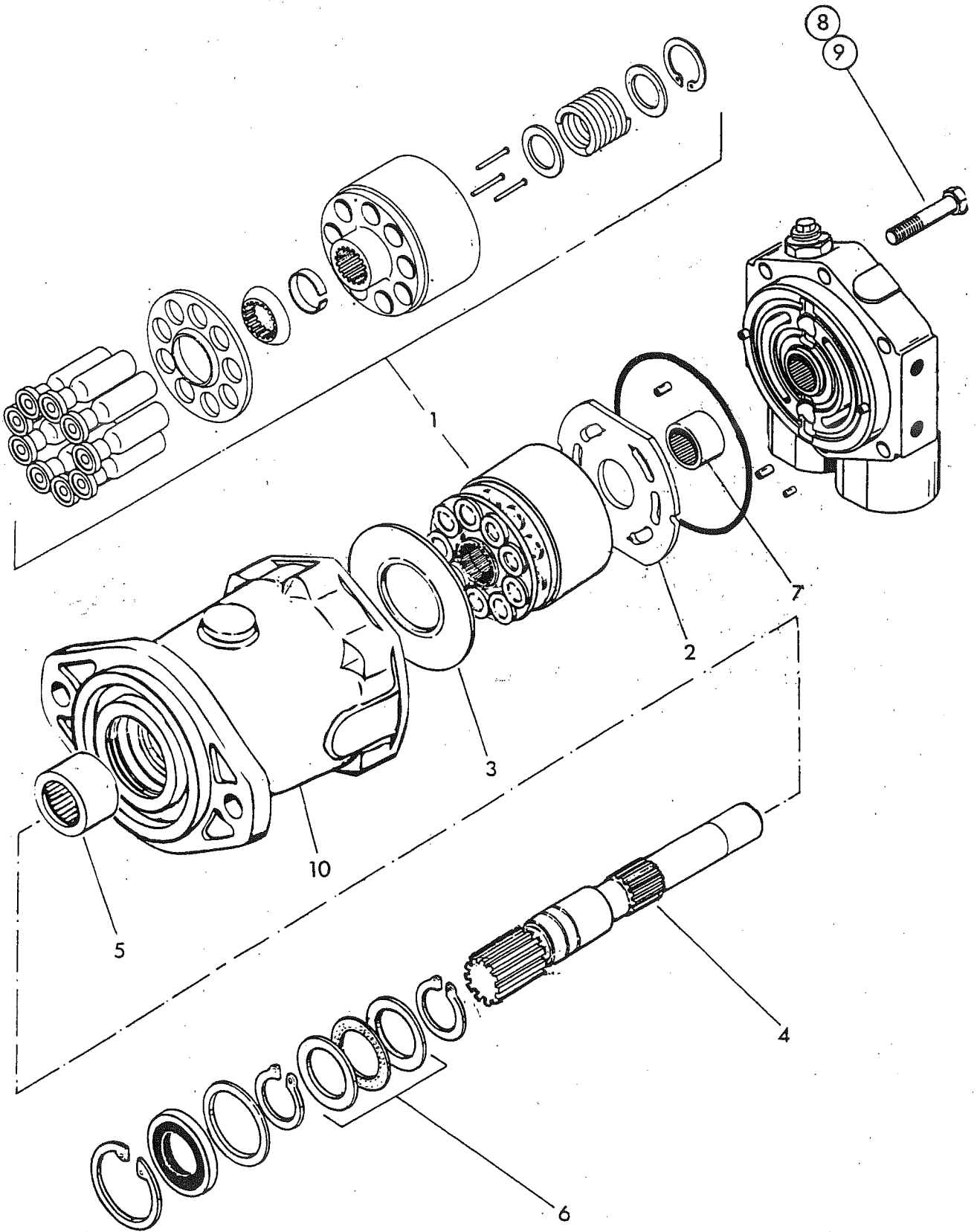
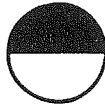


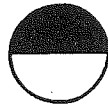
**McCormick**





REF	PART NO.	QTY	DESCRIPTION
	80 13 512		GEARBOX ASSY 3 : 1 540RPM Gear hydraulic machines
	80 13 513		GEARBOX ASSY 3 : 1 1000RPM Piston hydraulic machines
	80 13 514		GEARBOX ASSY 3.57 : 1 800RPM Piston hydraulic machines
1	80 13 515	1	Primary gear 540 RPM & 1000 RPM
	80 13 516	1	Primary gear 800 RPM
2	80 13 517	1	Driven gear 540 RPM
	80 13 518	1	Driven gear 800 RPM
	80 13 519	1	Driven gear 1000 RPM
3	80 13 520	1	Case
4	80 13 521	1	Cover
5	80 13 522	1	Input shaft
6	80 13 523	1	Key 16 x 10 x 40
7	80 13 524	2	Bearing 6210
8	80 13 525	2	Internal circlip dia 90
9	80 13 526	1	Shaft seal
10	80 13 527	1	Cap - dia 90
11	80 13 528	2	Bearing 6307
12	80 13 529	2	Internal circlip - dia 80
13	80 13 530	1	Cap - dia 80
14	80 13 531	6	Setscrew M6 x 16
15	80 13 532	1	Breather
16	80 13 533	1	Drain plug
17	80 13 534	2	Level plug
18	80 13 535	1	Cover plug
19	75 50 048	1	Pump face gasket
20	04.282.17	4	Stud M12 x 41
21	91 00 206	4	Spring washer
22	91 13 006	4	Plain nut M12
23	85 81 355	1	Adaptor 1/2 BSP MF





# McCONNEL

REF	PART NO	QTY	DESCRIPTION
	83 01 290		MOTOR ASSEMBLY
1	83 01 035	1	Rotating kit assembly
2	83 01 036	1	Valve plate
3	83 01 037	1	Cam plate
4	83 01 046	1	Shaft
5	83 01 038	1	Needle bearing
6	83 01 039	1	Thrust bearing
7	83 01 040	1	Needle bearing
8	02 12 142	3	Bolt 5/16 UNC x 1 3/4
9	02 12 202	3	Bolt 5/16 UNC x 2 1/2
10	83 01 048	1	Housing
	86 99 238		SEAL KIT

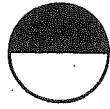
### SERVICE NOTE:

To safeguard warranty rights during the warranty period the motor must not be dismantled prior to examination by McConnel engineers.

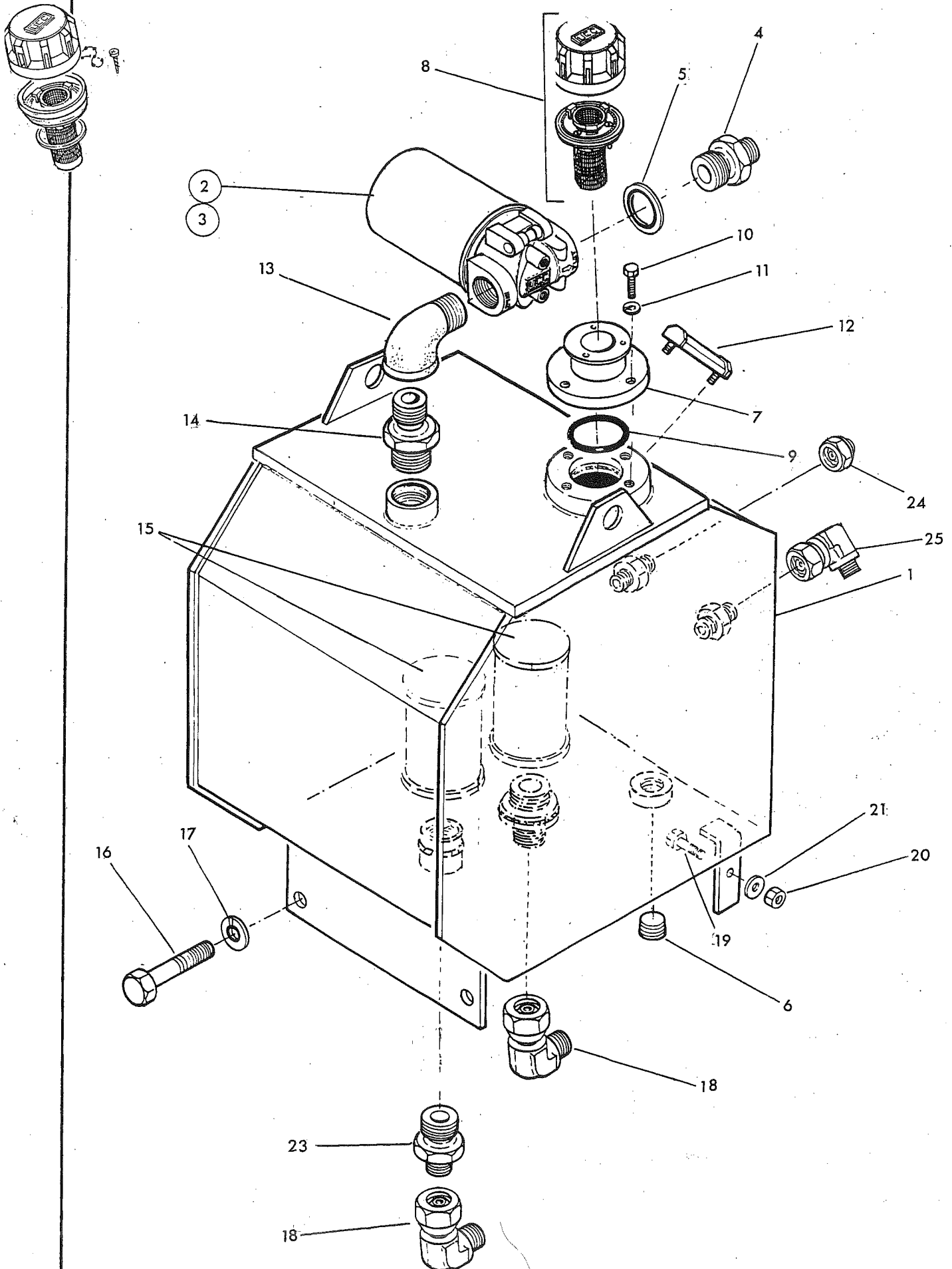
Subsequently, when servicing, always be aware that piston motors are manufactured to very fine tolerances and any service work must be carried out by qualified specialist technicians working in a clean, dust free environment.

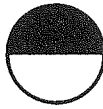
If in any doubt contact McConnel Service department for advice.

# HYDRAULIC TANK



# MCCORMELL





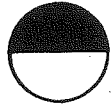
REF	PART NO.	QTY	DESCRIPTION
<b>OIL TANK AND FITTINGS</b>			
	75 50 304	1	Oil tank assembly compr:-
1	75 60 431	1	Oil tank
2	84 01 069	1	Filter
3	84 01 070	1	Filter element
4	80 02 104	1	Adaptor 1 1/4 BSP -1" BSP
5	86 50 109	1	Bonded seal 1 1/4 BSP
6	85 81 203	1	Drain plug 1" BSP
7	71 92 090	1	Access cover
8	84 01 074	1	Breather/Filler
9	86 00 151	1	'O' ring
10	93 13 054	4	Setscrew M8 x
11	91 00 204	4	Spring washer dia 8
12	84 01 048	1	Oil level gauge
13	85 81 261	1	Elbow 1 1/4 BSP MF
14	85 81 187	1	Adaptor 1 1/2 -1 1/4 BSP
15	84 01 047	2	Strainer
16	92 13 097	2	Bolt M16 x 45
17	91 00 207	2	Spring washer dia 16
18	85 81 212	2	Elbow 1" BSP MF
19	92 13 136	1	Setscrew M12 x 65
20	91 43 006	1	Self locking nut M12
21	91 00 106	1	Plain washer dia 12
22	85 81 264	1	Swept elbow 1" BSP MF
23	85 81 352	1	Adaptor 1 1/4 BSP -1" BSP
24	G381 2119	1	Blanking cap 5/8 BSP
25	85 81 338	2	Elbow 5/8 BSP MF

**ASSEMBLY NOTE:**

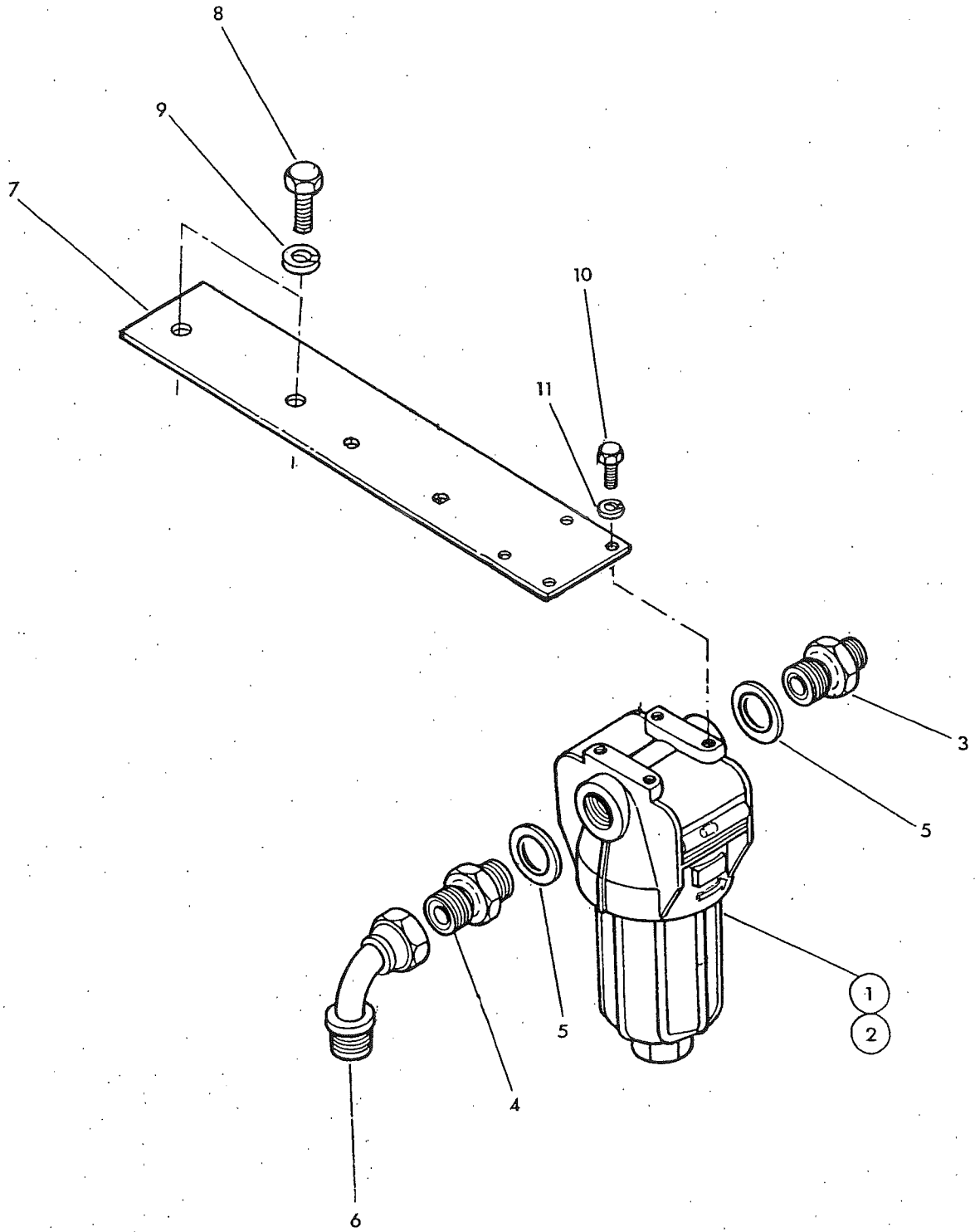
- \* Item 15 to be fitted using PTFE tape, Permabond A 115 or similar
- \* Item 24 to be fitted using Permabond A 121 or similar, alternatively use PTFE tape

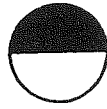


FILTER



McCOMBI



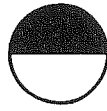
**McCONNELL**

REF	PART NO.	QTY	DESCRIPTION
<b>FILTER ASSEMBLY</b>			
1	84 01 066	1	Charge filter end element-
2	84 01 067	1	Element
3	60 00 112	1	Adaptor 1/2" BSP -3/8" BSP MM
4	85 81 110	3	Union 1/2" BSP MM
5	86 50 104	2	Bonded washer 1/2" BSP
6	85 81 215	1	Elbow - swept 90 deg 1/2" BSP MF
7	42213.01	1	Filter mounting bracket
8	93 13 055	2	Setscrew M10 x 25
9	91 00 205	2	Spring washer dia 10
10	93 13 013	4	Setscrew M6 x 10
11	91 00 203	4	Spring washer - dia 6

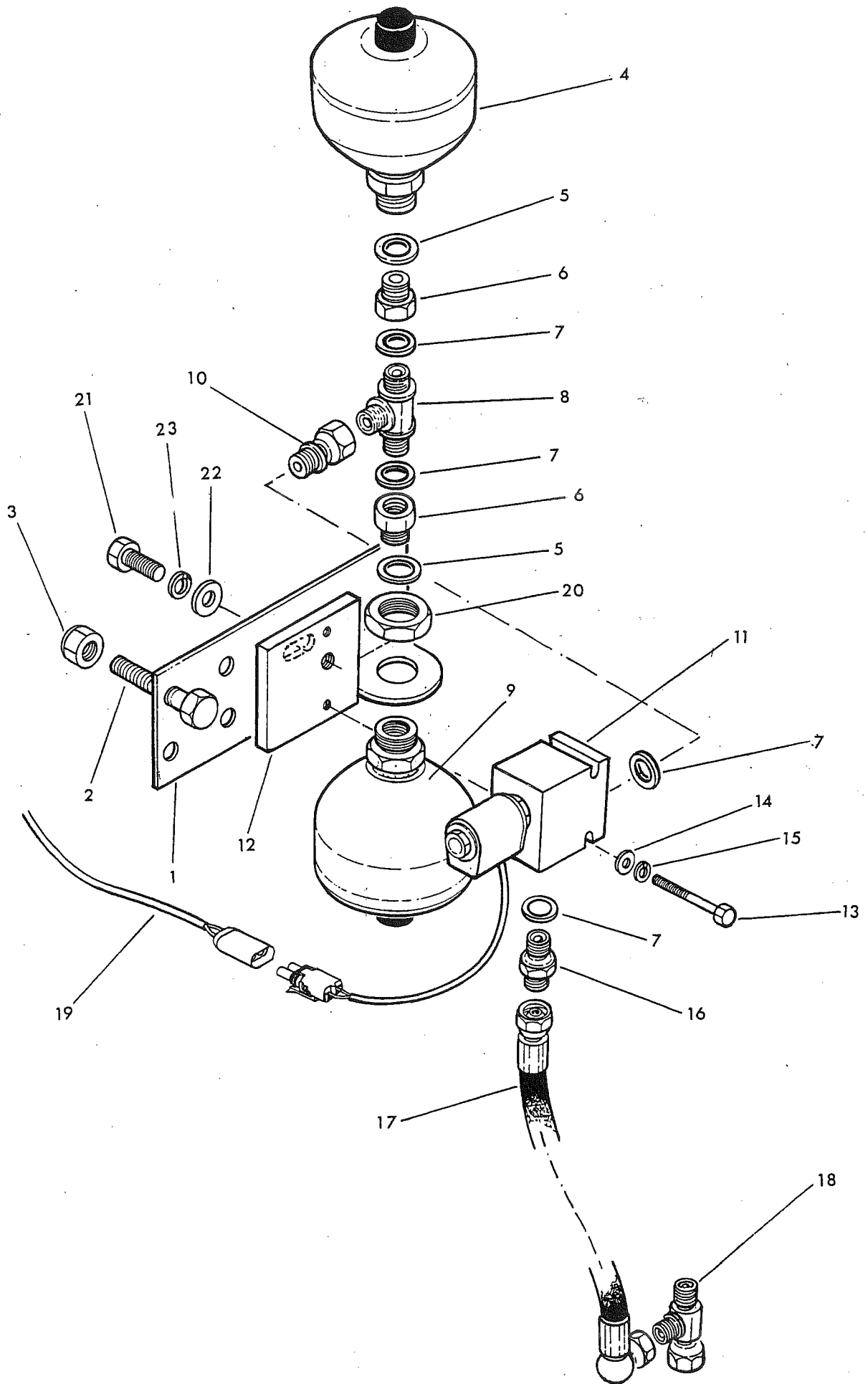
**Note**

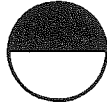
R.Hand assembly illustrated. For L.Hand assembly the bracket is turned over.

LIFT FLOAT KIT



McCONEL

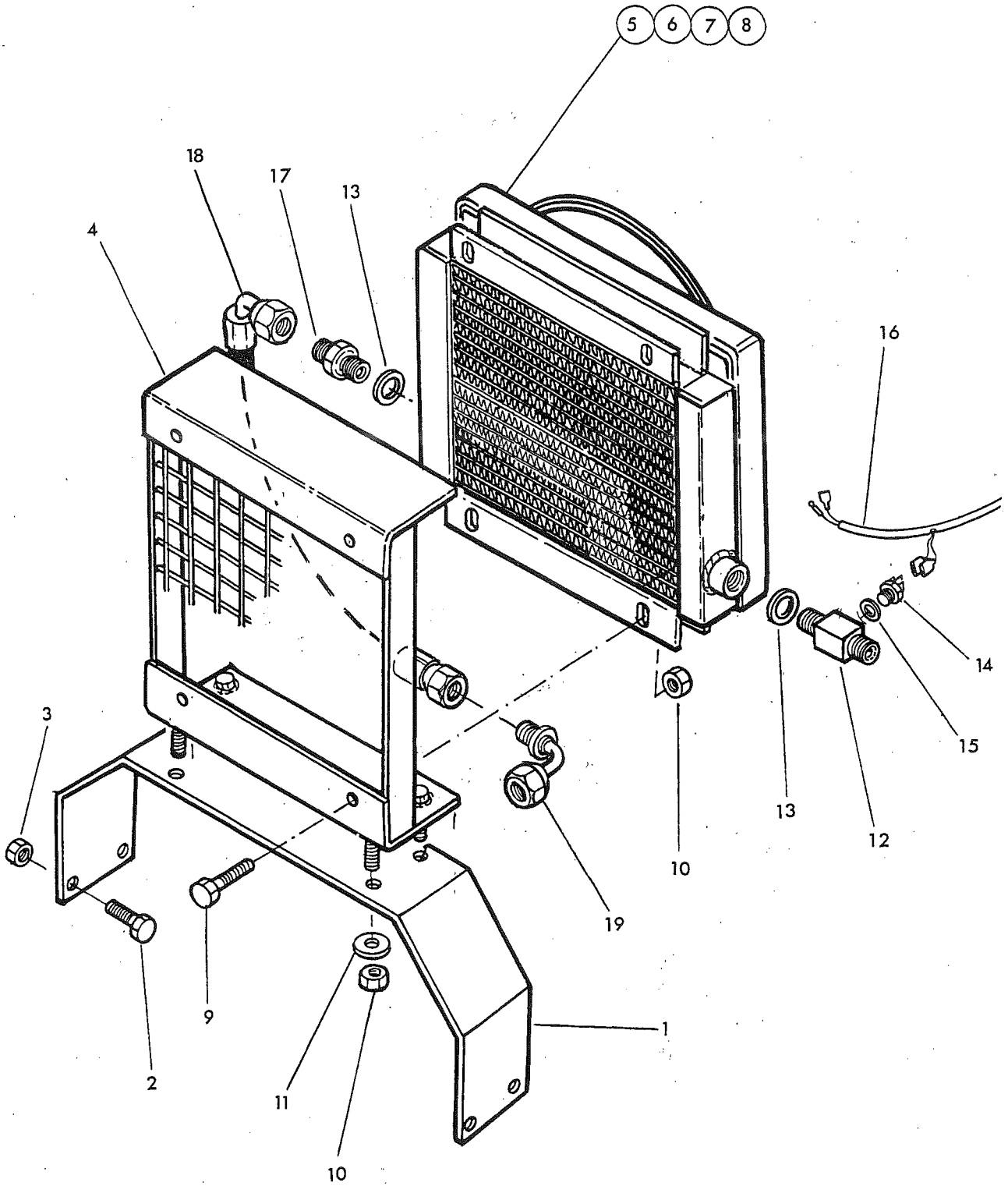
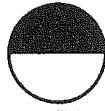


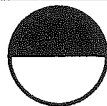


REF PART NO. QTY DESCRIPTION

## LIFT FLOAT KIT -TWIN ACCUMULATOR

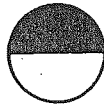
1	42254.01	1	Mounting plate
2	92 13 137	2	Bolt M16 x 65
3	91 43 007	2	Self locking nut M16
4	81 26 044	1	Accumulator 1L 25 Bar
5	86 50 322	2	Bonded seal M22
6	85 81 284	2	Adaptor M22M - 3/8 BSP F
7	86 50 103	4	Bonded seal 3/8 BSP
8	85 81 267	1	Tee 3/8 BSP MMM
9	81 26 045	1	Accumulator 1L 50 Bar
10	85 81 178	1	Straight swivel adaptor 3/8 BSP MF
11	08.619.09	1	Solenoid valve
12	42254.02	1	Spacer plate
13	92 13 133	2	Bolt M6 x 65
14	91 00 103	2	Plain washer dia 6
15	91 00 203	2	Spring washer dia 6
16	60 00 113	1	Union 3/8 BSP MM
17	10.004.15	1	Hose 3/8 BSP x 750 long
18	11.008.69	1	Tee 3/8 BSP FMM
19	84 02 207	1	Loom
20	81 26 035	1	Thin bulkhead nut M33
21	93 13 055	1	Setscrew M10 x 25
22	91 00 105	1	Plain washer dia 10
23	91 00 205	1	Spring washer dia 10



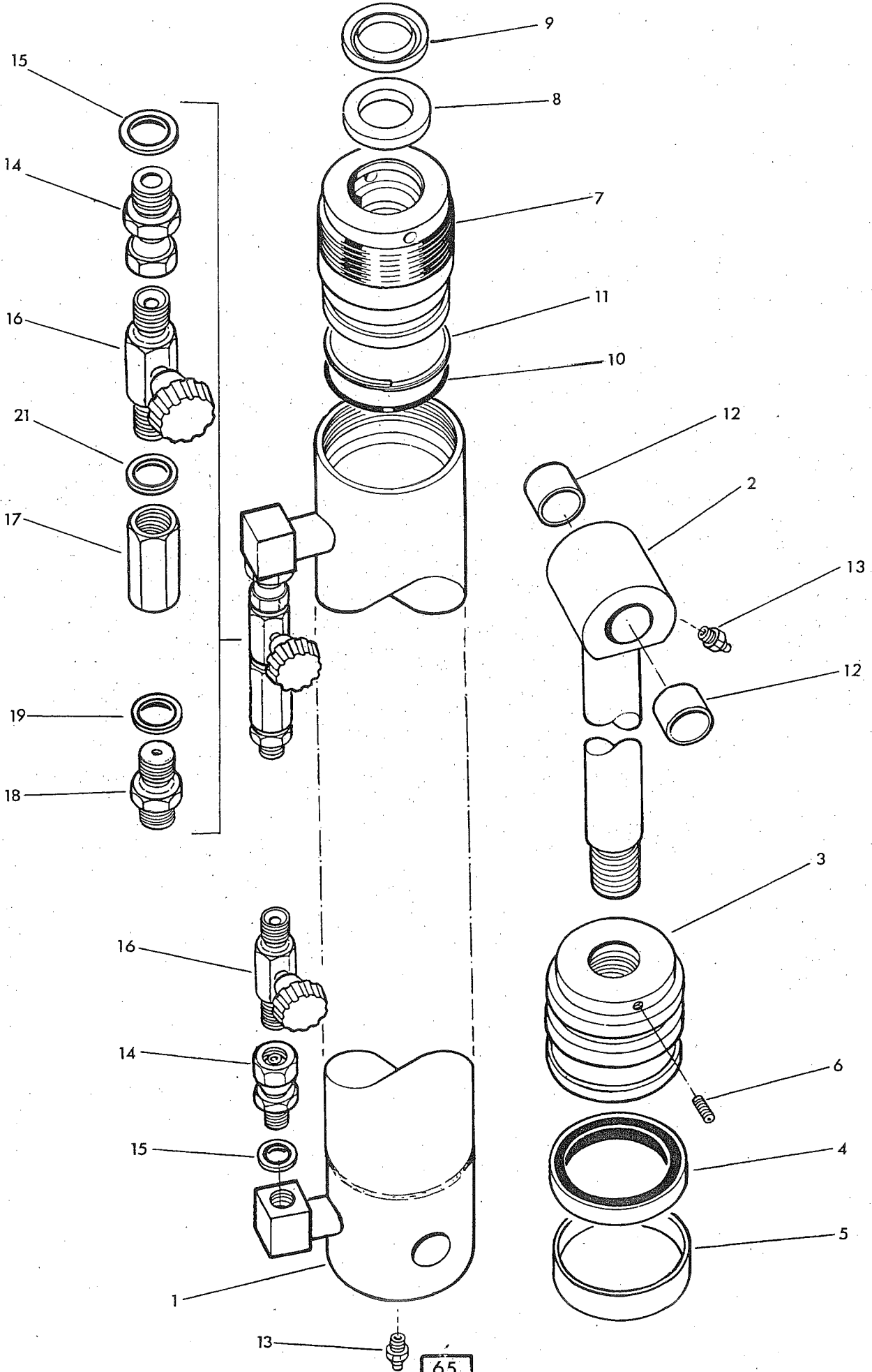


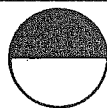
REF	PART NO.	QTY	DESCRIPTION
			<b>COOLER ASSEMBLY - Option</b>
1	71 90 476	1	Bridge plate
2	93 13 055	4	Setscrew M10 x 25
3	91 43 005	4	Self locking nut M10
4	84 02 319	1	Cooler mounting
5	84 02 318	1	Cooler/Fan incl.
6	84 02 352	1	Electric motor
7	84 02 353	1	Blade
8	84 02 351	1	Cooler matrix
9	92 13 104	4	Bolt M8 x 50
10	91 43 004	8	Self locking nut M8
11	91 00 104	4	Plain washer dia 8
12	85 81 319	1	Oil inlet adaptor
13	86 50 108	2	Bonded seal 1" BSP
14	84 02 160	1	Thermostatic switch
15	86 50 322	1	Bonded seal dia M22
16	71 90 494	1	Wiring loom
17	05.434.01	1	Union 1" BSP MM
18	10.022.35	1	Hose 1" BSP x 410 long -outlet-tank
19	85 81 264	1	Swept elbow 1" BSP MF

LIFT RAM



**MCCORMICK**





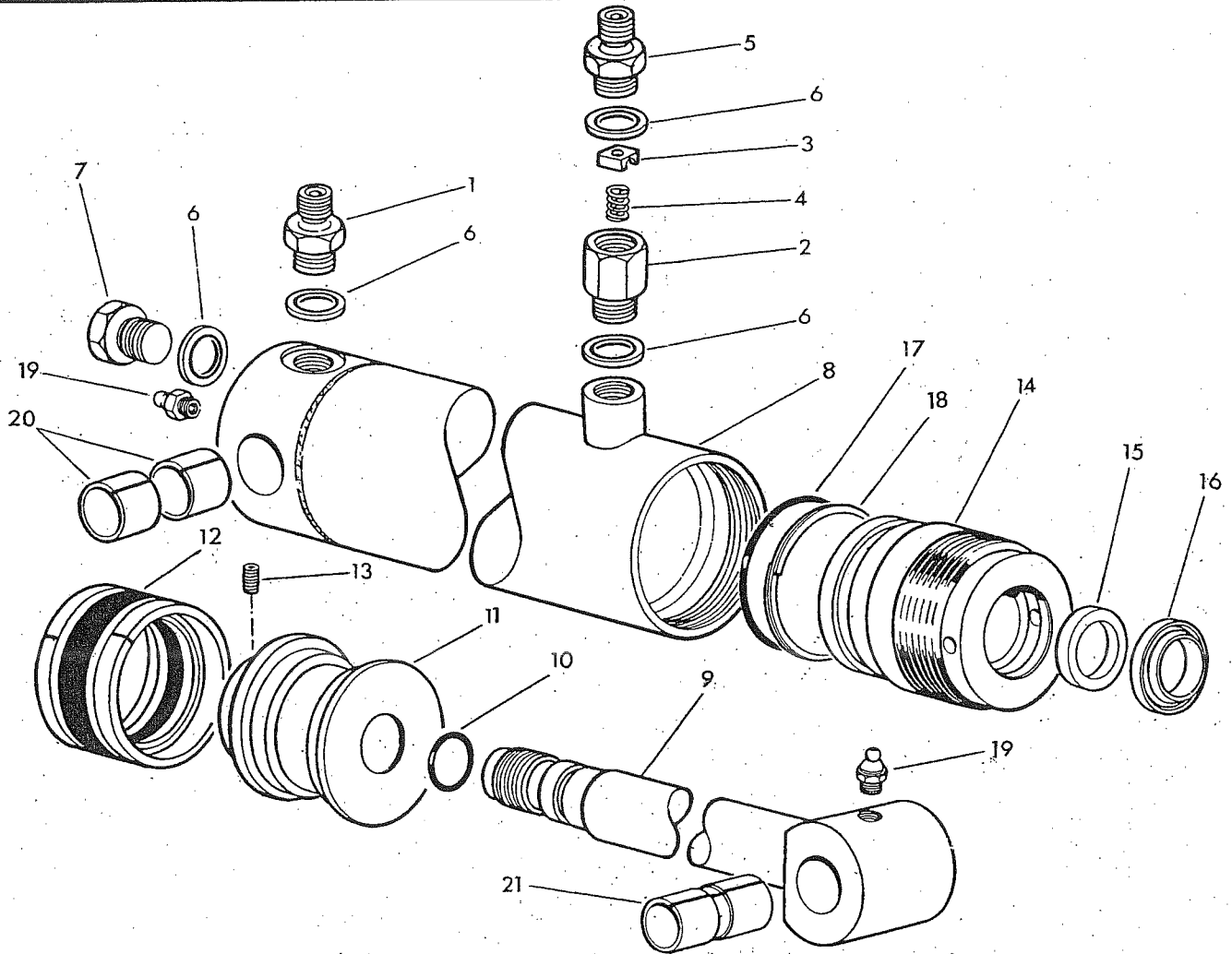
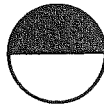
REF	PART NO.	QTY	DESCRIPTION
	<b>76 60 260</b>		<b>LIFT RAM ASSEMBLY</b>
1	75 60 301	1	Cylinder
2	75 60 001	1	Rod
3	75 60 302	1	Piston
4	86 29 182	1	Piston seal
5	86 29 183	1	Bearing ring
6*	93 63 033	1	Grubscrew socket head
7	75 60 303	1	Gland housing
8	86 29 184	1	Rod seal
9	86 29 185	1	Wiper seal
10	86 00 317	1	'O' ring
11	86 09 317	1	Anti extrusion ring
12	71 15 208	2	Bush
13	09 01 121	2	Greaser 1/8 BSP straight
14	85 81 285	2	Straight swivel adaptor 1/2 BSP-M 3/8 BSP-F
15	86 50 104	2	Bonded seal 1/2 BSP
16	81 30 109	2	Tap
17	85 81 225	1	Restrictor housing
18	60 01 229	1	Restrictor union - 44
19	86 50 103	2	Bonded seal 3/8 BSP

**86 99 223****SEAL KIT**

\* Assembly note :- Screw item 6 firmly home and centre punch edge of hole to retain.



# SLEW RAM ASSEMBLY



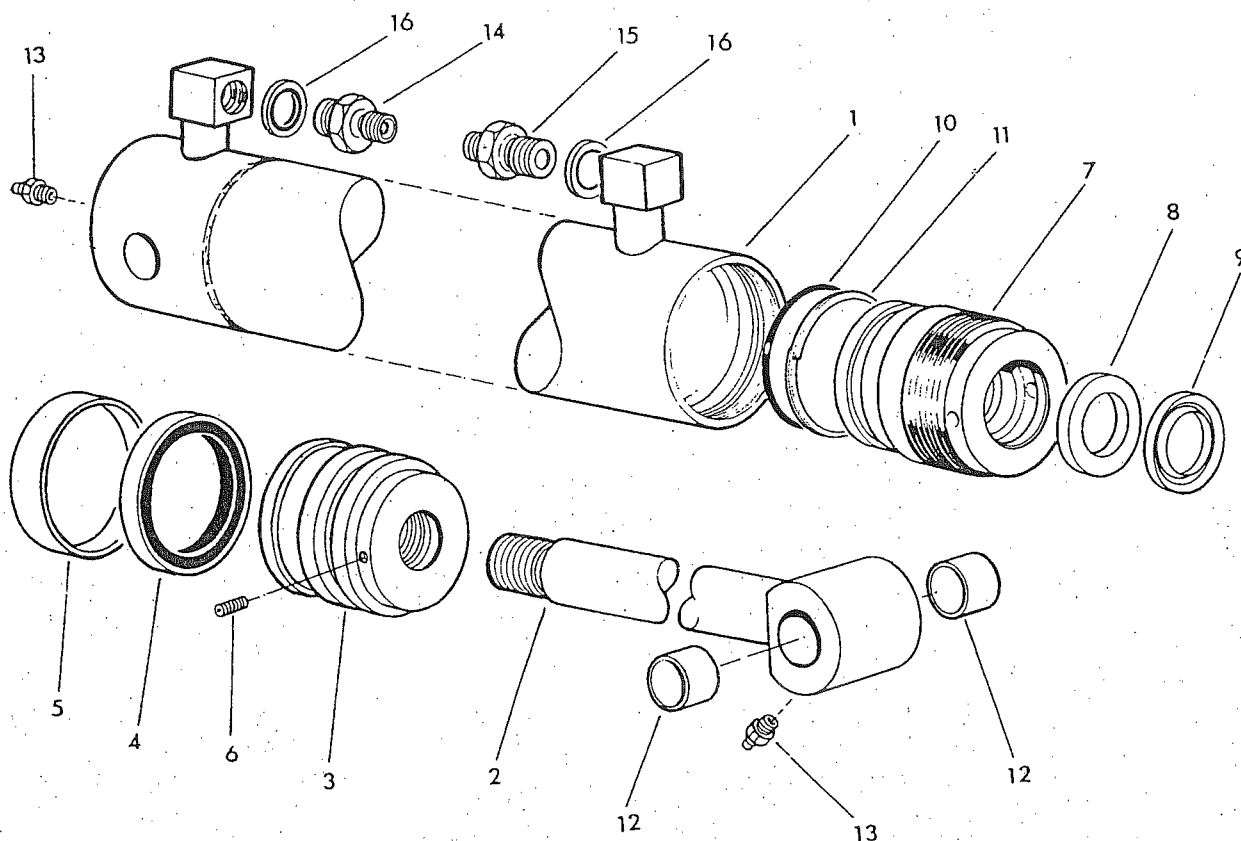
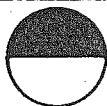
Ref.	Part No.	Qty.	Description
	<b>75-60-346</b>		<b>SLEW RAM ASSEMBLY</b>
1	85-81-115	1	Adaptor 3/8 BSP - 1/4 BSP MM
2	85-81-208	1	Restrictor body
3	81-23-041	1	Restrictor disc - Red
4	81-16-011	1	Spring
5	85-81-145	1	Adaptor 3/8 BSP - 1/4 BSP MM
6	86-50-103	4	Bonded seal 3/8 BSP
7	80-03-001	1	Plug 3/8 BSP
8	71-35-283	1	Cylinder
9	71-93-029	1	Rod
10	86-00-119	1	'O' ring
11	71-35-004	1	Piston
12	86-38-740	1	Piston seal
13	93-63-023	1	Grubscrew socket head M6 x 12
14	71-35-282	1	Gland housing
15	86-29-164	1	Gland seal
16	86-29-147	1	Wiper seal
17	87-00-740	1	'O' ring
18	87-09-740	1	Anti extrusion ring
19	09-01-121	2	Greaser 1/8 BSP straight
20	71-01-134	2	Bush - cylinder
21	60-12-032	2	Bush - rod

## 86-99-187

## SEAL KIT

### \* Assembly note

Assemble piston onto rod using 'Permabond A113' or similar medium strength thread locking compound. Tighten grubscrew firmly and centre punch



REF	PART NO.	QTY	DESCRIPTION
	<b>75 60 473</b>		<b>REACH RAM ASSEMBLY</b>
1	75 60 301	1	Cylinder
2	75 60 001	1	Rod
3	75 60 471	1	Piston
4	86 29 182	1	Piston seal
5	86 29 183	1	Bearing ring
6*	93 63 033	1	Grubscrew socket head M6 x 16
7	75 60 303	1	Gland housing
8	86 29 184	1	Gland seal
9	86 29 185	1	Wiper seal
10	86 00 317	1	'O' ring
11	86 09 317	1	Anti extrusion ring
12	71 15 208	2	Bush
13	09 01 121	2	Greaser 1/8 BSP straight
14	60 00 112	1	Adaptor 1/2 BSP 3/8 BSP MM
15	60 00 112	1	Adaptor 1/2 BSP 3/8 BSP MM
16	86 50 104	2	Bonded seal 1/2 BSP

**75 60 474 REACH RAM ASSEMBLY (M only)**

The parts list is identical with the following exceptions.

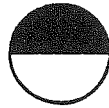
14	81 24 065	1	Adaptor 1/2 BSP 3/8 BSP MM
15	81 24 064	1	Adaptor 1/2 BSP 3/8 BSP MM

**86 99 223 SEAL KIT**

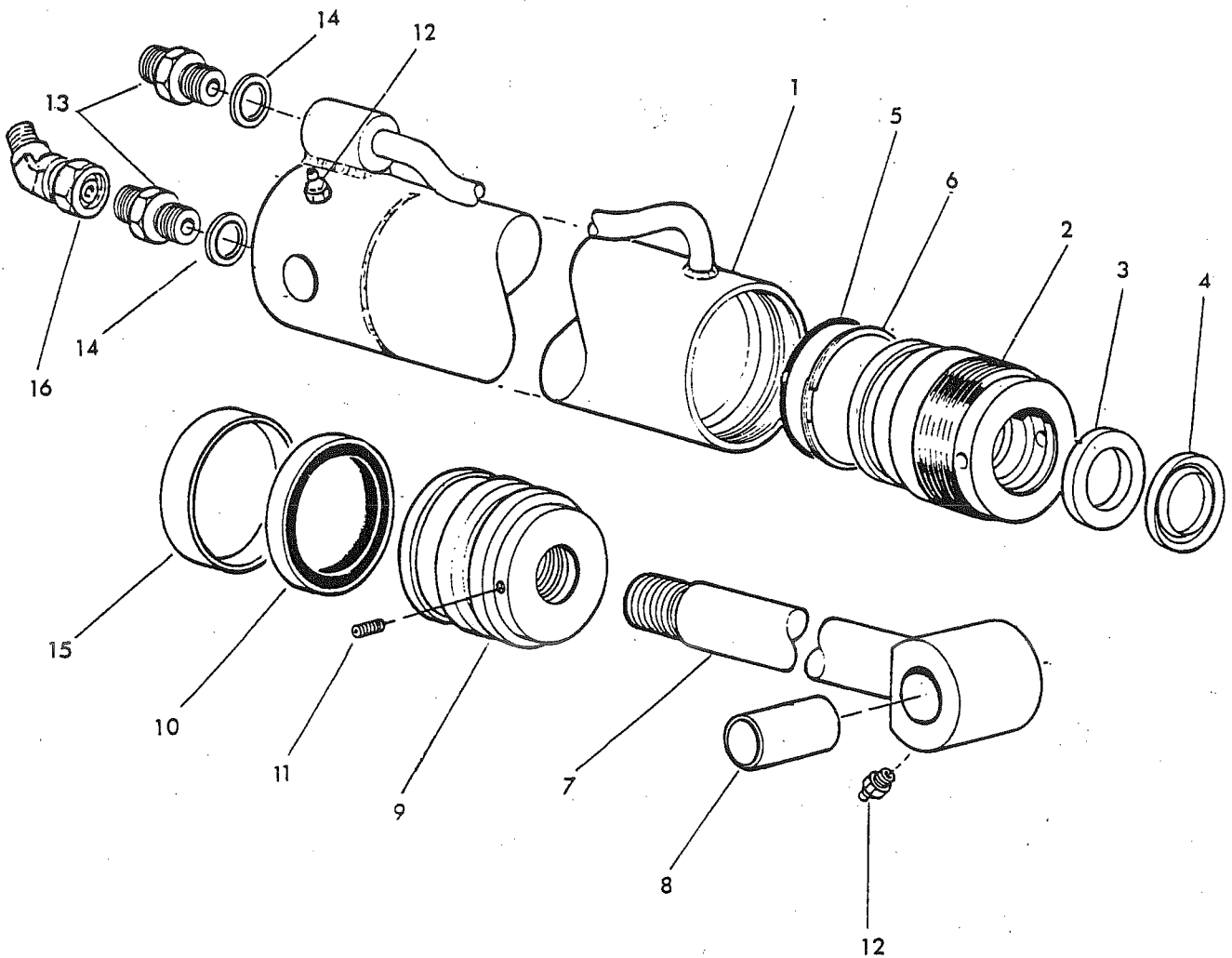
\* ASSEMBLY NOTE:

Screw firmly in and centre punch edge of hole to retain

ANGLE RAM

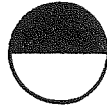


**McCONNEL**

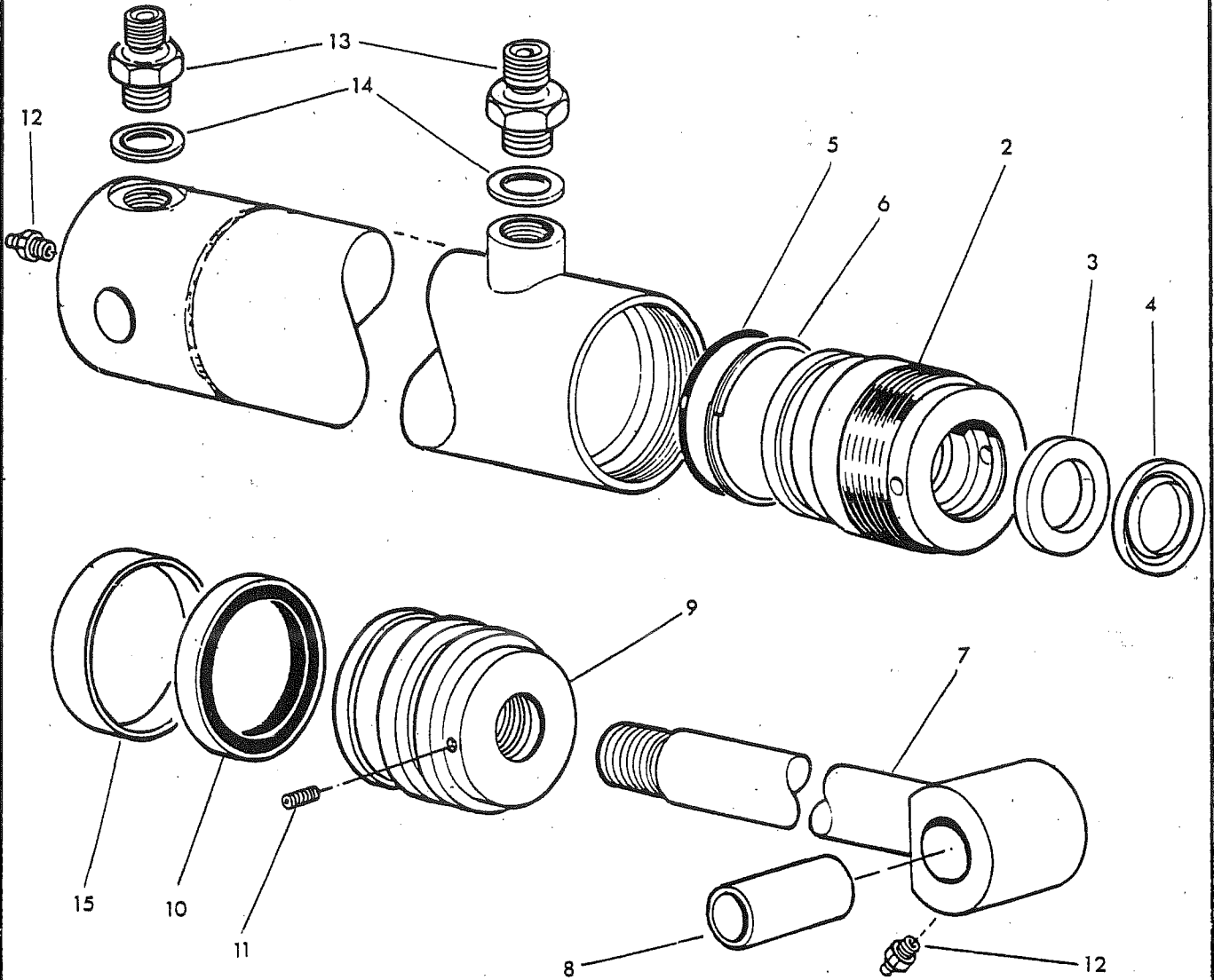


REF	PART NO.	QTY	DESCRIPTION
	<b>76 50 255</b>		<b>ANGLE RAM ASSEMBLY</b>
1	76 50 298	1	Ram barrel
2	11 86 512	1	Gland housing
3	86 29 164	1	Gland seal
4	86 29 147	1	Piston rod wiper seal
5	86 00 306	1	'O' ring
6	86 09 306	1	Anti extrusion ring
7	71 91 307	1	Piston rod
8	71 05 050	1	Bush
9	71 20 368	1	Piston
10	86 29 156	1	Piston seal
11	93 63 023	1	Grub screw M6 x 12 socket headed
12	09 01 121	2	Greaser 1/8 BSP straight
13	85 81 115	2	Adaptor 3/8 BSP 1/4 BSP MM
14	86 50 103	2	Bonded seal 3/8 BSP
15	86 29 157	1	Guide ring
16	85 81 347	1	Compact elbow 1/4 BSP-MF-midcut only
	<b>86 99 217</b>		<b>SEAL KIT</b>

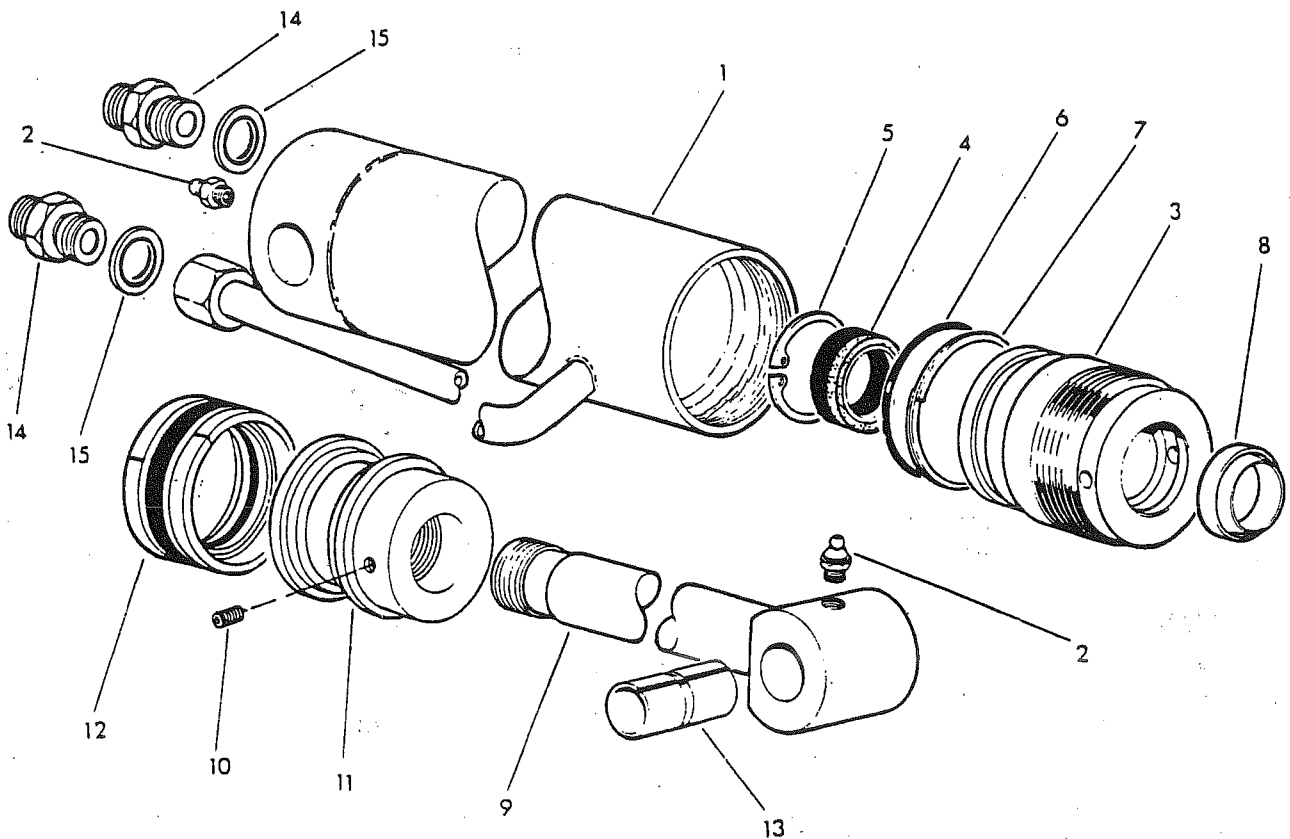
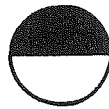
COMPENSATOR RAM



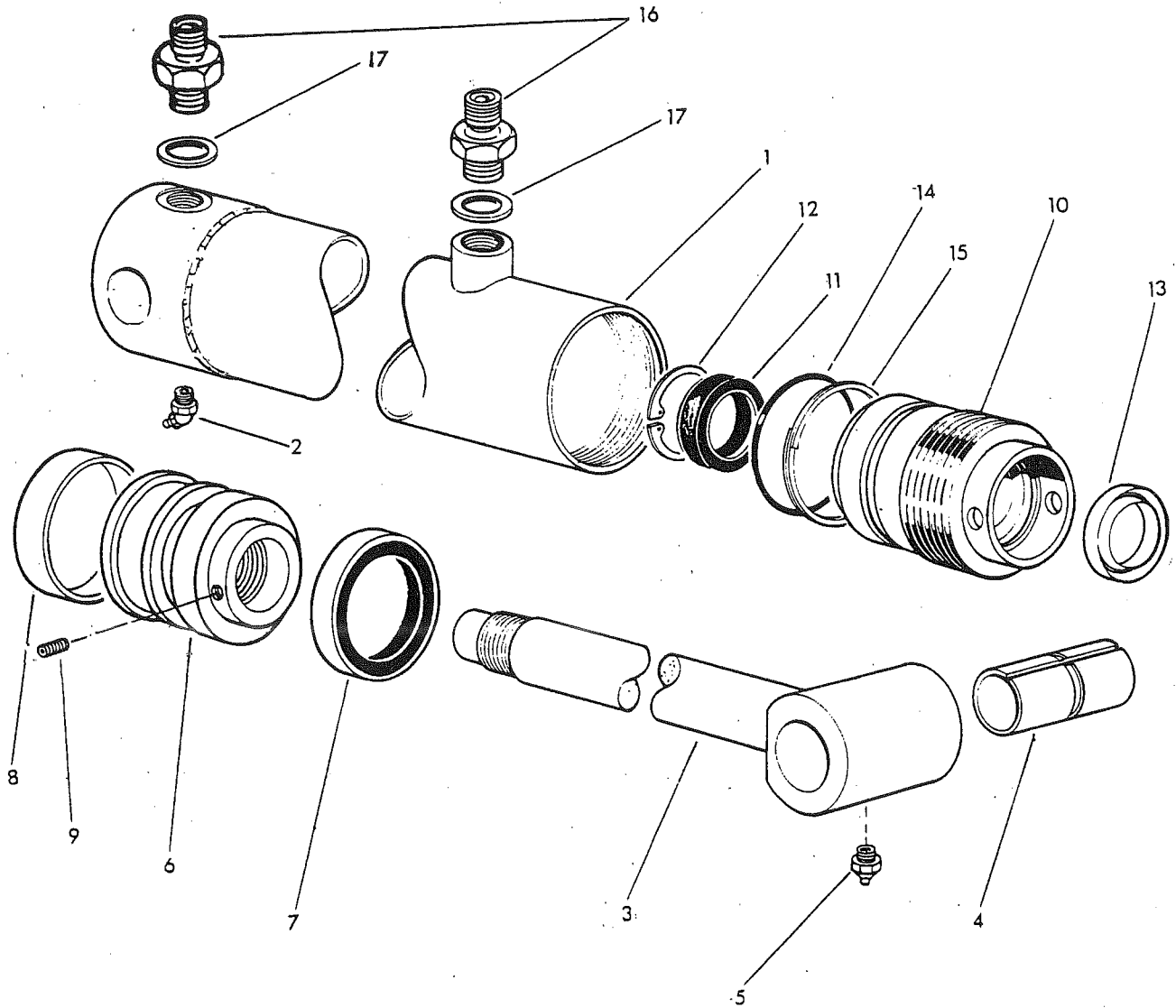
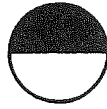
**McDONNELL**



REF	PART NO.	QTY	DESCRIPTION
	<b>76 50 260</b>		<b>COMPENSATOR RAM</b>
1	76 50 002	1	Ram barrel
2	11 86 512	1	Gland housing
3	86 29 164	1	Gland seal
4	86 29 147	1	Piston rod wiper seal
5	86 00 306	1	'O' ring
6	86 09 306	1	Anti extrusion ring
7	76 50 003	1	Piston rod
8	71 05 050	1	Bush
9	71 20 368	1	Piston
10	86 29 156	1	Piston seal
11	93 63 023	1	Grub screw M6 x 12 socket headed
12	09 01 121	2	Greaser 1/8 BSP straight
13	85 81 115	2	Adaptor 3/8 BSP -1/4 BSP MM
14	86 50 103	2	Bonded seal 3/8 BSP
15	86 29 157	1	Guide ring
	<b>86 99 217</b>		<b>SEAL KIT</b>



REF	PART NO.	QTY	DESCRIPTION
	<b>75 70 318</b>		<b>TELE' RAM ASSEMBLY</b>
1	75 70 319	1	Ram cylinder
2	09 01 121	2	Greaser 1/8 BSP -straight
3	71 35 291	1	Gland housing
4	86 29 148	1	Gland seal
5	04 16 240	1	Internal circlip
6	86 00 302	1	'O' ring
7	86 09 302	1	Anti extrusion ring
8	86 29 149	1	Piston rod wiper seal
9	75 70 008	1	Piston rod
10	93 63 023	1	Grubscrew - socket headed M6x12
11	71 35 008	1	Piston
12	86 38 788	1	Piston seal
13	71 05 050	1	Bush
14	85 81 169	2	Union 1/4 BSP MM
15	86 50 102	2	Bonded seal 1/4 BSP
	<b>86 99 188</b>		<b>SEAL KIT</b>

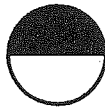


REF	PART NO.	QTY	DESCRIPTION
	<b>75 80 300</b>		<b>MIDCUT RAM ASSEMBLY</b>
1	71 36 065	1	Cylinder
2	09 01 124	1	Greaser 1/8 BSP 45 degrees
3	71 36 062	1	Rod
4	71 05 050	1	Bush -rod
5	09 01 121	1	Greaser 1/8 BSP straight
6	71 20 368	1	Piston
7	86 29 156	1	Piston seal
8	86 29 157	1	Guide ring
9	93 63 023	1	Grub screw socket head M6 x 12
10	71 36 312	1	Gland housing
11	86 29 148	1	Gland seal
12	04 16 240	1	Internal circlip
13	86 29 149	1	Wiper seal
14	86 00 306	1	'O' ring
15	86 90 306	1	Anti extrusion ring
16	85 81 115	2	Adaptor 3/8 BSP 1/4 BSP MM
17	86 50 103	2	Bonded seal 3/8 BSP

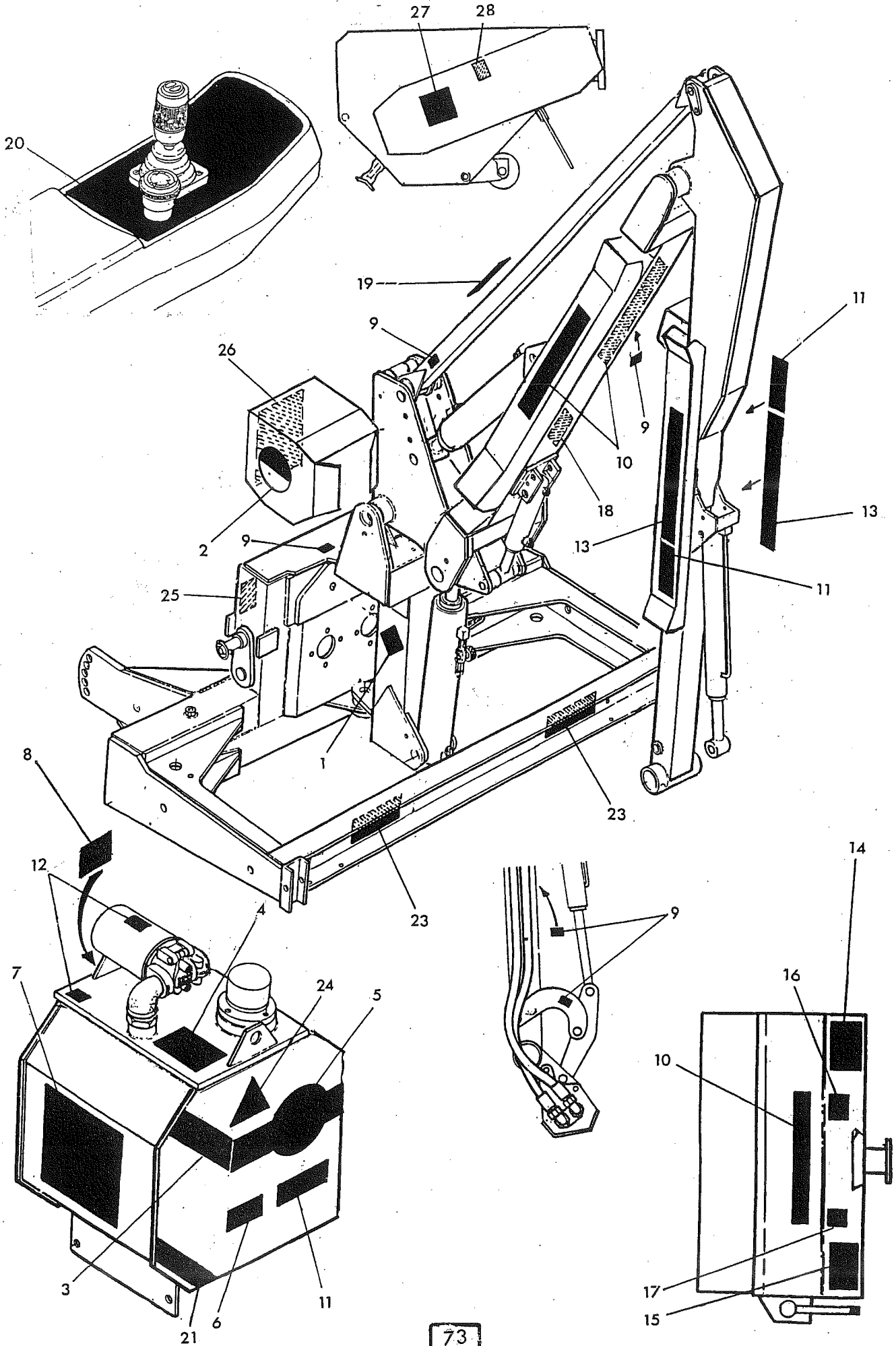
**86 99 190**

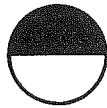
**SEAL KIT**

STICKERS



McCOMEL



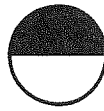


# McCONNEL

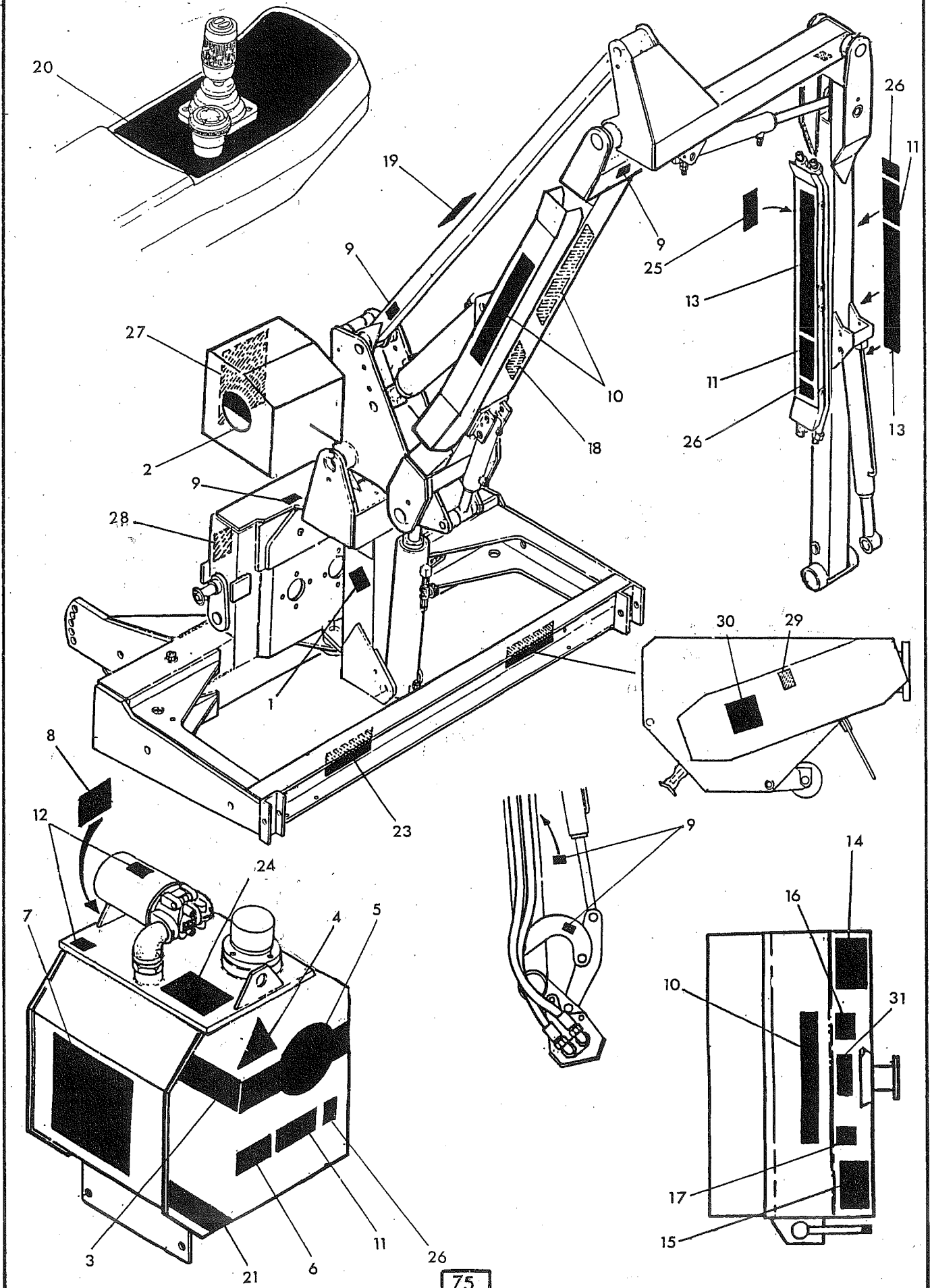
REF	PART NO.	QTY	DESCRIPTION
			<b>STICKERS PA6000</b>
1	71 05 130	1	Read book first
2	12 90 296	1	Logo roundel
3	12 90 454	1	Tank stripe
4	12 90 477	1	Greasing
5	12 90 455	1	Fairing stripe/roundel
6	12 90 453	1	PA
7	12 90 391	1	General warning
8	00756494	1	Fitting P.T.O. shaft
9	00962764	5	Pinch point
10	12 90 255	3	McConnel
11	12 90 423	3	6000
12	12 90 023	2	Oil filter change
13	12 90 295	2	Power Arm
14	12 90 462	1	Flail head instructions
15	12 90 341	1	Flail head guarding
16	00756485	1	Rotating blade warning
17	12 90 392	1	Use McConnel spares
18	12 90 403	1	Breakaway return warning
19	12 90 406	1	Transport
20	12 90 514	1	Monolever controls
21	12 90 482	1	Piston system
22	84 02 138	1	Slew warning - loose - incab
23	12 90 347	2	Chevrons
24	12 90 346	1	Warning triangle
25	12 90 086	1	800 RPM
26	12 90 465	1	Wiring connections
27	12 90 478	1	Belt pulley alignment
28	12 90 065	1	Belt tension

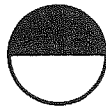


STICKERS



**MCCORMEL**

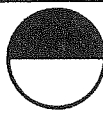




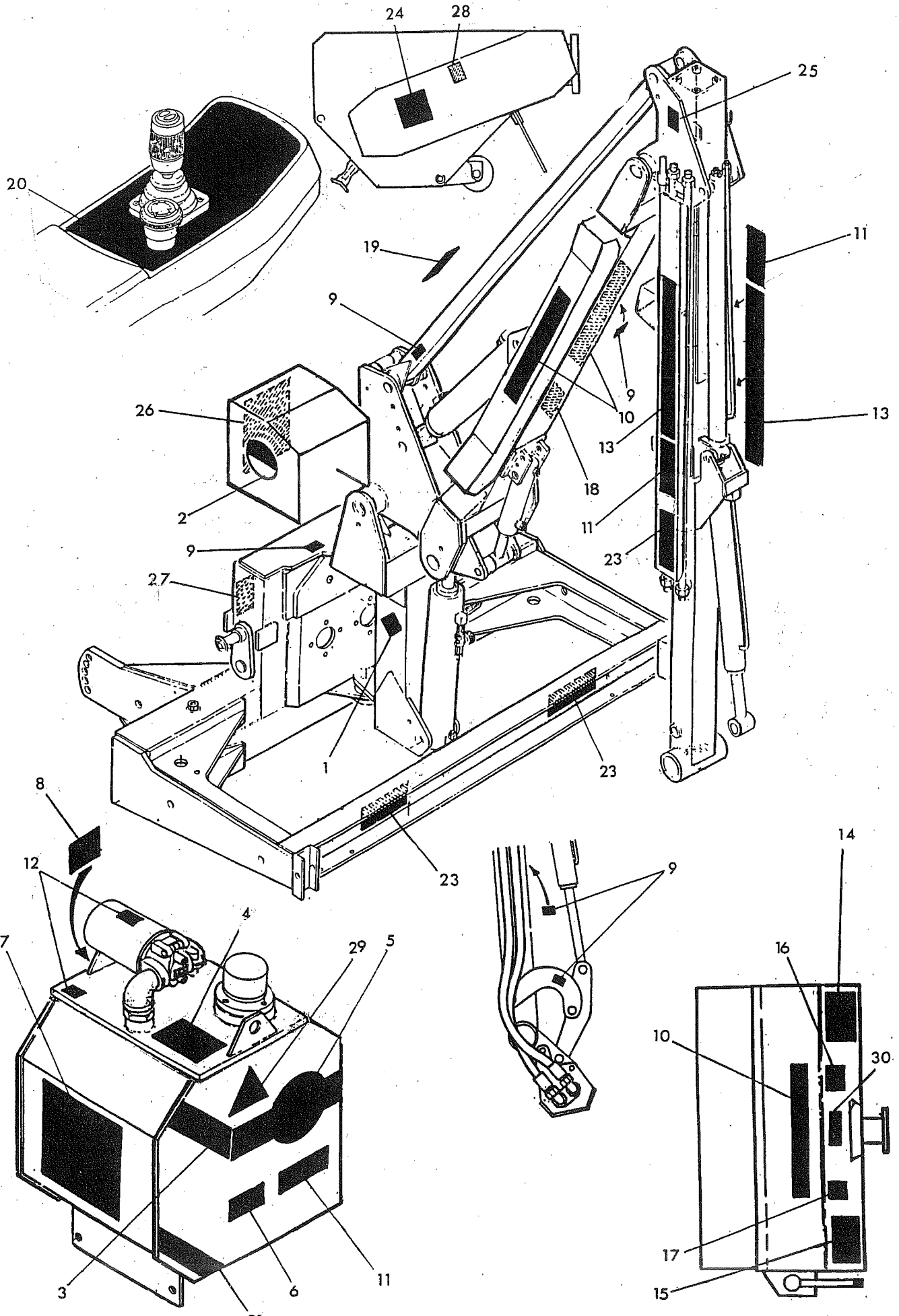
# McCONNEL

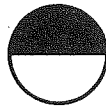
REF	PART NO.	QTY	DESCRIPTION
<b>STICKERS PA6000M</b>			
1	71 05 130	1	Read book first
2	12 90 296	1	Logo roundel
3	12 90 454	1	Tank stripe
4	12 90 346	1	Warning triangle
5	12 90 455	1	Fairing stripe/roundel
6	12 90 453	1	PA
7	12 90 391	1	General warning
8	00756494	1	Fitting P.T.O. shaft
9	00962764	6	Pinch point
10	12 90 255	3	McConnel
11	12 90 423	3	6000
12	12 90 023	2	Oil filter change
13	12 90 295	2	Power Arm
14	12 90 462	1	Flail head instructions
15	12 90 341	1	Flail head guarding
16	00756485	1	Rotating blade warning
17	12 90 392	1	Use McConnel spares
18	12 90 403	1	Breakaway return warning
19	12 90 406	1	Transport
20	12 90 514	1	Monolever controls
21	12 90 482	1	Piston system
22	84 02 138	1	Slew warning - loose - incab
23	12 90 347	2	Chevrons
24	12 90 477	1	Greasing
25	09.821.11	1	Cab clearance
26	12 90 059	1	M
27	12 90 465	1	Wiring connections
28	12 90 086	1	800 RPM
29	12 90 065	1	Belt tension
30	12 90 478	1	Belt pulley alignment

STICKERS



McCOMEL





# McCONNEL

REF	PART NO.	QTY	DESCRIPTION
			<b>STICKERS PA7000T</b>
1	71 05 130	1	Read book first
2	12 90 296	1	Logo roundel
3	12 90 454	1	Tank stripe
4	12 90 477	1	Greasing
5	12 90 455	1	Fairing stripe/roundel
6	12 90 453	1	PA
7	12 90 391	1	General warning
8	00756494	1	Fitting P.T.O. shaft
9	00962764	5	Pinch point
10	12 90 255	3	McConnell
11	12 90 427	3	7000 T
12	12 90 023	2	Oil filter change
13	12 90 295	2	Power Arm
14	12 90 462	1	Flail head instructions
15	12 90 341	1	Flail head guarding
16	00756485	1	Rotating blade warning
17	12 90 392	1	Use McConnell spares
18	12 90 403	1	Breakaway return warning
19	12 90 406	1	Transport
20	12 90 514	1	Monolever controls
21	12 90 482	1	Piston system
22	84 02 138	1	Slew warning - loose - incab
23	12 90 347	4	Chevrons
24	12 90 478	1	Belt pulley alignment
25	12 90 005	1	Grease socket
26	12 90 465	1	Wiring connections
27	12 90 086	1	800 RPM
28	12 90 065	1	Belt tension



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