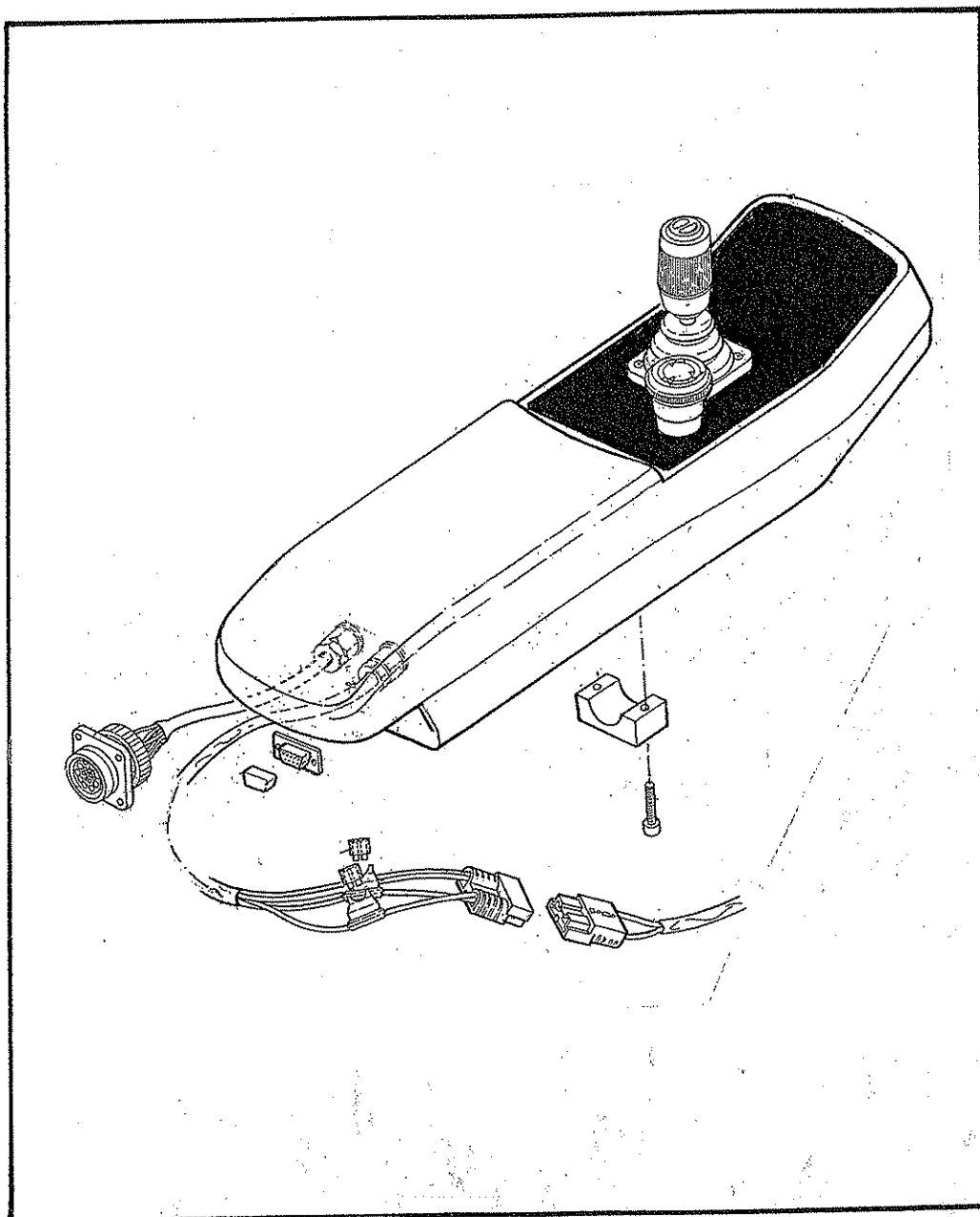


PA 5000 series Spare parts

For machines with gear hydraulics
and proportional controls



LIST OF CONTENTS

MAIN FRAME, PILLAR AND ARMS	Page 1
HYDRAULIC INSTALLATIONS	Page 19
CONTROL VALVES	Page 29
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FOR NOTES

SPARE PARTS MANUAL

FOR BEST PERFORMANCE....

USE ONLY McCONNEL SPARE PARTS

To be assured of the latest design improvements purchase your genuine replacements from the original equipment manufacturer **McConnel Ltd.** through your local dealer or stockist.

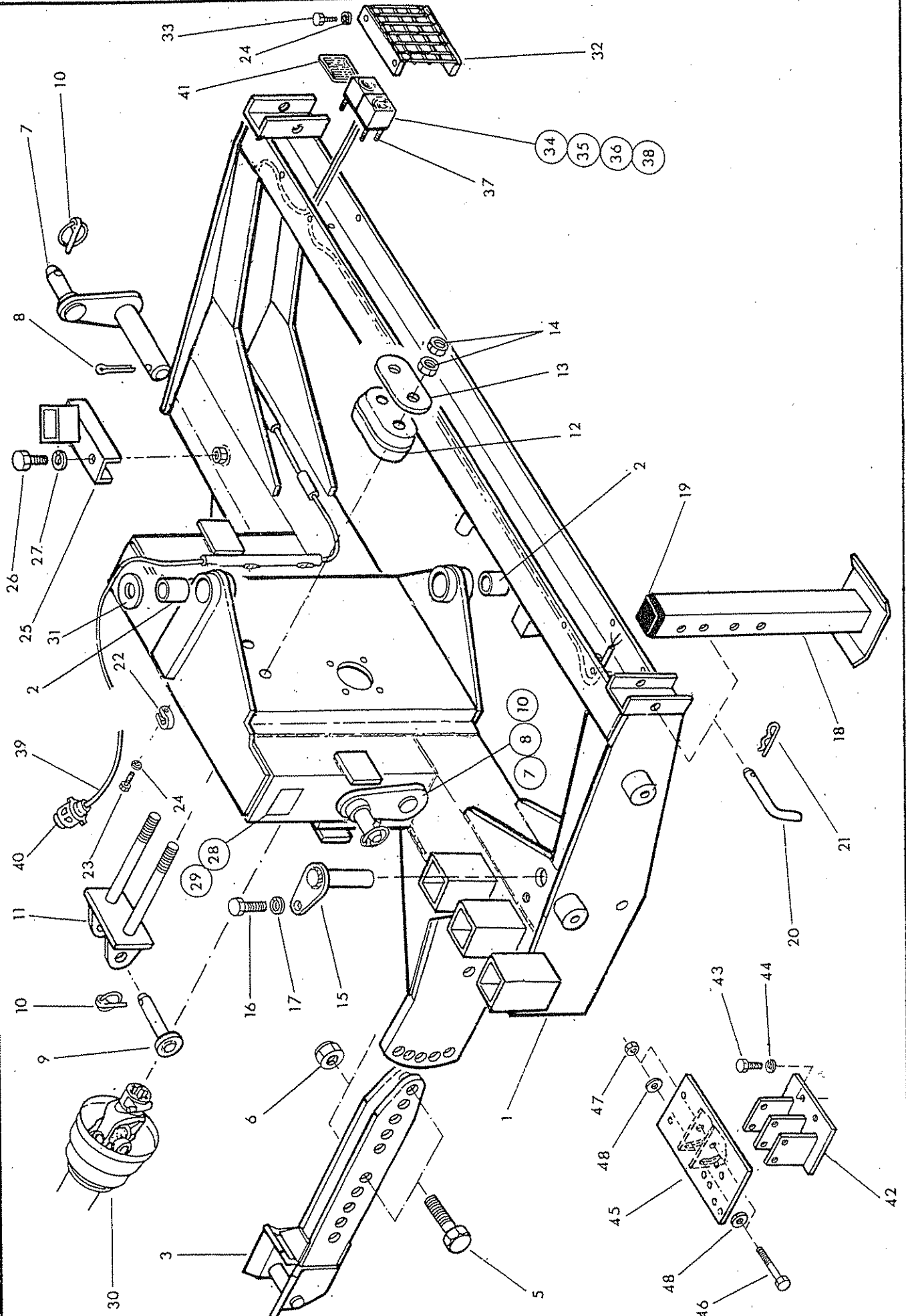
Always quote machine type and serial number as well as the part number.

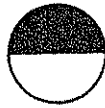
Design improvement may have altered some of the parts listed in this manual - The latest part will always be supplied when it is interchangeable with an earlier one.

MAIN FRAME



WILCOX



**McCONNELL**

REF PART NO. QTY DESCRIPTION

MAINFRAME ASSEMBLY

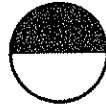
REF	PART NO.	QTY	DESCRIPTION
1	42000.02	1	Mainframe - R.Hand
	42000.01	1	Mainframe --L.Hand - not illus
2	75 60 050	2	Bush
3	75 60 387	1	Mounting arm
4	75 60 386	1	Mounting arm - not illus
5	92 13 159	4	Bolt M24 x 75 long
6	91 43 009	4	Self locking nut M24
7	75 60 374	2	Lift link pin
8	95 01 509	2	Split 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
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

Cable controlled m/c's only

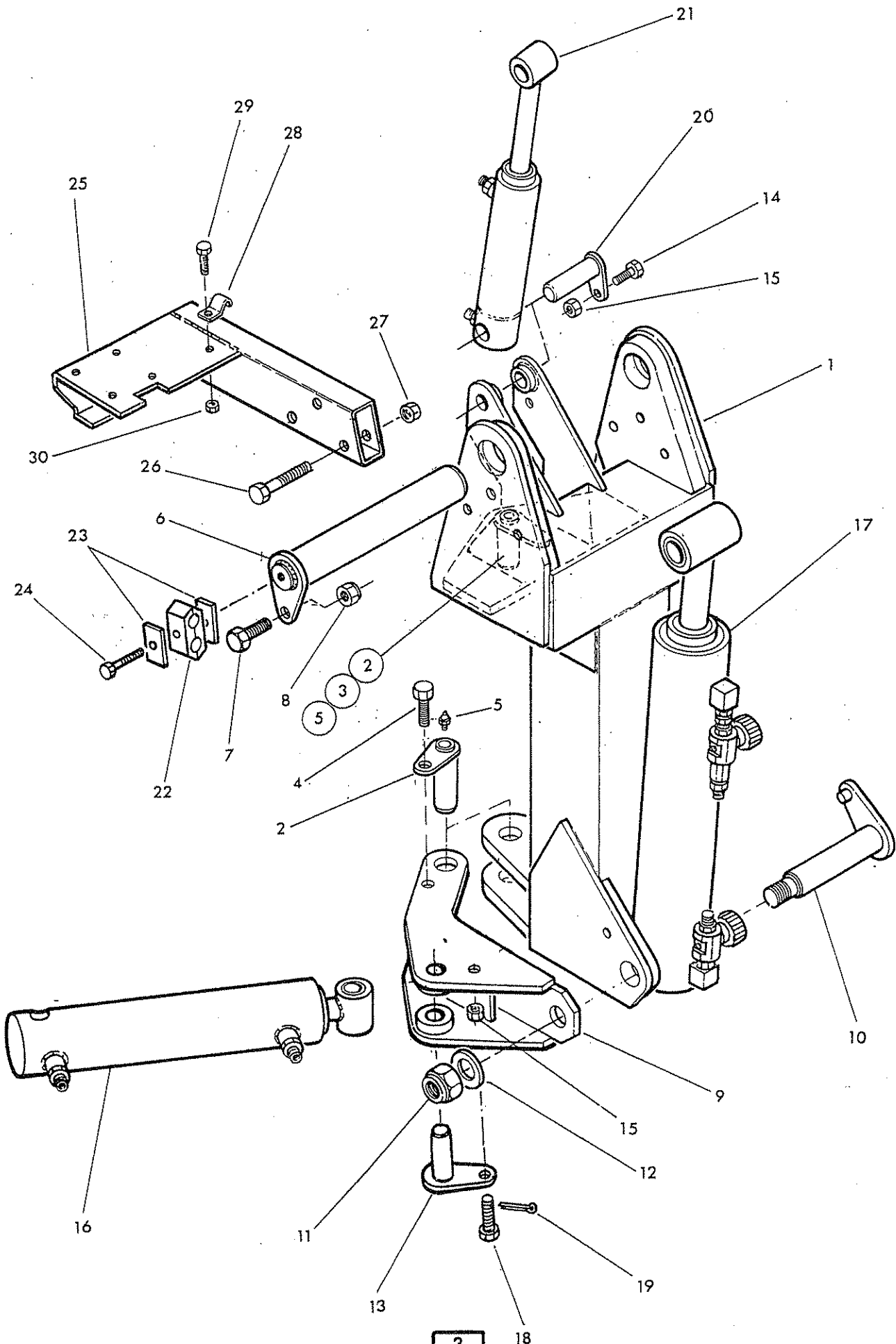
*** Assembly Note**

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

PILLAR



McCOMBELL





REF PART NO. QTY DESCRIPTION

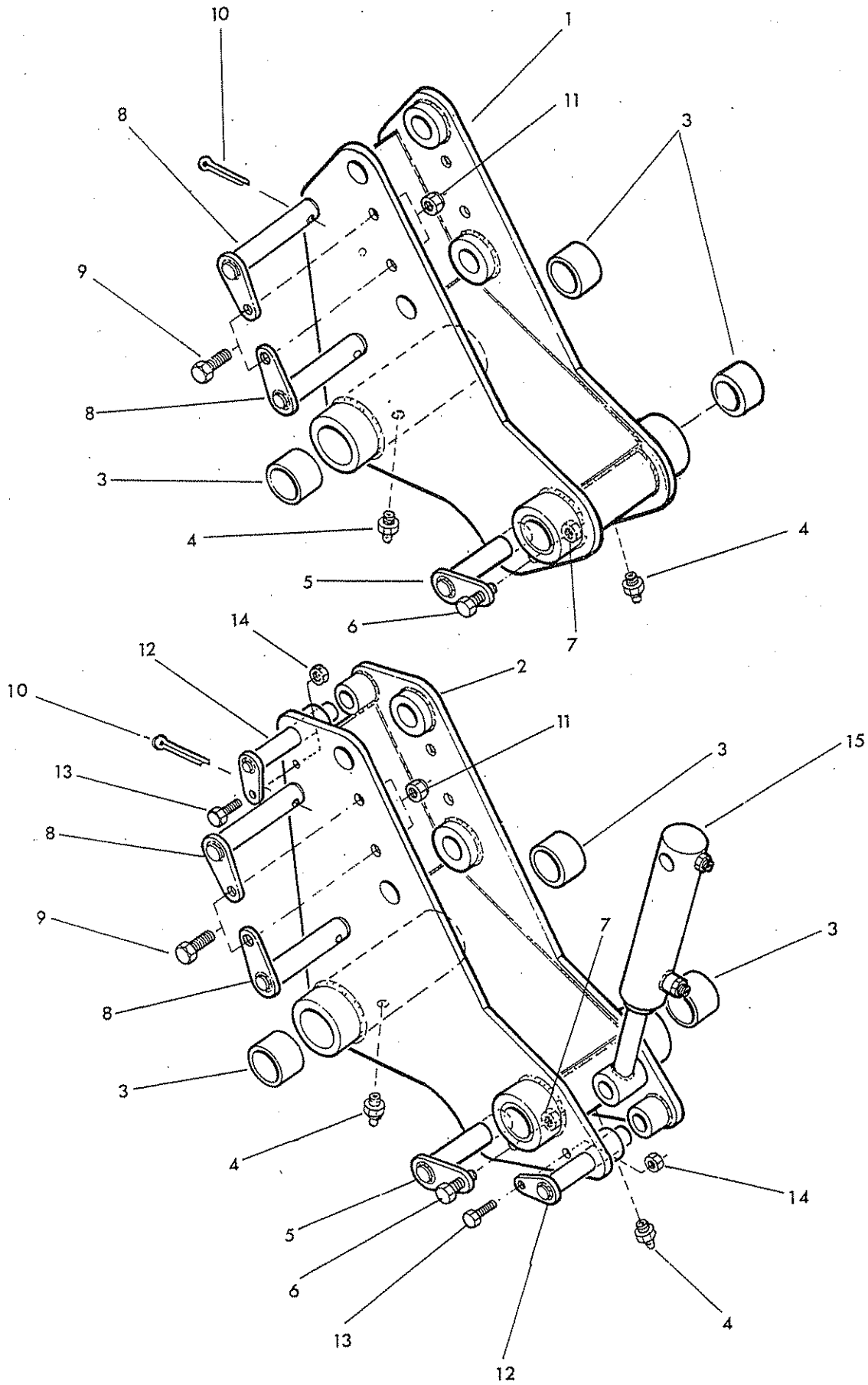
PILLAR

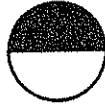
REF	PART NO.	QTY	DESCRIPTION	
1	42001.01	1	Pillar	
2	75 60 058	2	Pivot pin - pillar	
3	93 13 097	1	Setscrew M16 x 45	
4	93 13 087	1	Setscrew M16 x 40	
5	09 01 124	2	Greaser 1/8 BSP 67 deg	
6	75 60 059	1	Pivot pin - rocker	
7	92 13 137	1	Setscrew M16 x 65	
8	91 43 007	1	Self locking nut M16	
9	42023.01	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	1	Setscrew M10 x 30	
15	91 43 005	2	Self locking nut M10	
16	75 60 346	1	Slew ram assembly	
17	76 60 260	1	Lift ram assembly	
18	42269.02	1	Special setscrew M10 x 35	
19	95 01 255	1	Split pin dia 4 x 25	
20	41691.02	1	Pivot pin - Lift comp base	AHC
21	76 50 260	1	Compensator ram assembly	only
22	71 93 063	1	Hose clamp	
23	06.418.05	2	Clamp plate	Gear hydraulic
24	92 13 165	1	Bolt M10 x 80	m/c's only
25	42122.02	1	Valve mounting bracket R.Hand	Electric
	42122.01	1	Valve mounting bracket L.Hand	machines
26	92 13 207	3	Bolt M16 x 100	only
27	91 43 007	3	Self locking nut	
28	71 09 151	1	Cable clamp	
29	93 13 034	1	Setscrew M8 x 16	
30	91 43 004	1	Self locking nut M8	

ROCKERS



MCCORMICK



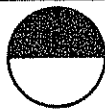


McCONNELL

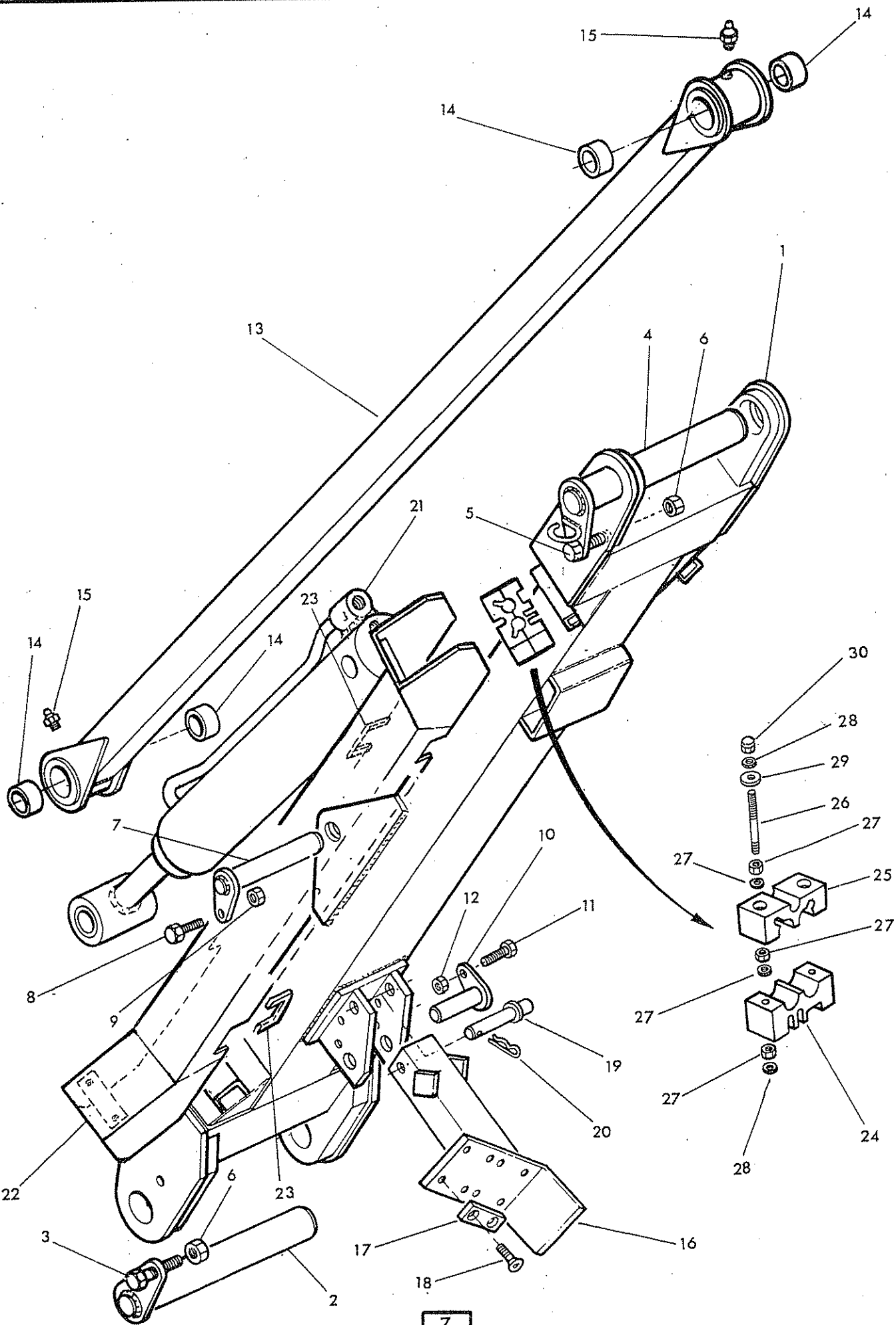
REF	PART NO.	QTY	DESCRIPTION
ROCKERS			
1	42002.02	1	Rocker - standard
2	42002.01	1	Rocker - AHC
3	75 60 050	4	Bush
4	09 01 121	2	Greaser - 1/8 BSP straight
5	75 60 061	1	Pivot pin - lift rod
6	93 13 087	1	Setscrew M16 x 40
7	91 43 007	1	Self locking nut M16
8	41694.04	2	Pivot pin - tension link +reach rod
9	92 13 066	2	Setscrew M12 x 30
10	95 01 507	2	Split pin dia 6 x 50
11	91 43 006	2	Self locking nut M12
12	75 60 063	2	Pivot pin - comp ram rods
13	93 13 065	2	Setscrew M10 x 30
14	91 43 005	2	Self locking nut M10
15	76 50 260	1	Compensator ram assembly

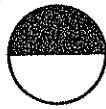
} AHC
only

MAIN ARM



McCONNEL



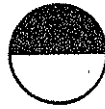
**McCONNELL**

REF PART NO. QTY DESCRIPTION

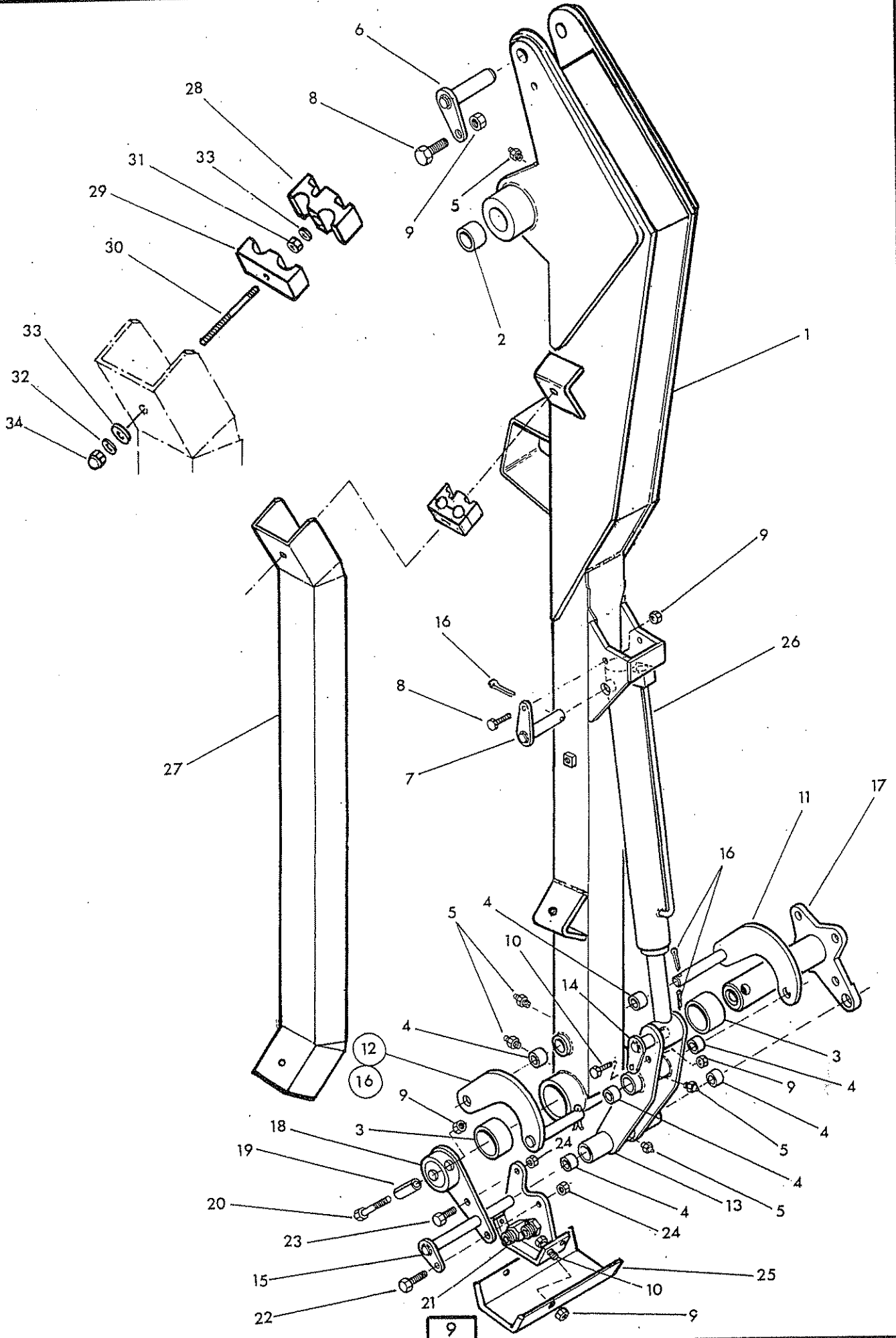
MAIN ARM AND FITTINGS

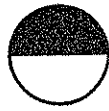
REF	PART NO.	QTY	DESCRIPTION	
1	42006.01	1	Main arm	
2	75 60 059	1	Pivot pin - main arm	
3	92 13 137	1	Bolt M16 x 65	
4	75 60 060	1	Pivot pin - dipper	
5	92 13 137	2	Bolt M16 x 65	
6	91 43 007	2	Self locking nut M16	
7	41694.04	1	Pivot pin - reach ram base	
8	93 13 066	1	Setscrew M12 x 30	
9	91 43 006	1	Self locking nut M12	
10	75 60 064	1	Pivot pin comp. ram base	} AHC only
11	93 13 065	1	Bolt M10 x 30	
12	91 43 005	1	Self locking nut M10	
13	42003.01	1	Tension link	
14	60 12 032	4	Bush	
15	09 01 121	2	Greaser 1/8 BSP - straight	
16	42820.04	1	Parking cradle - R.Hand	} Midcut only
	42820.03	1	Parking cradle - L.Hand	
17	10 75 041	4	Cradle pad	
18	10 75 047	8	Countersunk rivet	
19	42892.01	1	Cradle pin	
20	04 31 105	1	Spring cotter	
21	42095.04	1	Reach ram assembly	
22	42190.02	1	Hose cover	
23	41741.01	2	Edge strip	
24	42024.02	2	Hose clamp lower	
25	42024.03	2	Hose clamp upper	
26	42198.01	4	Stud M10 x 135	
27	91 13 005	12	Plain nut M10	
28	91 00 405	8	External serrated washer dia 10	
29	91 00 105	12	Plain washer dia 10	
30	91 00 025	4	Special nut M10	

DIPPER - Std arm



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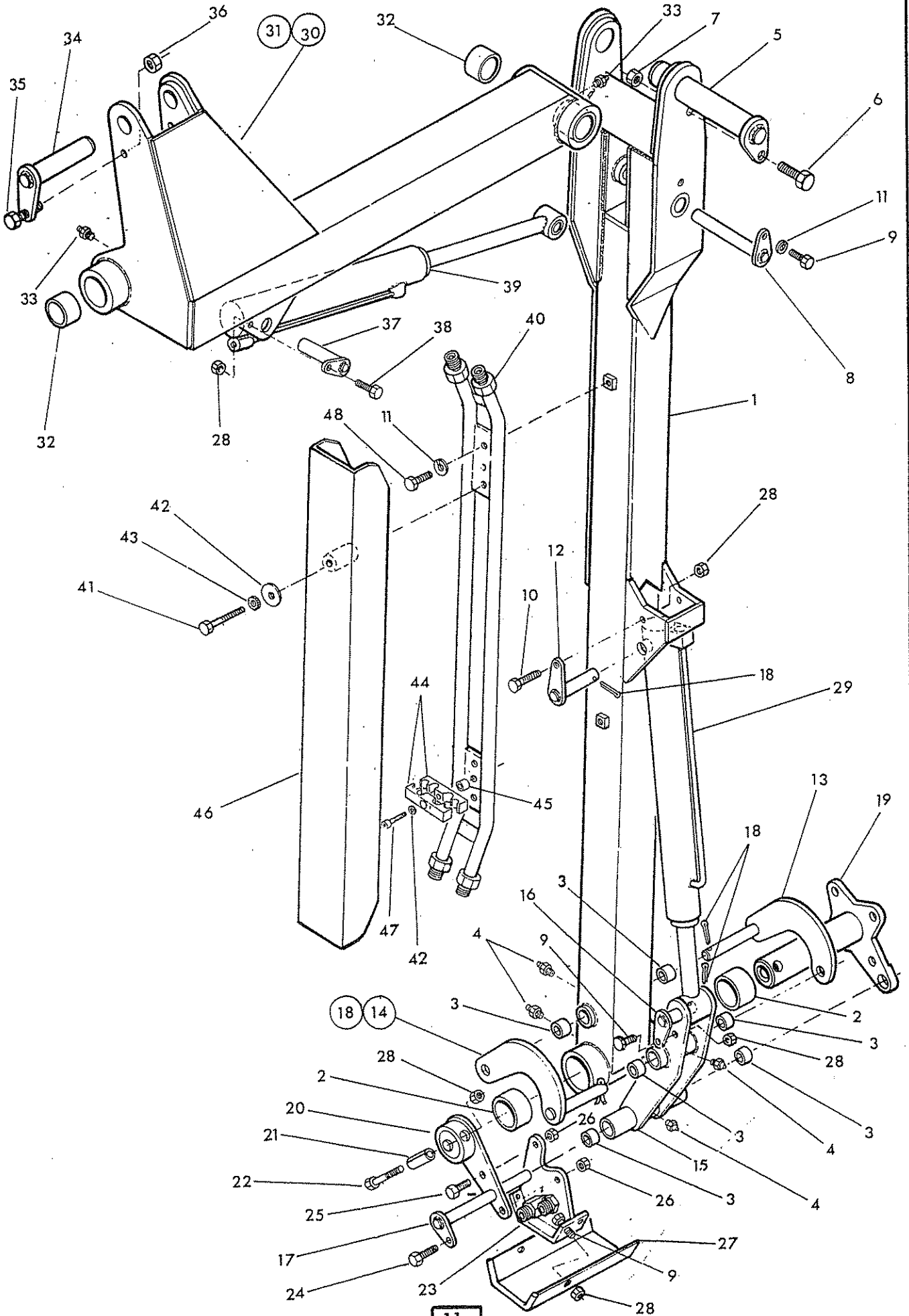


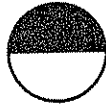
REF	PART NO.	QTY	DESCRIPTION
DIPPER ARM AND FITTINGS			
1	42004.01	1	Dipper arm
2	75 60 050	2	Bush dia 50
3	71 36 035	2	Nylon head bush
4	41690.01	6	Bush 1" dia
5	09 01 121	5	Greaser 1/8 BSP straight
6	41692.05	1	Pivot pin - tension link
7	41691.02	1	Pivot pin - Angle base
8	93 13 075	2	Setscrew M10 x 35
9	91 43 005	6	Self locking nut M10
10	93 13 045	4	Setscrew M10 x 20
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	71 95 303	1	Hose junction bracket
22	02 11 146	1	Bolt 5/8 UNF x 1 3/4" long
23	02 11 126	1	Bolt 5/8 UNF x 1 1/2" long
24	01 41 006	2	Self locking nut 5/8 UNF
25	71 98 333	1	Hose tray
26	76 50 255	1	Angle ram assembly
27	41665.07	1	Hose cover
28	06.430.18	1	Hose clamp lower
29	06.430.17	1	Hose clamp upper
30	42198.02	2	Stud M10
31	91 13 005	2	Plain nut M10
32	91 00 405	2	External serrated washer dia 10
33	91 00 105	4	Plain washer dia 10
34	91 00 025	2	Special nut M10

DIPPER - midcut



McCOMEL



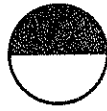


REF. PART NO. QTY DESCRIPTION

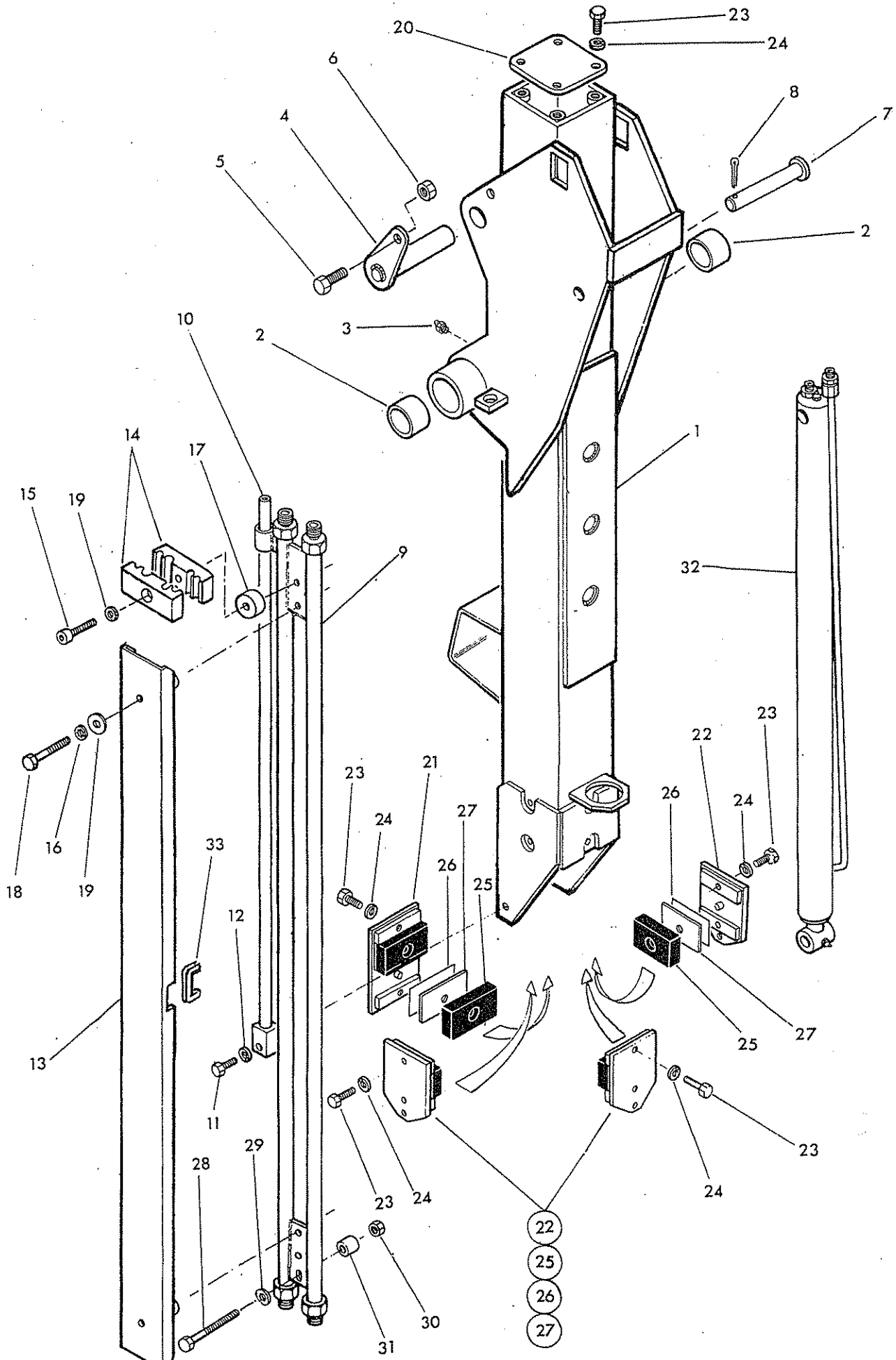
MIDCUT -DIPPER ARM AND FITTINGS

1	76 50 258	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	1	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	71 95 303	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	42229.02	1	Forward extension 1.0m R.Hand
31	42229.01	1	Forward extension 1.0m L.Hand
32	75 60 050	4	Bush
33	09 01 121	2	Greaser 1/8 BSP straight
34	75 50 013	1	Pivot pin - tension link
35	93 13 076	1	Bolt M12 x 35
36	91 43 006	1	Self locking nut M12
37	75 60 064	1	Pivot pin -breakaway base
38	92 13 065	1	Bolt M10 x 30
39	75 50 288	1	Breakaway ram assembly
40	42263.01	1	Rigid pipe assembly
41	92 13 135	2	Bolt M10 x 65
42	91 00 105	4	Plain washer dia 10
43	91 00 405	2	Shakeproof washer dia 10
44	42024.04	4	Clamp
45	42215.01	2	Spacer
46	42205.03	1	Hose cover
47	93 43 105	2	Capscrew M10 x 50
48	93 13 055	2	Setscrew M10 x 25

DIPPER SOCKET - tele



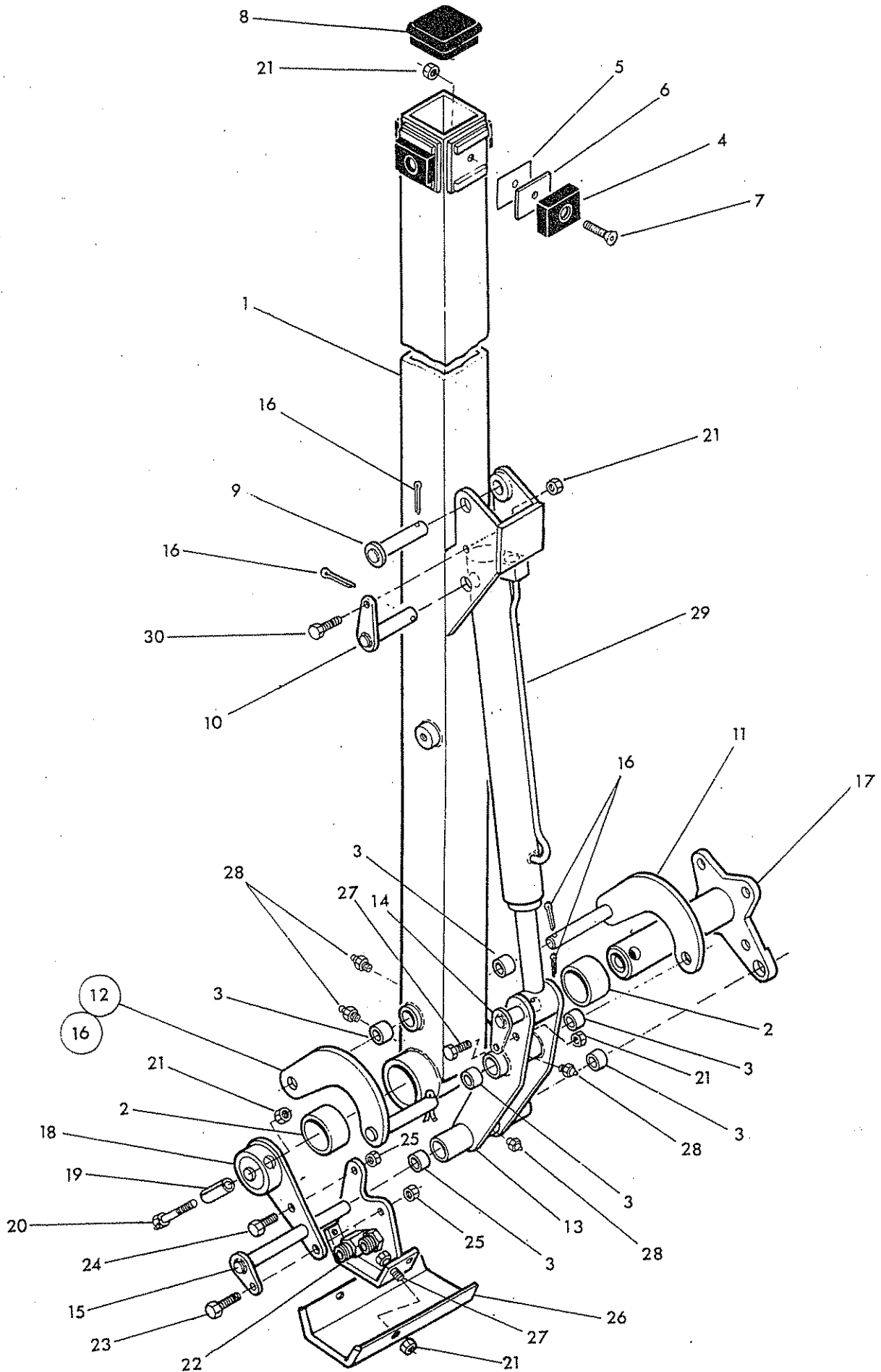
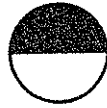
McCOMBS

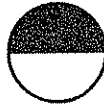




REF PART NO. QTY DESCRIPTION
DIPPER SOCKET AND FITTINGS

REF	PART NO.	QTY	DESCRIPTION
1	42217.01	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	42211.02	1	Rigid pipe assembly
10	71 97 012	1	Guide rod
11	92 13 125	1	Bolt M10 x 60
12	91 00 205	1	Spring washer dia 10
13	42205.02	1	Pipe cover
14	42024.04	4	Hose clamp
15	93 43 105	2	Capscrew M10 x 50
16	91 00 405	2	External shakeproof washer dia 10
17	42215.01	2	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



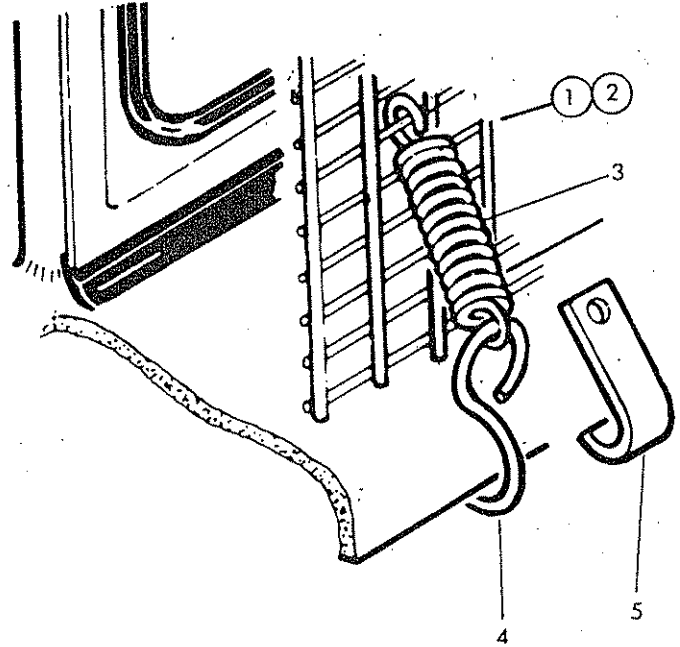
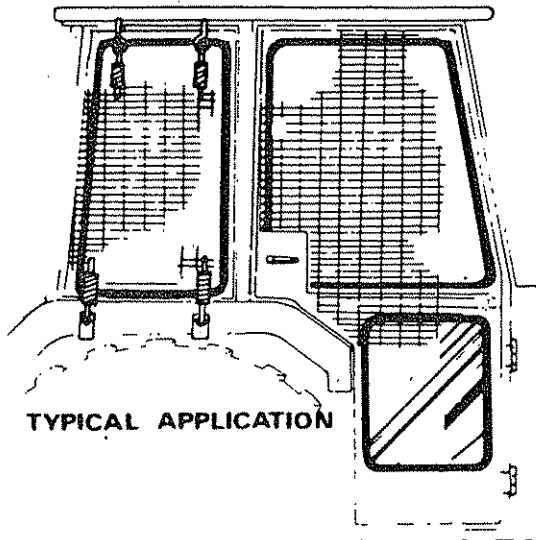
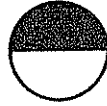


WAGNER

REF PART NO. QTY. DESCRIPTION

**DIPPER SLIDER AND FITTINGS -
continued**

	76 50 251	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	8	Self locking nut M10
22	71 95 303	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	3	Setscrew M10 x 20
28	09 01 121	4	Greaser 1/8 BSP straight
29	76 50 255	1	Angling ram assembly
30	93 13 075	1	Setscrew M10 x 35



Ref. Part No.

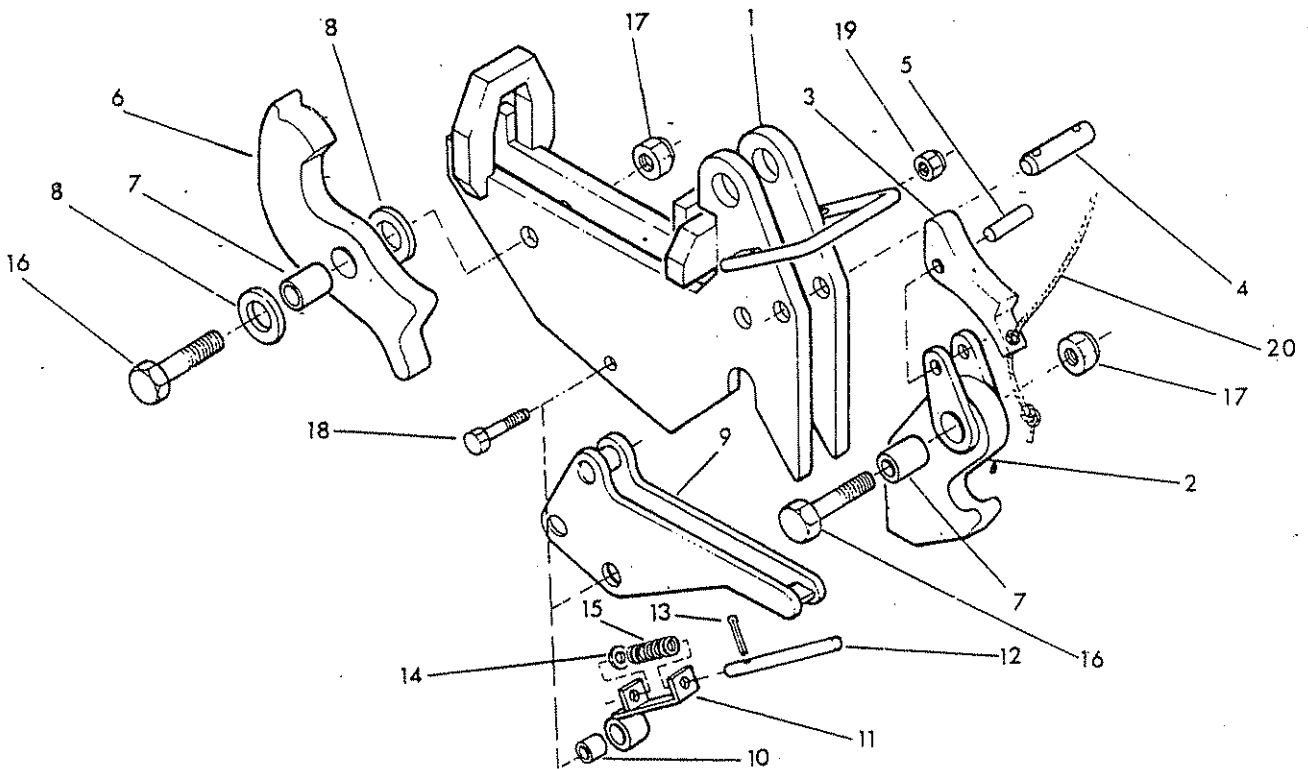
Qty. Description

73-13-324

CAB GUARD KIT

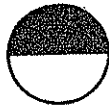
1 73-13-049
 2 73-13-050
 3 60-01-064
 4 60-01-065
 5 73-13-051

1 Guard panel - large
 1 Guard panel - small
 12 Spring
 6 Hook
 6 Hook

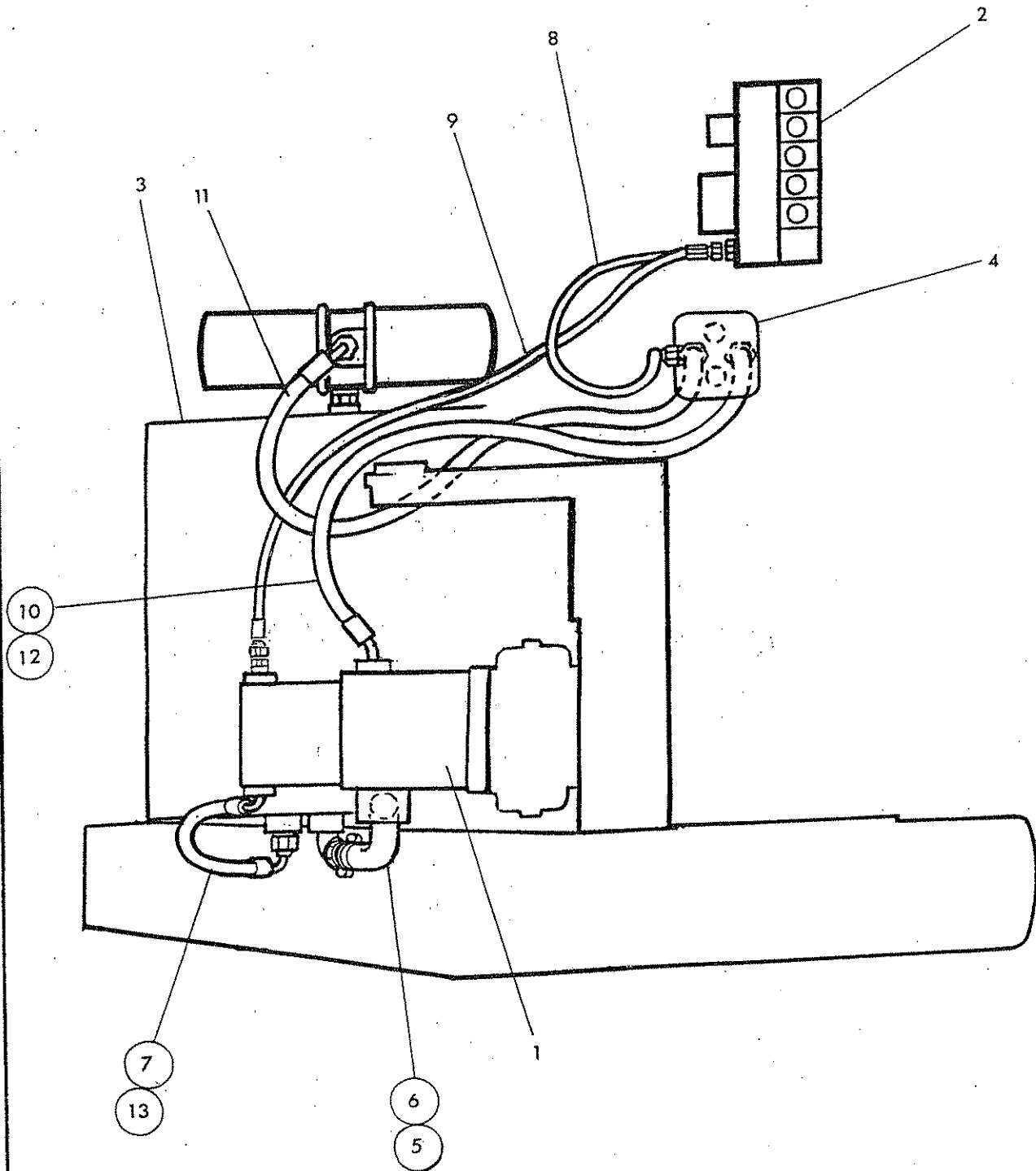


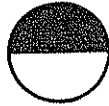
Ref.	Part No.	Qty.	Description
	20-20-999		CATCH ASSEMBLY
1	20-20-901	1	Catch body
2	20-20-902	1	Hitch hook
3	20-20-903	1	Hook release
4	20-20-904	1	Locking pin
5	20-20-906	1	Pivot - hook release
6	20-20-907	1	Plate latch
7	20-20-908	2	Pivot sleeve
8	20-20-909	2	Spacer - plate latch
9	20-20-910	1	Catch 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



McCOMBI



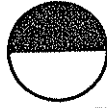


REF PART NO. QTY DESCRIPTION

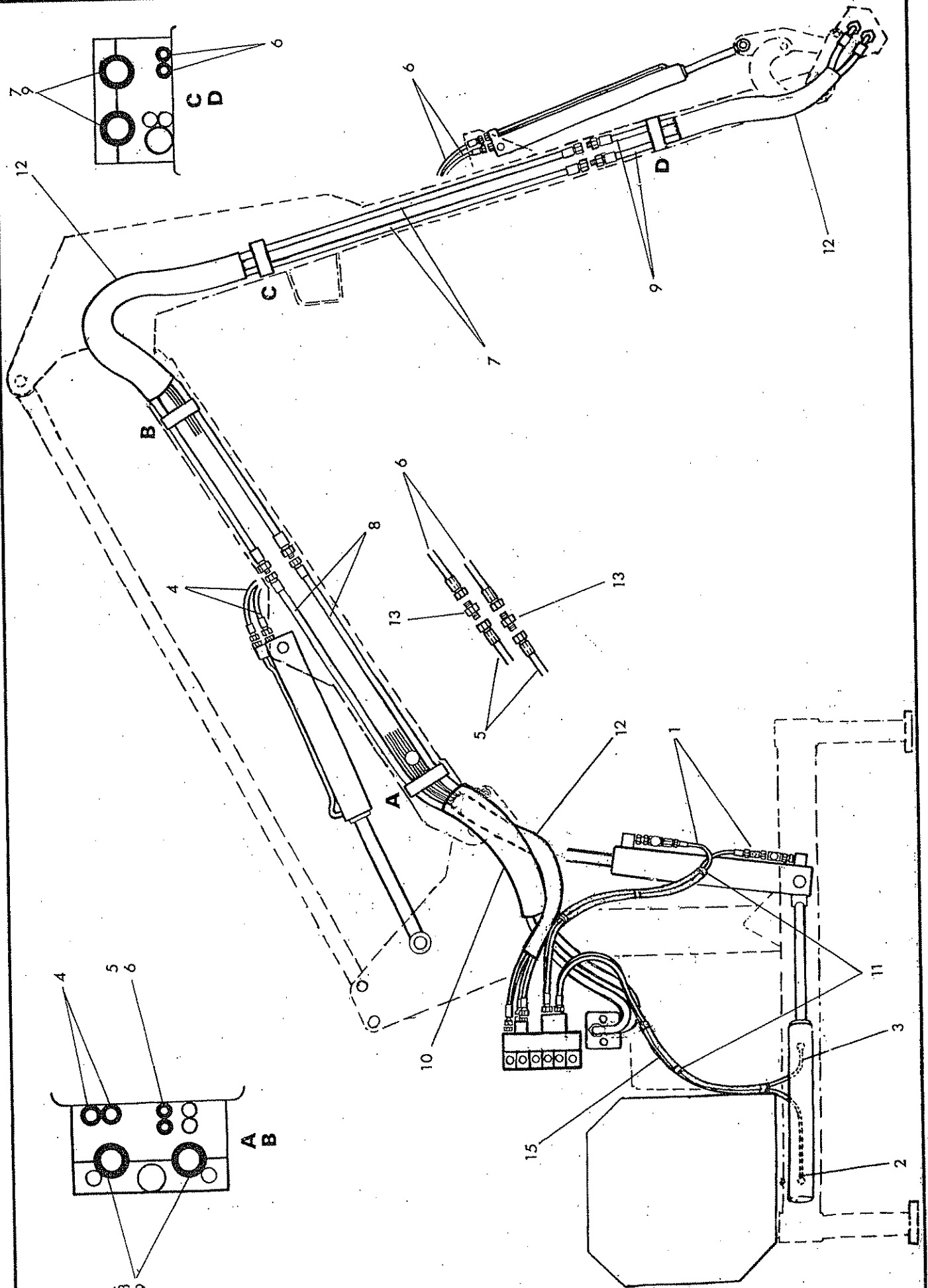
**HOSE INSTALLATION FOR PRIMARY
CIRCUIT - ALL MODELS**

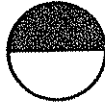
1			Pump
2			Control valve
3			Hydraulic tank
4			Rotor control valve
5	09 04 107	4	Hose clip
6	85 01 252	1	Hose 1 1/2 bore x 14" long Suction R.Hand
	85 01 188	1	Hose 1 1/2 bore x 16" long Suction L.Hand
7	85 01 264	1	Hose 1" BSP - 3/4 SAE x 17" long - Suction
8	10.006.14	1	Hose 1/2 BSP x 700 long Valve - R.C. Valve
9	10 006.20	1	Hose 1/2 BSP x 1000 long pump press - valve
10	85 01 263	1	Hose 1" BSP SAE x 1200 long pump - R.C. valve
11	10.012.23	1	Hose 1" BSP x 1300 long - R.C. valve - tank
12	86 00 124	1	'O' ring
13	86 00 119	1	O ring

HOSE INSTALLATION -
Service circuits



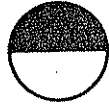
McCORRELL



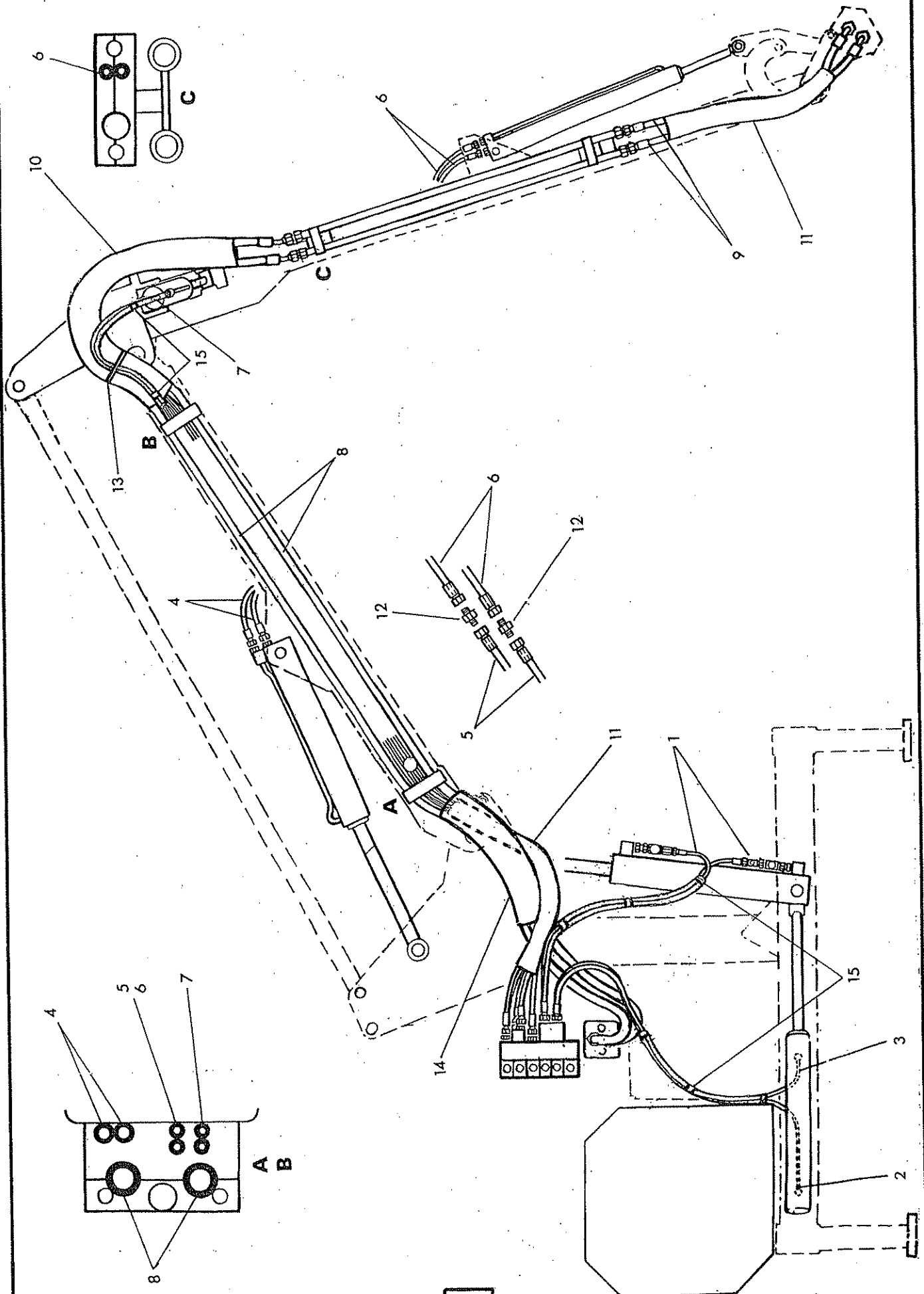


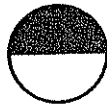
REF	PART NO.	QTY	DESCRIPTION
HOSE INSTALLATION SERVICE CIRCUITS 5000			
1	10.003.22	2	Hose 3/8 BSP x 1200 long Lift
2	10.002.26	1	Hose 1/4 BSP x 1600 long Slew base
3	10.002.24	1	Hose 1/4 BSP x 1400 long Slew gland
4	10.003.32	2	Hose 3/8 BSP x 2200 long Reach
5	10.001.23	2	Hose 1/4 BSP x 1300 long valve-angle Union
6	10.001.36	2	Hose 1/4 BSP x 2600 long Union angle
7	42248.30	2	Hose 1" BSP x 2000 long Dipper pivot
8	41348.32	2	Hose 1" BSP x 2200 long R.C.Valve
9	41349.22	2	Hose 1" BSP x 1200 long - junction bracket
10	75 50 065	1	Hose sleeve x 20" long
11	71 35 084	6	Hose tie
12	75 50 063	3	Hose sleeve x 30" long
13	85 81 169	1	Union 1/4 BSP MM

HOSE INSTALLATION -
Service circuits -



McCOMBS



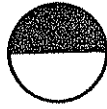


REF PART NO. QTY DESCRIPTION

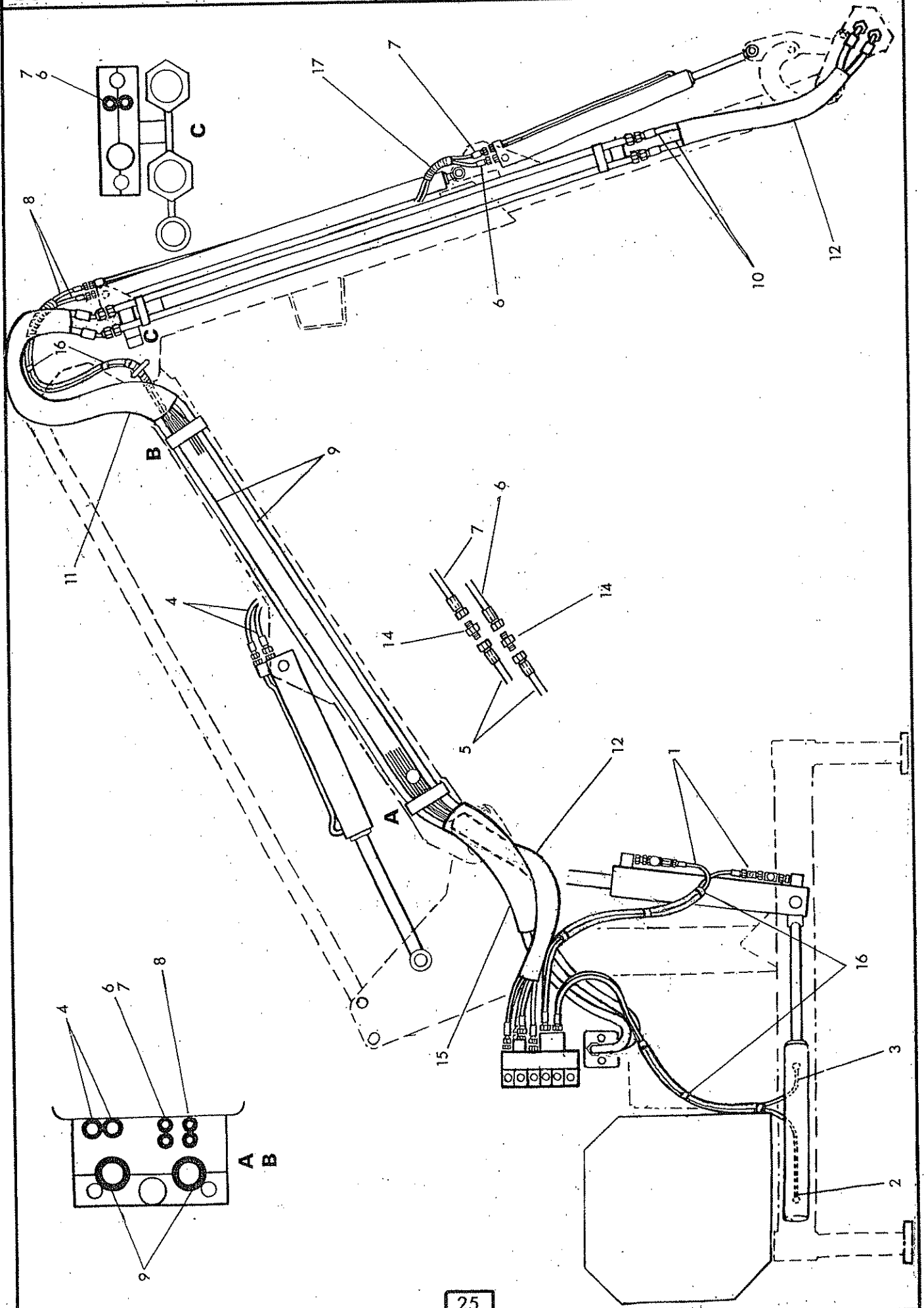
**HOSE INSTALLATION SERVICE
CIRCUITS 5000M**

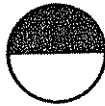
1	10.003.22	2	Hose 3/8 BSP x 1200 long Lift
2	10.002.26	1	Hose 1/4 BSP x 1600 long Slew base
3	10.002.24	1	Hose 1/4 BSP x 1400 long Slew gland
4	10.003.32	2	Hose 3/8 BSP x 2200 long Reach
5	10.001.23	2	Hose 1/4 BSP x 1300 long valve-angle Union
6	10.001.42	2	Hose 1/4 BSP x 3200 long Union angle
7	10.001.39	2	Hose 1" BSP x 2900 long midcut
8	41350.52	2	Hose 1" BSP x 4200 long R.C.Valve-pipes
9	85 01 226	2	Hose 1" BSP x 34" long pipes -bracket
10	75 50 026	1	Hose sleeve x 66" long
11	75 50 063	2	Hose sleeve x 30" long
12	85 81 169	1	Union 1/4 BSP MM
13	71 96 045	1	Hose tie
14	75 50 065	1	Hose sleeve 20" long
15	71 35 084	8	Hose tie

HOSE INSTALLATION -
Service circuits -



McCONNELL



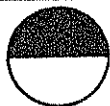
**McCOMBELL**

REF PART NO. QTY DESCRIPTION

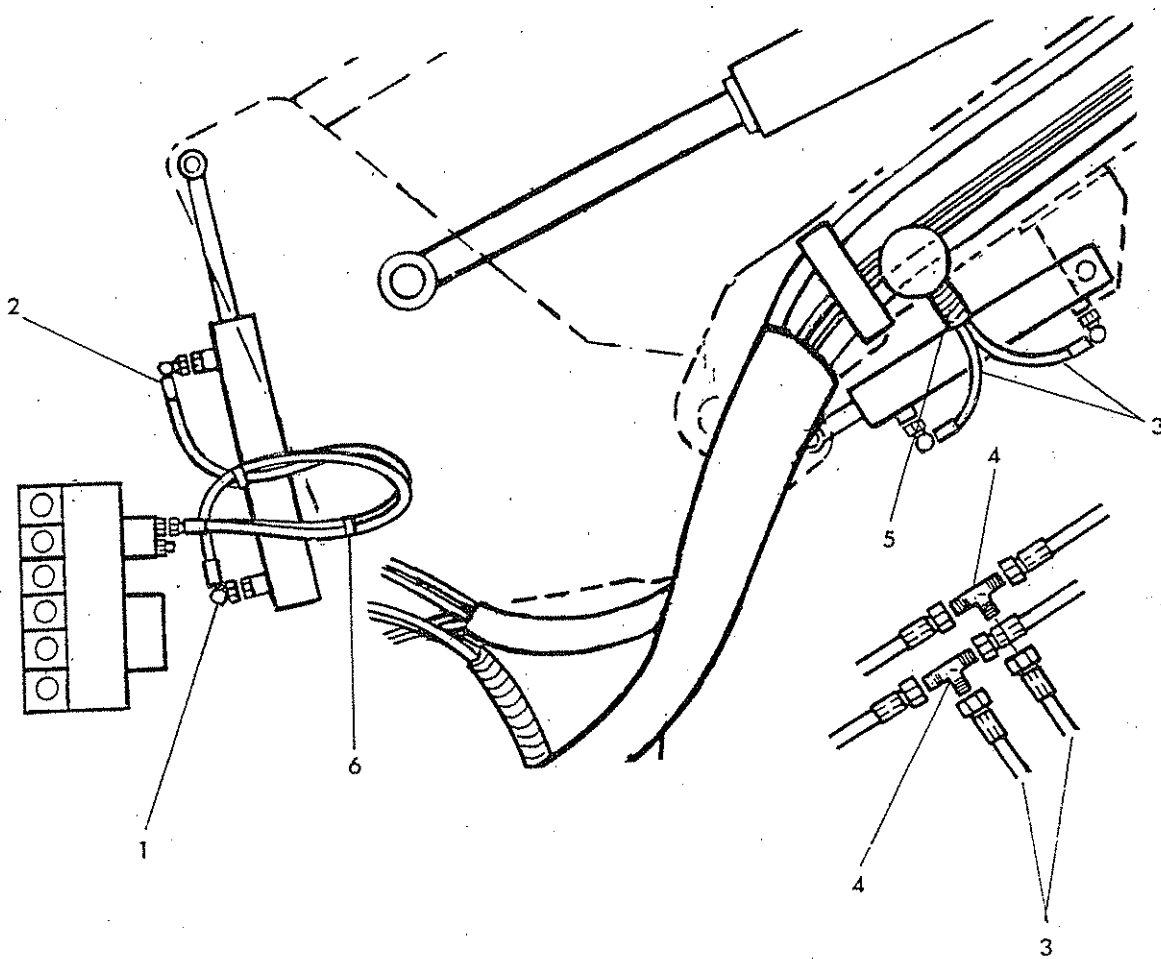
**HOSE INSTALLATION SERVICE
CIRCUITS 5000T**

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	10.003.32	2	Hose 3/8 BSP x 2200 long Reach
5	10.001.23	2	Hose 1/4 BSP x 1300 long valve-angle Union
6	10.017.45	1	Hose 1/4 BSP x 3500 long Union angle base
7	10.001.45	1	Hose 1/4 BSP x 3500 long Union-angle gland
8	10.001.45	2	Hose 1/4 BSP x 3500 long Tele
9	41350.50	2	Hose 1" BSP x 4000 long R.C. valve-pipes
10	85 01 226	2	Hose 1" BSP x 34" long pipes -bracket
11	75 50 026	1	Hose sleeve x 66" long
12	75 50 063	2	Hose sleeve x 30" long
13		4	Hose armour coil 3/8 dia x 6" wrapped length
14	85 81 169	1	Union 1/4 BSP MM
15	75 50 065	1	Hose sleeve 20" long
16	71 35 084	8	Hose tie

HOSE INSTALLATION -
Service circuits -AHC variations



McCOMBELL





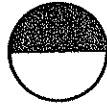
WABCO

REF PART NO. QTY DESCRIPTION

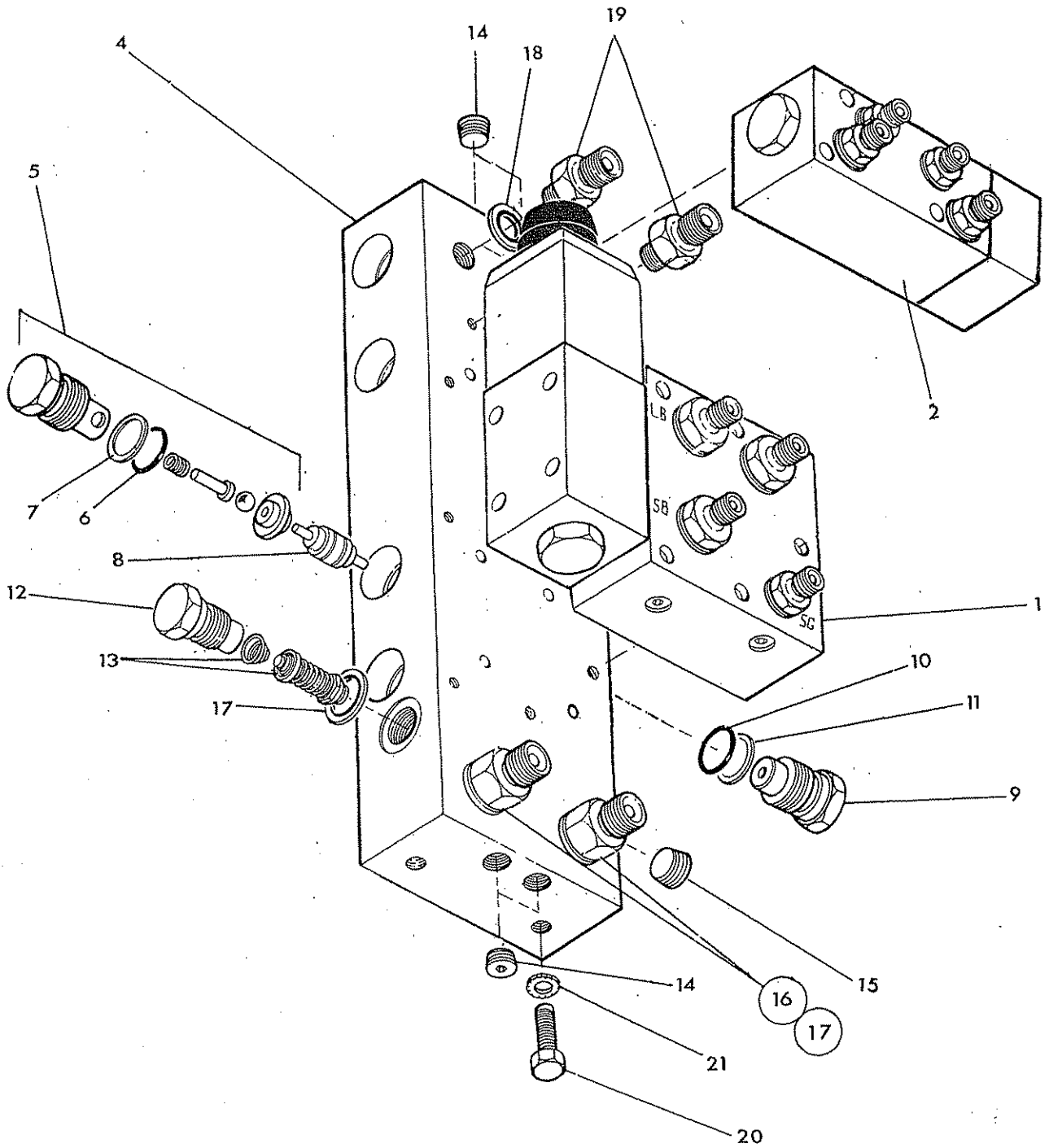
**HOSE INSTALLATION - AHC
VARIATIONS**

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

CONTROL VALVE -- std arm



McCONNELL



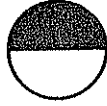


Ref	Part No	Qty	Description
STD. ARM CONTROL VALVE			
	81 30 622	1	Solenoid/manifold assy - non AHC compr:
	82 30 620	1	Solenoid/manifold assy - non AHC with angle float compr:
	81 30 623	1	Solenoid/manifold assy - AHC compr:
	81 30 621	1	Solenoid/manifold assy - AHC with angle float compr:
1		1	Slew 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

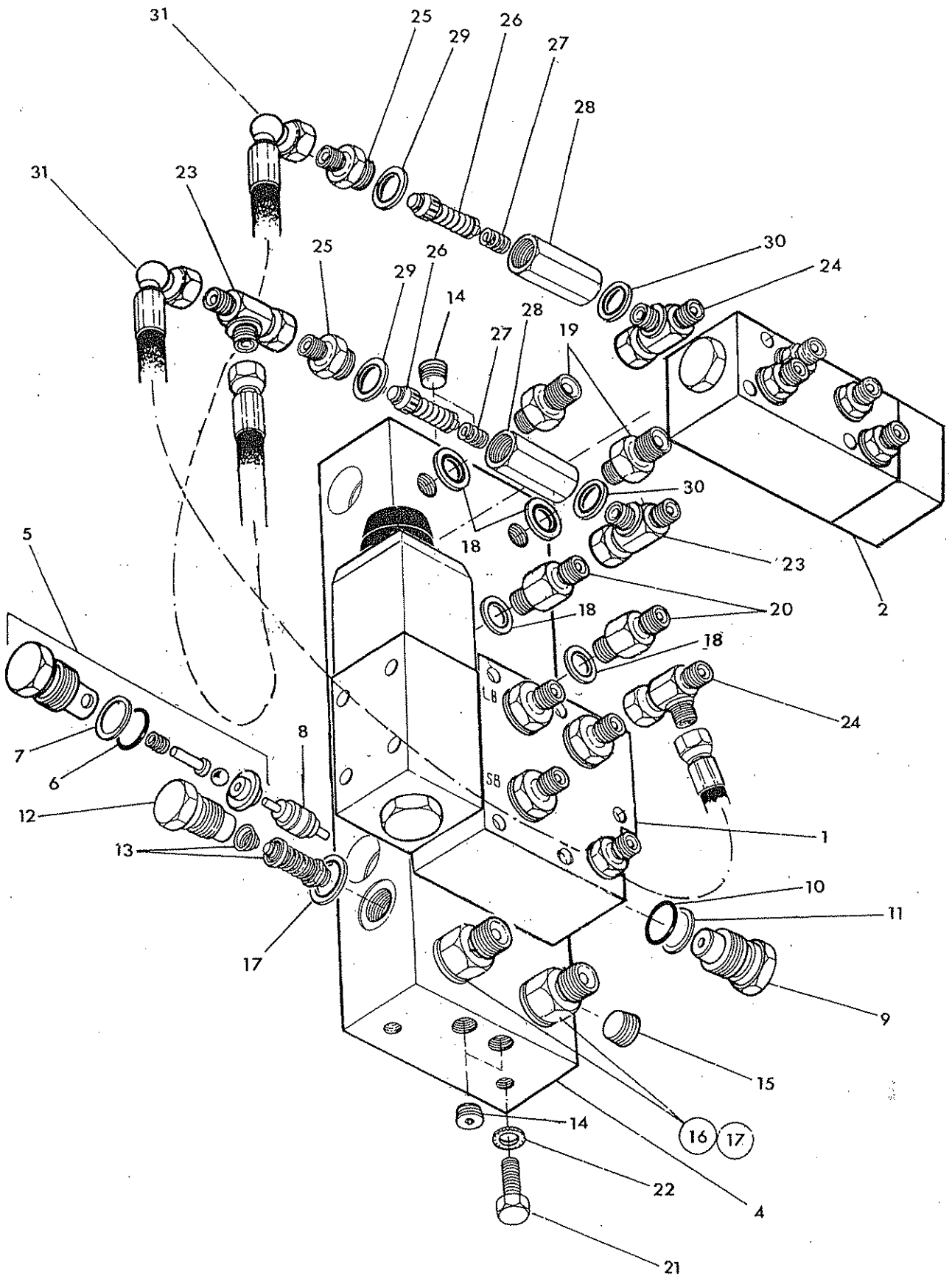
86 99 197

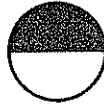
SEAL KIT

CONTROL VALVE - midcut

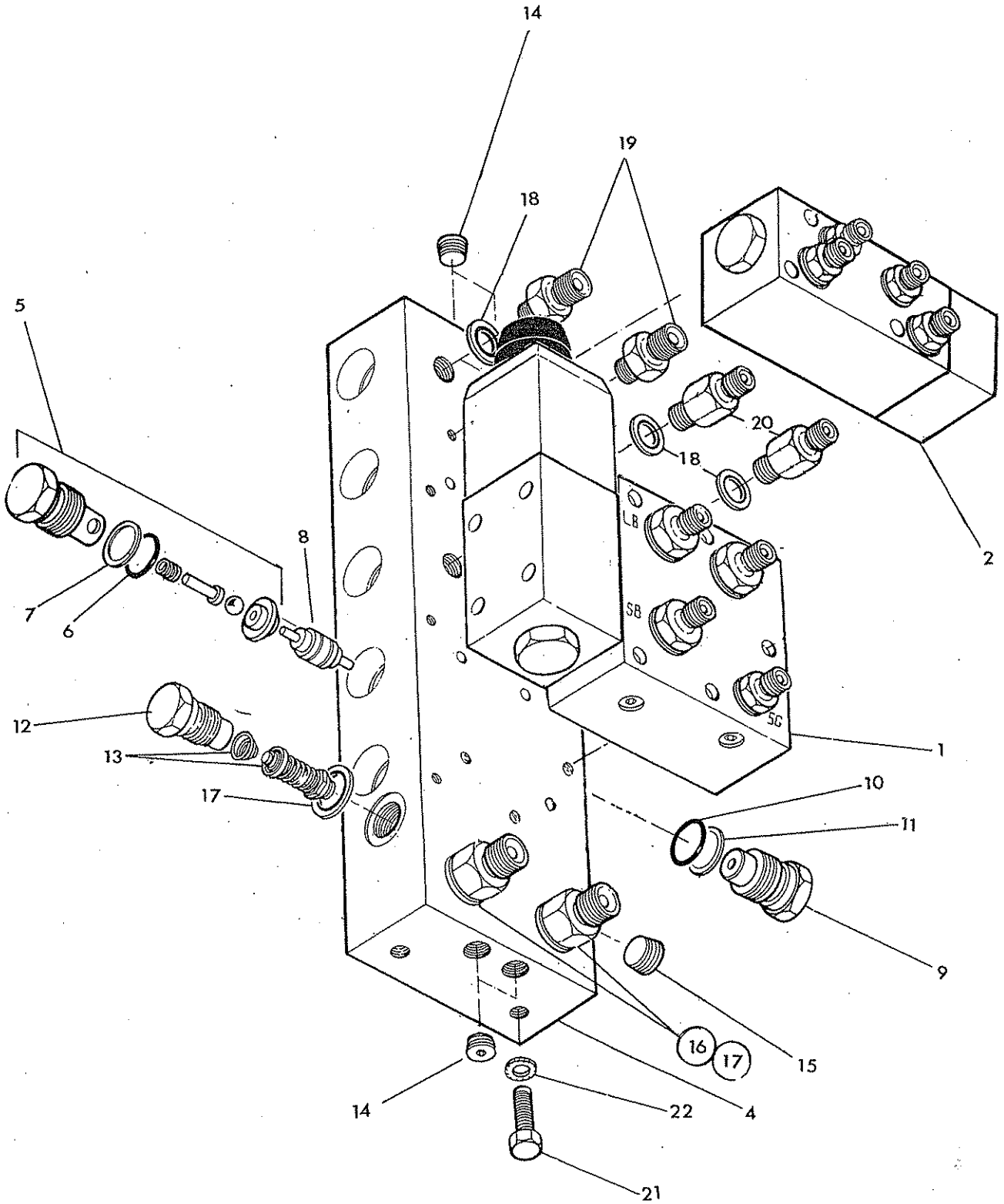
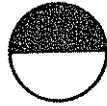


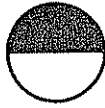
McCORMICK





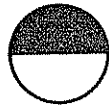
Ref	Part No	Qty	Description
MIDCUT ARM CONTROL VALVE			
	81 30 626	1	Solenoid/manifold assy - non AHC compr:
	81 30 624	1	Solenoid/manifold assy - non AHC with angle float compr:
	81 30 627	1	Solenoid/manifold assy - AHC compr:
	81 30 625	1	Solenoid/manifold assy - AHC with angle float compr:
1		1	Slew circuit valve
2		1	Hose plate or AHC 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
86 99 197			SEAL KIT



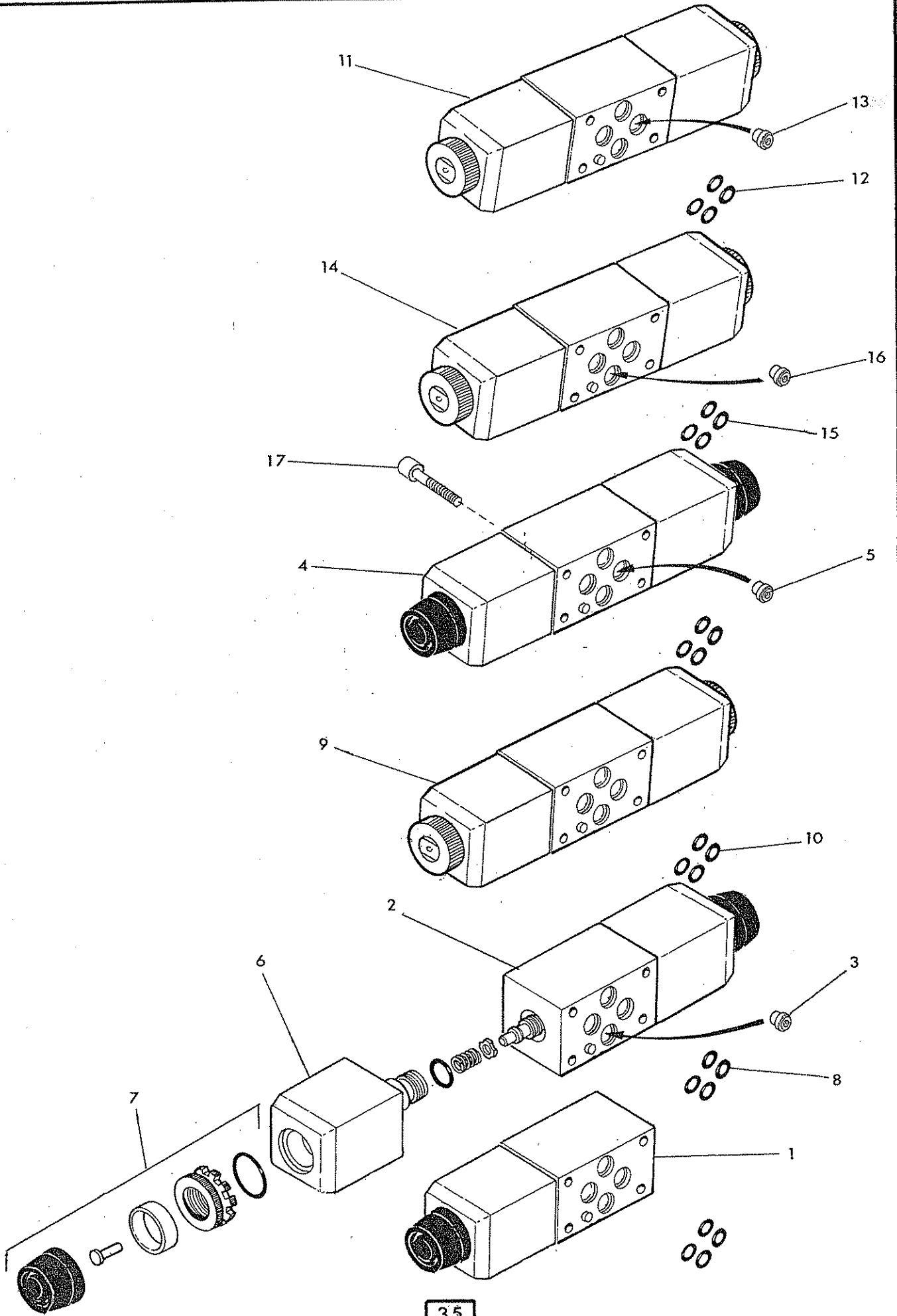


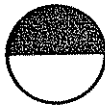
Ref	Part No	Qty	Description
TELE ARM CONTROL VALVE			
	81 30 626	1	Solenoid/manifold assy - non AHC compr:
	81 30 624	1	Solenoid/manifold assy - non AHC with angle float compr:
	81 30 627	1	Solenoid/manifold assy - AHC compr:
	81 30 625	1	Solenoid/manifold assy - AHC with angle float compr:
1		1	Slew 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
	86 99 197		SEAL KIT

SOLENOIDS



McCOMBELL



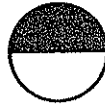


Ref	Part No	Qty	Description
SERVICE SOLENOIDS			
1	81 30 456	1	Single solenoid - standard "cut off"
2	81 30 629	1	Double solenoid - standard - "slew"
3	42989.05	1	Restrictor plug
4	81.30.629	1	Double solenoid - standard - "tele"/ "midcut" if fitted
5	42989.05	1	Restrictor plug

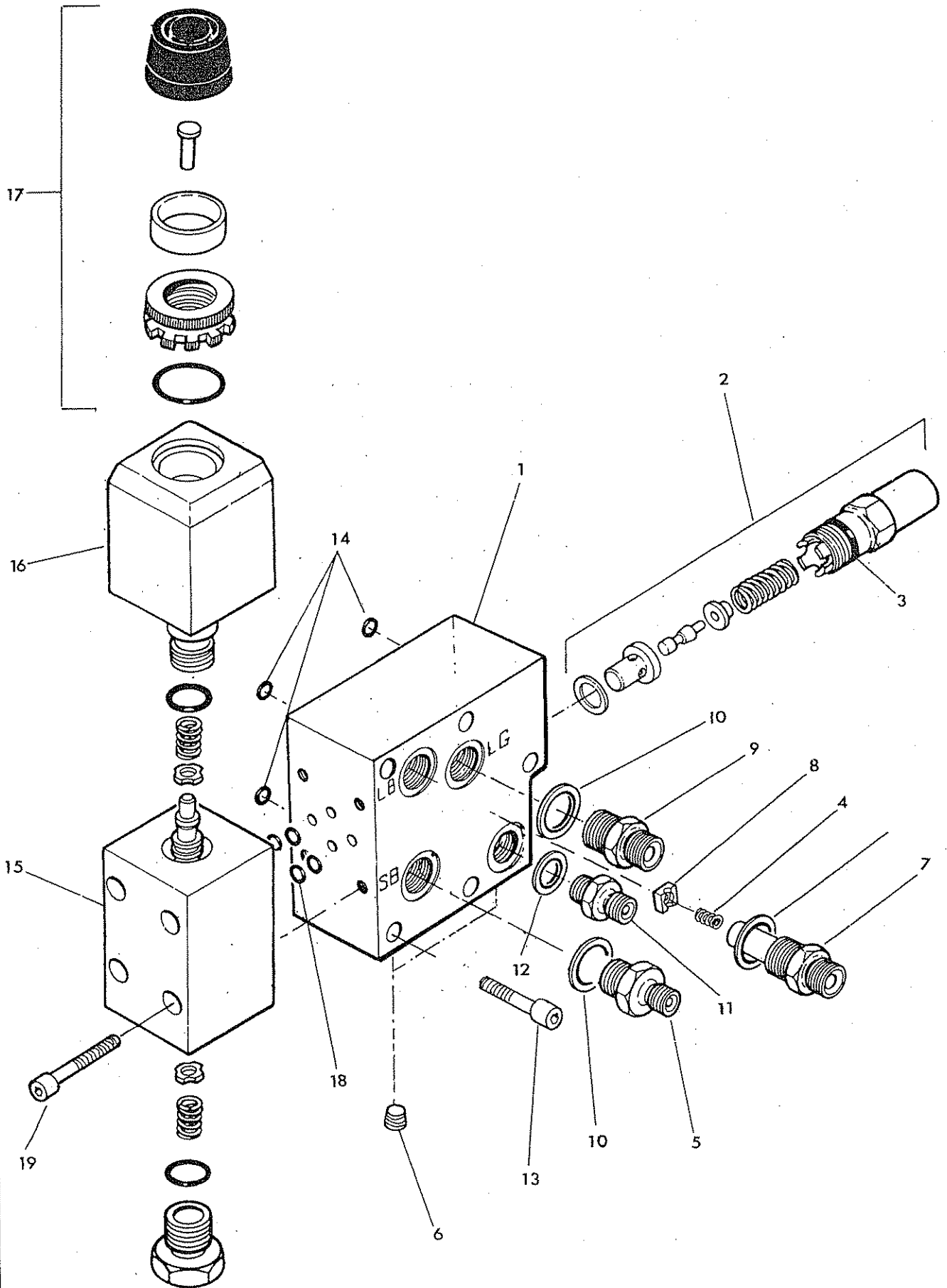
Items 6, 7 and 8 are common to all standard solenoid valves.

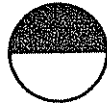
6	81 30 175	1	Coil
7	81 30 176	1	Manual override kit
8	86 00 107	4	'O' ring
9	41784.31	1	Double solenoid - proportional "lift"
10	86 00 107	4	'O' ring
11	41784.31	1	Double solenoid - proportional "reach"
12	86 00 107	4	'O' ring
13	42989.09	1	Restrictor plug
14	41784.31	1	Double solenoid proportional - "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



McCormick



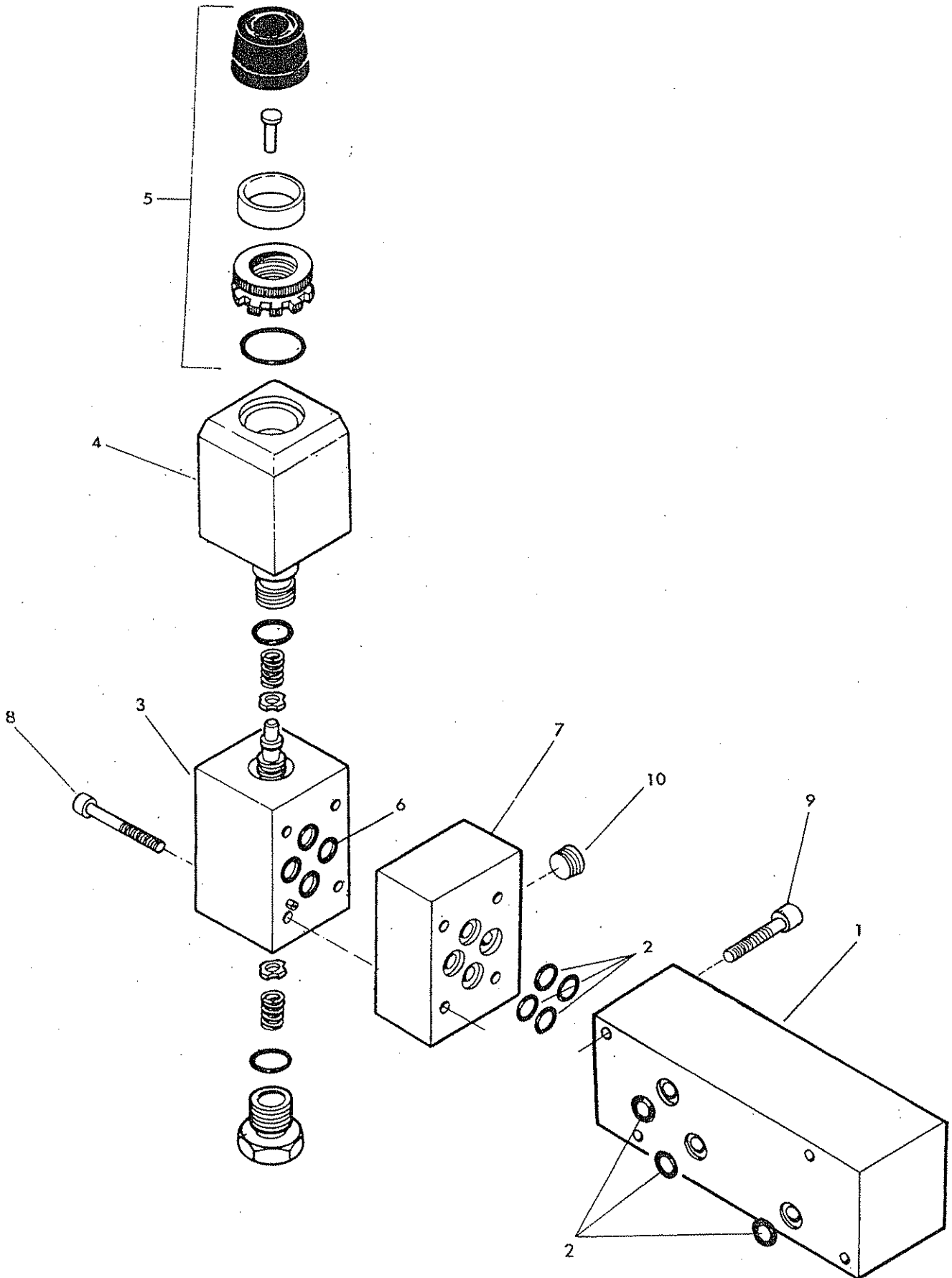
**McCOMBELL**

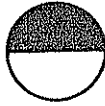
Ref	Part No	Qty	Description
SLEW VALVE ASSEMBLY			
1	81 30 348	1	Valve block
2	81 30 145	1	Relief valve assembly - 210 bar
3	86 00 113	1	Relief valve 'O' ring
4	81 16 011	1	Spring
5	85 81 115	1	Adaptor 3/8 BSP - 1/4 BSP MM
6	85 82 041	4	Plug
7	85 81 345	1	Special union 3/8 BSP MM
8	81 23 046	1	Restrictor 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
86 99 224			SOLENOID SEAL KIT

ANGLE FLOAT KIT - Std models



WAGNER

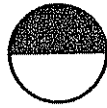




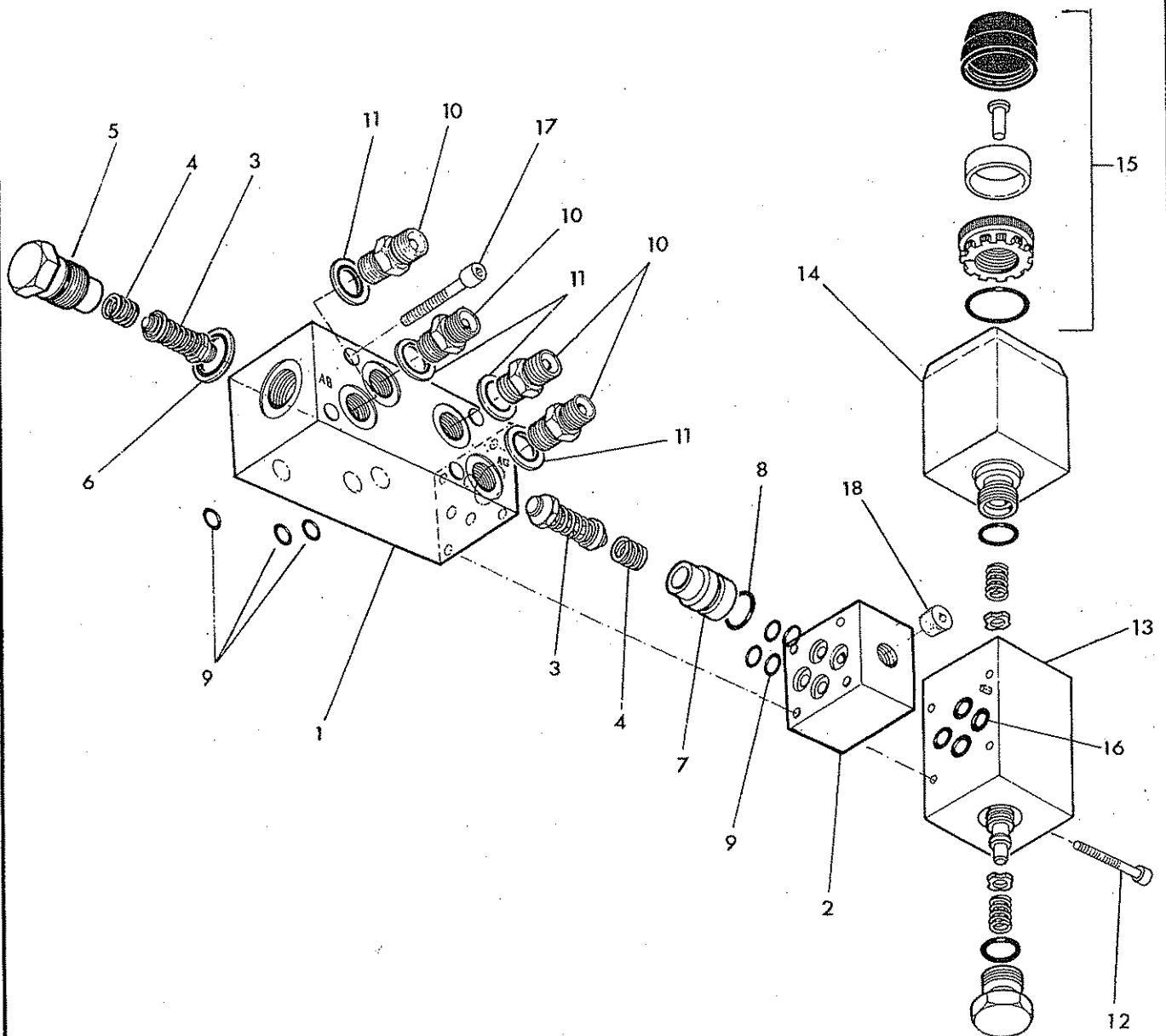
WILSON

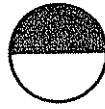
Ref	Part No	Qty	Description
			ANGLE FLOAT VALVE - for non AHC models
1	81 30 323	1	Float valve block
2	87 00 511	7	'O' ring
3	81 30 457	1	Angle float solenoid incl:
4	81 30 175	2	Coil
5	81 30 176	1	Manual override kit
6	86 00 107	4	'O' ring
7	81 26 280	1	Bridging plate
8	92 43 102	4	Capscrew - socket 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



McCormick

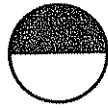


**HEAD COMPENSATOR/ANGLE FLOAT VALVE -
for AHC models**

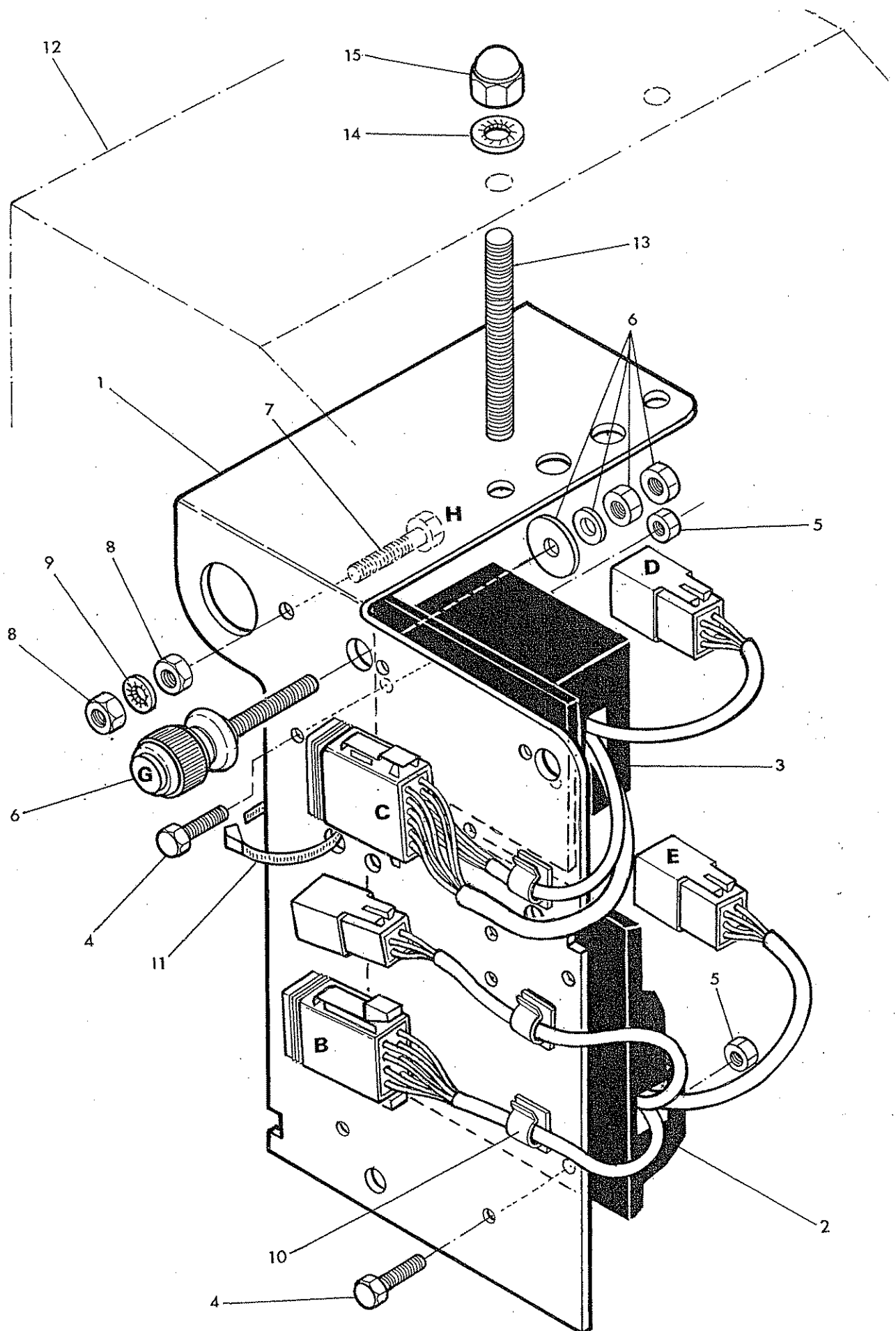
1	81 30 361	1	Valve block
2	81 26 280	1	Bridging plate
3	81 30 124	2	Relief valve - 140 bar
4	81 16 011	2	Spring
5	81 30 032	1	Relief valve cap
6	86 50 103	1	Bonded seal 3/8 BSP
7	81 30 140	1	Valve plug
8	86 00 109	1	'O' ring
9	87 00 511	7	'O' ring
10	85 81 169	4	Adaptor 1/4 BSP MM
11	86 50 102	4	Bonded 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

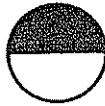
86 99 224**SOLENOID SEAL KIT**

ELECTRONIC CONTROL BOXES



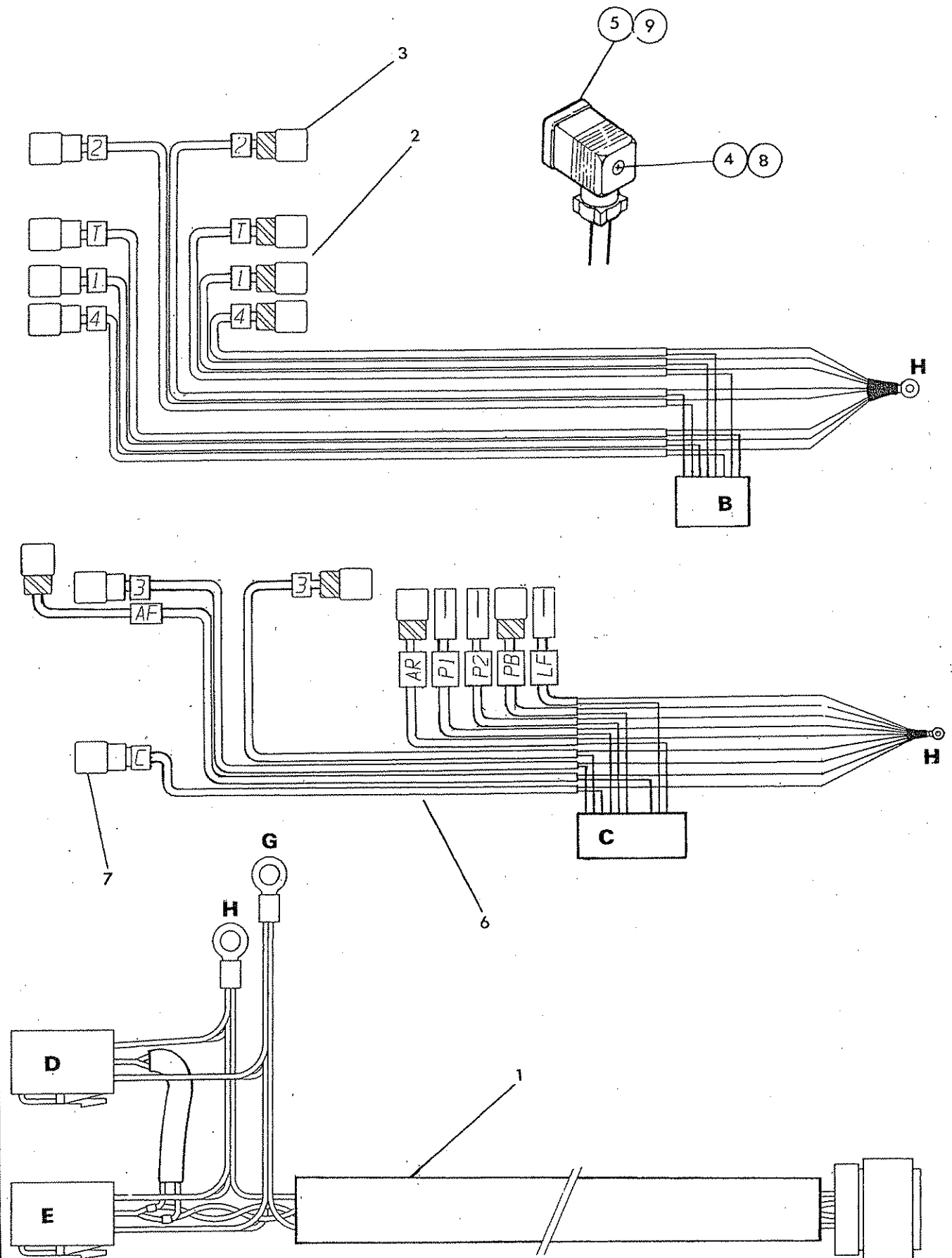
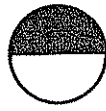
WABCO





**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





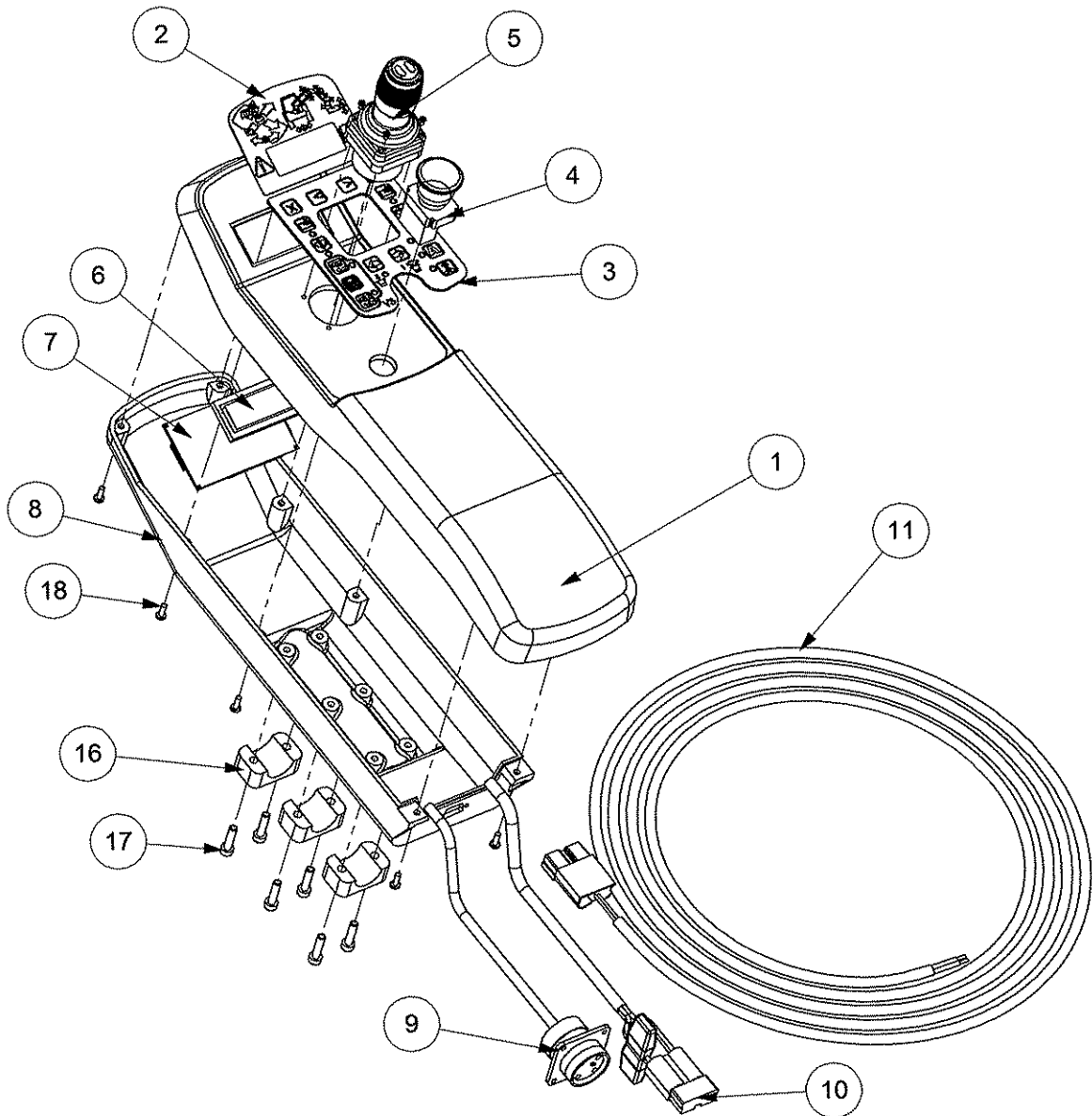
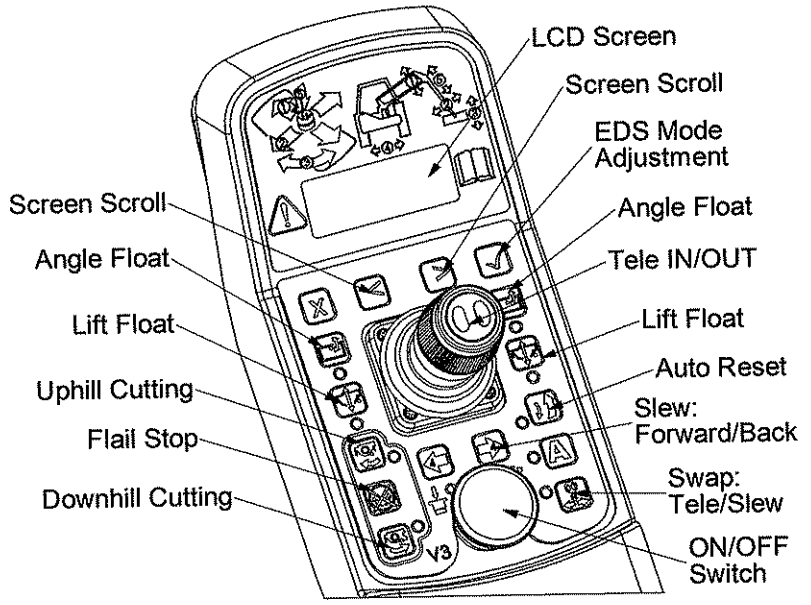
Ref	Part No	Qty	Description
CONTROL LOOMS			
1	43177.12	1	Control loom
2	43177.10	1	Service loom incl. connectors - lift, reach, tele and slew
3	07.835.04	8	Plug incl. screw & gasket
4	07.835.03	1	Screw
5	07.835.02	1	Gasket
6	43177.11	1	Service loom incl. connectors - angle and auxiliaries
7	07.835.04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

MODULES:

43022.20 – Proportional

43022.21 – Proportional EDS

OPERATOR CONTROLS/FUNCTIONS



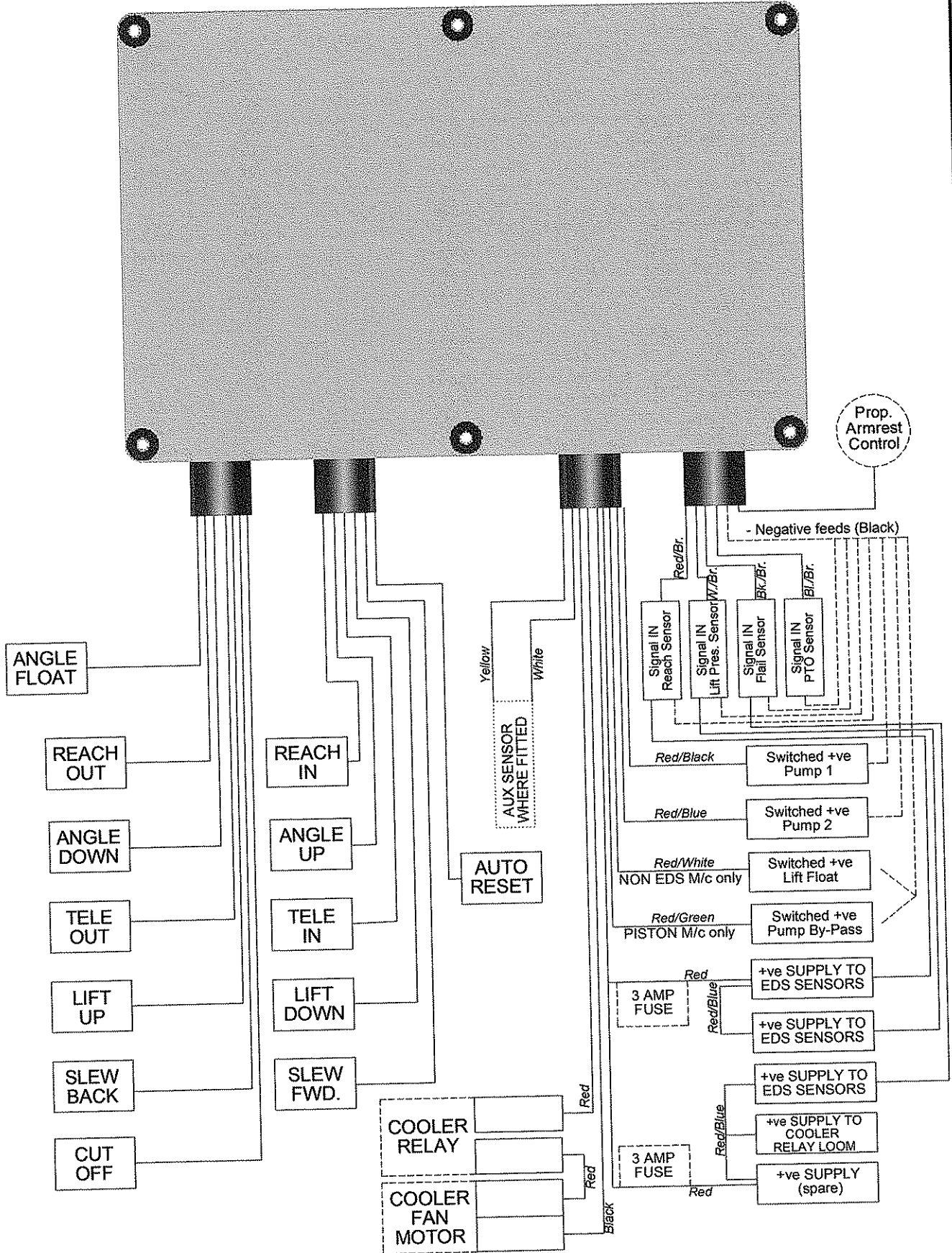


REF.	QTY.	PART No.	DESCRIPTION
		43022.20	v.3 PROPORTIONAL ARMREST CONTROLS
		43022.21	v.3 PROPORTIONAL ARMREST CONTROLS - EDS
1	1	43022.324	ARMREST LID - GREY
2	1	43022.50	FRONT DECAL
3	1	43022.51	JOYSTICK KEYPAD
4	1	41786.33	SWITCH - EMERGENCY STOP
5	1	45710.96	JOYSTICK - <i>inc. fixing screws</i>
6	1	43022.52	LCD SCREEN
7	1	43022.53	CIRCUIT BOARD
8	1	43022.321	ARMREST BASE - YELLOW
9	1	43022.46	CONNECTOR & LEAD
10	1	43022.47	CONNECTOR & POWER LEAD (2 FUSES)
11	2	8402237	LOOM - POWER SUPPLY
12	2	8402149	GLAND
13	1	43022.39	CONNECTOR 9 WAY
14	1	8600119	O RING - <i>not illustrated</i>
15	1	8402239	PUSH ON COVER - <i>not illustrated</i>
16	3	30.209.71	PIPE CLAMP
17	6	9343053	CAPSCREW
18	8	9300132	PANHEAD SCREW

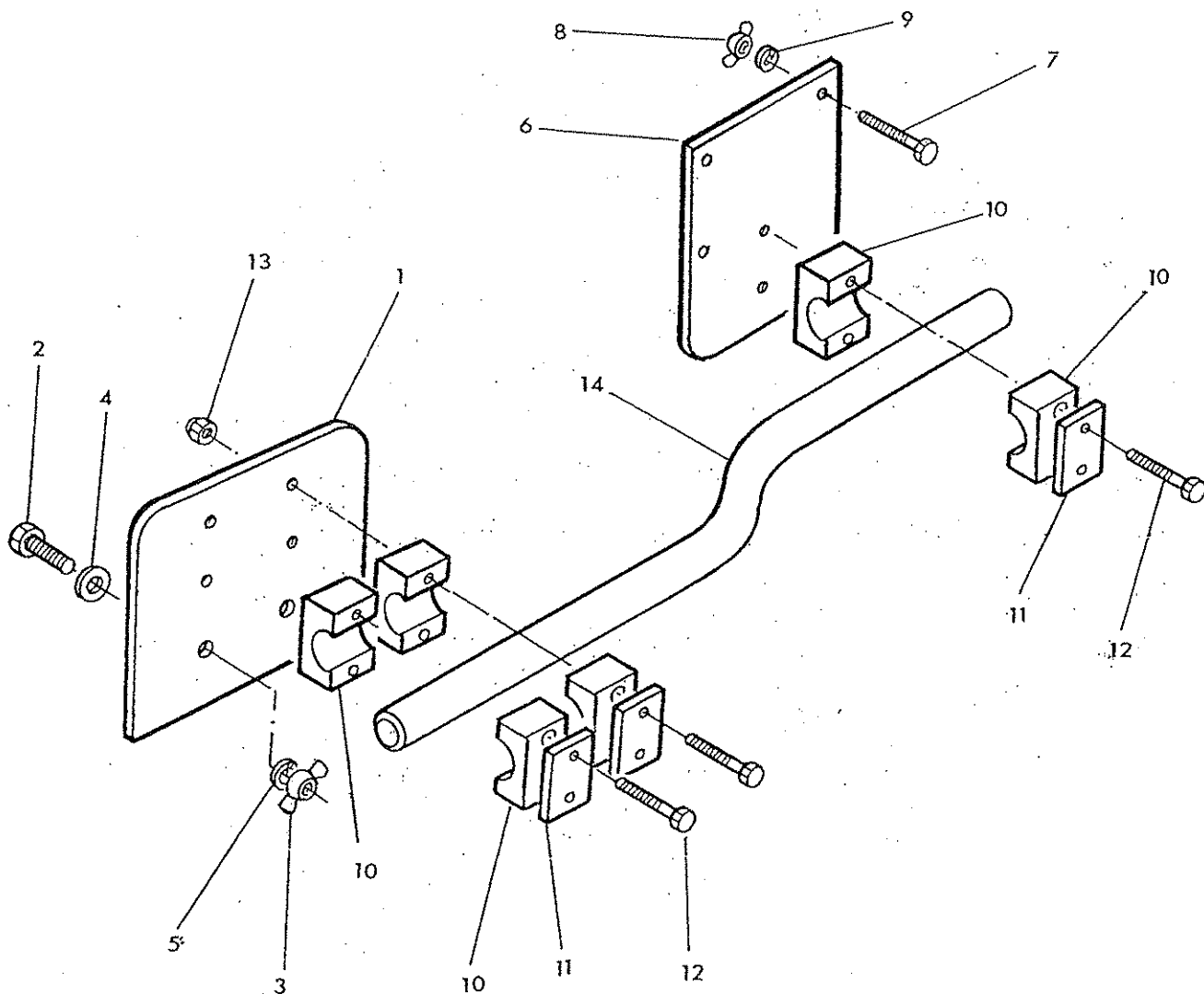
AUXILIARY BOX

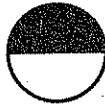


MODULE:
21164.03







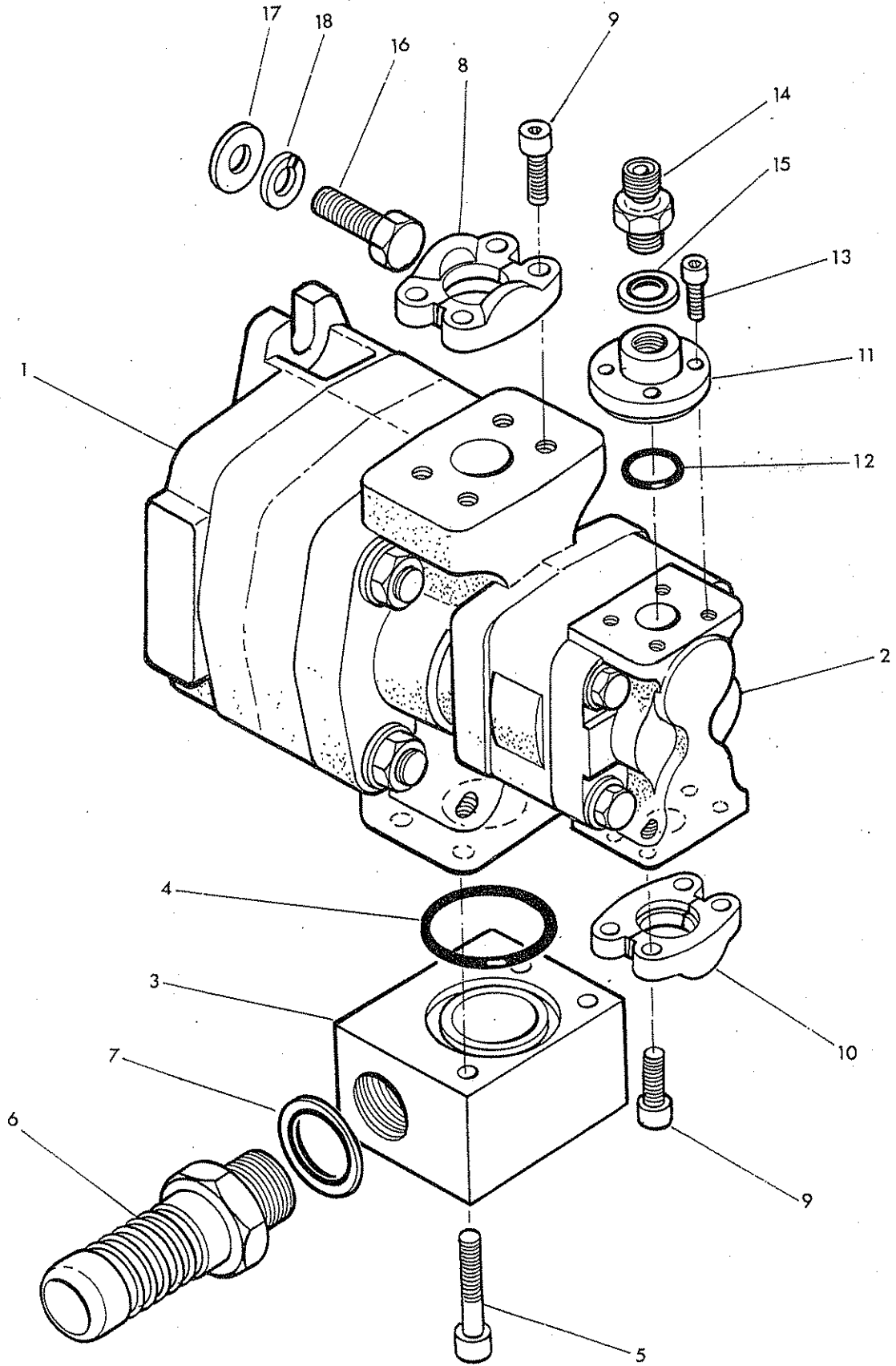


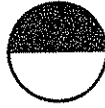
Ref	Part No	Qty	Description
	73 13 275		CAB MOUNTING KIT
1	08.317.01	1	Control mounting bracket
2	93 13 054	2	Setscrew M8 x 25
3	91.93 004	2	Wingnut M8
4	91 00 104	2	Plain washer dia 8
5	91 00 204	2	Spring washer dia 8
6	41.046.01	1	Rotor control valve mounting plate
7	92 13 113	3	Bolt M6 x 55
8	05.948.37	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



McCOMBELL





WAGNER

REF	PART NO.	QTY	DESCRIPTION
PUMP ASSEMBLY			
	82 01 703	1	Pump complete incl.
1	82 01 199	1	Pump section large
2	82 01 200		Pump section small
3	42142.01	1	Suction block
4	86 00 304	1	'O' ring
5	92 43 126	3	Capscrew M12 x 60
6	85 81 260	1	Adaptor 1 1/4 BSP - 1 1/2 low pressure
7	86 50 109	1	Bonded seal 1 1/4 BSP
8	01.697.03	1	Split flange - pressure connection
9	93 43 065	8	Capscrew M10 x 30
10	41.294.02	1	Split flange - suction connection
11	42.029.01	1	Pressure connection
12	86 00 405	1	'O' ring
13	93 00 147	4	Capscrew M8 x 20
14	85 81 110	1	Union 1/2 BSP MM
15	86 50 104	1	Bonded seal 1/2 BSP
16	05.839.01	2	Bolt M14 x 35
17	91.00.020	2	Plain washer dia 14
18	05.282.08	2	Spring washer dia 14

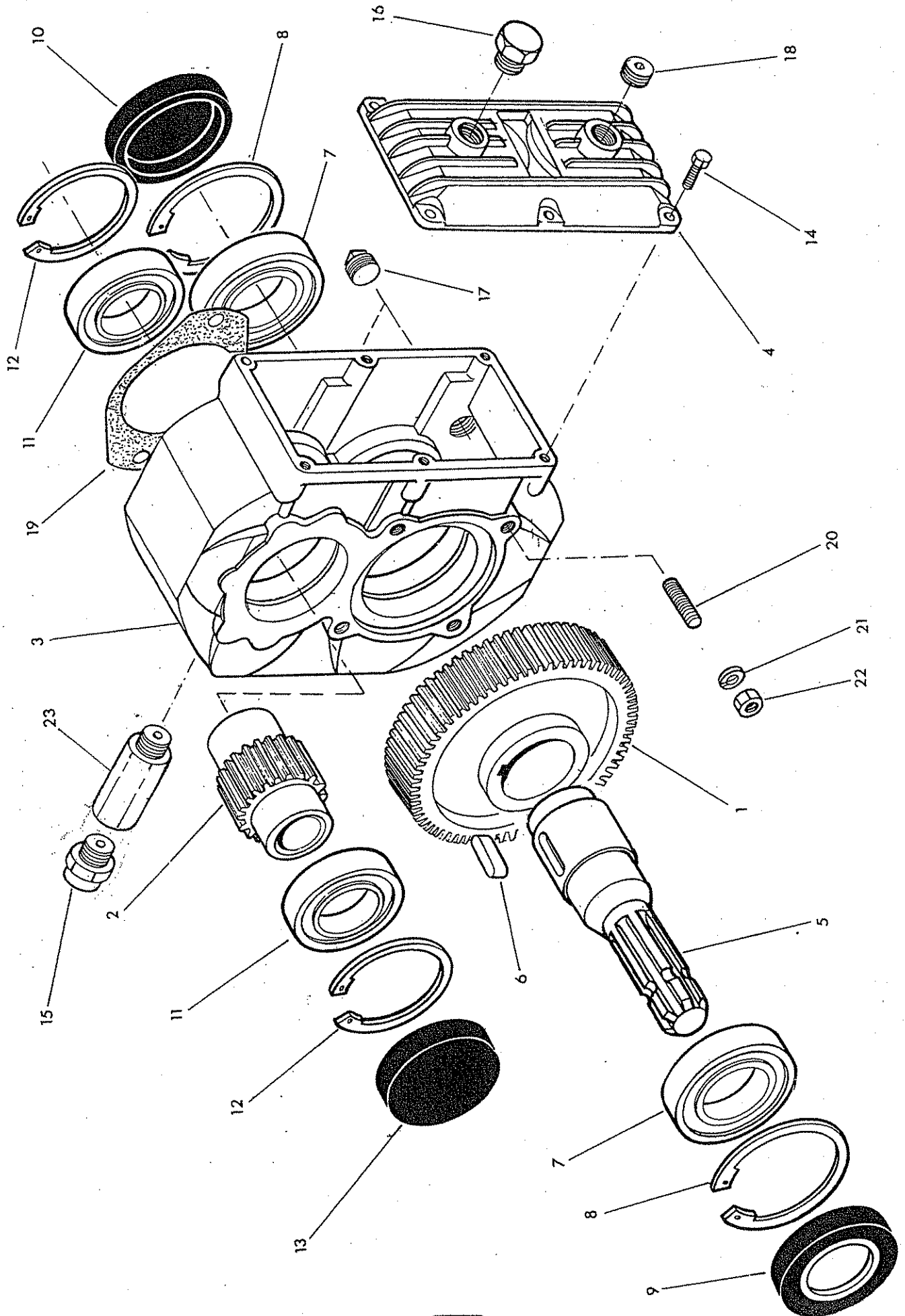
86 99 248

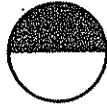
SEAL KIT

GEARBOX

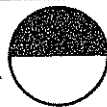


WAGNER



**WIDOMEX**

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



REF	PART NO.	QTY	DESCRIPTION
ROTOR CONTROL VALVE ASSEMBLY			
1	81 25 356	1	Rotor control valve
2	81 25 108	1	Relief valve 2750 PSI (190 Bar)
3	81 25 109	1	Detent assembly
4	85 81 295	1	Extended adaptor 3/4 BSP -1" BSP MM
5	80 02 086	3	Adaptor 3/4" BSP - 1" BSP
6	04.056.34	1	Tee 1" BSPF - 1" BSP 1/2 BSP M
7	86 50 106	4	Bonded seal 3/4" BSP
8	92 13 095	2	Bolt M10 x 45
9	91 43 005	5	Self locking nut M10
10	80 17 052	1	Lever and cable assembly - Rotor control compr:-
11	80 17 025	1	Lever pivot box
12	09 968 99	1	Knob
13	80 17 026	1	Weather gaiter
14	80 17 014	1	Locknut
15	80 17 018	1	Flange and sleeve
16	80 17 021	1	Pin
17	93 73 081	2	Screw M4 x 40
18	91 13 001	2	Nut M4
19	93 43 023	2	Capscrew M6 x 12
20*	42210.01	1	Mounting plate
21	71 09 151	2	Cable clamp
22	92 13 065	3	Bolt M10 x 30
23	76 50 282	1	Lever mounting plate
24	92 13 113	3	Bolt M6 x 55
25	91 43 003	3	Self locking nut M6
26	93 13 034	2	Setscrew M8 x 16
27	91 93 004	2	Wingnut M8

86 99 218**SEAL KIT***** Note**

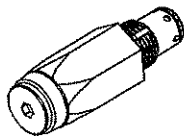
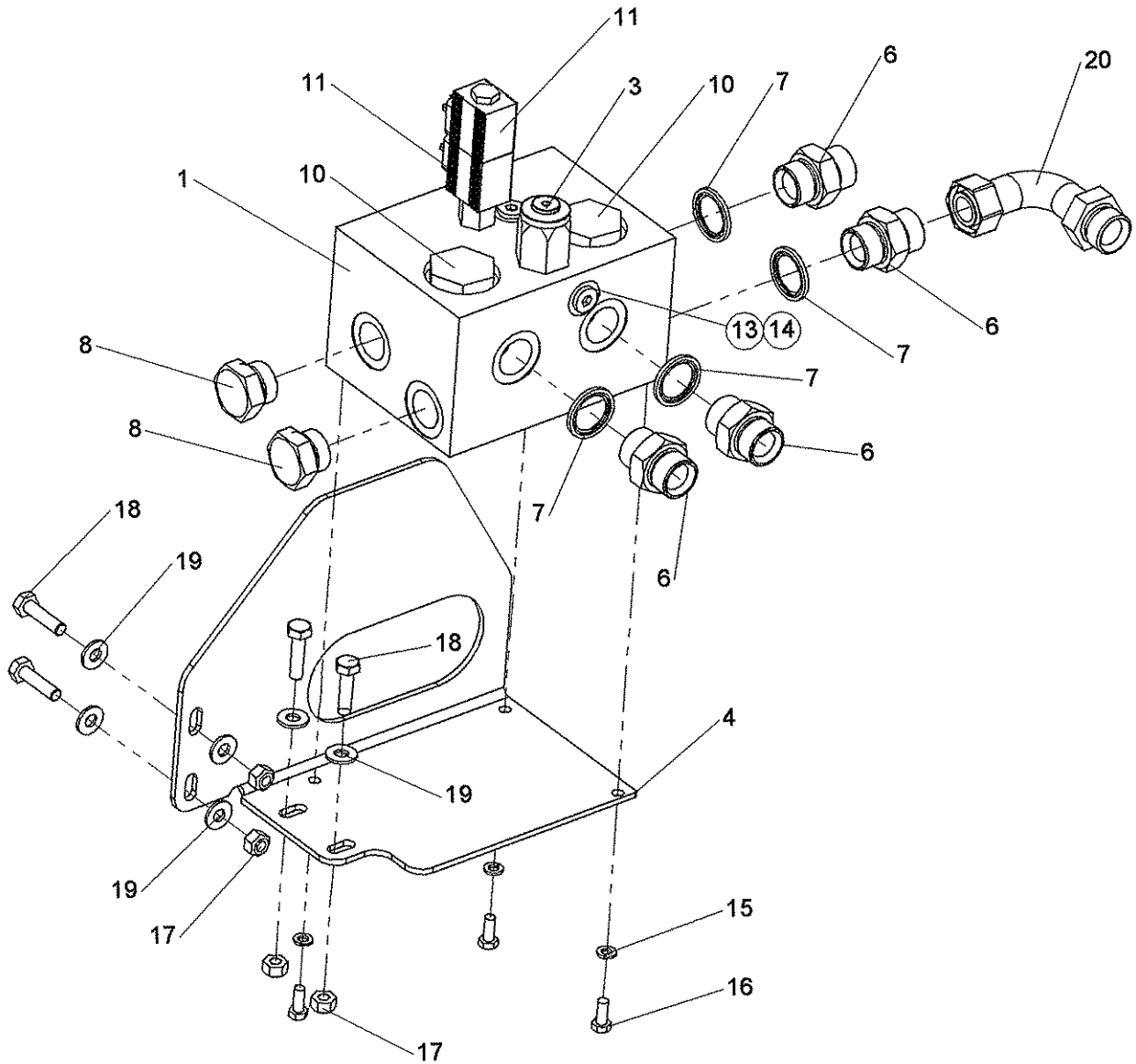
R.Hand assembly shown. For L.Hand assembly item 21 is turned over lengthwise.

PA 5000, 6000 & 7000 series - Proportional
ROTOR CONTROL VALVE - Electric



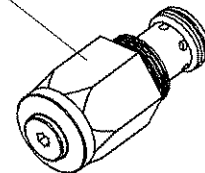
Illustrated in Left Hand build

MODULES:
 7650624 - L/H
 7650625 - R/H



Early version Relief Valve 42768.33
 as fitted to Manifold Block 42768.31

1 1/2" A/F



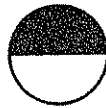
Later version Relief Valve 42768.41
 as fitted to Manifold Block 42768.40



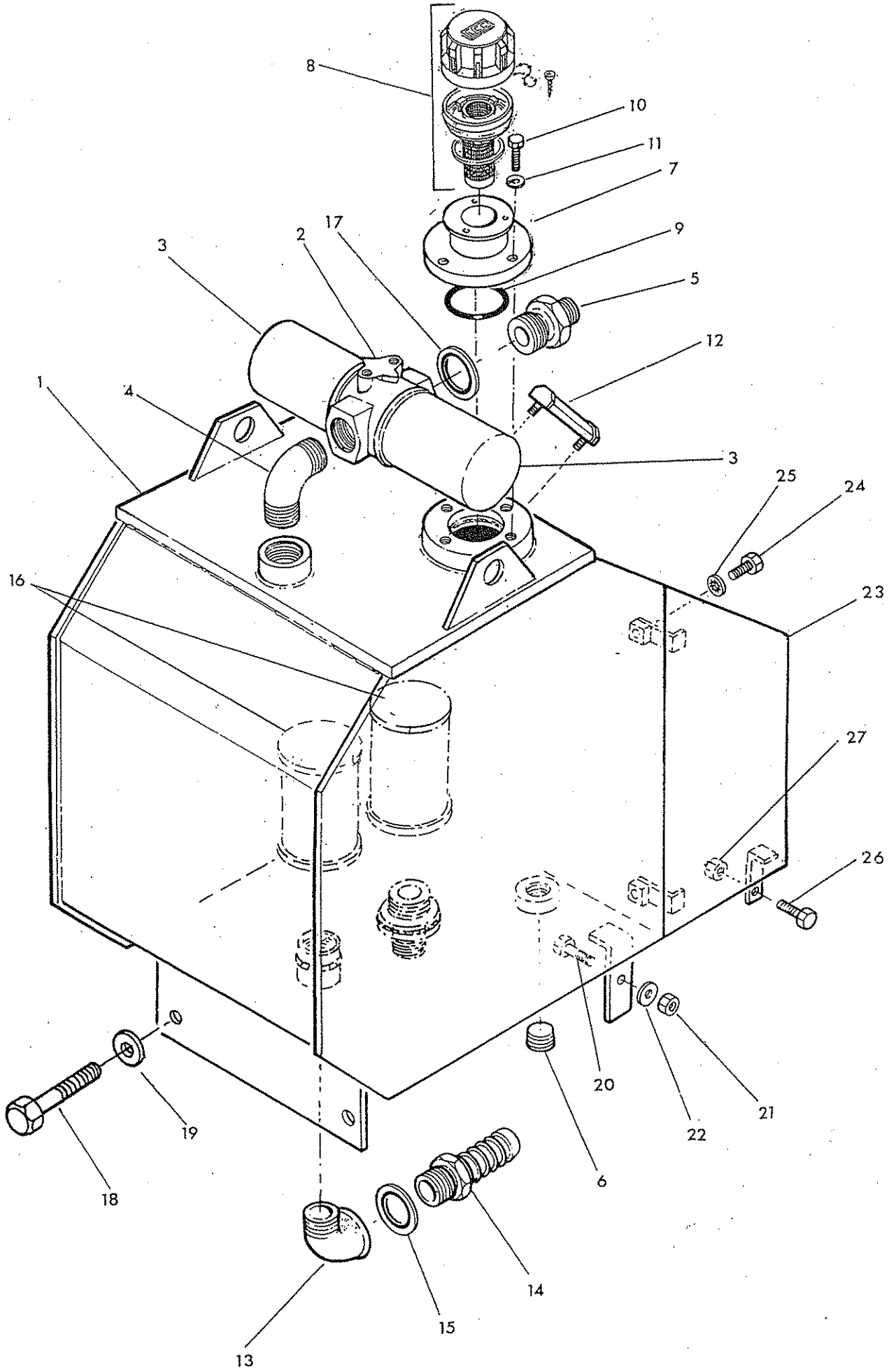
REF.	QTY.	PART No.	DESCRIPTION
		7650624	ROTOR CONTROL VALVE ASSEMBLY - L/H
		7560625	ROTOR CONTROL VALVE ASSEMBLY - R/H
1	1	42768.01	Valve - RCV Electric
2	1	42768.31	Manifold Block - Early Version*
	1	42768.40	Manifold Block - Later Version*
3	1	42768.33	Relief Valve - Early Version*
	1	42768.41	Relief Valve - Later Version*
4	1	45820.01	RCV Bracket - L/H
5	1	45820.02	RCV Bracket - R/H (not illustrated)
6	4	05.434.01	Adaptor 1" BSP MM
7	4	8650108	Bonded Seal 1" BSP
8	2	8581389	Adaptor Plug 1" BSP
9	1	43177.26	Loom - Rotor Reverse (not illustrated)
10	4	42768.32	Logic Element
11	2	42768.35	Solenoid 12V 28W
12	1	42768.34	Spool - Open Centre
13	2	42768.39	Plug
14	1	42768.36	Orifice Plug
15	3	9100204	Spring Washer
16	3	9313044	Setscrew
17	4	9143005	Self-Locking Nut
18	4	9213085	Bolt
19	6	9100105	Flat Washer
20	1	8581264	Adaptor Elbow 1" BSP MF

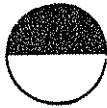
* *Early and Later versions of these components are not interchangeable with each other.*

TANK



McCOMBS



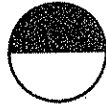


REF	PART NO.	QTY	DESCRIPTION
OIL TANK AND FITTINGS			
	76 50 553	1	Oil tank assembly compr:-
1	42234.01	1	Oil tank
2	84 01 060	1	Filter body
3	84 01 041	2	Filter element
4	85 81 292	1	Elbow 1 1/2" BSP MM
5	85 81 291	1	Adaptor 1 1/2" BSP - 1" BSP MM
6	85 81 203	1	Drain plug
7	71 92 090	1	Access cover - Tapped
8	84 01 074	1	Breather
9	86 50 151	1	'O' ring
10	93 13 054	4	Setscrew M8 x 25
11	91 00 204	4	Spring washer dia 8
12	84 01 048	1	Oil level gauge
13	85 81 261	1	90 degrees elbow 1 1/4" BSP M-F
14	85 81 367	1	Suction connection 1 1/4" BSP-1 1/2 low press.
15	86 50 109	1	Bonded seal 1 1/4" BSP
16	84 01 047	2	Strainer
17	86 50 224	1	Bonded seal 1 1/2" BSP
18	92 13 097	2	Bolt M16 x 45
19	91 00 207	2	Spring washer dia 16
20	92 13 136	1	Setscrew M12 x 65
21	91 43 006	1	Self locking nut M12
22	91 00 106	1	Plain washer dia 12
23	42236.02		Tank extension plate R.hand build
	42236.01		Tank extension plate L.hand build -not illus.
24	93 13 045	2	Setscrew M10 x 20
25	91 00 305	2	Internal serrated washer dia 10
26	92 13 135	1	Setscrew M10 x 65
27	91 43 005	1	Self locking nut M10

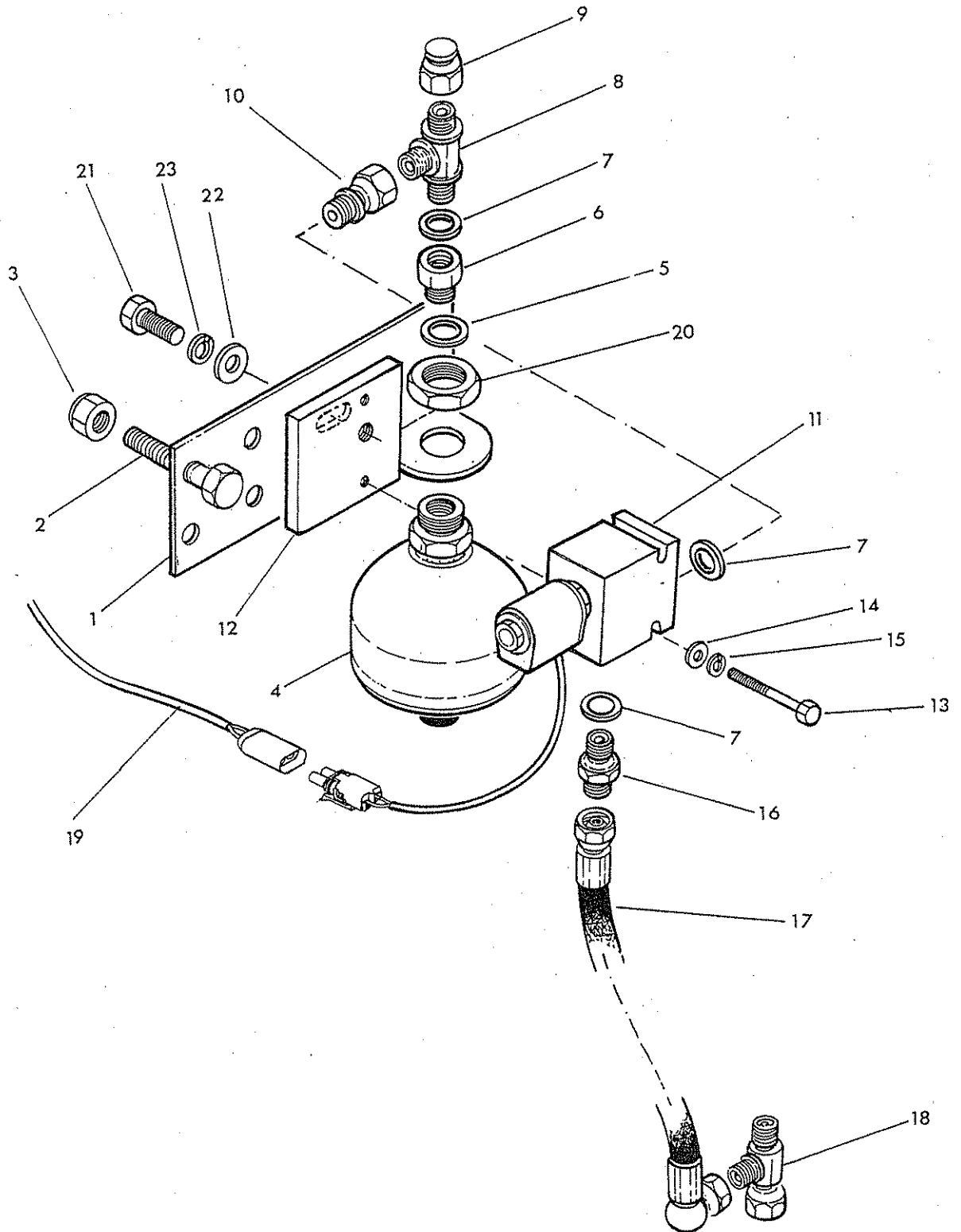
Assembly note

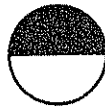
* To be fitted using PTFE tape, Permabond A121 or similar.

LIFT FLOAT - single bottle



McCormell



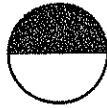


REF PART NO. QTY DESCRIPTION

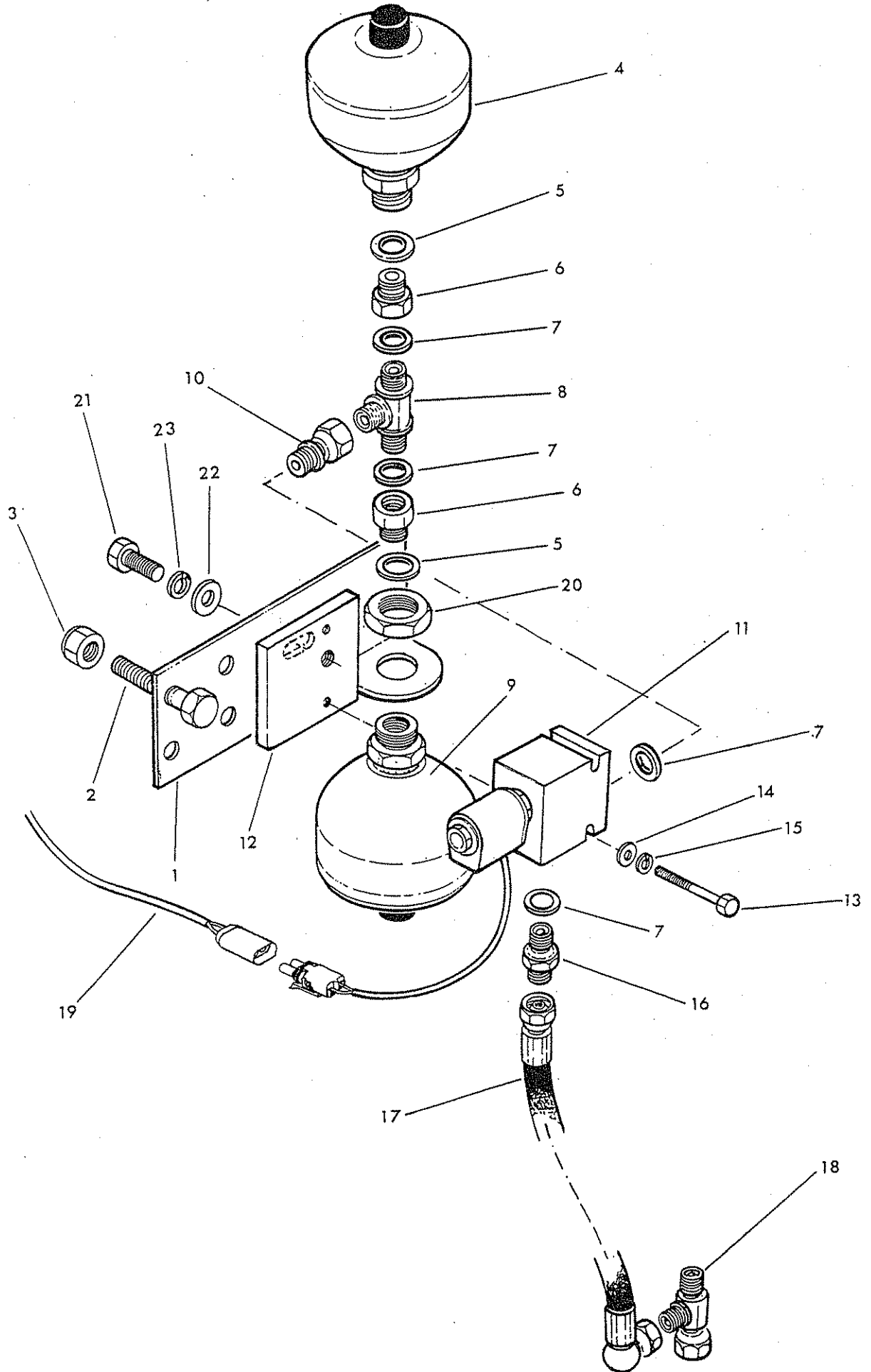
LIFT FLOAT KIT-SINGLE ACCUMULATOR

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 26 034	1	Accumulator 1.4 L 20 Bar
5	86 50 322	1	Bonded seal M22
6	85 81 284	1	Adaptor M22M - 3/8 BSP F
7	86 50 103	3	Bonded seal 3/8 BSP
8	85 81 267	1	Tee 3/8 BSP MMM
9	52091	1	Cap 3/8 BSP
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

LIFT FLOAT KIT - twin bottle



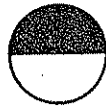
McCONNELL



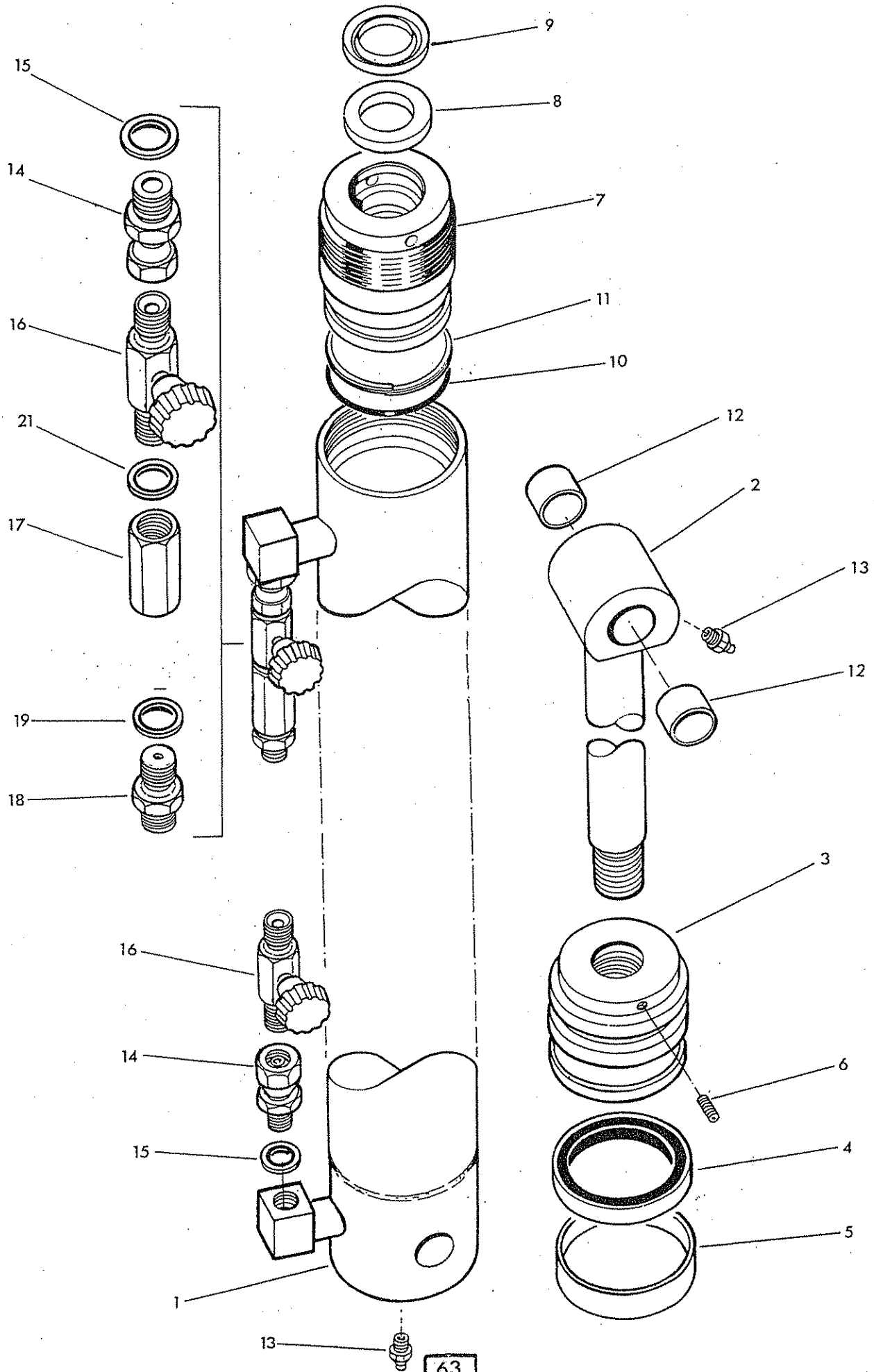


REF	PART NO.	QTY	DESCRIPTION
LIFT FLOAT KIT -TWIN ACCUMULATOR			
1	42254.01	1	Mounting plate
2	92 13 137	2	Bolt M16 x 65
3	91 43 007	2	Self locking nut M16
4	81 26 044	1	Accumulator 1L 25 Bar
5	86 50 322	2	Bonded seal M22
6	85 81 284	2	Adaptor M22M - 3/8 BSP F
7	86 50 103	4	Bonded seal 3/8 BSP
8	85 81 267	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

LIFT RAM



McCOMBS





REF	PART NO.	QTY	DESCRIPTION
	76 60 260		LIFT RAM ASSEMBLY
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

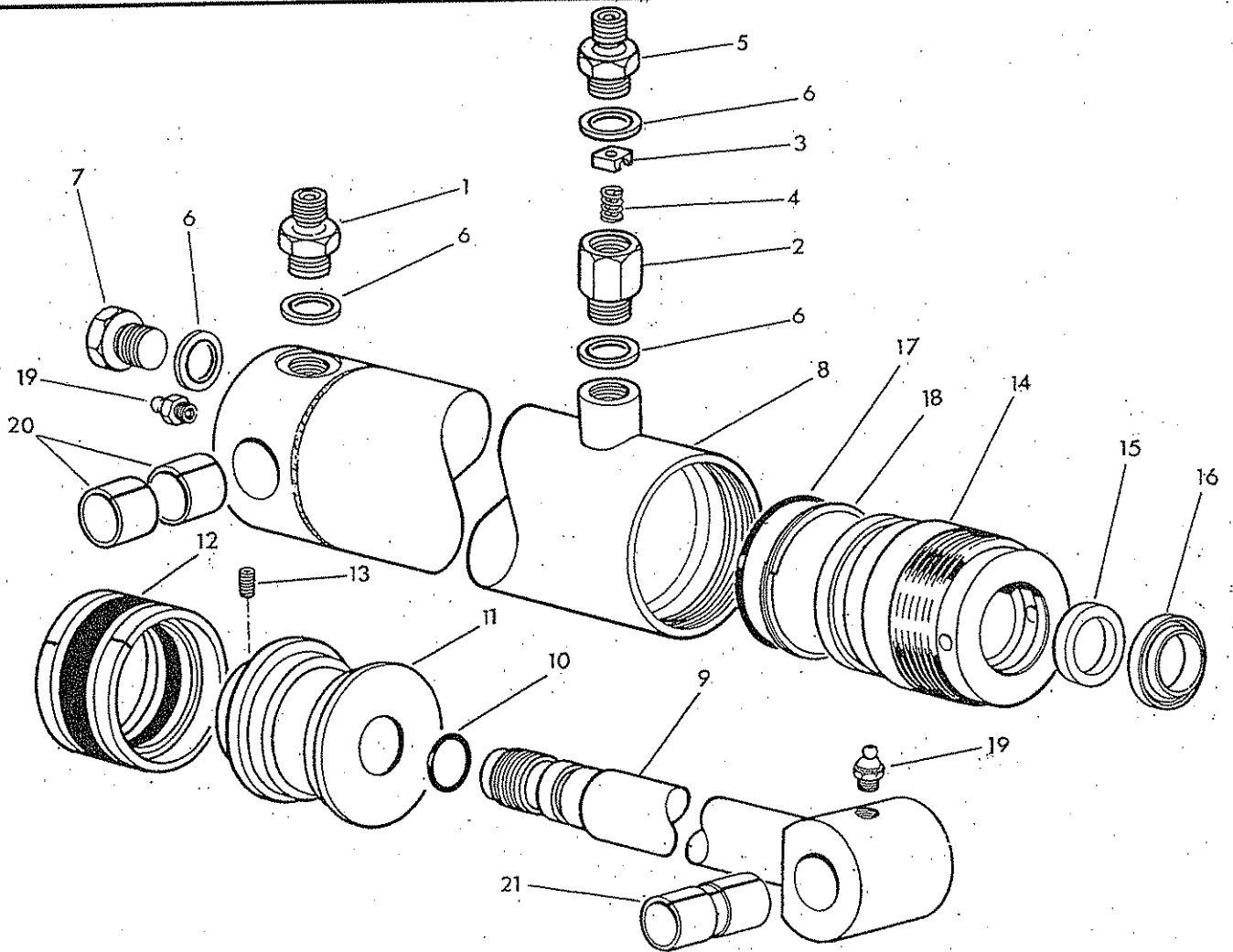
86 99 223 SEAL KIT

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

SLEW RAM ASSEMBLY



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Ref.	Part No.	Qty.	Description
	75-60-346		SLEW RAM ASSEMBLY.
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

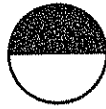
86-99-187

SEAL KIT

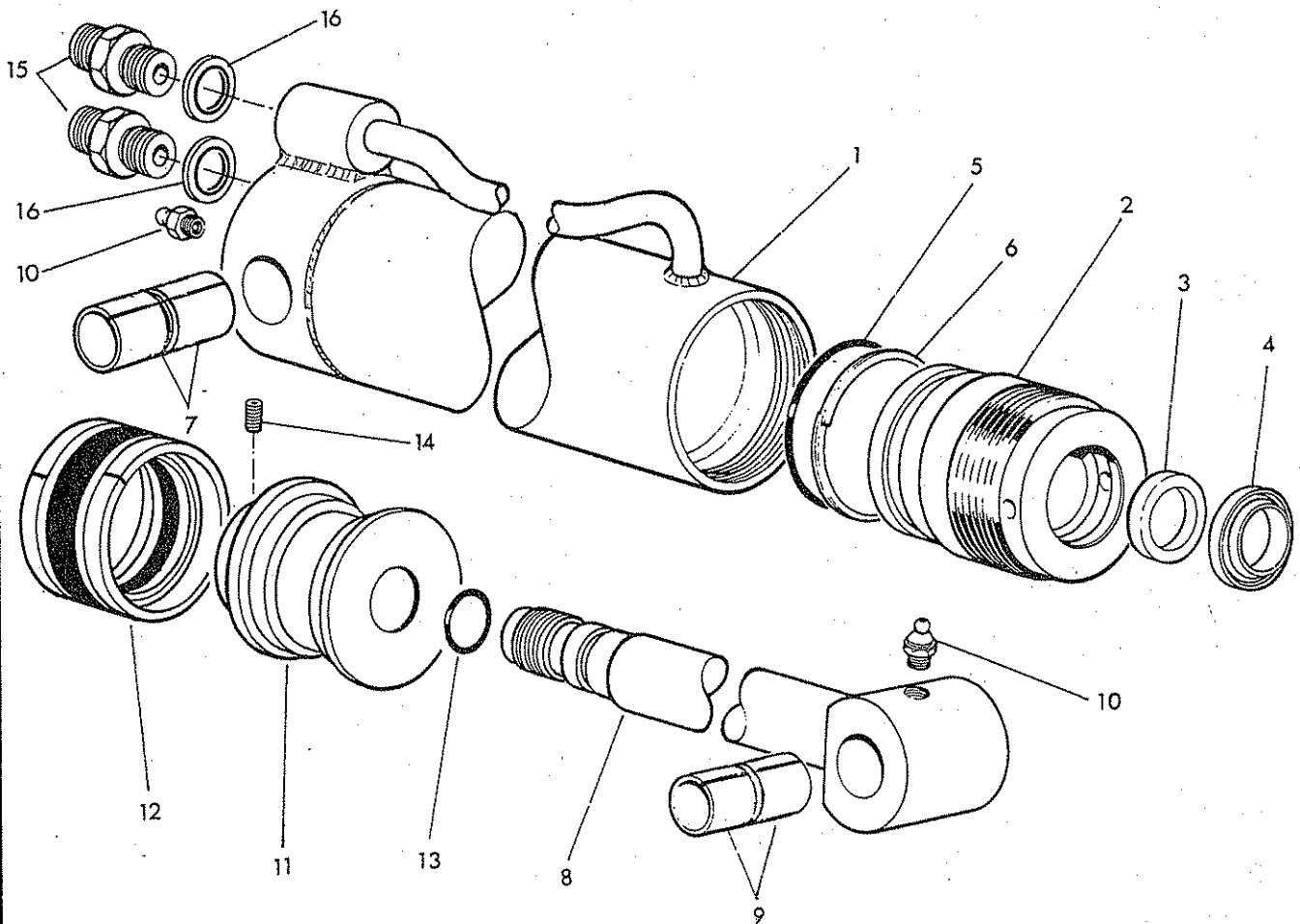
*** Assembly note**

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

REACH RAM



McCORMICK

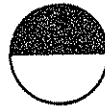


REF	PART NO.	QTY	DESCRIPTION
	42095.04		REACH RAM ASSEMBLY
	42095.03	1	Reach ram compr:-
1	42095.36	1	Barrel
2	42095.35	1	Gland housing
3	86 29 164	1	Gland seal
4	86 29 147	1	Rod wiper
5	86 00 742	1	'O' ring
6	86 09 742	1	Anti extrusion ring
7	71 01 134	2	Bush
8	71 36 333	1	Rod
9	60 12 032	2	Bush
10	09 01 121	2	Greaser 1/8 BSP straight
11	42095.34	1	Piston
12	86 38 742	1	Piston seal
13	86 00 119	1	'O' ring
14	93 63 023	1	Grubscrew M6 x 12
15	60 00 113	2	Union 3/8 BSP MM
16	86 50 103	2	Bonded seal 3/8 BSP

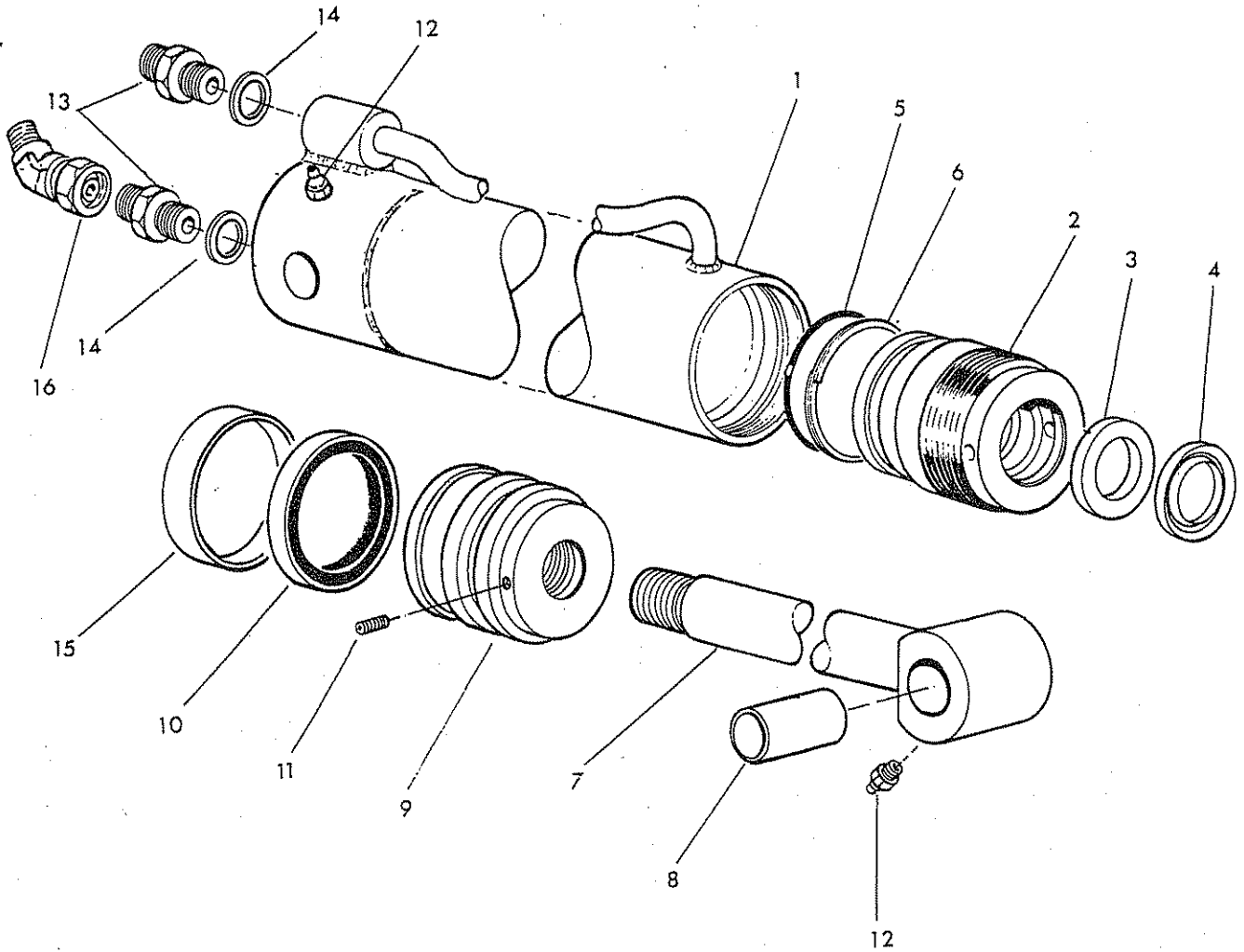
86 99 249

SEAL KIT

ANGLE RAM



McCONNELL

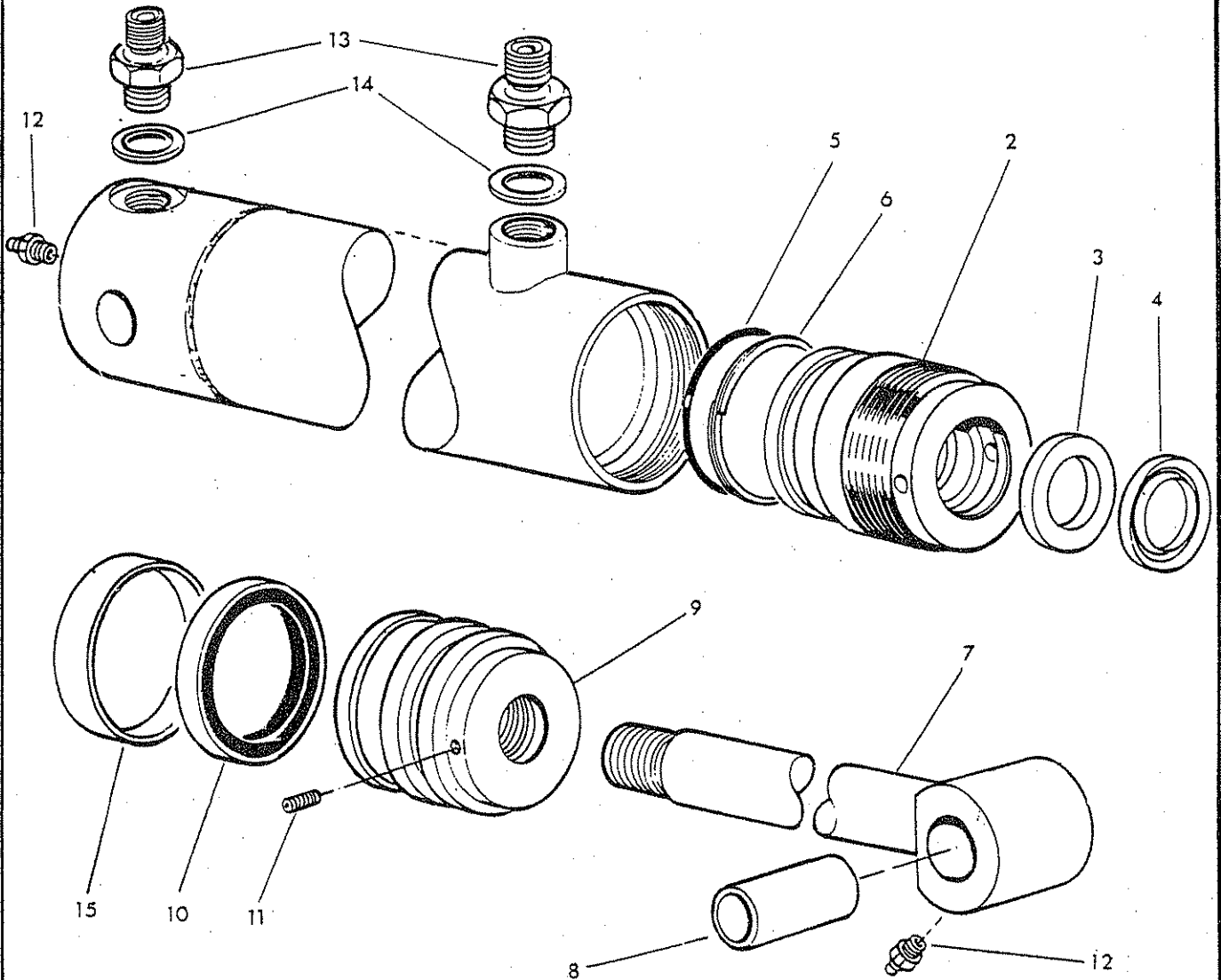


REF	PART NO.	QTY	DESCRIPTION
	76 50 255		ANGLE RAM ASSEMBLY
1	76 50 298	1	Ram barrel
2	11 86 512	1	Gland housing
3	86 29 164	1	Gland seal
4	86 29 147	1	Piston rod wiper seal
5	86 00 306	1	'O' ring
6	86 09 306	1	Anti extrusion ring
7	71 91 307	1	Piston rod
8	71 05 050	1	Bush
9	71 20 368	1	Piston
10	86 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
	86 99 217		SEAL KIT

COMPENSATOR RAM

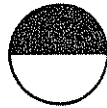


WABCO

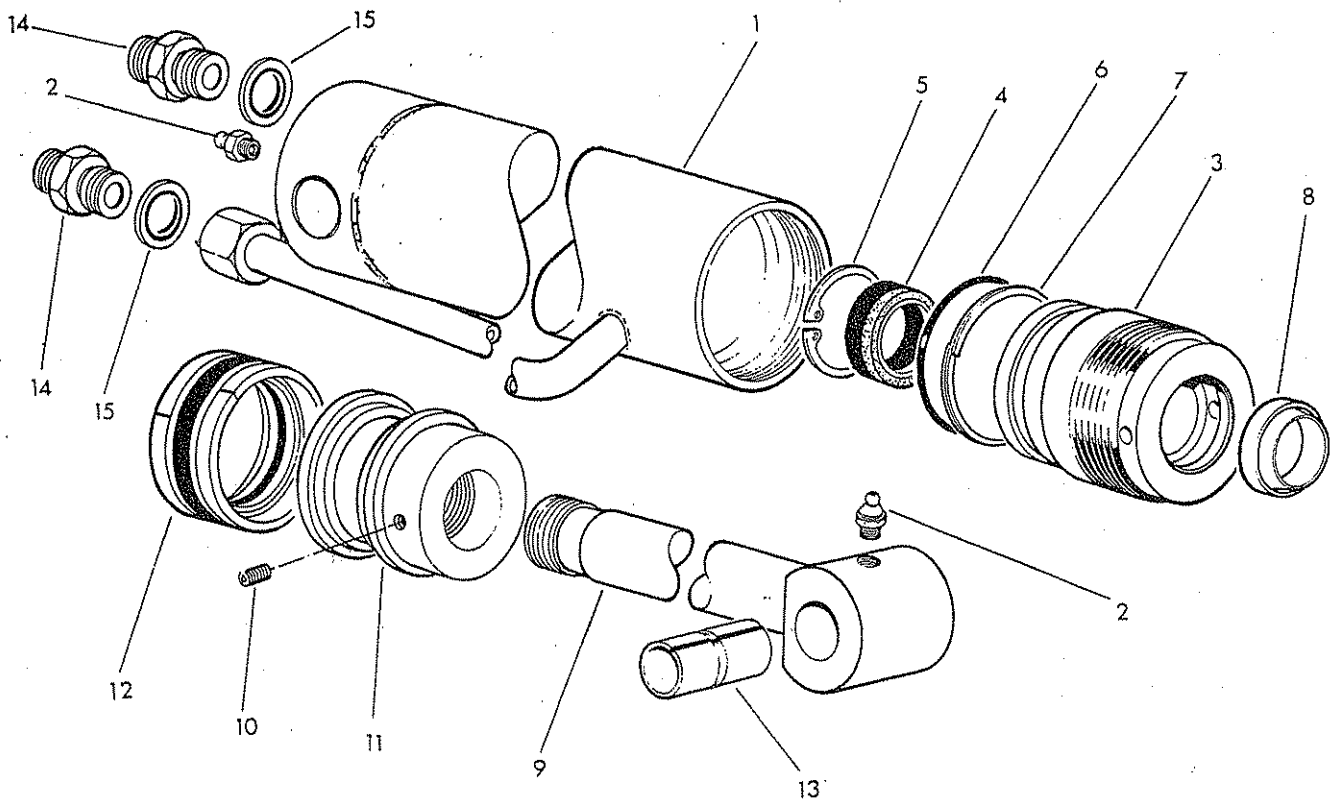


REF	PART NO.	QTY	DESCRIPTION
	76 50 260		COMPENSATOR RAM
1	76 50 002	1	Ram barrel
2	11 86 512	1	Gland housing
3	86 29 164	1	Gland seal
4	86 29 147	1	Piston rod wiper seal
5	86 00 306	1	'O' ring
6	86 09 306	1	Anti extrusion ring
7	76 50 003	1	Piston rod
8	71 05 050	1	Bush
9	71 20 368	1	Piston
10	86 29 156	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
	86 99 217		SEAL KIT

TELE RAM

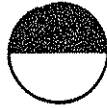


McGraw-Hill

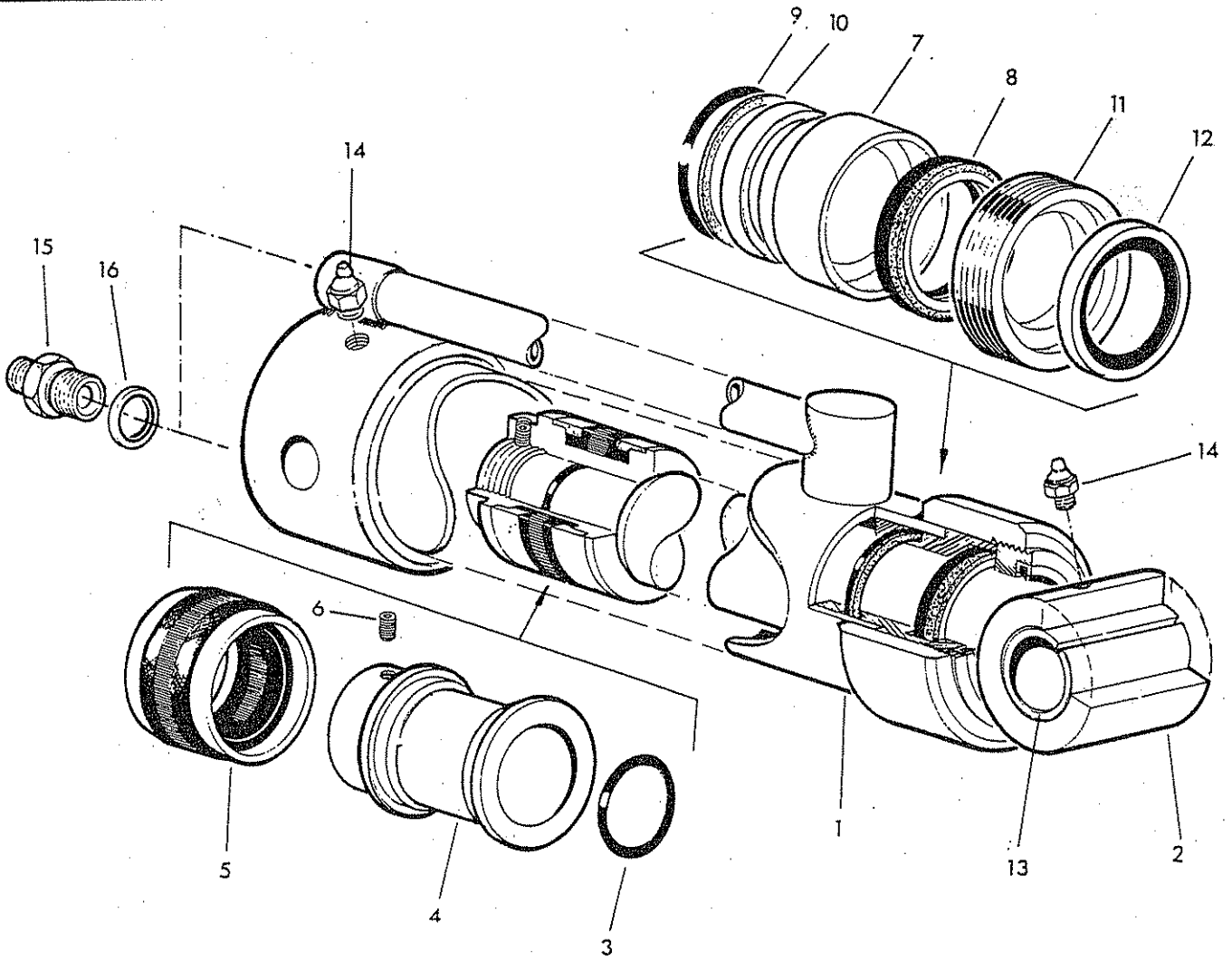


REF	PART NO.	QTY	DESCRIPTION
	71 36 275		TELE RAM ASSEMBLY
1	71 36 276	1	Ram cylinder
2	09 01 121	2	Greaser - straight
3	71 35 291	1	Gland housing
4	86 29 148	1	Gland seal
5	04 16 240	1	Internal circlip
6	86 00 302	1	'O' ring
7	86 09 302	1	Anti extrusion ring
8	86 29 149	1	Piston rod wiper seal
9	71 36 104	1	Piston rod
10	93 63 023	1	Grubscrew - socket headed
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
15	86 50 102	2	Bonded seal
	86 99 188		SEAL KIT

BREAKAWAY RAM - Midcut only

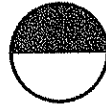


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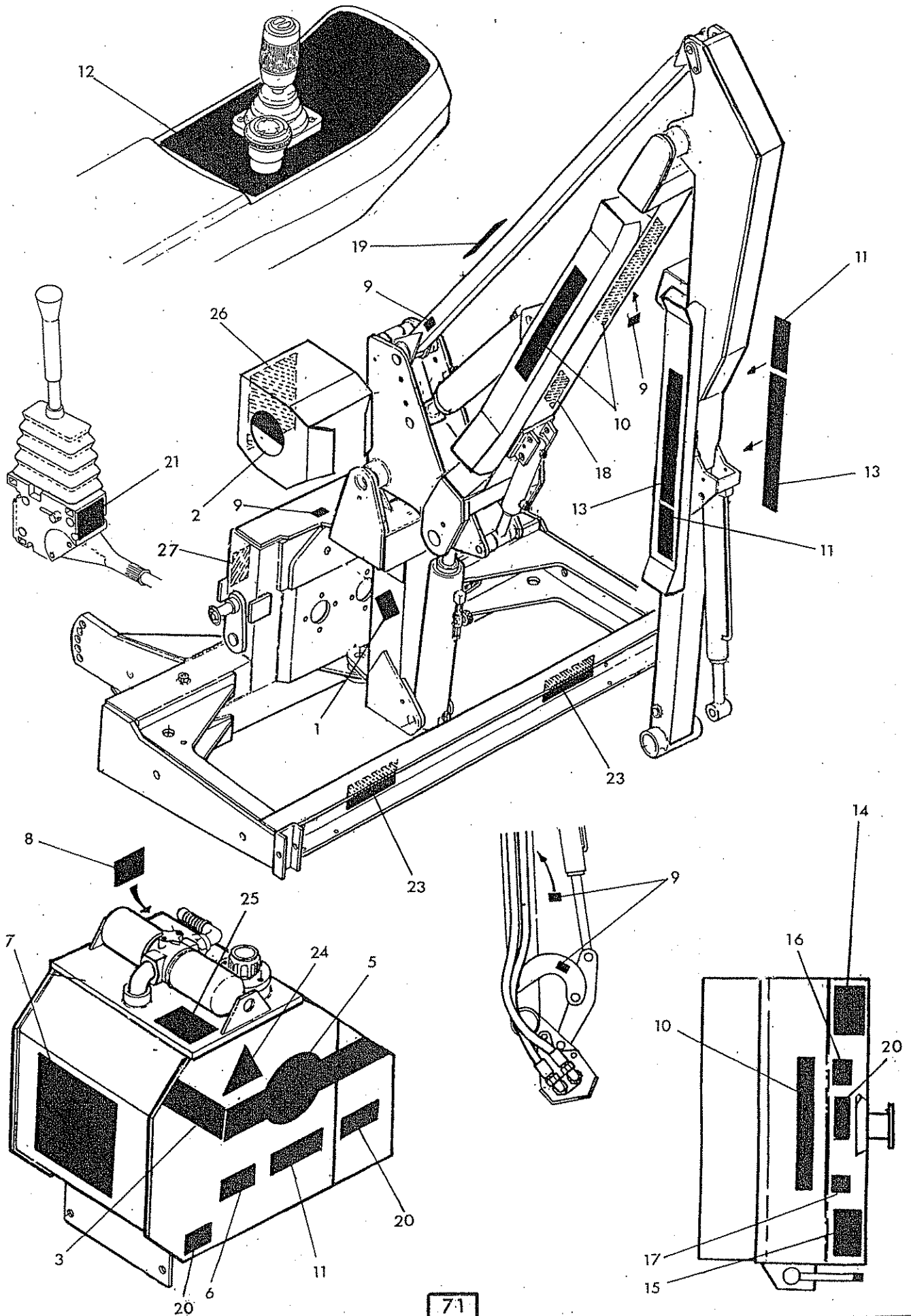


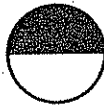
REF	PART NO.	QTY	DESCRIPTION
	75 50 288		BREAKAWAY RAM (M only)
1	72 12 272	1	Ram cylinder
2	72 14 004	1	Piston rod
3	86 00 119	1	O ring
4	71 01 165	1	Piston
5	86 36 131	1	Piston seal
6	93 00 110	1	Grub screw
7	71 01 099	1	Gland seal housing
8	86 22 127	1	Gland seal
9	86 00 304	1	O ring
10	86 09 304	1	Anti extrusion ring
11	71 01 100	1	Gland nut
12	86 40 328	1	Piston rod wiper
13	71 05 050	1	Bush
14	09 01 121	2	Greaser
15	85 81 115	2	Union
16	86 50 103	2	Bonded seal
	86 99 102		RAM SEAL KIT

STICKERS



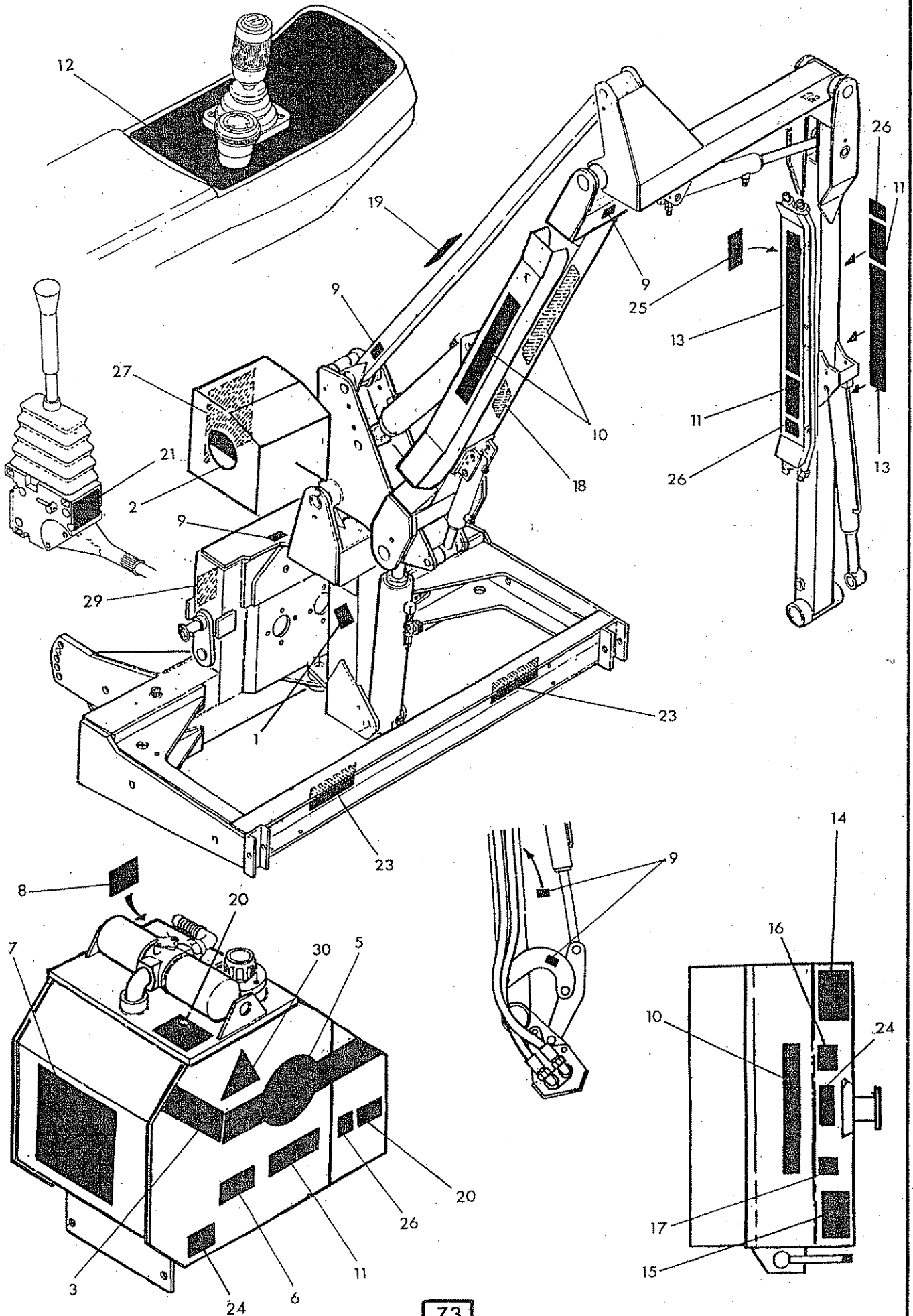
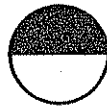
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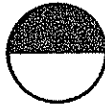




REF	PART NO.	QTY	DESCRIPTION
STICKERS PA5000			
1	71 05 130	1	Read book first
2	12 90 296	1	Logo roundel
3	12 90 454	1	Tank stripe
4	12 90 352	1	Gen. warning - despatched loose
5	12 90 455	1	Fairing stripe/roundel
6	12 90 453	1	PA
7	12 90 391	1	General warning
8	00756494	1	Fitting P.T.O. shaft
9	00962764	5	Pinch point
10	12 90 255	3	McConnel
11	12 90 479	3	5000
12	12 90 514	1	Switch box controls
13	12 90 295	2	Power Arm
14	12 90 377	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 90 491	2	65 hp
21	12 90 338	1	R.C. valve controls
22	84 02 138	1	Slew warning
23	12 90 347	2	Chevrons
24	12 90 346	1	Warning triangle
25	12 90 477	1	Greasing
26	12 90 465	1	Wiring connections
27	09-811-03	1	500 rpm

STICKERS



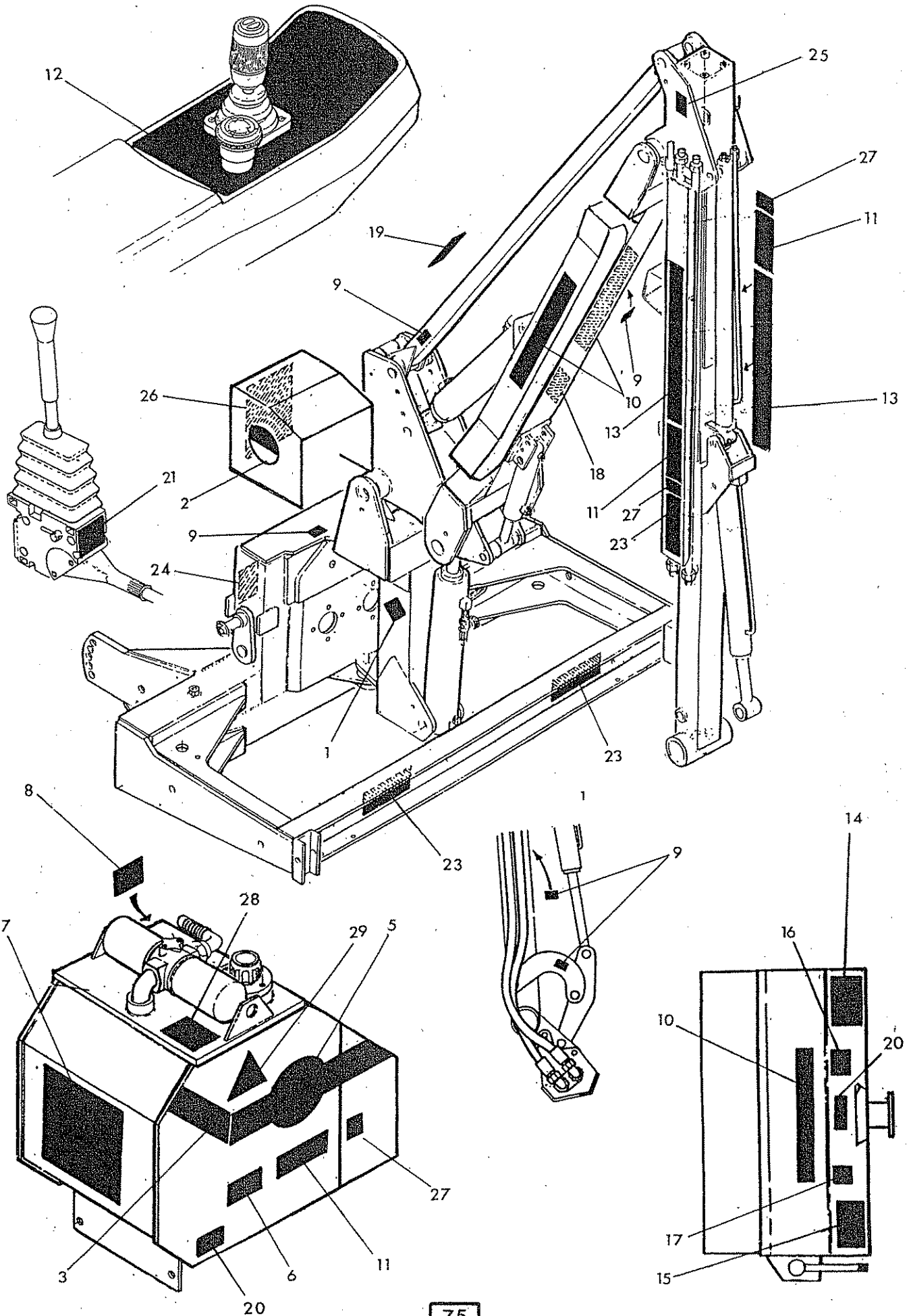


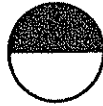
REF	PART NO.	QTY	DESCRIPTION
STICKERS PA5000M			
1	71 05 130	1	Read book first
2	12 90 296	1	Logo roundel
3	12 90 454	1	Tank stripe
4	12 90 352	1	Gen. warning - despatched loose
5	12 90 455	1	Fairing stripe/roundel
6	12 90 453	1	PA
7	12 90 391	1	General warning
8	00756494	1	Fitting P.T.O. shaft
9	00962764	6	Pinch point
10	12 90 255	3	McConnel
11	12 90 479	3	5000
12	12 90 514	1	Switch box controls
13	12 90 295	2	Power Arm
14	12 90 377	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 90 477	1	Greasing
21	12 90 338	1	R.C. valve controls
22	84 02 138	1	Slew warning - loose - incab
23	12 90 347	2	Chevrons
24	12 90 491	2	65 hp
25	09.821.11	1	Cab clearance
26	12 90 059	1	M
27	12 90 465	1	Wiring connections
28	12 90 477	1	Greasing
29	09-811-03	1	500 rpm
30	12 90 346	1	Warning triangle

STICKERS



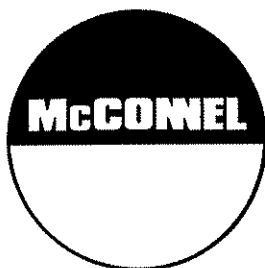
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REF	PART NO.	QTY	DESCRIPTION
STICKERS PA5000T			
1	71 05 130	1	Read book first
2	12 90 296	1	Logo roundel
3	12 90 454	1	Tank stripe
4	12 90 352	1	Gen. warning - despatched loose
5	12 90 455	1	Fairing stripe/roundel
6	12 90 453	1	PA
7	12 90 391	1	General warning
8	00756494	1	Fitting P.T.O. shaft
9	00962764	5	Pinch point
10	12 90 255	3	McConnel
11	12 90 479	3	5000
12	12 90 514	1	Switch box controls
13	12 90 295	2	Power Arm
14	12 90 377	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 90 491	2	65 hp
21	12 90 338	1	R.C. valve controls
22	84 02 138	1	Slew warning - loose - incab
23	12 90 347	3	Chevrons
24	09 811 03	1	500 rpm
25	12 90 005	1	Grease socket
26	12 90 465	1	Wiring connections
27	12 90 057	2	T
28	12 90 477	1	Greasing
29	12 90 346	1	Warning triangle



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