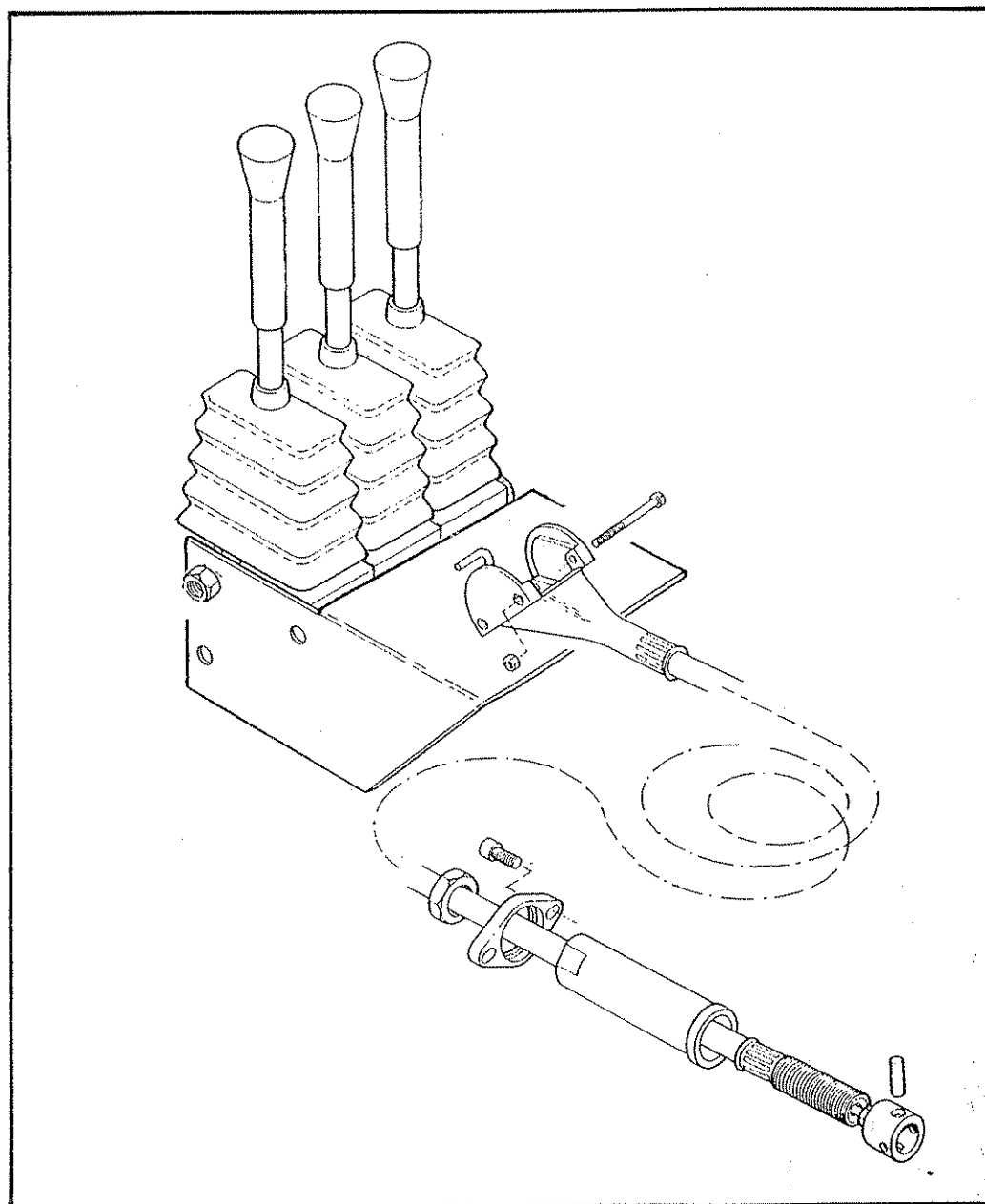


# **PA 5000**

## **series**

### **Spare parts**

**For machines with gear hydraulics  
and cable controls**



## LIST OF CONTENTS

### MAIN FRAME, PILLAR AND ARMS

Main Frame.....	Page 1
Pillar.....	Page 3
Rockers.....	Page 5
Main arm.....	Page 7
Dipper - 5000.....	Page 9
Dipper - 5000M.....	Page 11
Dipper socket - 5000T.....	Page 13
Dipper slider - 5000T.....	Page 15
Control mounting.....	Page 17
Operator guard.....	Page 17
Catch assembly.....	Page 18

### HYDRAULIC INSTALLATIONS

Primary circuits - all models.....	Page 19
Service circuit 5000.....	Page 21
Service circuit 5000M.....	Page 23
Service circuit 5000T.....	Page 25

### CONTROL VALVES

Control valve 5000.....	Page 27
Control valve 5000M.....	Page 29
Control valve 5000T.....	Page 31
Auxiliary control valve.....	Page 33
Rotor control valve.....	Page 35
Levers and cables 5000.....	Page 37
Levers and cables 5000M & 5000T.....	Page 39

### GENERAL HYDRAULICS

Pump and fittings.....	Page 41
Gearbox.....	Page 43
Hydraulic tank.....	Page 45
Lift float - single accumulator.....	Page 47
Lift float - twin accumulator.....	Page 49

### HYDRAULIC RAMS

Lift ram.....	Page 51
Slew ram.....	Page 53
Reach ram.....	Page 54
Angling ram.....	Page 55
Telescopic ram - 5000T only.....	Page 56
Breakaway ram - 5000M only.....	Page 57

### STICKERS

5000.....	Page 59
5000M.....	Page 61
5000T.....	Page 63

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.

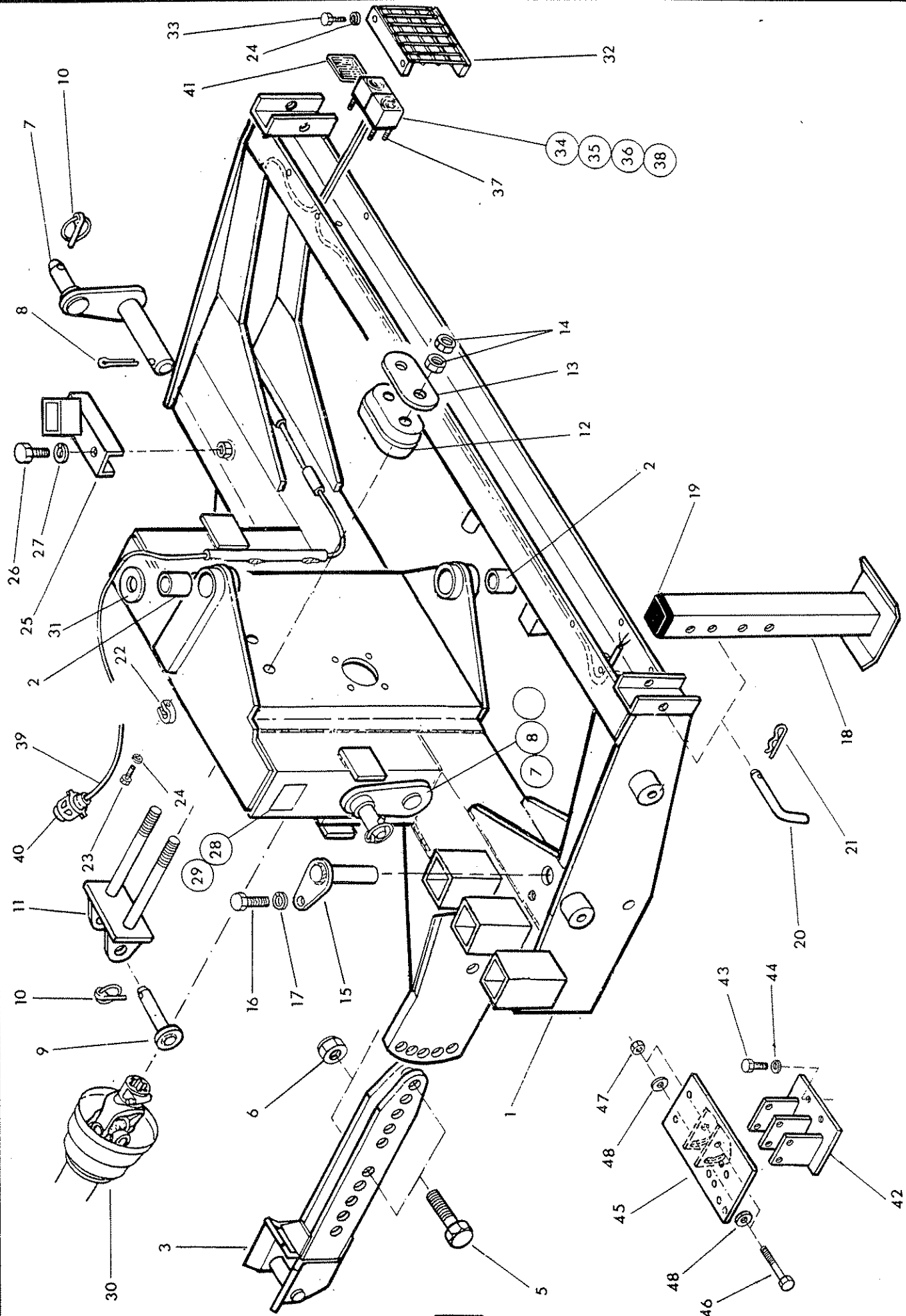
Always quote machine type and serial number as well as the part number.

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



# McCONEL



**McCONEL**

REF	PART NO.	QTY	DESCRIPTION
-----	----------	-----	-------------

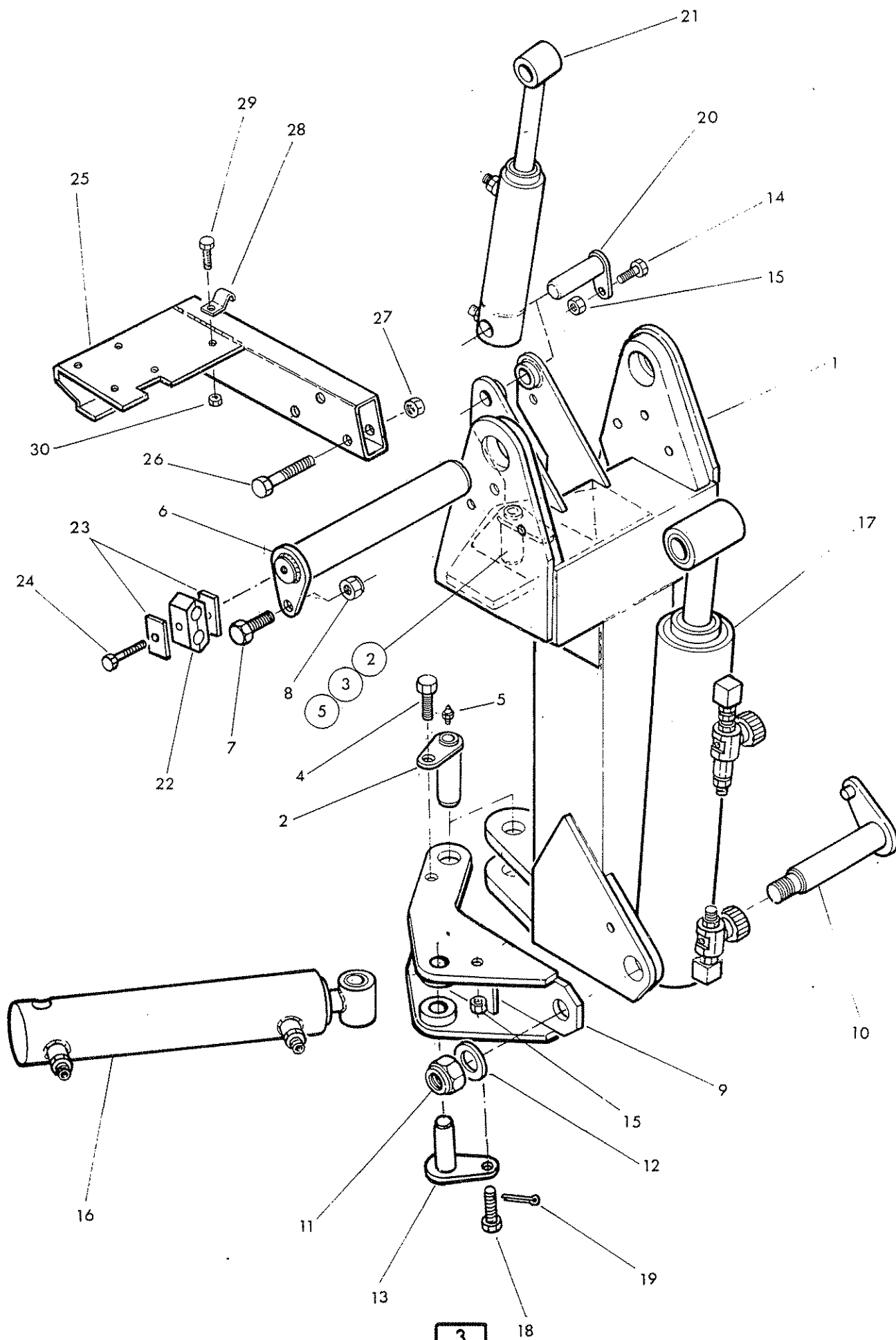
**MAINFRAME ASSEMBLY**

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	
6	91 43 009	4	Self locking nut	
7	75 60 374	2	Lift link pin	
8	95 01 509	2	Split pin	
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	
15	75 60 057	1	Slew ram base pin	
16	93 13 055	1	Setscrew	
17	91 00 205	1	Spring washer	
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	
24	91 00 203	9	Spring washer	
25	42821.01	1	Parking cradle socket - midcut only	
26	93 13 077	1	Setscrew	
27	91 00 207	1	Spring washer	
28	13 35 246	1	Serial No. plate	
29	71 03 230	4	Pop rivet	
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	
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	
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	
44	91 00 205	2	Spring washer	
45	75 50 289	1	Valve mounting plate	
46	92 13 225	2	Bolt	
47	91 43 005	2	Self locking nut	
48	91 00 105	2	Plain washer	

Cable  
controlled  
m/c's  
only

**\* Assembly Note**

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



**McDONNELL**

REF PART NO. QTY DESCRIPTION

**PILLAR**

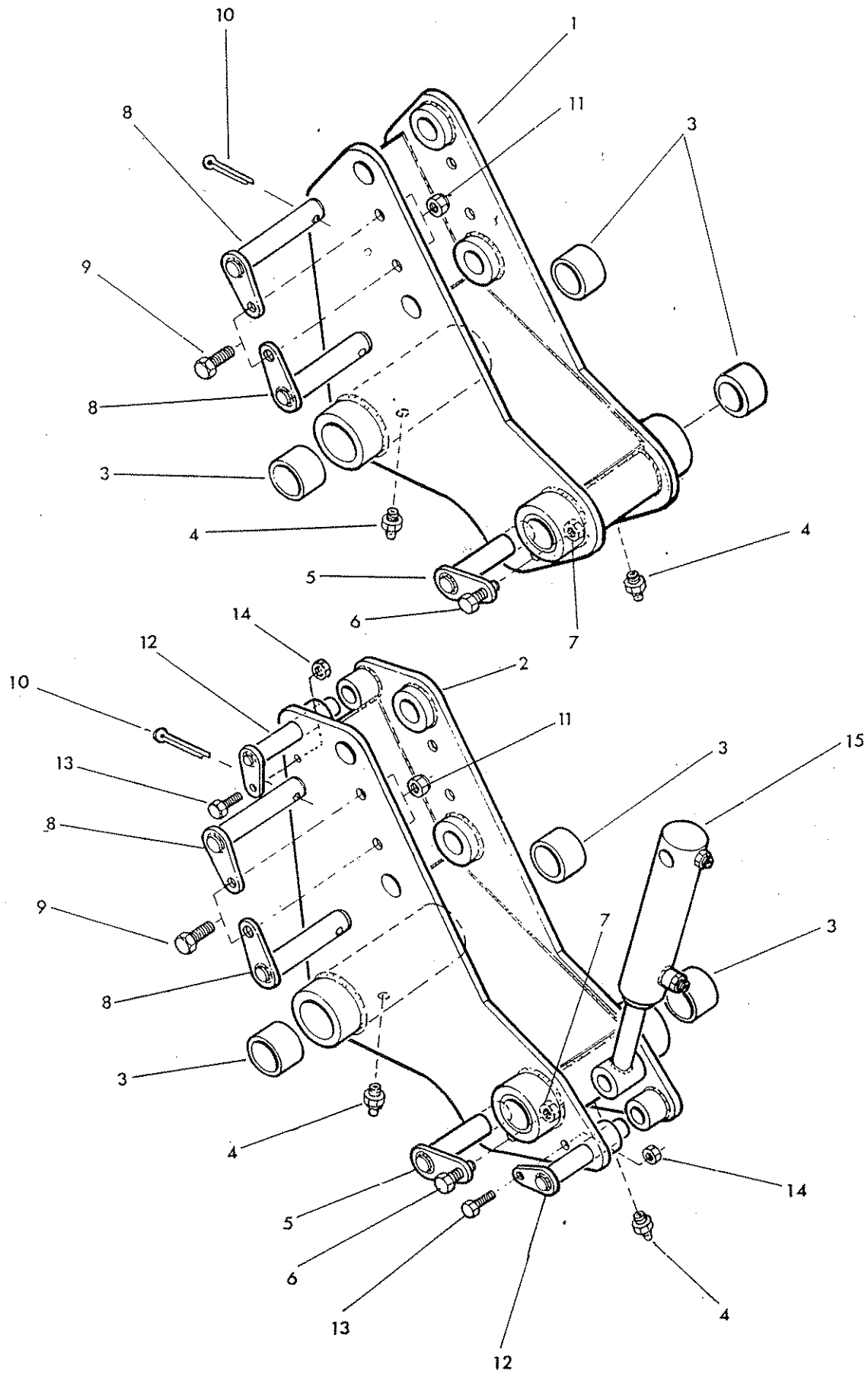
1	42001.01	1	Pillar	
2	75 60 058	2	Pivot pin - pillar	
3	93 13 097	1	Setscrew	
4	93 13 087	1	Setscrew	
5	09 01 124	2	Greaser	
6	75 60 059	1	Pivot pin - rocker	
7	92 13 137	1	Setscrew	
8	91 43 007	1	Self locking nut	
9	42023.01	1	Slew ram bracket	
10	75 60 375	1	Pivot pin - lift base	
11	91 00 023	1	Self locking nut	
12	75 60 070	1	Special washer	
13	75 60 154	1	Pivot pin - slew rod	
14	93 13 065	1	Setscrew	
15	91 43 005	2	Self locking nut	
16	75 60 346	1	Slew ram assembly	
17	76 60 260	1	Lift ram assembly	
18	42269.01	1	Special setscrew	
19	95 01 255	1	Split pin	
20	41691.02	1	Pivot pin - Lift comp base	] AHC only
21	76 50 260	1	Compensator ram assembly	
22	71 93 063	1	Hose clamp	] Gear hydraulic m/c's only
23	06.418.05	2	Clamp plate	
24	92 13 165	1	Bolt	] Electric machines only
25	42122.02	1	Valve mounting bracket R.Hand	
	42122.01	1	Valve mounting bracket L.Hand	
26	92 13 207	3	Bolt	
27	91 43 007	3	Self locking nut	
28	71 09 151	1	Cable clamp	
29	93 13 034	1	Setscrew	
30	91 43 004	1	Self locking nut	



# ROCKERS



# McCONEL



**McCONEL**

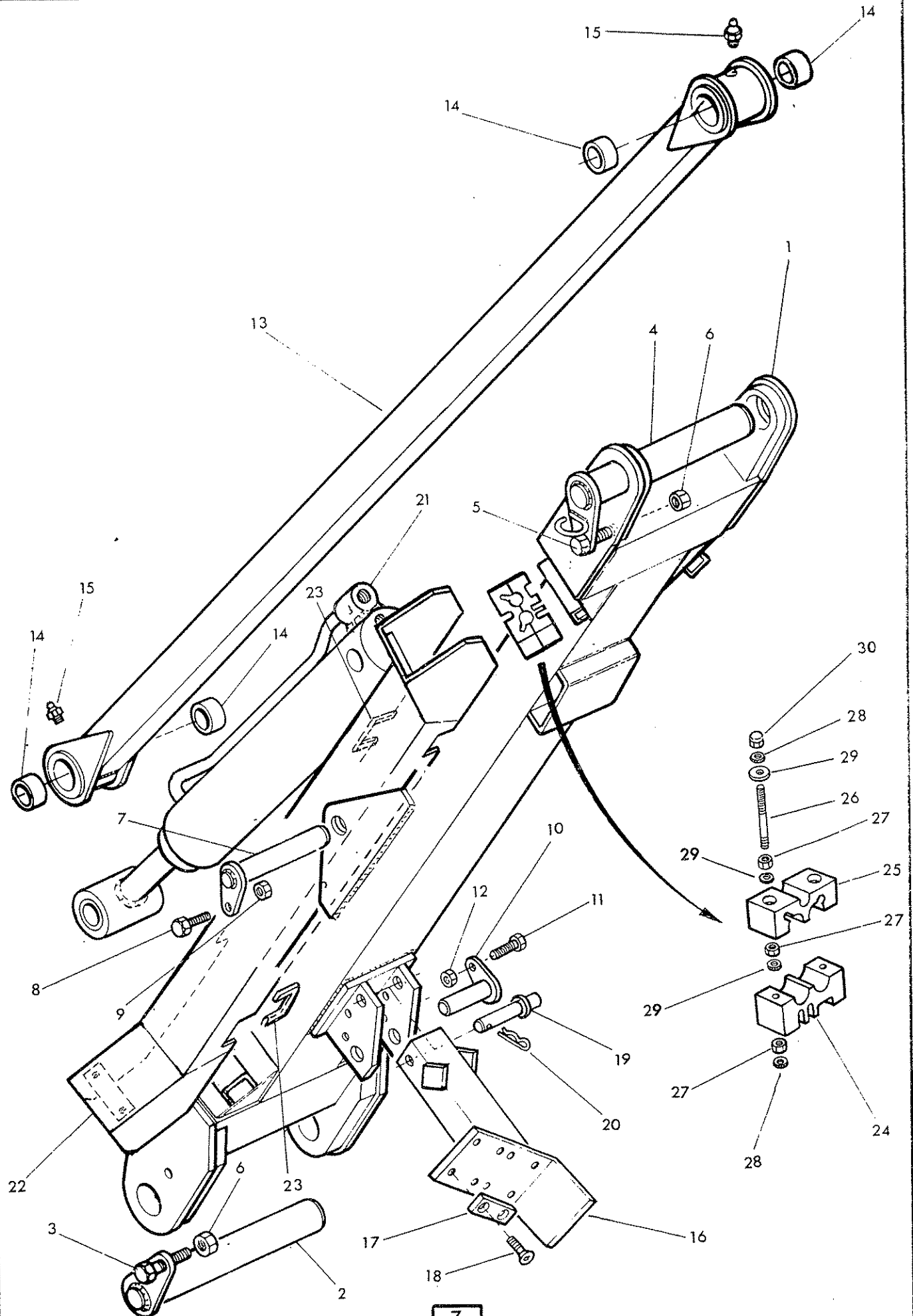
REF	PART NO.	QTY	DESCRIPTION
<b>ROCKERS</b>			
1	42002.02	1	Rocker - standard
2	42002.01	1	Rocker - AHC
3	75 60 050	4	Bush
4	09 01 121	2	Greaser
5	75 60 061	1	Pivot pin - lift rod
6	93 13 087	1	Setscrew
7	91 43 007	1	Self locking nut
8	41694.04	2	Pivot pin - tension link +reach rod
9	92 13 066	2	Setscrew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

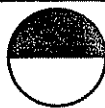
AHC  
only

MAIN ARM



McCONEL

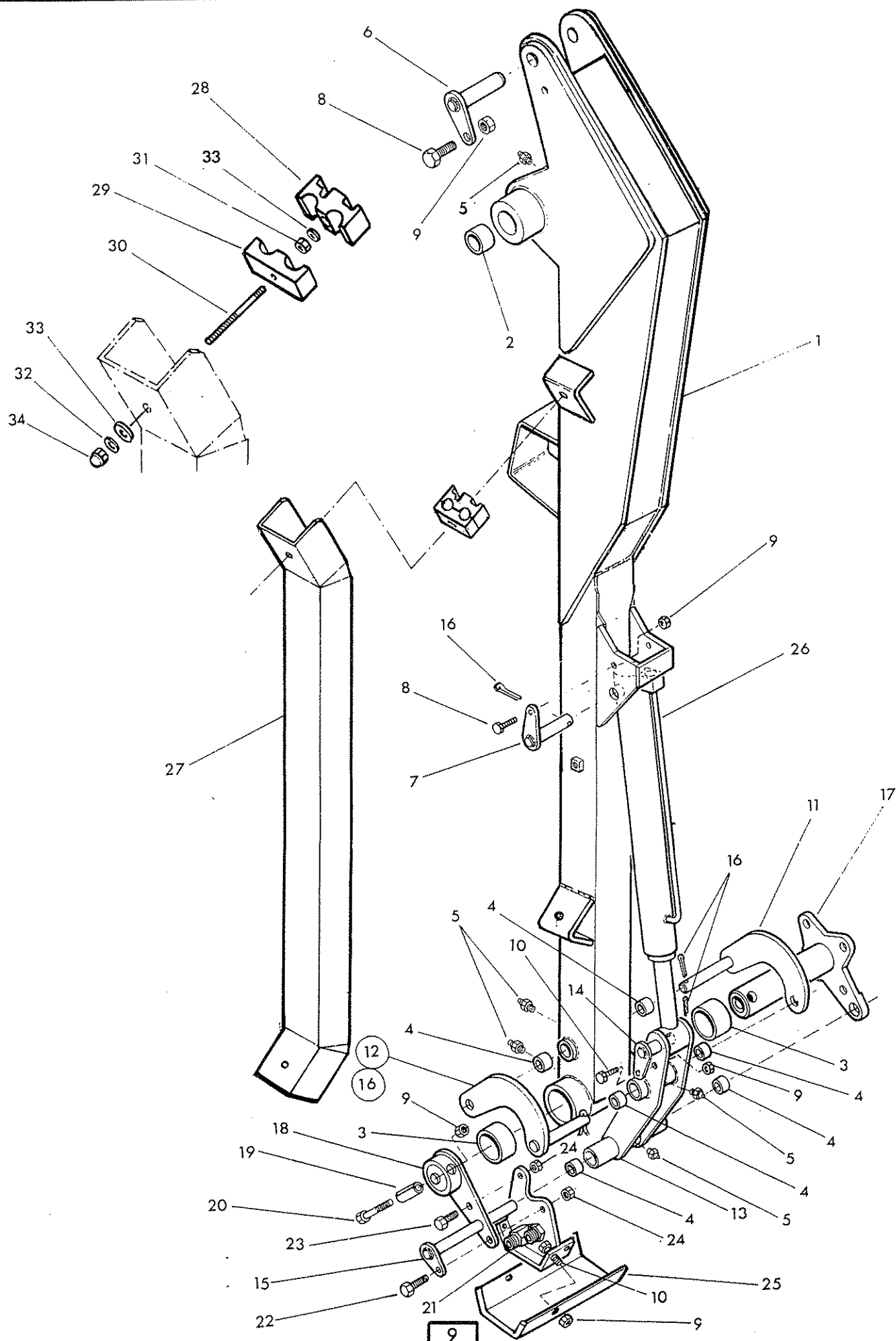


**McCORMELL**

REF	PART NO.	QTY	DESCRIPTION
-----	----------	-----	-------------

**MAIN ARM AND FITTINGS**

1	42006.01	1	Main arm	
2	75 60 059	1	Pivot pin - main arm	
3	92 13 137	1	Bolt	
4	75 60 060	1	Pivot pin - dipper	
5	92 13 137	2	Bolt	
6	91 43 007	2	Self locking nut	
7	41694.04	1	Pivot pin - reach ram base	
8	93 13 066	1	Setscrew	
9	91 43 006	1	Self locking nut	
10	75 60 064	1	Pivot pin comp. ram base	} AHC only
11	93 13 065	1	Bolt	
12	91 43 005	1	Self locking nut	
13	42003.01	1	Tension link	
14	60 12 032	4	Bush	
15	09 01 121	2	Greaser	
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	
27	91 13 005	12	Plain nut	
28	91 00 405	8	External serrated washer	
29	91 00 105	12	Plain washer	
30	91 00 025	4	Special nut	



**McCONEL**

REF	PART NO.	QTY	DESCRIPTION
-----	----------	-----	-------------

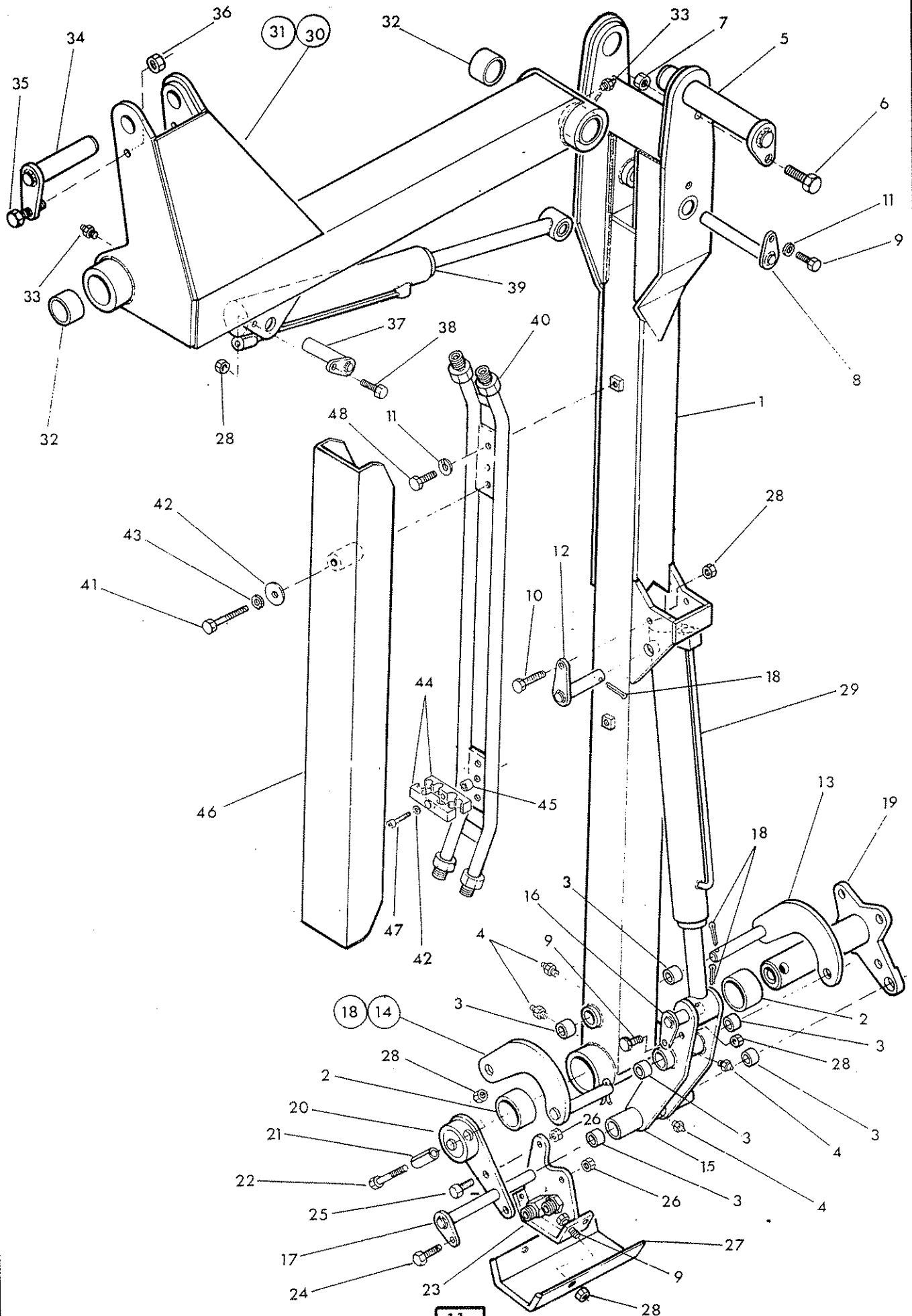
**DIPPER ARM AND FITTINGS**

1	42004.01	1	Dipper arm
2	75 60 050	2	Bush
3	71 36 035	2	Nylon head bush
4	41690.01	6	Bush
5	09 01 121	5	Greaser
6	41692.05	1	Pivot pin - tension link
7	41691.02	1	Pivot pin - Angle base
8	93 13 075	2	Setscrew
9	91 43 005	6	Self locking nut
10	93 13 045	4	Setscrew
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
17	71 92 308	1	Head pivot tube
18	71 92 316	1	Jaw plate
19	04 23 548	1	Spring dowel
20	92 13 185	1	Bolt
21	71 95 303	1	Hose junction bracket
22	02 11 146	1	Bolt
23	02 11 126	1	Bolt
24	01 41 006	2	Self locking nut
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
31	91 13 005	2	Plain nut
32	91 00 405	2	External serrated washer
33	91 00 105	4	Plain washer
34	91 00 025	2	Special nut

# DIPPER - midcut



# McCONEL



**McCONEL**

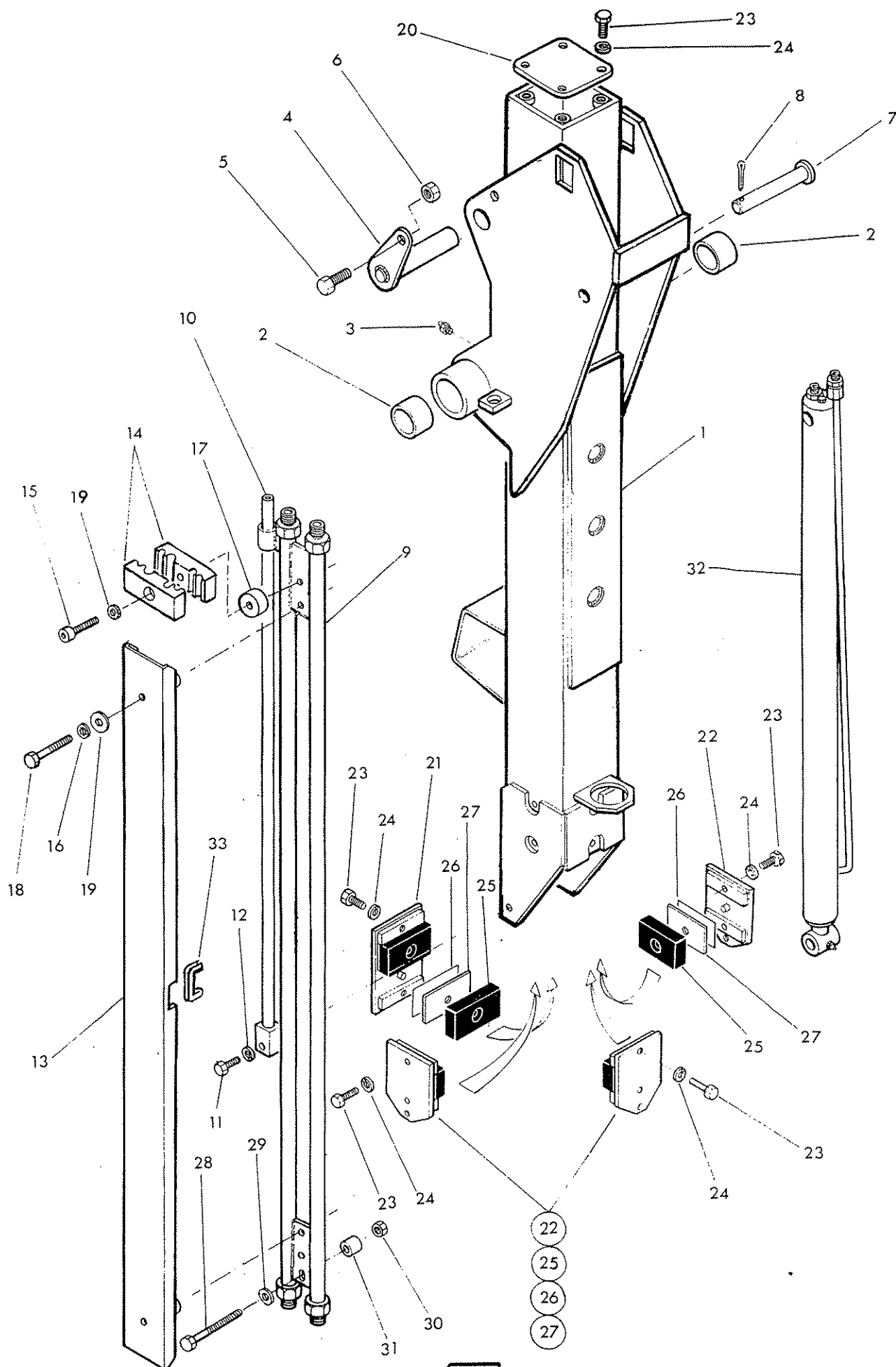
REF. PART NO.

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
7	91 43 007	1	Self locking nut
8	75 60 063	1	Pivot pin -breakaway rod
9	93 13 045	4	Setscrew
10	93 13 075	1	Setscrew
11	91 00 205	3	Spring washer
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
19	71 92 308	1	Head pivot tube
20	71 92 316	1	Jaw plate
21	04 23 548	1	Spring dowel
22	92 13 185	1	Bolt
23	71 95 303	1	Hose junction bracket
24	02 11 146	1	Bolt
25	02 11 126	1	Bolt
26	01 41 006	2	Self locking nut
27	71 98 333	1	Hose tray
28	91 43 005	7	Self locking nut
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
34	75 50 013	1	Pivot pin - tension link
35	93 13 076	1	Bolt
36	91 43 006	1	Self locking nut
37	75 60 064	1	Pivot pin -breakaway base
38	92 13 065	1	Bolt
39	75 50 288	1	Breakaway ram assembly
40	42263.01	1	Rigid pipe assembly
41	92 13 135	2	Bolt
42	91 00 105	4	Plain washer
43	91 00 405	2	Shakeproof washer
44	42024.04	4	Clamp
45	42215.01	2	Spacer
46	42205.03	1	Hose cover
47	93 43 105	2	Capscrew
48	93 13 055	2	Setscrew



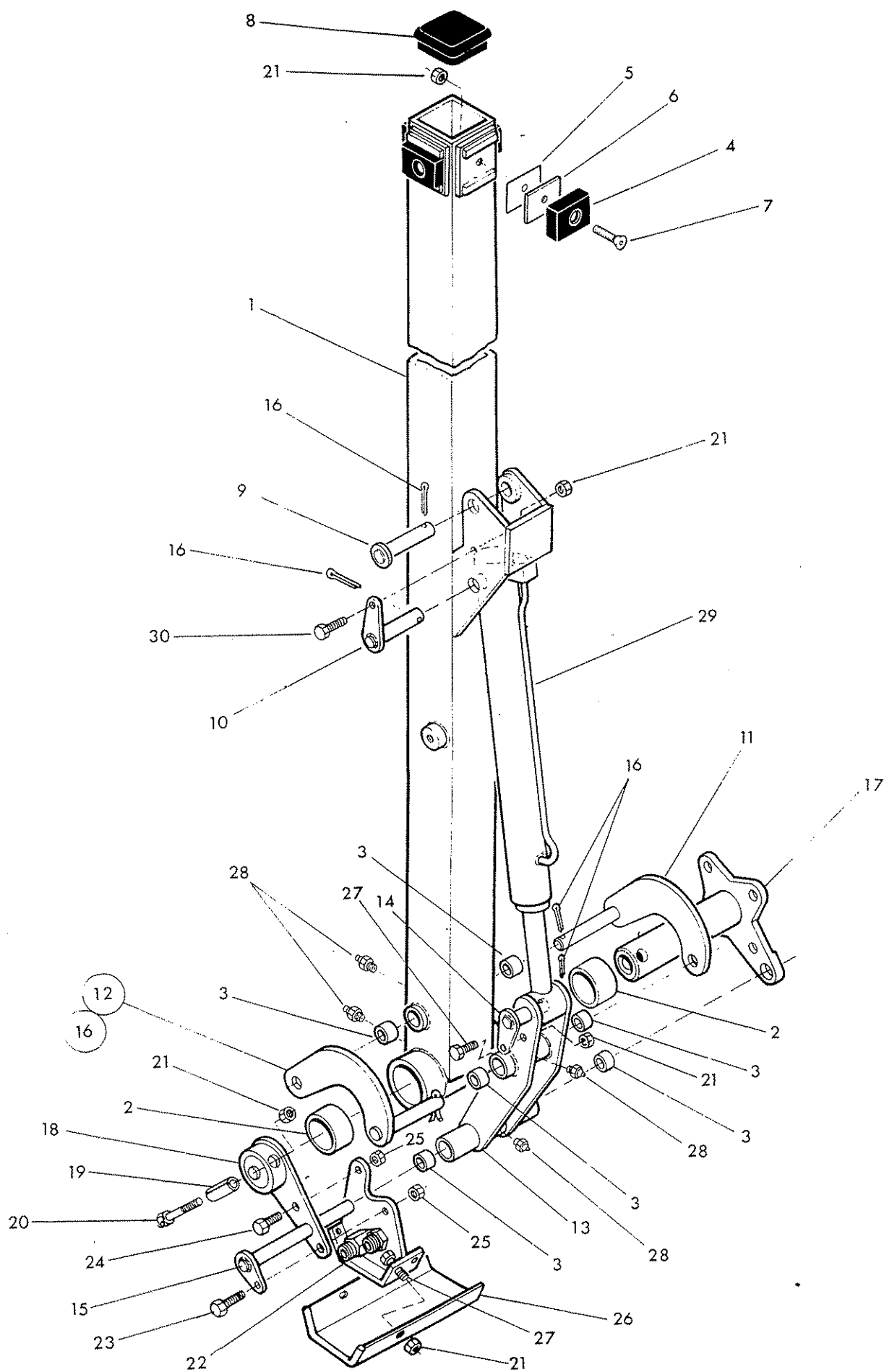


**McCONEL**

REF	PART NO.	QTY	DESCRIPTION
-----	----------	-----	-------------

**DIPPER SOCKET AND FITTINGS**

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
6	91 43 007	1	Self locking nut
7	75 70 006	1	Pivot pin - tele ram base
8	95 01 406	1	Split pin
9	42211.02	1	Rigid pipe assembly
10	71 97 012	1	Guide rod
11	92 13 125	1	Bolt
12	91 00 205	1	Spring washer
13	42205.02	1	Pipe cover
14	42024.04	4	Hose clamp
15	93 43 105	2	Capscrew
16	91 00 405	2	External shakeproof washer
17	42215.01	2	Spacer
18	92 13 135	2	Bolt
19	91 00 105	4	Plain washer
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
24	01 00 205	12	Spring washer
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
29	91 00 106	1	Plain washer
30	91 43 006	1	Self locking nut
31	71 97 009	1	Spacer
32	75 70 318	1	Tele ram
33	41741.01	1	Edge strip

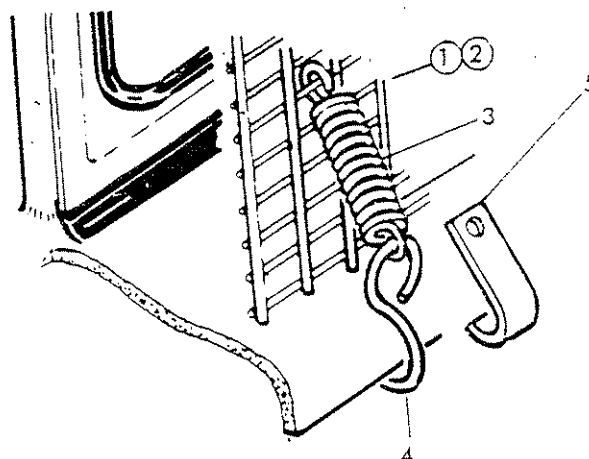


**McCONEL**

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
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
17	71 92 308	1	Head pivot tube
18	71 92 316	1	Jaw plate
19	04 23 548	1	Spring dowel
20	92 13 185	1	Bolt
21	91 43 005	8	Self locking nut
22	71 95 303	1	Hose junction bracket
23	02 11 146	1	Bolt
24	02 11 126	1	Bolt
25	01 41 006	2	Self locking nut
26	71 98 333	1	Hose tray
27	93 13 045	3	Setscrew
28	09 01 121	4	Greaser
29	76 50 255	1	Angling ram assembly
30	93 13 075	1	Setscrew

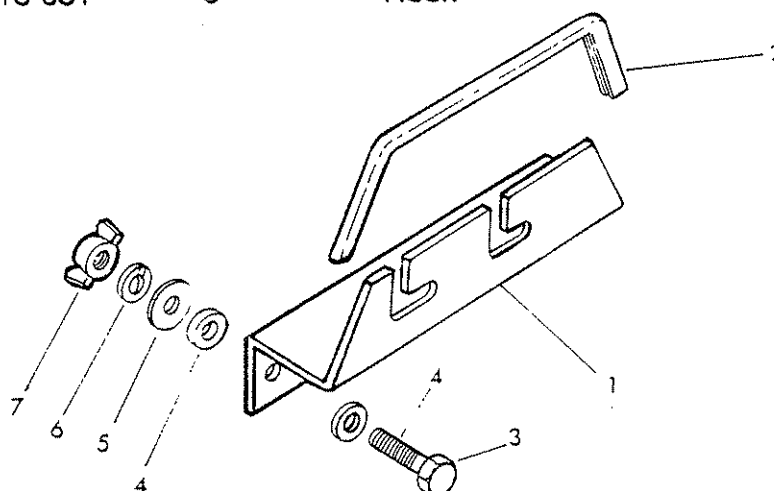


Ref.	Part No.	Qty.	Description
------	----------	------	-------------

**73-13-324**

**CAB GUARD KIT**

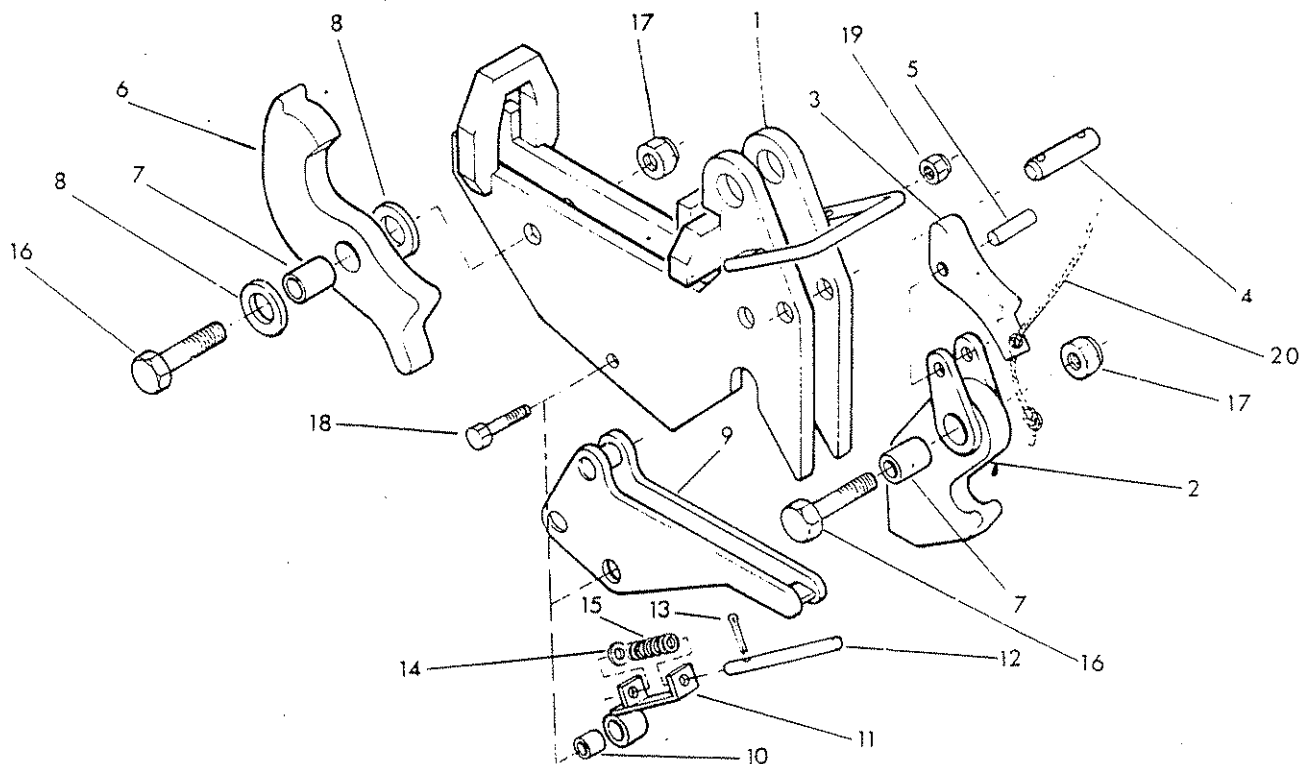
1	73-13-049	1	Guard panel - large
2	73-13-050	1	Guard panel - small
3	60-01-064	12	Spring
4	60-01-065	6	Hook
5	73-13-051	6	Hook



Ref	Part No	Qty	Description
-----	---------	-----	-------------

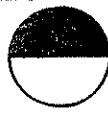
**CONTROL UNIT MOUNTING ASSY**

1	03.583.01	1	Bracket
2	03.231.02	1	Rubber edge strip
3	93 13 094	2	Setscrew
4	03.152.01	4	Rubber washer
5	91 00 104	2	Plain washer
6	91 00 204	2	Spring washer
7	91 93 004		Wingnut

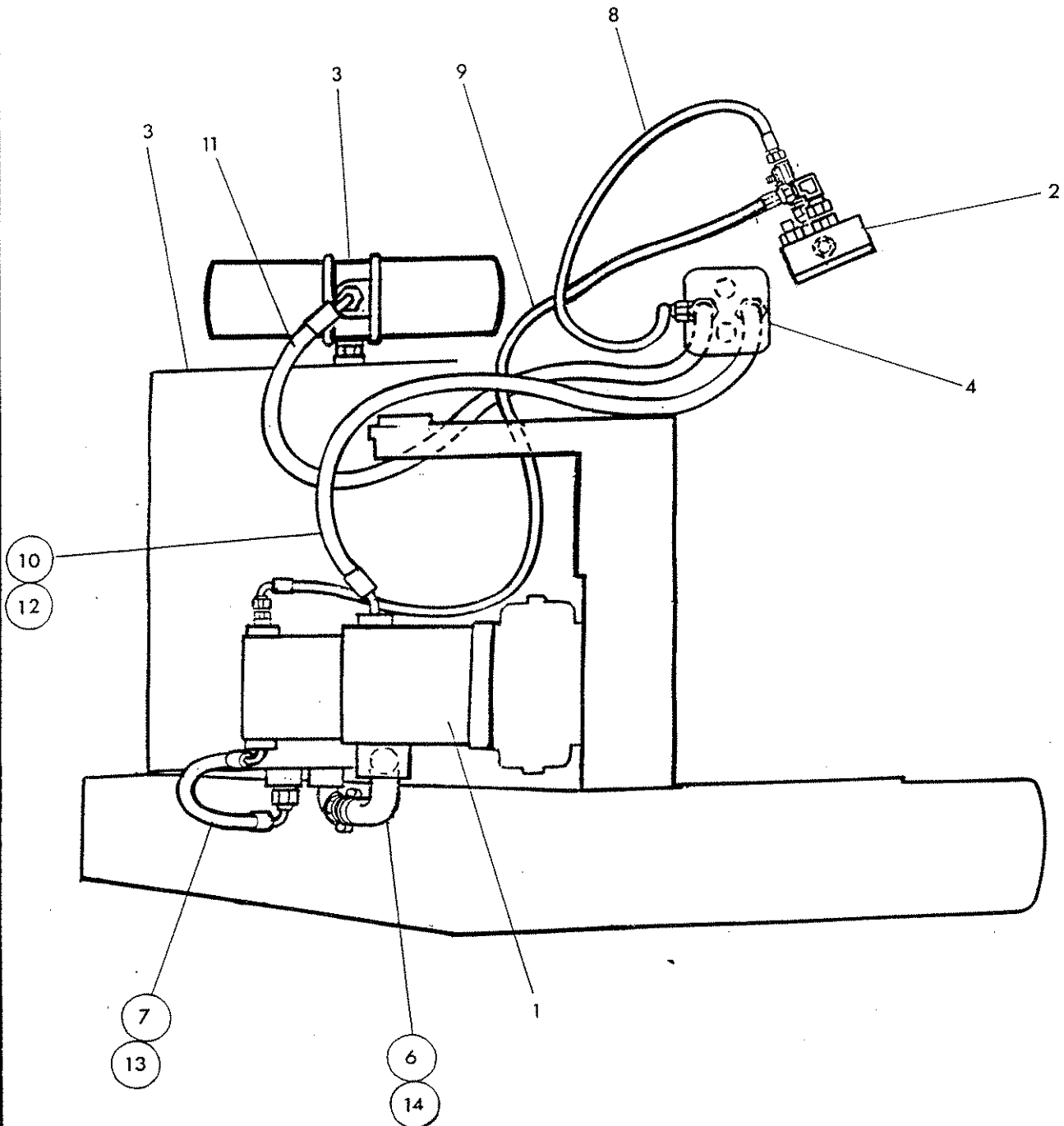


Ref.	Part No.	Qty.	Description
	<b>20-20-999</b>		<b>CATCH ASSEMBLY</b>
1	20-20-901	1	Catch body
2	20-20-902	1	Hitch hook
3	20-20-903	1	Hook release
4	20-20-904	1	Locking pin
5	20-20-906	1	Pivot - hook release
6	20-20-907	1	Plate latch
7	20-20-908	2	Pivot sleeve
8	20-20-909	2	Spacer - plate latch
9	20-20-910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



**McCONNEL**



**McDONNELL**

REF	PART NO.	QTY	DESCRIPTION
-----	----------	-----	-------------

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

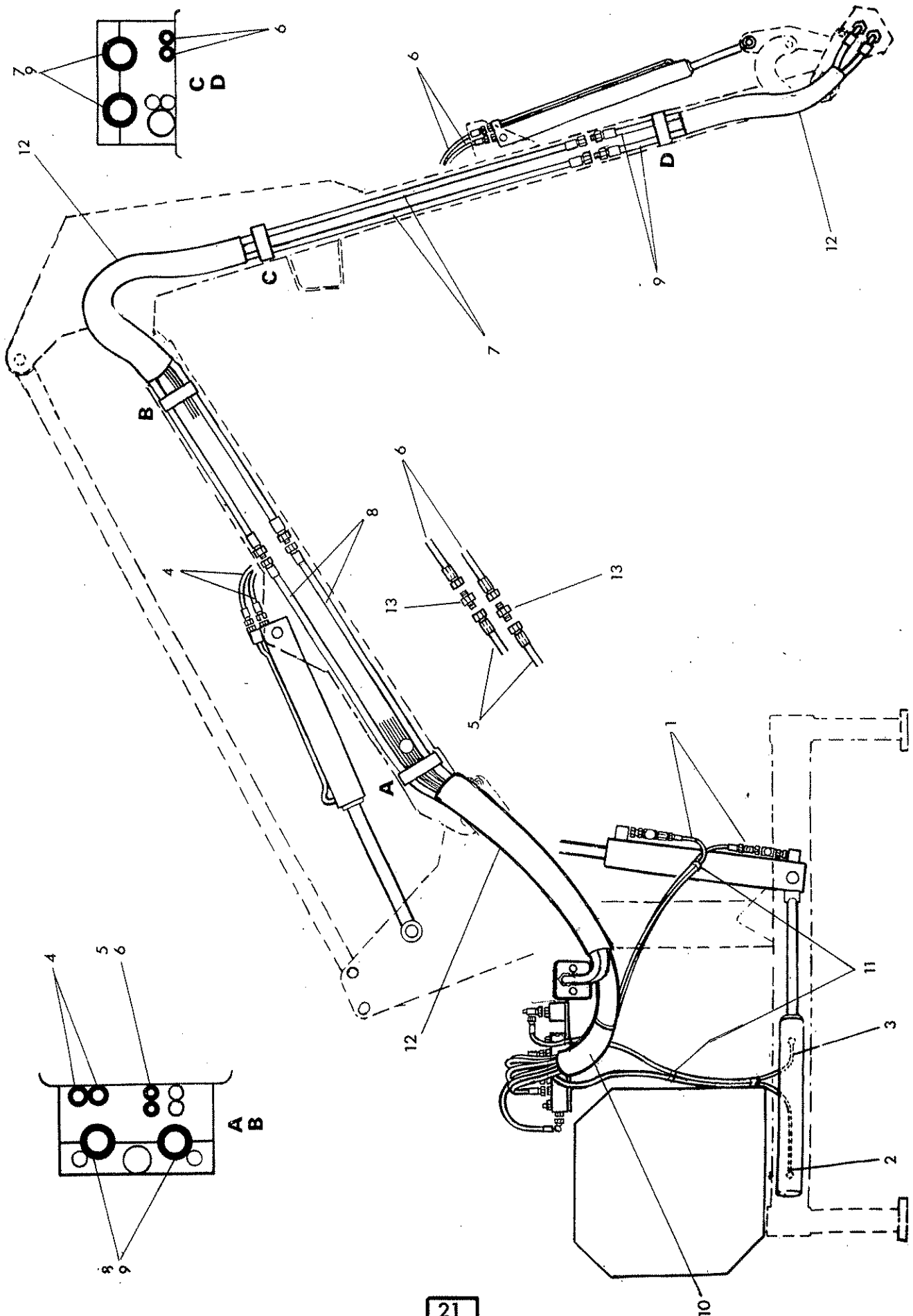
1			Pump
2			Control valve
3			Hydraulic tank
4			Rotor control valve
5			filter
6	85 01 252	1	Hose 1 1/2 bore x 14" long Suction R.Hand
	85 01 188	1	Hose 1 1/2 bore x 16" long Suction L.Hand
7	85 01 264	1	Hose 1" BSP -- 3/4 SAE x 17" long - Suction
8	10.006.16	1	Hose 1/2 BSP x 800 long Valve - R.C. Valve
9	10 006.21	1	Hose 1/2 BSP x 1100 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
14	09 04 107	4	Hose clip

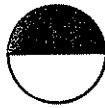


**HOSE INSTALLATION -**  
**Service circuits - std arm**



**McCONEL**



**McCOMEL**

REF	PART NO.	QTY	DESCRIPTION
-----	----------	-----	-------------

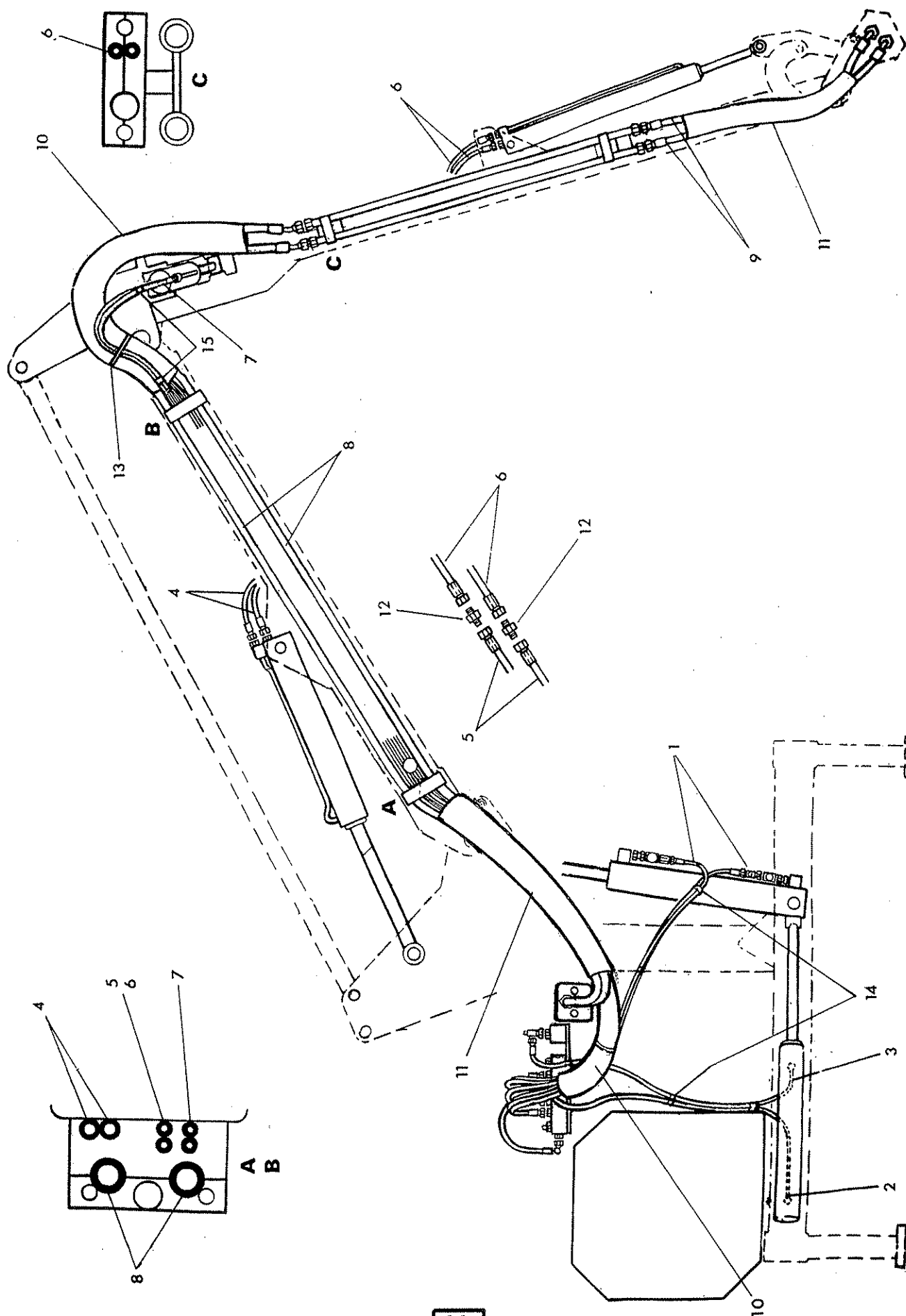
**HOSE INSTALLATION SERVICE  
CIRCUITS 5000**

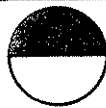
1	10.003.29	2	Hose 3/8 BSP x 1900 long Lift
2	10.002.23	1	Hose 1/4 BSP x 1300 long Slew base
3	10.002.22	1	Hose 1/4 BSP x 1200 long Slew gland
4	10.003.39	2	Hose 3/8 BSP x 2900 long Reach
5	10.001.30	2	Hose 1/4 BSP x 2000 long valve-angle Union
6	10.001.36	2	Hose 1/4 BSP x 2600 long Union angle
7	42248.30	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 50 026	1	Hose sleeve x 66" 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 - midcut



# McCONEL



**McDONNELL**

REF	PART NO.	QTY	DESCRIPTION
-----	----------	-----	-------------

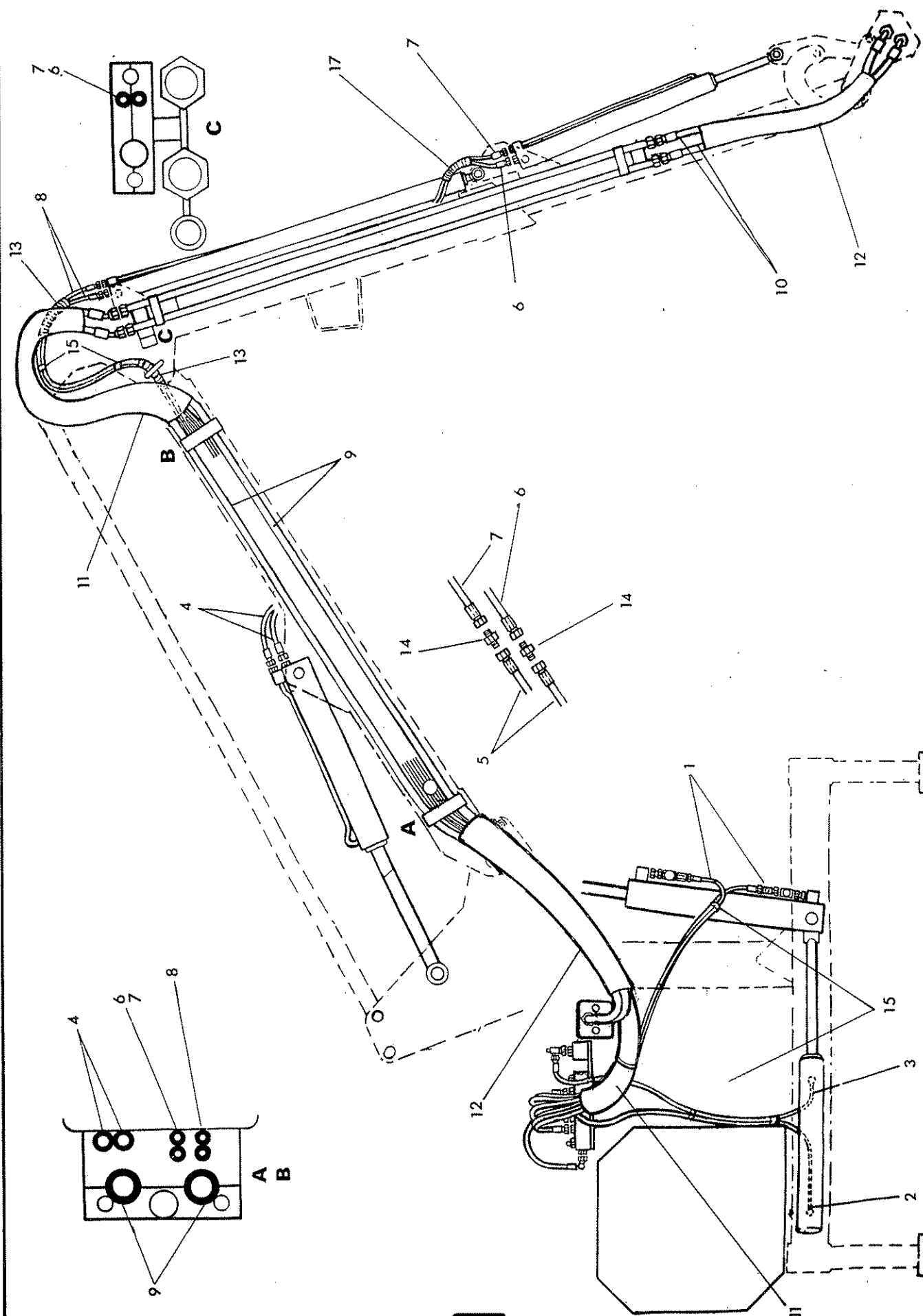
**HOSE INSTALLATION SERVICE  
CIRCUITS 5000M**

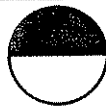
1	10.003.29	2	Hose 3/8 BSP x 1900 long Lift
2	10.002.23	1	Hose 1/4 BSP x 1300 long Slew base
3	10.002.22	1	Hose 1/4 BSP x 1200 long Slew gland
4	10.003.39	2	Hose 3/8 BSP x 2900 long Reach
5	10.001.30	2	Hose 1/4 BSP x 2000 long valve-angle Union
6	10.001.42	2	Hose 1/4 BSP x 3200 long Union angle
7	10.001.47	2	Hose 1" BSP x 3700 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	2	Hose sleeve x 66" long
11	75 50 063	1	Hose sleeve x 30" long
12	85 81 169	1	Union 1/4 BSP MM
13	71 96 045	1	Hose tie
14	71 35 084	8	Hose tie

**HOSE INSTALLATION -**  
Service circuits - tele



**McCONEL**



**McCONEL**

REF	PART NO.	QTY	DESCRIPTION
-----	----------	-----	-------------

**HOSE INSTALLATION SERVICE  
CIRCUITS 5000T**

1	10.003.29	2	Hose 3/8 BSP x 1900 long Lift
2	10.002.23	1	Hose 1/4 BSP x 1300 long Slew base
3	10.002.22	1	Hose 1/4 BSP x 1200 long Slew gland
4	10.003.39	2	Hose 3/8 BSP x 2900 long Reach
5	10.001.30	2	Hose 1/4 BSP x 2000 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	10.001.53	2	Hose 1/4 BSP x 4300 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	2	Hose sleeve x 66" long
12	75 50 063	1	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	71 35 084	8	Hose tie

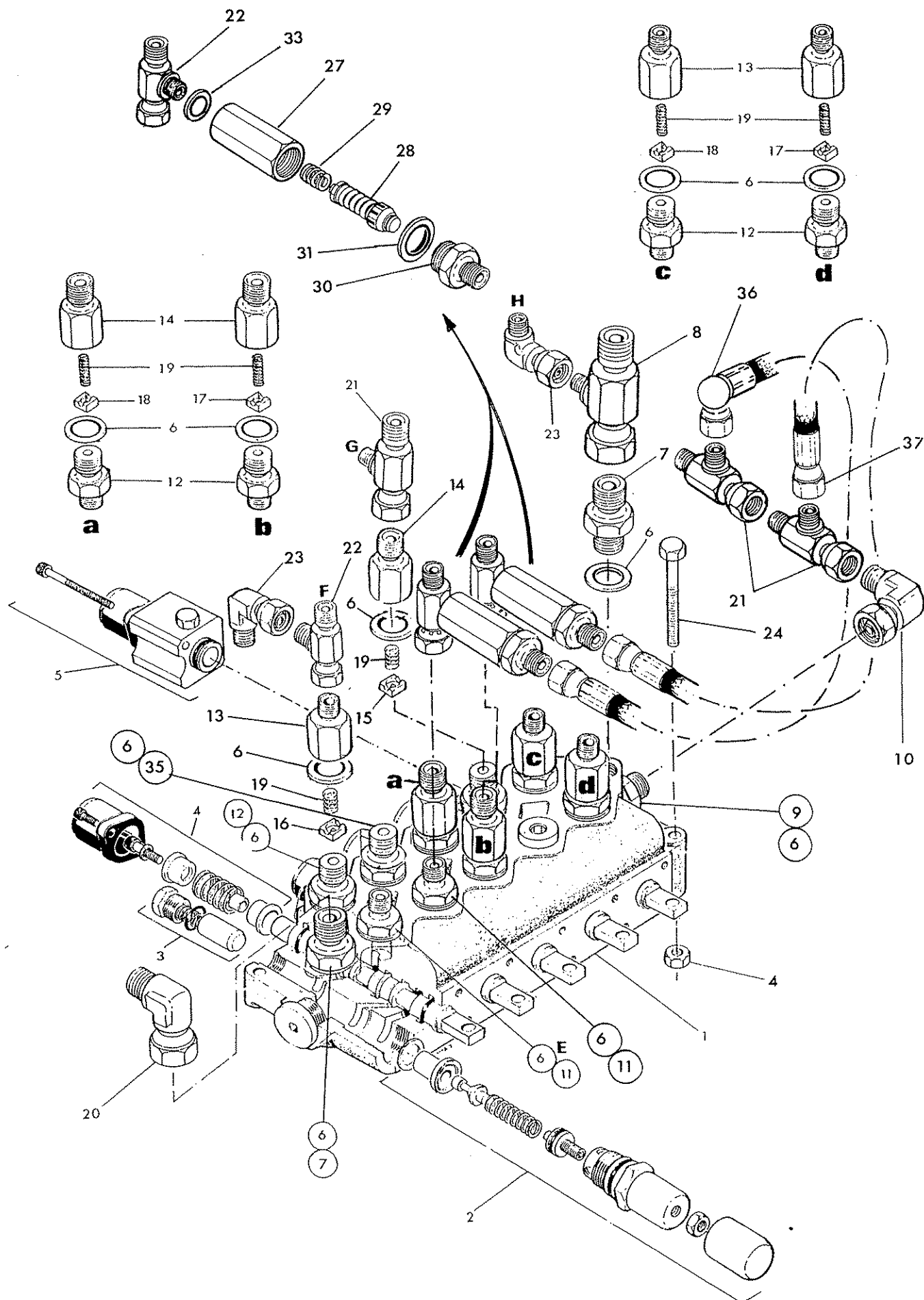
# McCOMBS



**McCONEL**

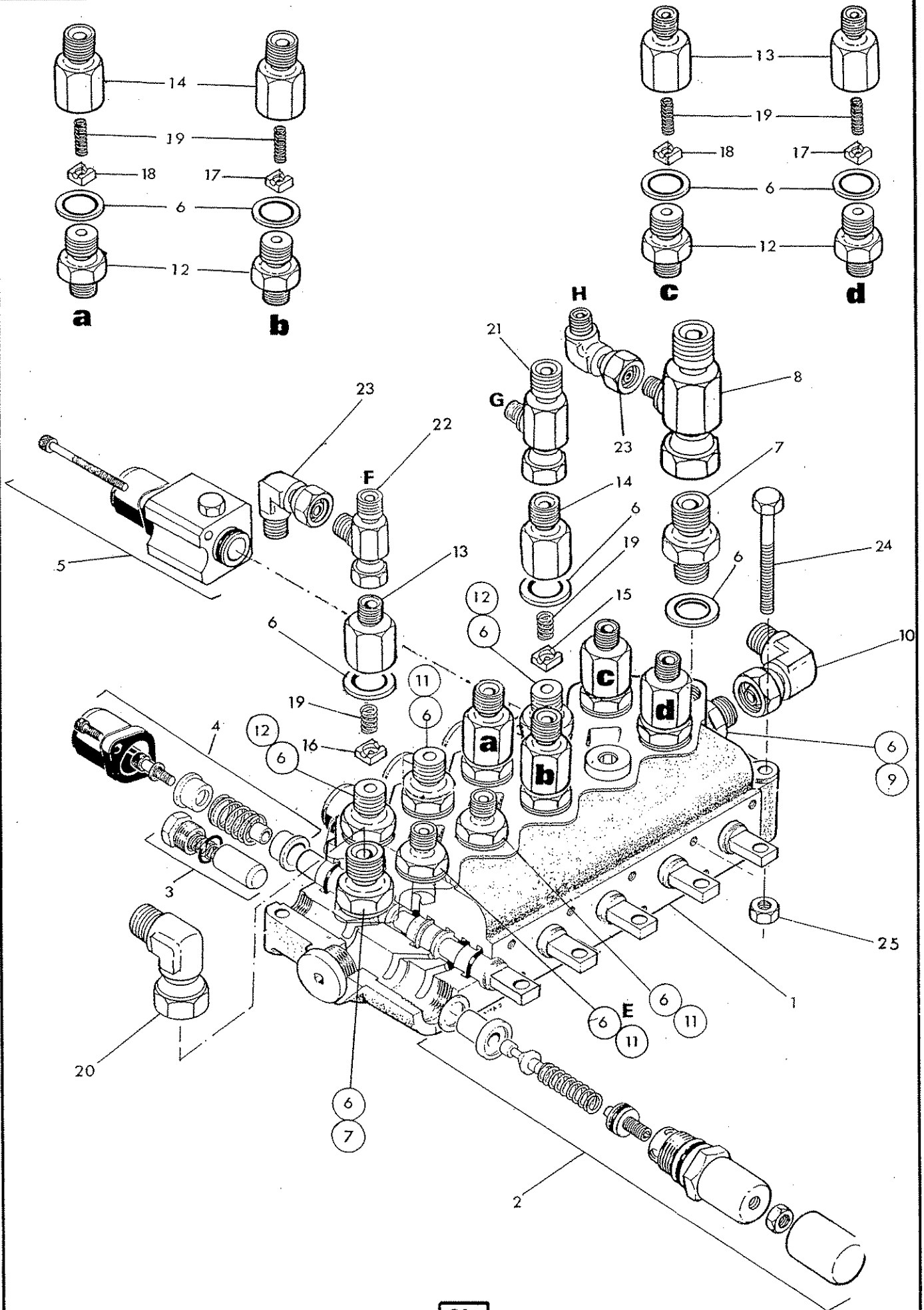
Ref	Part No.	Qty	Description
<b>CONTROL VALVE ASSEMBLY - for lift, reach, angle and slew functions</b>			
1	81 30 466	1	Valve including
2	G3812542	1	Main relief valve - 190 bar
3	81 30 022	1	Non return valve assembly
4	81 30 134	3	Centering spring assembly
5	81 30 084	1	Angle float detent assembly
6	86 50 103	15	Bonded seal
7	60 00 112	2	Adaptor
8	04.056.25	1	Tee
9	60 00 113	1	Union
10	85 81 117	1	Swivel elbow
11	85 81 115	1	Adaptor
12	85 81 209	6	Adaptor flat faced
13	85 81 214	3	Restrictor body
14	85 81 346	3	Restrictor body
15	81 23 046	1	Restrictor disc - black
16	81 23 041	1	Restrictor disc - red
17	81 23 044	2	Restrictor disc - yellow
18	81 23 043	2	Restrictor disc - green
19	81 16 011	6	Spring
20	85 81 215	1	Swivel elbow
21	04.056.16	1	Tee
22	85 81 254	1	Tee
23	85 81 190	2	Swivel elbow
24	92 13 134	3	Bolt
25	91 43 004	3	Self locking nut
	86 99 163	2	SEAL KIT





**McCORMELL**

Ref	Part No.	Qty	Description
<b>CONTROL VALVE FOR LIFT, REACH, ANGLE, MIDCUT AND SLEW FUNCTIONS</b>			
1	81 30 466	1	Valve including
2	G3812542	1	Main relief valve - 190 bar
3	81 30 022	1	Non return valve assembly
4	81 30 134	4	Centering spring assembly
5	81 30 084	1	Angle float detent assembly
6	86 50 103	17	Bonded seal
7	60 00 112	2	Adaptor
8	04.056.25	1	Tee
9	60 00 113	1	Union
10	85 81 117	1	Swivel elbow
11	85 81 115	2	Adaptor
12	85 81 209	6	Adaptor flat faced
13	85 81 214	3	Restrictor body
14	85 81 346	3	Restrictor body
15	81 23 046	1	Restrictor disc - black
16	81 23 041	1	Restrictor disc - red
17	81 23 044	2	Restrictor disc - yellow
18	81 23 043	2	Restrictor disc - green
19	81 16 011	6	Spring
20	85 81 215	1	Swivel elbow
21	04.056.16	3	Tee
22	85 81 254	3	Tee
23	85 81 190	2	Swivel elbow
24	92 13 134	3	Bolt
25	91 43 004	3	Self locking nut
26	81 30 155	2	service relief valve
27	81 30 156	1	Relief valve housing
28	81 30 030	1	Relief valve -210 Bar
29	81 16 011	1	Spring
30	81 30 083	1	Relief valve body
31	86 50 104	1	Bonded seal
32	85 81 254	1	T adaptor
33	86 50 102	1	Bonded seal
34	85 81 254	3	Tee
35	81 30 066	1	Restrictor union 'M'
36	10.002.09	1	Hose 1/4 BSP x 450 long.
37	10.001.08	1	Hose 1/4 BSP x 400 long.



Tele

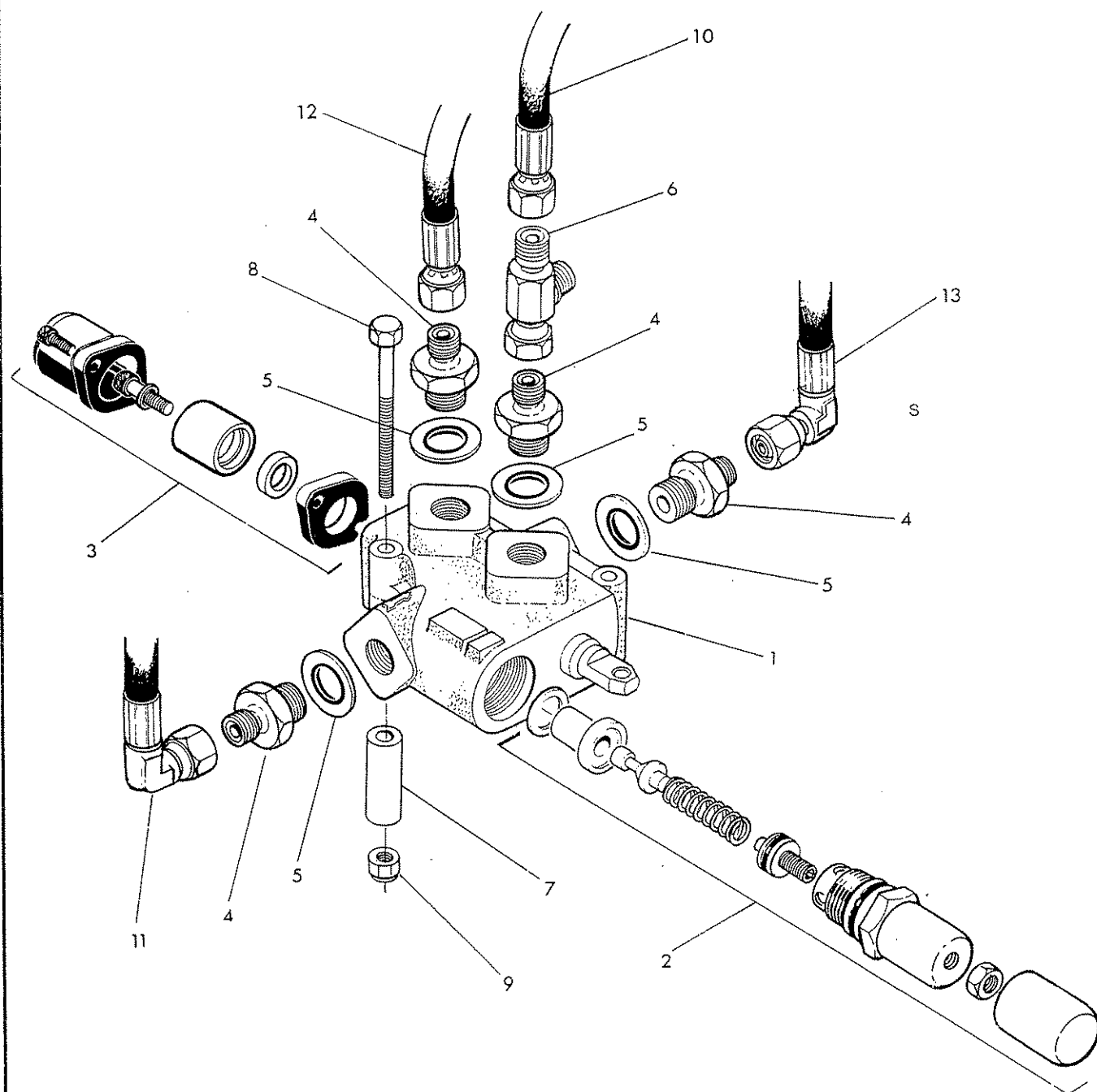
**McCONEL**

Ref	Part No.	Qty	Description
			<b>CONTROL VALVE FOR LIFT, REACH, ANGLE, TELE AND SLEW FUNCTIONS</b>
1	81 30 416	1	Valve including
2	G3812542	1	Main relief valve - 190 bar
3	81 30 022	1	Non return valve assembly
4	81 30 134	4	Centering spring assembly
5	81 30 084	1	Angle float detent assembly
6	86 50 103	17	Bonded seal
7	60 00 112	2	Adaptor
8	04.056.25	1	Tee
9	60 00 113	1	Union
10	85 81 117	1	Swivel elbow
11	85 81 115	3	Adaptor
12	85 81 209	6	Adaptor flat faced
13	85 81 214	3	Restrictor body
14	85 81 346	3	Restrictor body
15	81 23 046	1	Restrictor disc - black
16	81 23 041	1	Restrictor disc - red
17	81 23 044	2	Restrictor disc - yellow
18	81 23 043	2	Restrictor disc - green
19	81 16 011	6	Spring
20	85 81 215	1	Swivel elbow
21	04.056.16	1	Tee
22	85 81 254	1	Tee
23	85 81 190	2	Swivel elbow
24	92 13 134	3	Bolt
25	91 43 004	3	Self locking nut
	86 99 163	2	SEAL KIT

# AUXILIARY CONTROL VALVE -



# McCONEL



**McCONEL**

REF	PART NO.	QTY	DESCRIPTION
<b>CONTROL VALVE - slew/auto reset selection</b>			
1	81 30 467	1	Valve including
2	G3812540	1	Relief valve assembly 2500 Psi (170Bar)
3	81 30 133	1	Spool detent assembly
4	85 81 115	4	Union
5	86 50 103	4	Bonded seal
6	85 81 254	1	Tee
7	71 96 052	2	Mounting spacer
8	92 13 224	2	Bolt
9	91 43 004	2	Self locking nut
10*	85 15 092	1	Hose 1/4 BSP X 12" long SF-SF
11*	85 35 102	1	Hose 1/4 BSP x 17" long SF-90F
12*	85 15 032	1	Hose 1/4" BSP x 16" long SF-SF
13*	85 35 102	1	Hose 1/4" BSP x 17" long SF-90F

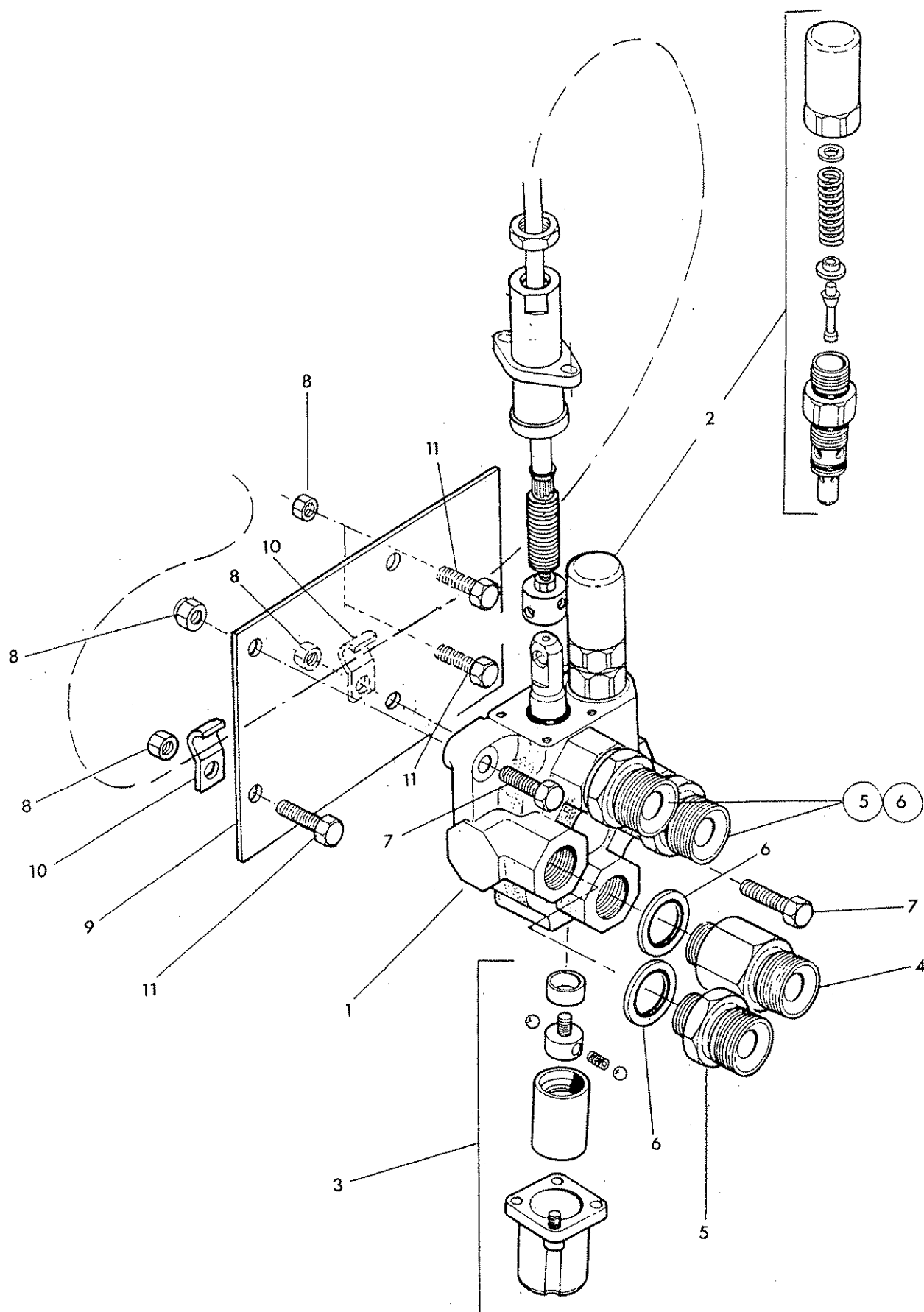
**86 99 163****SEAL KIT**

Item 10 connects to position E)

Item 11 connects to position F) Shown on

Item 12 connects to position G) page 27 29 31

Item 13 connects to position H)



**McCONEL**

REF	PART NO.	QTY	DESCRIPTION
-----	----------	-----	-------------

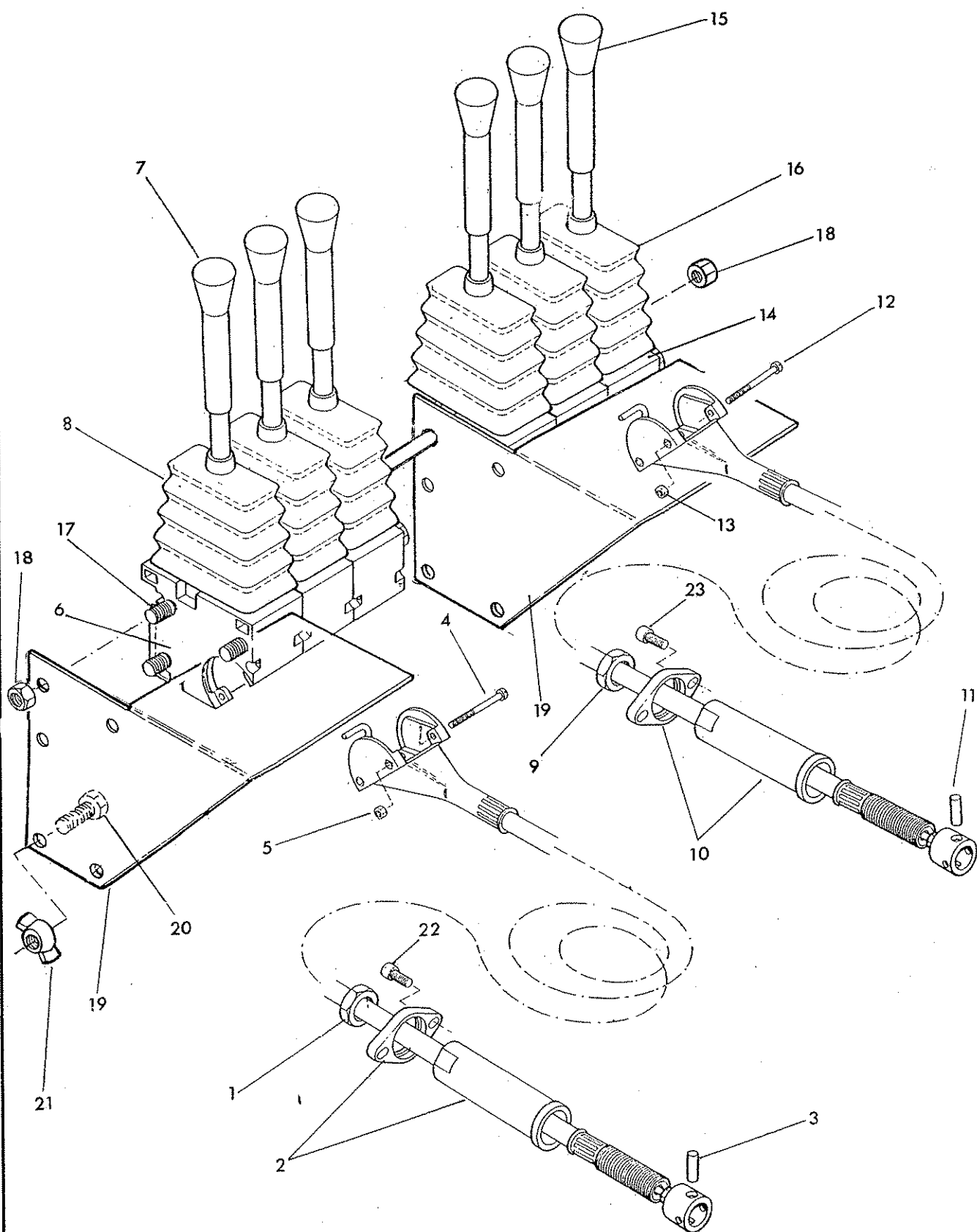
**ROTOR CONTROL VALVE ASSEMBLY**

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
5	80 02 086	3	Adaptor
6	86 50 106	4	Bonded seal
7	92 13 095	2	Bolt
8	91 43 005	5	Self locking nut
9 *	42210.01	1	Mounting plate
10	71 09 151	2	Cable clamp
11	92 13 065	3	Bolt

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

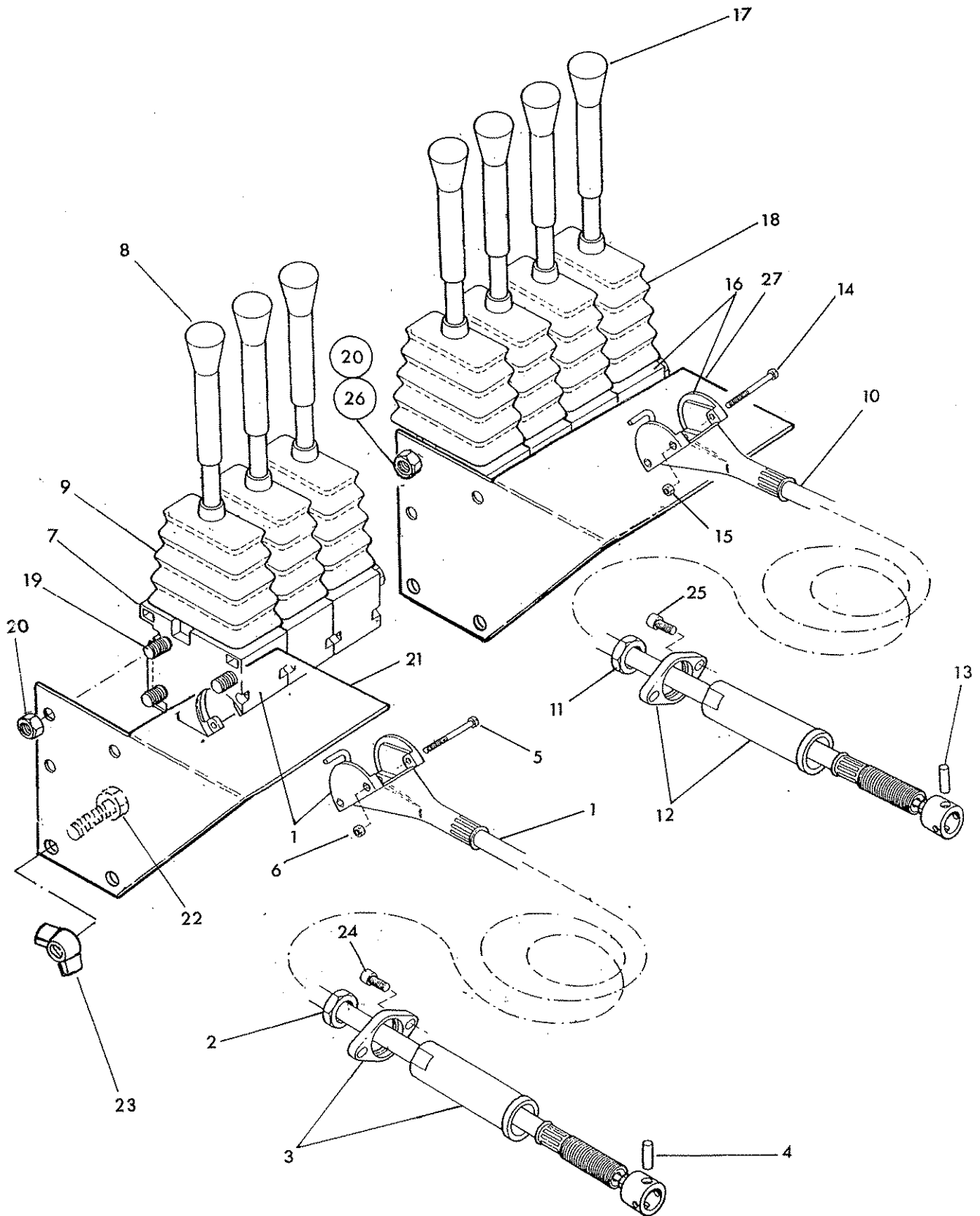
R.Hand assembly shown. For L.Hand assembly item 21 is turned over lengthwise.





**McCONEL**

REF	PART NO.	QTY	DESCRIPTION
<b>CONTROL LEVERS AND CABLES</b>			
	80 17 054	5	Lever and cable assy. lift, reach, angle slew and auto reset compr:-
1	80 17 014	1	Locknut
2	80 17 013	1	Flange and sleeve
3	80 17 016	1	Spool eye pin
4	93 73 081	2	Screw
5	91 13 001	2	Nut
6	80 17 023	1	Lever pivot box
7	80 17 027	1	Knob
8	80 17 026	1	Weather gaiter
	80 17 052	1	Lever and cable assembly - Rotor control compr:-
9	80 17 014	1	Locknut
10	80 17 013	1	Flange and sleeve
11	80 17 016	1	Spool eye pin
12	93 73 081	2	Screw
13	91 13 001	2	Nut
14	80 17 025	1	Lever pivot box
15	09 968 99	1	Knob
16	80 17 026	1	Weather gaiter
17	04.282.73	6	Tie rod
18	91 43 003	6	Self locking nut
19	41.181.01	2	Mounting bracket
20	93 13 034	4	Setscrew
21	91 93 004	4	Wingnut
22	93 43 022	10	Capscrew
23	93 43 023	2	Capscrew



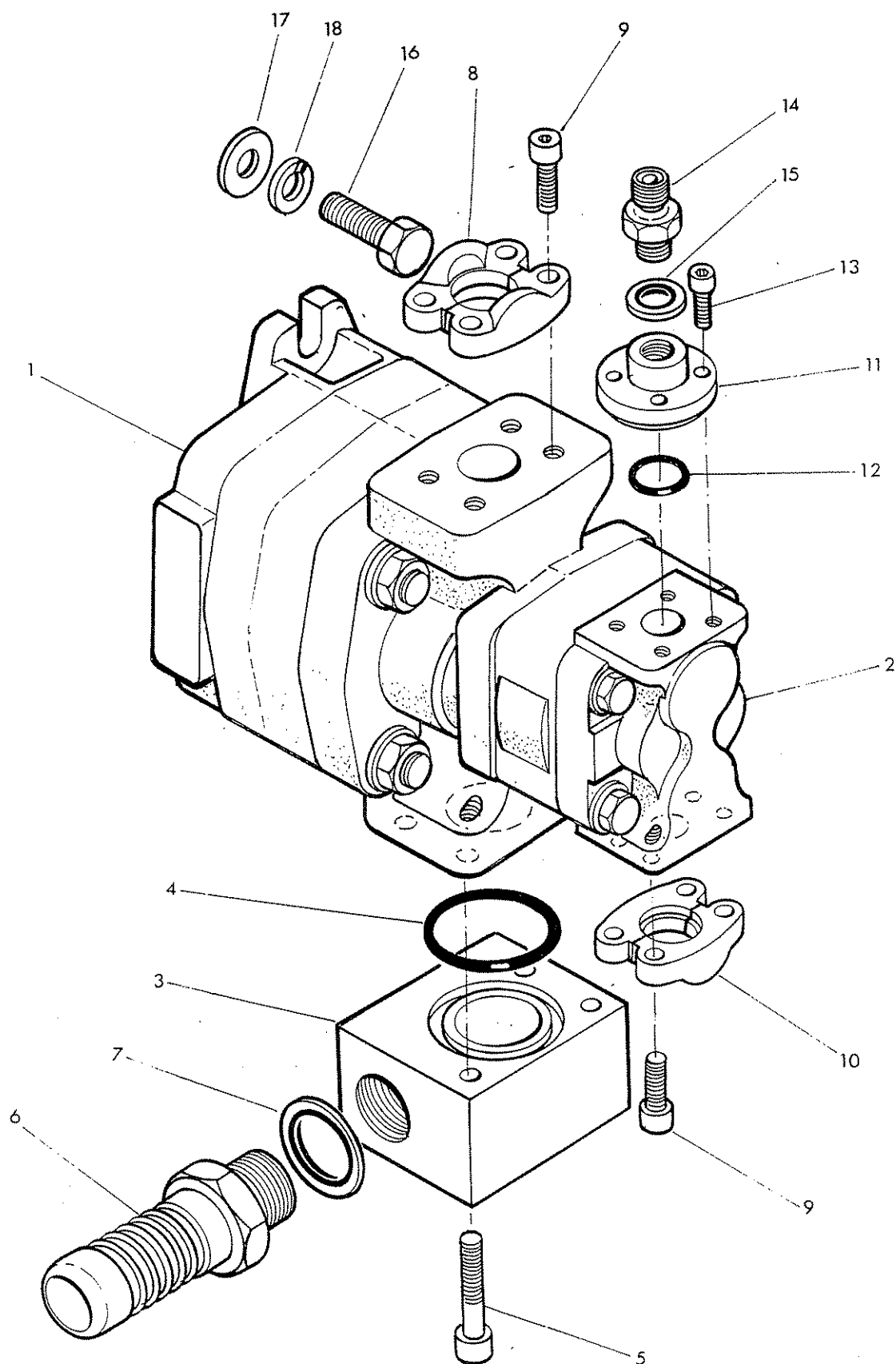
**McCONEL**

REF	PART NO.	QTY	DESCRIPTION
<b>CONTROL LEVERS AND CABLES</b>			
1	80 17 054	6	Lever and cable assy. lift, reach, angle slew Tele and auto reset compr:-
2	80 17 014	1	Locknut
3	80 17 013	1	Flange and sleeve
4	80 17 016	1	Spool eye pin
5	93 73 081	2	Screw
6	91 13 001	2	Nut
7	80 17 023	1	Lever pivot box
8	80 17 027	1	Knob
9	80 17 026	1	Weather gaiter
10	80 17 052	1	Lever and cable assembly - Rotor control compr:-
11	80 17 014	1	Locknut
12	80 17 013	1	Flange and sleeve
13	80 17 016	1	Spool eye pin
14	93 73 081	2	Screw
15	91 13 001	2	Nut
16	80 17 025	1	Lever pivot box
17	09 968 99	1	Knob
18	80 17 026	1	Weather gaiter
19	04.282.73	3	Tie rod
20	91 43 003	6	Self locking nut
21	41.181.01	1	Mounting bracket aiter
22	93 13 034	4	Setscrew
23	91 93 004	4	Wingnut
24	93 43 022	12	Capscrew
25	93 43 023	2	Capscrew
26	04.282.73	3	Tie rod
27	09 970 01	1	Mounting bracket

PUMP



**McCORMEL**



**McCONEL**

REF	PART NO.	QTY	DESCRIPTION
-----	----------	-----	-------------

**PUMP ASSEMBLY**

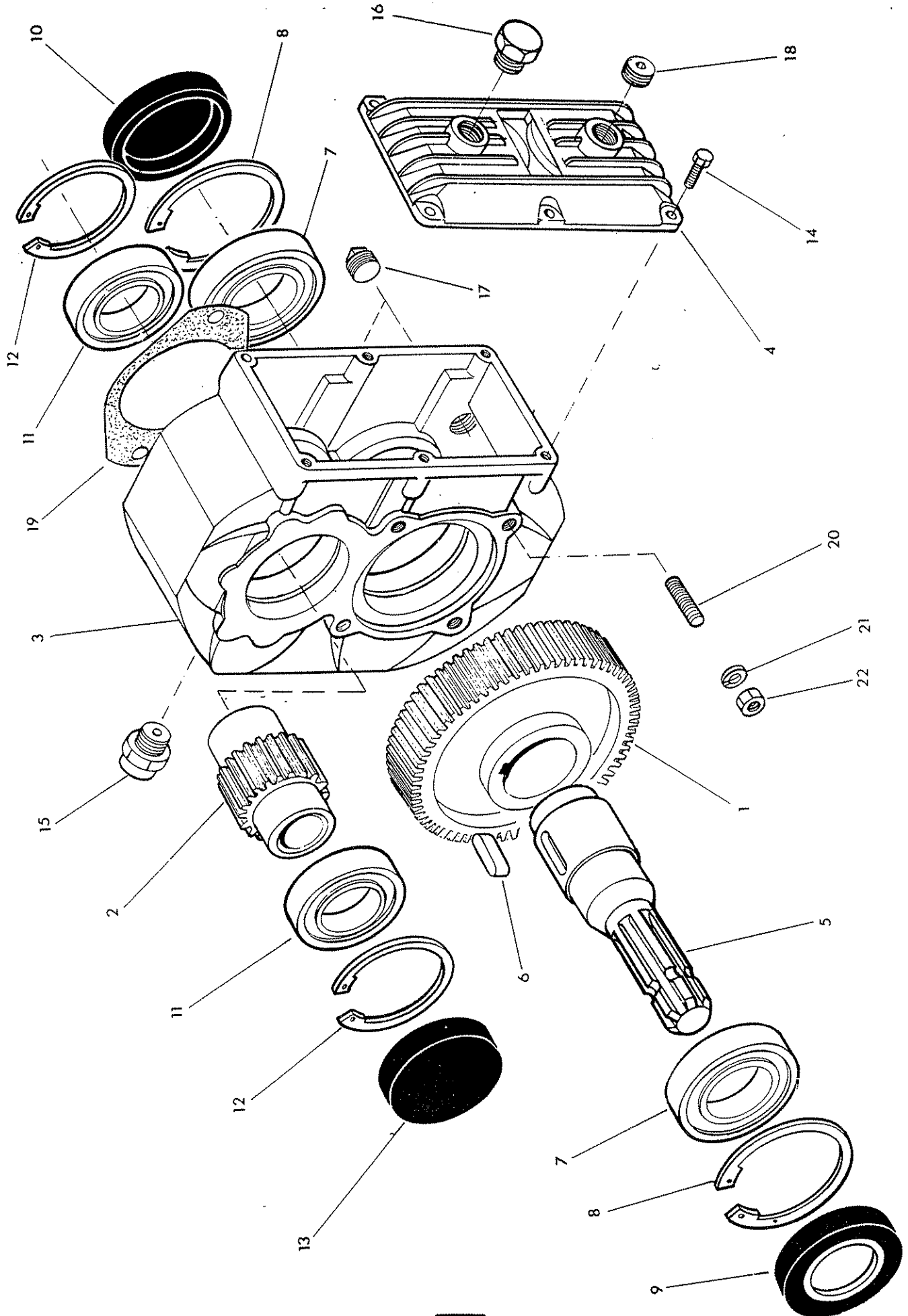
	82 01 703	1	Pump complete incl.
1	82 01 199	1	Pump section large
2	82 01 200		Pump section small
3	42142.01	1	Suction block
4	86 00 304	1	'O' ring
5	92 43 126	3	Capscrew
6	85 81 260	1	Adaptor low pressure
7	86 50 109	1	Bonded seal
8	01.697.03	1	Split flange - pressure connection
9	93 43 065	8	Capscrew
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
14	85 81 110	1	Union
15	86 50 104	1	Bonded seal
16	05.839.01	2	Bolt
17	91.00.020	2	Plain washer
18	05.282.08	2	Spring washer

**86 99 248****SEAL KIT**

GEARBOX



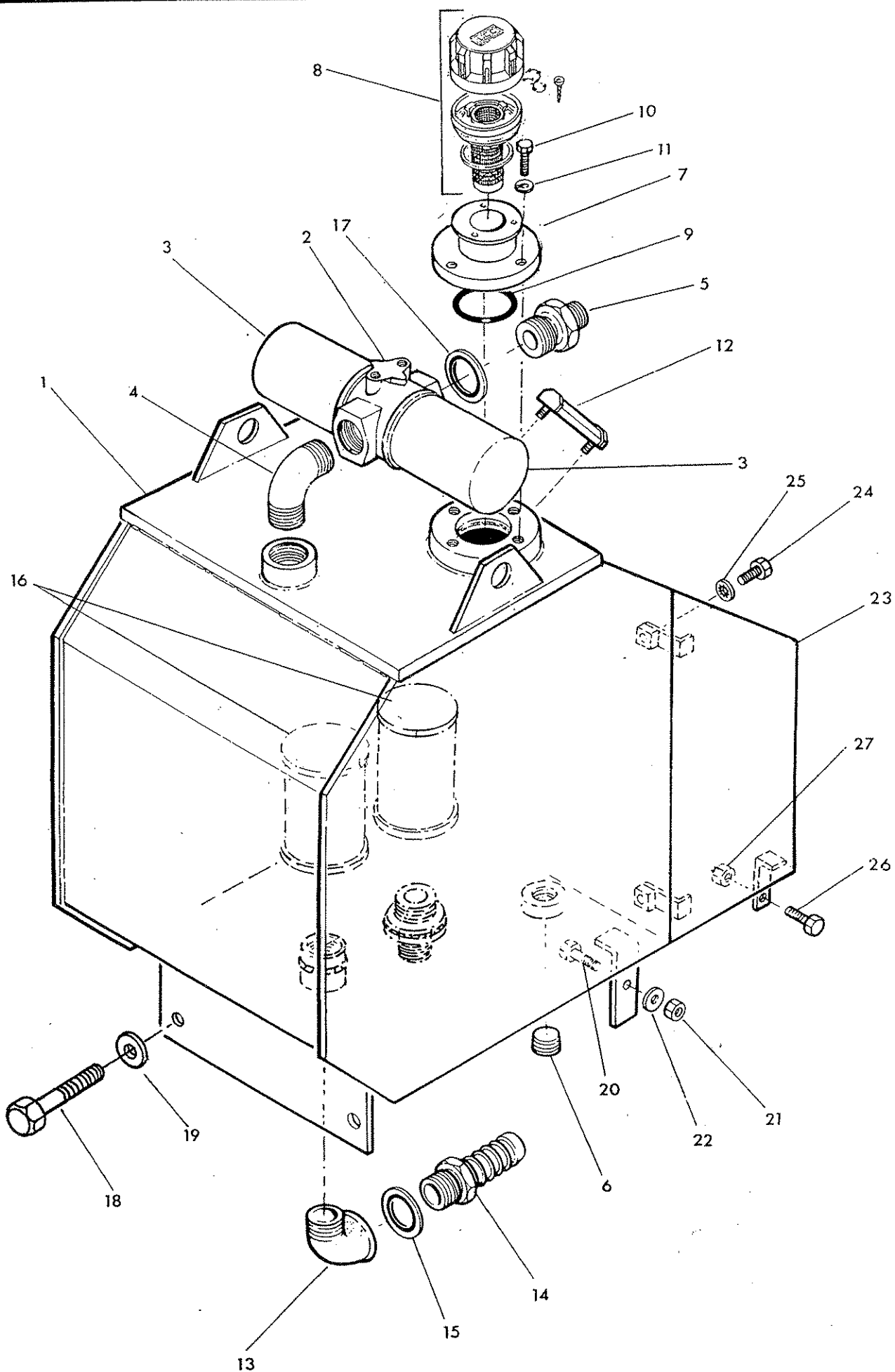
McCONEL



**McCONEL**

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
7	80 13 524	2	Bearing
8	80 13 525	2	Internal circlip
9	80 13 526	1	Shaft seal
10	80 13 527	1	Cap
11	80 13 528	2	Bearing
12	80 13 529	2	Internal circlip
13	80 13 530	1	Cap
14	80 13 531	6	Setscrew
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
21	91 00 206	4	Spring washer
22	91 13 006	4	Plain nut







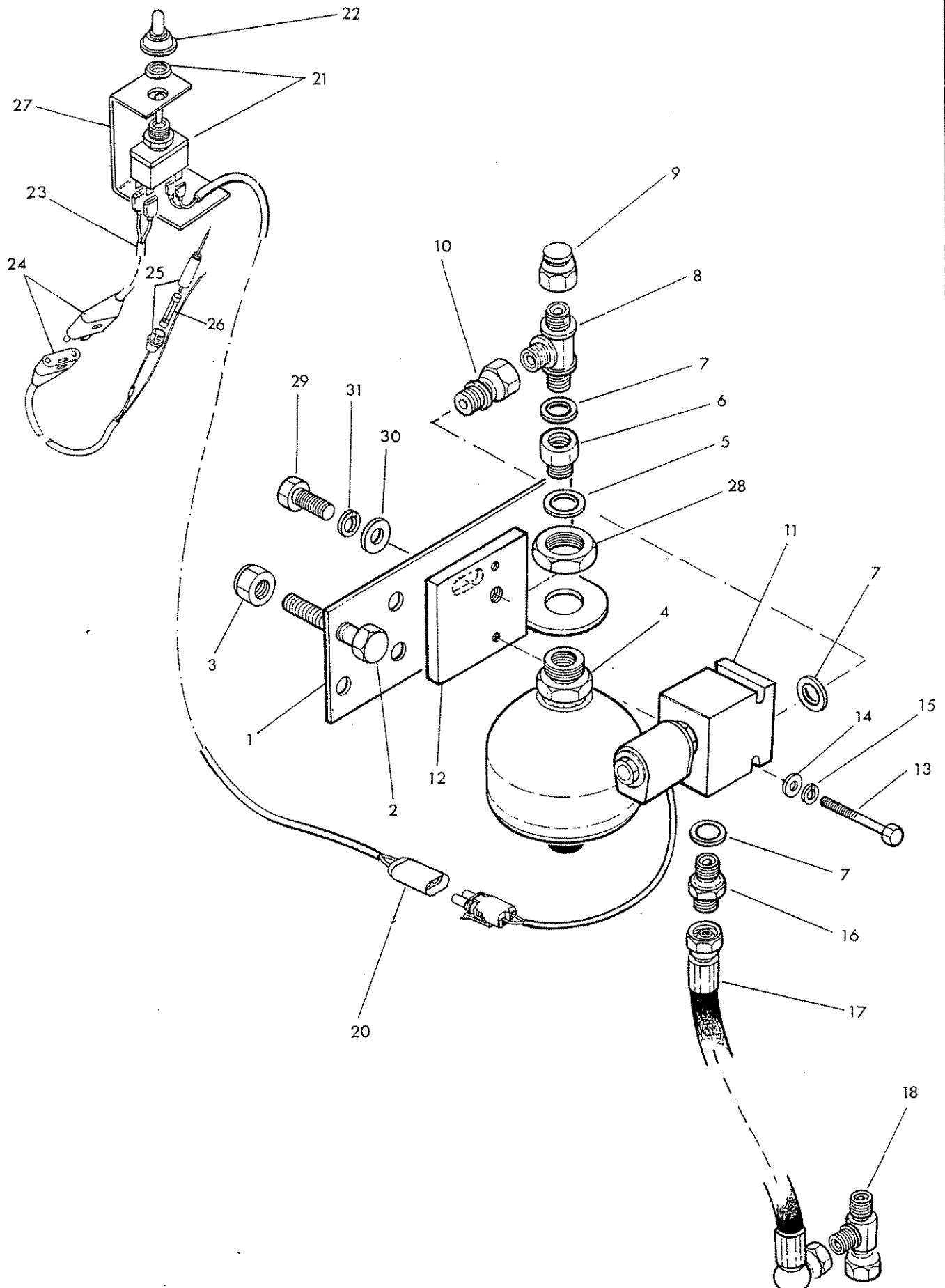
REF	PART NO.	QTY	DESCRIPTION
-----	----------	-----	-------------

**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
5	85 81 291	1	Adaptor
6	85 81 203	1	Drain plug
7	71 92 090	1	Access cover
8	84 01 074	1	Breather
9	86 50 151	1	'O' ring
10	93 13 054	4	Setscrew
11	91 00 204	4	Spring washer
12	84 01 048	1	Oil level gauge
13	85 81 367	1	90 degrees elbow
14	85 81 260	1	Suction connection low press.
15	86 50 109	1	Bonded seal
16	84 01 047	2	Strainer
17	86 50 224	1	Bonded seal
18	92 13 097	2	Bolt
19	91 00 207	2	Spring washer
20	92 13 136	1	Setscrew
21	91 43 006	1	Self locking nut
22	91 00 106	1	Plain washer
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
25	91 00 305	2	Internal serrated washer
26	92 13 135	1	Setscrew
27	91 43 005	1	Self locking nut

**Assembly note**

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



**McCONEL**

REF	PART NO.	QTY	DESCRIPTION
-----	----------	-----	-------------

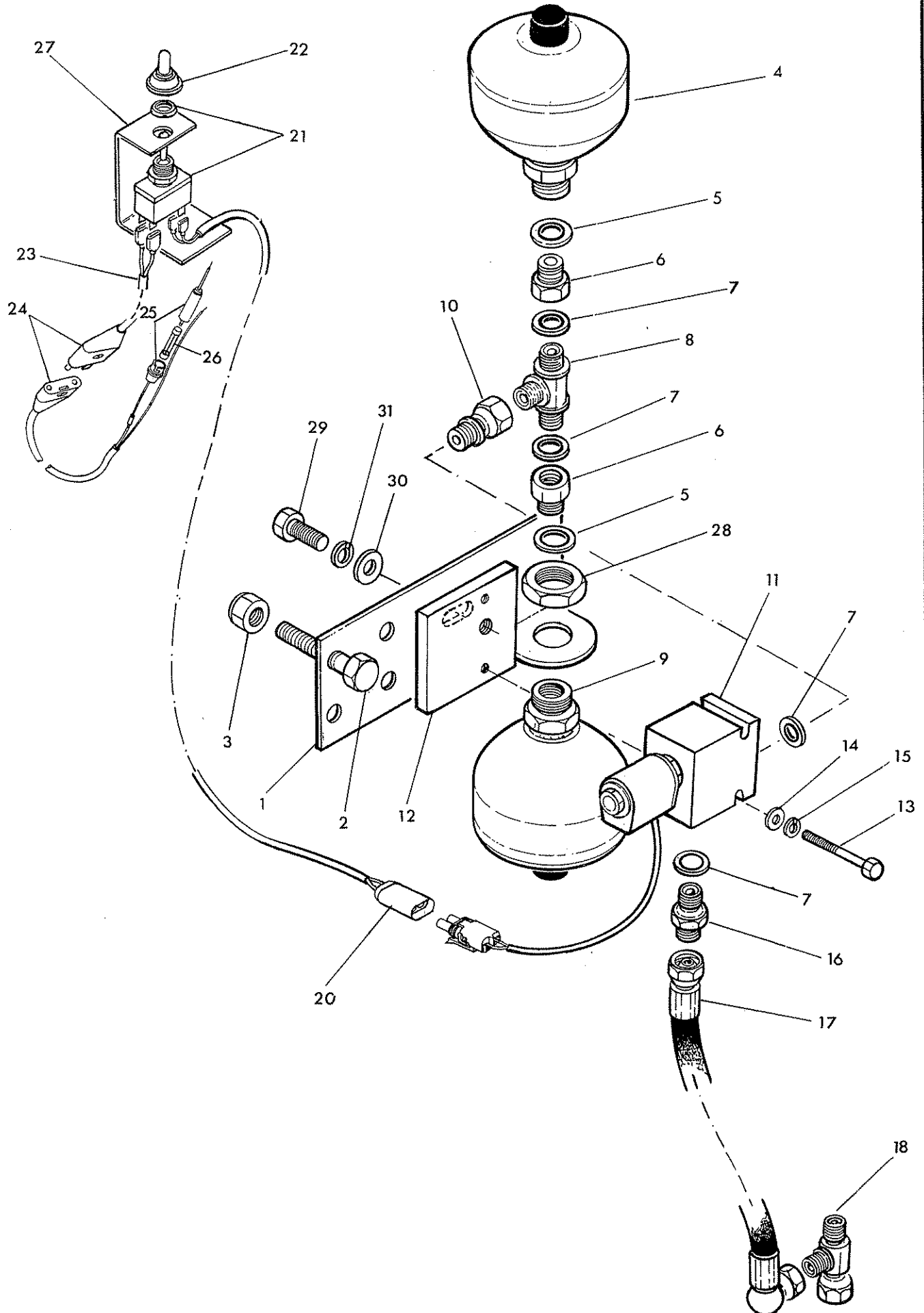
**LIFT FLOAT KIT-SINGLE ACCUMULATOR**

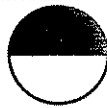
1	42254.01	1	Mounting plate
2	92 13 127	2	Bolt
3	91 43 007	2	Self locking nut
4	81 26 034	1	Accumulator
5	86 50 322	1	Bonded seal
6	85 81 284	1	Adaptor
7	86 50 103	3	Bonded seal
8	85 81 267	1	Tee
9	52091	1	Cap
10	85 81 178	1	Straight swivel adaptor
11	08.619.09	1	Solenoid valve
12	42254.02	1	Spacer plate
13	92 13 133	2	Bolt
14	91 00 103	2	Plain washer
15	91 00 203	2	Spring washer
16	60 00 113	1	Union
17	10.004.15	1	Hose 3/8 BSP x 750 long
18	11.008.69	1	Tee
19	84 02 208	1	Switch kit incl.
20	84 02 209	1	Cable with connector
21	84 02 091	1	Switch
22	84 02 024	1	Toggle cover
23	84 02 284	1	Supply harness incl.
24	84 02 062	1	Plug/socket
25	84 02 114	1	Fuse holder
26	84 02 037	1	Fuse - 10 amp
27	71 92 081	1	Switch mounting bracket
28	81 26 035	1	Thin bulkhead nut
29	93 13 055	1	Setscrew
30	91 00 105	1	Plain washer
31	91 00 205	1	Spring washer

# LIFT FLOAT KIT - twin bottle



# McCONEL





REF	PART NO.	QTY	DESCRIPTION
-----	----------	-----	-------------

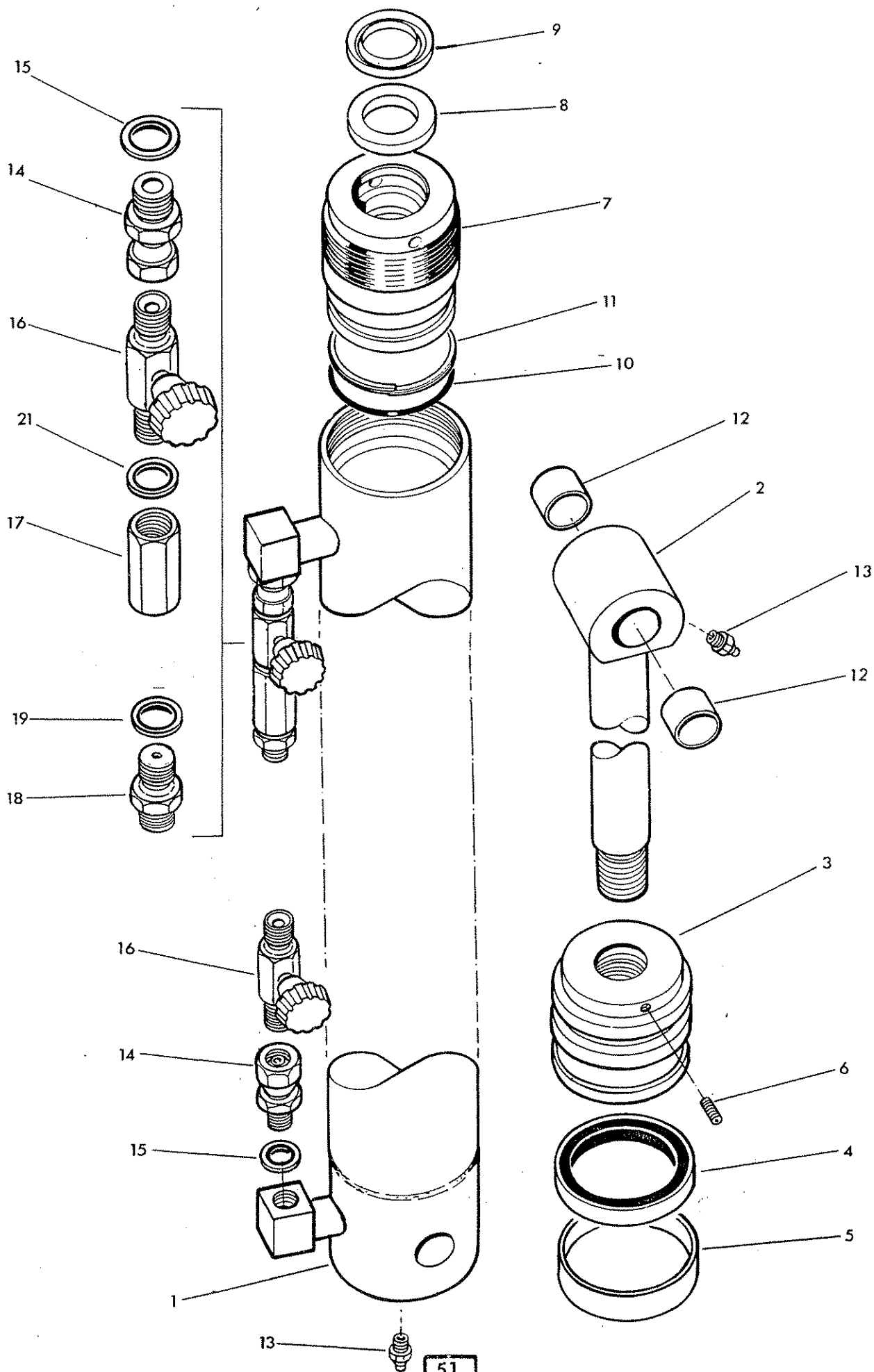
**LIFT FLOAT KIT - TWIN ACCUMULATOR**

1	42254.01	1	Mounting plate
2	92 13 127	2	Bolt
3	91 43 007	2	Self locking nut
4	81 26 044	1	Accumulator
5	86 50 322	2	Bonded seal
6	85 81 284	2	Adaptor
7	86 50 103	4	Bonded seal
8	85 81 267	1	Tee
9	81 26 045	1	Accumulator
10	85 81 178	1	Straight swivel adaptor
11	08.619.09	1	Solenoid valve
12	42254.02	1	Spacer plate
13	92 13 133	2	Bolt
14	91 00 103	2	Plain washer
15	91 00 203	2	Spring washer
16	60 00 113	1	Union
17	10.004.15	1	Hose 3/8 BSP x 750 long
18	11.008.69	1	Tee
19	84 02 208	1	Switch kit incl.
20	84 02 209	1	Cable with connector
21	84 02 091	1	Switch
22	84 02 024	1	Toggle cover
23	84 02 284	1	Supply harness incl.
24	84 02 062	1	Plug/socket
25	84 02 114	1	Fuse holder
26	84 02 037	1	Fuse - 10 amp
27	71 92 081	1	Switch mounting bracket
28	81 26 035	1	Thin bulkhead nut
29	93 13 055	1	Setscrew
30	91 00 105	1	Plain washer
31	91 00 205	1	Spring washer

# LIFT RAM



# McCOMEL



**McCONEL**

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
14	85 81 285	2	Straight swivel adaptor
15	86 50 104	2	Bonded seal
16	81 30 109	2	Tap
17	85 81 225	1	Restrictor housing
18	60 01 229	1	Restrictor union
19	86 50 103	2	Bonded seal

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

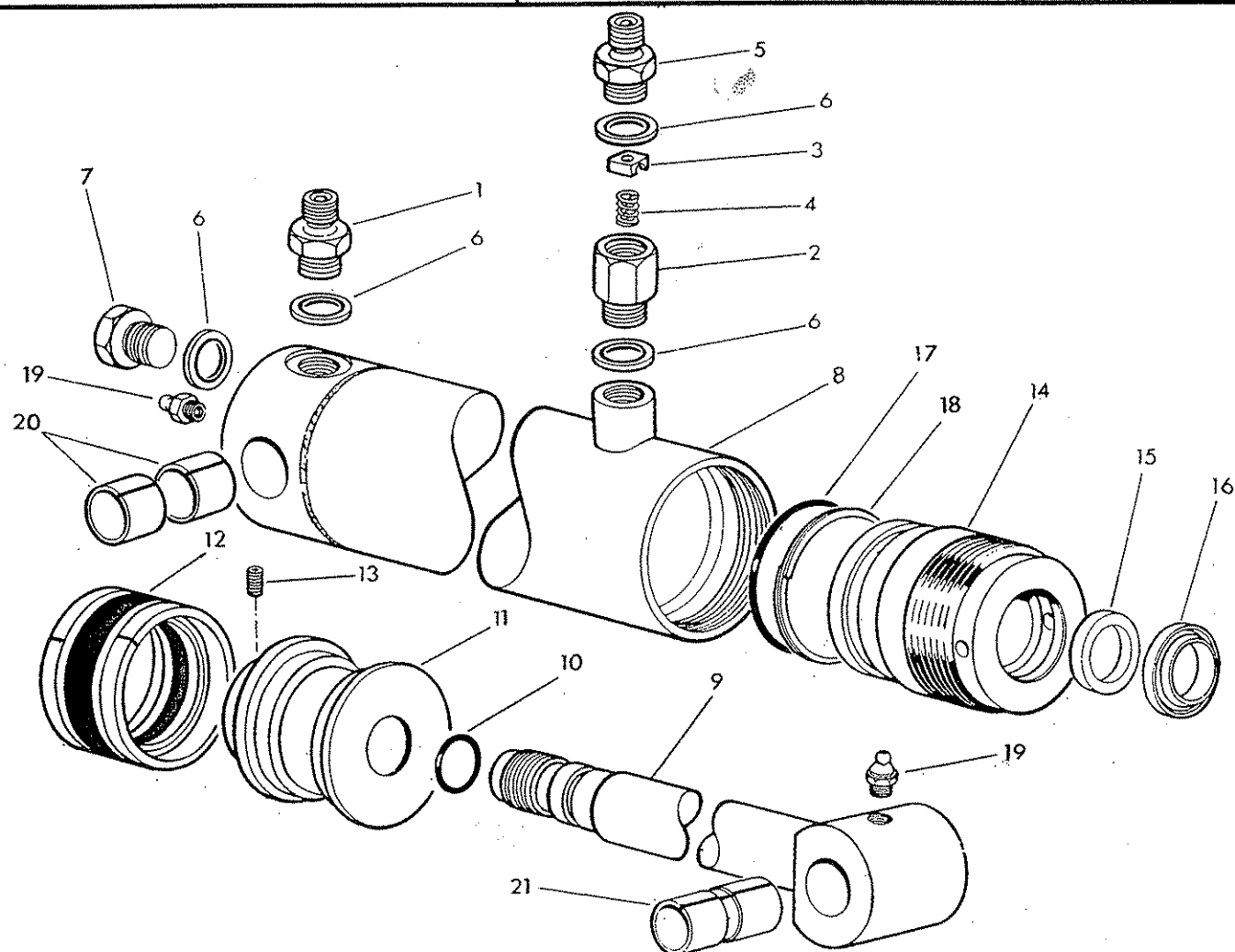
\* Assembly note :- Screw item 6 firmly home and centre punch edge of hole to retain.



# SLEW RAM ASSEMBLY



# McCONEL



Ref.	Part No.	Qty.	Description
	<b>75-60-346</b>		<b>SLEW RAM ASSEMBLY</b>
1	85-81-115	1	Adaptor
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
6	86-50-103	4	Bonded seal
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
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
20	71-01-134	2	Bush - cylinder
21	60-12-032	2	Bush - rod
	<b>86-99-187</b>		<b>SEAL KIT</b>

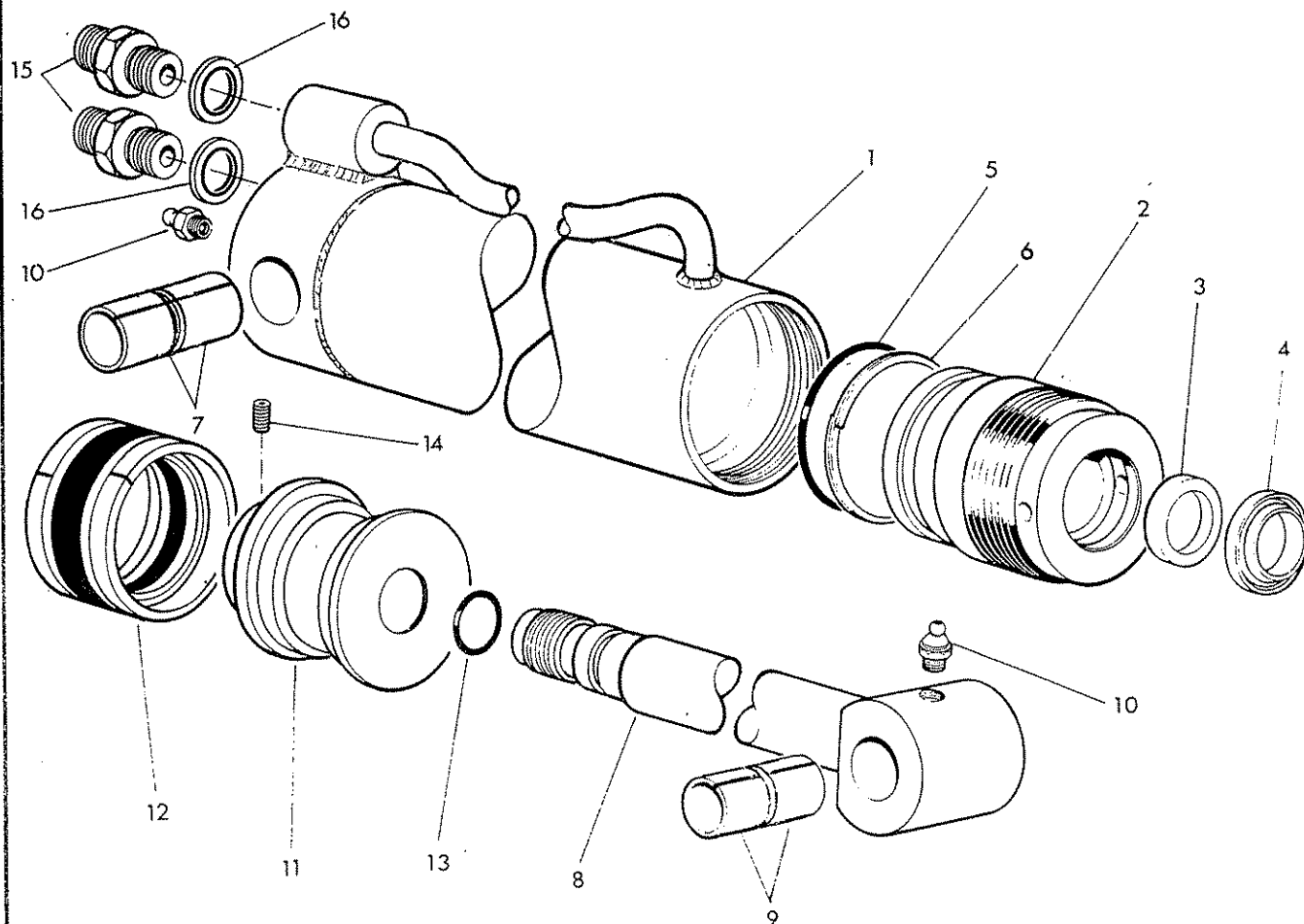
## \* Assembly note

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

# REACH RAM



# McCONEL

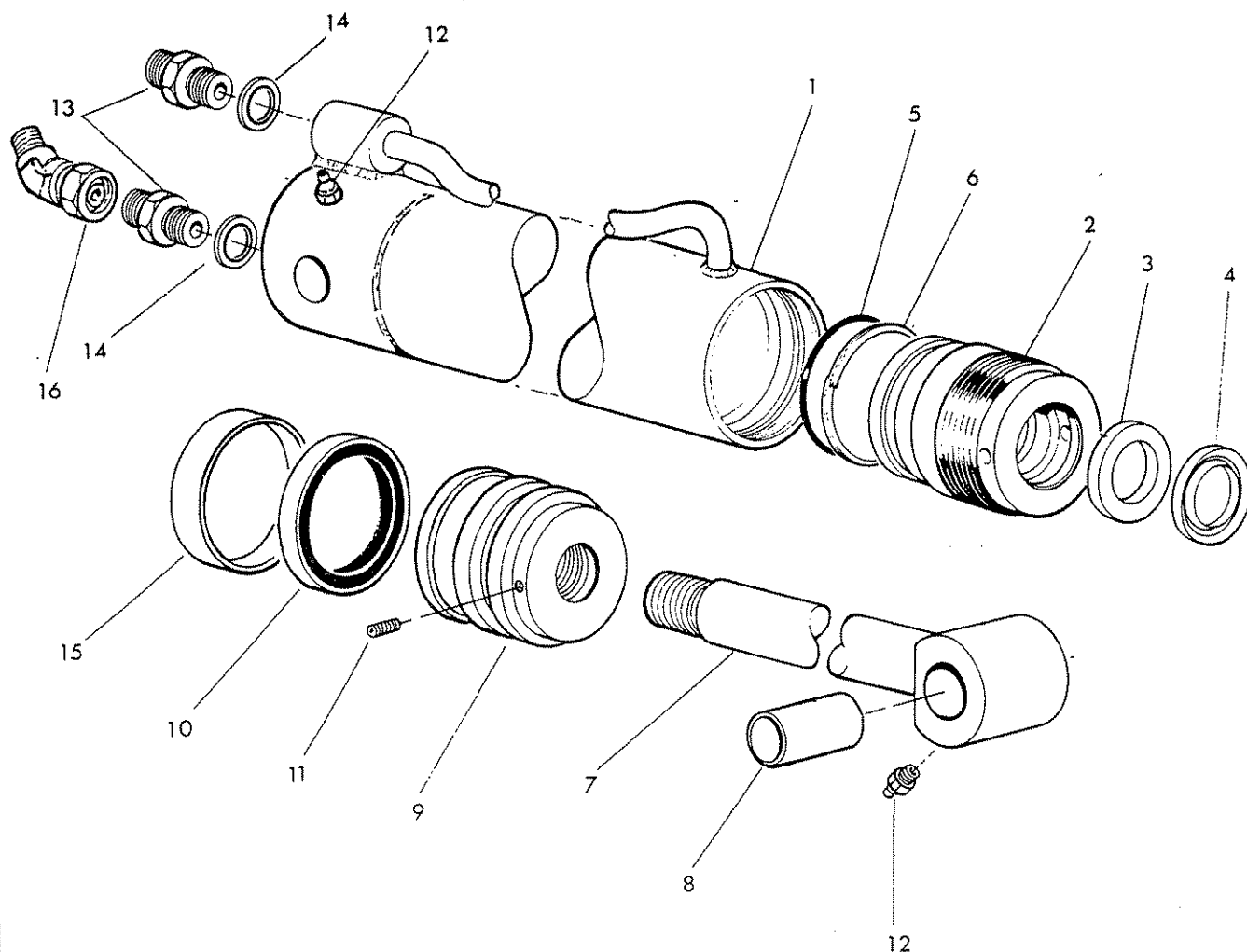


REF	PART NO.	QTY	DESCRIPTION
	<b>42095.04</b>		<b>REACH RAM ASSEMBLY</b>
	42095.03	1	Reach ram compr:-
1	42095.36	1	Barrel
2	42095.35	1	Gland housing
3	86 29 164	1	Gland seal
4	86 29 147	1	Rod wiper
5	86 00 742	1	'O' ring
6	86 09 742	1	Anti extrusion ring
7	71 01 134	2	Bush
8	71 36 333	1	Rod
9	60 12 032	2	Bush
10	09 01 121	2	Greaser
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
15	60 00 113	2	Union
16	86 50 103	2	Bonded seal
	<b>86 99.249</b>		<b>SEAL KIT</b>

# ANGLE RAM



# McCONEL

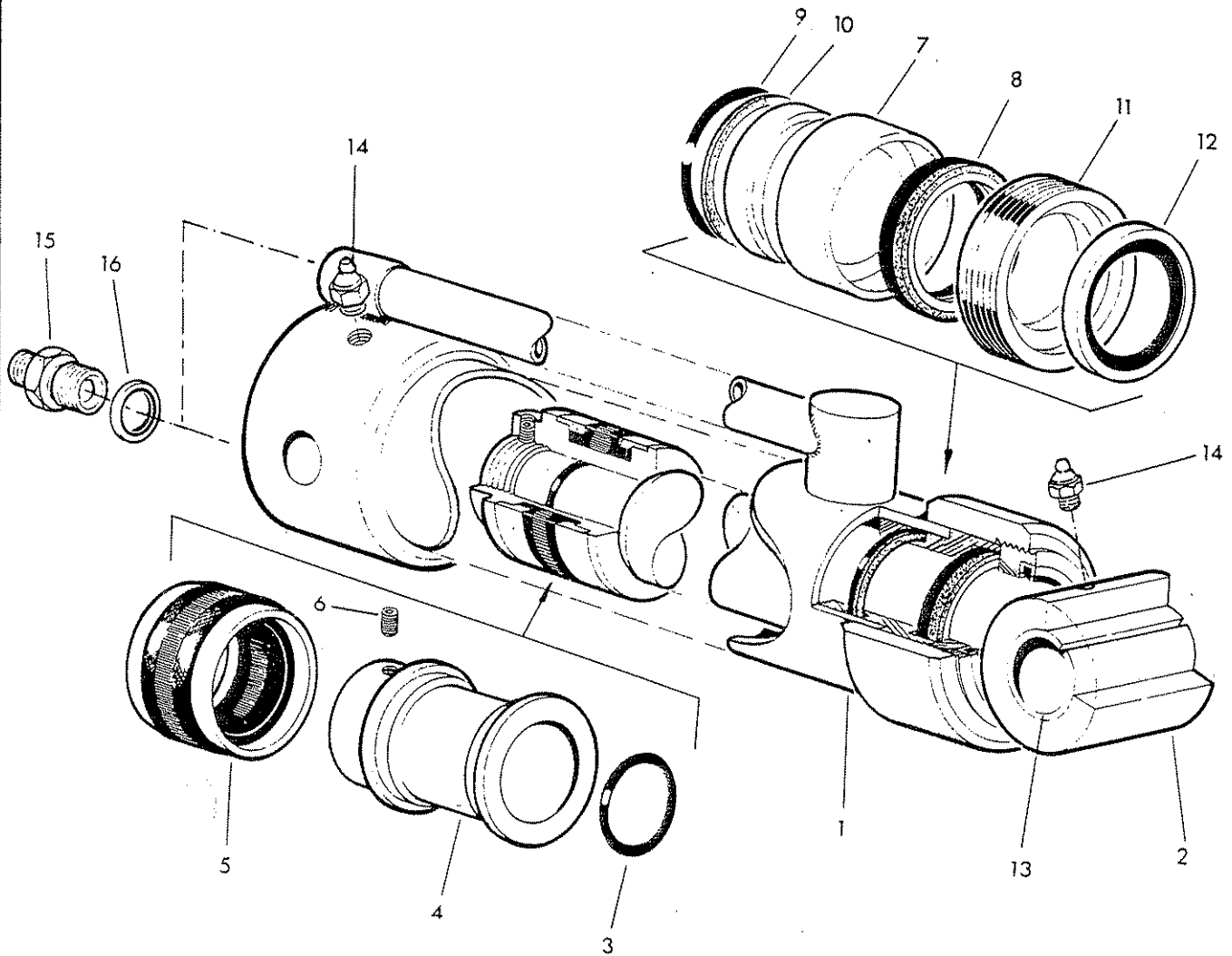


REF	PART NO.	QTY	DESCRIPTION
<b>76 50 255</b>			<b>ANGLE RAM ASSEMBLY</b>
1	76 50 298	1	Ram barrel
2	11 86 512	1	Gland housing
3	86 29 164	1	Gland seal
4	86 29 147	1	Piston rod wiper seal
5	86 00 306	1	'O' ring
6	86 09 306	1	Anti extrusion ring
7	71 91 307	1	Piston rod
8	71 05 050	1	Bush
9	71 20 368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

# BREAKAWAY RAM - Midcut only



# McCONEL

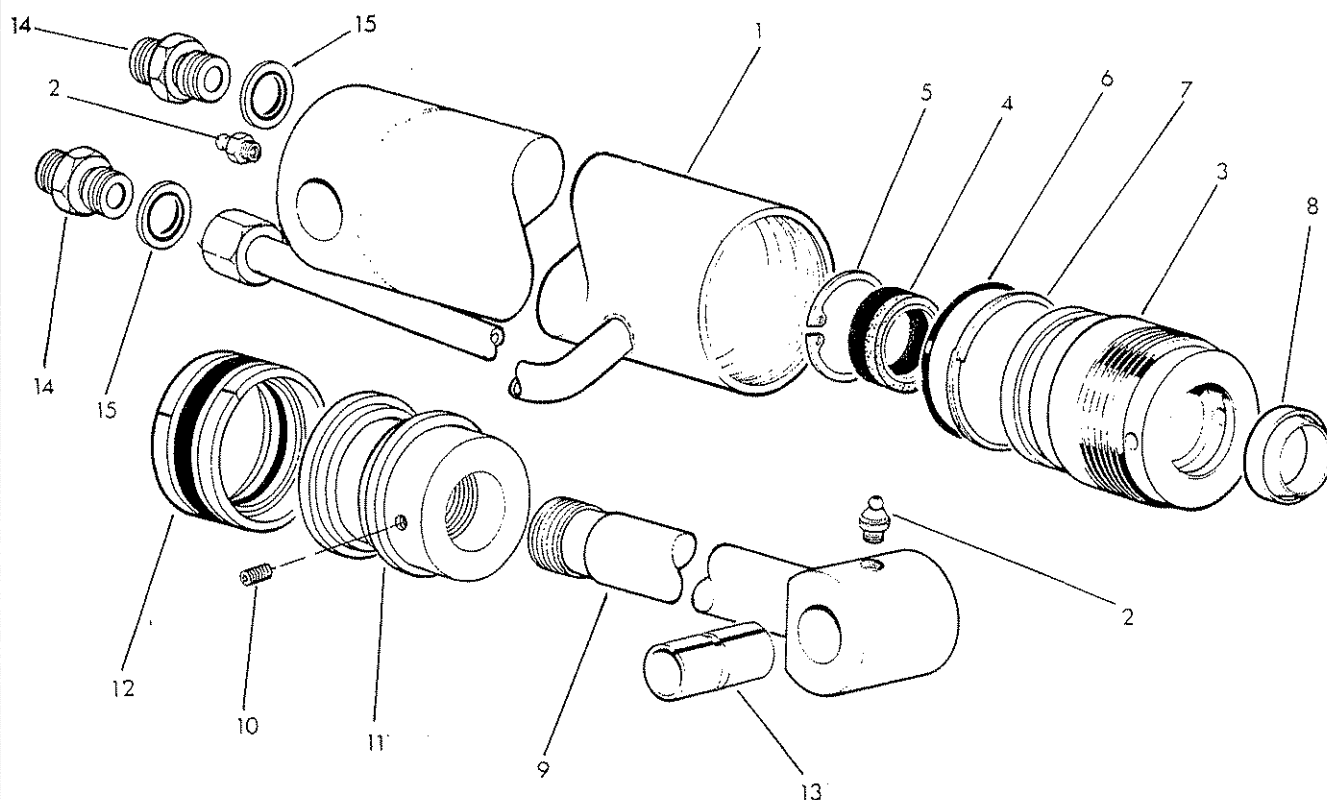


REF	PART NO.	QTY	DESCRIPTION
	<b>75 50 288</b>		<b>BREAKAWAY RAM (M only)</b>
1	72 12 272	1	Ram cylinder
2	72 14 004	1	Piston rod
3	86 00 119	1	O ring
4	71 01 165	1	Piston
5	86 36 131	1	Piston seal
6	93 00 110	1	Grub screw
7	71 01 099	1	Gland seal housing
8	86 22 127	1	Gland seal
9	86 00 304	1	O ring
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
	<b>86 99 102</b>		<b>RAM SEAL KIT</b>

# TELE RAM



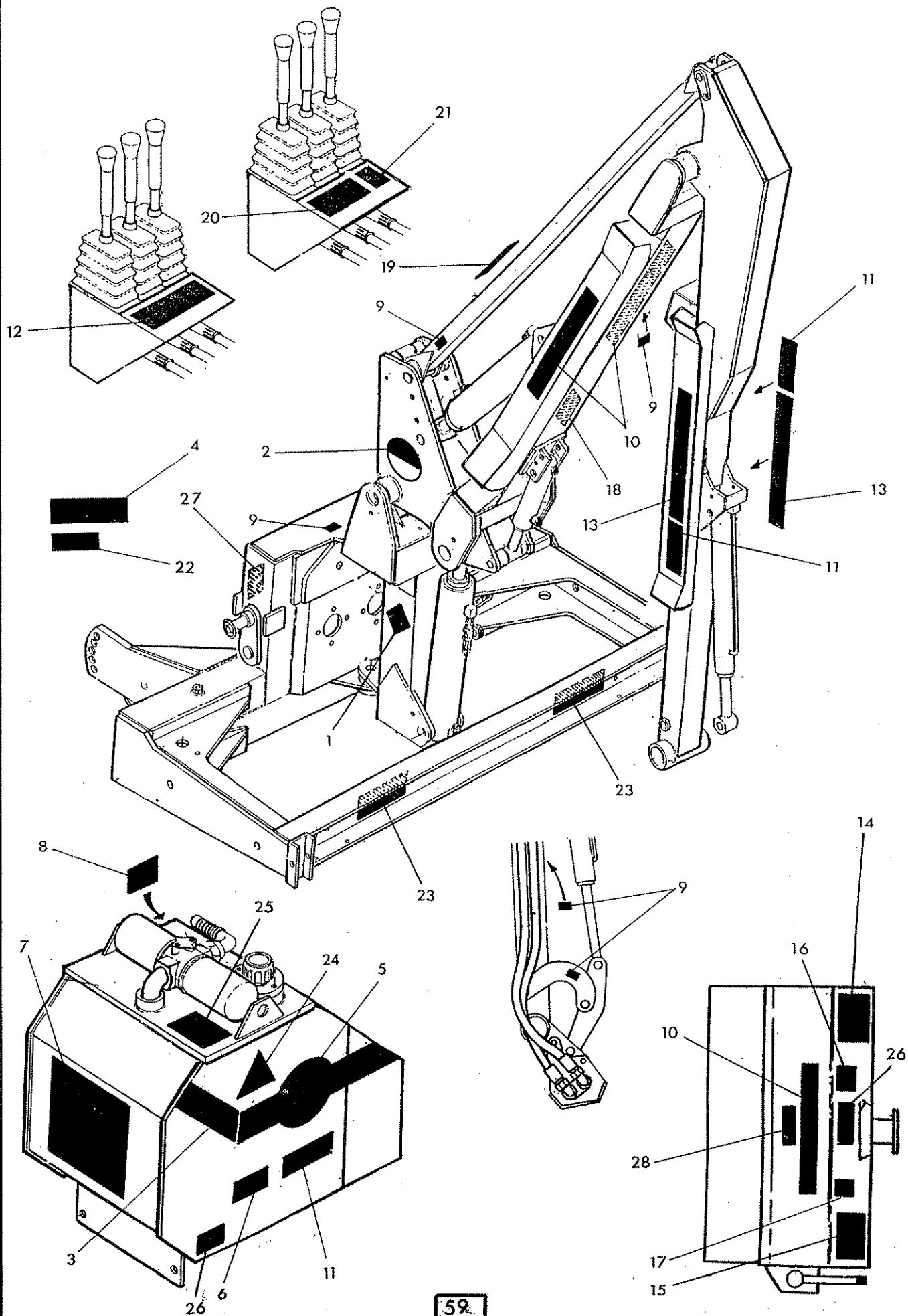
# McCONEL



REF	PART NO.	QTY	DESCRIPTION
	<b>71 36 275</b>		<b>TELE RAM ASSEMBLY</b>
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
	<b>86 99 188</b>		<b>SEAL KIT</b>



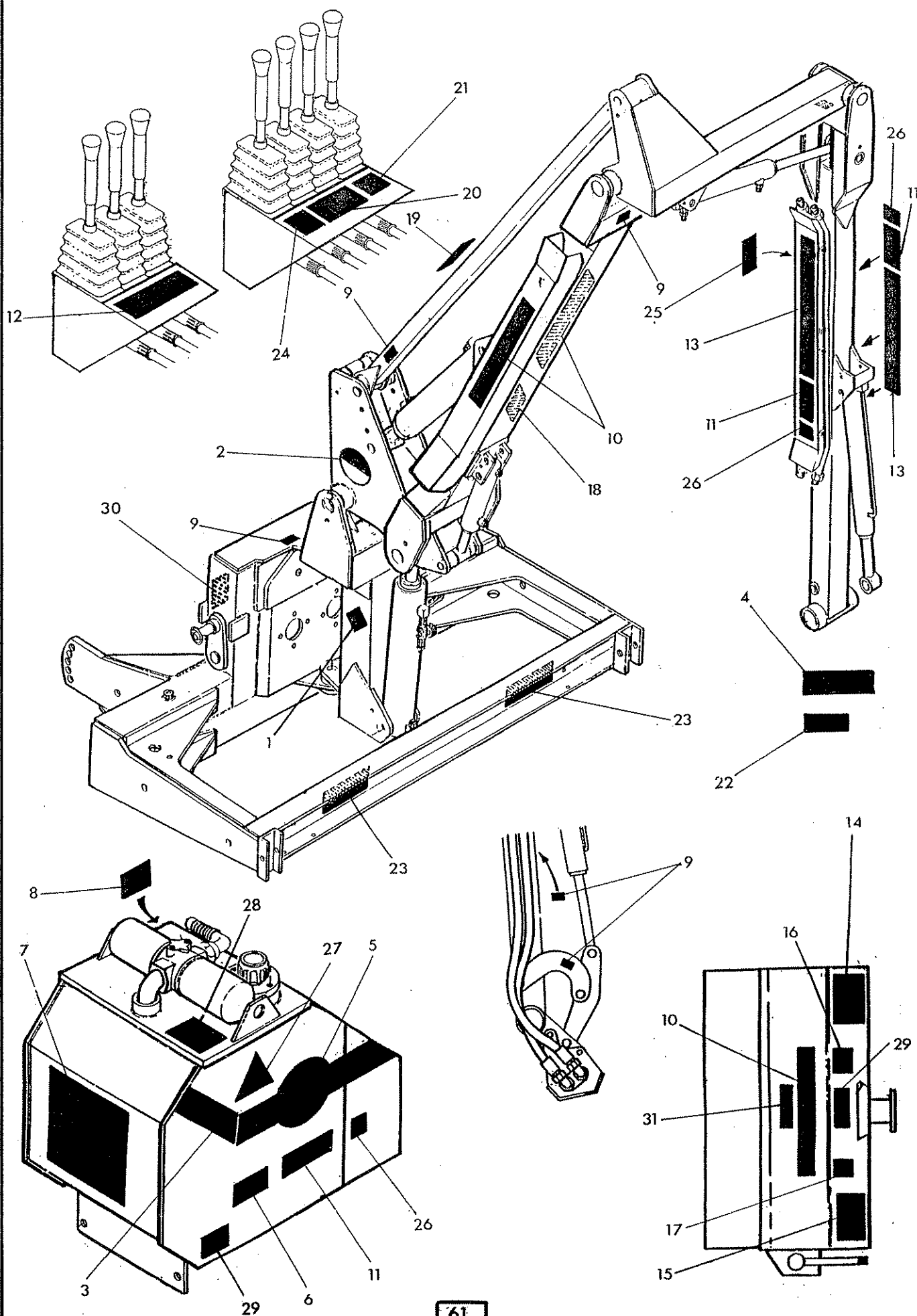
**McCONEL**

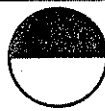


**McCONNEL**

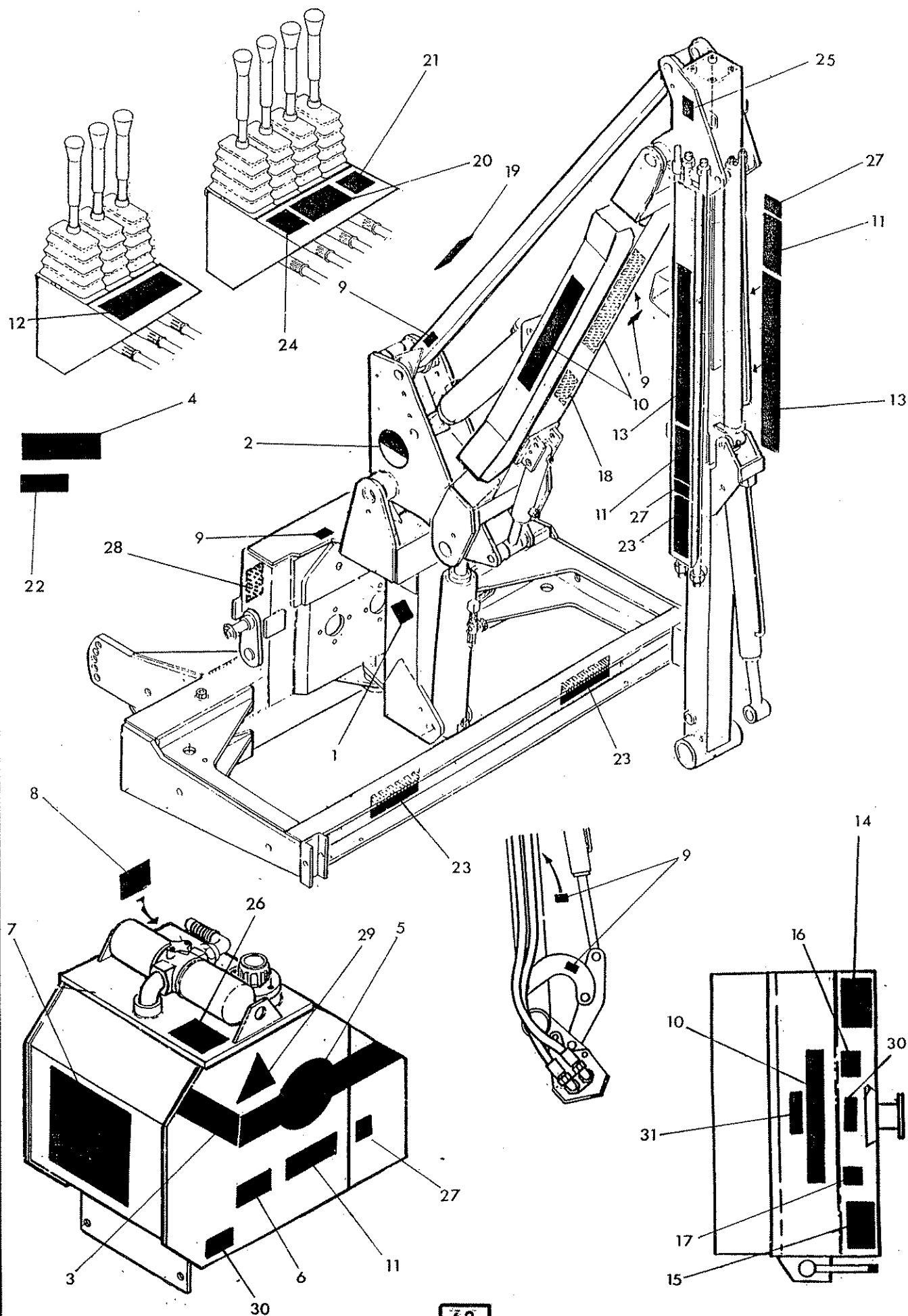
REF	PART NO.	QTY	DESCRIPTION
<b>STICKERS PA5000</b>			
1	71 05 130	1	Read book first
2	12 90 296	1	Logo roundel
3	12 90 454	1	Tank stripe
4	12 90 352	1	Gen. warning - despatched loose
5	12 90 455	1	Fairing stripe/roundel
6	12 90 453	1	PA
7	12 90 391	1	General warning
8	00756494	1	Fitting P.T.O. shaft
9	00962764	5	Pinch point
10	12 90 255	3	McConnel
11	12 90 479	3	5000
12	12 90 368	1	Lever controls -lift, reach and angle
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 90 357	1	Lever control -slew/auto reset
21	12 90 338	1	R.C. valve controls
22	84 02 138	1	Slew warning - loose - in cab
23	12 90 347	2	Chevrons
24	12 90 346	1	Warning triangle
25	12 90 477	1	Greasing
26	12 90 491	2	65 hp
27	09-811-03	1	500 rpm
28	71 14 481	1	Keep bolts tight.





**McCONNEL**

REF	PART NO.	QTY	DESCRIPTION
<b>STICKERS PA5000M</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 90 352	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 90 368	1	Lever controls -lift, reach and angle
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 90 357	1	Lever control -slew/auto reset
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 90 084	1	Midcut control
25	09.821.11	1	Cab clearance
26	12 90 059	1	M
27	12 90 346	1	Warning triangle
28	12 90 477	1	Greasing
29	12 90 491	2	65 hp
30	09.811.03	1	500 rpm
31	71 14 481	1	Keep bolts tight.

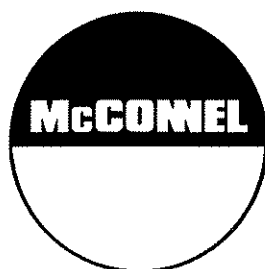


**McCONNEL**

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 90 368	1	Lever controls -lift,reach and angle
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 90 357	1	Lever control -slew/auto reset
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	12 90 060	1	Lever control - Tele
25	12 90 005	1	Grease socket
26	12 90 477	1	Greasing
27	12 90 057	3	T
28	09-811-03	1	500 rpm
29	12 90 346	1	Warning triangle
30	12 90 491	2	65 hp
31	71 14 481	1	Keep bolts tight.



McConnel Limited, Temeside Works, Ludlow, Shropshire SY8 1JL. England.  
Telephone: 01584 873131. Facsimile: 01584 876463. [www.mcconnel.com](http://www.mcconnel.com)