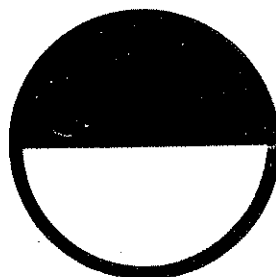
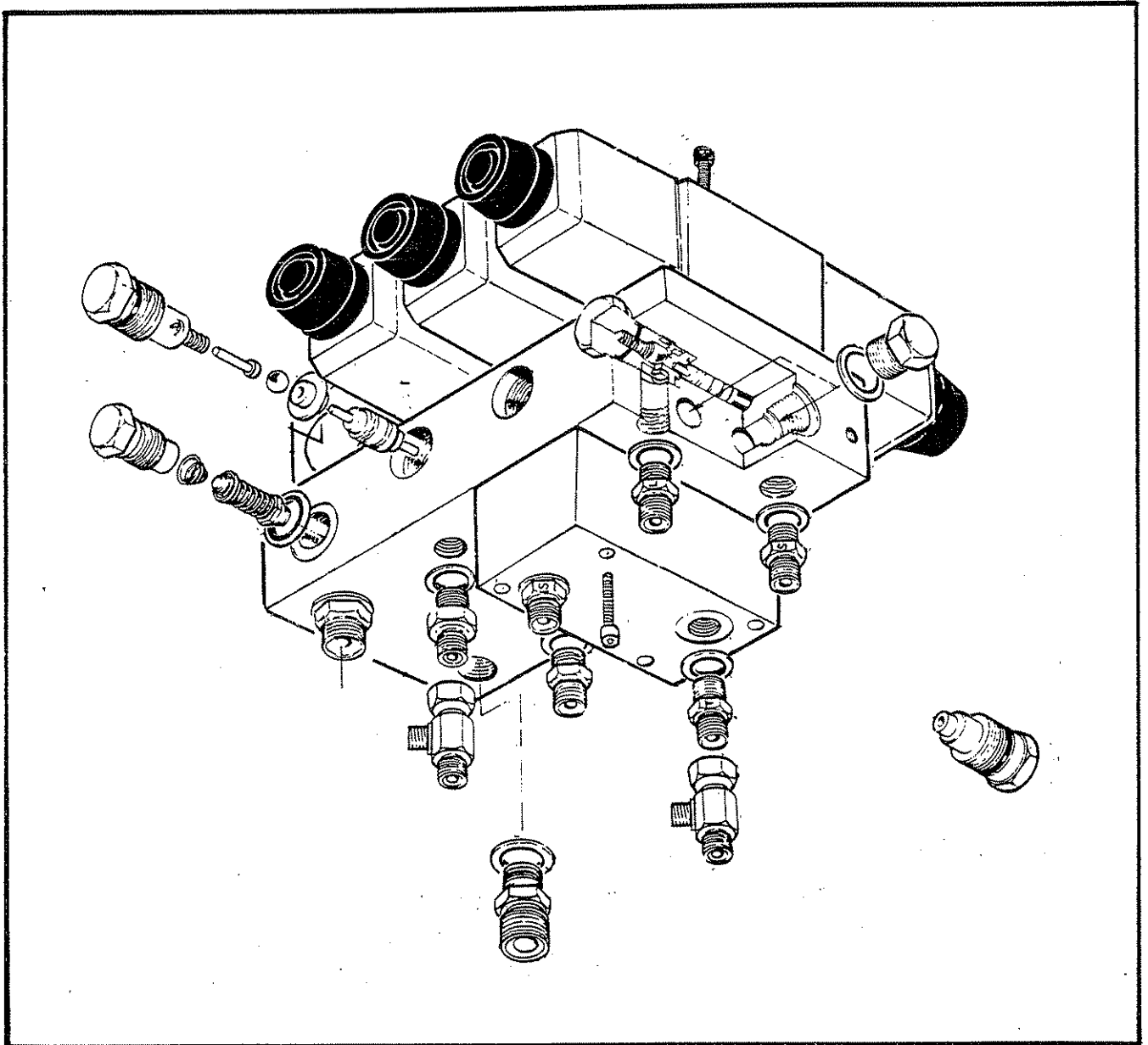


PA 470 E

Spare parts



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SPARE PARTS MANUAL

FOR BEST PERFORMANCE....

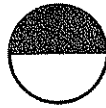
USE ONLY McCONNEL SPARE PARTS

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.

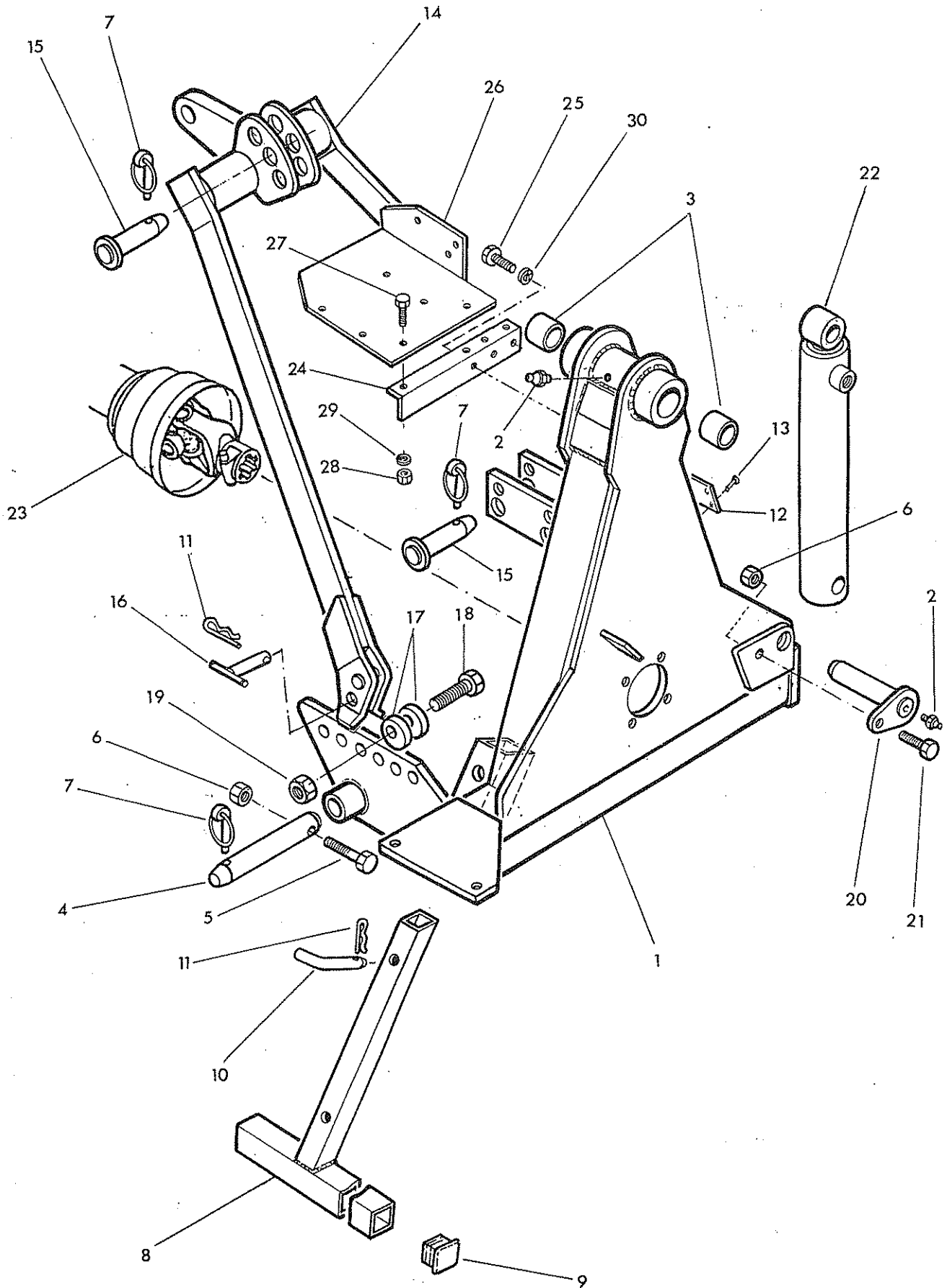
Always quote machine type and serial number as well as the part number.

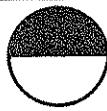
Design improvement may have altered some of the parts listed in this manual - The latest part will always be supplied when it is interchangeable with an earlier one.

MAIN FRAME & STABILISER



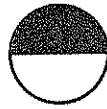
McCormick



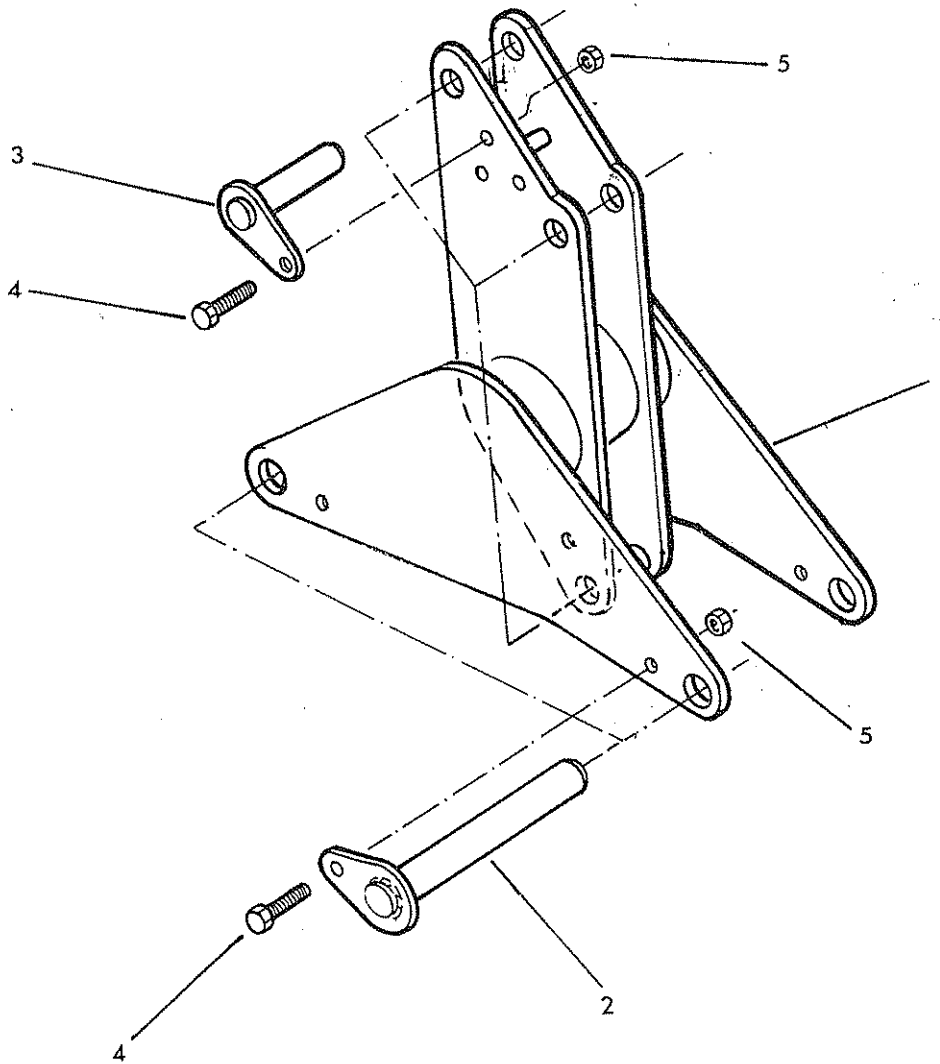


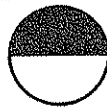
Ref. Part No.	Qty.	Description
MAINFRAME AND STABILISER		
1	41860.01	1 Mainframe L.Hand - not illus
	41860.02	1 Mainframe R.Hand
2	09 01 121	2 Greaser 1/8 BSP
3	72 13 023	2 Bush
4	41899.01	2 Linkage pin
5	92 13 125	2 Bolt M10 x 60
6	91 43 005	3 Self locking nut M10
7	04 31 217	4 Linch pin
8	71 98 046	1 Stand leg - L.Hand - not illus
	71 98 016	1 Stand leg - R.Hand
9	71 91 108	2 Bung
10	71 92 023	2 Leg pin
11	04 31 105	4 Spring cotter
12	13 35 246	1 Serial No. plate
13	71 03 230	4 Pop rivet 1/8 dia
14	41915.01	1 Stabiliser
15	71 18 112	2 Top link pin
16	71 92 027	2 Stabiliser pin
17	71 92 080	4 Eccentric collar
18	92 13 148	2 Bolt M20 x 70
19	91 43 008	2 Self locking nut M20
20	41692.03	1 Pivot pin - lift ram base
21	93 13 065	1 Setscrew M10 x 30
22	71 98 375	1 Lift ram assembly
23	71 14 289	1 P.T.O. shaft
24	71 91 076	1 Valve mounting bracket
25	92 13 055	2 Bolt M10 x 25
26	71 91 079	1 Valve mounting plate
27	93 13 044	2 Setscrew M8 x 20
28	91 13 004	2 Nut M8
29	91 00 204	2 Spring washer dia 8
30	91 00 205	2 Spring washer dia 10

ROCKER



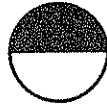
McCOMEL



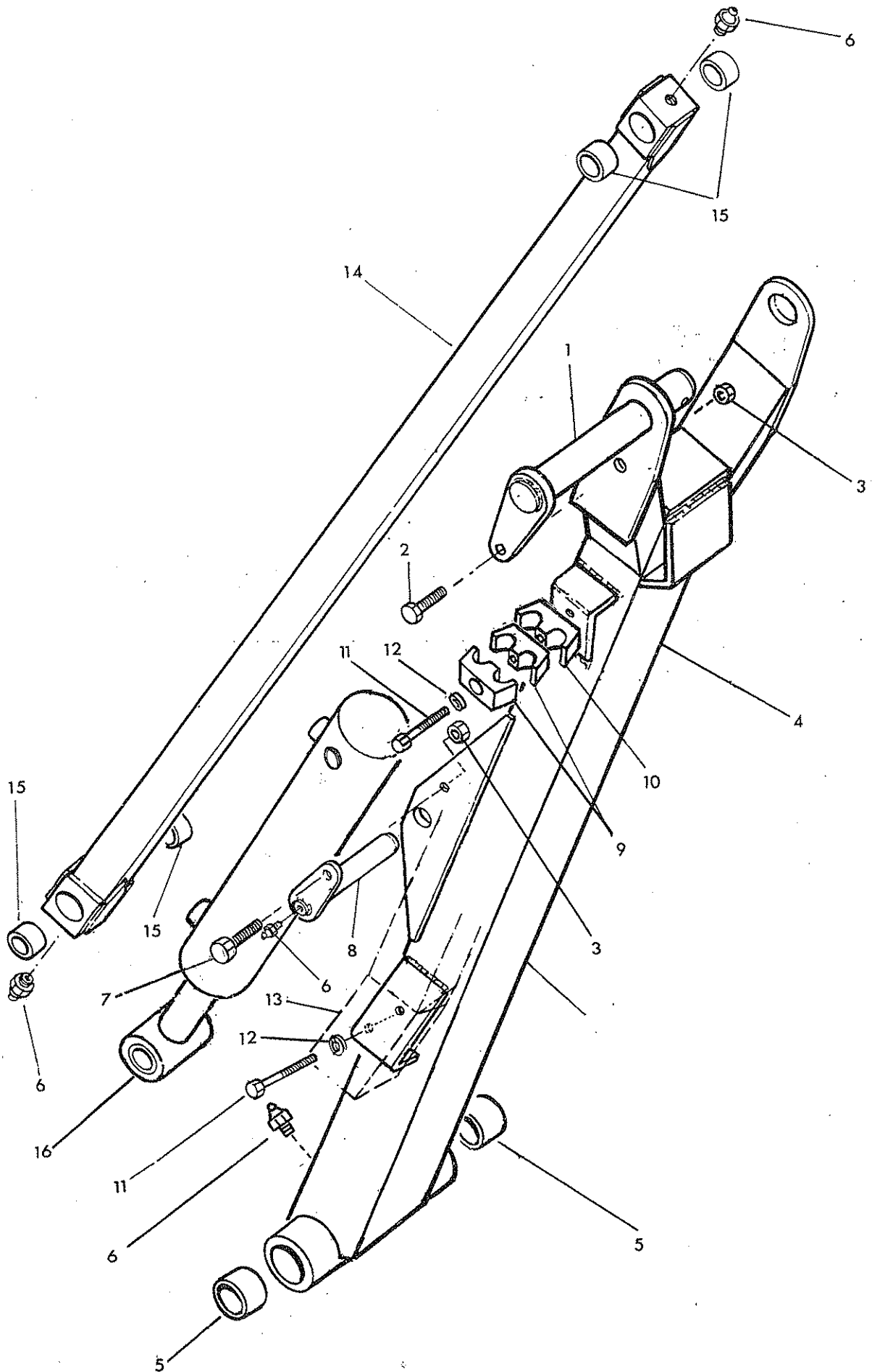


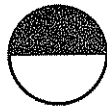
Ref. Part No.	Qty.	Description
		ROCKER
1 41861.01	1	Rocker
2 71 91 033	2	Pivot pin main arm & rocker
3 41692.02	3	Pivot pin lift ram, reach ram & tension link
4 92 13 065	5	Bolt M10 x 30
5 91 43 005	5	Self locking nut M10

MAIN ARM



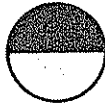
MCCORMICK



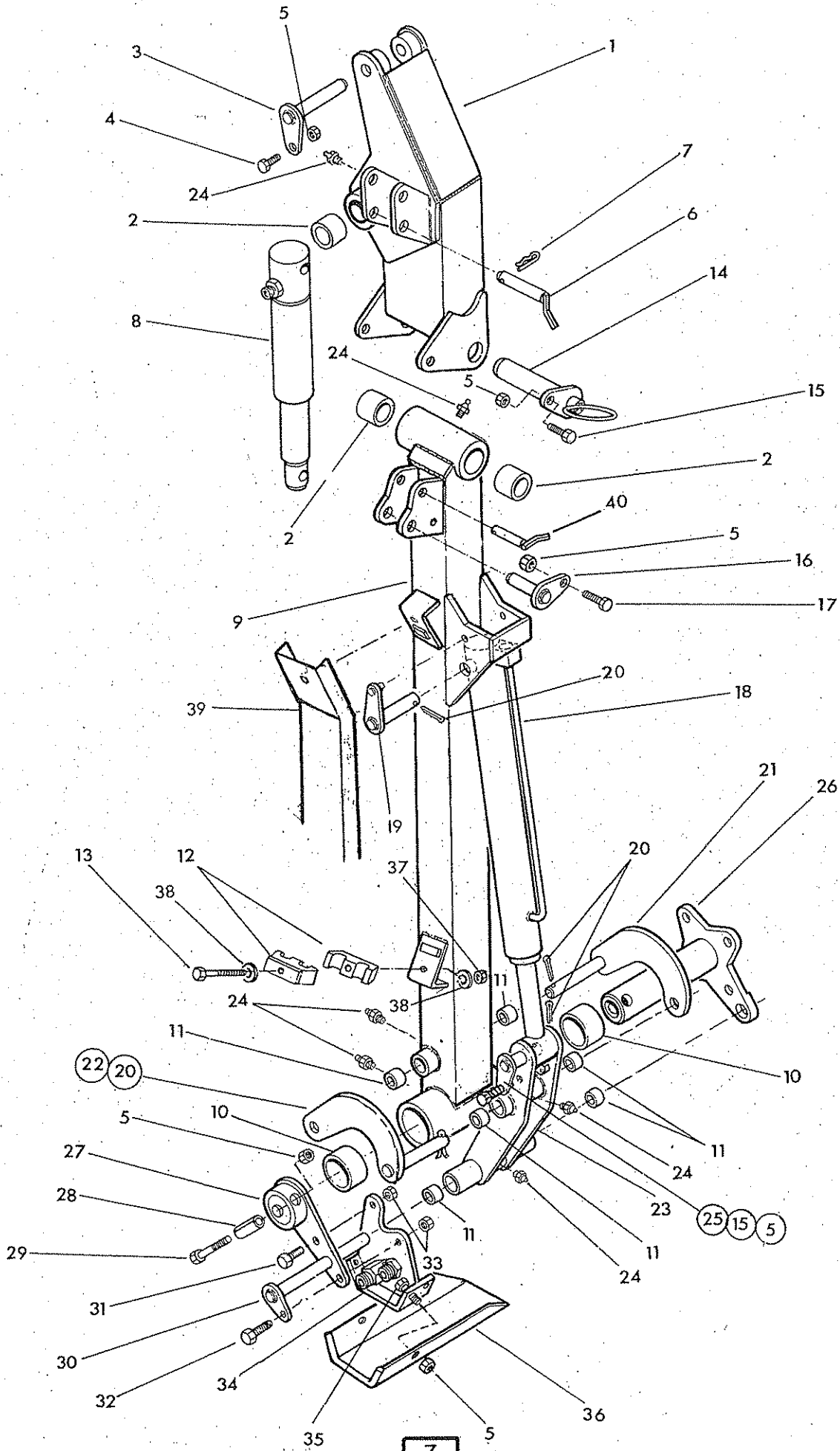


Ref.	Part No.	Qty.	Description
MAIN ARM AND TENSION LINK			
1	71 91 033	1	Pivot pin -dipper arm
2	92 13 075	1	Bolt M10 x 35
3	91 43 005	2	Self locking nut M10
4	41862.01	1	Main arm L.Hand - not illus
	41862.02	1	Main arm R.Hand
5	72 13 023	2	Bush
6	09 01 121	4	Greaser 1/8 BSP - straight
7	93 13 075	2	Setscrew M10 x 35
8	41692.03	1	Pivot pin - reach base
9	71 90 148	2	Hose clamp
10	71 93 065	1	Hose clamp
11	92 13 205	2	Bolt M10 x .100
12	91 00 105	2	Plain washer dia 10
13	71 98 341	1	Hose cover
14	41662.03	1	Tension link
15	60 12 032	4	Bush
16	71 98 376	1	Reach ram assembly

DIPPER ARM



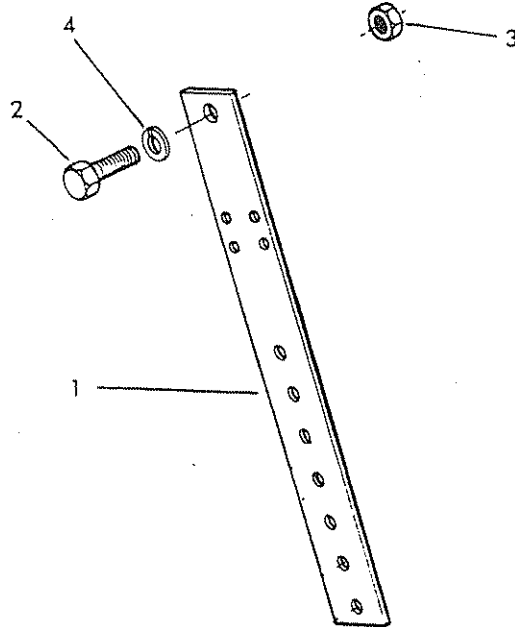
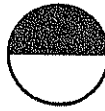
WAGNER



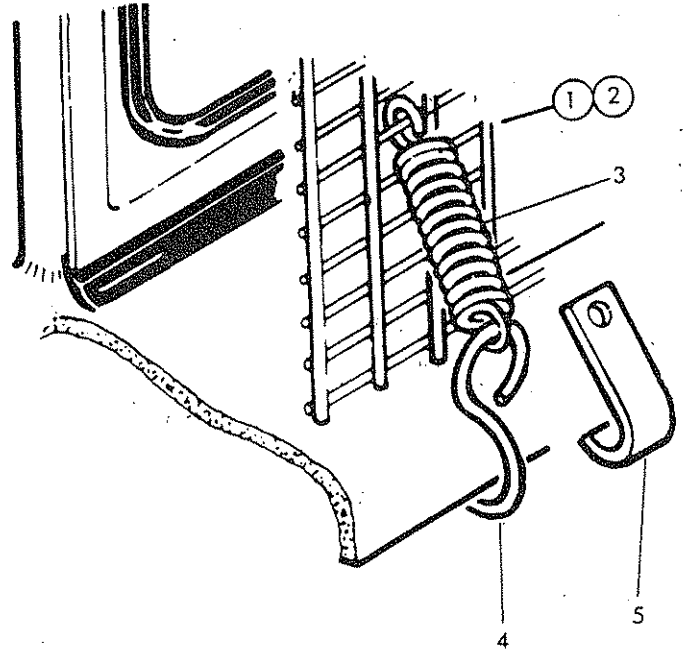
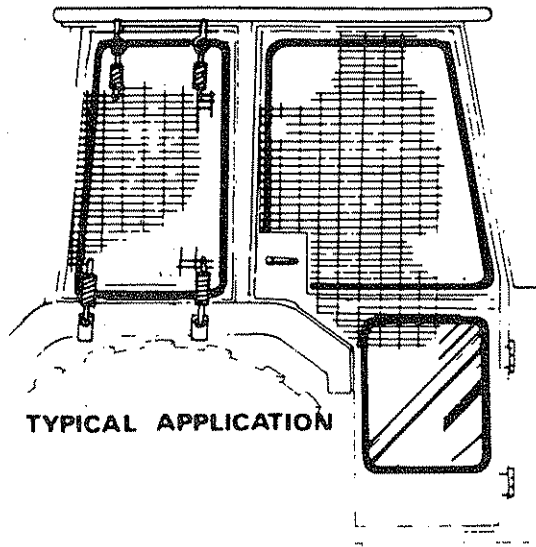
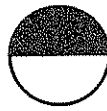
Ref. Part No. Qty. Description

DIPPER ARM AND ANGLING MECHANISM

1	41869.01	1	Dipper arm upper -L.Hand -not illus
	41869.02	1	Dipper arm upper -R.Hand
2	72 13 023	4	Bush
3	41692.04	1	Pivot pin - Tension link
4	93 13 055	2	Setscrew M10 x 25
5	91 43 005	8	Self locking nut
6	71 91 036	1	Pivot pin - B/away ram base
7	04 31 105	2	Spring cotter
8	71 98 357	1	Breakaway ram
9	41870.01	1	Dipper arm lower -L.Hand -not illus
	41870.02	1	Dipper arm lower -R.Hand
10	71 36 035	2	Bush
11	41690.01	6	Bush
12	71 98 077	2	Hose clamp
13	92 13 114	2	Bolt M8 x 55
14	71 98 015	1	Pivot pin - Dipper lower
15	93 13 075	2	Setscrew M10 x 35
16	71 91 037	1	Pivot pin - B/away ram rod
17	93 13 065	1	Setscrew M10 x 30
18	75 60 344	1	Angle ram
19	71 92 024	1	Pivot pin - Angle ram base
20	95 01 406	4	Split pin
21	74 50 251	1	Radius arm
22	74 50 250	1	Radius arm
23	71 92 309	1	Slave link
24	09 01 121	6	Greaser 1/8" BSP straight
25	41693.01	1	Pivot pin Angle ram rod
26	71 92 308	1	Head pivot tube
27	71 92 316	1	Jaw plate
28	04 23 548	1	Spring dowel
29	92 13 185	1	Bolt M10 x 90
30	71 92 009	1	Pivot pin - slave link
31	02 11 126	1	Bolt 5/8" UNF X 1 1/2" long
32	02 11 146	1	Bolt 5/8" UNF X 1 3/4" long
33	01 46 006	2	Self locking nut 5/8" UNF
34	71 92 321	1	Hose junction bracket
35	93 13 045	2	Setscrew M10 x 20
36	71 98 333	1	Hose tray
37	91 13 004	2	Self locking nut M8
38	91 00 104	4	Plain washer dia 8
39	71 98 335	1	Hose cover
40	71 98 363	1	Transport lock pin



Ref.	Part No.	Qty.	Description
	71-09-319		CONTROL MOUNTING ASSEMBLY
1	71-09-146	1	Pillar including
2	93-11-086	1	Setscrew
3	01-11-006	1	Nut
4	01-00-206	1	Spring washer

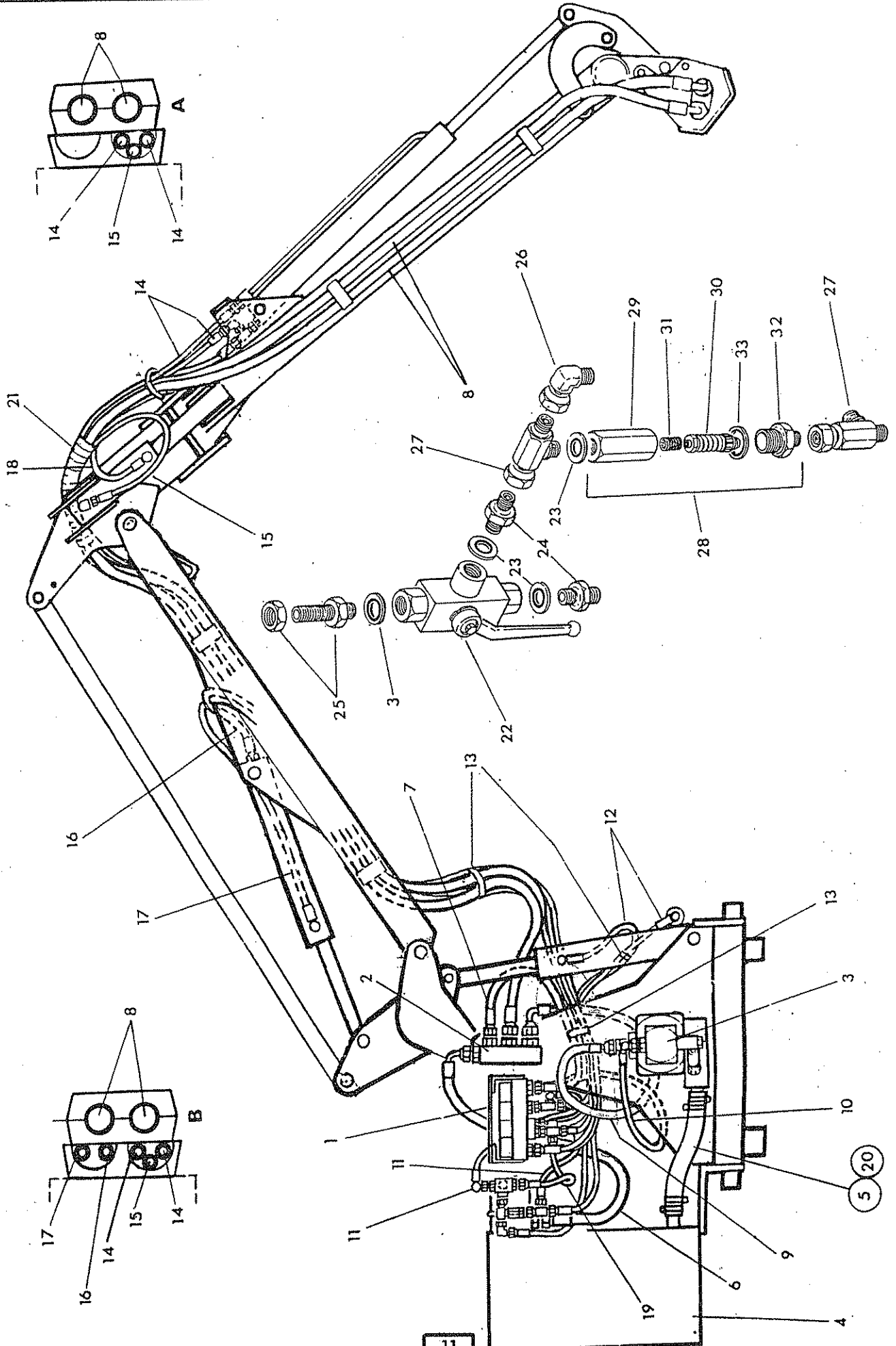


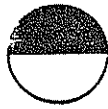
Ref. Part No.	Qty.	Description
73-13-324		CAB GUARD KIT
1 73-13-049	1	Guard panel - large
2 73-13-050	1	Guard panel - small
3 60-01-064	12	Spring
4 60-01-065	6	Hook
5 73-13-051	6	Hook

HOSE INSTALLATION



WAGNER



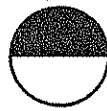
**McCORMICK**

Ref. Part No. Qty. Description

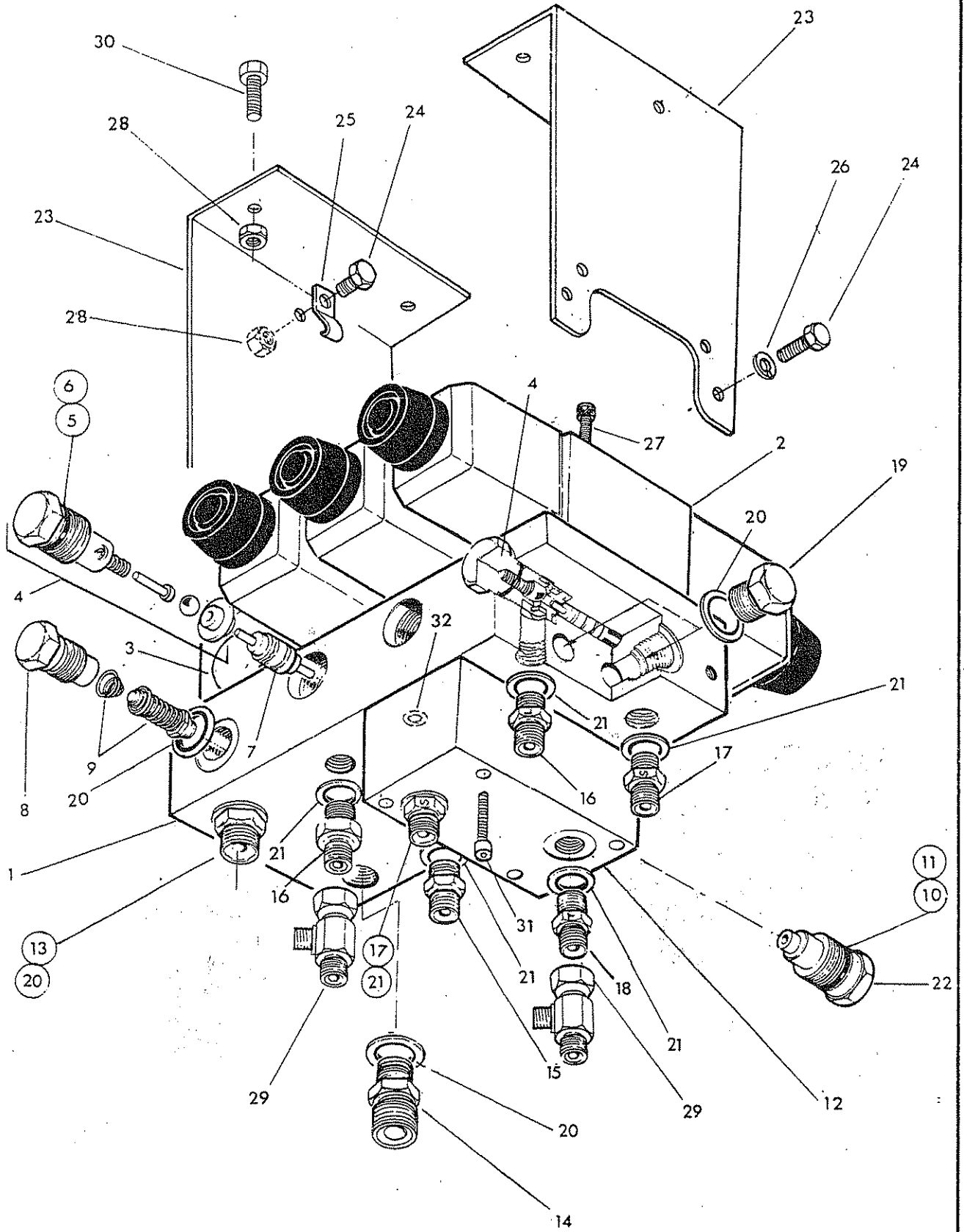
**HYDRAULIC INSTALLATION - T.I.
MACHINES**

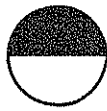
1		1	Control valve
2		1	Rotor control valve
3		1	Pump/gearbox
4		1	Tank
5	85 01 192	1	Hose x 27" long -suction 1 1/2" bore
6	85 01 142	1	Hose 1" BSP x 58" long return to tank
7	85.13 074	1	Hose 1/2 BSP x 46" long control valve to rotor control valve
8	85.38 065	2	Hose 3/4" BSP x 203" long-flail motor
9	85 38 115	1	Hose 3/4" BSP x 51" long pump to rotor control valve
10	85 31 343	1	Hose 3/8" BSP x 36" long-pump to control valve
11	85 35 092	2	Hose 1/4" BSP x 22" long
12	85 35 192	2	Hose 1/4" BSP x 44" long -lift ram
13	71 35 084	6	Hose tie
14	85 15 012	2	Hose 1/4" BSP x 156" long -angle ram
15	85 15 142	1	Hose 1/4 BSP x 144" long-Breakaway base
16	85 15 242	1	Hose 1/4" BSP x 106" long-reach base
17	85 35 212	1	Hose 1/4 BSP x 124" long -Reach gland
18	85 35 082	1	Hose 1/4 BSP x 34" long breakaway gland- angle ram
19	85 35 102	1	Hose 1/4 BSP x 17" long
20	09 04 107	4	Hose clip - 1 1/2" bore
21	71 93 026	1	Hose armour
22	41392.01	1	Diverter
23	86 50 102	4	Bonded seal 1/4 BSP
24	85 81 169	2	Union 1/4 BSP MM
25	71 05 153	1	Bulkhead union 1/4 BSP with locknut
26	85 81 190	1	Swivel elbow 1/4 BSP MF
27	85 81 254	2	Tee piece 1/4 BSP F MM
28	81 30 153	1	Lift service relief valve assy compr:-
29	81 30 156	1	Relief valve housing
30	81 30 029	1	Relief valve
31	81 16 011	1	Spring
32	81 30 083	1	Relief valve body
33	86 50 104	1	Bonded seal 1/2 BSP

ARM CONTROL VALVE - Electric



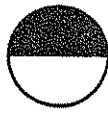
McCOMBS



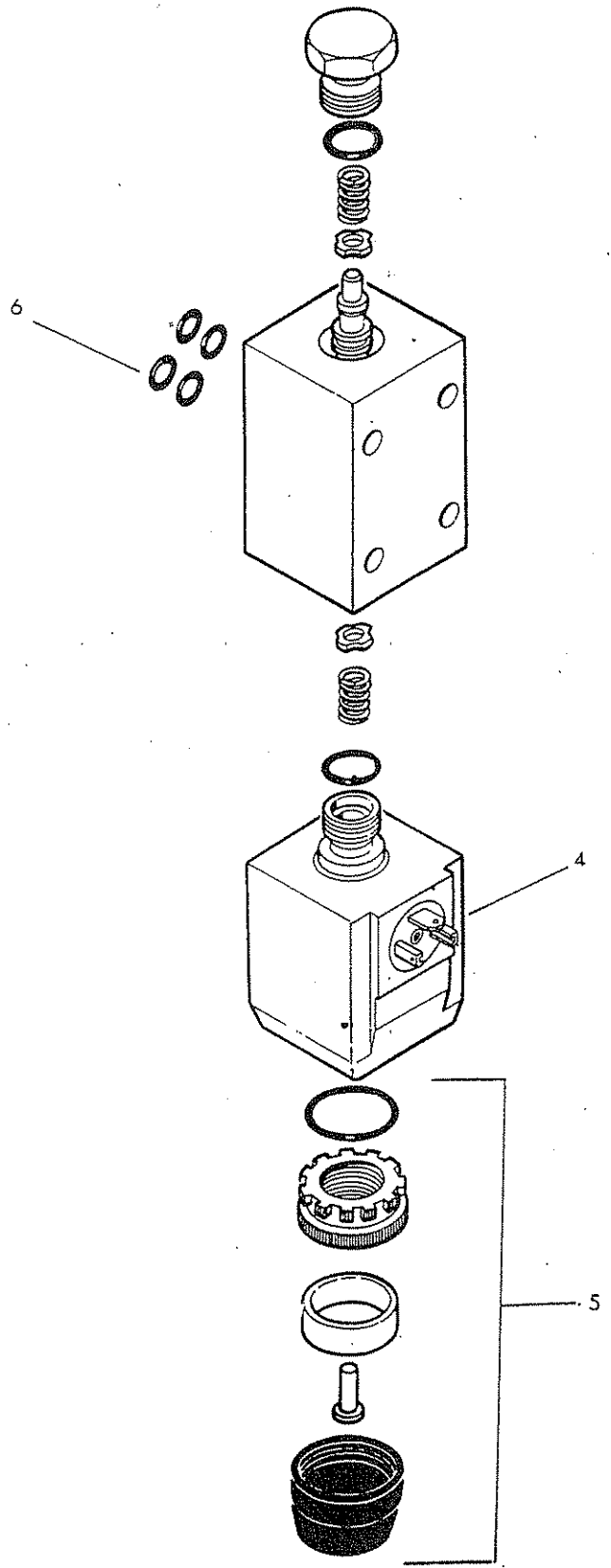
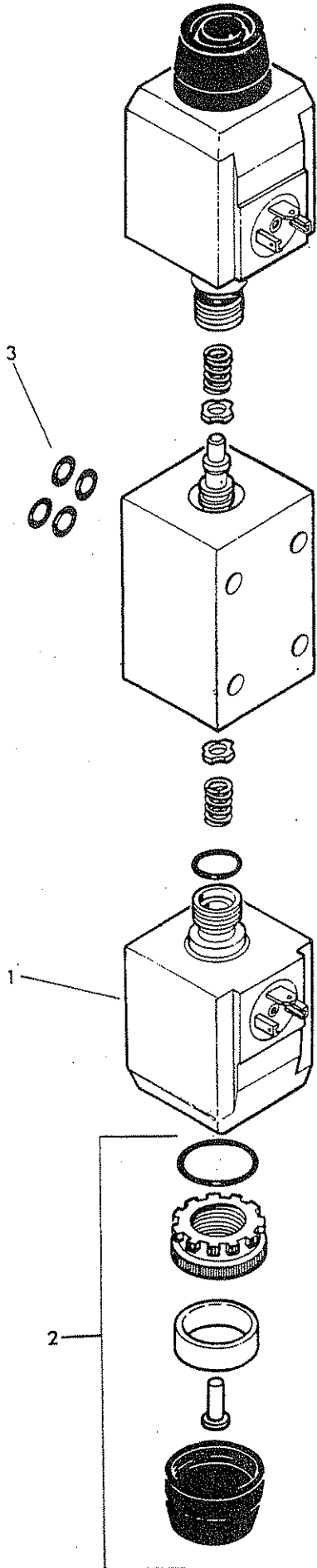


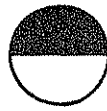
Ref.	Part No.	Qty.	Description
			ELECTRIC CONTROL VALVE
	81-30-318		Solenoid/manifold assembly compr:
1	81-30-321	1	Manifold block
2	81-30-455	3	Double solenoid valve
3	81-30-456	1	Single solenoid valve
4	81-30-090	5	Check valve assembly incl.
5	87-00-644	1	O ring
6	87-09-644	1	Anti extrusion ring
7	81-30-087	3	Actuator
8	81-30-032	1	Relief valve cap
9	81-30-124	1	Relief valve c/w spring
10	87-09-644	1	Anti extrusion ring
11	87-00-644	1	'O' ring
12	81 30 322	1	Hose plate
13	60-00-113	1	Union 3/8 BSP-MM
14	60 00 112	1	Adaptor 3/8 BSP - 1/2 BSP MM
15	85 81 169	2	Union 1/4 BSP- 1/4" BSP M-M
16	81-30-038	3	Restrictor Union 'L' 1/4" BSP-MM
17	81-30-037	2	Restrictor Union 'S' 1/4" BSP M-M
18	81-30-103	1	Restrictor union T 1/4" BSP MM
19	80-03-001	2	Plug 3/8" BSP
20	86-50-103	5	Bonded seal 3/8" BSP
21	86-50-102	5	Bonded seal 1/4" BSP
22	81-30-078	1	Check valve gallery plug
23	71-98-050	2	Valve mounting bracket
24	93-13-034	5	Setscrew M8 x 16
25	71-09-151	1	Cable clamp
26	91-00-204	4	Spring washer dia 8
27	92-43-062	16	Capscrew, socket headed M5 x 35
28	91-43-004	1	Self locking nut M 10
29	85-81-254	2	Tee connector
30	93-43-044	4	Bolt M 8x20
31	92-43-082	4	Capscrew
32	87 00 511	3	'O' ring
	86-99-197		SEAL KIT

SOLENOIDS



McCOMBEE



**81-30-455****DOUBLE SOLENOID VALVE**

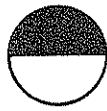
1	81-30-175	2	Coil
2	81-30-176	2	Manual override kit
3	86-00-107	4	'O' ring

81-30-456**SINGLE SOLENOID VALVE**

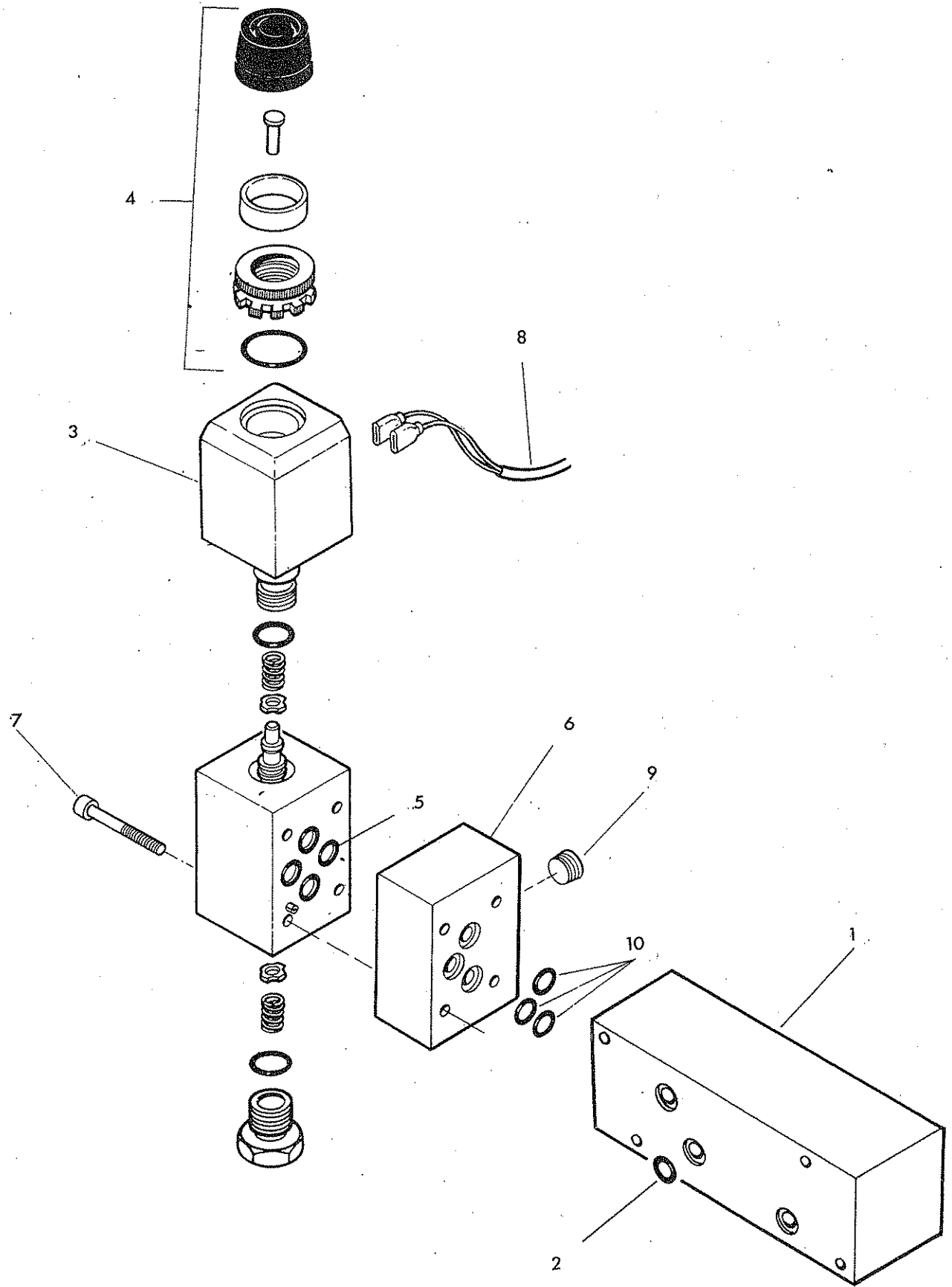
4	81-30-175	1	Coil
5	81-30-176	1	Manual override kit
6	86-00-107	4	'O' ring

86-99-224**SEAL KIT**

ANGLE FLOAT KIT



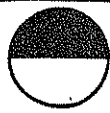
McCormell



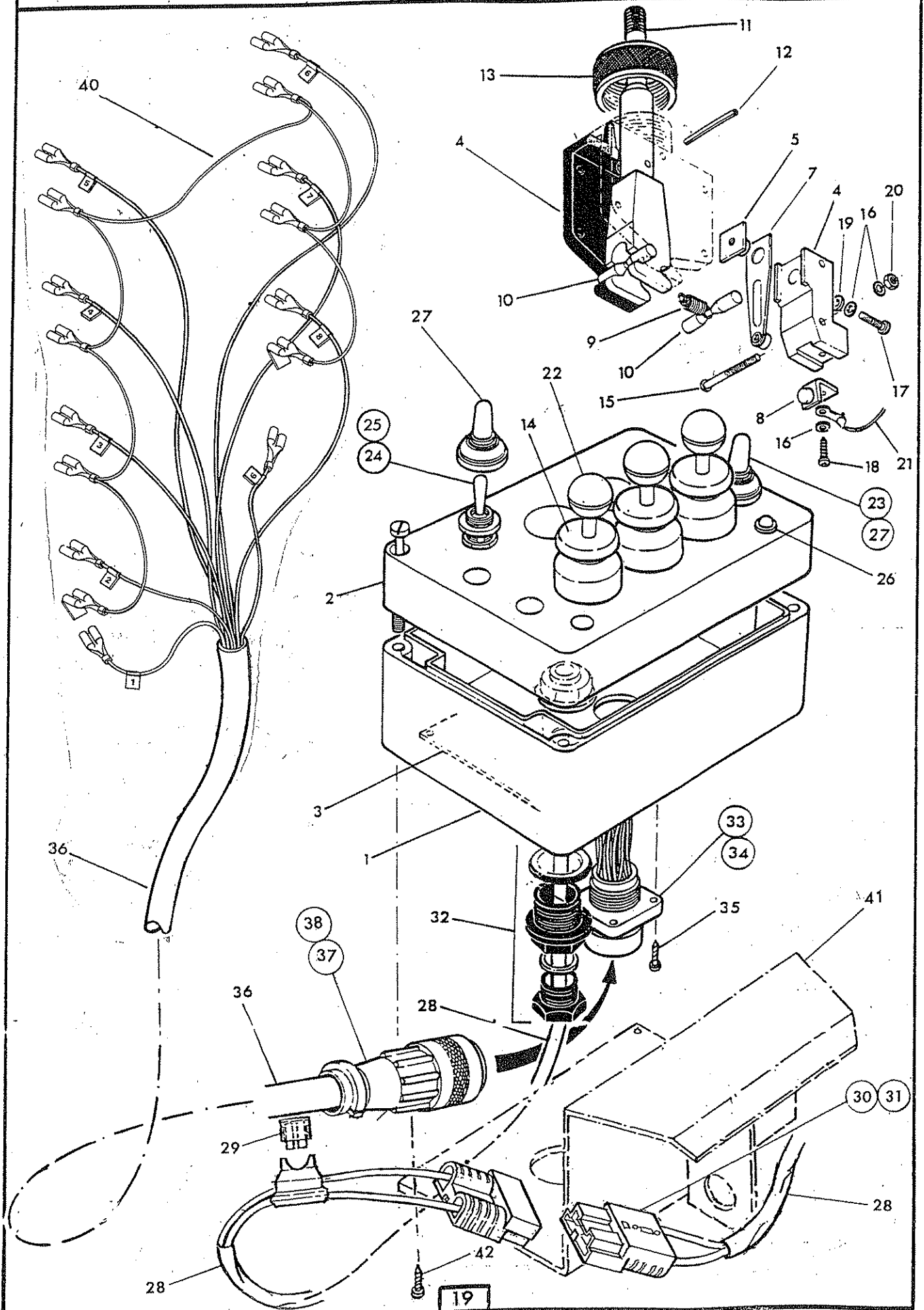


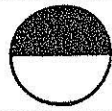
Ref.	Part No.	Qty.	Description
	81 26 261		ANGLE FLOAT KIT - Optional extra for ground cutting
1	81 30 323	1	Float valve block
2	87 00 511	3	'O' ring
	81 30 457	1	Angle float solenoid incl:-
3	81 30 175	2	Coil
4	81 30 176	1	Manual override kit
5	87 00 511	4	'O' ring
6	81 26 280	1	Bridging plate
7	92 43 102	4	Setscrew socket headed
8	84 02 059	1	Wiring harness
9	85 82 041	1	Plug
10	87 00 511	3	'O' ring - ref only
	86 99 224		SOLENOID SEAL KIT

SWITCHBOX & LOOM.



McDONNELL



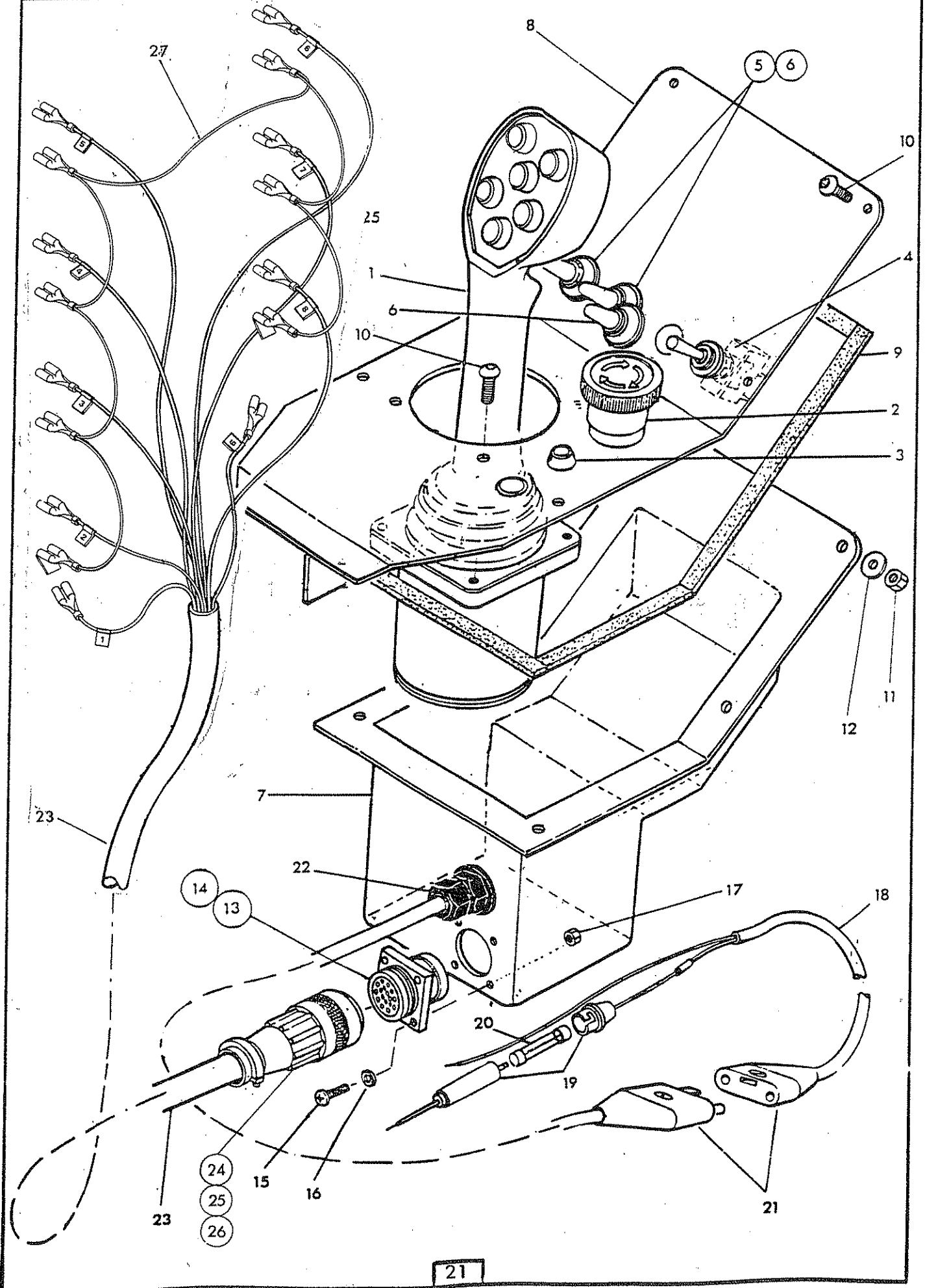


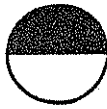
Ref.	Part No.	Qty.	Description
	41845.01		MULTI 3 LEVER SWITCHBOX FOR GEAR HYDRAULIC MACHINES
1	41845.32	1	Box
2	41845.31	1	Lid c/w screws
3	41845.33	1	Circuit board
	84 02 122	3	Lever switch unit comprising:-
4	84 02 285	1	Switch body
5	84 02 106	2	Contact holder
6	84 02 109	2	Spring contact retainer
7	84 02 113	2	Spring contact
8	84 02 108	2	Fixed contact
9	84 02 101	1	Spring
10	84 02 111	2	Bar
11	84 02 256	1	Lever
12	04 25 320	1	Spring dowel dia 3 x 20
13	84 02 051	1	Bezel ring
14	84 02 022	1	Lever gaiter
15	92 00 006	4	Screw - posidrive panhead M3 x 25
16	91 00 400	8	External serrated washer dia 3
17	92 00 005	2	Screw posidrive pan head M3 x 12
18	84 02 119	2	Self tapping screw No.4 type B x10mm long
19	84 02 120	2	Plain washer dia 3
20	91 13 000	2	Nut plated M3
21	41845.34	3	Loom - lever switch
22	84 02 056	3	Knob - black
23	84 02 023	1	Switch - power on/off
24	84 02 197	1	Switch - Float
25	41845.37	1	Loom - Float switch
26	41845.38	1	L.E.D. and loom
27	84 02 024	2	Weather gaiter
28	84 02 232	1	Power loom incl.
29	43 034.02	1	Fuse
30	84 02 230	2	Contact housing
31	84 02 229	4	Contacts
32	84 02 042	1	Gland
33	84 02 189	1	Socket shell
34	84 02 192	9	Pin socket
35	28 00 203	4	Screw No.10 x 1/2" long
36	84 02 331	1	Wiring loom incl
37	84 02 188	1	Shell
38	84 02 190	1	Cable clamp
39	84 02 193	1	Special tool
40	84 02 058	1	Common link harness
41	84 02 345	1	Mounting bracket
42	28 00 203	4	Self tapping screw No.10 x 1/2" long

MONOLEVER CONTROLS & LOOM



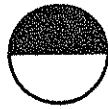
McCONNELL



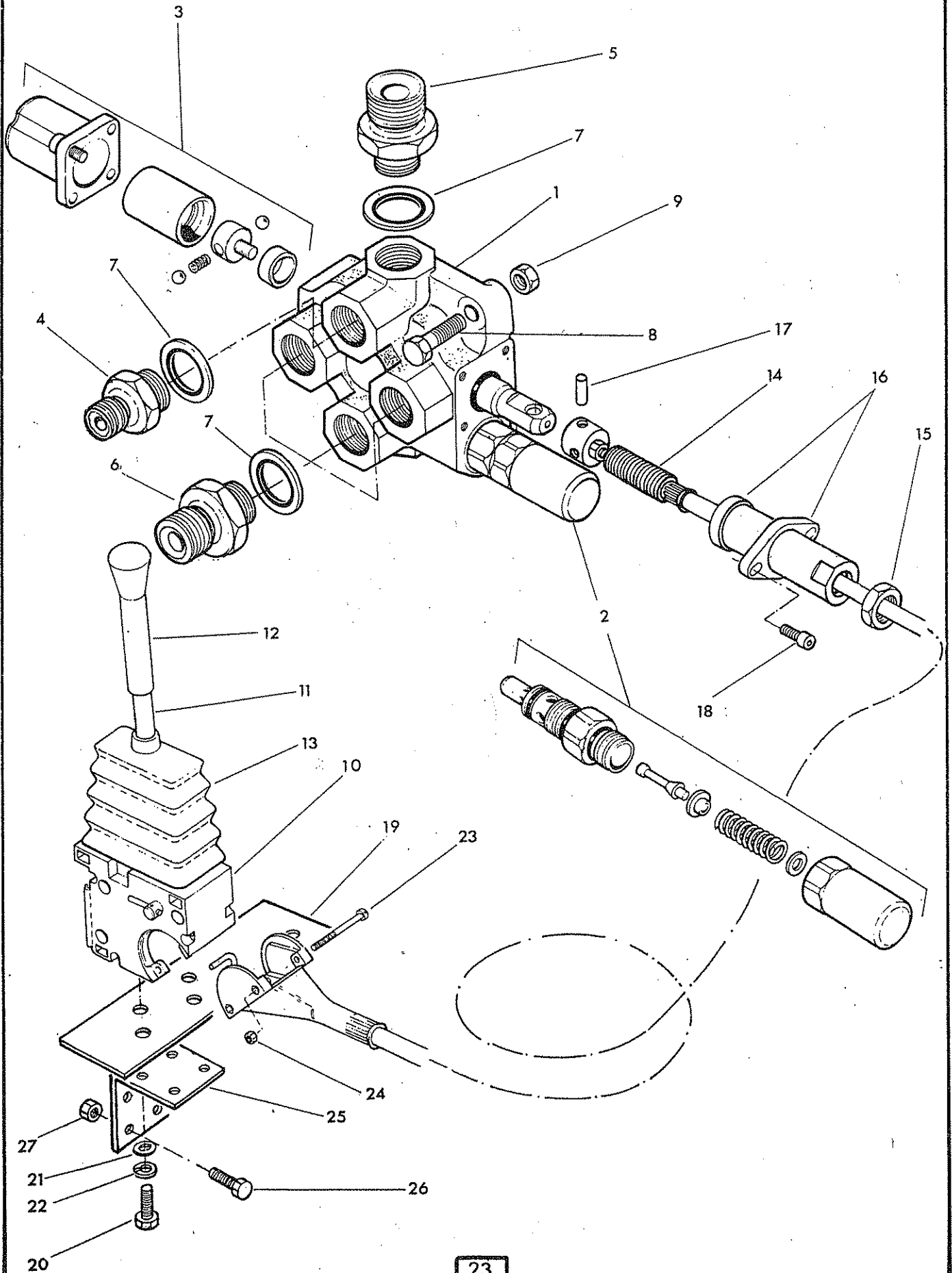


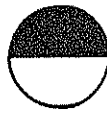
Ref.	Part No.	Qty.	Description
	41590.03		MONOLEVER 4 BUTTON CONTROL ASSY
1	41590.33	1	Joystick incl. circuit board
2	84 02 184	1	Power on/emergency stop
3	84 02 174	1	L.E.D. main power on
4	84 02 182	1	Switch - slew/auto reset
5	84 02 023	2	Switch Lift and angle float
6	84 02 024	3	Weather cover
7	75 50 300	1	Cover pod
8	75 50 339	1	Top plate
9	72 90 052	1	Sealing strip -cut to suit
10	93 00 125	10	Screw - button head M6 x 16
11	91 43 003	6	Self locking nut M6
12	91 00 103	6	Washer dia 6
13	84 02 189	1	Socket shell
14	84 02 192	14	Female socket pin
15	92 00 007	4	Screw posidrive panhead M3 x 10
16	91 00 400	4	External serrated washer dia 3
17	91 00 013	4	Nut - plated M3
18	84 02 340	1	Power supply.harness incl.
19	84 02 114	1	Fuse holder
20		1	Fuse 20 amp
21	84 02 062	1	Plug/socket
22	84 02 042	1	Gland
23	84 02 331	1	Wiring loom incl. tions
24	84 02 188	1	Shell
25	84 02 190	1	Cable clamp
26	84 02 193	1	Special tool
27	84 02 058	1	Common link harness

ROTOR CONTROL VALVE



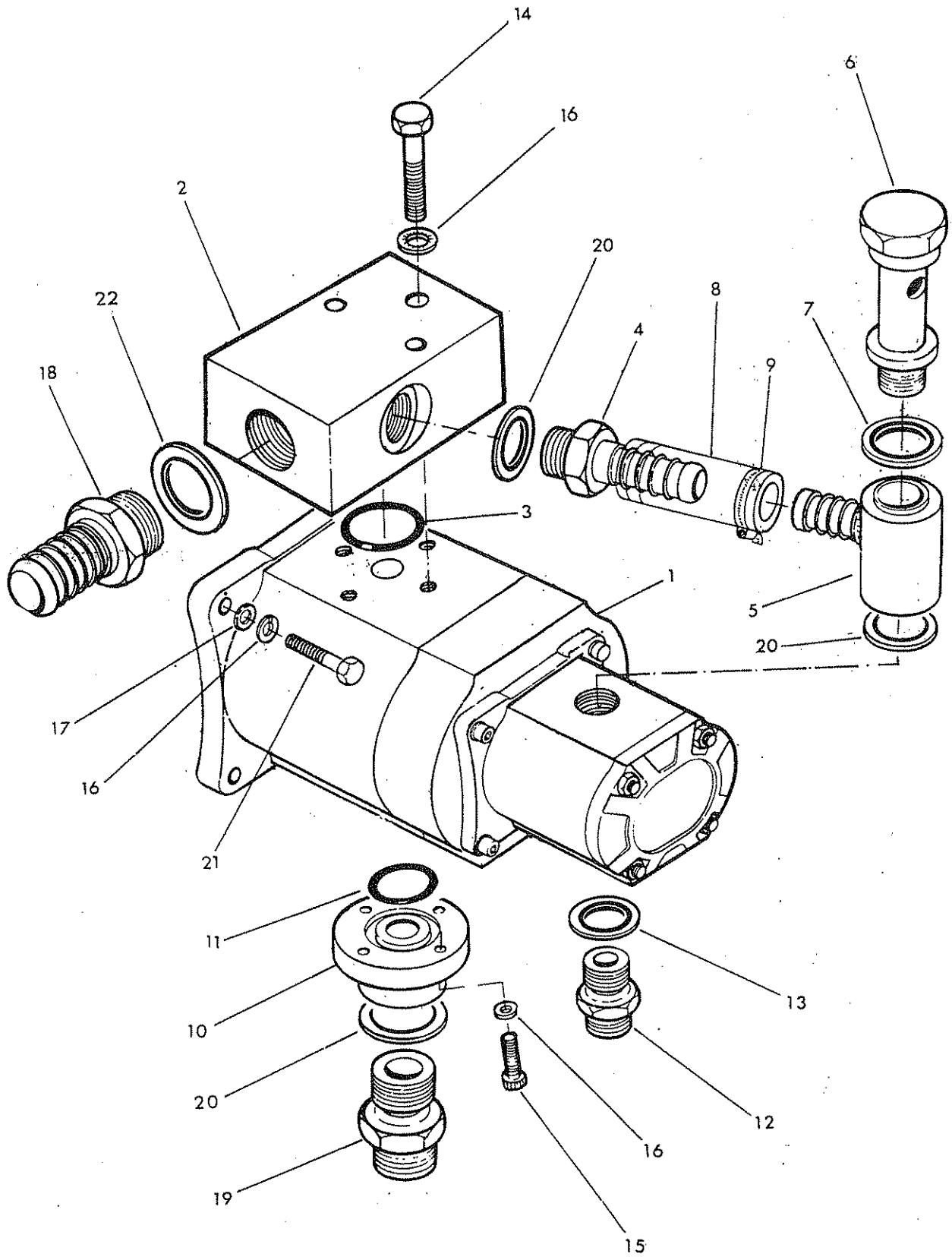
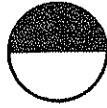
McCORMICK





Ref.	Part No.	Qty.	Description
ROTOR CONTROL VALVE ASSEMBLY			
1	81 25 355	1	Rotor control valve
2	81 25 095	1	Relief valve
3	81 25 109	1	detent assembly
4	85 81 130	1	Adaptor 3/4" BSP x 1/2 BSP MM
5	80 02 086	4	Adaptor 3/4" BSP - 1" BSP
6	85 81 136	1	Union 3/4 BSP MM
7	86 50 106	5	Bonded seal 3/4" BSP
8	92 13 095	2	Bolt M10 x 40
9	91 43 005	2	Self locking nut M10
	80 17 024	1	Lever assy. includes
10	80 17 025	1	Lever pivot box
11	80 17 028	1	Lever
12	80 17 027	1	Knob
13	80 17 026	1	Weather gaiter
14	80 17 053	1	Cable assy. includes
15	80 17 014	1	Locknut
16	80 17 018	1	Flange and sleeve
17	80 17 021	1	Pin
18	93 43 023	2	Capscrew M6 x 12
19	71 14 071	1	Mounting plate
20	93 13 003	1	Bolt M6 x 16
21	91 00 103	1	Plain washer dia 6
22	91 00 203	1	Spring washer dia 6
23	93 73 081	2	Screw M4 x 40
24	91 13 001	2	Nut M 4
25	81 25 070	1	Mounting bracket
26	93 13 044	2	Bolt M8 x 20
27	91 43 004	2	Self locking nut M8

86 99 218**SEAL KIT**





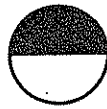
Ref. Part No. Qty. Description

PUMP ASSEMBLY - FOR T.I. MACHINES

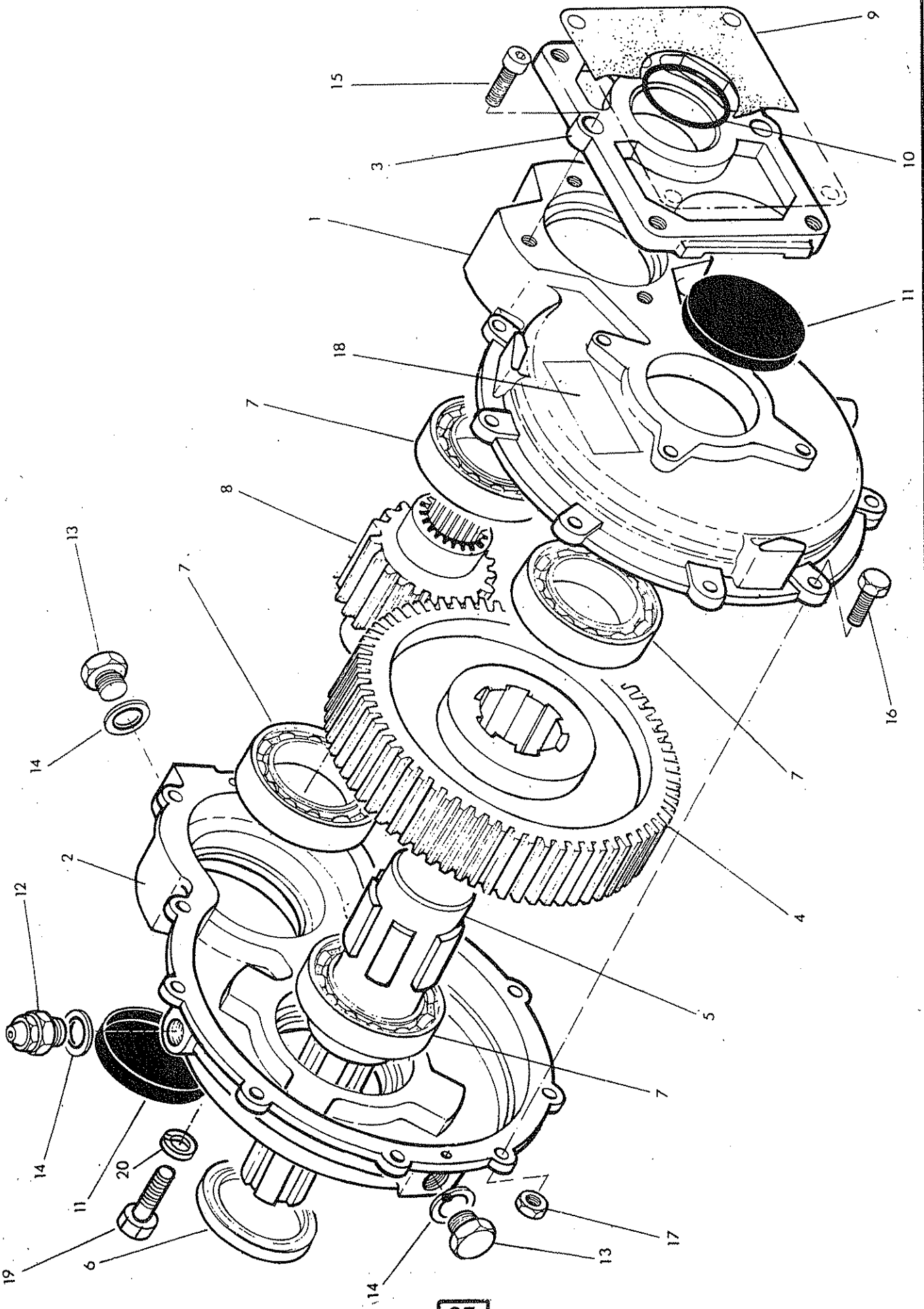
1	82 01 466	1	Tandem pump compr:-
	82 01 684	1	Large pump
	82 01 677	1	Small pump
2	71 92 371	1	Suction block - L.Hand
	71 92 372	1	Suction block - R.Hand
3	86 00 122	1	'O' ring
4	85 81 301	1	Adaptor 3/4 BSP-3/4 low pressure
5	80 13 096	1	Banjo
6	80 13 095	1	Banjo bolt
7	86 50 107	1	Bonded seal 7/8 BSP
8	85 01 213	1	Connecting hose
9	09 04 204	2	Hose clip
10	80 13 088	1	Pump flange
11	86 00 119	1	'O' ring
12	85 81 110	1	Adaptor 1/2" BSP MM
13	85 50 104	1	Bonded seal 1/2" BSP
14	92 13 144	3	Bolt M8 x 70
15	93 13 054	4	Setscrew M8 x 25
16	91 00 404	11	Shakeproof washer dia 8
17	91 00 104	4	Plain washer dia 8
18	85 81 260	1	Adaptor 1 1/4 BSP - 1 1/2 low pressure
19	85 81 136	1	Union 3/4" BSP MM
20	86 50 106	3	Bonded seal 3/4" BSP
21	92 13 094	4	Bolt M8 x 45
22	86 50 109		Bonded seal 1 1/4" BSP

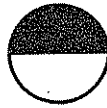
86 99 231**PUMP SEAL KIT**

GEARBOX



McCOMEL



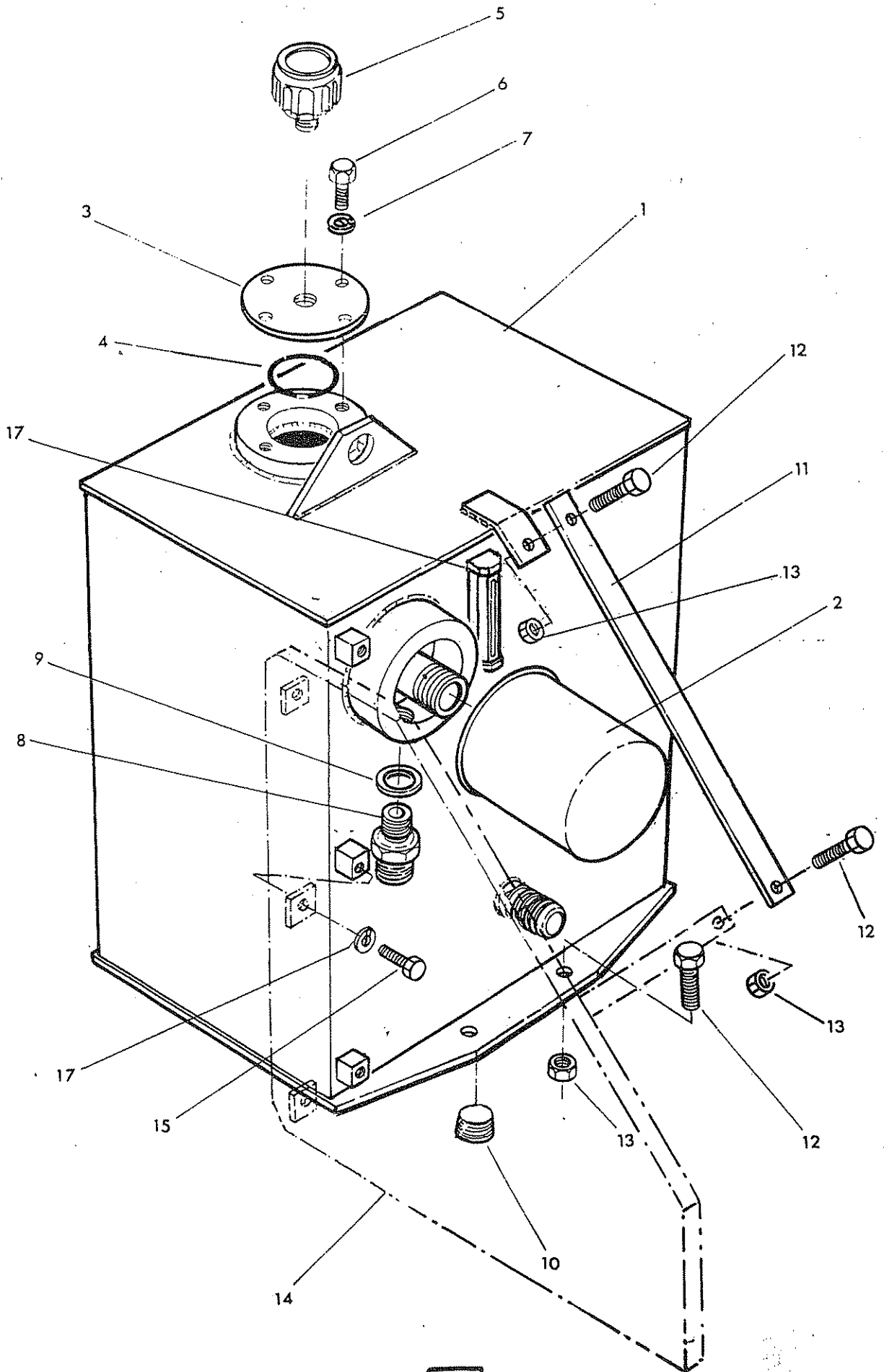


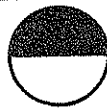
Ref.	Part No.	Qty.	Description
	80 13 444		GEARBOX
1	80 13 100	1	Case - output side
2	80 13 101	1	Case - input side
3	80 13 102	1	Pump mounting flange
4	80 13 103	1	Gear 72t
5	80 13 105	1	Shaft
6	86 29 196	1	Shaft seal
7	06 00 042	4	Bearing
8	80 13 104	1	Pinion 17t
9	80 13 056	1	Gasket
10	86 00 523	1	'O' ring
11	80 13 106	2	End cover
12	80 13 107	1	Breather/adaptor
13	85 81 133	4	Plug 1/4 BSP
14	86 50 102	4	Bonded seal 1/4 BSP
15	93 43 045	3	Capscrew socket headed M10 x 20
16	92 13 064	10	Bolt M8 x 30
17	91 43 004	10	Self locking nut M8
18	12 90 054	1	Sticker
19	93 13 056	4	Setscrew M12 x 25
20	91 00 206	4	Spring washer dia 12

OIL TANK



MCCORMICK





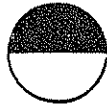
Ref. Part No.

Qty. Description

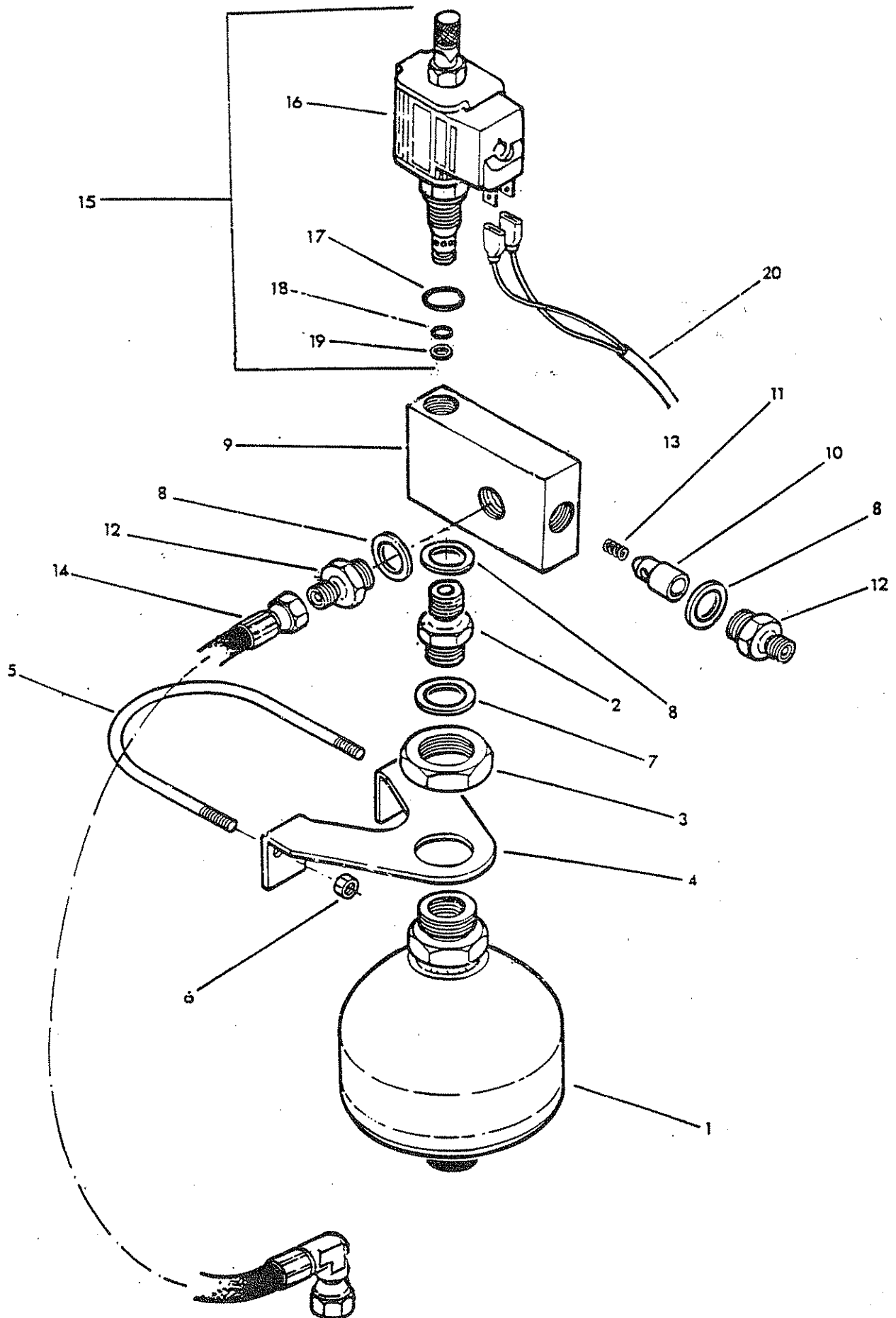
HYDRAULIC TANK ASSEMBLY

1	41874.01	1	Tank L.Hand - not illustrated
	71 98 269	1	Tank R.Hand
2	84 01 041	1	Filter
3	71 92 063	1	Cover
4	86 00 051	1	O ring
5	84 01 063	1	Breather
6	93 13 054	4	Setscrew M8 x 25
7	91 00 204	4	Spring washer dia 8
8	80 02 086	1	Adaptor 3/4 BSP -1" BSP MM
9	86 50 106	1	Bonded seal
10	85 81 203	1	Drain plug
11	71 98 020	1	Tank strap
12	93 13 066	4	Bolt M12 x 30
13	91 43 006	4	Self locking nut M12
14	41875.01	1	Cover plate - L.Hand - not illustrated
	71 98 289	1	Cover plate - R.Hand
15	93 13 045	3	Setscrew M10 x 20
16	91 00 205	3	Spring washer dia 10
17	84 01 048	1	Level guage

LIFT FLOAT KIT

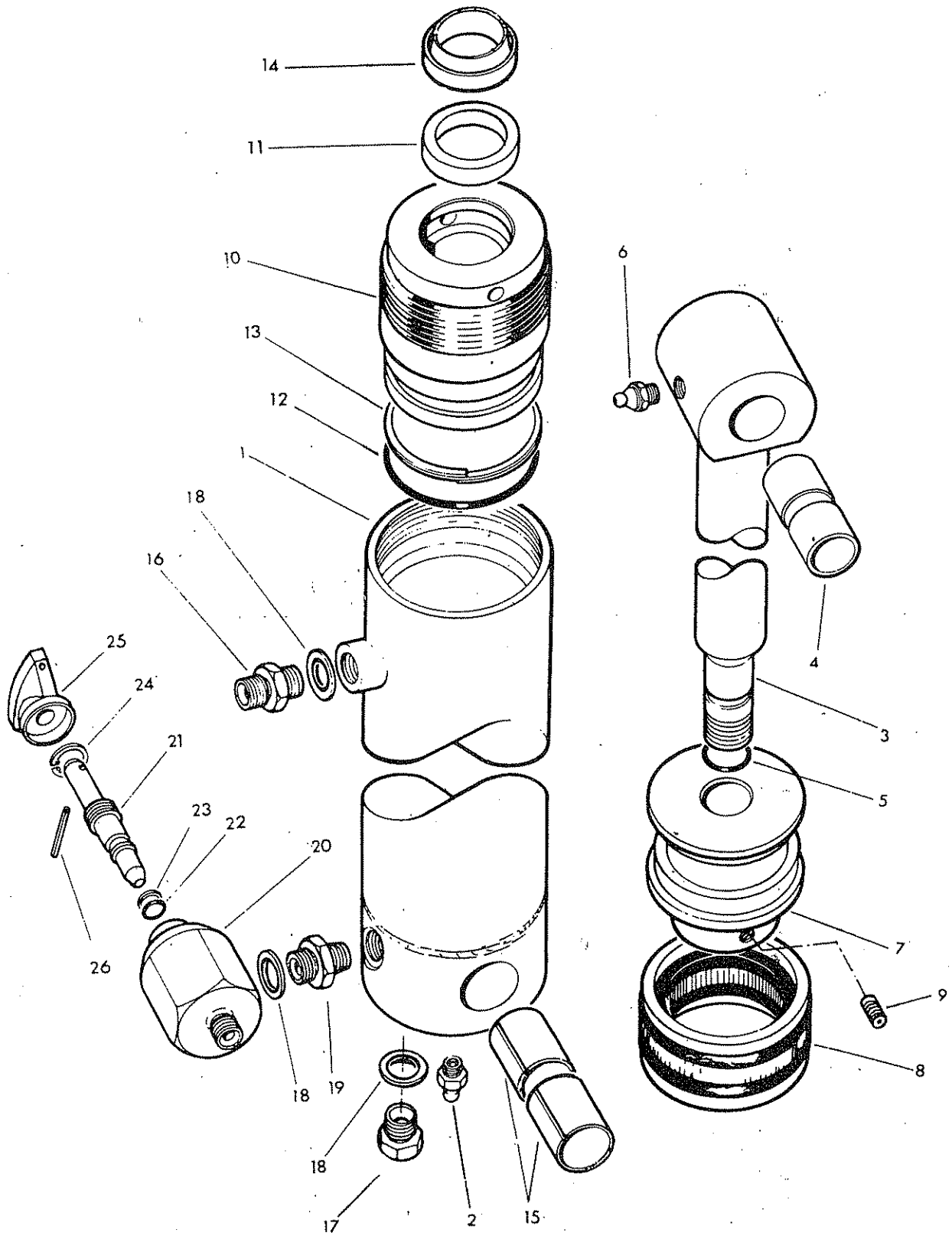
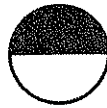


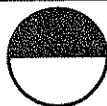
McQUAY-NORRIS





REF.	PART NO.	QTY.	DESCRIPTION
	81 26 294		LIFT FLOAT KIT - Quick response
1	81 26 042	1	Accumulator
2	G241 0380	1	Adaptor M22
3	81 26 035	1	Bulkhead nut M33
4	81 26 286	1	Bracket
5	81 26 031	1	U bolt
6	91 43 004	2	Self locking nut M8
7	86 50 322	1	Bonded seal M22
8	86 50 103	3	Bonded seal 3/8" BSP
9	81 26 287	1	Control block
10	81 26 037	1	Response piston
11	81 16 011	1	Spring
12	85 81 115	2	Adaptor 3/8" BSP -1/4" BSP
13	12 90 061	1	Operating sticker
14	85 35 012	1	Hose 1/4" BSP x 18" long SF-90F
15	81 30 183	1	Poppet valve including:-
16	81 30 184	1	Coil
17	87 00 017	1	O ring
18	87 00 511	1	O ring
19	87 09 511	1	Anti extrusion ring
20	84 02 195	1	Cable

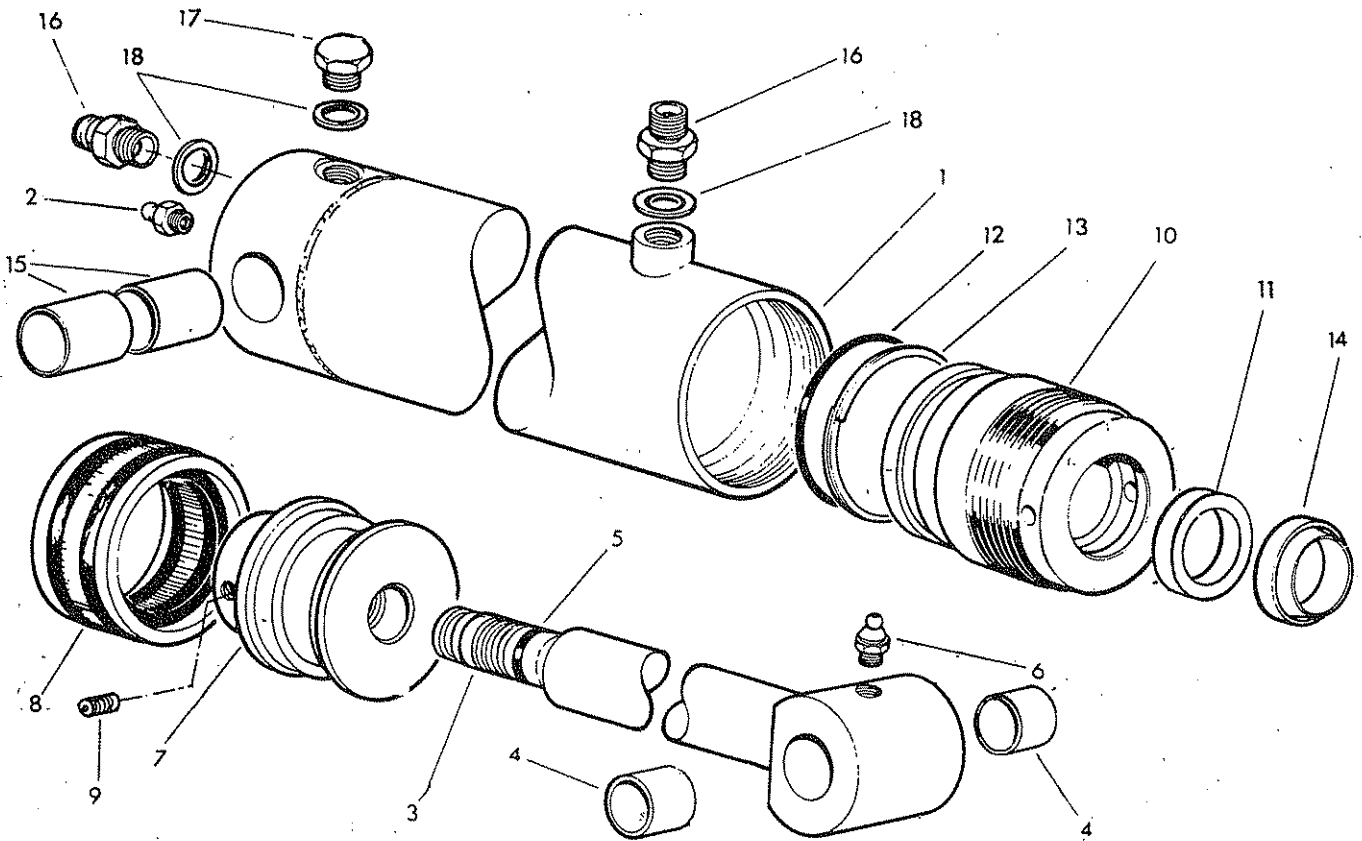
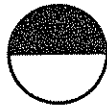




Ref.	Part No.	Qty.	Description
71 98 375			LIFT RAM ASSEMBLY
1	71 98 378	1	Ram cylinder
2	09 01 121	1	Greaser
3	71 98 091	1	Piston rod
4	60 12 032	2	Bush
5	86 00 119	1	'O' ring
6	09 01 121	1	Greaser
7	71 35 004	1	Piston
8	86 38 740	1	Piston seal
9	93 63 023	1	Grub screw
10	71 35 282	1	Gland housing
11	86 29 164	1	Gland seal
12	87 00 740	1	'O' ring
13	87 09 740	1	Anti extrusion ring
14	86 29 147	1	Wiper
15	71 01 134	2	Bush - ram base
16	85 81 115	1	Union
17	80 03 001	1	Plug
18	86 50 103	3	Bonded seal
19	80 05 007	1	Taper adaptor
	71 35 005	1	Lock tap assembly compr:
20	71 35 284	1	Tap body
21	71 35 006	1	Tap spindle
22	86 00 107	1	'O' ring
23	86 09 107	1	Anti extrusion ring
24	04 16 110	1	Internal circlip
25	81 08 006	1	Tap knob
26	04 20 820	1	Spring dowel

86 99 187**SEAL KIT**

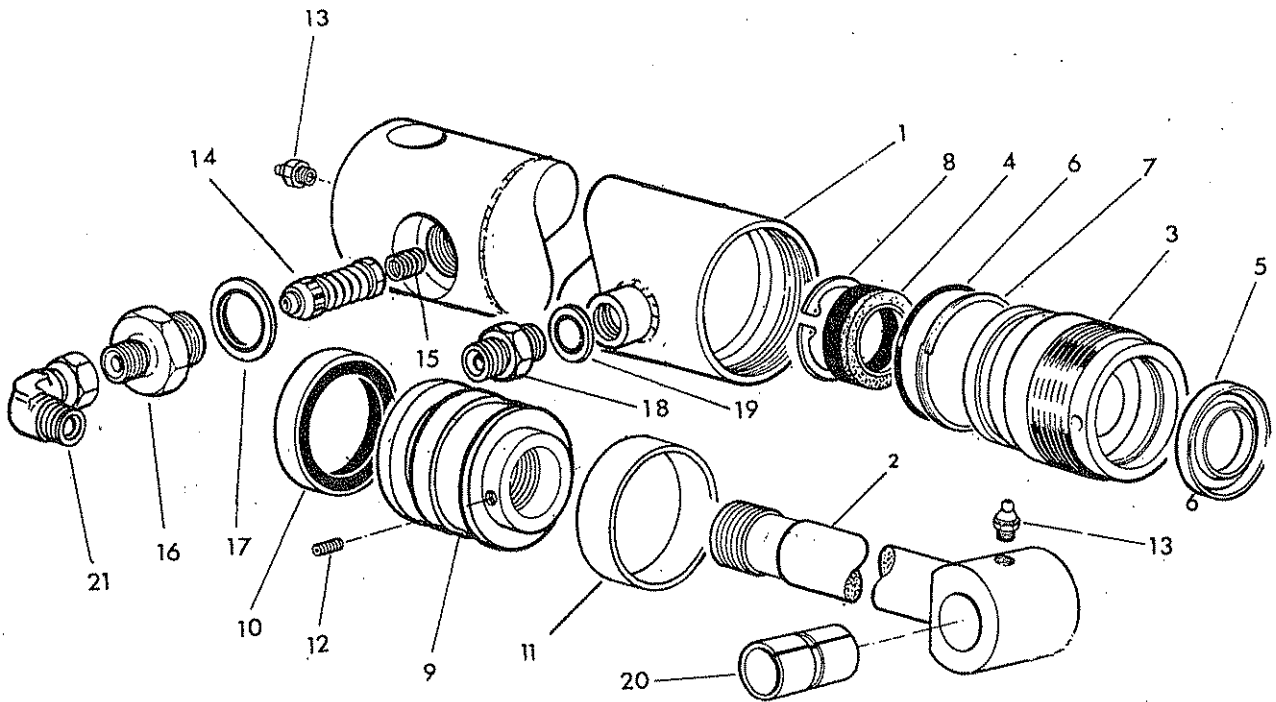
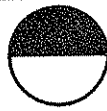
Assembly note Fully tighten item 9 and centre pop edge of hole to retain.



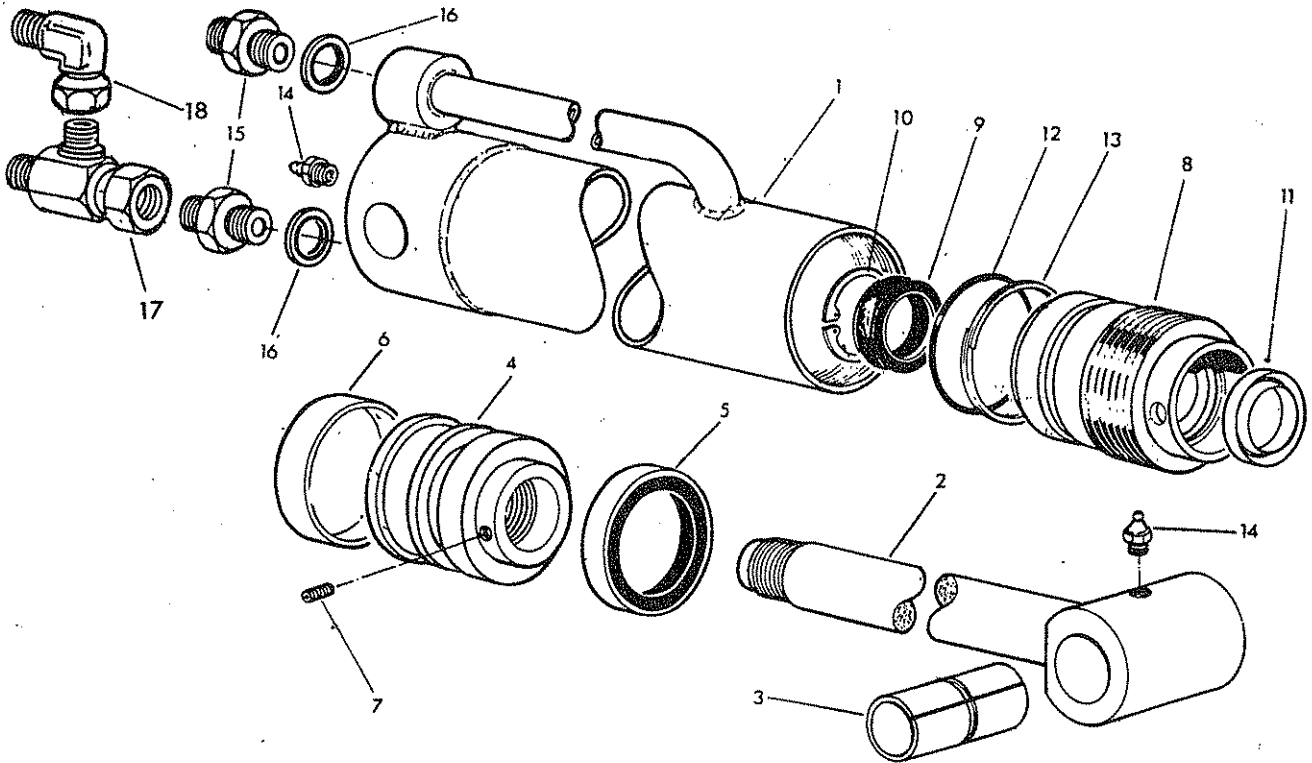
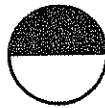
Ref.	Part No.	Qty.	Description
	71 98 376		REACH RAM ASSEMBLY
1	71 98 378	1	Ram cylinder
2	09 01 121	1	Greaser
3	71 98 091	1	Piston rod
4	60 12 032	2	Bush
5	86 00 119	1	'O' ring
6	09 01 121	1	Greaser
7	71 35 004	1	Piston c/w seal and grub screw
8	86 38 740	1	Piston seal
9	93 63 023	1	Grub screw
10	71 35 282	1	Gland housing
11	86 29 164	1	Gland seal
12	87 00 740	1	'O' ring
13	87 09 740	1	Anti extrusion ring
14	86 29 147	1	Wiper
15	71 01 134	2	Bush - ram base
16	85 81 115	2	Union
17	80 03 001	1	Plug
18	86 50 103	3	Bonded seal

86 99 187 SEAL KIT

Assembly note Fully tighten item 9 and centre pop edge of hole to retain.

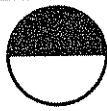


Ref. Part No.	Qty.	Description
71-98-357		BREAKAWAY/PARK RAM ASSY
1	1	Ram barrel
2	1	Rod
3	1	Gland housing
4	1	Gland seal
5	1	Rod wiper seal
6	1	'O' ring
7	1	Anti extrusion ring
8	1	Internal circlip
9	1	Piston
10	1	Piston seal
11	1	Bearing ring
12	1	Grub screw M6 x 12
13	2	Greaser 1/8 BSP straight
14	1	Relief valve - 40 bar
15	1	Spring
16	1	Relief valve housing
17	1	Bonded seal 1/2 BSP
18	1	Union 1/4 BSP MM
19	1	Bonded seal 1/4 BSP
20	1	Bush
21	1	Swivel elbow 1/4 BSP MF



Ref.	Part No.	Qty.	Description
	75-60-344		ANGLING RAM ASSEMBLY
1	71-35-292	1	Cylinder
2	71-35-009	1	Rod
3	71-05-050	1	Bush
4	75-60-095	1	Piston
5	86-29-187	1	Piston seal
6	86-29-188	1	Bearing ring
7*	93-63-023	1	Grub screw socket head
8	71-35-291	1	Gland housing
9	86-29-148	1	Gland seal
10	04-16-240	1	Internal circlip
11	86-29-149	1	Wiper seal
12	86-00-302	1	'O' ring
13	86-09-302	1	Anti extrusion ring
14	09-01-121	2	Greaser
15	85-81-169	2	Union
16	86-50-102	2	Bonded seal
17	85-81-254	1	Tee piece 1/4 BSP F MM
18	85-81-190	1	Swivel elbow 1/4 BSP-MF
	86-99-188		SEAL KIT

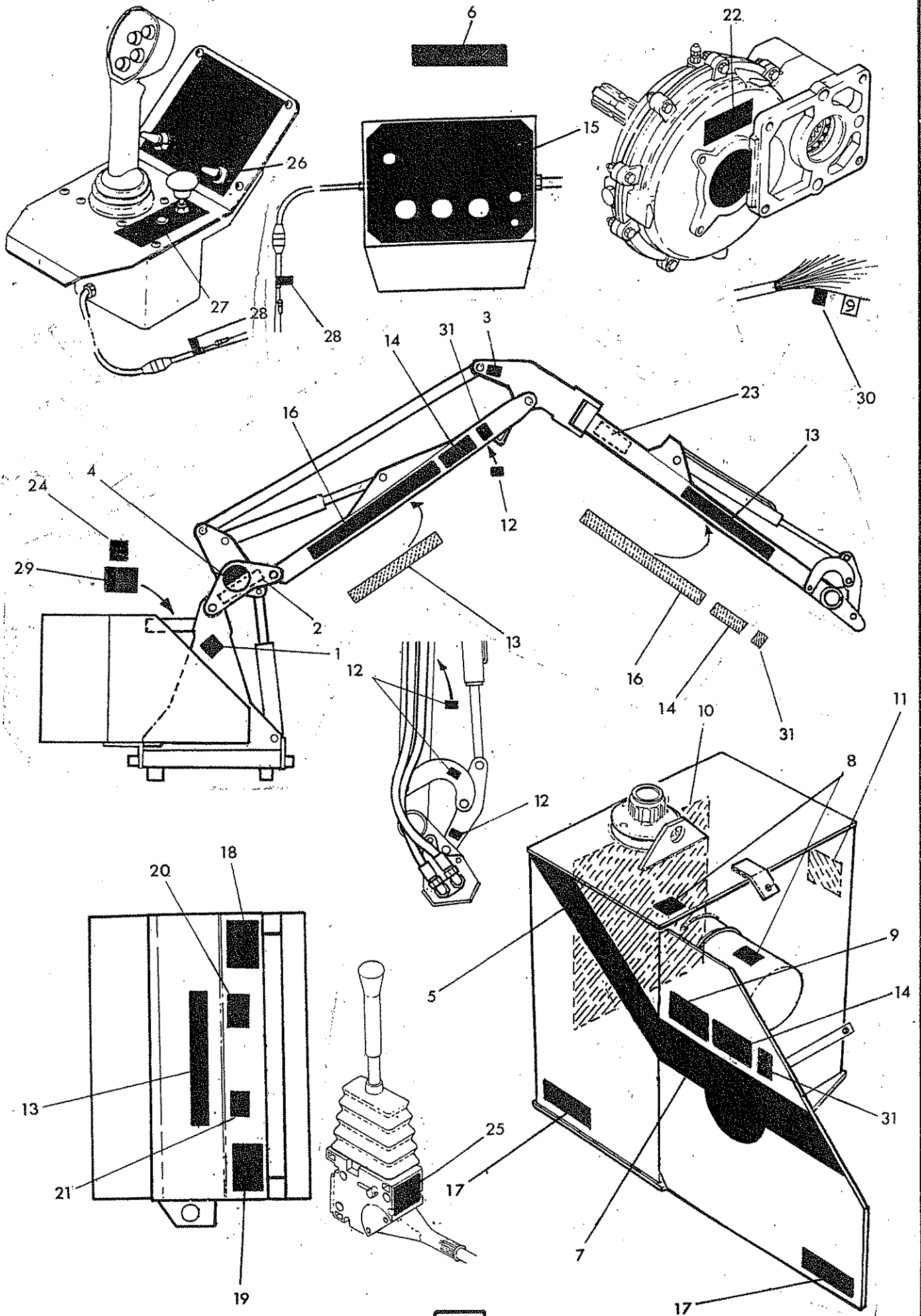
* Assembly note
Tighten fully and centre punch edge of hole to secure.

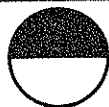


STICKERS



McCOMEL





Ref.	Part No.	Qty.	Description
STICKERS			
1	71 05 130	1	Read book first
2	71 35 295	1	Tighten check chains
3	12 90 074	1	Sling here symbol
4	12 90 296	1	Logo roundel
5	12 90 454	1	Tank stripe
6	12 90 352	1	Gen. warning - despatched loose
7	12 90 455	1	Fairing stripe/roundel
8	12 90 023	2	Oil filter instructions
9	12 90 453	1	PA
10	12 90 391	1	General warning
11	00756494	1	Fitting P.T.O. shaft
12	00962764	6	Pinch point.
13	12 90 255	3	McConnel
14	12 90 466	2	470
15	12 90 458	1	Switch box controls
16	12 90 295	2	Power arm
17	12 90 347	2	Chevrons
18	12 90 377	1	Flail head instructions
19	12 90 341	1	Flail head guarding
20	00756485	1	Rotating blade warning
21	12 90 392	1	Use McConnel spares
22	12 90 054	1	Gearbox oil capacity
23	12 90 403	1	Breakaway return warning
24	12 90 082	1	Transport/work
25	12 90 338	1	R.C. valve controls
26	12 90 451	1	Controls - joystick only
27	12 90 080	1	Power - joystick controls only
28	12 90 038	1	Polarity warning
29	71 09 143	1	Solenoid connections
30	84 02 121	1	Connection warning
31	12 90 071	3	E



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