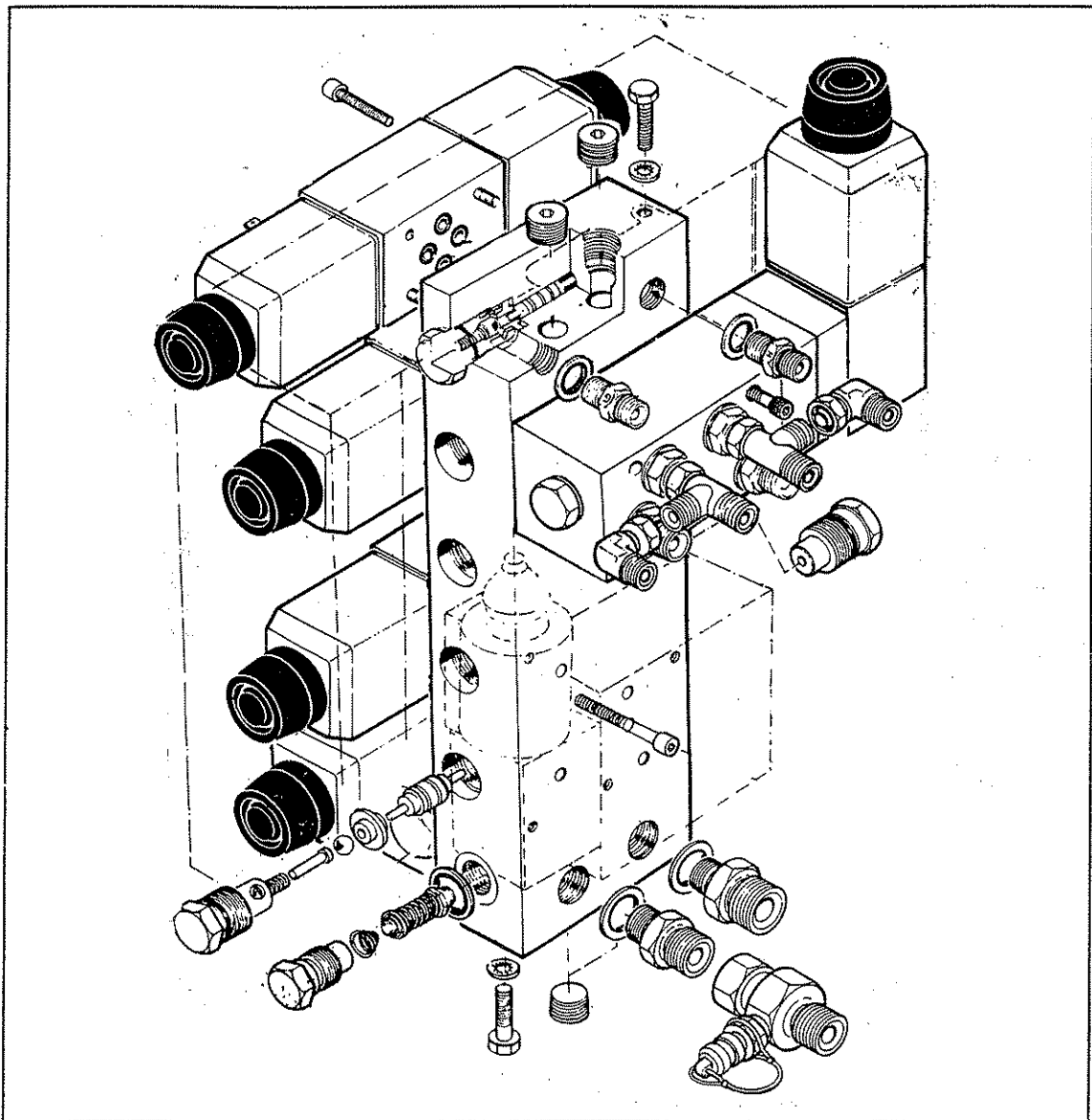


MAG 500

Pièces détachées

Pour les machines à commandes électriques



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NOTES PERSONELLES

MANUEL DE PIECES DETACHEES

POUR AVOIR LES MEILLEURES PERFORMANCES...

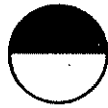
**UTILISER EXCLUSIVEMENT LES PIECES DETACHEES
McCONNEL**

Pour être certains d'avoir les dernières améliorations apportées, acheter vos pièces de remplacement chez le fabricant d'origine de votre équipement McConnel Ltd, chez votre concessionnaire ou stockiste local.

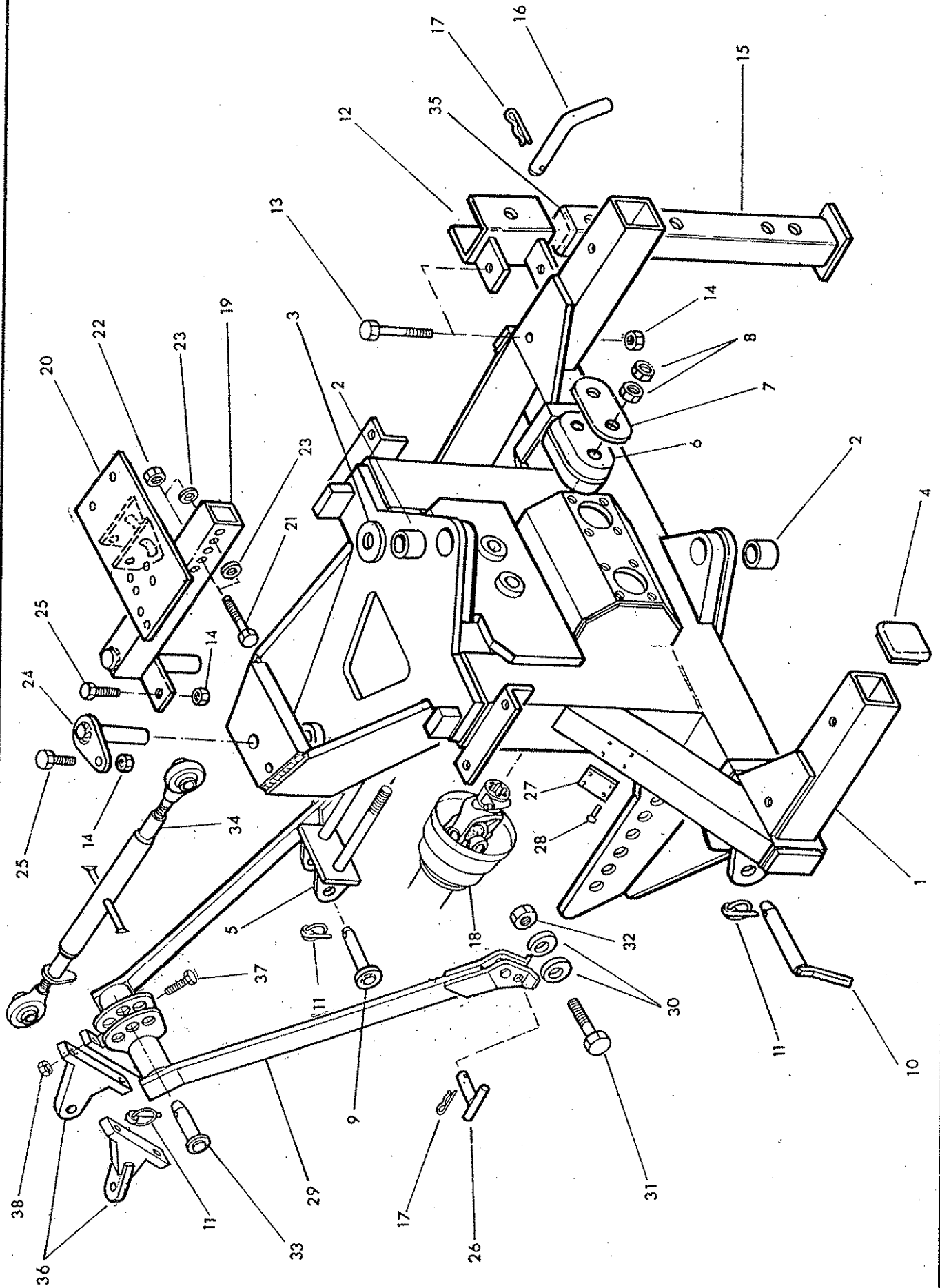
Donner toujours votre type et numéro de série de machine en même temps que le numéro de la pièce.

Des améliorations de conception peuvent avoir modifié certaines pièces listées dans ce manuel - La pièce la plus récente vous sera toujours fournie si elle est interchangeable avec la plus ancienne.

MAIN FRAME

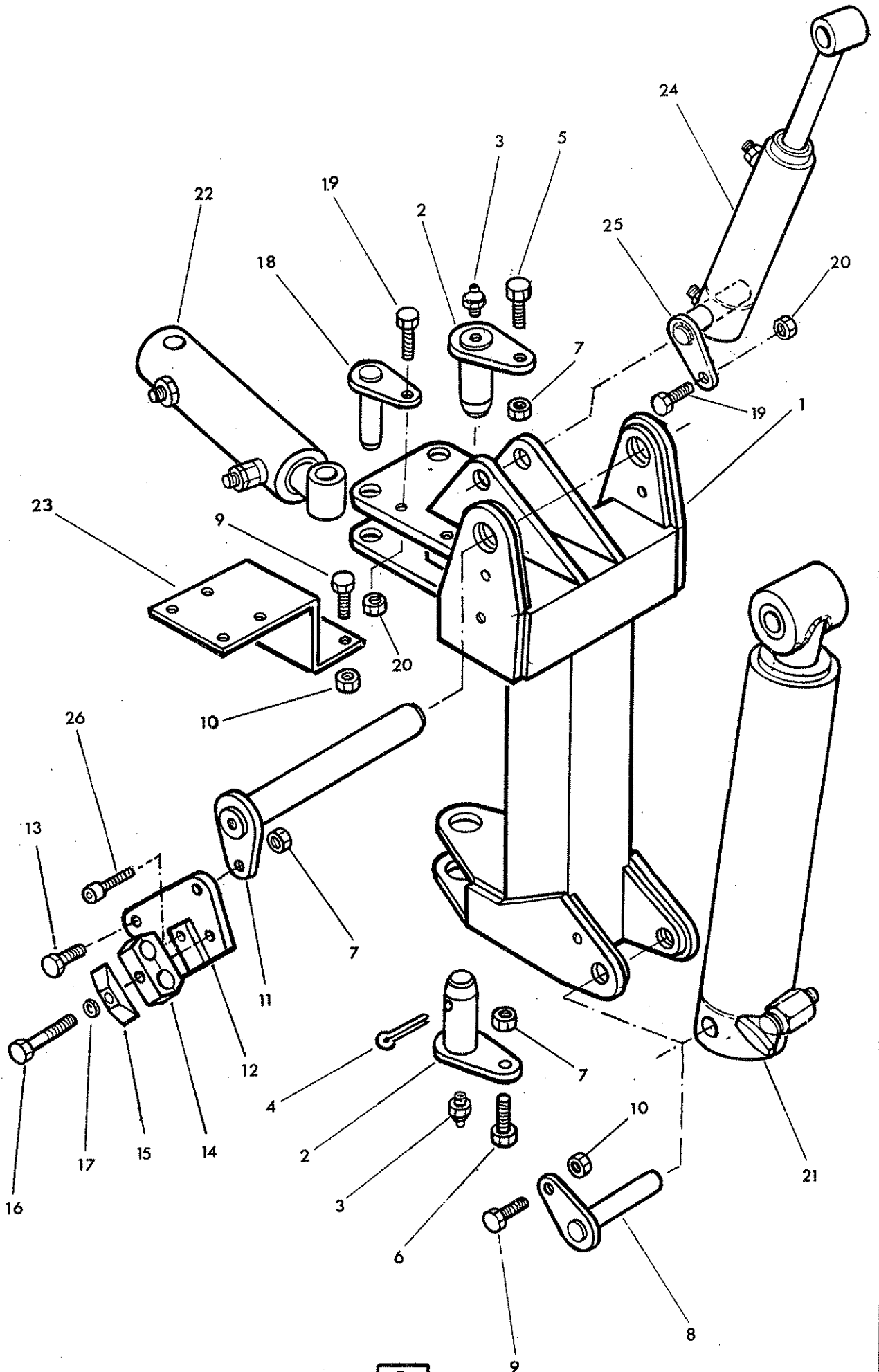
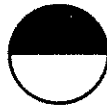


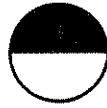
McCOMBI





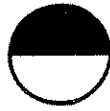
Ref.	Part No.	Qty.	Description
MAIN FRAME AND FITTINGS			
1	41522.01	1	Main frame
2	70 16 010	2	Bush
3	60 01 136	1	Thrust washer
4	41580.01	2	Plastic plug
5	75 60 398	1	Top hitch bracket
6	75 60 141	1	Rubber clamper
7	75 60 130	1	Reaction plate
8	91 13 009	4	Plain nut
9	75 60 144	1	Top link pin
10	41559.01	2	Linkage pin
11	04 31 217	4	Linch pin
12	41551.01	1	Leg bracket
13	92 13 266	1	Bolt
14	91 43 006	2	Self locking nut
15	41773.01	1	Stand leg
16	71 92 023	1	Leg pin
17	04 31 105	4	Spring cotter
18	71 36 330	1	P.T.O. shaft
19	75 50 021	1	Slew ram base pin)
20	75 50 289	1	Valve mounting bracket) -Cable
21	92 13 225	2	Bolt) machines
22	91 43 005	2	Self locking nut) only.
23	91 00 105	2	Plain washer)
24	41560.01	1	Slew ram base pin - switchbox and proportional machines only.
25	92 13 066	1	Bolt
26	71 92 027	2	Stabiliser pin
27	13 35 246	1	Serial No. plate
28	71 03 230	4	Pop rivet
29	42181.02	1	Stabiliser
30	71 92 080	4	Eccentric collar
31	92 13 148	2	Bolt
32	91 43 008	2	Self locking nut
33	71 18 112	1	Top link pin
34	07.584.01	1	Top link
35	71 91 108	1	Plastic Bung
36	42182.01	1	Stabiliser tongue Cat 2
	42182.02	1	Stabiliser tongue Cat 3
	42182.03	1	Stabiliser tongue Cat 2.5
	42182.04	1	Stabiliser tongue Cat 2 Thin
	42182.06	1	Stabiliser tongue -Special IH
37	92 00 029	2	Bolt
38	91 43 008	2	Self locking nut



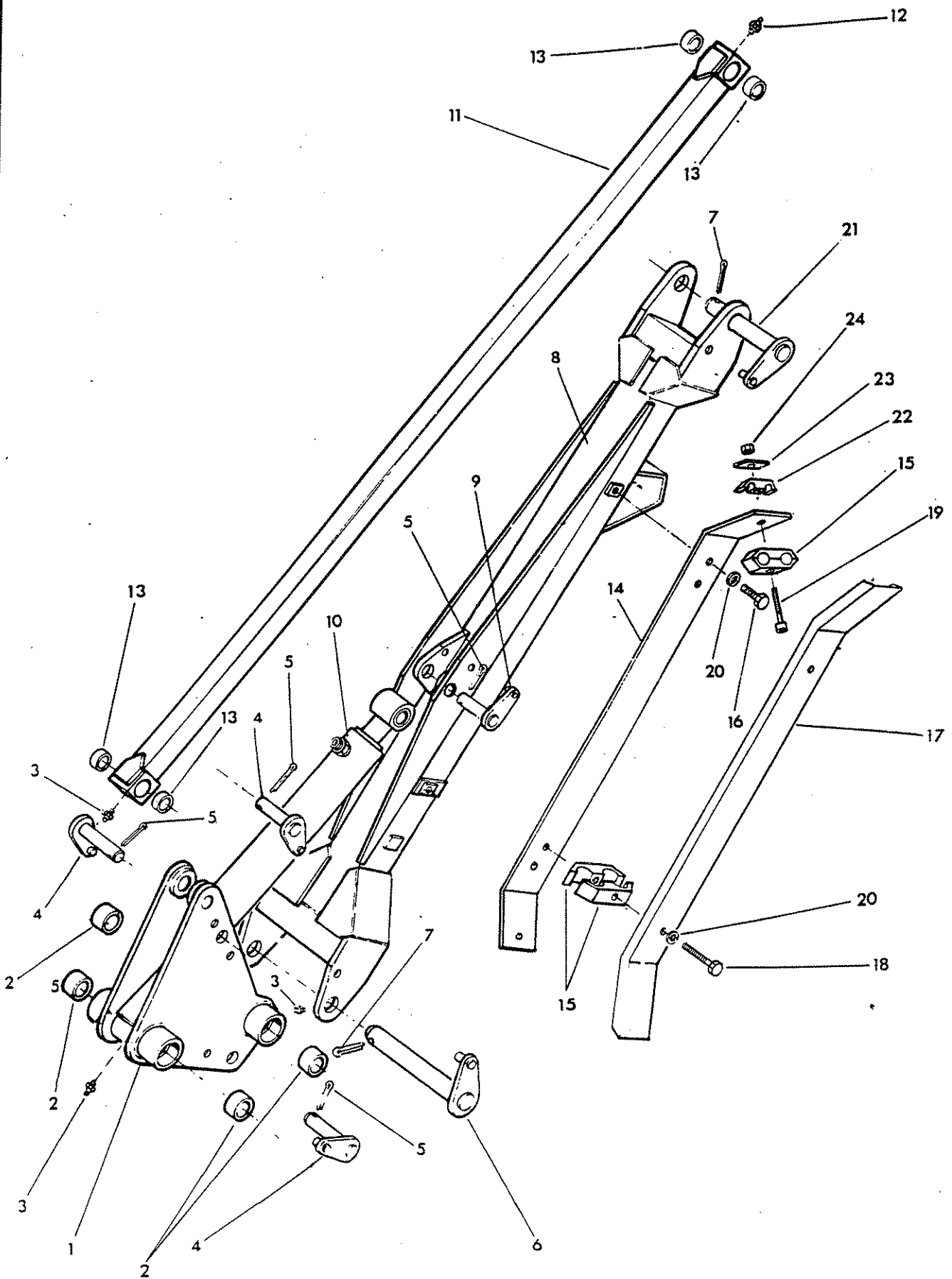


Ref.	Part No.	Qty.	Description
PILLAR AND FITTINGS			
1	41525.01	1	Pillar
2	41555.01	2	Pivot pin - pillar
3	09 01 121	2	Greaser
4	95 01 507	1	Split pin
5	93 13 087	1	Bolt
6	93 13 097	1	Bolt
7	91 43 007	3	Self locking nut
8	41557.01	1	Pivot pin - Lift ram base
9	92 13 066	3	Bolt
10	91 43 006	3	Self locking nut
11	41556.01	1	Pivot pin - Rocker
12	41574.01	1	Hose bracket
13	92 13 137	1	Bolt
14	42024.06	2	Hose clamp
15	71 93 064	2	Hose clamp plate
16	92 13 155	2	Bolt
17	91 00 305	2	Shakeproof washer
18	41558.01	1	Pivot pin
19	93 13 065	2	Setscrew
20	91 43 005	2	Self locking nut
21	71 93 333	1	Lift ram assembly
22	41565.01	1	Slew ram assembly
23	41508.01	1	Valve mounting brkt - E models only
24	75 60 356	1	Compensator ram] A.H.C. models
25	41693.01	1	Pin - base end] only
26	93 43 075	1	Capscrew

**MAIN ARM, ROCKER &
TENSION LINK. - Std arm**



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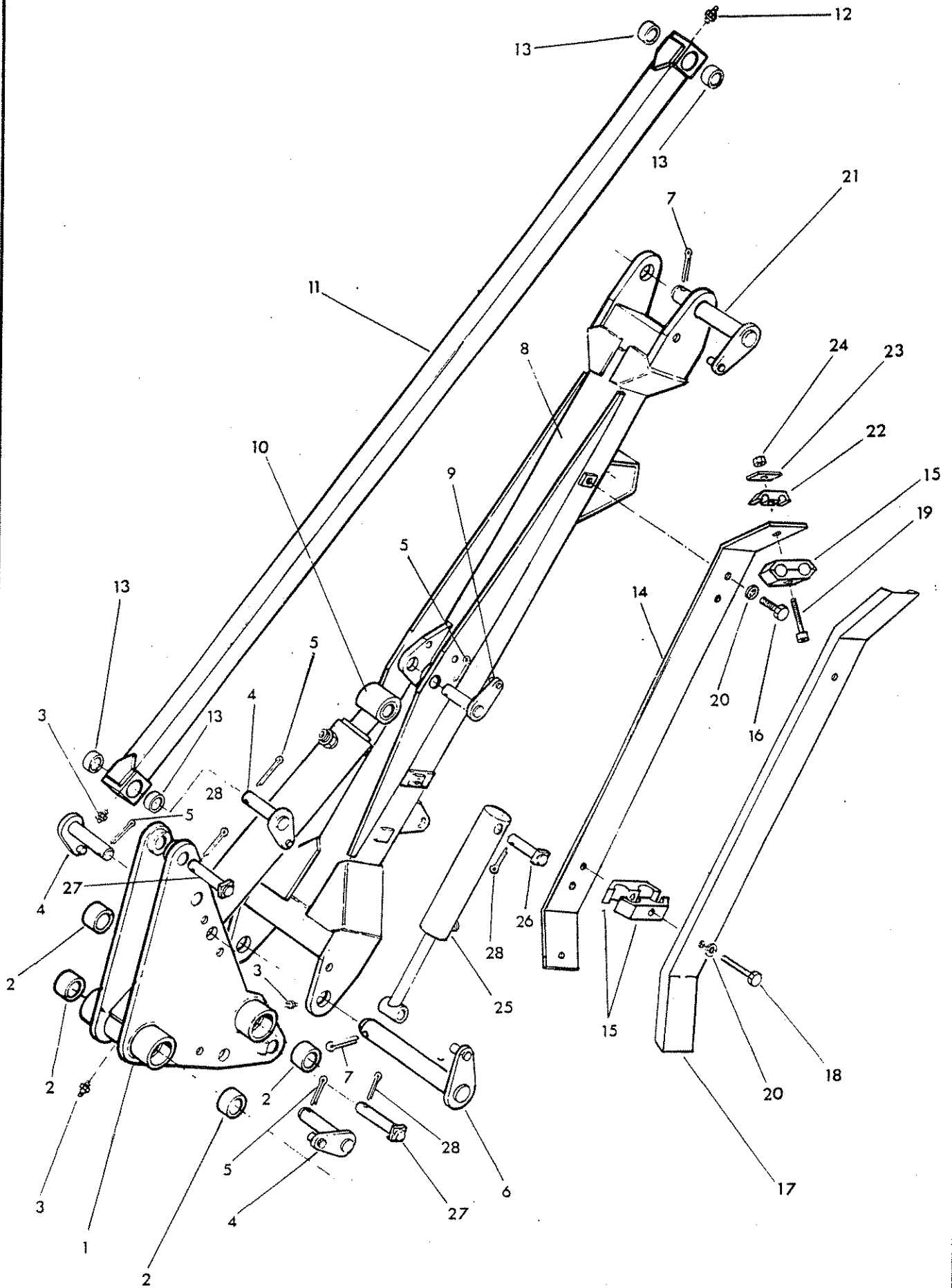


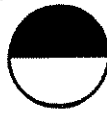
Ref.	Part No.	Qty.	Description
MAIN ARM ROCKER & TENSION LINK			
1	71 93 330	1	Rocker
2	72 13 023	4	Bush - Rocker pivot
3	09 01 121	3	Greaser
4	71 93 025	4	Pivot pin - Tension link, Reach base & lift ram rod
5	05 03 166	5	Split pin
6	71 93 033	1	Pivot pin - Main Arm and rocker
7	95 01 509	2	Split pin
8	71 93 358	1	Main arm
9	71 93 022	1	Pivot pin - Reach
10	71 93 334	1	Reach ram assembly
11	71 93 360	1	Tension link
12	09 01 124	1	Greaser
13	60 12 032	4	Bush
14	71 93 397	1	Hose guide
15	42024 06	4	Hose clamp
16	93 13 035	2	Setscrew
17	71 93 398	1	Hose cover
18	92 13 145	2	Bolt
19	93 43 204	2	Capscrew
20	91 00 305	4	Internal serrated washer
21	71 93 034	1	Pivot pin - Dipper
22	42024 07	1	Clamp
23	71 93 066	2	Clamp plate
24	91 13 004	2	Self locking nut

MAIN ARM, ROCKER &
TENSION LINK - AHC

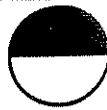


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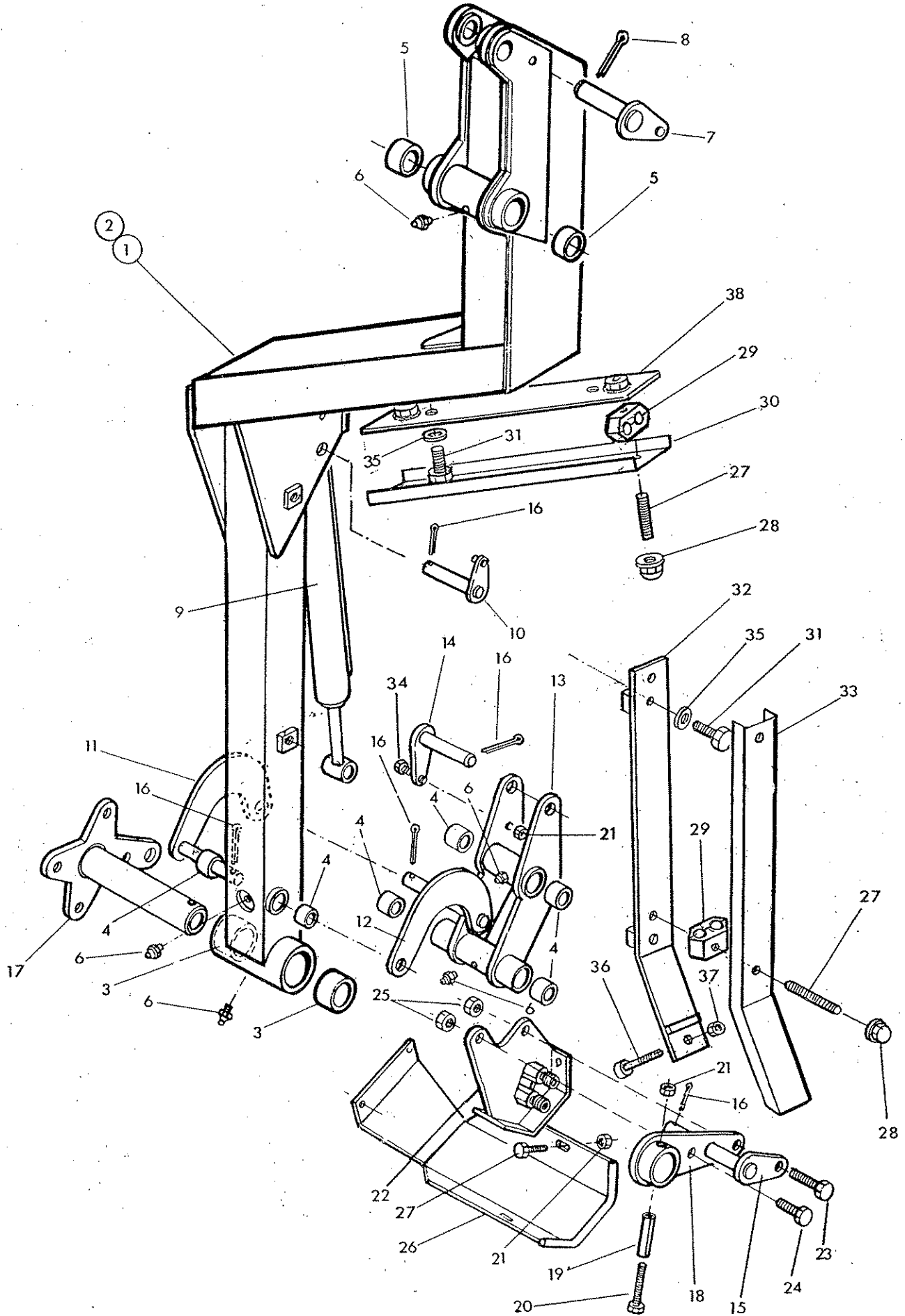




Ref.	Part No.	Qty.	Description
MAIN ARM ROCKER & TENSION LINK			
1	71 95 300	1	Rocker
2	72 13 023	4	Bush - Rocker pivot
3	09 01 121	3	Greaser
4	71 93 025	4	Pivot pin - Tension link, Reach base & lift ram rod
5	05 03 166	5	Split pin
6	71 93 033	1	Pivot pin - Main Arm
7	95 01 509	2	Split pin
8	71 93 396	1	Main arm
9	71 93 022	1	Pivot pin - Reach
10	71 93 334	1	Reach ram assembly
11	71 93 360	1	Tension link
12	09 01 124	1	Greaser
13	60 12 032	4	Bush
14	71 93 397	1	Hose guide
15	42024-06	4	Hose clamp
16	93 13 035	2	Setscrew
17	71 93 398	1	Hose cover
18	92 13 145	2	Bolt
19	93 43-204	2	Capscrew
20	91 00 305	4	Internal serrated washer
21	71 93 034	1	Pivot pin - Dipper
22	42024-07	1	Clamp
23	71 93 066	2	Clamp plate
24	91 13 004	2	Self locking nut
25	75 60 356	1	Compensator ram
26	71 95 004	1	Pin - compensator ram base
27	71 95 003	21	Pin - compensator ram rod
28	95 01 406	3	Split pin

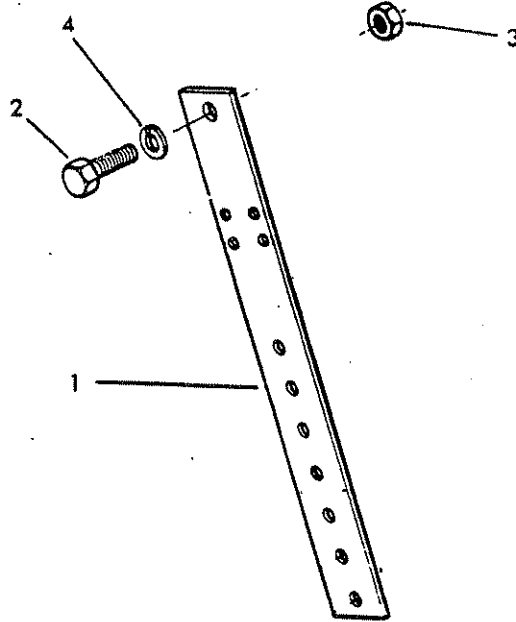


Ref.	Part No.	Qty.	Description
DIPPER ARM & ANGLING MECHANISM			
1	71 93 308	1	Dipper arm
2	71 36 035	2	Bush - head pivot
3	41690-01	6	Bush - Radius arm pivot and slave link
4	72 13 023	2	Bush - Dipper pivot
5	09 01 121	4	Greaser
6	71 93 025	1	Pivot pin - Tension link
7	05 03 166	1	Split pin
8	71 93 399	1	Hose cover
9	42024-06	3	Hose clamp
10	92 13 155	2	Bolt
11	92 13 105	2	Bolt
12	91 00 305	2	Internal serrated washer
13	75 60 344	1	Angle ram assembly
14	71 92 024	1	Pivot pin - Angle ram base
15	74 50 251	1	Radius arm - rear
16	74 50 250	1	Radius arm - front
17	71 92 309	1	Slave link
18	41693.01	1	Pivot pin - Angle ram rod
19	71 92 009	1	Pivot pin - Slave link
20	95 01 406	5	Split pin
21	71 92 308	1	Head pivot tube
22	71 92 316	1	Jaw plate
23	04 23 548	1	Spring dowel
24	92 13 185	1	Bolt
25	91 43 005	6	Self locking nut
26	71 92 303	1	Hose junction bracket
27	02 11 146	1	Bolt
28	02 11 126	1	Bolt
29	01 41 006	2	Self locking nut
30*	71 92 324	1	Hose tray
31	93 13 045	2	Setscrew
32	71 93 064	2	Clamp plate
33	93 13 075	1	Setscrew
* SPARES NOTE:			
	72 90 346	1	Hose Tray - belt drive head

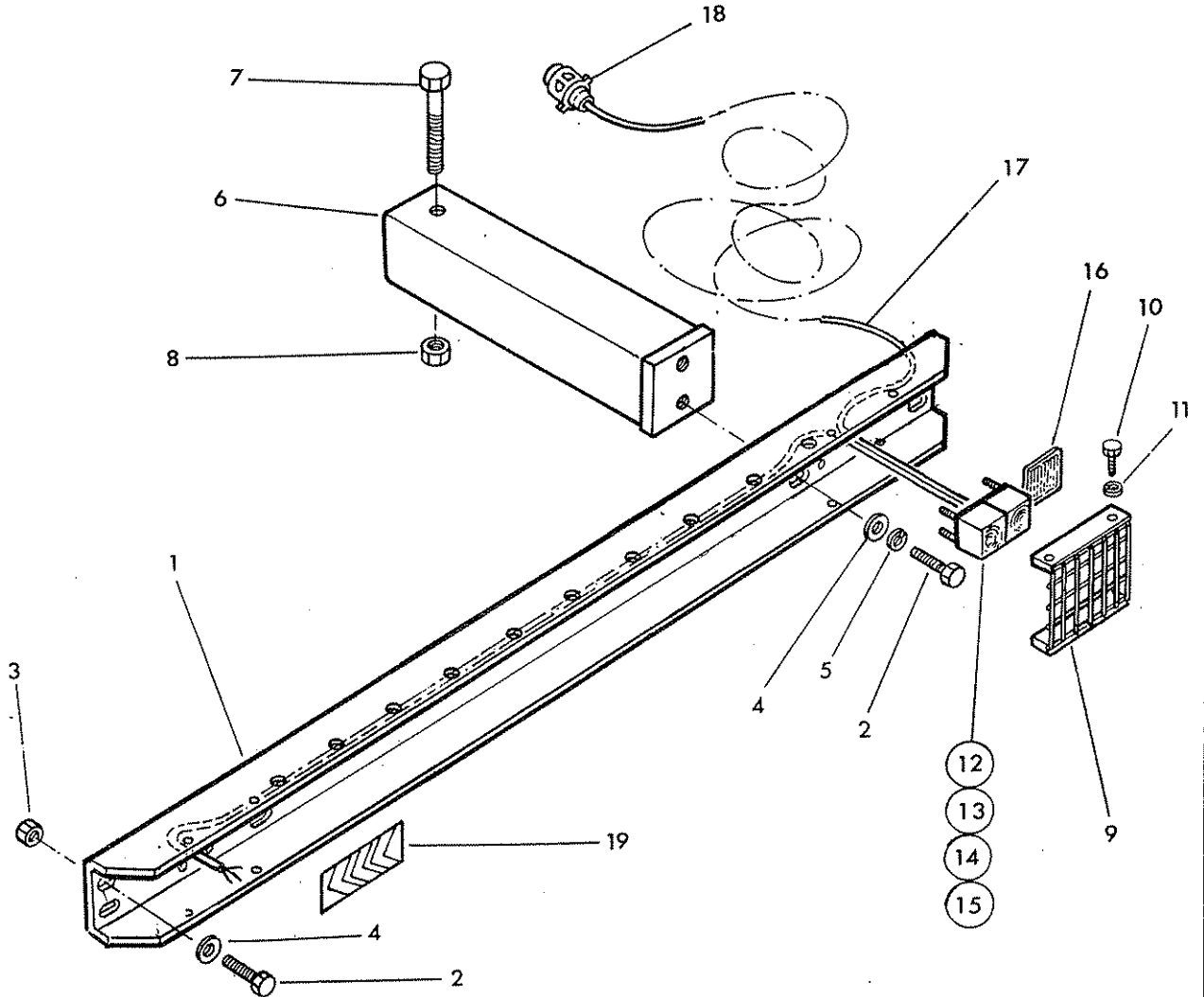




Ref	Part No	Qty	Description
			MID CUT DIPPER ARMS AND ANGLING MECHANISM
1	71 93 345		Dipper arm
3	71 36 035	2	Bush - head pivot
4	41690.01	6	Bush - radius arm pivot and slave link
5	72 13 023	2	Bush - dipper pivot
6	09 01 121	5	Greaser
7	71 93 025	1	Pivot pin - tension link
8	05 03 166	1	Split pin
9	75 60 344	1	Angle ram assembly
10	71 92 024	1	Pivot pin - angle ram base
11	74 50 251	1	Radius arm - front
12	74 50 250	1	Radius arm - rear
13	71 92 309	1	Slave link
14	41693.01	1	Pivot pin - angle ram rod
15	71 92 009	1	Pivot pin - slave link
16	95 01 406	5	Split pin dia
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	6	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 92 324	1	Hose tray - direct drive head
	72 90 346	1	Hose tray - belt drive head
27	04.282.76	4	Stud
28	91 00 025	4	Dome nut
29	42024.06	5	Hose clamp - 1 pair
30	71 93 047	1	Hose cover
31	93 13 045	6	Bolt
32	42951.01	1	Hose guide
33	71 93 048	1	Hose cover
34	93 13 055	1	Setscrew
35	91 00 305	4	Internal serrated washer
36	92 43 154	1	Capscrew
37	91 43 004	1	Self locking nut
38	42952.01	1	Hose guide



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

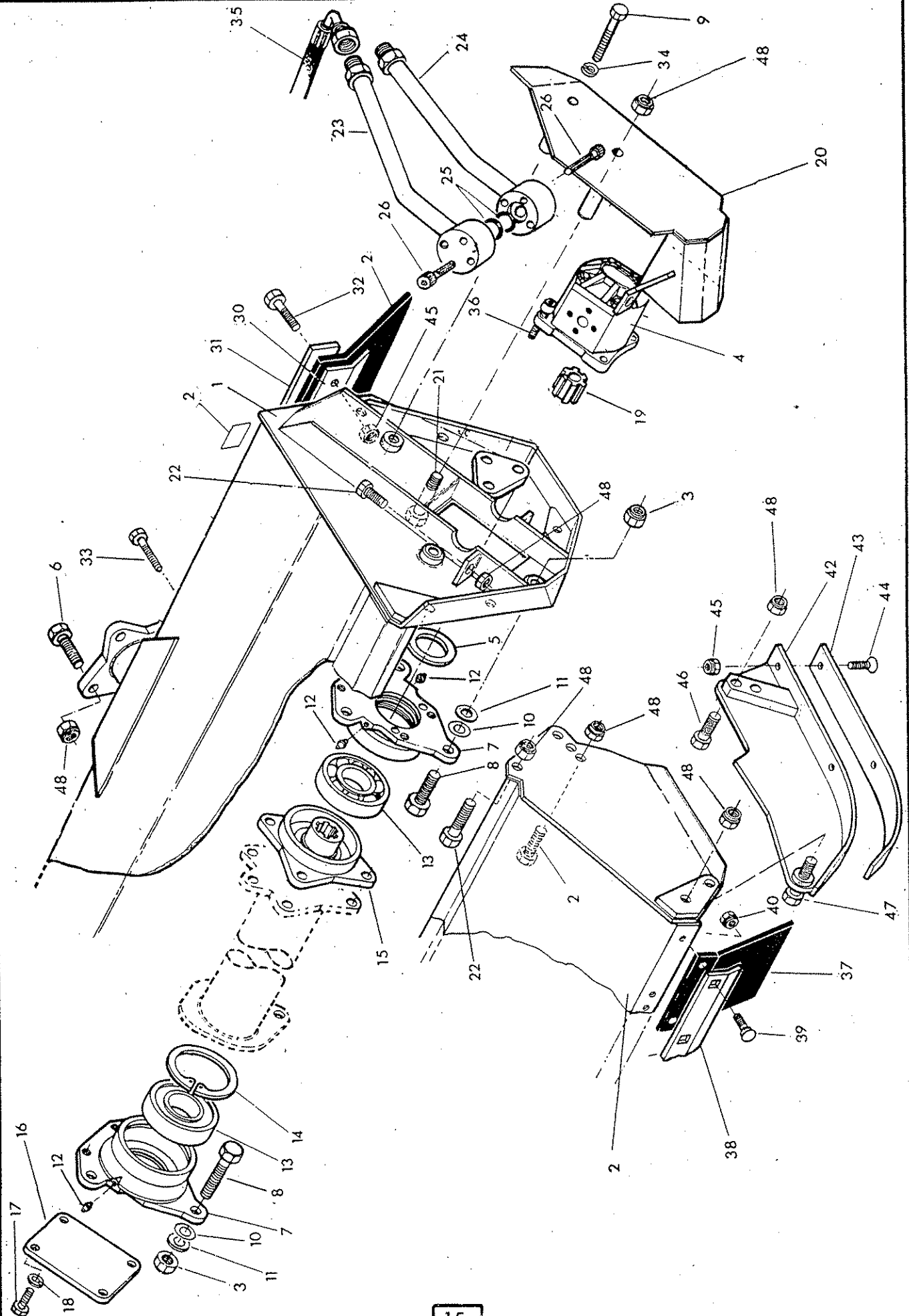


Ref.	Part No.	Qty.	Description
	74 50 922		LIGHT BAR KIT
1	41549.01	1	Light bar
2	93 13 065	4	Setscrew
3	91 43 005	2	Self locking nut
4	91 00 105	4	Plain washer
5	91 00 205	2	Spring washer
6	41527.01	1	Light bar mount
7	05.292.23	1	Bolt
8	91 43 006	1	Self locking nut
9	75 60 353	2	Light guard
10	93 13 023	8	Setscrew
11	91 00 203	8	Spring washer
12	75 60 086	2	Light incl:-
13	75 60 087	2	Stop/tail bulb 12v
14	75 60 088	2	Flasher bulb 12v
15	93 00 142	8	Self tap screw
16	75 60 093	2	Reflector - self adhesive
17	75 60 090	1	Cable
18	75 60 089	1	Plug - 7 pin
19	12 90 347	2	Sticker - chevron

FLAIL CASING - Direct drive



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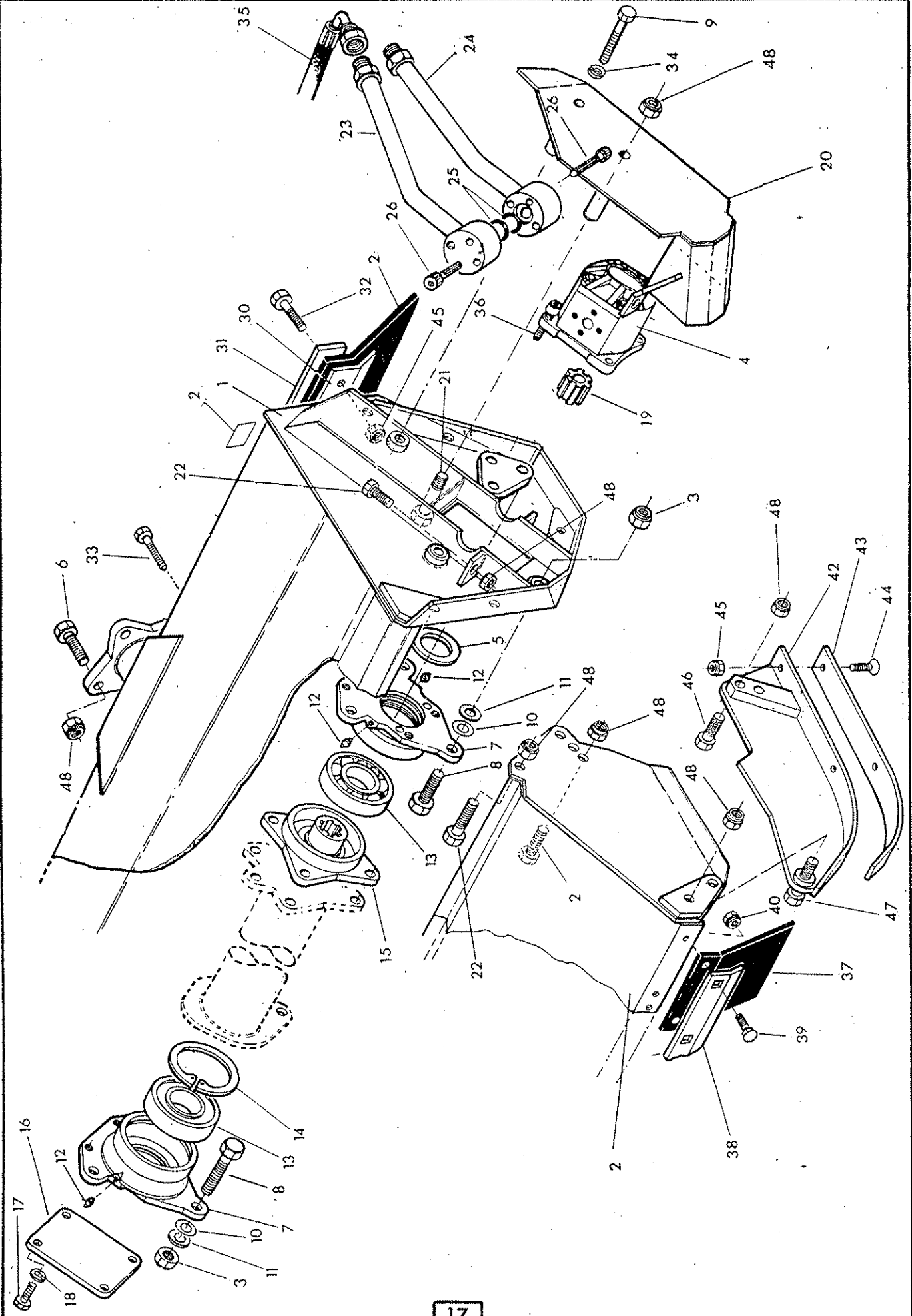


Ref.	Part No.	Qty	Description
			FLAIL HEAD CASING - DIRECT DRIVE
1	71 90 262	1	Flail casing
2	13 35 246	1	Serial No. plate
3	91 00 024	6	Special nut
4	83 01 282	1	Hydraulic motor
5	71 90 015	1	Motor locating washer
6	02 11 186	4	Bolt
7	71 90 261	2	Bearing housing
8	92 00 023	6	Special bolt
9	02 11 326	1	Bolt
10	81 21 043	as reqd	Shim
11	81 21 044	as reqd	Shim
12	09 01 121	4	Greaser
13	06 00 018	2	Bearing
14	71 90 022	1	Internal circlip
15	71 90 571	2	Rotor hub
16	71 90 444	1	Cover plate
17	93 13 045	4	Setscrew
18	91 00 205	4	Spring washer
19	71 90 573	1	Drive coupling
20	42282 01	1	Motor cover
21	02 11 566	1	Bolt
22	03 11 126	2	Setscrew 5/8" BSP x 1 1/2" long
23	71 90 378	1	Motor pipe - upper
24	71 90 379	1	Motor pipe - lower
25	86 00 121	2	'O' ring
26	93 00 014	6	Capscrew 'wedglok'
27	71 90 288	1	Front hood
28	03 11 106	2	Setscrew 3/8" BSP x 1 1/2" long
29	71 90 314	1	Rear flap
30	71 90 312	1	Mounting strip
31	71 90 313	1	Clamp strip
32	93 13 065	7	Setscrew
33	93 13 075	2	Setscrew
34	01 00 206	1	Spring washer
35	85 01 154	2	Hose 1" BSP x 42" long
36	93 00 144	4	Capscrew wedglok
	86 99 236		SEAL KIT for hydraulic motor
	86 29 209		Shaft seal

FLAIL CASING - Direct drive



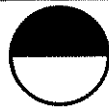
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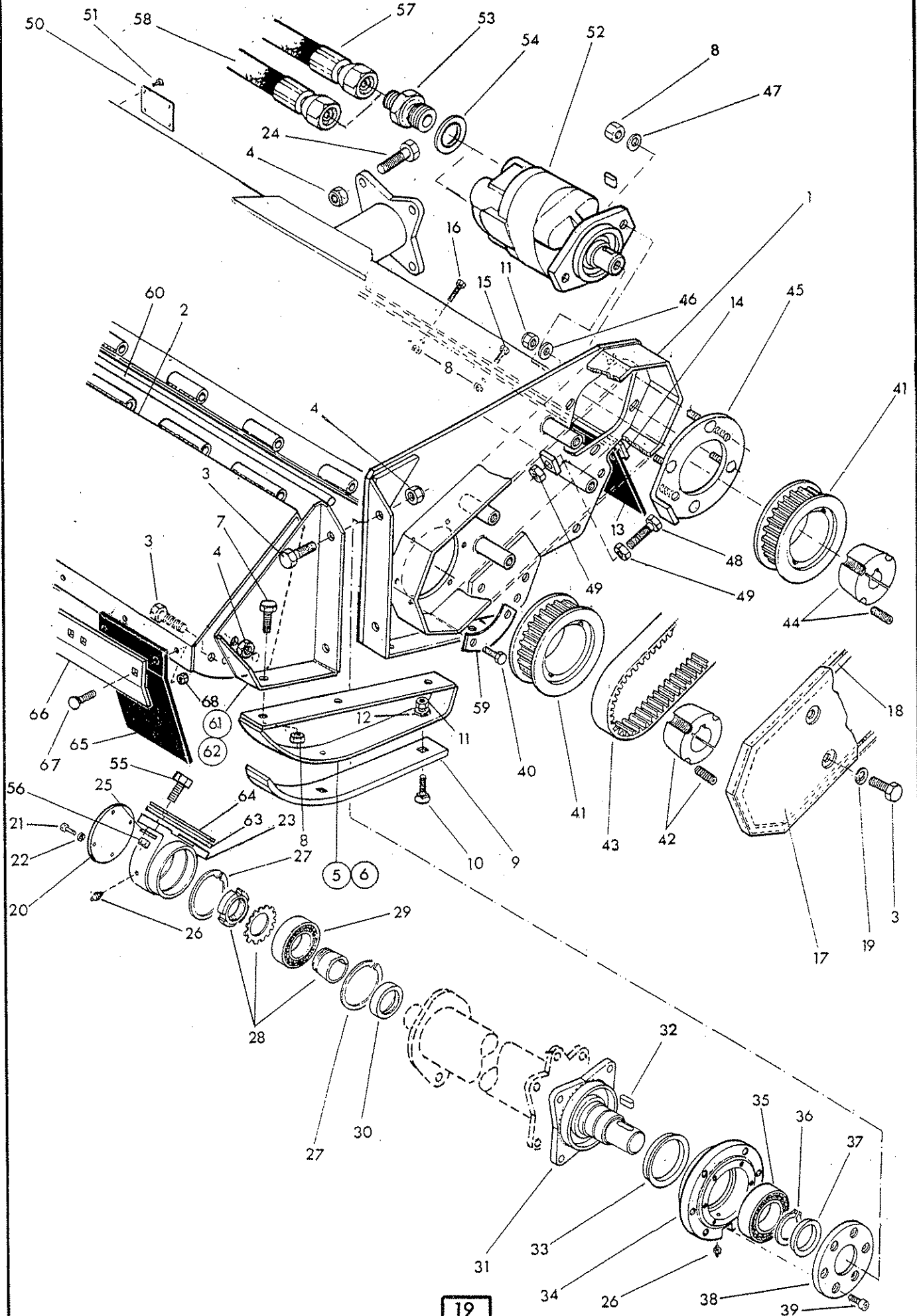


Ref.	Part No.	Qty	Description
			FLAIL HEAD CASING - DIRECT DRIVE
	72 90 375		FRONT FLAP KIT
37	72 90 053	8	Flap
38	71 90 304	1	Flap clamp strip
39	92 93 054	16	Cup square bolt
40	91 43 004	16	Self locking nut
	71 90 421		SKID KIT
41	71 90 300	1	Skid R. Hand - not illus.
42	71 90 301	1	Skid L. Hand
43	73 14 323	1	Wear Skid
44	93 13 065	6	Setscrew c/sunk
45	91 43 005	15	Self locking nut
46	03 11 146	2	Setscrew
47	03 11 086	2	Setscrew
48	01 41 006	15	Self locking nut

FLAIL CASING - Belt drive



MCCORMICK



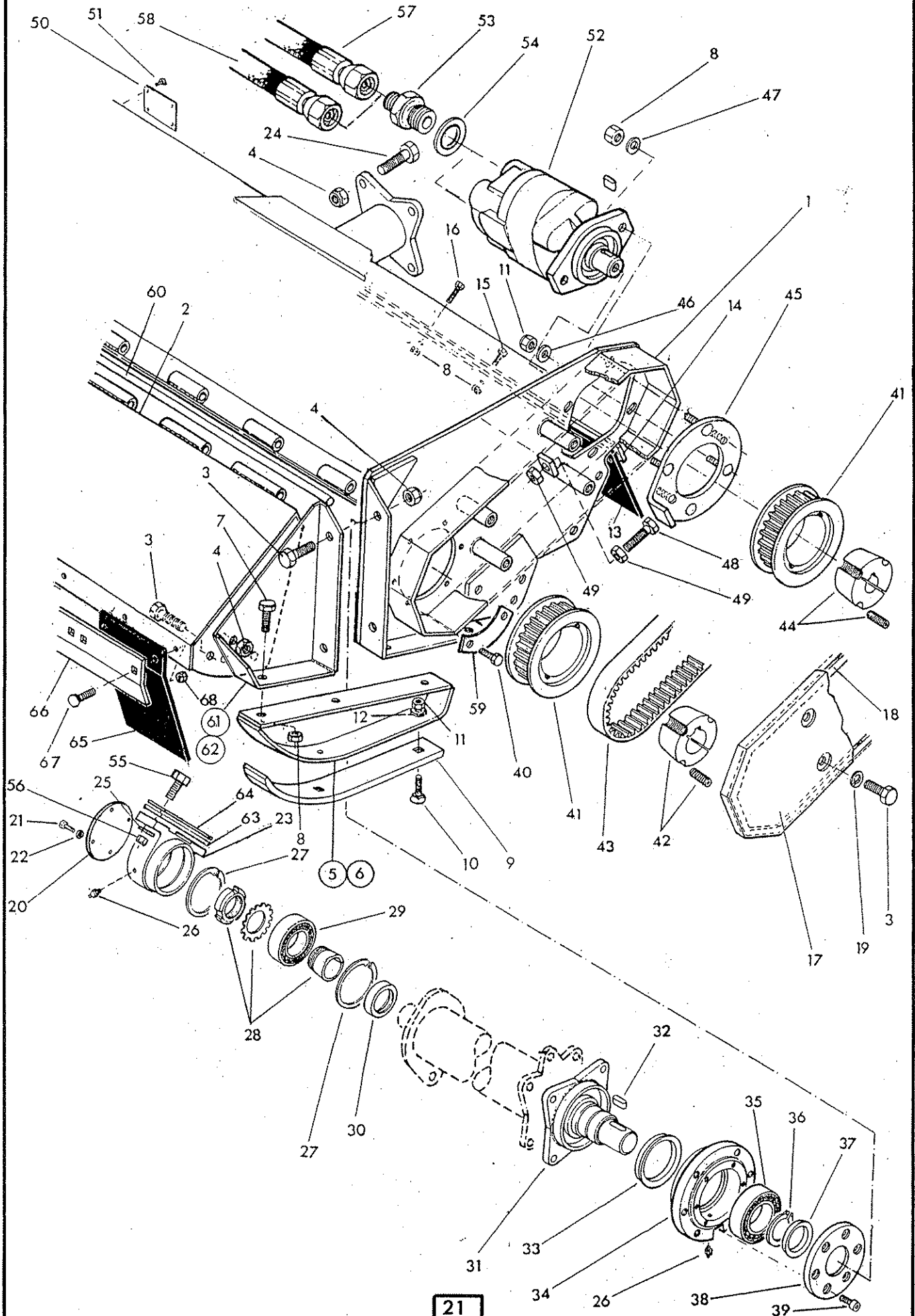


Ref.	Part No.	Qty.	Description
1.2M BELT DRIVE FLAIL HEAD CASING			
1	72 90 333	1	Hood
2	72 90 386	1	Front hood
3	03 11 106	10	Setscrew
4	01 41 006	10	Self locking nut
5	72 90 389	1	Skid - R. hand
6	72 90 390	1	Skid - L. hand
7	93 13 055	6	Setscrew
8	91 43 005	23	Self locking nut
9	72 90 391	2	Wear skid
10	60 12 034	6	Tine bolt
11	01 42 004	10	Self locking nut
12	01 00 104	6	Plain washer
13	72 90 348	1	Rear flap
14	72 90 347	1	Clamp strip
15	93 13 065	6	Setscrew
16	93 13 075	3	Setscrew
17	72 90 343	1	Belt cover
18	72 90 052	1	Seal strip
19	01 00 206	4	Spring washer
20	72 90 042	1	Bearing cover - free end
21	93 13 033	4	Setscrew
22	91 00 203	4	Spring washer
23	72 90 322	1	Bearing housing
24	02 11 186	4	Bolt
25	10 65 077	2	Special washer
26	09 01 121	2	Greaser
27	72 90 056	2	Internal circlip
28	06 00 097	1	'Adaptor sleeve assembly
29	06 00 096	1	Bearing - free end
30	72 90 013	1	Bearing adaptor
31	72 90 323	1	Drive hub
32	72 90 017	1	Key
33	72 90 048	1	Seal

FLAIL CASING - Belt drive



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

1.2M BELT DRIVE FLAIL HEAD CASING
Continued

34	72 90 321	1	Bearing housing - drive end
35	06 00 095	1	Bearing - drive end
36	04 01 255	1	External circlip
37	72 90 049	1	Seal
38	72 90 023	1	Bearing retainer
39	93 43 034	6	Capscrew
40	93 13 045	6	Setscrew
41	72 90 047	2	Drive sprocket
42	72 90 016	1	Taper lock drive bush
43	72 90 046	1	Belt
44	05-424-07	1	Taper lock drive bush
45	72 90 426	1	Motor mounting plate
46	72 90 051	4	Special washer
47	91 00 105	2	Plain washer
48	93 13 117	1	Belt adjuster screw
49	91 13 007	2	Nut
50	13 35 246	1	Serial No. plate
51	71 03 230	4	Pop rivet
52	09-773-05	1	Hydraulic motor
53	80 02 086	2	Adaptor
54	86 50 106	2	Bonded seal
55	92 00 023	2	Special bolt
56	91 00 024	2	Special nut
57	85 01 227	1	Hose 1" BSP x 21" long SF- 135F
58	85 01 228	1	Hose 1" BSP x 22 1/2" long SF - 135F
59	72 90 073	3	Tab washer
60	72 90 061	1	Pivot rod
61	72 90 388	1	Hood carrier bracket L hand
62	72 90 387	1	Hood carrier bracket R Hand - not illustrated
63	72 90 425	as	Shim
64	72 90 424	reqd	Shim

72 90 375

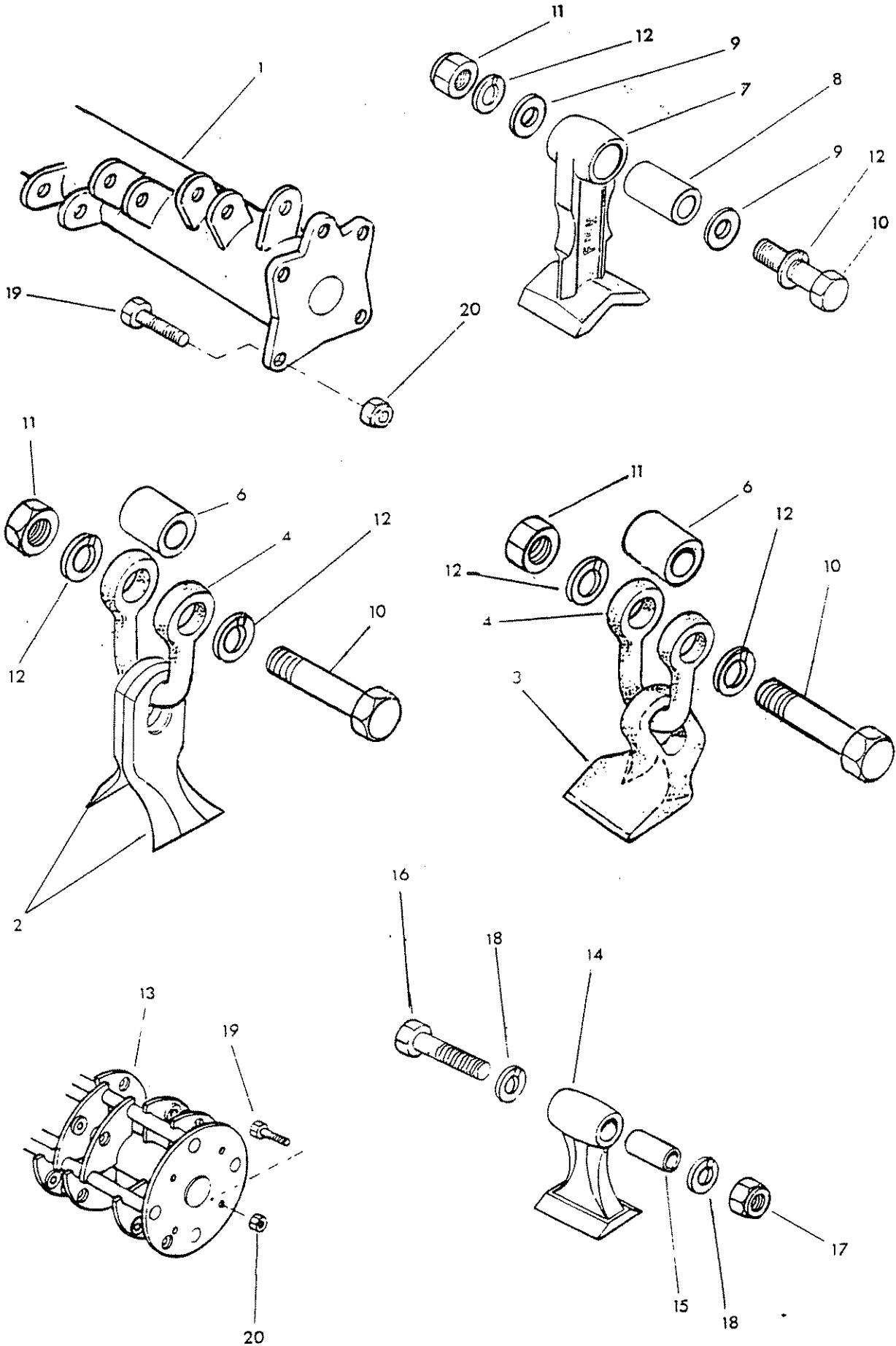
FRONT FLAP KIT

65	72 90 053	8	Front flap
66	71 90 304	1	Clamp strip
67	92 93 054	16	Dome headed coach bolt
68	91 43 005	16	Self locking nut

ROTOR & FLAIL OPTIONS



McCormel





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

ROTORS AND FLAILS

1	73 90 270	1	Rotor
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The following flails are suitable for use with 73 90 270

2	41654.01	48	Flail
3	71 90 462	24	Flail
4	73 90 013	24	Shackle
6	73 90 018	24	Spacer sleeve
7	73 14 366	24	Flail
8	73 14 223	24	Pivot boss
9	73 90 005	48	Spacer
10	73 90 006	24	Special bolt
11	01 41 006	24	Self locking nut
12	01 00 206	48	Spring washer
13	71 90 465	1	Rotor - Omega

The following are used with 71 90 465

14	71 90 464	20	Flail
15	71 90 117	20	Bush
16	73 90 006	20	Special bolt
17	01 41 006	20	Self locking nut
18	01 00 206	20	Spring washer

The following are used with both rotors

19	92 00 025	2	Special bolt
20	91 00 024	2	Special nut

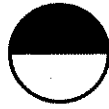
ROTOR ASSEMBLIES - DIRECT DRIVE

71 90 501	Rotor assembly - Hedge
71 90 502	Rotor assembly - Grass
71 90 503	Rotor assembly - Universal
71 90 471	Rotor assembly - Omega

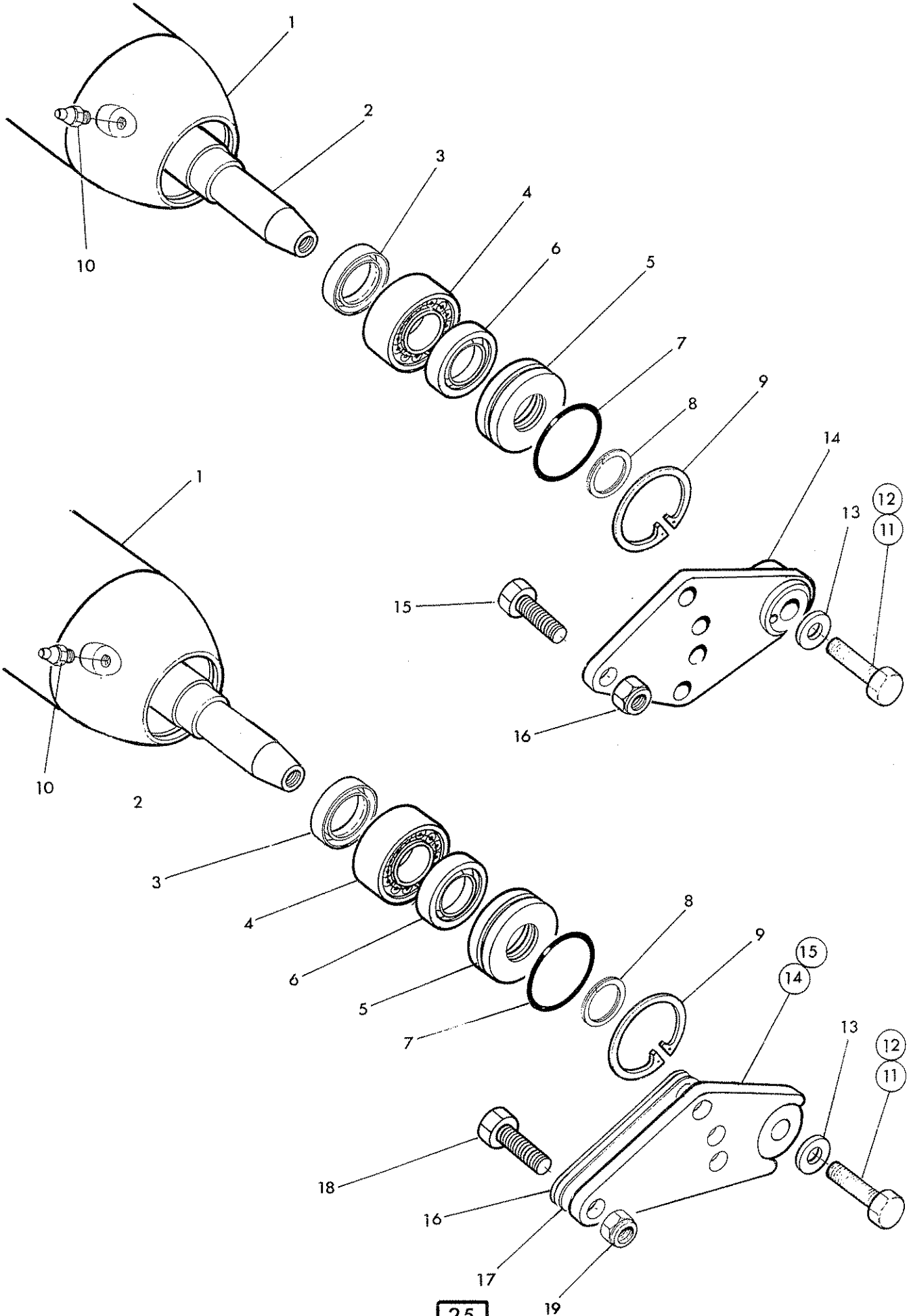
ROTOR ASSEMBLIES - BELT DRIVE

73 90 271	Rotor assembly - Hedge
73 90 272	Rotor assembly - Grass
73 90 273	Rotor assembly - Universal
71 90 498	Rotor assembly - Omega

ROLLERS



McCONEL

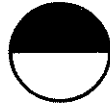




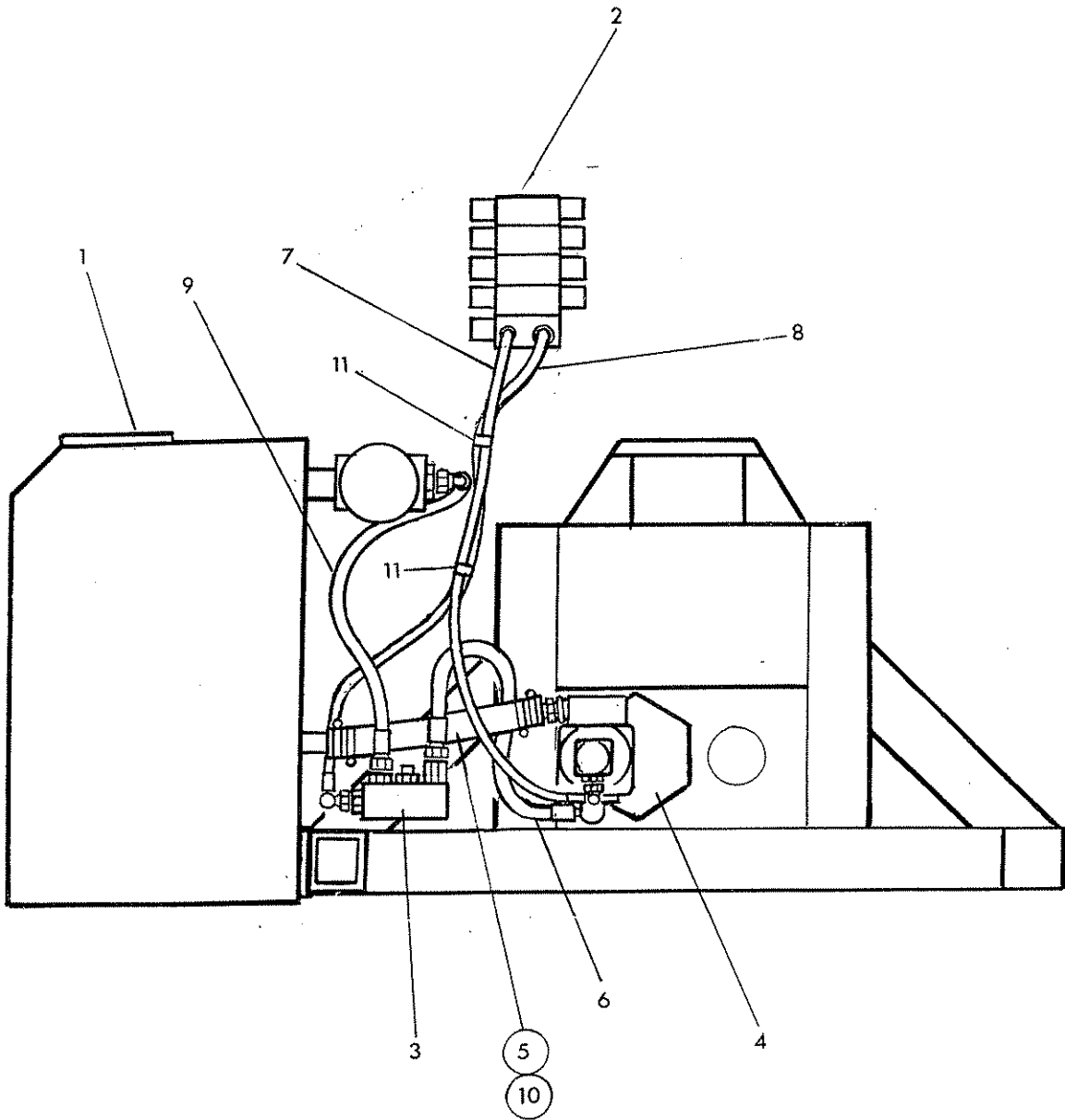
Ref	Part No.	Qty	Description
ROLLER ASSEMBLIES			
42241.25		DIRECT DRIVE HEADS	
1	42241.10	1	Roller
2	42242.04	1	Roller axle
3	86 29 181	2	Seal
4	06 00 099	2	Bearing
5	73 90 011	2	Seal carrier
6	86 29 125	2	Seal
7	86 00 422	2	'O' ring
8	04 12 120	2	Spring ring
9	04 11 262	2	Circlip - internal
10	09 01 121	2	Greaser
11	93 00 150	1	Special set screw L Hand
12	93 00 149	1	Special set screw R Hand
13	42503.02	2	Special washer
14	42246.03	2	Roller bracket
15	02 11 186	4	Bolt
16	01 41 006	4	Self locking nut

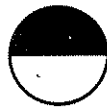
42241.24		BELT DRIVE HEADS	
1	42241.10	1	Roller
2	42242.04	1	Roller axle
3	86 29 181	2	Seal
4	06 00 099	2	Bearing
5	73 90 011	2	Seal carrier
6	86 29 125	2	Seal
7	86 00 422	2	'O' ring
8	04 12 120	2	Spring ring
9	04 11 262	2	Circlip - internal
10	09 01 121	2	Greaser
11	93 00 150	1	Special set screw L Hand
12	93 00 149	1	Special set screw R Hand
13	42503.02	2	Special washer
14	42246.01	1	Roller bracket L Hand
15	42246.02	1	Roller bracket R Hand
16	42257.02	as req.	Shim
17	42257.01	as req.	Shim
18	93 13 097	4	Setscrew
19	91 43 007	4	Self locking nut

**HOSE INSTALLATION -
Primary circuit**



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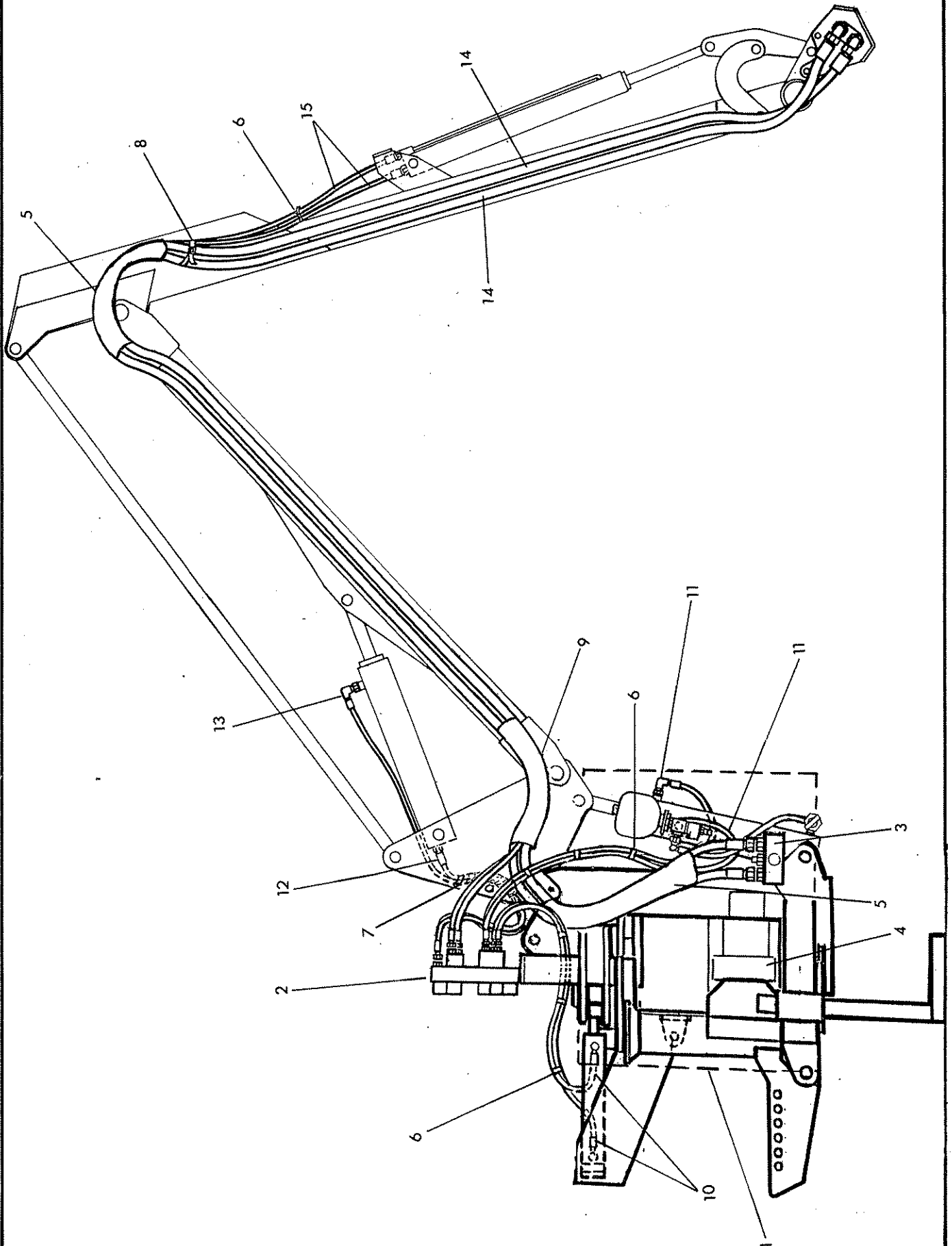


Ref. Part No.	Qty.	Description
		HOSE INSTALLATION - PRIMARY CIRCUIT
1		Hydraulic reservoir
2		Main control valve
3		Rotor control valve
4		Pump and gearbox
5	85 01 252	1 Hose 1 1/2" bore x 14"long - suction
6	85 01 170	1 Hose 1" BSP x 14"long - Pump -RC Valve
7	85 33 094	1 Hose 1/2" BSP x 63" long -Pump-Arm Valve
8	85 38 105	1 Hose 3/4 BSP x 59" long -Arm valve-RC Valve
9	85 01 206	1 Hose 1" BSP x 50" long - Tank return
10	09 04 107	4 Hose clip 1 1/2 bore
11	71 96 045	2 Hose tie

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

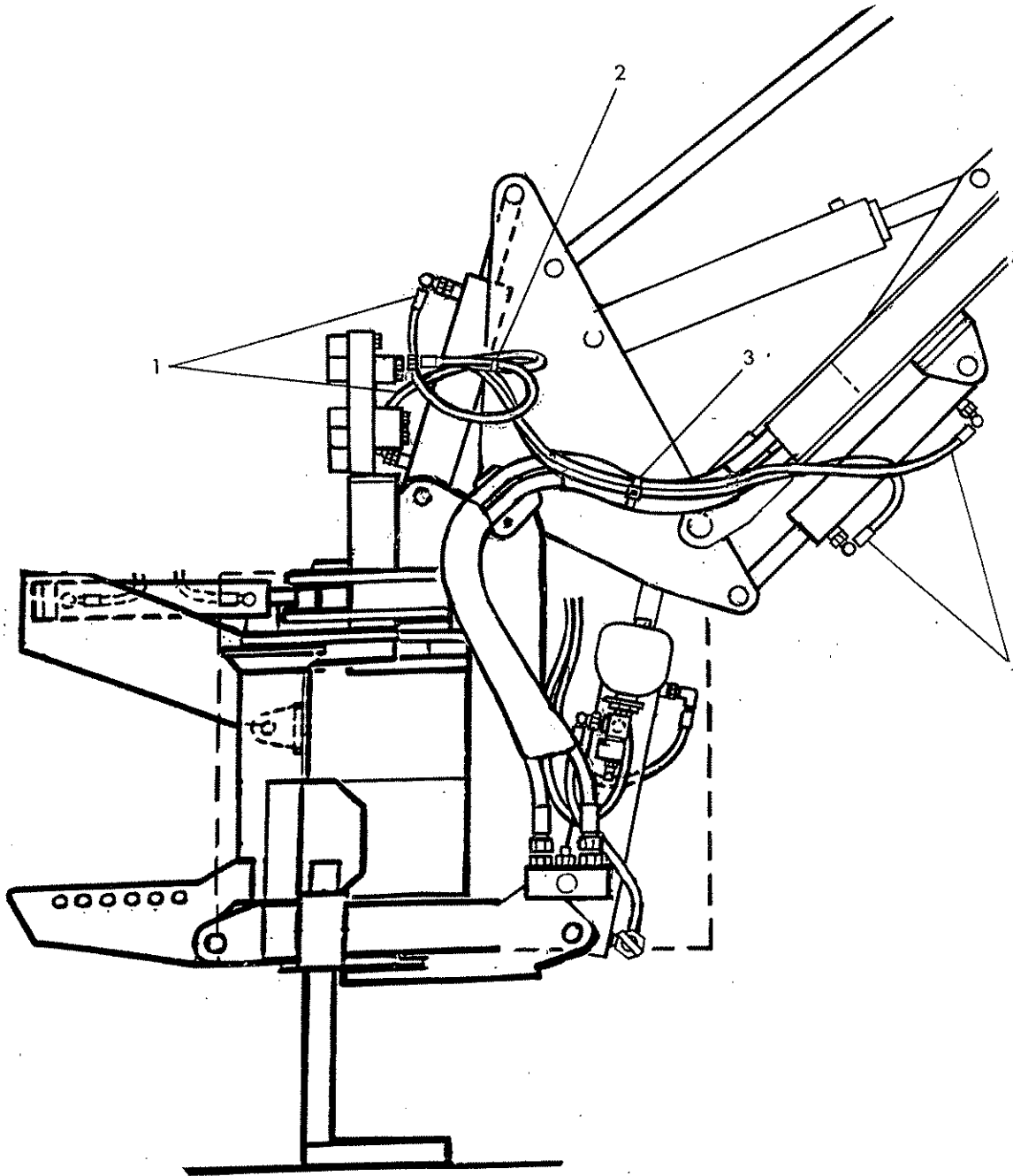


McCONNELL





Ref. Part No.	Qty.	Description
HOSE INSTALLATION - SERVICE CIRCUITS		
1		Hydraulic reservoir
2		Main control valve
3		Rotor control valve
4		Pump and gearbox
5	75 50 063	2 Hose sleeve
6	71 35 084	6 Hose tie
7	72 13 005	1 Hose armour 3/8" dia x 450
8	71 06 187	1 Hose tie
9	75 50 065	1 Hose sleeve
10	85 35 182	2 Hose 1/4 BSP x 54" long -slew
11	85 35 022	2 Hose 1/4 BSP x 48" long -lift
12	85 15 052	1 Hose 1/4 BSP x 40" long -Reach base
13	85 35 072	1 Hose 1/4 BSP x 60" long -Reach gland
14	85 01 243	2 Hose 1" BSP x 220" long -Flail std arm
	85 01 265	2 Hose 1" BSP x 235" long -Flail midcut
15	85 15 142	2 Hose 1/4 BSP x 144" long -Angle std arm
	85 15 012	2 Hose 1/4 BSP x 156" long -Angle midcut

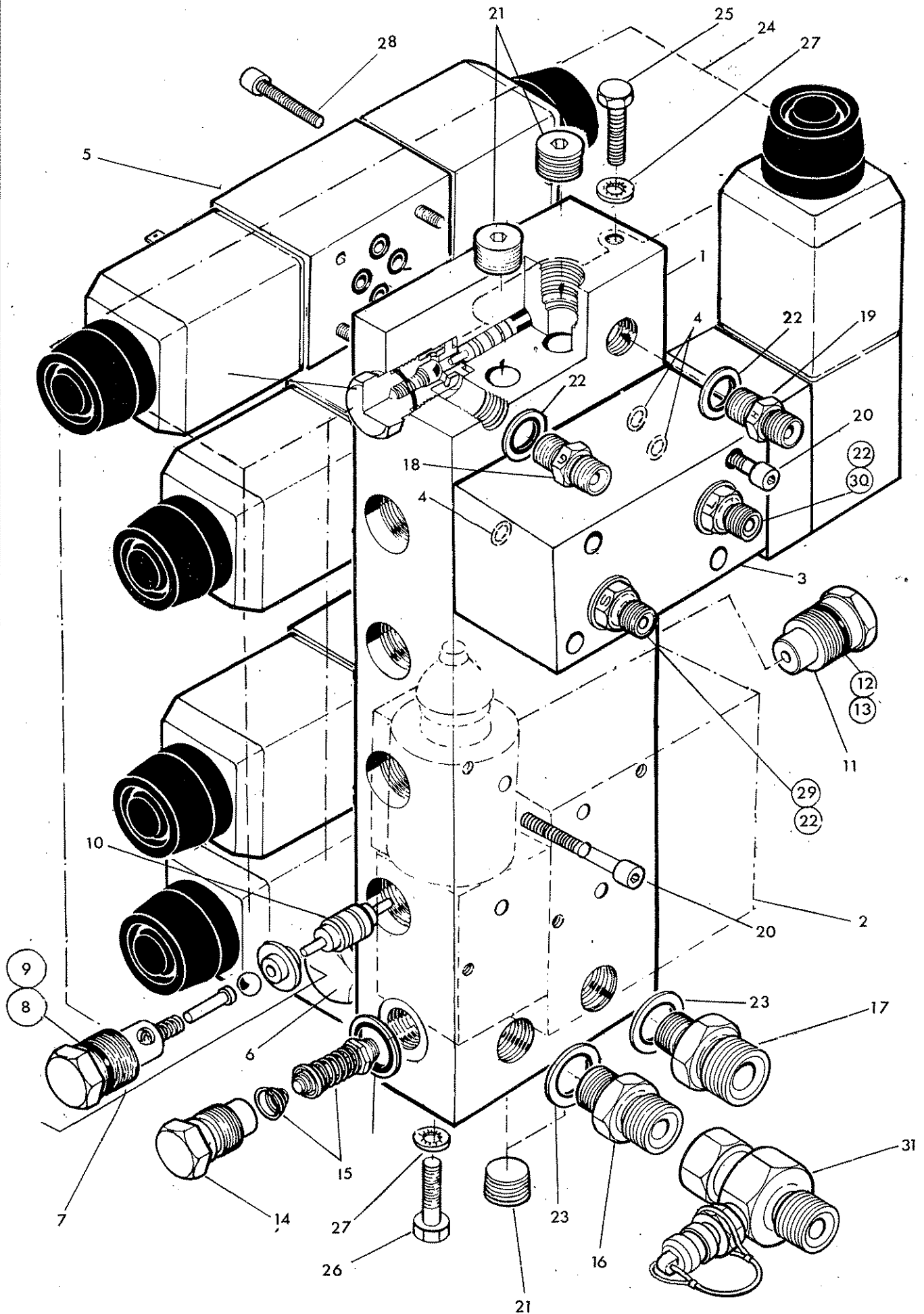




Ref. Part No. Qty. Description

The hose installation for A.H.C. models is identical to standard E machines with the following additions

1	85 35 92	4	Hose 1/4 BSP x 44" long - Lift/Reach comp
2	71 35 084	1	Hose tie
3	71 06 187	1	Hose tie

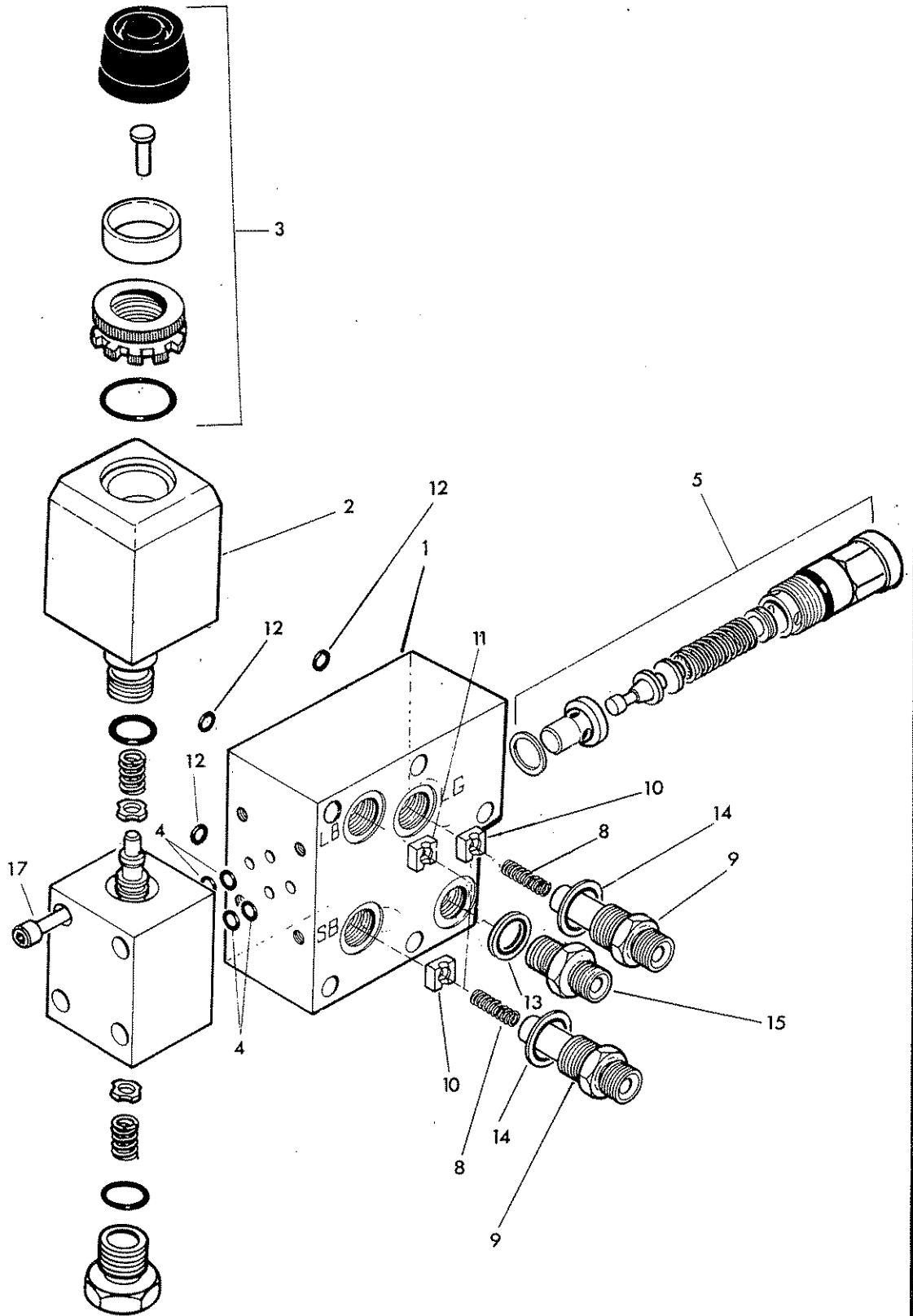




Ref.	Part No.	Qty.	Description
			CONTROL VALVE FOR STD ELECTRIC NON AHC MACHINES
	81 30 523		Solenoid/manifold valve assy.compr:
1	81 30 346	1	Manifold block
2		1	Slew circuit valve assembly
3		1	Angle float valve assembly
4	87 00 511	3	'O' ring
5		4	Double solenoid valve
6		1	Single solenoid valve
7	81 30 090	7	Check valve assy. incl. 'O' ring
8	87 00 644	1	'O' ring
9	87 09 644	1	Anti extrusion ring
10	81 30 087	4	Actuator
11	81 30 078	1	Check valve blank
12	87 00 644	1	'O' ring
13	87 09 644	1	Anti extrusion ring
14	81 30 032	1	Relief valve cap
15	81 30 092	1	Relief valve c/w spring (190 Bar)
16	60 00 112	1	Union
17	85 81 131	1	Adaptor
18	81 30 104	1	Restrictor union 'G' reach base
19	81 30 105	1	Restrictor union 'H' reach gland
20	92 43 082	9	Socket headed cap screw
21	85 82 042	4	Taper plug
22	86 50 102	4	Bonded seal
23	86 50 103	3	Bonded seal
24	71 96 302	1	Solenoid cover
25	93 13 035	2	Setscrew
26	93 13 055	2	Setscrew
27	91 00 305	4	Internal serrated washer
28	92 43 062	20	Capscrew socket headed
29	81 30 037	1	Restrictor union 'S'
30	81 30 038	1	Restrictor union 'L' BSP MM
31	81 31 009	1	Test point union
	86 99 197		SEAL KIT

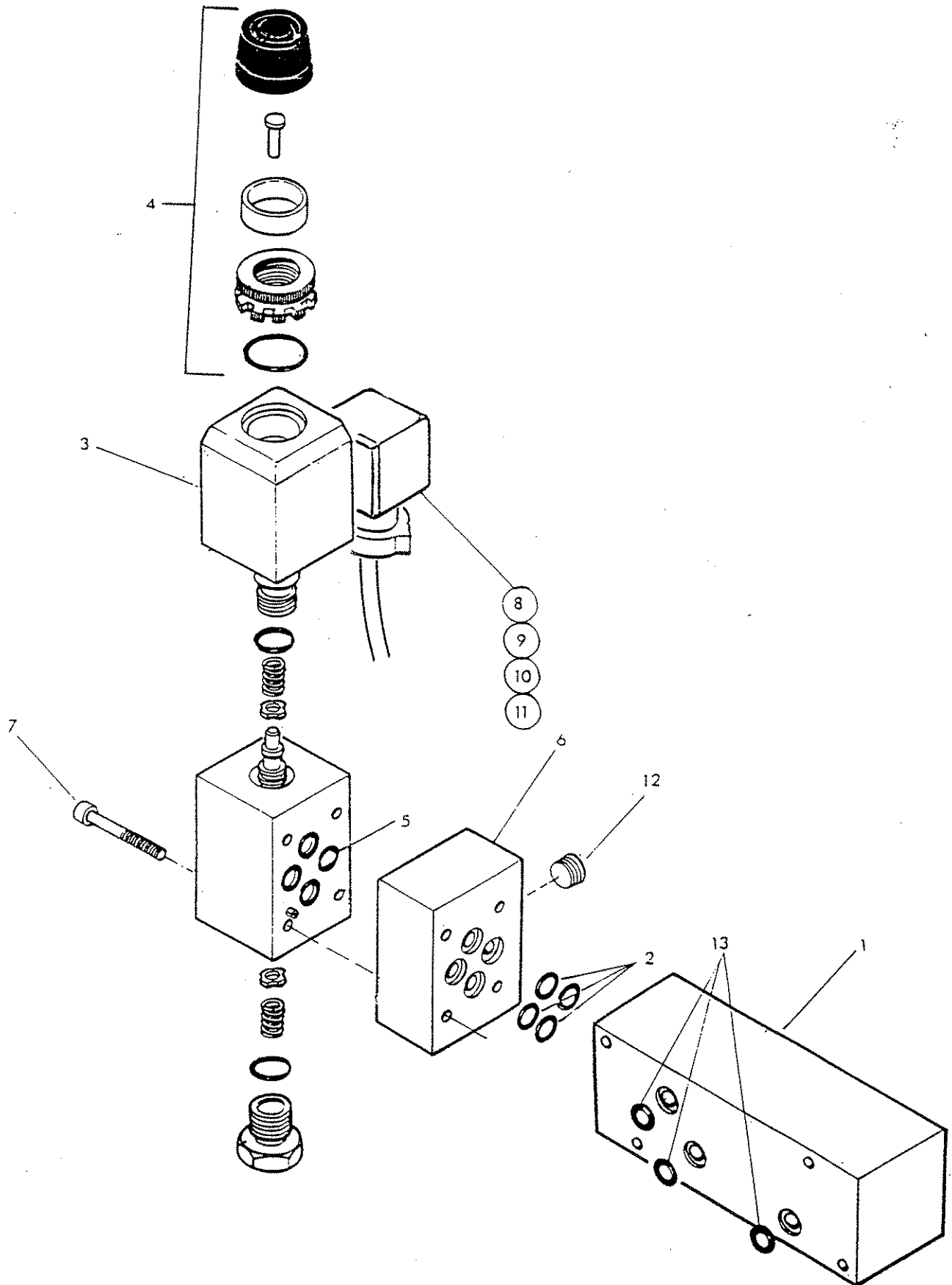


Ref.	Part No.	Qty.	Description
			CONTROL VALVE FOR STD. ELECTRIC AHC MACHINES
	81 30 524	1	Solenoid/manifold valve assembly compr:
1	81 30 346	1	Manifold block
2		1	Slew circuit valve assembly
3		1	Compensator/angle float valve assy.
4		4	Double solenoid valve
5		1	Single solenoid valve
6	81 30 090	7	Check valve assembly incl. 'O' ring
7	87 00 644	1	'O' ring
8	87 09 644	1	Anti extrusion ring
9	81 30 087	4	Actuator
10	81 30 078	1	Check valve blank
11	87 00 644	1	'O' ring
12	87 09 644	1	Anti extrusion ring
13	81 30 032	1	Relief valve cap
14	81 30 092	1	Relief valve c/w spring (190 Bar)
15	60 00 112	1	Union
16	85 81 131	1	Adaptor
17	81 30 104	1	Restrictor union 'G' reach base
18	81 30 105	1	Restrictor union 'H' reach gland
19	92 43 082	9	Socket headed cap screw
20	85 82 042	4	Taper plug
21	86 50 102	2	Bonded seal
22	86 50 103	3	Bonded seal
23	71 96 302	1	Solenoid cover
24	93 13 035	2	Setscrew
25	93 13 055	2	Setscrew
26	91 00 305	4	Internal serrated washer
27	92 43 062	20	Capscrew socket headed
28	81 31 009	1	Test point union
	86 99 197		SEAL KIT





Ref.	Part No.	Qty.	Description
	81 30 349		SLEW VALVE ASSEMBLY
1	81 30 348	1	Valve block
	81 30 457	1	Single solenoid valve inc:-
2	81 30 175	1	Coil
3	81 30 176	1	Manuel override kit
4	86 00 107	4	'O' ring
5	G381 2540	1	Relief valve assembly 170 bar (2500 PSi)
9	85 81 210	3	Special union
10	81 23 041	2	Restrictor disc red-Lift gland, slew base
11	81 23 043	1	Restrictor disc green - Lift base
12	87 00 511	3	'O' ring
13	86 50 102	1	Bonded seal
14	86 50 103	3	Bonded seal
15	85 81 169	1	Union
16	85 82 041	4	Plug
17	92 43 102	4	Capscrew - socket headed
	86 99 224		SOLENOID SEAL KIT



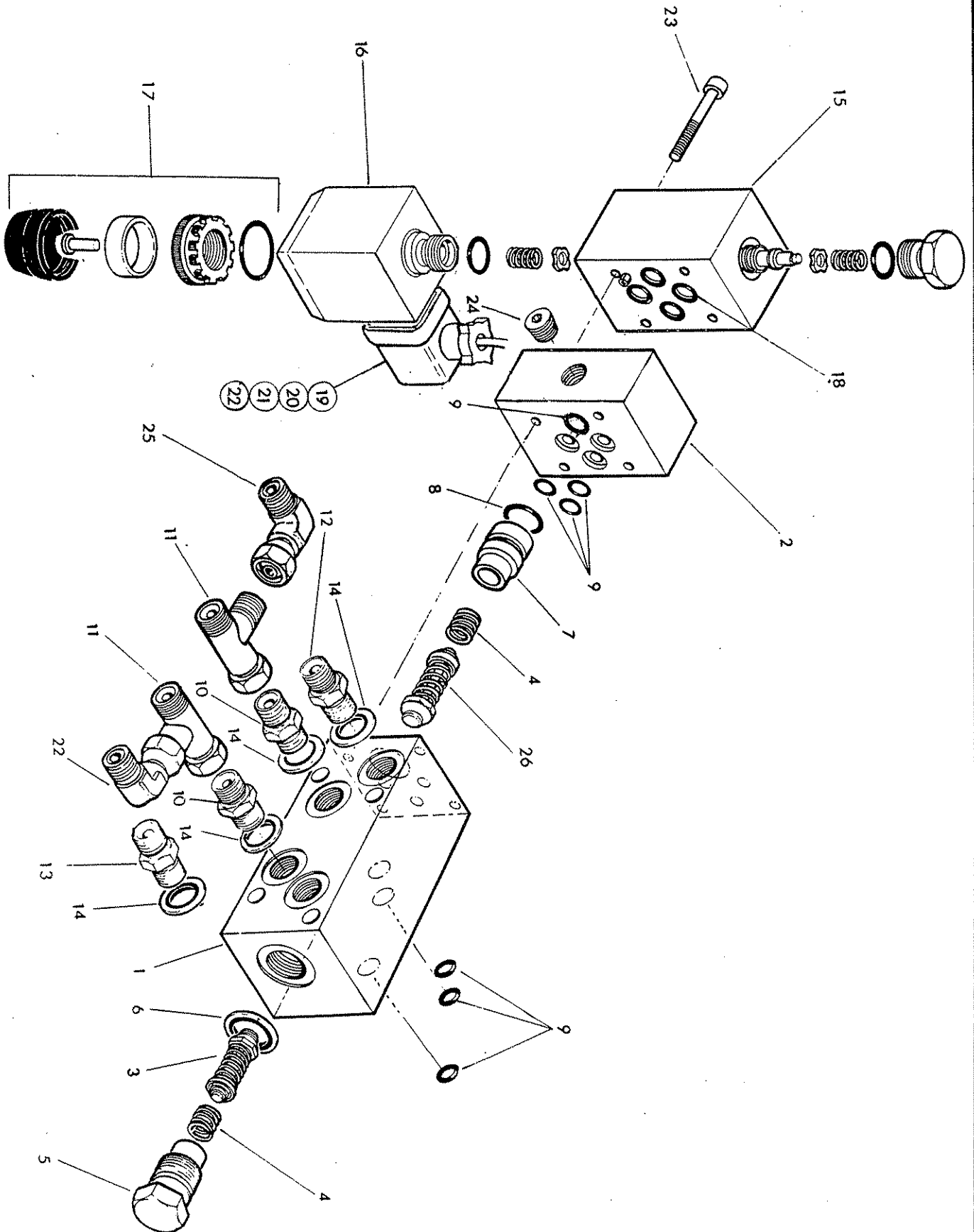


REF	PART NO.	QTY	DESCRIPTION
			ANGLE FLOAT VALVE - for non AHC models
1	81 30 323	1	Float valve block
2	87 00 511	4	'O' ring
	81 30 457	1	Angle float solenoid incl:
3	81 30 175	2	Coil
4	81 30 176	1	Manual override kit
5	86 00 107	4	'O' ring
6	81 26 280	1	Bridging plate
7	92 43 102	4	Setscrew socket headed
8	84 02 338	1	Wiring harness incl. plug+gasket
9	07.835.04	1	Plug c/w screw + gasket
10	07.835.03	1	Screw
11	07.835.02	1	Gasket
12	85 82 041	1	Plug
13	87 00 511	3	'O' ring
	86 99 224		SOLENOID SEAL KIT

COMPENSATOR VALVE / ANGLE
FLOAT-AHC Models



McCOMBI





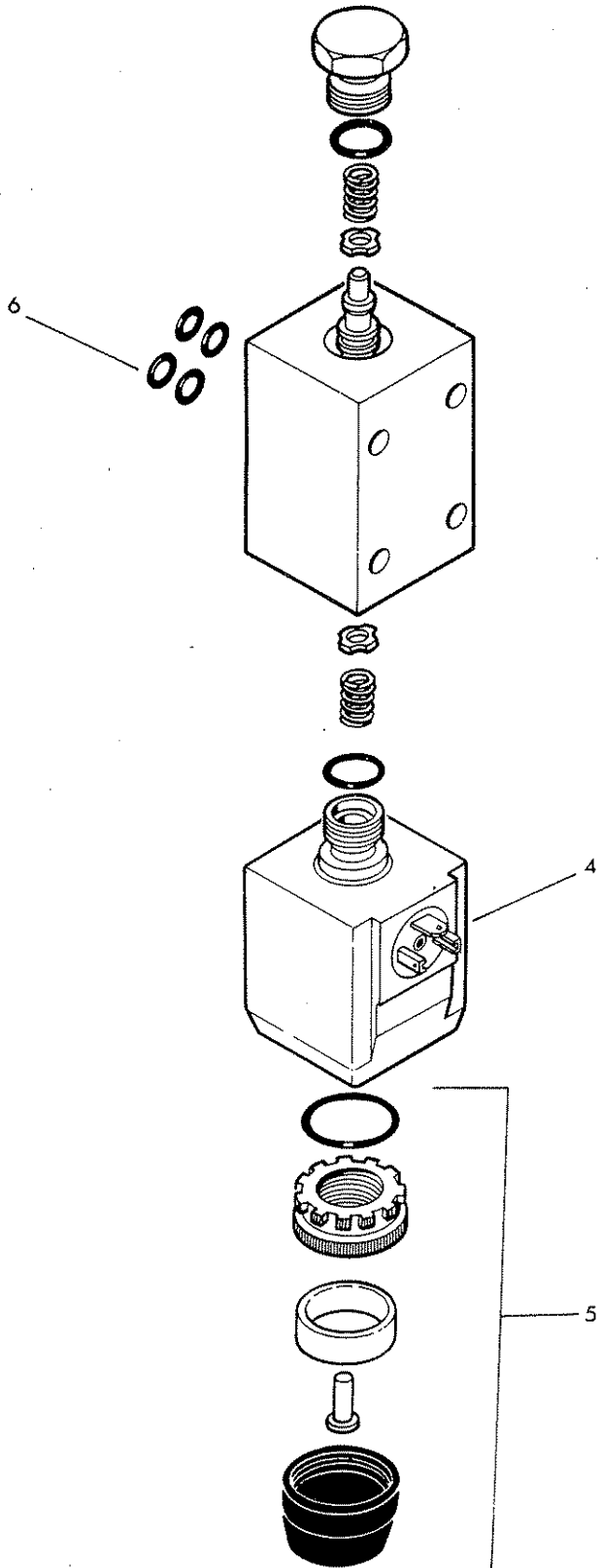
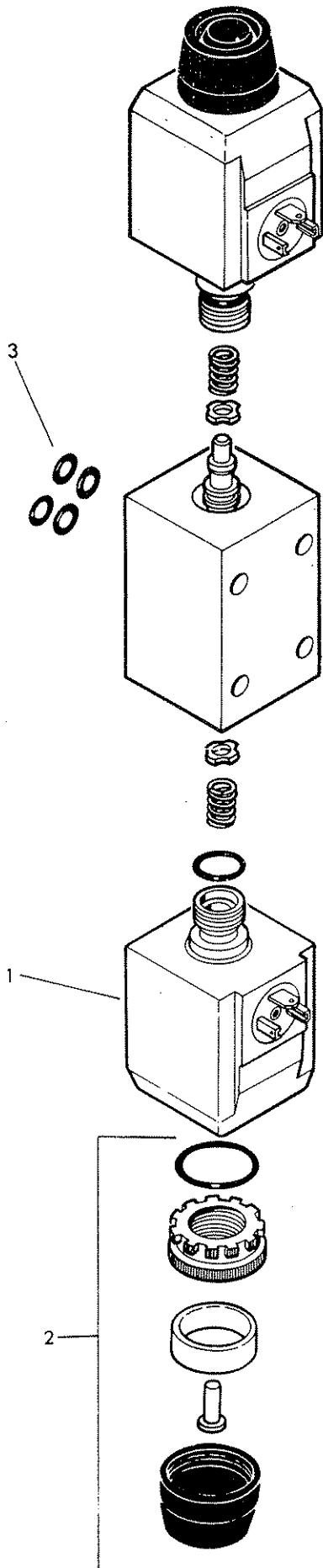
REF	PART NO	QTY	DESCRIPTION
			HEAD COMPENSATOR AND ANGLE FLOAT VALVE AHC ONLY
1	81 30 361	1	Valve block
2	81 26 280	1	Bridging plate
3	81 30 141	2	Relief valve cartridge
4	81 16 011	2	Spring
5	81 30 032	1	Relief valve cap
6	86 50 103	1	Bonded seal
7	81 30 140	1	Relief valve plug
8	86 00 109	1	'O' ring
9	87 00 511	7	'O' ring
10	85 81 169	2	Union
11	85 81 254	2	Tee piece
12	81 30 037	1	Restrictor union 'S'
13	81 30 038	1	Restrictor union 'L'
14	86 50 102	4	Bonded seal
15	81 30 457	1	Single solenoid valve compr:-
16	81 30 175	1	Coil
17	81 30 176	1	Manual override kit
18	86 00 107	4	'O' ring
19	84 02 338	1	Wiring harness incl. plug+gasket
20	07.835.04	1	Plug c/w screw + gasket
21	07.835.03	1	Screw
22	07.835.02	1	Gasket
23	92 43 102	4	Capscrew - socket headed
24	85 82 041	1	Plug
25	85 81 190	2	Elbow
26	81 30 151	2	Relief valve cartridge
	86 99 224		SOLENOID SEAL KIT

Model:

SOLENOID ASSEMBLIES

McCONEL

Temeside Works, Ludlow,
Shropshire, SY8 1JL, England.
Telephone: (0584) 3131.
Telex 35313. Facsimile: (0584) 6463.





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

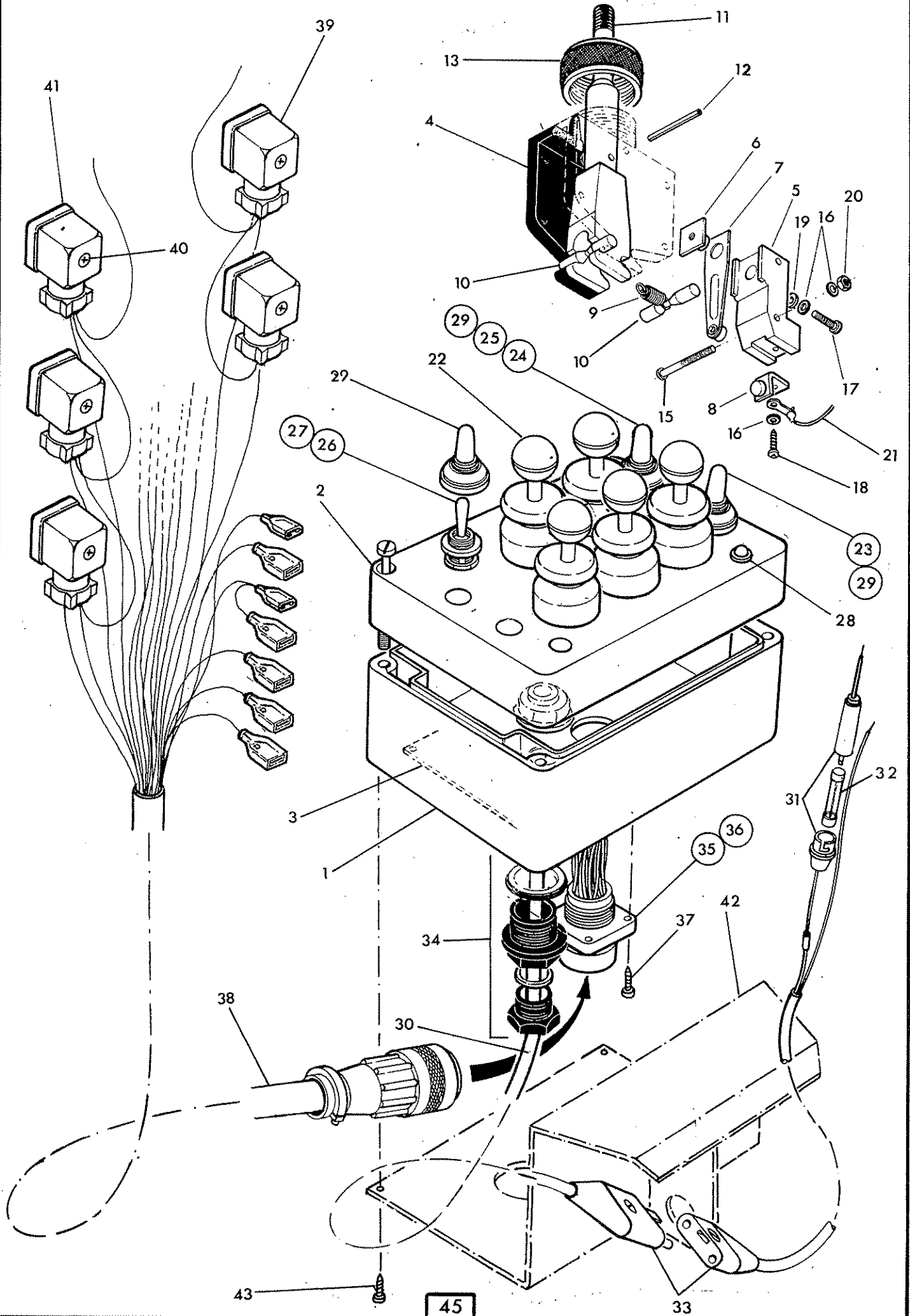
81 30 456

SINGLE SOLENOID VALVE

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

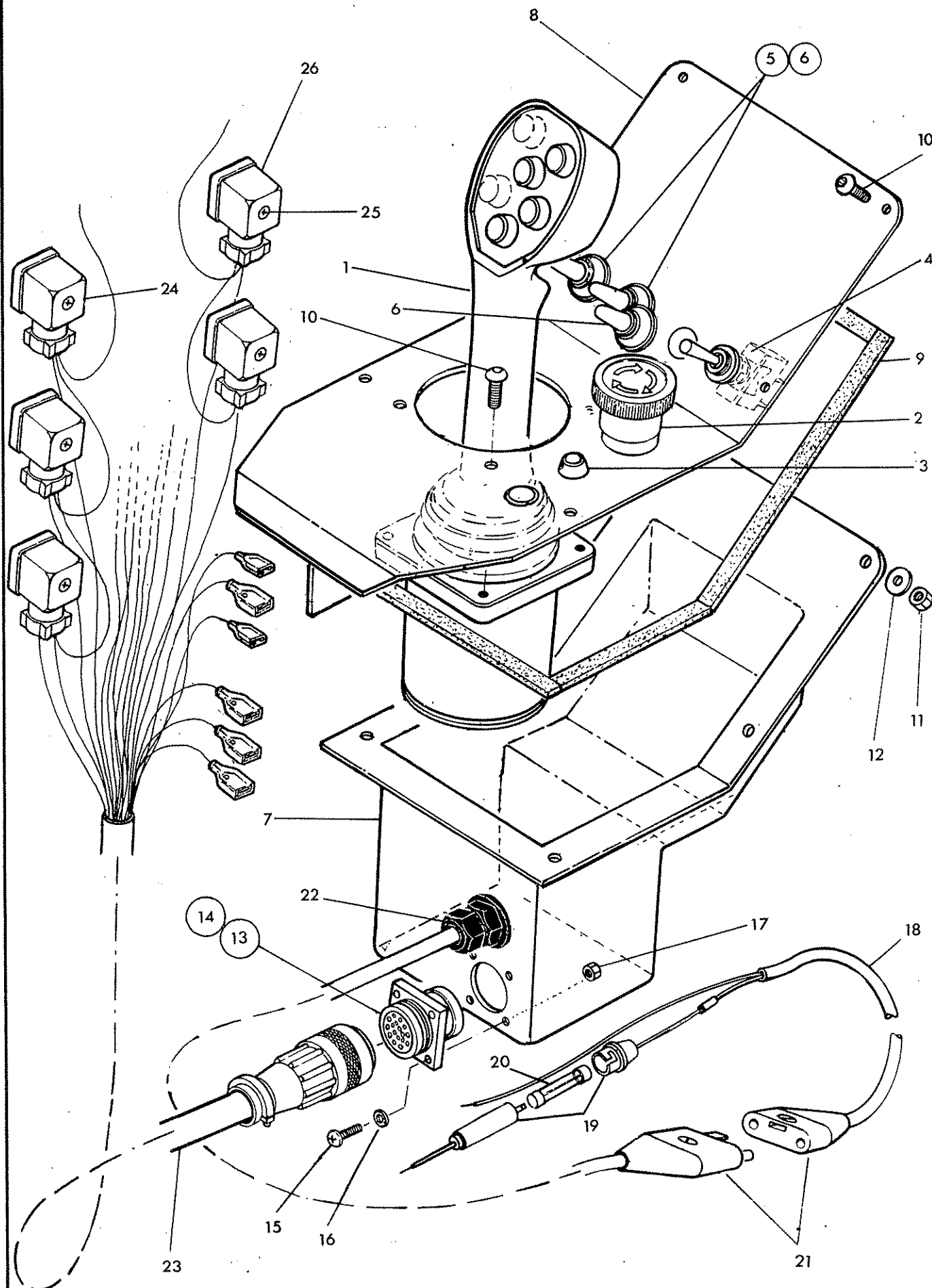
86 99 224

SEAL KIT





Ref.	Part No.	Qty.	Description
	41845.03		MULTI 5 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	5	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
13	84 02 051	1	Bezel ring
14	84 02 022	1	Lever gaiter
15	92 00 006	4	Screw - posidrive panhead
16	91 00 400	8	External serrated washer
17	92 00 005	2	Screw posidrive pan head
18	84 02 119	2	Self tapping screw
19	84 02 120	2	Plain washer
20	91 13 000	2	Nut plated
21	41845.34	5	Loom - lever switch
22	84 02 056	5	Knob - black
23	84 02 023	1	Switch - power on/off
24	84 02 182	1	Switch - slew/auto reset
25	41845.35	1	Loom - slew/auto reset switch
26	84 02 197	1	Switch - Float
27	41845.37	1	Loom - Float switch
28	41845.38	1	L.E.D. and loom
29	84 02 024	3	Weather gaiter
30	84 02 340	1	Power harness incl.
31	84 02 114	1	Fuse holder
32		1	Fuse 20 amp
33	84 02 062	1	Plug and socket
34	84 02 042	1	Gland
35	84 02 189	1	Socket shell
36	84 02 192	17	Pin socket
37	28 00 243	4	Screw
38	41844.01	1	Loom incl. connections
39	07.835.04	12	Plug incl. screw + gasket
40	07.835.03	1	Screw
41	07.835.02	1	Gasket
42	84 02 345	1	Mounting bracket
43	28 00 203	4	Self tapping screw



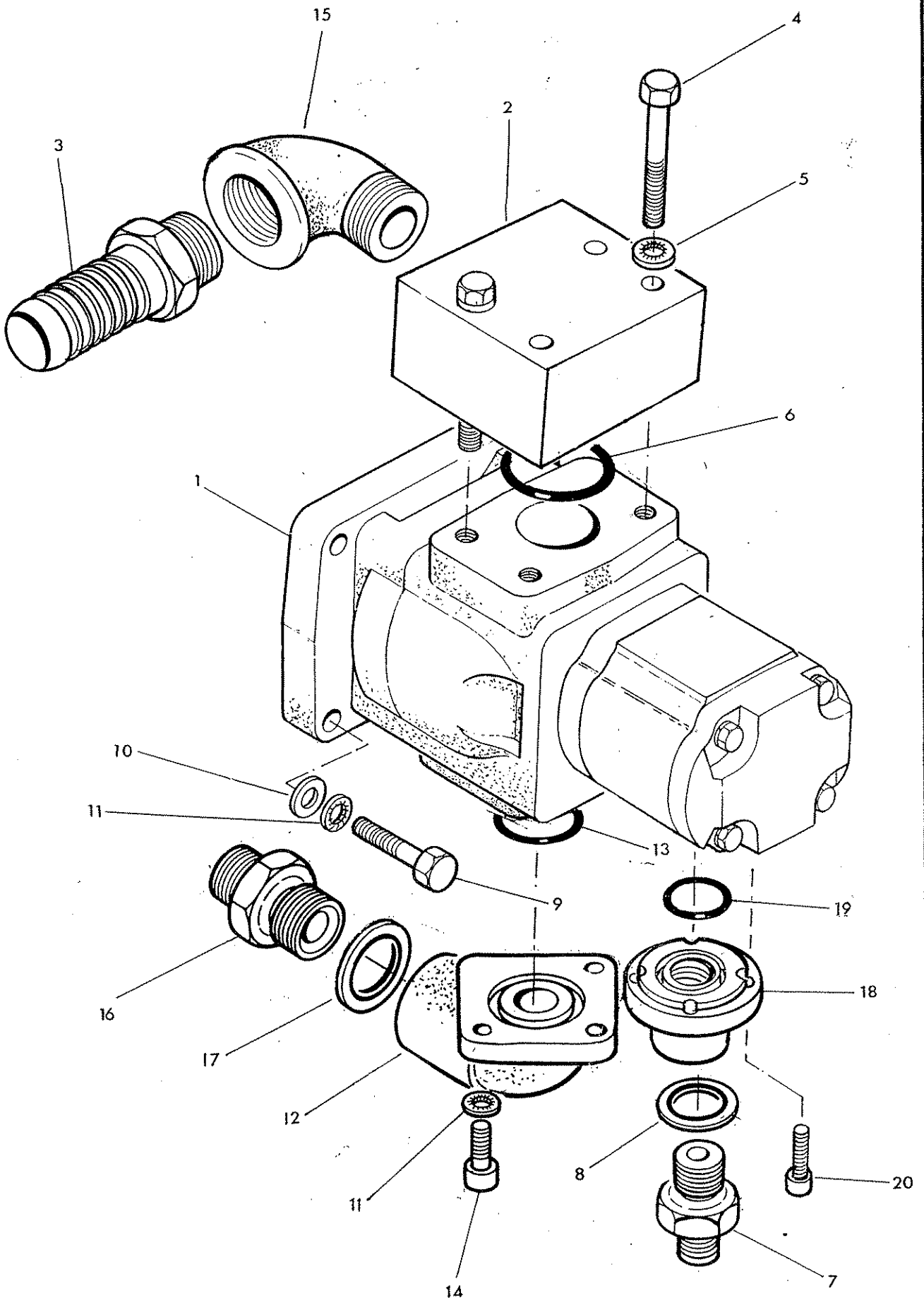


Ref. Part No.	Qty.	Description
41590.03		MONOLEVER 4 BUTTON CONTROL ASSY FOR GEAR HYDRAULICS
1 41590.33	1	Joystick incl. circuit board
2 84 02 184	1	Power on/emergency stop
3 84 02 174	1	L.E.D. main power on
4 84 02 182	1	Switch - slew/auto reset
5 84 02 023	2	Switch Lift and angle float
6 84 02 024	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
11 91 43 003	6	Self locking nut
12 91 00 103	6	Washer
13 84 02 189	1	Socket shell
14 84 02 192	14	Female socket pin
15 92 00 007	4	Screw posidrive panhead
16 91 00 400	4	External serrated washer
17 91 00 013	4	Nut - plated
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 41844.01	1	Loom c/w plug incl.
24 07.835.04	12	Plug incl. screw + gasket
25 07.835.03	1	Screw
26 07.835.02	1	Gasket

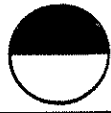
PUMP



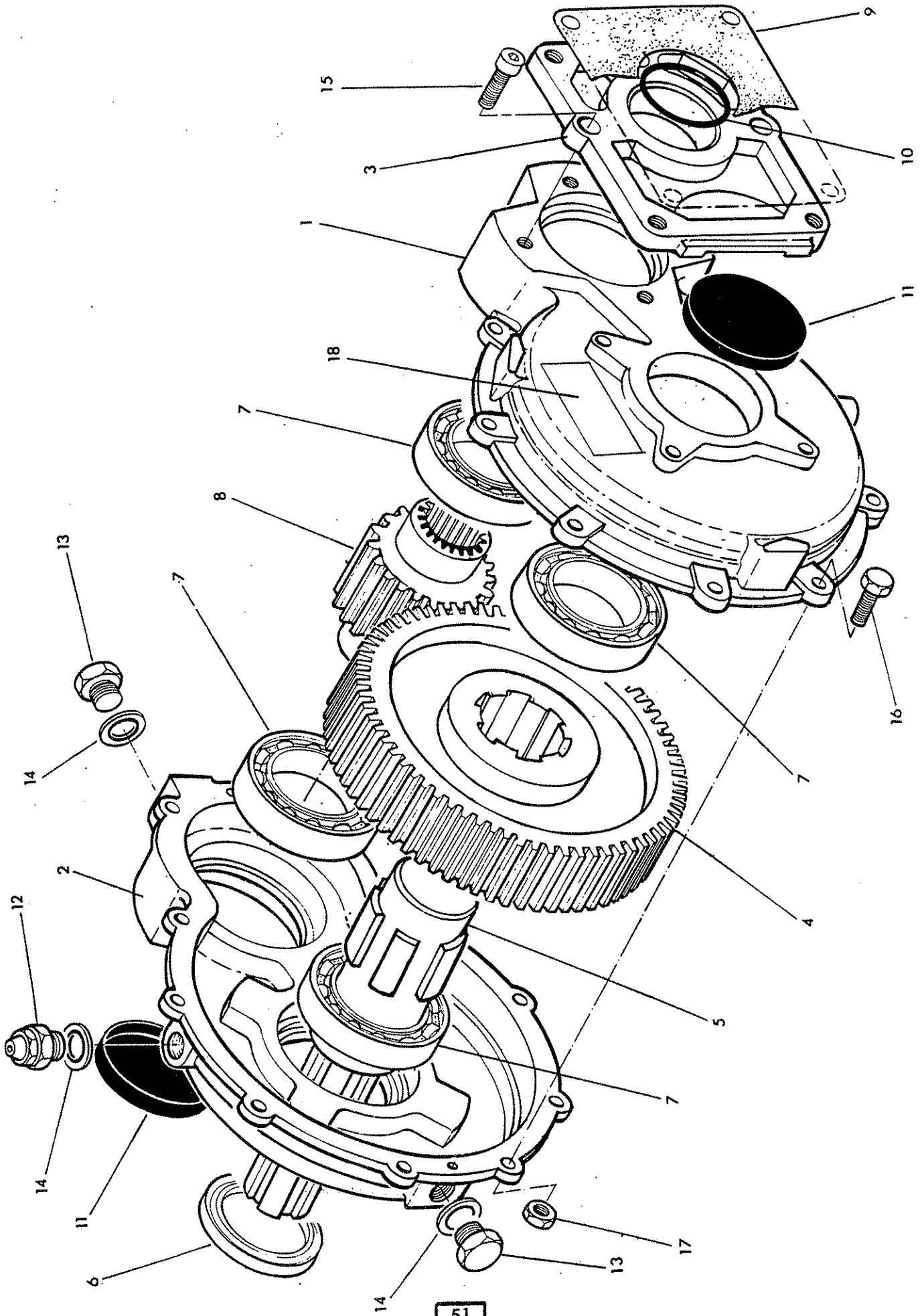
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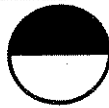


GEARBOX



McCOMBELL



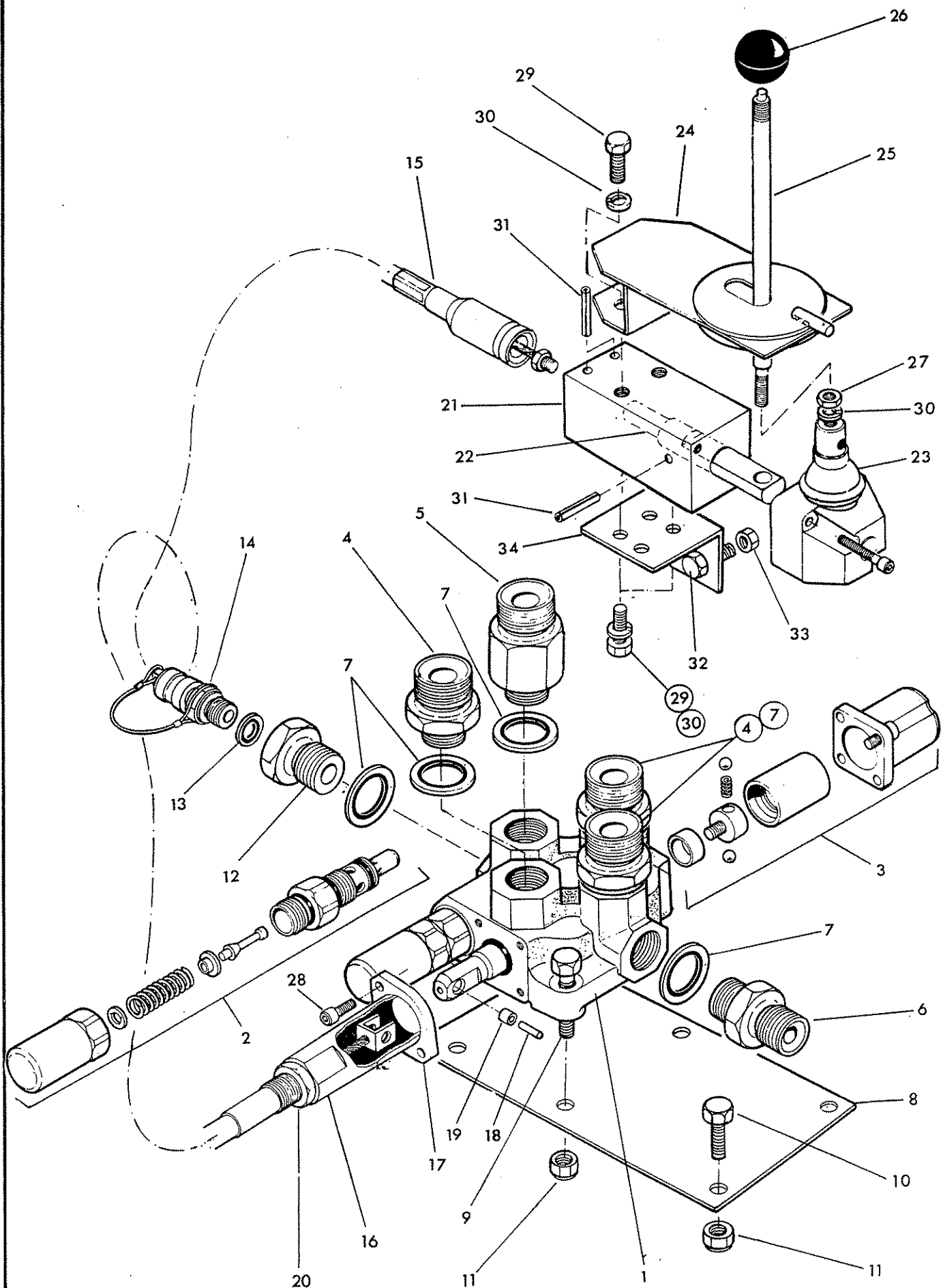


Ref	Part No	Qty	Description
	80 13 444		GEARBOX
1	80 13 100	1	Case - output side
2	80 13 101	1	Case - input side
3	80 13 102	1	Pump mounting flange
4	80 13 103	1	Gear 72t.
5	80 13 105	1	Shaft
6	86 29 196	1	Shaft seal
7	06 00 042	4	Bearing
8	80 13 104	1	Pinion 17t.
9	80 13 056	1	Gasket
10	86 00 523	1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

ROTOR CONTROL VALVE



McCONEL





Ref. Part No. Qty. Description

ROTOR CONTROL VALVE AND FITTINGS

Common items

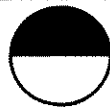
1	81 25 356	1	Rotor control valve including
2	81 25 108	1	Relief valve 190 Bar(2750PSI)
3	81 25 109	1	Detent assembly
4	80 02 086	3	Adaptor
5	85 81 295	1	Extended adaptor
6	85 81 136	1	Union
7	86 50 106	6	Bonded seal
8	41509.01	1	Valve mounting plate
9	92 13 095	2	Bolt
10	93 13 055	2	Setscrew
11	91 43 005	4	Self locking nut
12	81 03 006	1	Adaptor
13	86 50 102	1	Bonded seal
14	81 31 008	1	Test connection

The remaining items are required on the following models only.

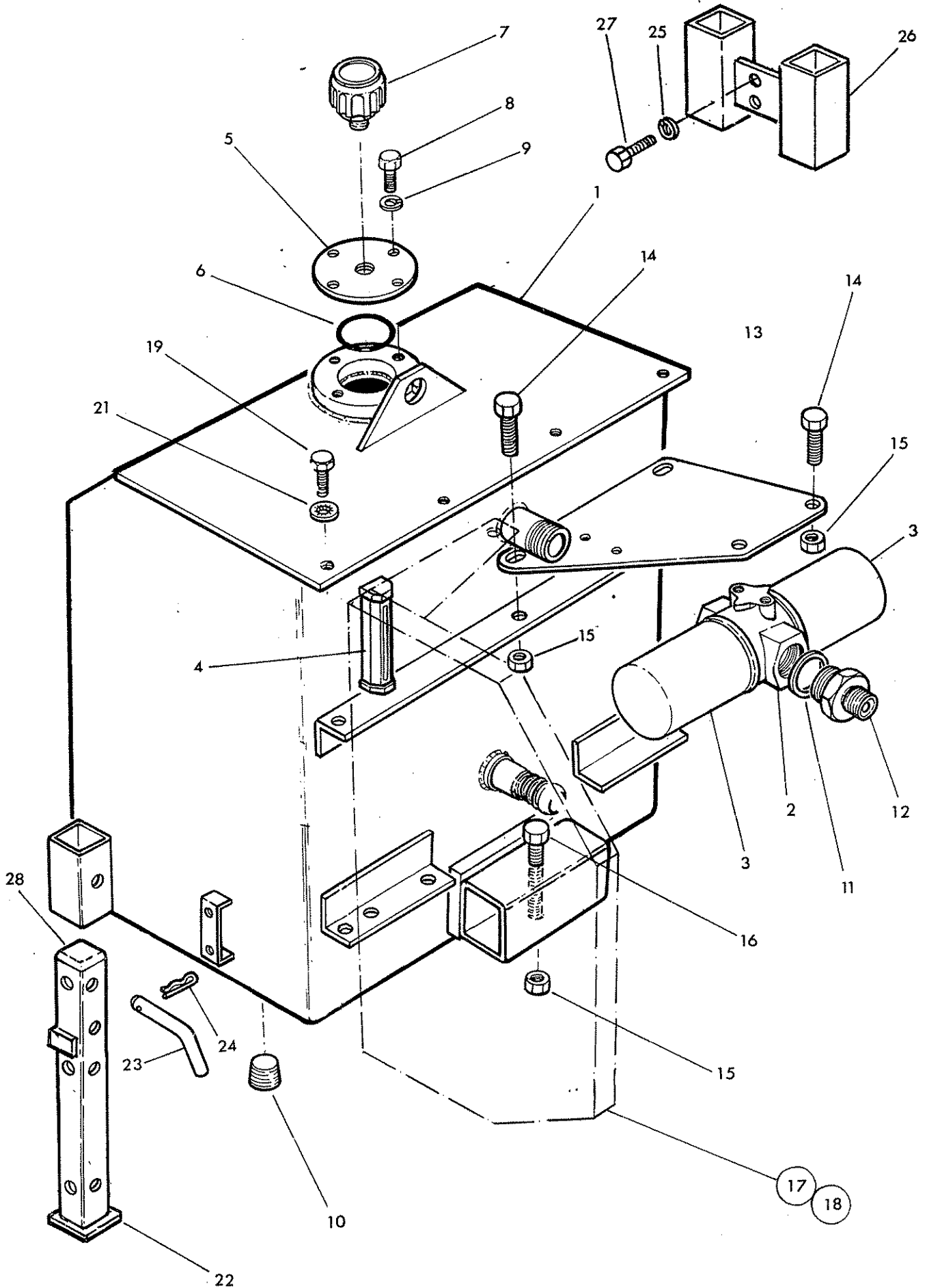
All electric machines.

15	81 25 102	1	Cable assembly 3m
16	81 25 097	1	Sleeve
17	81 25 098	1	Flange
18	81 25 099	1	Pin
19	81 25 100	1	Bush
20	01 31 006	1	Thin locknut
21	81 25 093	1	Control block
22	81 30 053	1	Spindle
23	81 30 065	1	Pivot box assembly
24	81 25 089	1	Lever control gate
25	71 14 072	1	Lever
26	09 03 121	1	Knob - black
27	91 13 004	1	Thin nut
28	93 43 033	2	Capscrew
29	93 13 034	4	Setscrew
30	91 00 204	5	Spring washer
31	04 25 540	3	Spring dowel
32	93 13 044	2	Bolt
33	91 43 004	2	Self locking nut
34	81 25 070	1	Mounting bracket

RESERVOIR



McCOMEL



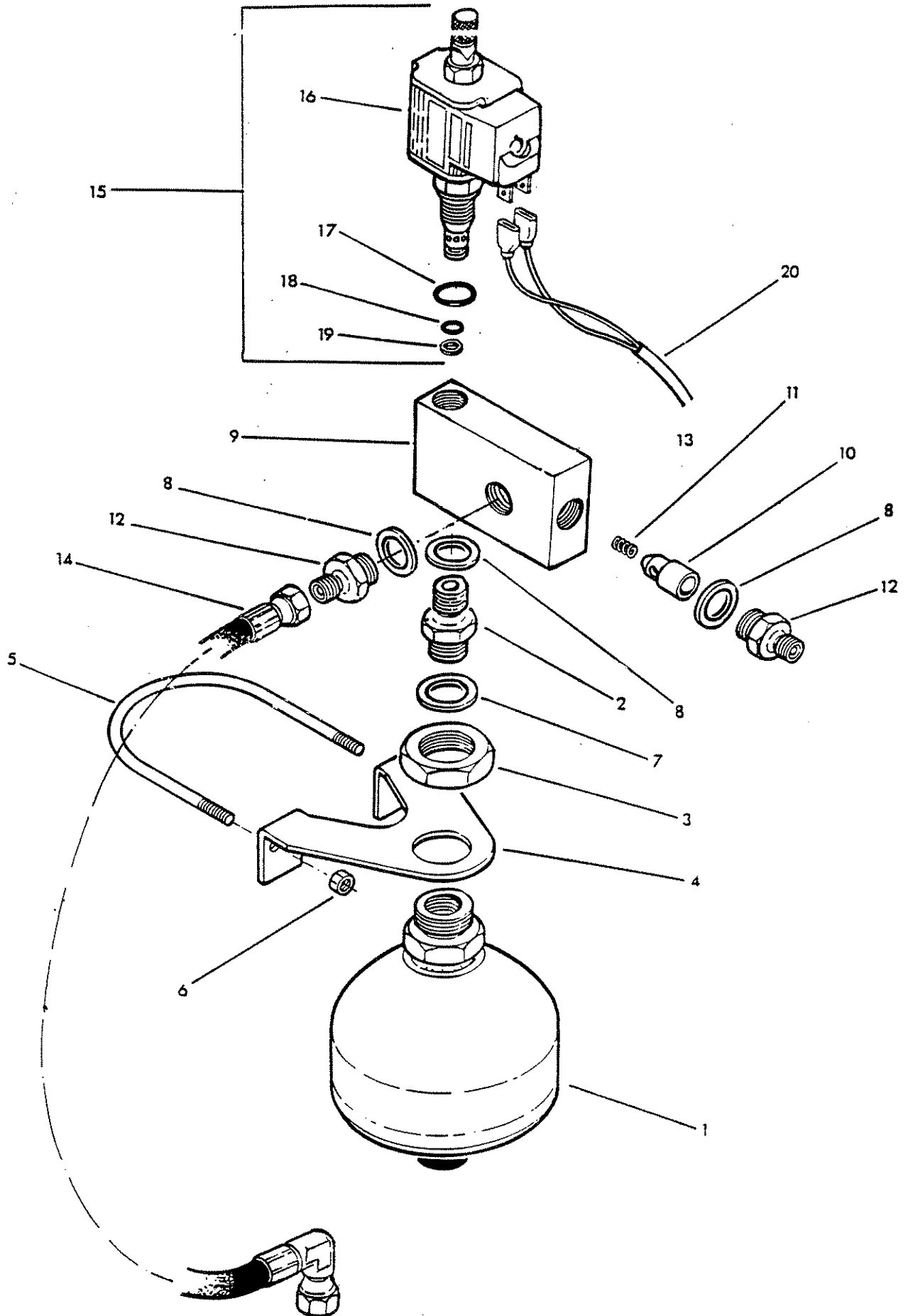


Ref.	Part No.	Qty.	Description
OIL TANK AND FITTINGS			
1	41523.01	1	Oil tank
2	84 01 060	1	Filter head
3	84 01 041	2	Filter element
4	84 01 048	1	Level guage
5	71 92 063	1	Cover
6	86 00 151	1	'O' ring
7	84 01 063	1	Breather
8	93 13 054	4	Setscrew
9	91 00 204	4	Spring washer
10	85 81 203	1	Drain plug
11	86 50 224	1	Bonded seal
12	85 81 291	1	Adaptor
13	41553.01	1	Tank stay bracket
14	93 13 056	4	Setscrew
15	91 43 006	5	Self locking nut
16	92 13 226	1	Bolt
17	41529.01	1	Tank fairing - L.Hand
18	41529.02	1	Tank fairing - R.Hand
19	93 13 045	2	Setscrew
20	93 13 055	1	Setscrew
21	91 00 305	2	Shakeproof washer
22	41528.01	2	Stand leg
23	71 92 023	2	Leg pin
24	04 31 105	2	Spring cotter
25	91 05	2	Spring washer
26	41743.01	1	Leg stow bracket
27	91 13 065	2	Setscrew
28	71 91 108	2	Plastic bung

LIFT FLOAT KIT

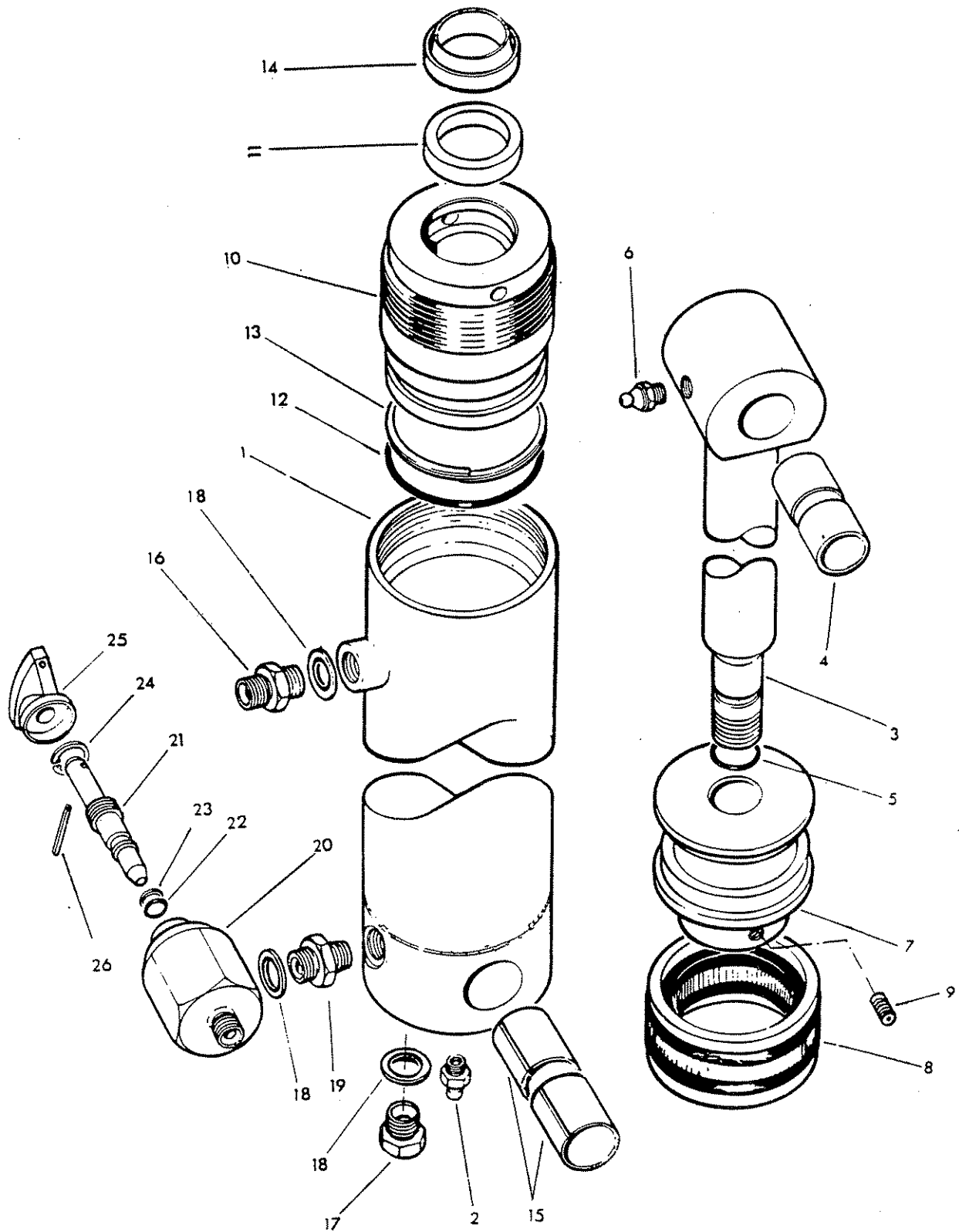


McCOMBELL





REF.	PART NO.	QTY.	DESCRIPTION
	81 26 294		LIFT FLOAT KIT - Quick response
1	81 26 042	1	Accumulator
2	G241 0380	1	Adaptor
3	81 26 035	1	Bulkhead nut
4	81 26 286	1	Bracket
5	81 26 031	1	U bolt
6	91 43 004	2	Self locking nut
7	86 50 322	1	Bonded seal
8	86 50 103	3	Bonded seal
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
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
	71-93-333		LIFT RAM ASSEMBLY
1	71-35-283	1	Ram cylinder
2	09-01-121	1	Greaser
3	71-93-029	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

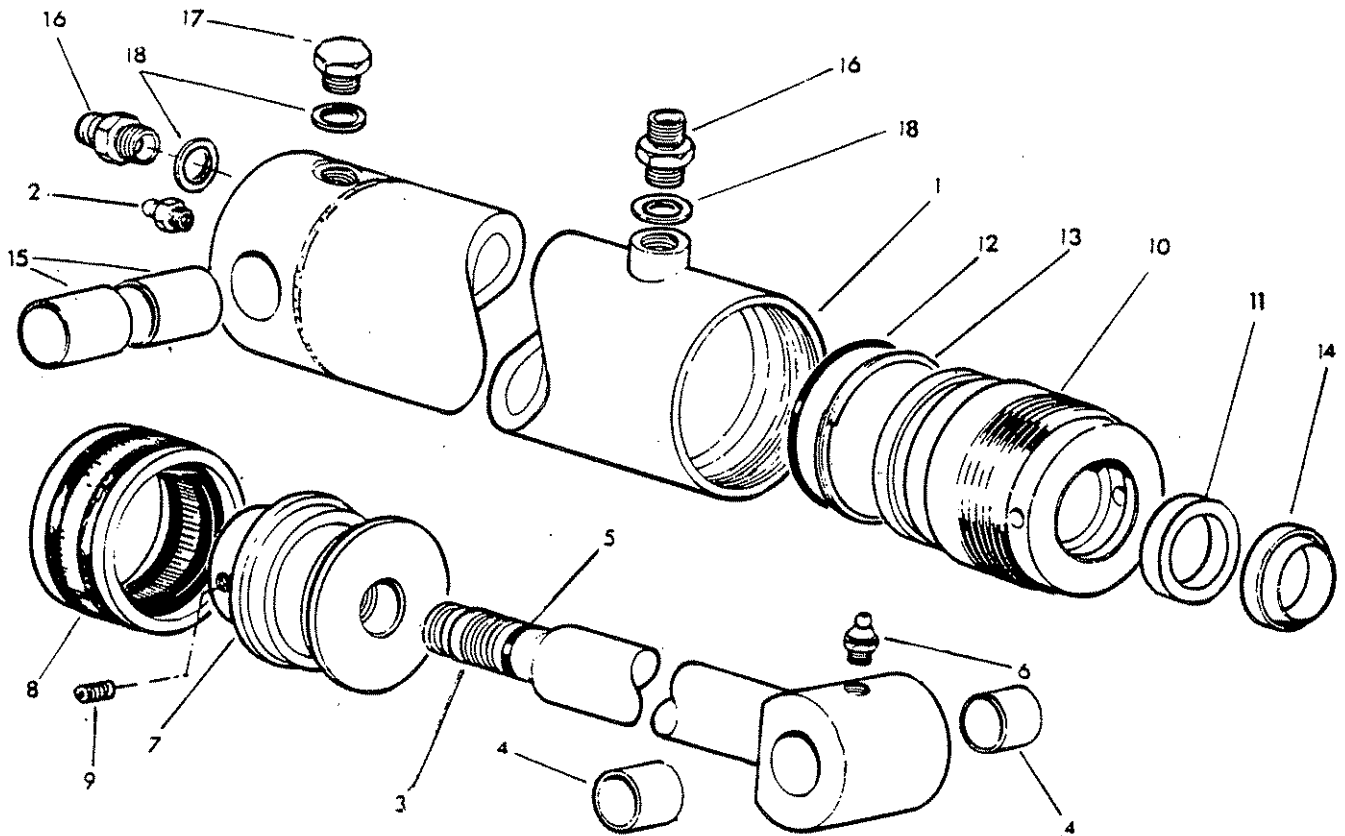
86-99-187**SEAL KIT**

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

REACH RAM



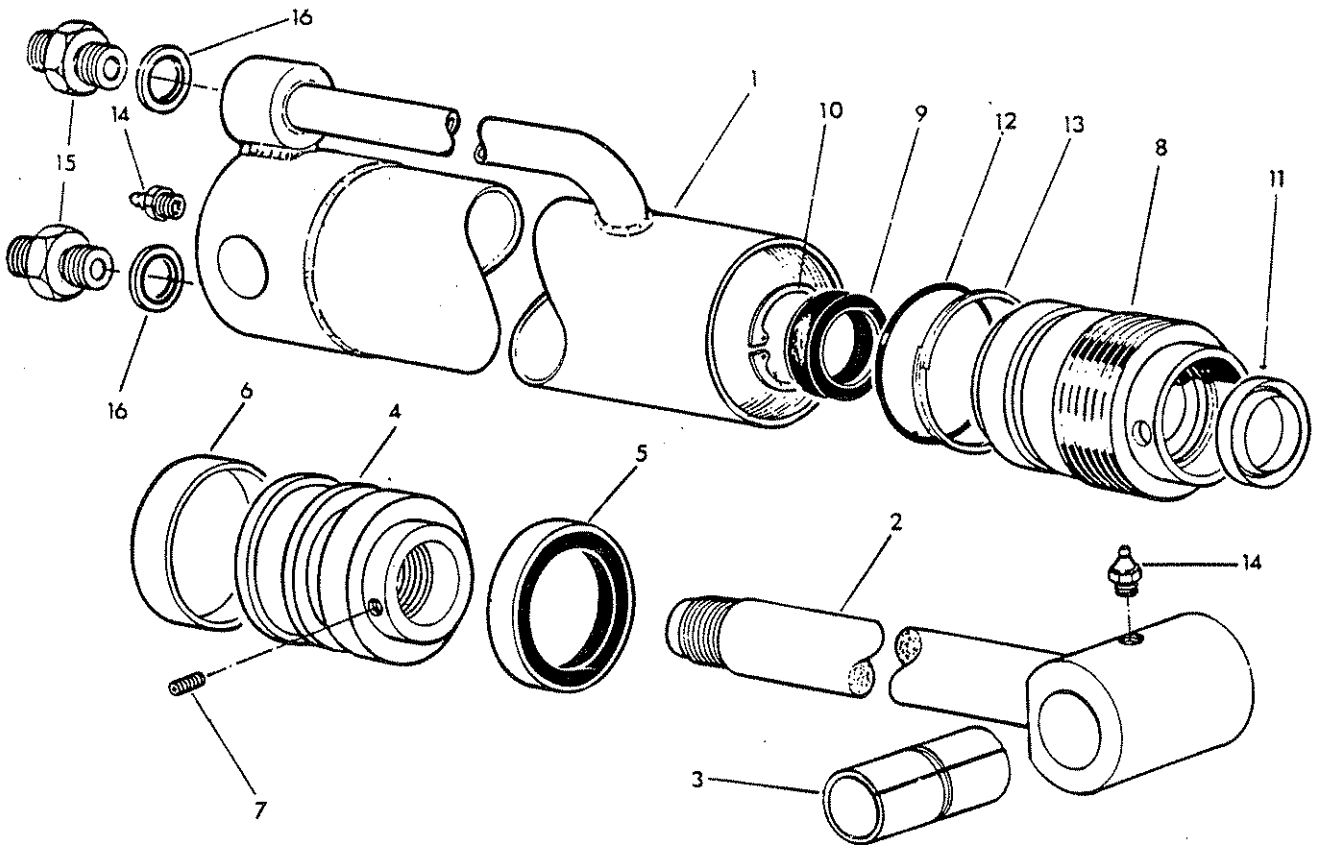
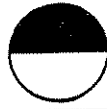
McDONNELL



Ref.	Part No.	Qty.	Description
	71-93-334		REACH RAM ASSEMBLY
1	71-35-283	1	Ram cylinder
2	09-01-121	1	Greaser
3	71-93-029	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	87-03-740	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
	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
	86-99-188		SEAL KIT

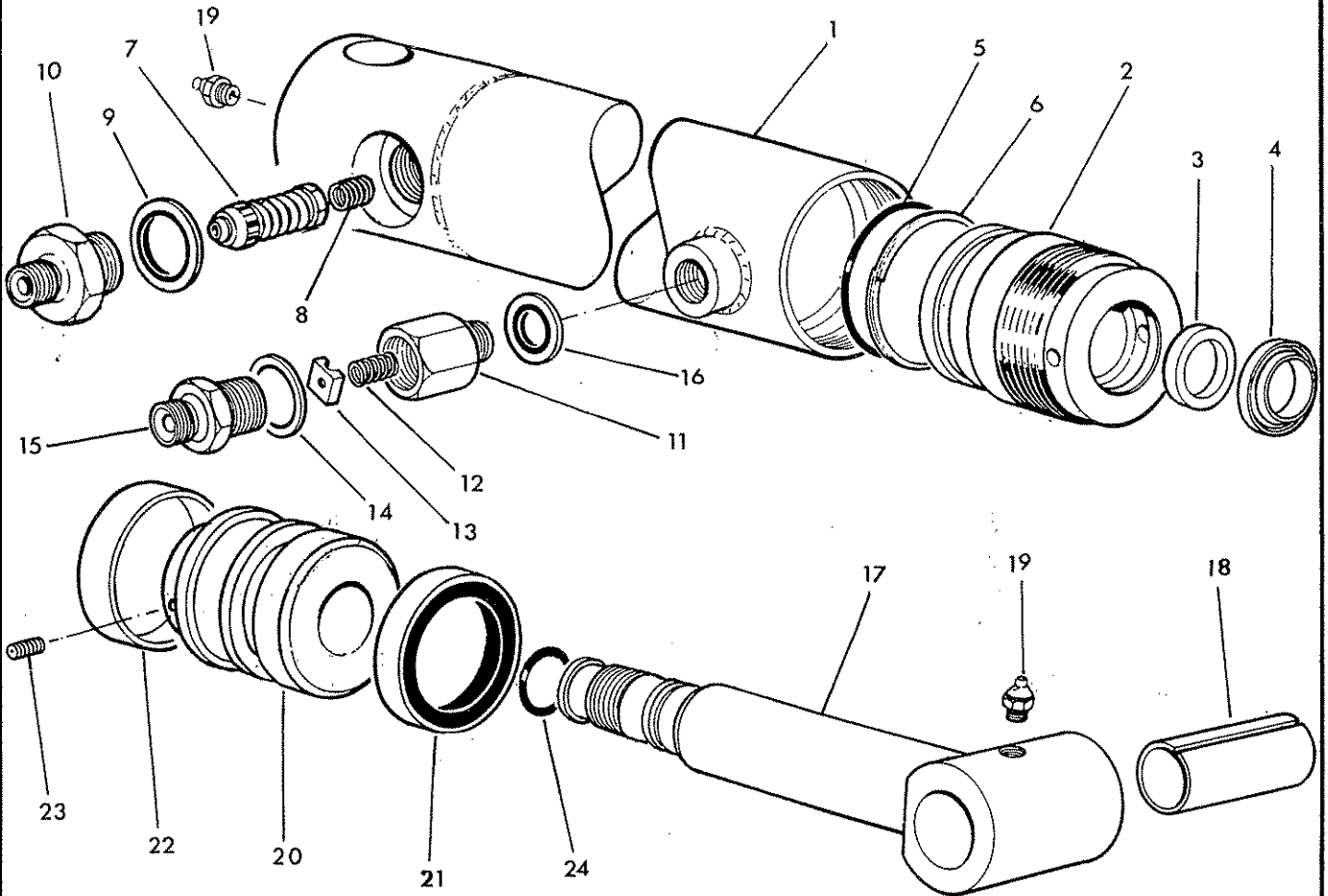
*** Assembly note**

Tighten fully and centre punch edge of hole to secure.

SLEW/BREAKAWAY RAM



McCormel

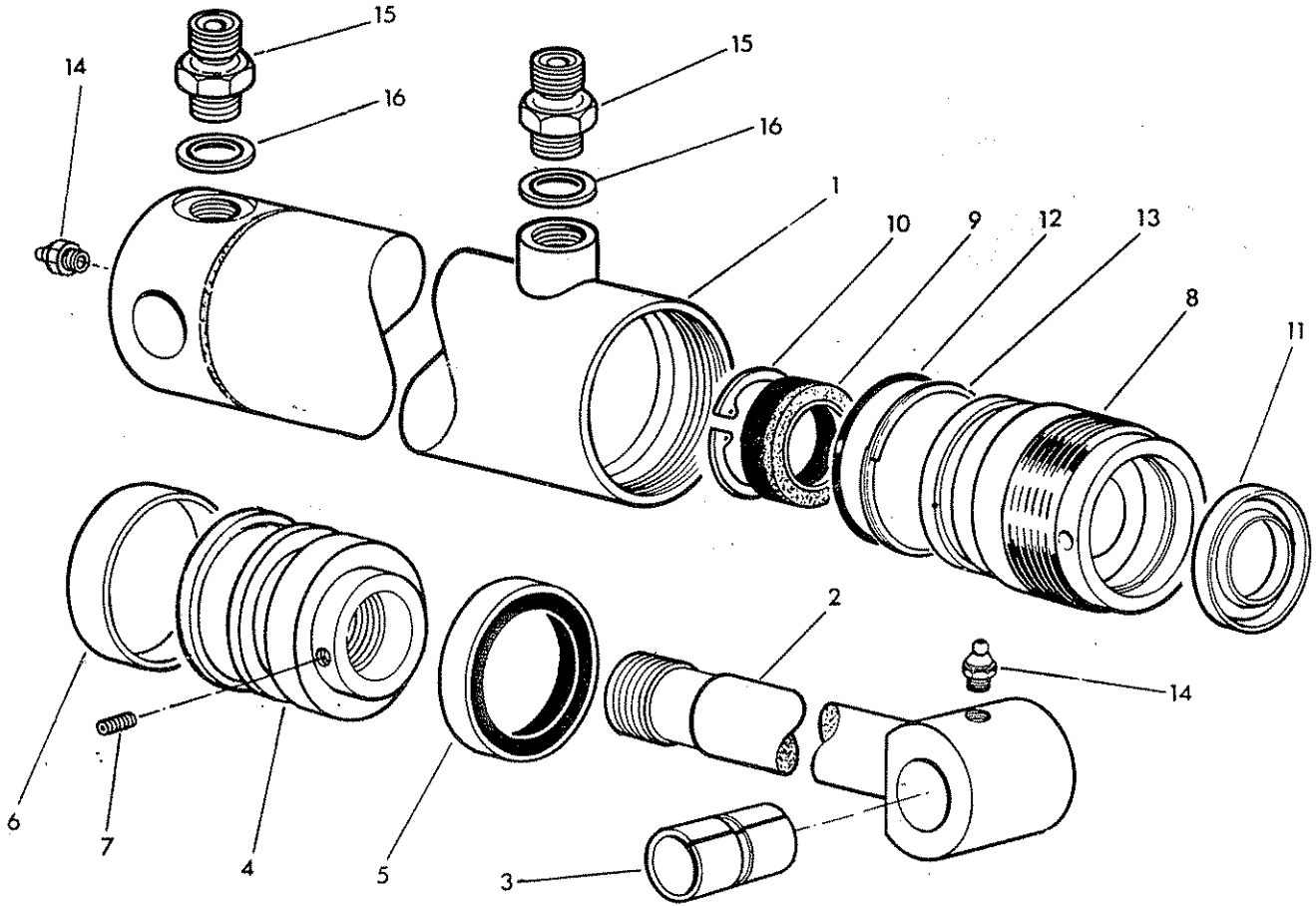


Ref.	Part No.	Qty.	Description
	41565.01		SLEW/BREAKAWAY RAM ASSEMBLY
1	41566.01	1	Ram barrel
2	71 20 384	1	Gland housing
3	86 29 164	1	Rod seal
4	86 29 147	1	Wiper seal
5	86 00 429	1	'O' ring
6	86 09 429	1	Anti extrusion ring
7	81 30 141	1	Relief valve
8	81 16 011	1	Spring
9	86 50 104	1	Bonded seal
10	81 30 083	1	Relief valve body
11	85 81 214	1	Restrictor body
12	81 16 011	1	Spring
13	81 23 047	1	Restrictor disc
14	86 50 103	1	Bonded seal
15	85 81 145	1	Adaptor
16	86 50 102	1	Bonded seal
17	41567.01	1	Rod
18	71 05 050	1	Bush
19	09 01 121	2	Greaser
20	71 20 383	1	Piston
21	86 29 189	1	Piston seal
22	86 29 190	1	Guide ring
23	93 63 023	1	Grub screw
24	86 00 403	1	'O' ring
	86 99 228		SEAL KIT

COMPENSATOR RAM



McDONNELL



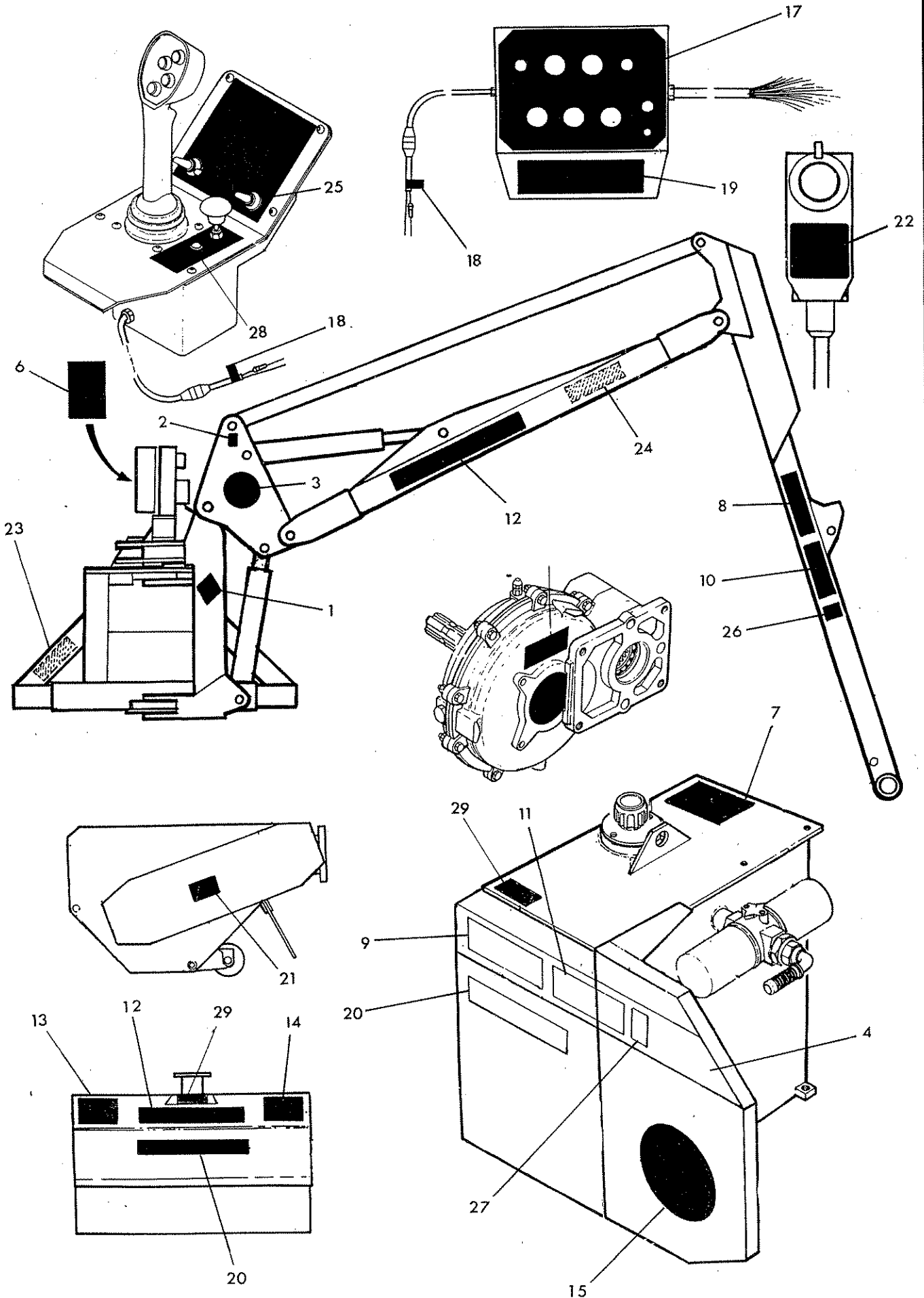
Ref.	Part No.	Qty.	Description
	75-60-356		COMPENSATOR RAM ASSEMBLY
1	71-95-305	1	Cylinder
2	71-95-010	1	Rod
3	71-05-050	1	Bush
4	75-60-095	1	Piston
5	86-29-187	1	Piston seal
6	86-29-188	1	Bearing ring
7	93-63-023	1	Grubscrew socket head
8	71-35-291	1	Gland housing
9	86-29-148	1	Gland seal
10	04-16-240	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

86-99-188

SEAL KIT

*** Assembly note**

Tighten fully and centre punch edge of hole to secure.



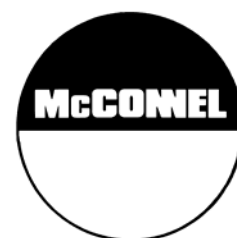


Ref. Part No.	Qty.	Description
STICKERS - ELECTRIC MACHINES		
1	71 05 130	1 Read book first
2	09-843-05	1 Sling here symbol on packing strap
3	12 90 296	1 Logo roundel
4	12 90 432	1 Tank stripe
5	12 90 352	1 Gen warning - despatched loose - not illus. in cab
6	12 90 465	1 Wiring connections
7	12 90 476	1 Greasing
8	12 90 411	2 Mag - black
9	12 90 412	1 Mag - yellow
10	12 90 448	2 500 - black
11	12 90 449	1 500 - yellow
12	12 90 255	3 McConnel
13	12 90 377	1 Flailhead instructions
14	12 90 341	1 Flailhead guarding
15	12 90 365	1 McConnel roundel
16	12 90 054	1 Gearbox oil capacity
17	12 90 458	1 Controls - switchbox only
18	12 90 038	1 Polarity label
19	84 02 138	1 Slew warning
20	12 90 435	2 Agram
21	12 90 065	1 Belt tension
22	12 90 338	1 Rotor controls
23	12 90 331	1 Check chains
24	12 90 450	1 Breakaway warning
25	12 90 451	1 Controls - joystick only
26	12 90 071	2 E - Black
27	12 90 072	1 E - Yellow
28	12 90 080	1 Power - joystick controls only
29	12 90 500	2 52 hp



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