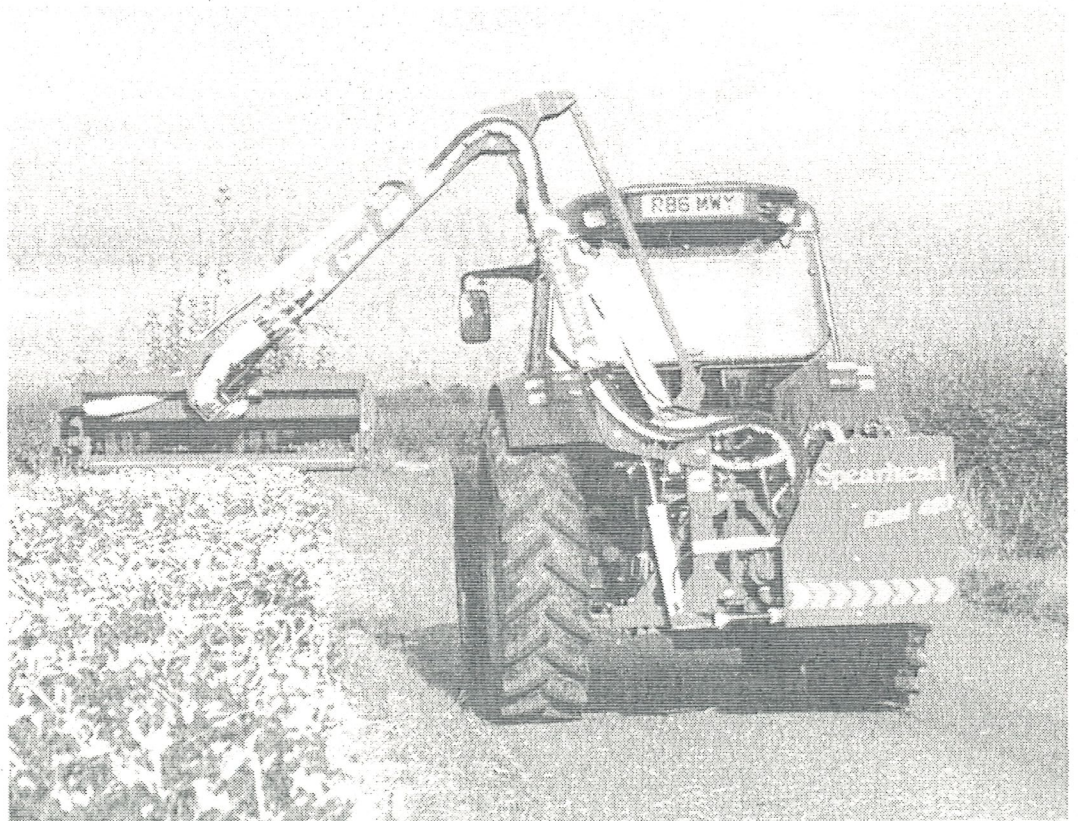


EXCEL 480 reach mower



Spearhead

Operator's manual & parts lists

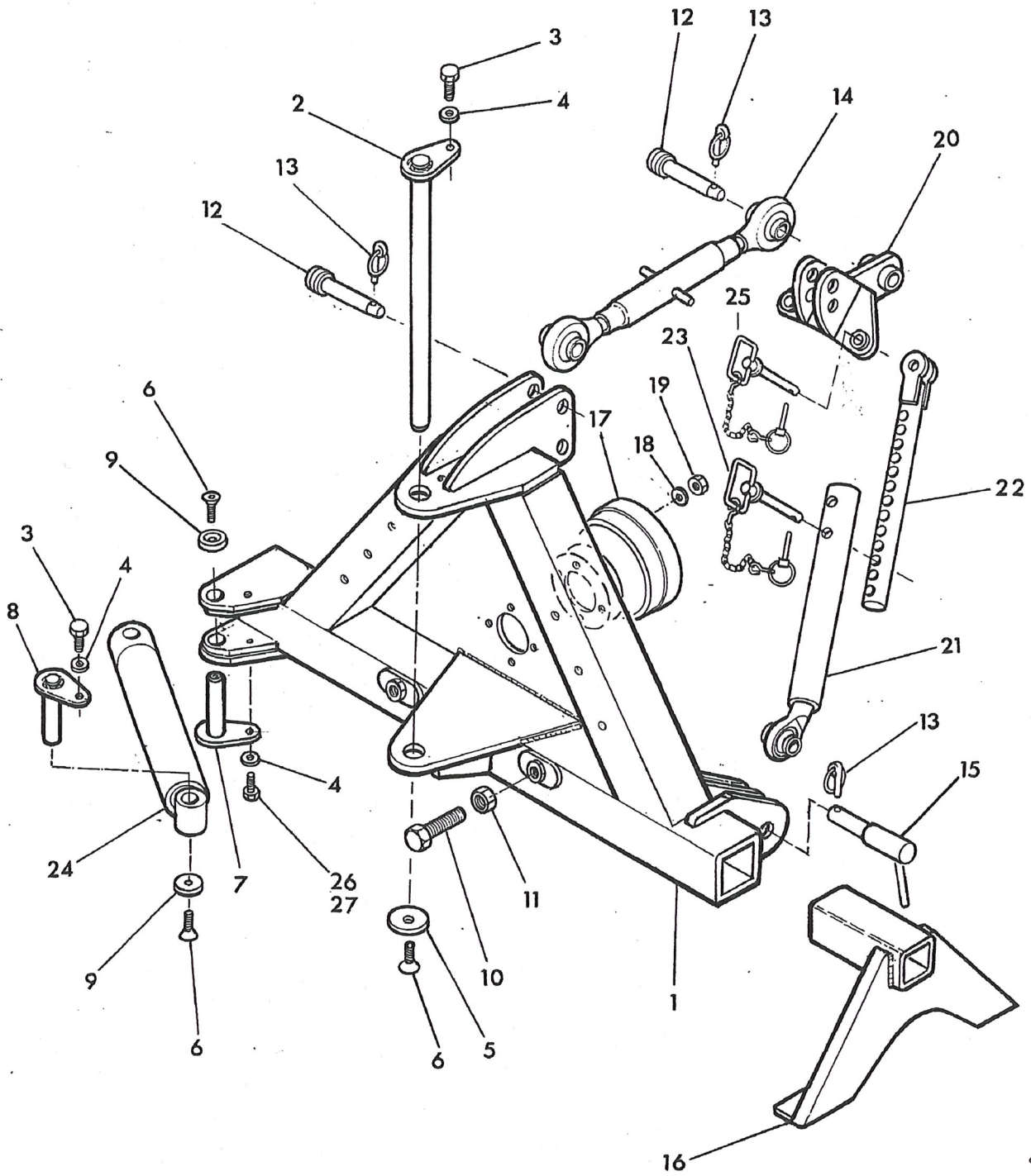
Parts lists

Ordering parts

When ordering parts please refer to your parts list to help your dealer with your order. Please provide the following.

- * Part number and quantity
- * Description
- * Machine model number
- * Machine serial number of the machine
- * Delivery instructions (e.g. next day).

Delivery is normally via carrier direct to your dealer. Services that are currently available are Next Day with the additional option of before 9am, 10.30am or Noon. Carriers also offer a 2-3 day service for heavier items. For light and small parts, these can be posted first or second class mail.



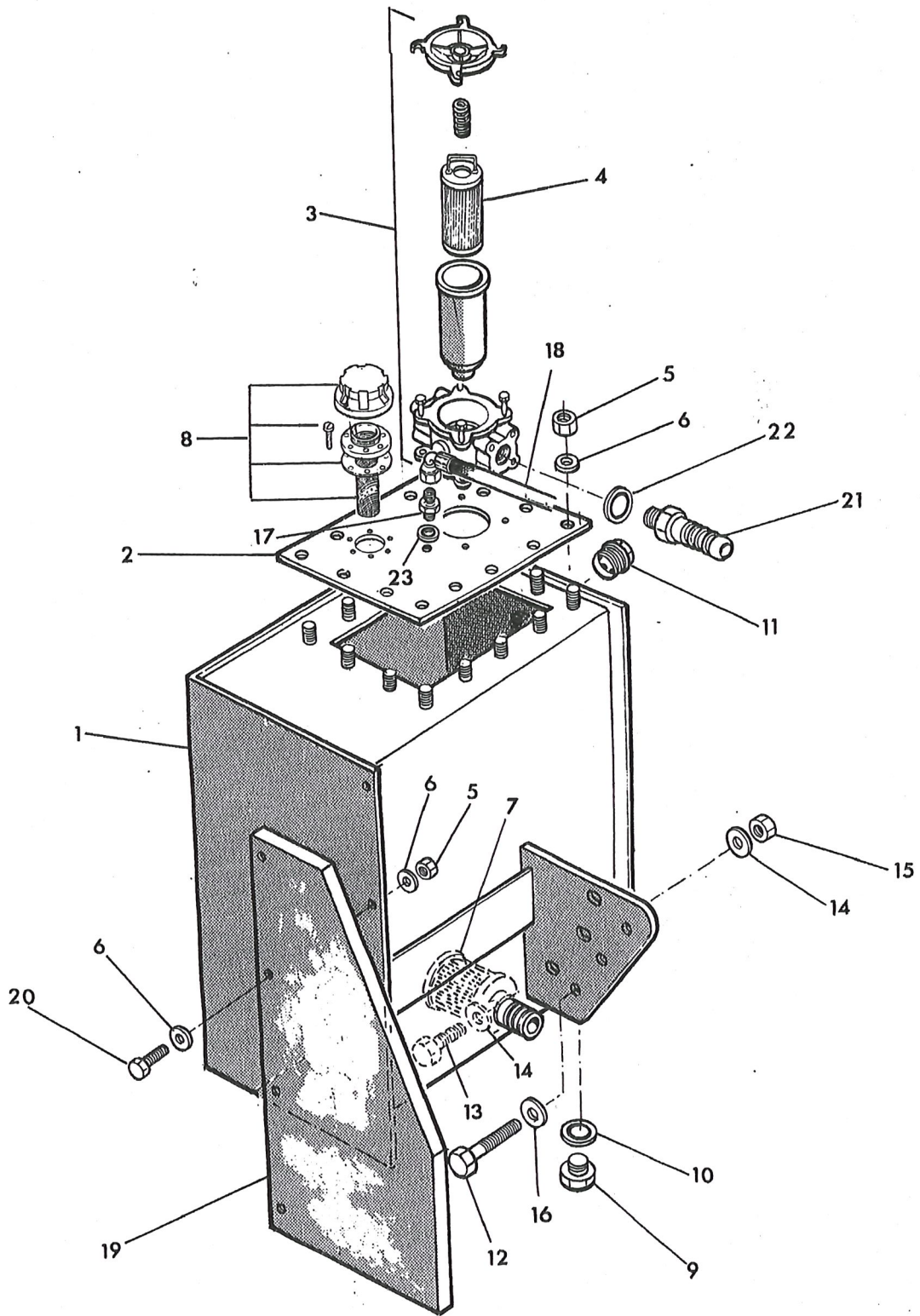
Main Frame Assembly

Parts list - Main Frame Assembly

Fig. Ref	Part number	Item description
1	1777460	L/H main frame
	1777460R	R/H main frame
2	1777465	Pin - slew frame
3	2770484	Bolt
4	2770436	Flat washer
5	1777209	Pin washer
6	2770506	Countersink screw
7	1777761	Pear pin
8	1777226	Pear pin
9	1777208	Pin washer
10	2770551	Bolt
11	2770460	Nut
12	6310203	Pin
13	6310206	Linch pin
14	6310198	Top link
15	1777068	Pin
16	1777757	R/H leg
16a	1777756	L/H leg
17	5770105	P.t.o. cone
18	2770415	Repair washer
19	2770370	Socket screw
20	1777302	Stabiliser bracket Cat 2
20a	1777302A	Stabiliser bracket Cat 3
21	1777304	Stabiliser tube
22	1777303	Stabiliser bar
23	6310220	Pin
24	3580651	Slew ram
25	6310215	Pin
26	2770524	Bolt with hole
27	2770238	Split pin

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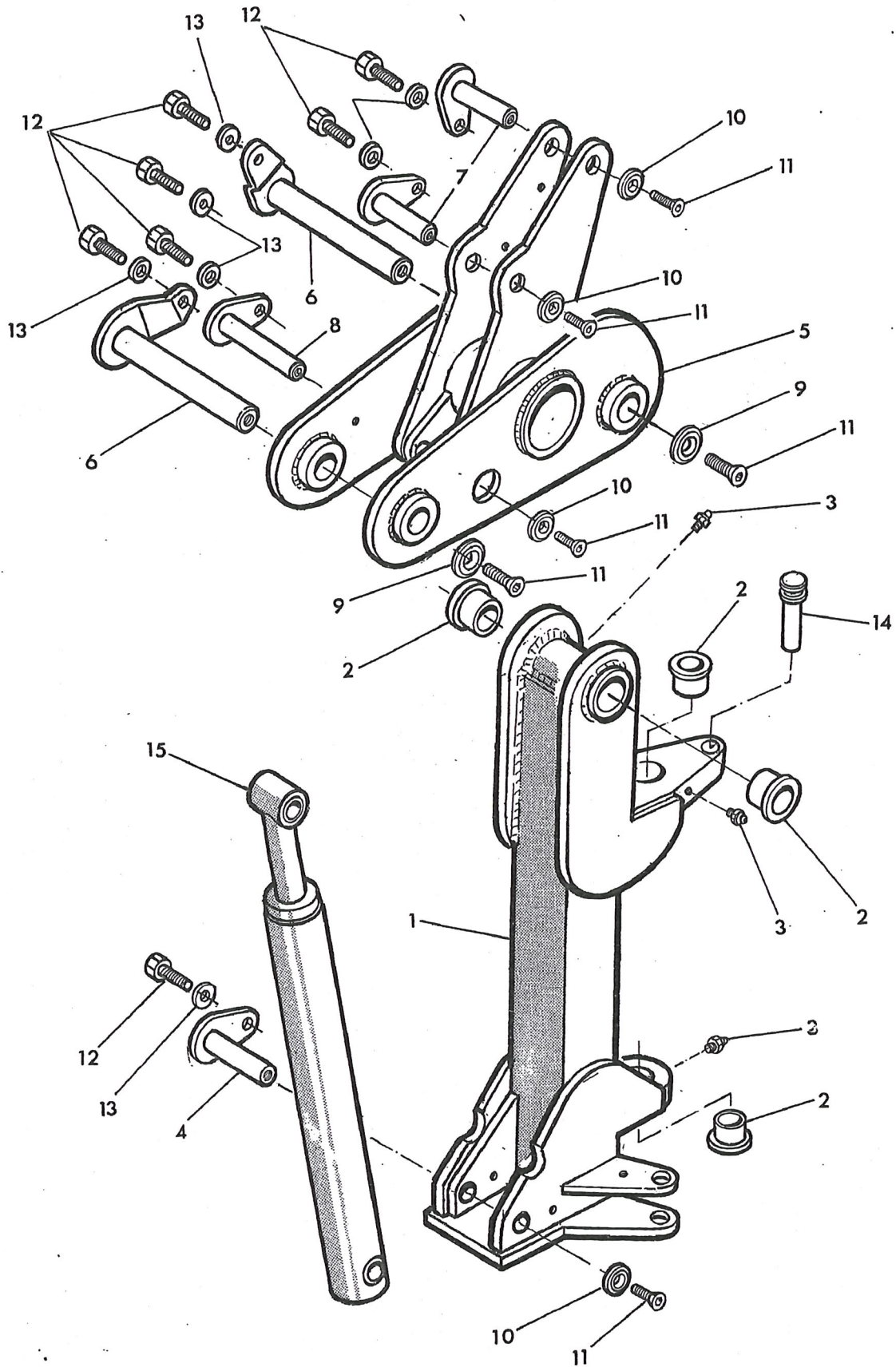
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Tank Assembly

Parts list - Tank Assembly

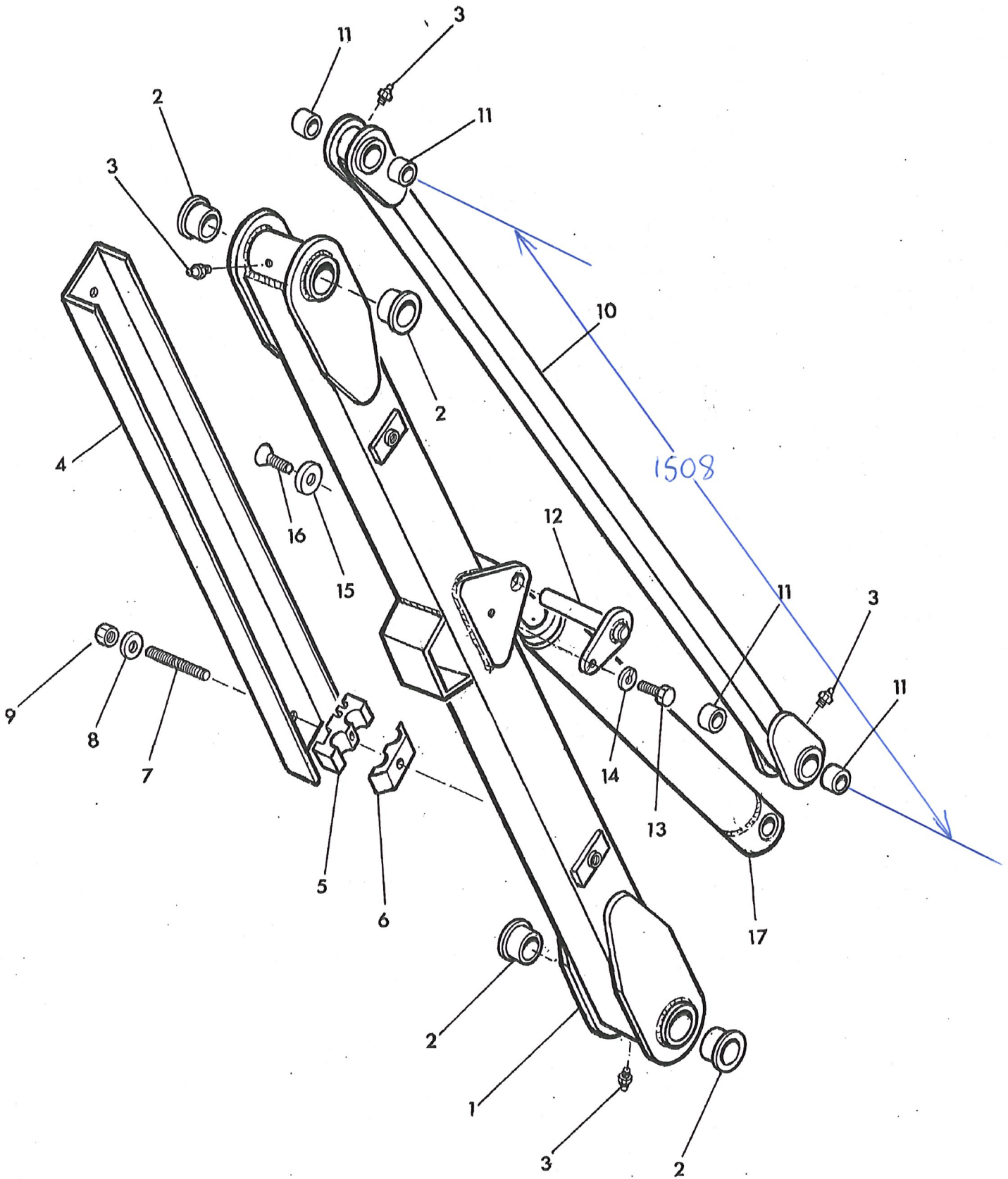
Fig. Ref	Part number	Item description
1	1777464	L/H tank
	1777464R	R/H tank
2	1777103	Tank lid
3	3900051	Return filter
4	3900060	Element
5	2770412	Nut
6	2770434	Washer
7	3900053	Strainer
8	3900050	Tank filter / filler
9	3460106	Plug
10	3260073	Bonded seal
11	3900063	Tank level gauge
12	2770443	Bolt
13	2772285	Bolt
14	2770436	Washer
15	2770417	Nut
16	2770436	Washer
17	3360080	Adaptor
	3460333	Nut
18	3760327	Hose
19	1777319	L/H rear panel
	1777319R	R/H rear panel
20	2770407	Bolt
21	3761002	Hose insert
22	3260075	Bonded seal
23	3260070	Bonded seal



Slew and Lift Frame Assembly

Parts list - Slew and Lift Frame Assembly

Fig. Ref	Part number	Item description
1	1777469	L/H Slew frame
	1777469R	R/H Slew frame
2	4600127	Bush
3	2770467	Grease nipple
4	1777764	Pear pin
5	1777474	Lift frame
6	1777212A	Pear pin
7	1777468	Pear pin
8	1777763	Pear pin
9	1777208	Pin washer
10	1777209	Pin washer
11	2770506	Counter sink screw
12	2770484	Bolt
13	2770436	Washer
14	6310203	Cat 2 pin
15	3580657	Main lift ram



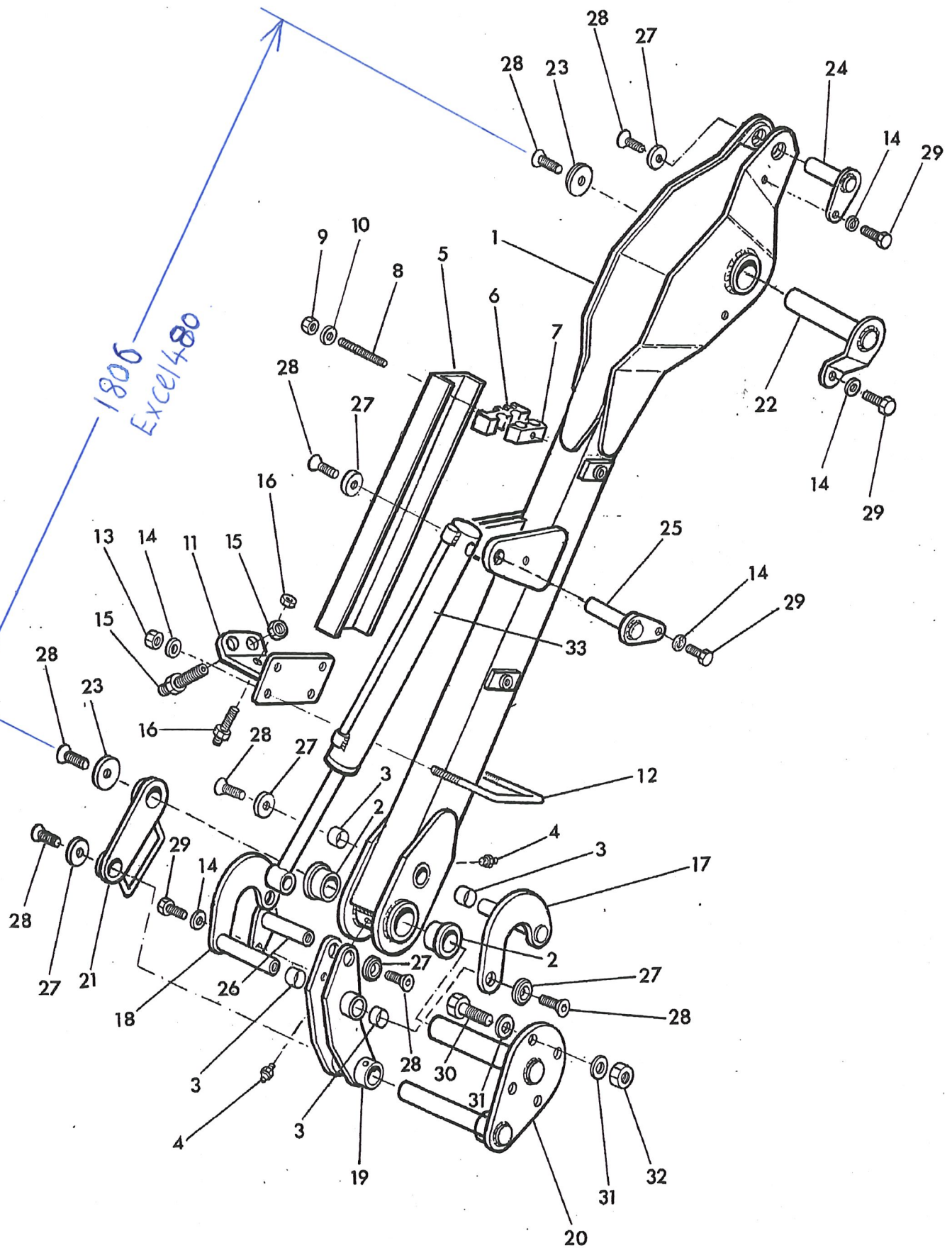
Main Arm Assembly

Main Arm = 1500mm

Parts list - Main Arm Assembly

Fig. Ref	Part number	Item description
1	1777470	Main arm
2	4600127	Bush
3	2770467	Grease nipple
4	1777473	Hose guard
5	3850111	Hose clamp
6	3850108	Hose clamp
7	2772295	Stud
8	2770432	Washer
9	2770416	Locknut
10	1777472	Tie bar
11	4600411	Split bush
12	1777764	Pear pin
13	2770484	Bolt
14	2770436	Washer
15	1777209	Pin washer
16	2770506	Counter sink screw
17	3580657	Reach ram

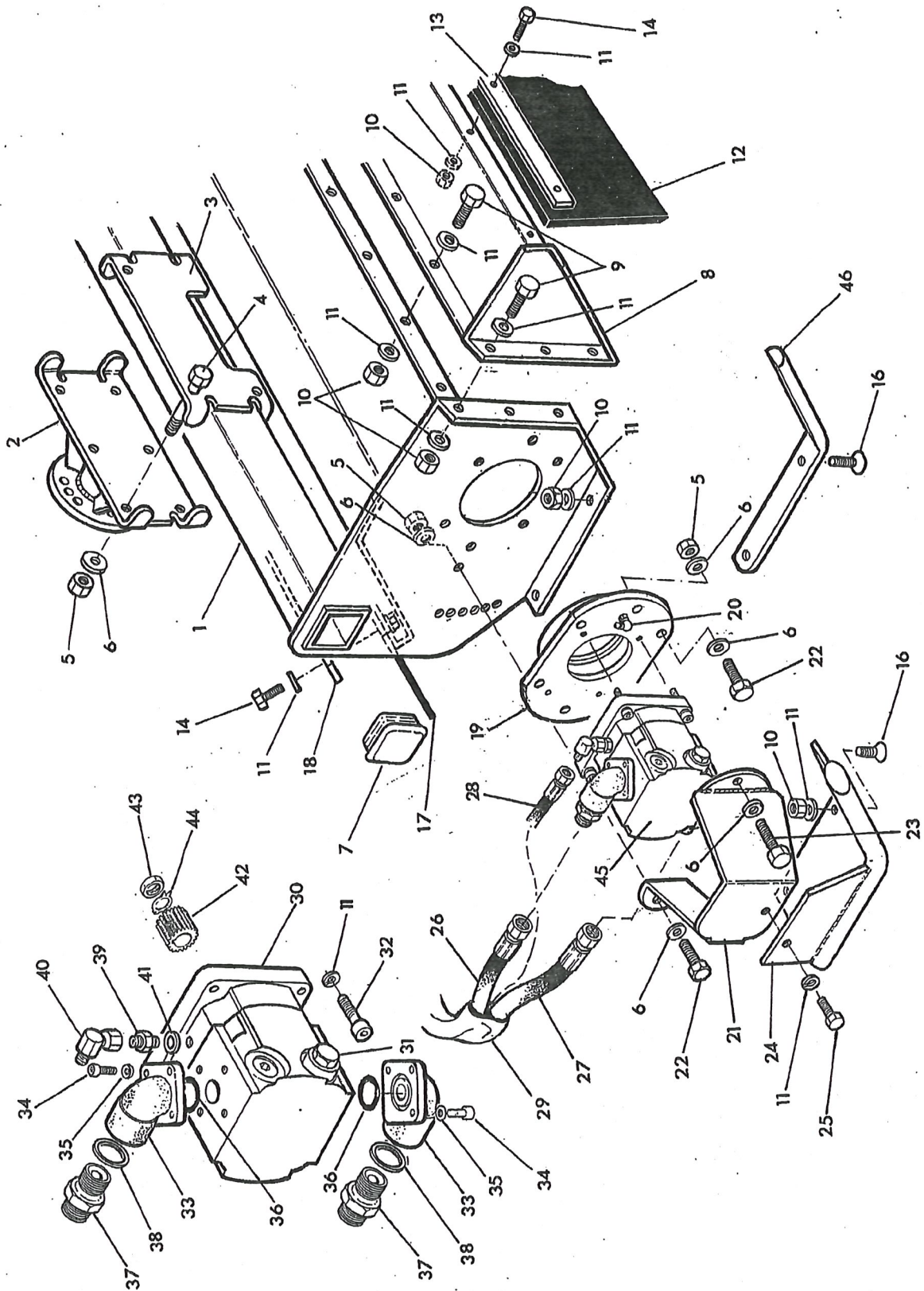
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Dipper Arm Assembly

Parts list - Dipper Arm Assembly

Fig. Ref	Part number	Item description
1	1777471	Dipper arm
2	4600127	Bush
3	4600124	Bush
4	2770467	Grease nipple
5	1777473	Hose guard
6	3850111	Hose clamp
7	3850108	Hose clamp
8	2772295	Stud
9	2770416	Lock nut
10	2770432	Washer
11	1777069	Bulk head bracket
12	2770560	U bolt
13	2770417	Lock nut
14	2770436	Washer
15	3460115	Bulk head fitting c/w nut
16	3460122	Bulk head fitting c/w nut
17	1777117R	Curved link R/H
18	1777117L	Curved link L/H
19	1777116	Head crowd link
20	1777316A	Double pear pin
21	1777322	L/H Double bush
	1777322R	R/H Double bush
22	1777212A	Pear pin
23	1777208	Pin washer
24	1777468	Pear pin
25	1777362	Pear pin
26	1777226	Pear pin
27	1777209	Pin washer
28	2770506	Counter sink screw
29	2770484	Bolt
30	2770425	Bolt
31	2770454	Washer
32	2770447	Lock nut



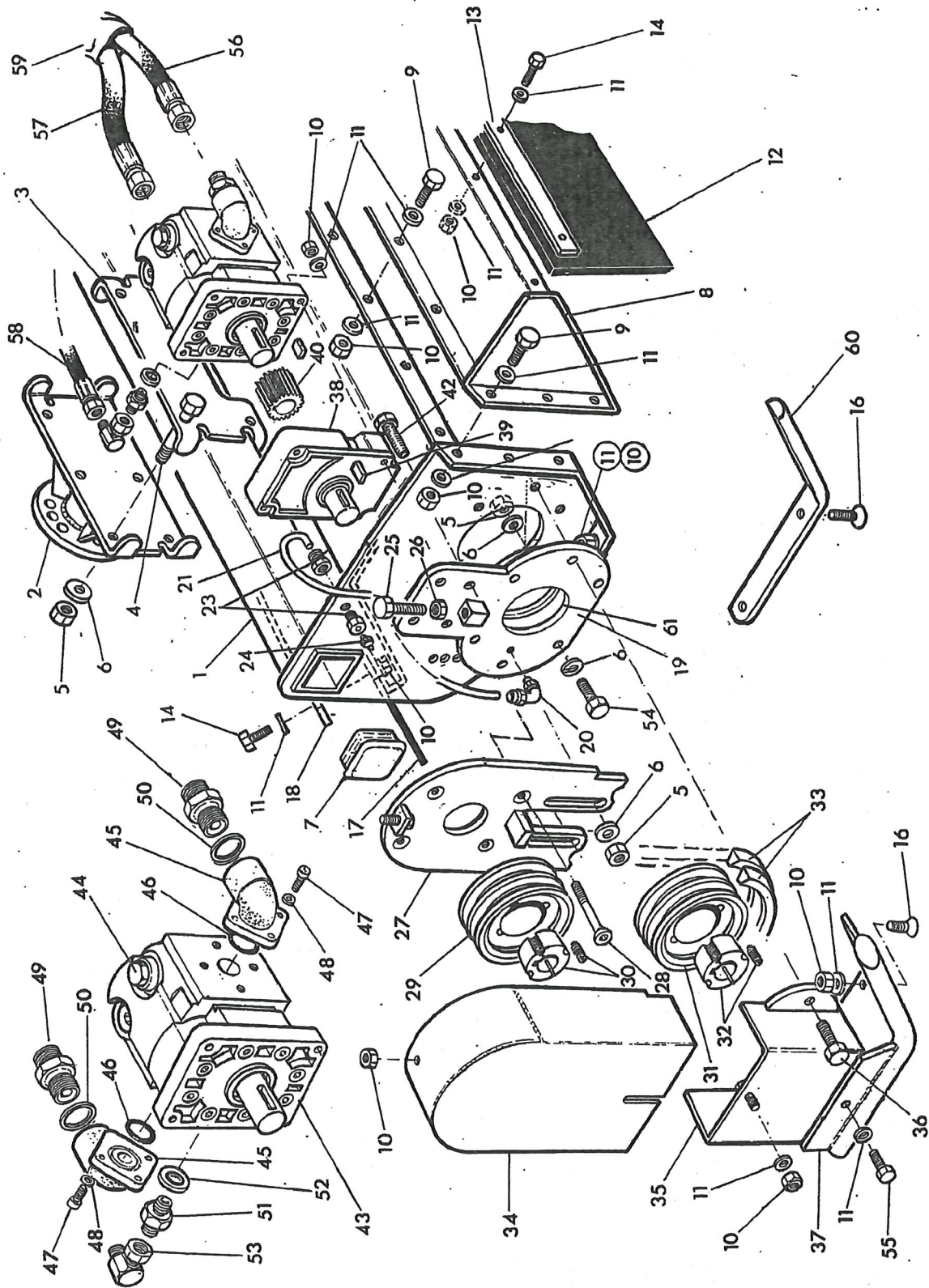
Direct Drive Head Assembly

Parts list - Direct Drive Head Assembly

Fig. Ref	Part number	Item description
1	1777305A	Head shell 1.2mtr.
2	1777315A	Head angle bracket
3	1777325	Head retaining plate
4	2770410	Bolt
5	2770417	Nut
6	2770436	Washer
7	8777516	Plastic cap
8	1777306A	Front hood 1.2mtr.
9	2770484	Bolt
10	2770417	Lock nut
11	2770436	Washer
12	8400204	Rubber strip 1.2mtr.
13	1777398	Retaining bar 1.2mtr.
14	2770494	Bolt
15	-	-
16	2770520	Socket counter sink screw
17	8400204	Ruber strip 1.2mtr.
18	1777398	Retaining bar
19	1777308	Bearing housing
20	2770497	Grease nipple
21	1777769	Motor guard
22	2270443	Bolt
23	2770397	Bolt
24	1777480	Cowl wear plate - outboard motor
	1777420R	Cowl wear plate - inboard motor
25	2770444	Bolt
26	3760193	Hose
27	3760193	Hose
28	3760011	Hose
29	3870500	Lay flat
30	3151034	Head motor
31	3610049	Cartridge valve
32	2770396	Bolt
33	3151008	Port Elbow
34	2770523	Cap bolt
35	2770469	Washer
36	3261001	O ring
37	3370092	Adaptor
38	3260074	Bonded seal
39	3360080	Adaptor
40	3460107	Adaptor
41	3260070	Bonded seal
42	3151028	Hub coupling
43	2770350	Nut
44	2770457	Washer
45	-	-
46	1777419	Skid
47	3151034k	Seal kit - motor

Parts list - Direct Drive Head Assembly

Fig. Ref	Part number	Item description
1	1777305A	Head shell 1.2mtr.
2	1777315A	Head angle bracket
3	1777325	Head retaining plate
4	2770410	Bolt
5	2770417	Nut
6	2770436	Washer
7	8777516	Plastic cap
8	1777306A	Front hood 1.2mtr.
9	2770484	Bolt
10	2770417	Lock nut
11	2770436	Washer
12	8400204	Rubber strip 1.2mtr.
13	1777398	Retaining bar 1.2mtr.
14	2770494	Bolt
15	-	-
16	2770520	Socket counter sink screw
17	8400204	Ruber strip 1.2mtr.
18	1777398	Retaining bar
19	1777308	Bearing housing
20	2770497	Grease nipple
21	1777769	Motor guard
22	2270443	Bolt
23	2770397	Bolt
24	1777480	Cowl wear plate - outboard motor
	1777420R	Cowl wear plate - inboard motor
25	2770444	Bolt
26	3760193	Hose
27	3760193	Hose
28	3760011	Hose
29	3870500	Lay flat
30	3151034	Head motor
31	3610049	Cartridge valve
32	2770396	Bolt
33	3151008	Port Elbow
34	2770523	Cap bolt
35	2770469	Washer
36	3261001	O ring
37	3370092	Adaptor
38	3260074	Bonded seal
39	3360080	Adaptor
40	3460107	Adaptor
41	3260070	Bonded seal
42	3151028	Hub coupling
43	2770350	Nut
44	2770457	Washer
45	-	-
46	1777419	Skid
47	3151034k	Seal kit - motor



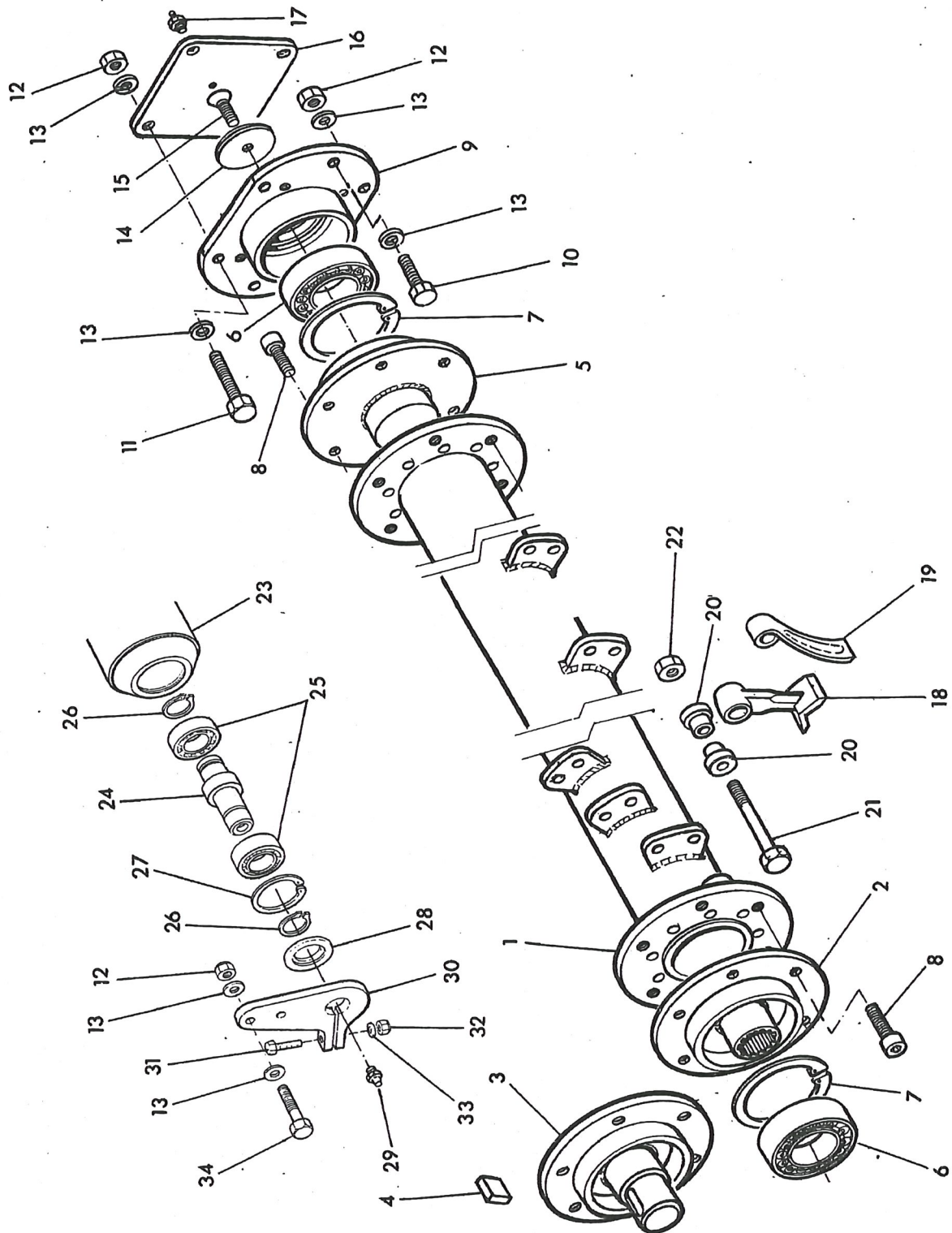
Belt Drive Head Assembly

Parts list - Belt Drive Head Assembly

Fig. Ref	Part number	Item description
1	1777305A	Head shell 1.2mtr.
2	1777315A	Head angle bracket
3	1777325	Head retaining plate
4	2770410	Bolt
5	2770417	Nut
6	2770436	Washer
7	8777516	Plastic cap
8	1777306A	Front hood 1.2mtr.
9	2770484	Bolt
10	2770417	Lock nut
11	2770436	Washer
12	8400204	Rubber strip 1.2mtr.
13	1777398	Retaining bar 1.2mtr.
14	2770494	Bolt
15	-	-
16	2770520	Counter sink screw
17	8400204	Ruber strip 1.2mtr.
18	1777398	Retaining bar
19	1777392	Bearing housing
20	3700177	Adaptor
21	3700178	Grease tube
23	3700176	Bulk head adaptor
24	2770511	Grease nipple
25	2770474	Adjusting screw
26	2770536	Nut
27	1777393A	Motor plate
28	2770522	Counter sink bolt
29	4770825	Pulley
30	4770875	Taper lock
31	4770863	Pulley
32	4770847	Taper lock
33	4770868	Vee belts
34	1777393A	Upper pulley guard
35	1777395	Lower pulley guard
36	2770443	Bolt
37	1777480	Cowl wear plate - outboard motor
	1777421R	Cowl wear plate - inboard motor
38	3151012	Pulley support
39	4772228	Key
40	3151011	Hub coupling
41	-	-
42	2770443	Bolt
43	3151034	Motor
44	3610049	Anti Cav. cartridge
45	3151008	Port elbow
46	3261001	O ring
47	2770523	Cap bolt
48	2770469	Spring washer
49	3370092	Adaptor
50	3260074	Bonded seal
51	3360080	Adaptor
52	3260070	Bonded seal
53	3460107	Adaptor
54	2770443	Bolt
55	2770444	Bolt
56	3760193	Hose
57	3760193	Hose
58	3760011	Hose
59	3870500	Lay flat hose
60	1777419	Skid
61	4771123	Oil seal
62	3151034k	Seal kit - motor

Parts list - Belt Drive Head Assembly

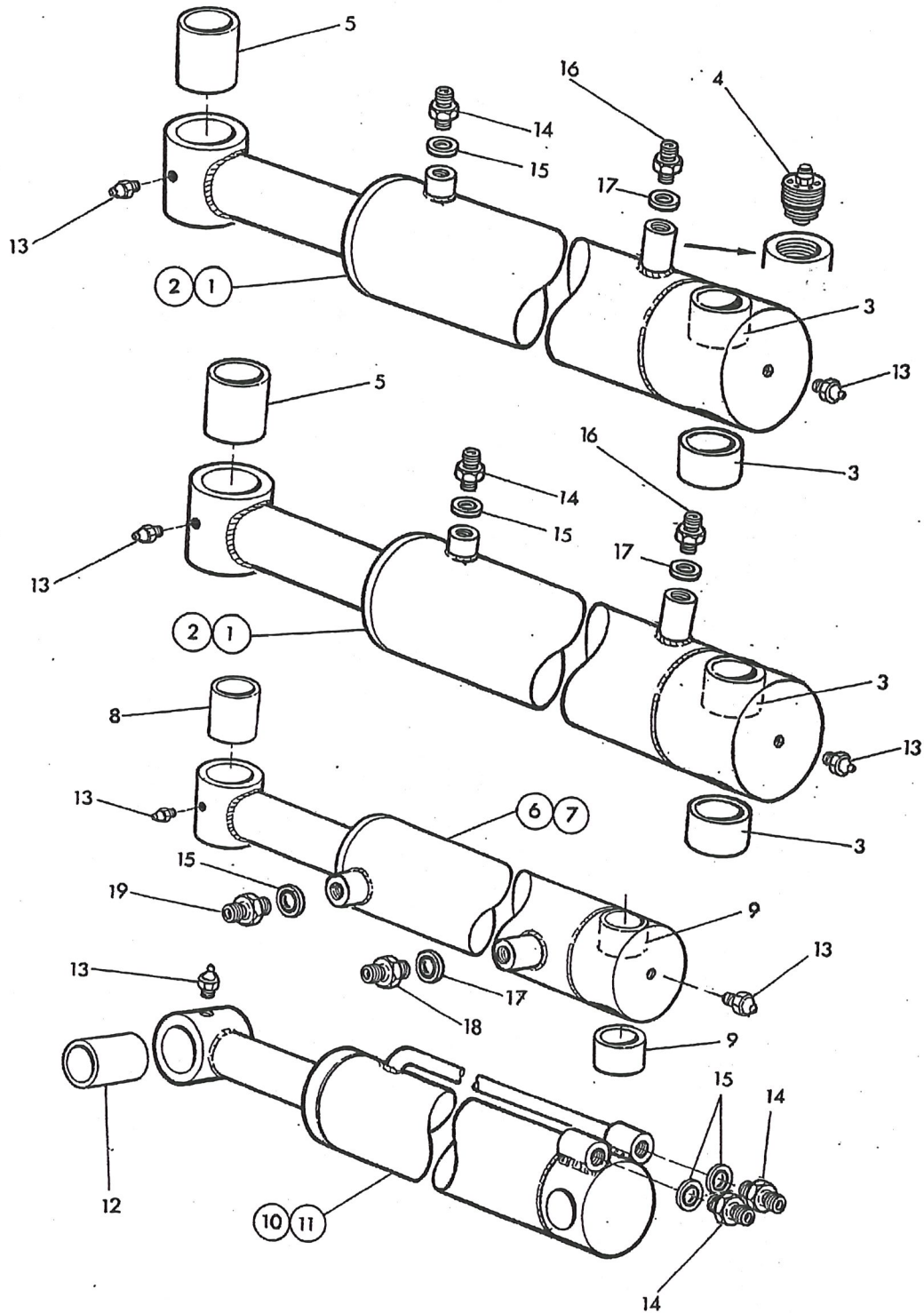
Fig. Ref	Part number	Item description
1	1777305A	Head shell 1.2mtr.
2	1777315A	Head angle bracket
3	1777325	Head retaining plate
4	2770410	Bolt
5	2770417	Nut
6	2770436	Washer
7	8777516	Plastic cap
8	1777306A	Front hood 1.2mtr.
9	2770484	Bolt
10	2770417	Lock nut
11	2770436	Washer
12	8400204	Rubber strip 1.2mtr.
13	1777398	Retaining bar 1.2mtr.
14	2770494	Bolt
15	-	-
16	2770520	Counter sink screw
17	8400204	Ruber strip 1.2mtr.
18	1777398	Retaining bar
19	1777392	Bearing housing
20	3700177	Adaptor
21	3700178	Grease tube
23	3700176	Bulk head adaptor
24	2770511	Grease nipple
25	2770474	Adjusting screw
26	2770536	Nut
27	1777393A	Motor plate
28	2770522	Counter sink bolt
29	4770825	Pulley
30	4770875	Taper lock
31	4770863	Pulley
32	4770847	Taper lock
33	4770868	Vee belts
34	1777393A	Upper pulley guard
35	1777395	Lower pulley guard
36	2770443	Bolt
37	1777480	Cowl wear plate - outboard motor
	1777421R	Cowl wear plate - inboard motor
38	3151012	Pulley support
39	4772228	Key
40	3151011	Hub coupling
41	-	-
42	2770443	Bolt
43	3151034	Motor
44	3610049	Anti Cav. cartridge
45	3151008	Port elbow
46	3261001	O ring
47	2770523	Cap bolt
48	2770469	Spring washer
49	3370092	Adaptor
50	3260074	Bonded seal
51	3360080	Adaptor
52	3260070	Bonded seal
53	3460107	Adaptor
54	2770443	Bolt
55	2770444	Bolt
56	3760193	Hose
57	3760193	Hose
58	3760011	Hose
59	3870500	Lay flat hose
60	1777419	Skid
61	4771123	Oil seal
62	3151034k	Seal kit - motor



Rotor and Roller Assembly

Parts list - Rotor and Roller Assembly

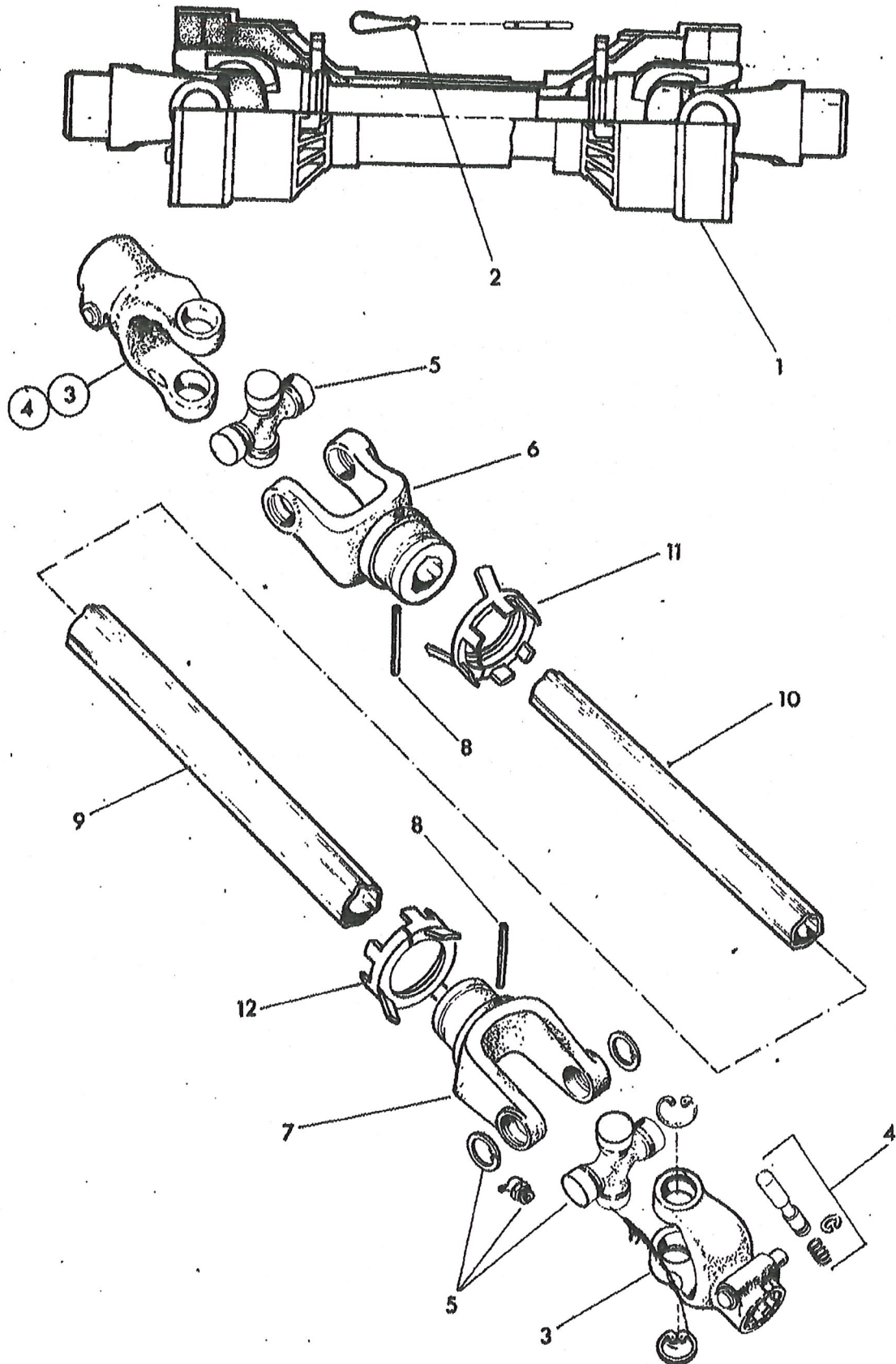
Fig. Ref	Part number	Item description
1	1777307	Rotor 1.2m
	1777342B	Rotor 1.5m
2	1777309	Bearing sheild - Direct drive
3	1777391	Bearing sheild - Belt drive
4	4773322	Key
5	1777311	Bearing sheild
6	4770891	Bearing
7	2771610	Circlip
8	2770575	Cap bolt 05-625-21
9	1777310	Bearing housing
10	2770443	Bolt
11	2770397	Bolt
12	2770417	Nut
13	2770436	Washer
14	1777207	Retaining washer
15	2770506	Counter sink bolt
16	1777312	Rotor shaft cover
17	2770467	Grease nipple
18	7770713	T flail
19	7770699	C flail
20	1777721	Bush
21	2770570	Bolt
22	2770572	Lock nut
23	1777186A	4" Roller 1.2mtr.
	1777187A	4" Roller 1.5mtr.
	1777125A	6" Roller 1.2mtr.
	1777146A	6" Roller 1.5mtr.
24	1777314	Stub shaft
25	4771604	Bearing
26	2777519	Circlip
27	2771108	Circlip
28	1777231A	Hub cover
29	2770468	Grease nipple
30	1777313	Roller plate
31	2770443	Bolt
32	2770417	Nut
33	2770436	Washer



Hydraulic Cylinder Assembly

Parts list - Hydraulic Cylinder Assembly

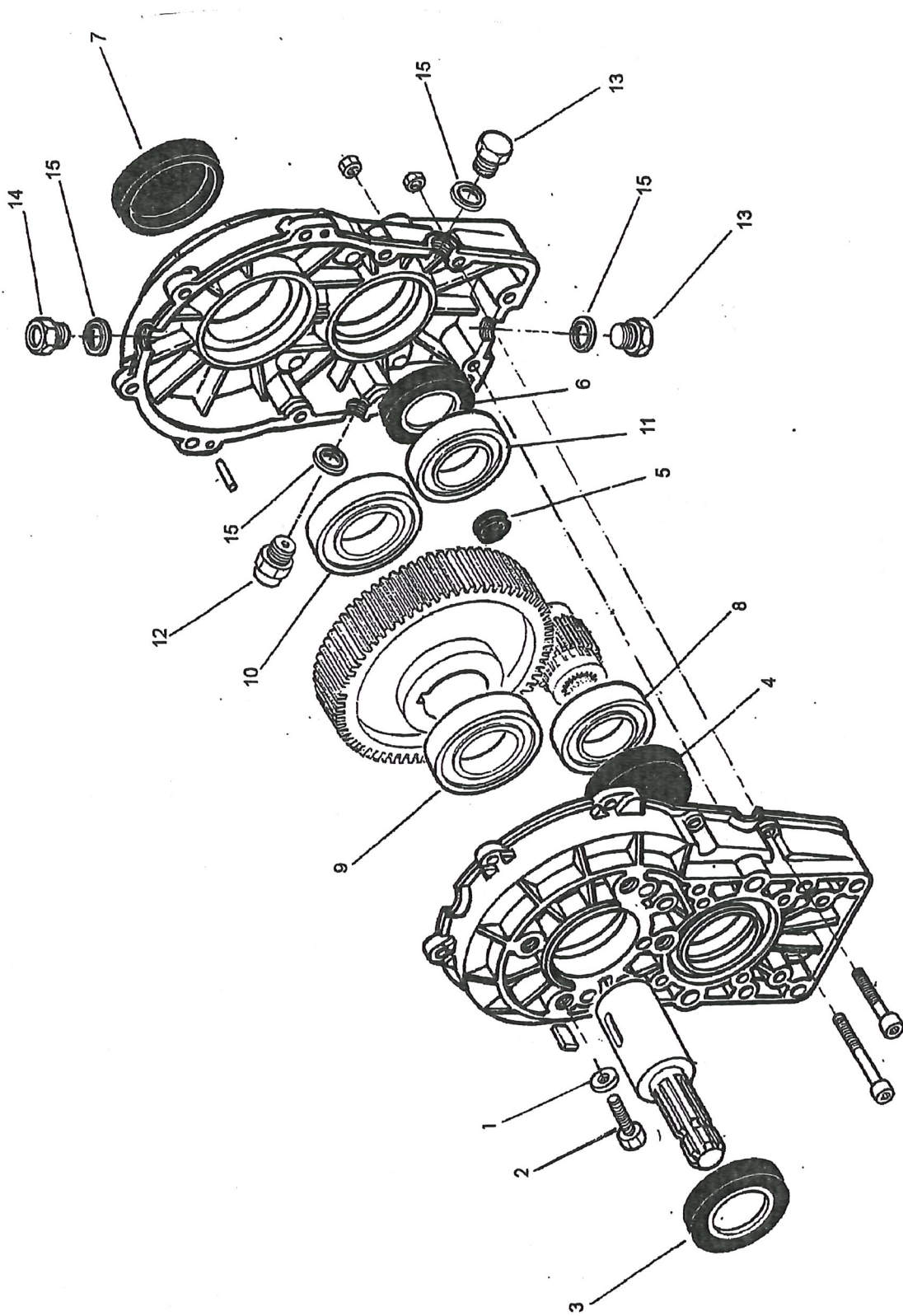
Fig. Ref	Part number	Item description
1	3580657	Main lift/reach ram
2	3570661	Seal kit
3	4600414	Bush
4	3600118	Hose burst cartridge
5	4600412	Bush
6	3580651	Ram - slew
7	3570666	Seal kit
8	4600413	Bush
9	4600413	Bush
10	3580644	Ram - head
11	3570665	Seal kit
12	4600413	Bush
13	2772300	Grease nipple
14	3360080	Adaptor
15	3260070	Bonded seal
16	3360083	Adaptor
17	3260071	Bonded seal
18	3360098	Restrictor (1mm)
19	3360097	Restrictor (1mm)



P.t.o. shaft assembly

Parts list - P.t.o. Shaft Assembly

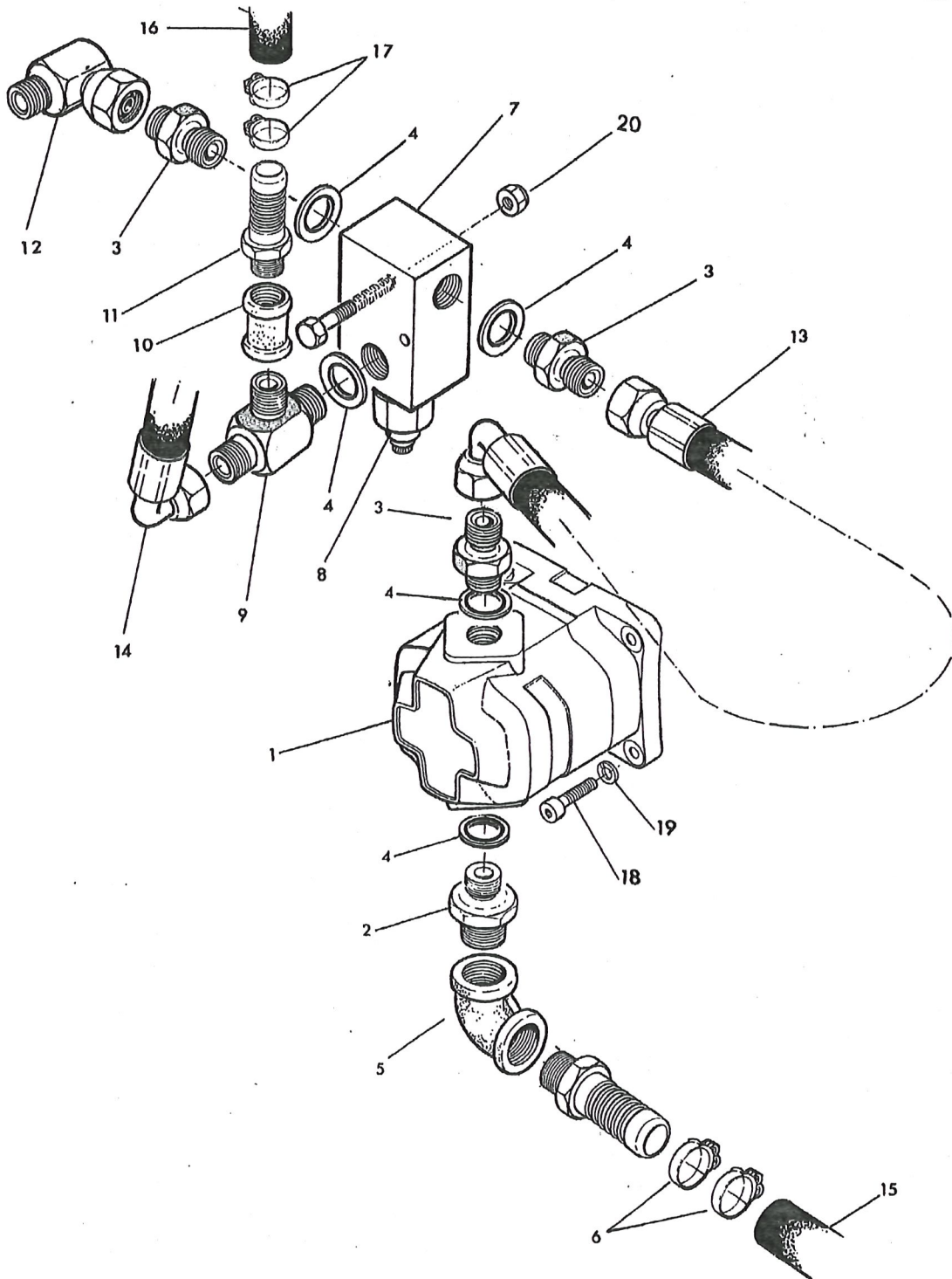
Fig. Ref	Part number	Item description
1	5770083	Complete p.t.o. Shaft
	5772262A	Complete Guard
2	5771020	Retaining Chain
3	5772240	Quick Release yoke, 6-spline
	5772241	Quick Release yoke, 21-spline
4	5771023	Release Button
5	5772242	Cross Journal Assembly
6	5772244	Inner Tube Yoke
7	5772254	Outer Tube Yoke
8	2770479	Roll Pin
9	5772248	Outer Profile Tube
10	5772250	Inner Profile Tube
11	5772238	Inner Bearing Guard
12	5772239	Outer Bearing Guard



Gearbox Assembly

Parts list - Gearbox Assembly

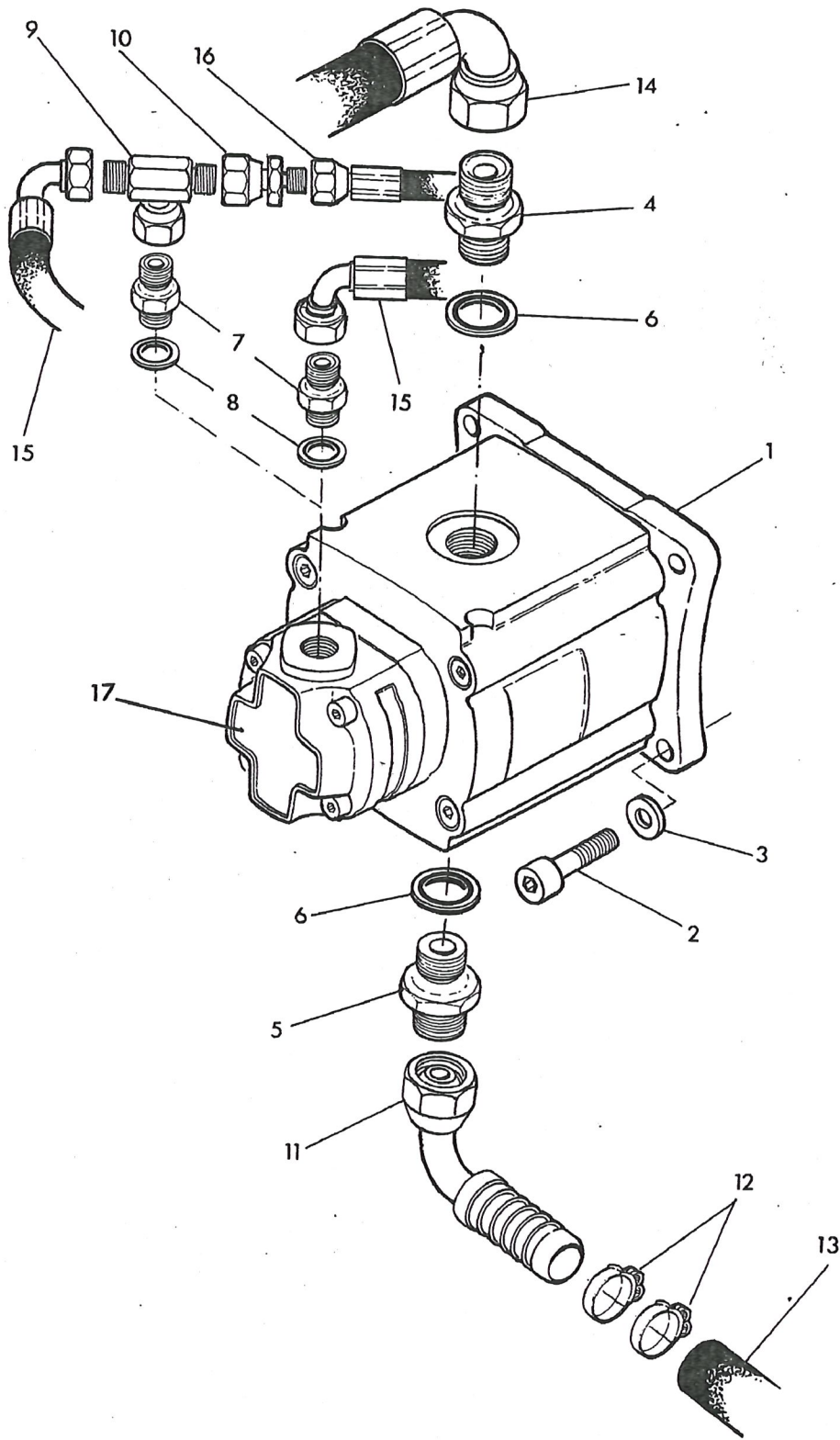
Fig. Ref	Part number	Item description
	3151026	Gearbox Assembly
1	2770436	Flat washer
2	2770535	Bolt
3	5771620	Oil Seal
4	5771621	Oil Seal
5	5771622	Oil Seal
6	5771623	Oil Seal
7	5771624	Oil Seal
8	5771625	Bearing
9	5771626	Bearing
10	5771627	Bearing
11	5771628	Bearing
12	5771607	Breather
13	5771608	Plug
14	5771610	Sight Gauge
15	5771609	Washer



Single pump Assembly

Parts list - Single pump Assembly

Fig. Ref	Part number	Item description
1	3151038	Single pump
2	3360094	Adaptor
3	3360092	Adaptor
4	3260074	Bonded seal
5	3460121	Elbow
6	3861012	Hose clip
7	3910197	Motor relief valve assembly
8	3910196	Cartridge valve
9	3460113	Tee
10	3490002	Reducing socket
11	3761006	Hose insert
12	3460116	Elbow
13	3760200	Hose
14	3760065	Hose
15	3710112	Suction hose
16	3710114	Returns hose
17	3861014	Hose clips
18	2772284	Cap bolt
19	2770469	Spring washers
20	2770412	Nut



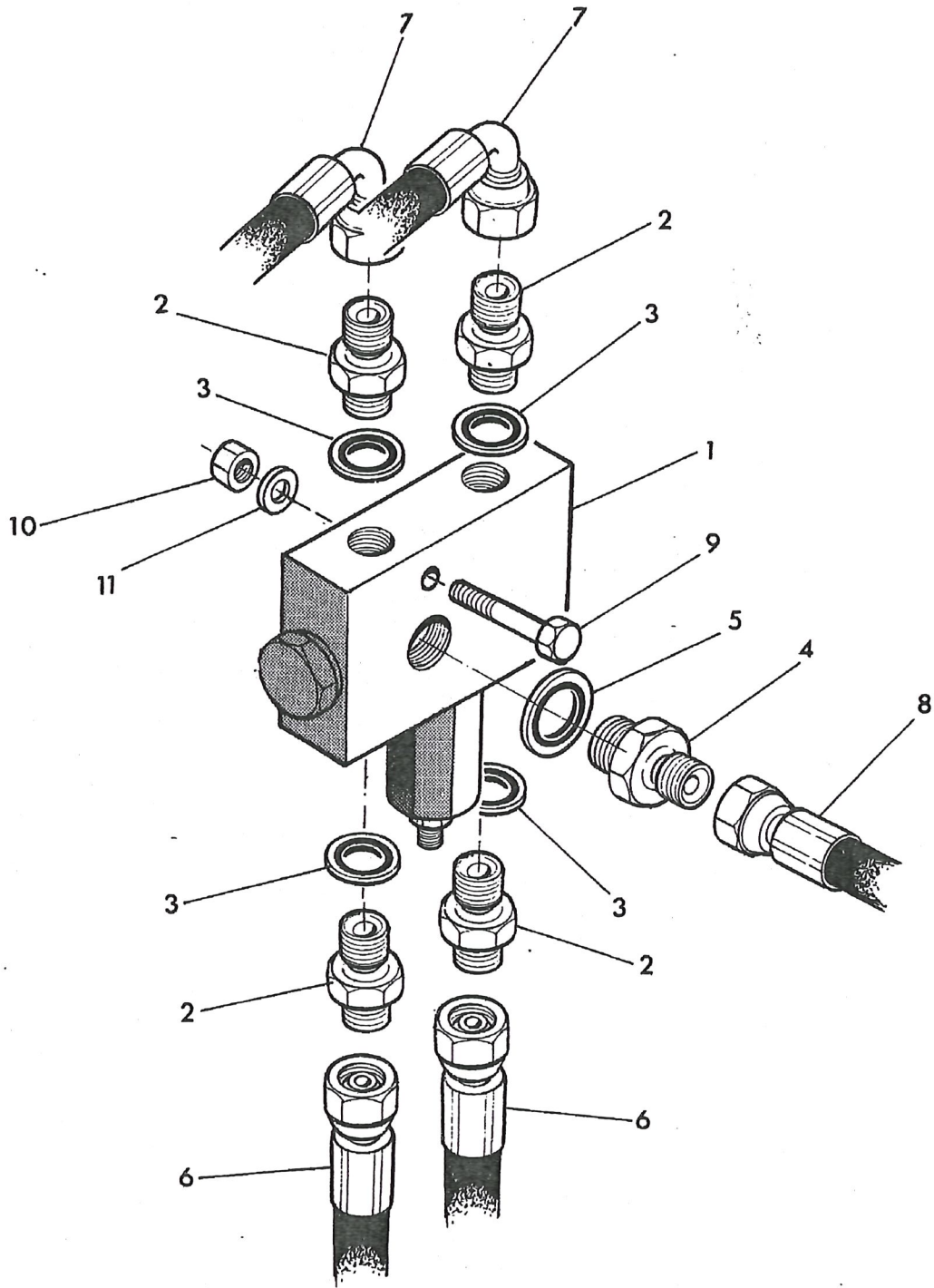
Tandem Pump Assembly

Parts list - Tandem Pump Assembly

Fig. Ref	Part number	Item description
1	3151033	Tandem pump (Cast iron)
2	2772284	Cap bolt
3	2770469	Washer
4	3360092	Adaptor
5	3360094	Adaptor
6	3260074	Bonded seal
7	3260088	Adaptor
8	3260072	Bonded seal
9	3460099	Adaptor
10	3360079	Adaptor
11	3761001	Hose insert
12	3861012	Hose clip
13	3710112	Suction hose
14	3760200	Hose - L/H
	3760064	Hose - R/H
15	3760310	Hose
16	3760096	Hose
17	3151043	Service pump (11.2cc)
18	3151003k	Seal kit

Parts list - Motor valve Assembly

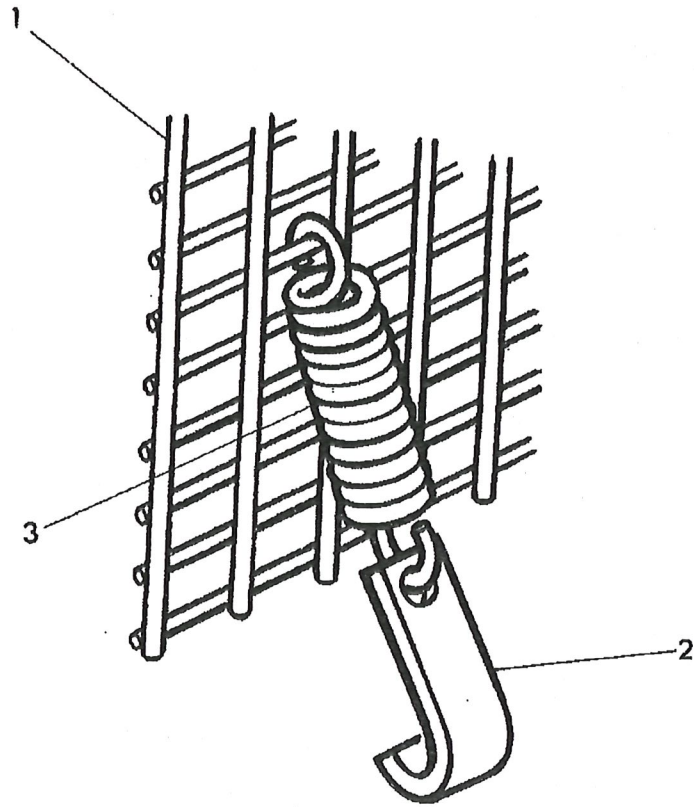
Fig. Ref	Part number	Item description
1	3600101	Motor control valve
2	3600080	Relief valve cartridge
3	3610081	Spool detent kit
4	3360091	Adaptor
5	3360101	Adaptor
6	3360102	Adaptor
7	3260073	Bonded seal
8	2772285	Bolt
9	2770434	Washer
10	2770412	Nut
11	3760119	Hose
12	3760119	Hose
13	3870500	Lay flat
14	3760002	Hose
15	3761004	Hose insert
16	3861014	Hose clip
17	3710114	Hose



Break back valve Assembly

Parts list - Break back valve Assembly

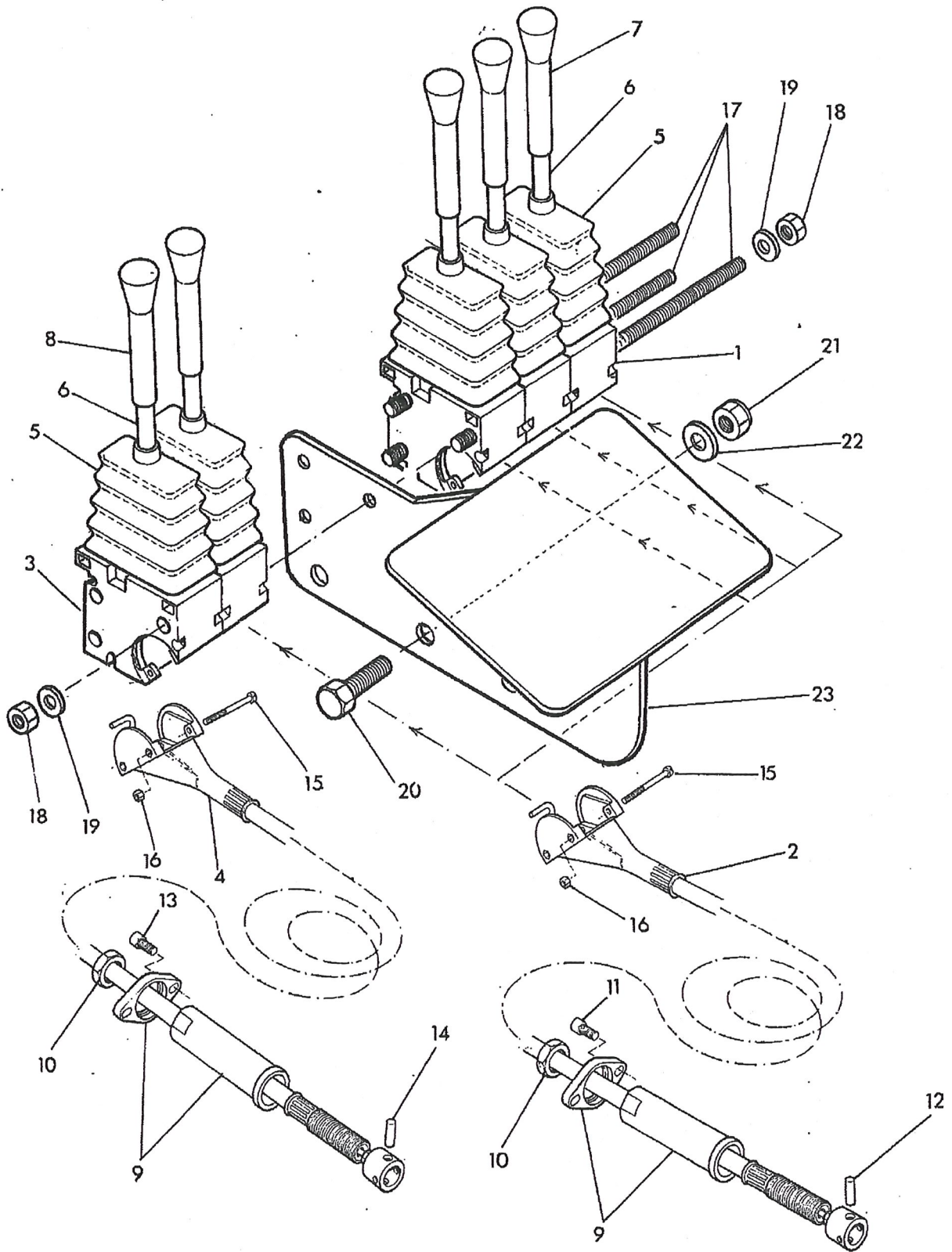
Fig. Ref	Part number	Item description
1	3610056	Break back valve
2	3360080	Adaptor
3	3260070	Bonded seal
4	3360083	Adaptor
5	3260071	Bonded seal
6	3760027	Hose
7	3760302	Hose
8	3760304	Hose
9	2772285	Bolt
10	2770412	Nut
11	2770434	Washer



Cab guard Assembly

Parts list - Cab Guard Assembly

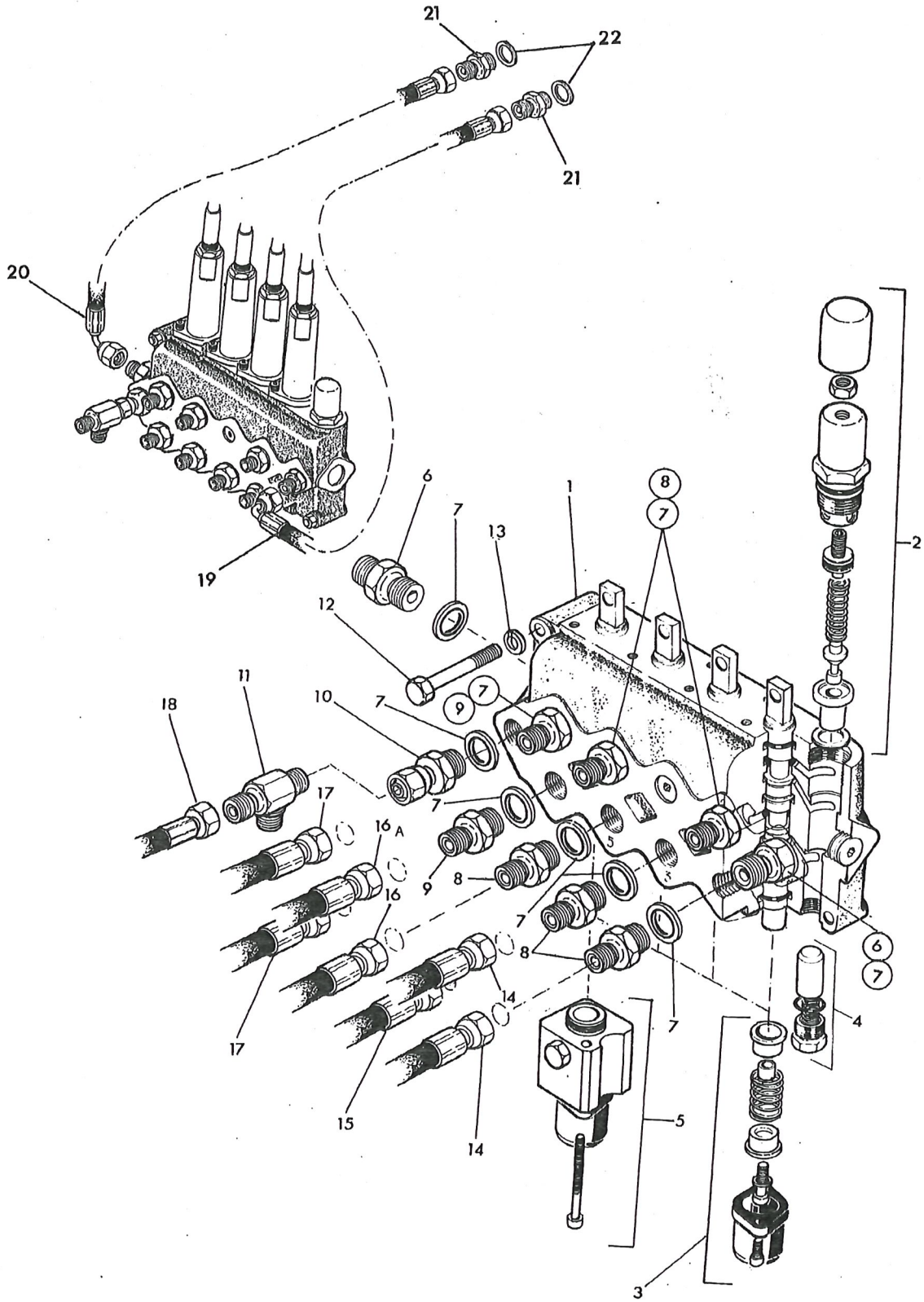
Fig. Ref	Part number	Item description
1	1777140	Mesh guard panel
2	1777141	Mesh guard fastener
3	6310209	Mesh guard spring



Cable Control Assembly

Parts list - Cable Control Assembly

Fig. Ref	Part number	Item description
1	3910311	Lever & Cable Assembly - Spool Bank Valve
2	3910318	Cable - Spool Bank Valve
3	3910310	Lever & Cable Assembly - Motor Control Valve
4	3910320	Cable - Motor Control Valve
5	3910315	Rubber Gaiter
6	3910316	Lever
7	3910314	Black Cover
8	3910312	Red Cover
9	3910319	Cable Support - Spool Bank Valve
9a	3910313	Cable Support - Motor Control Valve
10	2770449	Nut
11	2770243	Cap Bolt
12	3910322	Cable Pin
13	2770540	Cap Bolt
14	3910321	Cable Pin
15	2770252	Screw
16	2770251	Nut
17	2770576	Studding
18	2770373	Nut
19	2771408	Washer
20	2770484	Set Screw
21	2770417	Nut
22	2770436	Washer
23	1777073	Control Bracket



**Auxiliary valve - Cable Control
with float detent Assembly**