



# SPARE PARTS CATALOGUE

**LS45 — LS45/TC**

**LS55 — LS55/TC**

**LS55SL — LS55SL/TC**

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Date: Nov.82 Issue No: 07



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## **INSTRUCTIONS FOR ORDERING SPARES**

MODEL NUMBER AND SERIAL NUMBER MUST BE QUOTED WITH ALL ORDERS, ALSO SKID UNIT NUMBERS (FOR TRANSMISSION PARTS) AND ENGINE SERIAL NUMBERS (FOR ENGINE PARTS).


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GEARBOX

TORQUE CONVERTOR

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**SECTION 1**  
**POWER AND TRANSMISSION**

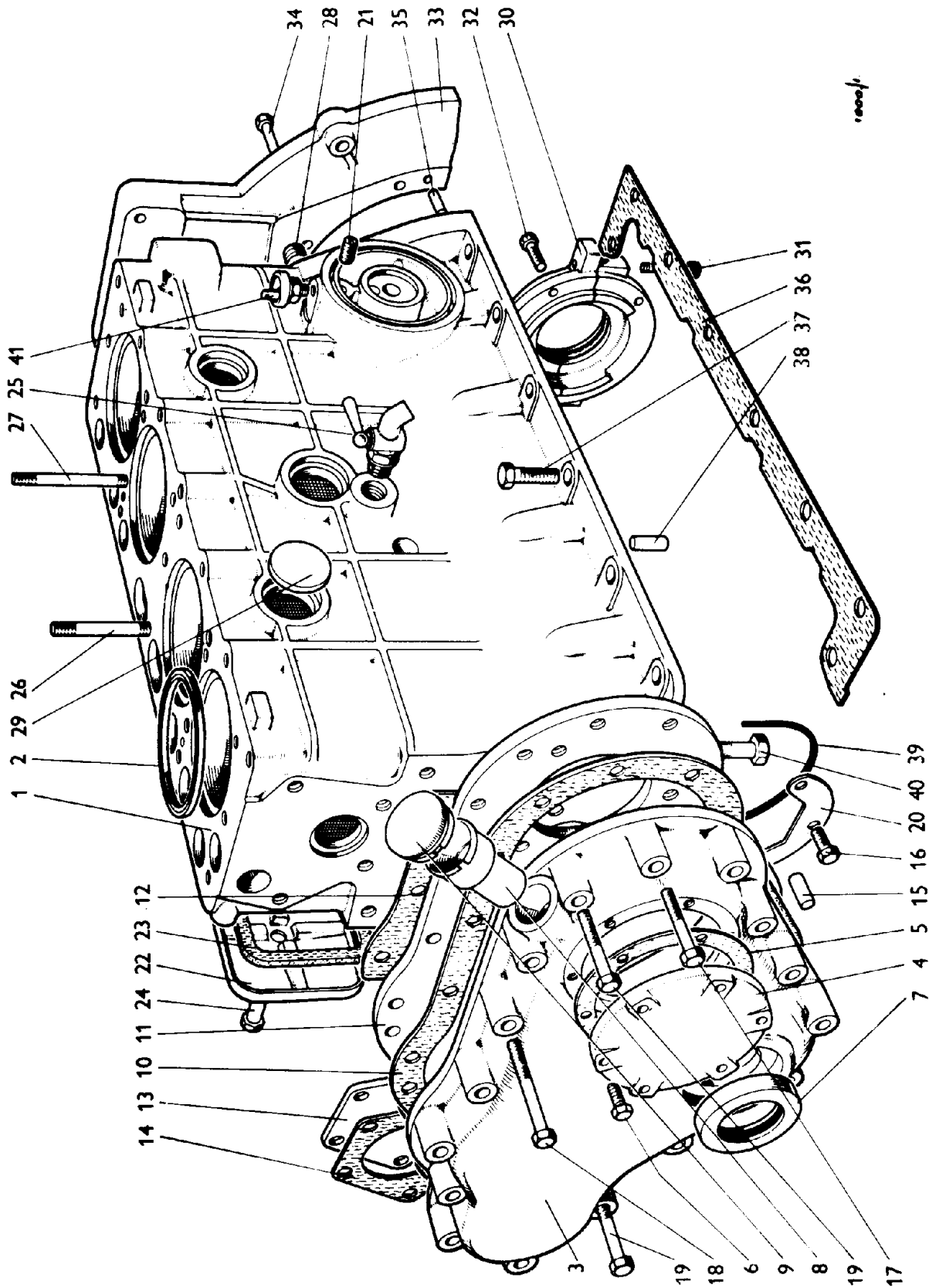
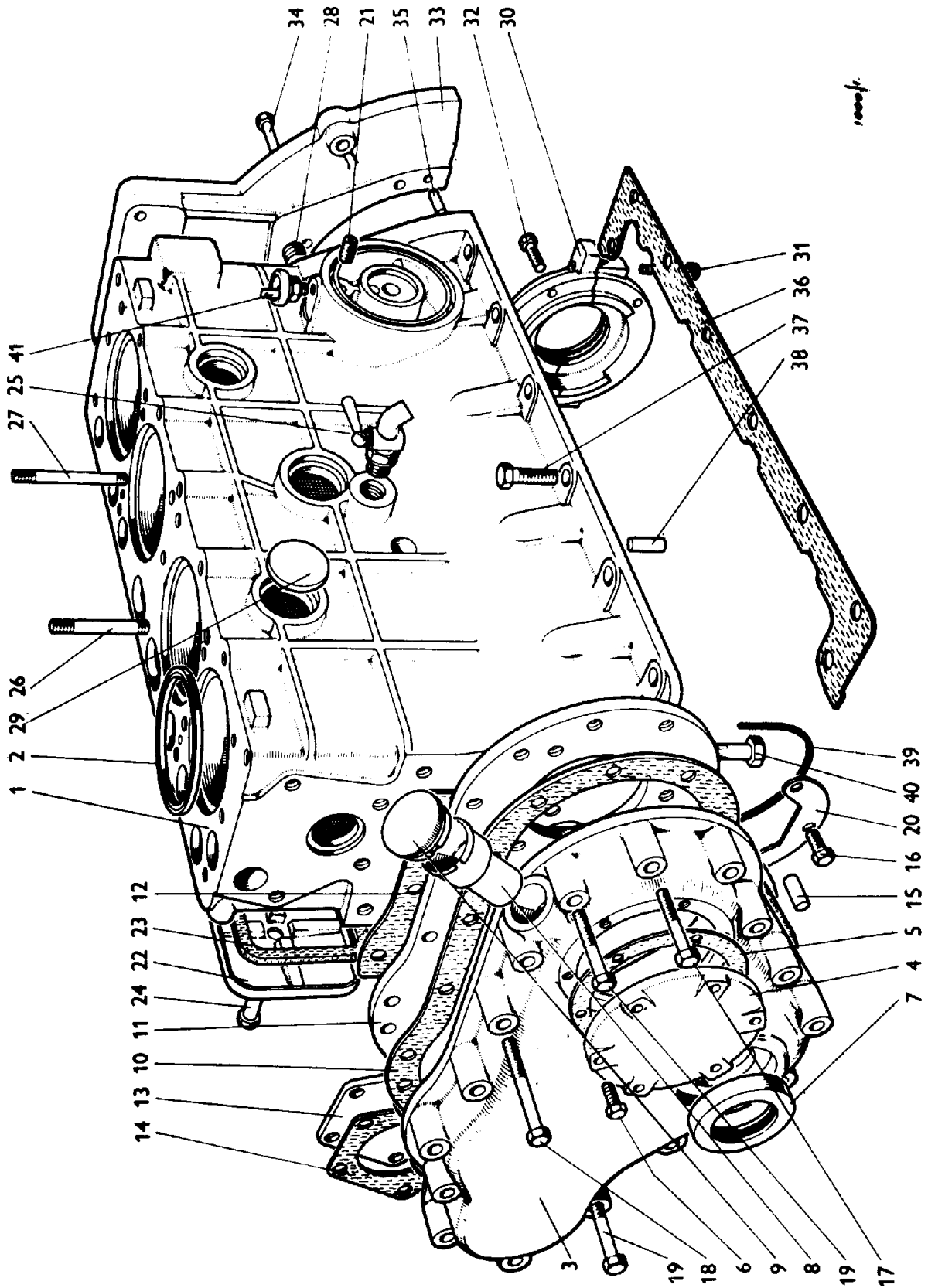


FIG. 1 : 01


**POWER AND TRANSMISSION, CYLINDER BLOCKS AND COVERS**

Fig.No.	1:01 Part No.	Description	Qty	Remarks
1	020051	Cylinder block	1	Comp.with brg. Caps
1A	047890	Cylinder block. Spin on type filter	1	Not Inter-changeable.
2	020142	Sealing Ring	4	Obsolete see BTSB 226-82
2A	012359	Dowel )Main bearing	6	
2B	020143	Bolt )caps to	6	
2C	020144	Tabwasher)cylinder block	6	
3A	020145	Timing Cover Assembly	1	
3	020146	Cover - Timing Gear	1)	See BTSB 233/89
4	020147	Plate - Inspection	1)	To order
5	020148	Gasket	1)	complete Timing
6	020149	Setscrew	6)	Gear Cover use
6A	012424	Spring Washer	6)	item 3A
7	020150	Oil Seal	1	
8	020151	Tube - Oil filler	1	
8A	020152	Oil Filler Extension	1	S'ceded by 023233.
9	020153	Filler Cap	1	
9A	020154	Filter Gauze	1	
9B	020155	Distance Piece	1	
10	020156	Gasket - Cover to Plate	1	
11	020157	Carrier Plate	1	
12	020158	Gasket - Plate to Block	1	
13	020159	Blanking Plate	1	
14	020160	Gasket - Blanking Plate to Carrier Plate	1	
15	020161	Dowel - Plate to Block	2	Obsolete see BTSB 162/36
16	020162	Setscrew - Carrier Plate	4	
17	020163	Setscrew )	9	Will
18	020164	Bolt )	1	service
19	020165	Bolt )Timing	6	early
19A	020166	Setscrew )gear	1	engines
19B	020167	Nut )cover	3	
19C	012424	Spring Washer )	21	
20	020168	Baffle Plate	1	
21	020169	Taper Plug - Oil Cleaner Mounting Boss	1	
22	020170	Cover - Tappets	2	
23	020171	Gasket - Tappet Cover	2	
24	020172	Bolt - Tappet Cover	2	
24A	012696	Fibre Washer	2	
25	012491	Drain Tap	1	
25A	020173	Adaptor - Drain Tap	1	
25B	020174	Sealing Washer	1	
26	020055	Stud	12	Obsolete see BTSB 226-82



*ref.*

FIG. 1 : 01

**POWER AND TRANSMISSION, CYLINDER BLOCKS AND COVERS**

Fig.No. 1:01	Part No.	Description	Qty	Remarks
27	020175	Stud )Cylinder	4	
27A	020176	Bolt, Special)head	7	
28	020177	Plug - Oil Gallery - Rear	1	
28A	020178	Copper Washer	1	
28B	020179	Plug - Oil Gallery - Front	1	
29	020181/ 020182	Core Plug	5	
30	020183	Oil Retainer	1	See BTSB 319/141
30A	020184	Packing (two halves) - Oil Retainer	1	
31	020185	Socket Screw	2	
31A	012424	Spring Washer	2	
31B	020186	Gasket - Oil Retainer to Cyl.Block	2	See BTSB 319/141
32	020149	Setscrew	4	
32A	012424	Spring Washer	4	S'eded by 020484
33	020187	Support Plate - Starter	1	
34	020188	Setscrew	6	
34A	013063	Spring Washer	6	
35	012359	Dowel	2	
36	020189	Gasket, left-hand	1	
36A	020190	Gasket, right-hand	1	
37	012710	Setscrew - frame	12	
37A	013063	Spring Washer	12	
38	020191	Dowel) Cylinder	2	
39	020192	Seal ) block	2	
40	020193	Bolt - Special	4	
40A	013063	Spring Washer	4	
41	012718	Switch - Oil Warning Light	1)	See also
41A	012696	Fibre Washer	1)	Fig.1:07

NOTE: Refer to BTSB 319/141 for changes to oil retainer.  
For changes to Engine Unit refer to BTSB 226/82, BTSB 233/89, BTSB 162/36.

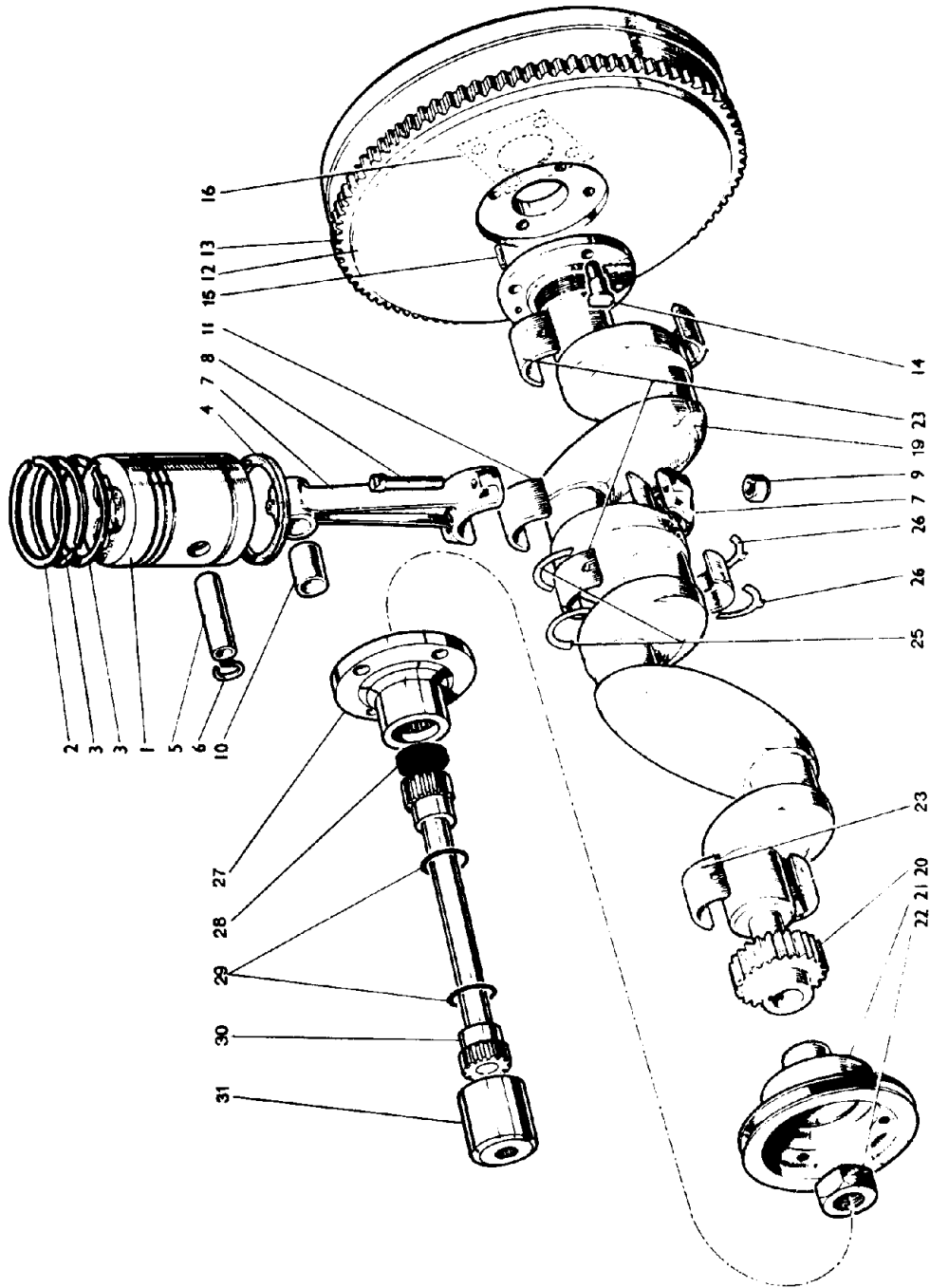


FIG. 1 : 02



**POWER AND TRANSMISSION  
CRANKSHAFT AND PISTONS**

Fig. No.	1:02 Part No.	Description	Qty	Remarks
1A	020194	Piston and Gudgeon Pin Assembly	4	S'ceded by 047678
1	020195	Piston (not supplied separately)	1	
1B	020196	Group — Ring Pack — Std.	1	
2	020197	Piston Ring — No. 1 Compression	8	Parts of Item 1B
3	020198	Piston Ring — Nos. 2 and 3 Compression	8	
4	020199	Piston Ring — Scraper	4	
4A	020200	Group — Oil Control — Ring Pack — Std.	1	Parts of Item 4A
4B	020201	Ring — No. 1 Compression	4	
4C	020198	Ring — No. 2 and No. 3 Compression	8	
4D	020203	Ring — Scraper	4	
5	020204	Gudgeon Pin	4	Item 7
6	020205	Circlip	8	
7	020206	Connecting Rod and Cap Assembly	4	
8	020207	Bolt — Connecting Rod	2	
9	020208	Nyloc Nut, $\frac{7}{16}$ " BSF	2	
10	020209	Bearing — Small End	4	Standard Gearbox Models
11	020210	Bearing — Big End (Halves)	8	
12	020211	Assembly — Flywheel and Starter Ring	1	Torque Conv. Models
12A	020212	Assembly — Flywheel and Starter Ring	1	
13	020213	Starter Ring	1	
14	020214	Bolt — Flywheel	4	
15	020215	Dowel	1	
16	020216	Tab Washer	1	
16A	020217	Nut, $\frac{7}{16}$ " UNF	4	
17				
18				
19	020218	Crankshaft (with Bearings & Thrust Washers)	1	
20	020219	Gear	1	
20A	020220	Key, Woodruff No. 606	1	S'ceded by 020233- BTSB 233/89
21	020221	Pulley	1	
22	020222	Nut	1	
22A	020223	Washer	1	
23	020224	Main Bearing	6	
25	020225	Thrust Washer — Upper	2	
26	020226	Thrust Washer — Lower	2	
27	012325	Coupling	1	Coupling to Pulley See also Fig. 1:30
27A	020227	Bolt, $\frac{5}{16}$ " UNC x 1 $\frac{1}{4}$ "	4	
27B	012424	Spring Washer, $\frac{5}{16}$ "	4	
28	012361	Packer, $\frac{5}{16}$ "	As Req'd.	
28A	012362	Packer, $\frac{7}{16}$ "	As Req'd.	
28B	012363	Packer, $\frac{9}{16}$ "	As Req'd.	
28C	012364	Distance Plate	1	
29	012324	'O' Ring Seal	2	
30	012322	Shaft	1	S'ceded by 012877
31	011661	Coupling	1	S'ceded by 020307

Items 30-31 interchangeable in sets only

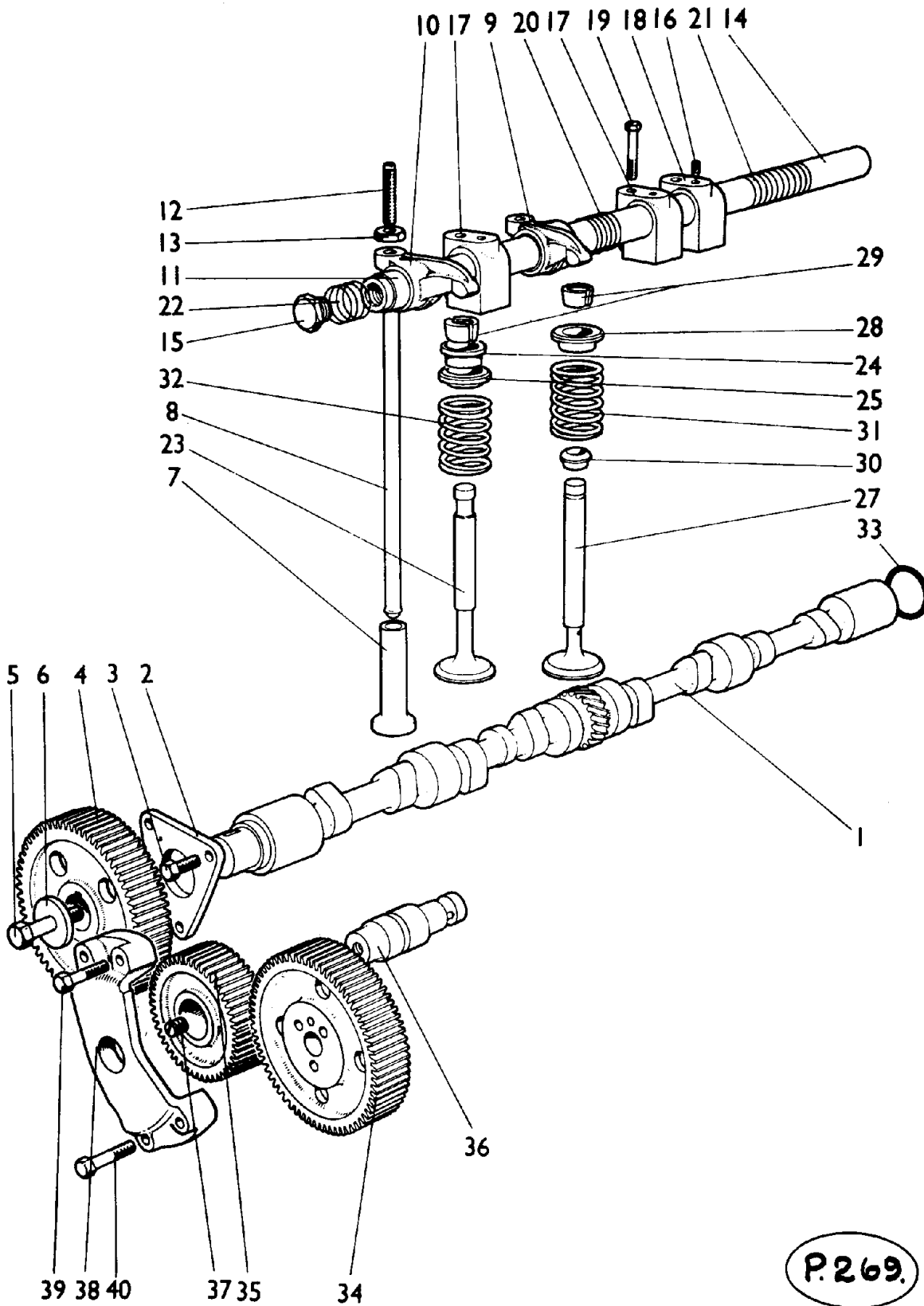


FIG. 1 : 03



**POWER AND TRANSMISSION  
CAMSHAFT, VALVE MECHANISM  
AND INJECTION PUMP DRIVE**

Fig. No.	1:03 Part No.	Description	Qty	Remarks
1	020266	Camshaft . . . . .	1	
2	020267	Locating Plate . . . . .	1	
3	012737	Setscrew, $\frac{5}{16}$ " UNC x 1" . . . . .	3	
3A	012424	Spring Washer, " . . . . .	3	
4	020268	Gear — Camshaft . . . . .	1	
4A	020269	Key, Woodruff No. 506 . . . . .	1	
5	020270	Bolt, $\frac{5}{16}$ " UNC x 2" . . . . .	1	
6	020271	Washer, " . . . . .	1	
7	020272	Tappet . . . . .	8	
8	020273	Push Rod . . . . .	8	
9	020274	Valve Rocker, Right-hand (with bush) . . . . .	4	Nos. 2, 4, 6, 8 from front
10	020275	Valve Rocker, Left-hand (with bush) . . . . .	4	Nos. 1, 3, 5, 7 from front
11	020276	Bush — Valve Rocker . . . . .	8	
12	020277	Screw — Adjusting . . . . .	8	
13	020278	Locknut, " UNC . . . . .	8	
14	020279	Shaft — rocker . . . . .	1	
15	020280	Plug, $\frac{3}{8}$ " BSP . . . . .	2	
16	020281	Locating Screw . . . . .	1	
17	020282	Bracket — Rocker Shaft (Nos. 1, 2 and 3) . . . . .	3	
18	020283	Bracket — Rocker Shaft (rear) . . . . .	1	
19	020284	Bolt, $\frac{3}{16}$ " UNC x $2\frac{5}{8}$ " . . . . .	4	
19A	020285	Spring Washer, $\frac{7}{16}$ " . . . . .	4	
19B	020286	Washer, $\frac{7}{16}$ " . . . . .	4	
20	020287	Locating Spring — Intermediate . . . . .	2	
21	020288	Locating Spring — Centre . . . . .	1	
22	020289	Locating Spring — Ends . . . . .	2	
23	020295	Valve — Exhaust (as inlet) . . . . .	4	
24	020292	Collar (inner) — exhaust valve } exhaust . . . . .	4	
25	020293	Collar (outer) — exhaust valve } valve only . . . . .	4	
27	020295	Valve — Inlet (as exhaust) . . . . .	4	
28	020297	Collar — Inlet Valve . . . . .	4	
29	020298	Cotters (pairs) . . . . .	8	
30	020299	Seal — Inlet Valve . . . . .	4	Obsolete see BTSB 250/99
31	020300	Spring — Inlet Valve . . . . .	4	
32	020301	Spring — Exhaust Valve . . . . .	4	
33	020302	'O' Ring, $1\frac{13}{16}$ " int. dia. $2\frac{1}{16}$ " extn. . . . .	1	
34	020303	Drive Gear — Injection Pump . . . . .	1	
35	020304	Gear — Intermediate . . . . .	1	
36	020305	Shaft — Intermediate Gear . . . . .	1	
37	020306	Plug, $\frac{5}{16}$ " UNC . . . . .	2	
38	020228	Bracket — Intermediate Gear Support . . . . .	1	
38A	020229	Shim, .003" . . . . .	As Req'd.	
38B	020230	Shim, .010" . . . . .	As Req'd.	
38C	020231	Shim, .020" . . . . .	As Req'd.	
39	020232	Bolt, $\frac{5}{16}$ " UNC x $1\frac{3}{4}$ " } . . . . .	2	
40	020164	Bolt, $\frac{5}{16}$ " UNC x 2" } support . . . . .	2	
40A	012424	Spring Washer, $\frac{5}{16}$ " } bracket . . . . .	4	

For changes to timing gears refer to BTSB 298/127.

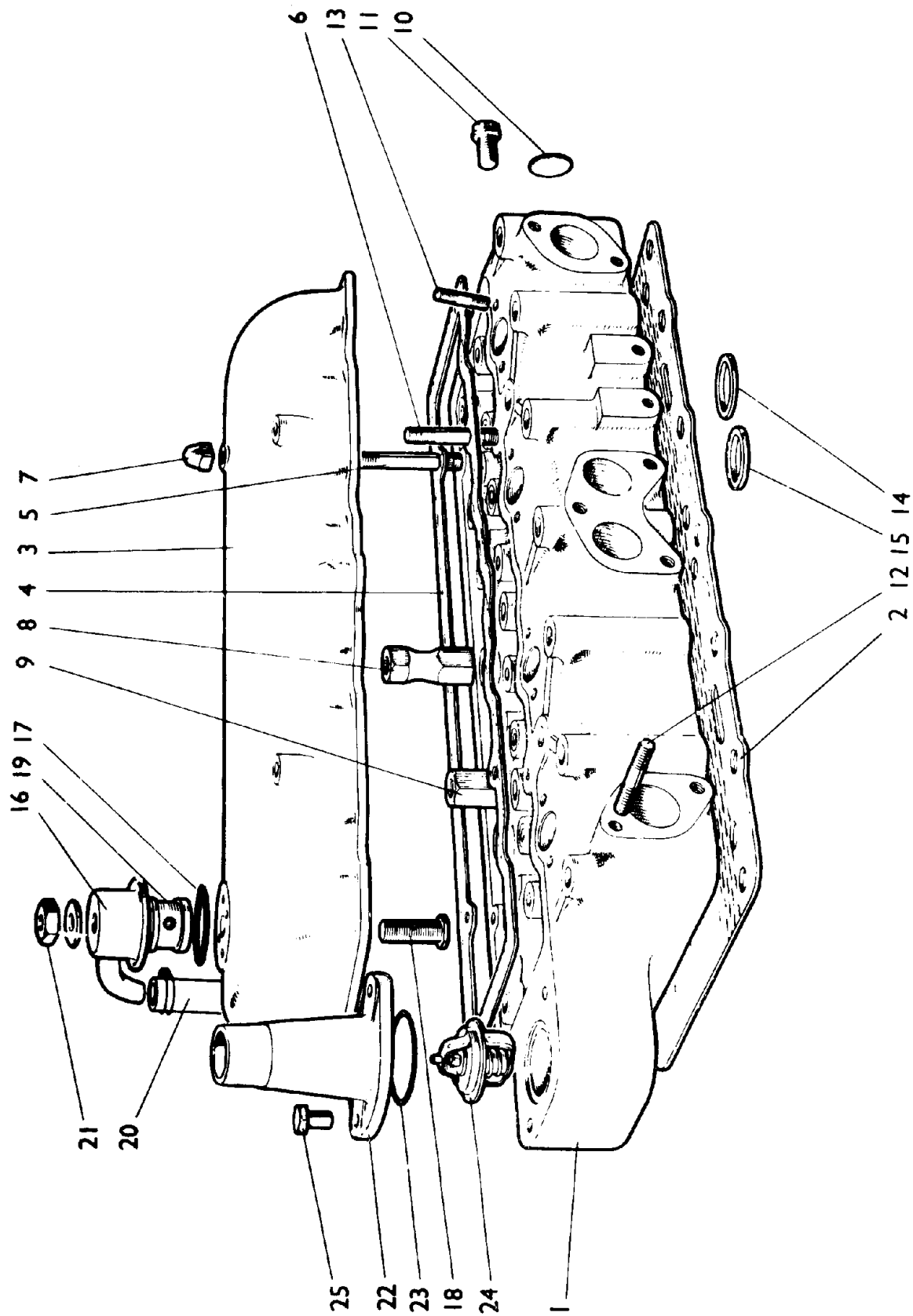


FIG. 1 : 04



**POWER AND TRANSMISSION  
CYLINDER HEAD**

Fig. No. 1:04	Part No.	Description	Qty	Remarks
1	020234	Cylinder Head (with valve inserts & plugs)	1	
2	020057	Gasket — head to block	1	S'seded BTSSB 309-135
3	020235	Cover — Cylinder Head	1	
4	020236	Gasket — Cylinder Head Cover	1	
5	020237	Stud, $\frac{3}{16}$ " UNC x $3\frac{7}{16}$ "	2	
6	020238	Stud, $\frac{3}{16}$ " UNC x $2\frac{13}{16}$ "	2	
6A	020239	Copper-asbestos Washer	4	
7	020240	Domed Nut, $\frac{5}{16}$ " UNC.	4	
7A	020497	Nut, $\frac{1}{2}$ " UNF, Special	3	S'seded by 020312 interchangeable
7B	020176	Bolt, $\frac{1}{2}$ " UNC x $4\frac{1}{4}$ " Special	7	Cyl. Head to Block
8	020498	Elongated Nut, $\frac{1}{2}$ " UNF	7	See also Cyl. Block S'seded by 020313 interchangeable
9	020242	Lifting Nut, $\frac{1}{2}$ " UNF	2	
9A	020243	Taper Plug.	4	
10	020244	Welch Plug, 1"	1	S'seded by 020308 (not interchangeable) See BTSSB 296/125
11	020245	Flanged Plug, $\frac{1}{8}$ " BSP	1	
11A	020246	Copper Washer, $\frac{3}{8}$ "	1	
12	012496	Stud, $\frac{3}{8}$ " UNC x $1\frac{1}{16}$ " — manifold	12	
12A	020247	Stud, $\frac{3}{8}$ " UNC x 2" — conduit to inlet manifold.	2	
12B	020248	Stud, $\frac{3}{8}$ " UNC x $1\frac{3}{8}$ " — exhaust manifold	1	
13	020249	Stud, $\frac{5}{16}$ " UNC x $2\frac{11}{16}$ " — injector.	8	
13A	020167	Nut, $\frac{5}{16}$ " UNC	8	
13B	012424	Spring Washer, $\frac{5}{16}$ "	8	
14	020250	Insert — Inlet Seat	4	
15	020251	Insert — Exhaust Seat	4	
16	020252	Cover, Engine Breather	1	
17	020253	'O' Ring, $1\frac{1}{16}$ " int. dia.	1	
18	020254	Bolt, $\frac{1}{2}$ " UNF, Special	1	S'seded by 014230 See BTSSB 251/100 S'seded by 020310 See BTSSB 251/100
19	020255	Distance Piece	1	Engine Breather
20	020256	Hose	1	
20A	020257	Hose Clip, $\frac{5}{8}$ "	1	
21	020258	Locknut, $\frac{1}{2}$ " UNF	1	S'seded by 020311 See BTSSB 251/100
21A	020259	Copper Washer, $\frac{1}{2}$ "	1	
21B	020260	Oil Pipe — Cylinder Block to Head	1	
22	011459	Pipe — Water Outlet	1	
23	011571	'O' Ring, $2\frac{1}{8}$ " dia.	1	
24	020261	Thermostat	1	
24A	020262	Gasket	1	
25	012737	Setscrew, $\frac{5}{16}$ " UNC x 1"	2	
25A	012424	Spring Washer, $\frac{5}{16}$ "	2	

For changes to Engine Unit refer to BTSSB 296/125 and BTSSB 309/135. Parts are not interchangeable. For changes to Engine lifting nuts refer to BTSSB 265/10.

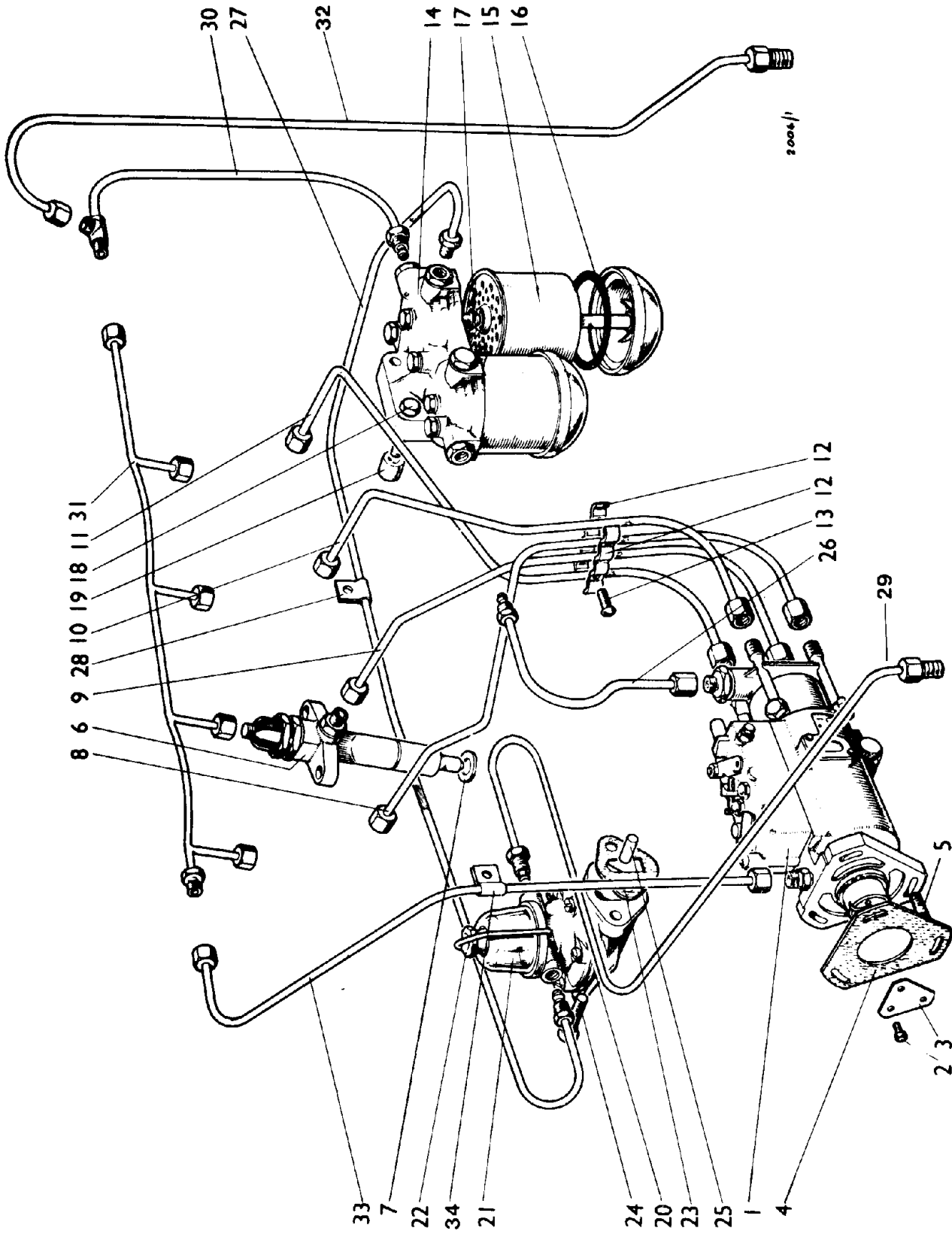


FIG. 1 : 05



**POWER AND TRANSMISSION  
INJECTION PUMP AND FUEL SYSTEM**

Fig. No.	1:05 Part No.	Description	Qty	Remarks
1	020263	Injection Pump (CAV DPA 3248820)	1	
2	020264	Setscrew	3	
2A	020265	Dowel	1	
3	020314	Tabwasher.	1	
4	020315	Gasket	1	
5	020316	Stud, $\frac{5}{16}$ " UNC x $1\frac{1}{4}$ "	3	
5A	020167	Nut, $\frac{5}{16}$ " UNC	3	
5B	012424	Spring Washer, $\frac{5}{16}$ "	3	
5C	020318	Washer, $\frac{5}{16}$ "	3	
6	020319	Injector	4	S'eded by 020320 See BTSB 230/86 Dated Aug. 72
6A	020321	Holder	1	
6B	020322	Nozzle	1	S'eded by 020323 See BTSB 230/86 Dated Aug. 72 Injector Assy. Item 6
7	020317	Copper Washer	1	
8	020324	Fuel Pipe — Injection Pump to No. 1 Cyl.	1	
9	020325	Fuel Pipe — Injection Pump to No. 2 Cyl.	1	
10	020326	Fuel Pipe — Injection Pump to No. 3 Cyl.	1	
11	020327	Fuel Pipe — Injection Pump to No. 4 Cyl.	1	
11A	020328	Union nut	8	
11B	020329	Olive	8	S'eded by 020330 See BTSB 282-119
12	020331	Clip	2	
13	020332	Screw, 2BA x $\frac{5}{8}$ "	2	
13A	020333	Nut, 2BA	2	
13B	020334	Spring Washer $\frac{3}{16}$ "	2	
14	020335	Fuel Filter (complete with Elements)	1	
15	020336	Element	2	Assy. Item 15
16	020337	Sealing Washer (supplied with Element)	4	
17	020338	'O' Ring (supplied with Element)	2	
18	020339	Bolt, $\frac{3}{8}$ " UNC x $1\frac{3}{4}$ "	2	
18A	013063	Spring Washer, $\frac{3}{8}$ "	2	Filter to Cylinder Head
19	020340	Distance Piece	2	
20	020341	Fuel Feed Pump	1	
20A	020342	Filter Gauze	1	
21	020343	Filter Bowl.	1	
21A	020344	Gasket	1	Fuel Pump Assy: Item 20
22	020345	Stirrup and Screw	1	
22A	020346	Diaphragm	1	
23	020347	Gasket	1	
24	020348	Setscrew, $\frac{5}{16}$ " UNC x $1\frac{1}{4}$ "	2	Feed Pump to Cyl. Block
24A	020239	Copper-asbest. Washer, $\frac{5}{16}$ "		
24B	020318	Washer, $\frac{5}{16}$ "	2	
25	020349	Push Rod — Feed Pump	1	
26	020350	Fuel Pipe — Filter to Injection Pump	1	
27	020351	Fuel Pipe — Feed Pump to Filter	1	
28	012824	Clip — Fuel Pipe to Manifold Stud	1	
29	04220	Fuel Pipe	1	See also Fig. 1:12
30	020352	Fuel Pipe — Leak-off to Filters	1	
31	020353	Leak-off Pipe — Injectors	1	
32	04221	Spill-off Pipe	1	See also Fig. 1:12
33	020354	Leak-off Pipe — Pump	1	
34	020355	Clip — Fuel Pipe to Exhaust Manifold Stud	1	

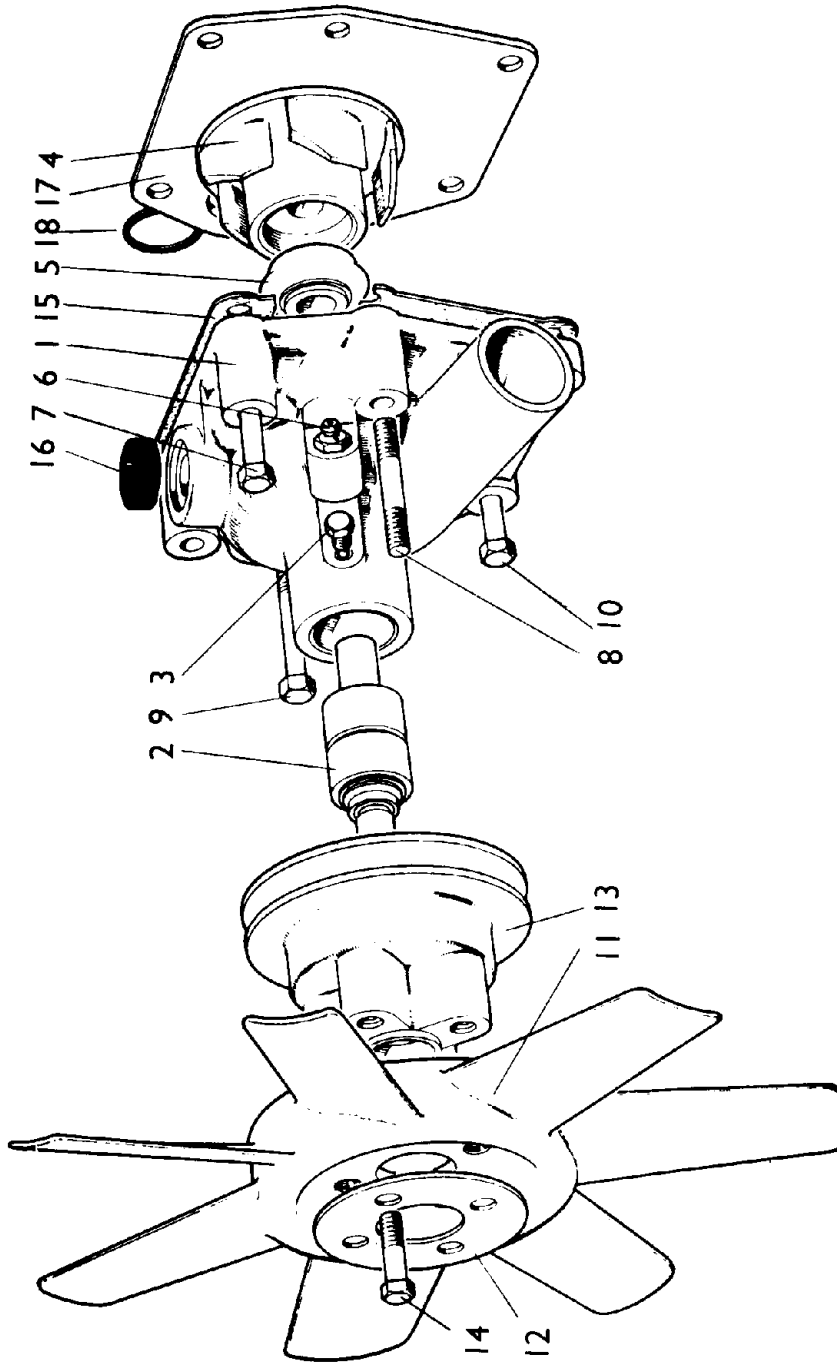


FIG. 1 : 06

**POWER AND TRANSMISSION, WATER PUMP**

Fig.No. 1:06	Part No.	Description	Qty	Remarks
1A	020058	Water Pump	1	S'seded by 047901
1	020060	Body	1)	
2	020104	Shaft and Bearing	1)	S'seded BTSB
3	020105	Locating Screw - Bearing	1)	309-135 Assy:
3A	020106	Tabwasher	1)	Item 1A incl.
4	020062	Impeller	1)	Item 13
5	020065	Seal - Gland	1)	S'seded BTSB
6	020356	Grease Nipple	1)	309-135
7	020120	Bolt )	1	
8	020249	Stud )	1	
9	020073	Bolt )Water Pump	1	
10	020074	Bolt )to Block	2	
10A	012424	Spring Washer )	6	
10B	020167	Nut )	1	
11	020357	Fan (Seven blade)	1	S'seded by 040675
12	040674	Retaining Plate - Fan	1	Not used with New Fan
12A	040672	Spacer	1	
13	020115	Pulley - Fan	1	S'seded: BTSB 309-135
14	013064	Setscrew	4	S'seded by 04468. New Fan only.
14A	013063	Spring Washer	4	
14B	020358	Driving Belt - Fan and Dynamo	1	Not illustrated
15	020067	Gasket - Pump to Plate	1	S'seded: BTSB 309-135
16	020112	Rubber Seal - Pump to Cylinder Head	1	
17	020359	Support Plate - Water Pump	1	
18	020069	'O' Ring	1	S'seded: BTSB 309-135
18A	020064	Water Pump Repair Pack	AR	S'seded: by 047907

NOTE: For modifications to Water Pump refer to BTSB 309/135 Issue 1 and 2.

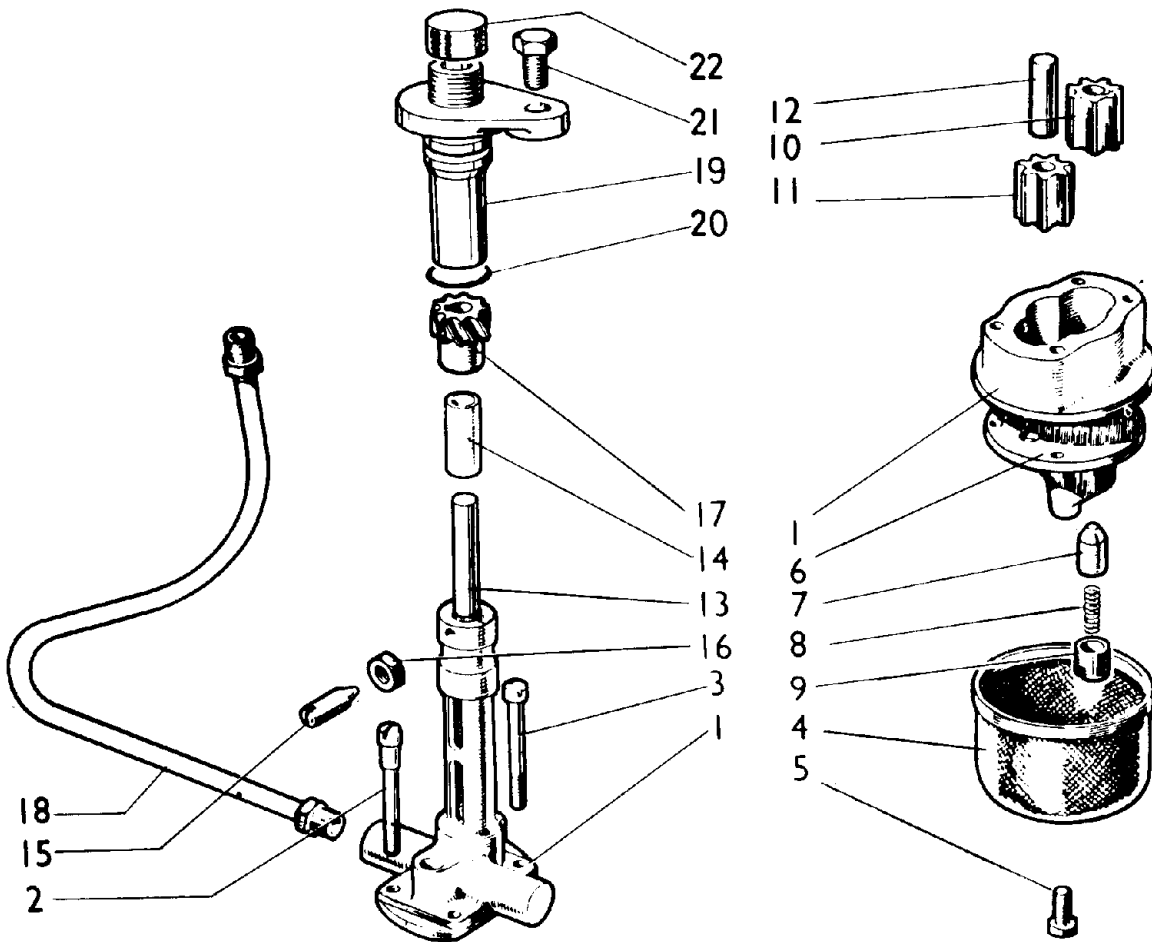


FIG. 1 : 07



**POWER AND TRANSMISSION  
OIL PUMP**

Fig. No.	1:07 Part No.	Description	Qty	Remarks
1A	020076	Oil Pump (complete)	1	S'seded: BTSB 309-135 (045877)
1	020360	Bracket & Gear Housing (with Spindle & Bush)	1	Supplied as unit only
2	020361	Bolt, 1/4" UNC x 2 1/8" Special Fitting	2	
3	020362	Bolt, 1/4" UNC x 2 1/8"	2	
3A	020363	Nut, 1/4" UNC	4	
3B	012428	Spring Washer, 1/4"	4	
4	020364	Gauze	1	
5	020365	Setscrew, 1/4" UNC x 1/2"	1	
5A	012428	Spring Washer, 1/4"	1	
6A	020367	Relief Valve Assembly	1	S'seded by 045878 1.1.77
6	020366	Cover — Pump Body	1	S'seded by 045879 1.1.77
7	020368	Plunger	1	Assy. S'seded by 045880
8	020369	Spring	1	Item 6A
9	020370	Screw — Adjusting	1	S'seded by 045881
10	020371	Driving Rotor	1	
11	020372	Driven Rotor	1	
11A	020373	Key, Woodruff No. 405	2	
12	020374	Spindle — Driven Rotor	1	
13	020078	Driving Spindle	1	S'seded: BTSB 309-135
14	020375	Bush	1	
15	020376	Locating Screw, 7/16" UNC	1	
16	020377	Locknut, 7/16" UNC	1	
16A	020378	Copper Washer, 7/16"	1	
17	020379	Spiral Pinion	1	
18	020380	Oil Pipe — Pump to Cylinder Block	1	
19	020381	Bracket — Tractor Meter	1	
20	020382	'O' Ring, 1" int. dia.	1	
21	020149	Setscrew, 5/16" UNC x 7/8"	1	
21A	012424	Spring Washer, 5/16"	1	
22	06365	Cap	1	

For changes to Oil Pump Refer to B T S B 309/135 (Parts not interchangeable). Revised Oil Pump from Jan. 77.  
Skid Unit 449005 - E4107.

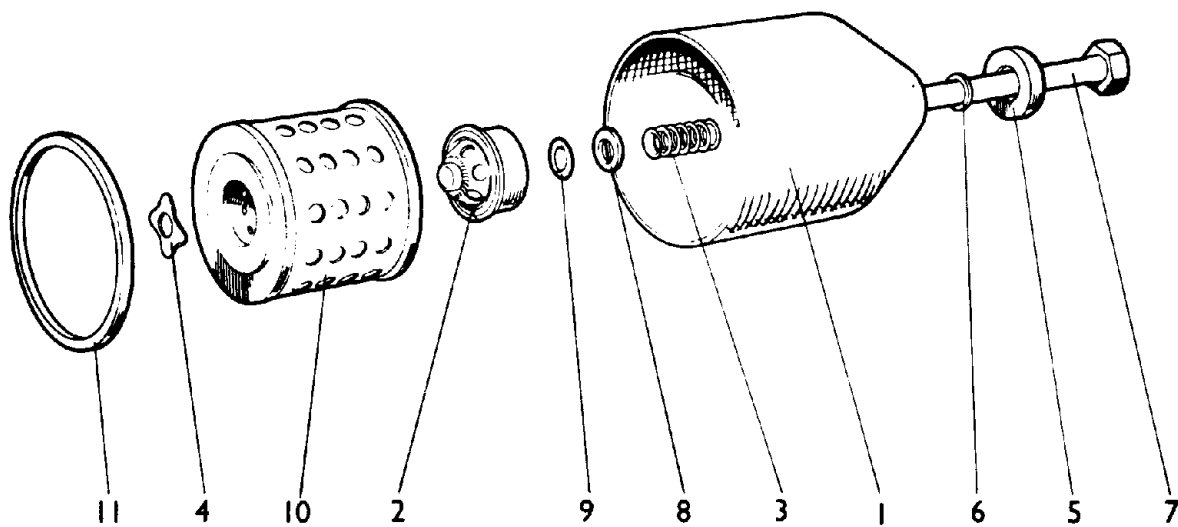


FIG. 1 : 08



**POWER AND TRANSMISSION  
OIL FILTER**

Fig. No.	1:08 Part No.	Description	Qty	Remarks
1A	020383	Oil Filter (complete)	1	} Assy: Item 1A
1B	020384	Bowl and Relief Valve Assy	1	
1	020385	Bowl	1	
2	020386	Relief Valve	1	
3	020387	Spring	1	
4	020388	Locating Plate	1	
5	020389	Collar	1	
6	020390	Sealing Ring	1	
7	020391	Bolt, $\frac{7}{16}$ " UNC x $5\frac{3}{8}$ "	1	
8	020286	Washer, "	1	
9	020392	Sealing Washer, $\frac{7}{16}$ "	1	
10	020393	Element, complete with Sealing Ring.	1	
11	020394	Sealing Ring - supplied with Element	1	

NOTE:- Above Items are for Element Type Oil Filter only.

047891	Oil filter cartridge type	1)	This replaces
		)	Element type
		)	filter. Not
		)	interchangeable

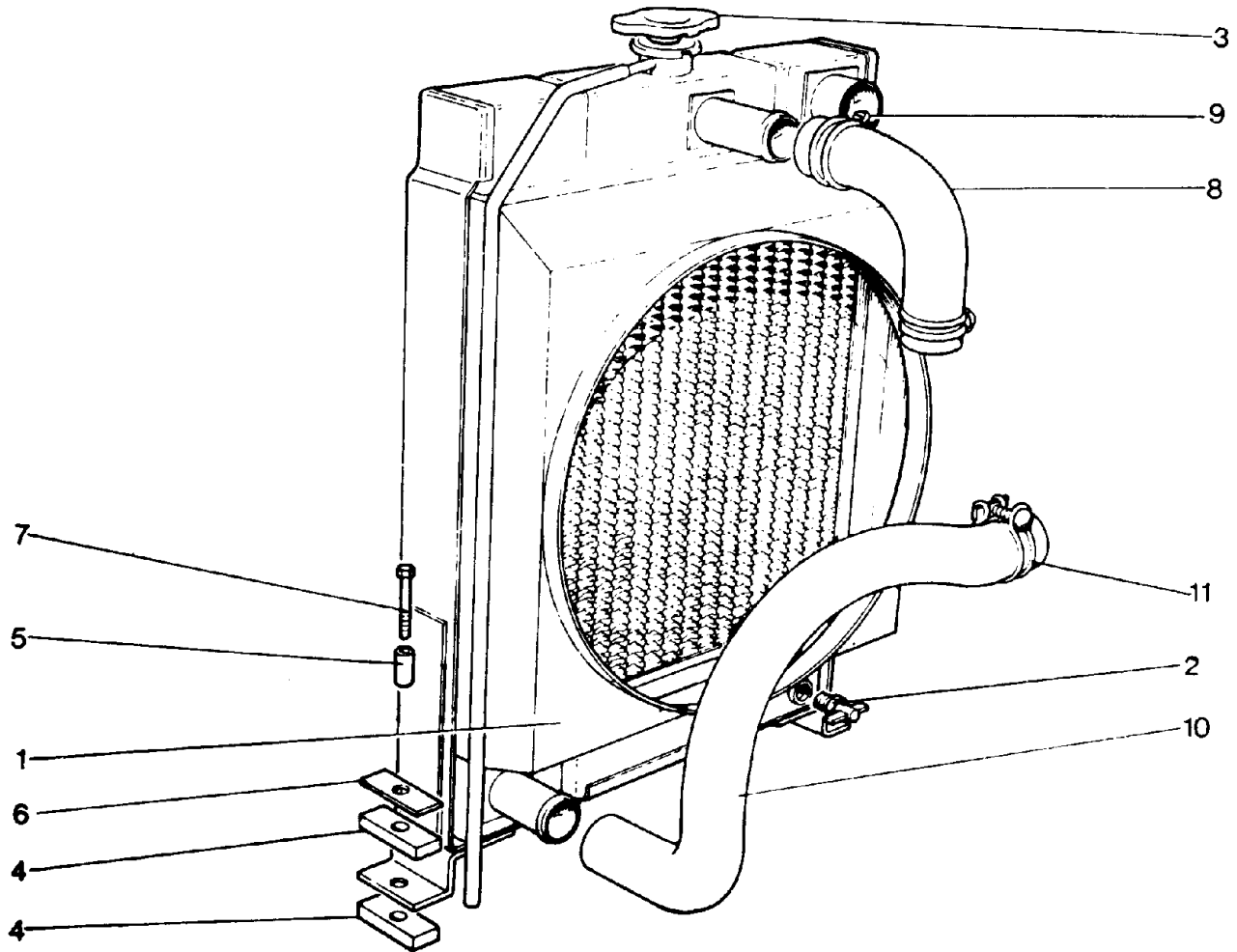


FIG. 1 : 09



**POWER AND TRANSMISSION  
RADIATOR**

Fig. No.	1:09	Part No.	Description	Qty	Remarks
1		012490	Radiator — 2¼" block . . . . .	1	
1A		020395	Radiator — 2¾" block . . . . .	1	For tropical use only
2		012491	Drain Tap, ¼" BSP . . . . .	1	
2A		011425	Fibre Washer, ½" . . . . .	1	
3		020397	Filler Cap . . . . .	1	S'seded by 011232
4		012493	Foot Packing . . . . .	4	
5		012494	Distance Tube . . . . .	2	
6		010839	Clamping Plate . . . . .	2	
7		020172	Bolt, ⅜" UNC x 1¼" . . . . .	2	S'seded by 04515
7A		013063	Spring Washer, ⅜" . . . . .	2	
8		05787	Hose — Radiator Inlet . . . . .	1	
9		05789	Hose Clip — worm drive size No. 2 . . . . .	2	
10		05788	Hose — Radiator Outlet . . . . .	1	S'seded by 017285 — See BTSB 309-135 (now 07771)
11		05789	Hose Clip — worm drive size No. 2 . . . . .	2	

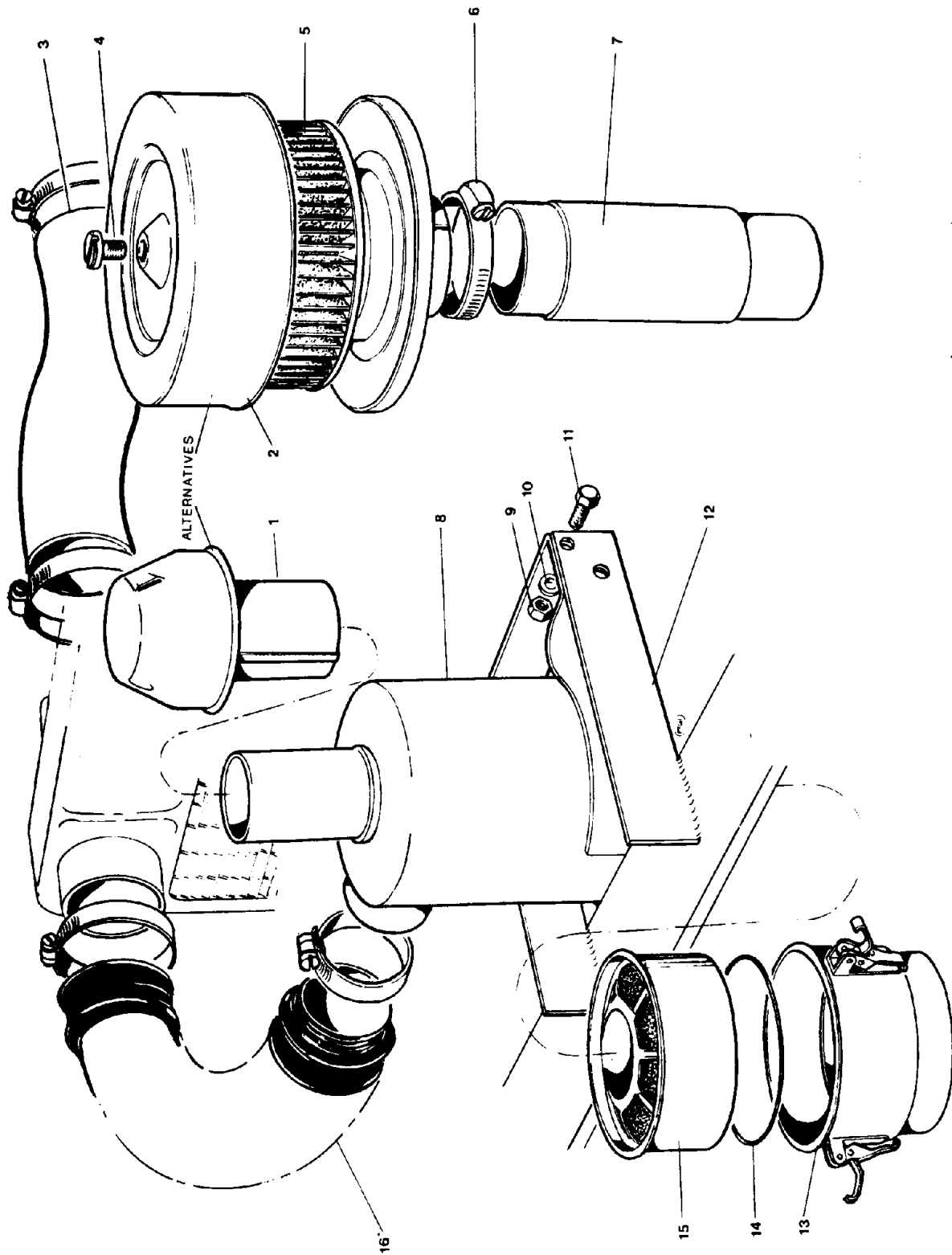


FIG. 1 : 10



**POWER AND TRANSMISSION  
AIR CLEANER**

Fig. No.	1:10 Part No.	Description	Qty	Remarks
1	012383	Pre-cleaner	1	} Revised for Dry Type Air Cleaner — See BTSB 257/105
2	011373	Pre-cleaner Assembly	1	
3	012488	Air Hose — Rad to Manifold	1	
4	011387	Screw	1	
5	011388	Element	1	
6	05391	Jubilee Clip	5	
7	07307	Extension	1	
8	012487	Air Cleaner Complete.	1	
9	04523	Nut, $\frac{5}{16}$ " UNC	4	
10	04568	Washer — Spring, $\frac{5}{16}$ " dia.	4	
11	04457	Setscrew, $\frac{5}{16}$ " UNC x $\frac{3}{4}$ " long Hex. Hd.	4	
12	023057	Mounting Bracket	1	
13	020399	Bowl	1	
14	020400	'O' Ring	1	
15	020401	Lower Element	1	
16	05368	Air Hose — Rad to Cleaner	1	

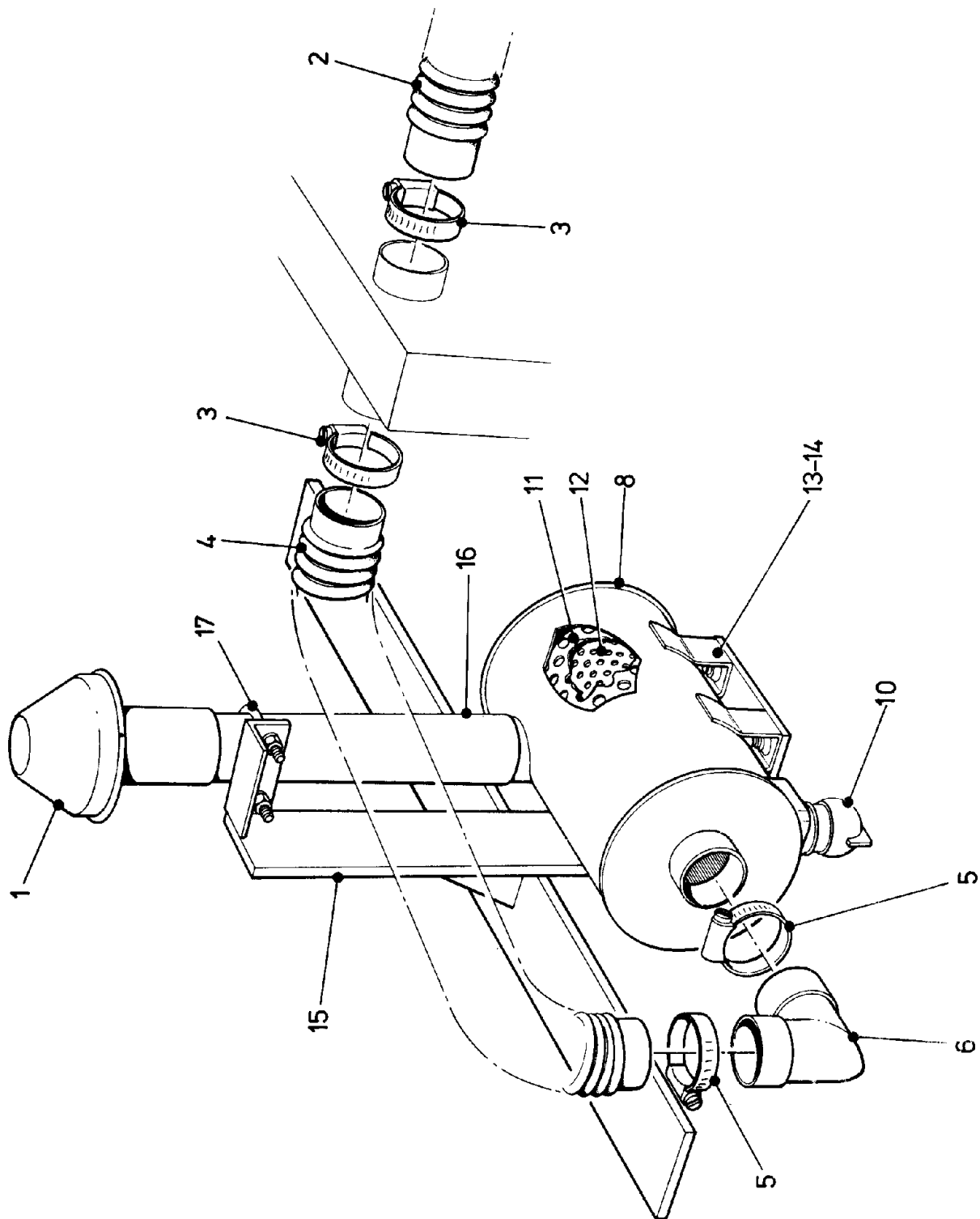


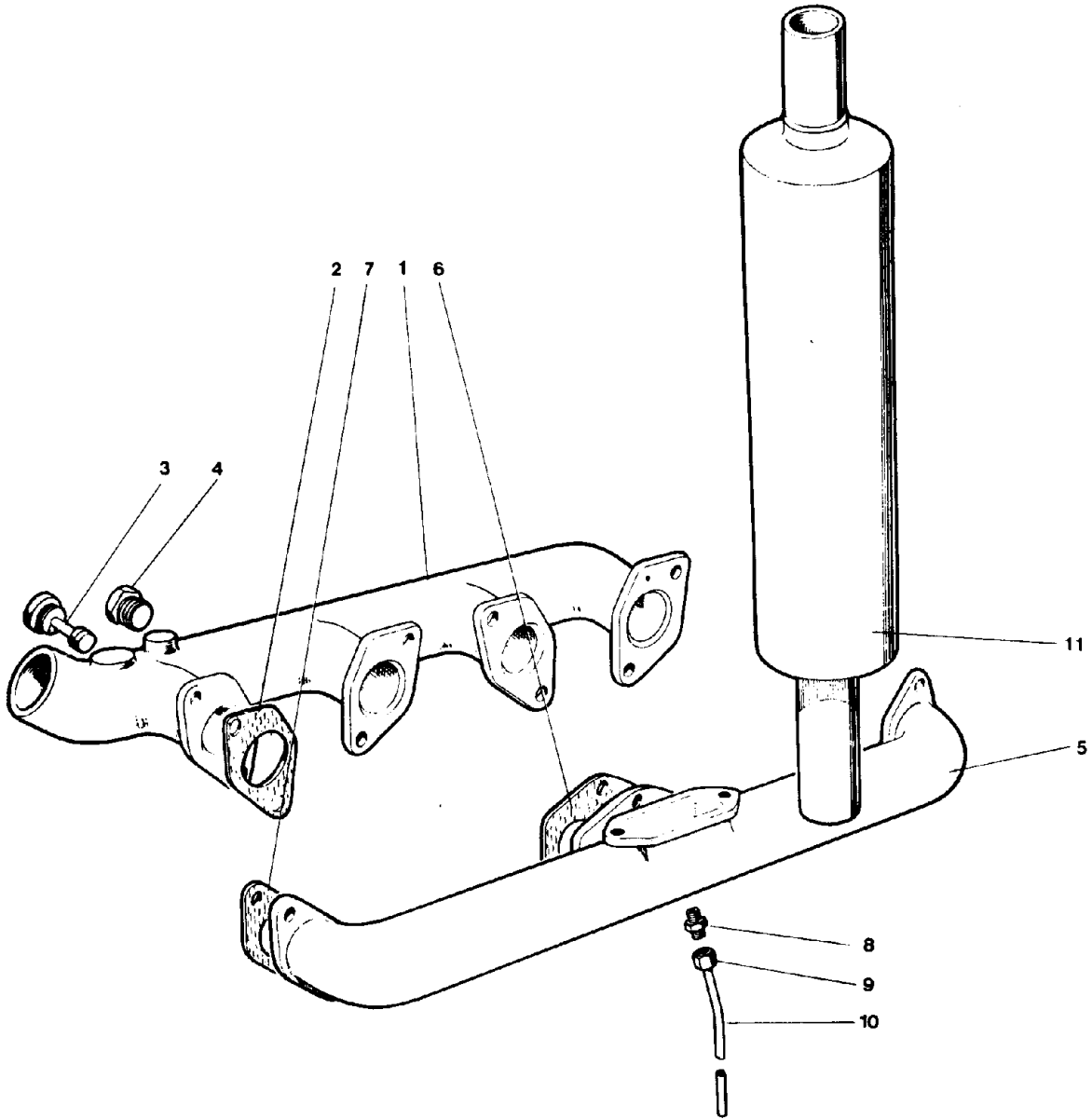
FIG. 1 : 10A



**POWER AND TRANSMISSION  
AIR CLEANER MARK III**

Fig. No.	1:10A Part No.	Description	Qty	Remarks
1	012383	Pre-Cleaner Assembly	1	
2	023643	Hose Radiator/Manifold	1	
3	05620	Hose Clip	3	
4	023718	Hose Radiator/Air Cleaner	1	
5	05620	Hose Clip	2	
6	023631	Elbow Air Cleaner	1	
7	045920	Fixing Bar Filter	1	Not illustrated
8	030137	Air Cleaner Complete.	1	
9				
10	045921	Dust Valve	1	
11	030164	Filter — Primary	1	S'ceded by 031371
12	030165	Filter — Secondary	1	Deleted
13	04317	Washer Spring $\frac{5}{16}$ " Dia.	4	
14	04450	Setscrew $\frac{5}{16}$ " UNF x $\frac{5}{8}$ " Long	4	
15	023961	Mounting Bracket Air Cleaner	1	S'ceded by 039325
16	023729	Adaptor Tube	1	S'ceded by 039791
17	023639	'U' Clamp Bolt	1	

NOTE:- For Changes to Filter Elements Refer to BTSB 348.157



**FIG. 1 : 11**



**POWER AND TRANSMISSION  
MANIFOLDS**

Fig. No.	1:11 Part No.	Description	Qty	Remarks
1	020396	Manifold — Inlet	1	
2	020402	Gasket	1	
3	020403	Ether Plug	1	
4	012367	Plug, Steel, $\frac{7}{8}$ " UNF	1	
4A	020404	Sealing Washer, $\frac{7}{8}$ "	1	
5	020405	Manifold — Exhaust	1	
6	020406	Gasket	1	S'seded by 045876
7	020407	Gasket	2	S'seded by 045875
8	020408	Union, Special	1	
9	020409	Union Nut, $\frac{1}{2}$ " UNF	1	
9A	020410	Olive — for $\frac{1}{4}$ " Pipe	1	
10	020411	Pipe — Exhaust Drain	1	
11	012486	Silencer	1	S'seded by 012872 — BTSB 255/104
11A	012352	Nut, Manifold to Block, $\frac{3}{8}$ " UNC	17	
11B	04091	Exhaust Extension	1	{ S'seded by 05230 (S'seded by 023469) See BTSB 255/104

For changes to Manifold Gaskets refer to BTSB 259/106.

For changes to Silencer and Exhaust extensions refer to BTSB 255/104.

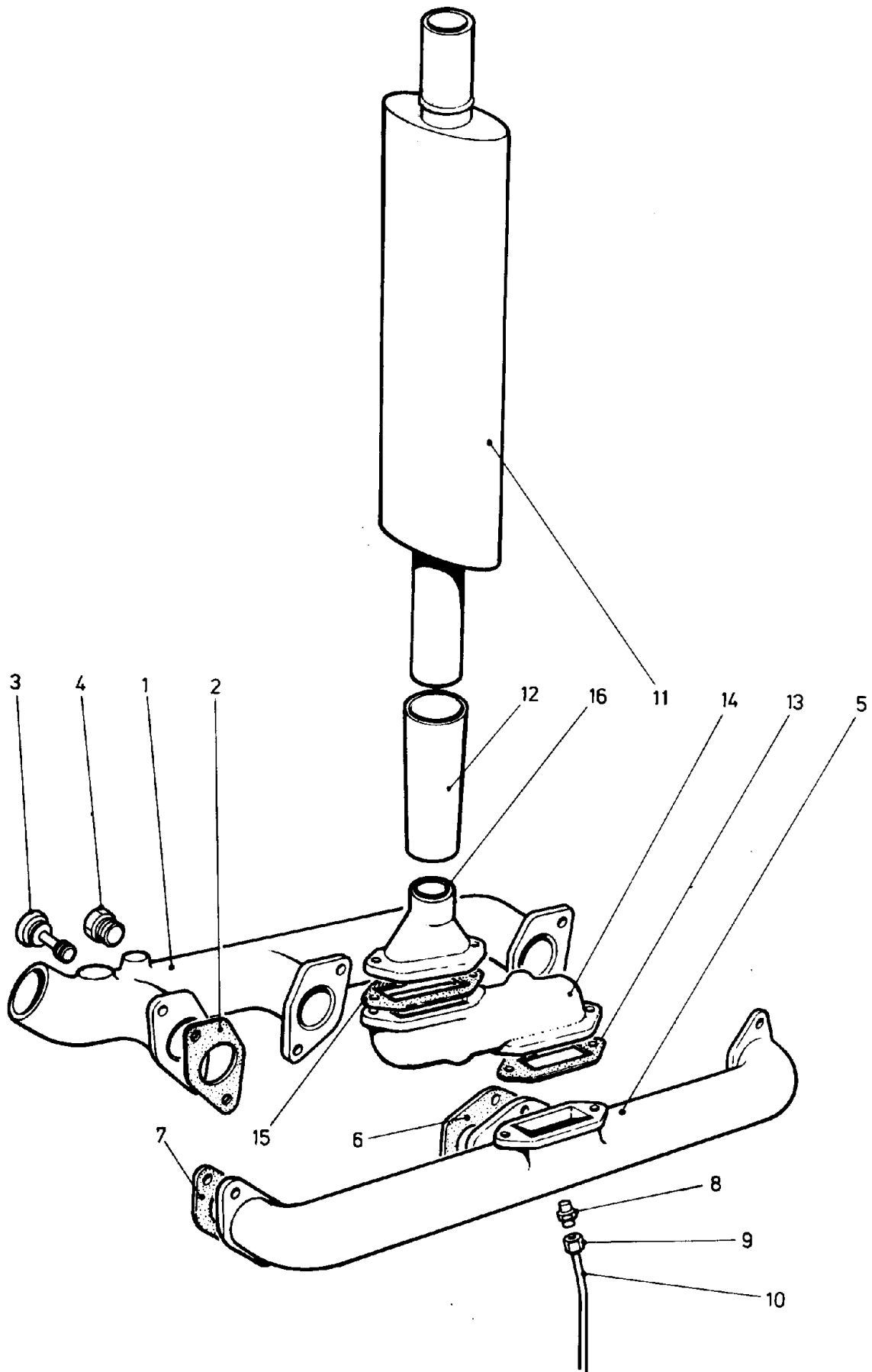
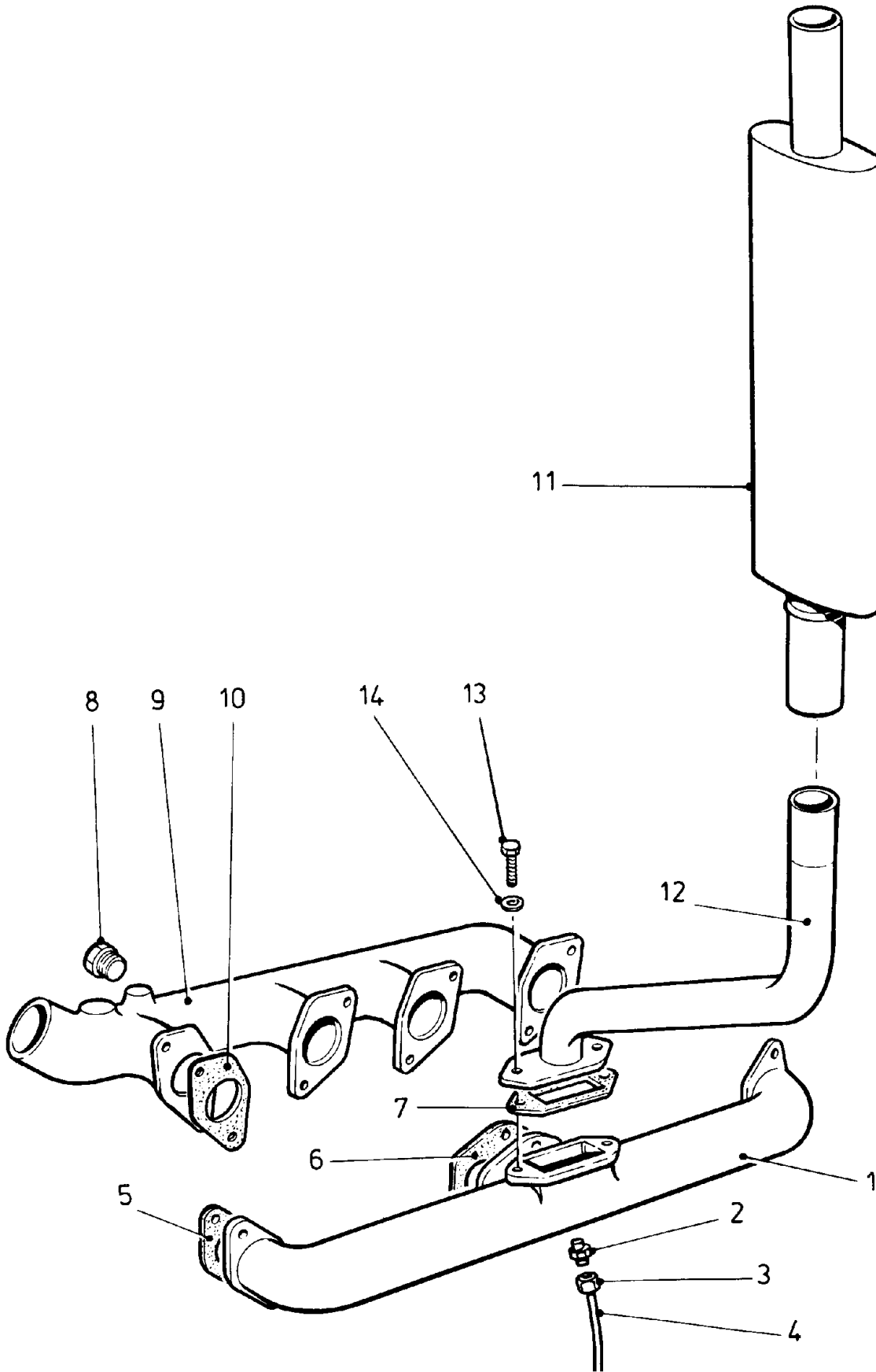


FIG. 1 : 11A



**POWER AND TRANSMISSION  
MANIFOLDS MARK III**

Fig. No. 1:11A	Part No.	Description	Qty	Remarks
1	020396	Manifold — Inlet	1	
2	020402	Gasket	4	
3	020403	Ether Plug	1	If fitted
4	012367	Plug, $\frac{7}{8}$ " UNF	1	
4A	020404	Sealing Washer, $\frac{7}{8}$ " dia.	1	
5	020405	Manifold — Exhaust	1	
6	045876	Gasket	1	
7	045875	Gasket	2	
8	020408	Union — Special	1	
9	020409	Union Nut, $\frac{1}{2}$ " UNF	1	
9A	020410	Olive — For $\frac{1}{4}$ " Pipe.	1	
10	020411	Pipe — Exhaust Drain	1	
11	012872	Silencer	1	
11A	012352	Nut — Manifold, $\frac{3}{8}$ " UNC	17	
12	023469	Exhaust Extension	1	
13	012350	Gasket	1	
14	027621	Exhaust Adaptor	1	
15	012350	Gasket	1	
16	06364	Exhaust Flange	1	S' seded by 047787



**FIG. 1 : 11B**

**POWER AND TRANSMISSION  
MANIFOLDS**

Fig. No. 1:11B	Part No.	Description	Qty	Remarks
1	020405	Manifold — Exhaust . . . . .	1	
2	020408	Union — Special . . . . .	1	
3	020409	Union Nut . . . . .	1	
3A	020410	Olive . . . . .	1	
4	020411	Pipe Exhaust Drain . . . . .	1	
5	045875	Gasket . . . . .	2	
6	045876	Gasket . . . . .	1	
7	012350	Gasket . . . . .	1	
8	012367	Plug . . . . .	1	
8A	020404	Washer . . . . .	1	
9	020396	Manifold — Inlet . . . . .	1	
10	020402	Gasket . . . . .	4	
11	012872	Silencer . . . . .	1	
12	039118	Exhaust . . . . .	1	
13	04466	Bolt . . . . .	2	
14	04579	Washer . . . . .	2	
15	012352	Nut — Manifold . . . . .	17	

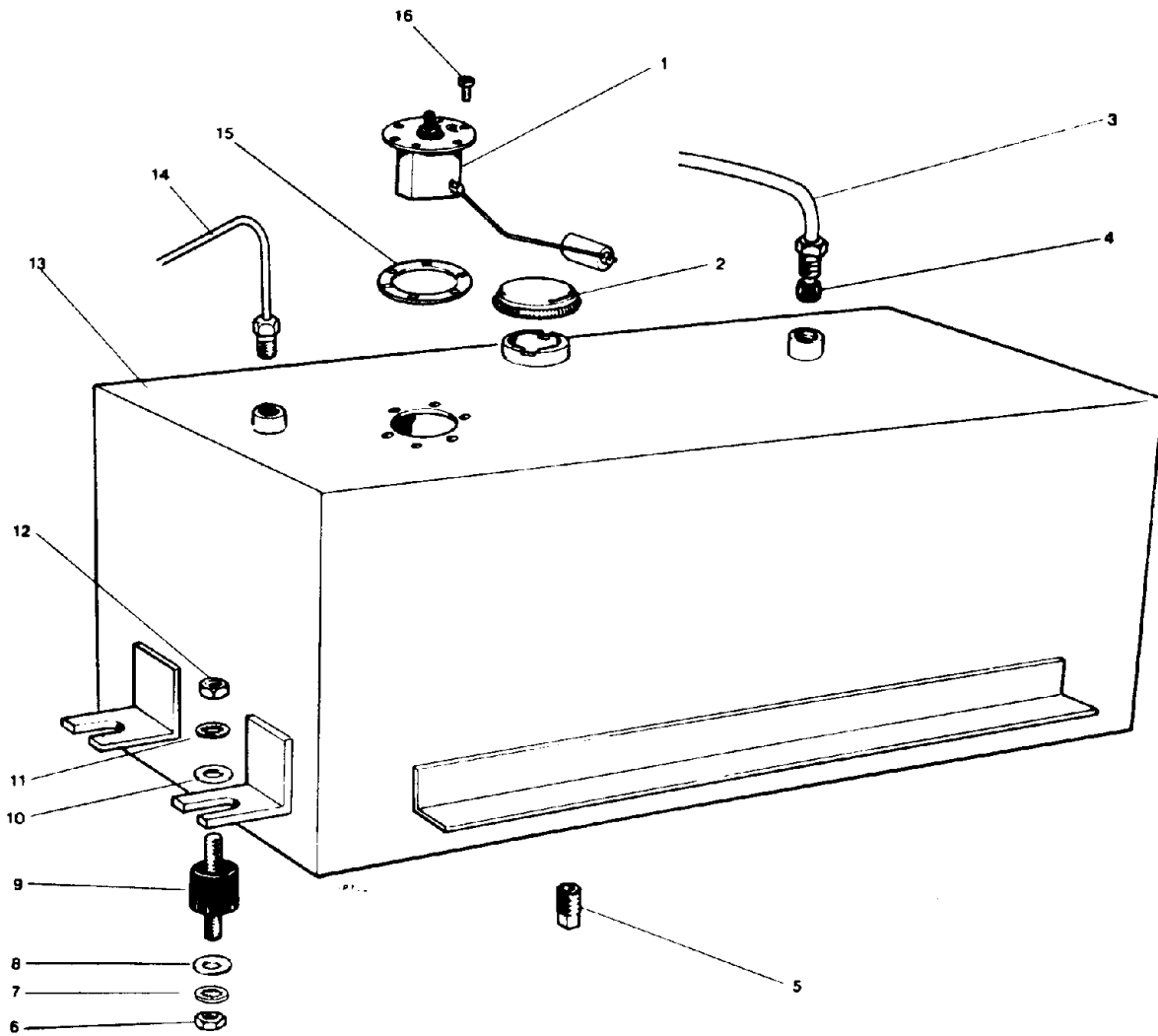
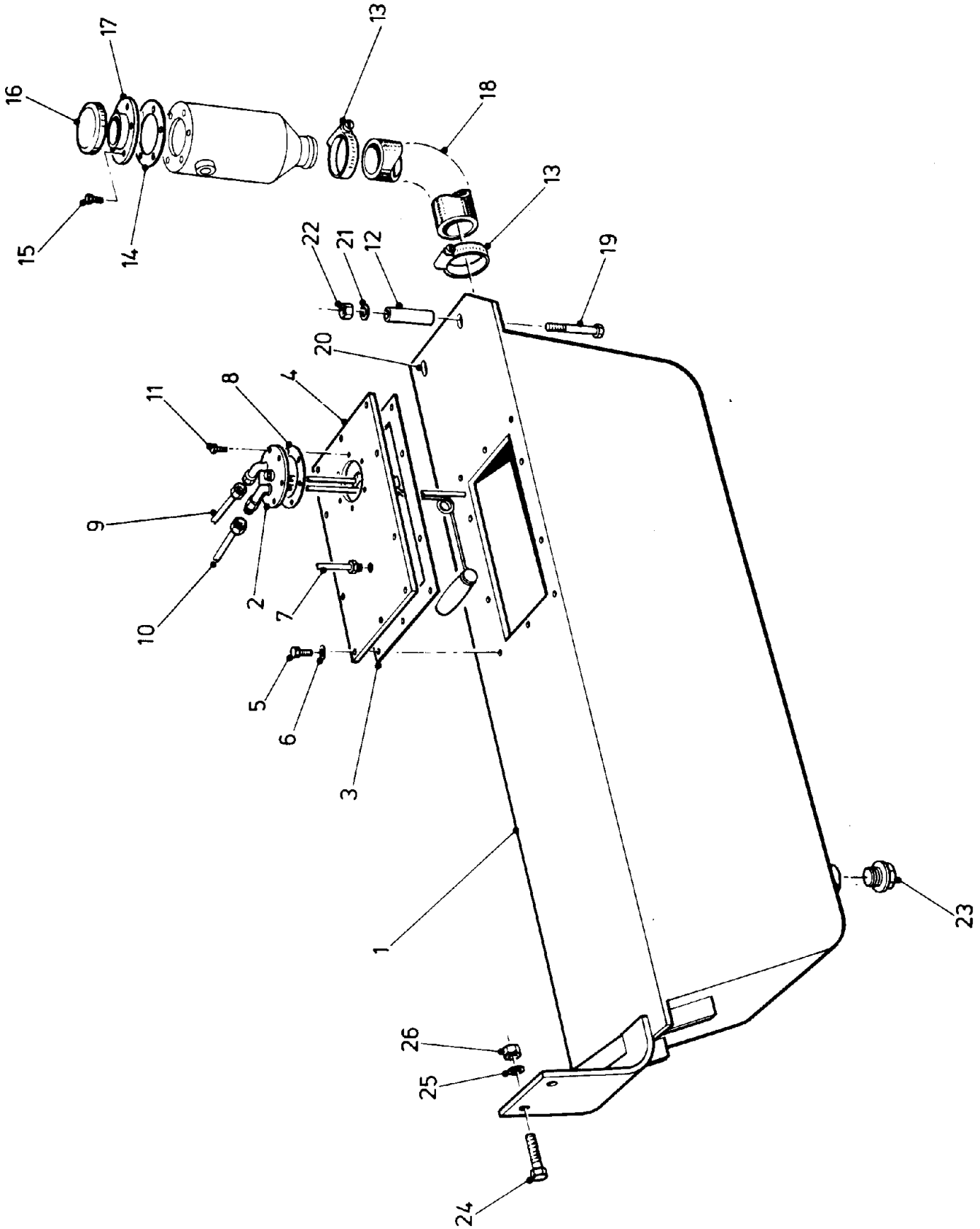


FIG. 1 : 12



**POWER AND TRANSMISSION  
FUEL TANK AND PIPES**

Fig. No.	1:12 Part No.	Description	Qty	Remarks
1	05361	Fuel Gauge Float Assembly	1	AC Delco
2	04429	Filler Cap	1	S'ced by 027858
3	023184	Fuel Pipe	1	S'ced by 027996
4	05337	Sealing Ring	1	
5	03468	Plug	1	
6	010819	Nut, $\frac{5}{16}$ " BSF	4	
7	04568	Washer, F.D., $\frac{5}{16}$ " dia.	4	
8	04556	Washer, $\frac{5}{16}$ " dia.	4	
9	07398	Tank Mounting	4	
10	04556	Washer, $\frac{5}{16}$ " dia.	4	
11	04568	Washer, F.D., $\frac{5}{16}$ " dia.	4	
12	010819	Nut, $\frac{5}{16}$ " BSF	4	
13	023026	Fuel Tank Assembly	1	
14	023179	Spill Off Pipe	1	
15	04626	Gasket	1	AC Delco
16	04605	Self Tapping Screw	6	
17	026252	Breather Pipe	1	Not illustrated
<b>Alternatives</b>				
1A	03449	Fuel Gauge Float Assembly	1	} Smiths Type
2A	023383	Filler Cap Lockable (if required)	1	
15A	04695	Gasket	1	



**FIG. 1 : 12A**



**POWER AND TRANSMISSION  
FUEL TANK AND PIPES**

Fig. No. 1:12A	Part No.	Description	Qty	Remarks
1	039376	Fuel Tank . . . . .	1	
2	039365	Fuel Sender . . . . .	1	
3	013437	Gasket . . . . .	1	
4	039343	Tank Top . . . . .	1	
5	04464	Bolt . . . . .	10	
6	03859	Washer . . . . .	10	
7	037139	Pipe — Breather. . . . .	1	
8	04626	Gasket . . . . .	1	
9	037174	Pipe — Spill-off . . . . .	1	
10	028925	Pipe — Lift Pump . . . . .	1	
10A	037126	Pipe . . . . .	1	
10B	038298	Tube Nut . . . . .	1	
10C	031323	Olive . . . . .	1	
10D	038599	Adaptor . . . . .	1	
11	04605	Screw . . . . .	6	S' seded by 011039
12	039443	Spacer . . . . .	1	
13	05789	Jubilee Clip . . . . .	2	
14	010795	Gasket . . . . .	1	
15	04605	Screw . . . . .	6	
16	04429	Filler Cap . . . . .	1	
17	06286	Filler Neck . . . . .	1	
18	039704	Hose . . . . .	1	
19	032140	Bolt . . . . .	1	
20	026710	Bolt . . . . .	1	
21	09619	Washer . . . . .	2	
22	019692	Nut . . . . .	2	
23	010705	Plug . . . . .	1	
24	030139	Setscrew . . . . .	2	
25	09618	Washer . . . . .	2	
26	019691	Nut . . . . .	2	

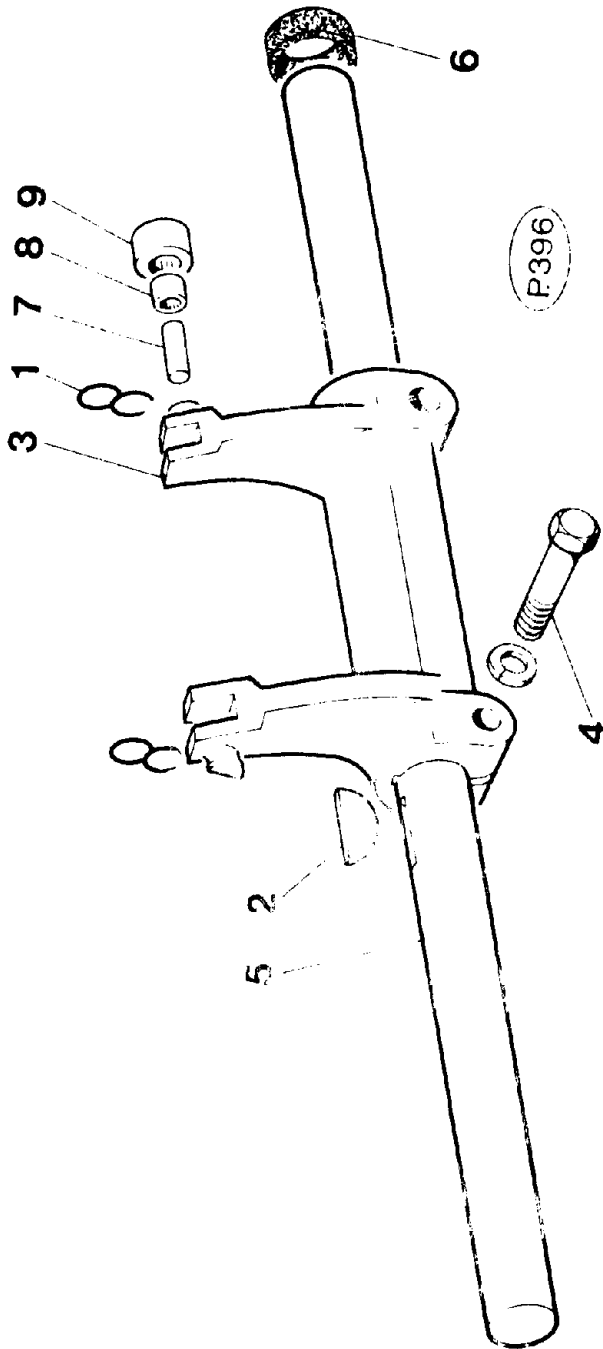


FIG. 1 : 13

**POWER AND TRANSMISSION  
CLUTCH CROSS SHAFT**

Fig. No. 1:13	Part No.	Description	Qty	Remarks
1	020412	Spring — Clutch Fork . . . . .	2	
2	020269	Key, Woodruff No. 506 . . . . .	2	
3	020413	Clutch Fork . . . . .	1	
4	020414	Bolt, $\frac{3}{8}$ " UNC x $1\frac{3}{8}$ " . . . . .	2	
4A	013063	Washer, Spring $\frac{3}{8}$ " . . . . .	2	
5	020415	Clutch Cross Shaft . . . . .	1	
6	020416	Dirt Excluder . . . . .	1	
7	020417	Pin — Fork Roller . . . . .	2	
8	012231	Bearing, Clutch Roller . . . . .	2	S'seded by 020418
9	012230	Roller — Clutch Fork . . . . .	2	S'seded by 020419

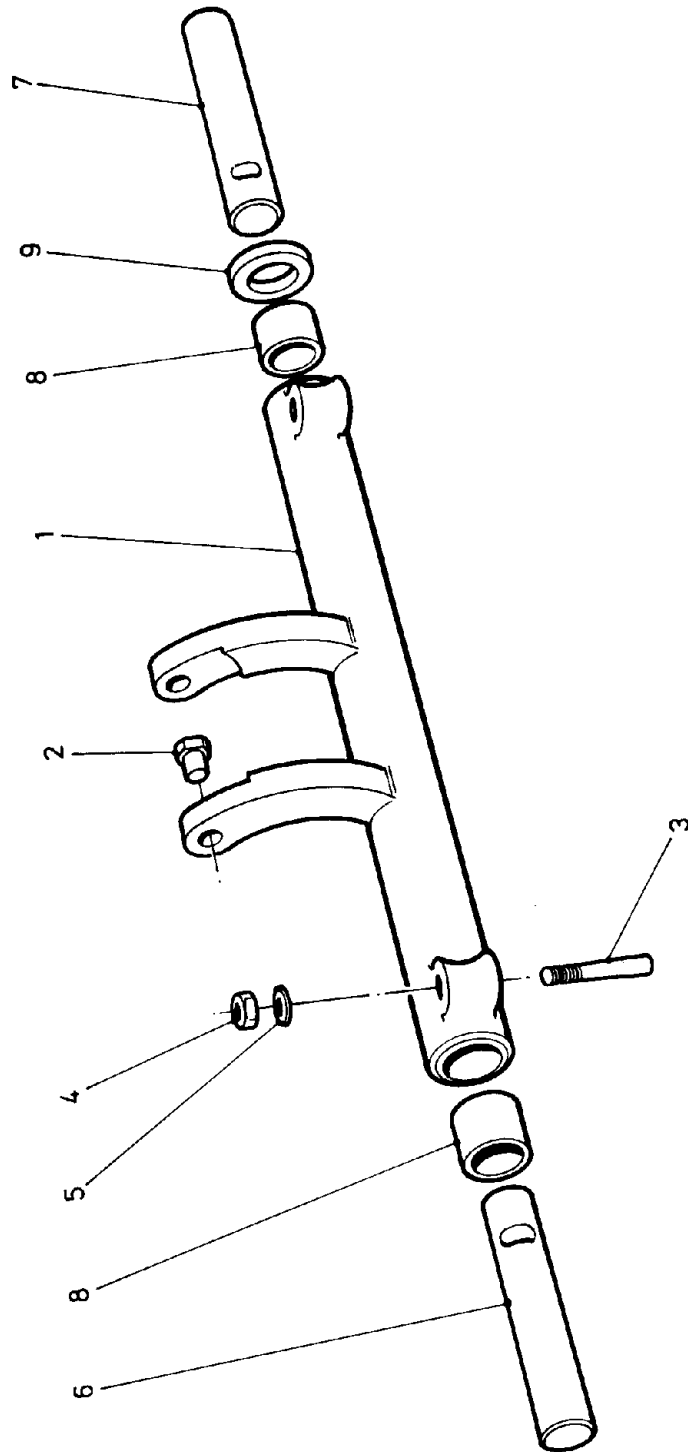


FIG. 1 : 13A

**POWER AND TRANSMISSION  
CLUTCH CROSS SHAFT MARK III**

Fig. No. 1:13A	Part No.	Description	Qty	Remarks
1	045943	Clutch Fork Arm . . . . .	1	
2	045944	Trunnion . . . . .	2	
3	012787	Cotter Pin — Fork Arm . . . . .	2	
4	012794	Nut, $\frac{3}{8}$ " UNC . . . . .	2	
5	012793	Washer, F.D. $\frac{3}{8}$ " dia. . . . .	2	
6	027610	Stub Cross Shaft — Left Hand . . . . .	1	S' seded by 027710
7	027611	Stub Cross Shaft — Right Hand . . . . .	1	S' seded by 038095
8	045934	Bearing — Clutch Cross Shaft . . . . .	2	
9	020416	Dirt Excluder . . . . .	1	

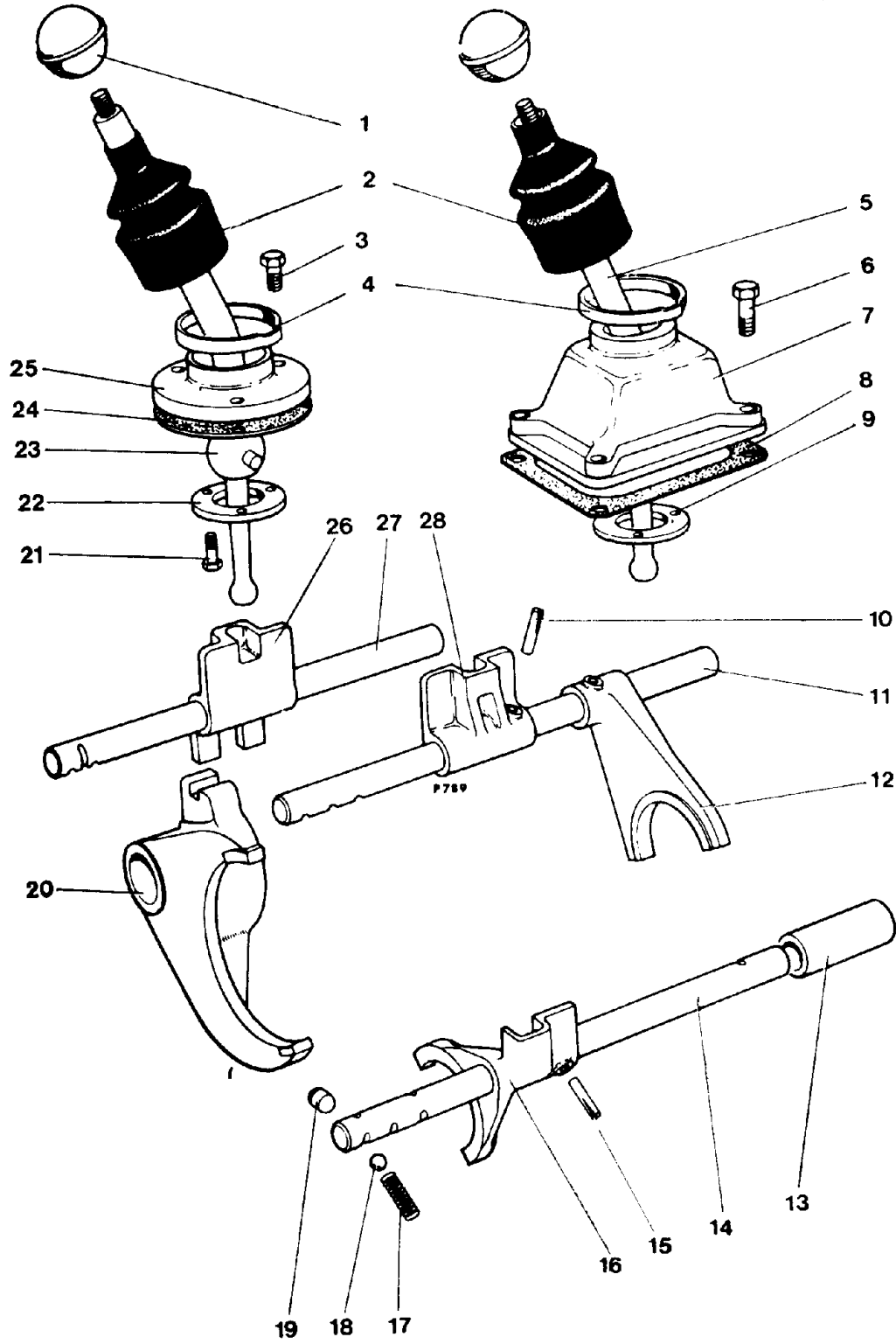


FIG. 1 : 14A



**POWER AND TRANSMISSION  
SELECTOR MECHANISM — SYNCHROMESH GEARBOX**

Fig. No.	1:14A Part No.	Description	Qty	Remarks
1	012330	Knob . . . . .	2	
2	012329	Dirt Excluder . . . . .	2	
3	020420	Setscrew, ¼" UNC x ¾" long . . . . .	3	
4	012334	Clip — Dirt Excluder . . . . .	2	Including Item 29, 30
5	07520	Lever Assembly — Ratio Change . . . . .	1	
6	020421	Setscrew, ¼" UNC x 1½" long . . . . .	4	
6A	012428	Spring Washer, ¼" dia. . . . .	7	
7	012735	Ball Housing — Ratio Change . . . . .	1	
8	012738	Gasket . . . . .	1	
9	012331	Support Plate . . . . .	1	
10	020422	Mills Pin, ⅜" dia. x 1½" long . . . . .	2	
11	020423	Selector Rod } First and . . . . .	1	S'seded by 020428
12	020424	Selector Fork } Reverse . . . . .	1	
13	020425	Sleeve } High and . . . . .	1	
14	020426	Selector Rod } Low . . . . .	1	
15	020422	Mills Pin, ⅜" x 1½" long . . . . .	2	
16	020427	Selector Fork — High and Low . . . . .	1	
17	012458	Spring — Gear Detent . . . . .	3	
18	012459	Steel Ball, ⅜" dia. — Gear Detent . . . . .	3	
19	020430	Gear Lock — High and Low . . . . .	1	
20	020431	Selector Fork . . . . .	1	
21	012333	Setscrew, ⅜" Whit. x ⅜" long . . . . .	6	
21A	012332	Tabwasher. . . . .	2	
22	012331	Support Plate . . . . .	1	
23	023259	Lever Assembly — Gear Change . . . . .	1	S'seded by 023835
24	012327	Gasket . . . . .	1	
25	012328	Ball Housing . . . . .	1	
26	020432	Selector Jaw . . . . .	1	
27	020433	Selector Rod . . . . .	1	S'seded by 020429
28	020434	Selector Jaw . . . . .	1	
29	012326	Selector Ball . . . . .	2	Supplied with Items 5 and 23
30	010806	Mills Pin, ¼" dia. x 1½" long . . . . .	2	

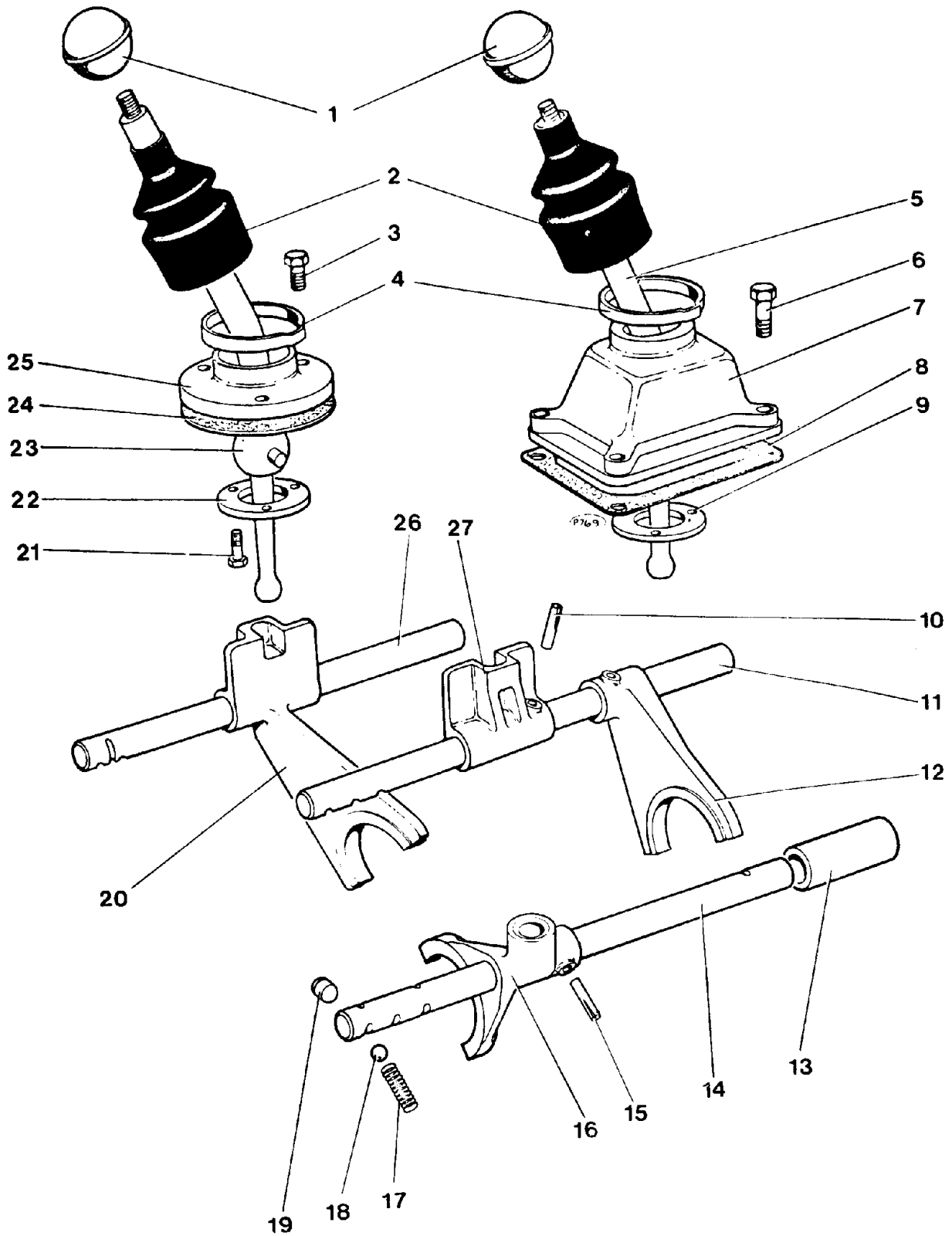
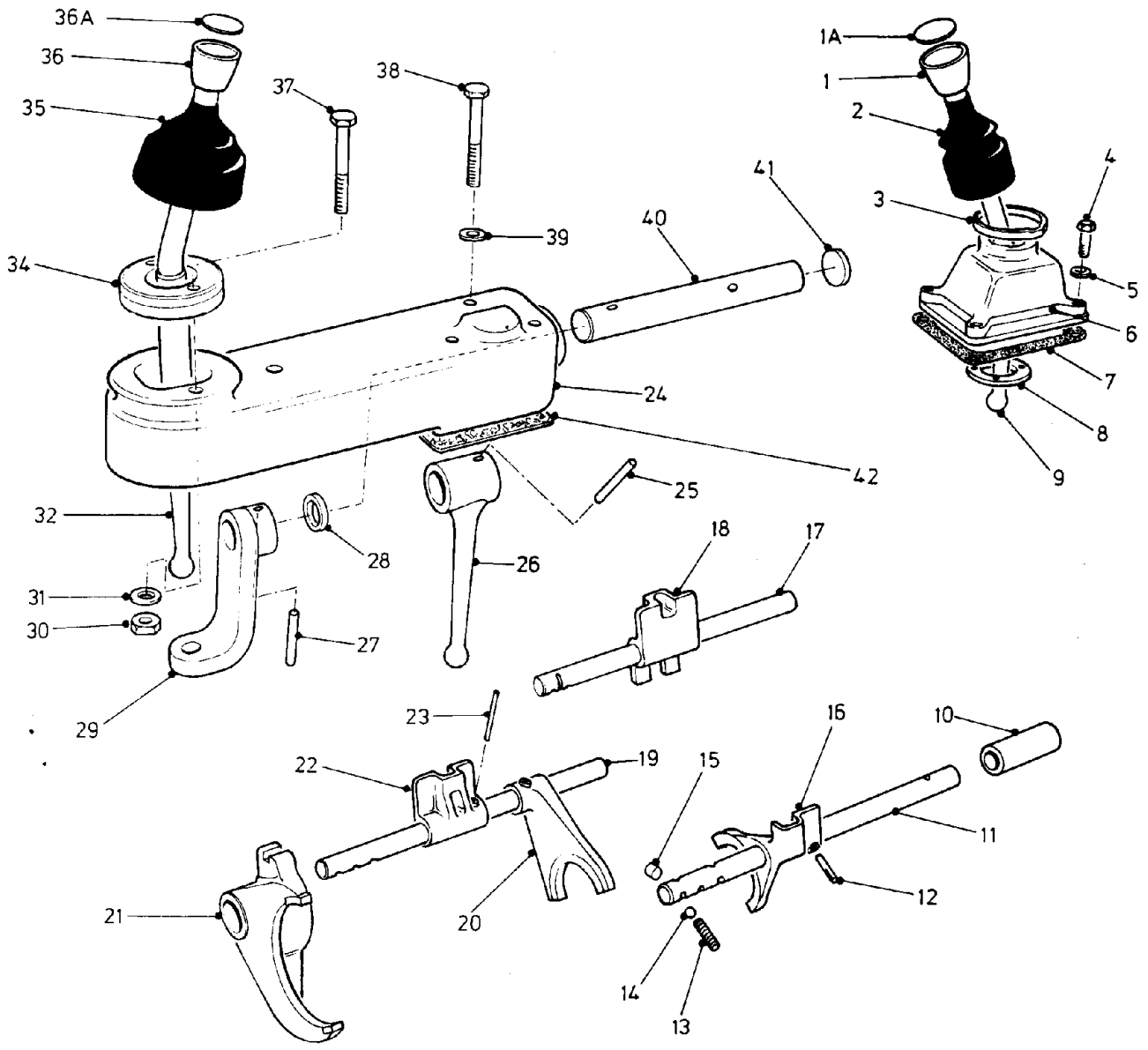


FIG. 1 : 14B



**POWER AND TRANSMISSION  
SELECTOR MECHANISM — NON-SYNCHROMESH GEARBOX**

Fig. No.	1:14B Part No.	Description	Qty	Remarks
1	012330	Knob	2	
2	012329	Dirt Excluder	2	
3	020435	Setscrew, 1/4" UNC x 3/4" long	3	
3A	012428	Spring Washer, 1/4" dia.	3	
4	012334	Clip — Dirt Excluder	2	
5	07520	Lever Assembly — Ratio Change	1	S'seded by 023749
6	020421	Setscrew, 1/4" UNC x 1 1/8" long	4	
6A	012428	Spring Washer, 1/4" dia.	4	
7	012735	Ball Housing — Ratio Change	1	
8	012738	Gasket	1	
9	012331	Support Plate	1	
10	020422	Mills Pin, 3/16" dia. x 1 1/8" long	2	
11	020423	Selector Rod — First and Reverse	1	
12	020424	Selector Fork — First and Reverse	1	
13	020425	Sleeve — High and Low	1	
14	020426	Selector Rod — High and Low	1	
15	020422	Mills Pin, 3/16" dia. x 1 1/8" long	2	
16	020427	Selector Fork — High and Low	1	
17	012458	Spring — Gear Detent	3	
18	012459	Steel Ball, 3/8" dia. — Detent	3	
19	020430	Gear Lock	1	
20	020437	Selector Fork — Second and Third	1	
21	012333	Setscrew, 3/16" BSW x 3/8" long	6	
21A	012332	Tabwasher	2	
22	012331	Support Plate	1	} Comprising Items 28, 29
23	07367	Lever Assembly — Gear Change	1	
24	012327	Gasket	1	
25	012328	Ball Housing — Gear Change	1	
26	020479	Selector Rod — Second and Third	1	
27	020434	Selector Jaw — Frst and Second	1	
28	012326	Selector Ball	2	} Supplied with Items 5 and 23
29	010806	Mills Pin, 1/4" dia. x 1 1/2" long	2	



**FIG. 1 : 14C**



**POWER AND TRANSMISSION  
REMOTE CHANGE — SELECTOR MECHANISM**

Fig. No. 1:14C	Part No.	Description	Qty	Remarks
1	035477	Knob . . . . .	1	
1A	035422	Nameplate — High/Low . . . . .	1	
2	012329	Dirt Excluder . . . . .	1	
3	012334	Clip . . . . .	1	
4	020421	Setscrew . . . . .	4	
5	012428	Washer . . . . .	4	
6	012735	Ball Housing . . . . .	1	
7	012738	Gasket . . . . .	1	
8	012331	Support Plate . . . . .	1	
9	07520	Lever — Ratio Change . . . . .	1	
10	020425	Sleeve . . . . .	1	
11	020426	Selector Rod . . . . .	1	
12	020422	Mills Pin . . . . .	1	
13	012458	Spring . . . . .	3	
14	012459	Steel Ball . . . . .	3	
15	020430	Gear Lock — High/Low . . . . .	1	
16	020427	Selector Fork — High/Low . . . . .	1	
17	020429	Selector Rod . . . . .	1	
18	020432	Selector Jaw . . . . .	1	
19	020428	Selector Rod . . . . .	1	
20	020424	Selector Fork . . . . .	1	
21	020431	Selector Fork . . . . .	1	
22	020434	Selector Jaw . . . . .	1	
23	020422	Mills Pin . . . . .	1	
24	039136	Housing . . . . .	1	S'ceded by 037100 *
25	06328	Dowel Pin . . . . .	1	
26	039035	Selector Lever . . . . .	1	
27	06328	Dowel Pin . . . . .	1	
28	039038	Seal . . . . .	1	
29	039029	Selector Arm . . . . .	1	
30	05473	Nut . . . . .	3	
31	04577	Washer . . . . .	3	
32	039006	Selector Lever . . . . .	1	
34	039261	Ball Housing . . . . .	1	
35	012329	Dirt Excluder . . . . .	1	S'ceded by 039037 *
36	035477	Knob . . . . .	1	
36A	038762	Nameplate — Gear Change . . . . .	1	
37	06216	Bolt . . . . .	3	
38	039861	Bolt . . . . .	3	S'ceded by 05822) *
39	04577	Washer . . . . .	3	S'ceded by 01259) *
40	039023	Selector Shaft . . . . .	1	
41	020244	Plug . . . . .	1	
42	012327	Gasket . . . . .	1	012738 *

NOTE: \* 4. Hole fixing only.

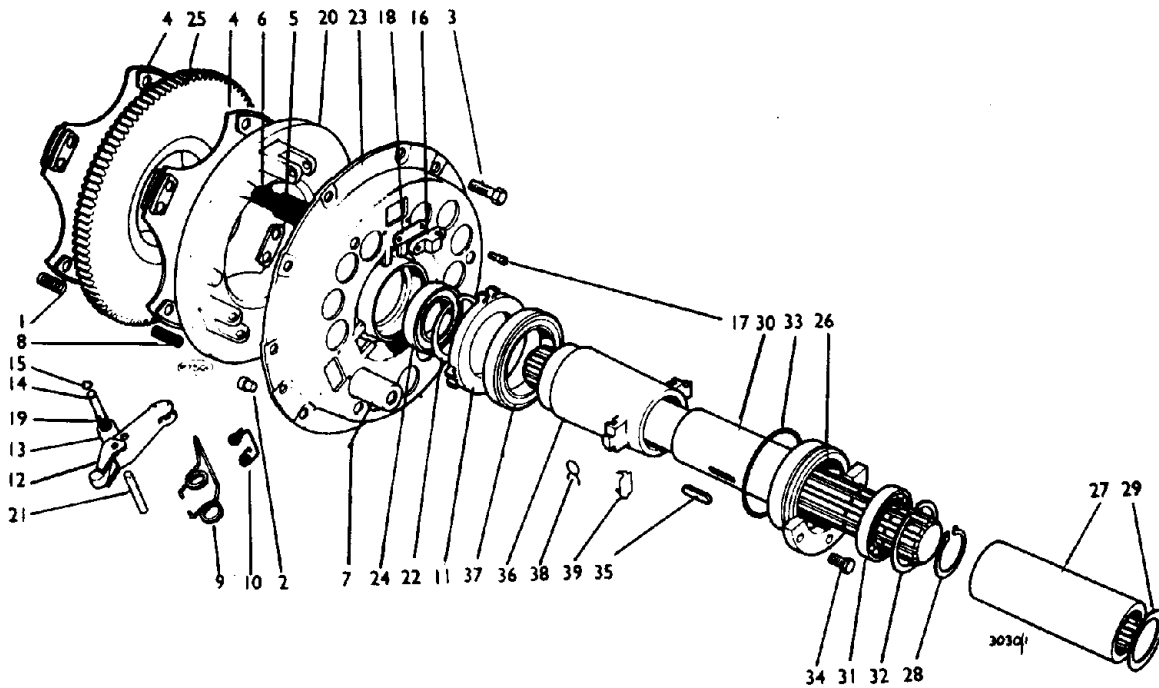


FIG. 1 : 15


**POWER AND TRANSMISSION**
**TWIN PLATE, SINGLE ACTING CLUTCH**

Fig.No.1:15	Part No.	Description	Qty	Remarks
1	020438	Spring - Flywheel	3	
2	020439	Dowel	2	
3	020440	Bolt	9	
3A	013063	Spring Washer	9	
4	07501	Drive plate, (with sint'd ceramic facings)	2)	S'seded by 020442 (Thermoid)
4A	020443	Cover assembly	1	S'seded by 021033
5		Thrust spring (red) - Outer	6	
6		Thrust spring (brown) - Inner	6	
7		Spring cup	12	
8	020447	Spring - Pressure plate	3	
8A	020448	Circlip	1	
9		Spring - Anti-rattle	3	
10		Retainer - Release lever plate	1	
11		Release lever plate	1	
12		Release lever	3	
12A		Split pin - Release cover	3	
13		Roller - Release lever	3	
14		Pin - Roller	3	
15		Circlip - Pin	6	
16		Adjusting pad - Release lever	3	
17	020458	Setscrew	6	
17A	020459	Washer - Shakeproof	6	
18		Shim, .002in	AR	
18A		Shim, .003in	AR	
18B		Shim, .010in	AR	
18C		Shim, .020in	AR	
19		Needle roller - Release lever	57	
20		Pressure plate	1	
21		Pin - Release lever pivot	3	
21A	020468	Split pin - Pressure plate pin	6	
21B	020469	Washer - Release lever	6	
22		Circlip	1	
23		Outer cover	1	
24		Ball Bearing	1	
25	020474	Separator plate	1	
26	020475	Clutch Driveshaft	1)	S'seded by 020476- ) See BTSB 237/92 ) Now 049244*
27	020477	Muff coupling	1)	S'seded by 020478- ) See BTSB 237/92
28	017620	Circlip	2	
28A	021073	'O' Ring	1	
29	021074	Shim, .032in	AR	
30	021075	Support snout - Thrust bearing carrier	1	S'seded by 047357*

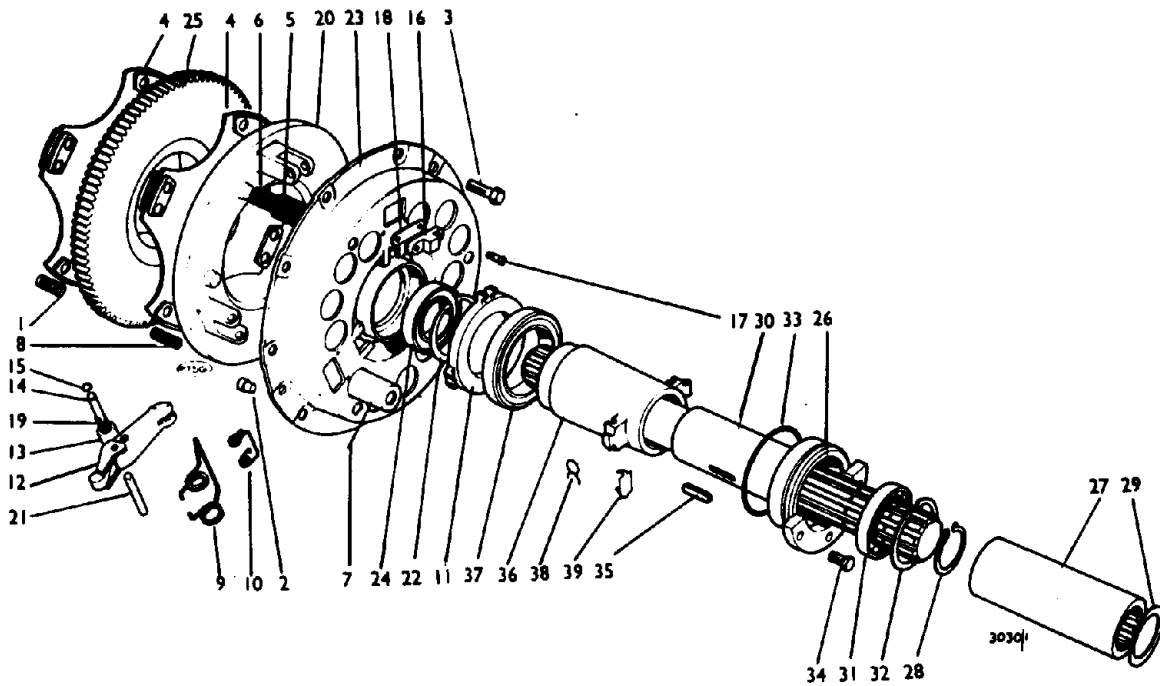


FIG. 1 : 15

**POWER AND TRANSMISSION****TWIN PLATE, SINGLE ACTING CLUTCH**

Fig.No.1:15	Part No.	Description	Qty	Remarks
31	021076	Ball bearing	1)	S'eded by
			)	DB change TSB 62,
			)	BTSB 244/97
32	021078	Circlip	1	
33	014072	'O' Ring	1	
34	012737	Setscrew )Support Snout	2	
34A	012424	Spring Washer)to Rear Frame	2	
35	021079	Key	1	
36	021080	Thrust bearing carrier	1	S'eded by 047358* (Not int.able).
37	021081	Thrust bearing.	1)	S'eded by 021082
			)	DB Eng.change
			)	note 16.10.72
			)	Now 047359*
38	020412	Spring - Clutch fork	2	
39	021083	Spring clip - Bearing carrier	2	

For re-introduction of Thermoid  
Clutch Linings refer to BTSB 290/121  
Issue 2.

Prior to U2267-1346 Use Clutch Driveshaft  
Kit Part No. 049243. Not Int.able \*.

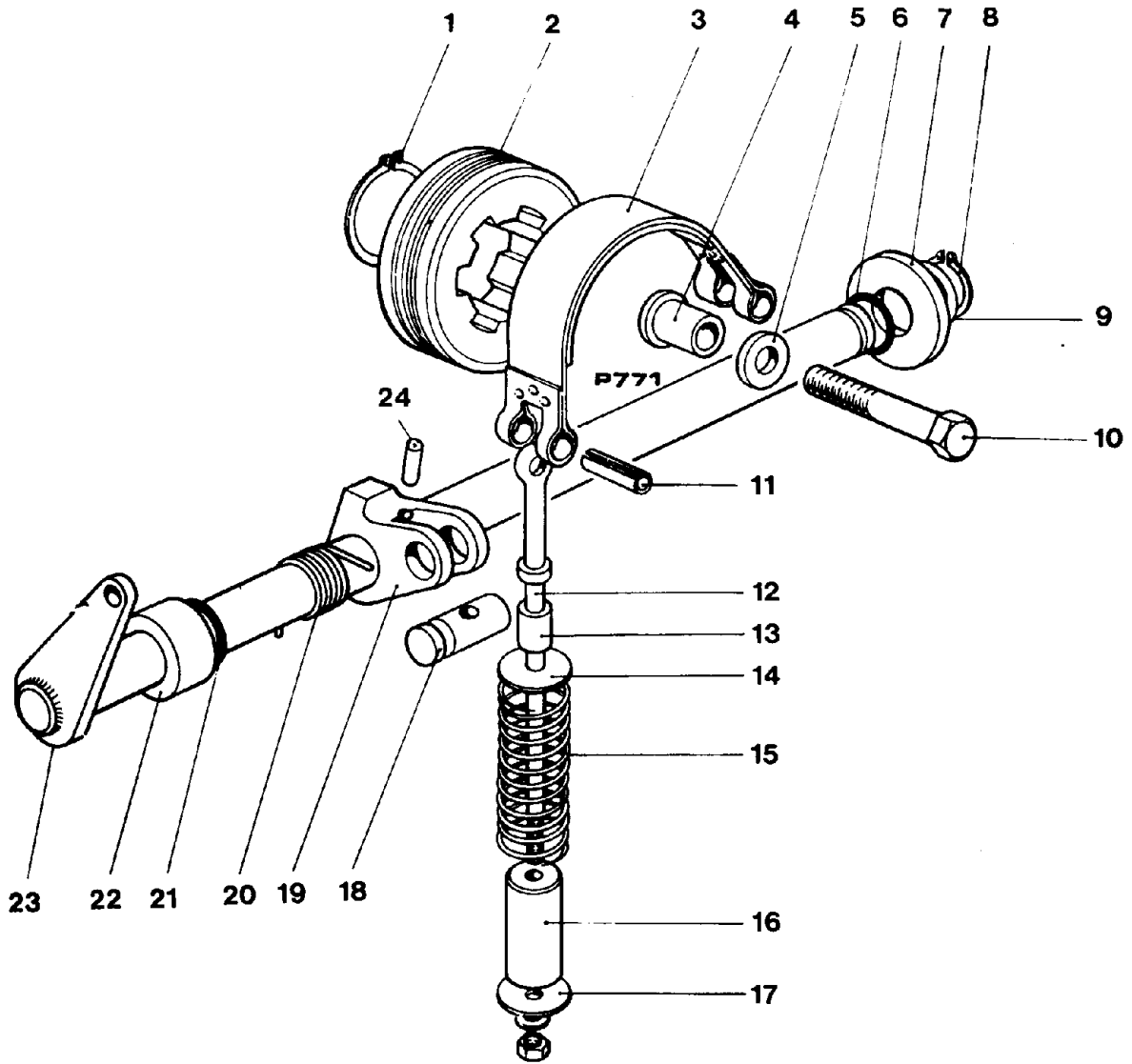


FIG. 1 : 16



**POWER AND TRANSMISSION  
CLUTCH STOP ASSEMBLY  
(Non-Synchromesh Gearbox)**

Fig. No.	Part No.	Description	Qty	Remarks
1	017620	Circlip, 1 3/4" ext.	2	
2	021084	Drum — Clutch Driveshaft.	1	
3	021085	Band End Lining	1	
4	021086	Bush	1	Band Pivot
5	021087	Washer, 5/16" dia. special	1	Band Pivot
6	021088	'O' Ring, 3/4" int. dia.	1	
7	021089	Washer, 3/4" dia.	1	
8	021090	Circlip, 3/4" ext.	1	
9	021091	Shim, .030"	As Req'd	
10	021092	Bolt, 5/16" UNC x 2 1/4" long	1	Band Pivot
11	021093	Spring Pin	1	
12	021094	Pull Rod	1	
13	021095	Spacer	1	Pull Rod
14	021096	Washer — Special	1	
15	016623	Spring	1	
16	021097	Distance Piece	1	For Item 15
17	021096	Washer — Special	1	
18	021098	Pin	1	For Item 19
19	021099	Fork — Cross Shaft	1	
20	021100	Return Spring — Cross Shaft	1	
21	021088	'O' Ring, 3/4" int. dia.	1	
22	021101	Distance Piece — Cross Shaft	1	
23	021102	Cross Shaft and Lever	1	
24	021103	Mills Pin, 1/4" dia. x 1 1/4" long	1	

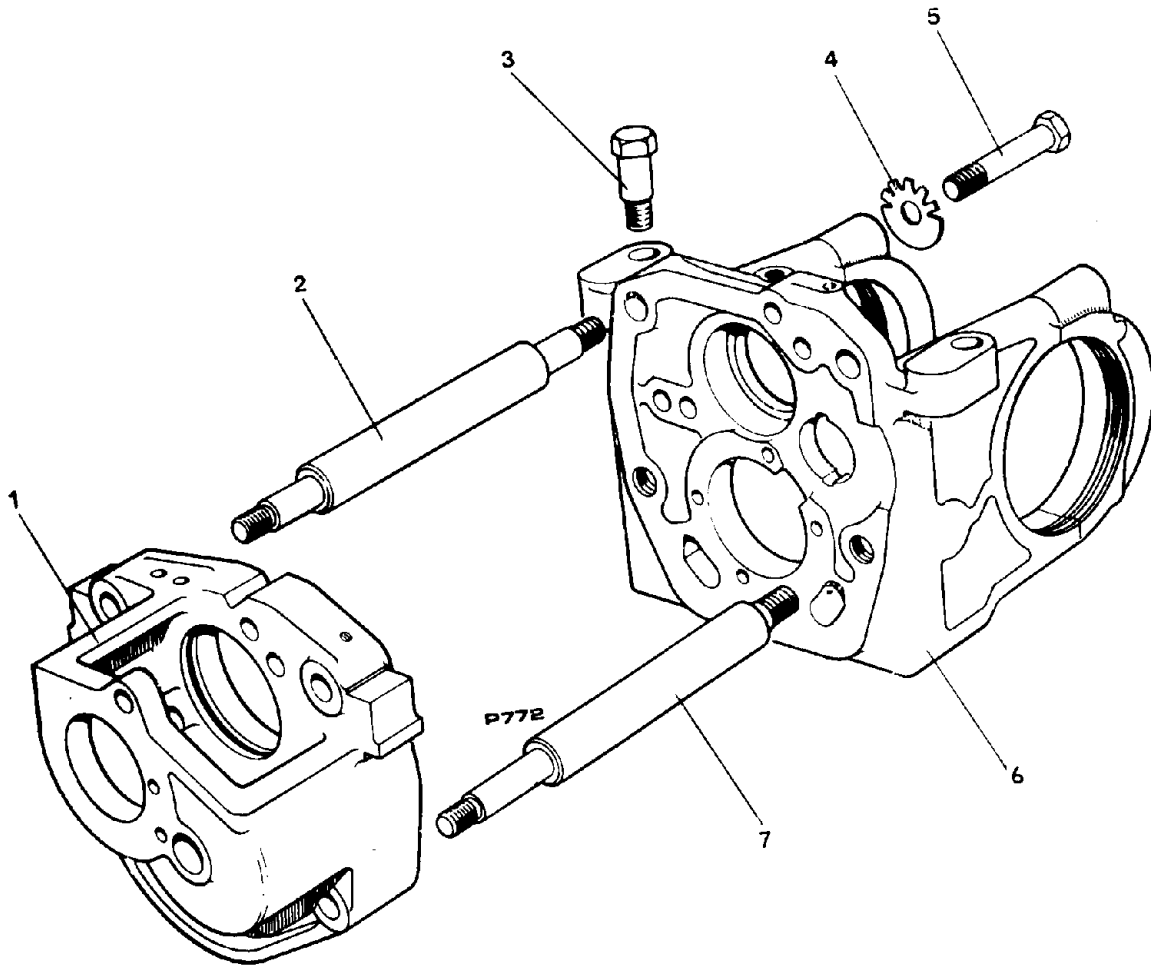
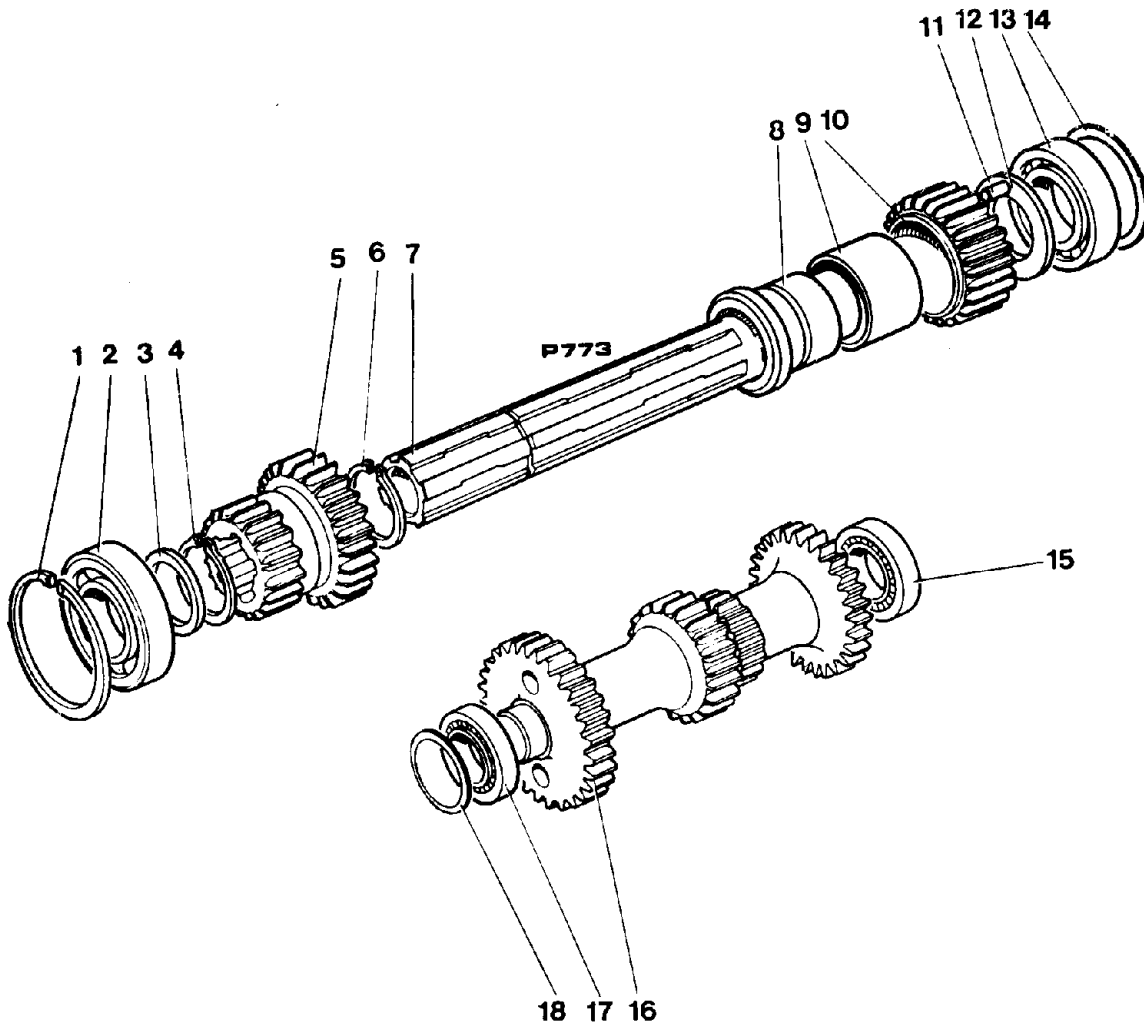


FIG. 1 : 17A



**POWER AND TRANSMISSION  
GEARBOX – CASE**

Fig. No.	1:17A Part No.	Description	Qty	Remarks
	021104	Gearbox complete (Non-synchromesh)	1	
	021105	Gearbox complete (Synchromesh)	1	S'eded by 021106
1	021107	End Plate – Front	1	Non-synchromesh
1A	021108	End Plate – Front	1	Synchromesh
2	021109	Spacing Bar – Top	2	
3	012463	Bolt, $\frac{5}{8}$ " UNC x 2 $\frac{1}{2}$ " long, special	2	} Gearbox to Mainframe
3A	021110	Bush	2	
4	012750	Tabwasher	4	} Brg. Caps to End Plate
5	012749	Bolt, $\frac{5}{8}$ " UNC x 3 $\frac{1}{4}$ " long	4	
6	021112	Endplate – Rear	1	
7	021113	Spacing Bar – Btm. – L.H.	1	
8	021114	Spacing Bar – Btm. – R.H.	1	Not illustrated
8A	021115	Gearbox Bottom Casting	1	
8B	021116	Gearbox Cover	1	
8C	021117	Gasket	2	



**FIG. 1 : 17B**



**POWER AND TRANSMISSION  
GEARBOX — DRIVESHAFT AND LAYSHAFT — SYNCHROMESH GEARBOX**

Fig. No.	1:17B Part No.	Description	Qty	Remarks
1	021118	Circlip, 3 $\frac{3}{4}$ " dia. int.	1	
2	021119	Ball Bearing	1	
3	021120	Spacer	1	
4	017620	Circlip, 1 $\frac{3}{4}$ " dia. int.	1	
5	021121	Range Pinion, 18-26 teeth	1	
6	021122	Circlip, 45mm dia. ext.	1	
7	021123	Drive Shaft	1	Non-synchromesh
7A	021124	Drive Shaft	1	Synchromesh
8	021125	Carrier Bush — Reverse Gear	1	
9	021126	Bush	1	
10	021127	Reverse Gear — 25 teeth	1	
11	021128	Pin	1	
12	021129	Thrust Washer	1	
13	012450	Ball Bearing	1	
14	021130	Shim, .003"	As Req'd	
14A	021131	Shim, .005"	As Req'd	
14B	021132	Shim, .020"	As Req'd	
15	021133	Roller Bearing	1	
16	021134	Layshaft — With Integral Gears	1	
17	021133	Roller Bearing	1	
18	021136	Shim, .002"	As Req'd	
18A	021137	Shim, .003"	As Req'd	
18B	021138	Shim, .007"	As Req'd	

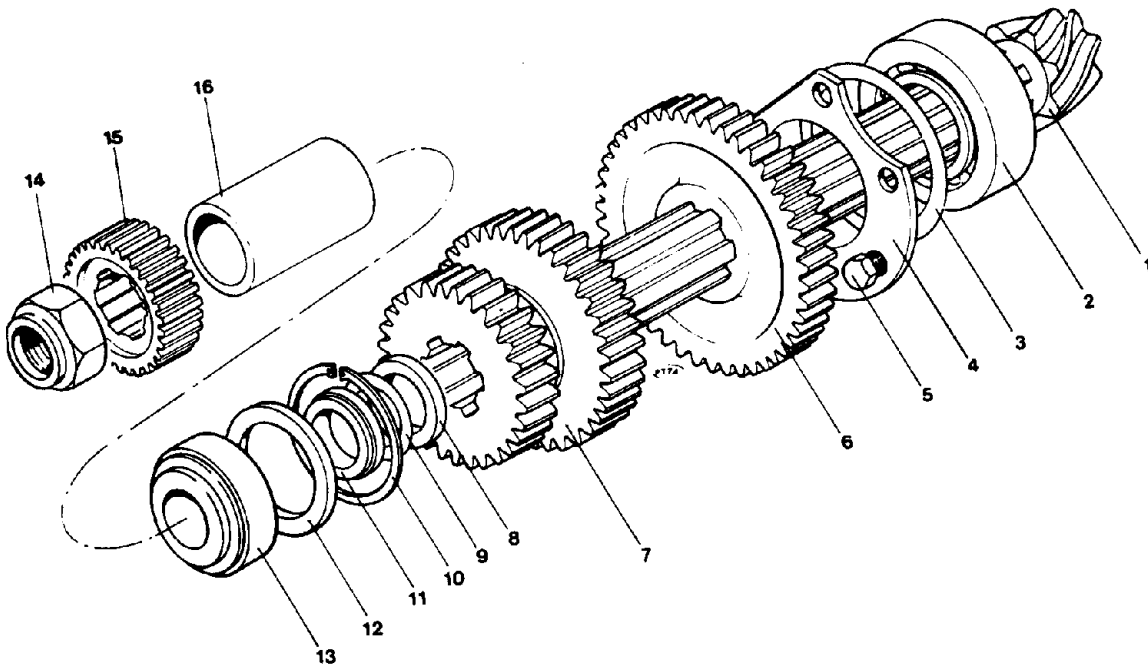


FIG. 1 : 17C



**POWER AND TRANSMISSION  
BEVEL PINION SHAFT — NON-SYNCHROMESH GEARBOX**

Fig. No.	1:17C Part No.	Description	Qty	Remarks
1	021139	Bevel Pinion and Spiral Gear	1	Supplied as Matched Pair
2	021140	Roller Bearing	1	
3A	021141	Shim, .002"	As Req'd	
3B	021142	Shim, .003"	As Req'd	
3C	021143	Shim, .010"	As Req'd	
3D	021144	Shim, .030"	As Req'd	
4	021145	Cover Plate	1	
5	021146	Setscrew, $\frac{7}{16}$ " UNC x 1" long	5	
6	017621	Driven Gear — Low (47 teeth)	1	
7	021148	Driven Gear — High and Medium (28/35 teeth)	1	
8	021149	Distance Piece	1	
9A	021150	Shim, .002"	As Req'd	
9B	021151	Shim, .005"	As Req'd	
9C	021152	Shim, .010"	As Req'd	
9D	021153	Shim, .030"	As Req'd	
10	021763	Circlip, 3" int. dia.	1	
11	021154	Distance Piece	1	
12	021155	Spacer	1	
13	021156	Taper Roller Bearing	1	
14	021157	Nyloc Nut, 1 $\frac{1}{2}$ " BSF LH	1	
15	021158	Driven Gear — Transmission Brake	1	
16	021159	Spacer Tube	1	

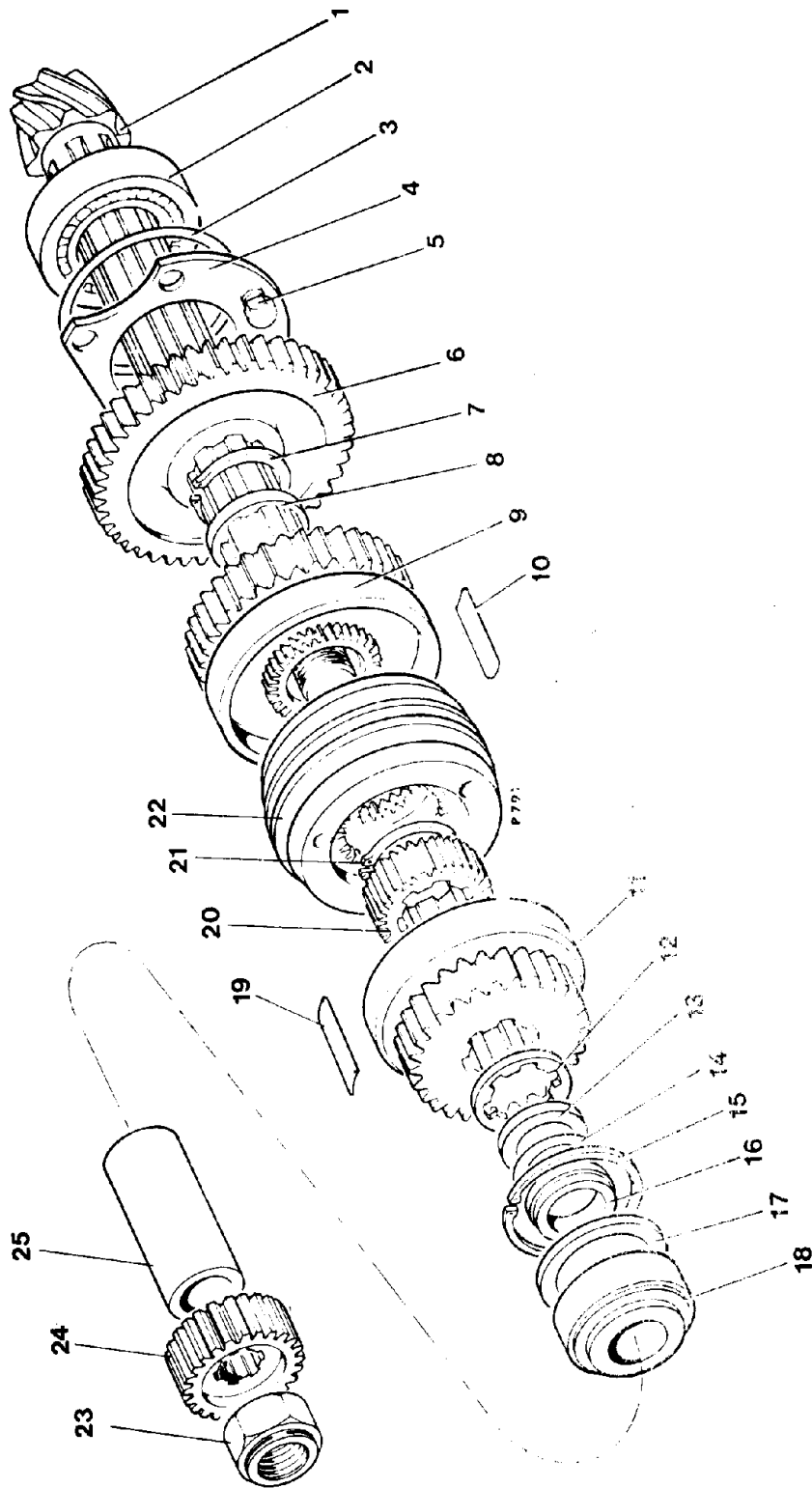


FIG. 1 : 17D



**POWER AND TRANSMISSION  
SYNCHROMESH BEVEL PINION SHAFT**

Fig. No.	1:17D Part No.	Description	Qty	Remarks
1	017617	Bevel Pinion and Spiral Gear (7/43 teeth)	1	{ Supplied as Matched Pair — See BTSB 311-136
2	021140	Roller Bearing	1	
3	021141	Shim, .002"	As Req'd	
3A	021142	Shim, .003"	As Req'd	
3B	021143	Shim, .010"	As Req'd	
3C	021144	Shim, .030"	As Req'd	
4	021145	Cover Plate — Rear Brg	1	
5	021146	Setscrew, $\frac{7}{16}$ " UNC x 1" long	1	
6	017621	Gear — Low (47 teeth)	1	{ S'ceded by 017619 — See BTSB 311-136
7	017620	Circlip, 1 $\frac{3}{4}$ " dia.	1	
8	047706	Split Ring	1	
9	021162	Gear — Medium (35 teeth)	1	
10	021163	Bearing Pad	6	
11	021164	Gear — High (28 teeth)	1	
12	021161	Washer, Special.	1	
13	021149	Distance Piece	1	
14	021150	Shim, .002"	As Req'd	
14A	021151	Shim, .005"	As Req'd	
14B	021152	Shim, .010"	As Req'd	
14C	021153	Shim, .030"	As Req'd	
15	012763	Circlip, 3" dia.	1	
16	021154	Distance Piece	1	
17	021155	Spacer	1	
18	021156	Roller Bearing	1	
19	021163	Bearing Pad	6	
20	021165	Gear — Dog Clutch	2	
21	017620	Circlip, 1 $\frac{3}{4}$ " dia.	1	
22	021166	Sliding Gear and Cones	1	
22A	021167	Spring — Sliding Gear	6	
23	021157	Nut, 1 $\frac{1}{8}$ " BSF L.H.	1	
24	021158	Driven Gear	1	{ Not illus. — Fitted between Gear and Taper Bearing on Pinion Shaft
25	021159	Spacer	1	
26	021179	Circular Trough	1	

**NOTE:** For Gearbox modifications see BTSB 261-108 and BTSB 311/136. Issue 1 and 2.

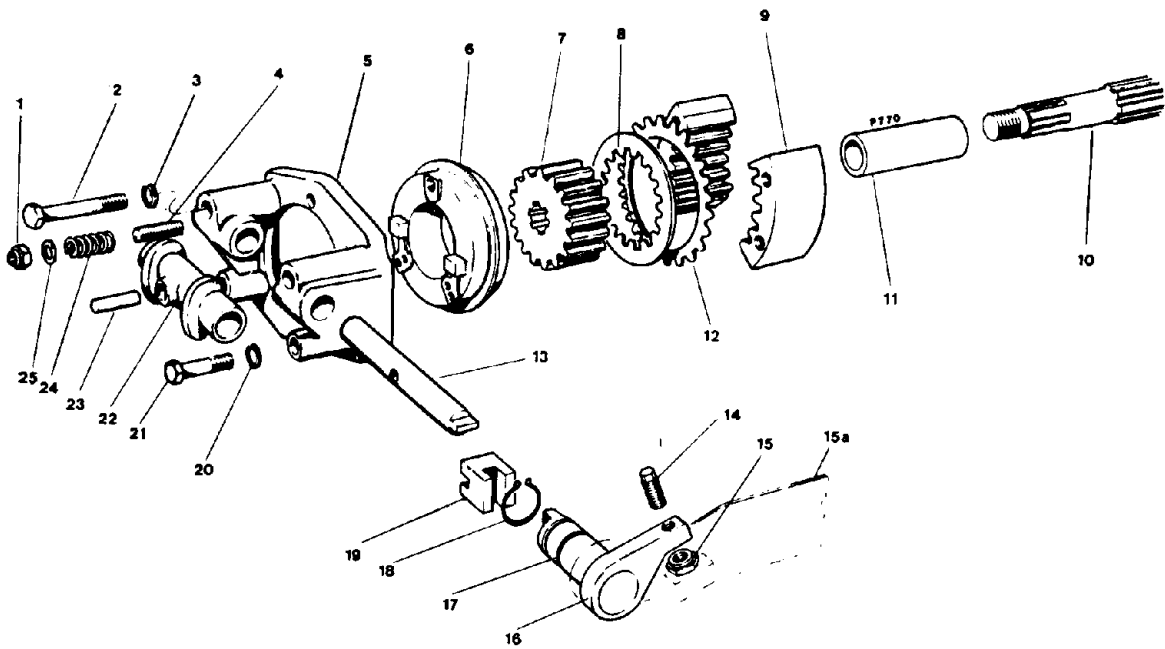


FIG. 1 : 18



## POWER AND TRANSMISSION TRANSMISSION BRAKE

Fig.No.1:18	Part No.	Description	Qty	Remarks
1	021168	Nut UNC - Nyloc	3	
2	021169	Bolt UNC Hex.Hd.	2	
3	013063	Spring Washer	2	
4	021170	Stud - Special	3	
5	021171	Pivot Bracket	1	
6	021172	Thrust Block	1	
7	021158	Driven Gear	1	
8	021173	Clutch Plate - Bronze	5	
9	021174	Clutch Ring Segment	2	
10	017617	Bevel Pinion and Spiral Gear 7/43 teeth	1)	Supplied as Matched Pair - S'seded See BTSB 311-136
10A	021139	Bevel Pinion and Spiral Gear 7/43 teeth	1	Supplied as Matched Pair
11	021159	Spacer	1	
12	021175	Clutch Plate - Steel	5	
13	021176	Shaft	1	
14	07538	Transmission Brake Adjusting Screw	1)	This now S'seded by DB adjusted 012441-
15	07539	Locknut - Transmission Brake	1)	012445-012444-012443
15A	07548	Transmission Brake Lever	)	012442.Dated 12.9.72 (Interchangeable as unit only)
16	021177	Shaft and Lever	1	
17	020382	'O' Ring	1	
17A	021178	Shim, .010in	AR	
17B	021180	Shim	AR	
17C	021181	Shim	AR	
17D	012448	Distance Piece	AR	
18	012449	Circlip	1	
19	012440	Coupling - Camshaft	1	
20	013063	Washer - Spring	2	
21	021182	Bolt	2	
22	021183	Camshaft	1	
23	021184	Mills - Pin	1	
24	012439	Spring	3	
25	021185	Washer	3	
	012441	Mills Pin	1)	
	012439	Spring	3)	
	012444	Washer	3)	These items
	012443	Pin - Adjusting lever	1)	S'sede item
	012445	Bellville Washer	6)	14-15
	012444	Locknut	1)	
	012443	Adjuster Bush	1)	
	012442	Nyloc Nut	1)	

NOTE: 10A for Non-Synchromesh Gearbox only.

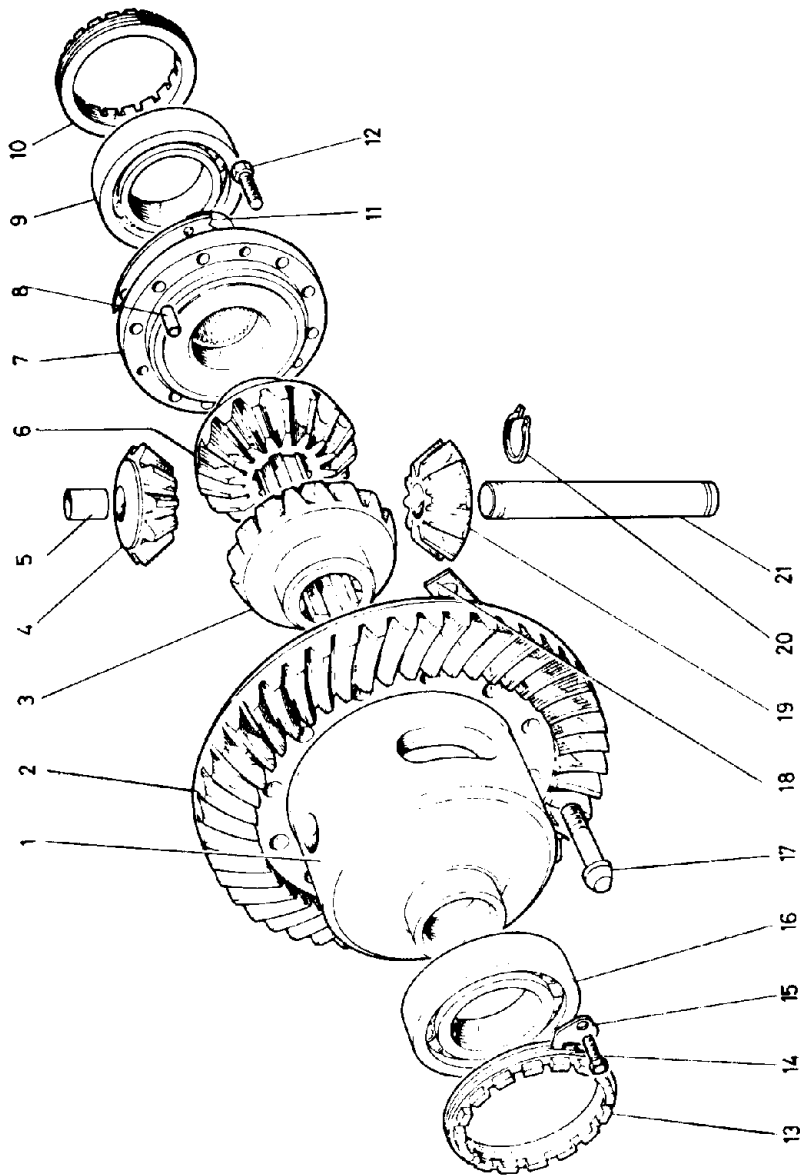


FIG. 1 : 19



**POWER AND TRANSMISSION  
DIFFERENTIAL**

Fig. No.	Part No.	Description	Qty	Remarks
1A	017617	Spiral Bevel Gear and Pinion Shaft	1	S'ceded by 017618 — See BTSB 311-136 Non-synchro. G/Box T.C. Only
1B	021139	Spiral Bevel Gear and Pinion Shaft	1	
1C	021186	Spiral Bevel Gear and Pinion Shaft	1	
1	012466	Differential Cage	1	S'ceded by 021383 (not interchangeable Nov. 71
2	021187	Spiral Bevel Gear	1	
3	012465	Differential Wheel	1	
4	021188	Differential Pinion with Bush	1	
5	021189	Bush — Differential Pinion.	2	
6	012465	Differential Wheel	1	
7	012467	End Plate — Differential	1	
8	012468	Dowel, $\frac{3}{8}$ " x $1\frac{1}{8}$ "	3	
9	012476	Ball Bearing	1	
10	012481	Adjuster Wheel	1	
11	012469	Tab Washer	3	
11A	012483	Tab Washer	3	
12	021190	Bolt, $\frac{3}{8}$ " UNC x 1"	9	
13	012481	Adjuster Wheel	1	
14	020166	Setscrew, $\frac{5}{16}$ " UNC x $\frac{1}{2}$ "	2	
15	012752	Locking Plate	2	
16	012476	Ball Bearing	1	
17	012475	Bolt, $\frac{7}{16}$ " UNC, Special	12	
18	012478	Tab Washer	6	
18A	021191	Nut, $\frac{7}{16}$ " UNC	12	
19	021192	Differential Pinion	1	
20	05809	Circlip, 1" external diameter	2	S'ceded by 021384 for use with 021385
21	012477	Differential Pin	1	
22	017616	Kit — Bevel Pinion and Spiral Gear		S'ceded by 021386 S'ceded by 021385 Not interchangeable Nov 71 Alternative to Item 1A

**NOTE:** Changes to Differential for Unit No.  
830669 to 830676. 830678 to 830680.  
830682 to 830691. 830693 to 830746 onwards.

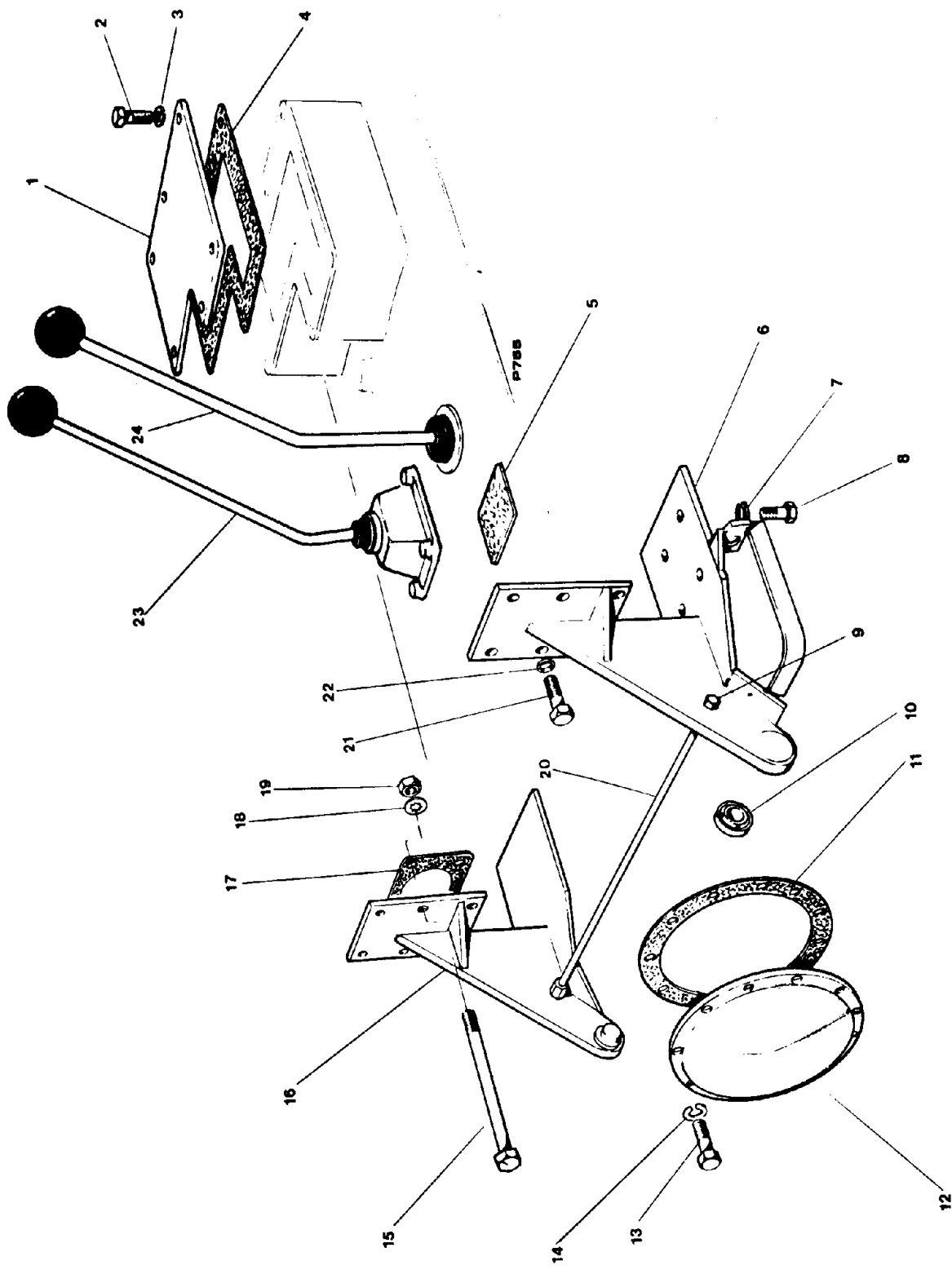


FIG. 1 : 20



**POWER AND TRANSMISSION  
MAST MOUNTINGS, ETC.**

Fig. No.	1:20 Part No.	Description	Qty	Remarks
1	03359	Cover Plate	1	
2	04452	Setscrew, $\frac{5}{16}$ " UNC x 1" long	6	
3	04317	Spring Washer, $\frac{5}{16}$ " dia.	6	
4	04006	Gasket — Cover Plate	1	
5	04189	Gasket	1	
6	023051	Mast Pivot, L.H.	1	S'ceded by 023544 (not interchangeable)
7	04576	Spring Washer, $\frac{3}{4}$ " dia.	8	
8	04512	Bolt, $\frac{3}{4}$ " UNC x 2 $\frac{1}{2}$ " long	8	S'ceded by 06332
9	04533	Nut, $\frac{5}{8}$ " UNF	4	
9A	04572	Washer, Fan Disc, $\frac{5}{8}$ " dia.	4	Called up on Mast
10	010407	Spherical Bearing	2	
11	012378	Gasket	1	
12	012377	Cover — Differential Aperture	1	
13	012379	Setscrew, $\frac{7}{16}$ " UNC x $\frac{7}{8}$ " long	12	
14	020285	Spring Washer, $\frac{7}{16}$ " dia.	12	
15	05695	Bolt, $\frac{5}{8}$ " BSF x 8 $\frac{3}{4}$ " long	2	
16	023052	Mast Pivot, RH	1	S'ceded by 023543 (not interchangeable)
17	04194	Gasket	2	
18	04572	Washer, Fan Disc, $\frac{5}{8}$ " dia.	2	
19	04534	Nut, $\frac{5}{8}$ " BSF	2	
20	023275	Cross Bar	1	
21	012387	Bolt, $\frac{1}{2}$ " UNC x 1 $\frac{3}{8}$ " long	6	
22	04624	Spring Washer, $\frac{1}{2}$ " dia.	6	
23	023259	Lever — Gear Change	1	S'ceded by 011950
24	07520	Lever — Ratio Change	1	S'ceded by 023749

NOTE:- Mast Mountings for Reduced Height and Triplex Masts. Refer to FIG.9:09  
PAGE 263.

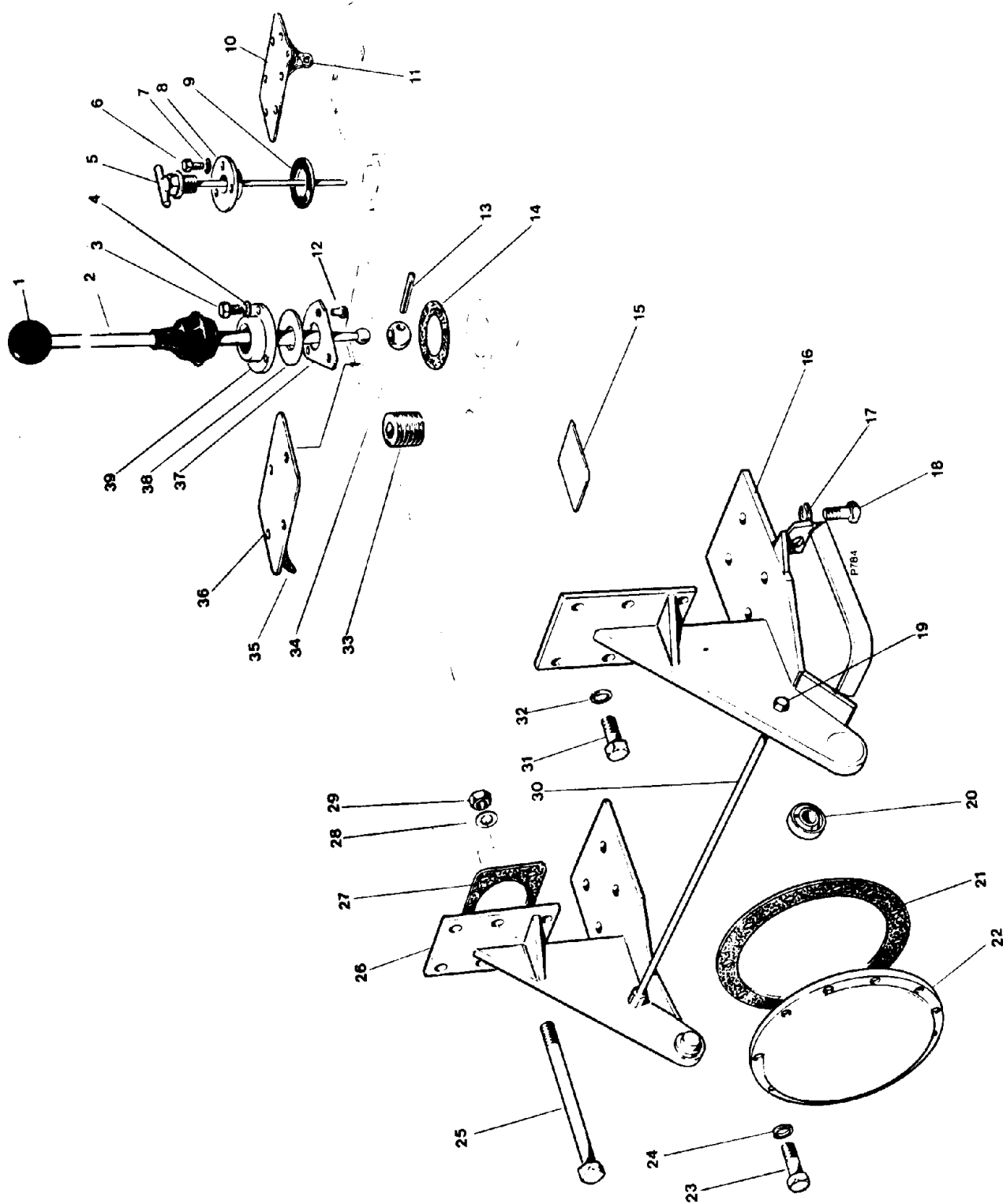


FIG. 1 : 21



**POWER AND TRANSMISSION  
GEAR LEVER AND MAST MOUNTINGS (T/C MODELS)**

Fig. No.	1:21 Part No.	Description	Qty	Remarks
1	012330	Knob	1	
2	023432	Lever Ratio Change	1	S'seded by 023730
3	012342	Setscrew, ¼" UNC x 1" long	3	
4	012428	Spring Washer, ¼" dia.	3	
5	023439	Dipstick Assembly	1	
6	06215	Setscrew, ¼" UNC x ½" long	3	
7	04567	Washer, Fan Disc, ¼" dia.	3	
8	06158	Cover Plate	1	
9	06192	Gasket	1	
10	06188	Cover	1	
10A	06215	Setscrew, ¼" UNC x ½" long	6	
10B	04567	Washer, Fan Disc, ¼" dia.	6	
11	06191	Gasket	1	
12	012333	Setscrew, ⅜" BSW x ⅜" long	3	
13	010806	Mills Pin	1	*Supplied as Assy.
14	012327	Gasket	1	
15	04189	Gasket	1	
16	023051	Mast Pivot, L.H.	1	{ S'seded by 023544 (not interchangeable)
17	04576	Spring Washer, ¾" dia.	8	
18	04512	Bolt, ¾" UNC x 2 ½" long Hex. Hd.	8	S'seded by 06332
19	04533	Nut, ⅝" UNF	4	
19A	04572	Washer Fan Disc, ⅝" dia.	4	
20	010407	Spherical Bearing	2	Called up on Mast
21	012378	Gasket	1	
22	012377	Cover — Differential Aperture	1	
23	012379	Setscrew, ⅞" UNC x ⅞" long Hex. Hd.	12	
24	020285	Spring Washer, ⅞" dia.	12	
25	05695	Bolt, ⅝" BSF x 8 ¾" long Hex. Hd.	2	(021193) { S'seded by 023543 (not interchangeable)
26	023052	Mast Pivot, R.H.	1	
27	04194	Gasket	2	
28	04572	Washer, Fan Disc, ⅝" dia.	2	
29	04534	Nut, ⅝" BSF	2	
30	023275	Cross Bar	1	
31	012387	Bolt, ½" UNC x 1 ⅜" long Hex. Hd.	6	
32	04624	Spring Washer, ½" dia.	6	
33	012430	Plug	1	
34	012326	Selector Ball	1	*Supplied as Assy.
35	06157	Gasket	1	
36	06189	Cover — Governor	1	
36A	06215	Setscrew, ¼" UNC x ½" long Hex. Hd.	4	
36B	04567	Washer, Fan Disc, ¼" dia.	4	
37	012332	Tab Washer	1	
38	012331	Support Plate	1	
39	012337	Ball Housing	1	

NOTE:- Mast Mountings for Reduced Height and Triplex Masts. Refer to FIG.9:09  
PAGE 263.

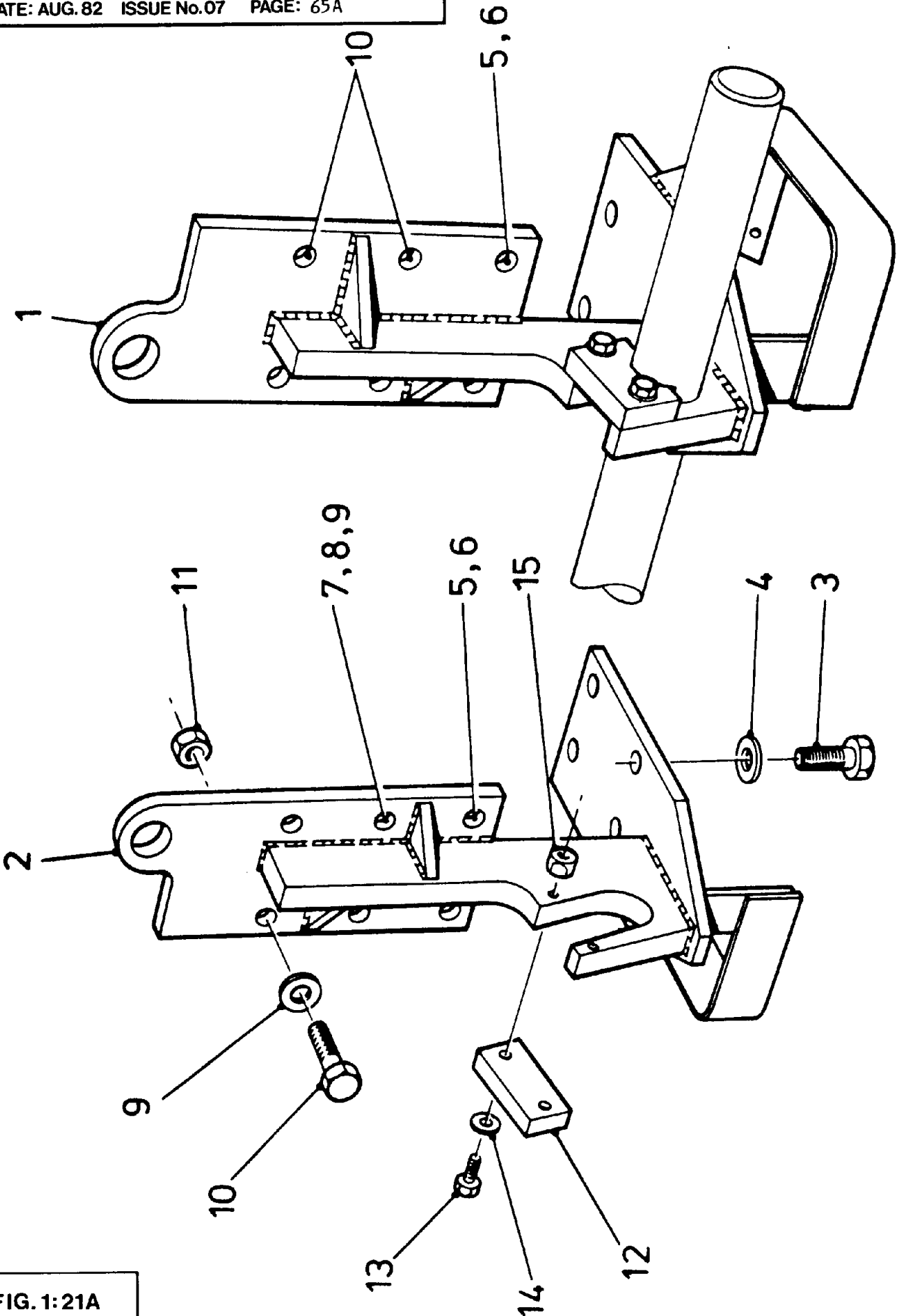


FIG. 1:21A

**POWER AND TRANSMISSION, MAST MOUNTING (CLEARVIEW DUPLEX MAST)**

<b>Fig.No.1:21A</b>	<b>Part No.</b>	<b>Description</b>	<b>Qty</b>	<b>Remarks</b>
1	029724	Mast Mounting L.H.	1	
2	029725	Mast Mounting R.H.	1	
3	04512	Bolt	8	
4	04576	Washer Spring	8	
5	012387	Setscrew	4	
6	04624	Washer Spring	4	
7	05695	Bolt Special	2	
8	04534	Nut	2	
9	04572	Washer Spring	8	
10	04503	Bolt	6	
11	04533	Nut	6	
12	029670	Location Plate	2	
13	04497	Bolt	4	
14	04624	Washer Spring	4	
15	04531	Nut	4	

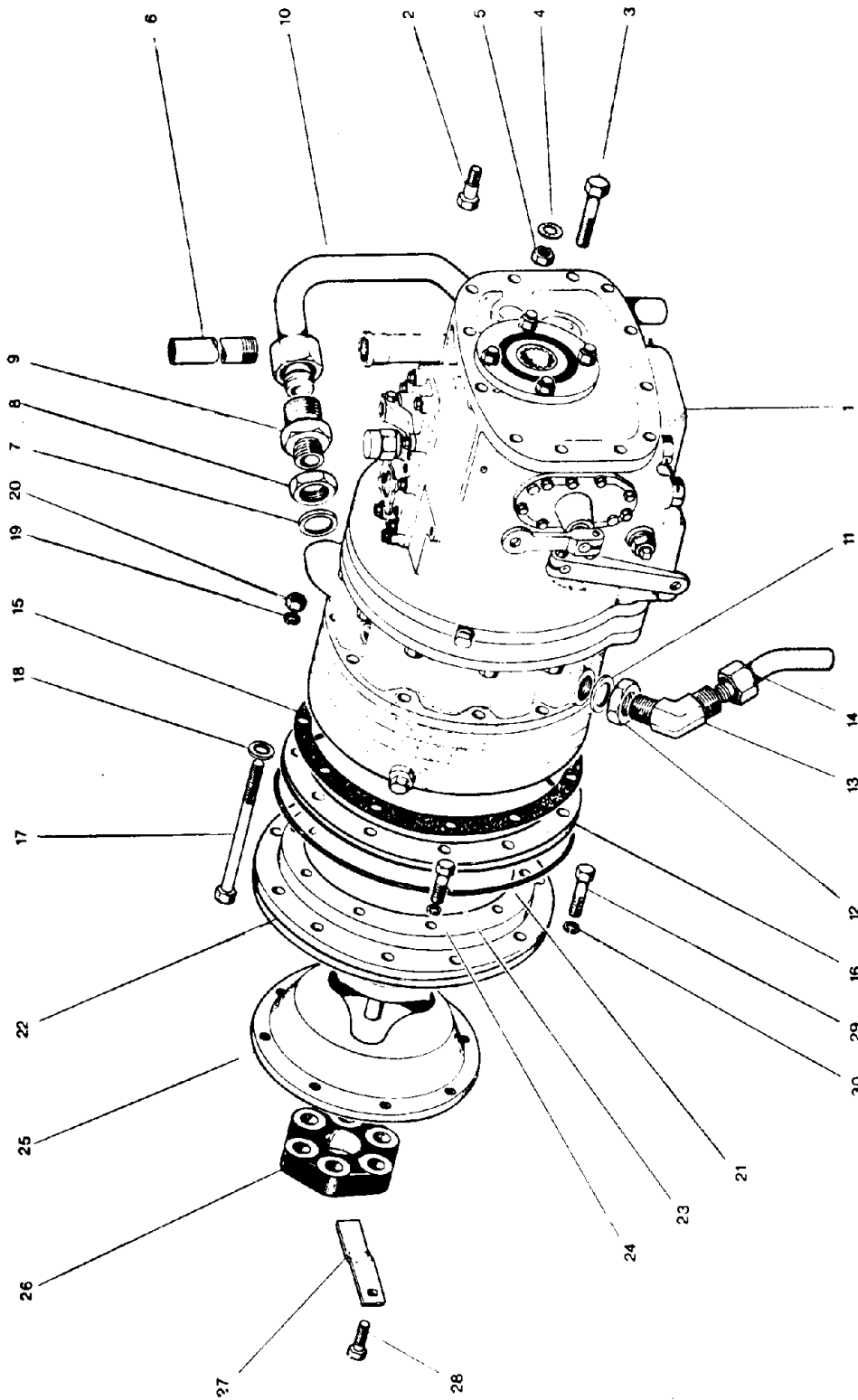


FIG. 1 : 22

**POWER AND TRANSMISSION, TORQUE CONVERTOR**

Fig.No.1:22	Part No.	Description	Qty	Remarks
1	06010	Torque Convertor, complete: Voith Diwamatic Type 833 KE	1	
2	06119	Bolt, Locating (T/C to Gear Box End Plate)	2	Top Centre
3	04470	Bolt	6	
4	04569	Washer, Fan Disc	6	
5	04526	Nut	4	
6	06156	Extension, Dipstick Tube	1	
7	04402	Bonded Seal	1	
8	06272	Locknut	1	
9	06270	Adaptor	1	
10	06243	Pipe, Water Cooling	1	
10A	049245	Nut, Cooling Pipe	2	
10B	049246	Olive, Cooling Pipe	2	
11	04402	Bonded Seal	1	
12	06272	Locknut	1	
13	06271	Adaptor Elbow	1	
14	06242	Pipe, Water Cooling	1	
14A	049245	Nut, Cooling Pipe	2	
14B	049246	Olive, Cooling Pipe	2	
15	06152	Gasket	1	
16	06116	Seal Ring	1	
17	04479	Bolt (Seal Ring to T/C)	12	
18	06222	Bonded Seal	12	
19	04579	Spring Washer	12	
20	04526	Nut	12	
21	04433	'O' Ring	1	
22	06127	Adaptor, Flywheel, Outer	1	
23	04617	Setscrew (Inner to Outer	6	S'seded by 04451
24	04317	Spring Washer	6	
25	06146	Adaptor, Flywheel, Inner	1	S'seded by 027651
25A	06039	Drive Coupling, T/C Shaft	1	Illus.in dotted line
25B	08021	Nut - hex. ) Item 25A	1	Not illustrated
25C	08020	Wave Washer) to Shaft	1	Not illustrated
26	06124	Coupling	1	
27	06203	Retainer	3	
28	04603	Setscrew	3	
28A	04524	Nut	3	Lock with Loctite
29	04616	Setscrew (Outer to Flywheel)	9	
30	04317	Spring Washer	9	

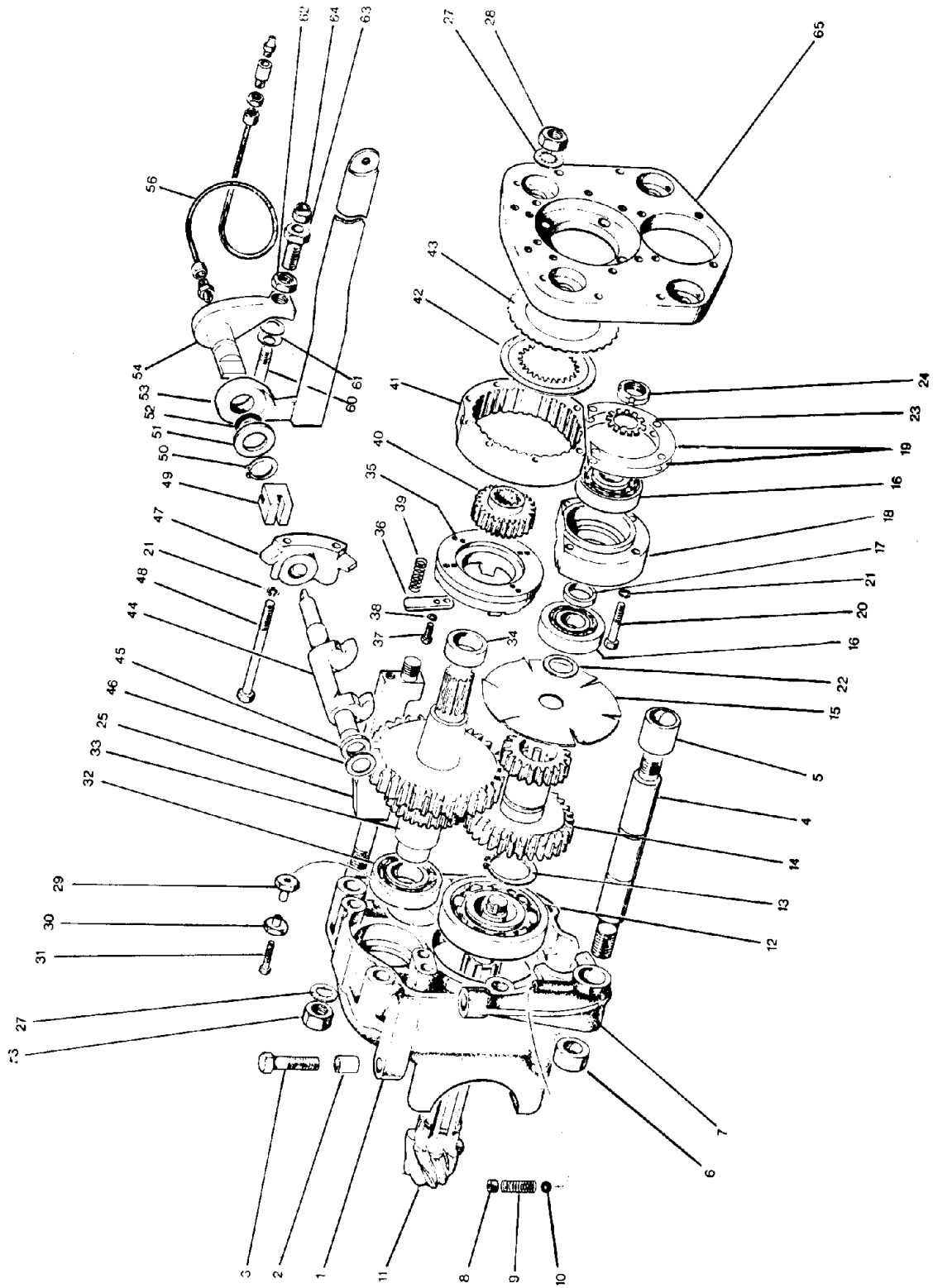


FIG. 1 : 23



## POWER AND TRANSMISSION GEARBOX — TORQUE CONVERTOR

Fig. No.	1:23 Part No.	Description	Qty	Remarks
1	021194	Front End Plate, Gear Box . . . . .	1	
2	012464	Bush . . . . .	2	
3	04507	Bolt, Special, $\frac{5}{8}$ " UNC x 2 $\frac{1}{2}$ " . . . . .	2	
*4	06120	Spacer Bar, Bottom . . . . .	2	
4A	04538	Nut, $\frac{3}{4}$ " UNC . . . . .	2	Not illus.
4B	04573	Washer, Fan Disc, $\frac{3}{4}$ " . . . . .	2	Not illus.
5	06265	Spacer, Rear . . . . .	1	
6	06264	Spacer, Front . . . . .	1	
7	06108	Selector . . . . .	1	
8	04592	Grub Screw . . . . .	1	
9	012458	Spring } Selector . . . . .	1	
10	012459	Ball . . . . .	1	
11	021186	Shaft, Bevel Pinion . . . . .	1	} Supplied with Item 2 Fig. 1:19
12	012462	Roller Bearing . . . . .	1	
13	012457	Circlip, External, 1 $\frac{7}{8}$ " . . . . .	1	
14	06114	Gear, Driven . . . . .	1	
15	06149	Oil-Flinger . . . . .	1	
16	012451	Taper-Roller Bearing . . . . .	2	
17	012452	Distance Piece . . . . .	1	
18	06107	Twin Bearing, Housing . . . . .	1	
19				
20	04470	Bolt, $\frac{3}{8}$ " UNF x 2" . . . . .	4	
21	04579	Spring Washer, $\frac{3}{8}$ " . . . . .	8	
22	012453	Shim, .002" . . . . .	As Req'd	
22A	012454	Shim, .003" . . . . .	As Req'd	
22B	012455	Shim, .005" . . . . .	As Req'd	
22C	012456	Shim, .010" . . . . .	As Req'd	
23	06302	Locking Washer . . . . .	1	
24	06301	Bearing Locknut . . . . .	1	
25*	06121	Spacer Bar, Top . . . . .	2	
25A	04470	Bolt, $\frac{3}{8}$ " UNF x 2" . . . . .	2	
25B	04579	Spring Washer, $\frac{3}{8}$ " . . . . .	2	
26	04535	Nut, $\frac{3}{4}$ " UNF . . . . .	2	
27	04573	Washer, Fan Disc, Int. $\frac{3}{4}$ " . . . . .	6	
28	04541	Locknut, $\frac{3}{4}$ " UNF . . . . .	4	
29	06104	Bearing-Retainer, Tapped . . . . .	1	
30	06105	Bearing-Retainer, Clearance . . . . .	1	
31	06106	Screw (Bearing-Retainers), No. 10 UNF x 1" . . . . .	1	
32	012450	Ball-Bearing . . . . .	1	
33	06303	Driving Gear and Shaft — Assembly . . . . .	1	
33A	06305	Shim, .005" . . . . .	As Req'd	Not illustrated
33B	06306	Shim, .015" . . . . .	As Req'd	Not illustrated
34	06136	Spacer . . . . .	1	
35	012436	Thrust Block . . . . .	1	
36	012437	Plate, Retaining . . . . .	4	
37	012438	Set-Bolt, $\frac{1}{4}$ " BSF x 1" . . . . .	8	
38	04577	Spring Washer, $\frac{1}{4}$ " dia. . . . .	8	
39	012439	Spring . . . . .	4	
40	06115	Gears, Transmission Brake . . . . .	1	
41	06117	Clutch Ring . . . . .	1	
41A	04470	Bolt, $\frac{3}{8}$ " UNF x 2" . . . . .	4	Not illustrated
41B	04579	Spring Washer, $\frac{3}{8}$ " . . . . .	4	Not illustrated
42	012433	Plate Transmission Brake . . . . .	3	

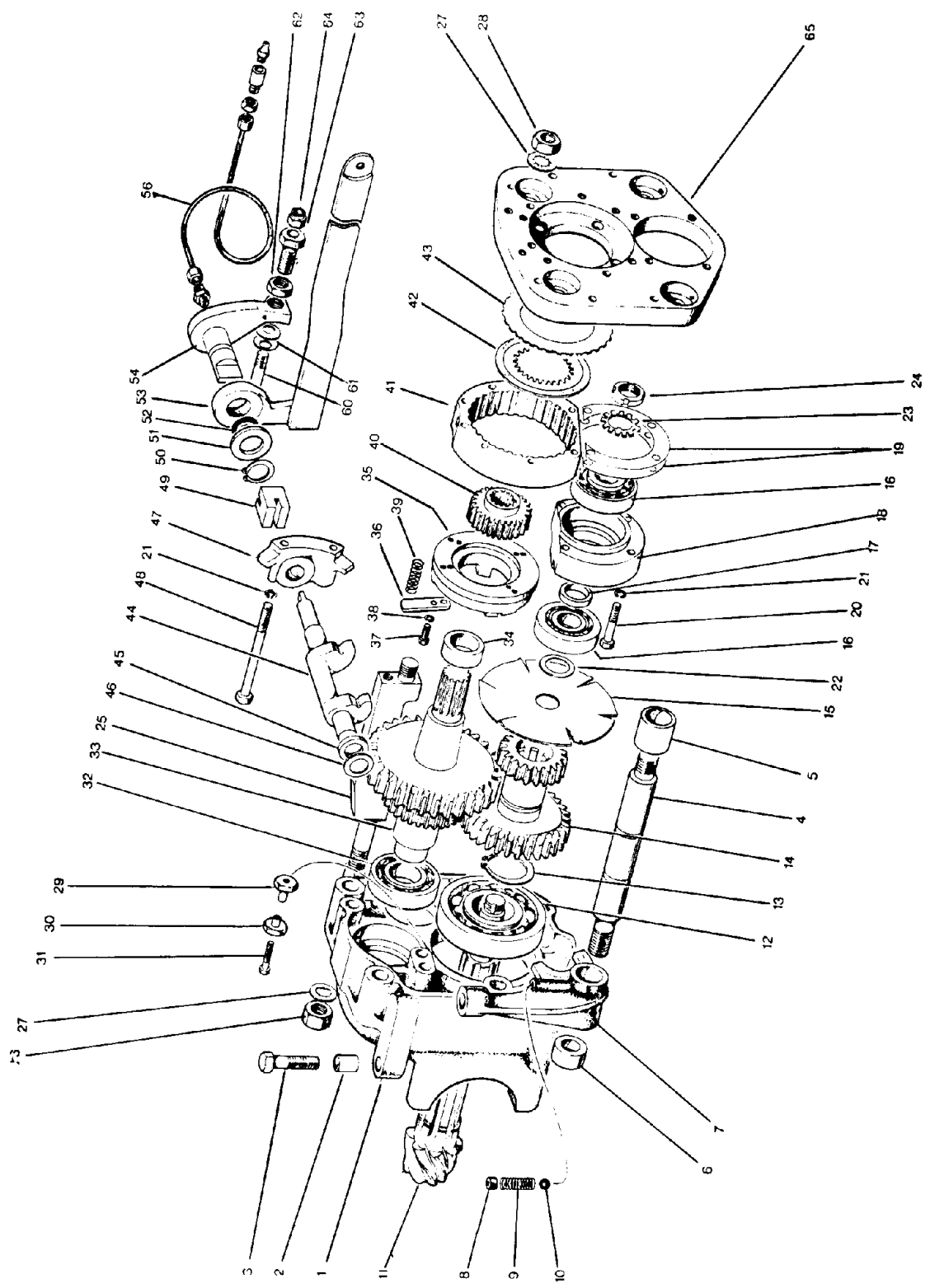


FIG. 1 : 23

**POWER AND TRANSMISSION  
GEARBOX — TORQUE CONVERTOR**

Fig. No.	1:23 Part No.	Description	Qty	Remarks
43	012434	Plate, Transmission Brake (fixed)	4	
44	06125	Camshaft, Transmission Brake	1	
45	012435	Thrust Washer	2	
46		Shim	As Req'd	See Item 22
47	012431	Bracket, Camshaft, R.H.	1	Illustrated
47A	012432	Bracket, Camshaft, L.H.	1	
48	04318	Bolt, $\frac{3}{8}$ " UNF x 4 $\frac{1}{4}$ "	4	
49	012440	Coupling	1	
50	012449	Circlip, 1" Ext.	1	
51	012448	Distance Piece	1	
52	021088	'O' Ring	1	
53	023433	Transmission-Brake Lever	1	
54	06141	Adjuster Lever and Shaft	1	
55				
56	03963	Greaser Extension Assembly	1	
56A	03959	Tube, 37"	1	
56B	03960	Grease Nipple Assembly	1	Assy. Item 56
56C	03956	Adaptor Assembly (at Brake Lever)	1	
60	012441	Pin	1	
61	012445	Belleville Washer	6	
62	012444	Locknut, $\frac{5}{8}$ " BSF	1	
63	012443	Adjuster	1	
64	012442	Nut, Nyloc.	1	
65	06103	End Plate, Gear Box	1	

\*Supplied as matched pair

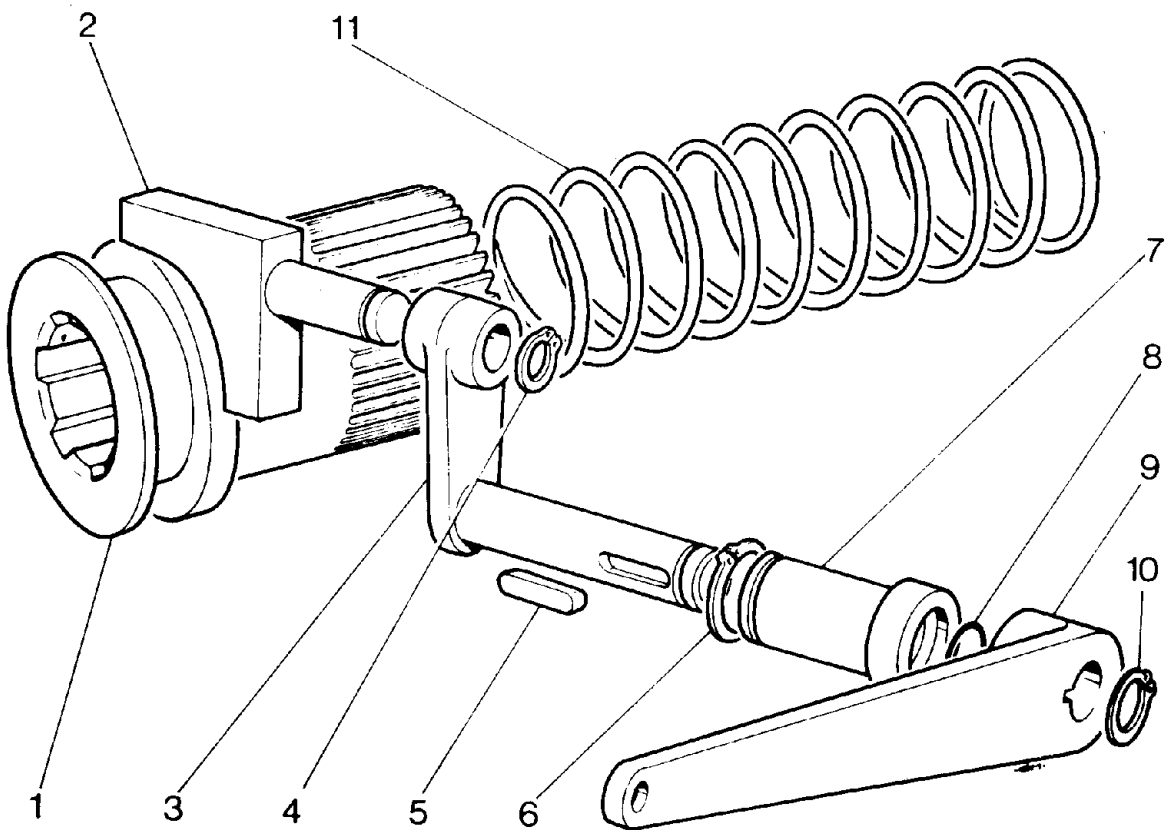


FIG. 1 : 24

POWER AND TRANSMISSION  
DIFFERENTIAL LOCK (T.C.)

Fig. No.	1:24	Part No.	Description	Qty	Remarks
1		012699	Sleeve . . . . .	1	
2		012703	Selector . . . . .	1	Should be 012702
3		012701	Cross-shaft . . . . .	1	
4		012703	Circlip . . . . .	1	
5		021195	Key . . . . .	1	
6		021196	Circlip . . . . .	1	Not fitted
7		012700	Bush . . . . .	1	
8		012704	'O' Ring . . . . .	1	
9		023450	Lever . . . . .	1	
10		012706	Circlip . . . . .	1	
11		012698	Spring . . . . .	1	

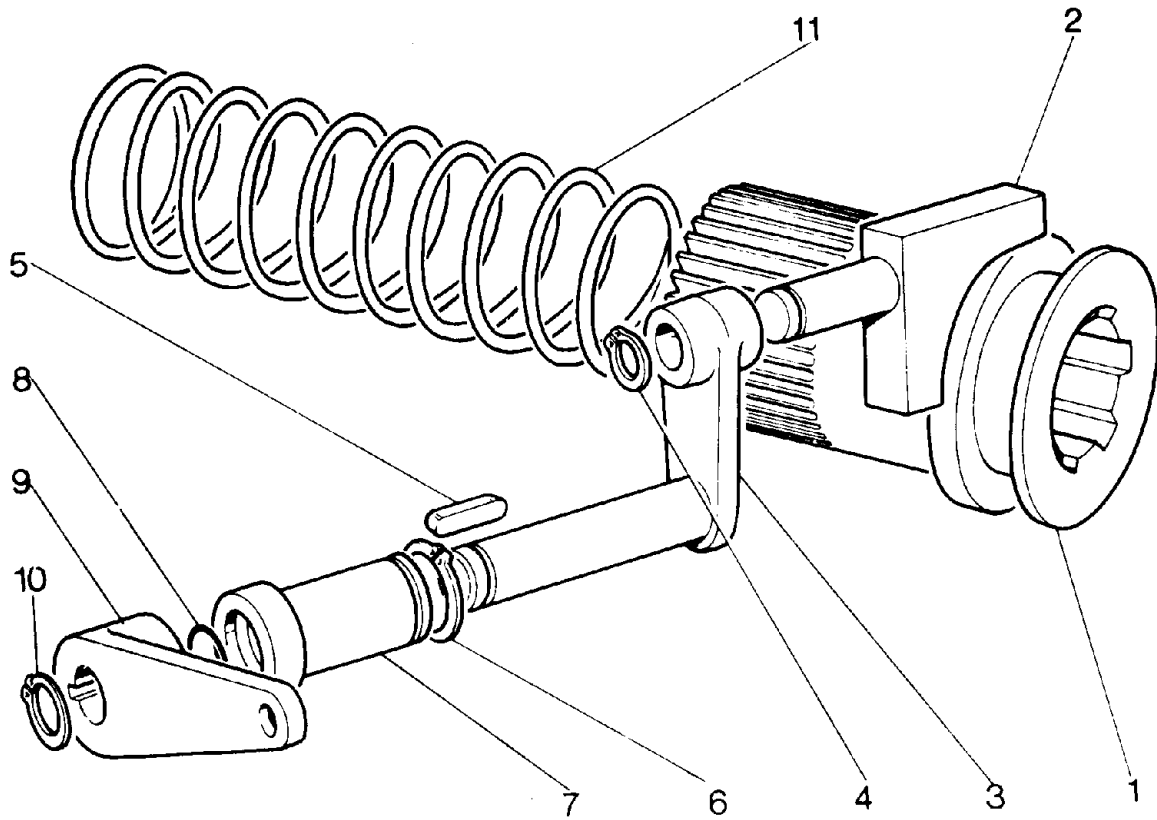


FIG. 1 : 25

POWER AND TRANSMISSION  
DIFFERENTIAL LOCK (G/Box)

Fig. No.	1:25	Part No.	Description	Qty	Remarks
1		012699	Sleeve . . . . .	1	
2		012703	Selector . . . . .	1	Should be 012702
3		012701	Cross-shaft . . . . .	1	
4		012703	Circlip . . . . .	1	
5		021195	Key . . . . .	1	
6		021196	Circlip . . . . .	1	Not fitted
7		012700	Bush . . . . .	1	
8		012704	'O' Ring . . . . .	1	
9		04353	Lever . . . . .	1	
10		012706	Circlip . . . . .	1	
11		012698	Spring . . . . .	1	

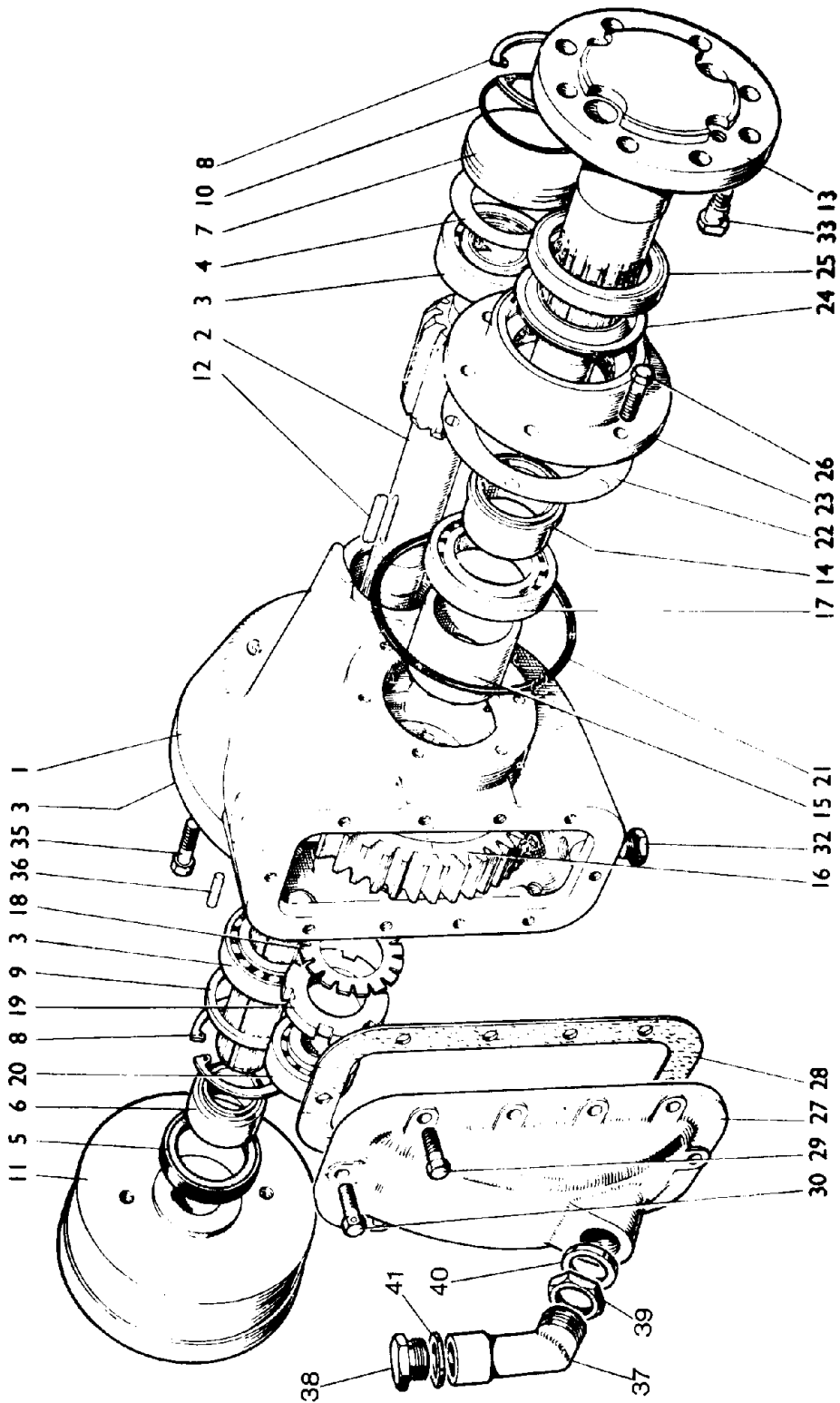


FIG. 1 : 26



**POWER AND TRANSMISSION  
FINAL DRIVE**

Fig. No.	1:26 Part No.	Description	Qty	Remarks
1A	021197	Final Drive Unit, Right Hand (complete)	1	
1B	021198	Final Drive Unit, Left Hand (complete)	1	
1	021199	Case, Right Hand	1	
1C	021200	Case, Left Hand	1	
2	021201	Pinion Shaft	2	
3	014068	Taper Roller Bearing	4	
4	014069	Shim, .003"	As Req'd	
4A	014070	Shim, .010"	As Req'd	
5	021202	Oil Seal	2	S'ceded by 014065 (14.3.73)
6	021203	Collar	2	
6A	014073	'O' Ring	2	
6B	021204	Plastic Plug — Stabiliser Holes	6	
7	021205	End Cover	2	
8	014066	Circlip, 3 1/4" internal	4	
9	014067	Distance Piece	2	
10	014072	'O' Ring, 2 3/4" internal diameter	2	
11	021206	Brake Drum	2	
12	021207	Key	2	
13	021208	Final Drive Shaft	2	S'ceded by 021219 — See BTSB 289/120
14	014095	Collar	2	
14A	014094	'O' Ring, 2 7/8" internal diameter	2	
14B	014092	Cover — Oil Seal	2	
15	021209	Sleeve	2	
16	021210	Spur Wheel	2	
17	012771	Taper Roller Bearing	2	
18	014075	Tab Washer	2	
19	014076	Locknut	2	Now supplied as an assembly, see BTSB 289/120
20	014068	Taper Roller Bearing	2	
21	012510	'O' Ring, 6 1/2" internal diameter	2	
22	012511	Shim, .003"	As Req'd	
22A	012512	Shim, .006"	As Req'd	
22B	012513	Shim, .009"	As Req'd	
22C	012514	Shim, .015"	As Req'd	
23	021211	Oil Seal Housing	2	
23A	012766	Grease Nipple, 1/4" ANF	2	
24	021212	Baffle Plate	2	
25	012768	Oil Seal	2	
26	014099	Bolt, 7/16" UNC x 1 1/2"	} Housing to Case	12
26A	020285	Spring Washer, 7/16"		12
27	014087	Cover	2	
28	014086	Gasket	2	
29	012710	Setscrew, 3/8" UNC x 1 1/8"	18	
29A	013063	Spring Washer, 3/8"	20	
30	021213	Breather Bolt	2	
31				

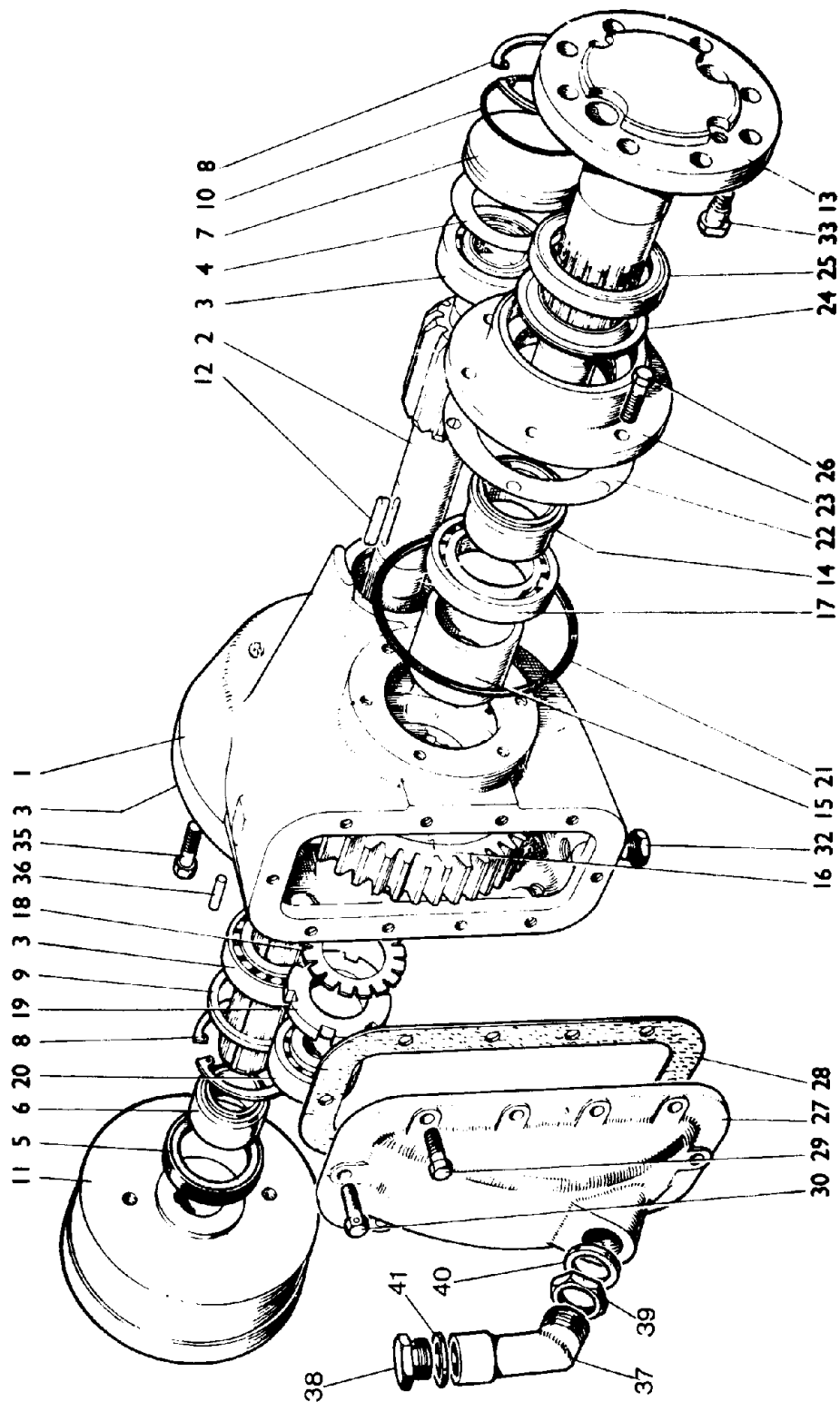


FIG. 1 : 26



**POWER AND TRANSMISSION  
FINAL DRIVE**

Fig. No. 1:26	Part No.	Description	Qty	Remarks
32	012741	Flanged Plug, 1/2" BSP	2	
32A	012742	Sealing Washer, Special (aluminium)	2	
33	040297	Special Bolt, 5/8" UNF	} Wheel Centre . 16	
33A	04487	Nut, 5/8" UNF (Chromed)		} Fixing . 16
34				
35	014230	Setscrew, 1/2" UNC x 1 5/8"	Case to . 20	
35A	012778	Spring Washer, 1/2" Special	Rear Axle . 20	
36	012412	Dowel, 7/16" x 1 1/4"	. . . . . 4	
37A	05460	Filler Neck Assembly	. . . . . 2	
37	09079	Filler Neck	. . . . . 1	
38	05499	Filler Cap	. . . . . 1	S'seded by 04127
39	05573	Locknut, 1" BSP	. . . . . 1	
40	04403	Bonded Seal	. . . . . 1	
41	04402	Bonded Seal	. . . . . 1	

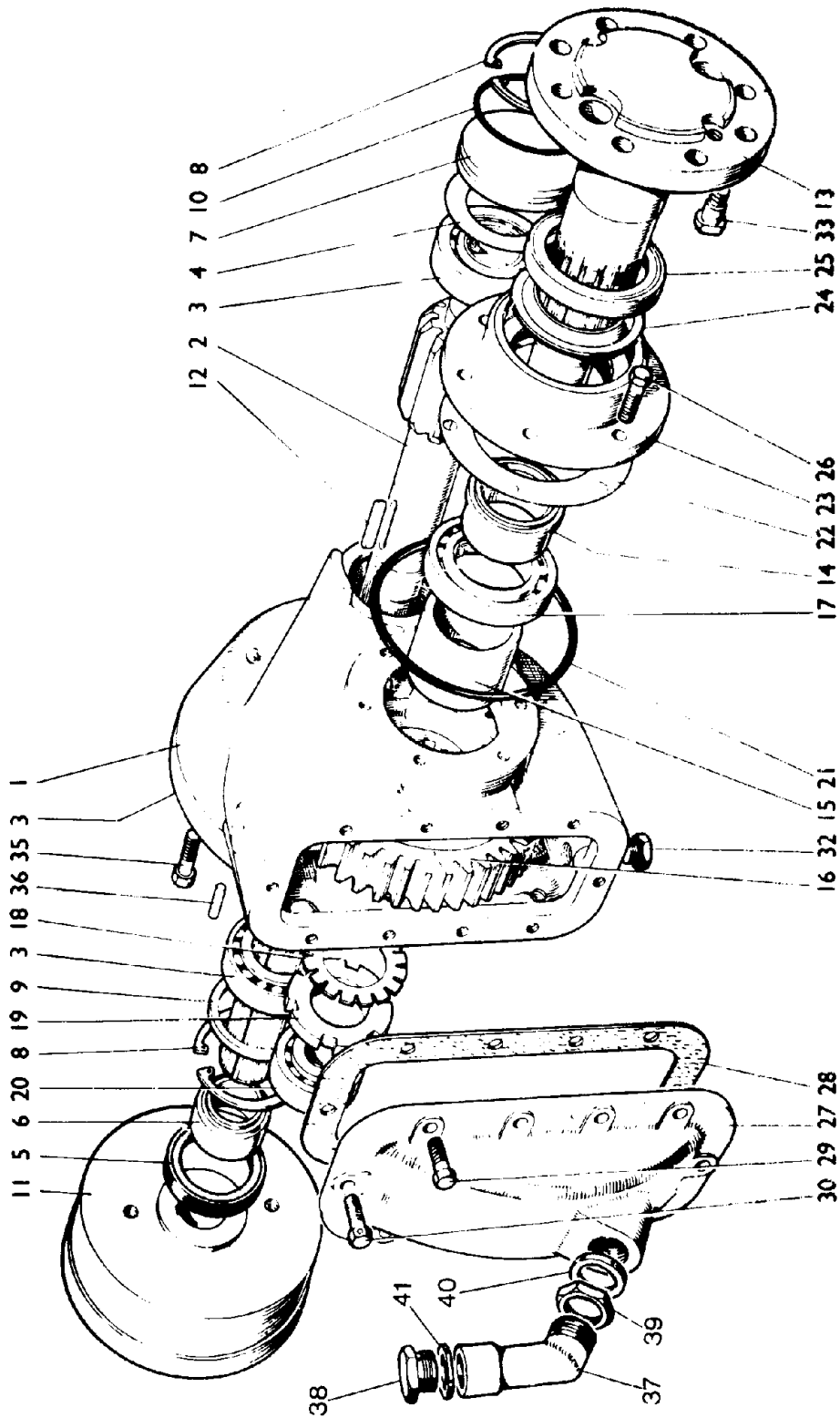


FIG. 1 : 26A



## POWER AND TRANSMISSION FINAL DRIVE — FROM UNIT No. 2772

Fig. No.	1:26A Part No.	Description	Qty	Remarks
1A	021214	Final Drive Unit R.H. (Complete)	1	S'ced by 021217 — See BTSB 272/114
1B	021215	Final Drive Unit L.H. (Complete)	1	
1	014221	Case, Right Hand	1	S'ced by 021218 — See BTSB 272/114
1C	021220	Case, Left Hand	1	
2	021221	Pinion Shaft	2	
3	014068	Taper Roller Bearing	4	
4	014069	Shim, .003"	As Req'd	
4A	014070	Shim, .010"	As Req'd	
5	021202	Oil Seal	2	S'ced by 014065 (14.3.73)
6	021203	Collar	2	
6A	014073	'O' Ring	2	
6B	021222	Plastic Plug	6	Stabiliser holes
7	014071	End Cover	2	
8	014066	Circlip, 3 1/4" internal	4	
9	014067	Distance Piece	2	
10	014072	'O' Ring, 2 3/4" internal diameter	2	
11	021206	Brake Drum	2	
12	021207	Key	2	
13	021208	Final Drive Shaft	2	Superseded by 021219 — See BTSB 289/120
14	014095	Collar	2	
14A	014094	'O' Ring, 2 7/8" internal diameter	2	
14B	014092	Cover — Oil Seal	2	
15	021224	Sleeve	2	
15A	014077	Oil Seal	1	Not illustrated
16	021210	Spur Wheel	2	
17	012771	Taper Roller	1	
18	014075	Tab Washer	1	
19	014076	Locknut	1	Now supplied as an assembly, see BTSB 289/120
20	014068	Taper Roller Bearing	1	
21	012510	'O' Ring		
22	012511	Shim, .003"	As Req'd	
22A	012512	Shim, .006"	As Req'd	
22B	012513	Shim, .009"	As Req'd	
22C	012514	Shim, .015"	As Req'd	
22D	021225	Shim	As Req'd	
23	021211	Oil Seal Housing	2	
23A	012766	Grease Nipple	2	
24	012768	Oil Seal	2	
25	014092	Seal Cover	2	
26	014099	Bolt, 7/16" UNC x 1 1/2" long	12	Housing to Case
26A	020285	Spring Washer, 7/16" dia.	12	
27	014087	Cover	2	

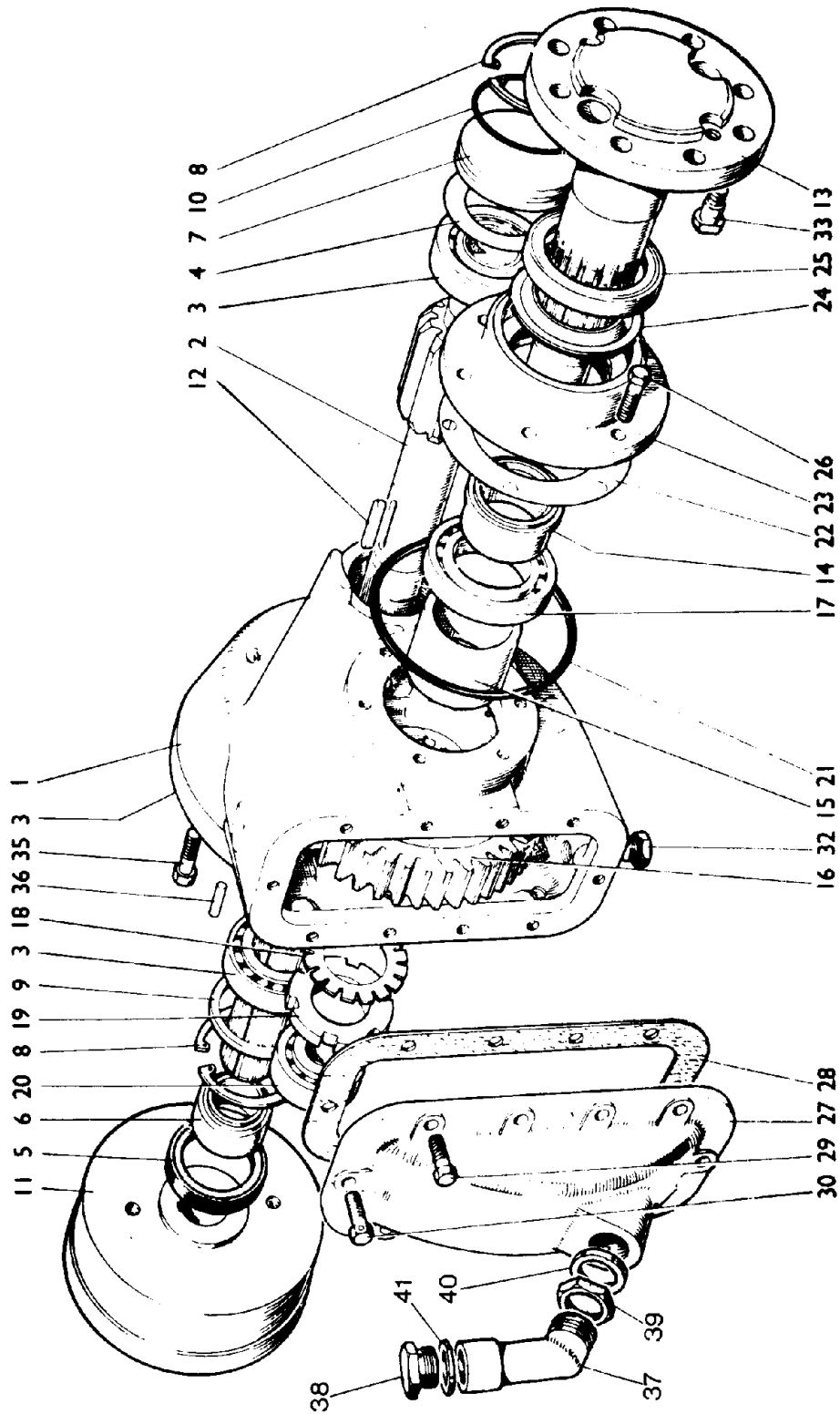


FIG. 1 : 26A



**POWER AND TRANSMISSION  
FINAL DRIVE — FROM UNIT No. 2772**

Fig. No.	1:26A Part No.	Description	Qty	Remarks
28	014086	Gasket	2	
29	012710	Setscrew, $\frac{3}{8}$ " UNC x $1\frac{1}{8}$ " long	18	
29A	013063	Spring Washer, $\frac{3}{8}$ " dia.	20	
30	021213	Breather Bolt	2	
30A	021226	Sealing Washer	2	
32	012741	Flanged Plug	2	
32A	012742	Sealing Washer (aluminium)	2	
33	040297	Special Bolt, $\frac{5}{8}$ " UNF.	16	
33A	04487	Nut, $\frac{5}{8}$ " UNF (chromed)	16	
35	014230	Setscrew, $\frac{1}{2}$ " UNC x $1\frac{5}{8}$ " long	20	
35A	012778	Spring Washer, $\frac{1}{2}$ " dia. special.	20	
36	012412	Dowel, $\frac{7}{16}$ " dia. x $1\frac{1}{4}$ " long	4	
37A	05460	Filler Neck Assembly	1	
37	09079	Filler Neck	2	} Part of Item 37A
38	04127	Filler Cap	2	
39	05573	Locknut, 1" BSP	2	
40	04403	Bonded Seal, 1" BSP	2	
41	04402	Bonded Seal, $\frac{3}{4}$ " BSP	2	

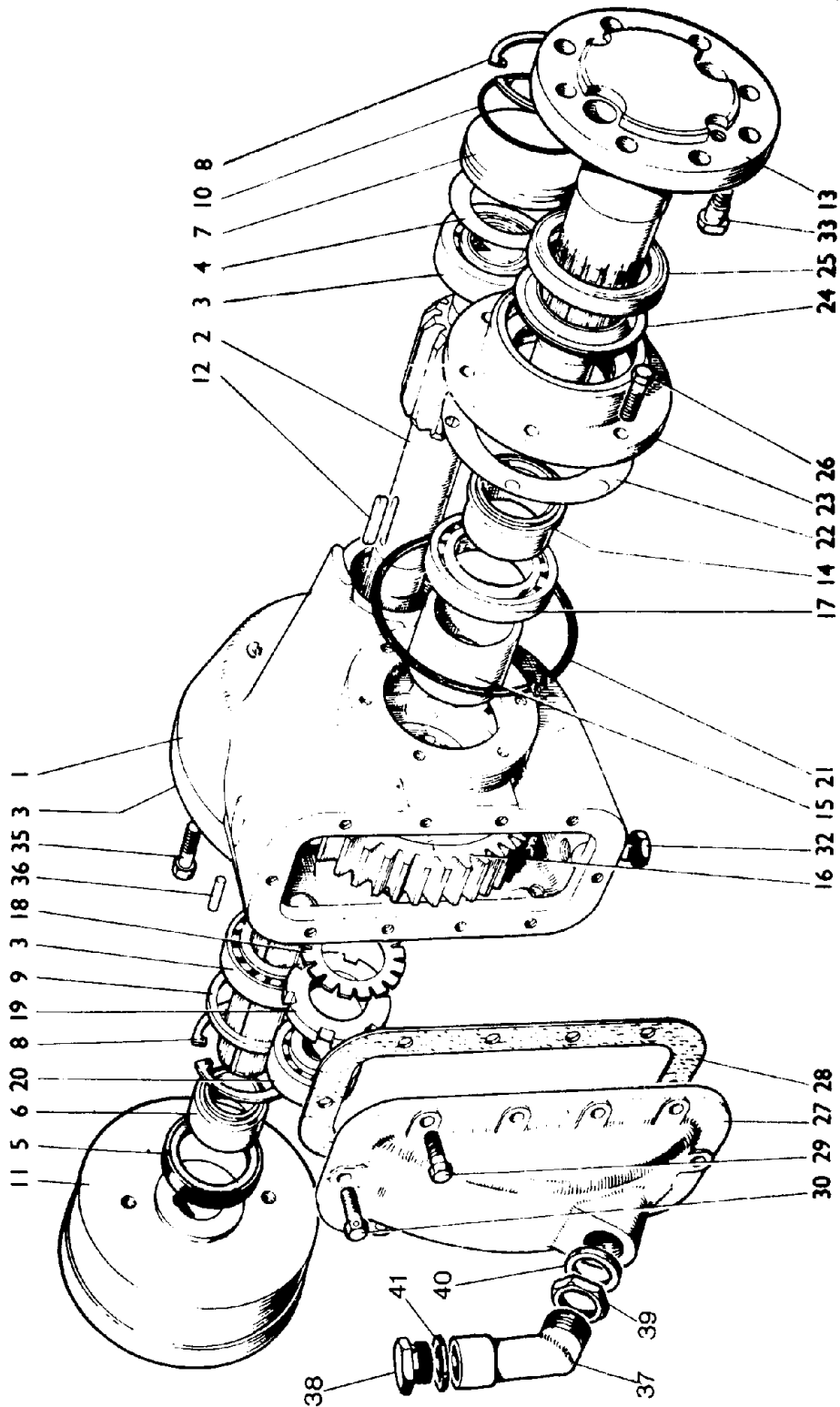


FIG. 1 : 26B



**POWER AND TRANSMISSION  
FINAL DRIVE UNIT 3/4" STUDS**

Fig. No.	1:26B Part No.	Description	Qty	Remarks
1A	014219	Final Drive Unit Assembly — L.H.	1	
1B	014220	Final Drive Unit Assembly — R.H.	1	Complete
1	014221	Case	1	Left Hand
1C	021220	Case	1	Right Hand
2	014063	Pinion Shaft	2	
3	014068	Taper Roller Bearing	4	
4	014069	Shim, .003"	As Req'd	
4A	014070	Shim, .010"	As Req'd	
5	014065	Oil Seal	2	
6	021229	Collar	2	
6A	014073	'O' Ring	2	
6B	021222	Plastic Plug	6	Stabiliser Holes
7	014071	End Cover	2	
8	014066	Circlip	4	
9	014067	Distance Piece	2	
10	014072	'O' Ring	2	
11	021231	Brake Drum	2	
12	021232	Key	4	
13	021233	Final Drive Shaft	2	S'eded by 021227
14	014095	Collar	2	
14A	014094	'O' Ring	2	
14B	014092	Cover — Oil Seal	2	
15	021224	Sleeve	2	
15A	014077	Oil Seal	2	Not illustrated
16	021235	Spur Wheel 49T	2	
17	012771	Taper Roller Bearing	2	
18	014075	Tab Washer	2	
19	014076	Locknut	2	Now supplied with Item 13
20	014068	Taper Roller Bearing	2	
21		'O' Ring		Not fitted
22	012511	Shim, .003"	As Req'd	
22A	012512	Shim, .006"	As Req'd	
22B	012513	Shim, .009"	As Req'd	
22C	012514	Shim, .015"	As Req'd	
22D	021236	Shim	As Req'd	
23	021237	Oil Seal Housing — L.H.	1	
23A	021238	Oil Seal Housing — R.H.	1	
23B	012766	Grease Nipple	2	
24	012768	Oil Seal	2	
25	014092	Seal Cover	2	
26	014099	Bolt, 7/16" UNC x 1 1/2" long	12	Housing to Case
26A	020285	Washer Spring, 7/16" dia.	12	
27	014087	Cover	2	
28	014086	Gasket	2	
29	012710	Setscrew, 3/8" UNC x 1 1/4" long	18	
29A	013063	Washer Spring, 3/8" dia.	20	
30	021213	Breather Bolt	2	
30A	021226	Washer Sealing	2	
32	021239	Flanged Plug	2	
32A	012742	Washer Sealing	2	Aluminium
33	021241	Bolt — Special, 3/4" UNF	16	

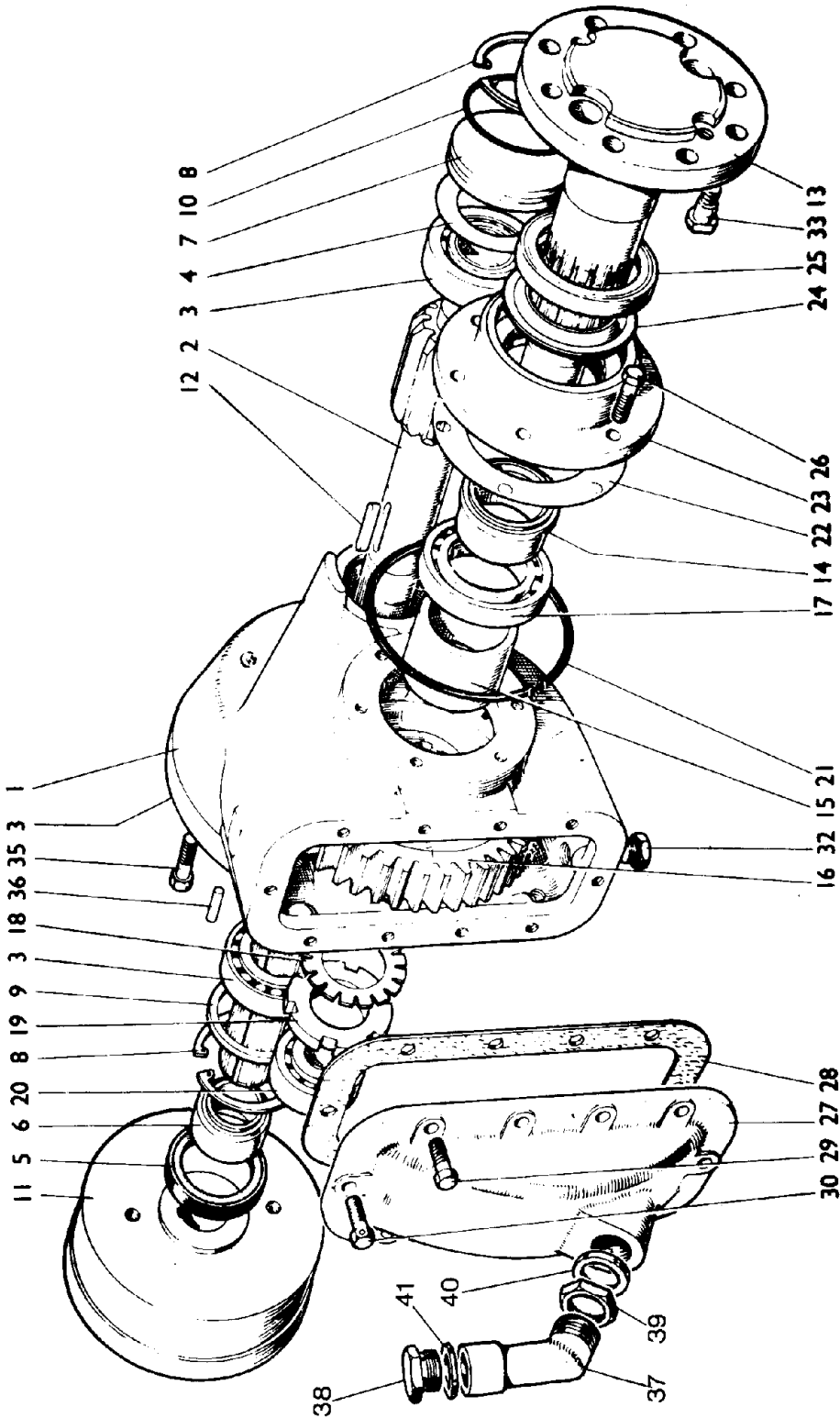


FIG. 1 : 26B



**POWER AND TRANSMISSION  
FINAL DRIVE UNIT ¾" STUDS**

Fig. No. 1:26B	Part No.	Description	Qty	Remarks
	33A 09693	Nut, ¾" UNF	16	Wheel Nut
	35 014230	Setscrew, ½" UNC x 1 ⅝" long	20	
	35A 012778	Washer Spring, ½" dia.	20	Special
	36 012412	Dowel, ⅞" dia. x 1 ¼" long	4	
	37A 05460	Filler Neck Assembly	2	
	37 09079	Filler Neck	2	} Part of Assembly 05460
	38 04127	Filler Cap	2	
	39 05573	Locknut, 1" BSP	2	
	40 04403	Bonded Seal, 1" BSP	2	
	41 04402	Bonded Seal, ¾" BSP	2	
	42 012430	Taper Plug	2	Drain Hole

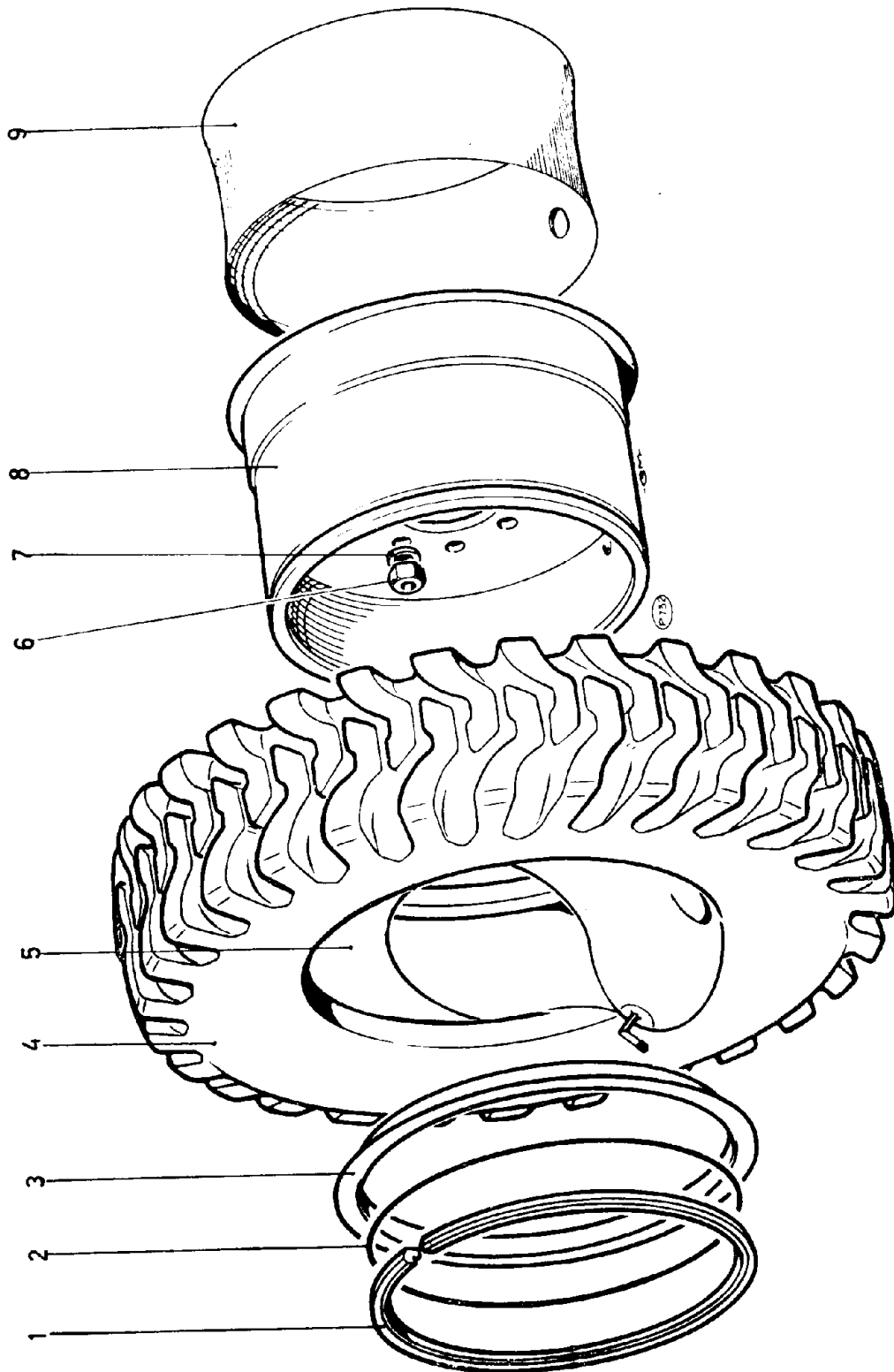


FIG. 1 : 27



**POWER AND TRANSMISSION  
DRIVE WHEEL ASSEMBLY**

Fig. No.	1:27 Part No.	Description	Qty	Remarks
1A	023014	Wheel Assembly, R.H.	1	S'ced by 023562, S'ced by 023790
1B	023019	Wheel Assembly, L.H.	1	
1		Locking Ring	1	S'ced by 023565, S'ced by 023789, see BTSB 274-114
2		'O' Ring	1	
3		Detachable Rim	1	
4	023176	Tyre — 14.9/13 x 24" x 8 ply	1	Part of Drive Wheel Assembly
5	023177	Inner Tube	1	
6	04487	Wheel Nut.	8	S'ced by 023563 S'ced by 023564
7	04253	Spring Washer	8	S'ced by 09693, see BTSB 272/114
8	023055	Drive Wheel, W.A.	1	Superseded by 04576, see BTSB 272/114
9	023178	Flap	1	Superseded by 023560, S'ced by 023676
		Wheel Assembly, R.H.	1	
		Wheel Assembly, L.H.	1	
		Tyre, 13 x 24 x 8 ply	1	
		Inner Tube.	1	
		Drive Wheel, W.A.	1	Standard

NOTE:- The Above Tyre Equipment applies to Series LS45.LS55 only.

Tyre Equipment LS55 SL only.

029201	Drive Wheel Assembly R.H.	1
029202	Drive Wheel Assembly L.H.	1

Consisting of the Following Items:-

023676	Drive Wheel W.A.	1
023564	Tube	1
029199	Tyre	1
09702	Washer	8
09693	Nut - Wheel	8

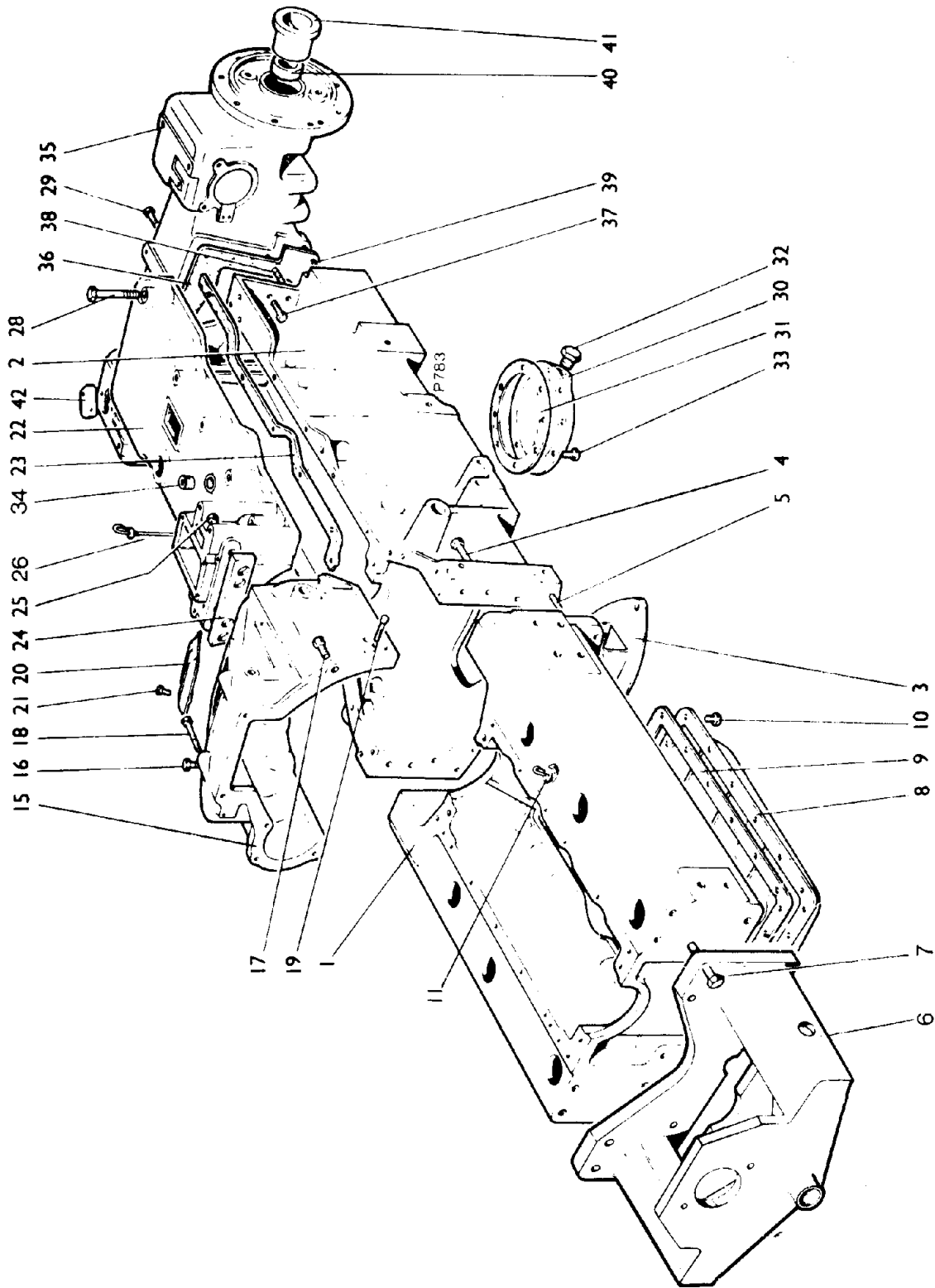


FIG. 1 : 28



## POWER AND TRANSMISSION SUMP FRAMES, COVERS AND AXLE CASES (G/Box)

Fig. No.	1:28 Part No.	Description	Qty	Remarks
1	012716	Main Frame Rear ( $\frac{5}{8}$ " Dowel Holes)	1	
2	021242	Main Frame Front	1	S'seded by 021115, Synchromesh
3	021243	Clutch Pit Cover	1	S'seded by 021244
3A	021185	Washer, $\frac{1}{4}$ "	2	
3B	021245	Setscrew, $\frac{1}{4}$ " UNC x $\frac{3}{8}$ " (Plated)	2	
4	021246	Bolt, $\frac{7}{16}$ " UNC x $1\frac{7}{8}$ "	4	
4A	021247	Bolt, $\frac{7}{16}$ " UNC x $2\frac{3}{4}$ "	6	Main Frame front to rear
4B	020285	Spring Washer, $\frac{7}{16}$ "	10	
4C	021191	Nut, $\frac{7}{16}$ " UNC	4	
5	012417	Dowel, $\frac{5}{8}$ " x $1\frac{1}{8}$ "	2	
6	06251	Pump and Axle Mount	1	
6A	04986	Pump and Axle Mount	1	
6B	021248	Plastic Plug, $1\frac{1}{4}$ " dia.	2	
6C	012393	Bush — Pump and Axle Mount	2	Not illustrated
7	04482	Bolt, $\frac{7}{16}$ " UNC x $1\frac{1}{4}$ "	10	Ext. to Front Main Frame
7A	020285	Spring Washer, $\frac{7}{16}$ "	10	
8	012394	Sump Cover	1	
9	021250	Gasket — Sump Cover	1	
10	012709	Setscrews, $\frac{5}{16}$ " UNC x $\frac{3}{8}$ "	18	
10A	012424	Spring Washer, $\frac{5}{16}$ "	18	
10B	012741	Drain Plug, $\frac{1}{2}$ " BSP, flanged	1	S'seded by 021239 Not interchangeable S'seded by 021278
10C	012742	Sealing Washer, Special (Aluminium)	1	
11	021251	Dipstick	1	
15	021252	Clutch Housing	1	
16	012710	Setscrew, $\frac{3}{8}$ " UNC x $1\frac{1}{8}$ "	4	Housing to Rear Frame
16A	013063	Spring Washer, $\frac{3}{8}$ "	4	
17	021253	Bolt, $\frac{3}{8}$ " UNC x $2\frac{1}{4}$ "	1	Housing to Support Plate
18	021254	Bolt, $\frac{3}{8}$ " UNC x $5\frac{1}{4}$ "	2	
18A	013063	Spring Washer, $\frac{3}{8}$ "	1	
18B	012794	Nut, $\frac{3}{8}$ " UNC	3	
18C	021255	Guide Bracket — Throttle Cable	1	
19	021256	Peg — Timing Location	1	
20	021257	Cover — Clutch Housing	1	
21	020365	Setscrew, $\frac{1}{4}$ " UNC x $\frac{1}{2}$ "	2	
21A	012428	Spring Washer, $\frac{1}{4}$ "	2	
22	021258	Gearbox Cover (6 speed)	1	Superseded : by 02116 see B T S B 231/87
23	021259	Gasket — Gearbox Cover	2	
24	012404	Wedge — Clutch Housing	1	
24A	012405	Shim — Clutch Housing	As Req'd	
24B	021260	Bolt, $\frac{7}{16}$ " UNC x $3\frac{1}{2}$ "	2	
25	021247	Bolt, $\frac{7}{16}$ " UNC x $2\frac{3}{4}$ "	1	Gearbox Cover to Clutch Housing
25A	021262	Bolt, $\frac{7}{16}$ " UNC x $2\frac{1}{2}$ "	1	
25B	020285	Spring Washer, $\frac{7}{16}$ "	4	
26	012429	Dipstick Assembly	1	S'seded by 021263 from U565/2724, S'seded by 021279 (Rev. Dipstick Assy. as B T S B 231/87) S'seded by 023748, S'seded by 023804

For changes to Skid Unit refer to B T S B 254/103 and B T S B 231/87.

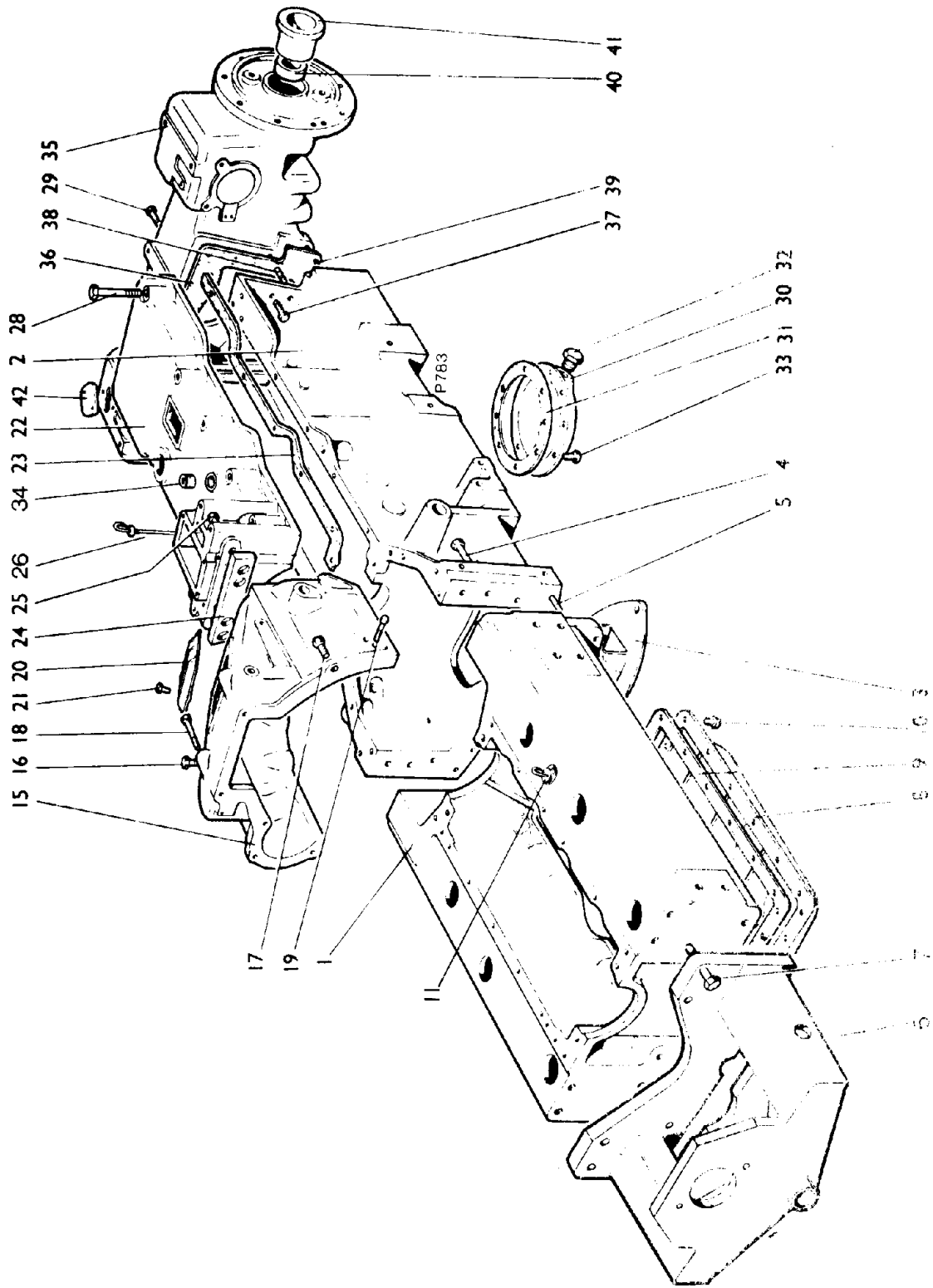
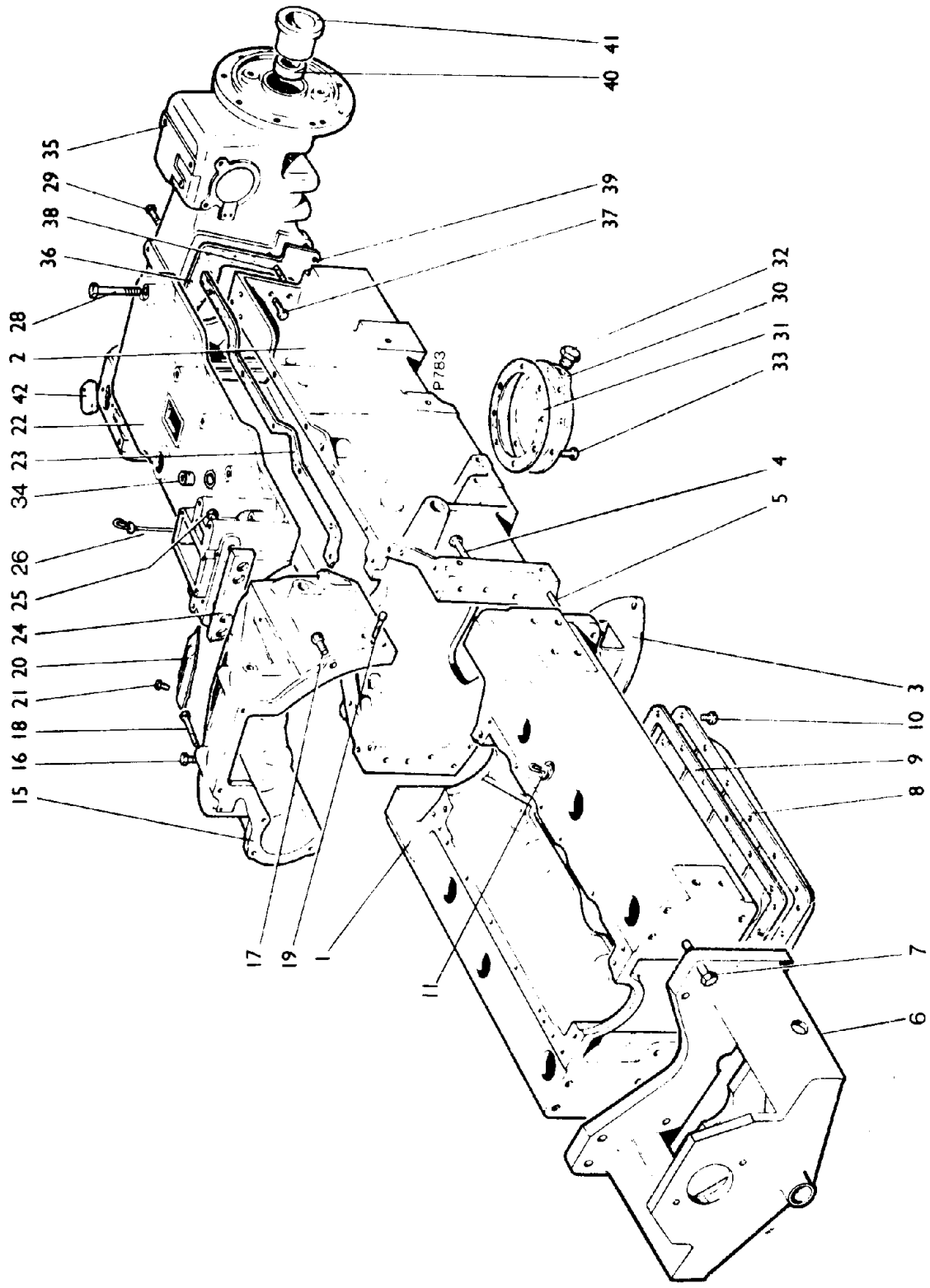


FIG. 1 : 28



**POWER AND TRANSMISSION  
SUMP FRAMES, COVERS AND AXLE CASES (G/Box)**

Fig. No. 1:28	Part No.	Description	Qty	Remarks
27	021264	Sleeve — Dipstick	1	Not illustrated
28	012406	Bolt, $\frac{7}{16}$ " UNC x $3\frac{1}{4}$ "	7	
28A	021265	Bolt, $\frac{7}{16}$ " UNC x $3\frac{1}{4}$ " (Plated)	2	Gearbox
28B	021266	Bolt, $\frac{7}{16}$ " UNC x $6\frac{3}{4}$ "	1	
28C	021267	Bolt, $\frac{3}{8}$ " UNC x $6\frac{1}{2}$ " Special	2	to
28D	020285	Spring Washer, $\frac{7}{16}$ "	8	
28E	06368	Spring Washer, $\frac{7}{16}$ " (Plated)	2	Frame
28F	013063	Spring Washer, $\frac{3}{8}$ "	4	
29	012407	Bolt, $\frac{7}{16}$ " UNC x $4\frac{1}{2}$ "	4	
29A	012360	Bolt, $\frac{7}{16}$ " UNC x $7\frac{3}{4}$ "	1	Axle Case to
29B	020285	Spring Washer, $\frac{7}{16}$ "	5	
30	021268	Sump Cover — Rear Frame	1	
31	021269	Gasket	1	
32	021270	Drain Plug, $\frac{1}{4}$ " BSP	1	
32A	021271	Sealing Washer, $\frac{1}{2}$ "	1	
33	012709	Setscrew, $\frac{5}{16}$ " UNC x $\frac{5}{8}$ "	8	
33A	012424	Spring Washer, $\frac{5}{16}$ "	8	
34	012430	Taper Plug, 1" BSP	1	
35	021272	Rear Axle Casing	1	
35A	012741	Drain Plug, $\frac{1}{2}$ " BSP (Flanged)	1	Superseded by 021239 see B T S B 254/103
35B	012742	Sealing Washer, $\frac{7}{8}$ " Special (Aluminium)	1	
35C	012412	Dowel, $\frac{7}{16}$ " — Axle Case to Reductions	4	
36	012413	Gasket	1	
37	012414	Screw, Cap Head, $\frac{7}{16}$ " UNC	2	
38	021273	Stud, $\frac{7}{16}$ " UNC x 2" — front flange	5	Axle
39	021274	Setscrew, $\frac{7}{16}$ " UNC x $1\frac{1}{4}$ "	2	
39A	021275	Nut, $\frac{7}{16}$ " UNC	5	Main
39B	020285	Spring Washer, $\frac{7}{16}$ "	7	
39C	021276	Lockwasher, $\frac{7}{16}$ "	2	
39D	012417	Dowel, $\frac{5}{8}$ " dia. x $1\frac{1}{8}$ "	2	
40	012419	Oil Seal	4	
41	012420	Oil Seal Housing	2	
41A	012409	Plug	1	Ram Cylinder
41B	012410	'O' Ring, $3\frac{7}{8}$ " int. dia.	1	
41C	012425	Blanking Plate	1	Oil Pipe
41D	012426	Gasket	1	
41E	021277	S'screw, $\frac{1}{4}$ " UNC x $\frac{5}{8}$ "	2	Rear Axle Case
41F	012428	Spring Washer, $\frac{1}{4}$ "	2	
41G	012421	Cover Plate	1	Gasket
41H	021291	Gasket	1	
41J	014230	Setscrew, $\frac{5}{16}$ " UNC x $\frac{3}{4}$ "	3	Washer, Spring $\frac{5}{16}$ "
41K	012424	Washer, Spring $\frac{5}{16}$ "	3	
41L	05065	Grease Nipple Extension (Steel 5")	2	For Clutch Cross Shaft
41M	012766	Grease Nipple, $\frac{1}{4}$ " ANF	2	
41N	021292	Dowel	1	Dowel
41P	012712	Dowel	1	



**FIG. 1 : 28A**

**POWER AND TRANSMISSION, SUMP COVERS AND AXLE CASE (GEARBOX) MARK 111**

Fig.No.1:28A	Part No.	Description	Qty	Remarks
1	045932	Mainframe - Rear	1	
2	045933	Mainframe - Front	1	
3	021244	Clutch Pit Cover	1	
3A	021185	Washer	2	
3B	021245	Setscrew	2	
4	012391	Bolt	4)	Mainframe
4A	045935	Stud	6)	Front to
4B	020285	Washer Spring	10)	Rear
4C	021191	Nut	10)	
5	012417	Dowel	2	
6		Pump and Axle Mount	1	Refer to Fig. 4:02A
7	05824	Bolt	10)	Extension to
7A	020285	Washer Spring	10)	Front Main Frame
8	012394	Sump Cover	1	
9	021290	Gasket - Sump Cover	1	
10	012709	Setscrew	18	
10A	012424	Washer Spring	18	
10B	012741	Drain Plug	1	
10C	012742	Sealing Washer (Aluminium)	1	
11	045936	Dipstick - Sump	1	
11A	045937	'O' Ring, Dipstick	1	
11B	045938	Sleeve - Dipstick	1	
15	045939	Clutch Housing	1	
16	045940	Setscrew	6)	Housing to
16A	013063	Washer Spring	6)	Rear Frame
17	021253	Bolt	1	
18	021254	Bolt	2)	Housing to
18A	013063	Washer Spring	3)	Support Plate
18B	012794	Nut	3)	
18C	012822	Guide Bracket - Throttle Cable	1	
19	021256	Peg - Timing Location	1	
20	021257	Cover - Clutch Housing	1	
21	020365	Setscrew	2	
21A	012428	Washer Spring	2	
22	045941	Gearbox Cover	1	
23	021117	Gasket - Gearbox Cover	2	
24	012404	Wedge - Clutch Housing	1	
24A	012405	Shim, Clutch Housing	AR	
24B	021260	Bolt	2)	Gearbox Cover to
25	021261	Bolt	1)	Clutch Housing
25A	021262	Bolt	1)	
25B	020285	Washer Spring	4)	
26	021279	Dipstick assembly	1	S'ceded by 023802
26A	045942	Sleeve - Dipstick	1	
26B	045612	'O' Ring Dipstick	1	

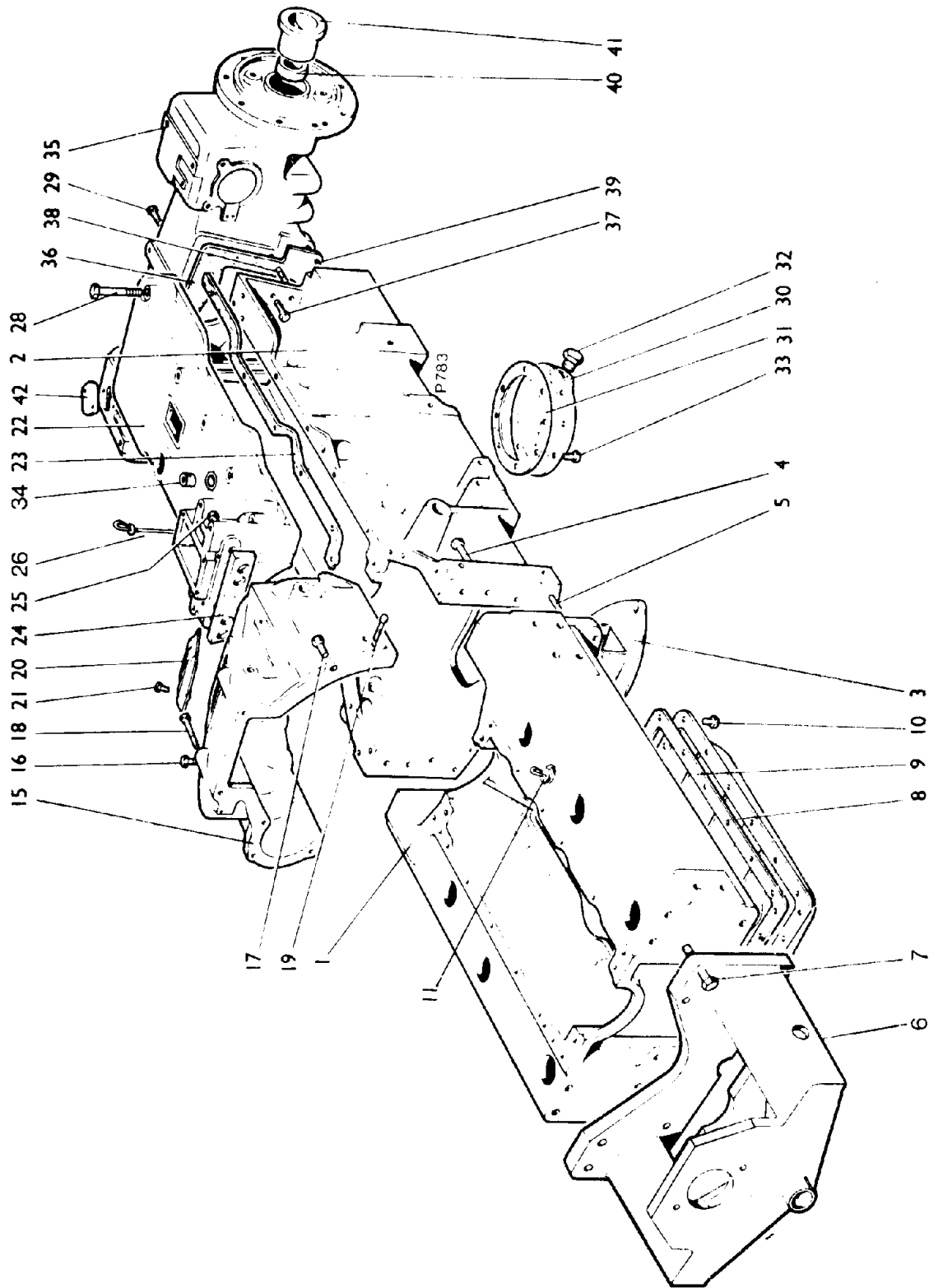


FIG. 1 : 28A



## POWER AND TRANSMISSION SUMP COVERS AND AXLE CASE (GEARBOX) MARK III

Fig. No. 1:28A	Part No.	Description	Qty	Remarks
28	012406	Bolt, $\frac{7}{16}$ " UNC x $3\frac{1}{4}$ " long . . . . .	9	Gearbox Cover to Rear Frame
28A	021266	Bolt, $\frac{7}{16}$ " UNC x $6\frac{3}{4}$ " long . . . . .	1	
28B	021267	Bolt, $\frac{3}{8}$ " UNC x $6\frac{1}{2}$ " long — special . . . . .	2	
28C	020285	Washer Spring, $\frac{7}{16}$ " dia. . . . .	10	
28D	013063	Washer Spring, $\frac{3}{8}$ " dia. . . . .	2	
29	012407	Bolt, $\frac{7}{16}$ " UNC x $4\frac{1}{2}$ " long . . . . .	4	Axle Case to Gearbox Cover
29A	012360	Bolt, $\frac{7}{16}$ " UNC x $7\frac{3}{4}$ " long . . . . .	1	
29B	020285	Washer Spring, $\frac{7}{16}$ " dia. . . . .	5	
30	021268	Sump Cover — Rear Frame . . . . .	1	
31	021269	Gasket — Sump Cover . . . . .	1	
32	021270	Drain Plug, $\frac{1}{4}$ " BSP . . . . .	1	
32A	021271	Sealing Washer, $\frac{1}{2}$ " dia. . . . .	1	
33	012709	Setscrew, $\frac{5}{16}$ " UNC x $\frac{5}{8}$ " long . . . . .	8	
33A	012424	Washer Spring, $\frac{5}{16}$ " dia. . . . .	8	
34	012430	Taper Plug, 1" BSP . . . . .	1	
35	021272	Axle Casing — Drive . . . . .	1	
35A	021239	Drain Plug, $\frac{3}{4}$ " BSP flanged . . . . .	1	
35B	021278	Sealing Washer — Aluminium . . . . .	1	
35C	012412	Dowel, $\frac{7}{16}$ " Axle Case to Red Units . . . . .	4	
36	012413	Gasket Axle Case to Frame . . . . .	1	
37	012414	Screw Cap Head, $\frac{7}{16}$ " UNC. . . . .	2	
38	021273	Stud, $\frac{7}{16}$ " UNC x 2" — Front Flange . . . . .	5	
39	021274	Setscrew, $\frac{7}{16}$ " UNC x $1\frac{1}{4}$ " long . . . . .	2	
39A	021191	Nut, $\frac{7}{16}$ " UNC . . . . .	5	
39B	020285	Washer Spring, $\frac{7}{16}$ " dia. . . . .	7	
39C	021276	Lockwasher, $\frac{7}{16}$ " dia. . . . .	2	
39D	012417	Dowel, $\frac{5}{8}$ " dia. x $1\frac{1}{8}$ " long . . . . .	2	
40	012419	Oil Seal . . . . .	4	
41	012420	Oil Seal Housing . . . . .	2	
41A	012409	Plug . . . . .	1	Ram Cyl. Aperture
41B	012410	'O' Ring, $3\frac{7}{8}$ " int. dia. . . . .	1	
41C	012425	Blanking Plate . . . . .	1	Drive Axle Case
41D	012426	Gasket . . . . .	2	
41E	021277	Setscrew, $\frac{1}{4}$ " UNC x $\frac{5}{8}$ " long . . . . .	2	Aperture
41F	012428	Washer Spring . . . . .	2	
41G	012421	Cover Plate . . . . .	1	Drive Axle Case
41H	021291	Gasket . . . . .	1	
41J	022490	Setscrew, $\frac{5}{16}$ " UNC x $\frac{3}{4}$ " long . . . . .	3	
41K	012424	Washer Spring, $\frac{5}{16}$ " dia. . . . .	3	Clutch Cross Shaft
41L	05065	Grease Nipple Extension . . . . .	2	
41M	012766	Grease Nipple, $\frac{1}{4}$ " ANF . . . . .	2	
41N	021292	Dowel . . . . .	1	
41P	012712	Dowel . . . . .	1	

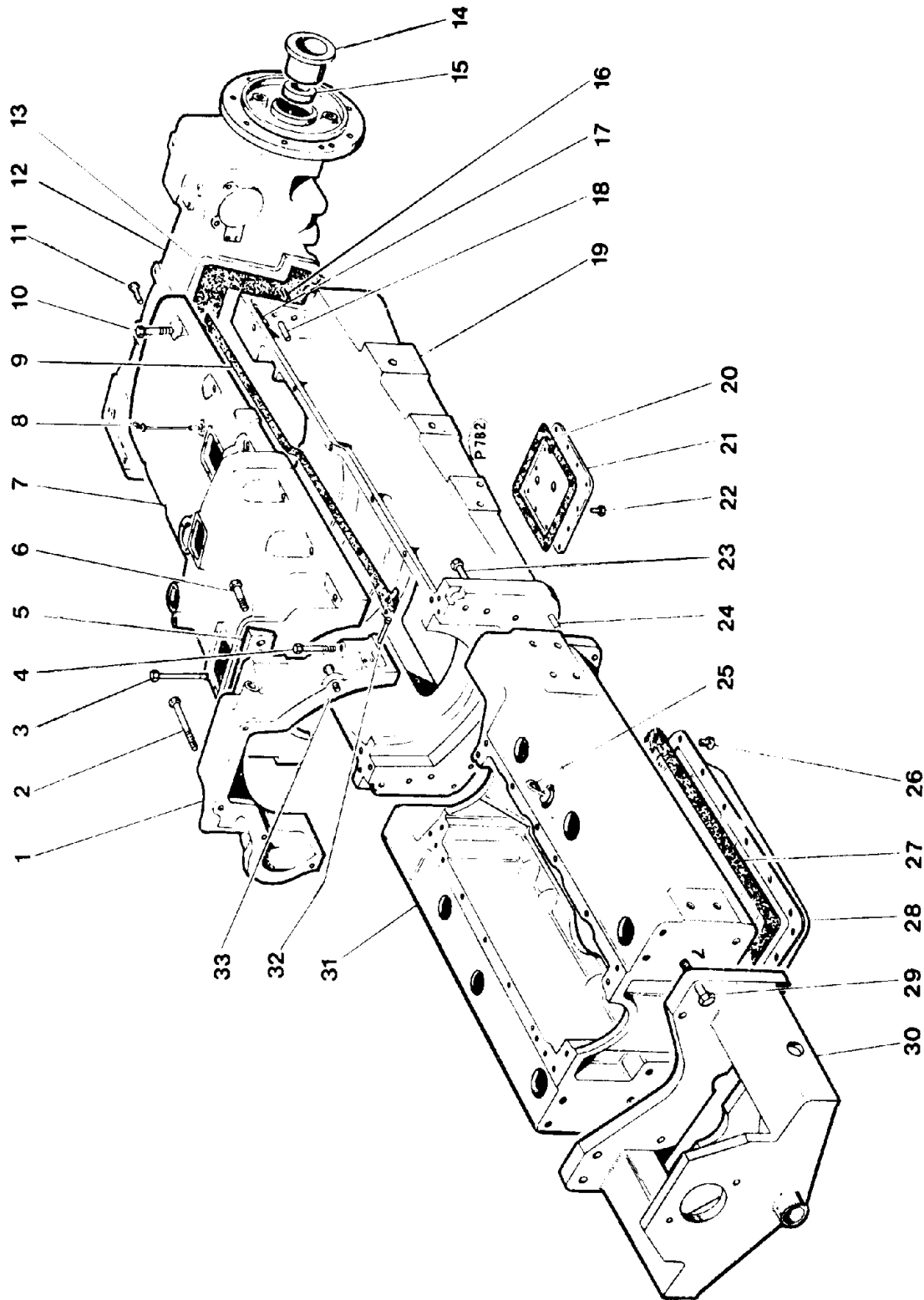


FIG. 1 : 29



## POWER AND TRANSMISSION SUMP FRAMES, COVERS AND AXLE CASES (T/C Only)

Fig. No. 1:29	Part No.	Description	Qty	Remarks
1	06102	Flywheel Housing	1	
2	021254	Bolt, $\frac{3}{8}$ " UNC x $5\frac{1}{4}$ " long	2	
2A	04579	Spring Washer, $\frac{3}{8}$ " dia.	2	
3	06210	Bolt, Special	2	G/B Cover to Mainframe
3A	04625	Spring Washer, $\frac{7}{16}$ " dia.	12	
4	04648	Setscrew, $\frac{3}{8}$ " UNC x $3\frac{1}{2}$ " long	2	
4A	04579	Spring Washer, $\frac{3}{8}$ " dia.	2	
5	012404	Wedge	1	
5A	012405	Shim	As Req'd	
6	04483	Bolt, $\frac{7}{16}$ " UNC x 2" long	4	
6A	04625	Spring Washer, $\frac{7}{16}$ " dia.	4	
7	06101	Gearbox Cover	1	
8	012429	Dipstick	1	
9	06211	Gasket	2	
10	012406	Bolt, $\frac{7}{16}$ " UNC x $3\frac{1}{4}$ " long	10	G/B Cover to Mainframe
11	012407	Bolt, $\frac{1}{16}$ " UNC x $4\frac{1}{2}$ " long	4	} Axle Case to Gearbox Cover
11A	012360	Bolt, $\frac{7}{16}$ " UNC x $7\frac{3}{4}$ " long	1	
11B	012408	Sealing Washer, $\frac{7}{16}$ " dia.	1	
11C	04625	Spring Washer, $\frac{7}{16}$ " dia.	5	
12	021272	Rear Axle Casing	1	
12A	021293	Drain Plug, $\frac{1}{2}$ " BSP	1	} Superseded by 021239 see BTSB 254/103
12B	012742	Sealing Washer, $\frac{7}{8}$ " dia.	1	
12C	012412	Dowel	4	} Superseded by 021278 see BTSB 254/103 Axle Case to Reduction Unit
13	012413	Gasket	1	
14	021294	Oil Seal Housing	2	
15	012419	Oil Seal	4	
16	012415	Stud, $\frac{7}{16}$ " UNC x $1\frac{11}{16}$ " long	5	
16A	021295	Setscrew, $\frac{7}{16}$ " UNC x $1\frac{1}{8}$ " long	2	
16B	021275	Nut, $\frac{7}{16}$ " UNC	7	
16C	020285	Spring Washer, $\frac{7}{16}$ " dia.	7	
16D	021276	Lockwasher, $\frac{7}{16}$ " dia.	2	
17	012414	Screw, Cap Head, $\frac{7}{16}$ " UNC	2	
18	012417	Dowel, $\frac{5}{8}$ " dia.	2	
19	06100	Mainframe — Rear	1	
20	06111	Gasket	1	
20A	012409	Plug	1	
20B	012410	'O' Ring	1	
21	06182	Cover Plate	1	
21A	05917	'O' Ring, 1" dia.	2	
22	06217	Setscrew, $\frac{7}{16}$ " UNC x 1" long	12	
22A	04570	Washer, F.D., $\frac{7}{16}$ " dia.	12	
23	012391	Bolt, $\frac{7}{16}$ " UNC x $1\frac{3}{4}$ " long	4	} Item 19 to 31
23A	012392	Bolt, $\frac{7}{16}$ " UNC x 1" long	6	
23B	020285	Spring Washer, $\frac{7}{16}$ " dia.	10	
23C	04528	Nut, $\frac{7}{16}$ " UNC	4	
24	012406	Dowel, $\frac{5}{8}$ " dia.	2	
25	021251	Dipstick	1	
26	012709	Setscrew, $\frac{5}{16}$ " UNC x $\frac{5}{8}$ " long	18	

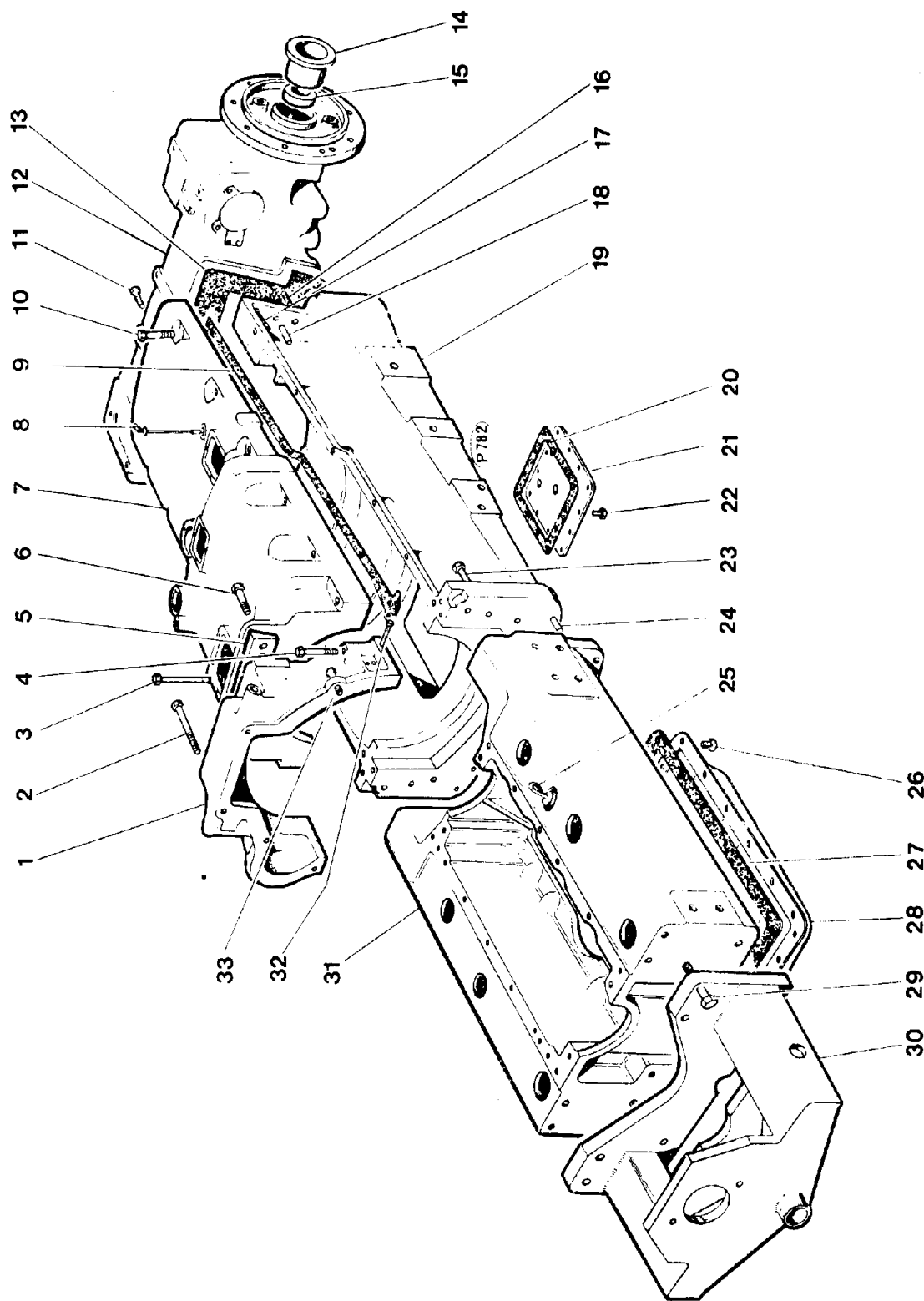


FIG. 1 : 29



**POWER AND TRANSMISSION  
SUMP FRAMES, COVERS AND AXLE CASES (T/C Only)**

Fig. No. 1:29	Part No.	Description	Qty	Remarks
26A	04556	Washer, $\frac{5}{16}$ " dia.	18	
26B	021293	Drain Plug, $\frac{1}{2}$ " BSP	1	
26C	012397	Sealing Washer, $\frac{7}{8}$ " dia.	1	
27	021290	Gasket	1	
28	012394	Sump Cover	1	
29	012391	Bolt, $\frac{7}{16}$ " UNC x $1\frac{3}{4}$ " long	4	
29A	012708	Stud, $\frac{7}{16}$ " UNC x $2\frac{5}{16}$ " long	6	
29B	04528	Nut, $\frac{7}{16}$ " UNC	6	
29C	020285	Spring Washer, $\frac{7}{16}$ " dia.	10	
30	06251	Pump & Axle Mounting Frame	1	} Not illustrated
30A	012393	Bush	2	
31	012390	Mainframe Front	1	
32	06147	Timing Peg	1	
33	04472	Bolt, $\frac{1}{2}$ " UNC x $2\frac{1}{4}$ " long	1	
33A	04579	Spring Washer, $\frac{3}{8}$ " dia.	1	} Starter Housing
33B	04478	Bolt, $\frac{1}{2}$ " UNC x $2\frac{1}{2}$ " long	1	
33C	04525	Nut, $\frac{1}{2}$ " UNC	1	
33D	04579	Spring Washer, $\frac{3}{8}$ " dia.	1	
33E	04515	Bolt, $\frac{1}{2}$ " UNC x 2" long	2	
33F	04579	Spring Washer, $\frac{3}{8}$ " dia.	2	

For changes to Skid Unit refer to BTSB 254/103

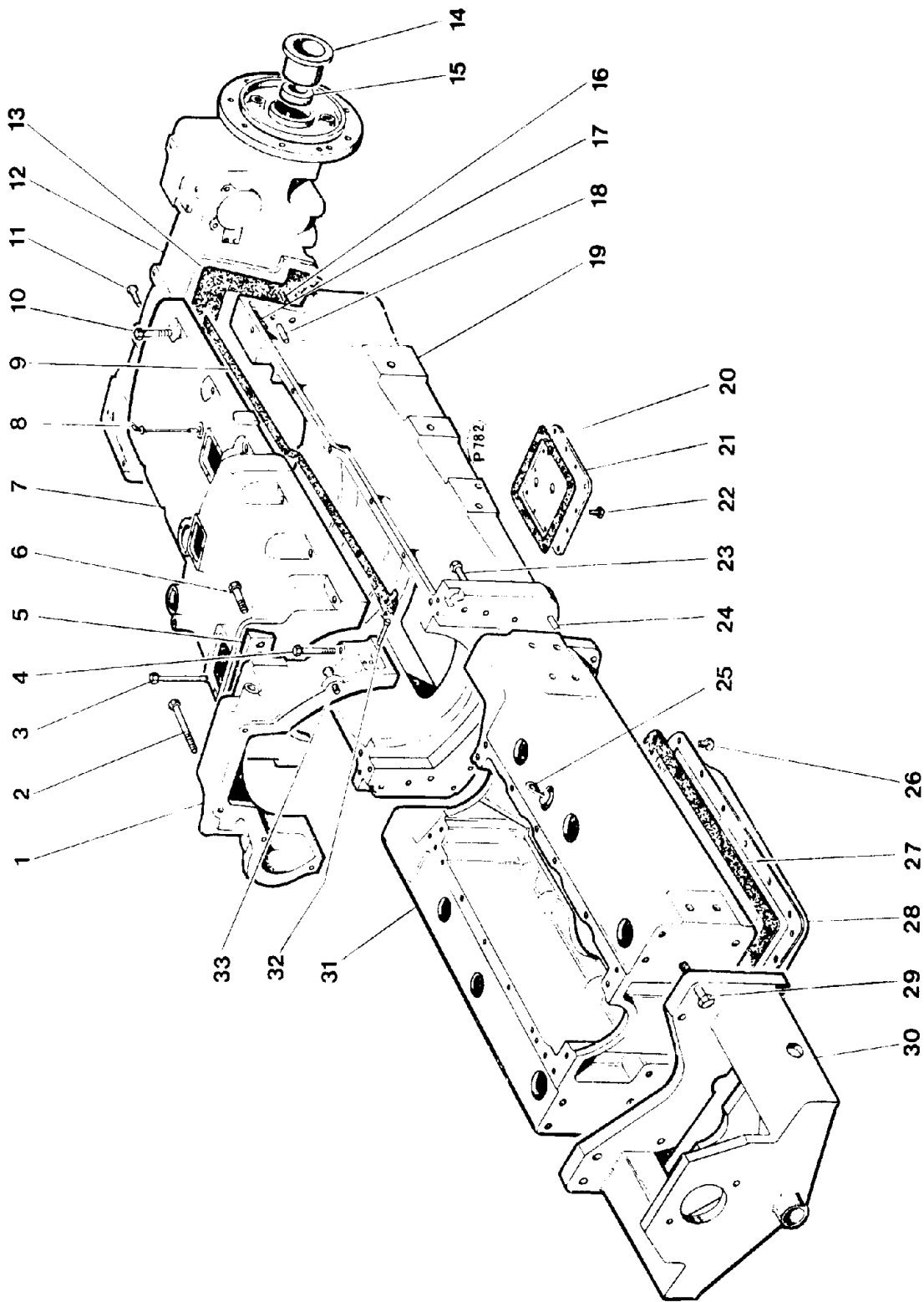


FIG. 1 : 29A



## POWER AND TRANSMISSION SUMP FRAMES COVERS AND AXLE CASE (TORQUE CONVERTER) MARK III

Fig. No.	1:29A Part No.	Description	Qty	Remarks
1	027653	Flywheel Housing	1	
2	021254	Bolt, $\frac{3}{8}$ " UNC x $5\frac{1}{4}$ " long	2	
2A	04579	Washer Spring, $\frac{3}{8}$ " dia.	2	
3	06210	Bolt, Special — Gearbox Cover to M/F	2	
3A	04625	Washer Spring, " dia.	12	
4	04648	Setscrew, $\frac{3}{8}$ " UNC x $3\frac{1}{2}$ " long	2	
4A	04579	Washer Spring, $\frac{3}{8}$ " dia.	2	
5	012404	Wedge	1	
5A	012405	Shim	As Req'd.	
6	04483	Bolt, $\frac{7}{16}$ " UNC x 2" long	4	
6A	04625	Washer Spring, $\frac{3}{8}$ " dia.	4	
7	06101	Gearbox Cover	1	
8	012429	Dipstick	1	
9	06211	Gasket	1	
10	012406	Bolt, $\frac{7}{16}$ " UNC x $3\frac{1}{2}$ " long	10	
11	012407	Bolt, $\frac{7}{16}$ " UNC x $4\frac{1}{2}$ " long	4	
11A	012360	Bolt, $\frac{7}{16}$ " UNC x $7\frac{3}{4}$ " long	1	
11B	012408	Sealing Washer, $\frac{7}{16}$ " dia.	1	
11C	04625	Washer Spring, $\frac{7}{16}$ " dia.	5	
12	021272	Drive Axle Casing	1	
12A	021239	Drain Plug, $\frac{3}{4}$ " BSP	1	
12B	021278	Sealing Washer — Aluminium	1	
12C	012412	Dowel — Axle Case to Red Unit	4	
13	012413	Gasket	1	
14	021294	Oil Seal Housing	2	
15	012419	Oil Seal	4	
16	012415	Stud, $\frac{7}{16}$ " UNC x $1\frac{11}{16}$ " long	5	
16A	021295	Setscrew, $\frac{7}{16}$ " UNC x $1\frac{1}{8}$ " long	2	
16B	021275	Nut, $\frac{7}{16}$ " UNC	7	
16C	020285	Washer Spring, $\frac{7}{16}$ " dia.	7	
16D	021276	Lockwasher, $\frac{7}{16}$ " dia.	2	
17	012414	Screw Cap Head, $\frac{7}{16}$ " UNC	2	
18	012417	Dowel, $\frac{5}{8}$ " dia.	2	
19	06100	Mainframe — Front	1	
20	06111	Gasket	1	
20A	012409	Plug	1	
20B	012410	'O' Ring	1	
21	06182	Cover Plate	1	
21A	05917	'O' Ring	2	
22	06217	Setscrew, $\frac{7}{16}$ " UNC x 1" long	12	
22A	04570	Washer Fan Disc, $\frac{7}{16}$ " dia.	12	
23	012391	Bolt, $\frac{3}{16}$ " UNC x $1\frac{3}{4}$ " long	4	
23A	012392	Bolt, $\frac{7}{16}$ " UNC x $1\frac{5}{8}$ " long	6	
23B	020285	Washer Spring, $\frac{7}{16}$ " dia.	10	
23C	04528	Nut, $\frac{7}{16}$ " UNC	4	
24	012417	Dowel, $\frac{5}{8}$ " dia.	2	
25	045936	Dipstick	1	

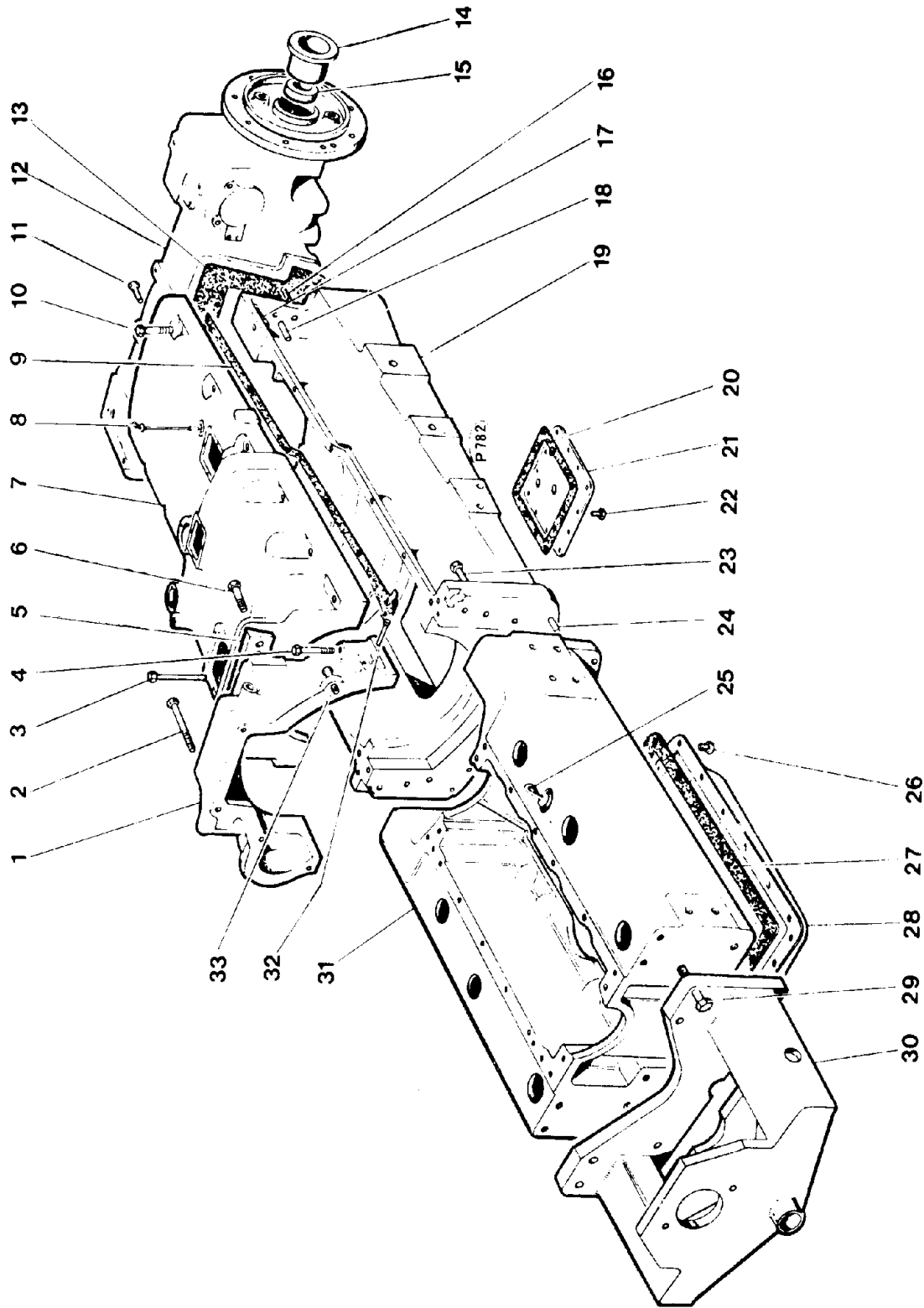
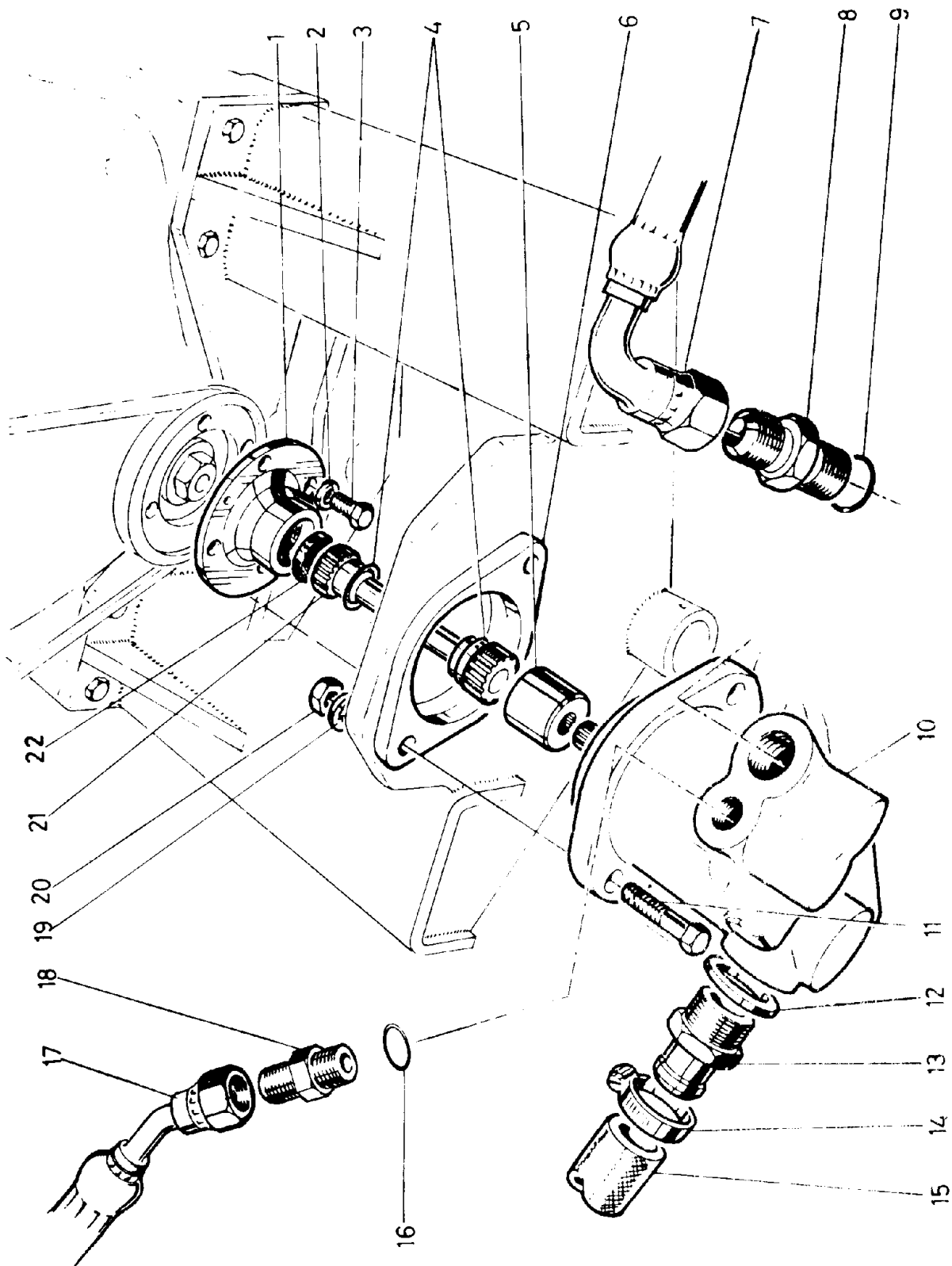


FIG. 1 : 29 A



**POWER AND TRANSMISSION  
SUMP FRAMES COVERS AND AXLE CASE (TORQUE CONVERTER) MARK III**

Fig.No.1:29A	Part No.	Description	Qty	Remarks
25A	045937	'O' Ring — Dipstick . . . . .	1	
25B	045938	Sleeve — Dipstick . . . . .	1	
26	012709	Setscrew, $\frac{5}{16}$ " UNC x $\frac{5}{8}$ " long . . . . .	18	
26A	012424	Washer, $\frac{7}{16}$ " dia. . . . .	18	
26B	012741	Drain Plug . . . . .	1	
26C	012742	Sealing Washer — Aluminium . . . . .	1	
27	021290	Gasket . . . . .	1	
28	012394	Sump Cover . . . . .	1	
29	012391	Bolt, $\frac{7}{16}$ " UNC x $1\frac{3}{4}$ " long . . . . .	4	
29A	012708	Stud, $\frac{7}{16}$ " UNC x $2\frac{5}{16}$ " long . . . . .	6	
29B	04528	Nut, $\frac{7}{16}$ " UNC . . . . .	6	
29C	020285	Washer Spring, $\frac{7}{16}$ " dia. . . . .	10	
30		Pump and Axle Mount . . . . .	1	Refer to Fig. 4:02A
31	045932	Mainframe — Rear . . . . .	1	
32	06147	Timing Peg . . . . .	1	
33	04472	Bolt, $\frac{3}{8}$ " UNC x $2\frac{1}{4}$ " long . . . . .	1	
33A	04579	Washer Spring, $\frac{3}{8}$ " dia. . . . .	1	
33B	04478	Bolt, $\frac{3}{8}$ " UNC x $2\frac{1}{2}$ " long . . . . .	1	Starter Housing
33C	04525	Nut, $\frac{3}{8}$ " UNC . . . . .	1	
33D	04579	Washer Spring, $\frac{3}{8}$ " dia. . . . .	1	
33E	04515	Bolt, $\frac{3}{8}$ " UNC x 2" long . . . . .	2	
33F	04579	Washer Spring, $\frac{3}{8}$ " dia. . . . .	2	



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FIG. 1 : 30



**POWER AND TRANSMISSION  
CESSNA PUMP DRIVE AND HOSES**

Fig. No. 1:30	Part No.	Description	Qty	Remarks
1	012325	Coupling — Shaft/Drive Pulley . . . . .	1	
2	05081	Spring Washer, $\frac{5}{16}$ " dia. . . . .	4	
3	04452	Bolt, $\frac{5}{16}$ " UNC x 1" long . . . . .	4	
4	012324	'O' Ring . . . . .	2	
5	011661	Pump Drive Coupling. . . . .	1	} S'ceded by 011985 (Only interchangeable if 012877 supplied)
6	023191	Pump Mounting Packer . . . . .	1	
7	023253	Hose, Pump to Valve Bank . . . . .	1	
8	010632	Adaptor, Outlet . . . . .	1	Comp. with 10550 'O' Ring
9	010550	'O' Ring . . . . .		
10	010973	Pump Assembly. . . . .	1	Comp. with 10728 Flo' Div
11	04493	Bolt, $\frac{1}{2}$ " UNF x 1 $\frac{1}{2}$ " long. . . . .	2	Pump Mounting
12	010549	'O' Ring . . . . .	1	For use with Item 13
13	010185	Adaptor, inlet . . . . .	1	
14	019898	Jubilee Clip . . . . .	2	For use with Item 15
15	023245	Hose, Tank to Pump . . . . .	1	
16	010551	'O' Ring . . . . .	1	For use with Item 18
17	023246	Hose, Pump to Orbitrol . . . . .	1	
18	010995	Adaptor, Outlet, Steering . . . . .	1	
19	04571	Fan Disc Washer, $\frac{1}{2}$ " dia. . . . .	2	} Pump Mounting For use with Item 11
20	04531	Nut, $\frac{1}{2}$ " UNF . . . . .	2	
21	012322	Pump Drive Shaft . . . . .	1	Re-introduced 1.3.76
22	012361	Packer, $\frac{5}{16}$ " Thk. . . . .	As Req'd	
22A	012362	Packer, $\frac{7}{16}$ " Thk. . . . .	As Req'd	
22B	012363	Packer, $\frac{9}{16}$ " Thk. . . . .	As Req'd	
22C	012364	Packer . . . . .	1	Not illustrated

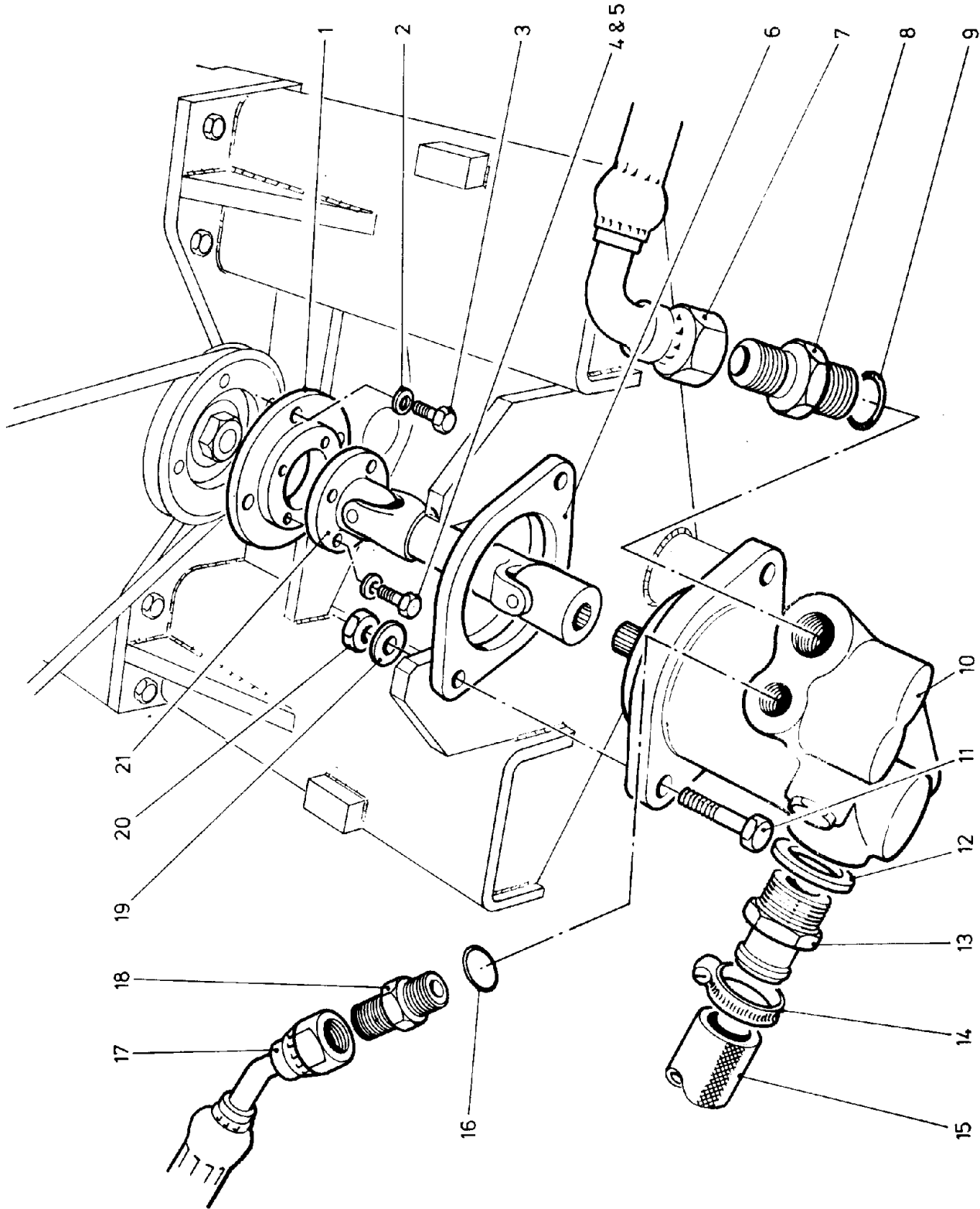
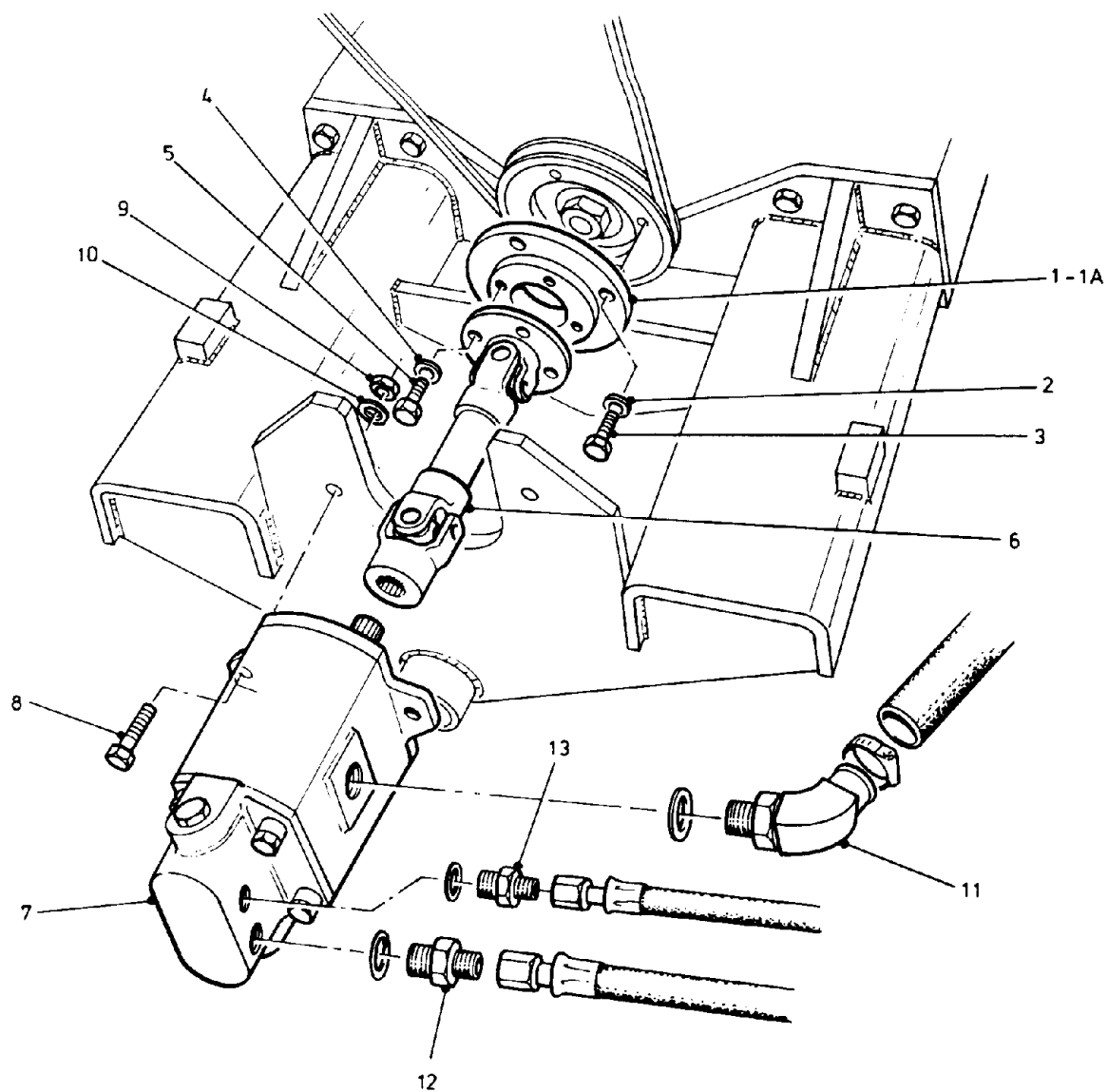


FIG. 1 : 30A



**POWER AND TRANSMISSION  
PUMP DRIVE AND HOSES MARK III**

Fig. No.	Part No.	Description	Qty	Remarks
1	027620	Spacer — Crankshaft Pulley	1	
2	04317	Washer Spring $\frac{5}{16}$ " Dia.	4	
3	04452	Setscrew $\frac{5}{16}$ " UNC x 1" Long	4	
4	04317	Washer Spring $\frac{5}{16}$ " Dia.	4	
5	04452	Setscrew $\frac{5}{16}$ " UNC x 1" Long	4	
6		Packer	1	Not used
7	023246	Hose — Pump to Orbitrol	1	
8	010995	Adaptor — Steering	1	
9	010551	'O' Ring	1	For use with item 8
10	010973	Pump Assembly	1	
11	023192	Bolt $\frac{7}{16}$ " UNF x 3 $\frac{3}{4}$ " Long	2	
12	04402	Dowty Seal	1	
13	010185	Adaptor — Inlet	1	
14	019898	Jubilee Clip	1	
15	023245	Hose — Tank to Pump	1	
16	010550	'O' Ring	1	For use with item 18
17	023253	Hose — Pump to Valve Bank	1	
18	010632	Adaptor Valve	—	
19		Washer	2	Not used
20		Nut	2	
21	027724	Pump Drive Shaft	1	
22	045945	Bearing Pack — Pump Drive Shaft	As Req'd	



**FIG. 1 : 30B**

**POWER AND TRANSMISSION, PUMP DRIVE - DOWTY**

<b>Fig.No.1:30B</b>	<b>Part No.</b>	<b>Description</b>	<b>Qty</b>	<b>Remarks</b>
1	038426	Spacer - Crankshaft	1	S'ceded by 038271
2	04317	Washer	4	
3	05841	Screw	4	
4	04317	Washer	4	
5	04452	Screw	4	
6	038292	Drive Shaft	1	
7	039322	Hydraulic Pump	1	Refer to Fig.6:05B
8	07258	Bolt	2	
9	012166	Nut	2	
10	04557	Washer	2	
11	036434	Adaptor - Suction	1	
12	018513	Adaptor - Valve Bank	1	
13	010457	Adaptor - Steering	1	

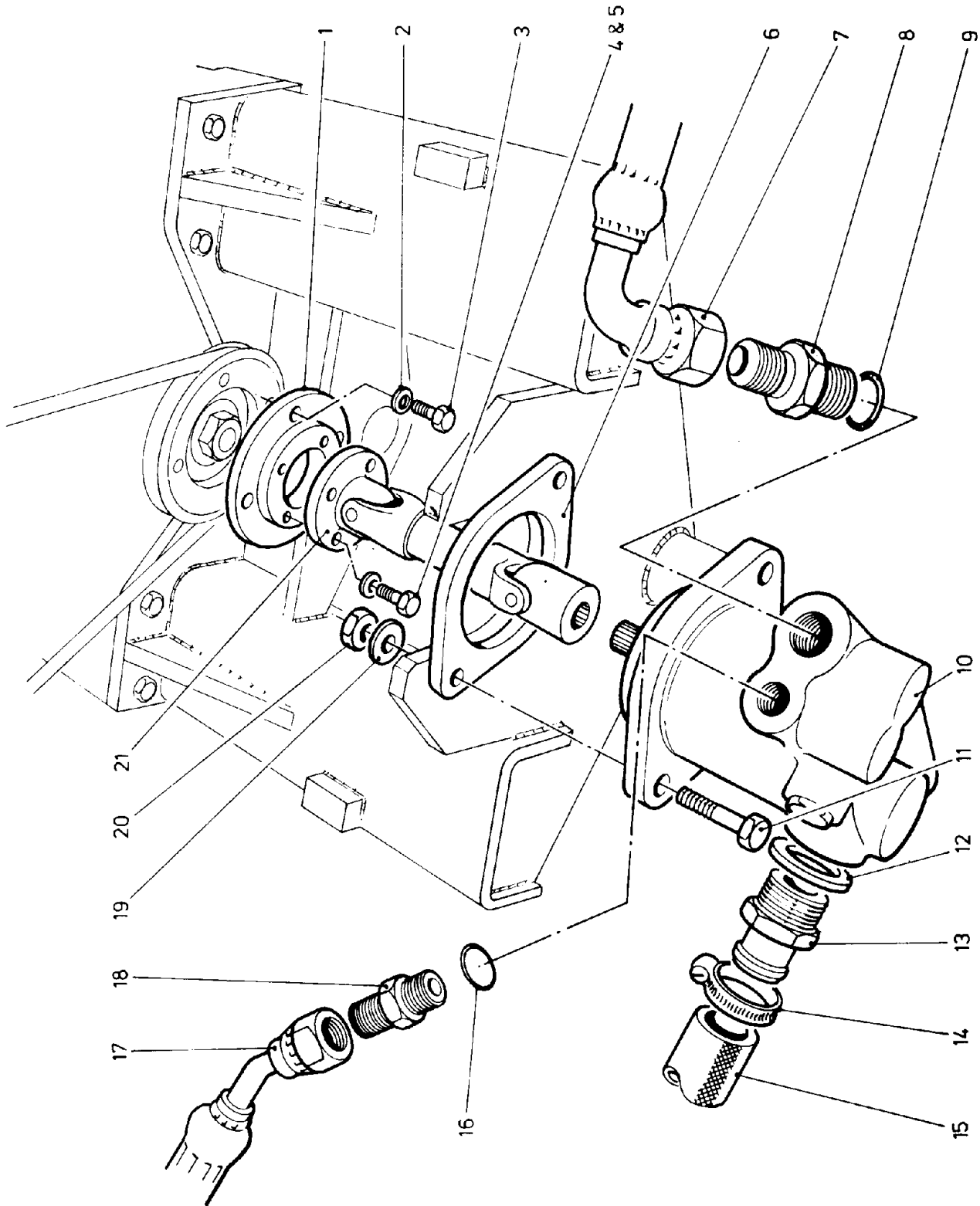


FIG. 1 : 30A



**POWER AND TRANSMISSION  
SUMP FRAMES, COVERS AND AXLE CASE (TORQUE CONVERTER) MARK III**

Fig. 1:30A	Part No.	Description	Qty	Remarks
29	012391	Bolt, $\frac{7}{16}$ " UNC x $1\frac{3}{4}$ " long . . . . .	4	
29A	012708	Stud, $\frac{7}{16}$ " UNC x $2\frac{5}{16}$ " long . . . . .	6	
29B	04528	Nut, $\frac{7}{16}$ " UNC . . . . .	6	
29C	020285	Washer Spring, $\frac{7}{16}$ " dia. . . . .	10	
30		Pump and Axle Mount . . . . .	1	Refer to Fig. 4:02A
31	045932	Mainframe - Rear . . . . .	1	
32	06147	Timing Peg . . . . .	1	
33	04472	Bolt, $\frac{3}{8}$ " UNC x $2\frac{1}{4}$ " long . . . . .	1	
33A	04579	Washer Spring, $\frac{3}{8}$ " dia. . . . .	1	
33B	04478	Bolt, $\frac{3}{8}$ " UNC x $2\frac{1}{2}$ " long . . . . .	1	Starter Housing
33C	04525	Nut, $\frac{3}{8}$ " UNC . . . . .	1	
33D	04579	Washer Spring, $\frac{3}{8}$ " dia. . . . .	1	
33E	04515	Bolt, $\frac{3}{8}$ " UNC x 2" long . . . . .	2	
33F	04579	Washer Spring, $\frac{3}{8}$ " dia. . . . .	2	

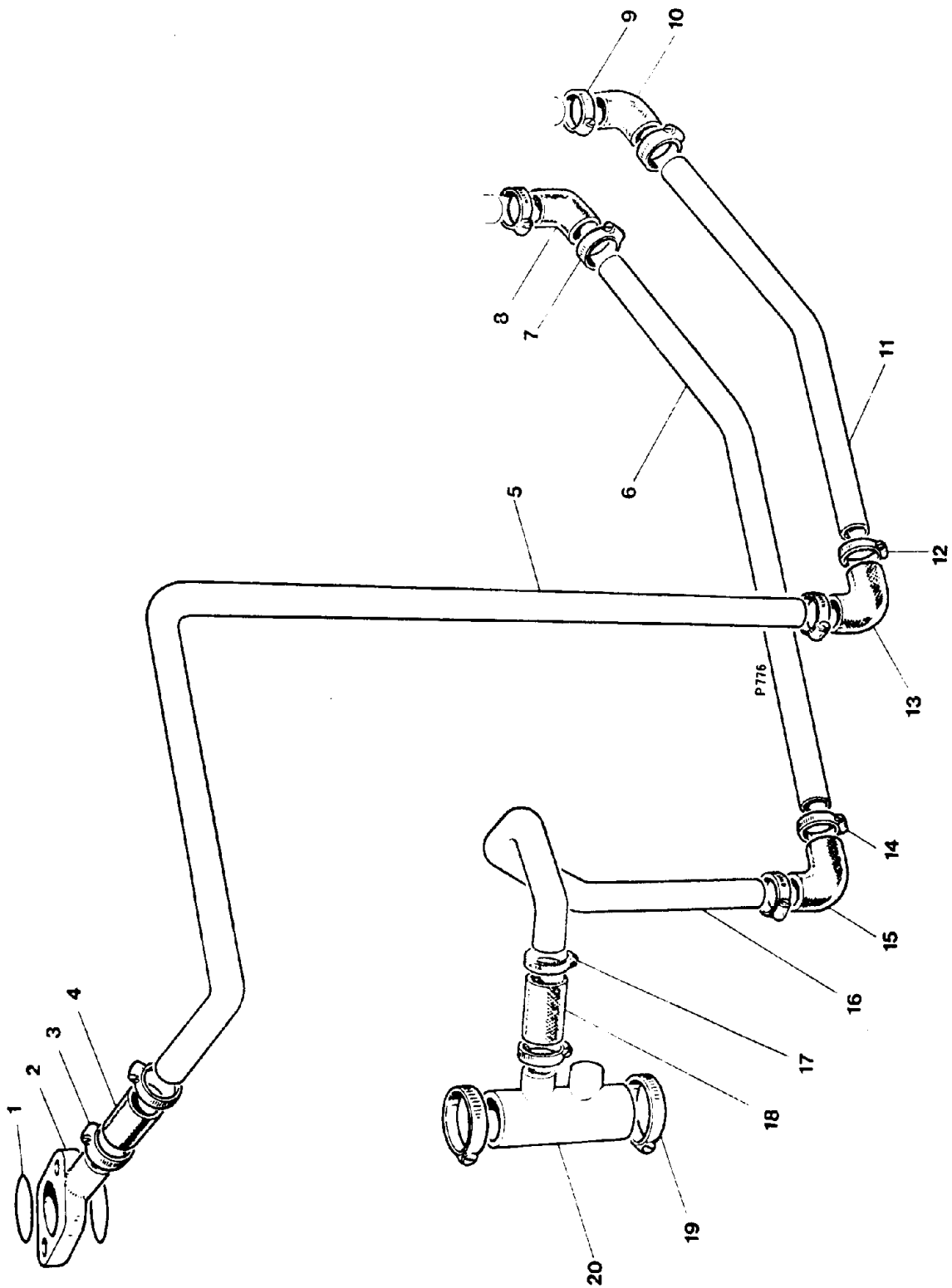


FIG. 1 : 31



**POWER AND TRANSMISSION  
TORQUE CONVERTOR COOLING SYSTEM**

Fig. No.	1:31 Part No.	Description	Qty	Remarks
1	06281	'O' Ring . . . . .	2	
2	06151	Adaptor . . . . .	1	
3	04431	Clip . . . . .	2	S'seded by 04796
4	06325	Hose, Connection . . . . .	1	
5	06245	Connecting Pipe . . . . .	1	
6	06246	Connecting Pipe . . . . .	1	
7	04431	Clip . . . . .	2	S'seded by 04796
8	06289	Hose, Elbow . . . . .	1	S'seded by 014333
9	04431	Clip . . . . .	2	S'seded by 04796
10	06289	Hose, Elbow . . . . .	1	
11	06247	Connecting Pipe . . . . .	1	
12	04431	Clip . . . . .	2	S'seded by 04796
13	06289	Hose, Elbow . . . . .	1	
14	04431	Clip . . . . .	2	
15	06289	Hose, Elbow . . . . .	1	
16	06244	Connecting Pipe . . . . .	1	
17	04431	Clip . . . . .	2	S'seded by 04796
18	06325	Hose, Connection . . . . .	1	
19	05789	Clip . . . . .	2	
20	06324	Venturi . . . . .	1	
	023547	Cooling Pipe Cover W.A.	1	Not illustrated

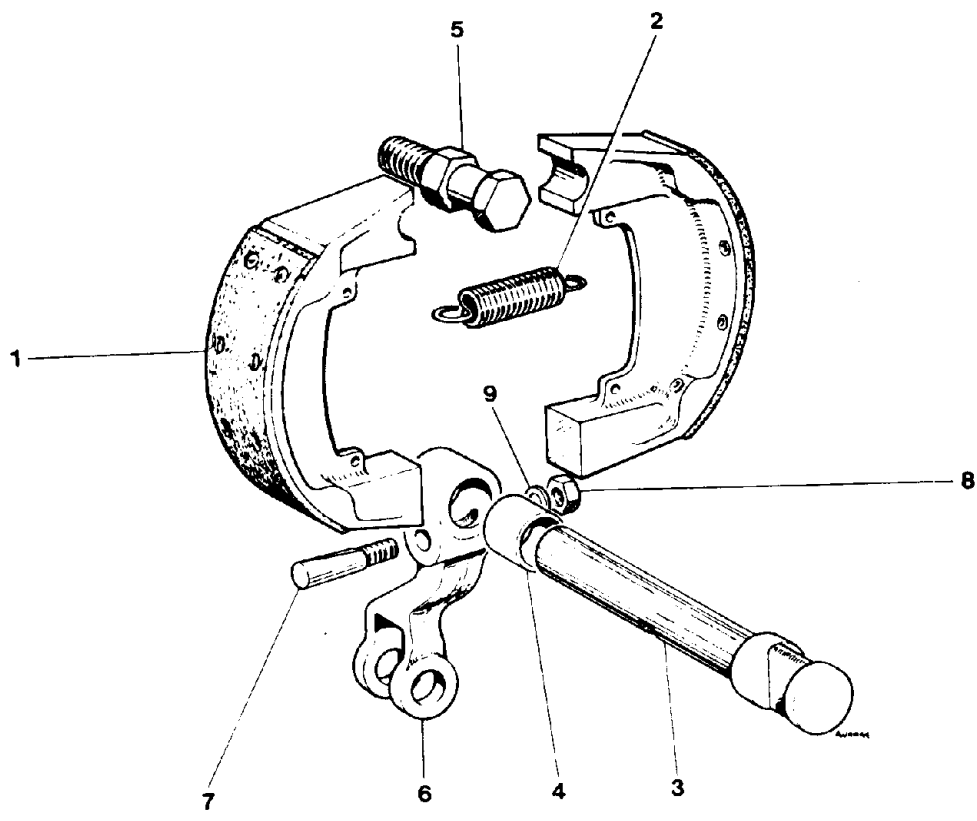


FIG. 1 : 32



**POWER AND TRANSMISSION  
BRAKE SHOE ASSEMBLY**

Fig. No.	1:32 Part No.	Description	Qty	Remarks
1A	012388	Brake Shoe and Lining Assembly	4	{ S'seded by 040602 see BTSB 272/114
1	012782	Brake Lining	4	{ S'seded by 014232 see BTSB 272/114
1B	012783	Rivet, $\frac{3}{16}$ " x $\frac{5}{8}$ "	16	Brake Shoe & Lining Assy. — Item 1A
1C	012784	Rivet, $\frac{3}{16}$ " x $\frac{7}{8}$ "	16	
2	012389	Spring, Brake Shoes	4	
3	021298	Brake Camshaft, Right Hand	1	{ S'seded by 014234 see BTSB 272/114
3A	021299	Brake Camshaft, Left Hand	1	{ S'seded by 014235 see BTSB 272/114
4	012791	Bush, Camshaft.	4	
4A	012792	Dirt Excluder	2	
5	012785	Fulcrum Pin	2	{ S'seded by 014233 see BTSB 272/114
5A	04253	Spring Washer, $\frac{5}{8}$ "	2	
6	021300	Brake Camshaft Lever	2	{ S'seded by 021307 (not interchangeable)
7	012787	Cotter Pin, $\frac{3}{8}$ " UNC	2	
8	012794	Nut, $\frac{3}{8}$ " UNC	2	
9	021301	Washer, $\frac{3}{8}$ "	2	
9A	012793	Shakeproof Washer, $\frac{3}{8}$ "	2	

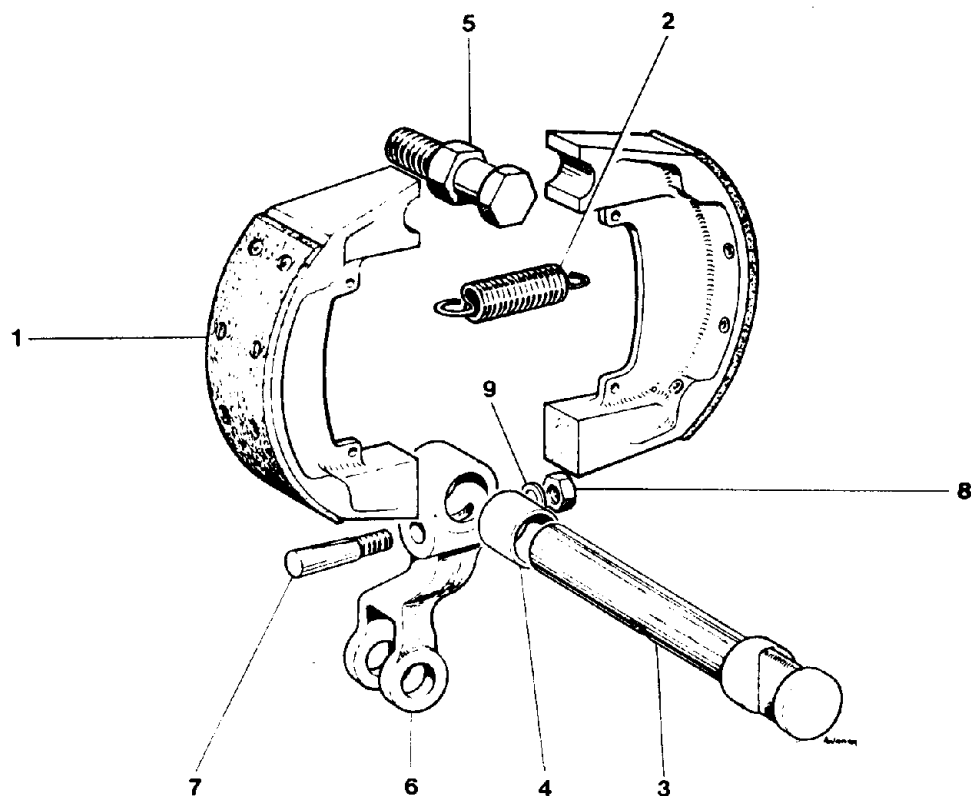


FIG. 1 : 32



**POWER AND TRANSMISSION  
BRAKE SHOE ASSEMBLY MARK III**

Fig. No.	1:33 Part No.	Description	Qty	Remarks
1	014232	Brake Lining	4	
1A	040602	Brake Shoe and Lining Assembly	4	
1B	012783	Rivet, $\frac{3}{16}$ " x $\frac{5}{8}$ "	16	} Part of Brake Shoe & Lining Assy.
1C	012784	Rivet, $\frac{3}{16}$ " x $\frac{7}{8}$ "	16	
2	012389	Spring — Brake Shoe	4	
3	014234	Brake Camshaft — Right Hand	1	
3A	014235	Brake Camshaft — Left Hand	1	
4	012791	Bush — Camshaft	4	
4A	012792	Dirt Excluder	2	
5	014233	Fulcrum Pin	2	
5A	04253	Washer Spring, $\frac{5}{8}$ " dia.	2	
6	021307	Brake Camshaft Lever	2	
7	012787	Cotter Pin, $\frac{3}{8}$ " UNC	2	
8	012794	Nut, $\frac{3}{8}$ " UNC	2	
9	021801	Washer, $\frac{3}{8}$ " dia.	2	
9A	012793	Washer Fan Disc, $\frac{3}{8}$ " dia.	2	



SERIES: LS45-LS45/TC ● LS55-LS55/TC

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## SECTION 2 FRAME AND CLADDING

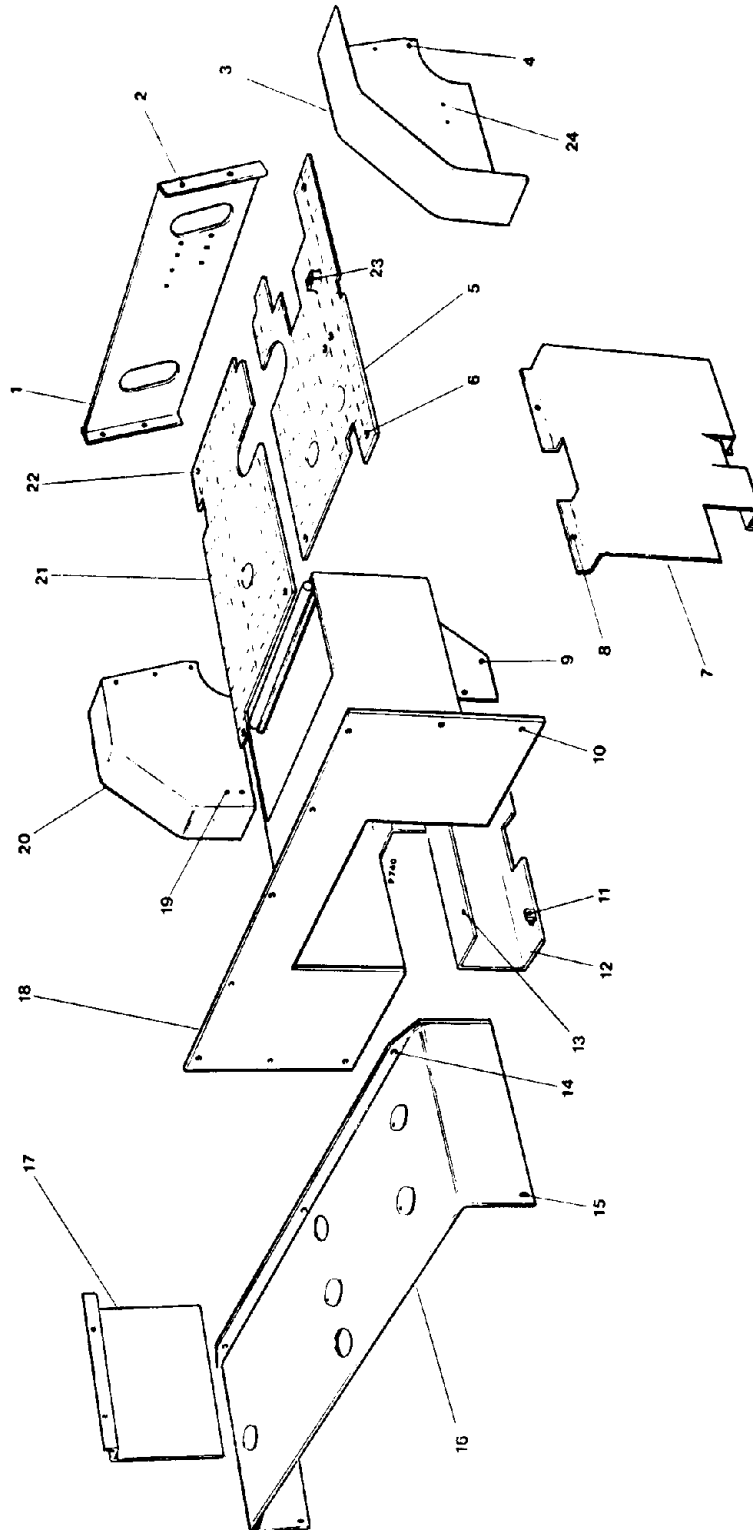


FIG. 2 : 01



**FRAME AND CLADDING  
CLADDING ASSEMBLY**

Fig. No.	2:01 Part No.	Description	Qty	Remarks
1	023302	Kickplate	1	
2	04491	Bolt, 1/2" UNF x 1"	4	Kickplate to M'guards
	04531	Nut, 1/2" UNF	4	
	04571	Fan Disc Washer, 1/2" dia.	4	
3	023098	Mudguard — R.H.	1	
4	04491	Bolt, 1/2" UNF x 1"	2	Mudguard to Cross Frame
	04531	Nut, 1/2" UNF	2	
	04571	Fan Disc Washer, 1/2" dia.	2	
*5	023078	Floor Plate, R.H.	1	
*5A	03860	Cover Plate	2	
*5B	04441	Setscrew, 1/4" UNF x 3/8"	4	
*5C	04567	Fan Disc Washer, 1/4" dia.	4	T.C. Only
5	023429	Floor Plate — Rear	1	
5A	03860	Cover Plate	1	T.C.
5B	04441	Setscrew, 1/4" UNF x 3/8"	2	Only
5C	04567	Fan Disc Washer, 1/4" dia.	2	
6	04462	Setscrew, 3/8" UNC x 3/4"	3	Floor Plate to Skid Unit
	04557	Plain Washer, 3/8" dia.	3	
	04569	Fan Disc Washer, 3/8" dia.	3	
6	04472	Bolt, 3/8" UNC x 2 1/4"	3	Floor Plate to Skid Unit
	023426	Floor Packer	3	
	04569	Fan Disc Washer, 3/8" dia.	3	
	04512	Bolt, 3/4" UNC x 2 1/2"	1	Floor Plate to Tilt Ram Anchor
	04576	Spring Washer, 3/4" dia.	1	
	05476	Nut, 3/4" UNC	1	
7	023150	Cover, R.H.	1	S'eded by 023874 (not interchangeable)
7	023437	Cover, R.H.	1	T.C. only S'eded by 023875 (not interchangeable)
8	019225	Setscrew, 1/4" UNF x 3/8"	4	Covers to Seat Support
	04567	Fan Disc Washer, 1/4" dia.	4	
9	04462	Setscrew, 3/8" UNC x 3/4"	4	Seat Support to Skid Unit
	04569	Fan Disc Washer, 3/8" dia.	4	
10	019225	Setscrew, 1/4" UNF x 3/8"	9	Seat Support to Mounting Frame
	04577	Spring Washer, 1/4" dia.	9	
11	04617	Setscrew, 5/16" UNF x 1"	2	Cover to Mainframe
	04568	Fan Disc Washer, 5/16" dia.	2	
12	023314	Cover	1	
13	04617	Setscrew, 5/16" UNF x 1"	2	Cover to Mainframe
	04568	Spring Washer, 5/16" dia.	2	
14	09675	Setscrew, 1/4" UNF x 3/4"	3	Bonnet to Mounting Frame
	016301	Plain Washer, 1/4" dia.	3	
	04567	Fan Disc Washer, 1/4" dia.	3	
15	09675	Setscrew, 1/4" UNF x 3/4"	2	Bonnet to Ballast Weight Support
	016301	Plain Washer, 1/4" dia.	2	
	04567	Fan Disc Washer, 1/4" dia.	2	
16	023069	Bonnet	1	S'eded by 023722 (Dry Type Air Cleaner Only) S'eded by 023960

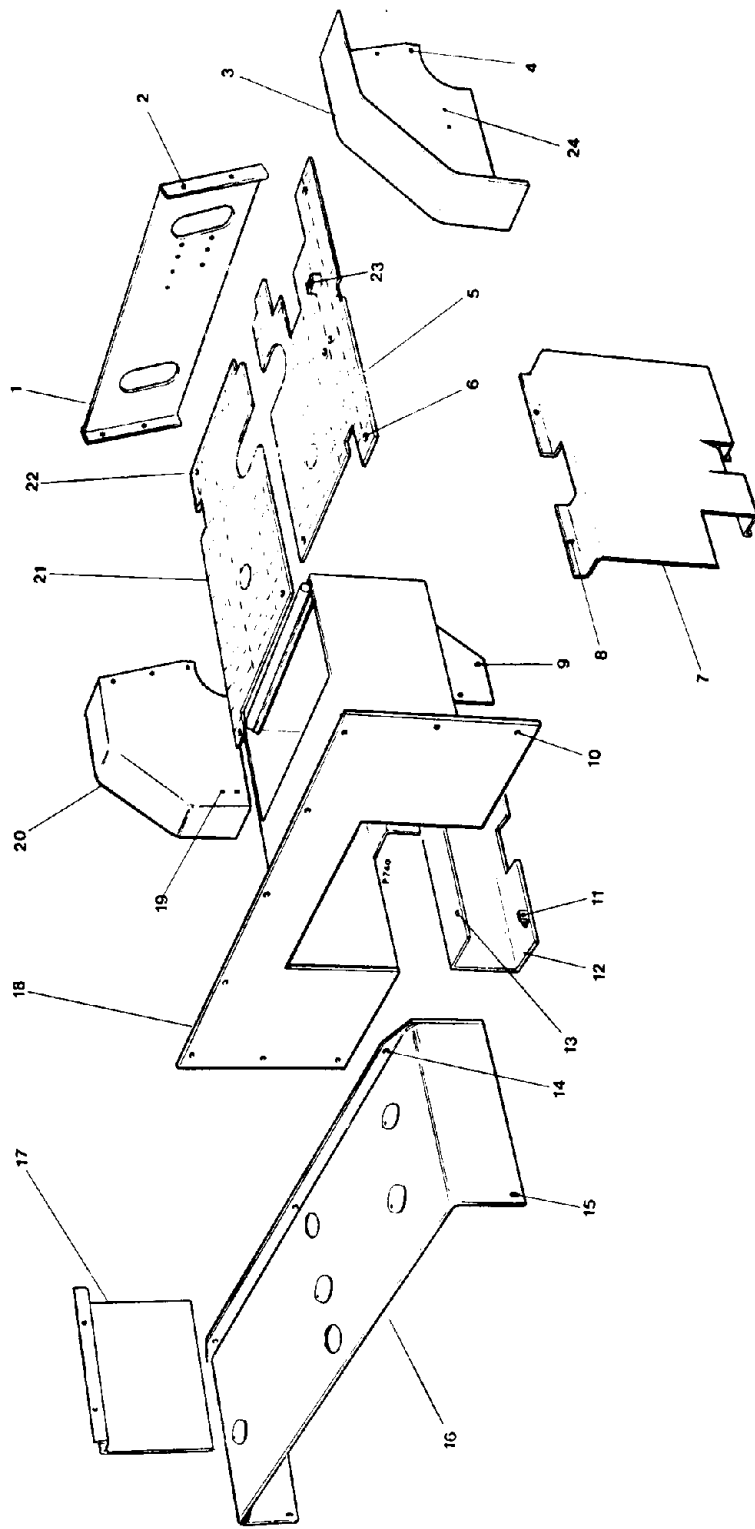
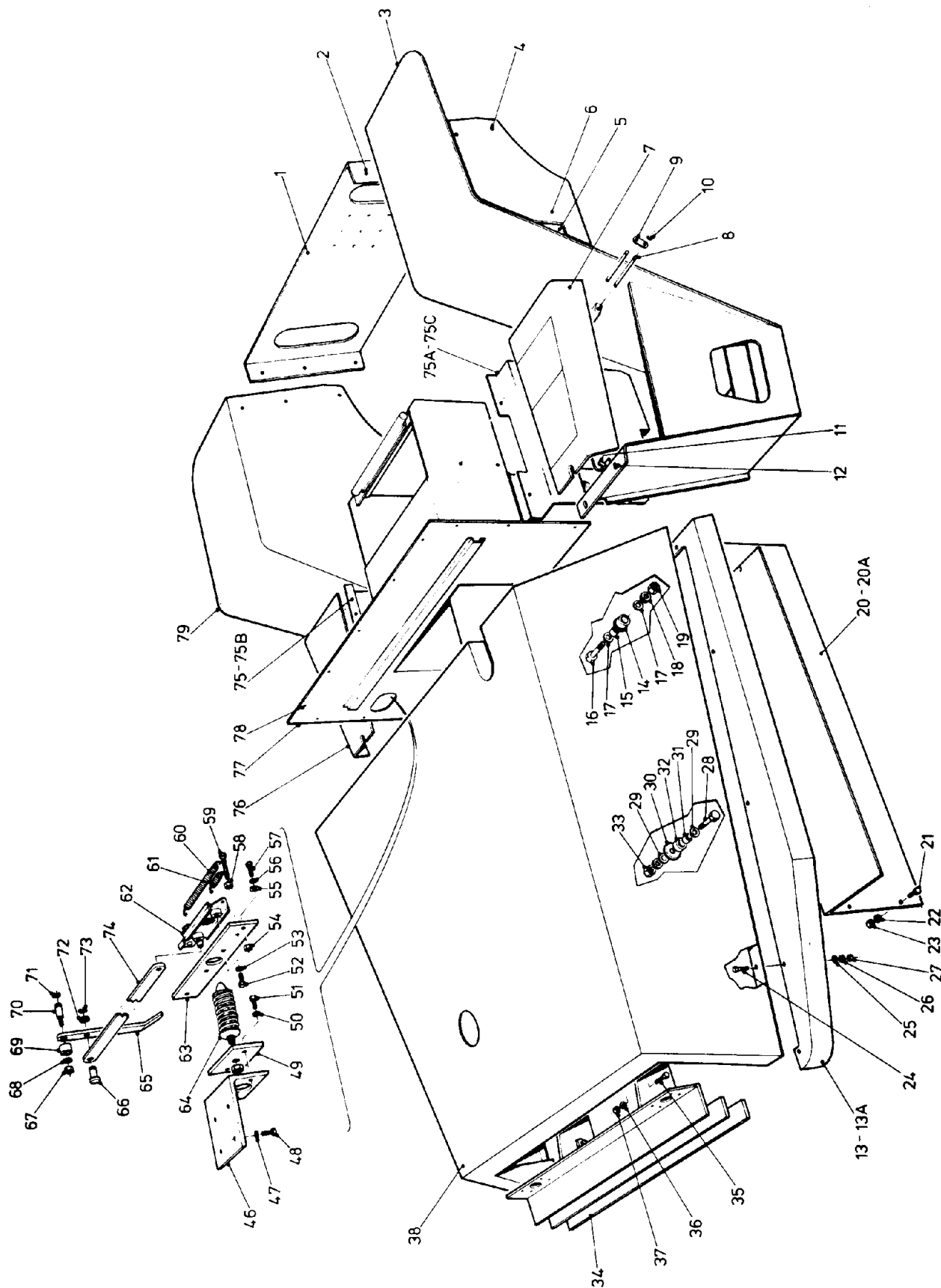


FIG. 2 : 01


**FRAME AND CLADDING - CLADDING ASSEMBLY**

Fig.No.2:01	Part No.	Description	Qty	Remarks
16A	023154	Cover Plate	2	
16B	023169	Cover Plate	2	
16C	023155	Agri - Fastener	4	
16D	023156	Rivet	4	
17	023149	Cover, L.H.	1	S'eded by 034051
17	023436	Cover, L.H.	1	T.C. only
18	023066	Seat Support	1	S'eded by 027775
19	04491	Bolt	4)	
	04531	Nut	4)	M'guards to
	04571	Fan Disc Washer	4)	M' frames
20	023097	Mudguard L.H.	1	
21	023074	Floor Plate, L.H.	1	S'eded by 023075
21A	03860	Cover Plate	1	
21B	04441	Setscrew - hex.hd.	2	
21C	04567	Fan Disc Washer	2	
21	023431	Floor Plate - Front	1(	T.C. only. S'eded by 023587 (016344-04515- 04466 F.R.Pedal)
22	04462	Setscrew	3	
	04569	Fan Disc Washer	3	
	04557	Plain Washer	3	
22	04472	Bolt	2)	
	023426	Floor Packer	2)	
	04569	Fan Disc Washer	3)	T.C. only
	04460	Setscrew	1)	
	04512	Bolt	1)	
	05476	Nut	1)	
	04576	Spring Washer	1	
23	04445	Setscrew	1	
	04522	Nut	1	
24	03376	Battery Carrier Top	1	S'eded by 07653
	03379	Clamp Bolt	2	
	04567	Fan Disc Washer	2	
	04548	Wing Nut	2	
25	011350	Bracket - Accumulator	1)	Accumulator:-
25A	011351	Clamp	1)	Fitted as
25B	04464	Bolt - hex.hd.	4)	Standard on
25C	04526	Nut	4)	LS 55 only
25D	04569	Fan Disc Washer	4)	
25E	023391	Chain Guard	1	Not illustrated
26	023547	Cooling Pipe Cover	1	T.C.only Not illusated.

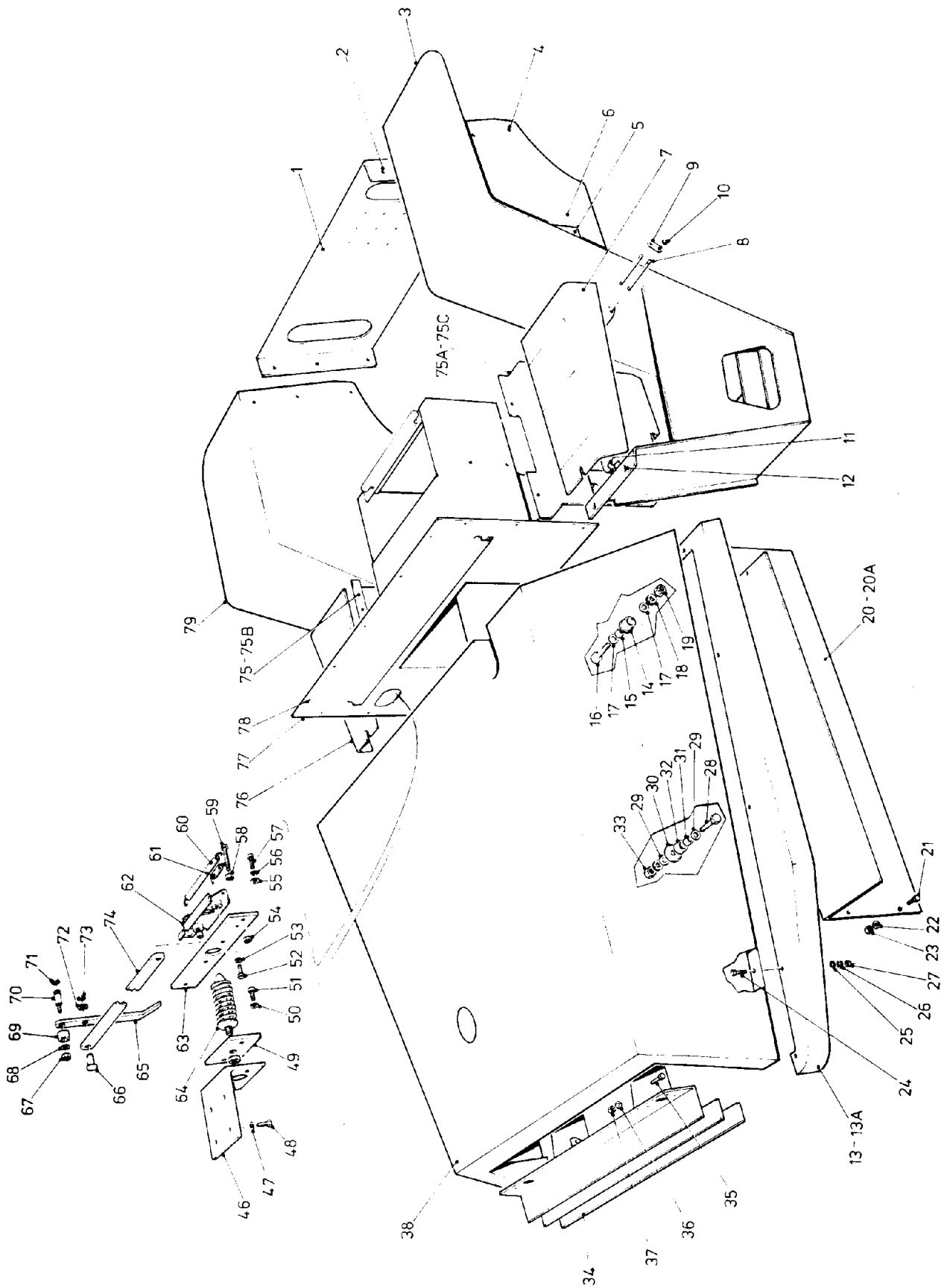


**FIG. 2 : 01A**



**FRAME AND CLADDING  
CLADDING**

Fig. No. 2:01A	Part No.	Description	Qty	Remarks
1	029108	Kickplate . . . . .	1	
2	04491	Bolt . . . . .	4	} Kickplate to Mudguard
2A	04531	Nut . . . . .	4	
2B	04571	Washer . . . . .	4	
3	039303	Mudguard — R.H. . . . .	1	
4	04491	Bolt . . . . .	2	} Crossframe to Mudguard
4A	04531	Nut . . . . .	2	
4B	04571	Washer . . . . .	2	
5	039450	Cover . . . . .	2	} Cover- Plate
6	018690	Setscrew . . . . .	4	
6A	04579	Washer . . . . .	4	
7	039513	Step Plate — R.H. . . . .	1	
8	039468	Hinge Pin . . . . .	4	
9	031306	Hinge Link . . . . .	4	
10	04381	'E' Clip . . . . .	8	
11	039521	Catch Assembly . . . . .	2	
12	04491	Bolt . . . . .	4	
12A	04531	Nut . . . . .	4	
12B	04571	Washer . . . . .	4	
13	039519	Rear Mudguard — R.H. . . . .	1	
13A	039518	Rear Mudguard — L.H. . . . .	1	
14	039334	Roller . . . . .	2	
15	039333	Spigot . . . . .	2	
16	039339	Bolt . . . . .	2	
17	037116	Washer . . . . .	4	
18	09619	Washer . . . . .	2	
19	019692	Nut . . . . .	2	
20	039580	Cover Bonnet — R.H. . . . .	1	
20A	039579	Cover Bonnet — L.H. . . . .	1	
21	030607	Screw . . . . .	6	
22	04568	Washer . . . . .	6	
23	019690	Nut . . . . .	6	
24	030463	Setscrew . . . . .	12	
25	09629	Washer . . . . .	12	
26	09616	Washer . . . . .	12	
27	019663	Nut . . . . .	12	
28	032084	Bolt . . . . .	2	
29	09606	Washer . . . . .	2	
30	04683	Washer — Special . . . . .	2	
31	039097	Spigot . . . . .	2	
32	039096	Roller . . . . .	2	
33	019692	Nut . . . . .	2	
34	039408	Rear Grille . . . . .	1	
35	030466	Setscrew . . . . .	4	
36	09618	Washer . . . . .	4	
37	019691	Nut . . . . .	4	
38	039406	Bonnet . . . . .	1	
39	039756	Chain . . . . .	1	} Limit Chain
40	032380	Bolt . . . . .	1	
41	09616	Washer . . . . .	1	
42	019663	Nut . . . . .	1	
43	030464	Setscrew . . . . .	1	
44	09603	Washer . . . . .	2	
45	019663	Nut . . . . .	1	
46	039451	Bracket . . . . .	1	
47	09616	Washer . . . . .	4	
48	031292	Setscrew . . . . .	4	
49	035184	Mounting Plate . . . . .	1	
50	09616	Washer . . . . .	2	

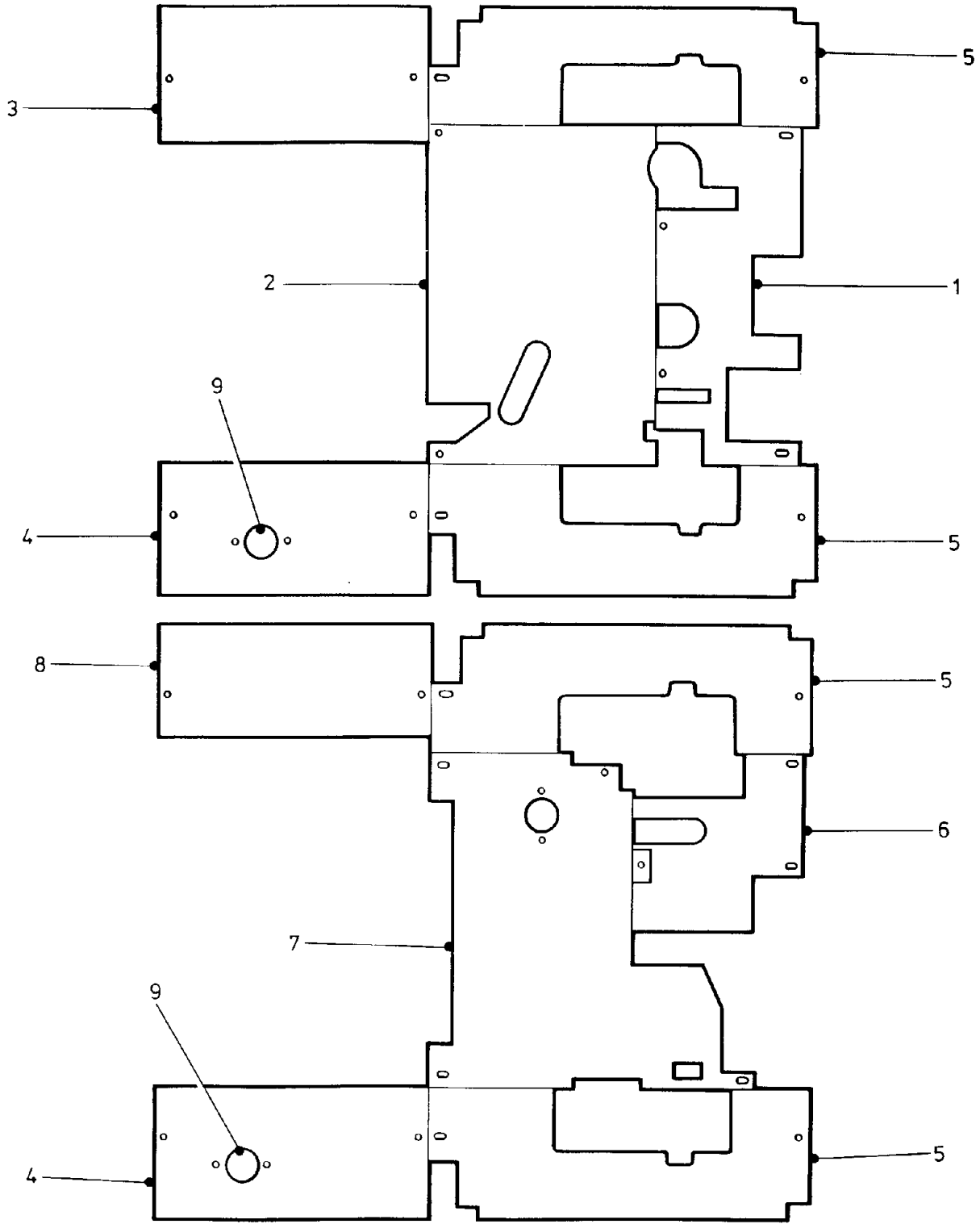


**FIG. 2: 01A**



**FRAME AND CLADDING  
CLADDING**

Fig. No.	2:01A Part No.	Description	Qty	Remarks
51	031292	Setscrew . . . . .	2	
52	031292	Setscrew . . . . .	2	
53	09616	Washer . . . . .	2	
54	019663	Nut . . . . .	2	
55	09616	Washer . . . . .	2	
56	09603	Washer . . . . .	2	
57	030464	Setscrew . . . . .	2	
58	019663	Nut . . . . .	1	
59	019662	Setscrew . . . . .	1	
60	011671	Spring . . . . .	1	
61	035188	Spring . . . . .	1	
62	035186	Slider Catch . . . . .	1	
63	035181	Mounting Plate . . . . .	1	
64	035185	Striker Pin . . . . .	1	
65	039556	Release Lever . . . . .	1	
66	036212	Clevis Pin . . . . .	1	
67	019689	Nut . . . . .	1	
68	09615	Washer . . . . .	1	
69	035949	Spacer . . . . .	1	
70	035409	Pivot Pin . . . . .	1	
71	019273	'E' Clip . . . . .	1	
72	04556	Washer . . . . .	1	
73	019273	'E' Clip . . . . .	1	
74	039557	Link Bar . . . . .	1	
75	029125	Cover — R.H. . . . .	1	S'ceded by 029065
75A	034051	Cover — L.H. . . . .	1	} Torque Convertor
75B	029148	Cover — L.H. . . . .	1	
75C	029149	Cover — R.H. . . . .	1	
76	039512	Step Plate — L.H. . . . .	1	
77	029054	Seat Support . . . . .	1	
78	019225	Setscrew . . . . .	13	
78A	04577	Washer . . . . .	13	
79	039302	Mudguard — L.H. . . . .	1	



**FIG. 2 : 01B**

**FRAME AND CLADDING - FLOORPLATES**

Fig.No.2:01B	Part No.	Description	Qty	Remarks
1	039764	Floorplate - Front	1	
2	039767	Floorplate - Rear	1	
3	039772	Floorplate - Rear L.H.	1	S'seded by 037564
4	039071	Floorplate - Rear R.H.	1	S'seded by 037563
5	039768	Floorplate - Front L.H.	2	S'seded by 029056
5A	029057	Floorplate - Front R.H.	1	
6	039769	Floorplate - Front	1	
7	039775	Floorplate - Rear	1	
8	039878	Floorplate - Rear L.H.	1	S'seded by 037565
9	03860	Cover Plate	1	
10	039145	Cover Plate	1	
11	04441	Screw	2	
12	04567	Washer	2	
13	04462	Setscrew	14	
14	04557	Washer	14	
15	023426	Packer - Floorplate	5	
16	04472	Setscrew	5	
17	04562	Setscrew	8	
18	04557	Washer	8	
19	039776	Floormat - Gearbox	1)	Deleted
20	039777	Floormat - Torque Convertor	1)	
	037570	Floormat - Centre Small	1	
	037571	Floormat - Centre Large	1	
	039772	Floormat - Rear L.H.	1)	
	039071	Floormat - Rear R.H.	1)	Weathercab
	039768	Floormat - Front	1)	only

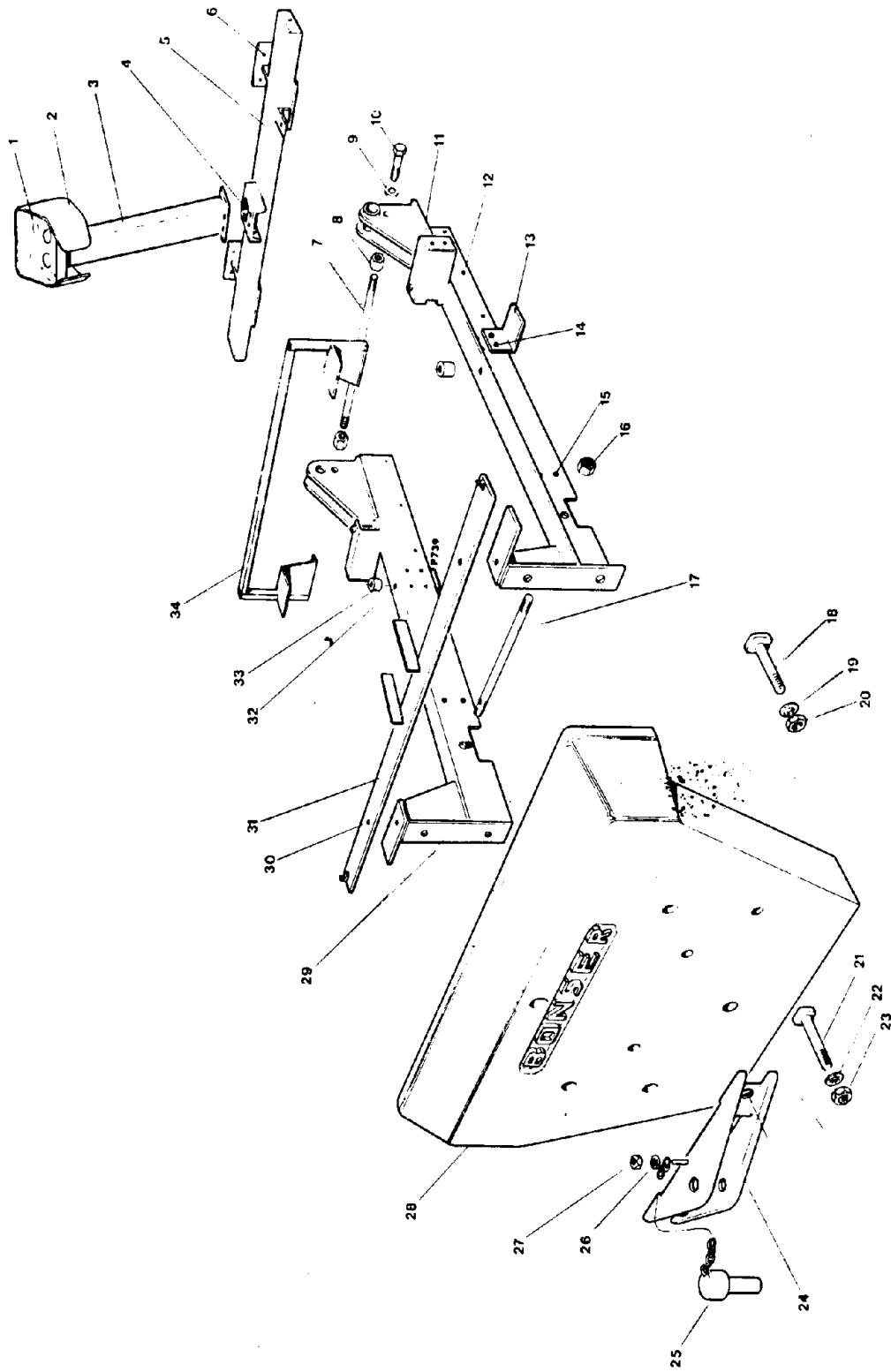


FIG. 2 : 02



**FRAME AND CLADDING  
FRAME ASSEMBLY**

Fig. No.	2:02 Part No.	Description	Qty	Remarks
1	023229	Control Panel	1	
1A	04606	Setscrew No. 12 x $\frac{5}{8}$ " Pan Hd.	4	Panel to Casing
2	023228	Control Panel Casing	1	
2A	04440	Setscrew, $\frac{1}{4}$ " UNF x $\frac{1}{2}$ "	4	Casing to Column
3	023071	Column	1	Now supp. as 023907
4	04461	Setscrew, $\frac{3}{8}$ " UNF x $\frac{3}{4}$ "	3	Column to
	04579	Springwasher, $\frac{3}{8}$ " dia.	3	Cross Frame
5	023070	Cross Frame	1	Now supp. as 023907
	012387	Bolt, $\frac{1}{2}$ " UNC x $1\frac{1}{8}$ " long Hex. Hd.	4	Cross Frame
	04624	Spring Washer, $\frac{1}{2}$ " dia.	4	to Skid
6	04503	Bolt, $\frac{3}{8}$ " UNF x $1\frac{3}{4}$ "	4	Cross Frame to
	04572	Fan Disc Washer, $\frac{5}{8}$ " dia.	4	Mast Mounting
	04533	Nut, $\frac{3}{8}$ " UNF	4	Brackets
7	023159	Tie Bar	1	
7A	023196	Floor Plate Support Angle, L.H.	1	Not illustrated
8	023195	Nut, 1" UNF Special	2	Gearbox Models
9	04574	Fan Disc Washer, 1" dia.	2	only
10	010404	Bolt, 1" UNF x 4"	2	
11	023064	Mainframe, R.H.	1	S'ced by 027768
12	04482	Bolt, $\frac{15}{16}$ " UNC x $1\frac{1}{4}$ "	3	Mainframe to
	04570	Fan Disc Washer, $\frac{15}{16}$ " dia.	3	Skid Unit
13	023157	Mounting Step	2	Superseded by 023567 (not supp. as spares item)
14	05665	Bolt, $\frac{5}{8}$ " UNC x 2" long Hex. Hd.	4	Deleted 17.12.72
	04572	Fan Disc Washer, $\frac{5}{8}$ " dia.	4	Mainframe to
15	04501	Bolt, $\frac{3}{8}$ " UNC x $1\frac{1}{2}$ " long Hex. Hd.	8	Skid Unit
	04572	Fan Disc Washer, $\frac{5}{8}$ " dia.	8	
16	04552	Binks Nut, 1" UNF	2	
17	03008	Stud, $1\frac{1}{4}$ " UNF x $2\frac{3}{4}$ " long	1	
18	023328	Anchor Bolt - Ballast Weight	4	LS45 Only
18	023329	Anchor Bolt - Ballast Weight	4	LS55 Only
19	010462	Washer Special	8	
20	010463	Binks Nut, 1" UNF	4	
21	023330	Anchor Bolt - Tow Hitch	2	LS45 Only
21	023331	Anchor Bolt - Tow Hitch	2	LS55 Only
22	05819	Spring Washer, 1" dia.	2	
23	04536	Nut, 1" UNF	2	
24	04190	Tow Bracket	1	
25	05481	Draw Pin Assembly	1	
26	04555	Washer, $\frac{1}{4}$ " dia.	1	
27	04522	Nut, $\frac{1}{4}$ " UNF	1	
28	023239	Ballast Weight	1	LS45
28	023056	Ballast Weight	1	LS55
29	023065	Mainframe, L.H.	1	S'ced by 027770
30	04493	Bolt, $\frac{1}{2}$ " UNF x $1\frac{1}{2}$ " long.	2	
	04571	Fan Disc Washer, $\frac{1}{2}$ " dia.	2	
	04531	Nut, $\frac{1}{2}$ " UNF	2	
31	023961	Ballast/Air Filter Mounting	1	S'ced by 038579
32	019262	Bolt, $\frac{1}{2}$ " UNF x $3\frac{1}{2}$ " long.	2	and 023958
33	023363	Spacer	2	
	04571	Fan Disc Washer, $\frac{1}{2}$ " dia.	2	
	04531	Nut, $\frac{1}{2}$ " UNF	2	
34	023471	Mounting Frame	1	
	04617	Bolt	4)	
	04525	Nut	4)	Air Cleaner
	05081	Washer - Spring	4)	Bracket
	038685	Ballast weight. Additional	1	LS55 Wide Mast only
	036409	Bolt	4)	
	031535	Nut	4)	

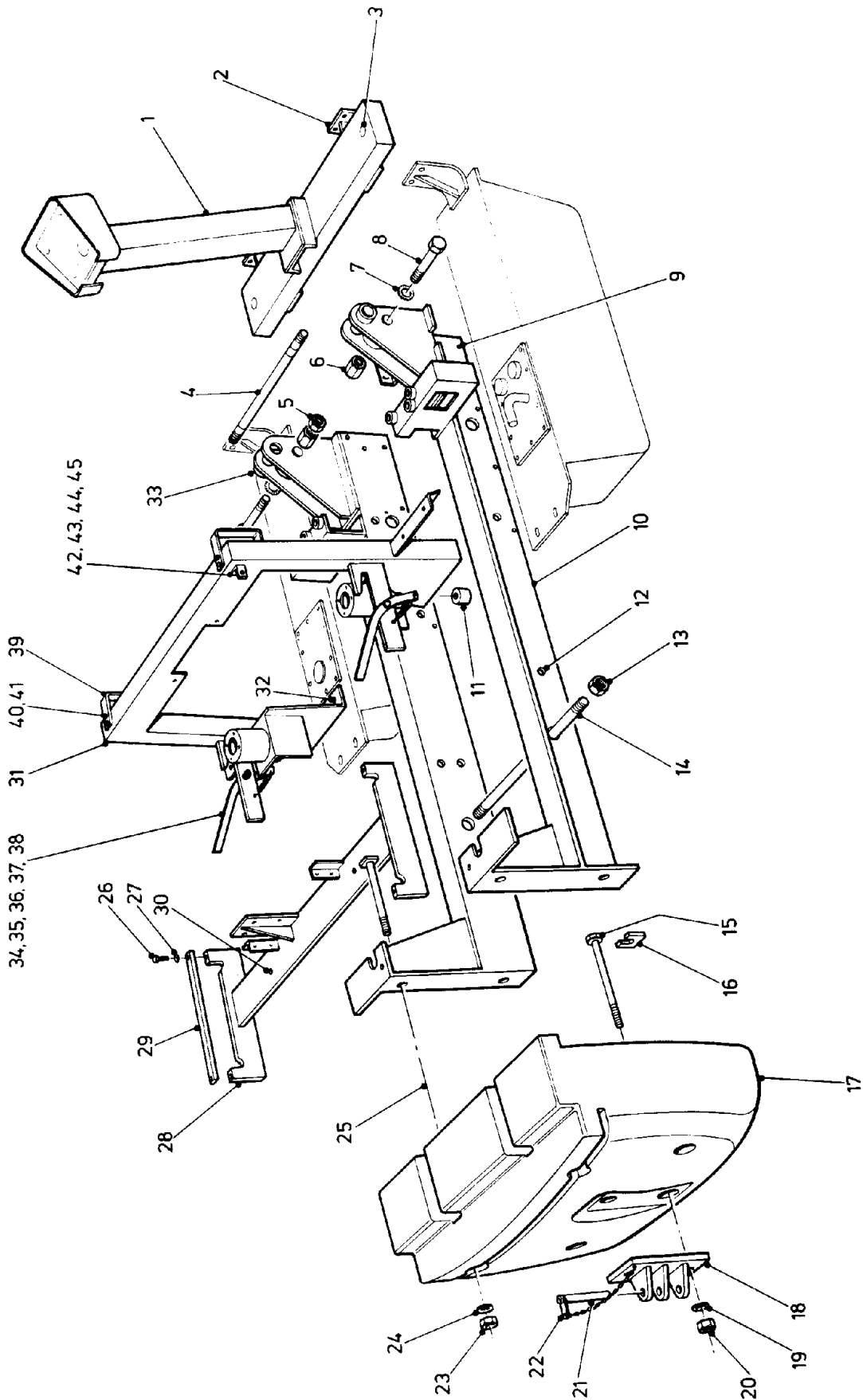


FIG. 2 : 02A



**FRAME AND CLADDING  
MAINFRAME AND BALLAST WEIGHT**

Fig. No. 2:02A	Part No.	Description	Qty	Remarks
1	023907	Steering Column/Cross Frame	1	
2	04503	Bolt	4	} Crossframe to Mast
2A	04572	Washer	4	
2B	04533	Nut	4	} Mounting
3	012387	Bolt	4	
3A	04624	Washer	4	} Crossframe to Skid
4	038983	Cross Shaft	1	
5	04542	Locknut	1	
6	023195	Coupling Nut	2	
7	04574	Washer	2	
8	010404	Bolt	2	
9	04482	Bolt	6	} Mainframe to Skid
9A	04570	Washer	6	
10	027768	Mainframe — RH	1	
11	023363	Spacer	2	
12	04501	Bolt	8	} Mainframe to Skid
12A	04572	Washer	8	
13	04552	Nut — Binks	2	
14	03008	Tie Bar	1	
15	039430	Bolt	2	
16	029060	Retaining Plate	2	
17	038970	Ballast Weight	1	
18	036188	Tow Hitch	1	
19	04561	Washer	2	
20	010463	Locknut — Binks	2	
21	033843	Pin	1	
22	036582	Chain	1	
22A	030463	Setscrew	2	
22B	04555	Washer	2	
23	010463	Locknut — Binks	4	
24	03024	Washer	4	
25	023332	Bolt	4	
26	032229	Setscrew	4	
27	09617	Washer	4	
28	039325	Transverse Plate	1	
29	039710	Clamp Plate	2	
30	04493	Bolt	2	
30A	04571	Washer	2	
30B	04531	Nut	2	
31	039422	Mounting Frame	1	
32	019262	Bolt	2	
32A	04571	Washer	2	
32B	04531	Nut	2	
33	027770	Mainframe — LH	1	
34	039510	Arm	2	
35	039499	Spring	2	
36	032316	Bolt	2	
37	04557	Washer — Plain	2	
38	031444	Locknut	4	
39	039701	Handle	2	
40	04473	Bolt	4	
41	016320	Washer — Spring	4	
42	039700	Angle Bracket	1	
43	030607	Setscrew	1	
44	04556	Washer — Plain	1	
45	09617	Washer — Spring	1	

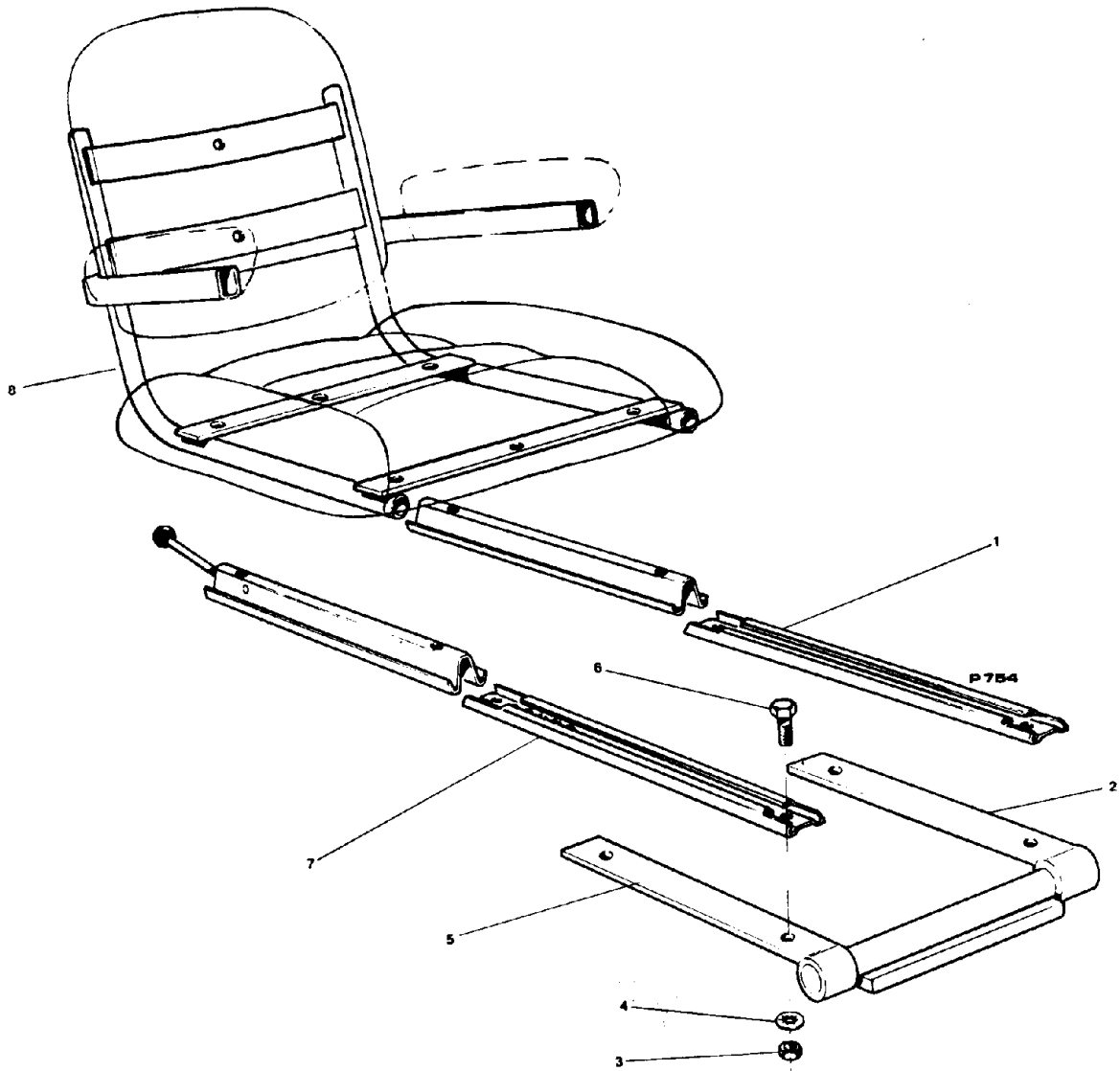


FIG. 2 : 03

FRAME AND CLADDING  
SEAT ASSEMBLY

Fig. No.	2:03	Part No.	Description	Qty	Remarks
1		011230	Seat Runner . . . . .	1	
2		010271	Hinge Plate . . . . .	1	
3		04522	Nut, 1/4" UNF . . . . .	4	S'seded by 05473
4		04567	Washer, Fan Disc, 1/4" dia. . . . .	4	
5		010271	Hinge Plate . . . . .	1	
6		04443	Bolt, 1/4" UNF x 3/4" long . . . . .	4	S'seded by 016250
7		011230	Seat Runner . . . . .	1	
8		023367	Seat . . . . .	1	





**SECTION 3**  
**ROLLER MAST AND CARRIAGE**

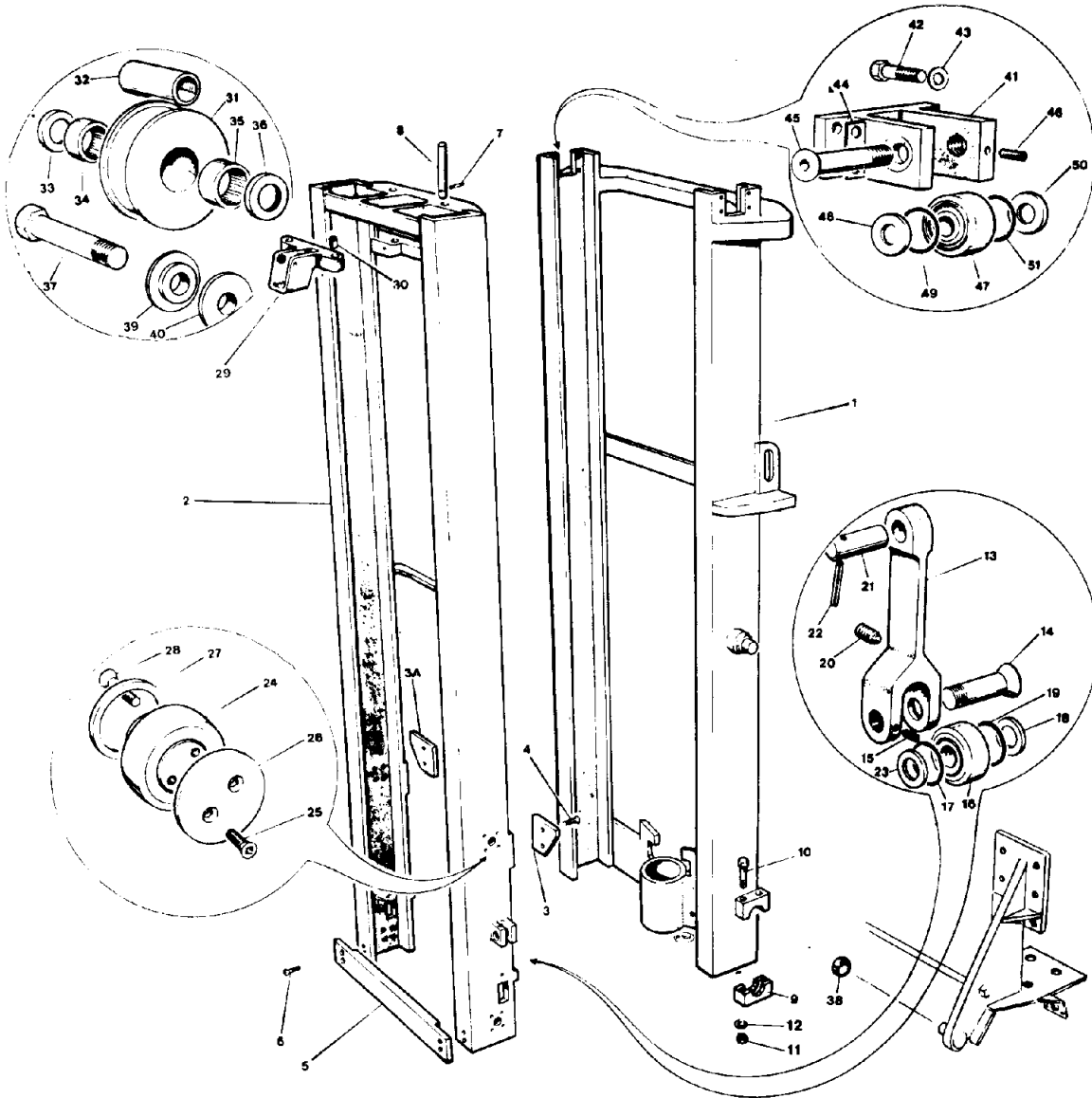


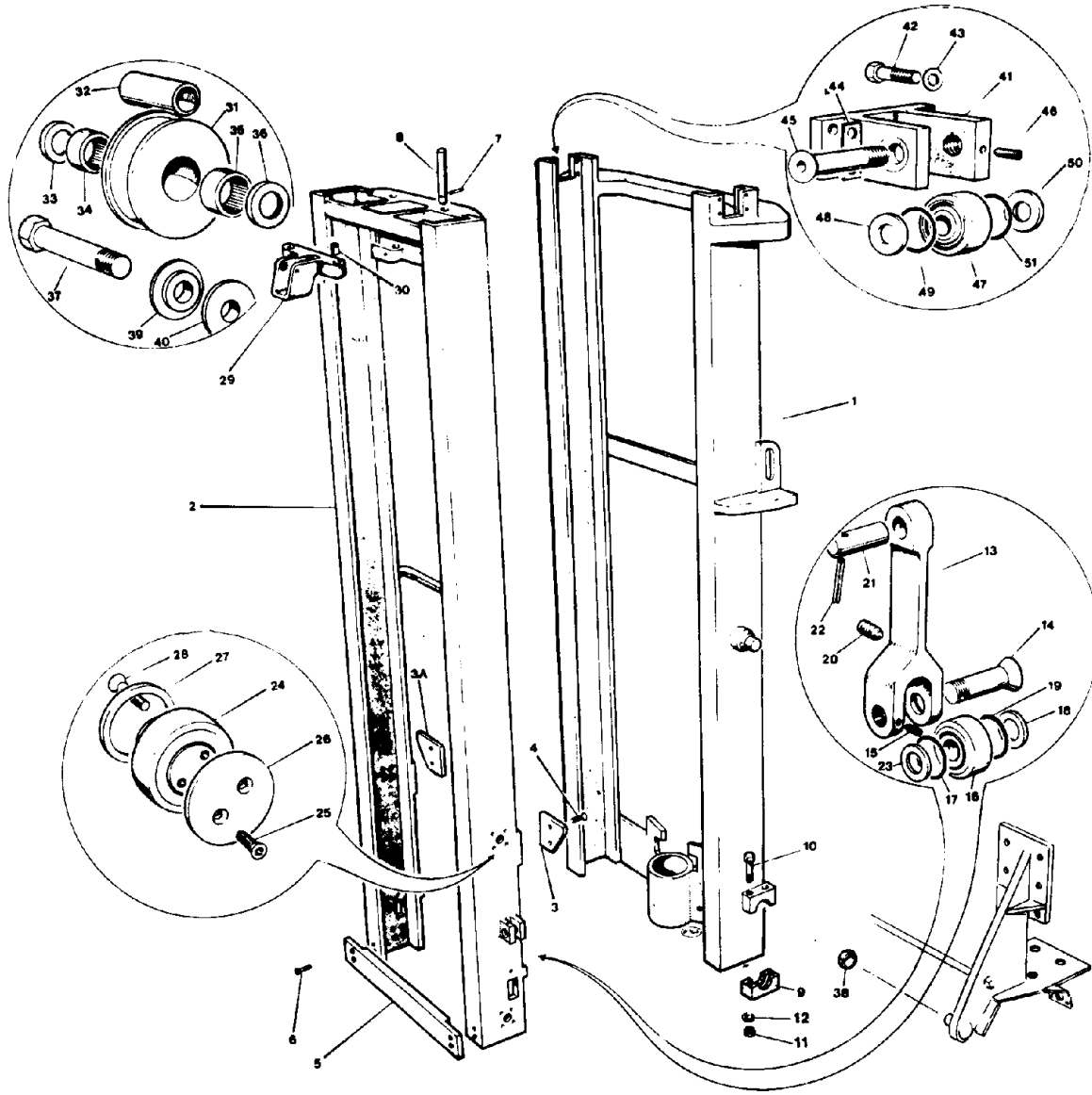
FIG. 3 : 01



**MAST AND CARRIAGE  
MAST**

Fig. No. 3:01	Part No.	Description	Qty	Remarks
1	023272	Outer Mast . . . . .	1	S'eded by 011966 when 011810 Lift Cylinder is used S'eded by 011159 for use with 011810 Lift Ram
2	011193	Inner Mast. . . . .	1	
3	011121	Stop Bracket, L. H. . . . .	1	
3A	011122	Stop Bracket, R.H. . . . .	1	
4	010394	Screw, $\frac{5}{8}$ " BSF x 1" Countersunk . . . . .	4	
5	010338	Front Brace . . . . .	1	
6	010805	Screw, $\frac{3}{8}$ " UNF x $\frac{5}{8}$ " Countersunk . . . . .	4	
7	04588	Spring Dowel . . . . .	2	
8	010347	Guide Pin . . . . .	2	
9	023270	Bottom Bearing Block . . . . .	2	
10	04671	Bolt, $\frac{7}{16}$ " UNF x 4" Hex. Hd. . . . .	4	Alt. to item 52
11	04529	Nut, $\frac{7}{16}$ " UNF . . . . .	4	
12	04625	Washer, Spring, $\frac{7}{16}$ " dia. . . . .	4	
12A	011878	Tab Washer . . . . .	4	
13	010322	Carrier Arm . . . . .	2	
14	010631	Screw, $\frac{3}{4}$ " BSF x 2 $\frac{1}{2}$ " Countersunk. . . . .	2	
15	010377	Grubscrew, $\frac{1}{4}$ " UNF x $\frac{3}{8}$ " long . . . . .	2	
16	010627	Side Roller. . . . .	2	
17	010380	'O' Ring . . . . .	2	
18	010353	Thrust Washer . . . . .	2	
19	010380	'O' Ring . . . . .	2	
20	010409	Grubscrew, $\frac{5}{8}$ " UNC x $\frac{3}{4}$ " Self Locking . . . . .	2	
21	010399	Pin . . . . .	2	
22	04585	Spring Dowel . . . . .	2	
23	010353	Thrust Washer . . . . .	2	
24	010626	Roller, Inner Mast . . . . .	4	
25	010805	Screw, $\frac{3}{8}$ " UNF x $\frac{5}{8}$ " Countersunk . . . . .	8	
26	010342	Retaining Plate . . . . .	4	
27	010346	Spacer . . . . .	4	
28	04608	Screw, $\frac{3}{8}$ " UNF x 1" Countersunk . . . . .	16	
29	011111	Bridge . . . . .	1	
30	010403	Bush . . . . .	2	
31	017122	Pulley . . . . .	1	
32	017123	Bearing — Bush . . . . .	1	
33	017125	Seal . . . . .	1	
34	017124	Needle Bearing . . . . .	1	
35	017124	Needle Bearing . . . . .	1	
36	017125	Seal . . . . .	1	
37	010404	Bolt, 1" UNF x 4" Hex. Hd. . . . .	1	S'eded by 05940
38	010407	Bearing — Spherical . . . . .	2	
39	03036	Spacer . . . . .	1	
40	03036	Spacer . . . . .	1	
41	03036	Spacer . . . . .	1	
41	010318	Mounting Block. . . . .	2	
42	04465	Bolt, $\frac{3}{8}$ " UNF x 1 $\frac{1}{4}$ " Hex. Hd. . . . .	8	
43	04569	Fan Disc Washer, $\frac{3}{8}$ " dia. . . . .	8	

**NOTE:** When ordering Spares Items for Masts, please quote Mast Serial Number. This is located on the right hand side of the Outer Mast above the Tilt Cylinder Pivot Point.



**FIG. 3 : 01**



**MAST AND CARRIAGE  
MAST**

Fig. No.	3:01 Part No.	Description	Qty	Remarks
44	010840	Shim, 0.15"	As Req'd	
	010343	Shim, $\frac{1}{8}$ " Standard	As Req'd	
	010396	Shim, $\frac{1}{16}$ "	As Req'd	
	010397	Shim, $\frac{3}{16}$ "	As Req'd	
45	010631	Screw, $\frac{3}{4}$ " BSF x 2 $\frac{1}{2}$ " Countersunk.	2	
46	010377	Grubscrew, $\frac{1}{4}$ " UNF x $\frac{3}{8}$ " long	2	
47	010627	Side Roller.	2	
48	010353	Thrust Washer	2	
49	010380	'O' Ring	2	
50	010353	Thrust Washer	2	
51	010380	'O' Ring	2	
52	023531	Bolt, $\frac{7}{16}$ " UNF x 6" long Hex. Hd.	4	Alt. to Item 10 Alt. to Item 52. S'ced by 010538
52A	017280	Bolt, $\frac{7}{16}$ " UNF x 4 $\frac{1}{4}$ " long Hex. Hd.	4	

**NOTE:** When ordering Spares Items for Masts, please quote Mast Serial Number. This is located on the right hand side of the Outer Mast above the Tilt Cylinder Pivot Point.

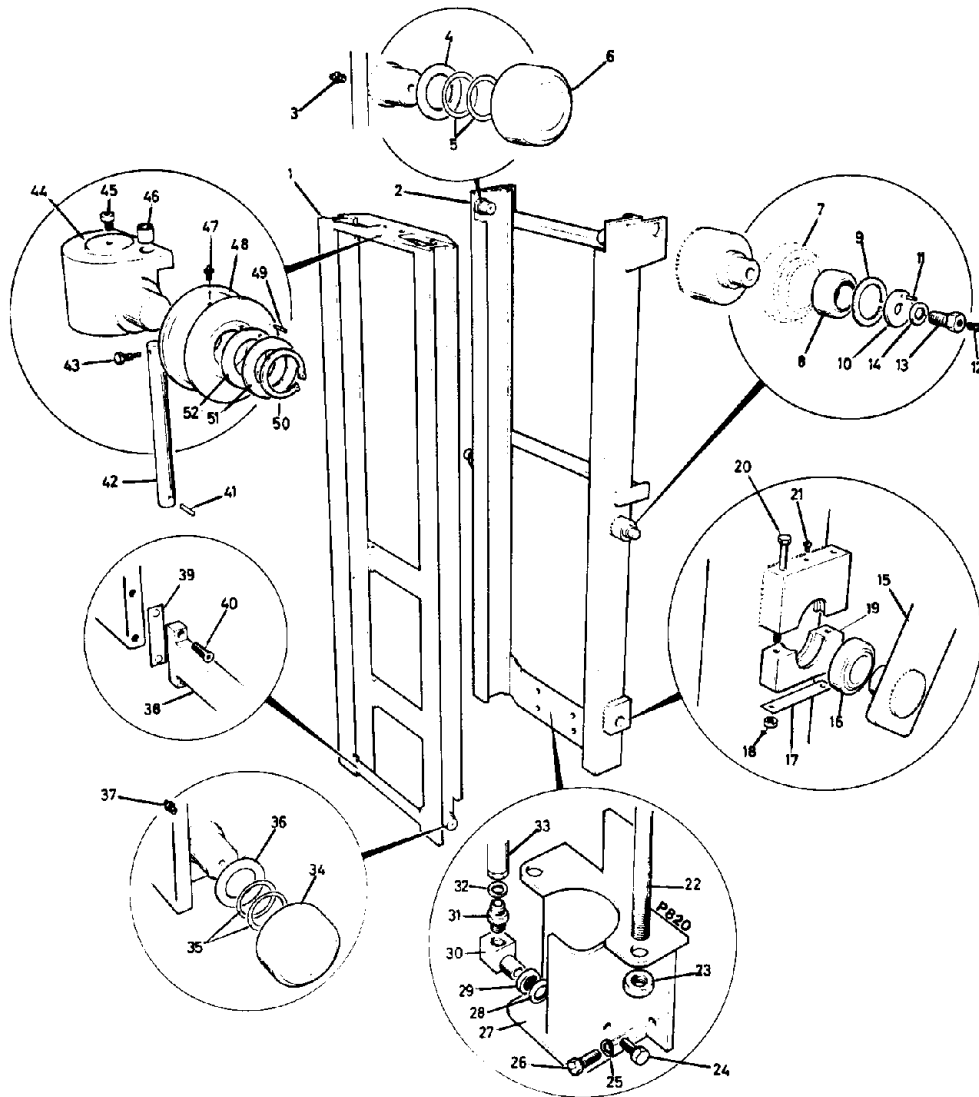


FIG. 3 : 01A



**MAST AND CARRIAGE  
MAST ASSEMBLY — NONADJUSTABLE ROLLERS — CHANNEL I/BEAM**

Fig. No.	Part No.	Description	Qty	Remarks
1	025006-144	Inner Mast.	1	
2	025005-144	Outer Mast	1	
3	04393	Grease Nipple	2	
4	025575	Abutment Washer	2	
5	025576	Shims	As Req'd	
6	025031	Roller Assembly, 4" dia.	2	
6A	025070	Roller Assembly, 4" dia.	2	Alt. to item 6
6B	010520	Grub Screw, 1/4" BSF x 1/4" long	2	For use with item 6A
7	011825	Tilt Cylinder Assembly	2	S'ced by 023313
8	010407	Spherical Bearing	2	Part of Tilt
9	011175	Circlip	2	Cylinder Assembly
10	025595	Retaining Washer	2	
11	019889	Spring Dowel Pin, 3/16" dia. x 1/2" long.	2	
12	04393	Grease Nipple	2	
13	011540	Bolt — Special	2	
14	04589	Spring Washer, 5/8" dia.	2	
15	023544	Mast Mounting Plate, L.H.	1	See Fig. 1:20
15A	023543	Mast Mounting Plate, R.H.	1	and Fig. 1:21
16	010407	Spherical Bearing	2	
17	011878	Tab Washer	4	Mast Mounting Pivot
18	04529	Nut, 7/16" UNF	4	
19	023270	Bottom Block	2	
20	023531	Bolt, 7/16" UNF x 6" long	4	
21	04393	Grease Nipple	2	
22	025056-42	Tie Bar x 42" long	2	S'ced by 027904
23	05477	Nut, 3/4" UNF Self Lock	2	For item 22 Tie Bar
24	04492	Setscrew, 1/2" UNF x 1 1/4" long.	1	Cylinder Location
25	04514	Setscrew, 5/8" UNF x 1 3/4" long	4	Lift Cyl. Support
26	04589	Spring Washer, 5/8" dia.	4	Bracket
27	025059	Lift Cylinder Support	1	
28	019309	Dowty Seal	1	
29	025063	Locknut, 7/8" UNF	1	
30	025061	Adaptor — Special	1	
31	010632	Adaptor	1	
32	010550	'O' Ring	1	For use with item 31
33	023609	Hose, 45" long	1	Lift Cylinder
34	025031	Roller Assembly, 4" dia.	2	
34A	025070	Roller Assembly, 4" dia.	2	Alt. to item 34
34B	010520	Grub Screw, 1/4" BSF x 1/4" long	2	For use with item 34A
35	025576	Shims	As Req'd	
36	025575	Abutment Washer	2	
37	04393	Grease Nipple	2	
38	025039	Bottom Brace	1	Inner Mast
39	025065	Shim	As Req'd	Bottom
40	016768	Setscrew, 1/4" UNF x 3/4" long, Csk. Skt. Hd.	4	Brace
41	04585	Spring Dowel Pin, 1/4" dia. x 1 1/2" long	2	
42	025054	Lift Guide	2	
43	025042	Bolt Special	2	
44	025025	Pulley Bridge	1	
45	025071	Screw, 5/8" UNF x 1 3/4" long	1	Pulley Bridge
46	016680	Bush	2	
47	04393	Grease Nipple	2	
48	025037	Pulley Assembly	2	
48A	025036	Pulley	2	Part of Assy
48B	025033	Bearing	2	025037
49	019889	Spring Dowel Pin, 3/16" dia. x 1/2" long.	4	
50	025035	Circlip	2	
51	025058	Backing Ring	2	
52	025034	Thrust Washer	4	

**NOTE:** When ordering Spares Items for Masts, please quote Mast Serial Number. This is located on the right hand side of the Outer Mast above the Tilt Cylinder Pivot Point.

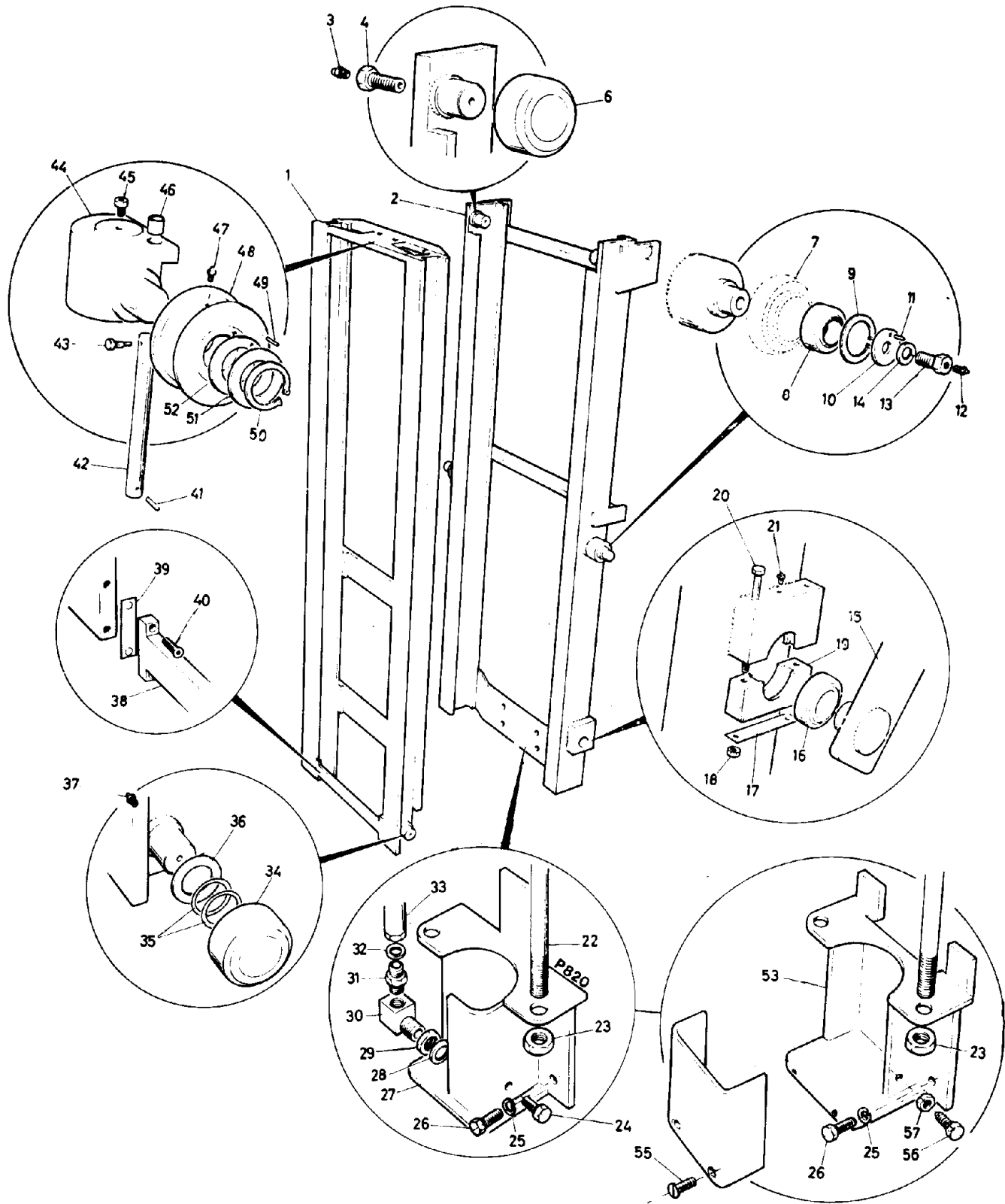


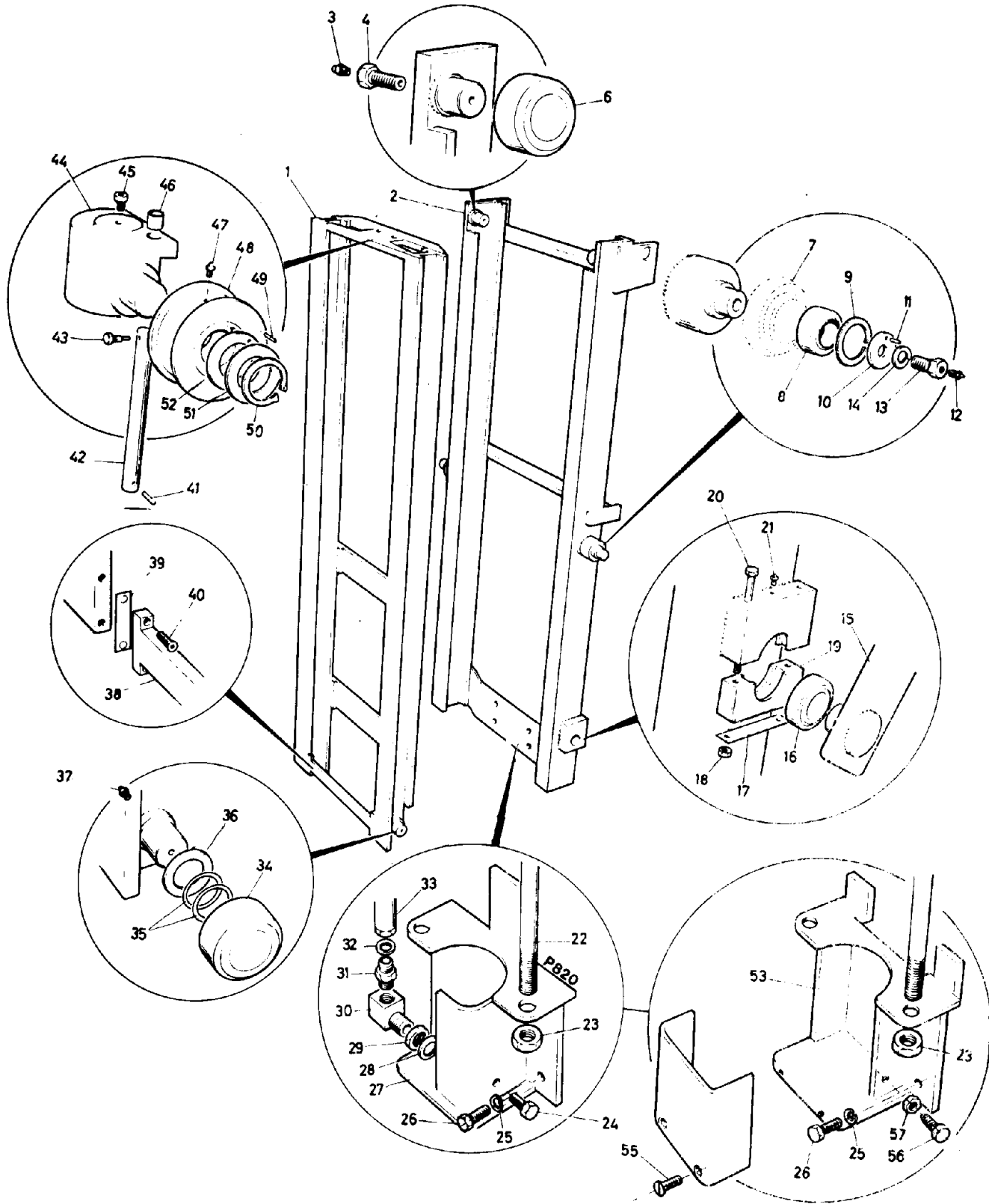
FIG. 3 : 01B



## MAST AND CARRIAGE ADJUSTABLE ROLLERS – CHANNEL/I BEAM

Fig. No.	3:01B Part No.	Description	Qty	Remarks
1	025006-144	Inner Mast	1	Standard
2	025120-144	Outer Mast	1	Standard
3	04393	Grease Nipple	2	
4	025637	Adjusting Screw	4	
5	025644	Dowel Pin – Roller Spigot	4	Not Illustrated
6	025646	Roller Assembly, 4" dia.	2	
6A	025649	Roller Assembly, 4" dia.	2	Alt. to 025646
7	023313	Tilt Cylinder Assembly	2	
8	010407	Spherical Bearing	2	} Part of Assy. 023313
9	011175	Circlip	2	
10	025595	Retaining Washer	2	
11	019889	Spring Dowel Pin, $\frac{3}{16}$ " x $\frac{1}{2}$ " long	2	
12	04393	Grease Nipple	2	
13	011540	Bolt – Special	2	
14	04589	Spring Washer	2	
15	023544	Mast Mounting Plate – L.H.	1	} See Fig. 1:20 or Fig. 1:21
15A	023543	Mast Mounting Plate – R.H.	1	
16	010407	Spherical Bearing	2	
17	011878	Tab Washer	4	
18	04529	Nut, $\frac{7}{16}$ " UNF	4	
19	023270	Bottom Block	2	
20	023531	Nut, $\frac{7}{16}$ " UNF x 6" long	4	
21	04393	Grease Nipple	2	
22	025056-42	Tie Bar – 42" long	2	Standard
23	05477	Nut, $\frac{3}{4}$ " UNF – Self Lock	2	For Item 22
24	04492	Setscrew, $\frac{1}{2}$ " UNF x $1\frac{1}{4}$ " long.	1	Lift Cyl. location
25	04589	Spring Washer, $\frac{5}{8}$ " dia.	4	
26	04514	Setscrew, $\frac{5}{8}$ " UNF x $1\frac{3}{4}$ " long	4	
27	025059	Lift Cylinder Support	1	S'ceded by 025108
28	019309	Dowty Seal	1	
29	025063	Locknut, $\frac{7}{8}$ " UNF	1	
30	025061	Adaptor Special.	1	
31	010632	Adaptor	1	
32	019309	Dowty Seal	1	
33	023609	Hose x 45" long.	1	Lift Cylinder
34	025646	Roller Assembly, 4" dia.	2	
34A	025649	Roller Assembly, 4" dia.	2	Alt. to 025646
35				} These items are not applicable
36				
37	04393	Grease Nipple	2	
38	025039	Bottom Brace	1	Inner Mast
39	025063	Shims	As Req'd	For Item 38
40	016768	Setscrew, $\frac{1}{4}$ " UNF x $\frac{3}{4}$ " long Csk. Skt. Hd.	4	Bottom Brace
41		Spring Dowel Pin	2	Not now used
42	025054	Lift Guide	2	
43	025042	Bolt – Special	2	
44	025025	Pulley Bridge	1	
45	04514	Setscrew, $\frac{5}{8}$ " UNF x $1\frac{3}{4}$ " long	1	Pulley Bridge
46	016680	Bush	2	Free Lift guide

**NOTE:** When ordering Spares Items for Masts, please quote Mast Serial Number. This is located on the right hand side of the Outer Mast above the Tilt Cylinder Pivot Point.



**FIG. 3 : 01B**



**MAST AND CARRIAGE  
ADJUSTABLE ROLLERS – CHANNEL /I BEAM**

Fig. No.	3:01B Part No.	Description	Qty	Remarks
47	04393	Grease Nipple	2	
48	025037	Pulley Assembly	2	
48A	025036	Pulley	2	Part of Assy 025037
48B	025033	Bearing	2	
49	019889	Spring Dowel Pin, $\frac{3}{16}$ " dia. x $\frac{1}{2}$ " long.	4	
50	025035	Circlip	2	
51	025038	Backing Ring	2	Should be 025058
52	025034	Thrust Washer	4	
53	025108	Lift Cylinder Support	1	Replaces item 27
54	025103	Front Plate	1	S'ced by 039437
55	04579	Spring Washer, $\frac{3}{8}$ " dia.	2	For use with items 53-54
56	04464	Bolt, $\frac{3}{8}$ " UNF x 1" long	2	
57	025101	Pipe and Adaptor Assembly	1	See Lift Cylinder Assembly
58	010542	Adaptor	1	
59				
60	025612	Guide Tie and Stop Plate	1	Free Lift Guide
61	04493	Bolt, $\frac{3}{8}$ " UNF x 1" long	2	Not illustrated
62	04624	Spring Washer, $\frac{3}{8}$ " dia.	2	This replaces item 41
63	025730	Thrust Block	2	If fitted to Mast at Bottom
64	025731	Thrust Block Shims	As Req'd	
65	011445	Bolt, $\frac{1}{2}$ " UNC x 1" long	4	

**NOTE:** When ordering Spares Items for Masts. Please Quote Mast Serial Number. This is located on the right hand side of the Outer Mast above the Tilt Cylinder Pivot Point.





**MAST AND CARRIAGE  
MAST – REDUCED HEIGHT**

Fig. No. 3:01C	Part No.	Description	Qty	Remarks
1	039395	Inner Mast . . . . .	1	Lift Ht. 12'0"
2	039382	Outer Mast . . . . .	1	Lift Ht. 12'0"
3	04393	Grease Nipple . . . . .	4	
4	025637	Adjusting Screw . . . . .	4	
5	025646	Roller Assembly . . . . .	4	
5A	025644	Dowel Pin . . . . .	4	
6	04393	Grease Nipple . . . . .	2	
7	011540	Bolt – Special . . . . .	2	
8	019889	Dowel Pin . . . . .	2	
9	04589	Washer . . . . .	2	
10	025595	Washer – Retaining . . . . .	2	
11	010407	Bearing . . . . .	2	
12	027907	Tie Bar . . . . .	2	
12A	05477	Nut – Selflock . . . . .	2	
12B	04541	Locknut . . . . .	4	
12C	04560	Washer . . . . .	2	
12D	025057	Chain Anchor . . . . .	2	
12E	025053	Chain Pin . . . . .	2	
12F	04580	Split Pin . . . . .	4	
13	039426	Cylinder Support . . . . .	1	
14	04514	Setscrew . . . . .	4	} Cylinder Support
14A	04589	Washer . . . . .	4	
15	04492	Setscrew . . . . .	1	
16	039437	Bracket . . . . .	1	
17	04579	Washer . . . . .	2	} Bracket Bolts
18	04464	Bolt . . . . .	2	
24	016768	Setscrew . . . . .	4	
25	039126	Bottom Brace . . . . .	1	
26	025065	Shims . . . . .	1	} S' seded by 037807-037806
27	04492	Setscrew . . . . .	2	
28	04624	Washer . . . . .	2	} Stop Plate
29	025612	Stop Plate . . . . .	1	
30	026111	Guide Pin . . . . .	2	
31	025025	Pulley Bridge . . . . .	1	
32	04514	Setscrew . . . . .	1	
33	016680	Bush . . . . .	2	
34	04393	Grease Nipple . . . . .	2	
35	025875	Chain Pulley . . . . .	2	
35A	025178	Chain and Hose Pulley . . . . .	2	} Alt. to 025875
35B	033930	Bearing . . . . .	2	
36	025034	Thrust Washer . . . . .	4	
37	025058	Backing Ring . . . . .	2	
38	025035	Circlip . . . . .	2	
38A	019889	Dowel Pin . . . . .	4	
38B	025876	Chain Pulley Assembly . . . . .	2	
39	025042	Bolt – Special . . . . .	2	} Free Lift Guide
40	04569	Washer . . . . .	2	
41	027571	Pivot Tube . . . . .	1	
43	025797	Pivot Shaft . . . . .	1	} Mast Pivot
44	04587	Dowel Pin . . . . .	1	
45	033928	Bush . . . . .	2	
46	029120	Spacer – Pivot Shaft. . . . .	2	

NOTE:- When ordering spares items for Mast please quote Mast serial number. This is located on the right hand side of the Outer Mast above the Tilt Cylinder Pivot Point.

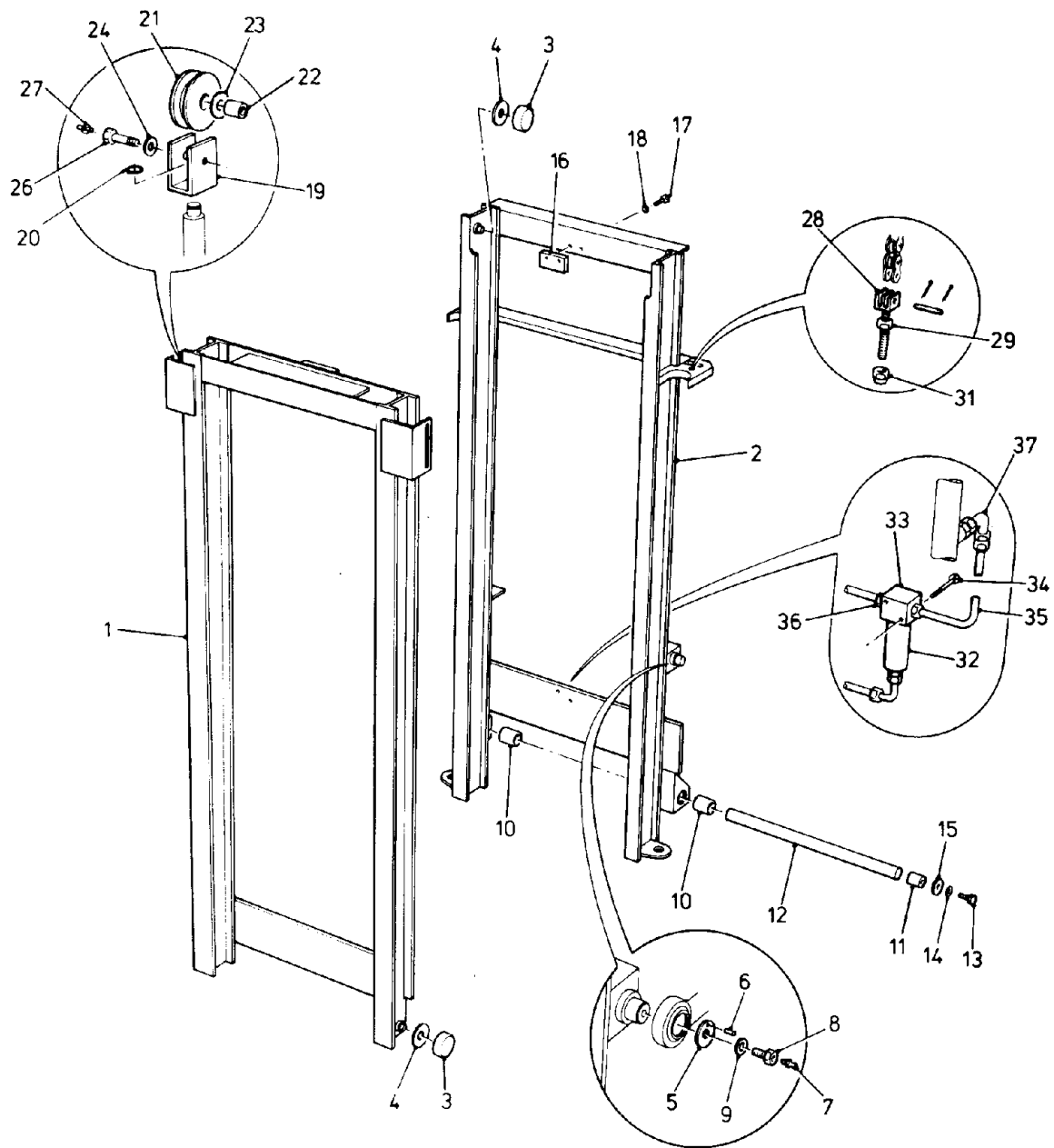


FIG. 3: 01D



**MAST AND CARRIAGE. CLEARVIEW DUPLEX MAST**

Fig.No.3:01D	Part No.	Description	Qty	Remarks
1	029741	Inner Mast 9'.0" lift	1	
	029742	Inner Mast 10'.0" lift	1	
	029743	Inner Mast 11'.0" lift	1	
	029744	Inner Mast 12'.0" lift	1	
	029745	Inner Mast 13'.0" lift	1	
	029746	Inner Mast 14'.0" lift	1	
	029747	Inner Mast 15'.0" lift	1	
	029748	Inner Mast 16'.0" lift	1	
	029749	Inner Mast 17'.0" lift	1	
	029750	Inner Mast 18'.0" lift	1	
	029751	Inner Mast 19'.0" lift	1	
	029752	Inner Mast 20'.0" lift	1	
2	029727	Outer Mast 9'.0" lift	1	
	029728	Outer Mast 10'.0" lift	1	
	029729	Outer Mast 11'.0" lift	1	
	029730	Outer Mast 12'.0" lift	1	
	029731	Outer Mast 13'.0" lift	1	
	029732	Outer Mast 14'.0" lift	1	
	029733	Outer Mast 15'.0" lift	1	
	029734	Outer Mast 16'.0" lift	1	
	029735	Outer Mast 17'.0" lift	1	
	029736	Outer Mast 18'.0" lift	1	
	029737	Outer Mast 19'.0" lift	1	
	029738	Outer Mast 20'.0" lift	1	
3	025070	Roller Assembly	4	
4	025576	Shim. Roller	AR	
5	025595	Retaining Washer	2)	
6	019889	Dowel Pin	2)	Tilt cylinder
7	04393	Grease Nipple	2)	Anchor
8	011540	Bolt Special	2)	
9	04589	Washer - spring	2	
10	029819	Bush	2)	
11	029754	Collar	2)	
12	029739	Pivot shaft	1)	Mast Pivot
13	04461	Setscrew	2)	
14	04579	Washer - spring	2)	
15	010804	Heavy duty washer	2)	
16	029673	Stop plate	1	
17	04514	Setscrew	2	
18	09621	Washer - spring	2	
19	029687	Pulley support	2	
20	036364	Circlip	2	
21	029688	Chain pulley	2	
22	027673	Bush	4	
23	027326	Thrust washer	4	
24	027874	Nylon washer	4	
25	04561	Washer	2	

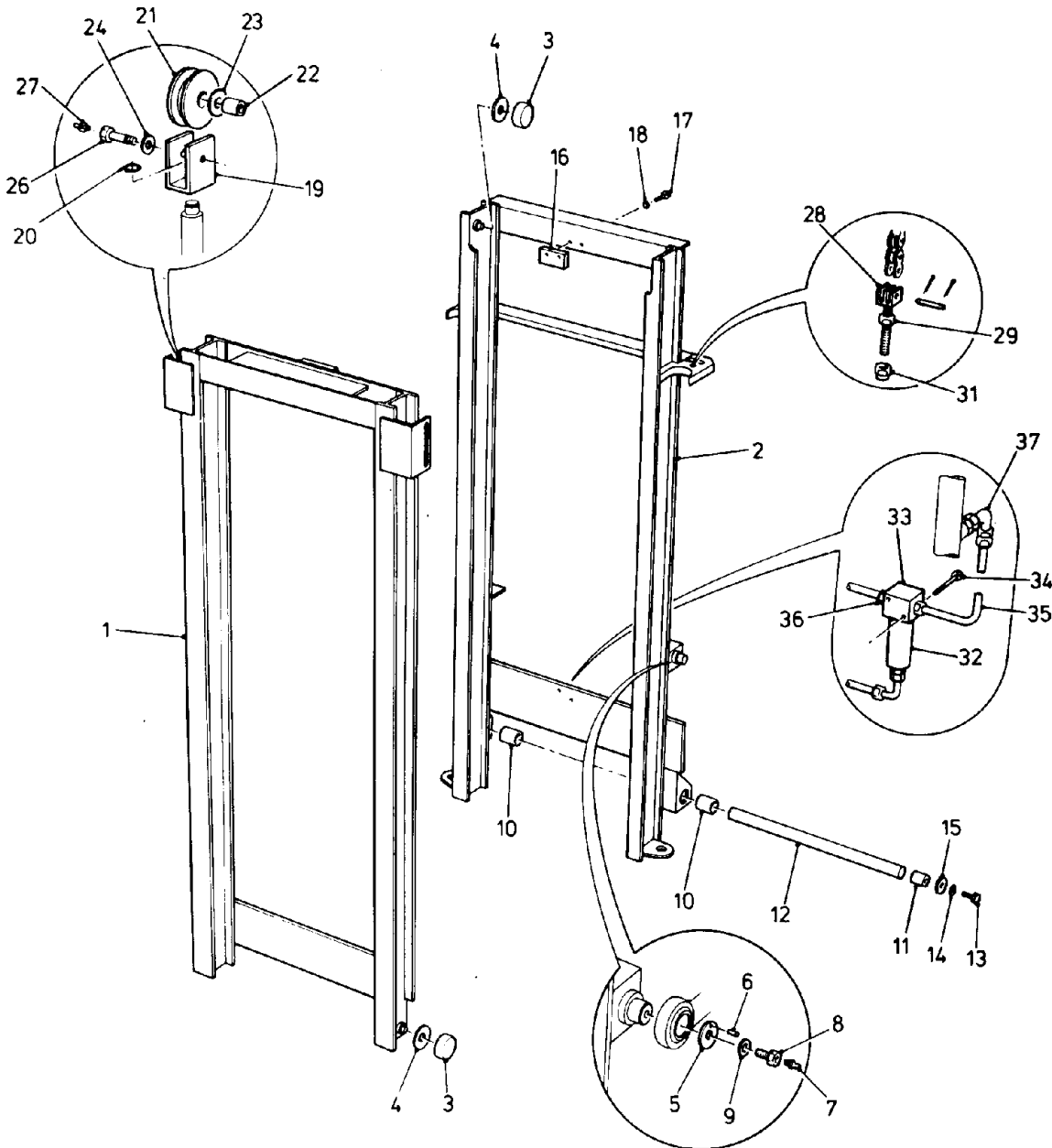
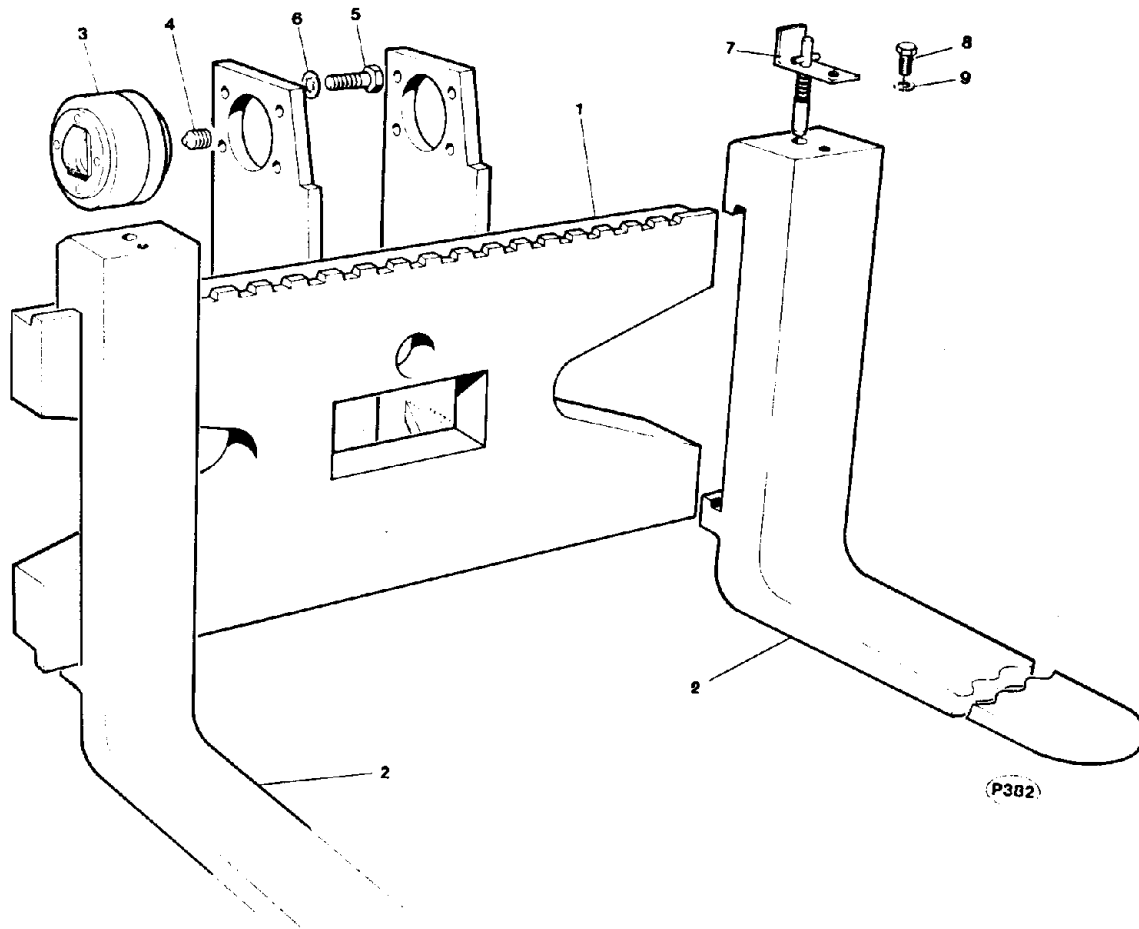


FIG. 3:01D

**MAST AND CARRIAGE. CLEARVIEW DUPLEX MAST**

<b>Fig.No.3:01D</b>	<b>Part No.</b>	<b>Description</b>	<b>Qty</b>	<b>Remarks</b>
26	029832	Bolt	2)	Chain
27	030476	Grease nipple	2)	pulley
28	029811	Chain anchor	2	
29	05479	Locknut	2	
30	04559	Washer	4	
31	04613	Nut - self lock	2	
32	025062	Flow regulator	1	
33	035569	Tee block	1	
34	036429	Setscrew	2	
35	032251	Feed hose	2	
36	012195	Adaptor	2	
37	018324	Adaptor	2	



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FIG. 3 : 02



**MAST AND CARRIAGE  
CARRIAGE AND FORKS — CHANNEL/CHANNEL**

Fig. No.	3:02 Part No.	Description	Qty	Remarks
1	023364	Carriage . . . . .	1	
2	023262	Fork Arm . . . . .	2	
3	010043	Carriage Roller Assembly . . . . .	4	Complete with 10388
4	010388	Grub Screw, $\frac{3}{16}$ " UNC x $\frac{3}{16}$ " long. . . . .	4	
5	04467	Bolt, $\frac{3}{8}$ " UNF x 1 $\frac{1}{2}$ " long . . . . .	14	
	019280	Socket Head Capscrew, $\frac{3}{16}$ " UNF x 1" long . . . . .	2	Not illustrated
6	04569	Fan Disc Washer, $\frac{3}{4}$ " dia. . . . .	16	
7	011698	Fork Pin Assembly . . . . .	2	
7A	011696	Fork Pin . . . . .	2	Part of Assembly Item 7
7B	012310	Spring . . . . .	2	
7C	011697	Mounting Bracket . . . . .	2	
7D	04585	Spring Dowel . . . . .	2	
8	04443	Setscrew, $\frac{1}{4}$ " UNF x $\frac{3}{4}$ " long Hex. Hd. . . . .	2	
9	04555	Washer, $\frac{1}{4}$ " dia. . . . .	2	
10	011541	Nylon Tube . . . . .	4	Not illustrated
11	011543	Grease Nipple . . . . .	4	

**NOTE:** When ordering spares items for carriage, please quote Carriage Serial Number. This is located on the right hand side rear face of the carriage.

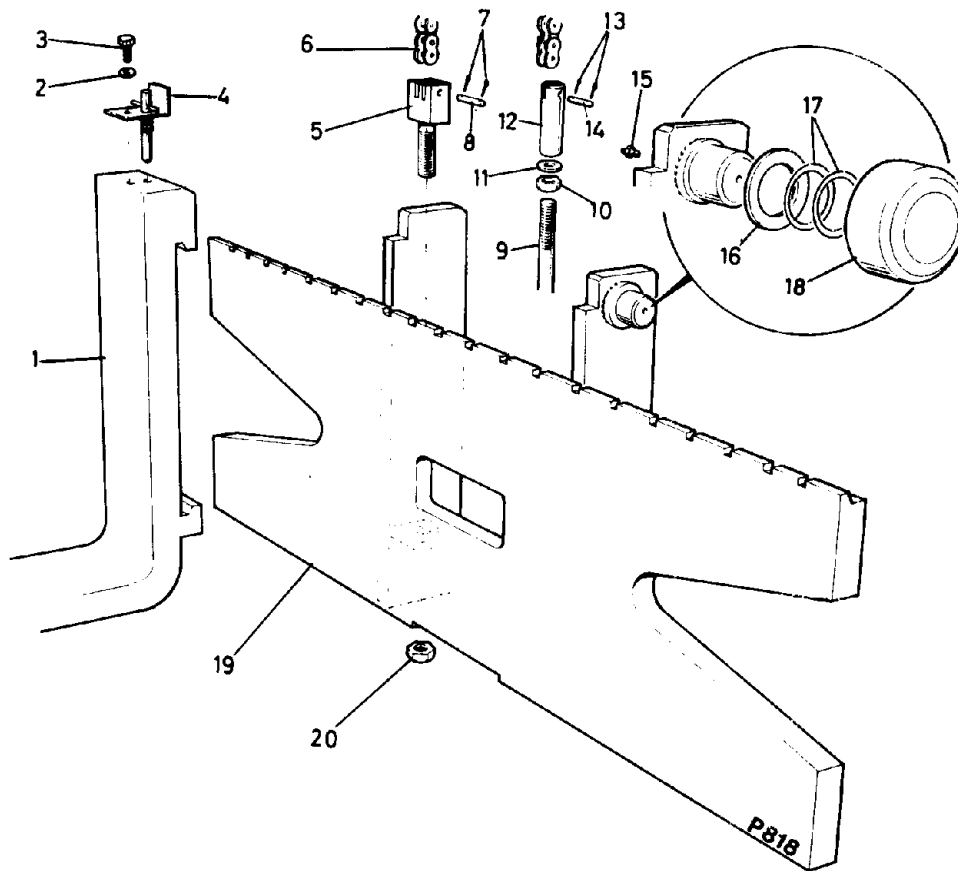


FIG. 3 : 02A



**MAST AND CARRIAGE  
CARRIAGE ASSEMBLY — NONADJUSTABLE ROLLERS — CHANNEL/I BEAM**

Fig. No.	3:02A Part No.	Description	Qty	Remarks
1	023262	Fork Arm . . . . .	2	
2	04555	Washer, ¼" dia. . . . .	2	
3	04443	Setscrew, ¼" UNF x ¾" long . . . . .	2	
4	011698	Fork Pin Assembly . . . . .	2	
4A	011696	Fork Pin . . . . .	2	} Part of Assembly 011698
4B	012310	Spring . . . . .	2	
4C	011697	Mounting Bracket . . . . .	2	
4D	04585	Spring Dowel Pin . . . . .	2	
5	025055	Chain Anchor . . . . .	2	
6	025027	Chain — 115 Links . . . . .	2	Carriage Standard, S'seded by 041033
7	04580	Split Pin, 1/16" x ¾" long . . . . .	4	
8	025053	Chain Anchor Pin . . . . .	4	
9	025056-42	Tie Bar — 42" long . . . . .	2	Standard, S'seded by 027904
10	04541	Locknut, ¾" UNF . . . . .	2	
11	04560	Washer Plain, ¾" dia. . . . .	2	
12	025057	Chain Anchor . . . . .	2	
13	04580	Split Pin, 1/16" x ¾" long . . . . .	4	
14	025053	Chain Anchor Pin . . . . .	2	
15	04393	Grease Nipple . . . . .	4	
16	025575	Abutment Washer . . . . .	4	
17	025576	Shims . . . . .	As Req'd	
18	025031	Roller, 4" dia. . . . .	4	Carriage
18A	025070	Roller, 4" dia. . . . .	4	Alt. to item 18
18B	010520	Grubscrew, ¼" BSF x ¼" long. . . . .	4	Reg. only with item 18A
19	023606	Carriage . . . . .	1	
20	05477	Nut, ¾" UNF, Self Lock . . . . .	2	

**NOTE:** When ordering Spares Items for Carriage please quote Carriage Serial Number. This is located on the right hand side rear face of the Carriage.

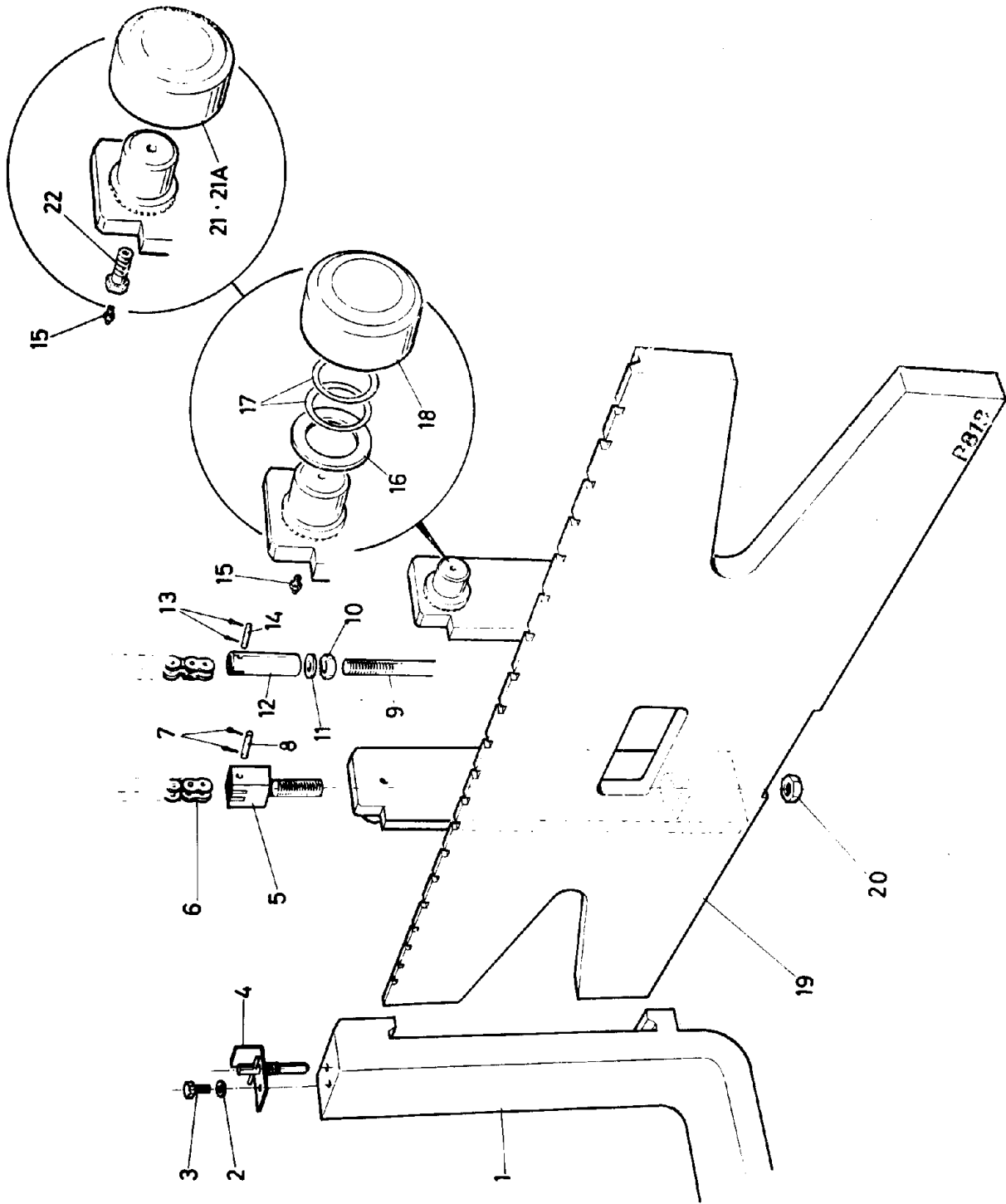


FIG. 3 : 02B



**MAST AND CARRIAGE  
CARRIAGE — ADJUSTABLE ROLLERS — CHANNEL/I BEAM**

Fig. No.	3:02B Part No.	Description	Qty	Remarks
1	023262	Fork Arm	2	
2	04555	Washer, 1/4" dia.	2	
3	04443	Setscrew, 1/4" UNF x 3/4" long	2	
4	011698	Fork Pin Assembly	2	
4A	011696	Fork Pin	2	} Part of Assembly 011698
4B	012310	Spring	2	
4C	011697	Mounting Bracket	2	
4D	04585	Spring Dowel Pin	2	
5	025055	Chain Anchor	2	Carriage
6	025027-144	Chain — 115 Links	2	Standard, S'seded by 041033
7	04580	Split Pin, 1/16" x 3/4" long	4	
8	025053	Chain Anchor Pin	2	
9	025056-144	Tie Bar — 42" long	2	S'seded by 027904
10	04541	Locknut, 3/4" UNF	2	
11	04560	Washer Plain, 3/4" dia.	2	
12	025057	Chain Anchor	2	
13	04580	Split Pin, 1/16" x 3/4" long	4	
14	025053	Chain Anchor Pin	2	
15	04393	Grease Nipple	4	
16				} These items are not applicable
17				
18				
18A 18B				
19	025669	Carriage	1	Standard
20	05477	Nut, 3/4" UNF	2	Self Lock
21	025646	Roller Assembly, 4" dia.	4	
21A	025649	Roller Assembly, 4" dia.	4	Alt. to Item 21
22	025638	Adjusting Screw	4	

**NOTE:** When Ordering spares items for Carriage please quote carriage serial number. This is located on the right hand side rear face of the Carriage.

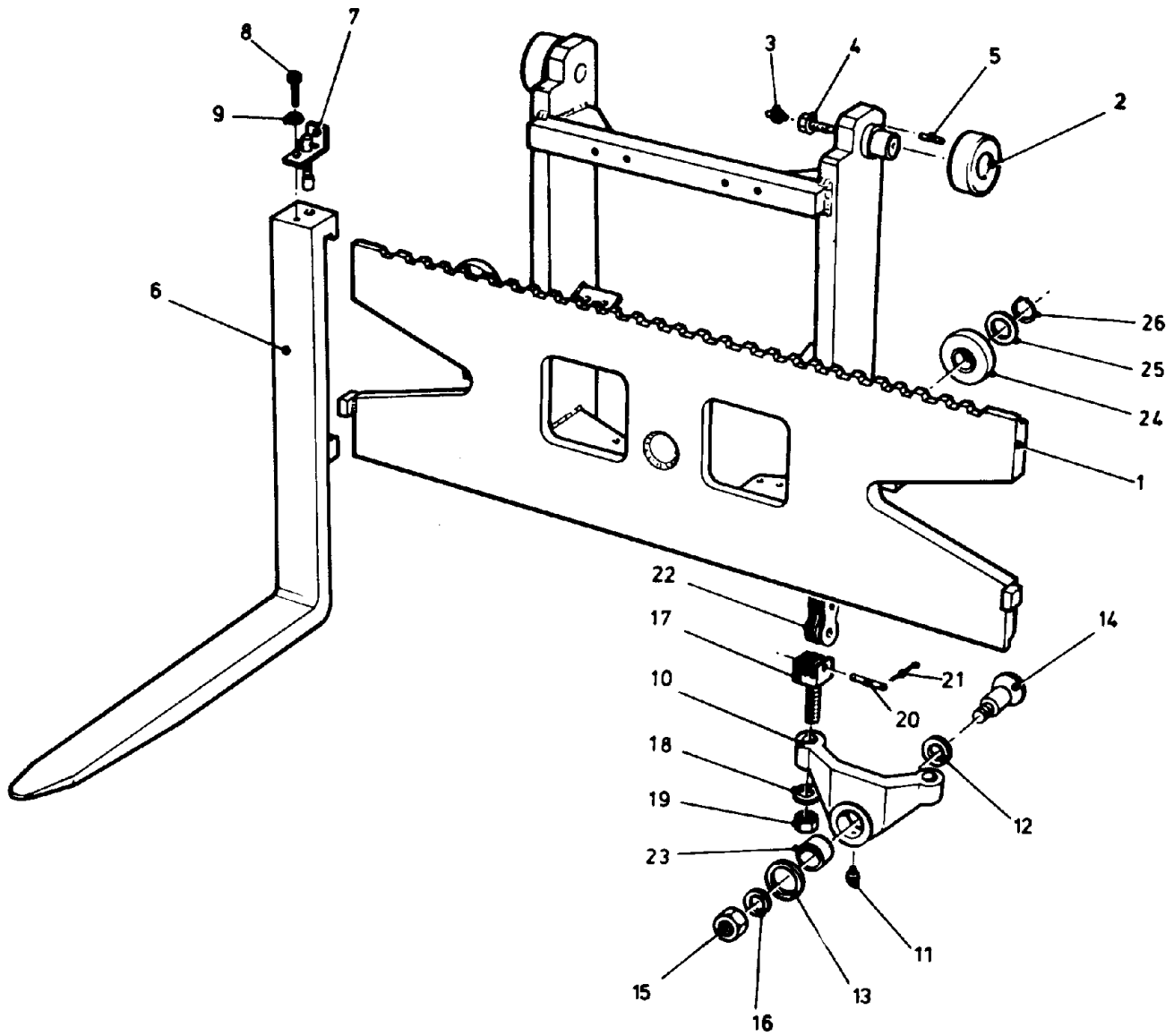


FIG. 3 : 02C



**MAST AND CARRIAGE  
CARRIAGE — REDUCED HEIGHT**

Fig. No. 3:02C	Part No.	Description	Qty	Remarks
1	039337	Carriage . . . . .	1	
2	025646	Roller Assembly . . . . .	4	
3	04393	Grease Nipple . . . . .	4	
4	025638	Adjusting Screw . . . . .	4	
5	025644	Dowel Pin . . . . .	4	
6	023262	Fork Arm . . . . .	2	
7	011698	Fork Pin Assembly . . . . .	2	
7A	011696	Fork Pin . . . . .	2	} Part of 011698
7B	012310	Spring . . . . .	2	
7C	011697	Bracket . . . . .	2	
7D	04585	Dowel Pin . . . . .	2	
8	04443	Setscrew . . . . .	2	
9	04555	Washer . . . . .	2	
10	039131	Equaliser Bridge . . . . .	1	} Equaliser
11	030471	Grease Nipple . . . . .	1	
12	027326	Thrust Washer . . . . .	1	
13	027213	Washer — Retaining . . . . .	1	
14	027338	Screw . . . . .	1	
15	019692	Nut . . . . .	1	
16	09619	Washer . . . . .	1	
17	038105	Chain Anchor . . . . .	2	
18	039127	Washer . . . . .	2	
19	04613	Nut, Selflock . . . . .	2	
20	027351	Pin — Chain Anchor . . . . .	2	S' seded by 025053
21	04581	Split Pin . . . . .	4	S' seded by 04580
22	038116	Chain . . . . .	2	Lift Ht. 12'0"
23	027673	Bearing . . . . .	1	
24	038511	Roller — Side . . . . .	2	} Part of 038511
24A	038510	Roller . . . . .	2	
24B	027673	Bush . . . . .	2	S' seded by 027326
25	025580	Thrust Washer . . . . .	4	S' seded by 027327
26	038512	Circlip . . . . .	2	
	030160	Bolt	2)	Carriage
	030302	Locknut	2)	Height Stop

NOTE: When ordering spares items for Carriage, Please quote Carriage serial number. This is located on the right hand side rear face of the Carriage.

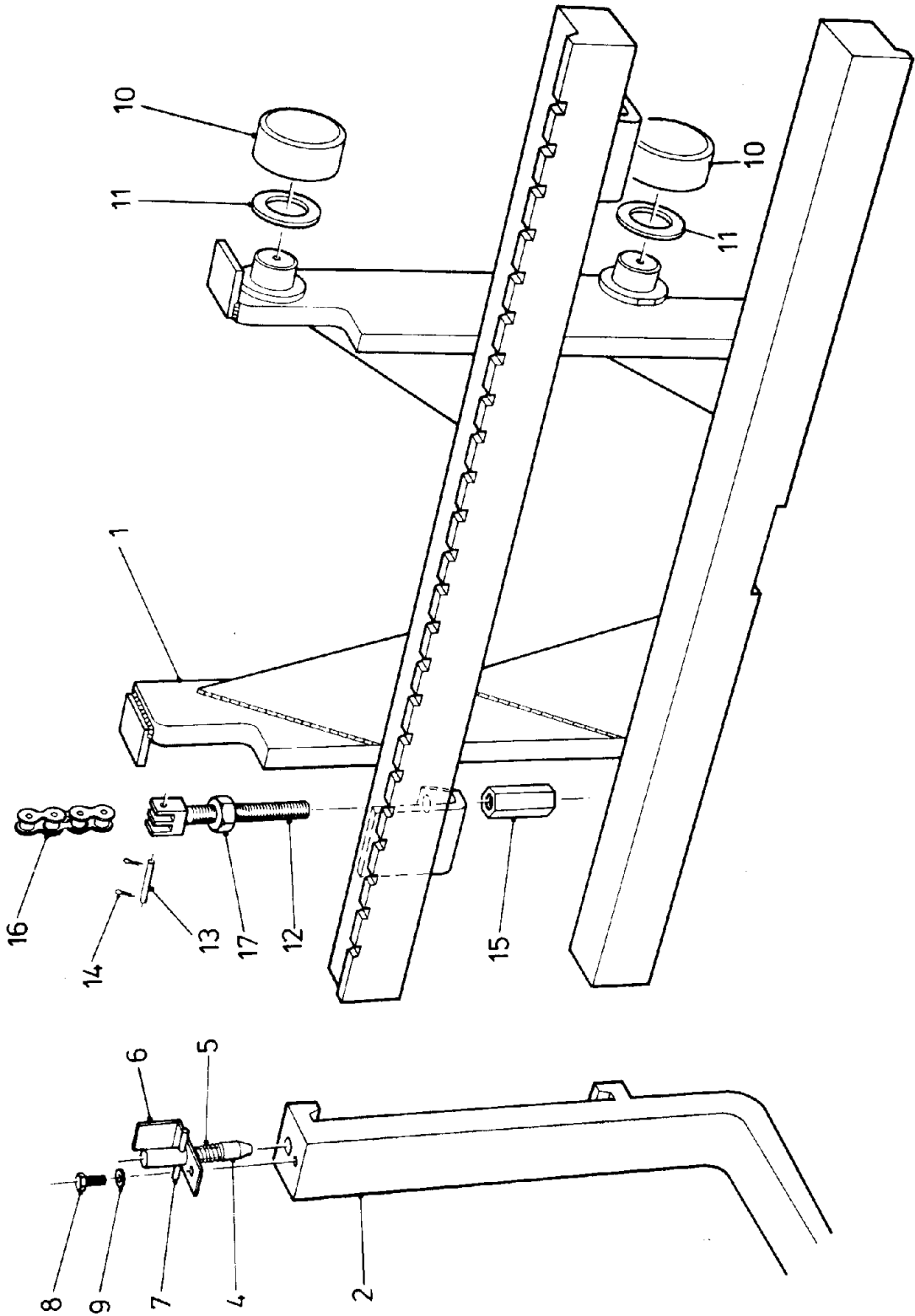


FIG. 3:02D

**MAST AND CARRIAGE. CARRIAGE - CLEARVIEW DUPLEX MAST**

Fig.No.3:02D	Part No.	Description	Qty	Remarks
1	029753	Carriage	1	
2	023262	Fork arm	2	
3	011698	Fork pin assembly	2	
4	011696	Fork pin	2)	Part of
5	012310	Spring	2)	Fork pin
6	011697	Bracket	2)	assembly
7	04585	Dowel pin	2)	
8	04443	Setscrew	2	
9	04555	Washer	2	
10	025070	Roller assembly	4	
11	025576	Shim. Roller	AR	
12	027216	Chain anchor	2	
13	027351	Pin chain anchor	4	
14	04581	Split pin	8	
15	029812	Anchor nut	2	
16	029799	Chain 93 links 9'.0" lift	2	
	029800	Chain 101 links 10'.0" lift	2	
	029801	Chain 109 links 11'.0" lift	2	
	029802	Chain 117 links 12'.0" lift	2	
	029803	Chain 125 links 13'.0" lift	2	
	029804	Chain 133 links 14'.0" lift	2	
	029805	Chain 141 links 15'.0" lift	2	
	029806	Chain 149 links 16'.0" lift	2	
	029807	Chain 157 links 17'.0" lift	2	
	029808	Chain 165 links 18'.0" lift	2	
	029809	Chain 173 links 19'.0" lift	2	
	029810	Chain 181 links 20'.0" lift	2	
17	04613	Nut Nyloc	2	

**Bonser** SPARE PARTS CATALOGUE



SERIES: LS45, LS45TC, LS55,  
LS55TC, LS55SL, LS55SLTC

DATE: AUG. 82 ISSUE No. 07 PAGE: 146D



## SECTION 4 STEERING

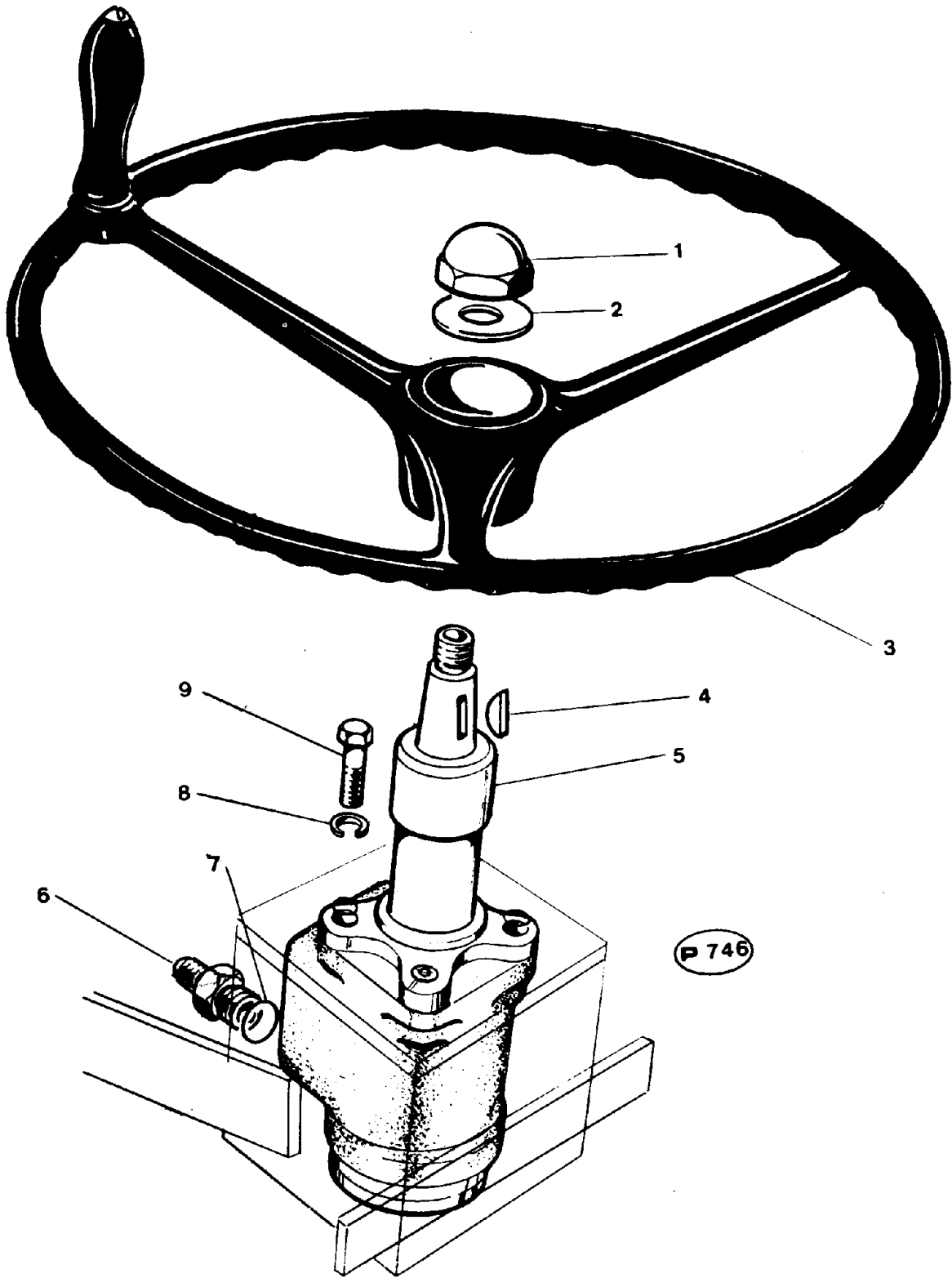


FIG. 4 : 01



**STEERING  
STEERING GEAR (ORBITROL)**

Fig. No.	4:01 Part No.	Description	Qty	Remarks
1	018432	Domed Nut, Plated 3/4" UNF	1	
2	018433	Washer, Plain, Plated	1	
3	016125	Steering Wheel	1	
4	010727	Woodruff Key	1	
5	023460	Column and Control Unit Assembly	1	S' seded by 023968
5A	023318	Column, Complete with Driveshaft and Key	1	
5B	011951	Control Unit, Orbitrol.	1	S' seded by 010096
5C	011219	Screw, 3/8" UNC x 3/4" long Skt. Hd. Cap	2	Column to Control Unit
6	010457	Adaptor, Complete with 'O' Ring	4	For use with Item 6
7	010729	'O' Ring	4	For use with item 6
8	04579	Spring Washer, 3/8" dia.	2	} Fixing Bolts for Item 5
9	04468	Bolt, 3/8" UNC x 1 1/2" long, Hex. Hd.	2	
10	020084	Seal Kit	1	Orbitrol Unit
	033954	Spacer	2	Orbitrol Unit

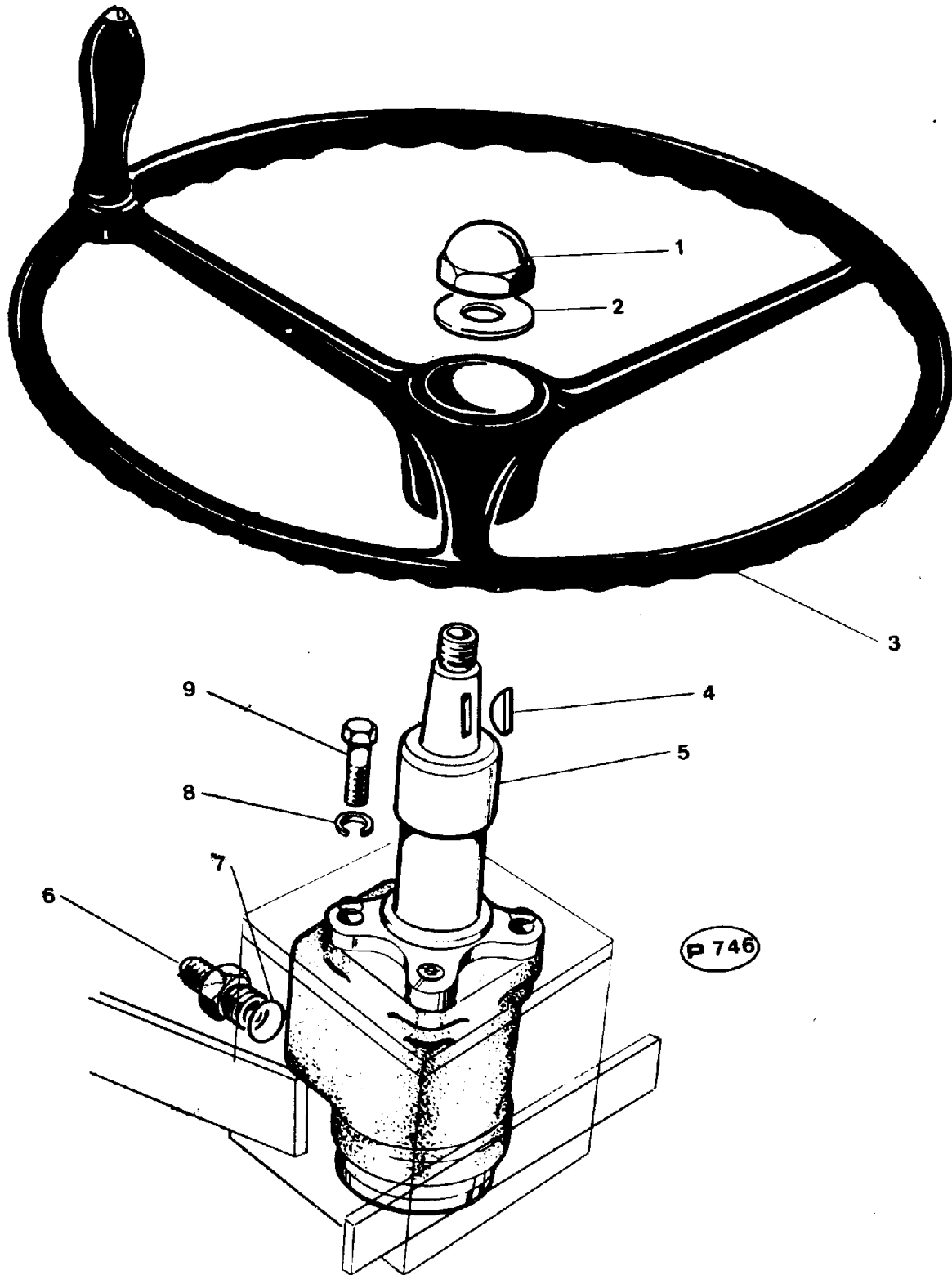


FIG. 4 : 01

**STEERING****STEERING GEAR - NEW CONSOLE**

<b>Fig.No.4:01A</b>	<b>Part No.</b>	<b>Description</b>	<b>Qty</b>	<b>Remarks</b>
1	018432	Nut domed	1	
2	018433	Washer	1	
3	016125	Steering wheel	1	
4	010727	Woodruff key	1	
5	023968	Column and Control unit	1	
5A	010095	Column complete with key and driveshaft	1	
5B	010096	Orbitrol control unit	1	
5C	011219	Screw. Column to control unit	2	
6	011457	Adaptor	2	
	016773	Adaptor	2	
	033855	Tube reducer	2	
	033854	Tube nut	2	
7				
8	04579	Washer - spring	2	
9	04468	Bolt	2	
	033954	Spacer	2	
	020084	Kit seal	AR	

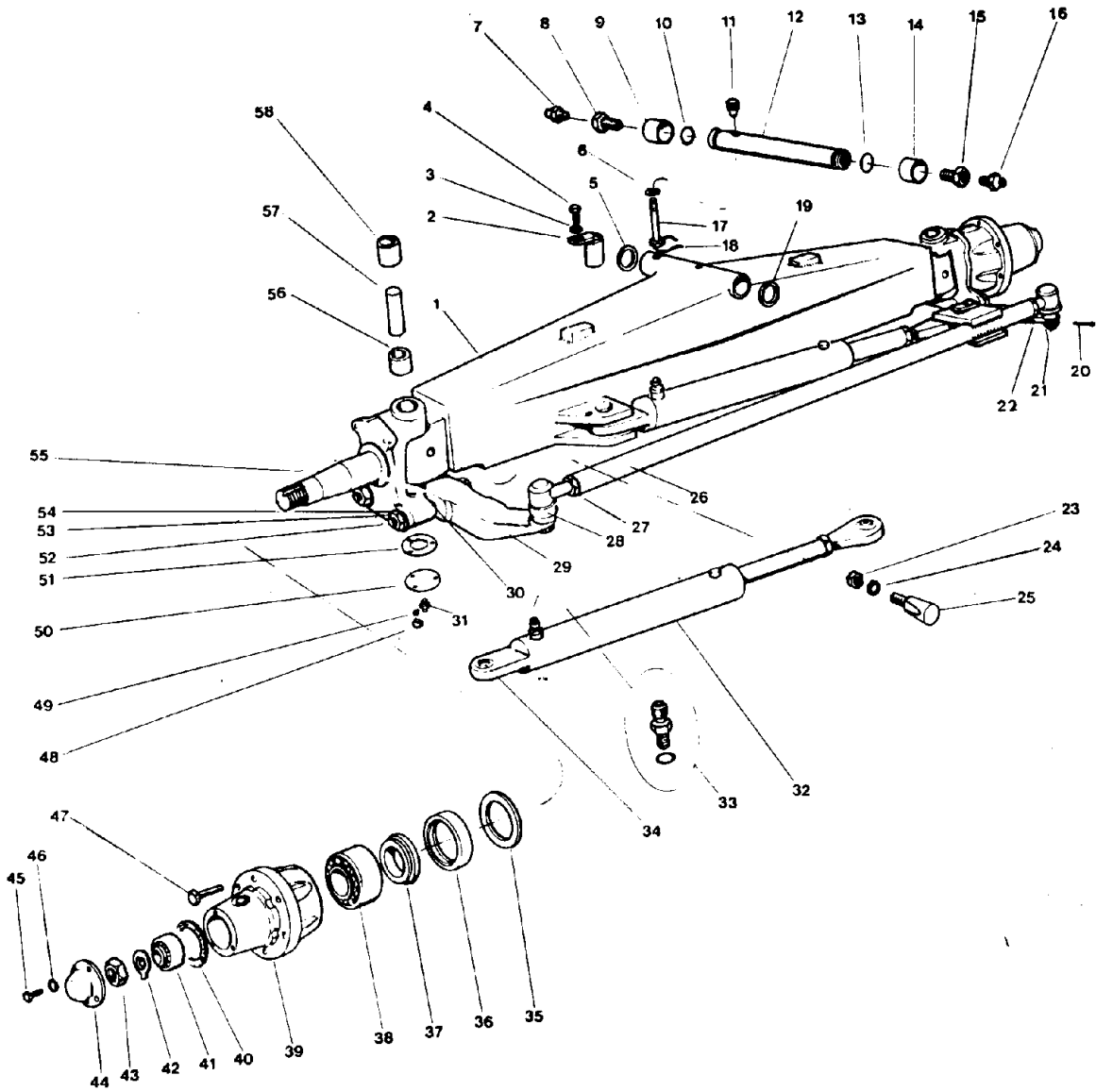


FIG. 4 : 02



**STEERING  
STEERING AXLE AND HUB**

Fig. No. 4:02	Part No.	Description	Qty	Remarks
1	023165	Rear Axle Beam . . . . .	1	
2	040112	Retaining Pin . . . . .	2	
3	04577	Washer, ¼" dia. . . . .	2	
4	04441	Screw, ¼" UNF x ¾" Hex. Hd.. . . . .	2	
5	023063	Thrust Washer . . . . .	1	
6	04579	Washer, ⅜" dia. . . . .	1	
7	04393	Grease Nipple . . . . .	1	
8	011540	Setscrew — Special . . . . .	1	
9	012393	Bush . . . . .	1	
10	04407	'O' Ring . . . . .	1	
11	012688	Screwed Bush . . . . .	1	
12	023059	Trunnion Pin . . . . .	1	
12A	023464	washer, Retaining . . . . .	2	
13	04407	'O' Ring . . . . .	1	
14	012393	Bush . . . . .	1	
15	011540	Setscrew — Special . . . . .	1	
16	04393	Grease Nipple . . . . .	1	
17	012689	Special Bolt . . . . .	1	
18	021296	Locking Wire — 18 swg (.048) x 14 ½ in. . . . .	1	
19	023063	Thrust Washer . . . . .	1	
20	04582	Split Pin, ⅜" x 1 ½" long . . . . .	2	
21	04545	Nut — Slotted, ⅜" UNF . . . . .	2	
22	012694	Steering Lever, L.H. . . . .	1	
23	04531	Nut, ½" UNF . . . . .	2	
24	04558	Washer, ½" dia. . . . .	2	
25	012680	Pin . . . . .	2	
26	023462	Track Rod . . . . .	1	
27	021308	Locknut, ¾" — 20 uns . . . . .	2	
28	023909	Ball Socket Assembly . . . . .	2	{ R.H. Thread Both Ends of Track Rod
29	012695	Steering Lever, R.H. . . . .	1	
30	012673	Thrust Bearing . . . . .	2	
31	040555	Grease Nipple . . . . .	4	
32	023029	Steering Ram Assembly . . . . .	1	
33	010995	Adaptor — Complete with 'O' Ring . . . . .	2	
34	040123	Spherical Bearing . . . . .	2	
35	012672	Dirt Excluder . . . . .	2	
36	012671	Oil Seal Sleeve . . . . .	2	
37	012670	Oil Seal . . . . .	2	{ S'seded by 021311 S'seded by 021312 See B T S B 253/102 for Truck Serial No.
38	012498	Bearing . . . . .	2	
39	021309	Rear Hub . . . . .	2	{ S'seded by 021313 See B T S B 253/102 for Truck Serial No.
40	021310	Gasket . . . . .	2	
41	012499	Bearing . . . . .	2	{ S'seded by 021314, see B T S B 253/102

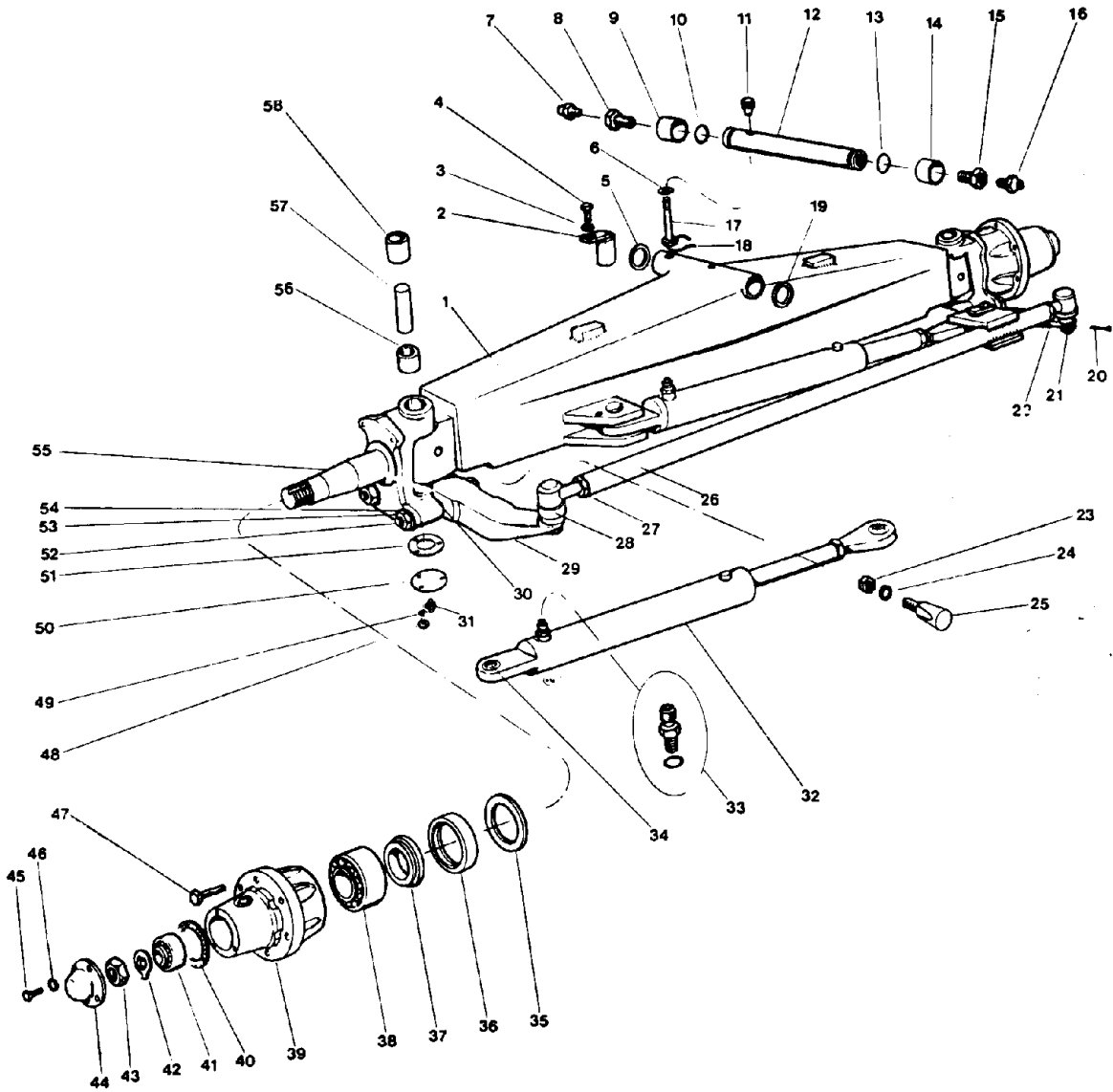


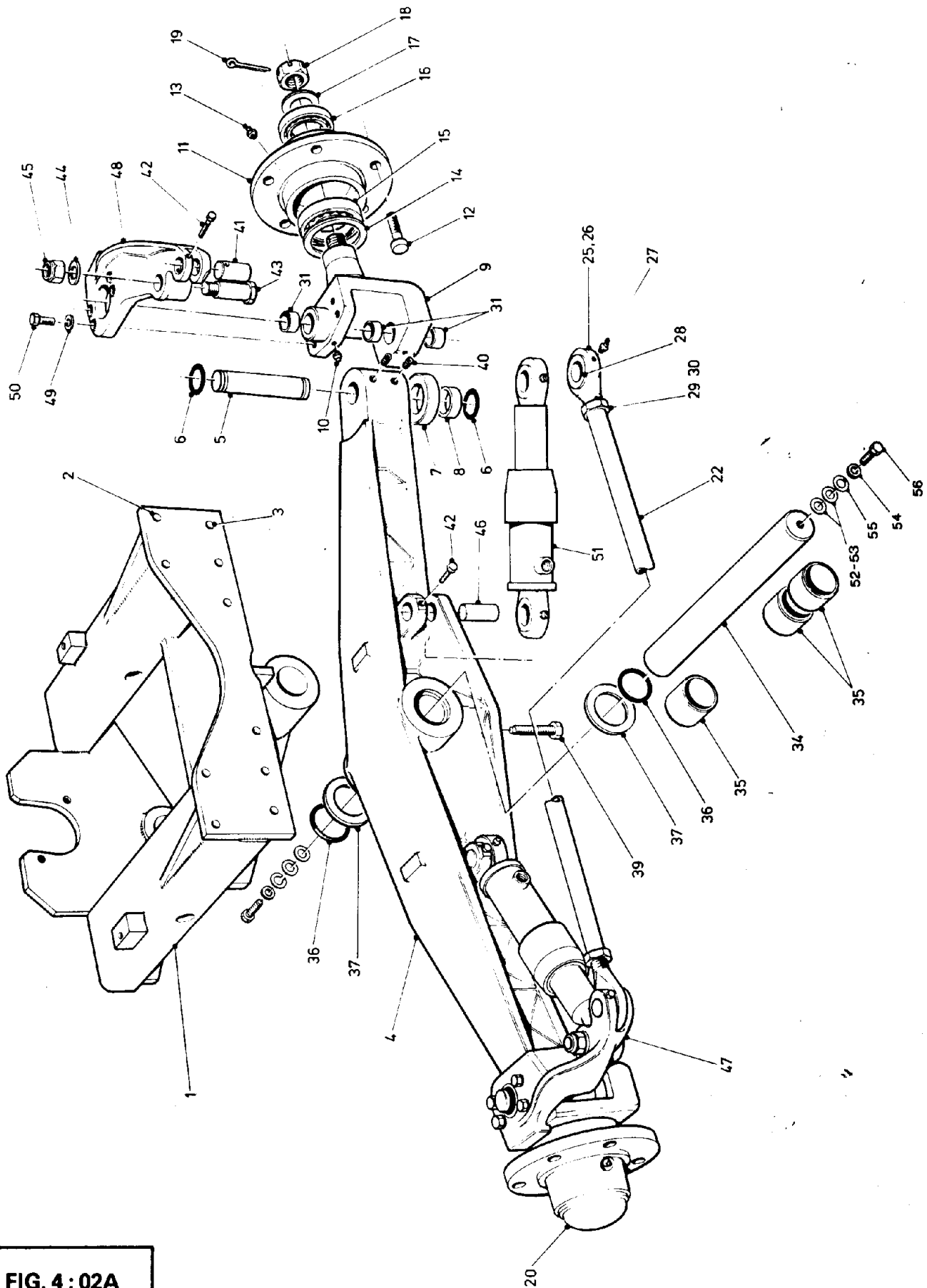
FIG. 4 : 02



**STEERING  
STEERING AXLE AND HUB**

Fig. No.	4:02 Part No.	Description	Qty	Remarks
42	012683	Tab Washer	2	
43	04537	Nut, 1 1/4" UNF	2	S'seded by 021315, see B T S B 253/102
44	012681	Hub Cap	2	
45	04618	Setscrew, 1/4" UNC x 5/8"	6	
46	04577	Spring Washer	6	
47	021319	Wheel Bolt	12	S'seded by 023540 & 023541, see B T S B 240/94
47A	023540	Wheel Stud	12	
47B	09692	Wheel Nut.	12	
47C	09711	Taper Washer	12	
47D	09695	Washer Spring	12	
48	04440	Setscrew, 1/4" UNF x 1/2"	6	
49	04577	Spring Washer, 1/4" dia.	6	
50	012675	Cover Plate (with Centre Tapped Hole)	2	S'seded by 021316, see B T S B 253/102
51	012674	Gasket	2	
52	011026	Bolt, 3/8" UNC x 6"	4	
53	04532	Nut, 3/8" UNC	4	
54	04589	Spring Washer, 5/8" dia.	4	
55	012676	Stub Axle Assembly	2	S'seded by 021317 see B T S B 253/102 for Truck Serial No.
56	012678	Bush	2	
57	012679	King Pin	2	S'seded by 021318, see B T S B 253/102 for Truck Serial No.
58	012678	Bush	2	

For changes to Wheel Fixing Bolts refer to B T S B 240/94 Issue 2 and Issue 3.



**FIG. 4 : 02A**



**STEERING  
REAR AXLE AND WHEEL HUB MARK III**

Fig. No. 4:02A	Part No.	Description	Qty	Remarks
	047525	Steer Axle Assembly	A.R.	Without Wheels, Brgs. and Seals.
1	027752	Pump and Axle Mount	1	
2	012391	Bolt, $\frac{7}{8}$ " UNC x $1\frac{3}{4}$ " long	4	
3	012708	Bolt, $\frac{7}{8}$ " UNC x $2\frac{5}{8}$ " long	6	
3A	020285	Washer Spring, $\frac{7}{8}$ " dia.	10	
4	033868	Axle Beam	1	
5	026712	Kingpin	2	
6	026282	'O' Ring — Kingpin	4	
7	03432	Bearing — Thrust	2	
8	03213	Spacer — Bearing	2	
9	026278	Stub Axle — Right Hand and Left Hand	2	
10	030476	Grease Nipple — Stub Axle	4	
11	026283	Wheel Hub	2	
12	014090	Wheel Stud	10	
13	030476	Grease Nipple — Wheel Hub	2	
14	026286	Nilos Ring	2	
15	026284	Bearing — Inner	2	
16	026285	Bearing — Outer	2	
17	026288	Washer — Heavy Duty	2	
18	04546	Nut — Castle	2	
19	04584	Split Pin	2	
20	03466	Hub Cap	2	
21	026707	Track Rod Assembly	1	
22	026616	Track Rod	1	
23	026614	Track Rod End Assembly	1	Left Hand
24	026303	Track Rod End Assembly	1	Right Hand
25	026615	Track Rod End	1	Left Hand
26	026304	Track Rod End	1	Right Hand
27	030476	Grease Nipple Track Rod End	2	
28	040123	Spherical Bearing	2	
29	04554	Locknut — Right Hand Thread	1	
30	04553	Locknut — Left Hand Thread	1	
31	026727	Bush — Kingpin	8	
32	026717	Spacer	2	
33				
34	026290	Pin — Axle Pivot	1	Replaced by 038618
35	033871	Bush — Axle Pivot	3	
36	026612	'O' Ring — Axle Pivot	2	
37	026713	Spacer — Axle Pivot	2	
38	030476	Grease Nipple — Axle Pivot	2	
39	026711	Bolt — Special — Axle Pivot	1	Replaced by 038614
40	026720	Grubscrew, M10 x 20	4	
41	026299	Pin — Track Rod	2	
42	032229	Bolt — M8 x 30	4	
43	026295	Pin — Cylinder Anchor	2	
44	04559	Washer Plain	2	
45	032086	Nut — Nyloc	2	
46	026293	Pin — Cylinder Anchor	2	
47	026279	Track Rod Arm — Left Hand	1	Replaced by 038962
48	026280	Track Rod Arm — Right Hand	1	Replaced by 038963
49	026706	Tab Washer	4	Replaced by 09619
50	032140	Setscrew, M12 x 40	8	Replaced by 039052
51	026719	Steering Cylinder Assembly	2	See Fig. 6:12
52	038616	Shim	A.R.	For use with Axle Pivot Pin 038618
53	038617	Shim	A.R.	
54	038615	Retaining Washer	2	
55	04589	Washer Spring	2	
56	08015	Setscrew	2	

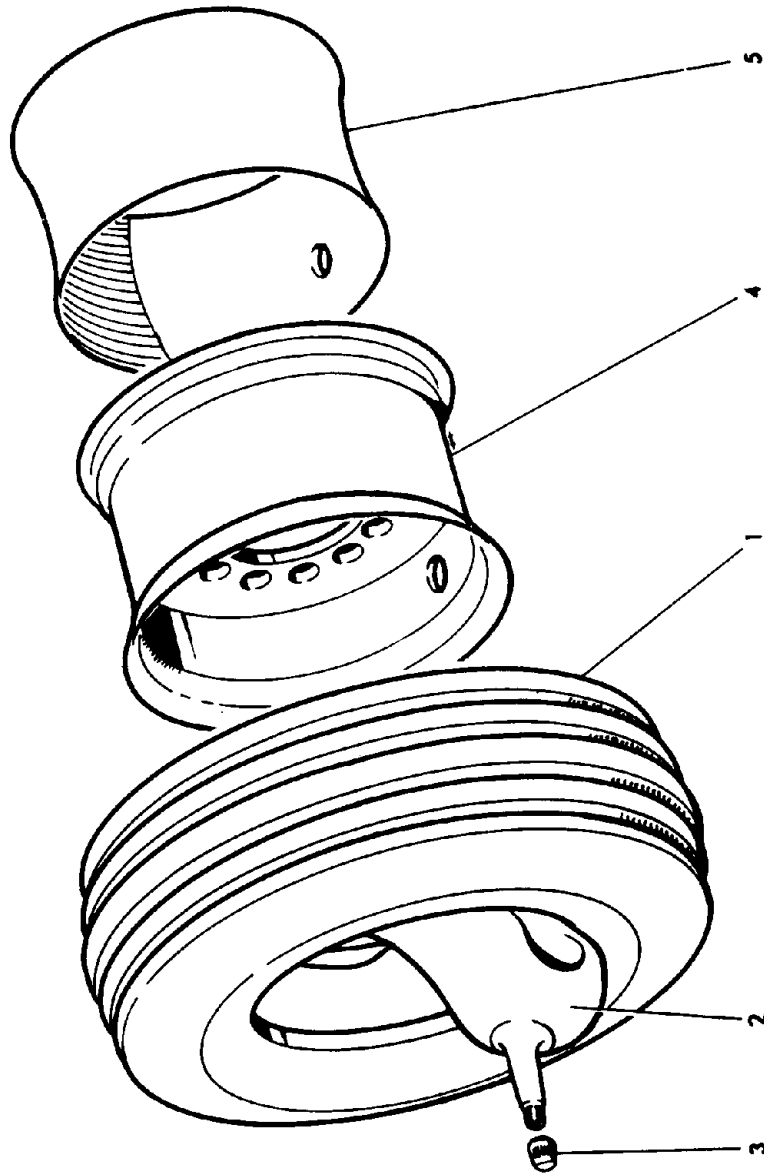


FIG. 4 : 03



**STEERING  
REAR WHEEL ASSEMBLY**

Fig. No.	4:03 Part No.	Description	Qty	Remarks
1A	023018	Wheel Assembly	2	Item 1A
1	023171	Tyre, 9" x 16" 10 PR 3 Rib	1	
2	023172	Tube	1	
3	04215	Valve Cap	1	
4	023067	Wheel Rim	1	
5	023173	Flap	1	

NOTE: Above items for use on MK1 Axle only. Refer to FIG. 4:02

047530	Wheel assembly	2)	For use with new Axle only. Refer to FIG.4:02A
026338	Wheel rim	)	
037826	Wheel assembly. Left Hand	1)	Revised wheel equipment Introduction July 80. New Axle only.
037925	Wheel assembly. Right Hand	1)	
Each consisting of the following items:-			
026728	Wheel rim	1)	
026731	Tyre 11.50/80.15. As farmer.	1)	
026732	Inner tube	1)	
026733	Flap	1)	





**SECTION 5  
CONTROLS**

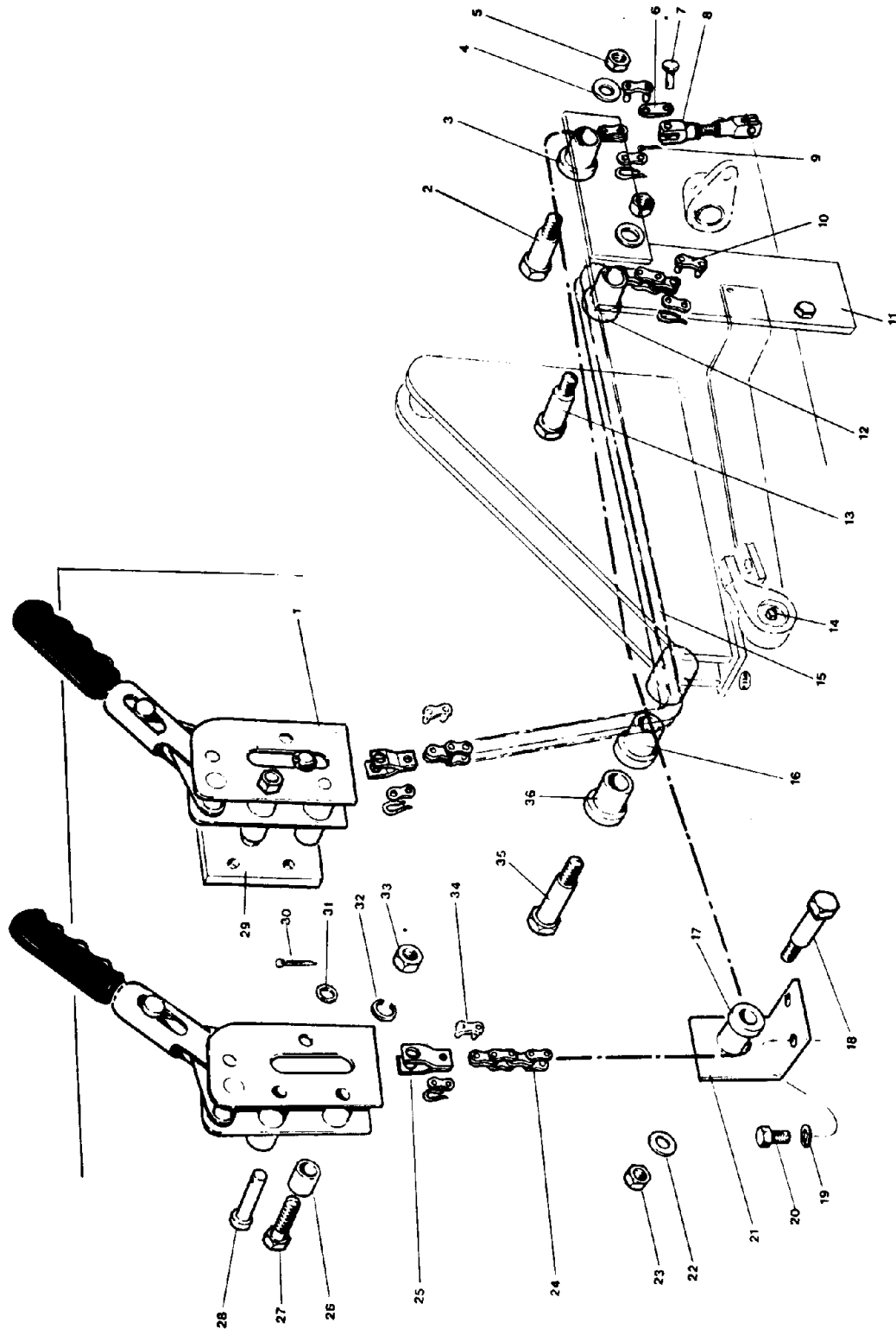


FIG. 5 : 01



**CONTROLS  
HANDBRAKE AND DIFFERENTIAL LOCK CONTROLS**

Fig. No.	Part No.	Description	Qty	Remarks
1	016832	Handbrake Lever	1	
1A	016832	Differential Lock Handle	1	Diff. Lock only
1B	016694	Internal Spacer	5	
1C	023463	Internal Spacer	1	Diff. Lock Handle only
2	016666	Shoulder Bolt	1	
3	016665	Roller	1	
4	04569	Washer, Fan Disc, $\frac{3}{8}$ " dia.	2	
5	04526	Nut, $\frac{3}{8}$ " UNF	2	
6	016757	Adaptor Plate	1	
7	05338	Clevis Pin	1	
8A	023299	Link Assembly	1	
8B	05425	Fork End	2	
8C	04522	Nut, $\frac{1}{4}$ " UNF	1	
8D	019473	Grubscrew, $\frac{1}{4}$ " UNF x 1" long	1	
9	04678	Split Pin	1	
10	016587	Chain Connecting Link	2	
11A	023304	Roller Mounting Bracket	1	
11B	06217	Setscrew, $\frac{1}{16}$ " UNC x 1" Hex. Hd.	3	
11C	04625	Spring Washer, $\frac{2}{16}$ " dia.	3	
12	016665	Roller	1	
13	023392	Shoulder Bolt Special	1	Chain Guard
14	05077	Greaser Assembly	1	
15	023115	Roller Chain — 63 Pitches	1	
16	016665	Roller	1	
17	016665	Roller	1	
18	016666	Shoulder Bolt	1	
19	04579	Spring Washer, $\frac{3}{8}$ " dia.	2	
20	04461	Setscrew, $\frac{3}{8}$ " UNF x $\frac{3}{4}$ " Hex. Hd.	2	
21	023199	Diff. Lock Roller Bracket	1	
22	04569	Washer Fan Disc, $\frac{3}{8}$ " dia.	1	
23	04526	Nut, $\frac{3}{8}$ " UNF	1	
24	023298	Roller Chain, 99 Pitches	1	
25	011361	Chain Connecting Plate	2	
26	03316	Spacer	6	
27	04474	Bolt, $\frac{3}{8}$ " UNC x 2 $\frac{3}{4}$ " Hex. Hd.	6	
28	018004	Clevis Pin	2	
29	023116	Mounting Plate	2	
30	04649	Split Pin, $\frac{1}{8}$ " dia. x 1" long	2	
31	04577	Washer, $\frac{3}{8}$ " dia.	2	
32	04579	Spring Washer, $\frac{3}{8}$ "	6	
33	04525	Nut, $\frac{3}{8}$ " UNC	6	
34	016587	Chain Connecting Link	2	
35	023110	Shoulder Bolt	1	Double Roller
36	016665	Roller	1	
37	04526	Nut, $\frac{3}{8}$ " UNF	1	
38	023391	Chain Guard	1	Not illustrated
39	023463	Spacer Stop — Diff. Lock Handle	1	Not illustrated

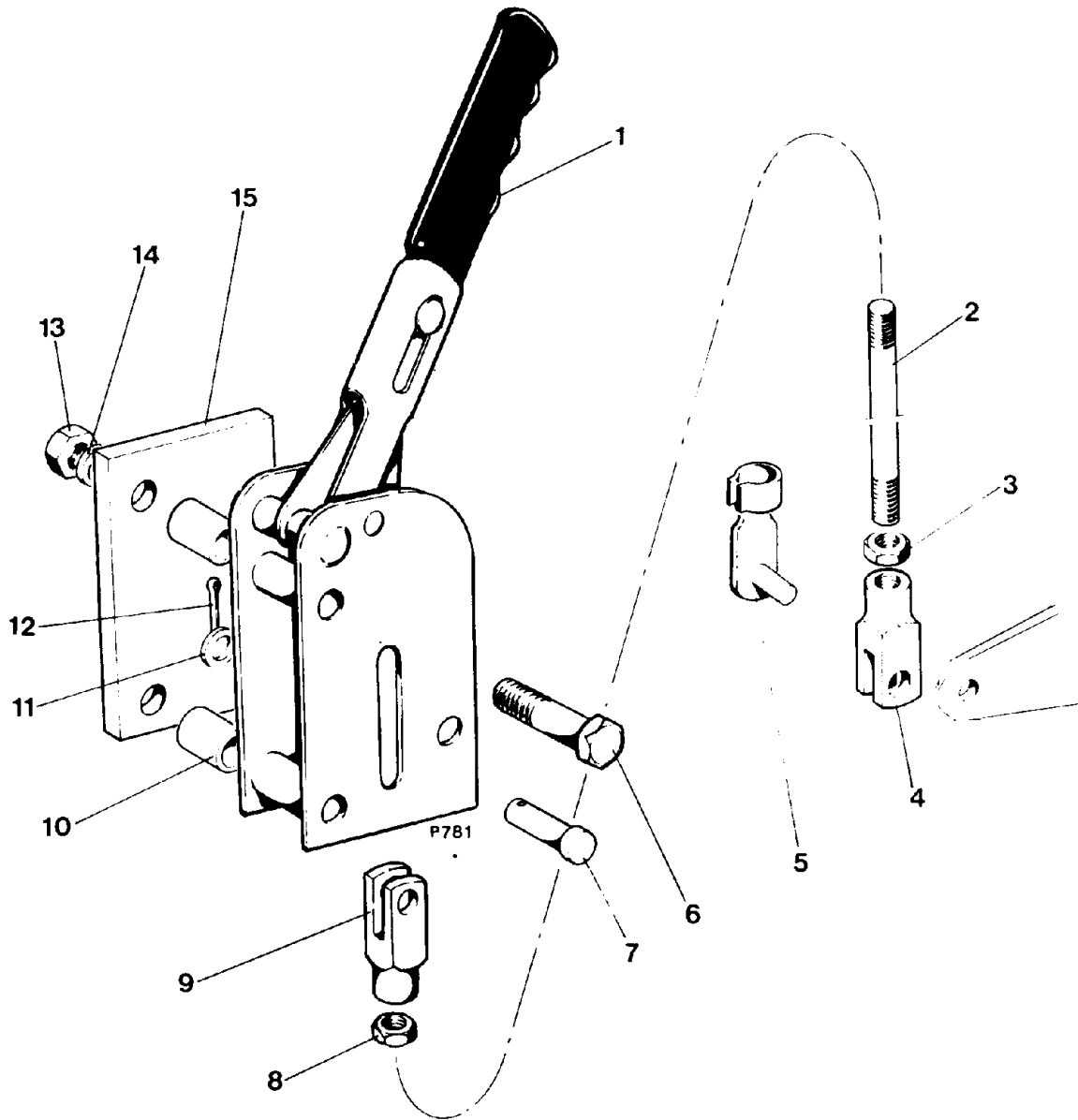


FIG. 5 : 02



**CONTROLS  
HANDBRAKE ASSEMBLY (T/C MODELS)**

Fig. No.	5:02 Part No.	Description	Qty	Remarks
1	016832	Operating Lever . . . . .	1	
2	023434	Connecting Rod . . . . .	1	
3	04540	Locknut, $\frac{3}{8}$ " UNF . . . . .	1	
4	040727	Fork End . . . . .	1	
5	040728	Spring Pin . . . . .	1	
6	04474	Bolt, $\frac{3}{8}$ " UNC x 2 $\frac{3}{4}$ " long Hex. Hd. . . . .	1	
7	018004	Clevis Pin . . . . .	1	
8	04540	Locknut, " UNF . . . . .	1	
9	040727	Fork End . . . . .	1	
10	016694	Distance Piece . . . . .	3	
11	04577	Washer, $\frac{1}{4}$ " dia. . . . .	1	
12	04649	Split Pin, $\frac{1}{8}$ " dia. x 1" long . . . . .	1	
13	04525	Nut, $\frac{3}{8}$ " UNC . . . . .	3	
14	04579	Spring Washer, $\frac{3}{8}$ " dia. . . . .	3	
15	023116	Mounting Plate . . . . .	1	

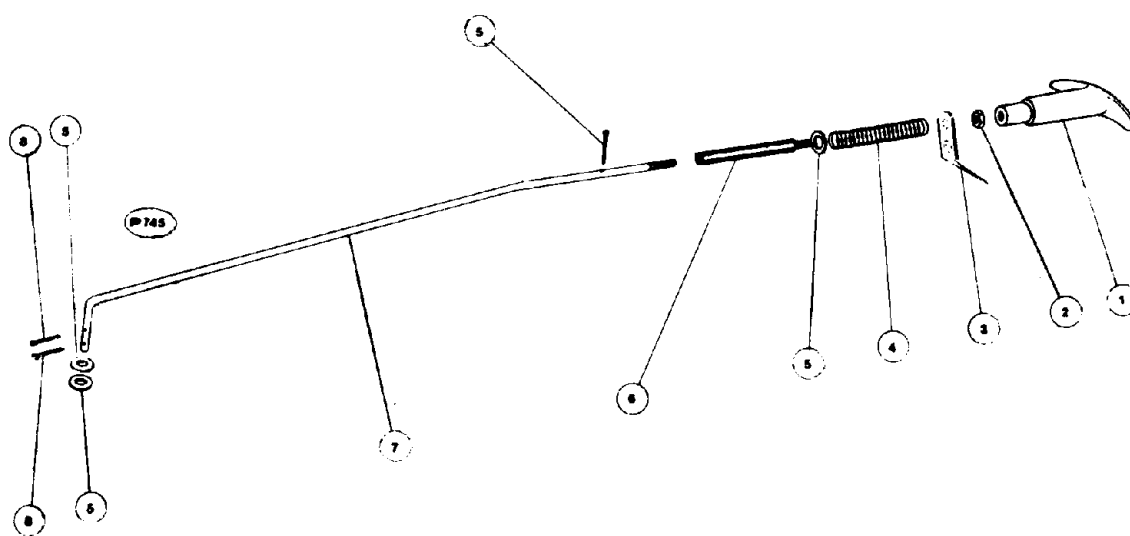


FIG: 5 : 03

**CONTROLS  
ENGINE STOP CONTROL**

Fig. No.	5:03	Part No.	Description	Qty	Remarks
1		012346	Knob . . . . .	1	S'ced by 023659
2		04520	Locknut, 2BA Plain . . . . .	2	
3		012822	Bracket . . . . .	1	Not fitted
4		04636	Spring . . . . .	1	
5		04564	Washer, $\frac{3}{16}$ " dia. Plain . . . . .	4	
6		023131	Extension Rod . . . . .	1	
7		03350	Rod . . . . .	1	
8		04678	Split Pin, $\frac{1}{16}$ " x $\frac{3}{8}$ " long . . . . .	3	

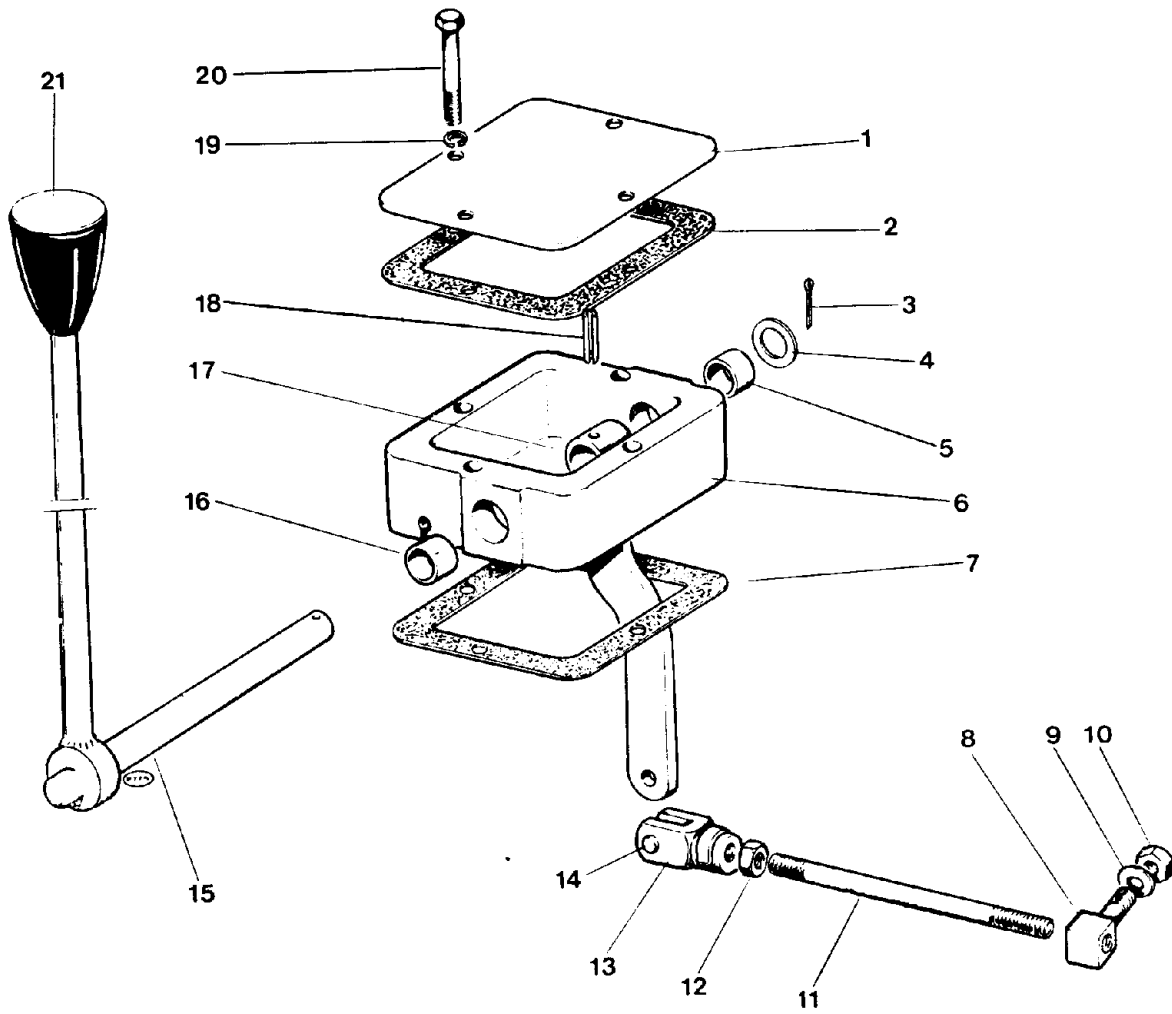
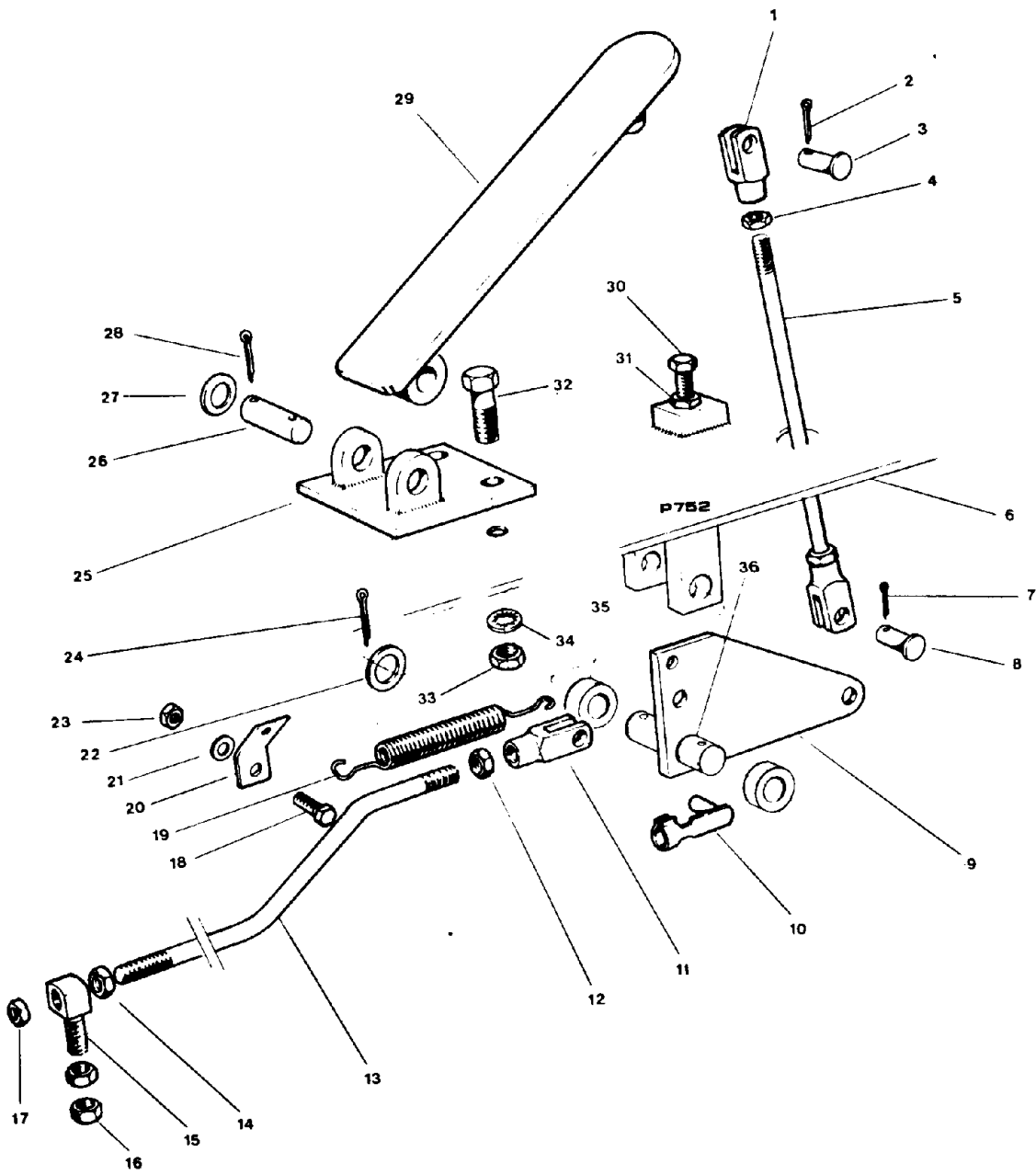


FIG. 5 : 04



**CONTROLS**  
**FORWARD/REVERSE CONTROL – T/C ONLY**

Fig. No.	5:04 Part No.	Description	Qty	Remarks
1	06189	Cover	1	
2	06157	Gasket	1	
3	011579	Split Pin, $\frac{1}{8}$ " dia. x $1\frac{1}{4}$ " long	1	
4	04560	Washer, $\frac{3}{4}$ " dia.	1	
5	04018	Bush	1	
6	06142	Pedal Mount	1	
7	06157	Gasket	1	
8	06331	Tee Barrel	1	
9	04556	Washer, $\frac{5}{16}$ " dia.	1	
10	05865	Nyloc Nut, $\frac{5}{16}$ " UNF	1	S'ceded by 05873
11	06330	Link Rod	1	
12	04524	Nut, $\frac{3}{16}$ " UNF	1	
13	06299	Fork End	1	
14	06298	Spring Pin, $\frac{5}{16}$ " dia.	1	
15	023422	Forward/Reverse Lever	1	Alt. to Item 15A
15A	023533	Forward/Reverse Pedal	1	(F.R. Pedal standard)
16	04018	Bush	1	
17	06138	Operating Lever	1	
18	06292	Spring Dowel, $\frac{5}{16}$ " dia. x $1\frac{1}{4}$ " long	1	
19	04567	Washer, $\frac{1}{4}$ " dia.	5	
20	04448	Bolt, $\frac{1}{4}$ " Unc x $\frac{1}{2}$ " Hex. Hd.	4	
21	040623	Knob, Plain	1	For use with Item 15 only
21A	023424	Nameplate, Forward/Reverse	1	

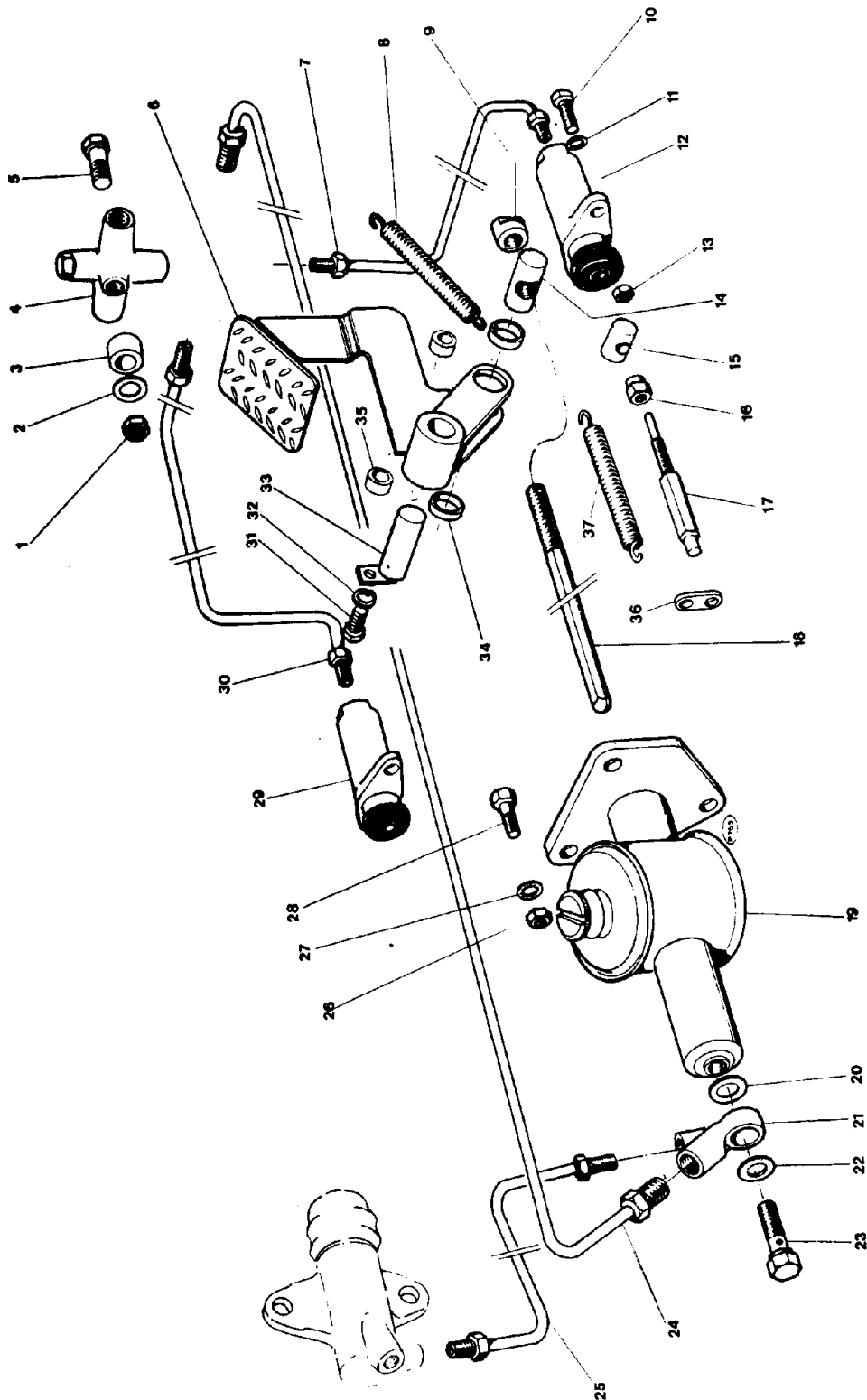


**FIG. 5 : 05**



**CONTROLS  
THROTTLE CONTROL**

Fig. No.	Part No.	Description	Qty	Remarks
1A	011566	Pedal Link Assembly . . . . .	1	
1	04871	Clevis Assembly . . . . .	2	
2	04678	Split Pin, $\frac{1}{16}$ " dia. x $\frac{3}{8}$ " long	1	} Part of Item 1 Clevis Assembly
3	05338	Pin . . . . .	1	
4	05474	Locknut, $\frac{1}{4}$ " UNF . . . . .	2	
5	011565	Pedal Link Stud . . . . .	1	
6	023078	Floor Plate, R.H. . . . .	1	Ref. only
7	04678	Split Pin, $\frac{1}{16}$ " dia. x $\frac{3}{8}$ " long	1	} Part of Item 1 Clevis Assembly
8	05338	Pin . . . . .	1	
9	011567	Throttle Link . . . . .	1	
10	040892	Clevis, Spring Pin . . . . .	1	
11	040891	Clevis, Fork End . . . . .	1	
12	04522	Nut, $\frac{1}{4}$ " UNF . . . . .	1	
13	023293	Throttle Rod . . . . .	1	S'seded by 021772
14	04522	Nut, $\frac{1}{4}$ " UNF . . . . .	1	
15	06322	T. Barrel . . . . .	1	
16	05474	Locknut, $\frac{1}{4}$ " UNF . . . . .	2	
17	04522	Nut, " UNF . . . . .	1	
18	05822	Bolt, $\frac{5}{16}$ " UNC x 1 $\frac{1}{2}$ " long . . . . .	1	} For use with Item 20 Spring Anchor Plate
19	010604	Return Spring . . . . .	1	
20	03692	Spring Anchor Plate . . . . .	1	
21	04317	Spring Washer, $\frac{5}{16}$ " dia. . . . .	1	For use with Item 20
22	04558	Washer, Plain, $\frac{1}{2}$ " dia. . . . .	2	For use with Item 36
23	04523	Nut, $\frac{5}{16}$ " UNC . . . . .	1	For use with Item 20
24	04649	Split Pin, $\frac{1}{8}$ " dia. x 1" long	2	For use with Item 36
25	010927	Pedal Mounting Bracket . . . . .	1	
26	010930	Pivot Pin . . . . .	1	
27	04556	Washer Plain, $\frac{5}{16}$ " dia. . . . .	1	
28	04580	Split Pin, $\frac{1}{16}$ " dia. x $\frac{3}{4}$ " long	2	
29	011562	Accelerator Pedal . . . . .	1	
30	04445	Setscrew, $\frac{1}{4}$ " UNF x 1" long . . . . .	1	} Pedal Adjuster on Floorplate
31	04522	Nut, $\frac{1}{4}$ " UNF . . . . .	1	
32	04443	Setscrew, $\frac{1}{4}$ " UNF x $\frac{3}{4}$ " long . . . . .	2	} For use with Item 25
33	04522	Nut, $\frac{1}{4}$ " UNF . . . . .	2	
34	04567	Fan Disc Washer, $\frac{1}{4}$ " dia. . . . .	2	
35	023348	Spacer . . . . .	2	
36	023347	Pivot Pin . . . . .	1	



**FIG. 5 : 06**



**CONTROLS**  
**FOOTBRAKE ASSEMBLY — GEARBOX MODELS**

Fig. No.	5:06 Part No.	Description	Qty	Remarks
1	04522	Nut, 1/4" UNF	1	
2	04567	Fan Disc Washer, 1/4" dia.	1	
3	023393	Spacer	1	
4	03849	Connector, 3 way	1	
5	023368	Bolt, 1/4" UNF x 1 1/4" long.	1	
6	023085	Footbrake Pedal Arm.	1	S'ceded by 023852
7	023353	Brake Pipe Assembly, R.H. Slave Cyl.	1	
8	022232	Return Spring	1	
9	040574	Adjusting Nut	1	
10	05585	Bolt, 1/4" UNF x 1 1/4" long.	4	S'ceded by 04458 Bolt — 010819 Nut - 04317 Washer 20.4.73
11	04567	Fan Disc Washer, 1/4" dia.	4	
12	03843	Slave Cylinder Assembly	2	See Fig. 6:09
13	04522	Nut, 1/4" UNF	4	For Item 12
14	03526	Trunnion, Brake Arm.	1	
15	03526	Trunnion, Slave Cylinder	2	
16	03585	Adjusting Nut, Slave Cylinder	2	
17	05736	Push Rod, Slave Cylinder	2	
18	023349	Push Rod, Master Cylinder.	1	
19	03842	Master Cylinder	1	See Fig. 6:08
20	03847	Washer, Banjo	1	Master Cylinder
21	03845	Angle Banjo	1	
22	03848	Washer, Banjo	1	
23	03846	Bolt, Banjo	1	
24	023297	Brake Pipe, Tee to Master Cylinder	1	
25	023291	Brake Pipe, Master Cylinder to Exhaust Brake	1	
26	04526	Nut, 3/8" UNF	3	For Item 19 Master Cylinder See Fig. 6:09
27	04569	Fan Disc Washer, 3/8" dia.	3	
28	04465	Bolt, 3/8" UNF x 1 1/4" long	3	
29	03843	Slave Cylinder Assembly	1	
30	023354	Brake Pipe Assembly, L.H. Slave Cylinder	1	
31	04440	Setscrew, 1/4" UNF x 1/2" long	1	
32	04577	Spring Washer, 1/4" dia.	1	
33	040514	Retaining Pin	1	
34	040518	Trunnion Bushes	2	For Item 6 Footbrake Pedal
35	012286	Bush, Brake Pedal	2	
36	03874	Return Spring Anchor	2	Slave Cylinder
37	03691	Return Spring	2	
38	022100	Spring Anchor, Brake Pedal	1	Not illustrated

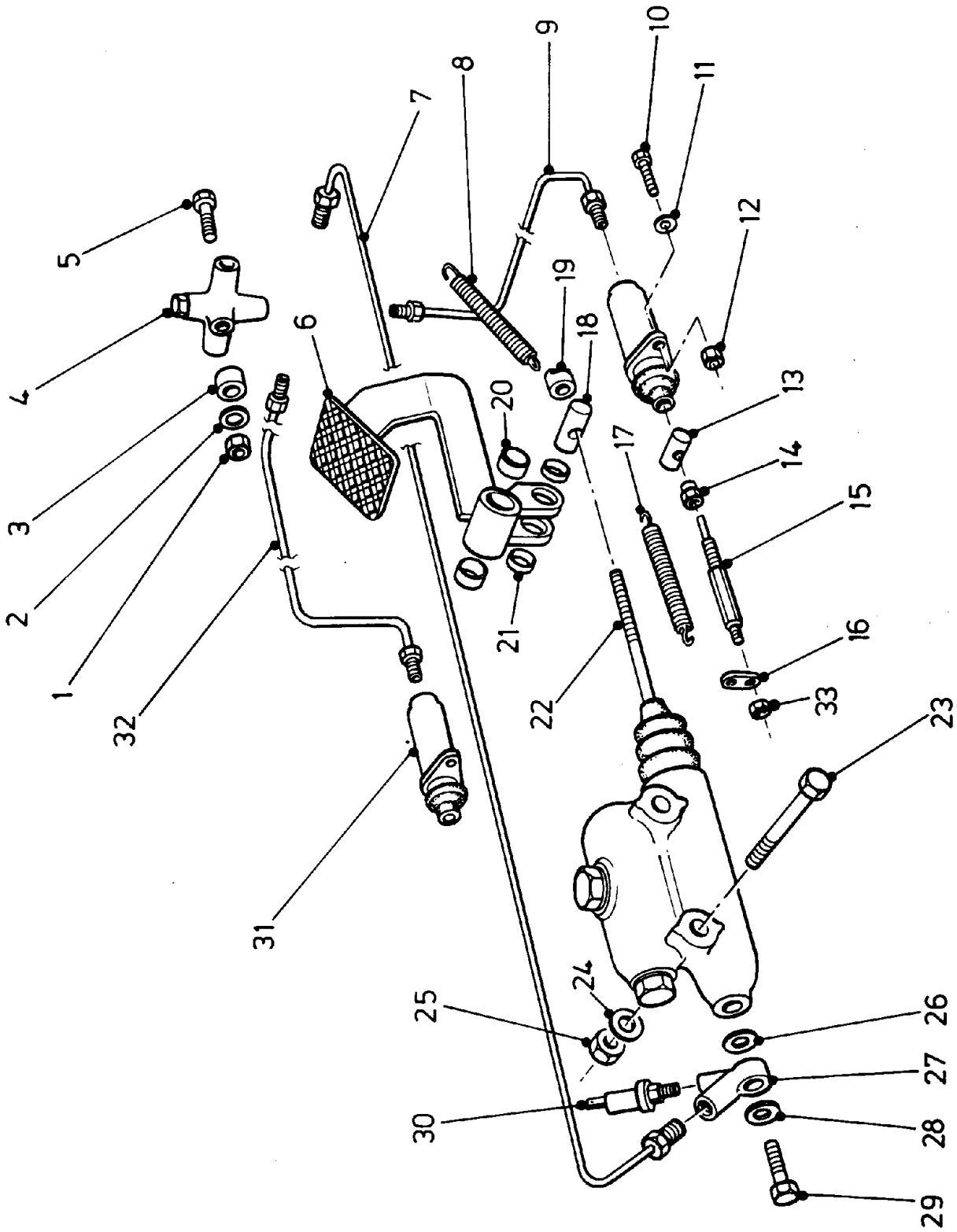


FIG. 5 : 06A



**CONTROLS  
FOOTBRAKE ASSEMBLY – GEARBOX**

Fig. No. 5:06A	Part No.	Description	Qty	Remarks
1	04522	Nut . . . . .	1	
2	04555	Washer . . . . .	1	
3	023393	Spacer . . . . .	1	
4	03849	Connector . . . . .	1	
5	023368	Bolt . . . . .	1	
6	023852	Pedal Arm . . . . .	1	
7	023297	Brake Pipe – Master Cylinder . . . . .	1	
8	02749	Spring . . . . .	1	
8A	023863	Anchor – Spring . . . . .	1	
9	023353	Brake Pipe – Slave Cylinder RH . . . . .	1	
10	04458	Bolt . . . . .	4	
11	04317	Washer . . . . .	4	
12	04524	Nut . . . . .	4	
13	03526	Trunnion . . . . .	2	
14	03585	Nut . . . . .	2	
15	023618	Push Rod – Slave Cylinder . . . . .	2	
16	03874	Anchor – Spring . . . . .	2	
17	03691	Spring . . . . .	2	
18	03526	Trunnion . . . . .	1	
19	040574	Nut . . . . .	1	
20	03998	Bush – Pedal . . . . .	2	
21	040518	Bush – Trunnion . . . . .	2	
22	027776	Push Rod – Extension . . . . .	1	
23	02901	Bolt . . . . .	2	
24	04579	Washer . . . . .	2	
25	04526	Nut . . . . .	2	
26	03847	Washer Copper . . . . .	1	
27	03845	Banjo . . . . .	1	
28	03848	Washer Copper . . . . .	1	
29	03846	Bolt Banjo . . . . .	1	
30	04873	Sender – Stop Light . . . . .	1	
31	03843	Slave Cylinder . . . . .	1	
32	023354	Brake Pipes – Slave Cylinder LH . . . . .	1	
33	05474	Locknut . . . . .	2	
	032245	Master Cylinder . . . . .	1	Refer to FIG.6.08A

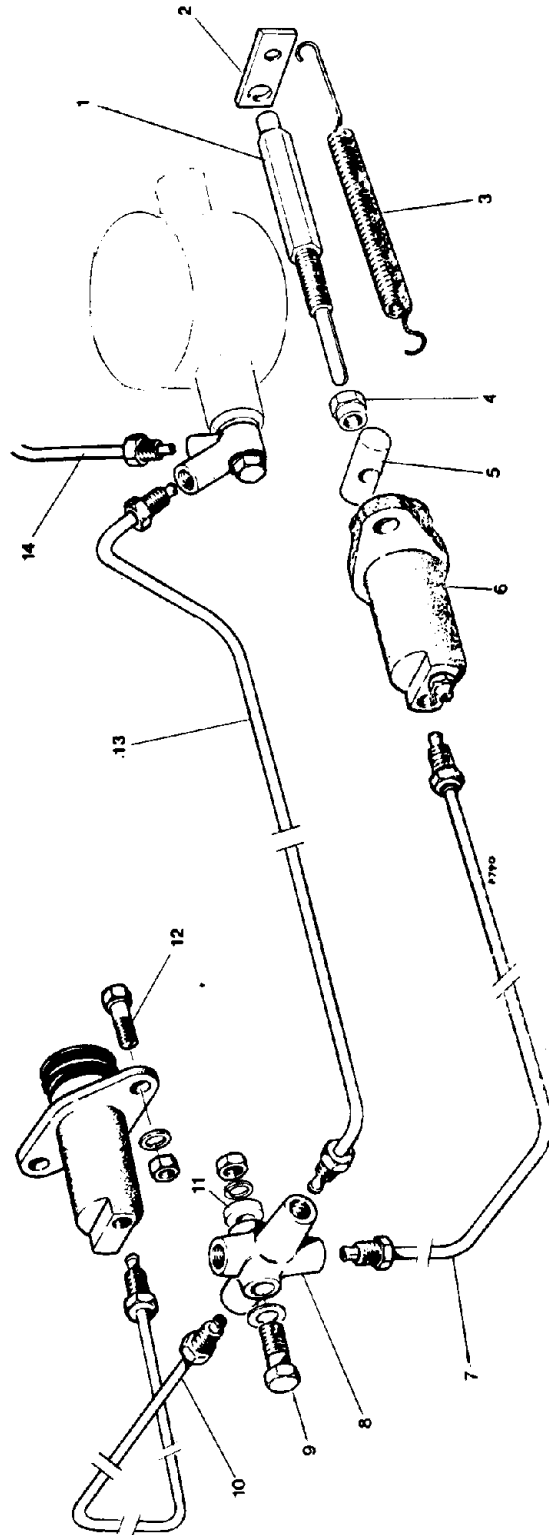


FIG. 5 : 07



**CONTROLS  
BRAKE SYSTEM (TORQUE CONVERTOR)**

Fig. No.	5:07 Part No.	Description	Qty	Remarks
1	05736	Push Rod . . . . .	2	
2	03874	Spring Anchor . . . . .	2	
3	03691	Spring . . . . .	2	
4	03585	Nut, Adjusting, $\frac{1}{8}$ " UNF . . . . .	2	
5	03526	Trunnion . . . . .	2	
6	03843	Slave Cylinder . . . . .	2	
7	023354	Pipe, Tee to L.H. Cylinder . . . . .	1	
8	03849	Tee Connector, 3 way . . . . .	1	
9	023368	Bolt, $\frac{1}{4}$ " UNF x $1\frac{1}{4}$ " long Hex. Hd. . . . .	1	
9A	04555	Washer, $\frac{1}{4}$ " dia. . . . .	1	
9B	04567	Fan Disc Washer, $\frac{1}{4}$ " dia. . . . .	1	
9C	04522	Nut, $\frac{1}{4}$ " UNF . . . . .	1	
10	023353	Pipe, Tee to R.H. Cylinder . . . . .	1	
11	023348	Packer . . . . .	1	
12	05585	Bolt, $\frac{1}{4}$ " UNF x $1\frac{1}{4}$ " long Hex. Hd. . . . .	4	
12A	04567	Fan Disc Washer, $\frac{1}{4}$ " dia. . . . .	4	
12B	04522	Nut, $\frac{1}{4}$ " UNF . . . . .	4	
13	023456	Pipe, Master Cylinder to Tee . . . . .	1	
13A	010870	Clip, Brake Pipe . . . . .	1	
13B	04464	Setscrew, $\frac{3}{8}$ " UNF x 1" long, Hex. Hd. . . . .	1	
13C	04557	Washer, $\frac{3}{8}$ " dia. . . . .	1	
13D	04569	Fan Disc Washer, $\frac{3}{8}$ " dia. . . . .	1	
13E	04526	Nut, $\frac{3}{8}$ " UNF . . . . .	1	
14	023457	Pipe, Master Cyl. to Adaptor (Exhaust Brake)	1	Not reqd on TC 20.12.72
15	023458	Pipe, Adaptor to Exhaust Brake . . . . .	1	Not read on TC 20.12.72
16	06256	Adaptor . . . . .	1	Not reqd on TC 20.12.72

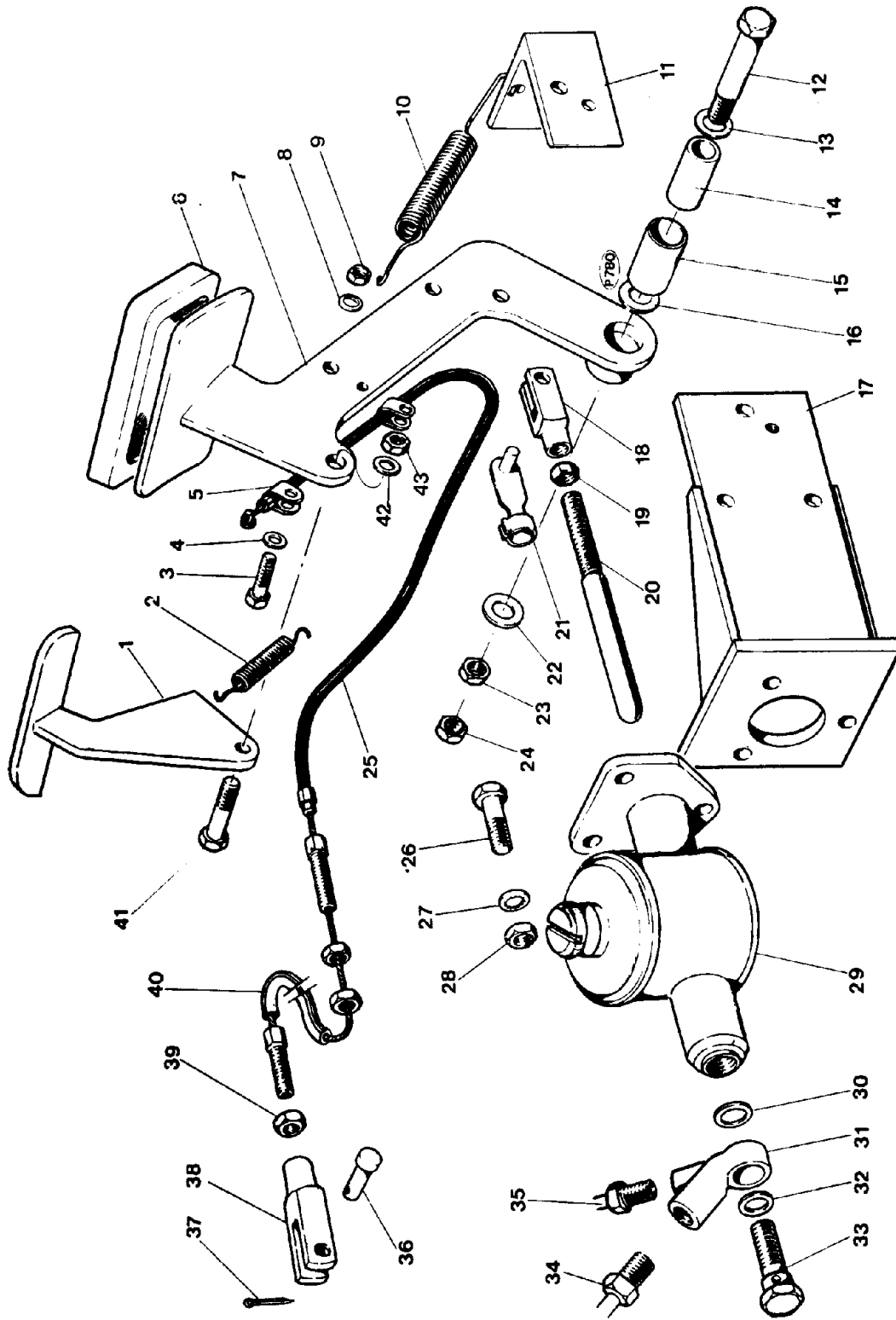


FIG. 5 : 08



## CONTROLS FOOTBRAKE AND CLUTCH ASSEMBLY (T/C MODELS)

Fig. No.	5:08 Part No.	Description	Qty	Remarks
1	023415	Inching Pedal	1	
2	04225	Spring	1	
3	04445	Setscrew, ¼" UNF x 1" long Hex. Hd.	2	
4	04555	Washer, ¼" dia.	2	
5	06159	Conduit Stop	2	
6	010477	Pedal Rubber	1	
7	023411	Brake Pedal	1	
8	04577	Spring Washer, ¼" dia.	2	
9	05474	Nut, ¼" UNF	2	
10	04355	Return Spring	1	
11	023448	Brake Stop	1	
11A	04441	Setscrew, ¼" UNF x 5/8" long Hex. Hd.	1	} Item 11 to Item 17
11B	04577	Spring Washer, ¼" dia.	1	
12	07507	Bolt, ½" UNF x 2¾" long Hex. Hd.	1	
13	04558	Washer, ½" dia.	1	
14	023421	Bush Pivot.	1	
15	04018	Bush	1	
16	04558	Washer, ½" dia.	1	
17	023417	Cylinder Mounting	1	
17A	04467	Bolt, 3/8" UNF x 1 ½" long Hex. Hd.	2	} Item 17 to Tilt Ram Anchor
17B	07258	Bolt, 3/8" UNF x 1 ¾" long Hex. Hd.	1	
17C	04526	Nut, 3/8" UNF	3	
17D	04579	Spring Washer, 3/8" dia.	3	
18	040712	Fork End	1	
19	04540	Locknut, 3/8" UNF	1	
20	03509	Push Rod	1	
21	040713	Spring Pin	1	
22	04558	Washer, ½" dia.	1	
23	05475	Locknut, ½" UNF	1	
24	05475	Locknut, ½" UNF	1	
25	04872	Cable Assembly	1	
26	04465	Setscrew, 3/8" UNF x 1 ¼" long Hex. Hd.	1	
27	04579	Spring Washer, 3/8" dia.	3	
28	04526	Nut, 3/8" UNF	3	
29	03842	Master Cylinder	1	
30	03847	Washer, Copper, 7/16" dia.	1	
31	03845	Angle Banjo	1	} Superseded by 023559, from Jan. 73
32	03848	Washer, Copper, 9/16" dia.	1	
33	03846	Banjo Bolt	1	
34	023297	Brake Pipe, M/C to Tee	1	} S'seded by 023456 S'seded by 023457, not used on T.C. Models
35	023291	Brake Pipe, M/C to Exhaust Brake	1	
36	05338	Clevis Pin	1	
37	04678	Split Pin, 1/16" dia. x 3/8" long	1	
38	04871	Fork End	1	
39	05474	Locknut, ¼" UNF	1	
40	06220	Nylon Tube	1	
40A	06221	Clip — for Nylon Tube	1	
41	04465	Bolt, 3/8" UNF x 1 ¼" long Hex. Hd.	1	
42	04557	Washer, 3/8" dia.	1	
43	04540	Locknut, 3/8" UNF	1	

**NOTE:** Exhaust Brake not fitted

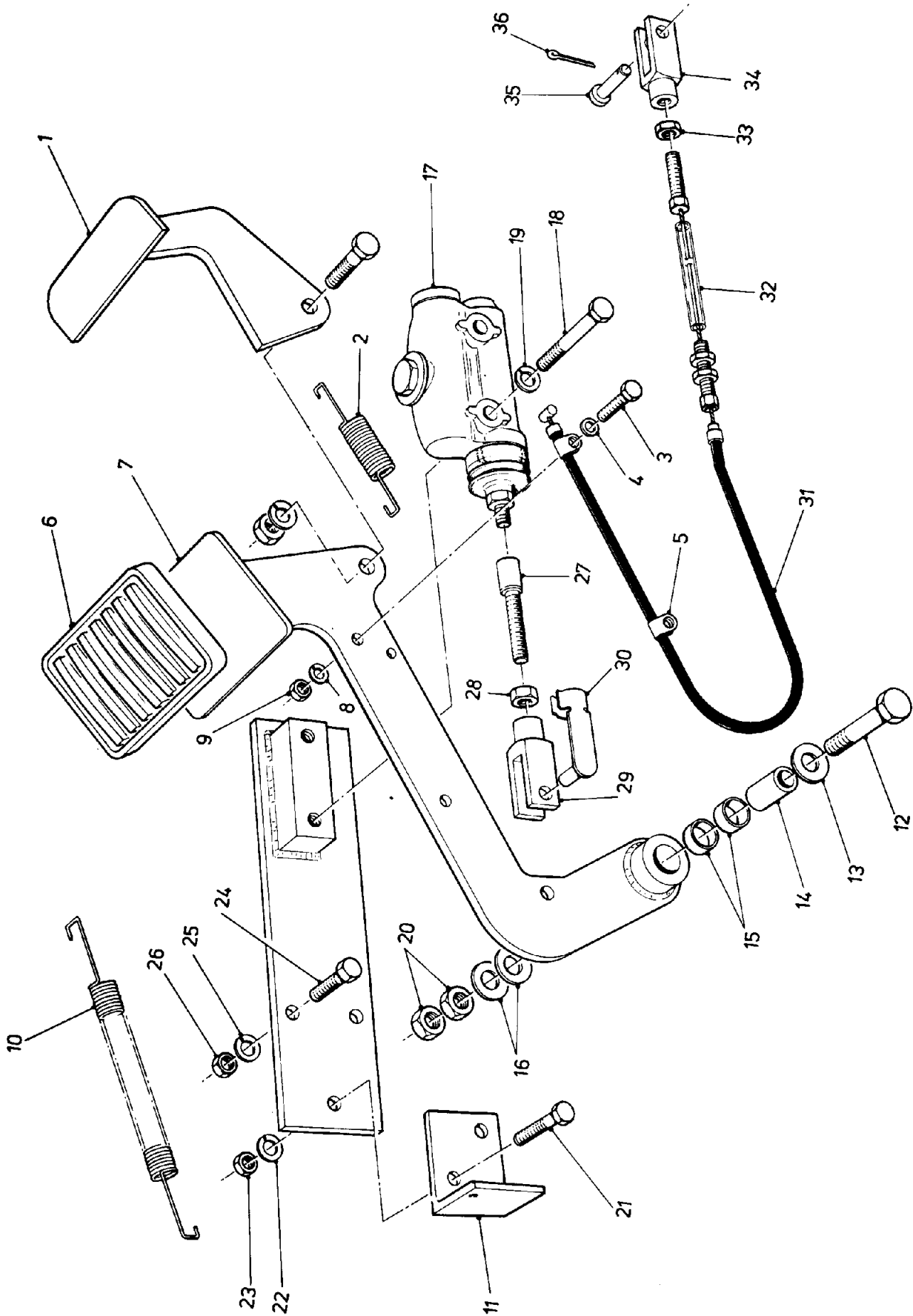
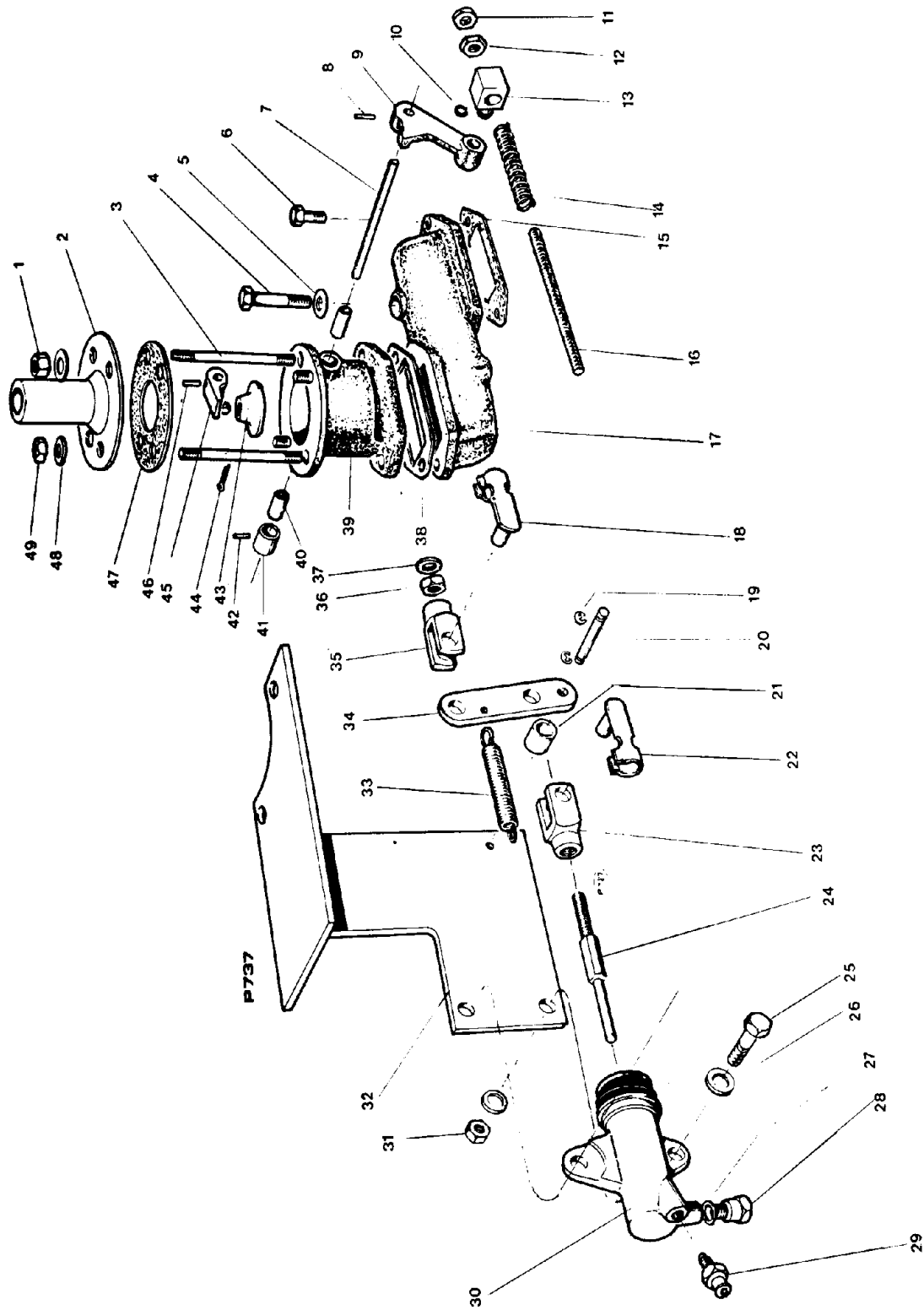


FIG. 5 : 08A



**CONTROLS  
FOOTBRAKE AND CLUTCH ASSEMBLY (TC MODELS) MARK III**

Fig. No. 5:08A	Part No.	Description	Qty	Remarks
1	023415	Inching Pedal	1	
2	04225	Spring	1	
3	04445	Setscrew, 1/4" UNF x 1" long	2	
4	04555	Washer, 1/4" dia.	2	
5	06159	Conduit Stop	2	
6	010477	Pedal Rubber	1	
7	023411	Brake Lever, W.A.	1	
8	04577	Washer Spring, 1/4" dia.	2	
9	05474	Nut, 1/4" UNF	2	
10	04355	Spring Return	1	
11	023448	Brake Stop	1	
12	07507	Bolt, 1/2" UNF x 2 3/4" long.	1	
13	04558	Washer Plain, 1/2" dia.	1	
14	023421	Bush — Pivot	1	
15	04018	Bush	2	
16	04558	Washer Plain, 1/2" dia.	2	
17		Master Cylinder	1	
18	012623	Bolt, 3/8" UNC x 3" long	2	Refer to Fig. 6:08A Fixing Bolts Master Cylinder
19	019482	Washer Spring, 3/8" dia.	2	
20	04575	Locknut, 1/2" UNF	2	
21	07258	Bolt, 3/8" UNF x 1 3/4" long	2	
22	04579	Washer Spring, 3/8" dia.	2	
23	04526	Nut, 3/8" UNF	2	
24	04467	Bolt, 3/8" UNF x 1 1/2" long	2	
25	04579	Washer Spring, 3/8" dia.	2	
26	04526	Nut, 3/8" UNF	2	
27	028171	Push Rod Extension	1	
28	04540	Locknut, 3/8" UNF	1	
29	040712	Clevis Fork End	1	
30	040713	Clevis Fork Pin	1	
31	04872	Cable Assembly	1	
32	06220	Nylon Tube	1	
33	05474	Locknut, 1/4" UNF	1	
34	04871	Clevis Fork End	1	
35	05338	Clevis Pin	1	
36	04678	Split Pin, 1/8" x 3/8" long	1	
37	023559	Banjo — Master Cylinder	1	Not illustrated Fitted to M/C
38	03847	Copper Washer, 7/16" dia.	1	
39	03848	Copper Washer, 7/16" dia.	1	
40	03846	Banjo Bolt	1	
41	023297	Brake Pipe M/C to Tee	1	



**FIG. 5 : 09**



## CONTROLS EXHAUST BRAKE ASSEMBLY (NOT FITTED NOW)

Fig. No. 5:09	Part No.	Description	Qty	Remarks
1	012352	Nut, " UNC	2	S'seded by 012828, see BTSB 255/104
2	012354	Exhaust Flange	1	
3	012351	Stud, " UNC x 4 3/4" long.	2	
3A	021321	Stud, " UNC x 1 5/16" long	2	
4	04474	Bolt, 3/8" UNC x 2 3/4" long	1	
5	04427	Washer, 3/8" dia.	2	
6	04466	Bolt, 3/8" UNC x 1 1/4" long	1	
*7	021322	Spindle, operating	1	
8	021333	Spring Pin, 3/16" x 7/8" long	1	
*9	021320	Lever, operating	1	
10*	012353	'E' Clip	1	
11	04526	Nut, " UNF	1	
12	04526	Nut, " UNF	1	
13*	07207	Eye End	1	
14*	023226	Compression Spring	1	
15	012350	Gasket	1	
16*	023225	Stud, 3/8" UNF x 4 1/2" long.	1	S'seded by 019483
17	03474	Exhaust Adaptor	1	
18*	040728	Spring Pin	1	
19	019273	'E' Clip	2	S'seded by 019272
20*	023261	Pivot Pin	1	S'seded by 023572
21*	019385	Spacer	1	
22*	040728	Spring Pin	1	
23*	040727	Fork End	1	
24*	03579	Push Rod	1	S'seded by 023571
25*	04467	Bolt, 3/8" UNF x 1 1/4" long	2	
26*	04579	Washer, 3/8" dia.	2	
27*	03847	Copper Washer	1	
28*	03840	Adaptor	1	
29	03841	Bleed Screw	1	
30	03844	Slave Cylinder	1	
31	04526	Nut, 3/8" UNF	2	
31A	04579	Spring Washer, 3/8" dia.	2	
32	023221	Mounting Bracket	1	S'seded by 023568
33	023232	Return Spring	1	S'seded by 023574
34	023224	Lever	1	S'seded by 023573
35	040727	Fork End	1	
36	04526	Nut, 3/8" UNF	1	
37	04557	Washer, 3/8" dia.	1	
38	012350	Gasket	1	
39*	021334	Valve Housing	1	
40*	021335	Bush	2	
41*	021336	Collar	1	
42*	021333	Spring Pin, 3/16" x 7/8" long	1	
43*	021337	Valve	1	
44*	019541	Split Pin, 5/32" x 1 1/8" long	1	
45*	021388	Lever	1	
46*	021333	Spring Pin, 3/16" x 7/8" long	1	
47*	012355	Gasket	1	
48	04569	Fan Disc Washer, 3/8" dia.	4	
49	016344	Locknut, 3/8" UNC	2	
50	012495	Exhaust Flange	1	Superseded by 06364, see BTSB 255/104
51	012496	Stud, 3/8" UNC x 1 7/16" long	2	
52	05230	Exhaust Extension	1	Superseded by 023469, see BTSB 255/104

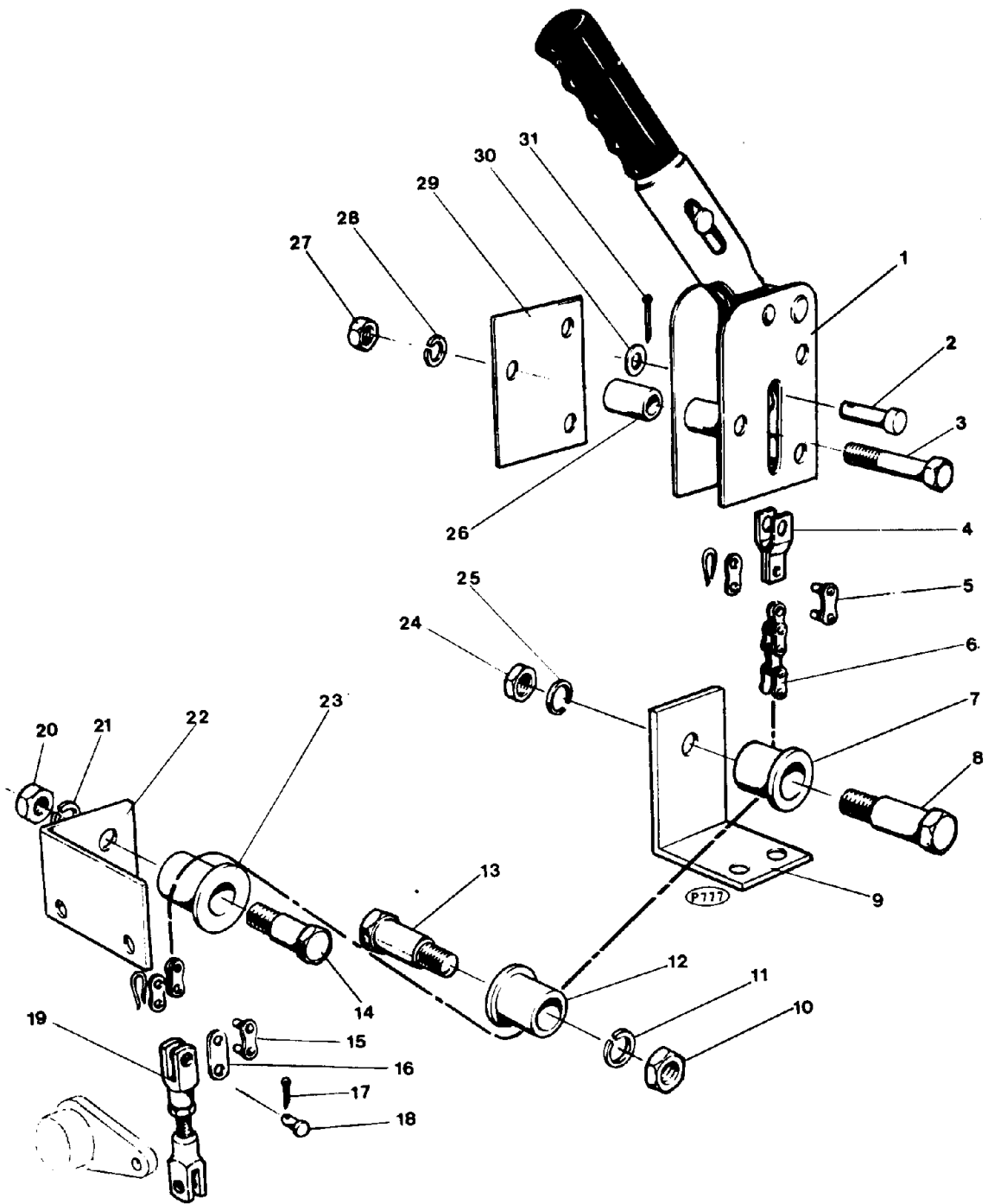


FIG. 5 : 10



**CONTROLS**  
**DIFFERENTIAL LOCK CONTROL — TORQUE CONVERTOR**

Fig. No.	5:10 Part No.	Description	Qty	Remarks
1	016832	Operating Lever Assy.	1	
2	018004	Clevis Pin . . . . .	1	
3	04474	Bolt, $\frac{3}{8}$ " UNC x 2 $\frac{3}{4}$ " long Hex. Hd. . . . .	3	
4	011361	Connecting Plate . . . . .	1	
5	016587	Connecting Link . . . . .	1	
6	023455	Chain, 97 Links . . . . .	1	
7	016665	Roller . . . . .	1	
8	016666	Stepped Bolt . . . . .	1	
9	023199	Roller Bracket . . . . .	1	
10	04526	Nut, $\frac{3}{8}$ " UNF . . . . .	1	
11	04579	Washer, $\frac{3}{8}$ " dia.. . . . .	1	
12	016665	Roller . . . . .	1	
13	016666	Stepped Bolt . . . . .	1	
14	016666	Stepped Bolt . . . . .	1	
15	016587	Connecting Link . . . . .	1	
16	016757	Chain Adaptor Plate . . . . .	1	
17	04678	Split Pin, $\frac{1}{16}$ " x $\frac{3}{8}$ " long . . . . .	2	
18	05338	Clevis Pin . . . . .	2	
19	023299	Adjustable Link . . . . .	1	
19A	05425	Fork End . . . . .	2	
19B	04522	Nut, $\frac{1}{4}$ " UNF . . . . .	1	
19C	019473	Grubscrew, $\frac{1}{4}$ " UNF x 1" long . . . . .	1	
20	04526	Nut, $\frac{3}{8}$ " UNF . . . . .	1	
21	04579	Washer, $\frac{3}{8}$ " dia.. . . . .	1	
22	023449	Bracket . . . . .	1	
23	016665	Roller . . . . .	1	
24	04526	Nut, $\frac{3}{8}$ " UNF . . . . .	1	
25	04579	Washer, $\frac{3}{8}$ " dia.. . . . .	1	
26	016694	Distance Piece . . . . .	5	
26A	023463	Distance Piece . . . . .	1	
27	04525	Nut, $\frac{3}{8}$ " UNC . . . . .	3	
28	04579	Washer, $\frac{3}{8}$ " dia.. . . . .	3	
29	023116	Mounting Plate . . . . .	1	
30	04577	Spring Washer, $\frac{1}{4}$ " dia. . . . .	1	
31	04649	Split Pin; $\frac{1}{8}$ " x 1" long . . . . .	1	
32	04461	Setscrew, $\frac{3}{8}$ " UNF x $\frac{3}{4}$ " long . . . . .	2	} Fixing for Item 9
33	04579	Washer, $\frac{3}{8}$ " dia.. . . . .	2	
34	04617	Setscrew, $\frac{5}{16}$ " UNF x 1" long . . . . .	2	} Fixings for Item 22
35	04317	Washer, $\frac{5}{16}$ " dia.. . . . .	2	
36	023463	Spacer - Stop - Diff. Lock Handle . . . . .	1	

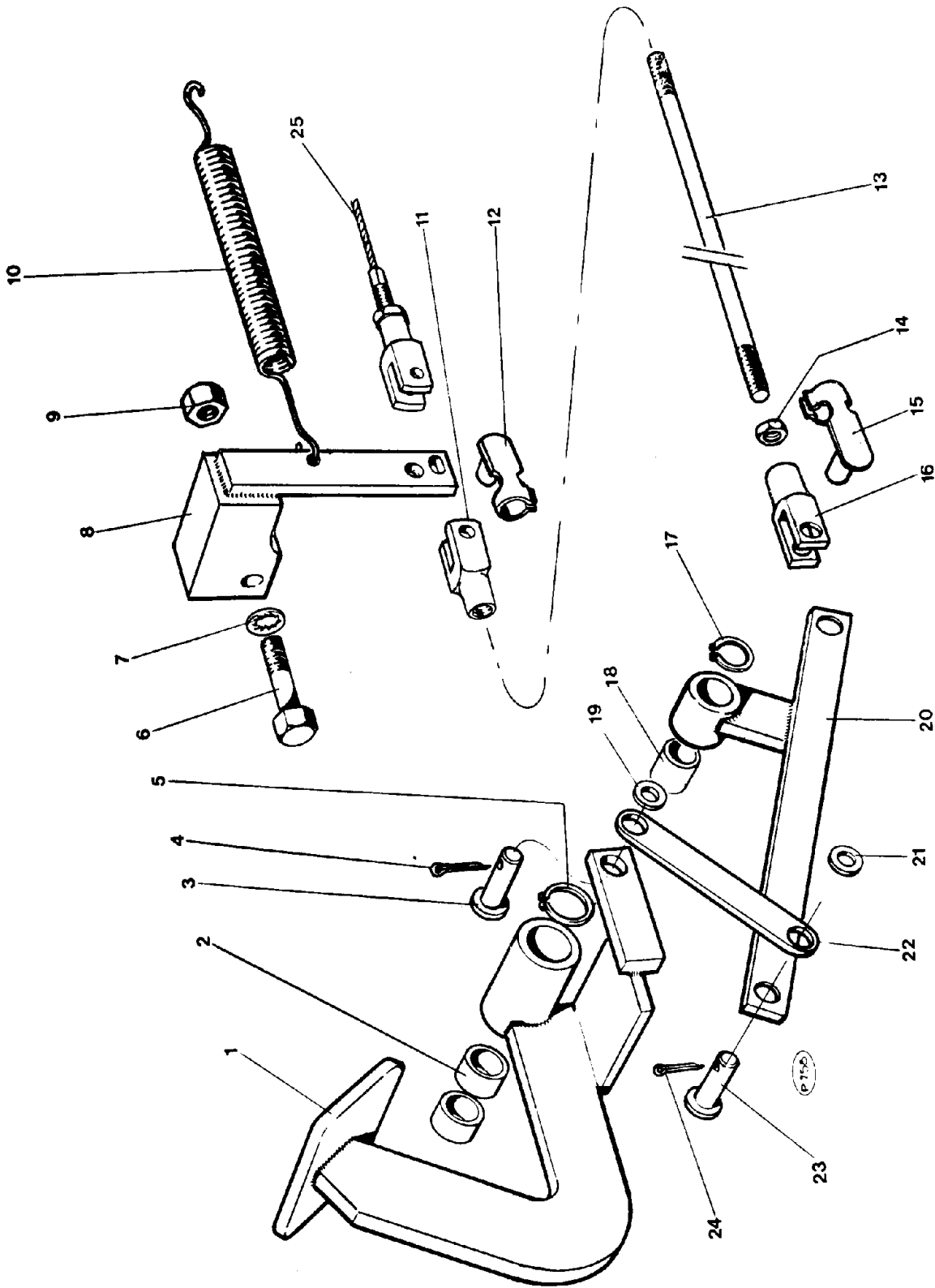


FIG. 5 : 11



**CONTROLS  
CLUTCH PEDAL AND LINKAGE**

Fig. No.	Part No.	Description	Qty	Remarks
1	023081	Clutch Pedal	1	
2	012286	Bush	2	
3	05691	Pin, $\frac{3}{8}$ " dia. x $\frac{15}{16}$ " long	1	S'seded by 023624
4	04649	Split Pin, $\frac{1}{8}$ " x 1" long	1	S'seded by 019272
5	04382	Circlip, $\frac{3}{4}$ "	1	
6	07258	Bolt, $\frac{3}{8}$ " UNF x $1\frac{3}{4}$ " long Hex. Hd.	1	
7	04569	Washer, Fan Disc, $\frac{3}{8}$ " dia.	1	
8	023086	Clutch Arm	1	S'seded by 027707
9	04526	Nut, $\frac{3}{8}$ " UNF	1	
10	04355	Return Spring	1	
11	040712	Fork End	1	} Assembly Item 26
12	040713	Spring Pin	1	
13	023096	Rod	1	
14	04540	Nut, $\frac{3}{8}$ " UNF	1	
15	040713	Spring Pin	1	
16	040712	Fork End	1	
17	04382	Circlip	1	
18	040725	Bush	1	
19	04557	Washer, $\frac{3}{8}$ " dia.	As Req'd	Deleted
20	023090	Pivot Plate	1	
21	04557	Washer, $\frac{3}{8}$ " dia.	As Req'd	Deleted
22	023093	Link Plate	1	
23	05691	Pin	1	S'seded by 023624
24	04649	Split Pin, $\frac{1}{8}$ " dia. x 1" long	1	S'seded by 019272
25	04872	Cable Assembly	1	} Non-Synchro G/Box only
25A	04871	Fork End Assembly	1	
25B	05474	Nut, $\frac{1}{4}$ " UNF	1	
25C	07544	Cable End Clip	1	
25D	05338	Pin	1	
26	023095	Link Rod Assembly	1	

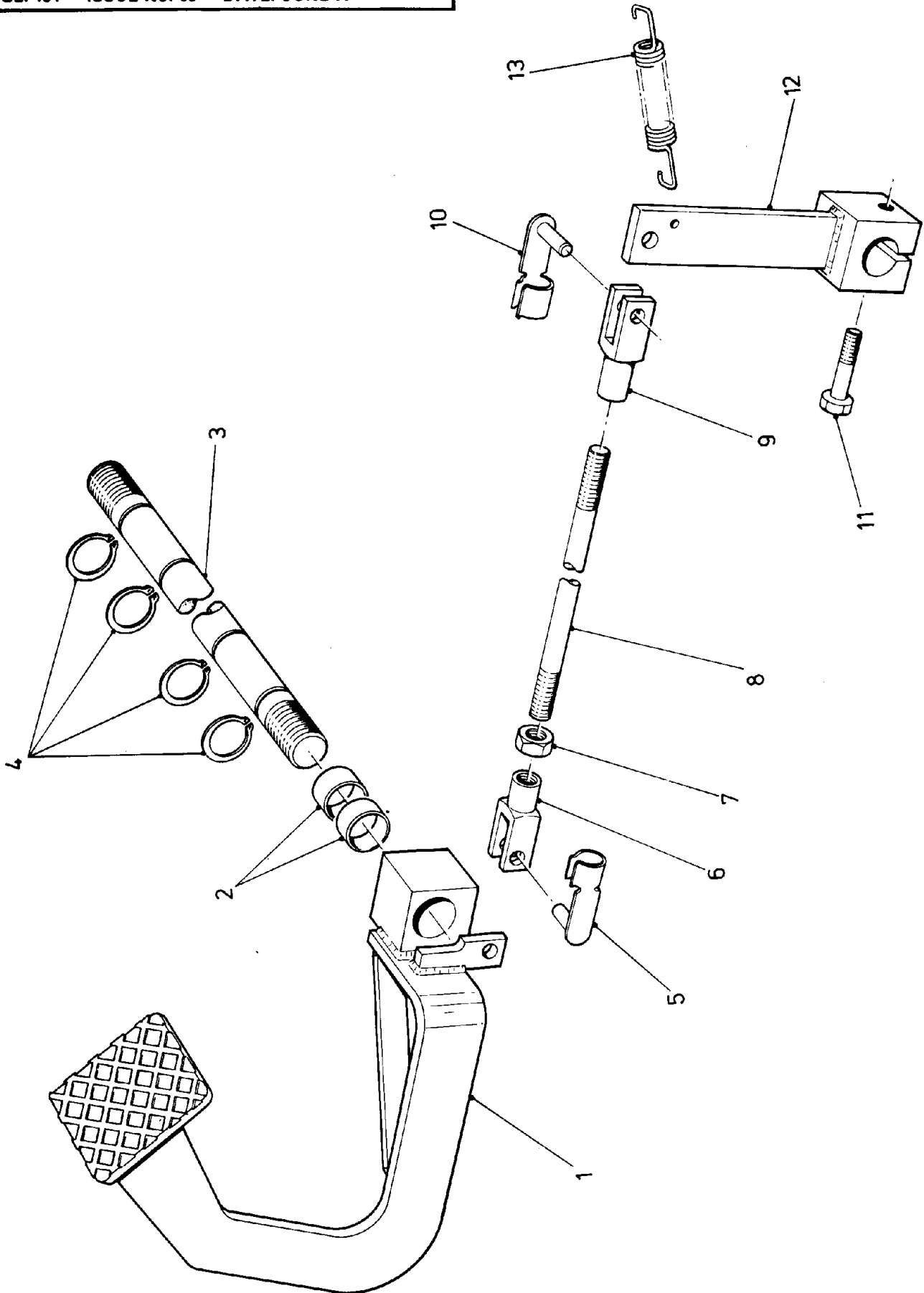


FIG. 5 : 11A



**CONTROLS**  
**CLUTCH PEDAL AND LINKAGE MARK III**

Fig. No. 5:11A	Part No.	Description	Qty	Remarks
1	027765	Clutch Pedal . . . . .	1	
2	012286	Bush . . . . .	2	S'ceded by 03998
3	027767	Pedal Pivot Shaft . . . . .	1	
4	04382	Circlip . . . . .	4	
5	040713	Clevis Spring Clip . . . . .	1	
6	040712	Clevis Fork End . . . . .	1	
7	04560	Locknut, $\frac{3}{8}$ " UNF . . . . .	1	Should be 04540
8	023891	Rod . . . . .	1	
9	023890	Clevis Fork End . . . . .	1	
10	040713	Clevis Spring Clip . . . . .	1	
11	07258	Bolt, $\frac{3}{8}$ " UNF x 1 $\frac{3}{4}$ " long . . . . .	1	
12	027707	Clutch Lever . . . . .	1	S'ceded by 038462
13	04355	Return Spring . . . . .	1	

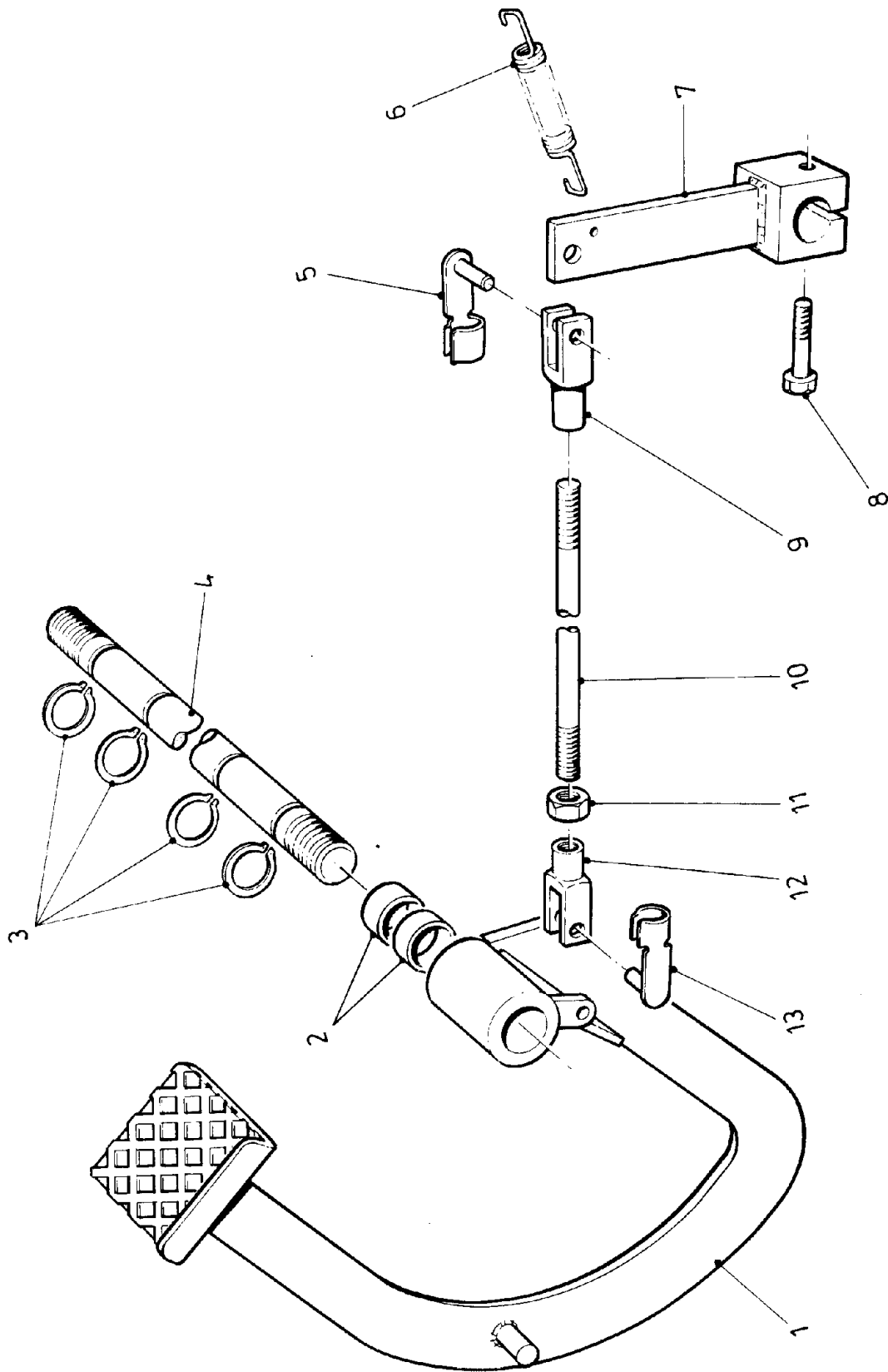


FIG. 5 : 11B

**CLUTCH PEDAL LINKAGE - CONTROLS**

Fig.No.5:11B	Part No.	Description	Qty	Remarks
1	039002	Clutch pedal	1	
2	03998	Bush	2	
3	023858	Circlip	4	
4	038983	Pivot shaft	1	
5	040713	Clevis pin	1	
6	04355	Spring	1	
7	027707	Clutch lever	1	
8	07258	Bolt	1	S'seded by 04470
8A	04526	Nut	1	
8B	04527	Washer	1	
9	023890	Clevis Fork	1	
10	023891	Conn.Rod	1	S'seded by 037603
11	04560	Locknut	1	S'seded by 04529
12	040712	Clevis fork	1	
13	040713	Clevis pin	1	

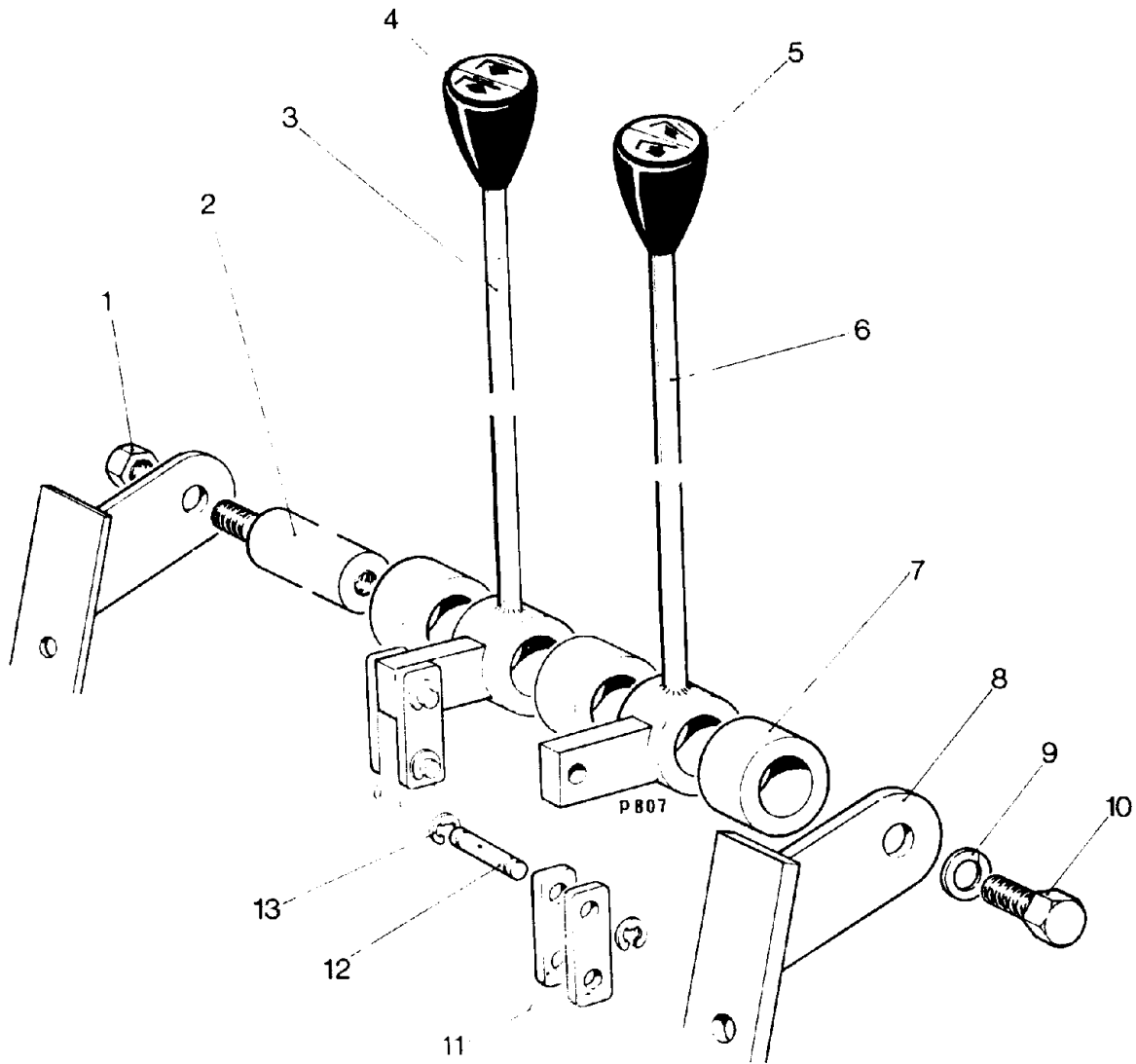
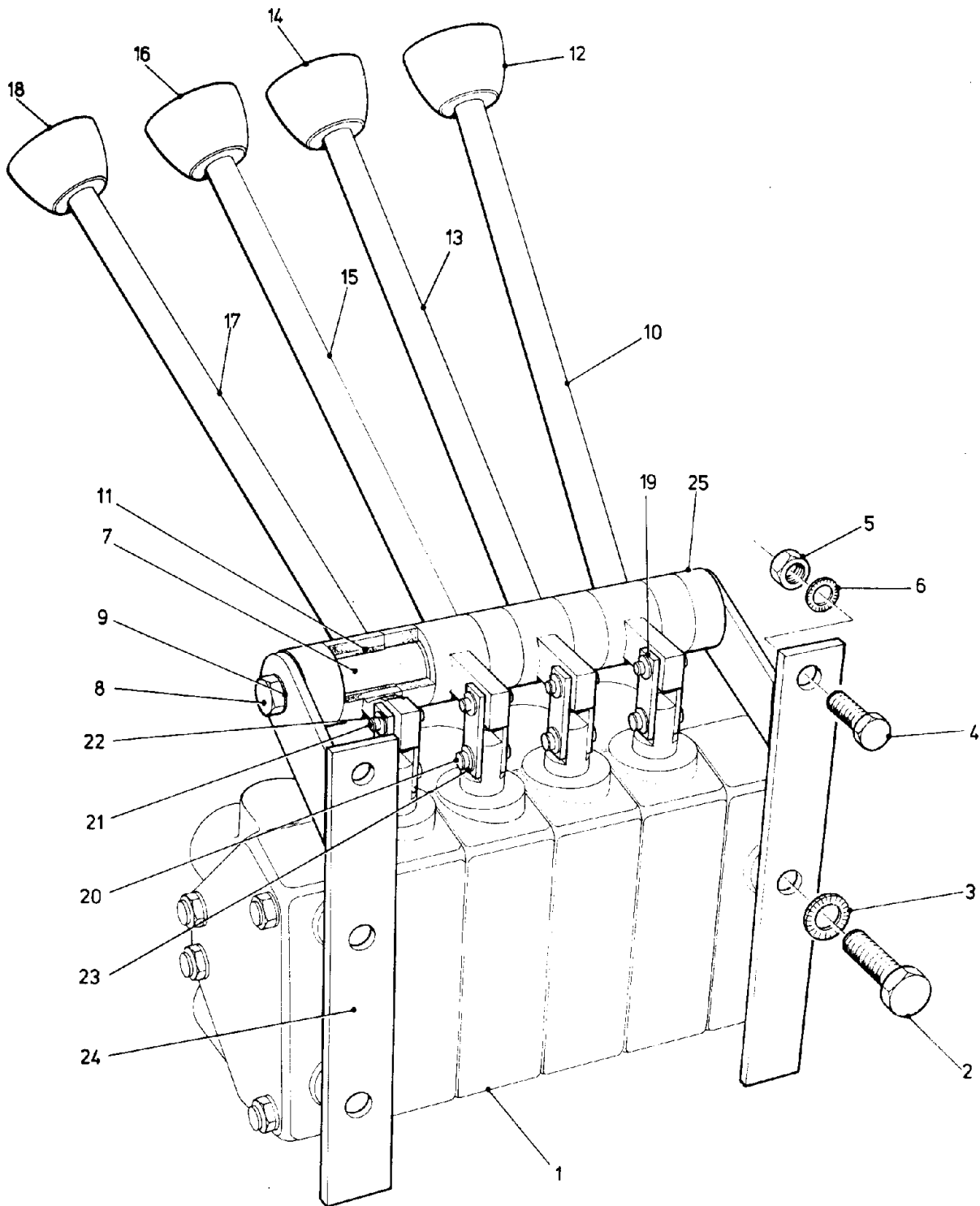


FIG. 5 : 12



**CONTROLS  
VALVE CONTROL LEVERS**

Fig. No. 5:12	Part No.	Description	Qty	Remarks
1	04526	Nut, $\frac{3}{8}$ " UNF	1	
1A	04569	F.D. Washer, $\frac{3}{8}$ " dia..	1	
2	023394	Spindle — 2 Spool Valve	As Req'd	
2A	023395	Spindle — 3 Spool Valve	As Req'd	
2B	023396	Spindle — 4 Spool Valve	As Req'd	
3	023185	Control Lever — Lift	1	
4	040626	Lift Lever Knob	1	
5	040627	Tilt Lever Knob	1	
6	023186	Control Lever — Tilt	1	
7	023188	Spacer — 2 Spool	3	
	040725	Spacer — 3 Spool	4	
	040725	Spacer — 4 Spool	5	
8	023399	Support Bracket	2	
8A	04474	Bolt, $\frac{3}{8}$ " UNC x 2 $\frac{3}{4}$ " long	3	
8B	04569	F.D. Washer, $\frac{3}{8}$ " dia..	3	
8C	04525	Nut, $\frac{3}{8}$ " UNC	3	
9	04569	F.D. Washer, $\frac{3}{8}$ " dia..	1	
10	04461	Setscrew, $\frac{3}{8}$ " UNF x " long	1	
11	019170	Link — 2 Spool	4	
	019170	Link — 3 Spool	6	
	019170	Link — 4 Spool	8	
12	019171	Pin, $\frac{1}{4}$ " dia. — Spool	4	
	019171	Pin, $\frac{1}{4}$ " dia. — 3 Spool	6	
	019171	Pin, $\frac{1}{4}$ " dia. — 4 Spool	8	
13	019273	'E' Clip, $\frac{1}{4}$ " dia. — 2 Spool	8	
	019273	'E' Clip, $\frac{1}{4}$ " dia. — 3 Spool	12	
	019273	'E' Clip, $\frac{1}{4}$ " dia. — 4 Spool	16	
	023376	Control Lever — Sideshift or Clamp	1	} Not illustrated
14	023375	Control Lever — Clamp	1	
	040623	Knob — Sideshift or Clamp	2	
	040618	Nameplate — Sideshift	1	
	040619	Nameplate — Clamp	1	



**FIG. 5 : 13**

**CONTROLS****VALVE CONTROL LEVERS AND MOUNTING - CESSNA**

<b>Fig.No.5:13</b>	<b>Part No.</b>	<b>Description</b>	<b>Qty</b>	<b>Remarks</b>
1		Hydraulic Valve Assembly	1	Refer to Fig. 6:04A.
2	04482	Setscrew	3)	Valve
3	04570	Washer	3)	Fixing.
4	04463	Setscrew	2)	Valve
5	04525	Nut	2)	Mounting
6	04569	Washer	2)	Brackets
7	025894	Spindle	1	
8	04464	Setscrew	2)	Spindle
9	04569	Washer	2)	Location
10	023185	Valve lever lift	1	
11	040725	Bush	1	Each valve lever
12	040626	Knob - lift	1	
13	023186	Valve lever tilt	1	
14	040627	Knob - tilt	1	
15	023375	Valve lever. 3rd service	1	
16	040623	Knob - plain	1	
17	023376	Valve lever. 4th service	1	
18	040623	Knob - plain	1	
19	025896	Operating link	8	
20	019171	Pin	4	
21	027419	Pin	4	
22	010617	'E' clip	8	
23	019273	'E' clip	8	
24	025895	Mounting bracket	2	
25	023188	Spacer	6	
26	010972	Restrictor	1	
27	010632	Adaptor	2	
28	010542	Adaptor	3	
29	010705	Blanking plug	1	





**SECTION 6**  
**HYDRAULICS**

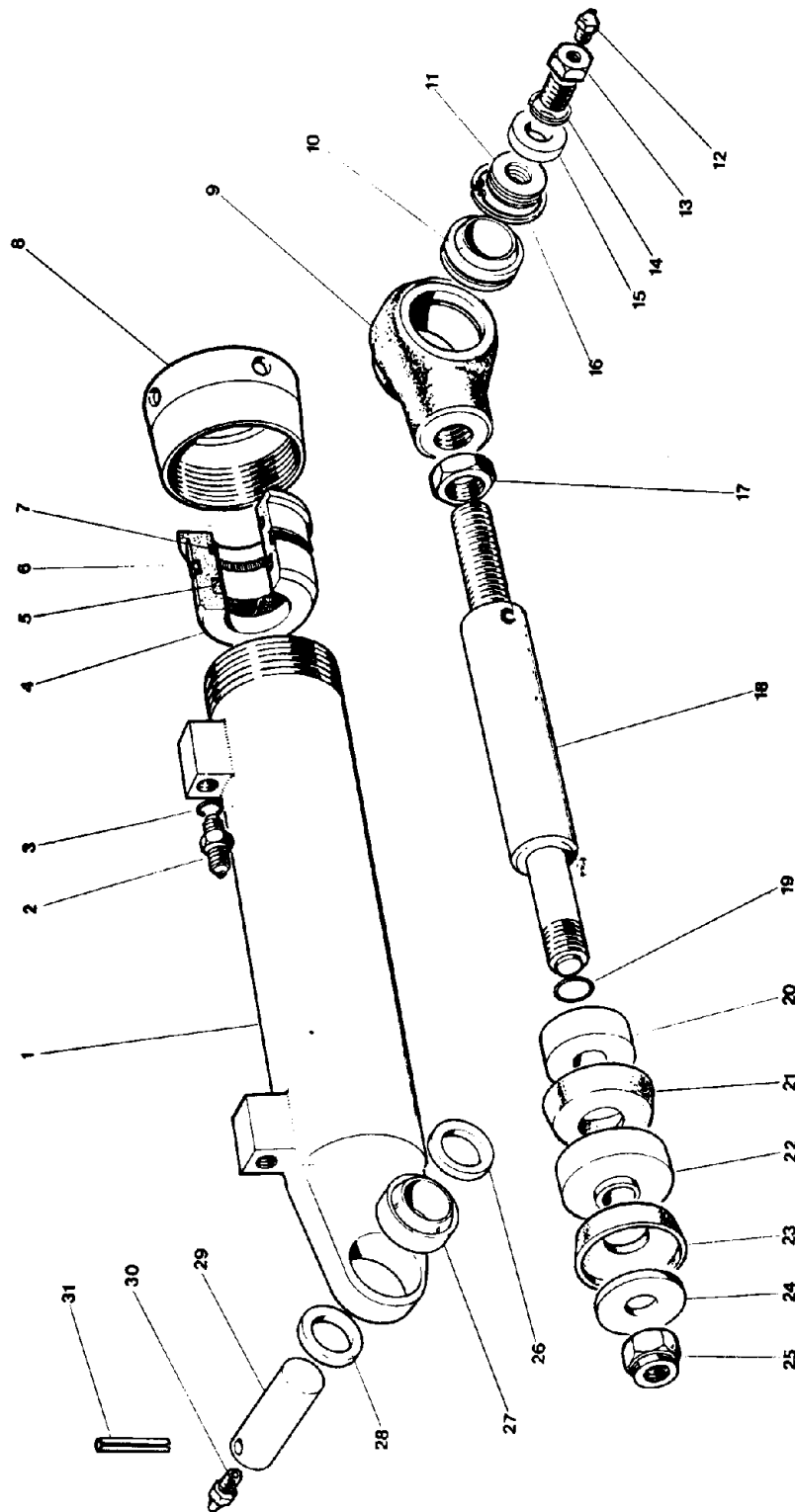


FIG. 6 : 01



**HYDRAULICS  
TILT CYLINDER**

(Not used for Reduced Height Mast)

Fig. No. 6:01	Part No.	Description	Qty	Remarks
	023313	Tilt Cylinder Assembly	1	
1	023312	Tilt Cylinder	1	
2	010541	Adaptor	2	
3	010625	'O' Ring	2	*
4	010485	Piston Guide	1	
5	03421	Seal	1	*
6	010557	'O' Ring	1	*
6A	034012	Back-up Ring	1	Fitted on front face of seal
7	03420	Wiper Seal	1	*
8	03534	End Cap	1	
9	010516	Coupling	1	
10	010407	Spherical Bearing	1	
11	023284	Shim, $\frac{1}{8}$ "	As Req'd	
	023285	Shim, $\frac{1}{16}$ "	As Req'd	
	023286	Shim, $\frac{1}{32}$ "	As Req'd	
12	04393	Grease Nipple	1	
13	011540	Screw, Special	1	
14	04589	Spring Washer, $\frac{5}{8}$ " dia.	1	
15	023282	Retaining Clip	1	Alt. 025595 (if 019889 sup.)
16	011175	Circlip	1	S'ced by 038747
17	04543	Locknut, 1 1/4" UNF	1	
18	04963	Piston Rod	1	
19	04407	'O' Ring	1	*
20	03532	Rear Cup Support	1	
21	04216	Cup Seal	1	*
22	03533	Cup Spacer	1	
23	04216	Cup Seal	1	*
24	03531	Front Cup Support	1	
25	010554	Nyloc Nut, Thin, 1 1/4" UNF	1	
26	023287	Collar	1	
27	010407	Spherical Bearing	1	
28	023287	Collar	1	
29	023280	Pivot Pin	1	
30	04393	Grease Nipple	1	
31	04587	Spring Dowel, 1/2" dia. x 2 1/2" long	1	
32	017191	Seal Kit	1	
	039315	Restrictor assembly	1	
		*Contained in Item 32		

NOTE:- Tilt Cylinder for Reduced Height Mast  
Refer to FIG.9:10 Page 265.

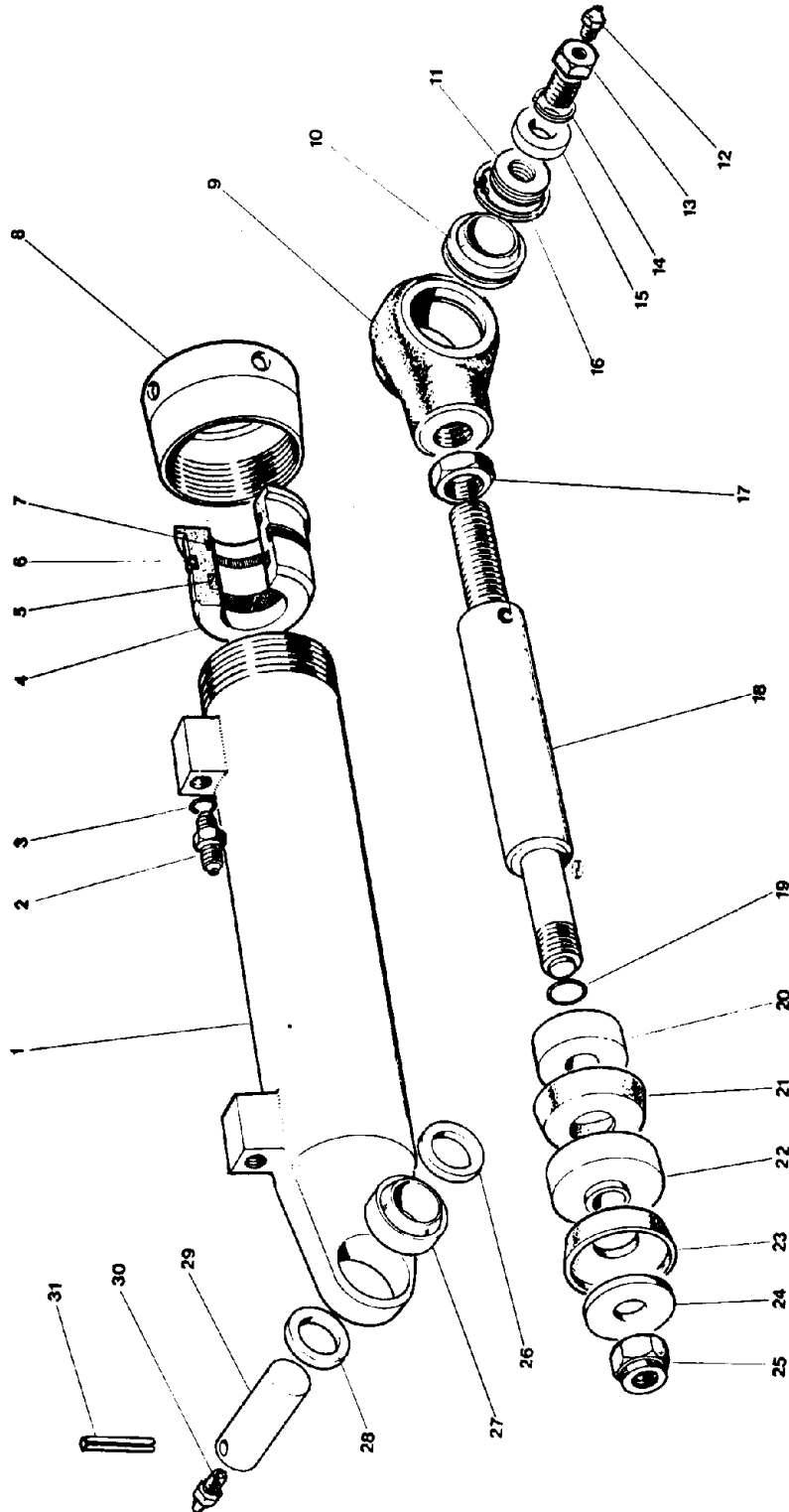


FIG. 6:01



## HYDRAULICS

## TILT CYLINDER - CLEARVIEW MAST

Fig.No.6:01A	Part No.	Description	Qty	Remarks
	011825	Tilt cylinder assembly	2	
1	011826	Cylinder	1	
2	010541	Adaptor	2	
3	010625	'O' Ring	2	
4	010485	Piston guide	1	
5	03421	Seal	1	
6	010557	'O' Ring	1	
6A	034012	Back-up ring	1	
7	03420	Wiper seal	1	
8	03534	End cap	1	
9	010516	Coupling block	1	
10	010407	Spherical bearing	1	
11				
12	04393	Grease nipple	1	
13	011540	Bolt special	1	
14	04589	Washer - spring	1	
15	025595	Retaining ring	1	
15A	019889	Dowel pin	1	
16	038747	Retaining ring	1	
17	04543	Locknut	1	
18	03530	Piston rod	1	
19	04407	'O' Ring	1	
20	03532	Rear cup support	1	
21	04216	Cup seal	1	
22	03533	Cup spacer	1	
23	04216	Cup seal	1	
24	03531	Front cup support	1	
25	010554	Locknut	1	
26	023287	Collar	1	
27	010407	Spherical bearing	1	
28	023287	Collar	1	
29	023280	Pivot pin	1	
30	04393	Grease nipple	1	
31	04587	Dowel pin	1	
	039315	Restrictor assembly	1	
	017191	Kit seal	AR	

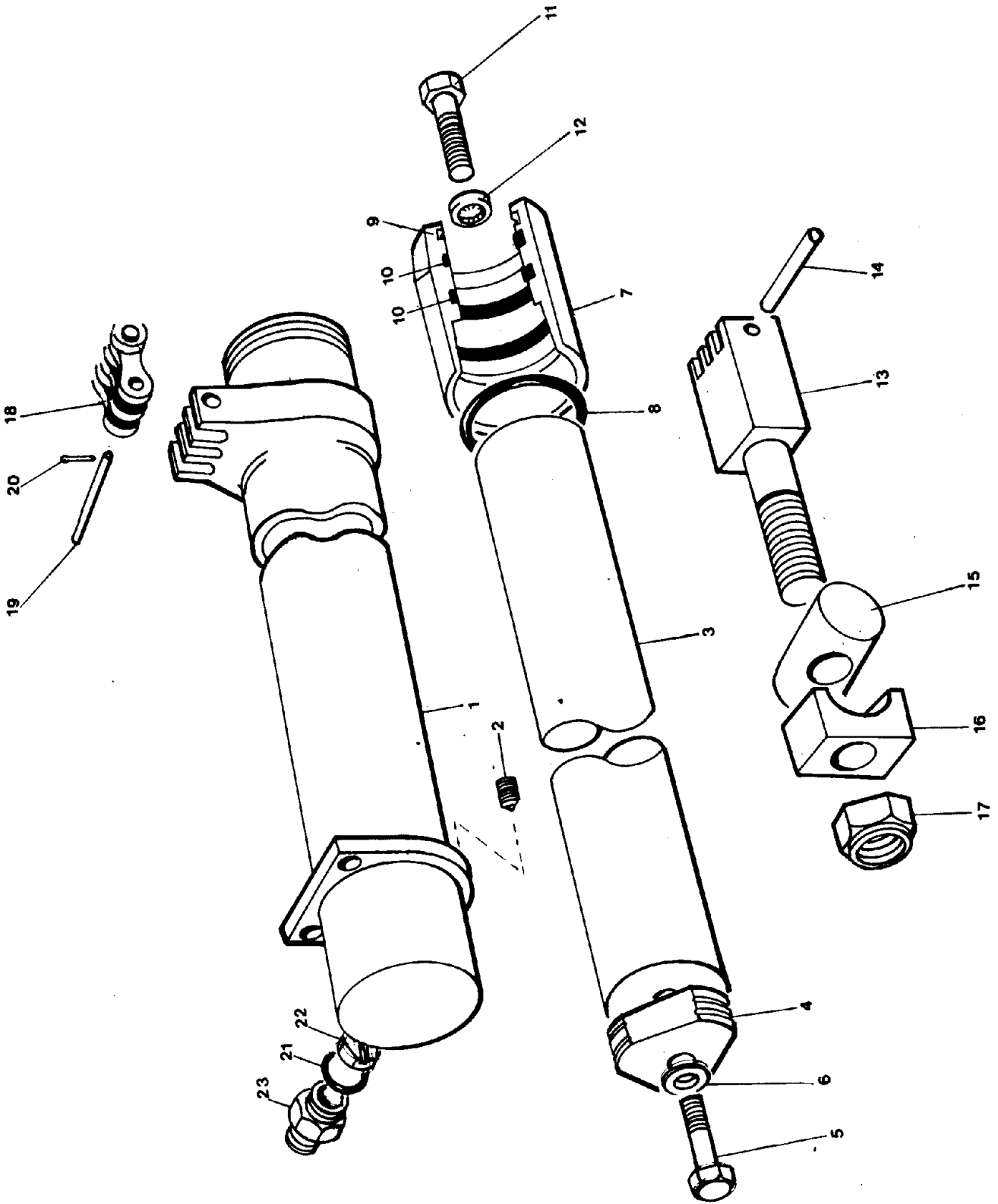
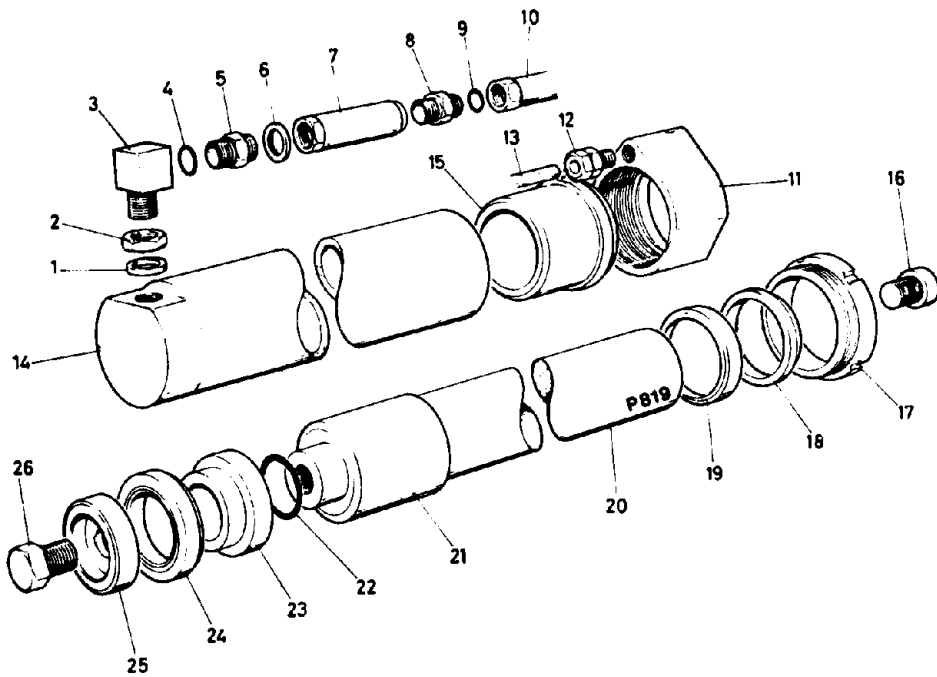


FIG. 6:02



**HYDRAULICS  
LIFT CYLINDERS — CHANNEL/CHANNEL MAST**

Fig. No. 6:02	Part No.	Description	Qty	Remarks
1A	011191	Cylinder Assembly, Type 144	1	
1	011343	Lift Cylinder (Type 144 std.)	1	
2	04591	Grub Screw, 1/4" BSF x 1" long.	1	
3	010588	Piston (Type 144 std.)	1	
4	03053	Steady	1	
5	04503	Bolt, 5/8" UNF x 1 3/4" long Hex. Hd.	1	
6	04572	Washer, Fan Disc, 5/8" dia.	1	
7	03052	End Cap	1	
8	04410	'O' Ring	1	*
9	03427	Wiper Seal.	1	
10	03428	Seal	2	*
11	04502	Bolt, 5/8" UNF x 1 1/2" long	1	
12	04572	Washer, Fan Disc, 5/8" dia.	1	
13	03895	Chain Anchor, lower	1	
14	03156	Pin, 5/16" dia. x 2 1/4" long	1	
15	010325	Pivot Pin	1	
16	010331	Spacer	1	
17	04551	Nut, 1" UNF, Self Locking.	1	
18	011344/22	Chain	1	
19	010334	Pin	1	
20	04580	Split Pin, 1/16" x 3/4" long	4	
21	010551	'O' Ring	1	
22	010837	Orifice Plate	1	
23	010542	Adaptor	1	
24	010500			
25	023532	Hose Clip	1	} Not illustrated
26	04444	Setscrew, 1/4" UNC x 3/4" long	1	
27	05473	Nut, 1/4" UNC	1	
28	04567	Washer Fan Disc, 1/4" dia.	1	
*	010500	Seal Kit*	1	Items contained in Seal Kit



**FIG. 6 : 02A**



**HYDRAULICS  
LIFT CYLINDER ASSEMBLY — CHANNEL/CHANNEL MAST**

Fig. No.	Part No.	Description	Qty	Remarks
	025067-144	Lift Cylinder Assembly	1	Standard
1	019309	Dowty Seal	1	
2	025063	Locknut, $\frac{7}{8}$ " UNF	1	
3	025061	Adaptor Special.	1	Not now used 7.11.73
*4	010625	'O' Ring	1	For use with item 5
5	010632	Adaptor	1	
6	019309	Dowty Seal	1	Not now used 7.11.73
7	025062	Flow Regulator	1	
8	010632	Adaptor	1	
*9	010625	'O' Ring	1	For use with item 8
10	023609	Hose x 45in. long	1	Standard
11	019938	Ram Collar	1	
12	011950	Adaptor — Straight	1	
13	011949	Nylon Tube	As Req'd	
14	025588-144	Lift Cylinder	1	Standard
15	011817	Gland	1	
16	025071	Screw, $\frac{5}{8}$ " UNF x 1 $\frac{3}{4}$ " long Skt. Hd. Cap.	1	
17	011819	End Cap	1	
18*	011820	Scraper Ring	1	
19	011869	Wiper Seal	1	Superseded by 017475 (With New Endcap) S'seded by 041032
20	011811-144	Piston	1	
21	025593	Sleeve	1	
22*	040201	'O' Ring	1	
23	011841	Seal Housing	1	
24*	011837	Seal	1	
25	011815	Seal Clamp Plate	1	
26	011838	Setscrew, $\frac{7}{8}$ " UNF x 1 $\frac{1}{2}$ " long	1	Self Locking Securing Nylon Tube to Cylinder
	07236	Self Adhesive Tape	As Req'd	Use Part No. 011882 (For use with 019938) (For use with 025062)
	025038	Seal Kit	1	
	010520	Grubscrew, $\frac{1}{4}$ " BSF x $\frac{1}{4}$ " long	1	
	025081	Service Kit — Flow Regulator	1	

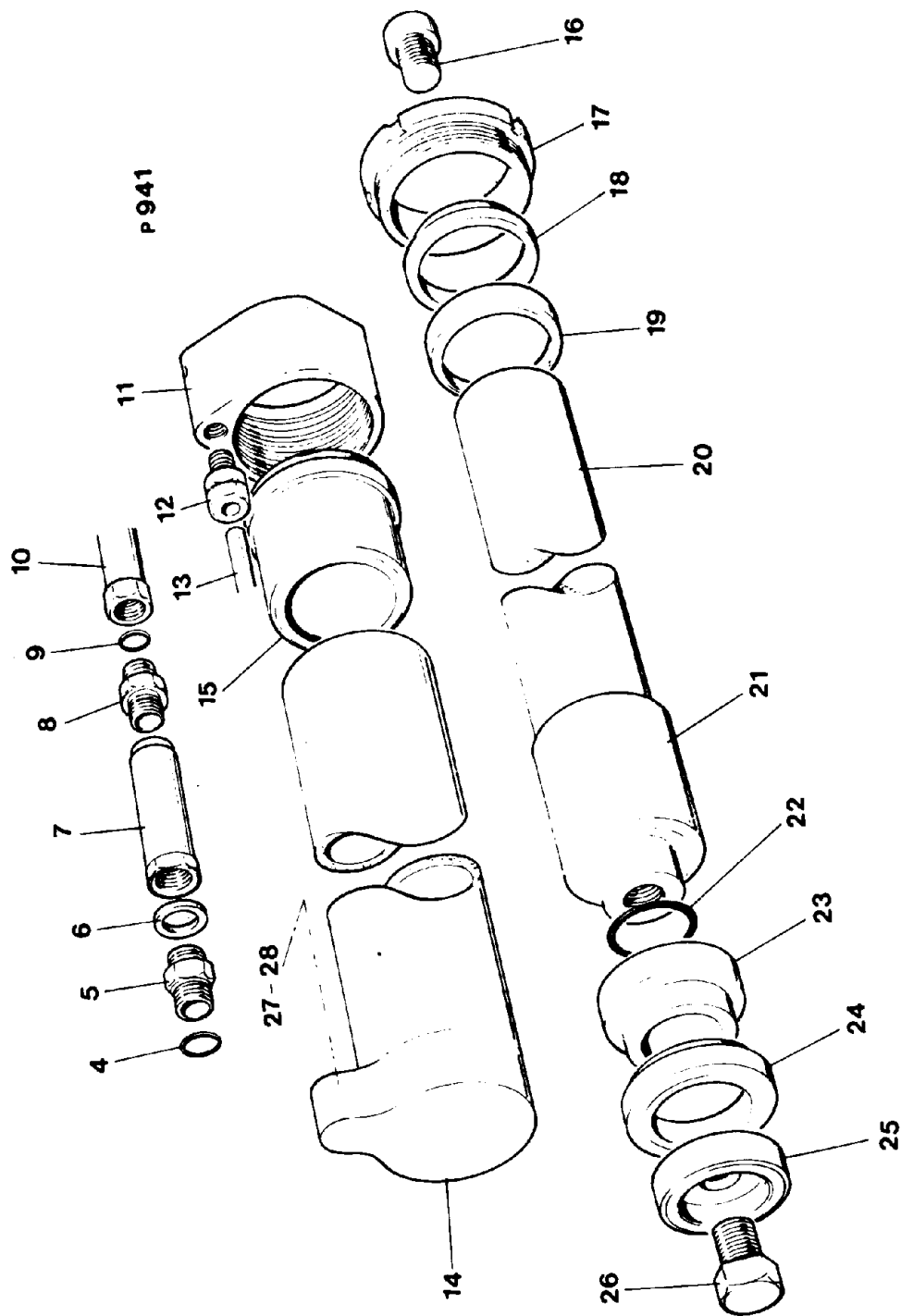
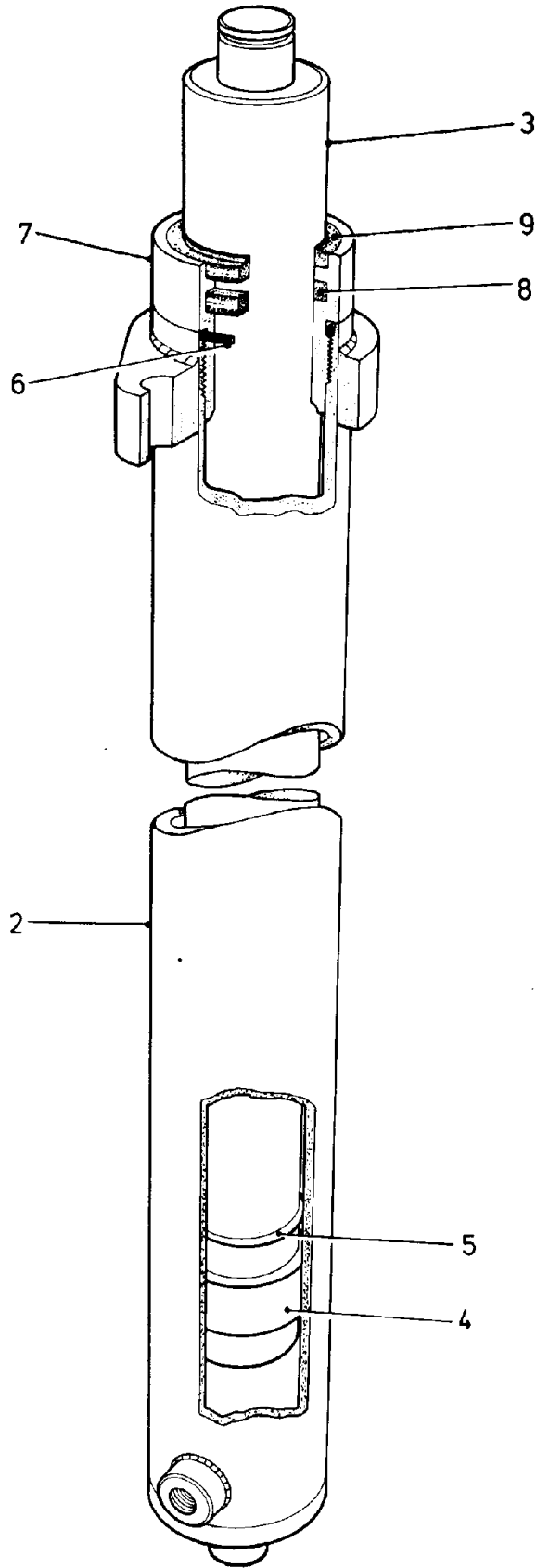


FIG. 6 : 02B



**HYDRAULICS  
LIFT CYLINDER ASSEMBLY — CHANNEL/I BEAM MAST**

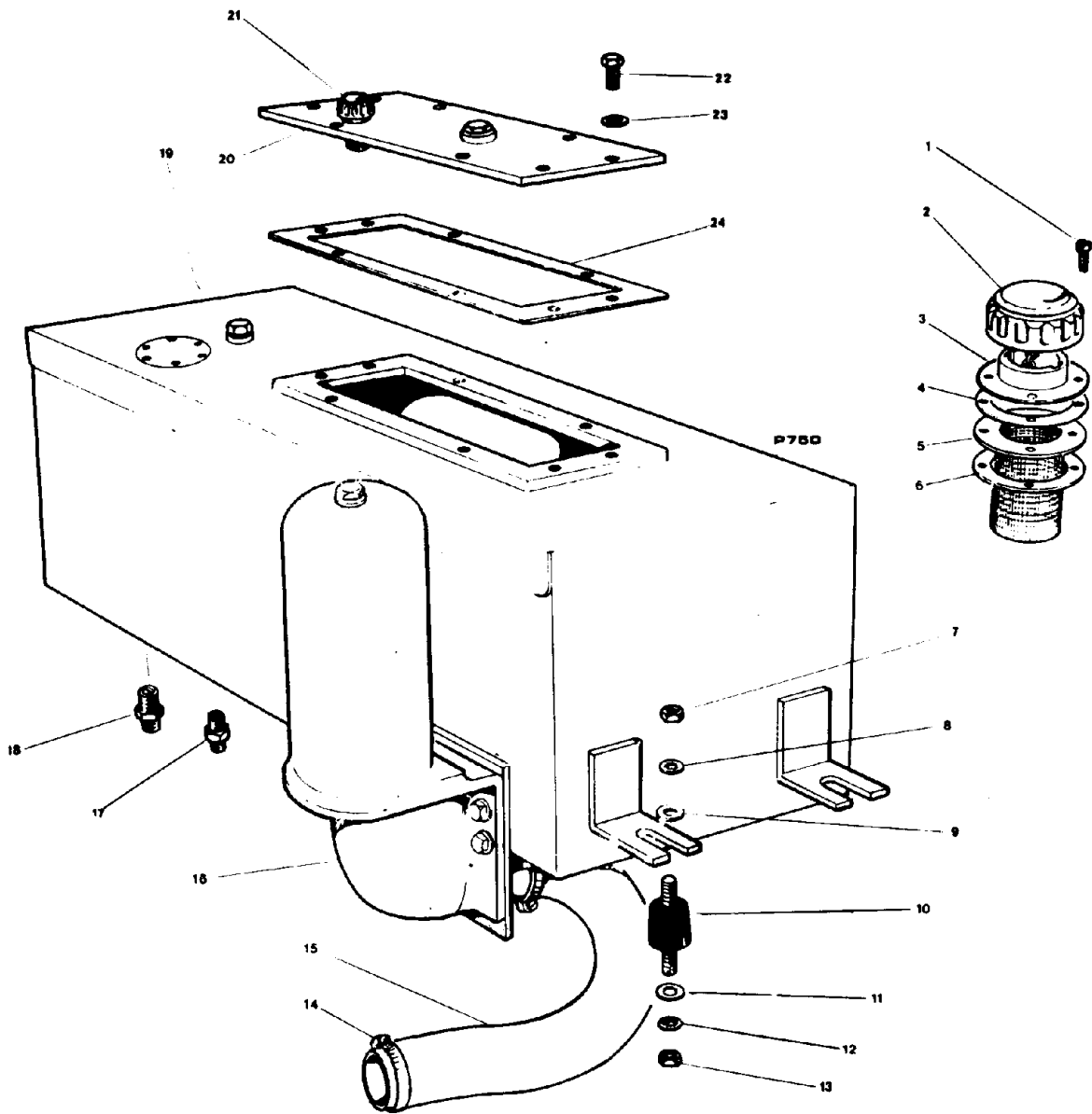
Fig. No.	Part No.	Description	Qty	Remarks
1	025067-144	Lift Cylinder Assembly	1	S' seded by 042124
4	010625	'O' Ring	1	
5	010632	Adaptor	1	
6	019309	Dowty Seal	1	
7	025062	Flow Regulator	1	
8	010632	Adaptor	1	
9	010625	'O' Ring	1	*
10	023609	Hose x 45" long	1	
11	019938	Ram Collar	1	S' seded by 028109
12	011950	Adaptor — Straight	1	S' seded by 010995
13	011949	Nylon Tube	As Req'd	S' seded by 028252
14	025588-144	Cylinder W.A.	1	S' seded by 042125
15	011817	Gland	1	
16	04514	Setscrew, $\frac{5}{8}$ " UNF x 1 $\frac{3}{4}$ " long	1	
17	011819	End Cap	1	
18	011820	Scraper Ring	1	
19	017475	Wiper Seal	1	*
20	011811-144	Piston	1	S' seded by 041032
21	025593	Sleeve	1	
22	040201	'O' Ring	1	*
23	011841	Seal Housing	1	
24	011837	Seal	1	*
25	011815	Seal Clamp Plate	1	
26	011838	Setscrew, $\frac{7}{8}$ " UNF x 1 $\frac{1}{2}$ " long	1	Self Locking
27	010632	Adaptor	1	
28	025101	Pipe Assembly	1	
29	07236	Self Adhesive Tape	As Req'd	Nylon Tube
30	025599	Seal Kit	1	*
31	025081	Service Kit — Flow Regulator	1	For Item 7
	039000	Sealing ring. Ram collar	1	



**FIG. 6:02C**

**HYDRAULICS****LIFT CYLINDER - CLEARVIEW MAST**

Fig.No.6:02C	Part No.	Description	Qty	Remarks
1	029786	Lift cylinder 9'.0" lift	2	
	029787	Lift cylinder 10'.0" lift	2	
	029788	Lift cylinder 11'.0" lift	2	
	029789	Lift cylinder 12'.0" lift	2	
	029790	Lift cylinder 13'.0" lift	2	
	029791	Lift cylinder 14'.0" lift	2	
	029792	Lift cylinder 15'.0" lift	2	
	029793	Lift cylinder 16'.0" lift	2	
	029794	Lift cylinder 17'.0" lift	2	
	029795	Lift cylinder 18'.0" lift	2	
	029796	Lift cylinder 19'.0" lift	2	
	029797	Lift cylinder 20'.0" lift	2	
2	029759	Cylinder 9'.0" lift	2	
	029760	Cylinder 10'.0" lift	2	
	029761	Cylinder 11'.0" lift	2	
	029762	Cylinder 12'.0" lift	2	
	029763	Cylinder 13'.0" lift	2	
	029764	Cylinder 14'.0" lift	2	
	029765	Cylinder 15'.0" lift	2	
	029766	Cylinder 16'.0" lift	2	
	029767	Cylinder 17'.0" lift	2	
	029768	Cylinder 18'.0" lift	2	
	029769	Cylinder 19'.0" lift	2	
	029770	Cylinder 20'.0" lift	2	
3	029772	Piston 9'.0" lift	2	
	029773	Piston 10'.0" lift	2	
	029774	Piston 11'.0" lift	2	
	029775	Piston 12'.0" lift	2	
	029776	Piston 13'.0" lift	2	
	029777	Piston 14'.0" lift	2	
	029778	Piston 15'.0" lift	2	
	029779	Piston 16'.0" lift	2	
	029780	Piston 17'.0" lift	2	
	029781	Piston 18'.0" lift	2	
	029782	Piston 19'.0" lift	2	
	029783	Piston 20'.0" lift	2	
4	029756	Guide	2	
5	029757	Stop ring	2	
6	029827	'O' Ring	2	
7	029784	End cap	2	
8	029825	Seal	2	
9	029826	Wiper seal	2	
	049189	Kit seal	AR	

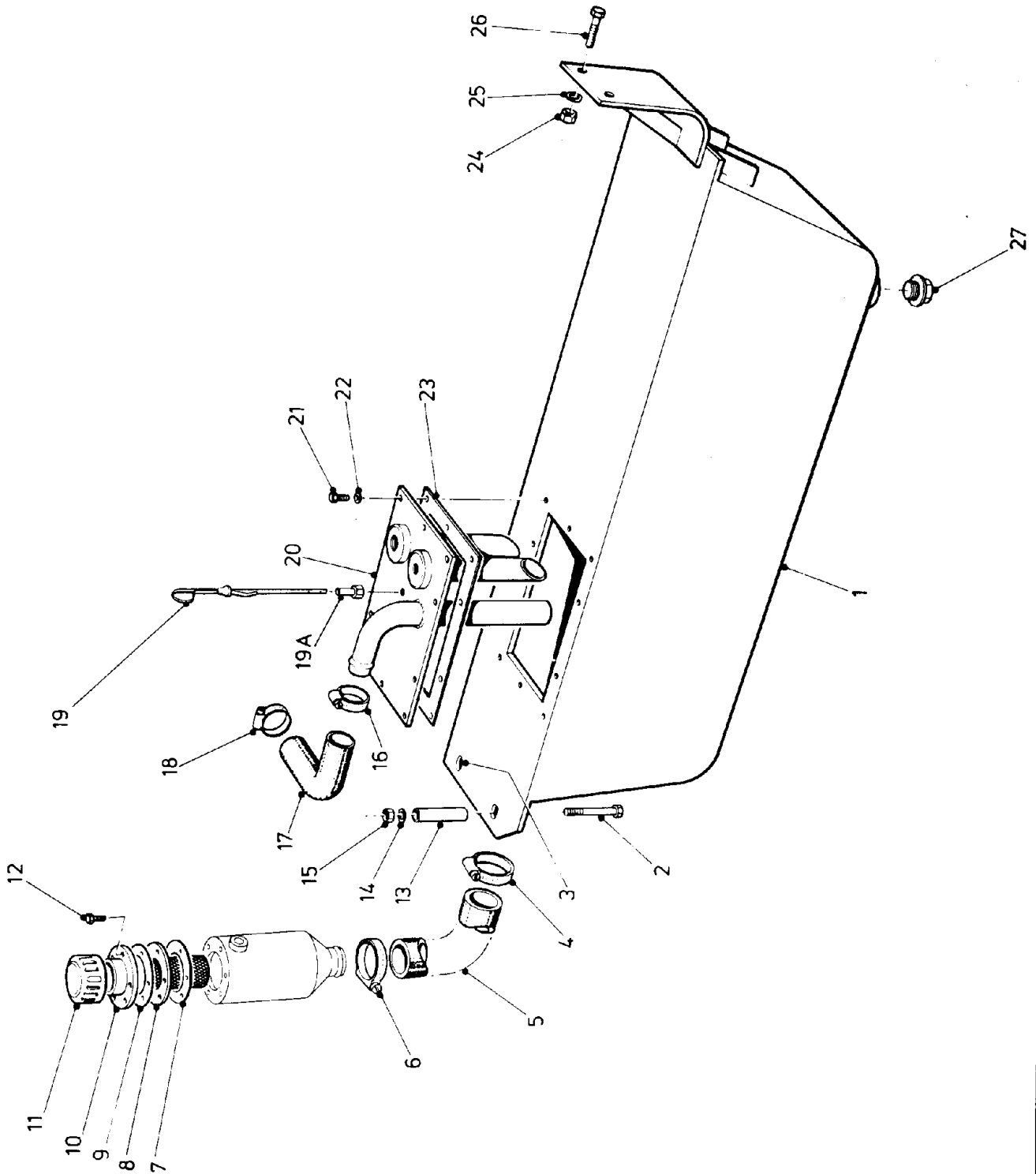


**FIG. 6 : 03**



**HYDRAULICS  
HYDRAULIC TANK ASSEMBLY**

Fig. No.	Part No.	Description	Qty	Remarks
1A	023025	Hydraulic Tank Assembly . . . . .	1	
1	04605	Screw, No. 10 x $\frac{5}{8}$ " long . . . . .	6	S'seded by 023799
2	04429	Filler Cap . . . . .	1	Part of Item 21
3	06286	Filler Neck . . . . .	1	
4	06287	Gasket . . . . .	1	
5	06288	Strainer . . . . .	1	
6	06287	Gasket . . . . .	1	For use with item 10
7	010819	Nut, $\frac{5}{16}$ " BSF . . . . .	4	
8	04568	Fan Disc Washer, $\frac{5}{16}$ " dia. . . . .	4	
9	04556	Washer, $\frac{5}{16}$ " dia. . . . .	4	
10	07398	Tank Mounting . . . . .	4	For use with item 10
11	04556	Washer, $\frac{5}{16}$ " dia. . . . .	4	
12	04568	Fan Disc Washer, $\frac{5}{16}$ " dia. . . . .	4	
13	010819	Nut, $\frac{5}{16}$ " BSF . . . . .	4	
14	019898	Jubilee Clip . . . . .	2	
15	023245	Hose — Tank to Pump, 1 $\frac{1}{4}$ " dia. . . . .	1	For Details see
16*	04167	Filter Unit . . . . .	1	Fig. 6:06
16A	04637	Gasket . . . . .	1	*
16B	04461	Setscrew, $\frac{3}{8}$ " UNF x $\frac{3}{4}$ " long Hex. Hd. . . . .	4	
16C	04569	Fan Disc Washer, $\frac{3}{8}$ " dia. . . . .	4	
17	010995	Adaptor — Steering Unit . . . . .	1	Complete with item 17A
17A	010551	'O' Ring . . . . .	1	For use with Item 17
18	010632	Adaptor — Valve Bank . . . . .	1	Comp. with Item 18A
18A	010550	'O' Ring . . . . .	1	For use with Item 18
19	023053	Hydraulic Tank . . . . .	1	
20	010509	Hydraulic Tank Lid . . . . .	1	S'seded by 011969
21	04876	Filler Assembly . . . . .	1	
22	04443	Setscrew, $\frac{1}{4}$ " UNF x $\frac{3}{4}$ " long . . . . .	8	Tank
23	04567	Fan Disc Washer, $\frac{1}{4}$ " dia. . . . .	8	
24	010235	Gasket . . . . .	1	S'seded by 013437



**FIG. 6 : 03A**



**HYDRAULICS  
HYDRAULIC TANK**

Fig. No. 6:03A	Part No.	Description	Qty	Remarks
1	039375	Hydraulic Tank . . . . .	1	
2	032140	Bolt . . . . .	1	
3	026710	Bolt . . . . .	1	
4	05789	Jubilee Clip . . . . .	1	
5	039704	Hose . . . . .	1	
6	05789	Jubilee Clip . . . . .	1	
7	06287	Gasket . . . . .	1	} Assembly 04876
8	06288	Strainer . . . . .	1	
9	06287	Gasket . . . . .	1	
10	06286	Filler Neck . . . . .	1	
11	06284	Filler Cap . . . . .	1	
12	04605	Screw . . . . .	6	
13	039443	Spacer . . . . .	1	
14	09619	Washer . . . . .	2	
15	019692	Nut . . . . .	2	
16	05789	Jubilee Clip . . . . .	1	
17	037115	Hose . . . . .	1	
18	05789	Jubilee Clip . . . . .	1	
19	039707	Dipstick . . . . .	1	
19A	039708	Dipstick Tube . . . . .	1	
20	039356	Tank Cover . . . . .	1	
21	04464	Bolt . . . . .	10	
22	03859	Washer . . . . .	10	
23	013437	Gasket . . . . .	1	
24	019691	Nut . . . . .	2	
25	09618	Washer . . . . .	2	
26	030139	Setscrew . . . . .	2	
27	010705	Plug . . . . .	1	
28	030084	Adaptor . . . . .	1	} Lift Cylinder Spill Off Pipe
29	04646	Seal . . . . .	1	

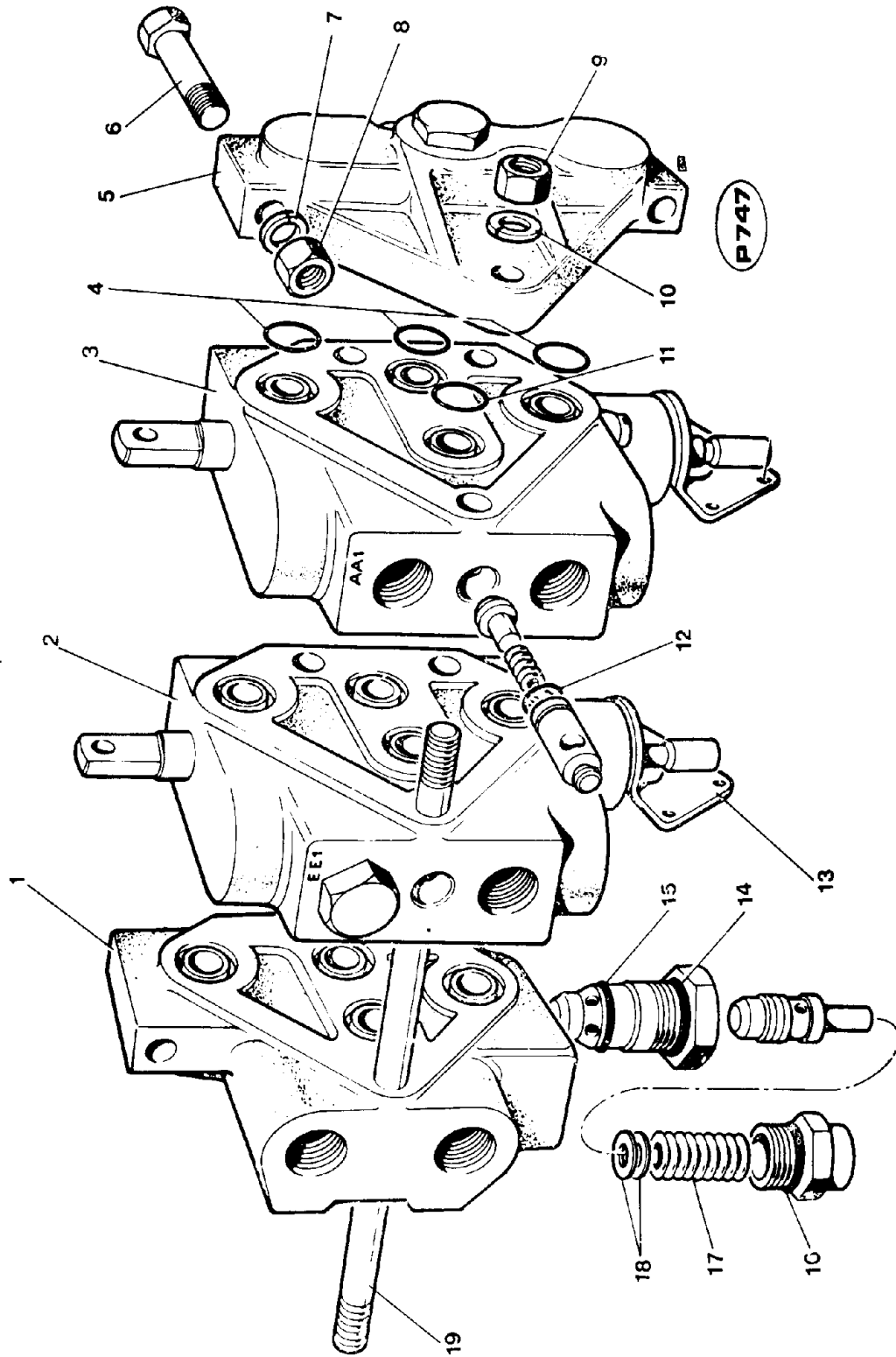


FIG. 6 : 04



**HYDRAULICS  
HYDRAULIC VALVE ASSEMBLY — KONTAK**

Fig. No. 6:04	Part No.	Description	Qty	Remarks
	018288	Valve Assembly, 2-spool, Standard	1	
	018287	Valve Assembly, 3-spool (Sideshift or Clamp)	1	
	018286	Valve Assembly, 4-spool (Sideshift & Clamp)	1	
1	018389	Relief Valve Cover	1	
2	018386	Spool Section Complete EE1	1	Lift Spool
3	018387	Spool Section Complete AA1	1	Tilt Spool — Sideshift etc. At each Position
4	018660	'O' Ring	3	
5	018388	End Cover	1	
6	04473	Bolt, $\frac{3}{8}$ " UNC x $2\frac{3}{4}$ " long	3	LS45 Only
7	04579	Spring Washer, $\frac{3}{8}$ " dia.	3	
8	04525	Nut, $\frac{3}{8}$ " UNC	3	
9	04526	Nut, $\frac{3}{8}$ " UNF	6	
10	04579	Spring Washer, $\frac{3}{8}$ " dia.	6	
11	018661	'O' Ring	1	At each Position
	018657	'O' Ring (Spool not illustrated)	2	Per Section
12	018662	'O' Ring (Check Valve)	1	
13	018404	Micro Switch Bracket	1	{ Per Section— Micro Switch not used
14	018657	'O' Ring	1	
15	018659	'O' Ring	1	
16	018658	'O' Ring	1	
17	018395	Relief Valve Spring	1	
	018402	Relief Valve Assembly	1	
	018403	Check Valve Assembly	1	
18	018663-4	Shims	As Req'd	
19	018396	Stud, $\frac{1}{2}$ " UNF — 2 spool Valve	3	
	018397	Stud, $\frac{1}{2}$ " UNF — 3 spool Valve	3	
	018389	Stud, $\frac{1}{2}$ " UNF — 4-spool Valve	3	
	018434	Restrictor Valve (Service Port—Forward Tilt)	1	Not illustrated
	018445	Seal	1	} Not illustrated Per Spool
	018446	Cover	1	
	018447	Screws	2	
	018448	Spring Washer	2	
		Seal Kits		
	018390	Relief Valve Seal Kit	1	
	018391	4-spool Valve — Sideshift and Clamp.	1	
	018392	2-spool Valve — Standard	1	
	018393	3-spool Valve — Sideshift or Clamp	1	

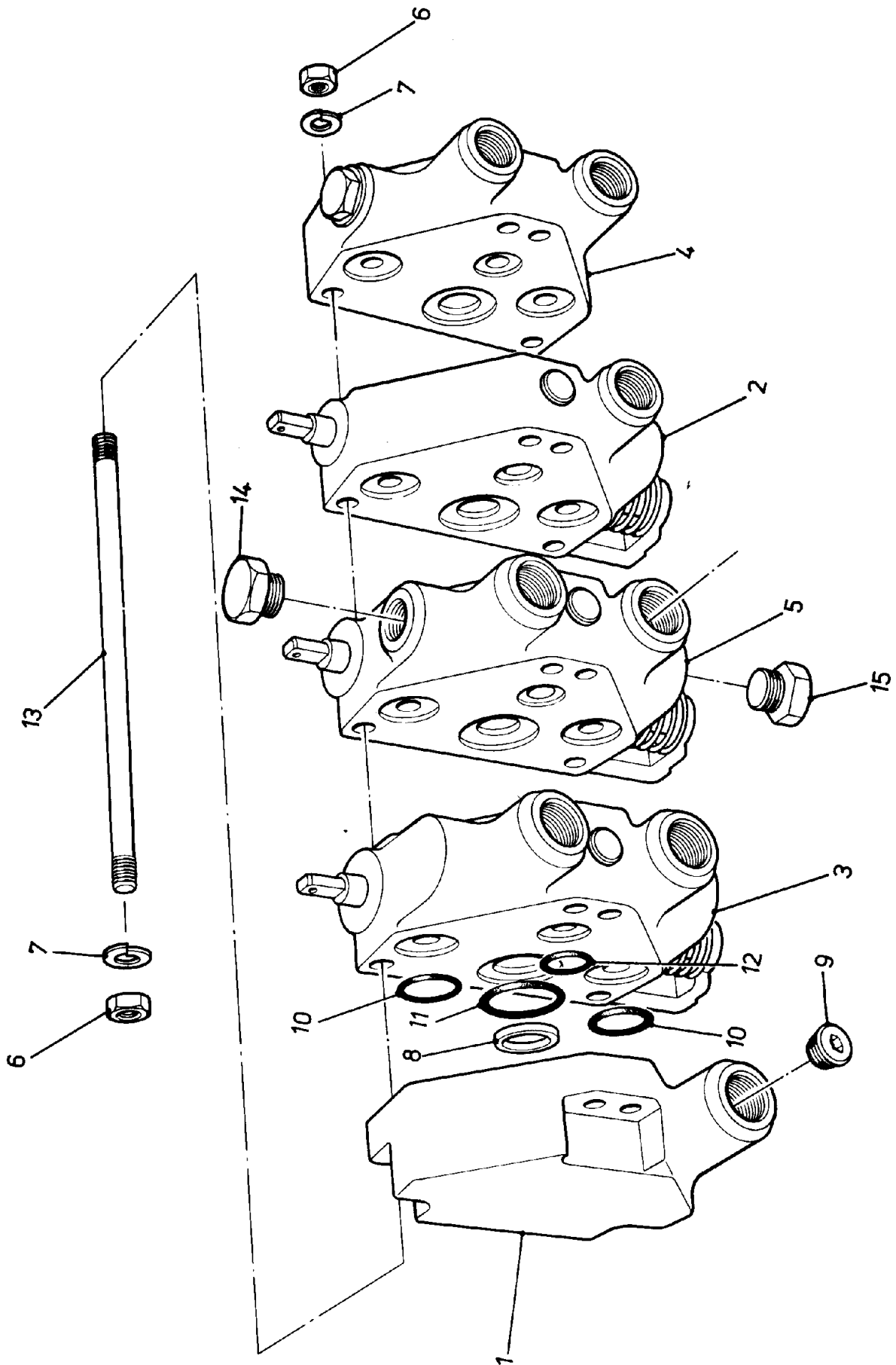


FIG. 6 : 04A



**HYDRAULICS**  
**HYDRAULIC VALVE ASSEMBLY — CESSNA MARK III**

Fig. No. 6:04A	Part No.	Description	Qty	Remarks
	027846	Valve Assembly — 3 spool.	1	
1	045905	Endplate — Left Hand	1	
2	045906	Valve Assembly — 3 way	1	
3	045907	Valve Assembly — 4 way	1	
4	045908	Port Plate — Right Hand	1	
5	045909	Valve Assembly — 4 way	1	
6	045910	Nut	8	
7	045911	Washer	8	
8	045912	Washer	4	
9	045913	Plug	1	
10	045914	'O' Ring	10	
11	045915	'O' Ring	5	
12	045916	'O' Ring	5	
13	045917	Stud	4	
14	027847	Relief Valve 2250 p.s.i.	1	
15	045918	Plug Assembly — Anti-cav.	1	
16	027849	Valve Section	1	For 4 spool valve only
17		Seal Kit	1	

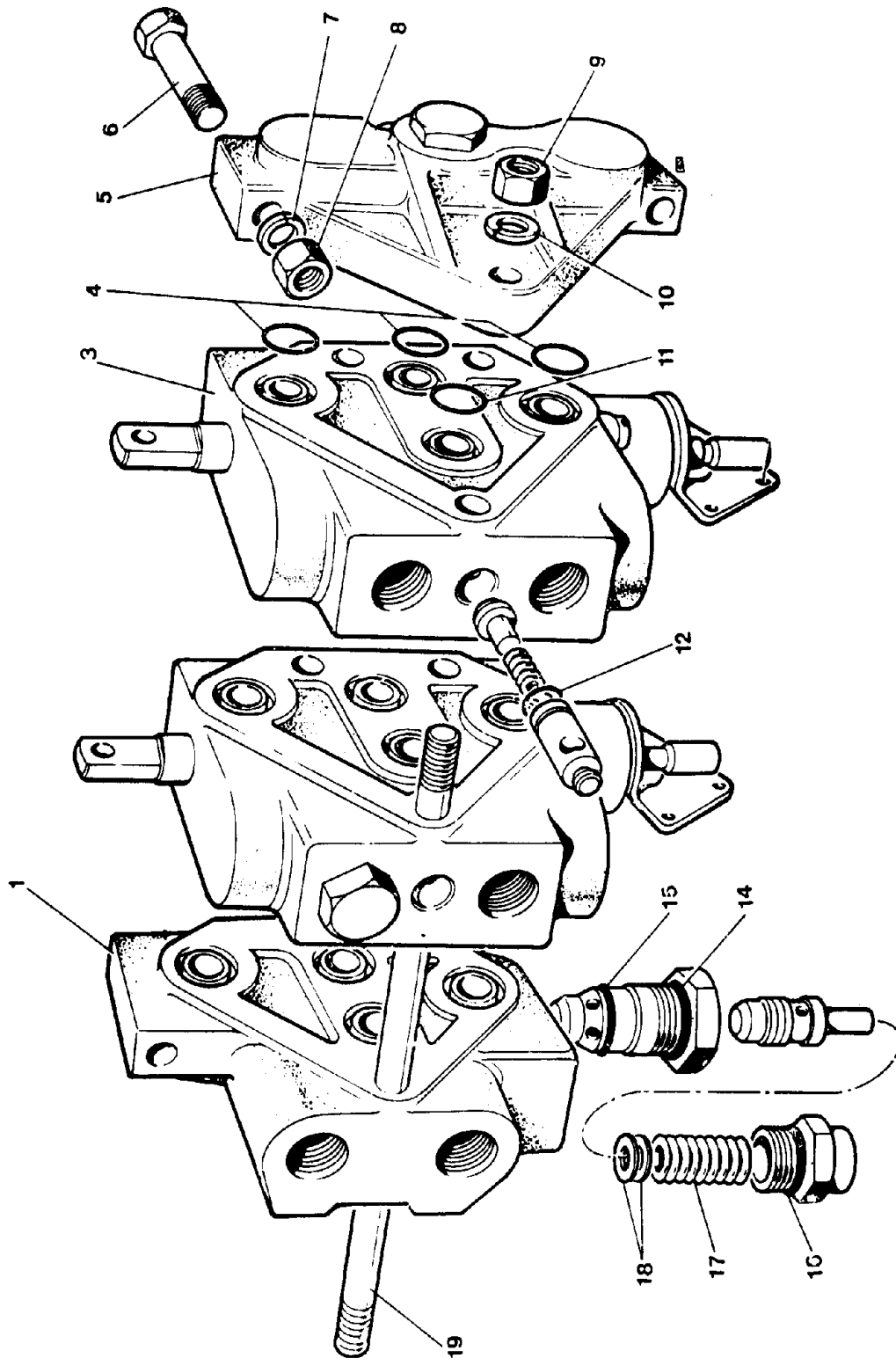


FIG. 6 : 04B



**HYDRAULICS  
HYDRAULIC VALVE ASSEMBLY – KONTAK  
SERIES MK.II**

Fig. No. 6:04B	Part No.	Description	Qty	Remarks
	038959	Valve Assembly, 4-spool	1	
1	038627	Relief Valve Cover	1	
2				
3	038630	Spool Section Complete	4	
4	018660	'O' Ring	2	At each Position
4A	038632	'O' Ring	1	At each Position
5	038960	End Cover	1	
6	04473	Bolt, $\frac{3}{8}$ " UNC x $2\frac{3}{4}$ " long	3	
7	04579	Spring Washer, $\frac{3}{8}$ " dia.	3	
8	04525	Nut, $\frac{3}{8}$ " UNC	3	
9	04526	Nut, $\frac{3}{8}$ " UNF	6	
10	04579	Spring Washer, $\frac{3}{8}$ " dia.	6	
11	038633	'O' Ring	1	At each Position
	047390	'O' Ring (Spool not illustrated)	2	Per Section
12	038644	'O' Ring (Check Valve)	1	
14	018659	'O' Ring	1	
15	038640	'O' Ring	1	
16	038641	'O' Ring	1	
17	038642	Relief Valve Spring	1	
	038655	Relief Valve Assembly	1	2250 PSI
	018403	Check Valve Assembly	1	
18	018663-4	Shims	As Req'd	
19	018398	Stud, $\frac{3}{8}$ " UNF – 4-spool Valve	3	
	018445	Seal	1	} Not illustrated Per Spool
	018446	Cover	1	
	018447	Screws	2	
	018448	Spring Washer	2	
	038638	Anti-Cav. Valve	1	
		Seal Kits		
	047391	Relief Valve Seal Kit	1	
	047392	4-spool Valve	1	

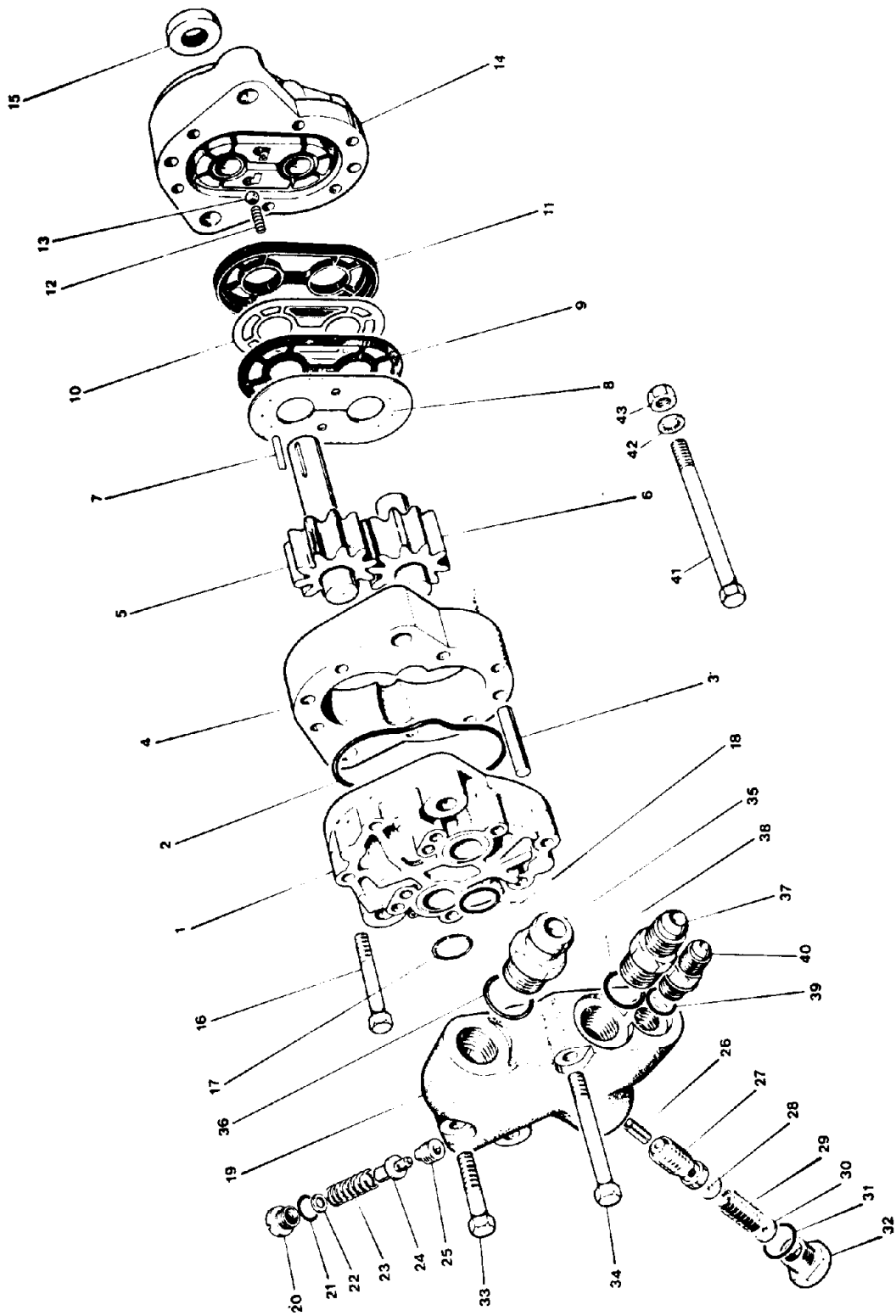


FIG. 6 : 05



HYDRAULICS  
HYDRAULIC PUMP — CESSNA

Fig. No.	6:05 Part No.	Description	Qty	Remarks
	010973	Pump Assembly.	1	Comp. with 010728**
1	010648	Back Plate.	1	
2	010652	'O' Ring, BS237	1	*
3	010651	Dowel Pin . . . . .	2	
4	010653	Body . . . . .	1	
5	010656	Drive Gear . . . . .	1	
6	010654	Idler Gear . . . . .	1	
7	010655	Key . . . . .	1	
8	010657	Diaphragm.	1	*
9	010658	Back-up Gasket .	1	*
10	010659	Protector Gasket	1	*
11	010660	Diaphragm Seal.	1	*
12	010661	Check Spring . . . . .	1	*
13	010662	Steel Ball, $\frac{3}{32}$ " dia.	1	*
14	010663	Front Plate . . . . .	1	
15	010664	Shaft Seal . . . . .	1	*
16	010624	Bolt, $\frac{5}{16}$ " UNF x 3"	4	
17	010650	'O' Ring, BS121.	1	*
18	010650	'O' Ring, BS121.	1	*
19	010633	Flow Divider Body . . . . .	1	Not serv'd, use 010728**
20	010641	Slotted Plug . . . . .	1	} Not serv'd, use 010728**
21	04409	'O' Ring, BS112.	1	
22	010639	Shim, 0.010"	As Req'd	
23	010638	Spring . . . . .	1	
24	010637	Poppet . . . . .	1	
25	010636	Seat . . . . .	1	
26	010642	Roll Pin . . . . .	1	
27	010939	Spool . . . . .	1	
28	010644	Disc . . . . .	As Req'd	
29	010645	Spring . . . . .	1	
30	010644	Disc . . . . .	As Req'd	
31	010550	'O' Ring, BS116.	1	
32	010647	Hexagon Plug . . . . .	1	
33	04455	Bolt, $\frac{5}{16}$ " UNF x 2" long	1	
34	010635	Bolt, $\frac{5}{16}$ " UNF x 4 1/2" long	2	
35	010185	Inlet Adaptor . . . . .	1	
36	010549	'O' Ring, BS119.	1	
37	010632	Outlet Adaptor . . . . .	1	Comp. 010550, 'O' Ring
38	010550	'O' Ring, BS116.	1	
39	010551	'O' Ring, BS014.	1	
40	010995	Adaptor . . . . .	1	Comp. 010551, 'O' Ring
41	04493	Bolt, 1/2" UNF x 1 1/2" long	} Pump to Mount . . . . . 1	
42	04571	Washer, F.D. 1/2" dia.		
43	04531	Nut, 1/2" UNF		
	010736	*Major Seal Kit consists of: Items 2, 8, 9, 10, 11, 12, 13, 15, 17, 18, 21 & 31		
	010728	**Flow Divider Assembly consists of: Items 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30 & 31.		

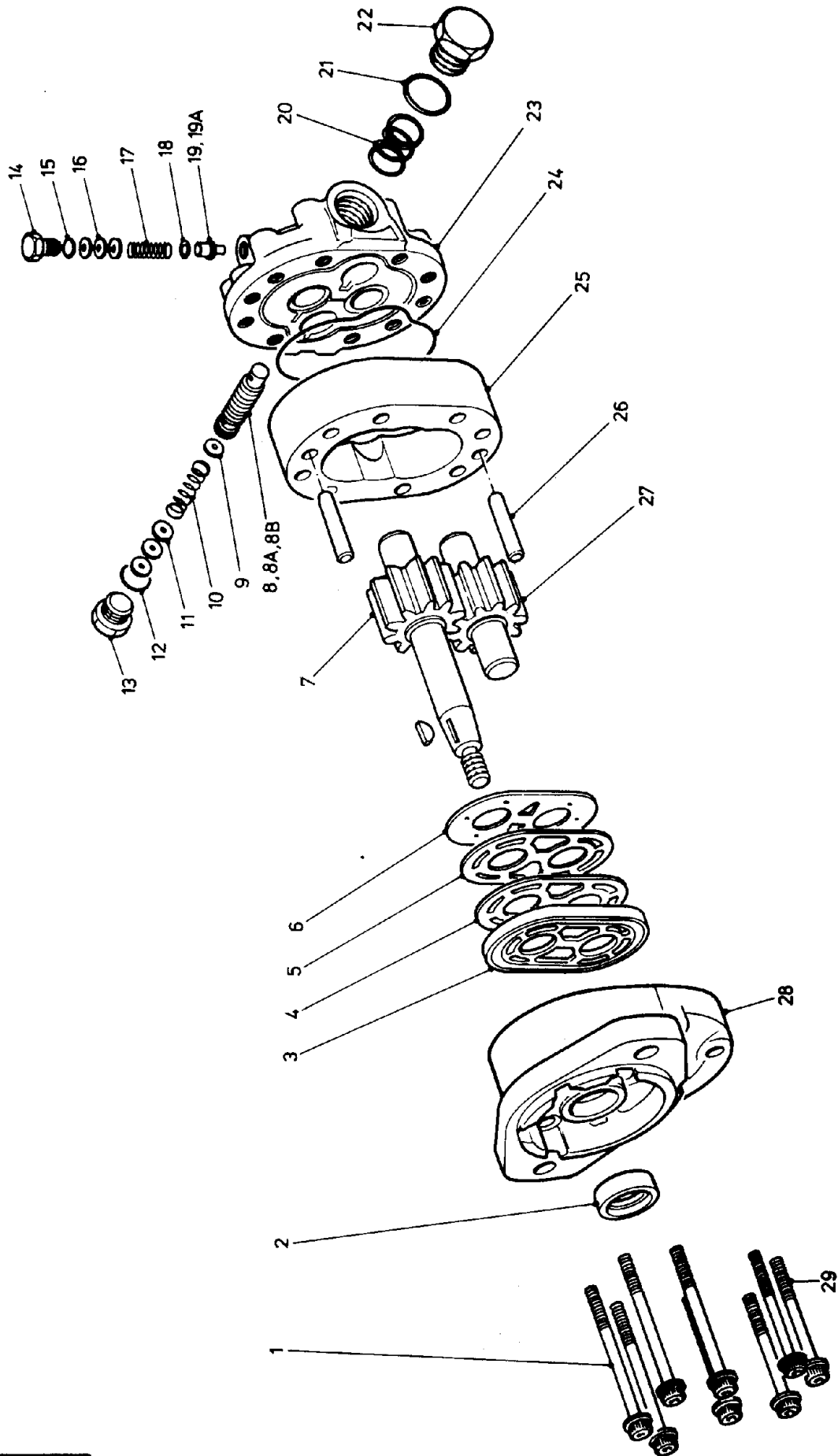


FIG. 6 : 05A



HYDRAULICS  
HYDRAULIC PUMP — SERVICES

Fig. No. 6:05A	Part No.	Description	Qty	Remarks
1	036092	Pump Assembly . . . . .	1	
2	047401	Screw . . . . .	4	
3	047482	Seal . . . . .	1	} Major Seal Kit 047490
4	017343	Seal — Diaphragm . . . . .	1	
5	017488	Gasket — Protector . . . . .	1	
6	017487	Gasket — Back Up . . . . .	1	
7	047413	Diaphragm . . . . .	1	
		Gear Assembly . . . . .	1	} Gear Kit 047489
8	047410	Spool . . . . .	1	
8A	047411	Sleeve . . . . .	1	
8B	047412	'O' Ring . . . . .	3	
9	022393	Disc . . . . .	1	
10	022392	Spring . . . . .	1	
11	022393	Disc . . . . .	A.R.	
12	017601	'O' Ring . . . . .	1	Incl. in 047490
13	022394	Plug . . . . .	1	
14	022395	Plug . . . . .	1	
15	047406	'O' Ring . . . . .	1	Incl. in 047490
16	022396	Shim . . . . .	A.R.	
17	022398	Spring . . . . .	1	
18	047483	Shim . . . . .	A.R.	
19	022399	Poppet . . . . .	1	
19A	047408	Seat . . . . .	1	
20	022387	Spring . . . . .	1	
21	047409	'O' Ring . . . . .	1	Incl. in 047490
22	022401	Plug . . . . .	1	
23	047484	Backplate . . . . .	1	
24	017486	'O' Ring . . . . .	1	Incl. in 047490
25	047485	Body . . . . .	1	
26	047486	Dowel . . . . .	2	
27		Idler Gear . . . . .	1	} Use Kit 047489
28	047487	Front Plate . . . . .	1	
29	047488	Screw . . . . .	4	
30	047489	Kit — Gear . . . . .	A.R.	
31	047490	Kit — Major Seal . . . . .	A.R.	
32	047491	Kit — Backplate Repair . . . . .	A.R.	

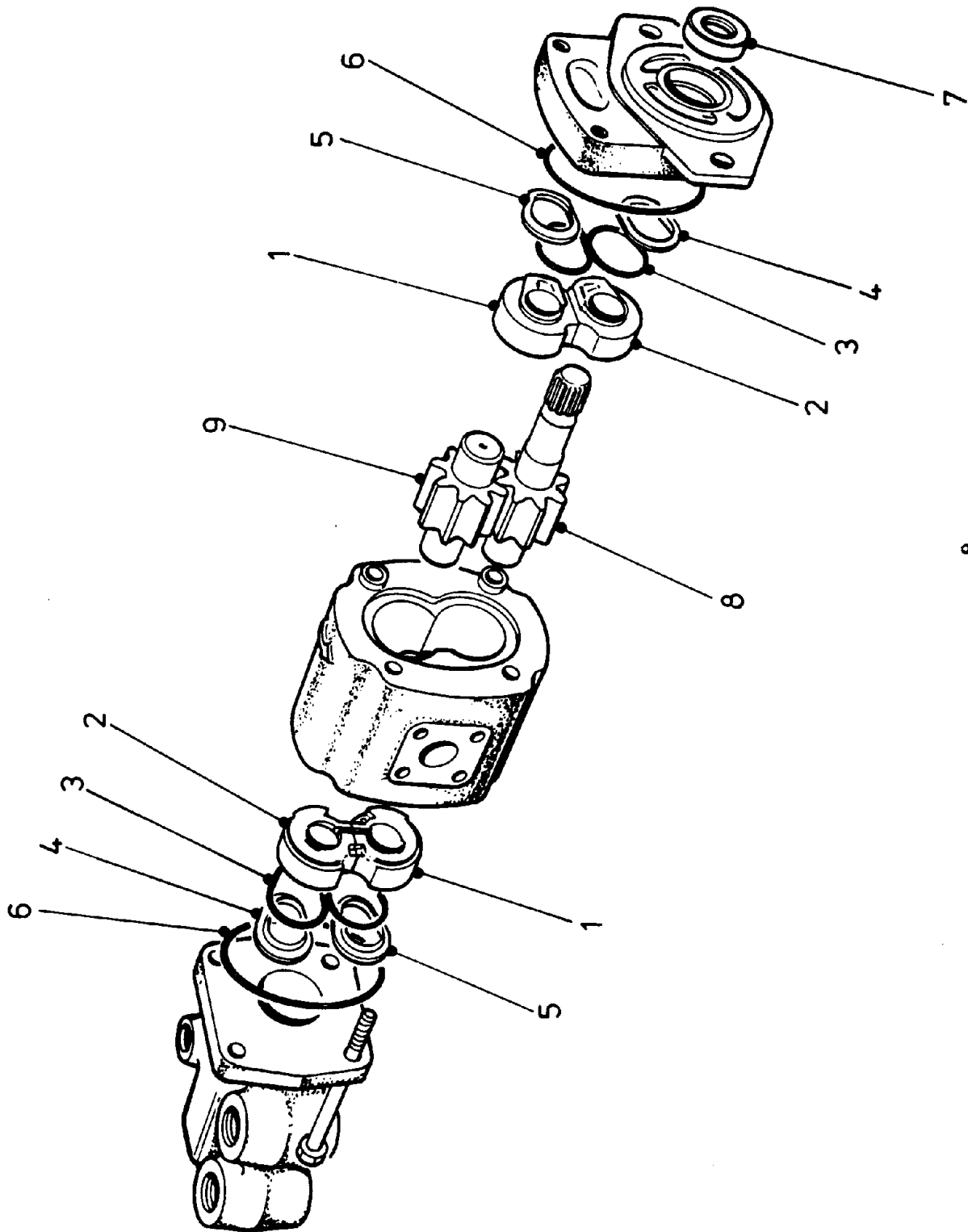


FIG. 6 : 05B



**HYDRAULICS  
HYDRAULIC PUMP – SERVICES  
DOWTY**

Fig. No. 6:05B	Part No.	Description	Qty	Remarks
	039322	Hydraulic Pump Assembly . . . . .	1	
	036108	Hydraulic Pump . . . . .	1	
	035045	Flow Divider . . . . .	1	
1	047975	Bush . . . . .	2	} Matched Pair
2	047976	Bush . . . . .	2	
3	047966	Seal . . . . .	2	
4	047967	Backing Ring . . . . .	2	
5	047968	Backing Ring . . . . .	2	
6	047970	'O' Ring . . . . .	2	
6A	047977	'O' Ring . . . . .	1	
7	047978	Seal . . . . .	1	
8	047979	Drive Gear . . . . .	1	} Matched Pair
9	047980	Driven Gear . . . . .	1	

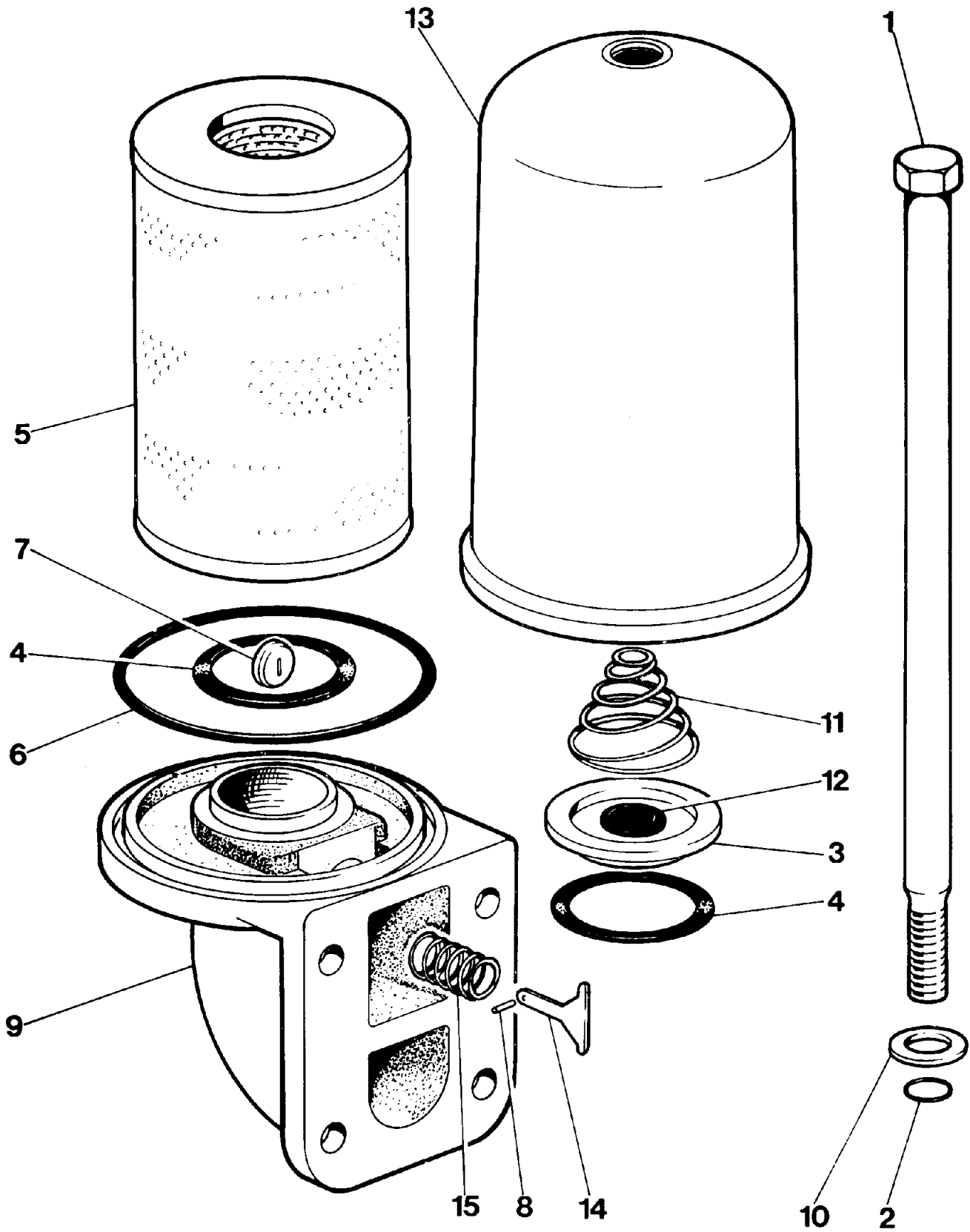
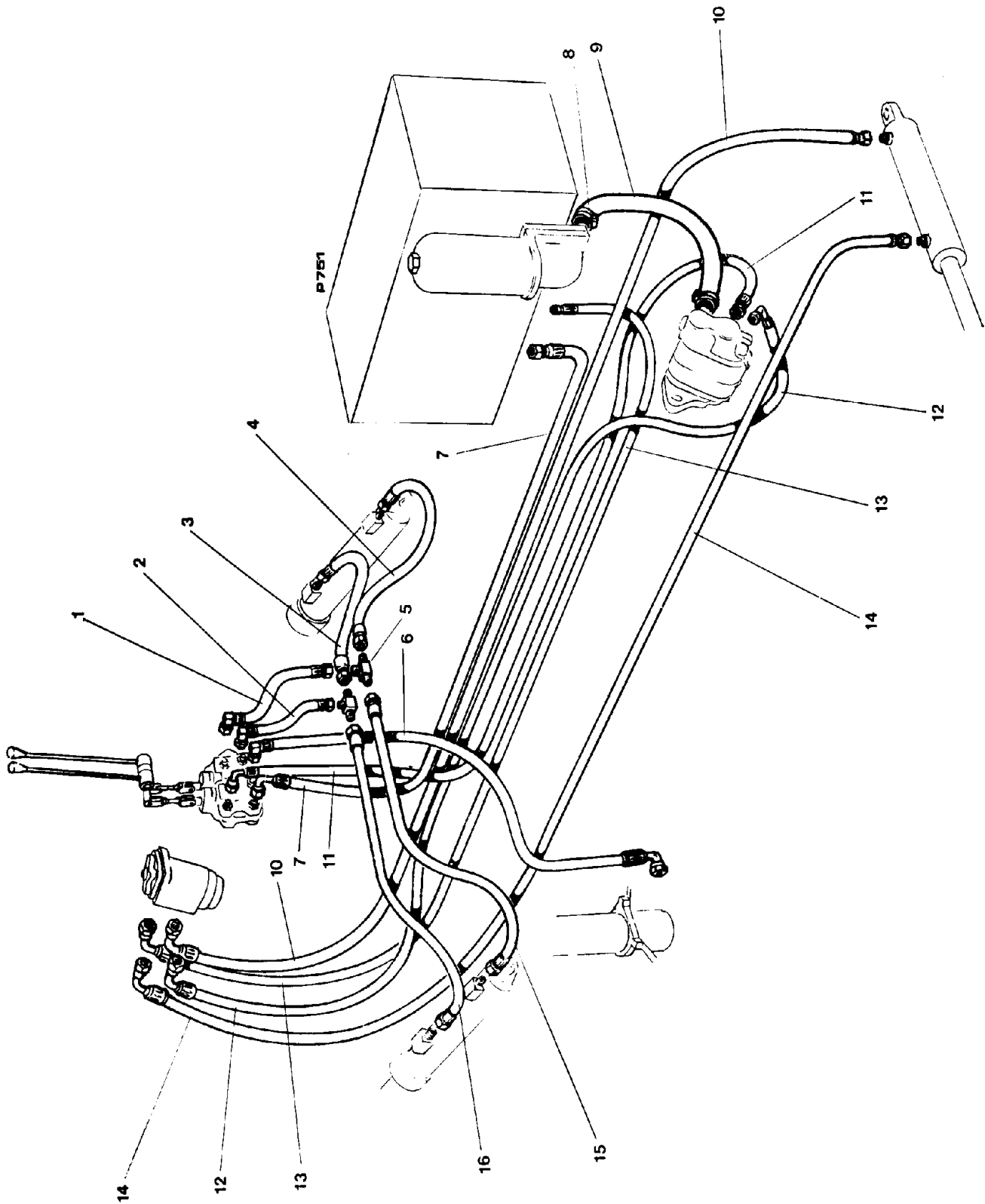


FIG. 6 : 06



**HYDRAULICS  
HYDRAULIC MICRO FILTER**

Fig. No.	6:06 Part No.	Description	Qty	Remarks
1A	04167	Filter Assembly . . . . .	1	
1	04904	Bolt . . . . .	1	
2	04912	'O' Ring* . . . . .	1	
3	04910	Retainer — Element . . . . .	1	
4	04909	Gasket* . . . . .	2	
5	04900	Element* . . . . .	1	
6	04913	'O' Ring* . . . . .	1	
7	04907	Poppet . . . . .	1	
8	04908	Pin . . . . .	1	
9	04902	Head . . . . .	1	
10	04914	Washer . . . . .	1	
11	04901	Spring . . . . .	1	
12	04911	Grommet* . . . . .	1	
12	04911	Grommet* . . . . .	1	
13	04903	Shell . . . . .	1	
14	04906	Retainer . . . . .	1	
15	04905	Spring, By-Pass. . . . .	1	
15B*	04168	Filter Replacement Kit*		

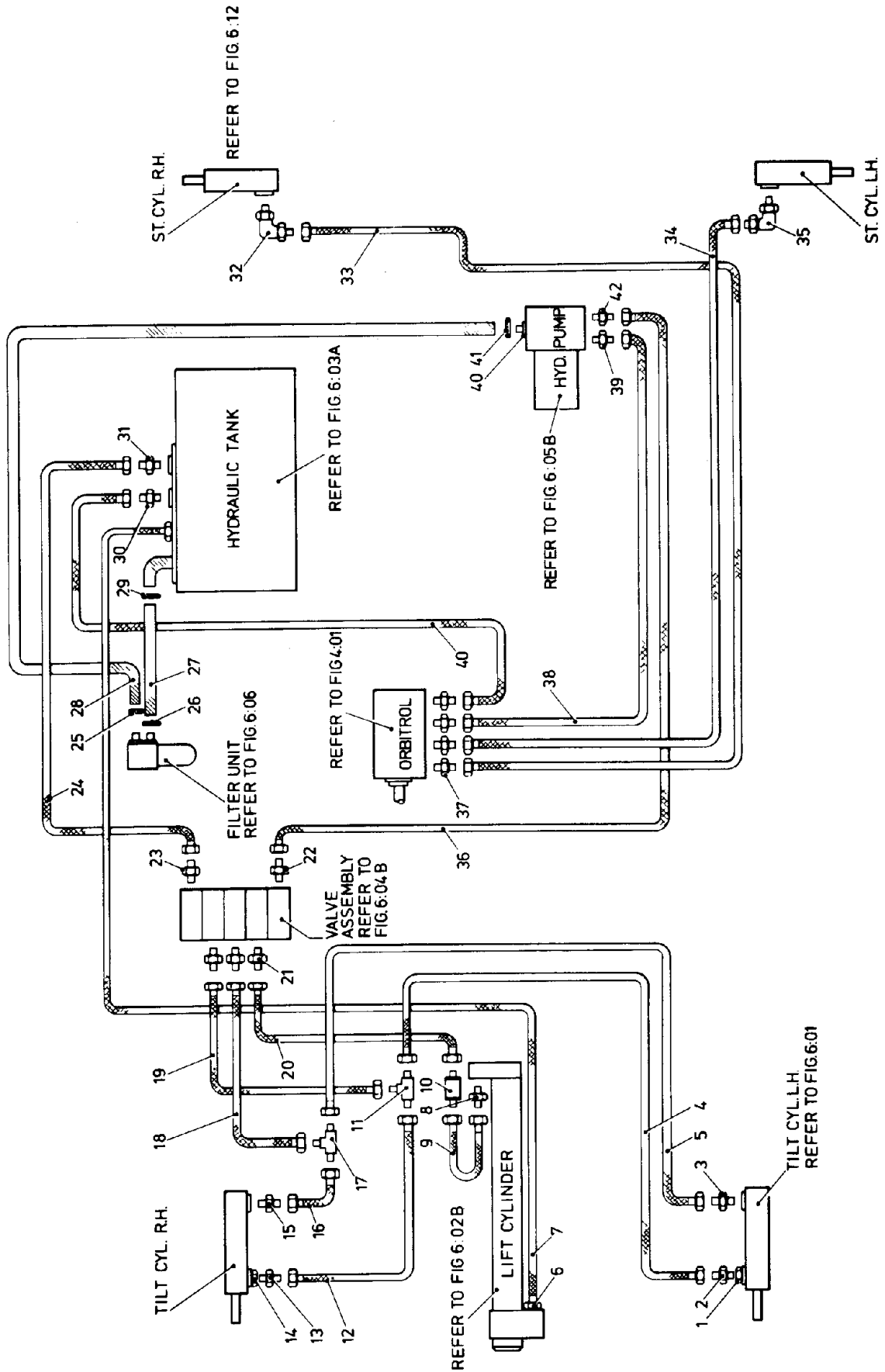


**FIG. 6 : 07**



HYDRAULICS  
HYDRAULIC HOSES ASSEMBLY

Fig. No.	6:07 Part No.	Description	Qty	Remarks
1	023248	Hose — Valve Bank to Tee	1	
2	023248	Hose — Valve Bank to Tee	1	
3	023250	Hose — Tee to R.H. Tilt (B'wd.)	1	
4	023249	Hose — Tee to R.H. Tilt (F'wd.)	1	
5	010548	Tee — Tilt.	2	
6	023255	Hose — Valve to Lift Ram	1	Used on LS45 only
7	023254	Hose — Valve to Tank	1	
8	019898	Jubilee Clip	2	
9	023245	Hose — Tank to Pump	1	
10	023247	Hose — Orbitrol to R.H. Side of Ram	1	S'seded by 07338 Mk. III only
11	023253	Hose — Pump to Valve Bank	1	
12	023246	Hose — Pump to Orbitrol	1	
13	07338	Hose — Tank to Orbitrol	1	
14	07338	Hose — Orbitrol to L.H. Side of Ram.	1	
15	023251	Hose — Tee to L.H. Tilt (F'wd.)	1	
16	023252	Hose — Tee to L.H. Tilt (B'wd.)	1	
17	05778	Hose Clip	6	Not illustrated
18	04420	Hose Clip	1	
19	04464	Bolt — $\frac{3}{8}$ " UNF x 1" long Hex. Hd.	4	
20	04467	Bolt — $\frac{3}{8}$ " UNF x 1½" long Hex. Hd.	1	
21	04557	Washer — $\frac{3}{8}$ " dia.	10	For Hose Clips
22	04569	Fan Disc Washer, $\frac{3}{8}$ " dia.	5	
23	04526	Nut — $\frac{3}{8}$ " UNF	5	
24	010457	Adaptors	3	Valve Bank (Tilt Tees and Lift Ram)
25	010632	Adaptor	2	Hyd. Tank & Pump
26	010550	'O' Ring	2	For use with Item 24
27	010729	'O' Ring	3	For use with Item 24
28	019505	Hose — Valve Bank to Accumulator	1	S'seded by 023611
29	010533	Hose — Accumulator to Lift Ram	1	S'seded by 023612
30	010457	Adaptor — (For Fitting to 18425 Adaptor)	2	
31	018425	Adaptor — (For Fitting to Accumulator)	2	Not fitted as Standard
32	04402	Dowty Seal	1	
33	09061	Accumulator	1	
34	023879	Hose Plug — Coned End, $\frac{9}{16}$ " UNF	1	



**FIG. 6 : 07A**



**HYDRAULICS  
HOSES AND FITTINGS**

Fig. No. 6:07A	Part No.	Description	Qty	Remarks
1	039315	Restrictor . . . . .	1	
2	010995	Adaptor . . . . .	1	
2A	010551	'O' Ring . . . . .	1	
3	010995	Adaptor . . . . .	1	
3A	010551	'O' Ring . . . . .	1	
4	023251	Hose — Tee to LH Tilt Cylinder . . . . .	1	
5	023252	Hose — Tee to LH Tilt Cylinder . . . . .	1	
6	010995	Adaptor — Spill off . . . . .	1	
7	028249	Spill off Pipe . . . . .	1	12.0" Lift Cylinder
8	010632	Adaptor . . . . .	1	
8A	010550	'O' Ring . . . . .	1	
9	025101	Pipe Assembly . . . . .	1	
10	025062	Flow Regulator . . . . .	1	
11	010548	Tee — Tilt . . . . .	1	
12	023250	Hose — Tee to RH Tilt Cylinder . . . . .	1	
13	010995	Adaptor . . . . .	1	
13A	010551	'O' Ring . . . . .	1	
14	039315	Restrictor . . . . .	1	
15	010995	Adaptor . . . . .	1	
15A	010551	'O' Ring . . . . .	1	
16	023249	Hose — Tee to RH Tilt Cylinder . . . . .	1	
17	010548	Tee — Tilt . . . . .	1	
18	023248	Hose — Valve to Tee . . . . .	1	
19	023248	Hose — Valve to Tee . . . . .	1	
20	039733	Hose — Valve to Lift Cylinder . . . . .	1	
21	011386	Adaptor . . . . .	3	
21A	010550	'O' Ring . . . . .	3	
22	010632	Adaptor . . . . .	1	
22A	010550	'O' Ring . . . . .	1	
23	010632	Adaptor . . . . .	1	
23A	010550	'O' Ring . . . . .	1	
24	039582	Hose — Valve to Tank . . . . .	1	
25	05789	Jubilee Clip . . . . .	1	
26	05789	Jubilee Clip . . . . .	1	
27	037115	Hose — Tank to Filter . . . . .	1	
28	039703	Hose — Filter to Pump . . . . .	1	
29	05789	Jubilee Clip . . . . .	1	
30	010995	Adaptor . . . . .	1	
30A	010551	'O' Ring . . . . .	1	
31	010632	Adaptor . . . . .	1	
31A	010550	'O' Ring . . . . .	1	
32	05646	Swivel Elbow . . . . .	1	
33	010715	Hose — Orbitrol to Steer Cylinder . . . . .	1	
34	010715	Hose — Orbitrol to Steer Cylinder . . . . .	1	
35	05646	Swivel Elbow . . . . .	1	
36	038293	Hose — Pump to Valve . . . . .	1	
37	010457	Adaptor . . . . .	4	
37A	010729	'O' Ring . . . . .	4	
38	010715	Hose — Pump to Orbitrol . . . . .	1	
39	010457	Adaptor . . . . .	1	
39A	010729	'O' Ring . . . . .	1	
40	036434	Adaptor . . . . .	1	
41	05789	Jubilee Clip . . . . .	1	
42	018513	Adaptor . . . . .	1	
42A	03423	'O' Ring . . . . .	1	
43	039583	Hose. Orbitrol to tank . . . . .	1	S'ised by 036987

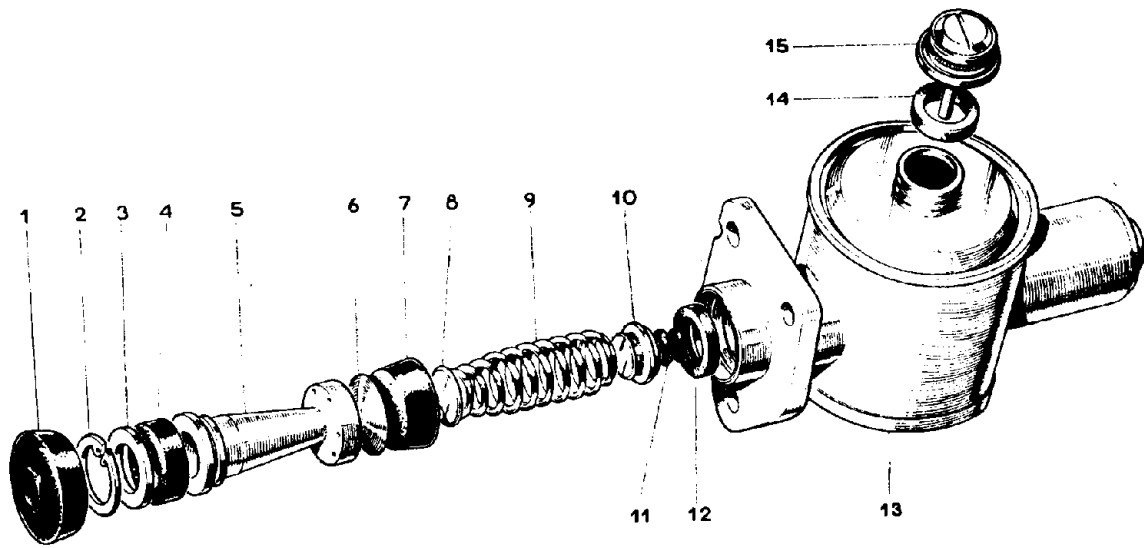


FIG. 6 : 08

**HYDRAULICS  
MASTER CYLINDER**

Fig. No.6:08	Part No.	Description	Qty	Remarks
1A	03842	Master Cylinder (Assembly Complete)	1	
1	05182	Boot*	1	
2	05183	Circlip	1	
3	05184	Retaining Washer	1	
4	05185	Secondary Seal*	1	
5	05186	Piston	1	
6	05187	Piston Washer*	1	
7	05188	Main Cup*	1	
8	05189	Retainer, Spring.	1	
9	05190	Spring	1	
10	05191	Valve Body	1	
11	05192	Valve Cup*	1	
12	05193	Valve Washer*	1	
13	05194	Barrel and Tank.	1	
14	05195	Seal	1	
15	05196	Filler and Dipstick	1	
15A	04610	Plug	1	
15B	04310	Service Kit*		Not illustrated

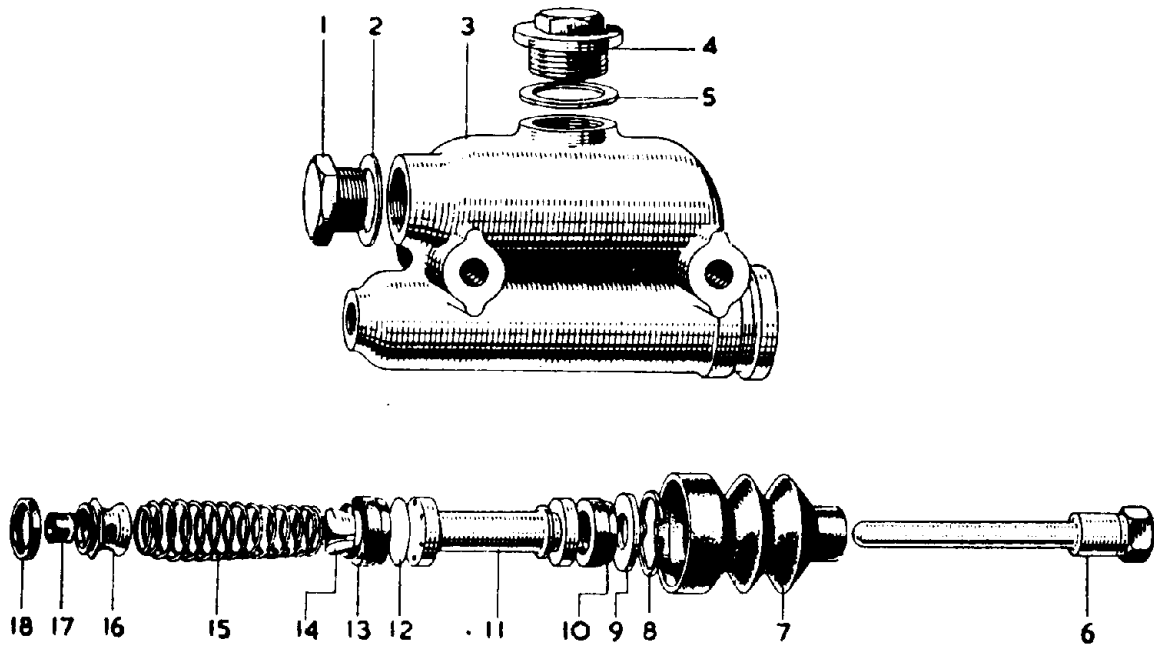
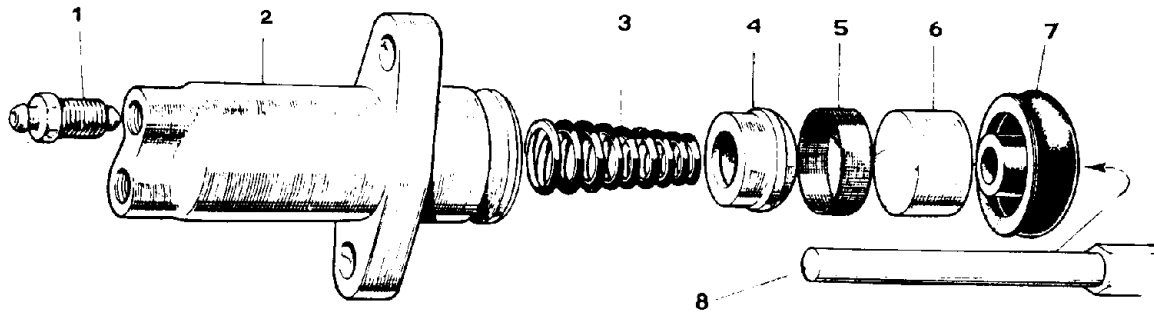


FIG. 6 : 08A

HYDRAULICS  
MASTER CYLINDER — NEW TYPE

Fig. No.6:08A	Part No.	Description	Qty	Remarks
1	032245	Master Cylinder Assembly . . . . .	1	
	033568	Drain Plug . . . . .	1	
2	033569	Gasket . . . . .	1	
3	033570	Cylinder Barrel and Tank . . . . .	1	
4	033571	Filler Plug . . . . .	1	
5	033572	Gasket . . . . .	1	
6	017543	Push Rod . . . . .	1	S'ceded by 023910
7	033573	Boot . . . . .	1	
8	033574	Spring — Circlip . . . . .	1	
9	033575	Stop Washer . . . . .	1	
10	033576	Secondary Cup . . . . .	1	
11	033577	Piston . . . . .	1	
12	033578	Piston Washer . . . . .	1	
13	033579	Main Cup . . . . .	1	
14	033580	Spring Retainer . . . . .	1	
15	033581	Spring . . . . .	1	
16	033582	Valve Body . . . . .	1	
17	033583	Valve Cup . . . . .	1	
18	033584	Valve Washer . . . . .	1	
18A	033585	Valve Assembly . . . . .	1	
18B	033586	Repair Kit . . . . .	As Req'd	



**FIG. 6 : 09**

HYDRAULICS  
BRAKE SLAVE CYLINDERS

Fig.No.6:09	Part No.	Description	Qty	Remarks
1A	03843	Slave Cylinder Assembly . . . . .	2	
1	05374	Bleed Screw . . . . .	1	
2	05375	Cylinder Body . . . . .	1	
3	05376	Spring . . . . .	1	
4	05377	Cup Filler . . . . .	1	
5	05378	Cup* . . . . .	1	
6	05379	Piston . . . . .	1	
7	05380	Boot* . . . . .	1	
8	04199	Push Rod . . . . .	1	
8A	04312	Service Kit*		

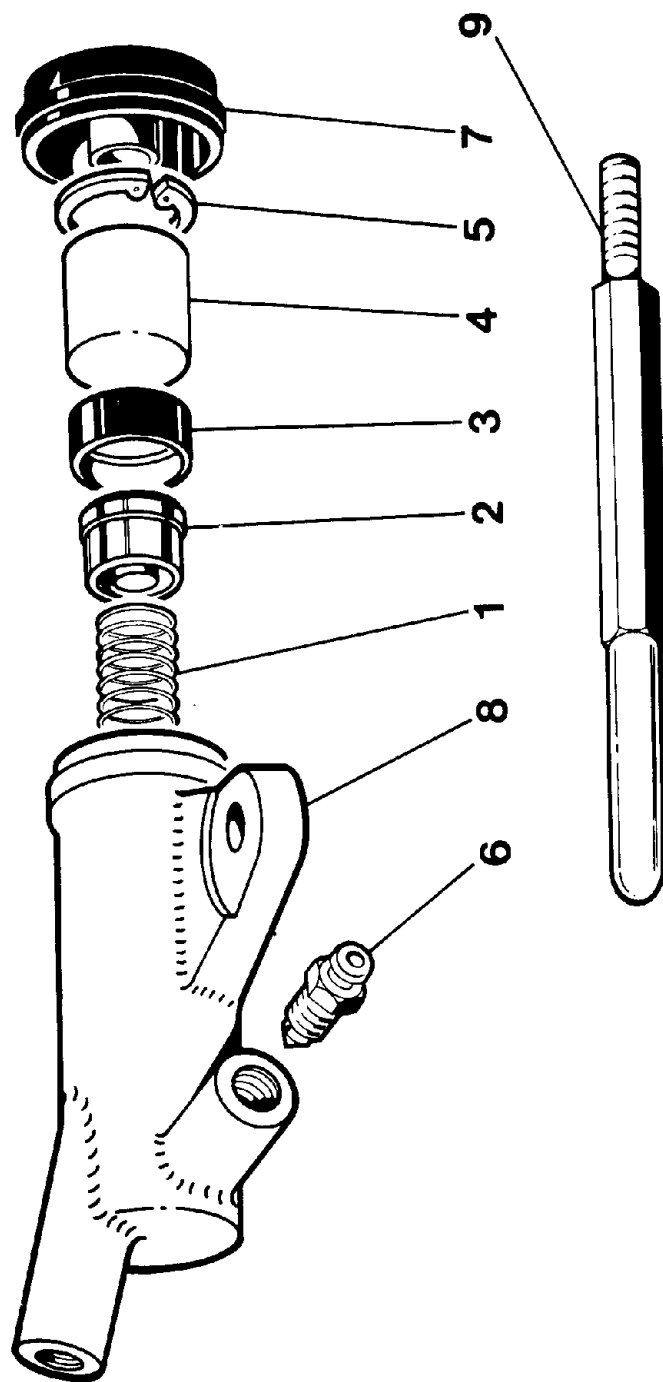
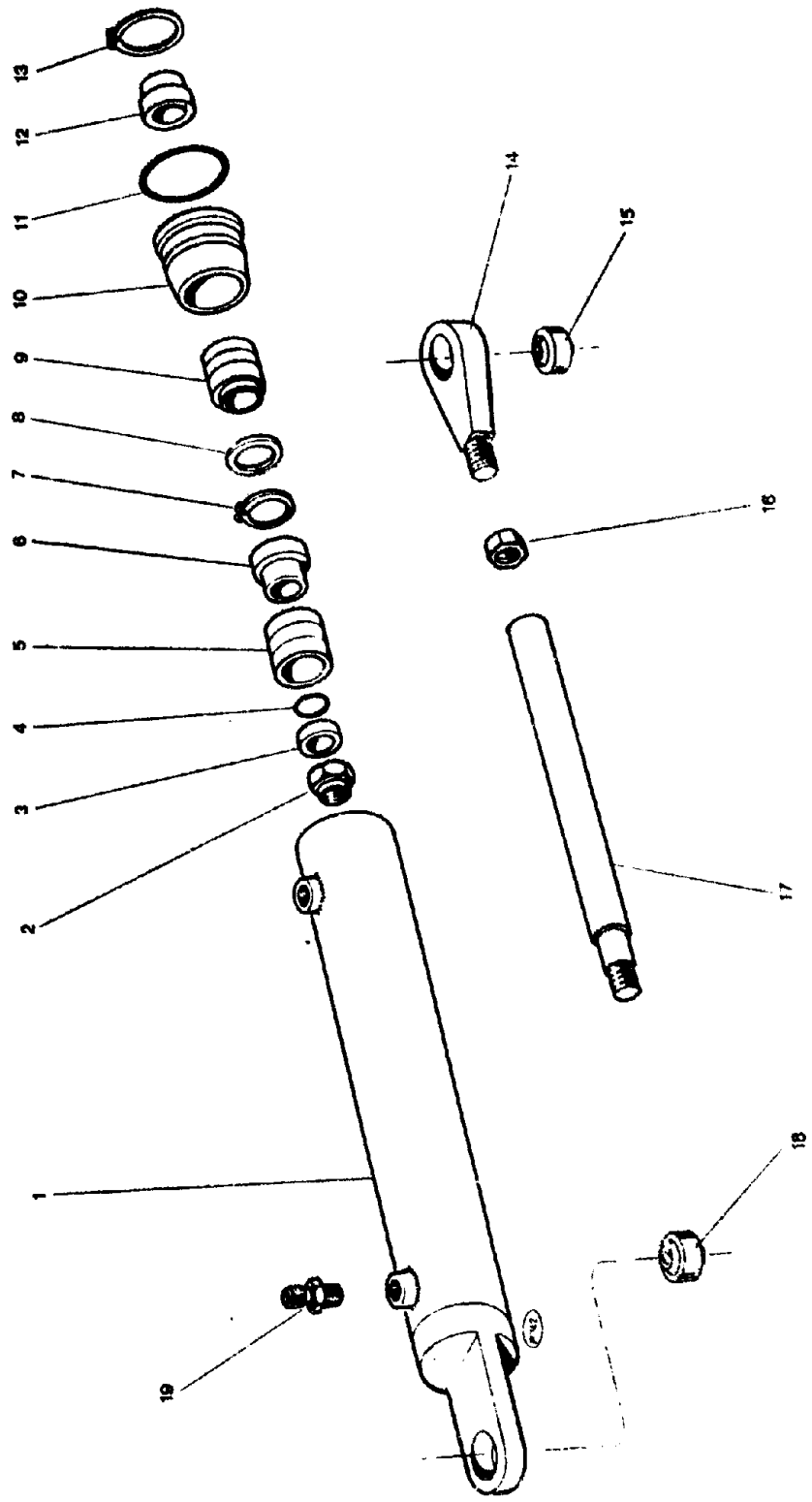


FIG. 6 : 10

HYDRAULICS  
SLAVE CYLINDER — EXHAUST BRAKE

Fig.No.6:10	Part No.	Description	Qty	Remarks
1A	03844	Slave Cylinder Assembly . . . . .	1	
1	05381	Spring . . . . .	1	
2	05382	Cup filler . . . . .	1	
3	05383	Cup* . . . . .	1	
4	05384	Piston . . . . .	1	
5	05385	Circlip . . . . .	1	
6	03841	Bleed Screw . . . . .	1	
7	05387	Boot* . . . . .	1	
8	05388	Body . . . . .	1	
9	03579	Push Rod . . . . .	1	
9A	04311	Service Kit* . . . . .		



**FIG. 6 : 11**



**HYDRAULICS  
POWER STEERING CYLINDER**

Fig. No.	Part No.	Description	Qty	Remarks
1A	023029	Steering Cylinder Assembly	1	
1	023058	Cylinder	1	
2	040363	Nut, $\frac{5}{8}$ " UNF	1	
3	040355	Seal Retaining Plate	1	
4	03423	'O' Ring	1	*
5	040362	Seal	1	*
6	040353	Seal Housing	1	
7	040359	Circlip	1	
8	040356	Ring	1	
9	040365	Lofilm Chevron Packing	1	*
10	040279	Gland	1	
11	040360	'O' Ring	1	*
12	040361	Scraper Ring	1	
13	040366	Circlip	1	
13	040366	Circlip	1	
14	040358	Piston Lug.	1	*S'eded by 023724
15	040123	Spherical Bearing	1	
16	04533	Nut, $\frac{5}{8}$ " UNF	1	*
17	023062	Piston Rod.	1	*S'eded by 023468
18	040123	Spherical Bearing	1	
19	023477	Seal Kit*		

\*Items 14, 16, 17 supplied as Complete Assembly Only

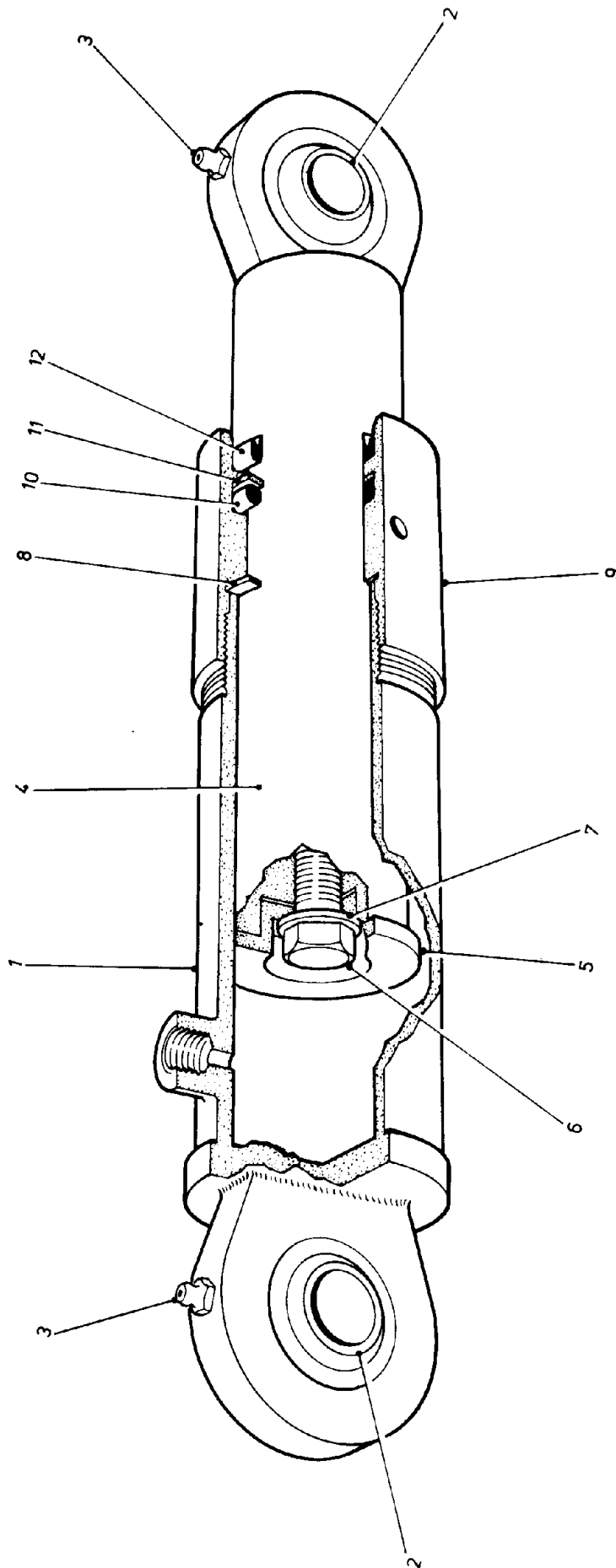


FIG No. 6:12

**HYDRAULICS  
STEERING CYLINDER MARK III**

Fig. No. 6:12	Part No.	Description	Qty	Remarks
	026719	Cylinder Assembly — Steering	2	
		Each consisting of the following:—		
1	026305	Cylinder, W.A.	1	
2	040123	Spherical Bearing	2	
3	030476	Grease Nipple	2	
4	026718	Piston Rod, W.A.	1	
5	026714	Piston Retaining Plate	1	
6	030096	Setscrew, M12 x 30	1	
7	09619	Washer Spring, M12	1	
8	026313	Sealing Ring	1	*S' seded by 038294
9	026311	Cylinder Cap	1	
10	026612	'O' Ring — Seal	1	*S' seded by 045190
11	026613	Back-up Ring	1	*S' seded by 045191
12	026611	Wiper Seal	1	
13	027080	Seal Kit	As Reqd.	*S' seded by 047836
	045189	Back-up Ring	1	**

\*\* NOTE:— Back up Ring only required with wide groove in endcap.





**SECTION 7**  
**ELECTRICS AND INSTRUMENTS**

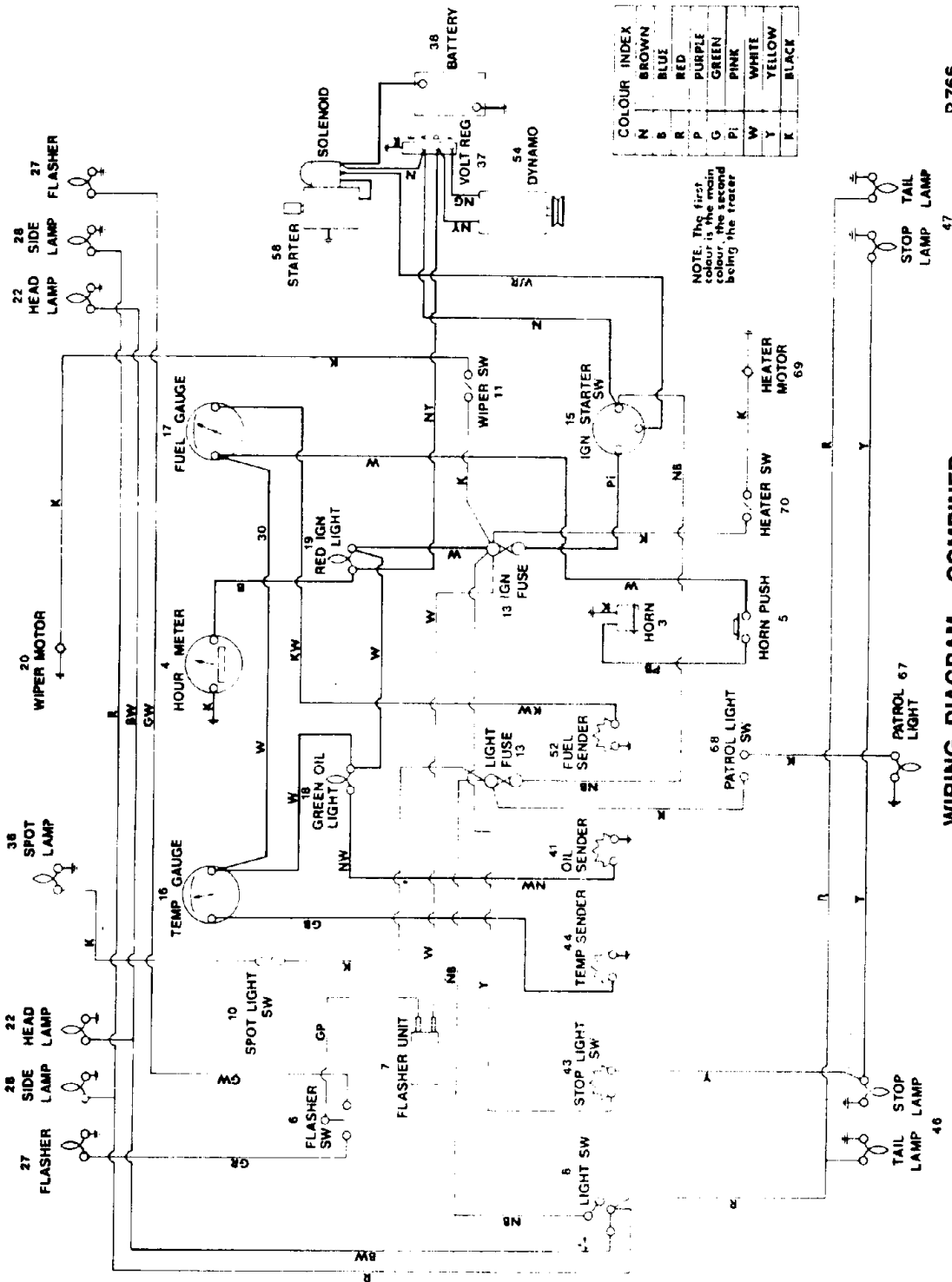


FIG. 7 : 01



**ELECTRICAL AND INSTRUMENTS  
ELECTRICAL EQUIPMENT**

Fig. No. 7:01	Part No.	Description	Qty	Remarks
1	023229	Instrument Panel	1	Without Fittings
2	04606	Screw No. 12 x $\frac{5}{8}$ " long	4	
3	07360	Horn, 12 volt	1	S'seded by 027445
4	05349	Engine Hour Meter	1	
5	019206	Horn Button	1	
6	03442	Switch, Direction Indicator	1	If fitted
7	03443	Flasher Unit, 12 volt, 45 watt	1	If fitted
7A	04601	Screw, 4BA x $\frac{3}{4}$ " long	2	
7B	04521	Nut, 4BA	2	
7C	04566	Fan Disc Washer	2	
8	05581	Light Switch	1	} Head and Tail Lights if fitted
9	05582	Escutcheon	1	
10	03858	Switch, Spot Light	1	If fitted
11	03858	Switch, Windscreen Wiper	1	If fitted
12	03452	Fuse Holder	2	
13	04326	Fuse, 25 amp	2	S' seded by 012722
14	010945	Ignition Key	1	
15	010944	Ignition Switch	1	
16	05356	Temperature Gauge	1	
17	05357	Fuel Gauge	1	
18	040778	Oil, Warning Light	1	
19	040779	Ignition, Warning Light	1	
20	05806	Windscreen Wiper Motor	1	Less Blade and Arm
21	05807	Windscreen Wiper Motor with Blade and Arm	1	
22	04621	Headlamp	2	12 volt, 48 watt Bulb
23	03627	Headlamp Bracket, L.H.	1	
24	03628	Headlamp Bracket, R.H.	1	
25	04465	Bolt, $\frac{3}{8}$ " UNF x 1 $\frac{1}{4}$ " long	4	
26	04569	Fan Disc Washer, $\frac{3}{8}$ " dia.	4	
27	04622	Flasher Lamp	2	
28	04623	Side Lamp	2	
29	04604	Screw, No. 10 x $\frac{3}{8}$ " long	4	
30	023324	Main Wiring Harness	1	} (Dynamo) S'seded by 023800 (Alternator)
31	023323	Head, Side, Indicator Lights, Harness	1	
32	010710	Tail Light, Harness	1	
33	05805	Wiper Blade, 16 in.	1	
34	05804	Wiper Arm, 16 $\frac{1}{2}$ "	1	
35	05798	Motor, Windscreen Wiper	1	
36	04621	Spotlamp	1	} If fitted Not used with Alternator, see BTSB 274/10
37	04415	Voltage Regulator	1	
38	03372	Battery, 12 volt	1	
39	03948	Earth Strap	1	
40	010494	Cable, Battery to Starter	1	
41	040790	Oil Pressure Sender	1	
42	019849	Tail Lamp Bracket	2	
43	04873	Stop Light Sender	1	
44	021340	Temperature Sender	1	

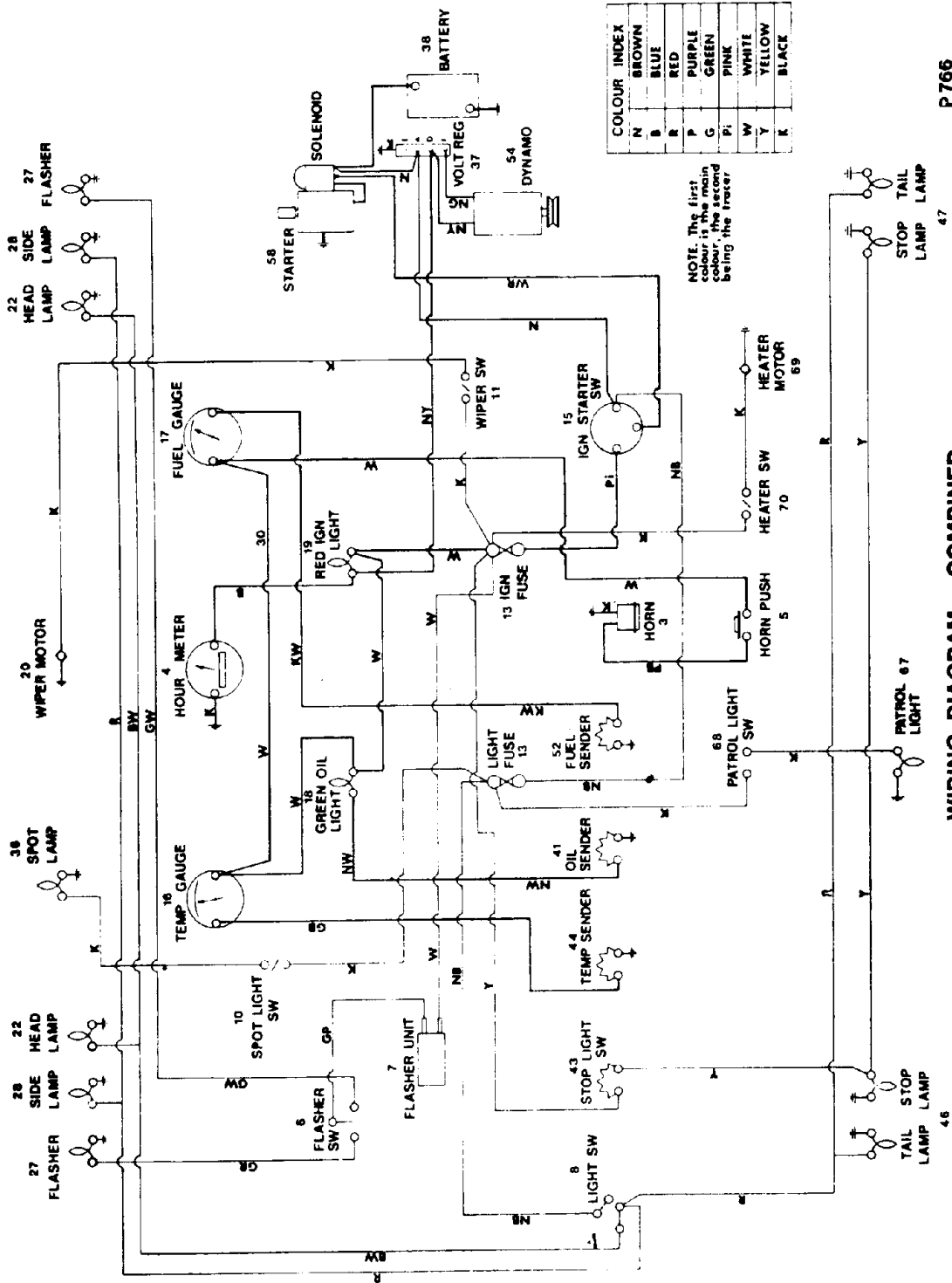


FIG. 7 : 01



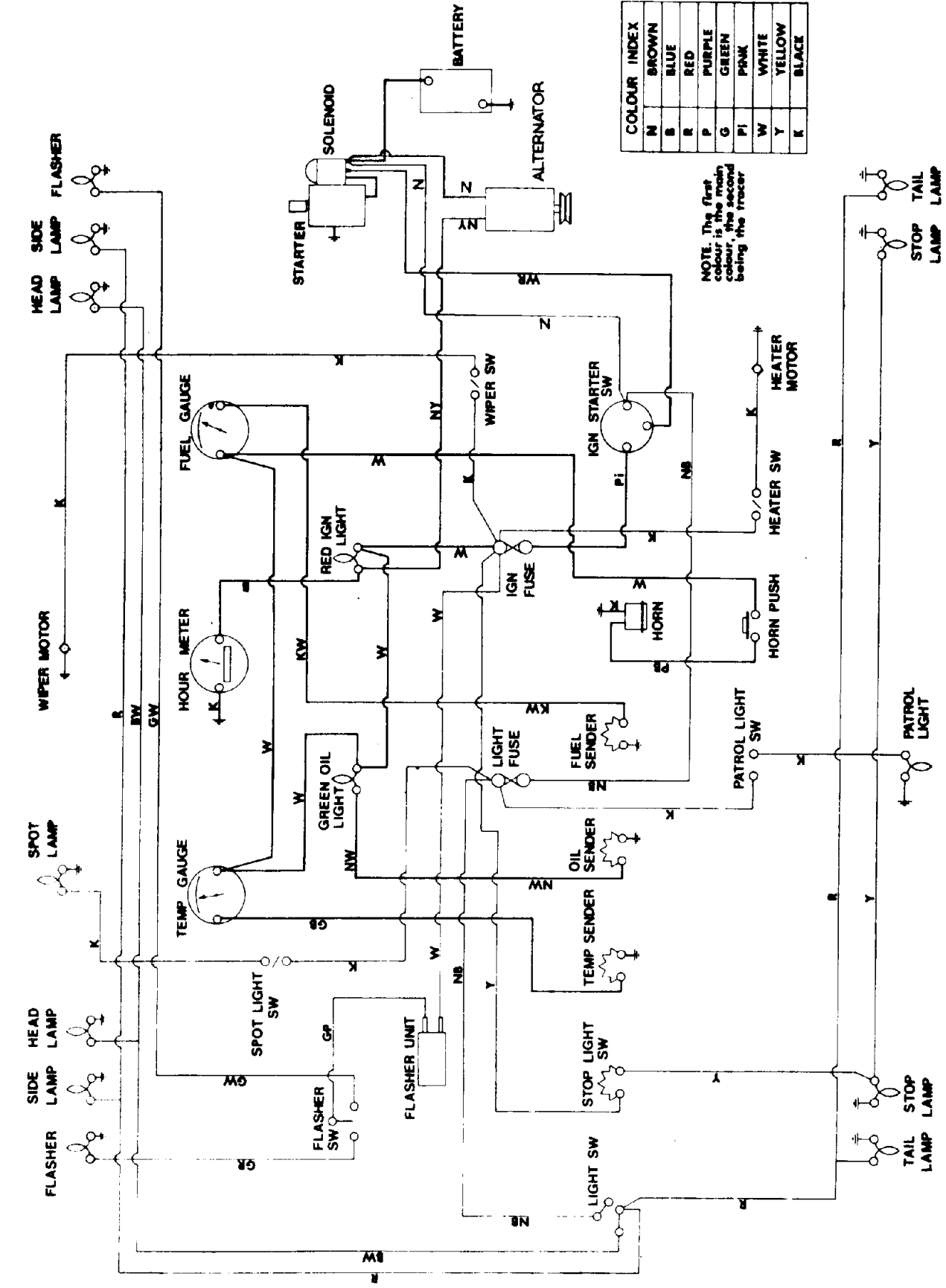
**ELECTRICS AND INSTRUMENTS  
ELECTRICAL EQUIPMENT**

Fig. No.	7:01 Part No.	Description	Qty	Remarks
45	021341	Copper Washer . . . . .	1	
46	04437	Tail Light . . . . .	1	
47	04438	Tail Light . . . . .	1	With Clear Window
48	04604	Screw, No. 10 x $\frac{3}{8}$ " long . . . . .	4	
49	011039	Screw, 2BA x $\frac{1}{2}$ " long . . . . .	4	
50	04520	Nut, 2BA . . . . .	4	Tail Light Brackets
51	04565	Fan Disc Washer, 2BA . . . . .	4	
52	05361	Fuel Sender . . . . .	1	
53	04626	Gasket . . . . .	1	
54	021342	Dynamo (Lucas) . . . . .	1	S'seded by 013047, see BTSB 274/10
55	021343	Support Bracket . . . . .	1	
56	020440	Bolt, " UNC x $\frac{7}{8}$ " long . . . . .	2	Bracket to Block
57	013063	Spring Washer, $\frac{3}{8}$ " dia. . . . .	2	
58	021344	Starter Motor . . . . .	1	
59	04516	Bolt, " UNC x $1\frac{3}{4}$ " long . . . . .	2	
60	04515	Bolt, " UNC x 2" long . . . . .	1	
61	04525	Nut, " UNC . . . . .	1	
62	04579	Spring Washer, $\frac{3}{8}$ " dia. . . . .	3	
63	021345	Dynamo Pulley . . . . .	1	S'seded by 013049
64	021346	Distance Piece . . . . .	1	S'seded by 013057
65	020358	Driving Belt . . . . .	1	S'seded by 013058
66	021347	Adjusting Strap . . . . .	1	S'seded by 013056
67	018585	Rotary Flashing Lamp, Amber . . . . .	1	
68	03858	Switch, Rotary Flashing Lamp . . . . .	1	
69	07326	Heater Unit Assembly . . . . .	1	
70	023847	Fuel Pipe — Tee to Tank . . . . .	1	Pre-Heater if fitted
71	023849	Return Pipe to Tee . . . . .	1	
72	023848	Fuel Pipe — Tee to Pre-Heater . . . . .	1	
73	020035	Adaptor — Pre-Heater . . . . .	1	
74	020036	Adaptor — Tank . . . . .	1	
75	020038	Tee . . . . .	1	
76	09159	Pre-Heater Element . . . . .	1	
77	020039	Reducer . . . . .	1	
78	031577	Ignition Switch . . . . .	1	
79	020510	Lead — Pre-Heater . . . . .	1	
80	010689	Adaptor — Oil Pressure Switch . . . . .	1	
81	047898	Starter Motor, Bosch . . . . .	1	Alternative
82	026210	Instrument panel & Harness . . . . .	1	
83	023133	Instrument panel assembly . . . . .	1	



**ELECTRICAL AND INSTRUMENTS****ELECTRICAL EQUIPMENT**

Fig.No.7:01A	Part No.	Description	Qty	Remarks
1	023133	Instrument panel assembly	1	
1A	026211	Wiring harness panel	1	
1B	026238	Panel harness extension	1	
1C	026210	Instrument panel and harness assy	1	
2	04606	Screw	4	
3	027445	Horn	1	
3A	029564	Support bracket - horn	1	
3B	04443	Setscrew	1	
3C	04577	Washer - spring	1	
3D	04522	Nut	1	
3E	029565	Horn extension harness	1	
4	05349	Hour meter	1	
5	019206	Horn button	1	
6	03442	Switch - Direction indicator	1	If fitted
7	014247	Flasher unit - 12 volt	1	
7A	04601	Screw	2	
7B	04521	Nut	2	
7C	04566	Washer fan disc	2	
8	010255	Switch - Light - 4 way	1	If fitted
8A	05582	Escutcheon	1	
9	03858	Switch - Spotlight	1	If fitted
10	03858	Switch - Windscreen wiper	1	If fitted
11	03452	Fuse holder	2	
12	04326	Fuse	2	
13	010945	Ignition key	1	
14	010944	Ignition switch	1	
15	05356	Temperature gauge	1	
16	05357	Fuel gauge	1	
17	040778	Oil warning light - Green	1	
18	040779	Ignition warning light - Red	1	
19	027145	Windscreen wiper motor	1	
20	028999	Wiper blade arm	1	
21	028998	Wiper blade	1	
22	026208	Main wiring harness - standard	1	
22A	029139	Wiring harness - Lights	1	
24	04621	Spotlight	1	If fitted
25	03372	Battery - 12 volt	1	
26	021388	Earth strap - Battery	1	
27	021388	Cable - Battery to Starter	1	
28	040790	Oil pressure sender	1	
28A	012696	Fibre washer	1	
29	021340	Temperature sender	1	
30	027676	Terminal cover	2	
31	021344	Starter motor	1	



COLOUR INDEX	
N	BROWN
B	BLUE
R	RED
P	PURPLE
G	GREEN
PI	PRNK
W	WHITE
Y	YELLOW
K	BLACK

NOTE: The first colour is the main colour, the second being the tracer

**WIRING DIAGRAM - COMBINED**

**FIG. 7:01A**

**ELECTRICAL AND INSTRUMENTS****ELECTRICAL EQUIPMENT (CONT'D)**

<b>Fig.No.7:01A</b>	<b>Part No.</b>	<b>Description</b>	<b>Qty</b>	<b>Remarks</b>
31A	04516	Bolt	2	
31B	04515	Bolt	1	
31C	04525	Nut	1	
31D	04579	Washer - Spring	3	
32	013047	Alternator	1	
32A	021343	Support bracket	1	
32B	013056	Adjusting strap	1	
32C	013057	Distance piece	1	
32D	020440	Bolt	2	
32E	013063	Washer - spring	2	
33	013049	Alternator Pulley	1	
34	013058	Belt - Fan	1	
35	047898	Starter motor - Bosch	1	Alternative



**ELECTRICAL****INSTRUMENTS AND EQUIPMENT - NEW CONSOLE**

<b>Fig.No.7:01B</b>	<b>Part No.</b>	<b>Description</b>	<b>Qty</b>	<b>Remarks</b>
	036984	Instrument panel and harness	1	
1	036985	Instrument panel assembly	1	
2	036272	Panel harness	1	
3	05349	Hour meter	1	
4	05357	Fuel gauge	1	
5	05356	Temperature gauge	1	
6	040779	Ignition warning light	1	Red
7	040778	Oil warning light	1	Green
8	027445	Horn push	1	
9	045174	Light switch	1	
10	038514	Flasher switch	1	
11	04606	Screw	4	Instr.panel
12	027445	Horn	1	
13	029564	Horn support bracket	1	
14	04443	Setscrew	1)	
15	04577	Washer - spring	1)	Horn support
16	04522	Nut	1)	bracket
17	014247	Flasher unit. 12 volt	1	
18	04601	Screw	2)	Flasher
19	04521	Nut	2)	unit
20	04566	Washer fan disc	2)	
21	03858	Switch spotlight	1	If fitted
22	03452	Fuse holder	2	
23	04326	Fuse	2	
24	010945	Ignition key	1	
25	010944	Ignition switch	1	
26	027145	Windscreen wiper motor	1	
27	028999	Wiper blade arm	1	
28	028998	Wiper blade	1	
29	026208	Main wiring harness	1	Standard
30	029139	Wiring harness	1	Lights
31	029565	Extension harness. Horn	1	
32	04621	Spotlight	1	If fitted
33	03372	Battery 12 volt	1	
34	021388	Earth strap - battery	1	
35	021388	Cable - Battery to starter	1	
36	040790	Oil pressure sender	1	
37	012696	Fibre washer	1	
38	021340	Temperature sender	1	
39	027676	Terminal cover	1	

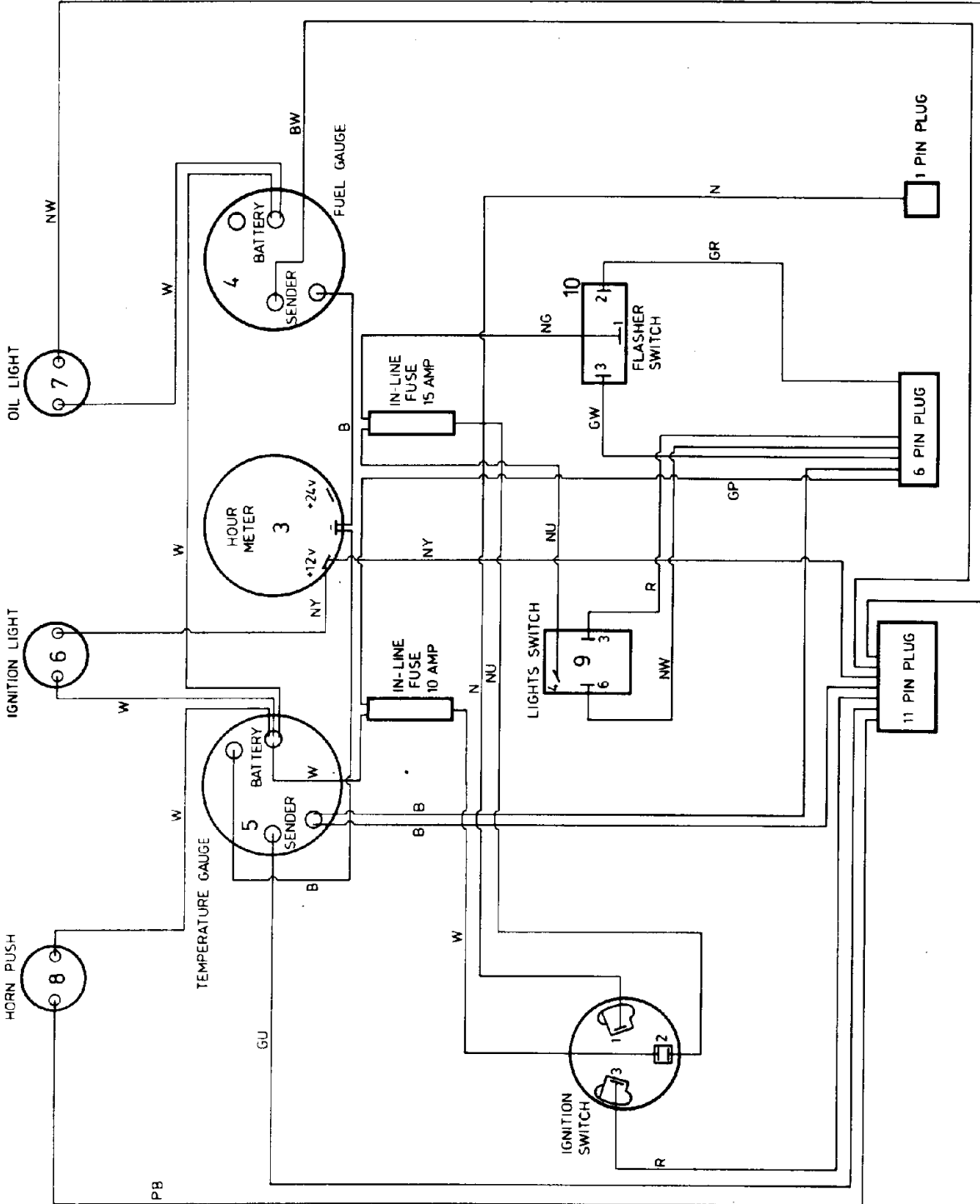


FIG.7:01B

**ELECTRICAL****INSTRUMENTS AND EQUIPMENT - NEW CONSOLE**

<b>Fig.No.7:01B</b>	<b>Part No.</b>	<b>Description</b>	<b>Qty</b>	<b>Remarks</b>
40	021344	Starter motor	1	
41	047898	Starter motor - Bosch	1	Alternative
42	04516	Bolt	2)	
43	04515	Bolt	1)	Starter
44	04525	Nut	1)	Motor
45	04579	Washer - spring	3)	
46	013047	Alternator	1	
47	021343	Support bracket	1)	
48	013056	Adjusting strap	1)	
49	013057	Distance piece	1)	Alternator
50	020440	Bolt	2)	
51	013063	Washer - spring	2)	
52	013049	Pulley	1)	
53	013058	Fan belt	1	

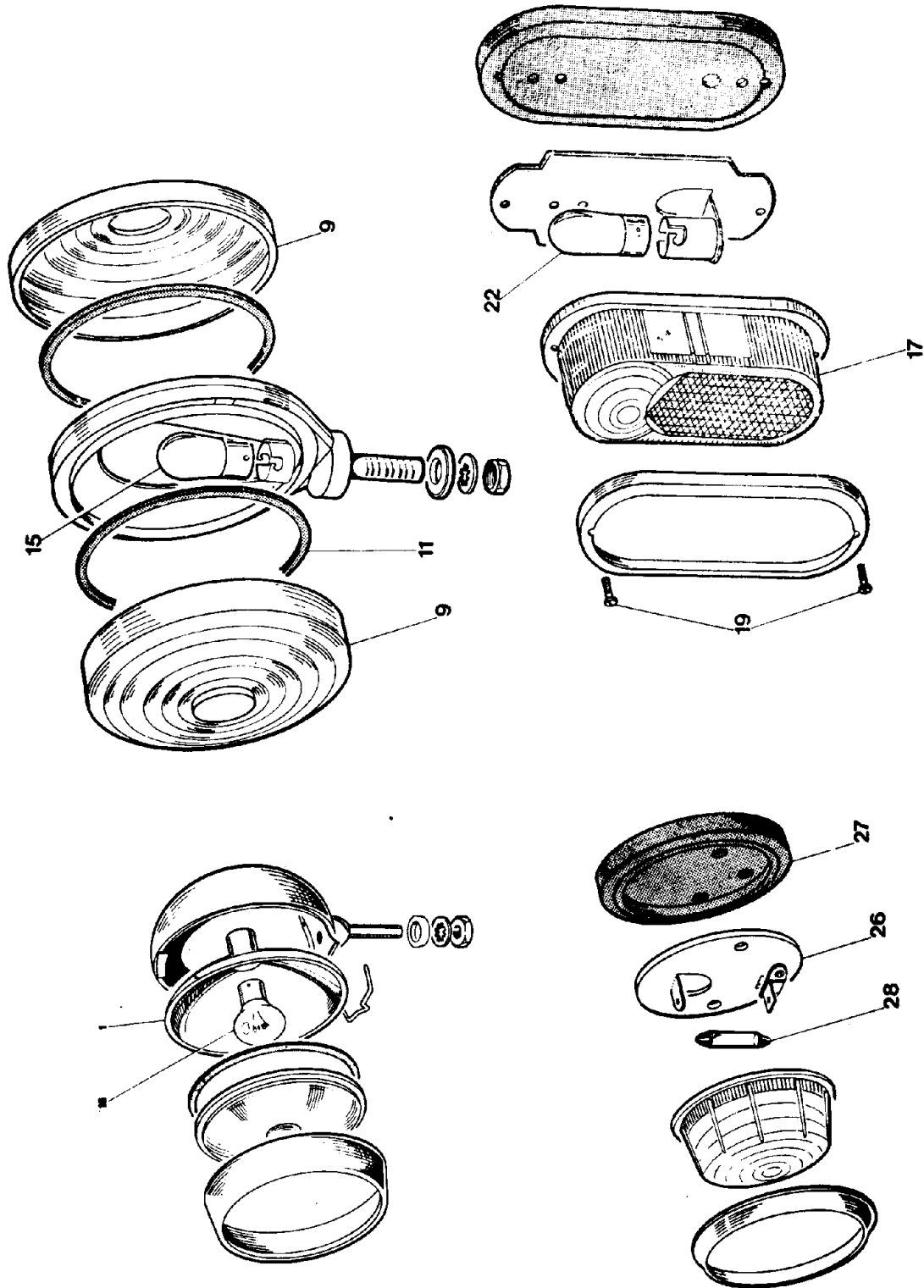


FIG. 7 : 02



**ELECTRICS AND INSTRUMENTS  
LAMPS**

Fig.No.7:02	Part No.	Description	Qty	Remarks
1	04621	Head Lamp	2	
9	04622	Direction Indicator Lamp	2	
15	011468	Bulb, 12v 21w	1	
16	011469	Bulb, 12v 48w	1	
17	04438	Rear/Stop Lamp (with windows)	1	
17A	04437	Rear/Stop Lamp (without window)	1	
19	04449	Round Head Screw, 4BA x 3/4"	2	} Lamp to Bracket
19A	04566	Fan Disc Washer, 4BA	2	
19B	04521	Nut, 4BA	2	
22	011467	Bulb, 12v 6/21w	1	
23				
	04623	Side Lamp.	2	
26				
27				
28	011466	Bulb, 12v 3w Festoon	1	

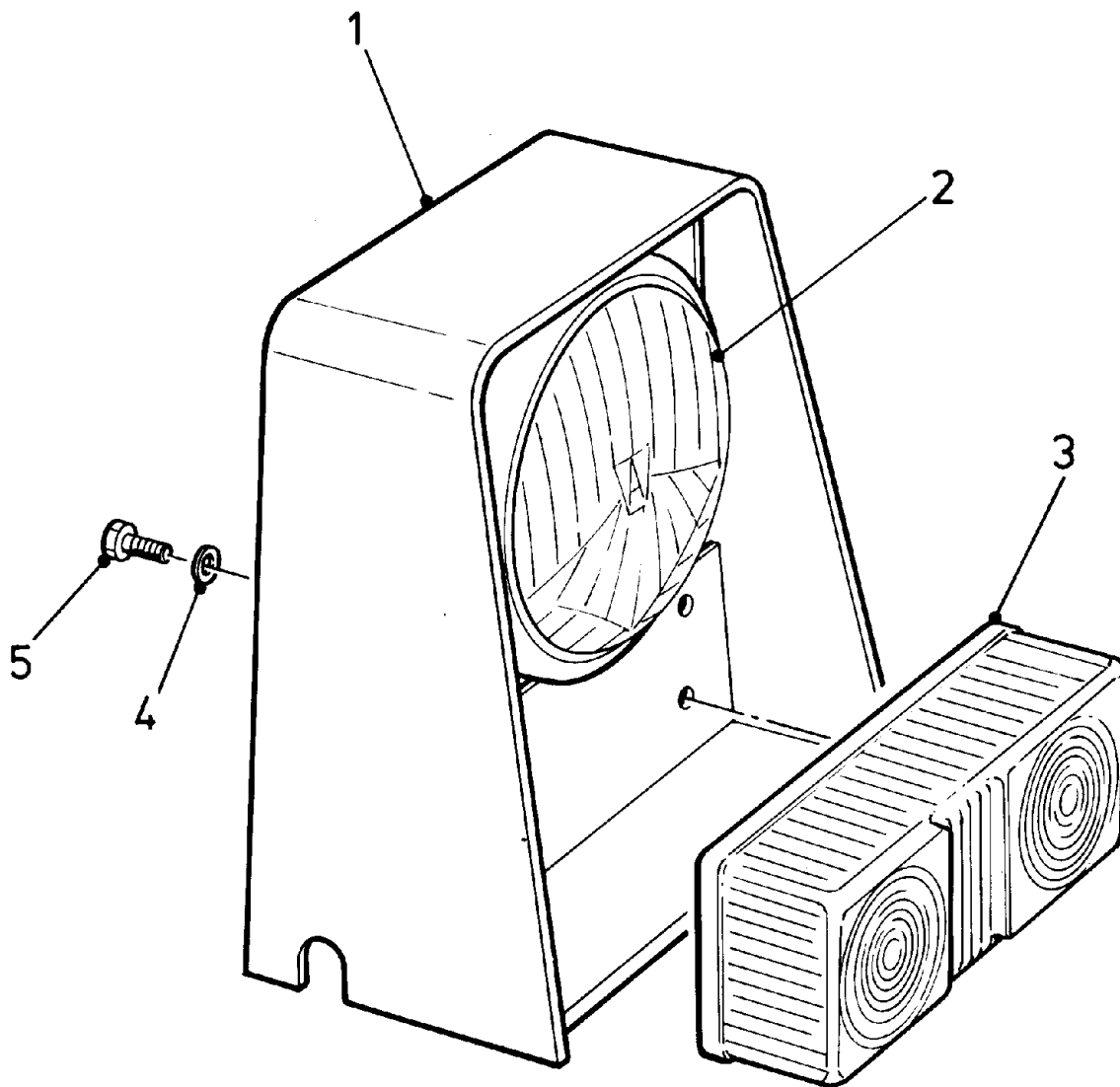


FIG. 7 : 02A



**ELECTRICS  
LAMP UNITS – RESTYLE**

Fig. No. 7:02A	Part No.	Description	Qty	Remarks
1	029187	Light Cluster Assembly – Front . . . . .	1	Left Hand
1A	029188	Light Cluster Assembly – Front . . . . .	1	Right Hand
1B	030607	Setscrew . . . . .	4	} Fixing Screw
1C	09617	Washer Spring . . . . .	4	
1D	04556	Washer Plain . . . . .	4	
2	029166	Headlamp Assembly . . . . .	1	
2A	029167	Headlamp Assembly . . . . .	1	Right Hand
3	029171	Light Cluster – Side Indicator . . . . .	2	
4	04564	Washer Plain . . . . .	8	
5	04520	Nut . . . . .	8	
6	029172	Rear Light Assembly . . . . .	2	
6A	04564	Washer Plain . . . . .	8	
6B	04520	Nut . . . . .	8	
7	029173	Bulb 12 volt . . . . .	A.R.	Headlamp
8	011468	Bulb 12 volt . . . . .	A.R.	Side-Indicator
9	011467	Bulb 12 volt . . . . .	A.R.	Tail-Stop



**SECTION 8**  
**SERVICE PARTS**





## SERVICE PARTS AND SPECIAL TOOLS

Fig.No.8:01 Part No.

		Description	Qty	Remarks
<b>PISTON AND RINGS</b>				
1	021348	Piston Assembly (complete with rings)	4	Pistons & Piston Ring Rev. to BTSB 230/86 Dated Aug. 72
1A	021349	Piston	1	
1B	021350	Piston Ring — No. 1 compression	1	
1C	021351	Piston Ring — Nos. 2 and 3 compression	2	
1D	021352	Piston Ring — Scraper	1	
2	021353	Piston Assembly	4	
2A	021354	Piston	1	0.040" oversize Assy. Item 2
2B	021355	Piston Ring — No. 1 compression	1	
2C	021356	Piston Ring — Nos. 2 and 3 compression	2	
2D	021357	Piston Ring — Scraper	1	
3	021358	Sealing Ring — Gasket	4	0.020" oversize
3A	021359	Sealing Ring — Gasket	4	0.040" oversize
4	020196	Piston Ring Pack	1	standard
4A	021360	Piston Ring Pack } sets of 16 rings	1	0.020" oversize
4B	021361	Piston Ring Pack	1	0.040" oversize
5	020200	Oil Control Ring Pack	1	standard
5A	021362	Oil Control Ring Pack } sets of 16 rings	1	0.040" oversize
5B	021363	Oil Control Ring Pack	1	0.020" oversize
<b>CRANKSHAFT BEARINGS</b>				
6	021364	Bearing — Big End (halves)	8	0.010" undersize
7	021365	Bearing — Big End (halves)	8	0.020" undersize
8	021366	Bearing — Big End (halves)	8	0.030" undersize
9	021367	Main Bearing — upper and lower	6	0.010" undersize
10	021368	Main Bearing — upper and lower	6	0.020" undersize
11	021369	Main Bearing — upper and lower	6	0.030" oversize
12	021370	Thrust Washer — upper	2	0.005"
13	021371	Thrust Washer — upper	2	oversize
14	021372	Thrust Washer — upper	2	0.020"
15	021373	Thrust Washer — lower	2	oversize
16	021374	Main and Big End Bearing Pack	1	standard, s'eded by 045882
17	021375	Main and Big End Bearing Pack } less	1	0.010" undersize
18	021376	Main and Big End Bearing Pack } thrust	1	0.020" undersize
19	021377	Main and Big End Bearing Pack } washers	1	0.030" undersize
<b>VALVES</b>				
20	021378	Valve (inlet and exhaust)	8	0.020" oversize stem
21	021379	Valve (inlet and exhaust)	8	0.010" oversize stem
<b>SERVICE PACKS</b>				
22	020080	Engine Gasket Pack	1	S'eded-btsb 309-135
23	020082	Gasket Pack (decarbonising)	1	
24	020064	Water Pump Repair Pack	1	S'eded-BTSB 309-135



SERIES: LS45-LS45/TC ● LS55-LS55T/C

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**SERVICE PARTS AND SPECIAL TOOLS**

Fig.No.8:01	Part No.	Description	Qty	Remarks
<b>TOOL KIT</b>				
25	04316	Tool Kit Complete	1	} Tool Kit Assy. Item 25 { S'seded by 023529 (1" A/F), S'seded by 023833 (3/4" A/F)
26	05483	Spanner, 7 <sup>1</sup> / <sub>8</sub> " x 5 <sup>5</sup> / <sub>16</sub> " AF	1	
27	05484	Spanner, 3/4" x 5 <sup>5</sup> / <sub>8</sub> " AF	1	
28	05485	Spanner, 9 <sup>9</sup> / <sub>16</sub> " x 1/2" AF	1	
29	05486	Spanner, 7 <sup>7</sup> / <sub>16</sub> " x 5 <sup>5</sup> / <sub>16</sub> " AF	1	
30	05487	Grease Gun	1	
31	05488	Box Spanner, 15 <sup>15</sup> / <sub>16</sub> " x 3/4" AF	1	
32	05489	Box Spanner, 9 <sup>9</sup> / <sub>16</sub> " x 3/4" AF	1	
33	05490	Tommy Bar, 15 <sup>15</sup> / <sub>16</sub> " dia. x 6"	1	
34	05491	Screwdriver	1	
35	05492	Wrench — Drain Plug	1	
36	05493	Wheel Brace, 1" AF	1	
37	05494	Wheel Brace, 15 <sup>15</sup> / <sub>16</sub> " AF	1	
38	05495	Allen Key, 15 <sup>15</sup> / <sub>16</sub> " AF	1	
39	05496	Tool Roll, Canvas	1	
39A	011336	Greaser Extension	1	
39B	06350	Flexible Extension x 12" long—Grease Gun	1	
<b>OIL, PAINT, GREASE</b>				
40	021380	"Hylomar" Gasket Cement, 4 oz. (113g) tubes		As Req'd
41	04378	Loctite or Equivalent, 10cc.		As Req'd
<b>RECONDITIONED SERVICE UNITS</b>				
42	021381	Engine Unit (less Dynamo, Starter and Clutch)	1	449005
<b>SPECIAL TOOLS</b>				
43	021382	Centralising Tool Timing Covers and Oil Seal		
44	023452	Transfers and Plates Assembly	1	LS45-LS45/TC
45	042634	Kit emblems and plates	1	LS 55
46	042646	Kit emblems and plates	1	LS 55 SL.



SERIES: LS45-LS46/TC ● LS55-LS55T/C

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**SECTION 9**  
**ANCILLARY EQUIPMENT**

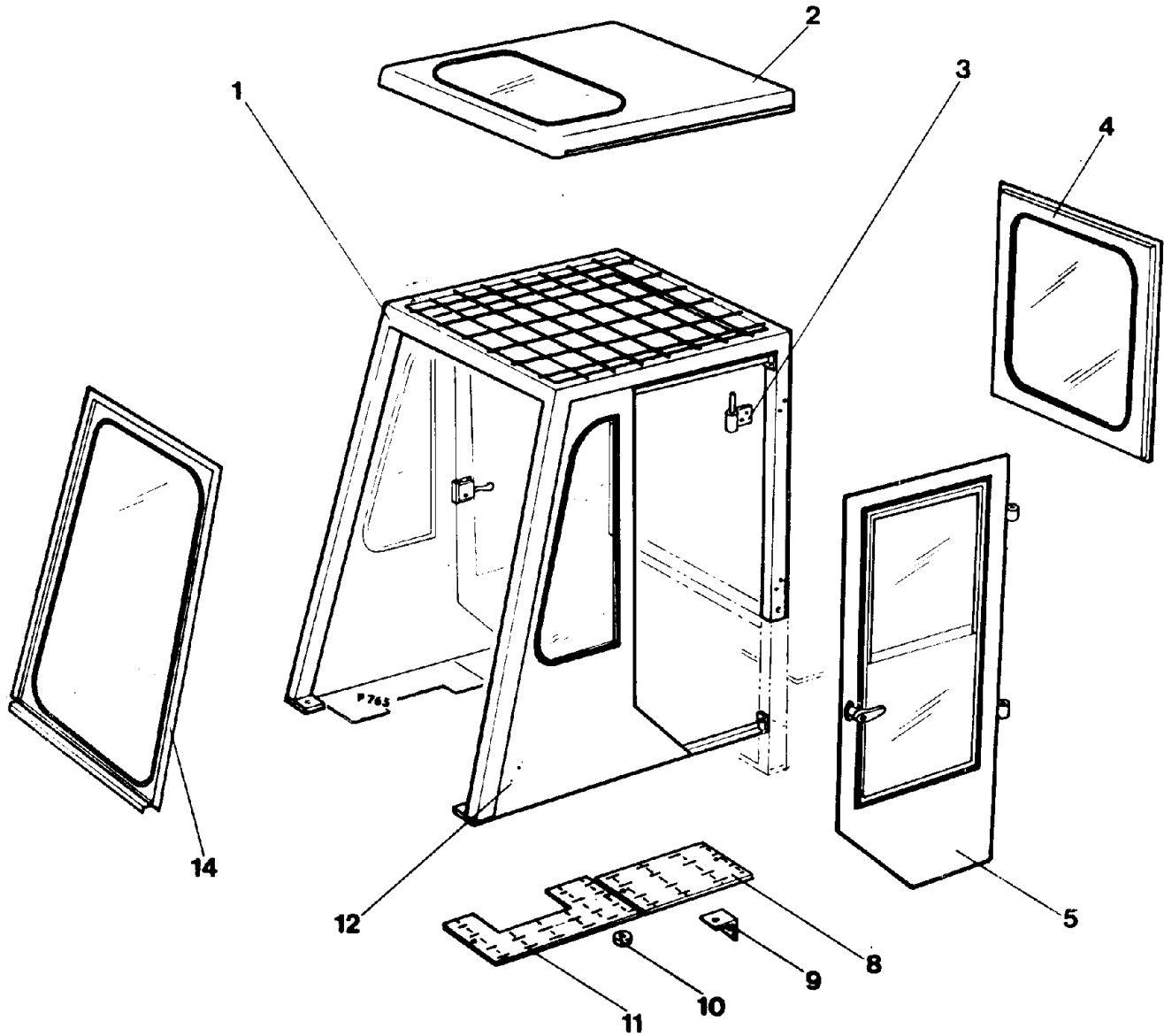


FIG. 9 : 01



**ANCILLARY EQUIPMENT  
ROOFGUARD AND WEATHERCAB**

Fig.No.9:01	Part No.	Description	Qty	Remarks
1	023139	Roof Guard	1	Standard Fitting
1A	04493	Bolt, 1/2" UNF x 1 1/2" long.	2	Front Fixing
1B	04558	Plain Washer, 1/2" dia.	2	Front Fixing
1C	04571	F.D. Washer, 1/2" dia.	2	Front Fixing
1D	04531	Nut, 1/2" UNF	2	Front Fixing
1E	04440	Setscrew, 1/4" UNF x 1/2" long	2	Rear Fixing
1F	04577	Spring Washer, 1/4" dia.	2	Rear Fixing
2	023502	Roof Assembly Complete	1	
2A	023509	Roof Panel	1	Included in Item 2
2B	023503	Roof Glass	1	
2C	023504	Glazing Rubber, Roof Glass	1	
2D	023505	Filler Strip, Roof Glass	1	
2E	023520	'Taptite' Screw	6	
2F	023524	Foam Strip	1	
3	023512	Male Hinge, R.H.	2	
3A	023513	Male Hinge, L.H.	2	
3B	023514	Bolt	8	
3C	023515	Nut	8	
3D	023516	Spring Washer	8	
4	023498	Rear Panel Assembly Complete	1	
4A	023499	Rear Panel Glass	1	Included in Item 4
4B	023500	Glazing Rubber, Rear Glass	1	
4C	023501	Filler Strip, Rear Glass	1	
4D	023521	Self Tapping Screw	As Req'd	
4E	023519	Foam Strip - Grey	1	
5	023481	Door Assembly Complete, R.H.	1	
5A	023506	Door Panel, R.H.	1	Included in Item 5
5B	023482	Door Window	1	
5C	023485	Glazing Rubber	1	
5D	023486	Filler Strip	1	
5E	023483	Outside Handle	1	
5F	023484	Slam Latch, R.h.	1	
5G	023525	Screw	2	
5H	023526	Nut	2	
5J	023527	S/Washer	2	
6	023487	Door Assembly Complete, L.H.	1	
6A	023507	Door Panel, L.H.	1	Included in Item 6
6B	023482	Door Window	1	
6C	023485	Glazing Rubber	1	
6D	023486	Filler Strip	1	
6E	023483	Outside Handle	1	
6F	023488	Slam Latch, L.H.	1	
6G	023525	Screw	2	
6H	023526	Nut	2	
6J	023527	S/Washer	2	
7		Gear Box Cab Floor Plate Assembly		Gearbox Model only

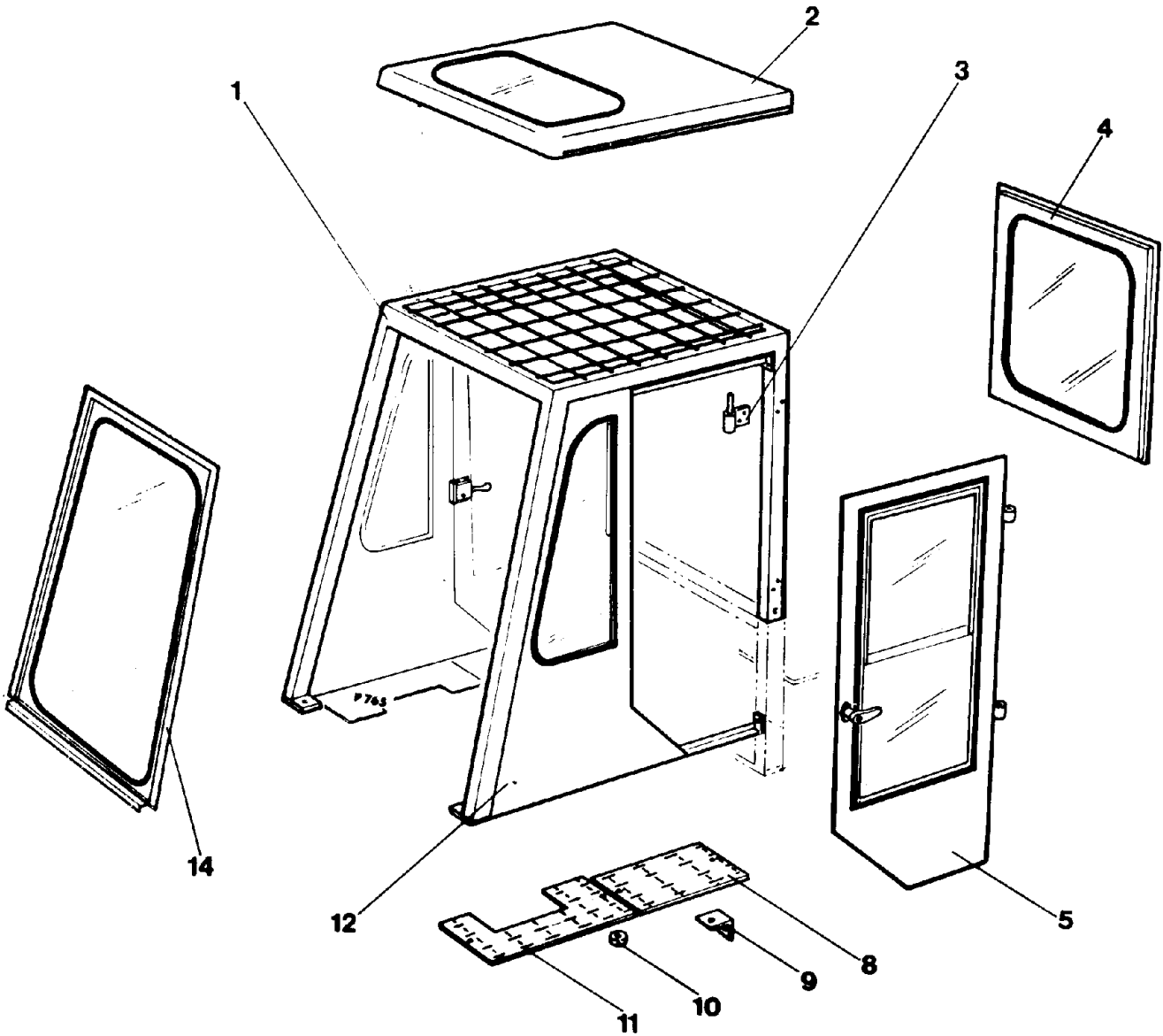


FIG. 9 : 01



**ANCILLARY EQUIPMENT  
ROOFGUARD AND WEATHERCAB**

Fig. No.	Part No.	Description	Qty	Remarks	
8	023379	Floor Plate — Rear, L.H.	1	Not supplied as spares item	
8A	04464	Floor Plate — Rear, R.H.	1		
8B	04526	Setscrew, $\frac{3}{8}$ " UNF x 1" long	6		
8C	04569	Nut, $\frac{3}{8}$ " UNF	6		
8D	023380	F.D. Washer, $\frac{3}{8}$ " dia.	6		
9	023199	Bracket	2		
10	023158	Spacer	2		
10A	04467	Bolt, $\frac{3}{8}$ " UNF x 1½" long	2		
10B	04569	F.D. Washer, $\frac{3}{8}$ " dia.	4		
11	023378	Floor Plate — Front	2		S'eded by 04463
11A	04464	Setscrew, $\frac{3}{8}$ " UNF x 1" long	2		
11B	04569	F.D. Washer, $\frac{3}{8}$ " dia.	2	T.C. Only	
7		Torque Convertor Cab Floor Plate Assembly			
8	023380	Floor Plate — Rear	2		
8A	04464	Setscrew, $\frac{3}{8}$ " UNF x 1" long	6		
8B	04526	Nut, $\frac{3}{8}$ " UNF	6		
8C	04569	F.D. Washer	6		
9	023199	Bracket	2		
10	023158	Spacer	2		
10A	04467	Bolt, $\frac{3}{8}$ " UNF x 1½" long	2		Not supplied as spares item supply Pt. No. 023426
10B	04569	F.D. Washer, $\frac{3}{8}$ " dia.	2		
11	023378	Floor Plate — Front	2	S'eded by 04463	
11A	04464	Setscrew, $\frac{3}{8}$ " UNF x 1" long	2		
11B	04569	F.D. Washer, $\frac{3}{8}$ " dia.	2	Included in	
12	023493	Side Panel Assembly, Complete L.H.	1		
12A	023511	Side Panel, L.H.	1		
12B	023490	Side Panel Glass	1		
12C	023491	Glazing Rubber	1		
12D	023492	Filler Strip	1		
12E	023521	Self Tapping Screw	As Req'd		
12F	023522	Bolt	2		
12G	023523	Plain Washer	2		
12H	023515	S/Washer	2		
12J	023516	Nut	2		
13	023489	Side Panel Assembly Complete, R.H.	1	Included in Item 13	
13A	023510	Side Panel, R.H.	1		
13B	023490	Side Panel Glass	1		
13C	023491	Glazing Rubber	1		
13D	023492	Filler Strip	1		
13E	023521	Self Tapping Screw	As Req'd		
13F	023522	Bolt	2		
13G	023523	Plain Washer	2		
13H	023515	S/Washer	2		
13J	023516	Nut	2		
14	023494	Front Panel Assembly Complete.	1	Incl. in Item 14	
14A	023495	Front Glass	1		
14B	023496	Glazing Rubber	1		
14C	023497	Filler Strip	1		
14D	023524	Foam Strip — Grey	1		
14E	023521	Self Tapping Screws	As Req'd		

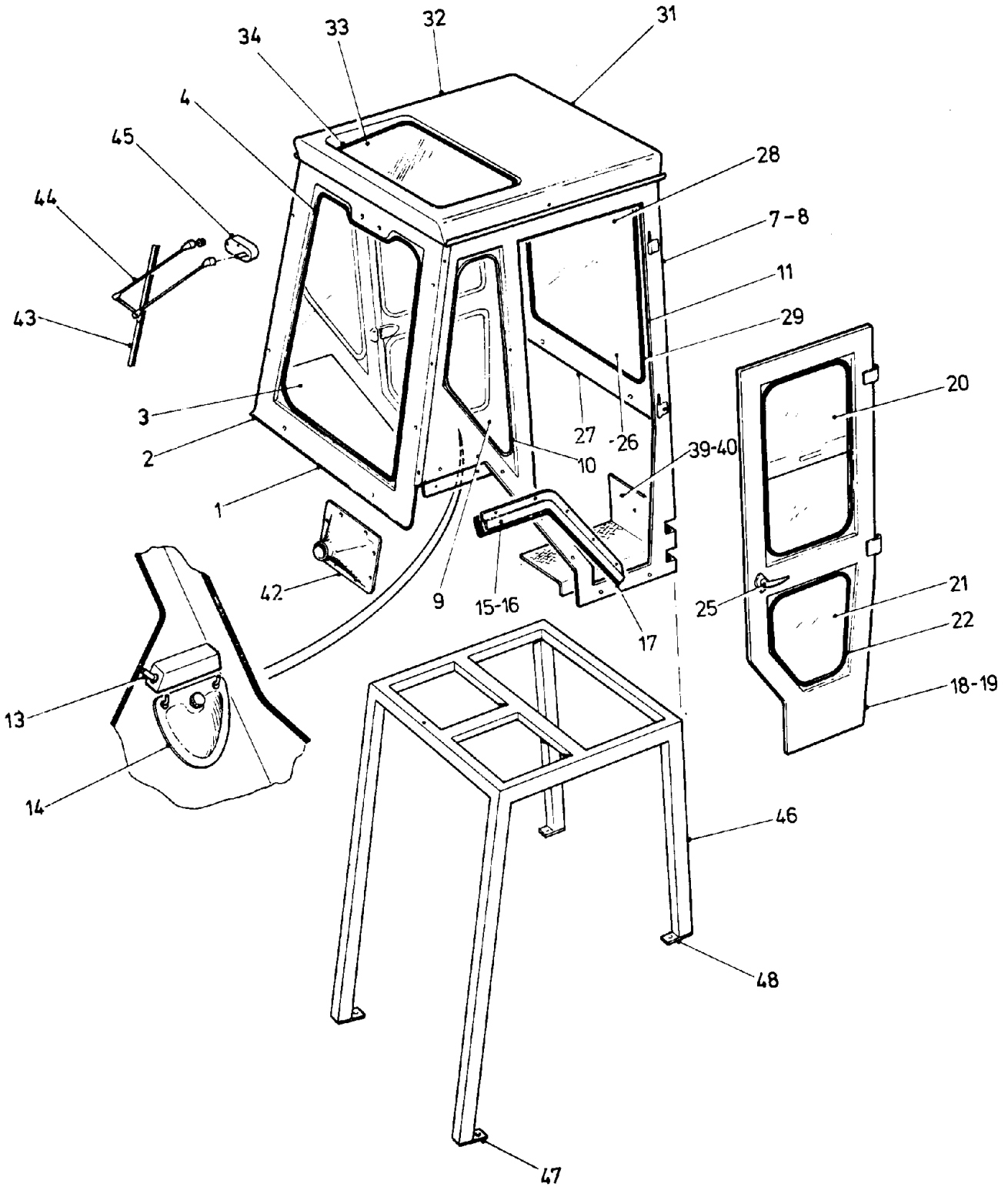


Fig. No. 9:01A



**ANCILLARY EQUIPMENT  
ROOFGUARD AND WEATHERCAB  
MK. 2**

Fig.No.9:01A	Part No.	Description	Qty	Remarks
	028192	Weather Cab Assembly	1	
1	047445	Front Screen Assembly	1	
2	047446	Front Screen Frame	1	
3	041297	Front Screen Glass	1	
4	041298	Glass Rubbed Surround Filler	1	
5	041299	Washer Jet	1	
6	041300	Washer Jet Feed Tube	1	
7	047447	Side Frame Assembly	1	Right Hand
8	047448	Side Frame Assembly	1	Left Hand
9	041303	Side Frame Glass	2	
10	041304	Side Frame Glass Rubber Surround	2	
11	041305	Door Aperture Trim	2	
12	041306	Lock Strike	2	
13	041307	Washer Pump	1	
14	041308	Washer Reservoir	1	
15	047449	Side Frame Weather Seal Assembly	1	Right Hand
16	047450	Side Frame Weather Seal Assembly	1	Left Hand
17	047451	Side Frame Weather Seal Rubber	2	
18	047452	Door Assembly	1	Right Hand
19	047453	Door Assembly	1	Left Hand
20	041314	Sliding Window Assembly	2	
21	041315	Lower Door Glass	2	
22	041316	Lower Door Glass Rubber Surround	2	
23	041317	Door Surround Foam Seal	2	
24	041316	Door Lock	2	
25	0			
26	041320	Rear Screen Assembly	1	
27	041321	Rear Screen Frame	1	
28	041322	Rear Screen Glass	1	
29	041323	Rear Screen Glass Rubber Surround	1	
30	041324	Interior Lamp Assembly	1	
31	041325	Roof Assembly	1	
32	041326	Roof Panel	1	
33	041327	Roof Glass	1	
34	041328	Roof Glass Rubber Surround	1	
35	041329	Roof External Edge Trim	2	Front/Rear
36	041330	Roof Rear Ventilators	2	
37	041331	Internal Foam Headlining	1	
38	041332	Roof Securing Brackets	4	
39	047454	Battery Carrier Extension Plate	1	Right Hand
40	047455	Battery Carrier Extension Plate	1	Left Hand
40A	047456	Battery Carrier Extension Plate	2	
41	047457	Tilt Ram Shroud Panel	1	Right Hand
42	047458	Tilt Ram Shroud Panel	1	Left Hand
43	027143	Wiper Blade	1	
44	027144	Wiper Arm	1	
45	027145	Wiper Motor	1	
46	023139	Roof Guard	1	
47	04493	Bolt ½" UNF x 1 ½" long	2	
47A	04558	Washer Plain ½" Dia.	2	Roof Guard
47B	04571	Washer Fan Disc ½" Dia.	2	Front Fixing
47C	04531	Nut ½" UNF	2	
48	04440	Setscrew ¼" UNF x ½" long	2	Roof Guard
48A	04577	Washer Spring ¼" Dia.	2	Rear Fixing

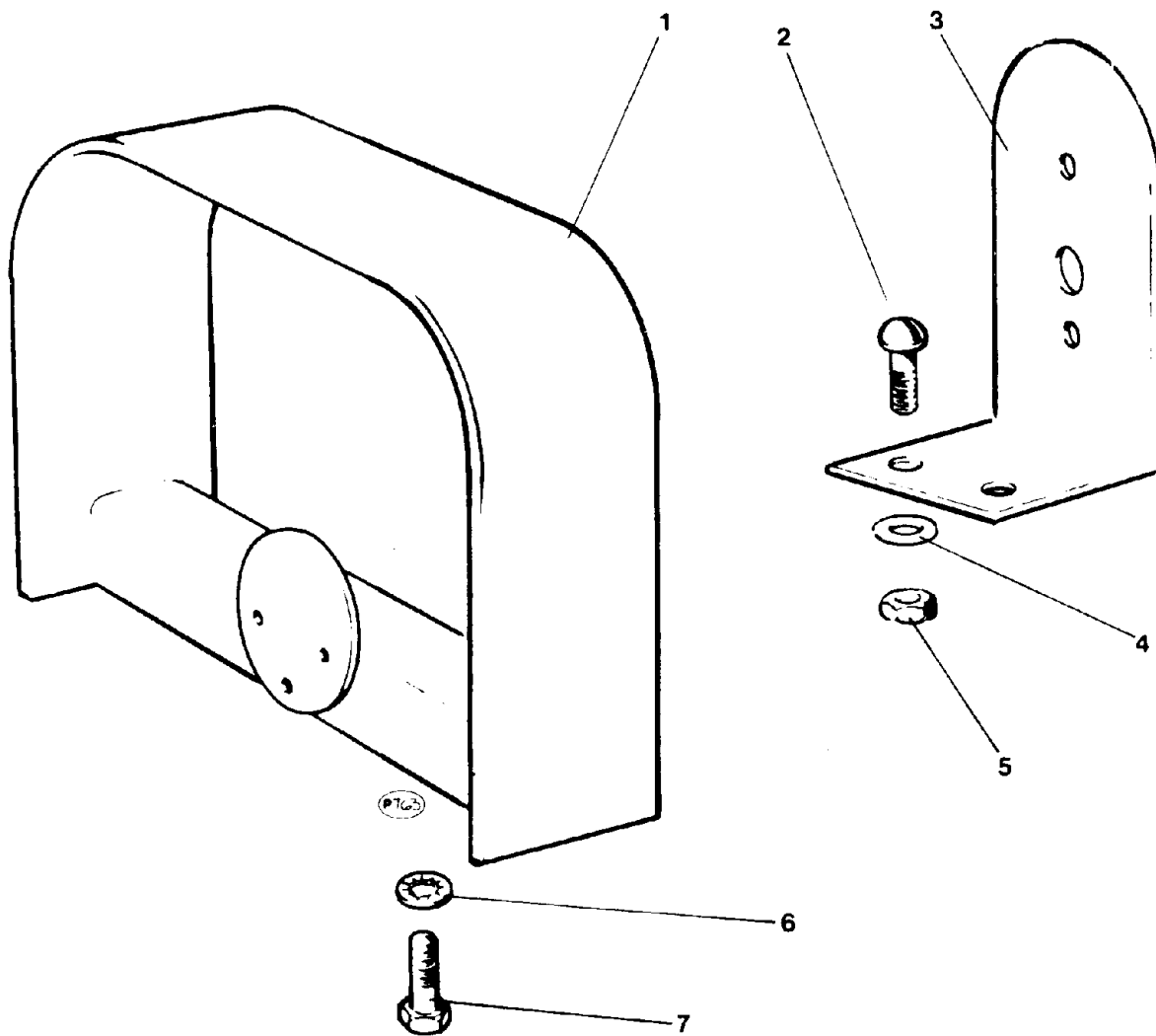


FIG. 9 : 02



**ANCILLARY EQUIPMENT  
LAMP BRACKETS**

Fig.No.9:02	Part No.	Description	Qty	Remarks
1	03627	Front Lamp Bracket, L.H.	1	S'seded by 011731
	03628	Front Lamp Bracket, R.H.	1	S'seded by 011732
*2	011039	Screw, 2BA x 1/2" Rd. Hd.	4	S'seded by 09675
3	019849	Tail Lamp Bracket	2	
*4	04565	Washer Fan Disc, 2BA	4	S'seded by 04577
*5	011040	Nut, 2BA	4	S'seded by 09691
6	04569	Washer Fan Disc, 3/8" dia.	4	
7	04465	Bolt, 3/8" UNF x 1 1/4" Hex. Hd.	4	
*2	04443	Screw, 1/4" UNF x 3/4" long	4	} Alt. to above
*4	04577	Washer, 1/4" dia.	4	
*5	04522	Nut, 1/4" UNF	4	

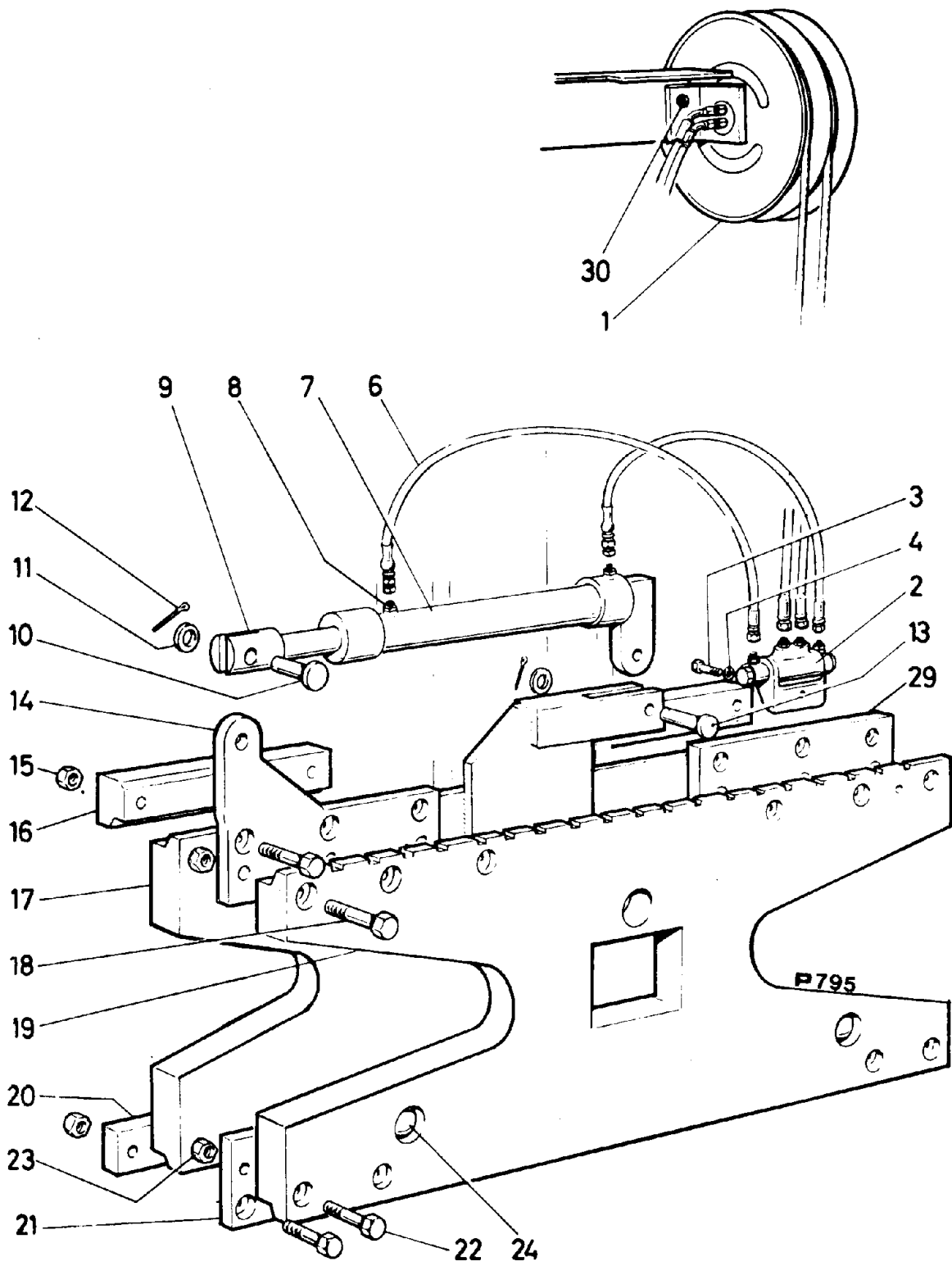


FIG. 9 : 03



**ANCILLARY EQUIPMENT  
SIDESHIFT ASSEMBLY**

Fig.No.9:03	Part No.	Description	Qty	Remarks
	023387	Sideshift Assembly . . . . .	1	(For Mast Height 8'0"/15'0" only)
1	010832	Hosereel Assembly, Right Hand . . . . .	1	
1A	010712	Hosereel Assembly, Left Hand . . . . .	1	
2	010713	Swivel Assembly . . . . .	1	
3	04461	Setscrew, $\frac{5}{8}$ " UNF x $\frac{3}{4}$ " long Hex. Hd. . . . .	1	
4	04569	Fan Disc Washer, $\frac{3}{8}$ " dia. . . . .	1	
5	011580	Hose, Sideshift Cylinder, 22" long . . . . .	1	
6	011593	Hose, Sideshift Cylinder, 33" long . . . . .	1	
7	011576	Sideshift Cylinder Assembly . . . . .	1	
8	018272	Adaptor, Sideshift Cylinder . . . . .	2	
8A	04406	Bonded Seal . . . . .	2	
9	011575	Connecting Link . . . . .	1	
10	011577	Fixing Pin, Piston . . . . .	1	
11	04560	Washer, $\frac{3}{4}$ " dia. . . . .	2	
12	011579	Split Pin, $\frac{1}{8}$ " x $1\frac{1}{4}$ " long . . . . .	2	
13	011578	Fixing Pin, Cylinder . . . . .	1	
14	011583	Mounting Plate . . . . .	1	
15	04533	Nut, $\frac{5}{8}$ " UNF . . . . .	12	
16	011585	Top Runner . . . . .	2	
17	023386	Fork Carriage Assembly . . . . .	1	S'ceded by 023610, on Channel/1 Section Mast only
18	011266	Bolt, $\frac{5}{8}$ " UNF x $1\frac{1}{2}$ " long, Hex. Hd. . . . .	12	
19	023384	Sideshift Carriage Assembly . . . . .	1	
20	011587	Bottom Runner Slide . . . . .	2	
21	011586	Bottom Runner . . . . .	2	
22	04498	Bolt, 3" UNF x 2" long, Hex. Hd. . . . .	8	
23	04531	Nut, $\frac{1}{2}$ " UNF . . . . .	8	
24	011653	Roller . . . . .	2	
25	011652	Spindle, Roller . . . . .	2	
26	011658	Dowel Pin . . . . .	2	
27	04018	Bush, Roller . . . . .	4	
28				
29	011584	Mounting Plate . . . . .	1	
30	04492	Bolt, $\frac{1}{2}$ " UNF x $1\frac{1}{4}$ " long, Hex. Hd.. . . .	2	
31	04571	Fan Disc Washer, $\frac{1}{2}$ " dia.. . . . .	2	
32	04531	Nut, $\frac{1}{2}$ " UNF . . . . .	2	
	023739	Sideshift Assembly . . . . .	1	Sideshift Assy. Over 16'0" Mast. (With 023249-019109-010529)
	010715	Hose. Valve to reel 136"	2	
	011923	Hose. Valve to reel 148"	2	Left Hand

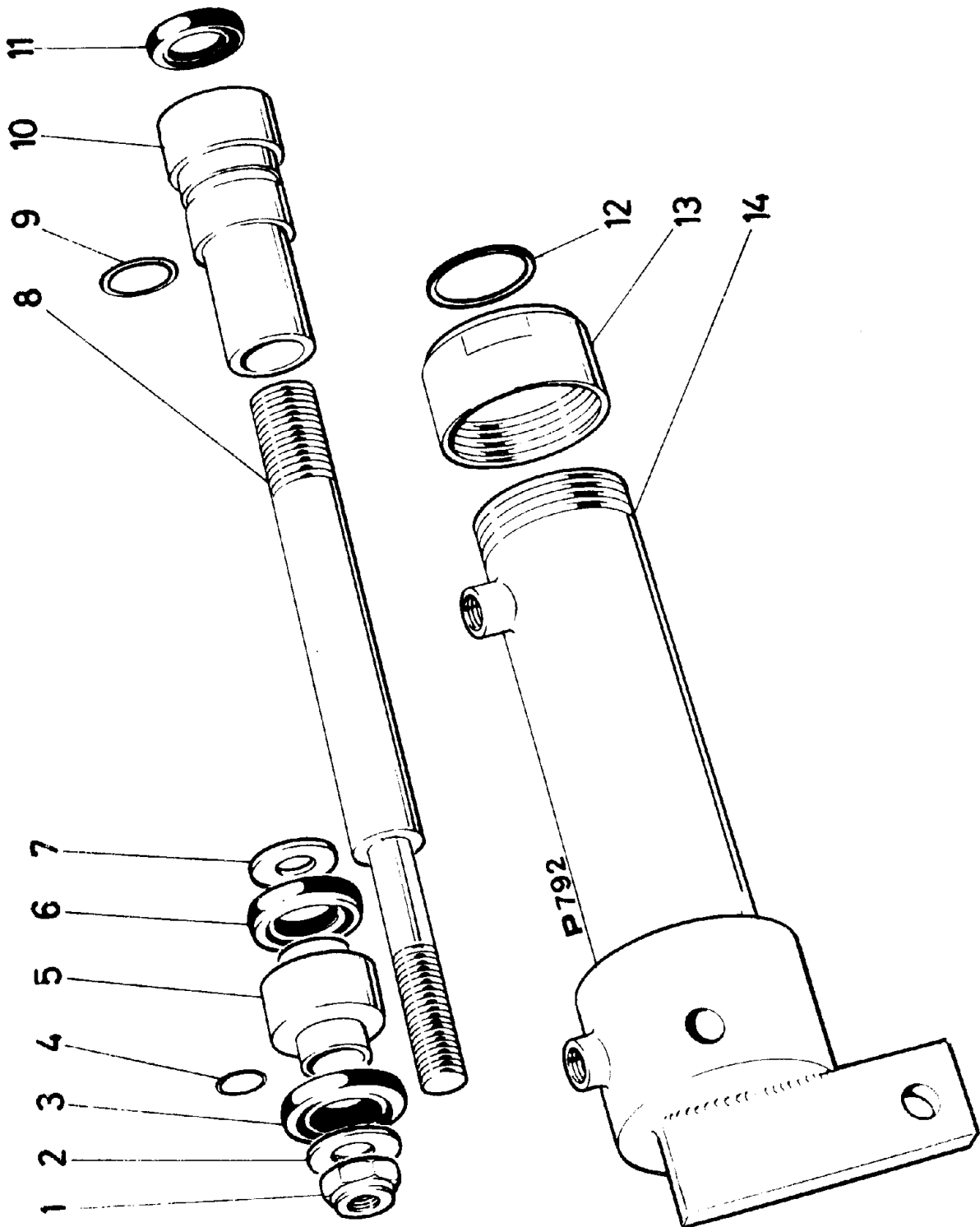


FIG. 9 : 04

**ANCILLARY EQUIPMENT  
SIDESHIFT CYLINDER**

Fig.9:04	Part No.	Description	Qty	Remarks
	011576	Sideshift Cylinder Assembly	1	
1	011682	Locknut	1	
2	011683	Backing Washer, Rear	1	
3	011684	Piston Seal	1	*
4	011685	'O' Ring — Piston Head	1	*
5	011686	Piston Head	1	
6	011687	Piston Seal	1	*
7	011688	Backing Washer	1	
8	011689	Piston Rod	2	
9	011690	'O' Ring — Sleeve	1	*
10	011691	Tube Sleeve	1	
11	011692	Sleeve Seal	1	*
12	011693	Wiper Seal	1	*
13	011694	Tube Cap	1	
14	011695	Tube	1	
15	011581	Seal Kit, Sideshift Cylinder.	1	S' seded by 011286

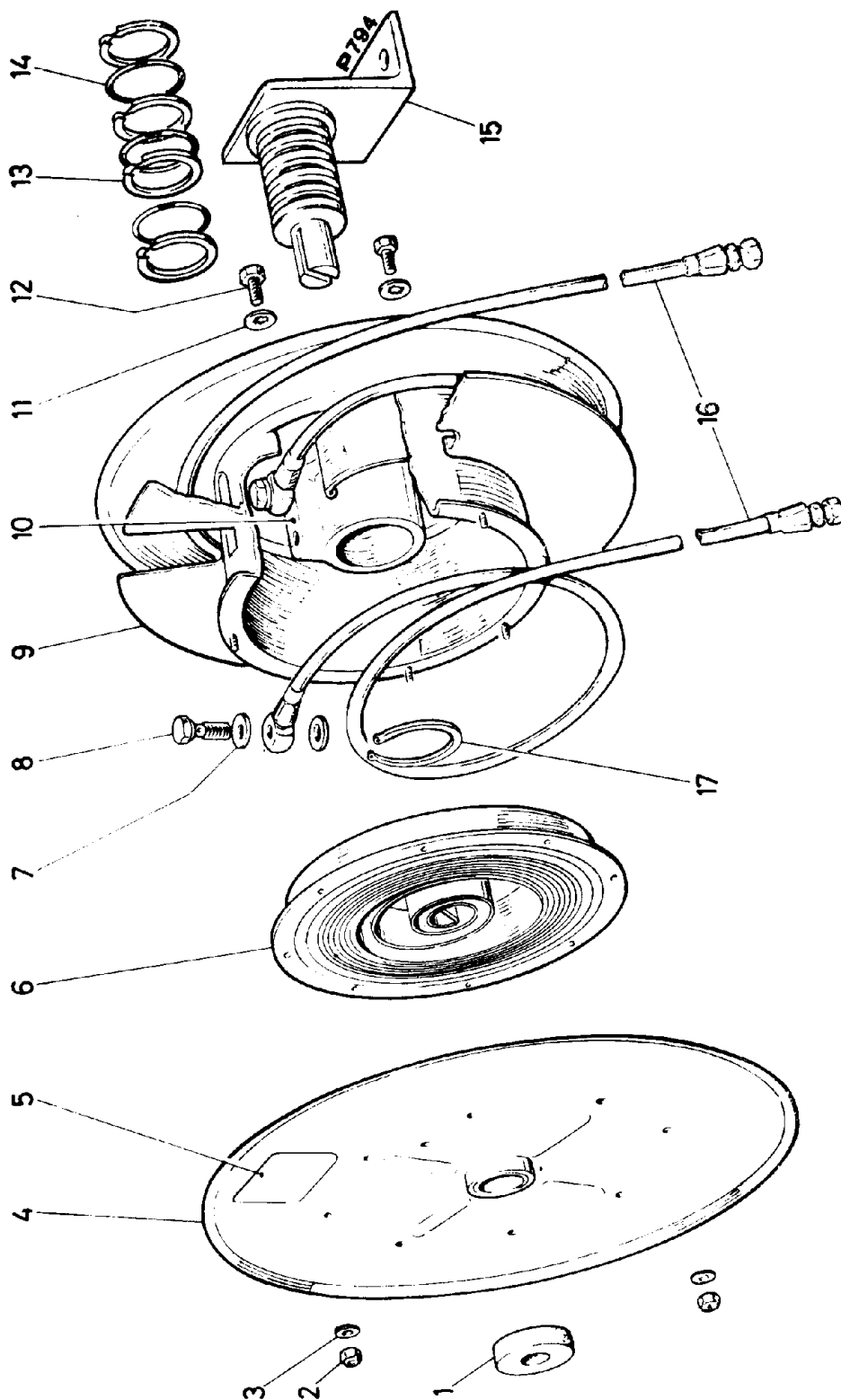


FIG. 9 : 05



**ANCILLARY EQUIPMENT  
HOSEREEL ASSEMBLY, LEFT HAND**

**HOSEREEL ASSEMBLY, LEFT HAND**

Fig. No. 9:05	Part No.	Description	Qty	Remarks
	010712	Hosereel Assembly, L.H.	1	
1	011307	Cap	1	
2	011308	Nut, 2BA, Self-locking	8	
3	04564	Washer, 2BA	8	
4	011310	Flange and Bush Assembly	1	
5	011322	Label	1	
6	011323	Spring and Housing Assembly	1	
7	04646	Seal	4	
8	011313	Banjo Bolt, 1/4" BSP	2	
9	011324	Drum and Flange Assembly	1	
10	011325	Hub	1	
11	04567	Fan Disc Washer, 1/4" dia.	4	
12	011316	Setscrew, 1/4" Whit.	4	
13	011317	Back-up Washer	4	
14	011326	'O' Ring	3	
15	011318	Bracket and Shaft Assembly	1	
16	011319	Hose, 15ft.		
17	011320	Circlip, 1 3/4" Shaft dia.	1	

**HOSEREEL ASSEMBLY, RIGHT HAND**

	Part No.	Description	Qty	Remarks
	010832	Hosereel Assembly, R.H.	1	
1	011307	Cap	1	
2	011308	Nut, 2BA, Self-locking	8	
3	04564	Washer, 2BA	8	
4	011310	Flange and Bush Assembly	1	
5	011311	Label	1	
6	011312	Spring and Housing Assembly	1	
7	04646	Seal	4	
8	011313	Banjo Bolt, 1/4" BSP	2	
9	011314	Drum and Flange Assembly	1	
10	011315	Hub	1	
11	04567	Fan Disc Washer, 1/4" dia.	4	
12	011316	Setscrew, 1/4" Whit.	4	
12	011316	Setscrew, 1/4" Whit.	4	
13	011317	Back-up Washer	4	
14	011326	'O' Ring	3	
15	011318	Bracket and Shaft Assembly	1	
16	011319	Hose, 15ft.		
17	011320	Circlip, 1 3/4" shaft dia.	1	

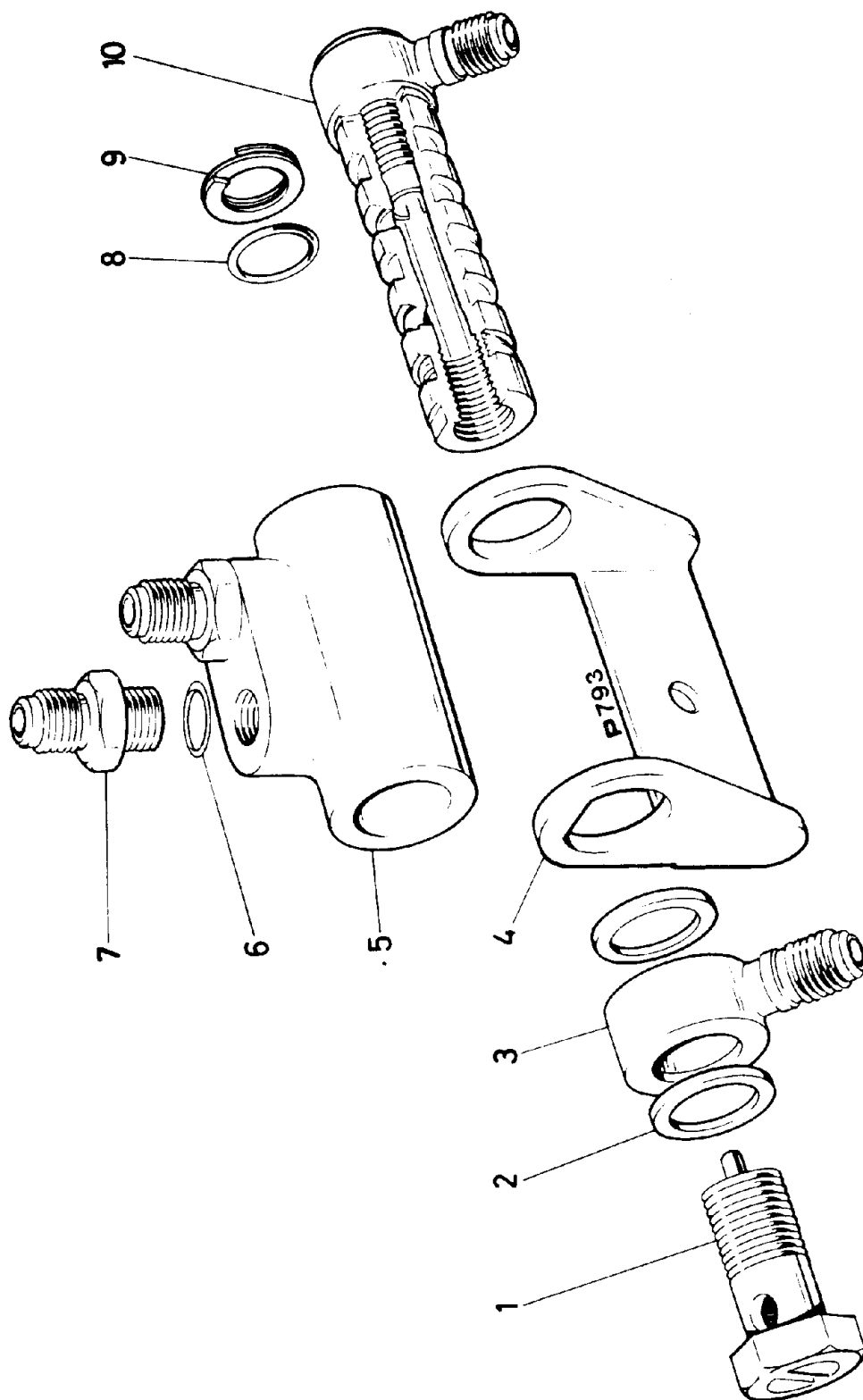


FIG. 9 : 06



**ANCILLARY EQUIPMENT  
HOSEREEL SWIVEL**

Fig. No.	9:06	Part No.	Description	Qty	Remarks
1		011328	Bolt	2	
2		04405	Seal	4	
3		018281	Banjo Assembly, $\frac{9}{16}$ " JIC	2	
4		011333	Mounting Bracket	1	
5		011327	Swivel Body	2	
6		010551	'O' Ring	2	
7		018280	Adaptor, $\frac{9}{16}$ " JIC	2	
8		011330	'O' Ring	3	
9		011331	Back-up Washer	4	
10		011332	Shaft	1	
		010713	Swivel Assembly	1	

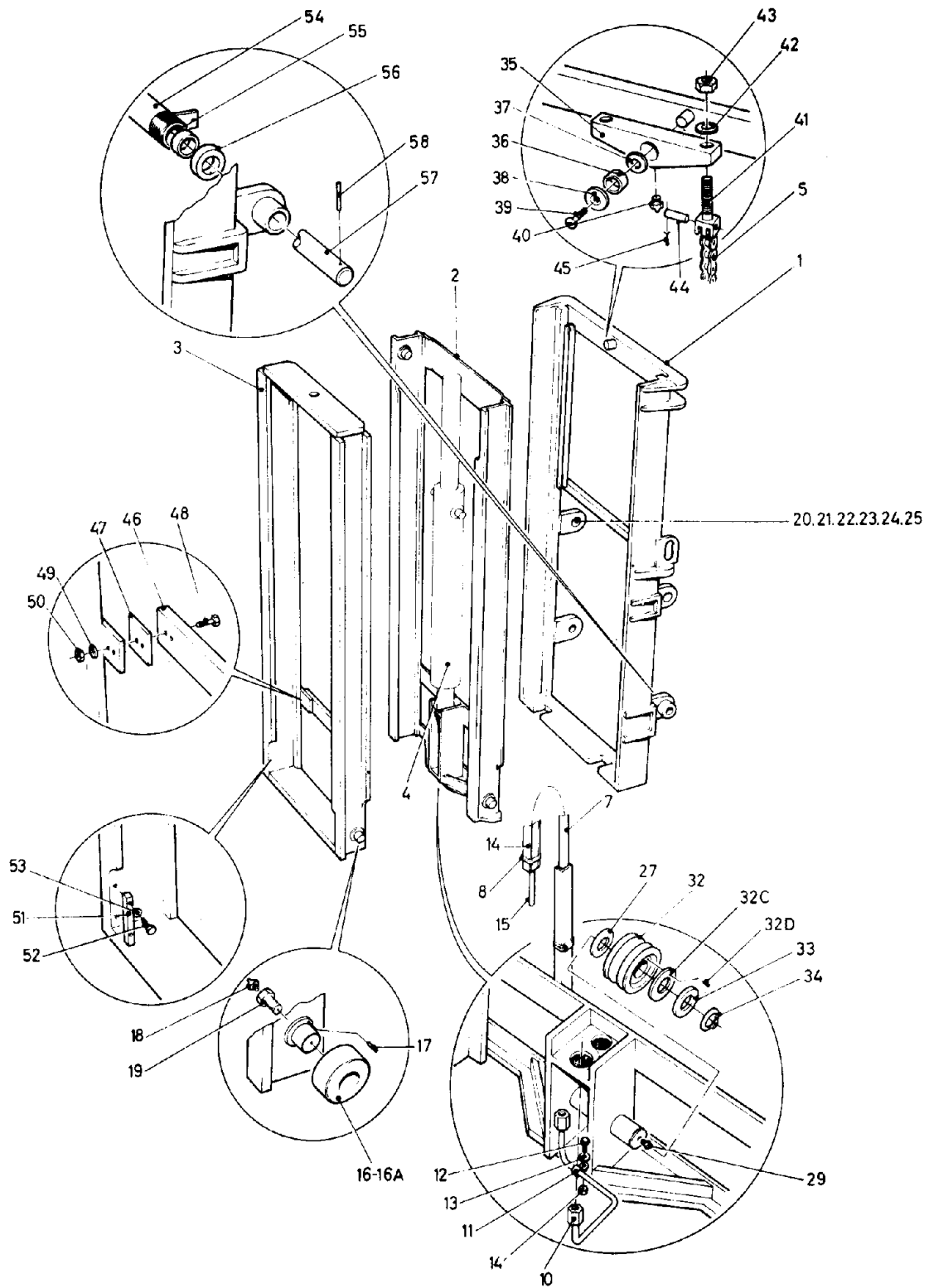


FIG. 9 : 07



## ANCILLARY

## THREE STAGE MAST MARK 111

Fig.No.9:07	Part No.	Description	Qty	Remarks
1	027245	Outer Mast, W.A.	1	Lift height 4.38M
1A	027246	Outer Mast, W.A.	1	Lift height 5.29M
1B	027247	Outer Mast, W.A.	1	Lift height 6.21M
1C	027248	Outer Mast, W.A.	1	Lift height 7.58M
2	027235	Intermediate Mast, W.A.	1	Lift height 4.38M
2A	027236	Intermediate Mast, W.A.	1	Lift height 5.29M
2B	027237	Intermediate Mast, W.A.	1	Lift height 6.21M
2C	027238	Intermediate Mast, W.A.	1	Lift height 7.58M
3	027225	Inner Mast, W.A.	1	Lift height 4.38M
3A	027226	Inner Mast, W.A.	1	Lift height 5.29M
3B	027227	Inner Mast, W.A.	1	Lift height 6.21M
3C	027228	Inner Mast, W.A.	1	Lift height 7.58M
4		Lift cylinder assembly	1	See Fig.No. 9:13 or 9:14
5	027343	Chain Upper, 129 Pitches, 4.38M lift	2	
5A	027344	Chain Upper, 145 Pitches, 5.29M lift	2	
5B	027345	Chain Upper, 161 Pitches, 6.21M lift	2	
5C	027346	Chain Upper, 185 Pitches, 7.58M lift	2	
6	027347	Chain Lower, 111 Pitches, 4.38M lift	2)	Note:Lift chains not inter-
6A	027348	Chain Lower, 127 Pitches 5.29M lift	2)	changeable
6B	027349	Chain Lower, 149 Pitches 6.21M lift	2)	
6C	027350	Chain Lower, 169 Pitches 7.58M lift	2)	
6	037140	Chain Lower, 113 Pitches 4.38M lift	2)	
6A	037141	Chain Lower, 129 Pitches 5.29M lift	2)	Note:Lift chains not inter-
6B	037142	Chain Lower, 145 Pitches 6.21M lift	2)	changeable
6C	037143	Chain Lower, 171 Pitches 7.58M lift	2)	
7	027364	Lift Cylinder Feed Hose, 4.38M lift	1	S'seded by 028008
7A	027365	Lift Cylinder Feed Hose, 5.29M lift	1	S'seded by 038683
7B	027366	Lift Cylinder Feed Hose, 6.21M lift	1	S'seded by 028010
7C	027367	Lift Cylinder Feed Hose, 7.58M lift	1	S'seded by 028011
8	019898	Jubilee Clip	2	

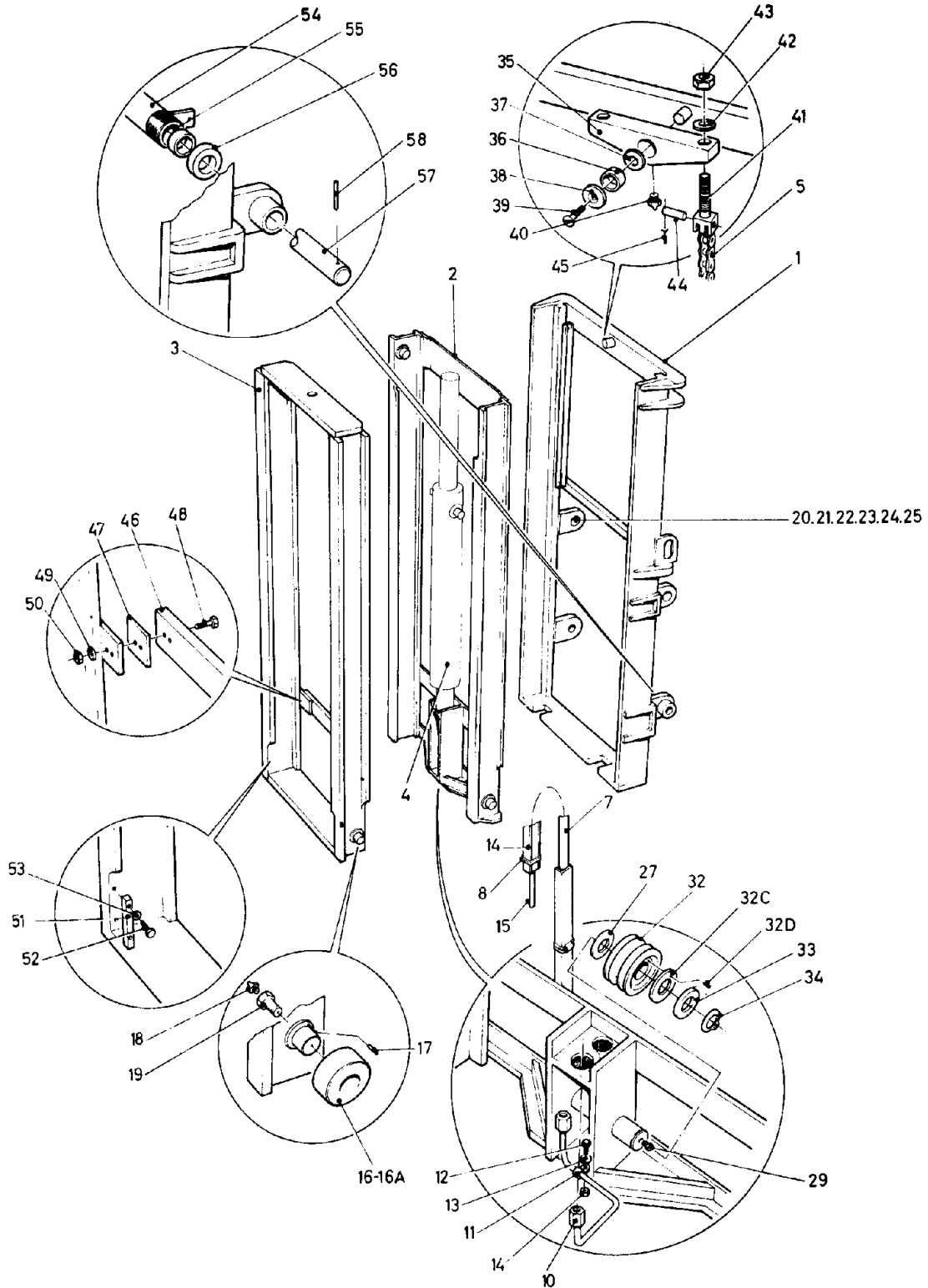


FIG. 9 : 07


**ANCILLARY**
**THREE STAGE MAST MARK 111**

Fig.No.9:07	Part No.	Description	Qty	Remarks
9	027355	Nylon Pad	2	
10	027368	Connector tube	1	
11	027744	Hose clip	2	
12	030465	Bolt, M10 x 20	2)	
13	04557	Washer, M10	4)	Hose Clip
14	019691	Nut, M10	2)	Fix. Bolts
15	027363	Connecting pipe	1	
16	027602	Roller assembly, 4in dia.	8	
16A	028186	Roller assembly, 4in dia.	8	Alternative to 027602
17		Dowel Pin		Not now used
18	04393	Grease nipple	8	
19	025637	Adjusting Screw	8	
20	04393	Grease Nipple	2)	
21	011540	Bolt - special	2)	
22	019889	Dowel pin	2)	
23	04589	Washer - spring	2)	Tilt Cylinder
24	025595	Retaining Washer	2)	
25	010407	Spherical Bearing	2)	
26		Chain pulley assembly	2)	
26A		Chain pulley	1)	Lift Cylinder
26B		Bearing	2)	Chain Pulley
26C		Thrust washer	2)	Refer to Fig.
26D		Retaining Pin	2)	9:13
27	027323	Spacer - Chain pulley	2	
29	04393	Grease Nipple	2	
30				
31				
32	027322	Chain Pulley assembly	2	
32A	027205	Chain Pulley	1)	Part of
32B	027325	Bearing	2)	assembly
32C	027326	Thrust Washer	2)	027322
32D	027329	Retaining Pin	2)	
33	027324	Retaining Washer - Chain Pulley	2	
34	027327	Circlip - Chain pulley	2	
35	027203	Equaliser Bridge - Outer Mast	1	
36	027673	Bearing	1	Use part No. 027328
37	027326	Thrust washer	2	
38	027204	Retaining washer	1	
39	027337	Bolt, csk. M12 x 25	1	
40	030471	Grease nipple, M6	1	
41	027216	Chain anchor - Mast	8	
42	027217	Spherical washer	8	
43	04613	Nut - self lock	8	
44	027351	Retaining pin - chain	8	
45	04581	Split pin	16	

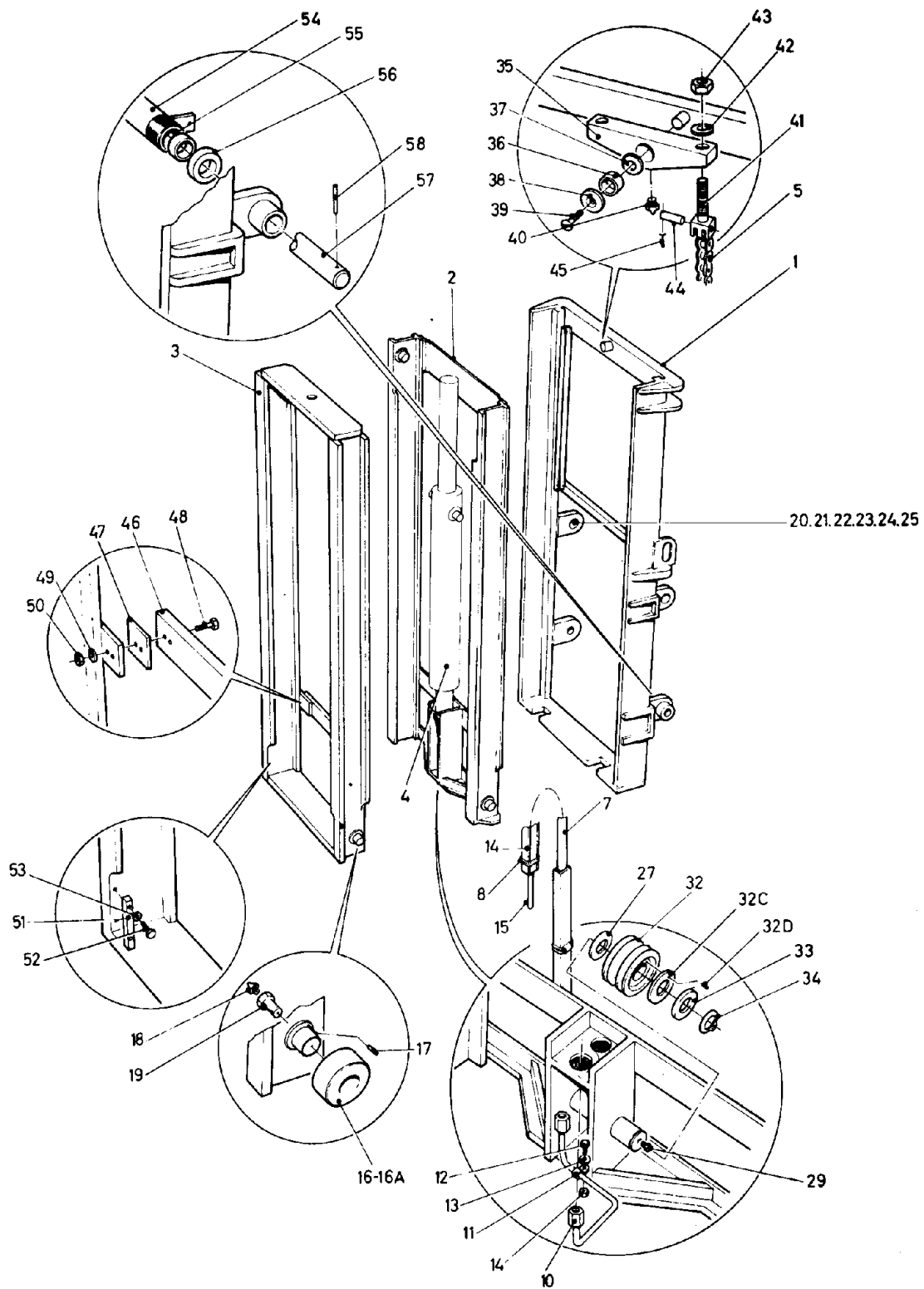


FIG. 9 : 07

**ANCILLARY****THREE STAGE MAST MARK 111**

Fig.No.9:07	Part No.	Description	Qty	Remarks
46	027202	Intermediate brace - Inner Mast	1	
47	027408	Spacer - Intermediate brace	2	
48	031300	Bolt	4)	S'eded by 04497
49	09618	Washer spring, M10	4)	S'eded by 09695
50	019691	Nut, M10	4)	S'eded by 04531
50A	037364	Dowel pin	2	
51	027352	Retaining plate - Carriage	2	
52	032140	Bolt, M12 x 40	4)	Retaining Plate
53	09619	Washer - Spring, M12	4)	Carriage
54	027571	Sideshift tube, W.A.	1	
55	033928	Bush	2	
56		Endcap		Not used
57	025797	Cross Shaft	1	
58	04587	Dowel Pin	1	
	032097	Bolt	2)	Carriage height
	030302	Locknut	2)	stop
	038160	Front guard	1)	
	038925	Shield - left hand	1)	Bottom pulley
	038926	Shield - right hand	1)	guard
	038261	'U' Bolt	1)	
	019691	Nut	4)	
	09618	Washer spring	4)	

NOTE: When ordering spares items for masts, please quote mast serial number. This is located on the right hand side of the outer mast above the tilt cylinder pivot point.

For ordering replacement chains, quote number of chain pitches.

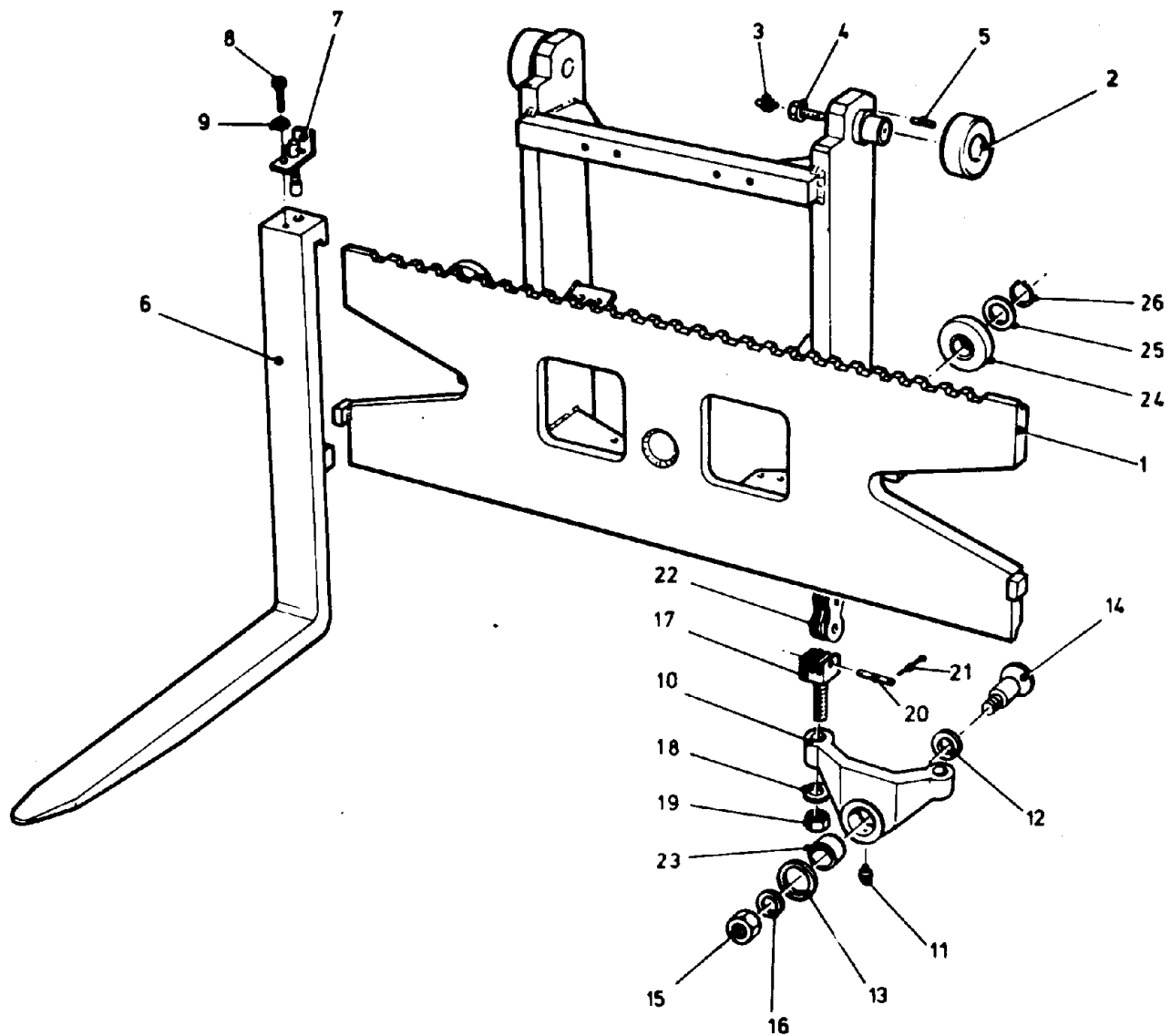


FIG. 9 : 08



**ANCILLARY  
CARRIAGE — THREE STAGE MAST MARK III**

Fig. No. 9:08	Part No.	Description	Qty	Remarks
1	027209	Carriage, W.A.	1	S'eded by 039337
2	025646	Roller Assembly, 4" dia.	4	
2A	025649	Roller Assembly, 4" dia.	4	Alt. to 025646
3	04393	Grease Nipple	4	
4	025638	Adjusting Screw	4	
5	025644	Dowel Pin	4	
6	023262	Fork Arm, 4" x 2½" x 42" long.	2	
7	011698	Fork Pin Assembly	2	
7A	011696	Fork Pin	1	} Part of fork pin assembly 011698
7B	012310	Spring	1	
7C	011697	Mounting Bracket	1	
7D	04585	Dowel Pin	1	
8	04443	Setscrew, ¼" UNF x ¾" long	2	
9	04555	Washer, ¼" dia.	2	
10	027212	Equaliser Bridge — Carriage	1	S'eded by 039131
11	030471	Grease Nipple	1	} Equaliser Bridge
12	027326	Thrust Washer	1	
13	027213	Retaining Washer — Equaliser	1	
14	027338	Screw, M12 x 60	1	
15	019692	Nut, M12	1	
16	09619	Washer Spring, M12	1	} S'eded by 039638
17	027216	Chain Anchor — Carriage	2	
18	027217	Spherical Washer	2	
19	04613	Nut, ⅝" UNF - Self Lock	2	
20	027351	Chain Anchor Pin	2	
21	04581	Split Pin, ⅜" x ¾"	4	) NOTE: Lift Chains are not interchangeable
22	027347	Chain Lower — 111 Pitches 4.38M	2	
22A	027348	Chain Lower, 127 Pitches 5.29M	2	
22B	027349	Chain Lower, 149 Pitches 6.21M	2	
22C	027350	Chain Lower, 169 Pitches 7.58M	2	
22	037140	Chain lower 113 pitches. 4.38M	2)	
22A	037141	Chain lower 129 pitches. 5.29M	2)	*
22B	037142	Chain lower 145 pitches. 6.21M	2)	
22C	037143	Chain lower 171 pitches. 7,58M	2)	
23	027673	Bearing	2	
24	038510	Roller	2	
24A	027673	Bush	2	
25	027326	Thrust washer	2	
26	027327	Circlip	2	

NOTE: When ordering spares items for carriage please quote carriage serial number. This is located on the right hand side rear face of the carriage.

For ordering replacement chains quote number of chain pitches.

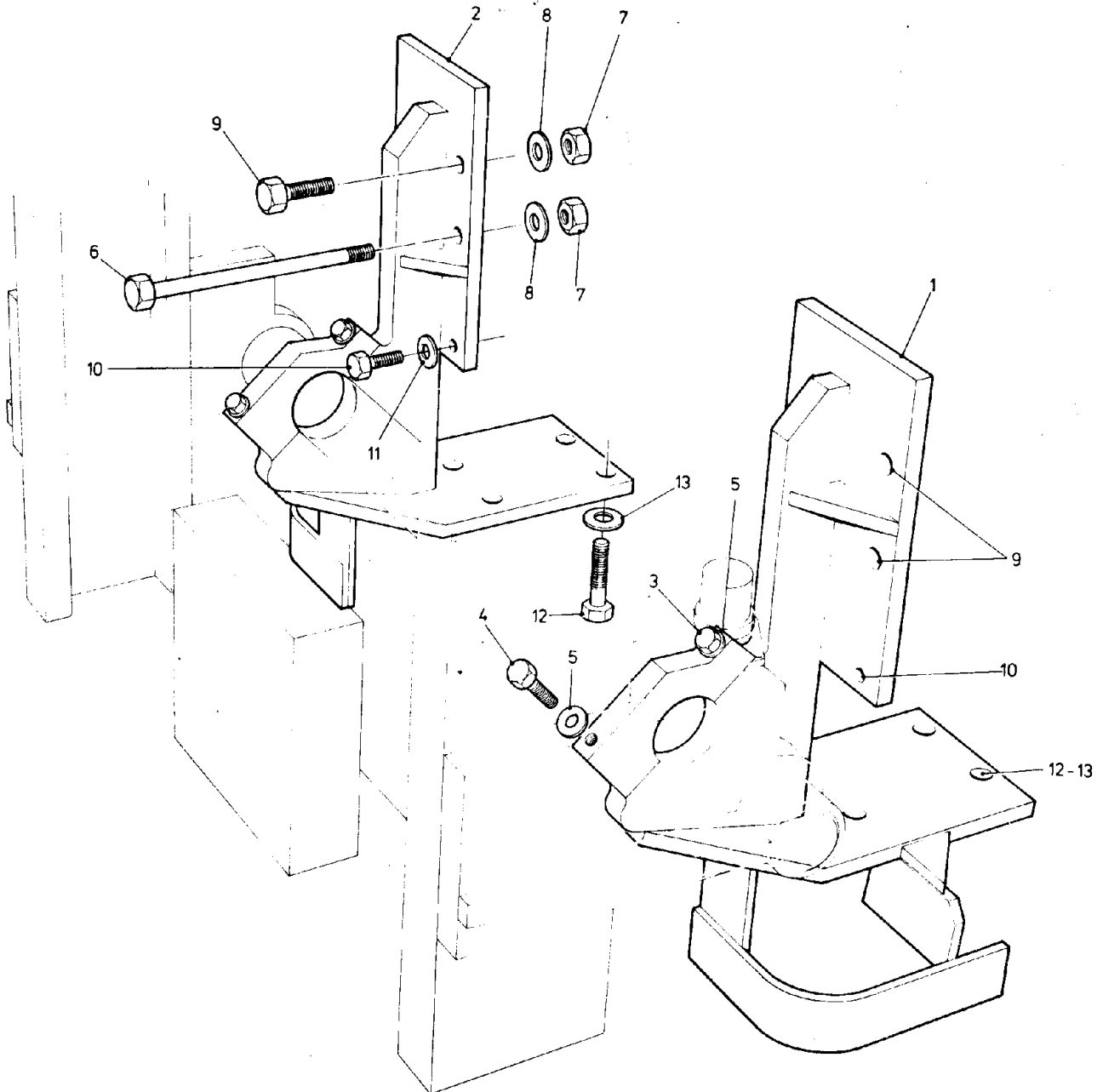


FIG. 9 : 09



ANCILLARY  
**MAST MOUNTING — THREE STAGE MAST MARK III**

Fig. No. 9:09	Part No.	Description	Qty	Remarks
1	027556	Mast Mounting Bracket — Left Hand	1	
2	027555	Mast Mounting Bracket — Right Hand	1	
3	030296	Bolt, M12 x 90 mm	2	S'eded by 026708
4	030467	Bolt, M12 x 70 mm	2	S'eded by 026708
5	09619	Washer Spring	4	
6	05695	Bolt — Special	2	
7	04534	Nut, " UNC	8	S'eded by 04532
8	04572	Washer Spring	8	
9	04503	Bolt, $\frac{5}{8}$ " UNC x $1\frac{3}{4}$ " long	6	
10	012387	Bolt, $\frac{1}{2}$ " UNC x $1\frac{3}{8}$ " long	4	
11	04624	Washer Spring	4	
12	04512	Bolt, $\frac{3}{4}$ " x $2\frac{1}{2}$ " long	8	S'eded by 06332
13	04576	Washer Spring	8	

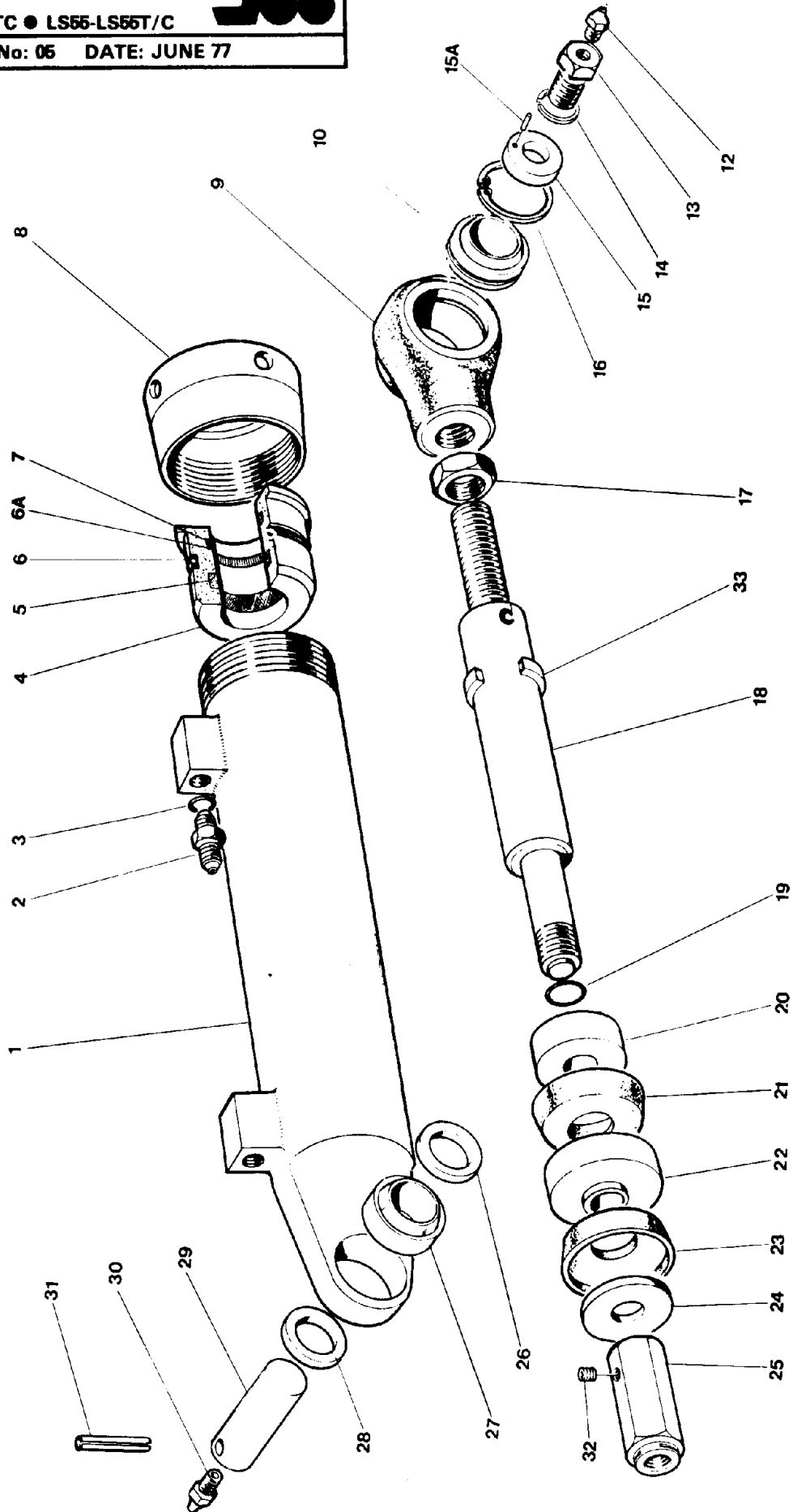


FIG. 9 : 10



ANCILLARY  
TILT CYLINDER — THREE STAGE MAST MARK III

Fig.No.9:10	Part No.	Description	Qty	Remarks
	028050	Tilt Cylinder Assembly	2	S' seded by 025235
		Consisting of the following:—		
1	023312	Tilt Cylinder	1	
2	010995	Adaptor	2	
3	010625	'O' Ring	2	
4	010485	Piston Guide	1	
5	03421	Seal	1	*
6	010557	'O' Ring	1	*
6A	034012	Back-up Ring	1*	
7	03420	Wiper Seal	1	*
8	03534	End Cap	1	
9	010516	Coupling	1	
10	010407	Spherical Bearing	1	
11				
12	04393	Grease Nipple	1	
13	011540	Screw — Special	1	
14	04589	Washer Spring, $\frac{3}{8}$ " dia.	1	
15	025595	Retaining Ring	1	
15A	019889	Dowel Pin	1	
16	011175	Circlip	1	S' seded by 038747
17	04543	Locknut, 1 1/4" UNF	1	
18	032272	Piston Rod	1	
19	04407	'O' Ring	1	*
20	03532	Rear Cup Support	1	
21	04216	Cup Seal	1	*
22	03533	Cup Spacer	1	
23	04216	Cup Seal	1	*
24	03531	Front Cup Support	1	
25	028112	Limit Nut	1	
26	023287	Collar	1	
27	010407	Spherical Bearing	1	
28	023287	Collar	1	
29	023280	Pivot Pin	1	
30	04393	Grease Nipple	1	
31	04587	Dowel Pin	1	
32	030475	Grub Screw	1	
33	05610	Limit Collar	1	
34	017191	Seal Kit	As Req'd.	*
	039315	Restrictor assembly	2	Not illustrated

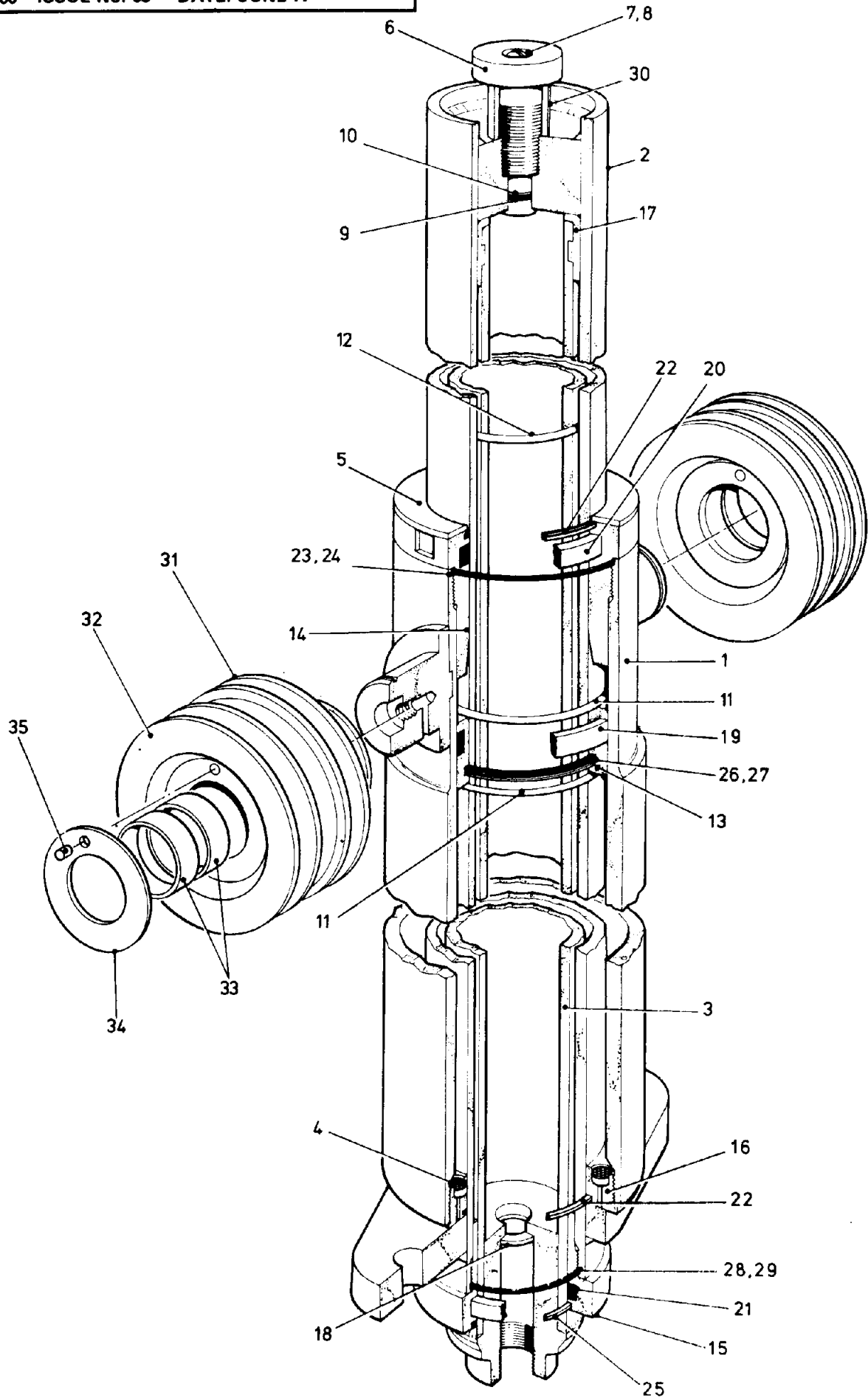
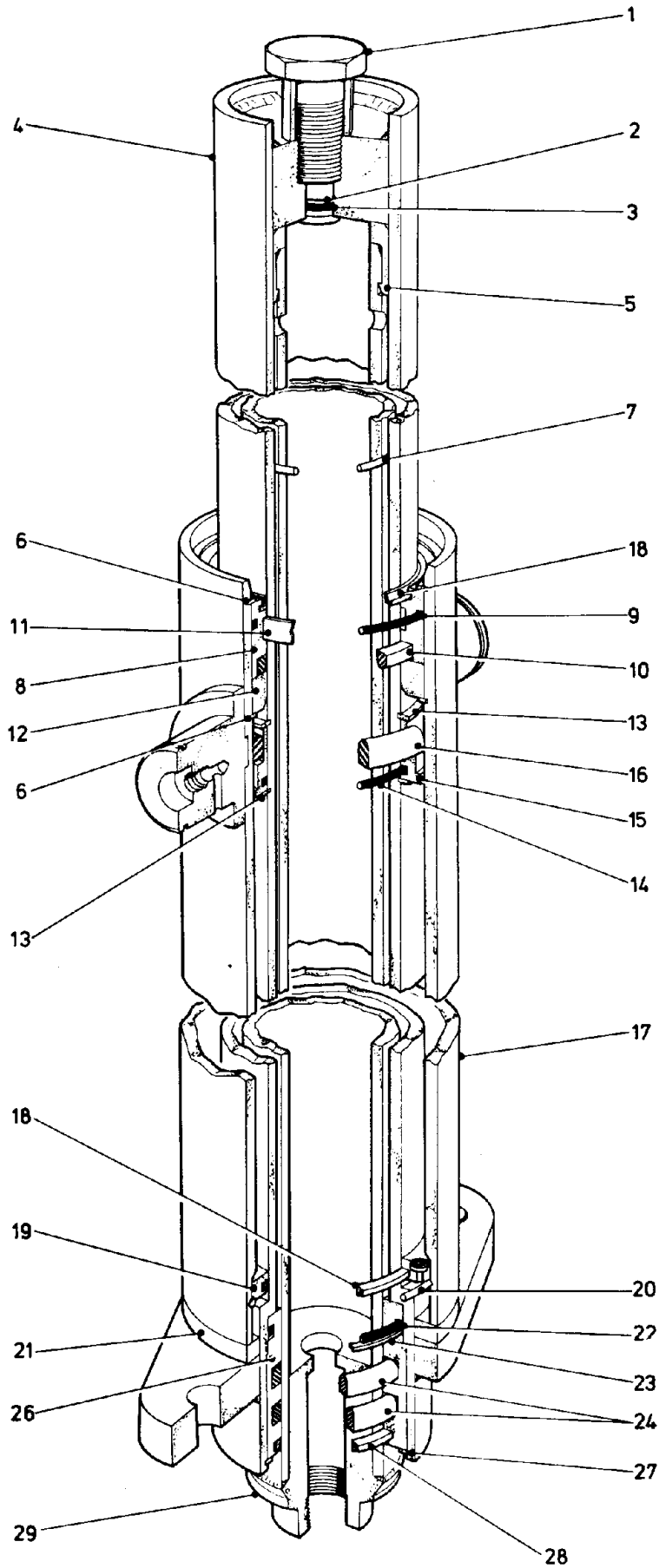


FIG. 9 : 11



**ANCILLARY  
LIFT CYLINDER – THREE STAGE MAST MARK III**

Fig. No.	9:11 Part No.	Description	Qty	Remarks
	028023	Lift Cylinder Assembly	1	Lift Height 4.38M
	028024	Lift Cylinder Assembly	1	Lift Height 5.29M
	028025	Lift Cylinder Assembly	1	Lift Height 6.21M
	028026	Lift Cylinder Assembly	1	Lift Height 7.58M
1	045203	Shell Assembly	1	Lift Height 4.38M
	045204	Shell Assembly	1	Lift Height 5.29M
	045205	Shell Assembly	1	Lift Height 6.21M
	045206	Shell Assembly	1	Lift Height 7.58M
2	045207	Interstage Assembly	1	Lift Height 4.38M
	045208	Interstage Assembly	1	Lift Height 5.29M
	045209	Interstage Assembly	1	Lift Height 6.21M
	045210	Interstage Assembly	1	Lift Height 7.58M
3	045211	Plunger Assembly	1	Lift Height 4.38M
	045212	Plunger Assembly	1	Lift Height 5.29M
	045213	Plunger Assembly	1	Lift Height 6.21M
	045214	Plunger Assembly	1	Lift Height 7.58M
4	041541	Filter	4	*
5	045219	Nylon Ring	1	
6	045220	Bleed Valve	1	
7	045221	Screw	1	
8	045222	Sealing Washer	1	
9	041527	'O' Ring	1	*
10	041528	Back-up Ring	1	*
11	045223	Retaining Ring	2	
12	045224	Retaining Ring	1	
13	045225	Piston	1	
14	045226	Retainer	1	
15	045227	Retainer	1	
16	045228	Retainer	1	
17	041529	Wear Ring	1	*
18	027264	Nylon Ring	1	Use Part No. 045229
19	041530	Seal	1	*
20	041531	Seal	1	*
21	041533	Seal	1	*
22	041532	Wiper	2	*
23	041534	'O' Ring	1	*
24	041535	Back-up Ring	1	*
25	041536	Wiper	1	*
26	041537	'O' Ring	1	*
27	041538	Back-up Ring	1	*
28	041539	'O' Ring	1	*
29	041540	Back-up Ring	1	*
30	045230	Spacer	1	
31	027322	Chain Pulley Assembly	2	
32	027205	Chain Pulley	1	
33	027325	Bearing	2	Part of Assembly 027322
34	027326	Thrust Washer	2	
35	027329	Retaining Pin	2	These items not supplied with Lift Cyl. Assembly
36	027263	Laser Spool	1	
37	027265	Adaptor	1	
38	027588	Washer	1	
39	041526	Service Kit	1	*

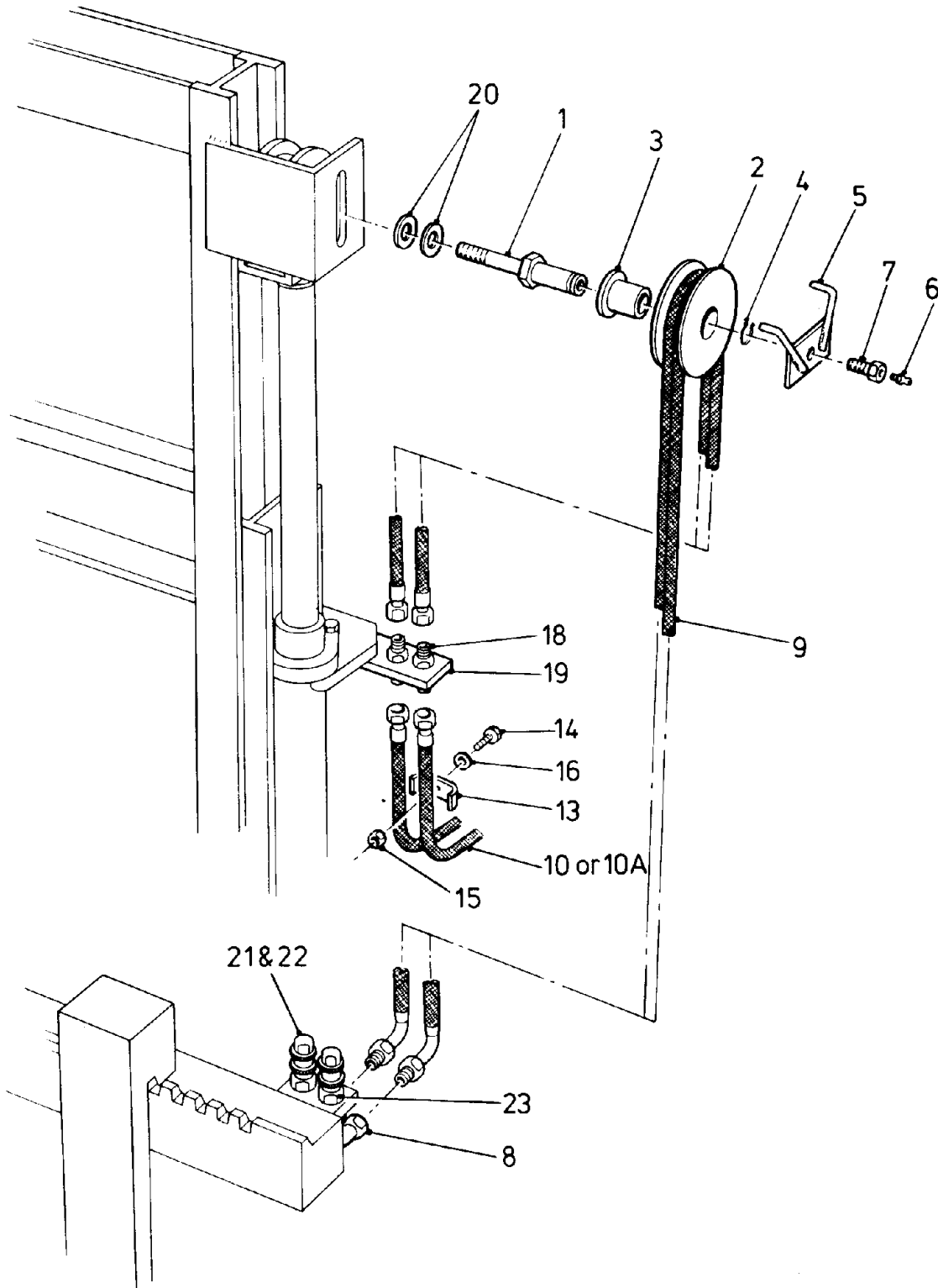


**FIG. 9 : 12**



**ANCILLARY  
LIFT CYLINDER – THREE STAGE MAST MARK III**

Fig.No.9:12	Part No.	Description	Qty	Remarks
	028019	Lift Cylinder Assembly	1	Lift Height 4.38M
	028020	Lift Cylinder Assembly	1	Lift Height 5.29M
	028021	Lift Cylinder Assembly	1	Lift Height 6.21M
	028022	Lift Cylinder Assembly	1	Lift Height 7.58M
1	045837	Retaining Screw	1	
2	045838	Back-up Ring	1	
3	045839	'O' Ring	1	
4	045840	2nd Stage Cylinder Sub-Assembly	1	Lift Height 4.38M
4A	045841	2nd Stage Cylinder Sub-Assembly	1	Lift Height 5.29M
4B	045842	2nd Stage Cylinder Sub-Assembly	1	Lift Height 6.21M
4C	045843	2nd Stage Cylinder Sub-Assembly	1	Lift Height 7.58M
5	045844	Bearing Cap	1	
6	045845	Circlip, 4 3/4" int.	2	
7	045846	Snap Ring	1	
8	045847	1st Stage Gland.	1	
9	045848	'O' Ring	1	
10	045849	Seal	1	
11	045850	Ring	1	
12	045851	Back-up Washer	1	
13	045852	Circlip, 3 1/2" ext.	2	
14	045853	'O' Ring	1	
15	045854	1st Stage Inner Gland	1	
16	045855	Seal	1	
17	045856	Outer Cylinder Sub-Assembly	1	Lift Height 4.38M
17A	045857	Outer Cylinder Sub-Assembly	1	Lift Height 5.29M
17B	045858	Outer Cylinder Sub-Assembly	1	Lift Height 6.21M
17C	045859	Outer Cylinder Sub-Assembly	1	Lift Height 7.58M
18	045860	Scraper	2	
19	045861	Breather Ring	1	
20	045862	Snap Ring, 4 7/8"	1	
21	045863	Cushion Plate	1	
22	045864	'O' Ring	1	
23	045865	Back-up Ring	1	
24	045866	Seal	2	
25				
26	045867	Inner Rod Gland	1	
27	045868	Circlip, 3 3/4" int.	1	
28	045869	Wiper	1	
29	045870	Outer Cylinder Sub-Assembly	1	Lift Height 4.38M
29A	045871	Outer Cylinder Sub-Assembly	1	Lift Height 5.29M
29B	045872	Outer Cylinder Sub-Assembly	1	Lift Height 6.21M
29C	045873	Outer Cylinder Sub-Assembly	1	Lift Height 7.58M
30	027263	Laser Spool	1	These not supplied With Lift Cyl. Assy.
31	027265	Adaptor	1	
32	027588	Washer	1	
33	027264	Nylon Ring	1	
34	027322	Chain Pulley Assembly	2	This Assy. as 9:13
35	027205	Chain Pulley	1	
36	027325	Bearing	2	Part of Assy. 027322
37	027326	Thrust Washer	2	
38	027329	Retaining Pin	2	
39	045874	Seal Kit	As Req'd.	



**FIG. 9:13**



## ANCILLARY

## 4th and 5th SERVICE (WIDE VIEW MAST)

Fig.No.9:13	Part No.	Description	Qty	Remarks
1	029920	Spindle	2	
2	029949	Pulley	2	
3	029951	Bush	2	
4	029950	Circlip	2	
5	049178	Keep plate	2	
6	04393	Grease nipple	2	
7	03893	Bolt	2	
8	025183	Adaptor	4	
9	029925	Hose. Carriage to Mast	4	Lift ht.9'.0"
9A	029926	Hose. Carriage to Mast	4	Lift ht.10'.0"
9B	029927	Hose. Carriage to Mast	4	Lift ht.11'.0"
9C	029928	Hose. Carriage to Mast	4	Lift ht.12'.0"
9D	029929	Hose. Carriage to Mast	4	Lift ht.13'.0"
9E	029930	Hose. Carriage to Mast	4	Lift ht.14'.0"
9F	029931	Hose. Carriage to Mast	4	Lift ht.15'.0"
9G	029932	Hose. Carriage to Mast	4	Lift ht.16'.0"
9H	029933	Hose. Carriage to Mast	4	Lift ht.17'.0"
9J	029934	Hose. Carriage to Mast	4	Lift ht.18'.0"
9K	029935	Hose. Carriage to Mast	4	Lift ht.19'.0"
9L	029936	Hose. Carriage to Mast	4	Lift ht.20'.0"
10	07338	Hose valve to mast	2	Right hand
10	011923	Hose valve to mast	2	Left hand
11	029939	Hose clip	4	
12	05115	Bolt	4	
13	029952	Hose clamp	2	
14	032345	Bolt	2	
15	019663	Nut	2	
16	04555	Washer	2	
17	04567	Washer	2	
18	025198	Adaptor	4	
19	029938	Anchor plate	2	
20	027874	Nylon washer	4	
21	09701	Quick release coupling	4	Female
22	09703	Quick release coupling	4	Male
23	06352	Adaptor	4	