

Repair Instructions for

novopress

SLB 120

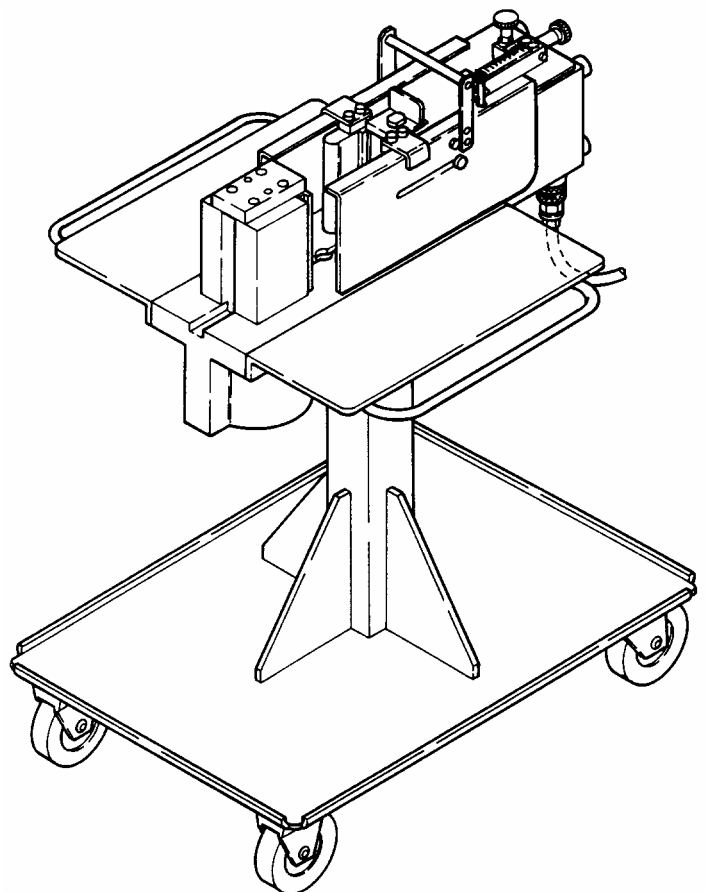
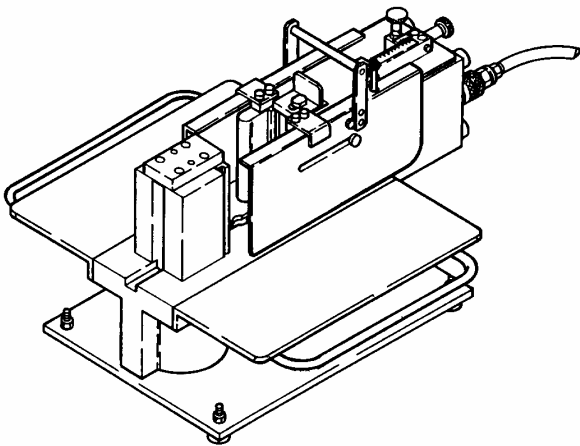


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GENERAL SAFETY REGULATIONS

Read all safety regulations and instructions!

1. Keep the place of work clean.
Disorderly work-places and work-benches invite accidents.
Ensure that lighting is good.
2. Keep children away.
Do not allow unauthorised persons to touch the device or the cable.
Keep unauthorised persons away from your place of work.
3. Wear suitable working clothing.
Do not wear any wide clothes nor jewellery - they may get caught up in moving parts.
When working in the open it is recommended that you wear rubber gloves and non-slip footwear. Wear a hair- net if you have long hair.
4. Always be alert.
Only use a device after having been instructed in its operation.
Concentrate on your work. Proceed sensibly.
Do not use the device when you are distracted.
5. Do not lean too far forward. Avoid abnormal stance.
Make sure that you have a secure standing position, and maintain balance at all times.
6. Leave safety devices where they belong.
7. Hand tools may not be installed as fixtures.
8. Repair and maintenance.
Have repairs and maintenance work carried out in an authorised NOVOPRESS specialist workshop.
Only use original and identical NOVOPRESS spare parts.
We reject all responsibility and liability for work carried out by third- party personnel.

SAFETY INSTRUCTIONS FOR HYDRAULIC EQUIPMENT

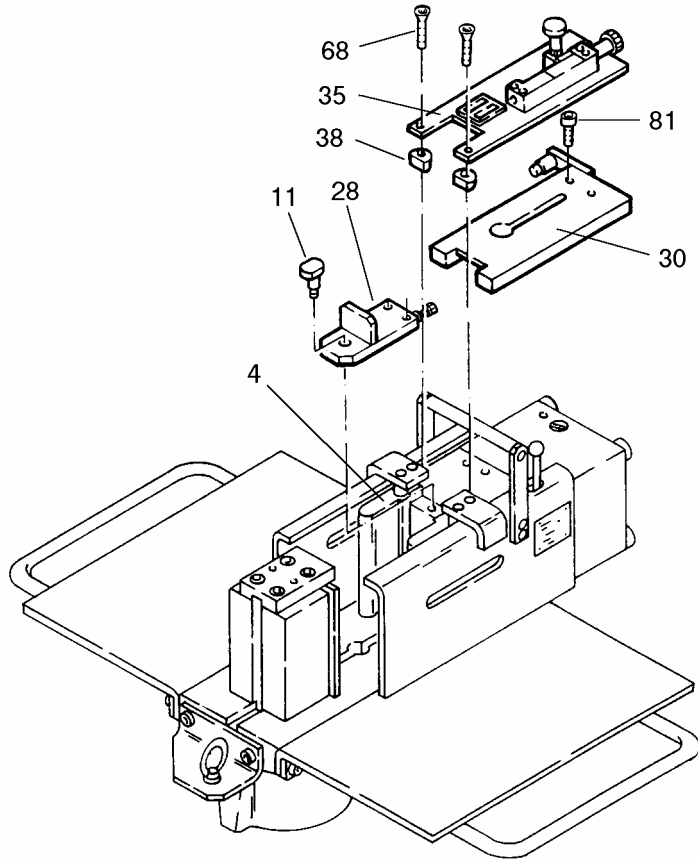
1. Please read the operating instructions.
Acquaint yourself with the hydraulic equipment.
2. Provide the equipment with the necessary care.
Always keep the equipment in operational condition.
Cleanness is an essential requirement for good and safe working.
3. Switch off the electric power supply to the hydraulic equipment,
 - when the equipment is not in use
 - when maintenance work is to be carried out.
4. Avoid unintentional switching - on.
Keep hands and feet away from the switch when the equipment is not being used.
5. Do not use the equipment in a manner in contravention of the instructions.
Never carry the equipment by the pipe or pull on the pipe.
Protect the piping from heat, oil, sharp edges and high levels of weight strain.
6. Use only piping, fittings and accessories which have been designed for the operating pressure of the hydraulic unit.
BURSTING PRESSURE OR TEST PRESSURE IS NOT OPERATING PRESSURE!
Avoid squashing or bending of the piping.
Piping must not be painted over.
7. Replace the hydraulic piping
 - when cracks, squashed or bent points are to be seen
 - when blistering is established
 - when hydraulic fluid escapes
 - when pipe fittings are damaged
 - when discolouration is established on the outer layer, e.g. due to the influence of solvents.
8. The hydraulic fluid used in the system is kerosene-based.
This requires particular care and attention.
 - Avoid continuous contact with the skin
 - ensure that the hydraulic fluid does not get into the eyes or mouth.Hydraulic pipes have to be replaced after 5 years of usage, despite of the circumstance that no damages should be remarkable.
9. The equipment must not be operated, if it has leaks and there is a danger of hydraulic fluid coming into contact with persons, open fire, heating equipment, electric cabling, ground water, foods and other substances which are intended for human consumption.
10. Hydraulic units with petrol engines
 - must not be operated in closed rooms, due to the **DANGER OF INTOXICATION!**
 - do not pour in petrol while the motor is running or in the vicinity of open fire. **DANGER OF EXPLOSION!**

WARNING!

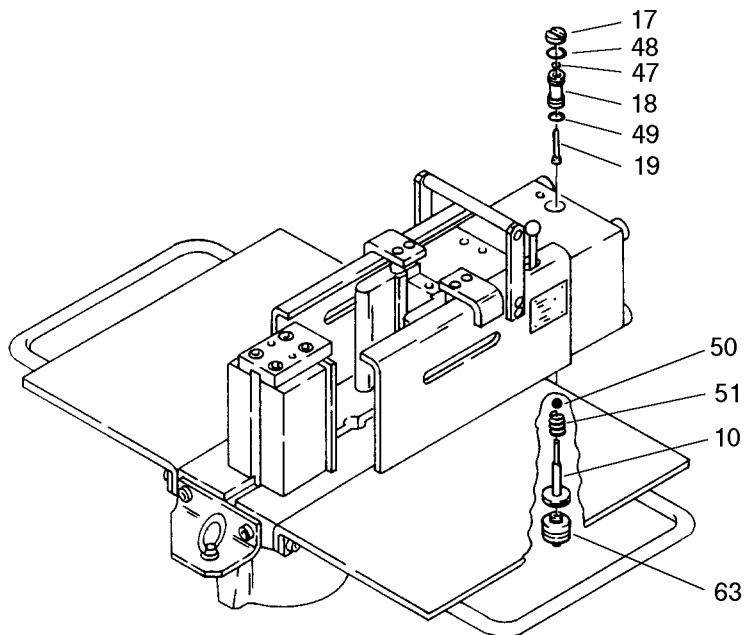
Before starting maintenance or repair work, uncouple the hydraulic unit.

DISMANTLING**1. Stroke adjuster and pusher**

- 1.1 Undo screws (68) (4mm hex. spanner).
- 1.2 Remove plate (35) complete with stroke adjuster.
- 1.3 Remove spacers (38).
- 1.4 Undo screws (81) (5 mm hex. spanner).
- 1.5 Remove pusher plate (30) complete.
- 1.6 Undo screw (11).
- 1.7 Remove pusher (28) complete.

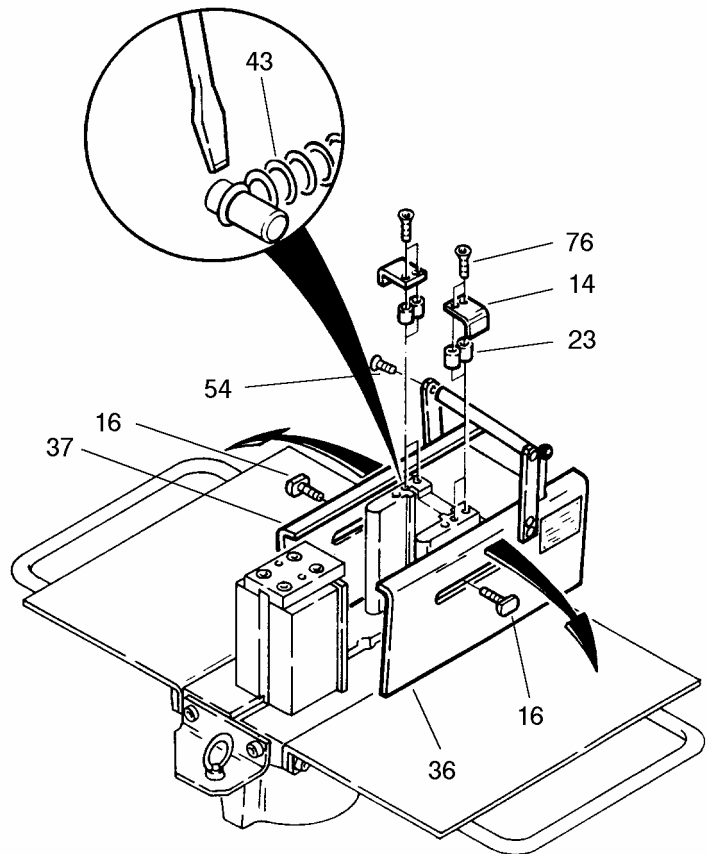
**2. Shut-off valve**

- 2.1. Undo screw (63) (8 mm hex. spanner).
- 2.2. Unscrew push-rod (10) (long-nosed pliers).
- 2.3. Remove ball (50) and spring (51).
- 2.4. Push parts 17,18,19,47,48 and 49 upwards and out (4mm Ø wire).



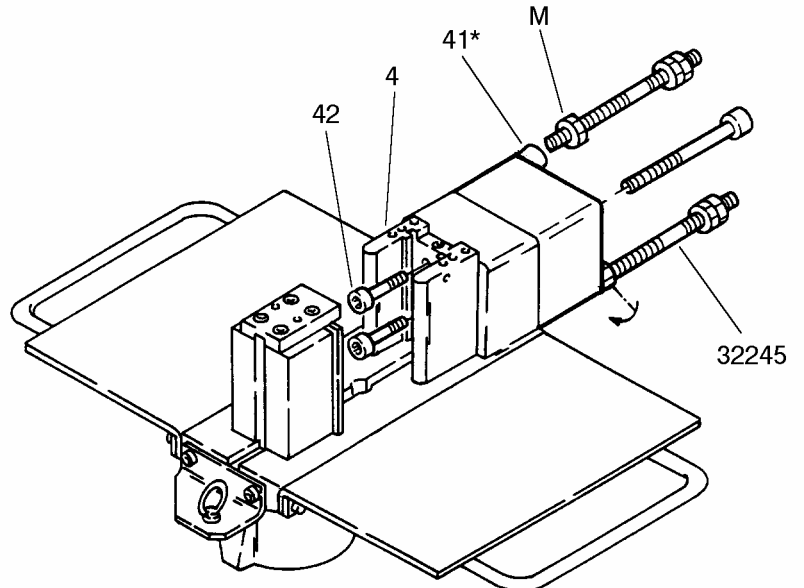
3. Guard

- 3.1. Undo screws (16).
- 3.2. Undo screws (76).
- 3.3. Remove cleats (14).
- 3.4. Remove spacers (23).
- 3.5. Remove one screw (54).
- 3.6. Tilt side sections (36) and (37) outwards as far as necessary and unhook springs (43).
- 3.7. Remove side sections (36) and (37).



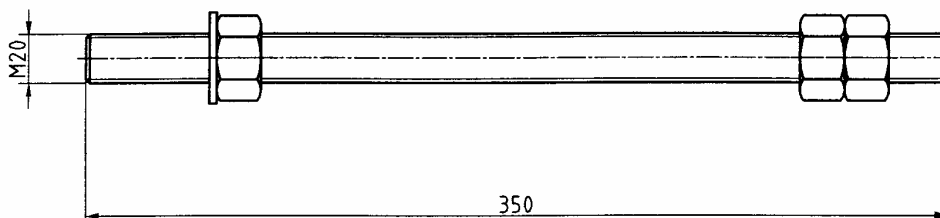
4. Cylinder

- 4.1. Undo screws (42) and remove former (4).
- 4.2. Undo screws (41*) diagonally.
- 4.3. Screw in and tighten the assembly bolts (Drg.No. 32245) in place of the screws (41*) as shown.
- 4.4. Turn the loose nut (M) by hand up to the cylinder.
- 4.5. Remove the remaining 2 screws (41).

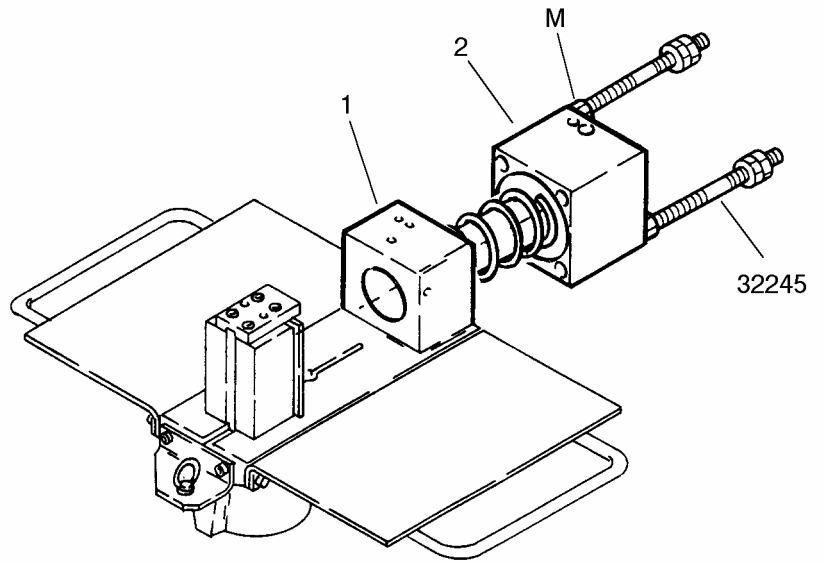


Drg.No. 32245

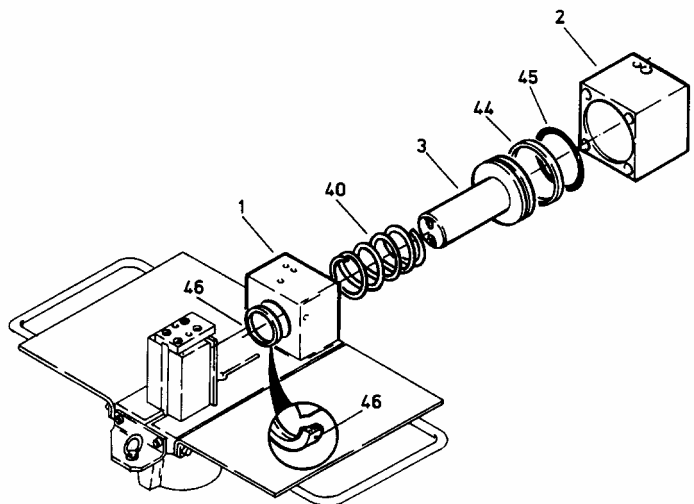
Lock nuts



- 4.6. Unscrew the loose nuts (M) on the assembly bolts alternately, a little at a time, until the return spring is no longer under tension.
- 4.7. Unscrew and remove the assembly bolts (32245).



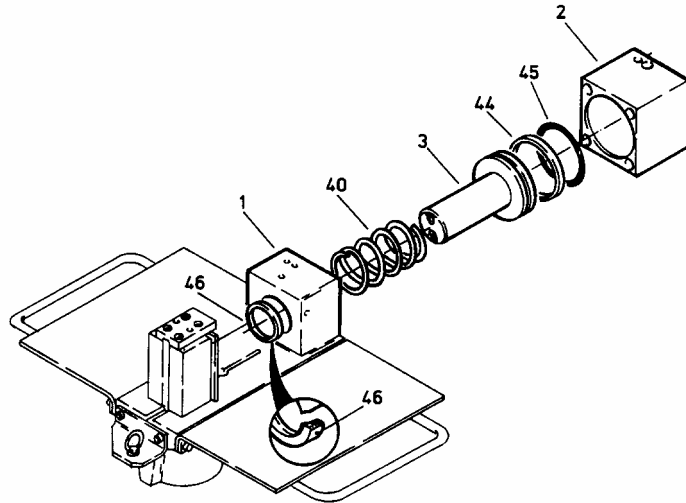
- 4.8. Remove cylinder (2), piston (3) and return spring (40).
- 4.9. Replace any worn parts, O-ring (45), thrust ring (44) and stripper (46), if necessary.



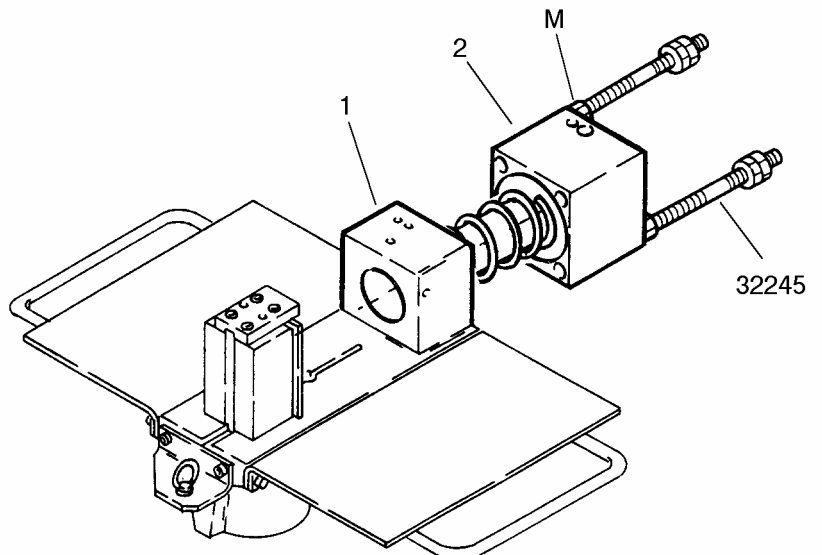
ASSEMBLY

1. Cylinder

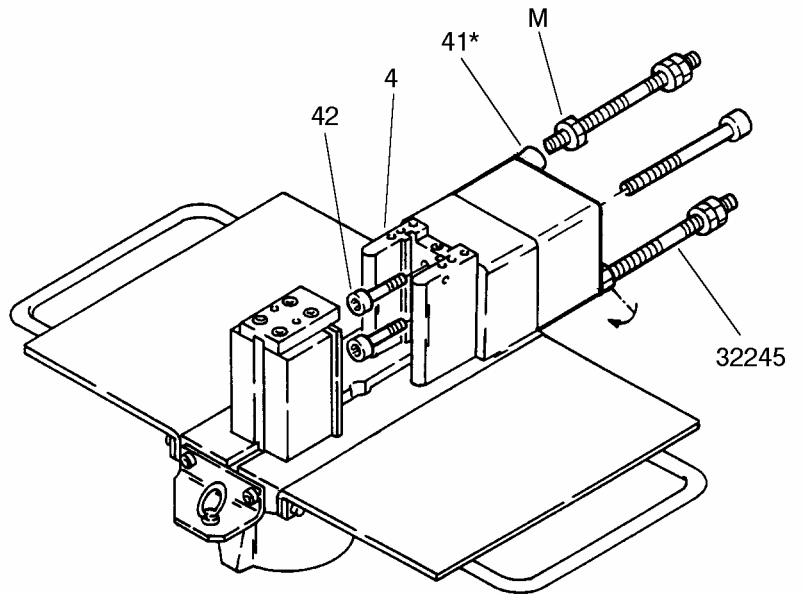
- 1.1. Fit the thrust ring (44) and O-ring (45) on to the piston (3).
- 1.2. Insert piston (3) into cylinder (2).
- 1.3. Push the return spring (40) on to the piston rod.
- 1.4. Insert stripper (46) into the table (1).



- 1.5. Fit cylinder (2) with built-in parts into the table (1).
- 1.6. Insert and tighten assembly bolts (32245) diagonally, through cylinder (2) into table (1).
- 1.7. Draw cylinder (2) up to table (1) by tightening the loose nuts (M) a little at a time (1/4 turns).

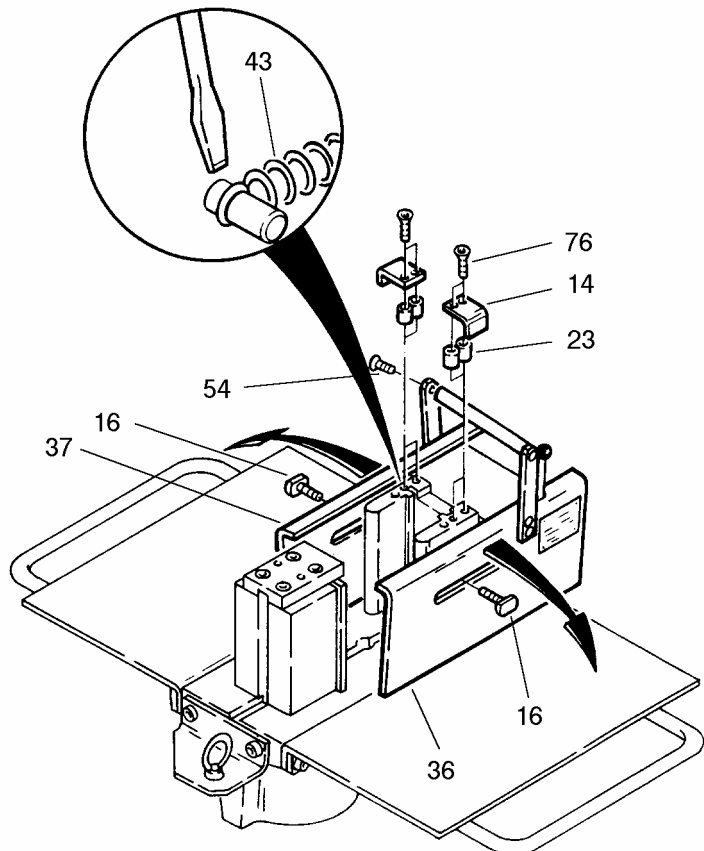


- 1.8. Fit and tighten 2 screws (41).
- 1.9. Unscrew assembly bolts (32245).
- 1.10. Fit and tighten 2 remaining screws (41).
- 1.11. Make one trial stroke to check the action.
- 1.12. Tighten screws (42) without former (4) into the piston (3).
- 1.13. The screws (42) must be aligned with the table vertically (check with a set square).
- 1.14. Undo screws (42), offer up former (4) and secure it with the screws (42) to the piston (3).



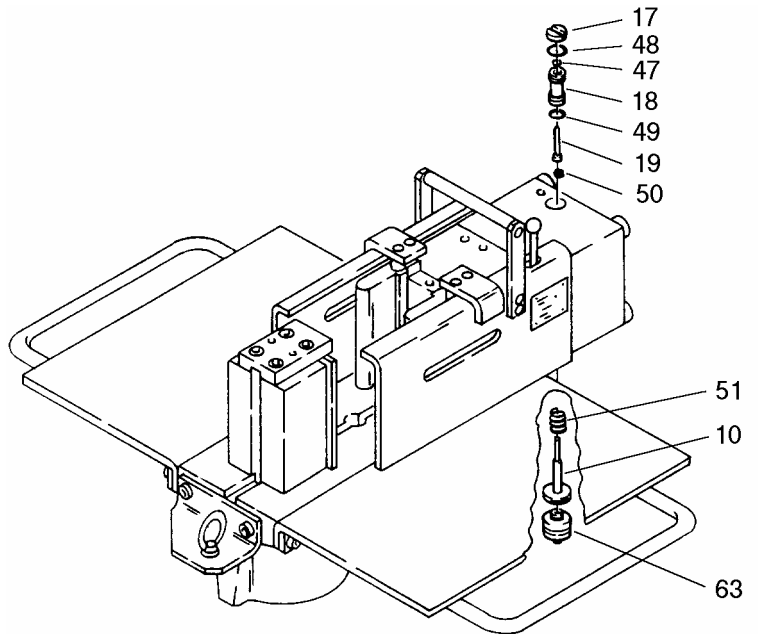
2. Guard

- 2.1. Fit side sections (36 and 37) to the cylinder.
- 2.2. Tilt side sections outwards as far as necessary and hook springs (43).
- 2.3. Tighten screw (54).
- 2.4. Tighten screws (16).
- 2.5. Fit spacers (23). Attach cleats (14) with the screws (76).



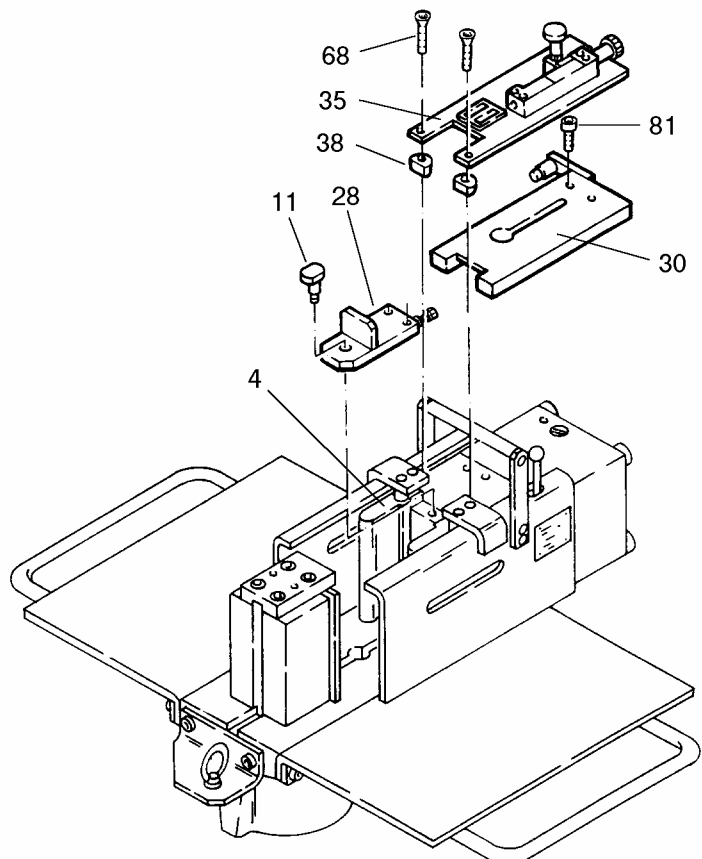
3. Shut-off valve

- 3.1. Push the spring (51) on to the push rod (10).
- 3.2. Insert push rod complete with spring into the cylinder (2) from below, and tighten it up to the stop with long-nosed pliers.
- 3.3. Tighten screw (63) (8mm hex. spanner).
- 3.4. Fit parts 50, 19, 49, 18, 47, 48 and 17 into the cylinder from above, as shown.



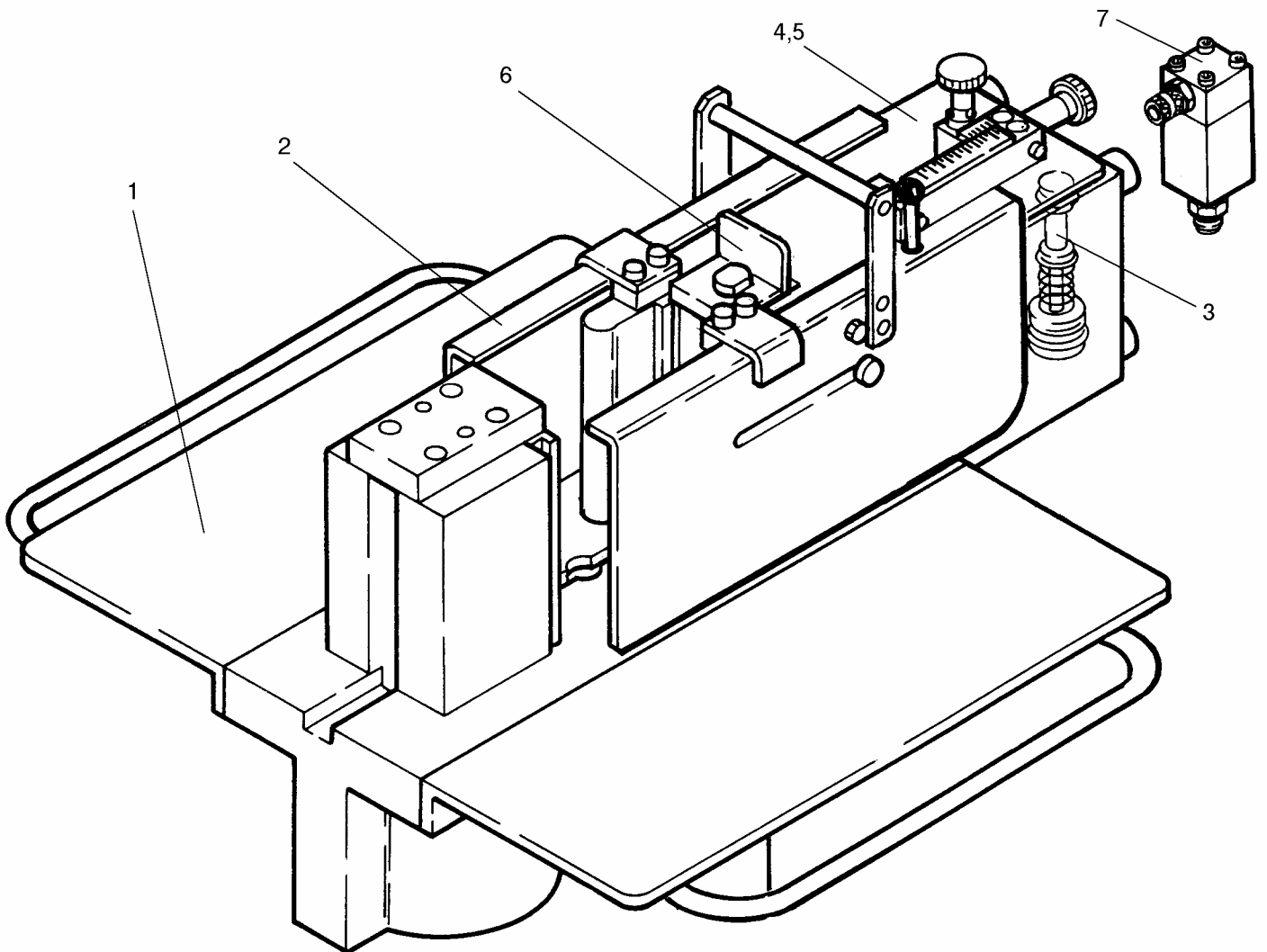
4. Stroke Adjuster and Pusher

- 4.1. Fit the complete pusher (28) on to the former (4) and secure it with screw (11).
- 4.2. Fit pusher plate complete (30) on to the cylinder and secure it with screws (81).
- 4.3. Fit spacers (38).
- 4.4. Fit plate (35) complete with stroke adjuster.
- 4.5. Make sure that the flat sides of the spacers (38) line up with the outer edges of the plate (35).
- 4.6. Secure the plate (35) with the screws (68).



31870 Tool Plate

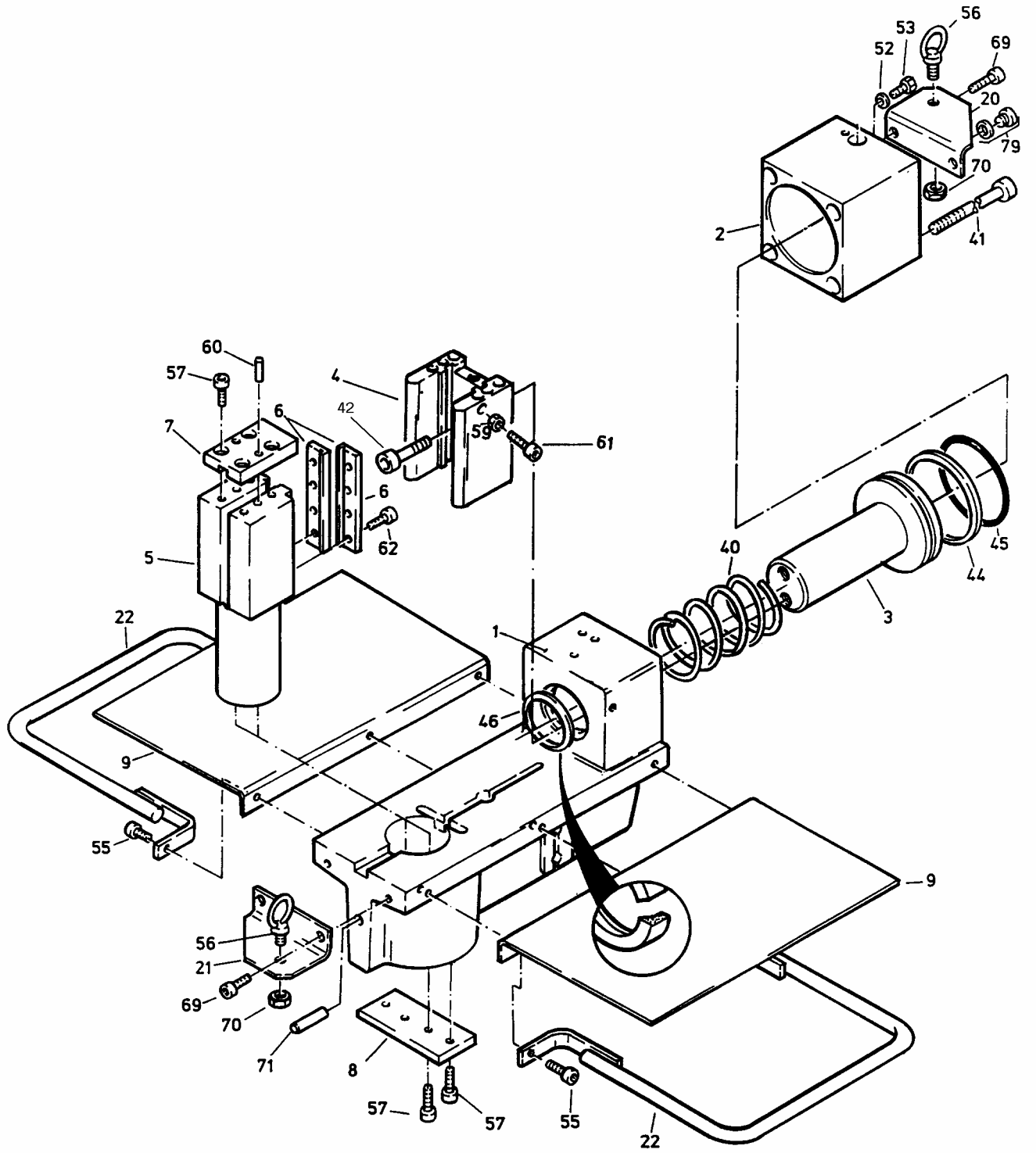
Item	Description	Order No.	Qty.
1	Platen with cylinder	32620	1
2	Guard complete	31570	1
3	Shut-off valve	32352	1
4	Plate with stroke adjuster	32351	1
5	Pusher plate complete	32052	1
6	Pusher complete	32053	1
7	Return valve	32610	1



32620 Platen with Cylinder

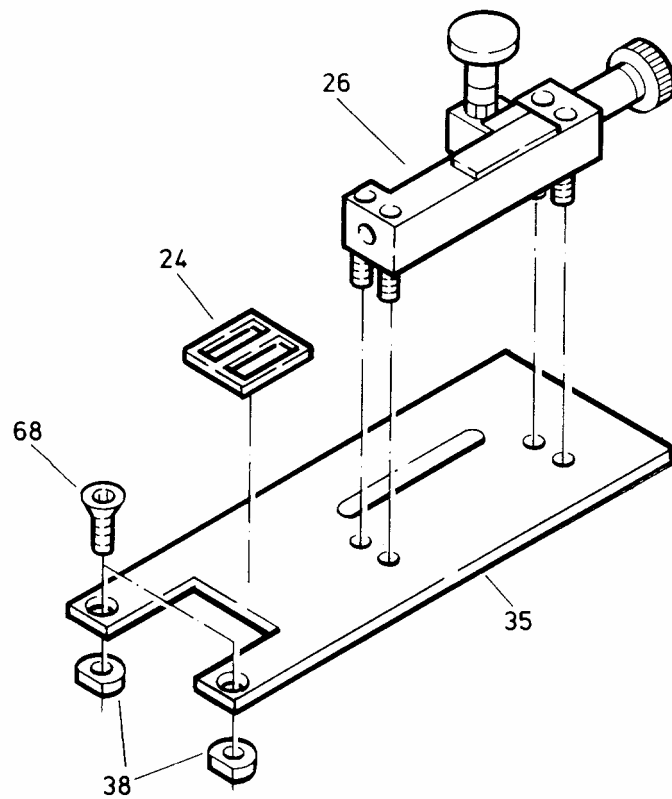
Item	Description	Order No.	Qty.
1	Table	30769	1
2	Cylinder	31028	1
3	Piston	31029	1
4	Former	31031	1
5	Tool holder	31032	1
6	Cutting bar	31033	2
7	Pressure plate	31034	1
8	Torsion stop	31035	1
9	Support plate	31036	2
20	Cleat	31463	1
21	Cleat, left	31464	1
22	Carrying handle	31334	2
40	Compression spring	30378	1
41	Cheesehead screw M20x160	12131	4
42	Cheesehead screw M16x30	13982	2
44	Thrust ring	13979	1
45	O-ring	13980	1
46	Stripper	13229	1
52	Usit ring	11369	1
53	Hexagon head screw M6x12	12599	1
55	Cheesehead screw M8x16	11313	4
56	Ring screw M12	13944	2
57	Cheesehead screw M10x25	11248	8
59	Hexagon nut M6	11383	4
60	Pin	12751	2
61	Cheesehead screw M6x25	11082	4
62	Cheesehead screw M6x12	11259	8
69	Cheesehead screw M10x20	11281	4
70	Hexagon nut M12	11256	2
71	Pin	14223	1
79	Cap screw with seal	14154	1

32620 Platen with Cylinder



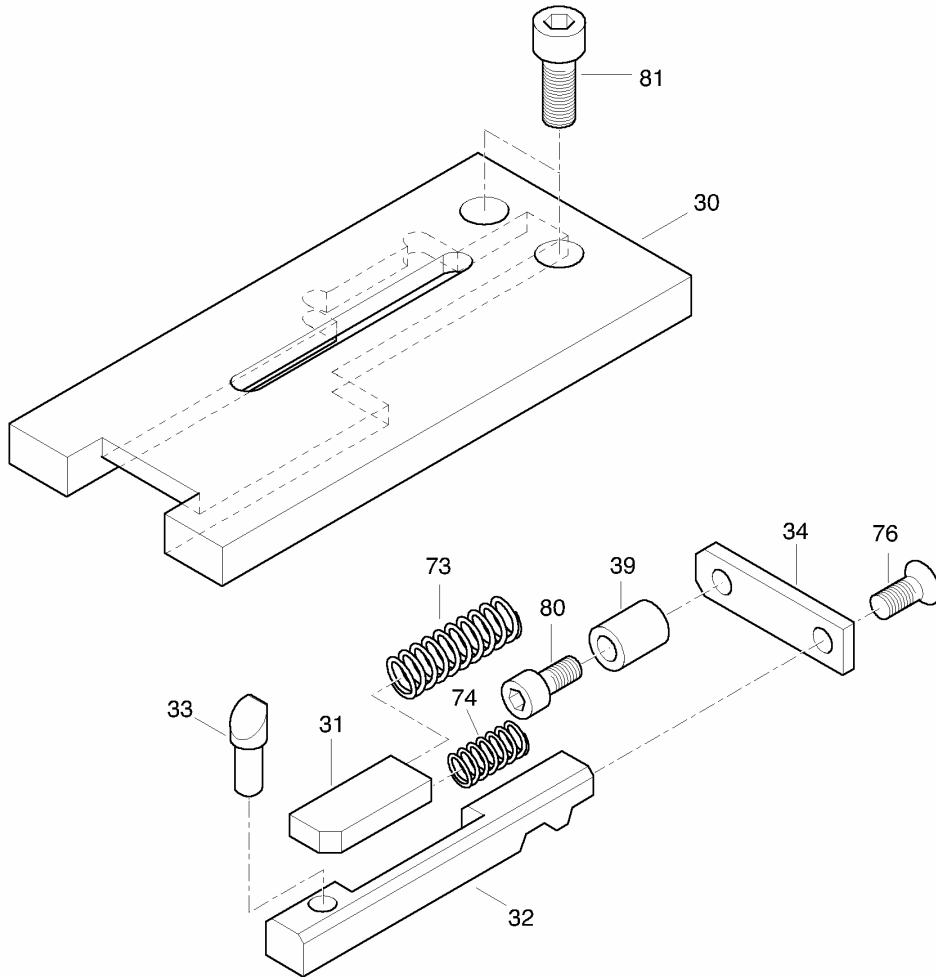
32351 Plate with Stroke Adjuster

Item	Description	Order No.	Qty.
24	Size plate	31272	1
26	Stroke adjuster	31445	1
35	Guard plate	31471	1
38	Spacer	31483	2
68	Countersunk screw M6x20	12609	2



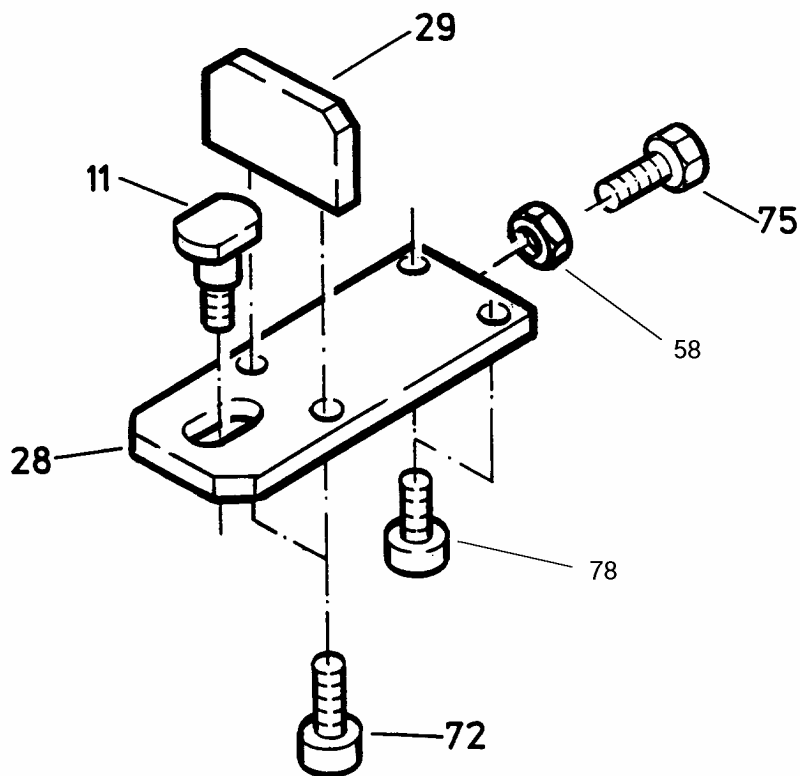
32052 Pusher Plate complete

Item	Description	Order No.	Qty.
30	Pusher plate	31461	1
31	Pusher	31466	1
32	Control bar	31467	1
33	Bolt	31468	1
34	Plate	31469	1
39	Spacer	31867	1
73	Compression spring	14250	1
74	Compression spring	14251	1
76	Countersunk screw M6x16	11904	1
80	Cheesehead screw M6x20	11009	1
81	Cheesehead screw M6x25	11082	2



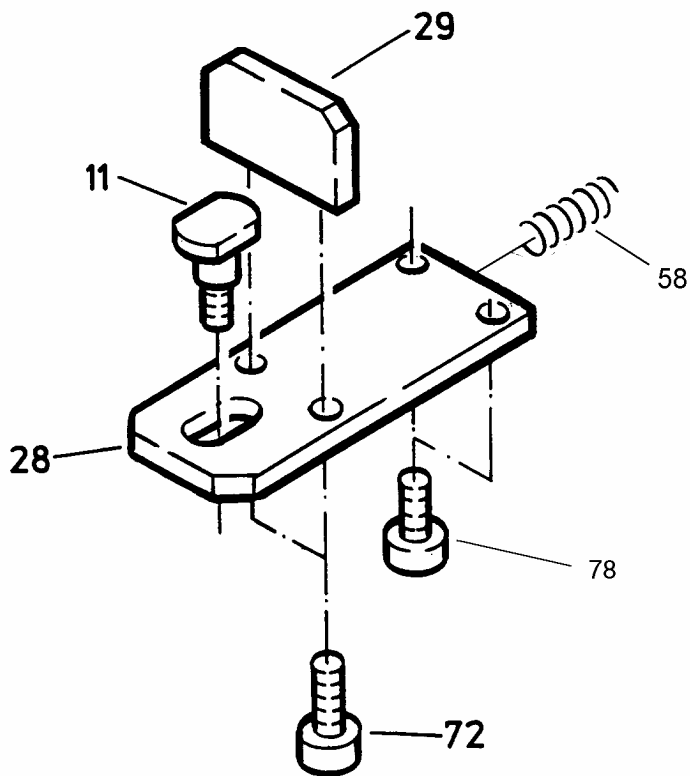
32053 Pusher complete up to unit number: 167

Item	Description	Order No.	Qty.
11	Spacer screw	31044	1
28	Pusher	31455	1
29	Holder	31968	1
58	Hexagon nut M5	11065	1
72	Cheesehead screw M5x14	12234	2
75	Hexagon head screw M5x20	13571	1
78	Cheesehead screw M3x6	11572	2



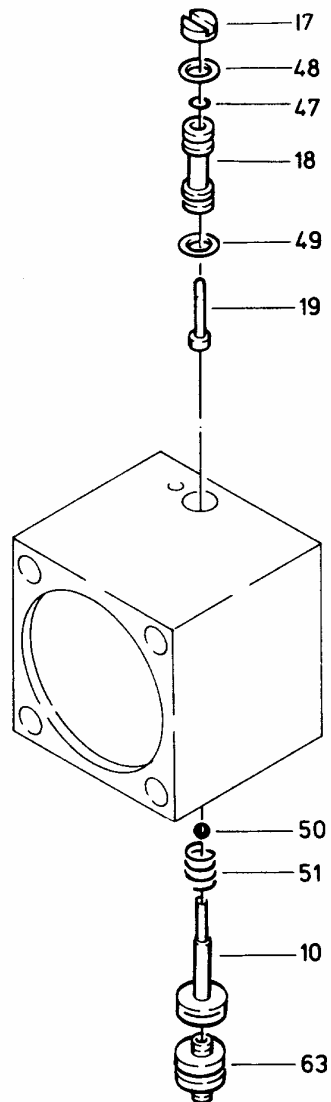
32053 Pusher complete from unit number: 168

Item	Description	Order No.	Qty.
11	Spacer screw	31044	1
28	Pusher	31455	1
29	Holder	31968	1
58	Compression spring	14250	1
72	Cheesehead screw M5x14	12234	2
78	Cheesehead screw M3x6	11572	2



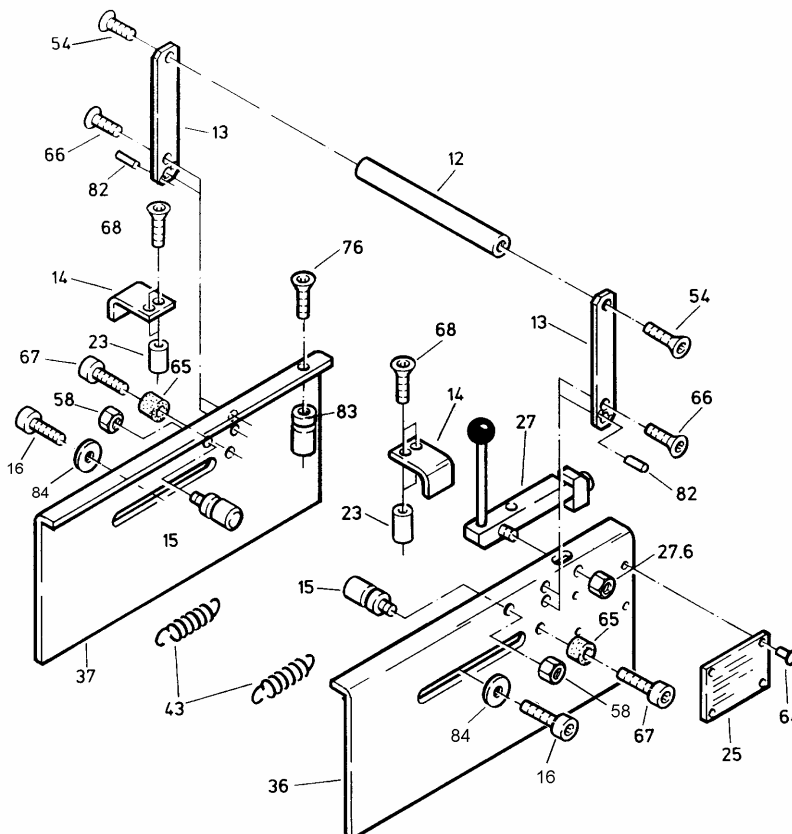
32352 Shut-Off Valve

Item	Description	Order No.	Qty.
10	Valve screw	31037	1
17	Cover disk	8787	1
18	Valve body	8774	1
19	Valve push rod	8775	1
47	O-ring	13240	1
48	O-ring	13241	1
49	O-ring	13286	1
50	Ball	11552	1
51	Compression spring	1300	1
63	Plug coupling	3718	1



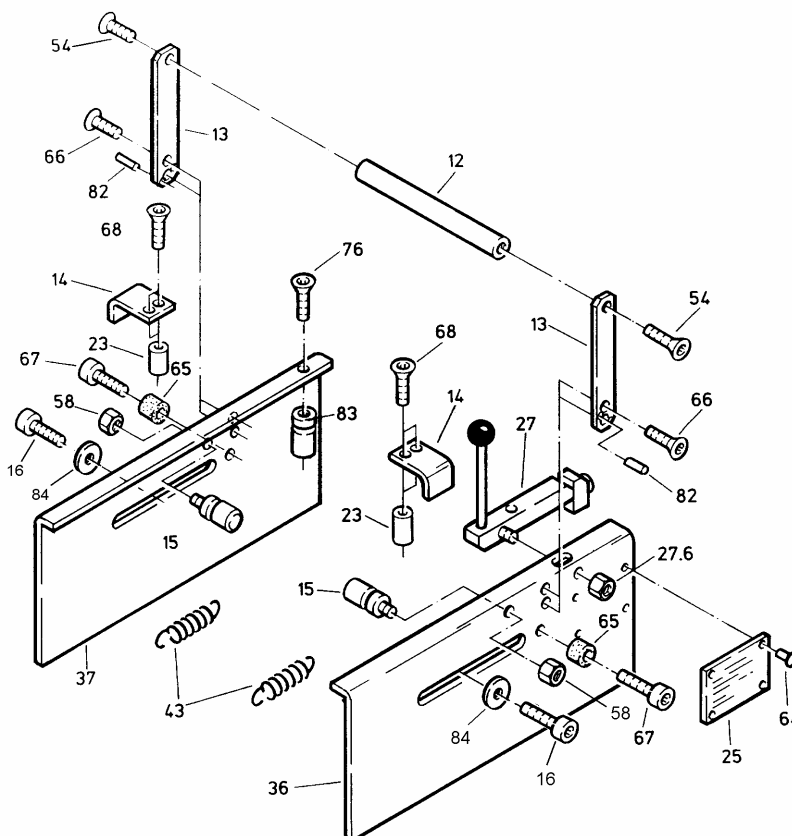
31570 Guard up to unit number: 151

Item	Description	Order No.	Qty.
12	Handle	31047	1
13	Plate	31866	2
14	Cleat	31051	2
15	Threaded bolt	30736	2
16	Cheesehead screw M6 x 25	11082	2
23	Spacer	31116	4
25	Machine label	6547	1
27	Lever	31450	1
36	End plate, right	31481	1
37	End plate, left	31482	1
43	Tension spring	13981	2
54	Countersunk screw M5x10	11197	2
58	Hexagon nut M5	11065	2
64	Notched stud	12189	4
65	Rubber buffer	14094	2
66	Countersunk screw M5x8	12608	4
67	Cheesehead screw M5x8	12185	2
68	Countersunk screw M6x20	12609	4
76	Countersunk screw M6x16	11673	1
82	Tension sleeve	12174	4
83	Spacer	7558	1
84	Disk A 6,4	11273	2



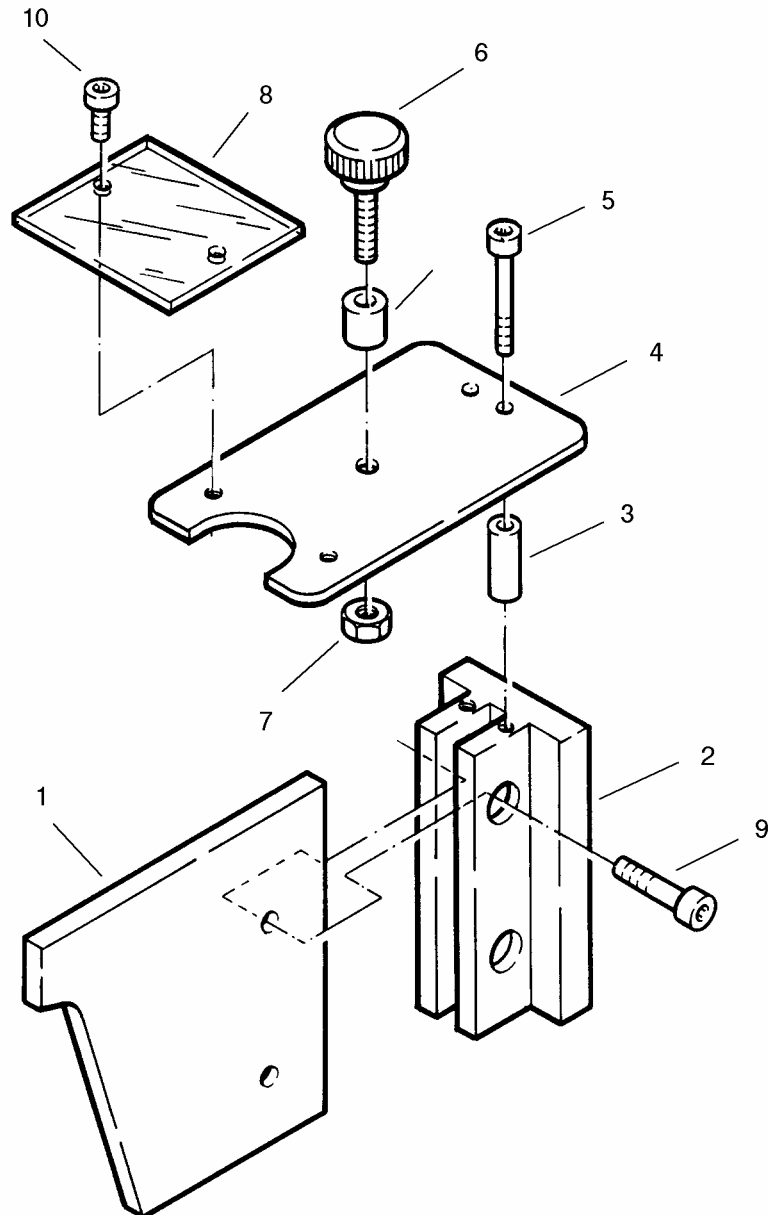
31570 Guard from unit number: 152

Item	Description	Order No.	Qty.
12	Handle	31047	1
13	Plate	31866	2
14	Cleat	31051	2
15	Threaded bolt	30736	2
16	Cheesehead screw M8 x 40 adjusted	11280	2
23	Spacer	31116	4
25	Machine label	6547	1
27	Lever	31450	1
36	End plate, right	31481	1
37	End plate, left	31482	1
43	Tension spring	13981	2
54	Countersunk screw M5x10	11197	2
58	Hexagon nut M5	11065	2
64	Notched stud	12189	4
65	Rubber buffer	14094	2
66	Countersunk screw M5x8	12608	4
67	Cheesehead screw M5x8	12185	2
68	Countersunk screw M6x20	12609	4
76	Countersunk screw M6x16	11673	1
82	Tension sleeve	12174	4
83	Spacer	7558	1
84	Disk A 8,4	11174	2

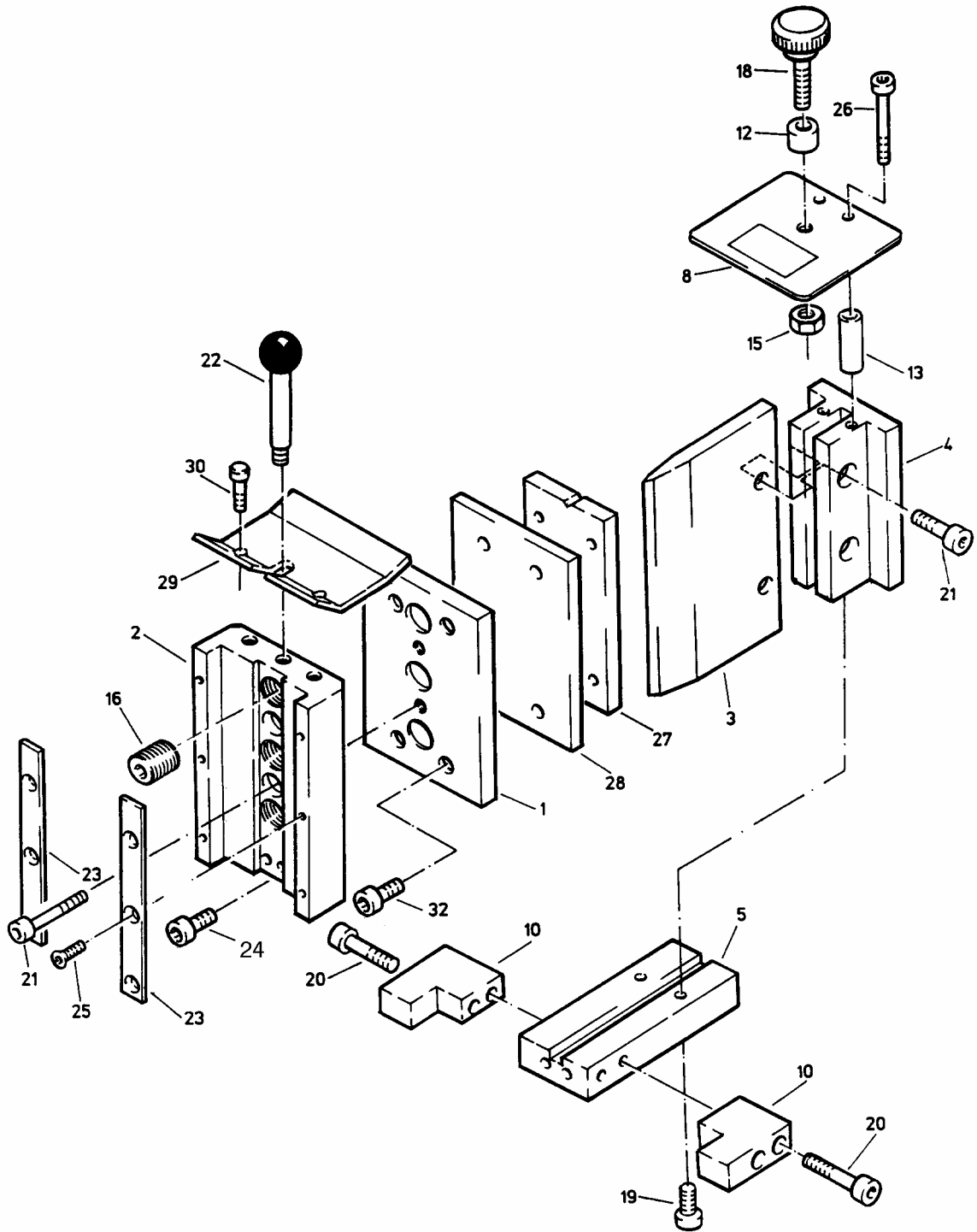


31242 Cutting Tool

Item	Description	Order No.	Qty.
1	Blade	31039	1
2	Blade holder	31041	1
3	Spacer	31307	2
4	Guard plate	31049	1
5	Cheesehead screw M5x50	12143	2
6	Knurled screw M8x25	14138	1
7	Hexagon nut M8	11367	1
8	Guard panel	31323	1
9	Cheesehead screw M8x20	11094	2
10	Cheesehead screw M5x10	12350	2
11	Spacer	31593	1



31681 Disk Cutting Set



31681 Disk Cutting Set

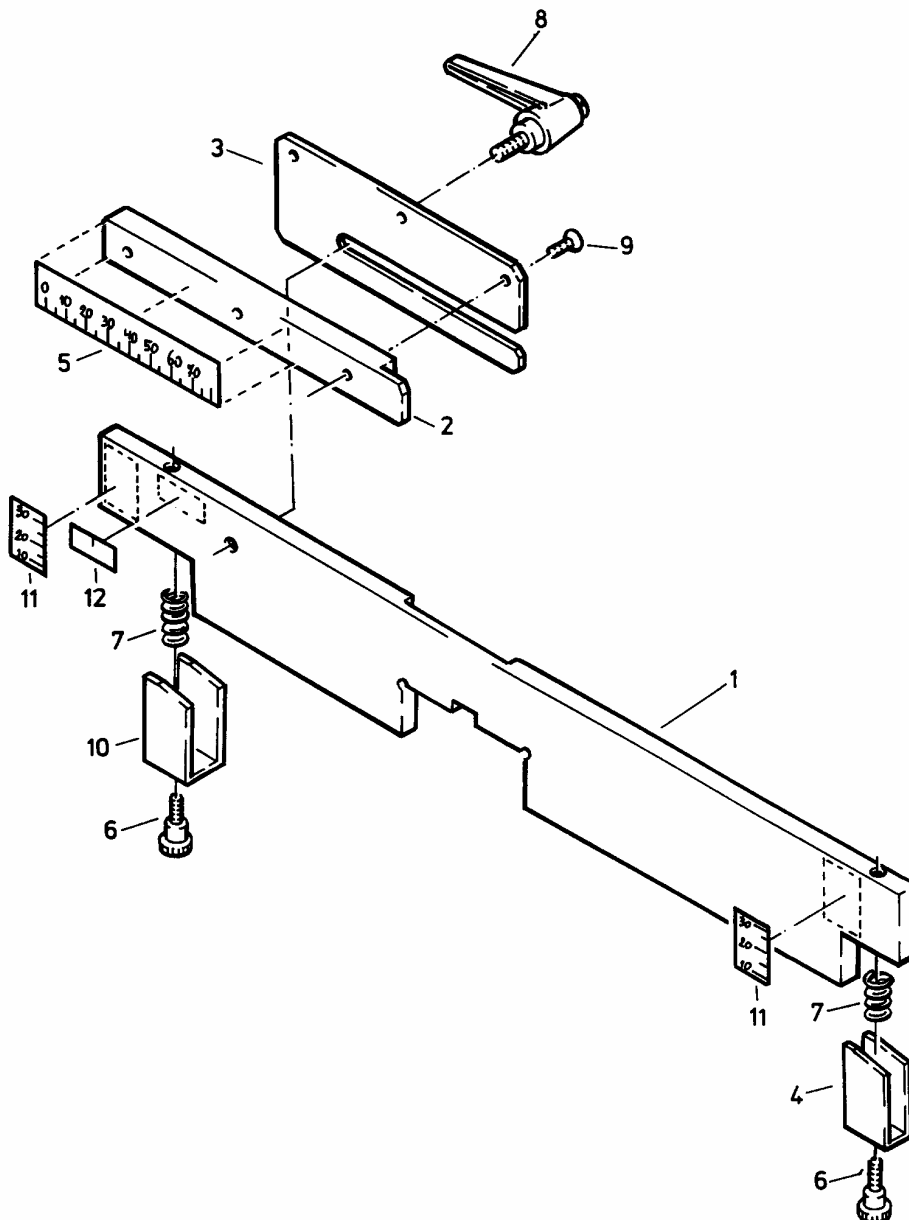
Item	Description	Order No.	Qty.
1	Former	32153	1
2	Guide	31736	1
3	Blade	31794	1
4	Blade holder	31795	1
5	Stop plate	31683	1
8	Guard plate	31796	1
10	Spacer block	31791	2
12	Spacer	31593	1
13	Spacer	32251	2
15	Hexagon nut M8	11367	1
16	Grub screw M20x25	14203	3
18	Knurled screw M8x25	14168	1
19	Cheesehead screw M5x25	11323	2
20	Cheesehead screw M5x50	12143	4
21	Cheesehead screw M8x20	11094	4
22	Grip bar	14197	1
23	Retaining strip	31845	2
24	Cheesehead screw M6x30	12184	2
25	Countersunk screw M5x10	11197	6
26	Cheesehead screw M5x40	11143	2
27	Pressure plate	32155	1
28	Rubber pad	32154	1
29	Cover	32247	1
30	Spacer screw	32253	2
31	Instruction label	32095	1
32	Cheesehead screw M5x20	11985	4

30980 Hole Punch

Item	Description	Order No.	Qty.
1	Base block	30971	1
2	Piston	30973	1
3	Stripper	30974	1
4	Return disk	30975	1
5	Holder, right	30972	1
6	Holder, left	31122	1
7	Spacer block	30977	1
8	Washer	30978	1
9	Grip holder	31289	2
10	Grip bar	31291	1
11	Main spring, yellow	13926	1
12	Pin 10m6x30	14072	1
13	Pin 6m6x12	13150	1
14	Grub screw M8x12	14128	2
15	Countersunk screw M6x10	11044	4
16	Countersunk screw M5x8	12608	1
17	Countersunk screw M5x10	11197	6
18	Cheesehead screw M6x20	11009	2
19	Tool screw, complete	31480	1
20	Securing screw M12x20	31456	1
21	Socket head spanner 4 mm	11769	1
22	Guard plate	31597	1
23	Cheesehead screw M4x6	14174	2

31890 Adjustable Template

Item	Description	Order No.	Qty.
1	Guide rail	31891	1
2	Pusher	31892	1
3	Guide plate	31893	1
4	Adjuster	31894	1
5	Scale	31071	1
6	Knurled screw	14260	2
7	Compression spring	14261	2
8	Clamping lever	14262	1
9	Countersunk screw	11197	3
10	Adjuster	31912	1
11	Scale	31965	2
12	Marker plate	31981	1

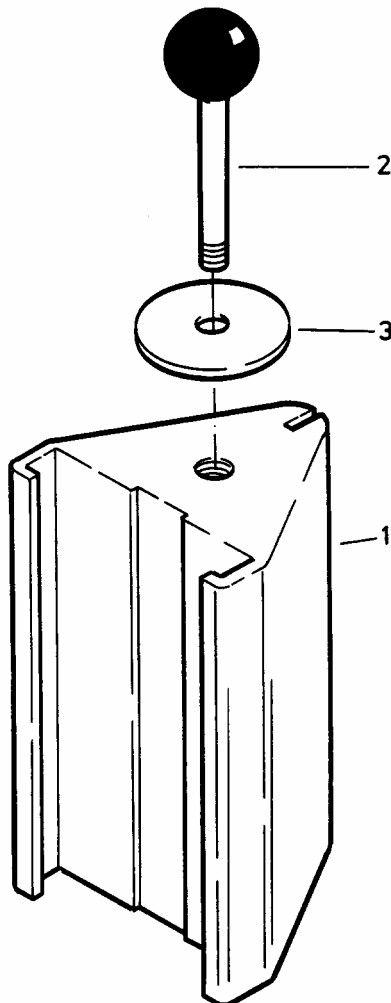


31243 Bending Tool R 10

Item	Description	Order No.	Qty.
1	Bending mandrel	31038	1
2	Grip bar	14197	1
3	Washer	31619	1

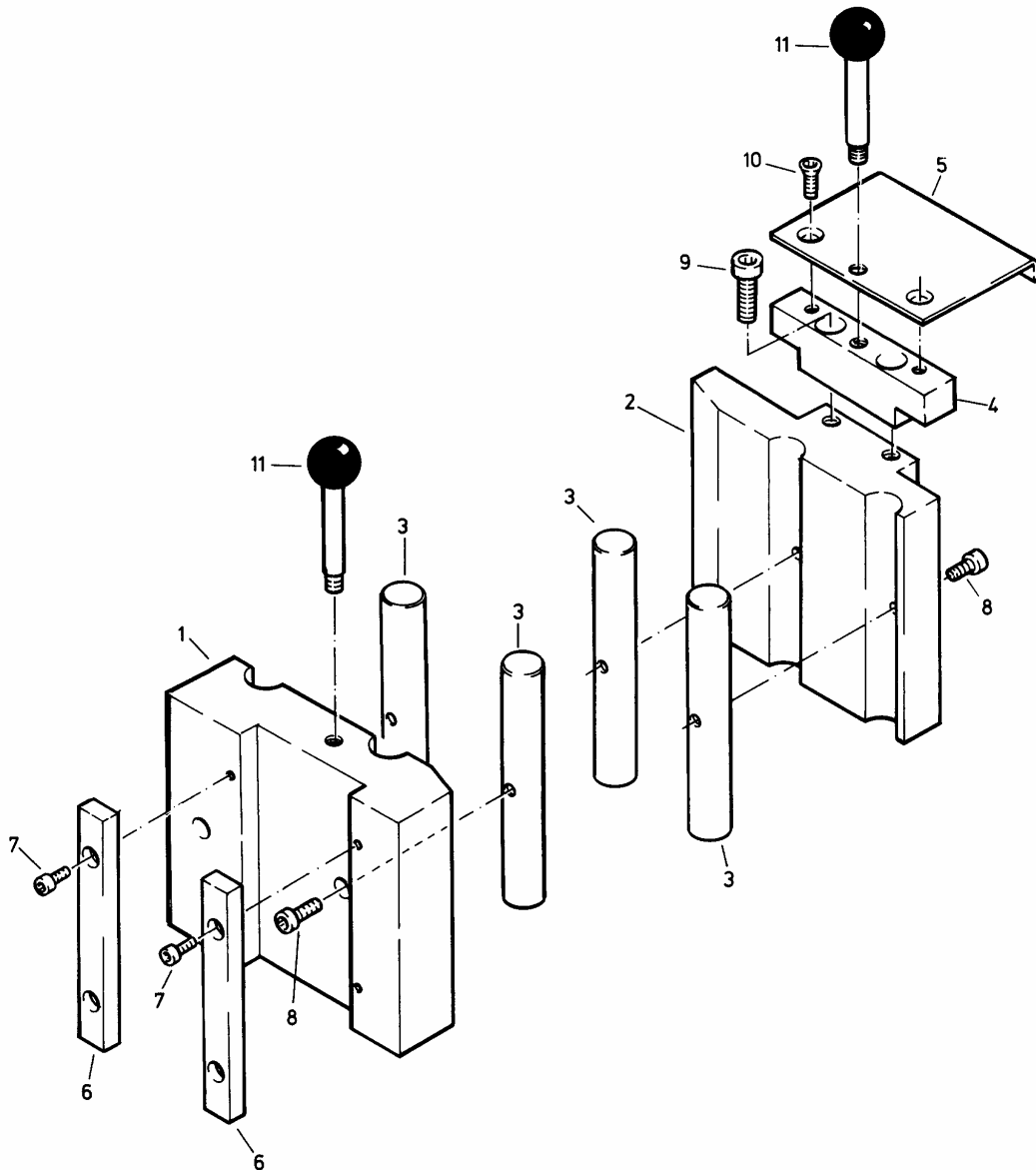
31732 Bending Tool R 6

Item	Description	Order No.	Qty.
1	Bending mandrel R6	31747	1
2	Grip bar	14197	1
3	Washer	31619	1



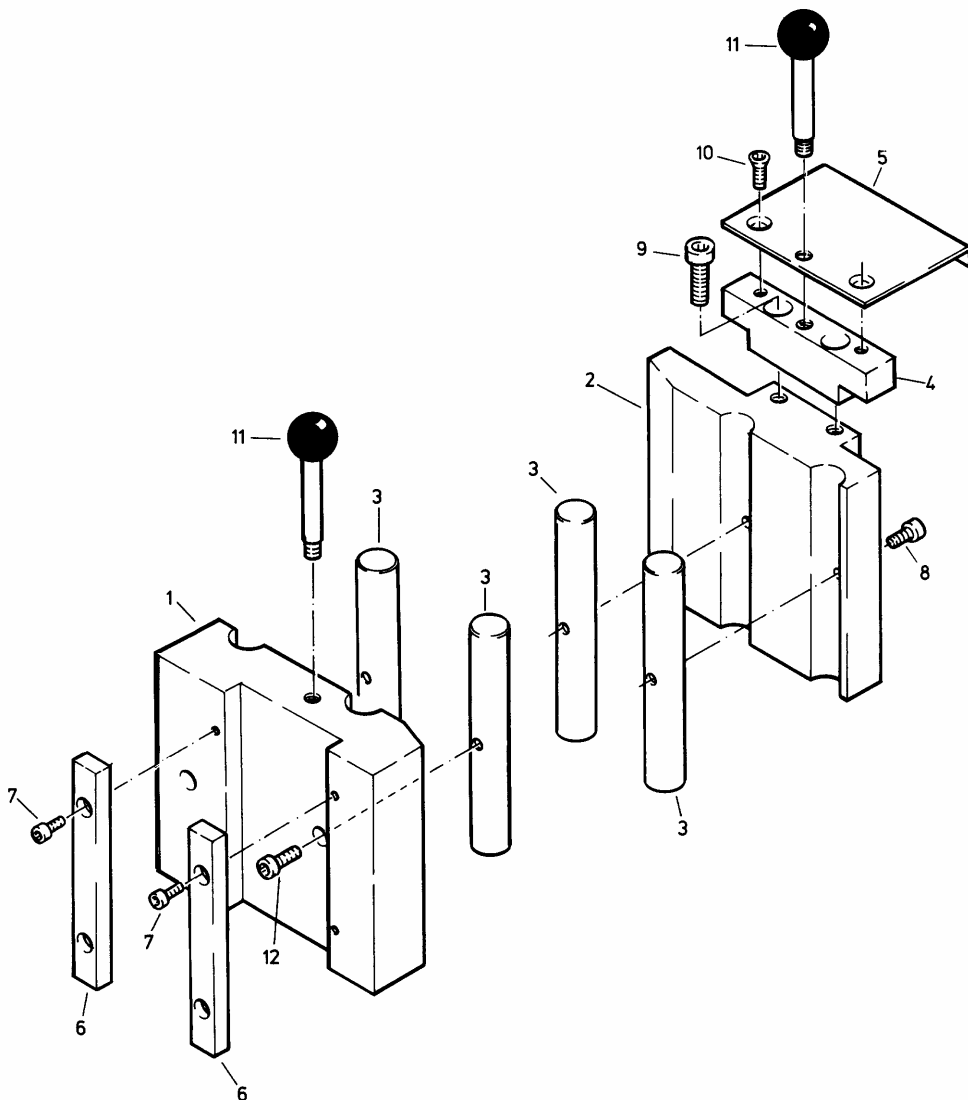
31425 Step bending tool, Small

Item	Description	Order No.	Qty.
1	Step bending former 1	31423	1
2	Step bending former 2	31424	1
3	Step bending radius	31327	4
4	Stop bridge	31774	1
5	Retractor	31775	1
6	Guide bar	31339	2
7	Cheesehead screw M5x10	11081	4
8	Cheesehead screw M5x20	11010	4
9	Cheesehead screw M8x30	12590	2
10	Countersunk screw M6x12	11647	2
11	Grip bar M8	14197	2



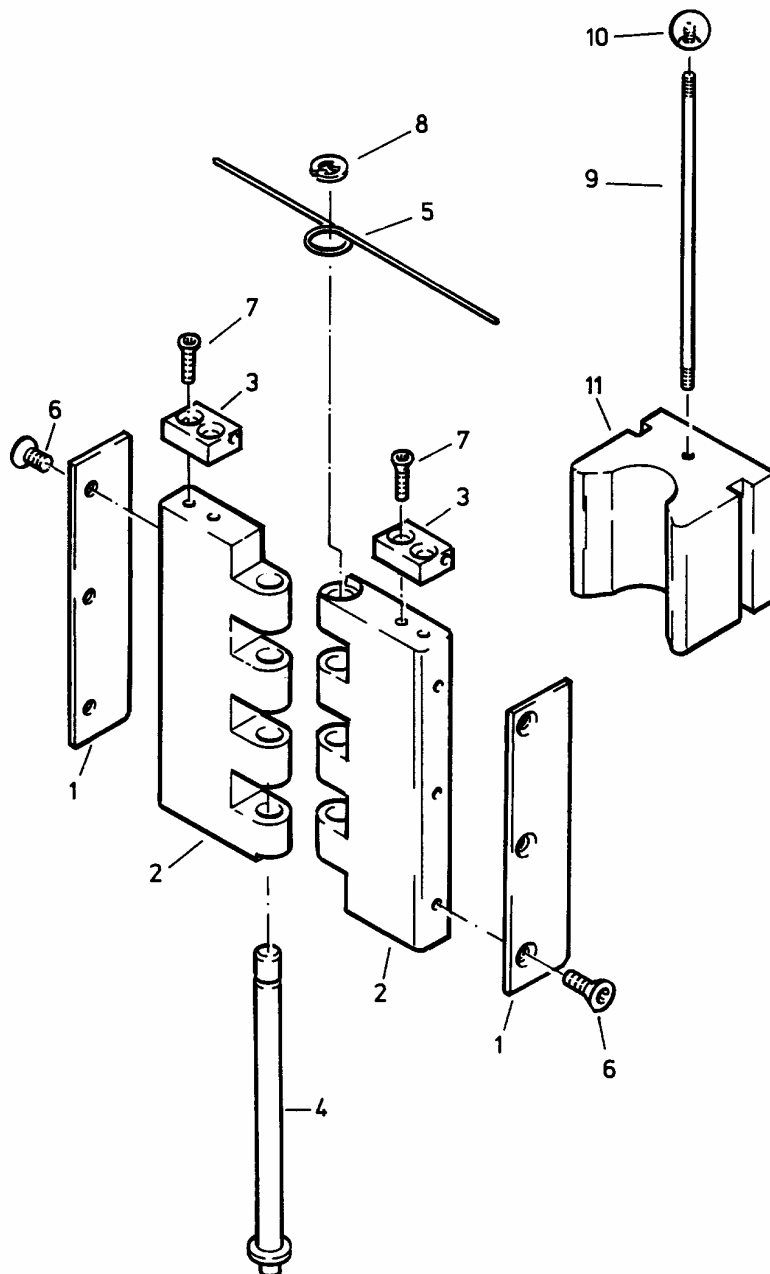
31646 Step bending tool, Large

Item	Description	Order No.	Qty.
1	Step bending former 1	31338	1
2	Step bending former 2	31647	1
3	Step bending radius	2643	4
4	Stop bridge	31774	1
5	Retractor	31775	1
6	Guide bar	31339	2
7	Cheesehead screw M5x10	11081	4
8	Cheesehead screw M6x12	11259	2
9	Cheesehead screw M8x30	12590	2
10	Countersunk screw M6x12	11647	2
11	Grip bar M8	14197	2
12	Cheesehead screw M6x30	12184	2



31636 Additional bending tool

Item	Description	Order No.	Qty.
1	Spacer plate	31913	2
2	Hinge section	31914	2
3	Spring socket	31915	2
4	Bolt	31916	1
5	Bending spring	14210	1
6	Countersunk screw M5x10	11197	6
7	Countersunk screw M5x16	12755	4
8	Spring washer	11644	1
9	Threaded rod	31653	1
10	Knob	11243	1
11	Stop	31641	1



Repair / Service

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