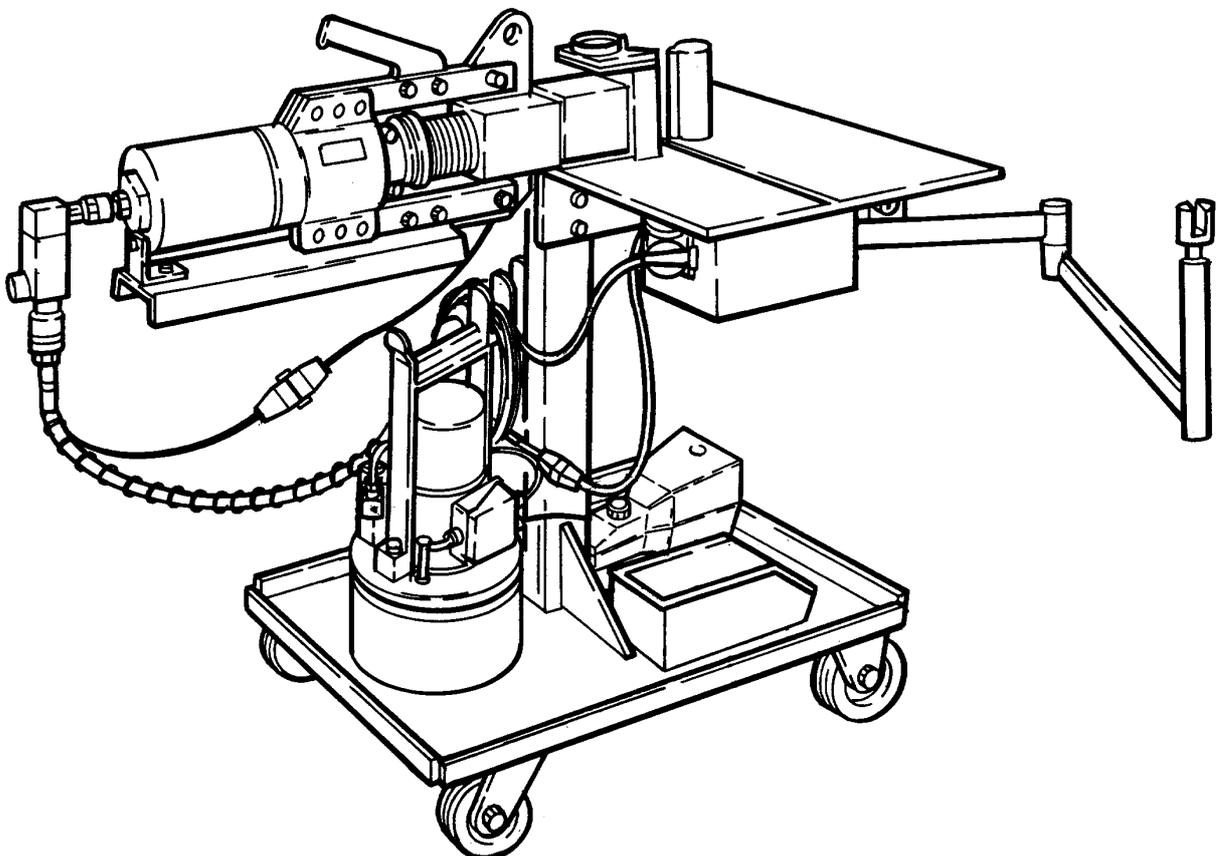


**Repair Instruction  
and  
Spare Part Lists  
for**

***novopress***

**BENDING BENCHES**

**BG**



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## Troubleshooting table - BG electronic -

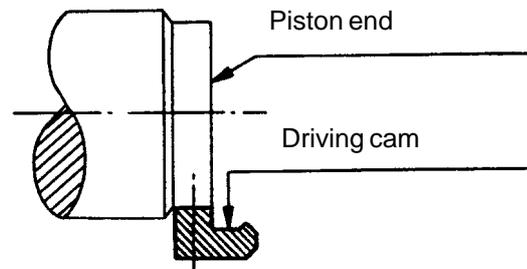
Item	Trouble	Cause	Elimination
1	The electronic system does not switch off operation	<p>The plug part of the solenoid valve is not connected with the connector of the electronic box.</p> <p>The spring in the pinion shaft is contaminated. NO CONTACT</p>	<p>Connect the plug "B" of the solenoid valve with the connector "C" of the electronic box. (see also operating instructions HA1ES)</p> <p>Remove the plexiglass window, pos. 29, from the angle preselector. Remove the pointer pos. 49. Take the spring, pos. 31, out of the pinion shaft. Clean the spring and blow off the pinion shaft with compressed air.</p>
2	No reaction after switching on, though BG and HA1ES are correctly connected.	<p>The EMERGENCY-OFF pushbutton is depressed.</p> <p>The treading pushbutton is not switched on.</p> <p>The pointer of the angle preselector touches the angle indicating contact</p>	<p>Unlock EMERGENCY-OFF pushbutton.</p> <p>Place the treading pushbutton in the yoke of the carriage.</p> <p>(See drawing 4080) Separate the pointer, pos. 49, from the angle indicating contact with the adjusting ring, pos. 12.</p>
3	No reaction after switching on, though a switching noise is to be heard in the solenoid valve	The printed circuit board in the electronic box is defective	Replace electronic box 4919
4	The bent angle considerably deviates from the set angle	<p>A straight pin, pos. 35, has broken away</p> <p>The solenoid valve does not switch off operation</p> <p>The mechanical pre stroke limitation is not set correctly</p> <p>The angle preselector is not correctly adjusted</p>	<p>(See drawing 4080) Replace the entire rocker, pos. 17</p> <p>Check the solenoid valve (see repair instructions HA1ES)</p> <p>Correct with the adjusting tube</p> <p>Carry out the zero-degree adjustment, see page 4, item 7</p>

### 1. Replacement of driving cam

see drawing 5080, pos. 8.

- 1.1 Turn the adjusting tube, pos. 9, such that the longitudinal slot of the adjusting tube is positioned above the fillister head screw, pos. 41.
- 1.2 Turn out the screw, pos. 41.
- 1.3 Replace the driving cam and fasten with the fillister head screw, pos. 41.

**ATTENTION:** The driving cam must be flush with the piston end.



- 1.4 To replace the driving cam, the scale, pos. 16 and 17, must be removed from the scale side. Then adjust the scale as described under item 2.9.

### 2. Replacement of adjusting tube

see drawing 5080, pos. 9.

- 2.1 Loosen the nuts, pos. 30 (4 pcs.), and turn out the straight pins, pos. 39.
- 2.2 Turn out the fillister head screw, pos. 35.
- 2.3 Pull off the adjusting tube with the pos. 12 and 13.
- 2.4 Unscrew the pos. 27 and 39 from the adjusting tube.
- 2.5 Turn off the pos. 12 and 13 from the adjusting tube and turn them on the new adjusting tube.
- 2.6 Mount the pos. 27 and 39 on the new adjusting tube.
- 2.7 Mount the adjusting tube to the bending bench and fix it with the pos. 35 and 39.

**ATTENTION:** Fully turn in the setscrews, pos. 39, and then screw them back one full turn. The adjusting tube must rotate smoothly.

- 2.8 Lock the setscrew, pos. 39, with the nuts, pos. 30.
- 2.9 Turn the adjusting tube to the right-hand side up to its stop. The pointer, pos. 13, must show ZERO on the millimeter scale. If the pointer does not show ZERO, the scale must be adjusted. For this purpose, the screws, pos. 41, are to be loosened and to be tightened again after adjusting the scale.

### 3. Replacement of piston

see drawing No. 5080, pos. 2.

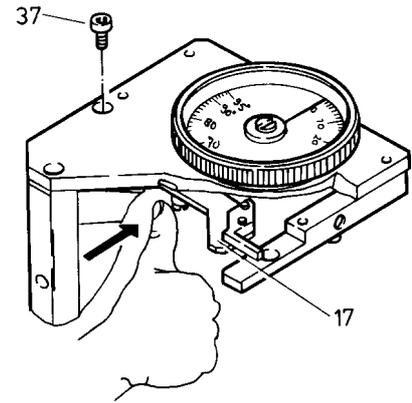
- 3.1 Turn out the screws, pos. 22, and remove the bending tool with the guard.
- 3.2 Now proceed as described under item 2.1 to 2.2.
- 3.3 Turn out the star grip screw, pos. 28.
- 3.4 Replace the piston.

#### 4. Replacement of angle preselector, complete

see drawing 4080.

##### DISMOUNTING

- 4.1 Turn out the 2 screws, pos. 37.
- 4.2 Push the rocker, pos. 17, backwards.
- 4.3 Remove the angle preselector.
- 4.4 Disconnect the cables.



##### MOUNTING

- 4.5 Connect the cables.
- 4.6 Place the angle preselector on the tool.

##### **DO NOT DEPRESS**

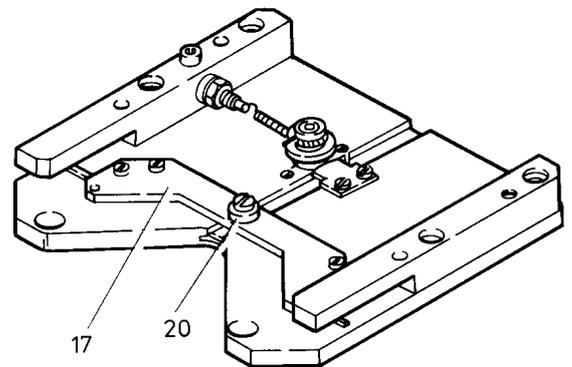
- 4.7 Push the rocker, pos. 17, backwards until the angle preselector drops down onto the tool.
- 4.8 Fasten the angle preselector with the screws, pos. 37.

#### 5. Replacement of rocker

see drawing 4080, pos. 17.

##### DISMOUNTING

- 5.1 Turn out the 2 screws, pos. 37.
- 5.2 Push the rocker, pos. 17, backwards.
- 5.3 Remove the angle preselector.
- 5.4 Turn out the screw, pos. 20.
- 5.5 Remove the rocker.



##### MOUNTING

- 5.6 Position the rocker, pos. 17, in place and fasten with the screw, pos. 20.
- 5.7 Place the angle preselector on the tool.

##### **DO NOT DEPRESS**

- 5.8 Push the rocker, pos. 17, backwards until the preselector drops onto the tool.
- 5.9 Fasten the angle preselector with the screws, pos. 37.

## 6. Replacement of pointer at angle preselector.

see drawing 4080, pos. 49.

- 6.1 Remove the snap ring, pos. 33.
- 6.2 Remove the plexiglass window, pos. 29.
- 6.3 Turn out the screw, pos. 40, and remove the pointer, pos. 49.
- 6.4 Install the new pointer and fasten it with the screw, pos. 40.

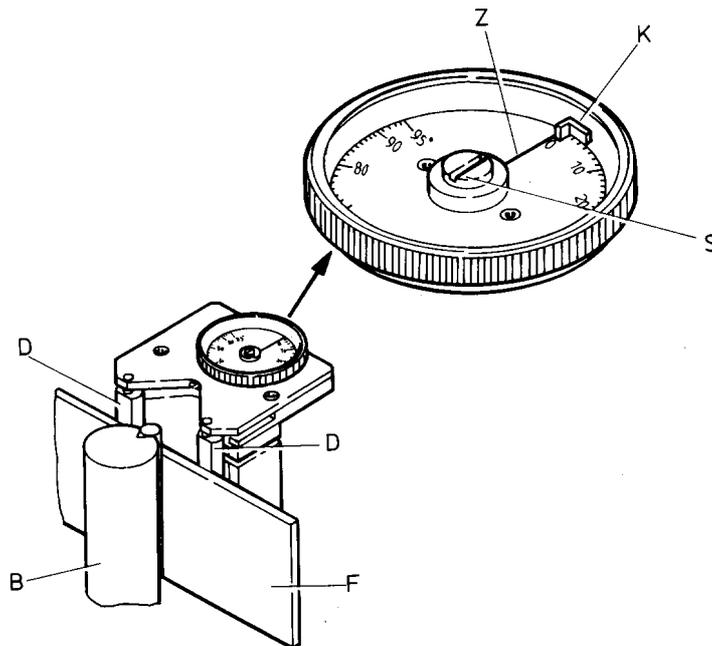
**ATTENTION:** Tighten the plastic screw, pos. 40, but slightly.

### **DO NOT OVERTURN !**

After replacement of the pointer the preselector must be .  
adjusted to **ZERO DEGREES**.

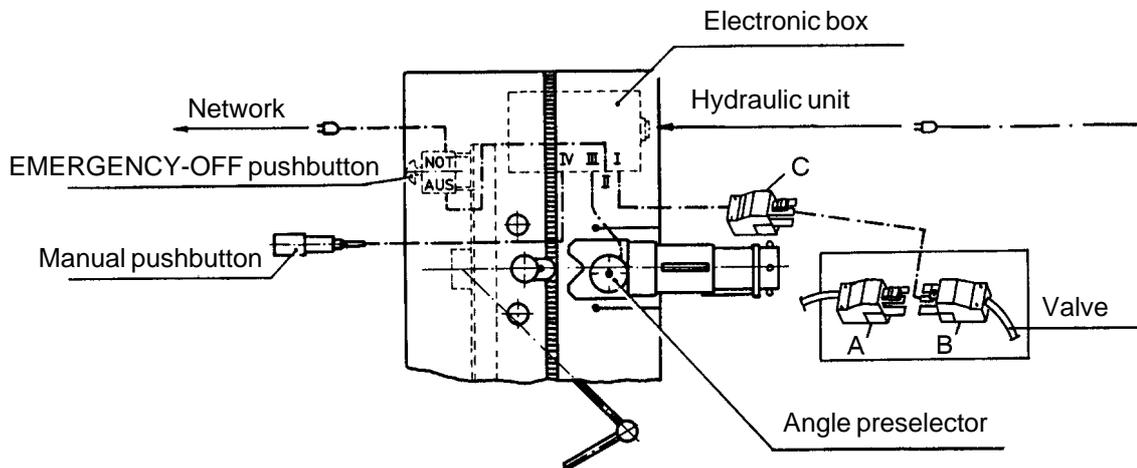
## 7. Adjusting the angle preselector to ZERO DEGREES.

- 7.1 Place a straight piece of flat material on the bending bench and move it to the bending mandrel "B".
- 7.2 Remove the HSBL-cylinder.
- 7.3 Move the piston of the bending bench forward by hand until the pressure pads "D" of the flat material "F" are being pressed against the bending mandrel "B".
- 7.4 Precisely set the contact plate "K" to ZERO DEGREES.
- 7.5 Loosen the screw "S" with a screwdriver.
- 7.6 Move the pointer "Z" to the contact plate "K" and slightly tighten the screw "S".



## 8. Replacement of electronic box

- 8.1 Pull off the mains plug.
- 8.2 Disconnect cable II from the EMERGENCY-OFF pushbutton.
- 8.3 Disconnect cable III from the angle preselector.

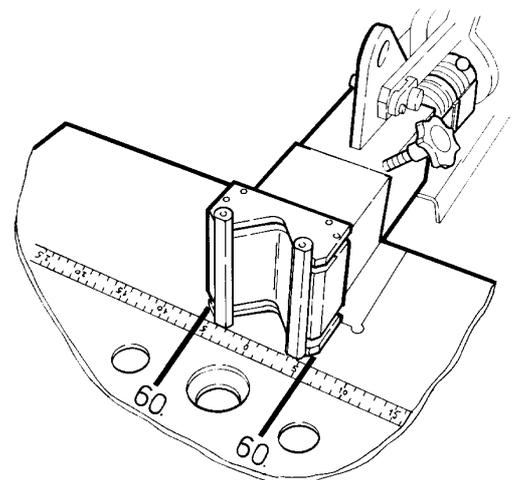


- 8.4 Remove the cover from the electronic box.
- 8.5 Remove the electronic box from the bending bench.
- 8.6 Connect the plug "C" and the manual pushbutton of the old electronic box to the corresponding cable of the new electronic box.
- 8.7 Mount the new electronic box at the bending bench.
- 8.8 Connect cable II to the EMERGENCY-OFF pushbutton.
- 8.9 Connect cable III to the angle preselector.

## 9. Replacement of bending tool 4210, complete

see also drawing 5080, page 8

- 9.1 Turn out the screws, pos. 22, and remove the bending tool.
- 9.2 Place the new bending tool 4210 on the workplate and fasten it with the screws, pos. 22, to the piston. Turn the screws in to such an extent only that the bending tool can still be moved to the right-hand or to the left-hand side.
- 9.3 Align the bending tool such that the external edges coincide with the 60 mm line at the measuring tapes on the workplate.
- 9.4 Press the bending tool by hand against the work plate and tighten the screws, pos. 22.



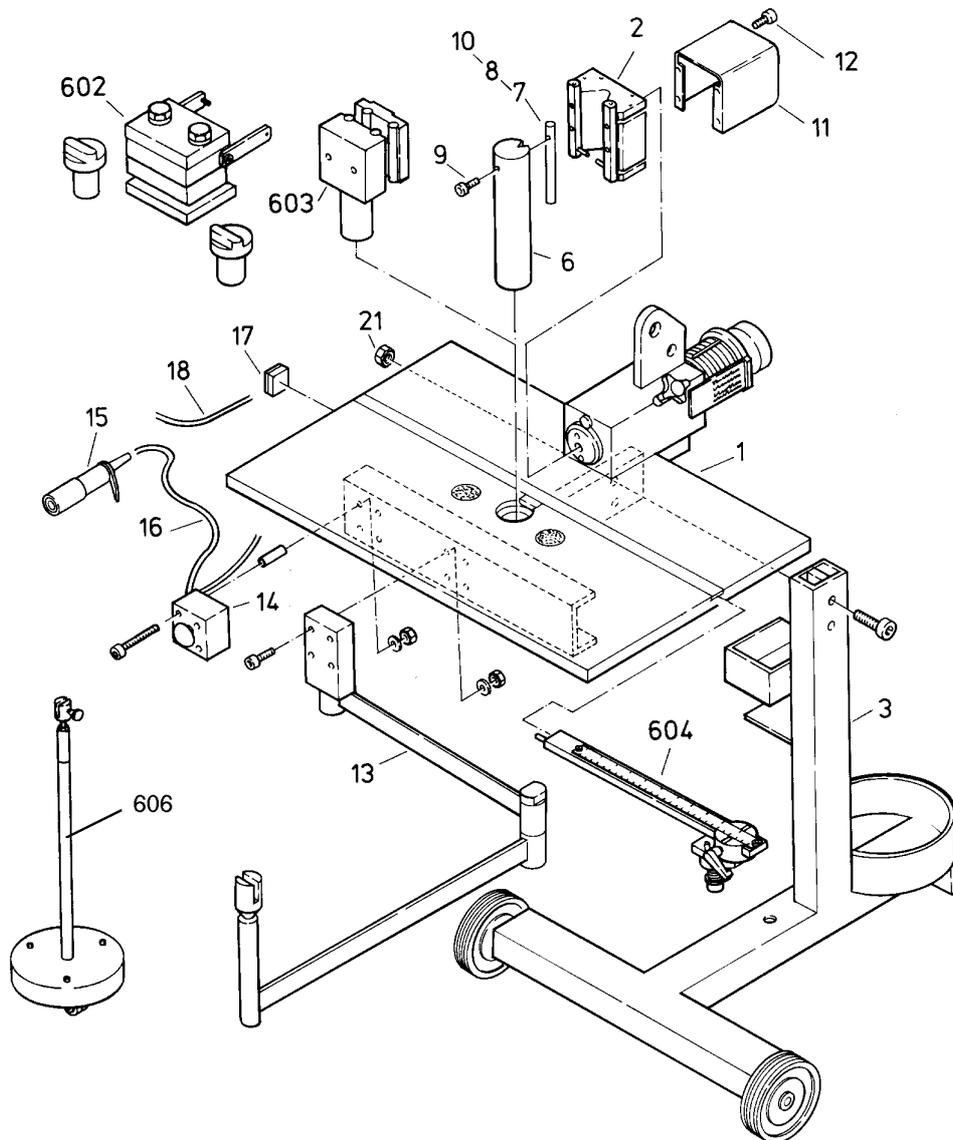
## Bending benches with mechanical bending angle switch-OFF

### Summary of assemblies

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31895 Step bending tool (small)	20
31188 Step bending tool (big)	21
31671 Step bending tool (small)	22
7060 Longitudinal stop BG	23

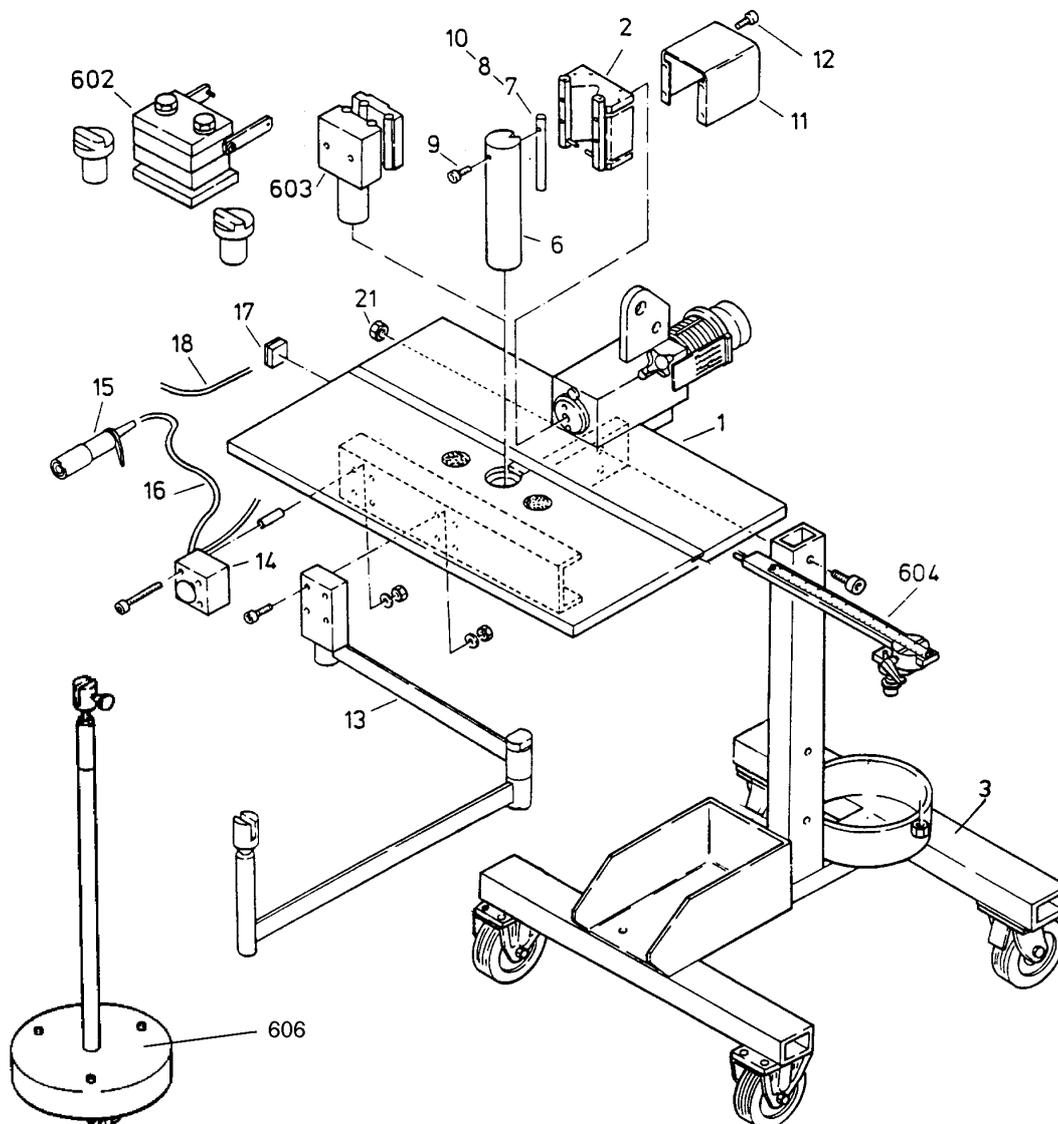
**4935 Bending bench BG for busbars up to 160x13 mm to pack no.621**

Pos.	Designation	Ordering No.	Quantity
1	Bench BG	5080	1
2	Bending tool up to Cu 160x13	4210	1
3	Carriage for BG to pack no. 621	4917	1
6	Bending mandrel	7432	1
7	Bending radius 7.5 for bar B-160	3136	1
8	Bending radius R10 for bar B-160	1881	1
9	Fillister head screw M 6x50	11530	1
10	Bending radius R 15 for bars B-160	5724	1
11	Guard	5654	1
12	Fillister head screw M 5x10	11081	4
13	Supporting arm	5636	1
14	Emergency-off switch	5666	1
15	Manual pushbutton	5665	1
16	Flexible connecting line 3x1 mm <sup>2</sup> 2,5 m long	11590	1
17	Wet-room socket with earthing contact	12003	1
18	Flexible connecting line 3x0,75 mm <sup>2</sup> 055, m long	11591	1
19	Name plate NOVOPRESS	12035	1
602	Upedging bending tool for BG	3123	1
603	Bending tool	7431	1
604	Longitudinal stop BG	7060	1
606	Supporting pedestal	30017	1



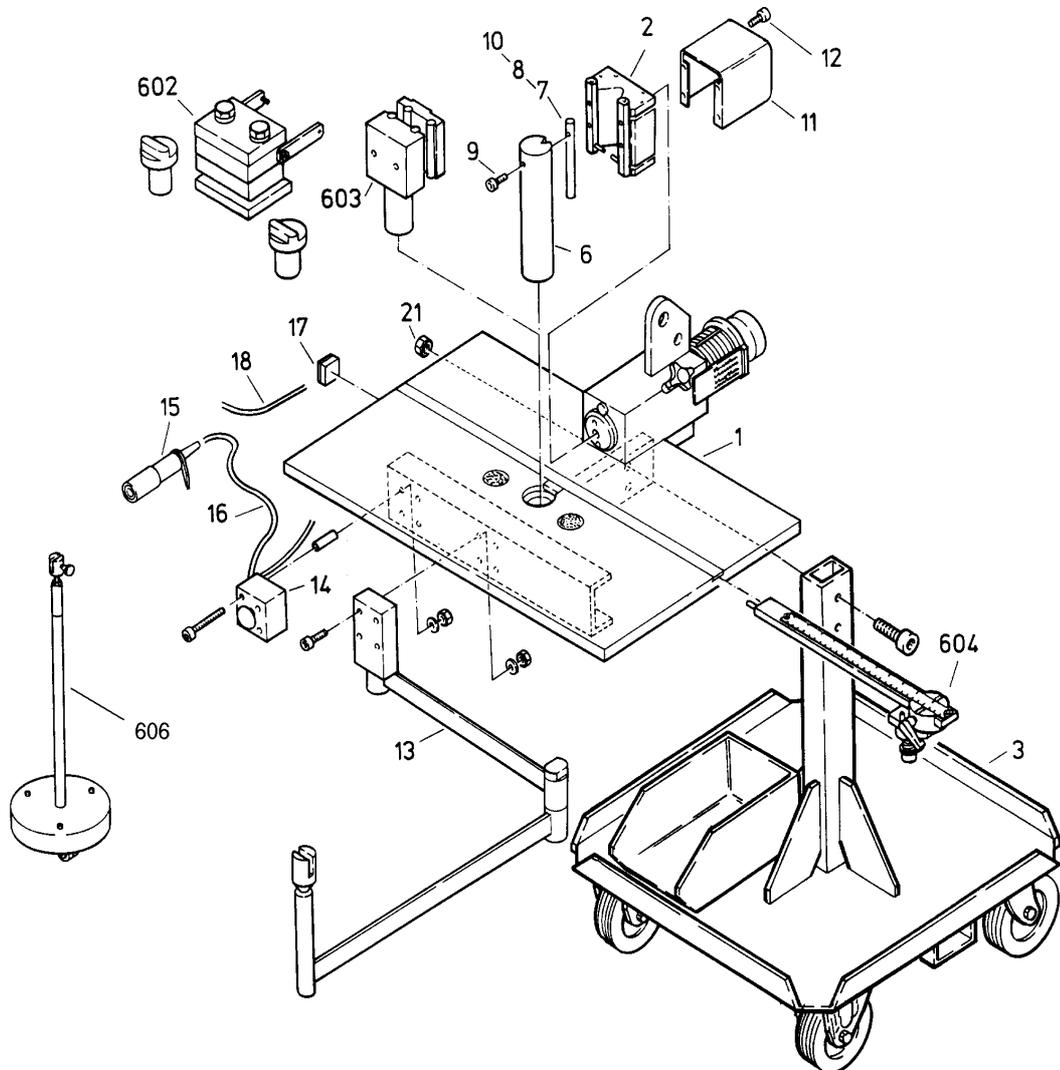
**4935 Bending bench BG for busbars up to 160x13 mm** from pack no.622

Pos.	Designation	Ordering No.	Quantity
1	Bench BG	5080	1
2	Bending tool up to Cu 160x13	4210	1
3	Carriage for BG from pack no. 622	2648	1
6	Bending mandrel	7432	1
7	Bending radius 7.5 for bar B-160	3136	1
8	Bending radius R10 for bar B-160	1881	1
9	Fillister head screw M 6x50	11530	1
10	Bending radius R 15 for bars B-160	5724	1
11	Guard	5654	1
12	Fillister head screw M 5x10	11081	4
13	Supporting arm	5636	1
14	Emergency-off switch	5666	1
15	Manual pushbutton	5665	1
16	Flexible connecting line 3x1 mm <sup>2</sup> 2,5 m long	11590	1
17	Wet-room socket with earthing contact	12003	1
18	Flexible connecting line 3x0,75 mm <sup>2</sup> 055, m long	11591	1
19	Name plate NOVOPRESS	12035	1
602	Upedging bending tool for BG	3123	1
603	Bending tool	7431	1
604	Longitudinal stop BG	7060	1
606	Supporting pedestal	30017	1

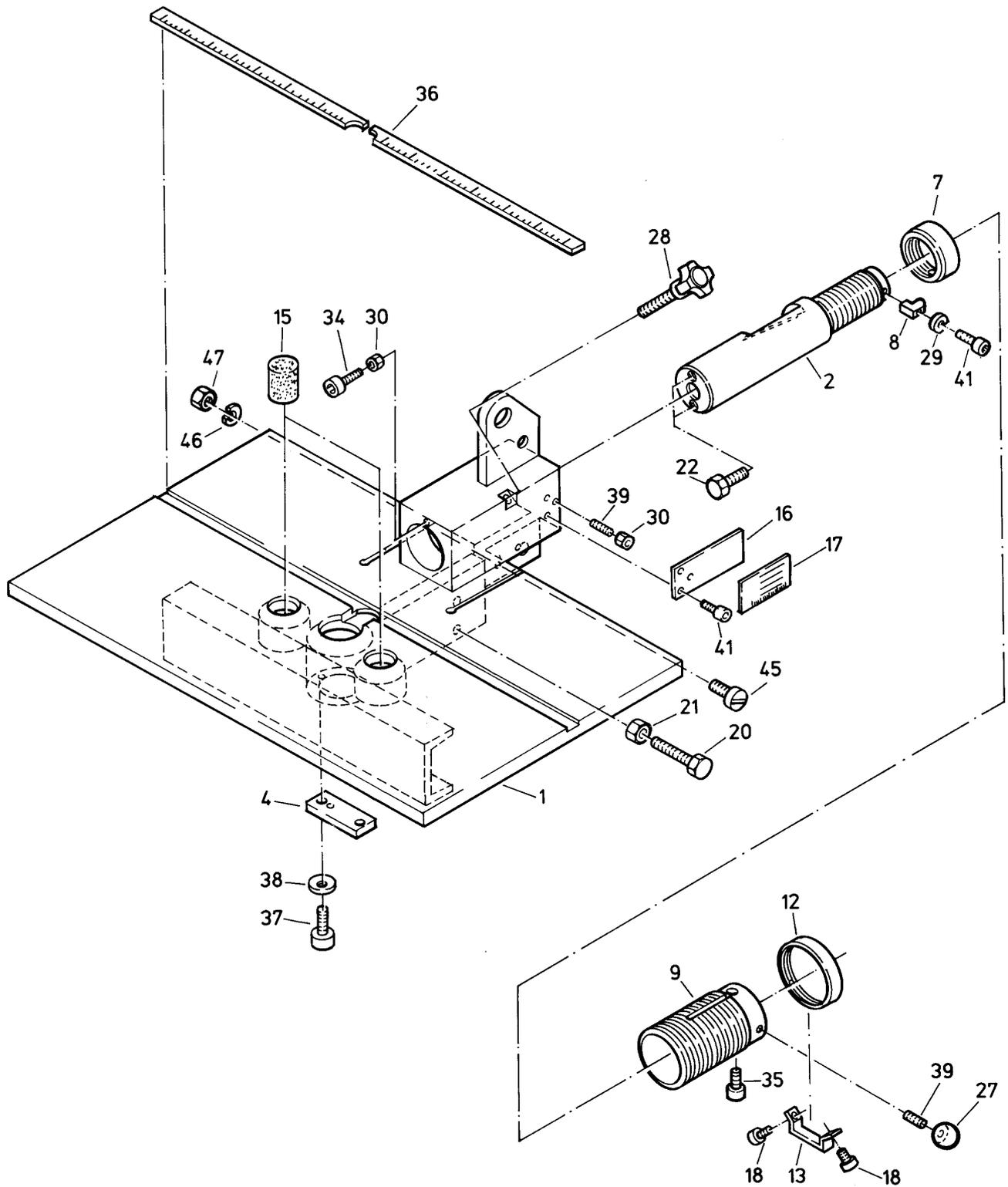


**4935 Bending bench BG for busbars up to 160x13 mm** from pack no.669

Pos.	Designation	Ordering No.	Quantity
1	Bench BG	5080	1
2	Bending tool up to Cu 160x13	4210	1
3	Carriage for BG from pack no. 669	30230	1
6	Bending mandrel	7432	1
7	Bending radius 7.5 for bar B-160	3136	1
8	Bending radius R10 for bar B-160	1881	1
9	Fillister head screw M 6x50	11530	1
10	Bending radius R 15 for bars B-160	5724	1
11	Guard	5654	1
12	Fillister head screw M 5x10	11081	4
13	Supporting arm	5636	1
14	Emergency-off switch	5666	1
15	Manual pushbutton	5665	1
16	Flexible connecting line 3x1 mm <sup>2</sup> 2,5 m long	11590	1
17	Wet-room socket with earthing contact	12003	1
18	Flexible connecting line 3x0,75 mm <sup>2</sup> 055, m long	11591	1
19	Name plate NOVOPRESS	12035	1
602	Upedging bending tool for BG	3123	1
603	Bending tool	7431	1
604	Longitudinal stop BG	7060	1
606	Supporting pedestal	30017	1



## 5080 Bench element BG

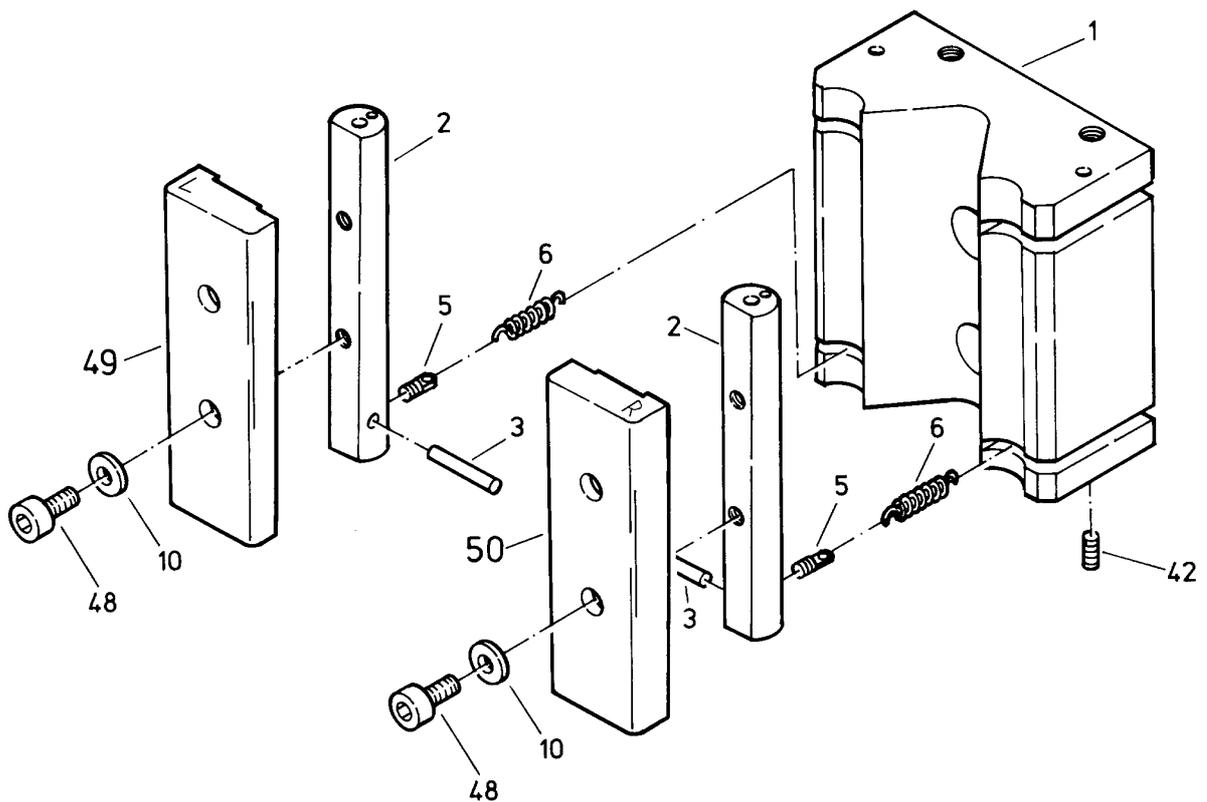


**5080 Bench element BG**

Pos.	Designation	Ordering No.	Quantity
1	Workplate	7436	1
2	Piston rod	5626	1
4	Holder	7437	1
7	Stop nut for BG	1969	1
8	Driving cam	1970	2
9	Adjusting tube	4902	1
12	Threaded ring	4903	1
13	Indicating plate	4904	1
14	Nameplate	5189	1
15	Closing plug	3734	2
16	Guide plate	4908	1
17	Scale	5186	1
18	Fillister head screw M 3x6	11572	2
20	Hexagon head screw M 12x90	11255	2
21	Hexagon nut M 12	11256	2
22	Fillister head screw M 12x45	11247	2
26	Lubricator, form A, M 6x1	11242	1
27	Ball knop M 5	11243	4
28	Star grip	11244	1
29	Spring washer A 5	11038	2
30	Hexagon nut M 5	11065	3
34	Fillister head screw M 5x30	11324	1
35	Fillister head screw M 3x6	11636	1
36	Measuring tape 18x0.5x500	12566	2
37	Fillister head screw M 8x25	11252	2
38	Washer, dia. 8.4	11230	2
39	Setscrew M 5x16	11253	6
41	Fillister head screw	11096	2
45	Supporting eccentric	6277	1
46	Spring washer A 10	11630	1
47	Hexagon nut M 10	11429	1

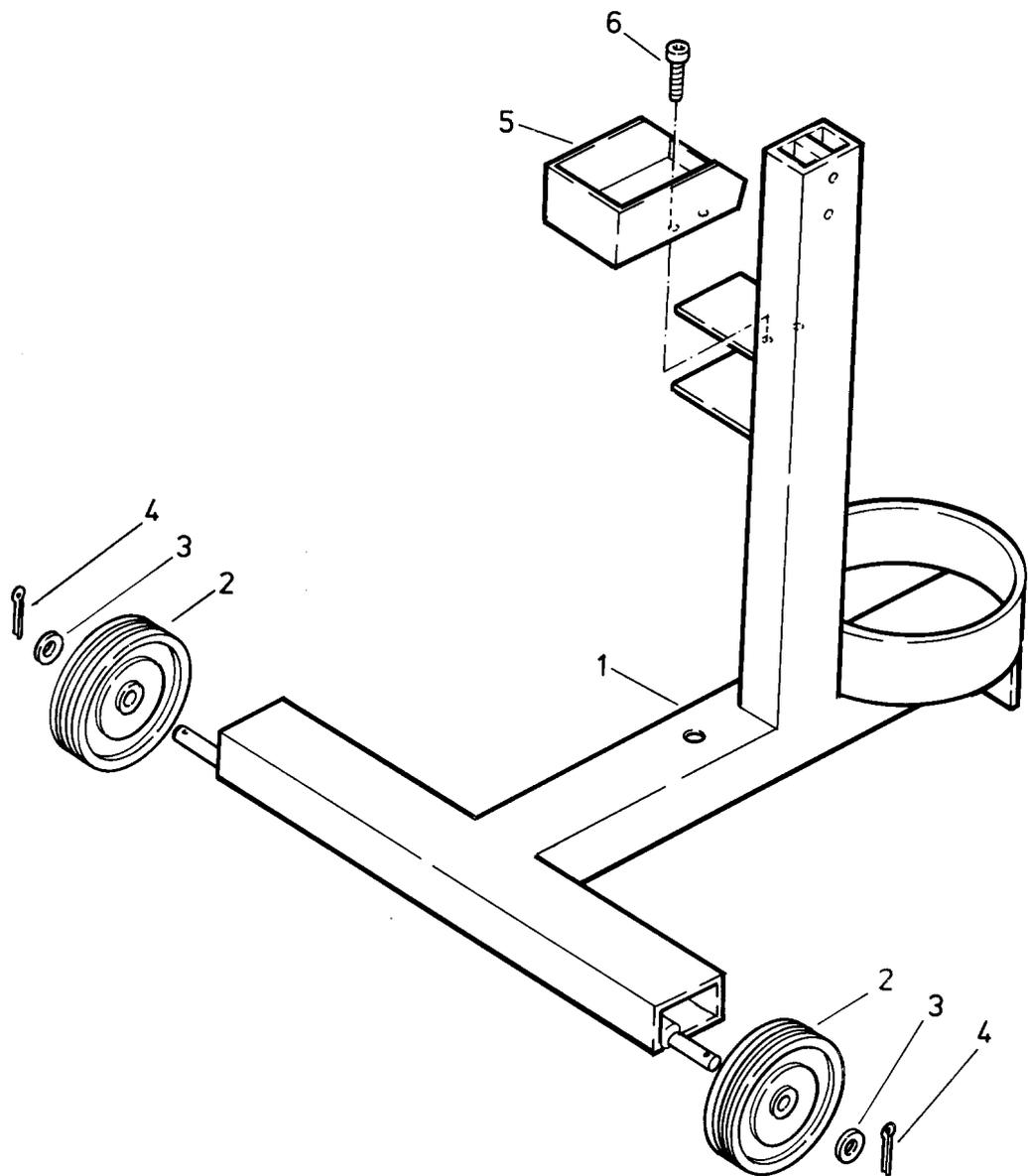
**4210 Bending tool up to Cu 160x13**

Pos.	Designation	Ordering No.	Quantity
1	Toolholding fixture	4176	1
2	Pressure pad	4177	2
3	Pin	4244	2
5	Screw	1980	2
6	Tension spring	2176	2
10	O-ring 5x1.5	11714	4
11	Hexagon socket head wrench, width across flats 5	11715	1
42	Setscrew M 6x16	11737	2
48	Fillister head screw M 6x12	13512	4
49	Pressure pad left	30798	1
50	Pressure pad right	30799	1



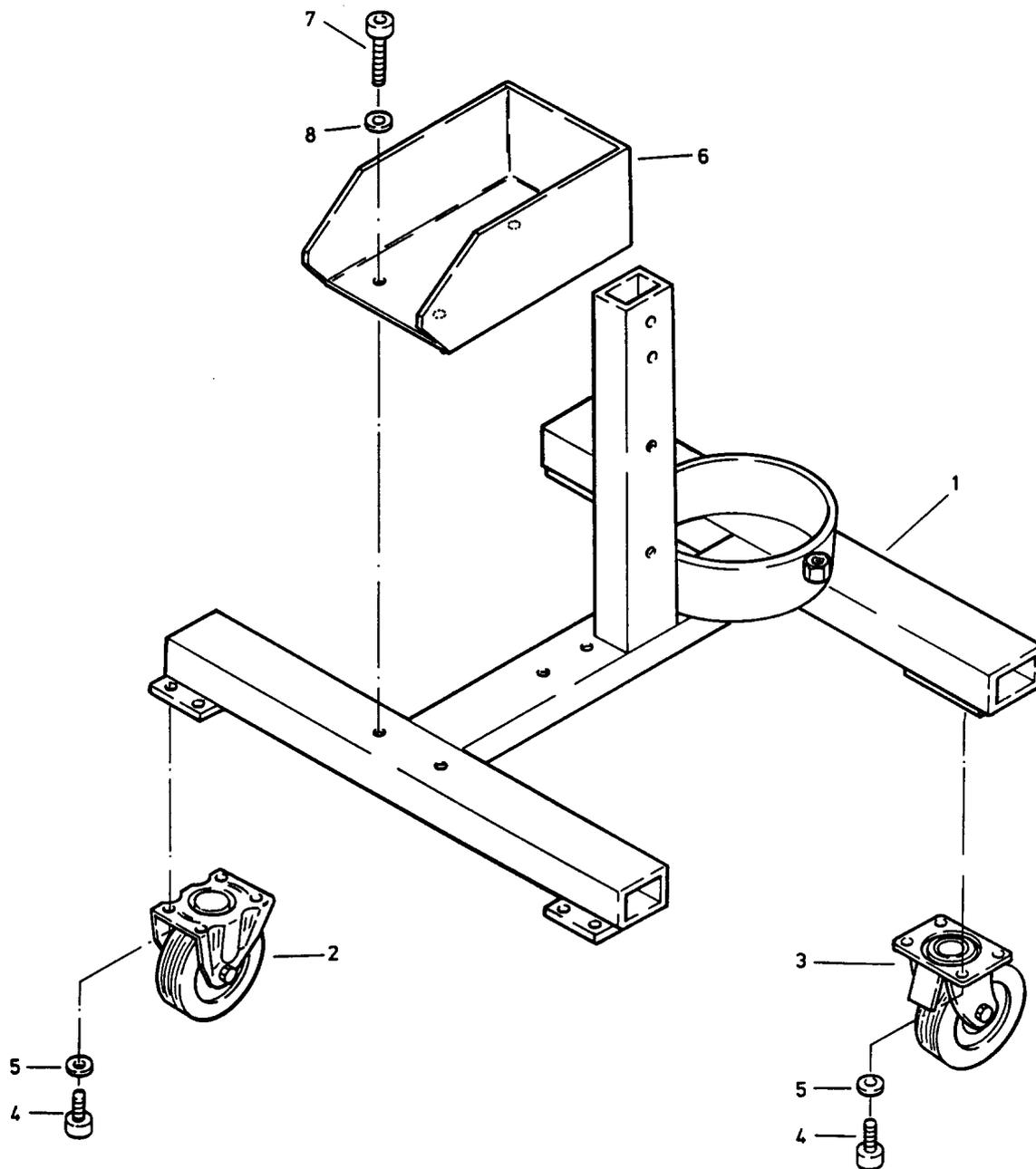
**4917 Carriage for BG** to pack no. 621

Pos.	Designation	Ordering No.	Quantity
1	Carriage for BG	5653	1
2	Caster	11239	2
3	Washer	11368	2
4	Cotter pin	11240	2
5	Storage box	11713	1
6	Fillister head screw M 6x8	11692	2



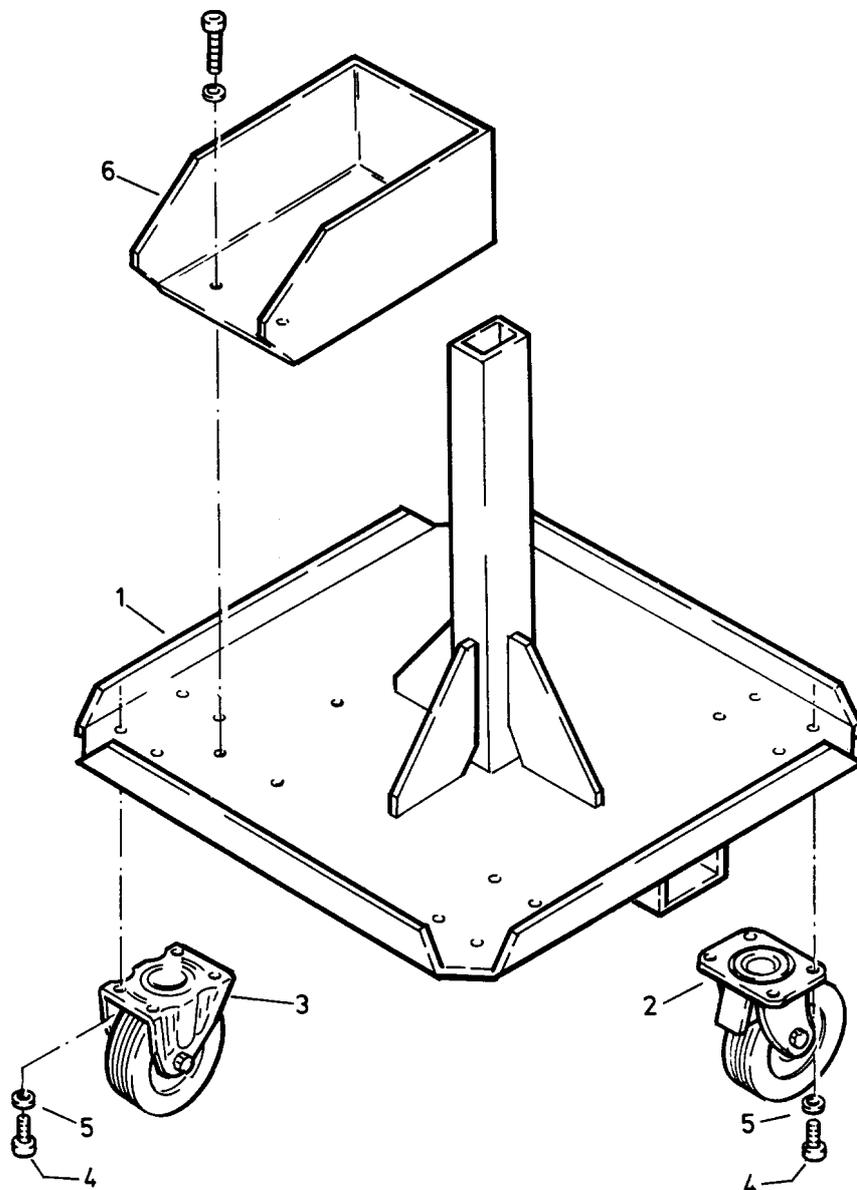
**2648 Carriage for BG** from pack no. 622

Pos.	Designation	Ordering No.	Quantity
1	Carriage - welded part	5722	1
2	Fixed castor wheel	11697	2
3	Swivel castor wheel	11696	2
4	Cheese head screw M8x16	11313	16
5	Washer	11174	16
6	Box	9283	1
7	Cheese head screw M8x10	11304	3
8	Washer	11174	3



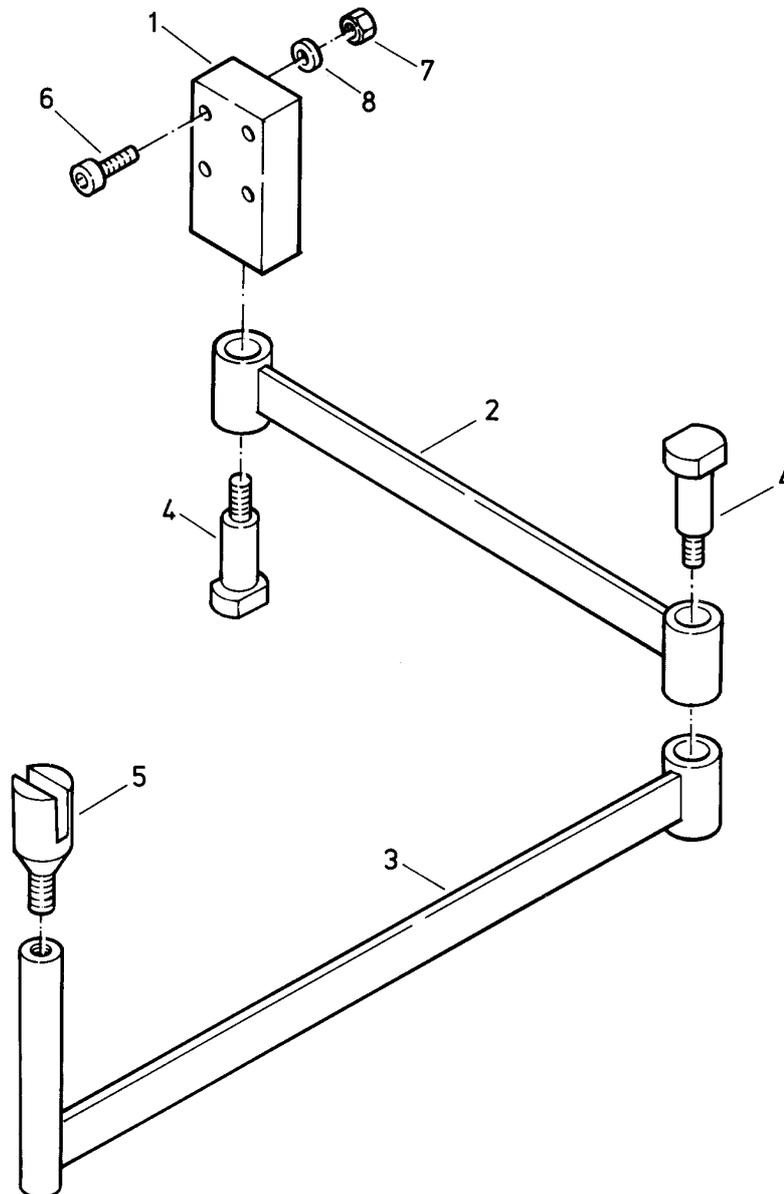
**30230 Carriage for BG** from pack no. 669

Pos.	Designation	Ordering No.	Quantity
1	Carriage	31093	1
2	Swivel castor wheel	11696	2
3	Fixed castor wheel	11697	2
4	Cheese head screw M8x10	11304	19
5	Washer	11174	19
6	Box	9283	1



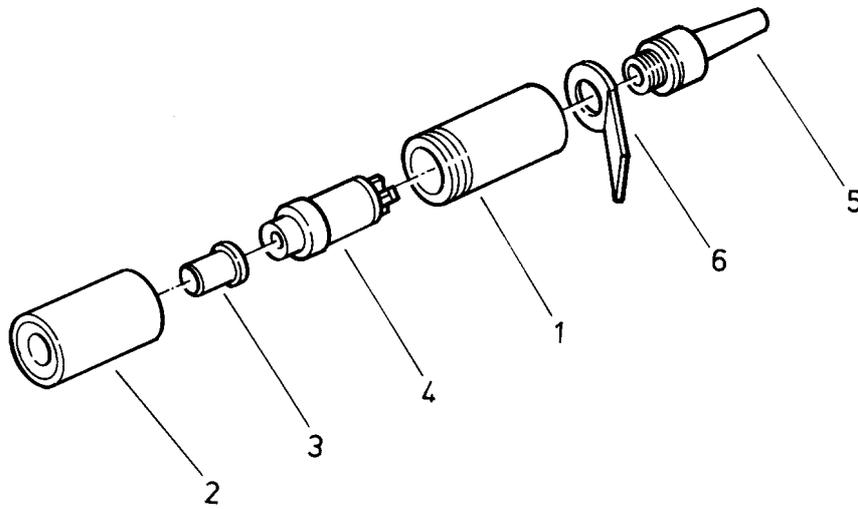
**5636 Supporting arm**

Pos.	Designation	Ordering No.	Quantity
1	Holder	5637	1
2	Swivel arm	5638	1
3	Swivel arm	5639	1
4	Threaded bolt	5640	2
5	Clevis	5641	1
6	Fillister head screw M 8x60	11473	4
7	Hexagon nut M 8	11367	4
8	Washer, dia. 8.4	11174	8



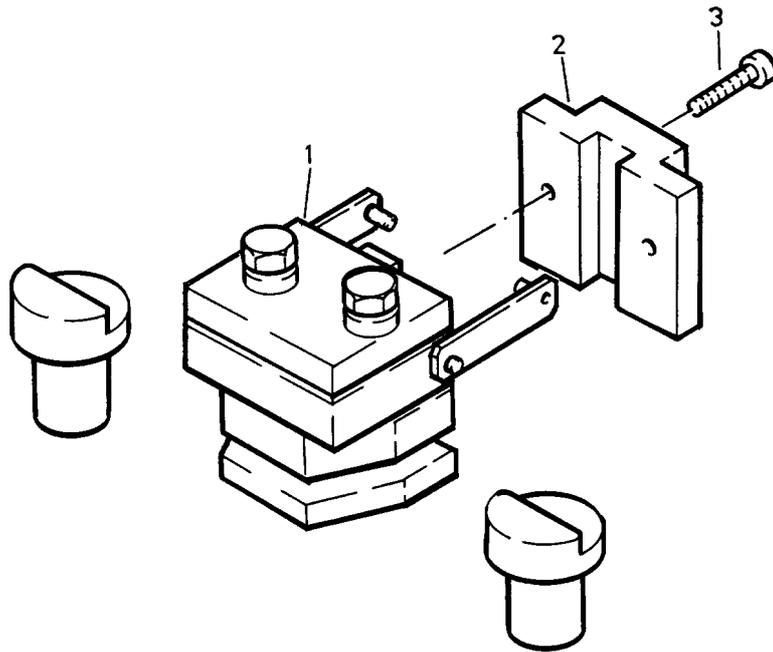
**5665 Manual pushbutton**

Pos.	Designation	Ordering No.	Quantity
1	Guard	1370	1
2	Screw cap for BG	5664	1
3	Pressure pin	1951	1
4	Manuel pushbutton	31197	1
5	Union Pa 13.5	11511	1
6	Holder	1422	1



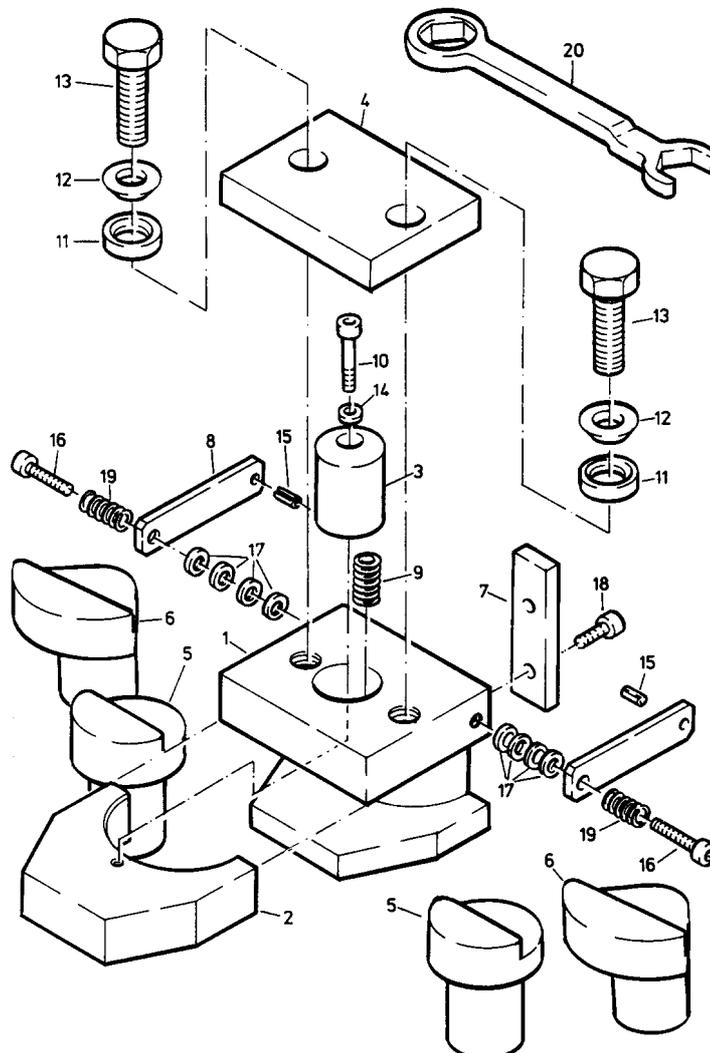
**3123 Upedging bending tool for BG**

Pos.	Designation	Ordering No.	Quantity
1	Upedging bending tool cpl.	31221	1
2	Adaptor	31652	1
3	Fillister head screw M 6x20	11009	2



### 31221 Upedging bending tool for BG

Pos.	Designation	Ordering No.	Quantity
1	Bending radius	31222	1
2	Pressure plate	31223	1
3	Pressure bolt	3122	1
4	Crosshead	3065	1
5	Bolt 1	31224	2
6	Bolt 2	31225	2
7	Centering plate	31226	1
8	Fastening plate	4293	2
9	Pressure spring 1.25 x 8.0x22	11263	1
10	Fillister head screw M 6x40	11190	1
11	Taper ring	11265	2
12	Spherical washer	11266	2
13	Hexagon head screw M 16x65	11275	2
14	Washer 6.4	11273	1
15	Clamping sleeve 6x12	11249	2
16	Fillister head screw M 8x40	11280	2
17	Washer, dia. 8.4	11174	8
18	Fillister head screw M 6x16	11095	2
19	Pressure spring	2751	2
20	Combination wrench	11932	1

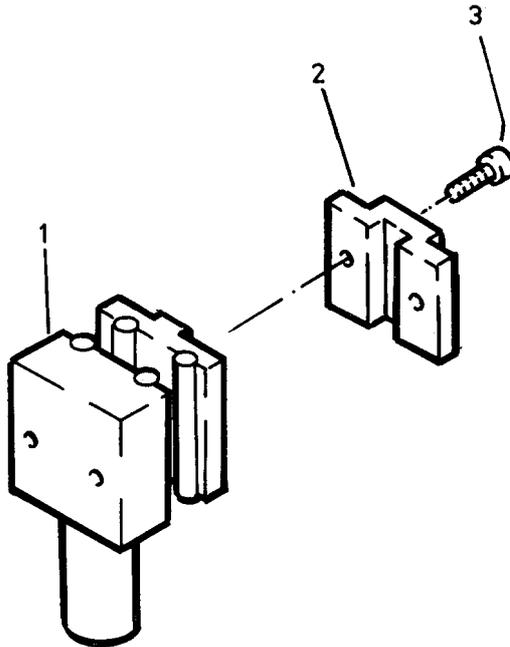


**7431 Step bending tool (big)**

Pos.	Designation	Ordering No.	Quantity
1	Step bending tool cpl.	31188	1
2	Adaptor	31652	1
3	Fillister head screw M 6x20	11009	2

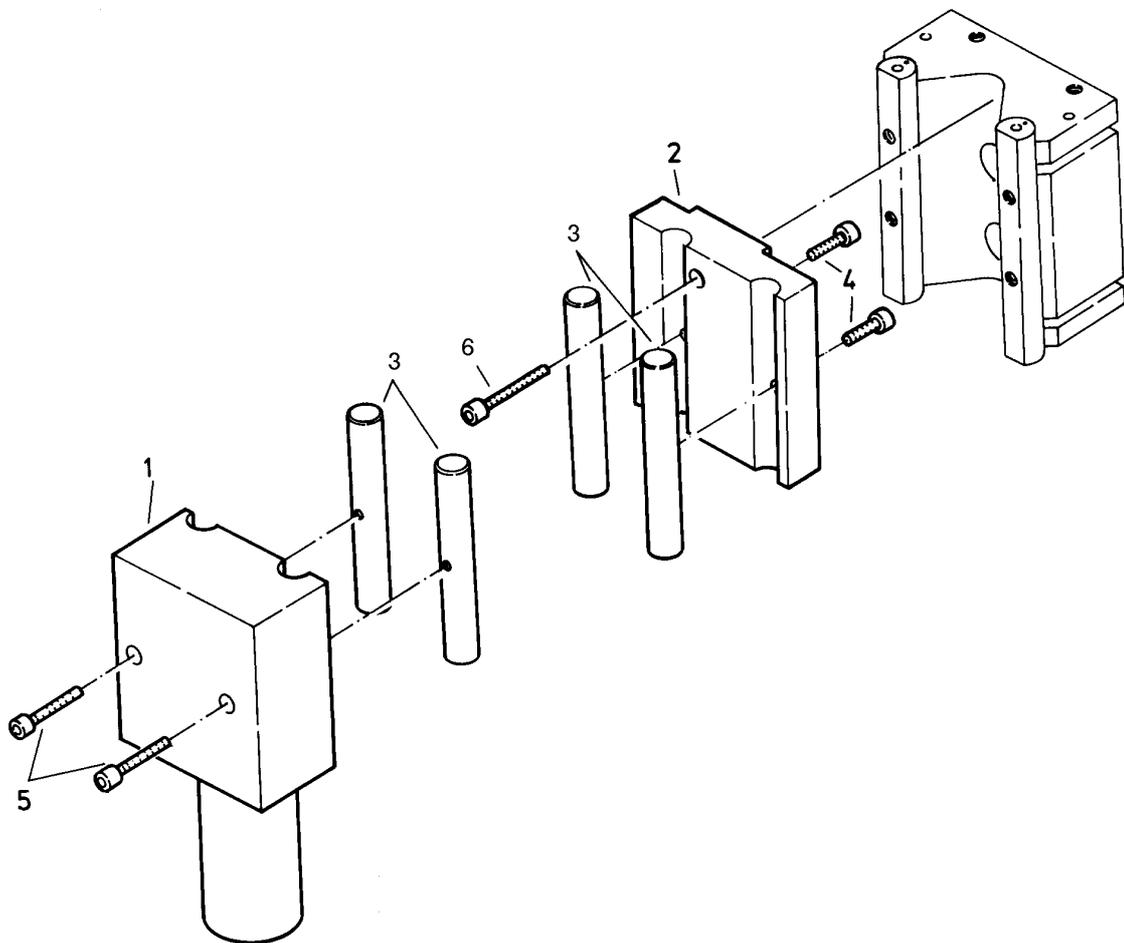
**7431 Step bending tool (small)**

Pos.	Designation	Ordering No.	Quantity
1	Step bending tool cpl.	31671	1
2	Adaptor	31652	1
3	Fillister head screw M 6x20	11009	2



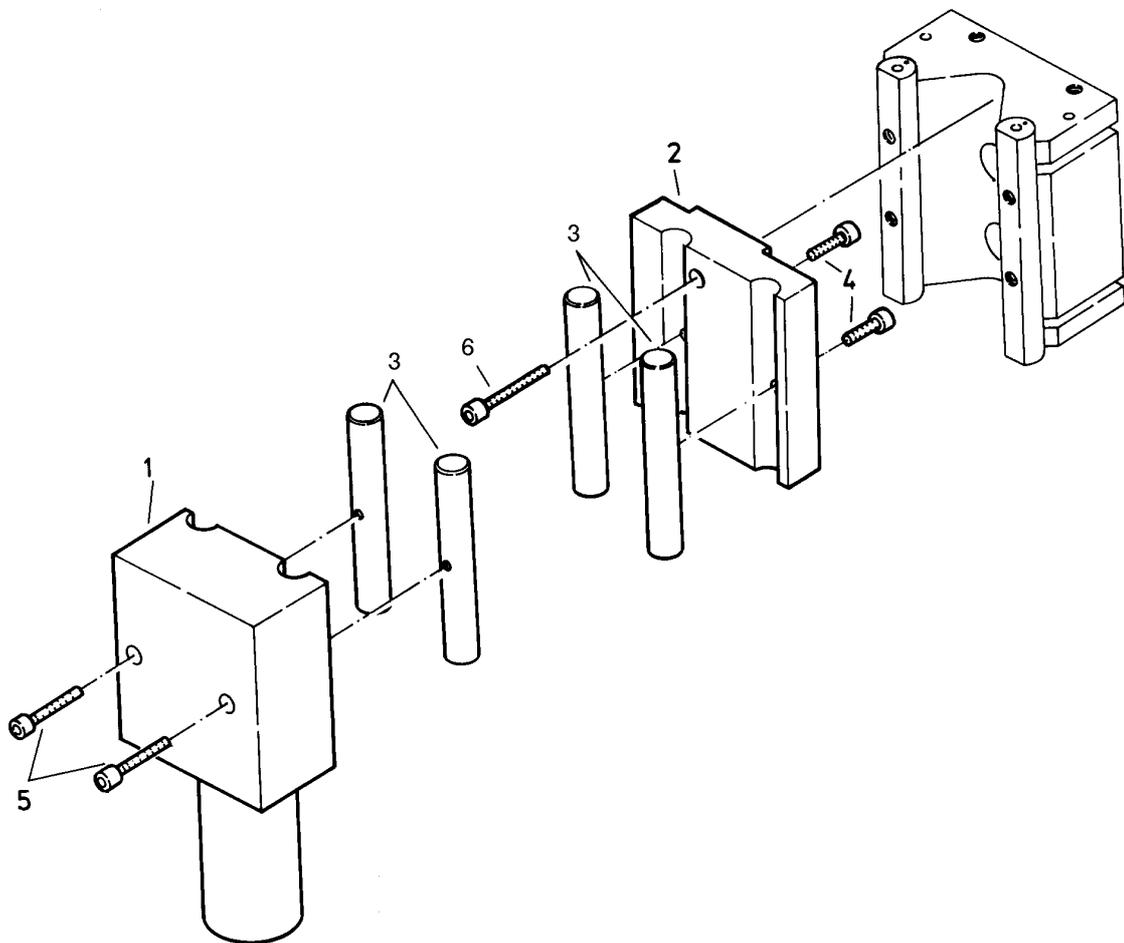
**31188 Step bending tool (big)**

Pos.	Designation	Ordering No.	Quantity
1	Step bending tool 1	31189	1
2	Step bending tool 2	31191	1
3	Tool	2643	4
4	Fillister head screw M 6x12	11259	2
5	Fillister head screw M 6x40	11190	2
6	Fillister head screw M 6x70	11650	1



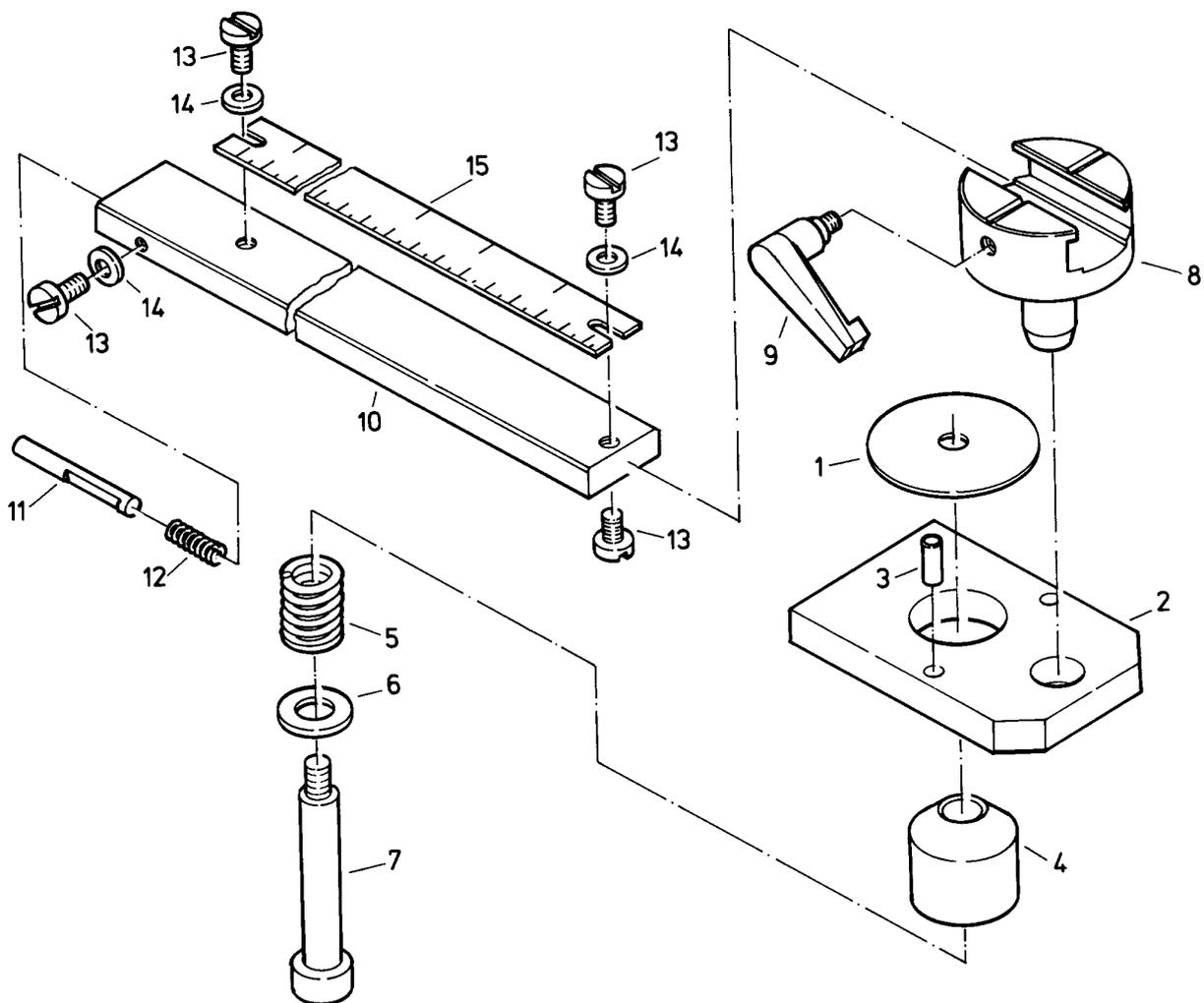
**31671 Step bending tool (small)**

Pos.	Designation	Ordering No.	Quantity
1	Step bending tool 1	31672	1
2	Step bending tool 2	31673	1
3	Tool	31327	4
4	Fillister head screw M 5x50	12143	2
5	Fillister head screw M 5x16	11096	2
6	Fillister head screw M 6x70	11650	1



**7060 Longitudinal stop BG**

Pos.	Designation	Ordering No.	Quantity
1	Washer	7079	1
2	Holding plate	7081	1
3	Dowel pin 6x24	12196	2
4	Cone	7083	1
5	Pressure spring	12436	1
6	Washer, dia. 13	11207	1
7	Screw	7082	1
8	Holder	7078	1
9	Clamping lever	12437	1
10	Stop slide	7077	1
11	Pin	7127	1
12	Pressure spring	12438	1
13	Fillister head screw M 4x4	12348	4
14	Washer 4.3	12329	3
15	Measuring tape	7084	1





## Bending benches with electronical bending angle switch-OFF

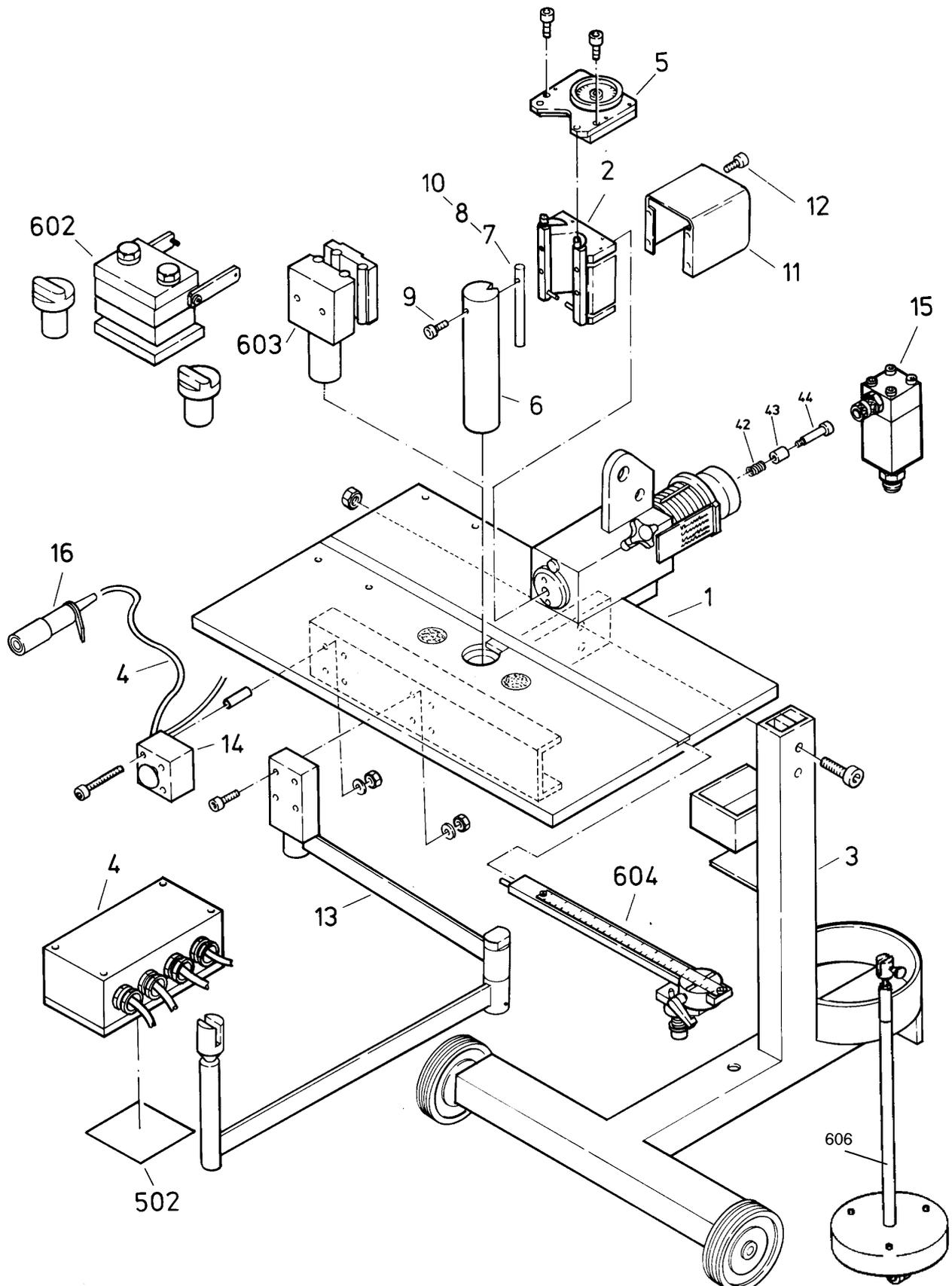
### Summary of assemblies

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5080 Bench element BG	10
4210 Bending tool up to Cu 160x13	12
4917 Carriage for BG to pack no. 621	13
2648 Carriage for BG from pack no. 622	14
30230 Carriage for BG from pack no. 669	15
5636 Supporting arm	16
5666 Emergency-off switch	
5665 Manual pushbutton	17
3123 Upedging bending tool for BG	18
31221 Upedging bending tool for BG	19
7431 Step bending tool (big)	20
31895 Step bending tool (small)	20
31188 Step bending tool (big)	21
31671 Step bending tool (small)	22
7060 Longitudinal stop BG	23

**4940 Bending bench BG for busbars up to 160x13 mm electronic** (to pack no. 621)

Pos.	Designation	Ordering No.	Quantity
1	Bench element BG	5080	1
2	Bending tool up to Cu 160x13	4210	1
3	Carriage for BG to pack no. 621	4917	1
4	Electronic box, cpl.	4919	1
5	Angle preselector	4080	1
6	Bending mandrel	7432	1
7	Bending radius 7.5 for bar B-160	3136	1
8	Bending radius R10 for bar B-160	1881	1
9	Fillister head screw M 6x50	11530	1
10	Bending radius R 15 for bars B-160	5724	1
11	Guard	5654	1
12	Fillister head screw M 5x10	11081	4
13	Supporting arm	5636	1
14	Emergency-off switch	5666	1
15	Reset valve RSV	5655	1
16	Manual pushbutton	5665	1
17	Nameplate NOVOPRESS	12035	1
42	Pressure spring 2,5x16x27,5	11975	1
43	Clamping sleeve	5662	1
44	Straining screw	5663	1
502	Electronic printed circuit board	11588	1
602	Upedging bending tool for BG	3123	1
603	Step bending tool 1	7431	1
604	Longitudinal stop BG	7060	1
606	Supporting pedestal	30017	1

**4940 Bending bench BG for busbars up to 160x13 mm, electronic** (to pack no. 621)



**4940 Bending bench BG for busbars up to 160x13 mm electronic** (from pack no. 622)

Pos.	Designation	Ordering No.	Quantity
1	Bench element BG	5080	1
2	Bending tool up to Cu 160x13	4210	1
3	Carriage for BG from pack no. 622	2648	1
4	Electronic box, cpl.	4919	1
5	Angle preselector	4080	1
6	Bending mandrel	7432	1
7	Bending radius 7.5 for bar B-160	3136	1
8	Bending radius R10 for bar B-160	1881	1
9	Fillister head screw M 6x50	11530	1
10	Bending radius R 15 for bars B-160	5724	1
11	Guard	5654	1
12	Fillister head screw M 5x10	11081	4
13	Supporting arm	5636	1
14	Emergency-off switch	5666	1
15	Reset valve RSV	5655	1
16	Manual pushbutton	5665	1
17	Nameplate NOVOPRESS	12035	1
42	Pressure spring 2,5x16x27,5	11975	1
43	Clamping sleeve	5662	1
44	Straining screw	5663	1
502	Electronic printed circuit board	11588	1
602	Upedging bending tool for BG	3123	1
603	Step bending tool 1	7431	1
604	Longitudinal stop BG	7060	1
606	Supporting pedestal	30017	1



**4940 Bending bench BG for busbars up to 160x13 mm electronic** (from pack no. 669)

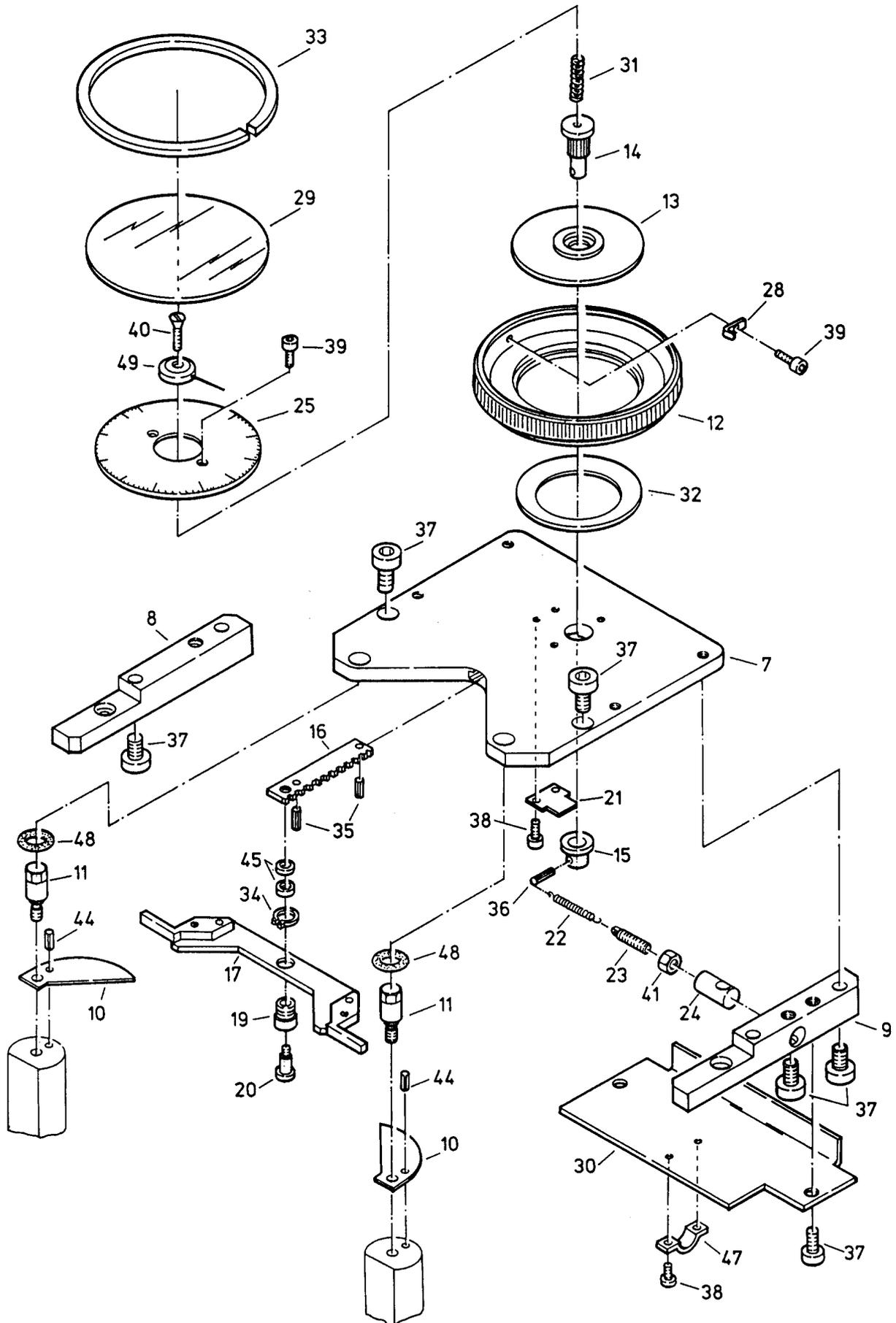
Pos.	Designation	Ordering No.	Quantity
1	Bench element BG	5080	1
2	Bending tool up to Cu 160x13	4210	1
3	Carriage for BG from pack no. 669	30230	1
4	Electronic box, cpl.	4919	1
5	Angle preselector	4080	1
6	Bending mandrel	7432	1
7	Bending radius 7.5 for bar B-160	3136	1
8	Bending radius R10 for bar B-160	1881	1
9	Fillister head screw M 6x50	11530	1
10	Bending radius R 15 for bars B-160	5724	1
11	Guard	5654	1
12	Fillister head screw M 5x10	11081	4
13	Supporting arm	5636	1
14	Emergency-off switch	5666	1
15	Reset valve RSV	5655	1
16	Manual pushbutton	5665	1
17	Nameplate NOVOPRESS	12035	1
20	Coding conector from pack no. 669	31924	1
42	Pressure spring 2,5x16x27,5	11975	1
43	Clamping sleeve	5662	1
44	Straining screw	5663	1
502	Electronic printed circuit board	11588	1
602	Upedging bending tool for BG	3123	1
603	Step bending tool 1	7431	1
604	Longitudinal stop BG	7060	1
606	Supporting pedestal	30017	1



**4080 Angle preselector**

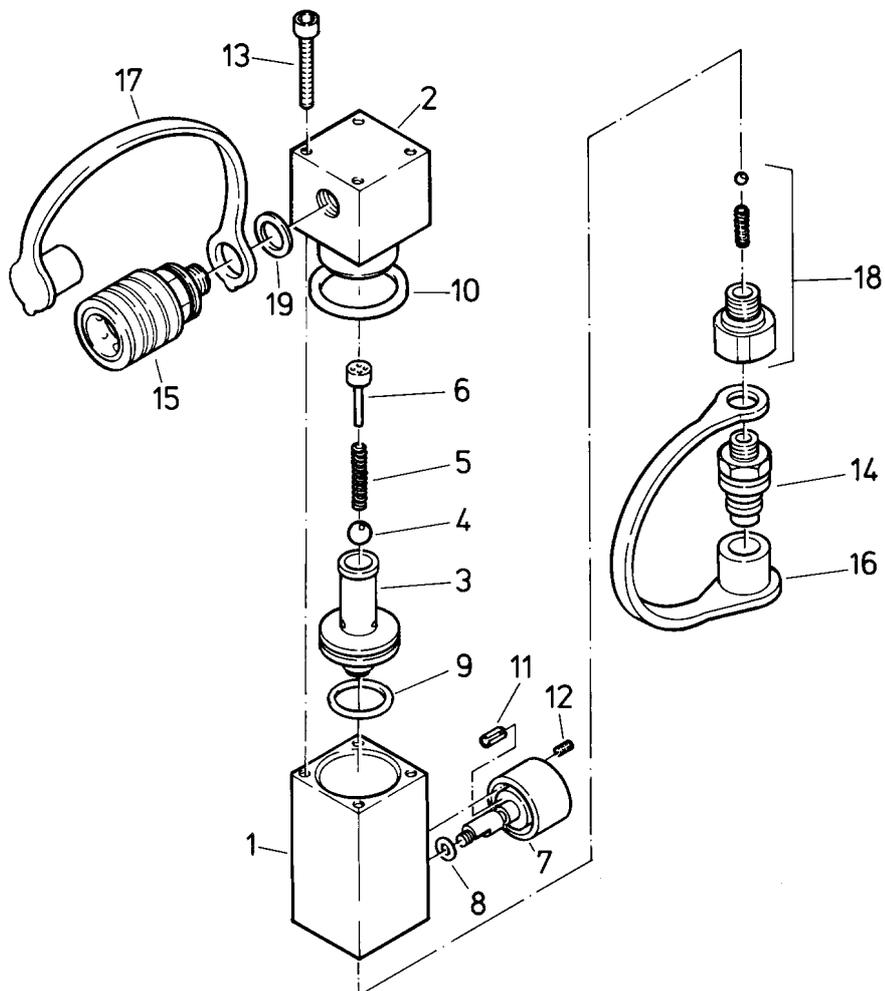
Pos.	Designation	Ordering No.	Quantity
7	Cover plate	4708	1
8	Rail A	4706	1
9	Rail B	4707	1
10	Curve plate	4734	2
11	Clamping screw	4704	2
12	Adjusting ring	4683	1
13	Centering disc	4686	1
14	Pinion shaft	4688	1
15	Sleeve	4689	1
16	Rack	4727	1
17	Rocker	9087	1
19	Collar nipple	4723	1
20	Screw	4725	1
21	Metal sheet	4705	1
22	Tension spring	4869	1
23	Set screw	4628	1
24	Holding bolt	4174	1
25	Angle scale	4845	1
28	Angle indicating contact	4703	1
29	Plexiglass window	4684	1
30	Metal sheet	4724	1
31	Pressure spring 0.16x2x20.9	11567	1
32	Cup spring K	11568	1
33	Snap ring	11566	1
34	Retaining ring	11565	1
35	Straight pin	11569	2
36	Straight pin	11570	1
37	Fillister head screw M 5x12	11571	9
38	Fillister head screw M 3x6	11572	6
39	Fillister head screw M 1.6x4	11573	3
40	Countersunk screw	11574	1
41	Hexagon nut M 4	11183	1
44	Clamping sleeve	11575	1
45	Washer A 3.2	11727	2
47	Pipe clamp Bürklin	11578	1
48	O-ring 8 x 2	11049	2
49	Pointer for angle preselector	6976	1

## 4080 Angle preselector



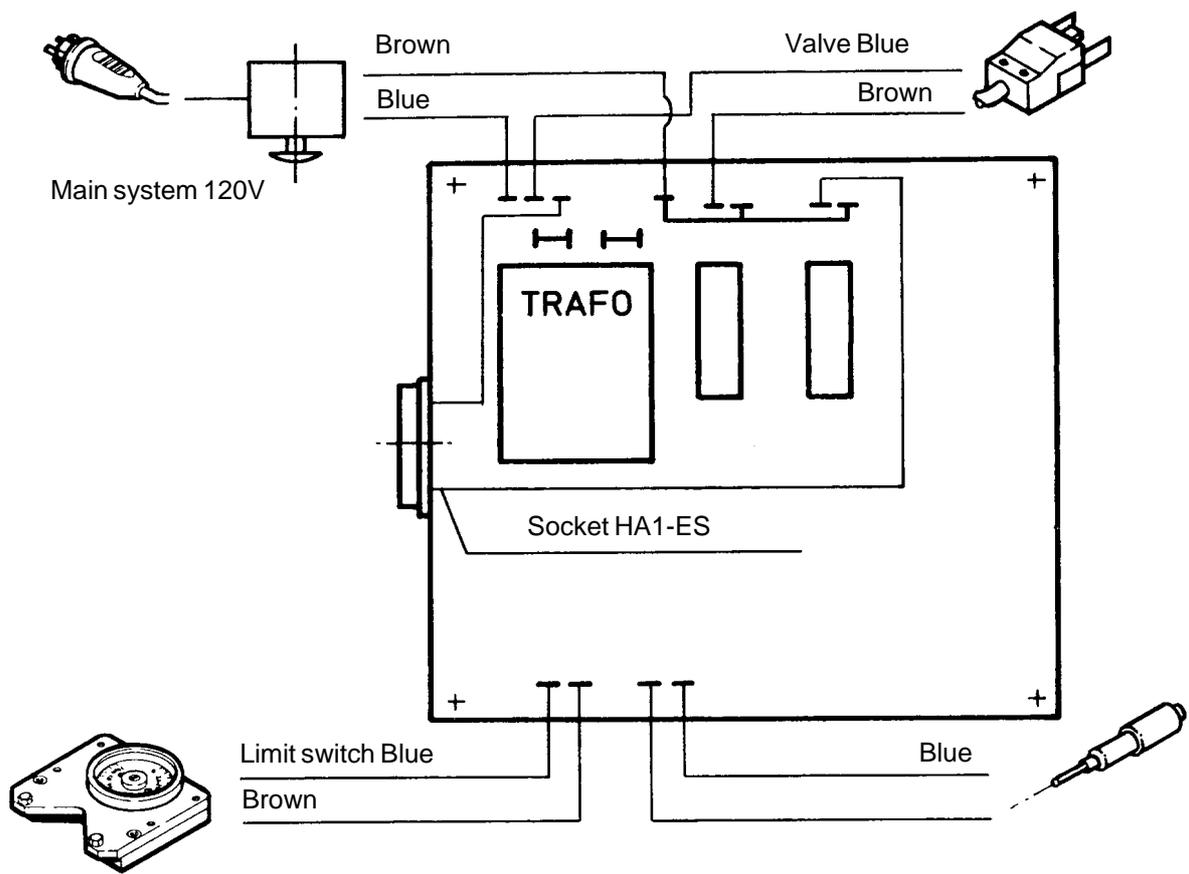
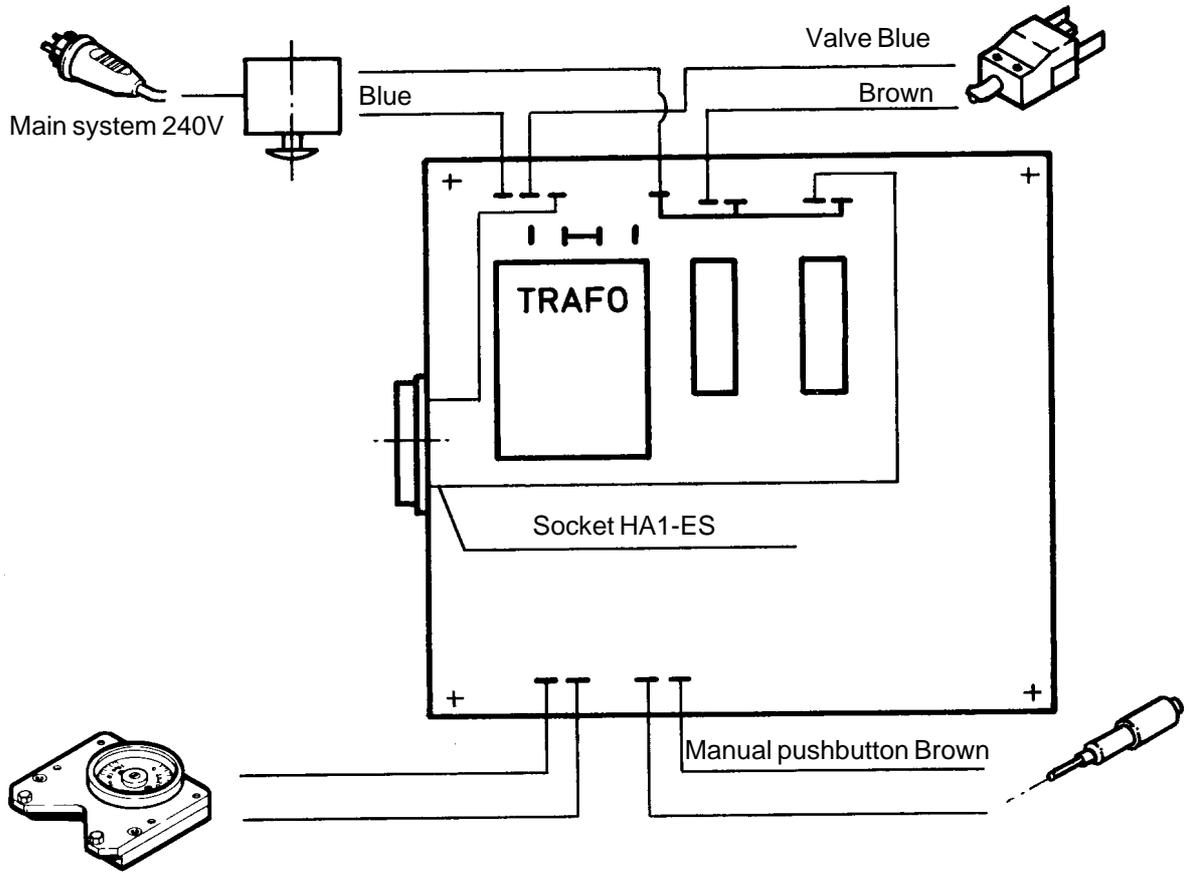
**5655 Reset valve RSV**

Pos.	Designation	Ordering No.	Quantity
1	Cylinder RSV	5906	1
2	Cylinder bottom RSV	6235	1
3	Piston RSV	6236	1
4	Sphere $\varnothing$ 10	11552	1
5	Spresure spring 0,8 x 5 x 36	11974	1
6	Valve screw	5659	1
7	Indexing bolt	5661	1
8	O-ring 6 x 2	11971	1
9	O-ring 33 x 3,5	11972	1
10	O-ring 40 x 2	11973	1
11	Clamping sleeve 4 x 12	11977	2
12	Set screw 4 x 10	11978	1
13	Cylinder screw M 5 x 55	12484	4
14	Coupling plug R 3/8" (device plug)	3718	1
15	Coupling socket	3719	1
16	Plug end dust cap	1514	1
17	Socket end dust cap	1515	1
18	RSV flow control valve	7244	1
19	Usit-ring 17,4 x 24 x 1,5	11423	1



4919 Electronic box

Connection schematics 220V and 110V



Repairs / Service

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