

Instruction Manual

MORSØ Mitring Machine

Model B - BA



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MORSØ-B



Bench Model ideal for glazing beads etc. to be cut in one cut. The machine is operated by a hand lever which is very easy to push down due to the carefully prepared construction. Morsø-B is supplied with table extensions to both sides and knives.

MORSØ-BA



The same machine as Morsø-B, but with rebate supports for small mouldings with rebate. Furthermore the machine has a 2 mm movement of the knife block.

TECHNICAL DATA			
Morsø-B		Morsø BA	
Double mitre	45°	Double mitre	45°
Single mitre up to	90°	Single mitre up to	90°
Cutting width max.	70 mm (2 3/4")	Cutting width max.	70 mm (2 3/4")
Cutting height max.	115 mm (4 1/2")	Cutting height max.	115 mm (4 1/2")
Measuring scale up to	none	Measuring scale up to	650 mm (25 1/2")
Weight	35 kilos (77 lbs)	Weight	35 kilos (77 lbs)

Assembling of the Machine/Operating the Machine

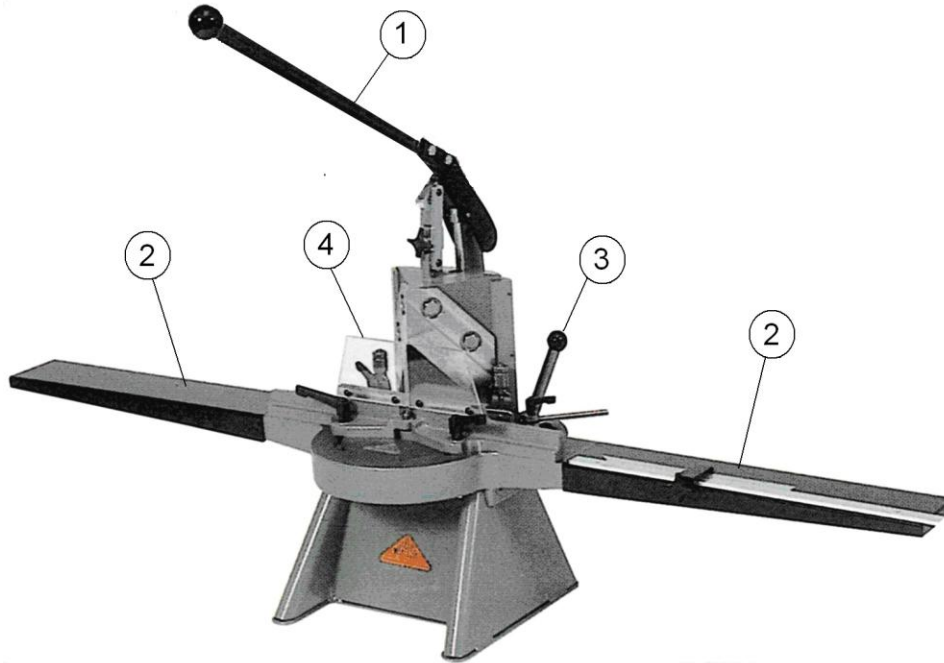


Fig. 1

Use and Adjustment of Rebate Supports

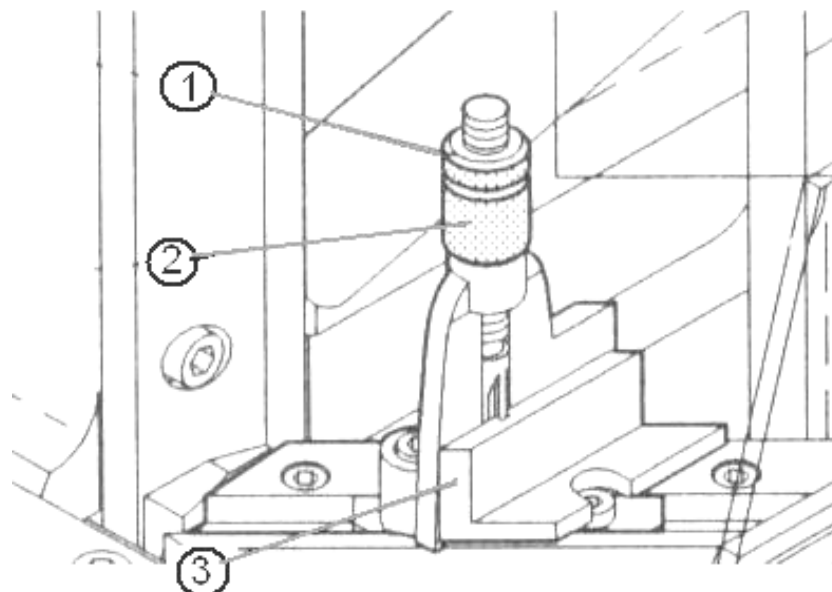


Fig. 2

Assembling of the Machine (Fig. 1)

MORSØ-B and BA

The machine is delivered assembled ready for use, except for the hand lever (1) and the extension tables left and right (2) which are disassembled during transit and must be fitted. The machine comes complete with all standard equipment.

The machine is ungreased.

Operating the Machine (Fig.1)

MORSØ- B

The machine is operated by means of the hand lever (1).

The knife block is fixed, and the moulding must be cut in one cut.

MORSØ- BA

The machine is operated by means of the hand lever (1).

The knife block has a 2 mm movement for the last trim cut so that the moulding will be quite exact and smooth. For the first cut the handle (3) is moved backwards. Before the second cut move the handle (3) forward.

OBS: According to current safety regulations **MORSØ-B** and **BA** must not be used without the safety guards (4).

Use and Adjustment of Rebate Supports (Fig. 2)

MORSØ-B

Has no rebate supports

MORSØ- BA

The knife block must be in the topmost position during the adjustment.

The rebate supports are only used when cutting mouldings with rebates.

To adjust the rebate supports knurled nut (1) is loosened.

Place the moulding to be cut in the machine. Push the rebate supports (3) into the rebate of the moulding. Press the moulding down on the machine table.

The height of the rebate supports is adjusted by means of the knurled nut (2). The rebate supports must be adjusted so that they are approx. 1/2 mm under the rebate of the moulding.

After the adjustment the knurled lock nut (1) is tightened.

The rebate supports can be removed from the machine when the knife block is in the rearmost position.



Cutting of mitres at other than 45 degrees
MORSØ-B and BA

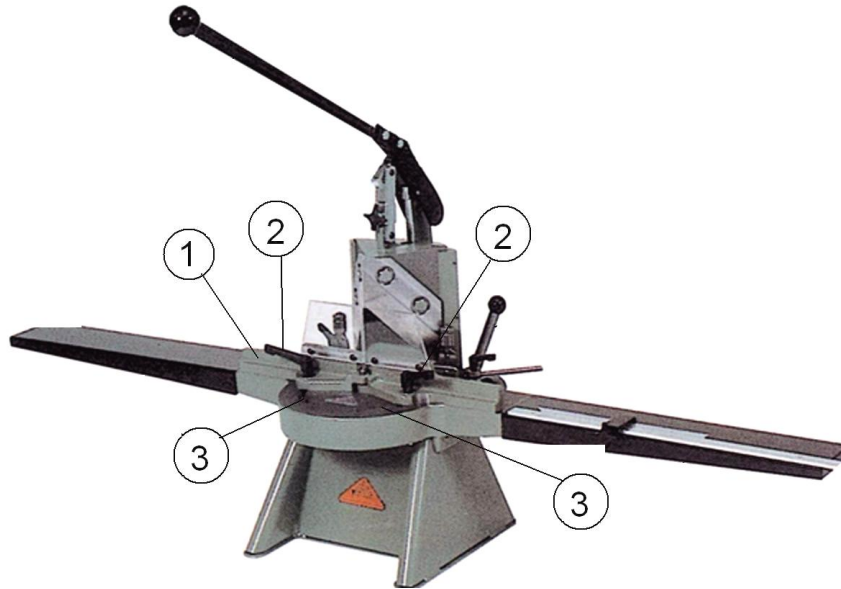


Fig. 3

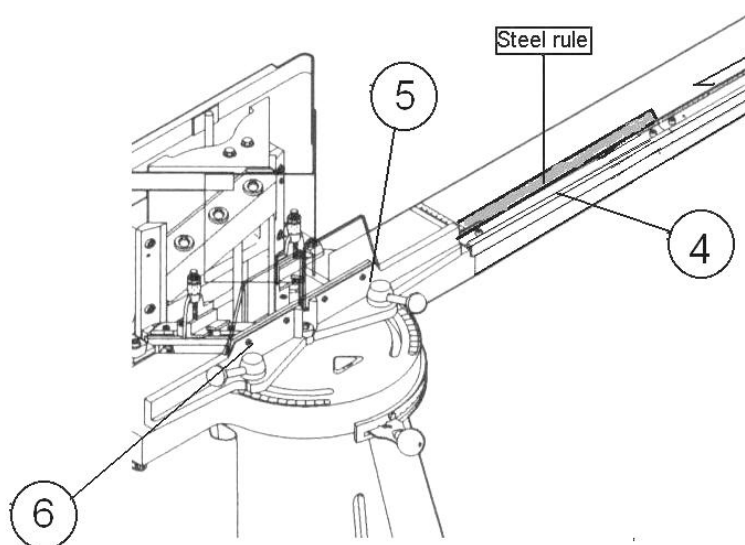


Fig. 4

Cutting of mitres at other than 45 degrees (Fig. 3)
MORSØ-B and BA

The fences (1) can be adjusted as required (from the factory they are adjusted to 45° for a double mitre).

If, for instance, you want to make a 6-sided (hexagonal) frame the following procedure is used:

6 pieces of moulding are cut in the normal way at 45° so that the inside measurement of each piece of moulding is equal to the finished inside measure of the frame plus approx. the width of the rebate.

Hand levers (2) are loosened and the fences (1) are turned according to the scales (3) to 60°.

The degree adjustment is read by means of the mark.

After the adjustment the hand levers (2) are fastened again, and all moulding ends are cut separately at 60° - single mitre.

Exact Adjustment of the Fences (Fig. 4)

The figure shows the Morsø-F mitring machine, but the procedure is the same for the MORSØ-BA and B.

When the fences have been adjusted to degrees other than 45°, the correct re-adjustment to 45° is made as follows:

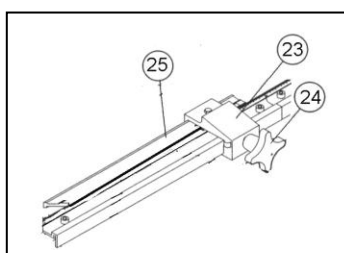
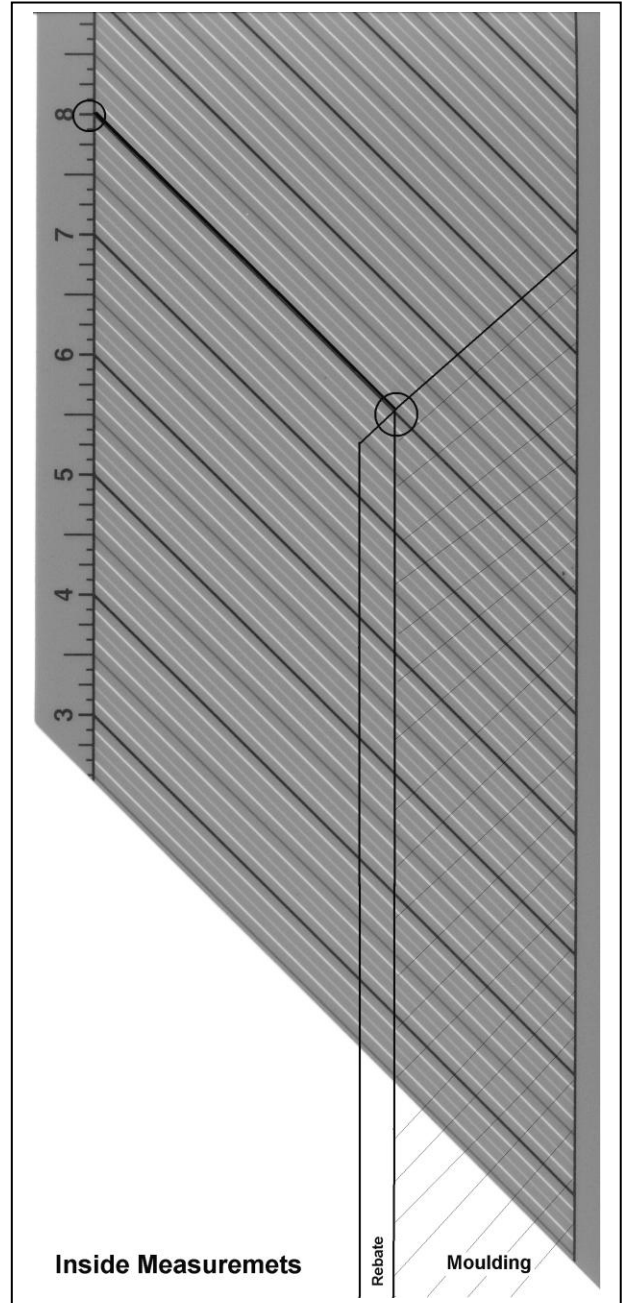
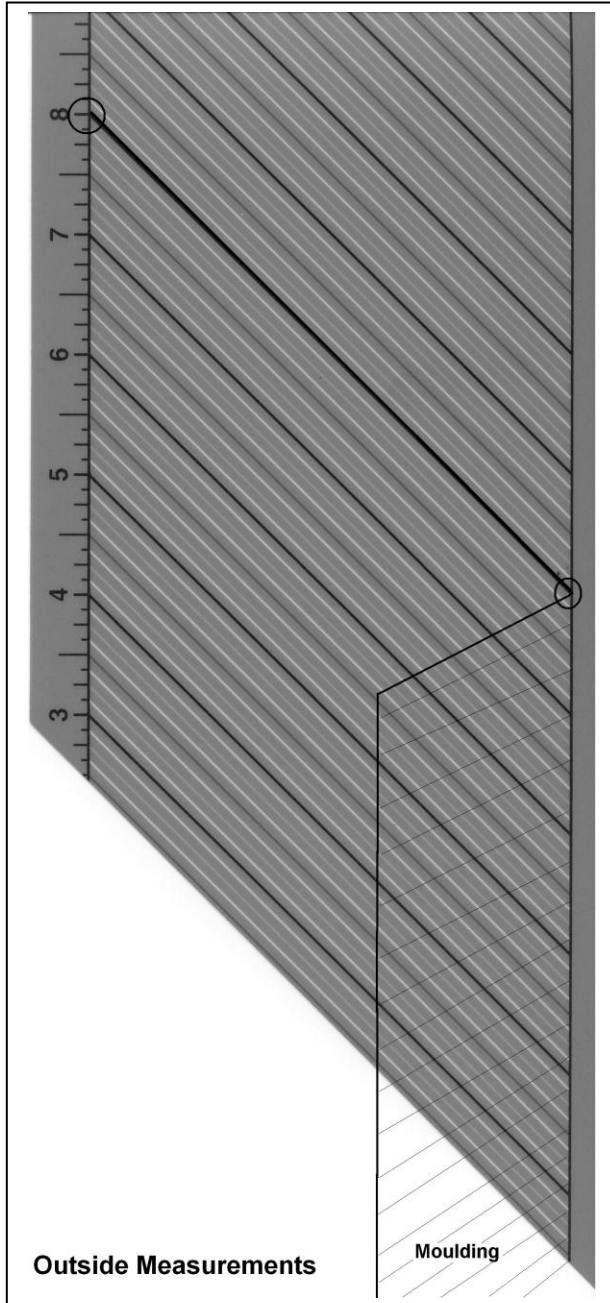
Place a straight steel rule against the measuring scale (4) so that it overlaps the whole of the right fence (5). Now, adjust the right fence (5) according to the steel rule, and the right fence (5) will be adjusted to exactly 45°.

Place the steel rule against the right fence (5) (now exactly adjusted at 45°), so that it overlaps the whole of the left hand fence (6) and proceed as mentioned above with the adjustment of the left fence (6).



Beware of the extremely sharp knives

Measuring Scale
MORSØ-BA



Measuring Scale **MORSØ-BA**

Principle:

The measuring scale engraved in the table indicates the distance from the right knife in inches. E.G. the line marked 8 has a distance of 8 inches from the right knife.

Outside measurement:

To make a frame of 8 x 6 inches outside measurement proceed as follows:

Cut the right hand side of the moulding to 45°. Place the moulding on the table so that the end of the moulding is exactly at the line marked 8.

Push the movable stop beam (25) against the end of the moulding, and tighten it by means of the stop block (23) and star wheel (24).

Cut two pieces of moulding.

Repeat the procedure as described above, but use the line marked 6 instead of 8.

Inside measurement:

To make a frame of 8 x 6 inches inside measurement proceed as follows:

Cut the right hand side of the moulding to 45°. Place the moulding on the table so that the corner between the start of the rebate and the end of the moulding is exactly at the line marked 8.

Push the movable stop beam (25) against the end of the moulding, and tighten it by means of the stop block (23) and star wheel (24).

Cut two pieces of moulding.

Repeat the procedure as described above, but use the line marked 6 instead of 8.

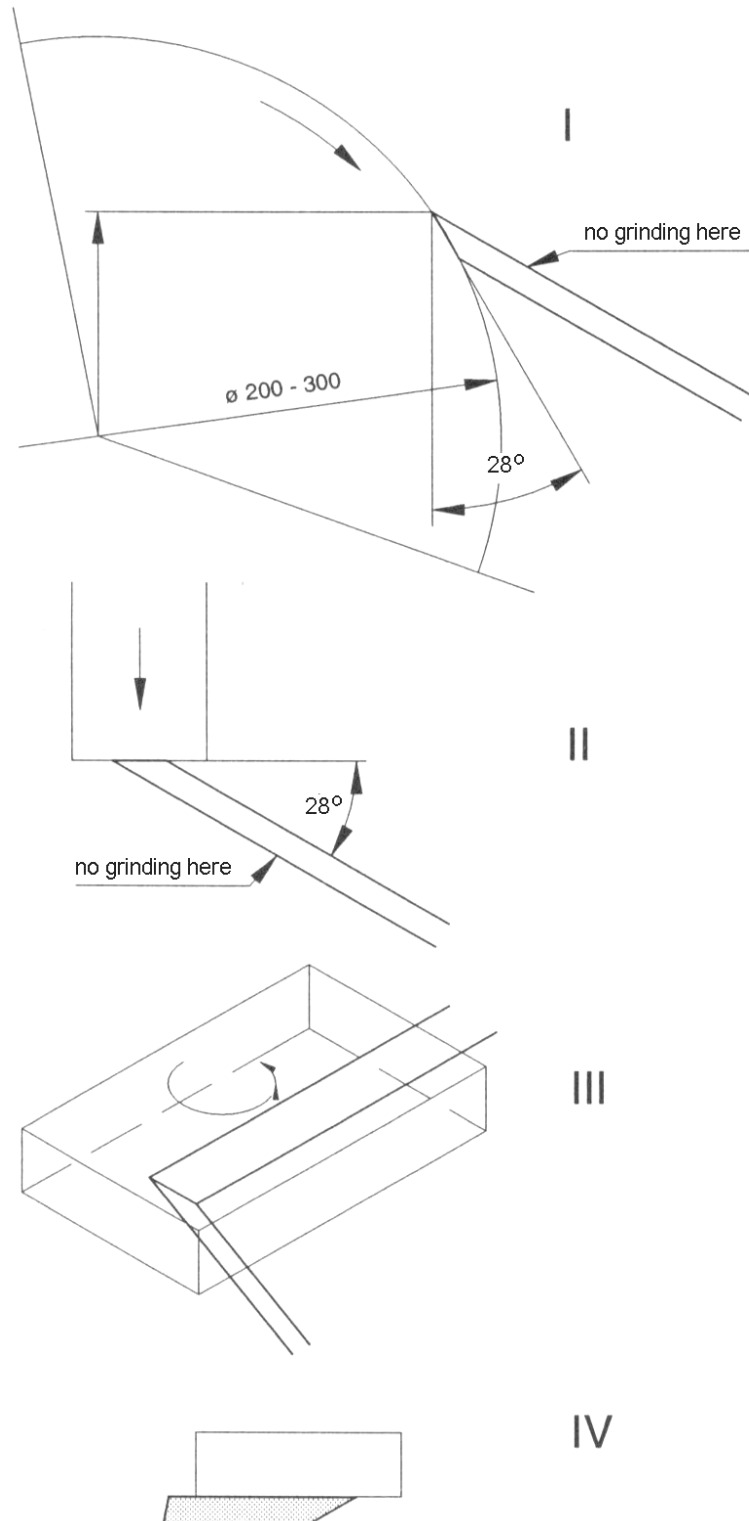
You can now make a frame which fits a picture of 8 x 6 inches.

The same procedure is adopted for machines engraved in metric.



**Beware of the extremely
sharp knives**

**Grinding of knives.
MORSØ-BA and B**



**Grinding of knives.
MORSØ-BA and B**

When grinding the knives you must **only** grind on the reverse of the cutting edge. You must under **no circumstances** grind on the front or ends of the knives, because the knives will then be destroyed. The angle of the cutting edge compared to the front of the knife must be 28°.

Hollow grinding (recommended), figure I.

Using a grinding wheel the diameter must be between 200 - 300 mm. Using a cup wheel the diameter must be 150 mm.

Surface grinding figure II

Honing figure III

By setting the cutting edge you must use a soft fine-grained silicon carbide hand flat stone that must be kept soaked in oil or kerosene.

By setting the cutting edge you must under **no circumstances** sharpen lengthwise of the cutting edge, always crosswise.

First sharpen on the reverse side of the knife. The flat stone is to be kept in an angle of 29° compared to the front of the knife.

Take off burrs, figure IV

After the honing the burrs on the front of the knife are taken off with a slate flat stone that must be quite straight.

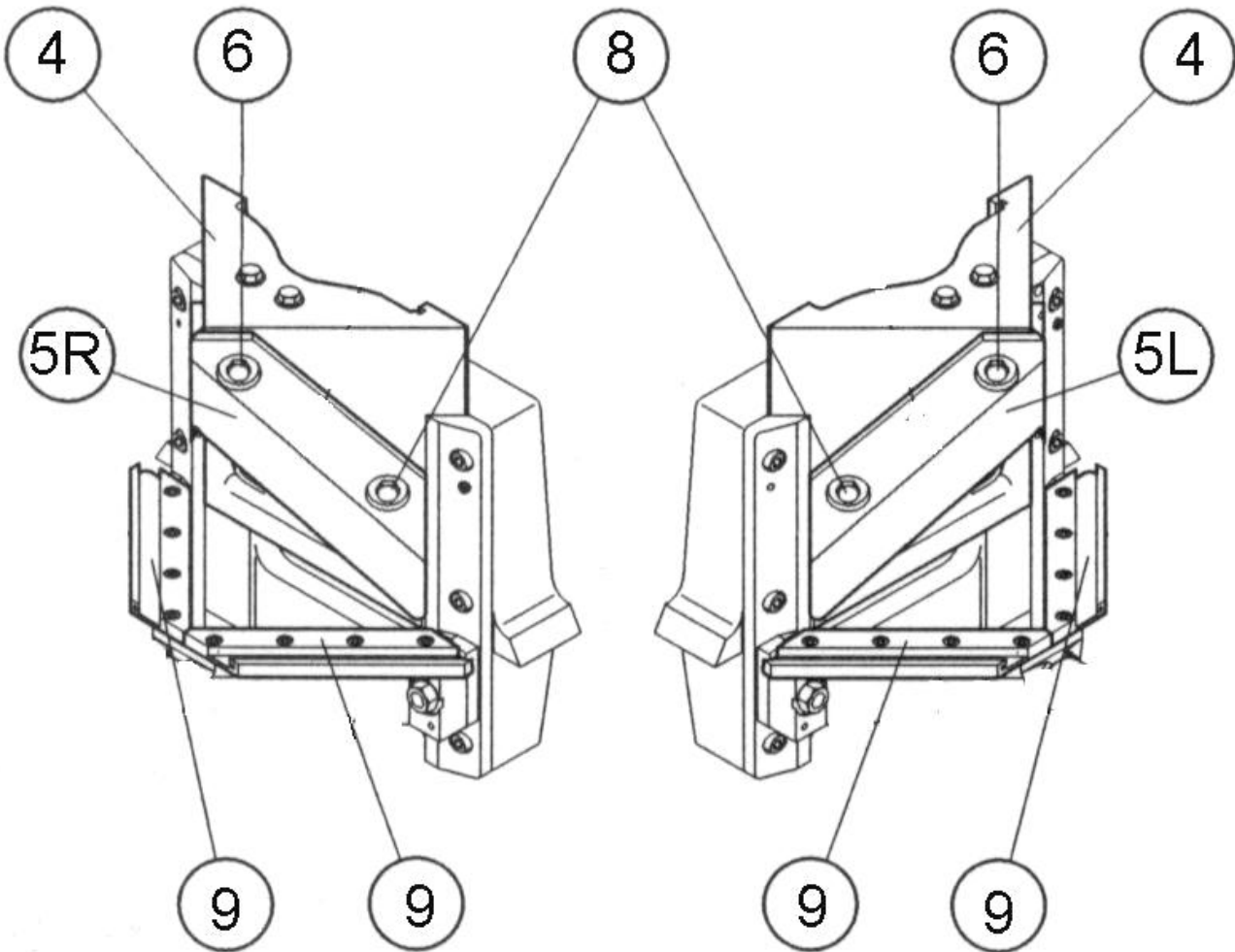
The flat stone must here be completely in line with the knife, because otherwise the outer cutting edge will get an incorrect angle.

Even the slightest error here will cause the knife to press too hard against the wood during the cutting, causing damage or bruising to the moulding.



**Beware of the extremely
sharp knives**

Changing Knives



Changing Knives **MORSØ-B and BA**

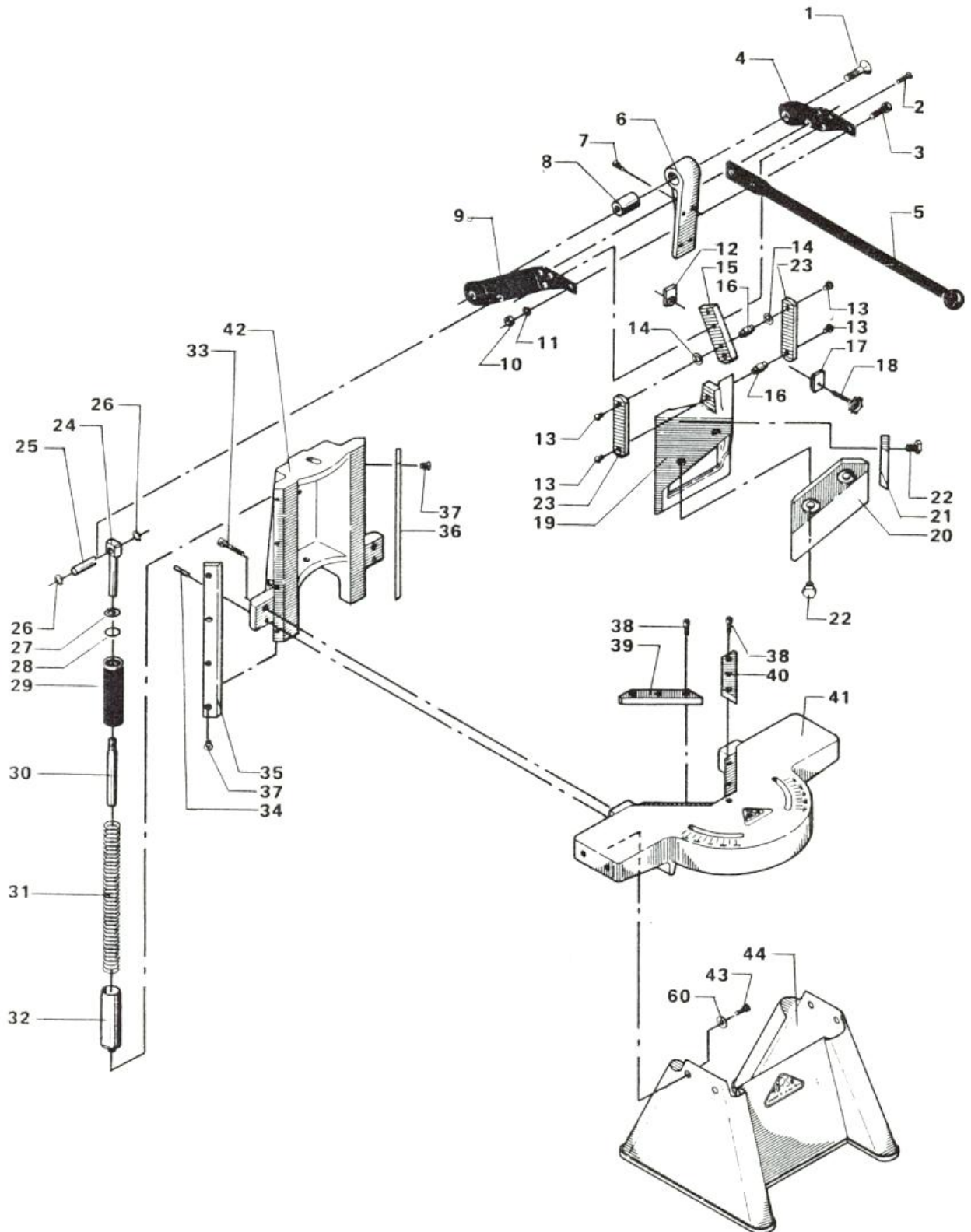
When the cutting is no longer satisfactory, e.g. unclean cut surfaces with grooves, the knives must be changed or sharpened.

1. Bolts (6) + (8) are loosened with spanner (17mm.).
2. Remove bolts (6) + (8) carefully while pressing the knife (5L) against the knife block (4) with your hand so that the knife does not fall down..
3. Remove the knife.
TAKE CARE OF YOUR FINGERS.
4. The same procedure is adopted with the opposite knife (5R).
5. Clean the surfaces of the knife block (4) and the new knives very carefully as even the smallest impurity between knife and knife block (4) will cause the knives to impinge too hard against the bottom knives (9).
6. Both new knives (5L) + (5R) are fitted on the knife block (4) with the bolts (6) + (8). Do not tighten the bolts.
7. The knives are pressed together at the front point. The knives must meet precisely at the front point and neither front edge must be further ahead than the other.
8. Check if the cutting edges of the knives are exactly the same height. If not, the knives can be adjusted up or down separately until the correct position is reached.
9. Tighten the bolts (6) (in both knives).
10. Tighten bolts (8).
11. Press the handle down very slowly and gently, to check that the new knives do not bind against the bottom knives.
12. Make a trial cut.



**Beware of the extremely
sharp knives**

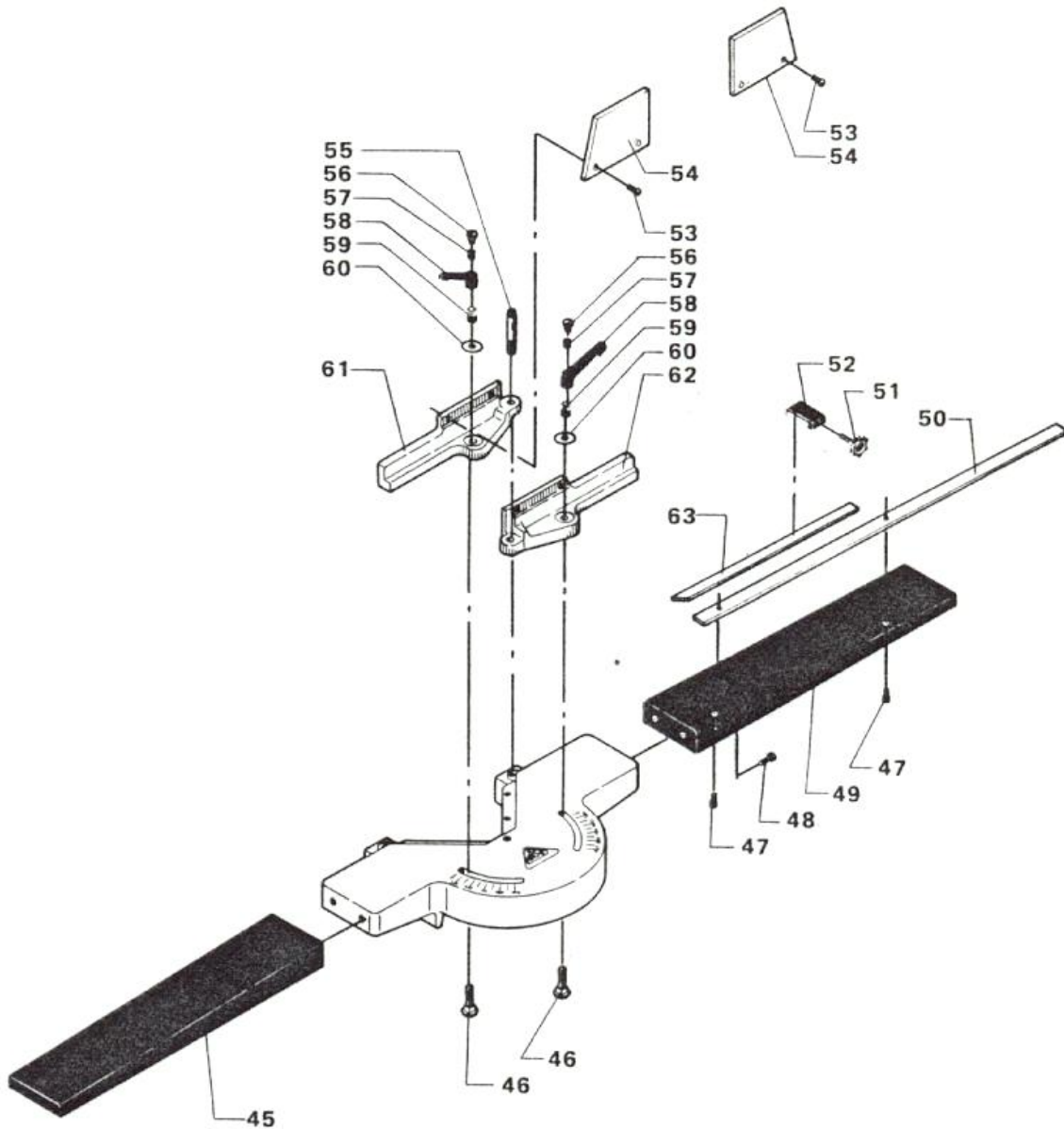
MORSØ-B



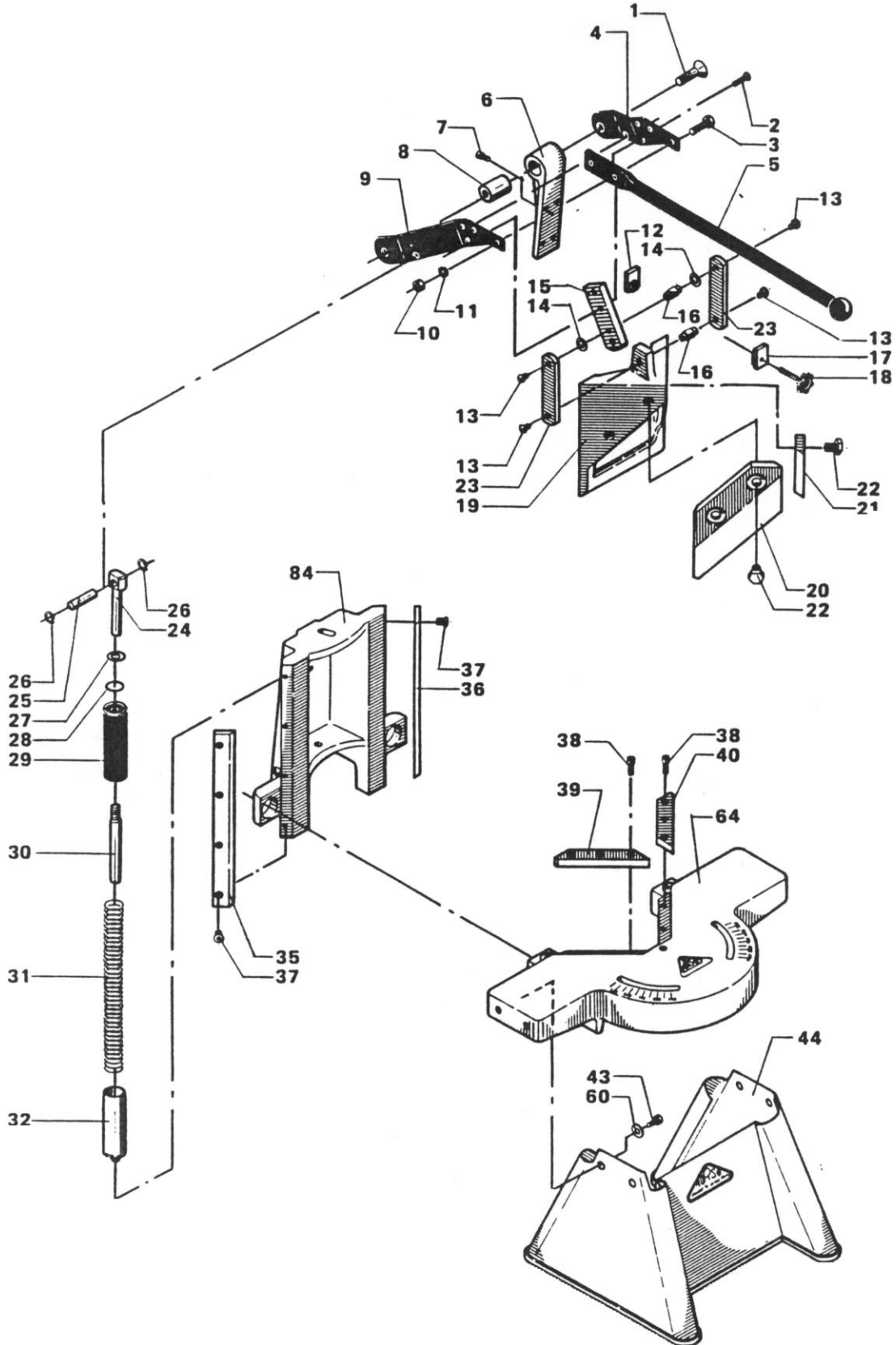
MORSØ-B

Pos	Art. No.	Betegnelse	Designation	Benennung
1 2 3 4 8 9 10 11	8001	Vippearm med bøsning og skruer	Tilting Lever with bushing and screws	Kipphebel mit Schrauben
6 7	8002	Trækarm med skruer	Draw Lever with screws	Zughebel mit Schrauben
12 17 18	8003	Højdestop med singerskure	Height Stop with thumb screws	Höhenanschlag mit Rändelschrauben
5	8150	Håndstang	Hand Lever	Handhebel
13 14 15 16 23	8005	Trækstrop, komplet	Draw Strap complete	Exzenterhebel
19	8202	Knivhoved	Knife Block	Messerkopf
20 21	0902	Overknive	Knives	Messer
22	0303	Skruer for overknive	Screws for knives	Schrauben für Messer
24 25 26 27 28 29 30 32	8006	Fjederhus, komplet	Spring Holder, complete	Federgehäuse, komplett
31	8220	Trykfjeder	Pressure Spring	Druckfeder
33 34 42	8007	Slædeparti	Slide Frame	Schlittenrahmen
35 36 37	8008	Styrelister højre/venstre med skruer	Long Guide Rails right/left with screws	Steuerleisten rechts/links, mit Schrauben
39 40	8155	Underknive	Bottom Knives	Untermesser
38	8016	Skruer for underknive	Screws for bottom knives	Schrauben für Untermesser
41	8195	Bord	Table	Tisch
43 44 60	8009	Stativ med skrue og skiver	Frame with screws and washer	Gestell mit Schrauben und Spannscheiben

MORSØ-B



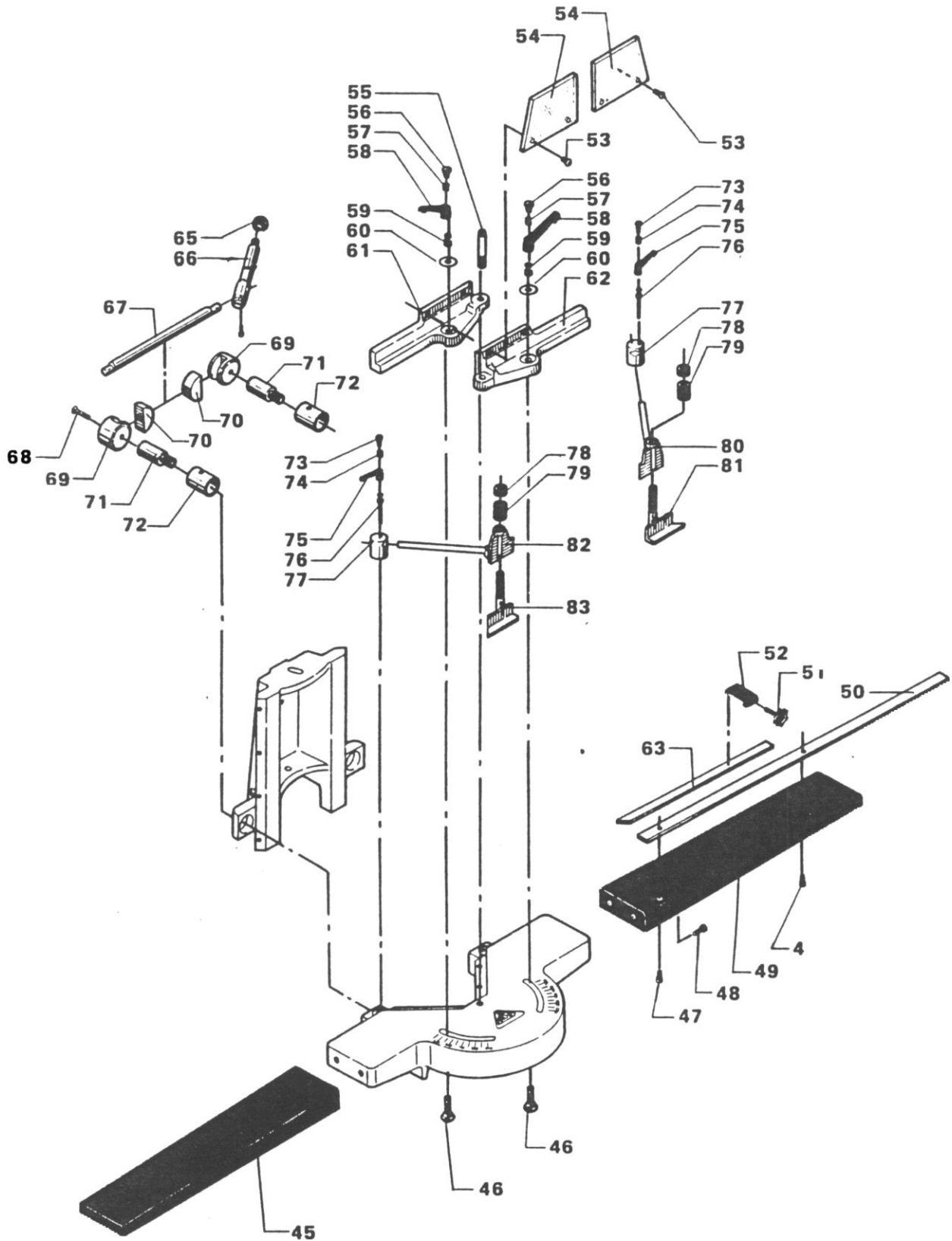
MORSØ-BA



MORSØ-BA

Pos	Art. No.	Betegnelse	Designation	Benennung
1 2 3 4 8 9 10 11	8001	Vippearm med bøsning og skruer	Tilting Lever with bushing and screws	Kipphebel mit Schrauben
6 7	8002	Trækarm med skruer	Draw Lever with screws	Zughebel mit Schrauben
12 17 18	8003	Højdestop med fingerskrue	Height Stop with thumb screws	Höhenanschlag mit Rändelschrauben
5	8150	Håndstang	Hand Lever	Handhebel
13 14 15 16 23	8005	Trækstrop, komplet	Draw Strap, complete	Exzenterhebel
19	8202	Knivhoved	Knife Block	Messerkopf
20 21	0902	Overknive	Knives	Messer
22	0303	Skruer for overknive	Screws for knives	Schrauben für Messer
24 25 26 27 28 29 30 32	8006	Fjederhus, komplet	Spring Holder, complete	Federgehäuse, komplett
31	8220	Trykfjeder	Pressure Spring	Druckfeder
35 36 37	8008	Styreliste med skruer	Long Guide rails with Screws	Steuerleisten Rechts/links mit Schrauben
39 40	8155	Underknive	Bottom Knives	Untermesser
38	8016	Skruer for underknive	Screws for bottom knives	Schrauben für Untermesser
43 44 60	8009	Stativ med skruer og skiver	Frame with screws and washer	Gestell mit Schrauben und Spannscheiben
64	8196	Bord	Table	Tisch
72 84	8004	Slædeparti	Slide Frame	Schlittenrahmen

MORSØ-BA



MORSØ-BA

Pos	Art. No.	Betegnelse	Designation	Benennung
45 48	8010	Bordforlænger V. med skruer	Extension Tale L. with Screws	Tischverlängerung, links, mit Schrauben
61 62	8203	Anslagslister H + V	Fences L + R	Anschlagsleisten rechts/links
46 56 57 58 59 60	8011	Skruer for anslagslister	Screws for Fences	Schrauben für Anschlagsleisten
47 48 49 50	8012	Borforlænger H. med lineal og skruer	Extension Table R. with Ruler and Screws	Tischverlängerung rechts mit Linial und Schrauben
63	8206	Stopskinne	Stop Beam	Anschlagsschiene
51 52	8013	Stopklods med fingerskrue	Stop Block with Thumb Screw	Endanschlag mit Rändelschraube
53 54	8014	Sikkerhedsskærm med skruer	Safety Guard with Screws	Unfallschutz mit Schrauben
55	0177	Styretap for anslagslister	Steering Pivot for Fences	Stehbolzen für Anschlagsleisten
65 66	8015	Håndtag med kugle for vippestang	Handle with Ball for Tilting Lever	Handhebel mit Knopf für Kipphebel
67	8306	Vippepestang	Tilting Lever	Kipphebel
68 69 70 71	8016	2 mm stop	2 mm Stop	2 mm Anschlag
73 74 75 76	8640	Spændehåndtag for falsstøtter	Tightening Handle for Rebate Supports	Spannhandhebel für Falzauflagen
77	8308	Spænde for falsstøtter	Clamp for Rebate Supports	Spannvorrichtung für Falzauflagen
78 79 80 81	8130	Falsstøtte højre	Rebate Support R.	Falzauflage, rechts
78 79 82 83	8131	Falsstøtte, venstre	Rebate Support L.	Falzauflage, links
72 84	8004	Slædeparti	Slide Frame	Schlittenrahmen