

ELECTRIC MAGNETIC SHEETMETAL BENDING MACHINE
MODEL: EB625/EB1000/EB1250/EB2000/EB2500/EB3200



OPERATING MANUAL

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1. INTRODUCTION

Electromagnetic sheet metal bending machines use an electromagnetic, rather than a mechanical, clamping system. The machine consists of a long electromagnet with a steel clamp bar located above it. The sheet metal is clamped between the two by an electromagnet capable of clamping with a force range of between 3-10 tons. Rotating the bending beam then forms the bend. The sheet is bent around the front edge of the clamp-bar.

Using the machine is simple, slide the sheet in under the clamp-bar; press the start-button to initiate clamping; lift the handle to form the bend to the desired angle; and then return the handle to automatically release the clamping force. The folded sheet can now be removed or repositioned ready for another bend.

The special centre less compound hinges, are distributed along the length of the bending beam allowing bending loads close to where they are generated.

The combined effect of the magnetic clamping with the special center less hinges means that the electromagnetic sheet metal bending machine is a very compact, space saving, machine with a very high strength-to-weight ratio.

1.1 ELECTROMAGNETIC SHEET METAL BENDING MACHINE EB0625

EB1000&EB1250

The electromagnetic sheet metal bending machine EB0625, EB1000, EB1250 are highly versatile sheet metal folding machines used to bend mild steel and aluminum sheet metal. Thickness of up to 1.6 mm thick can be folded across the full length of these machines. These multi-purpose machines bend sheet metal of lengths 625mm, 1000mm and 1250mm respectively.

The magnetic clamping system replaces the bulky clamping structure used in conventional folding machines. The small compact clamp bar does not hinder or obstruct the work piece. Automatic electromagnetic clamping and unclamping, means faster operation. These machines have a much greater versatility than conventional sheet metal benders. The machines are ideal for use in the sheet metal industry, air-conditioning and building industries.

An electrical interlock is offered to enhance operator safety. This operation ensure that a safe pre-clamping force must be applied before full-clamping can be engaged.

1.2 ACCESSORIES

Adjustable backstops, storage tray and a complete set of short-length clamp-bars are included as standard accessories.

A narrow clamp bar, a slotted clamp bar for forming shallow boxes more quickly and a power shear with guide for straight distortion-free cutting of up to 1.6 mm thick is all available as optional extra accessories. A further optional extra is a foot switch available for the EB1250 unit only.

A full 12 month warranty is offered that covers faulty materials and workmanship.

2. ASSEMBLY

Note: The machine is supplied upside down for assembly purposes.

1. Remove all parts from the package with the exception of magnet body assembly.

2. Find the 6 mm allen key and fasteners supplied.
3. Use slings provided to remove the magnet body from the crate. Rest the body on wooden blocks supplied.
4. Attach the feet to column by using the M10x16 button-head screws provided. Point the pair of feet forwards ensuring that the safety tape is facing forwards. Ensure that the joining seam on the column faces to the backwards.
5. On models EB0625 and EB1000, fasten foot plate under front feet using M10 by 16 cap-head screws with washers. Alignment is easier if foot mounting is not tightened until the foot plate is fitted. The rear feet cap head screws can be adjusted to level the machine. A foot plate is not supplied with the EB1250 machine. The machine is bolted directly to the floor on the front feet.
6. Place the magnet body on the stand securing it with M8x16 cap head screws. This would be best lifted with a lifting facility or some assistance. On models EB0625 and EB1000 ensure that connects and wires are guided down the column as the magnet body is lowered on the stand.
7. On models EB0625 and EB1000, connect the electromagnet to the electrical unit by removing the rear access panel and plug the three pin connector together. Refit access panel. On model EB1250 use the M6x10 pan head screw to attach the mains cable clip to the back of the column.
8. On model EB0625 using the M6 pan head screws and nuts, joint the two halves of the tray. Using cap M8x12 head screws attach tray to rear of machine. Fit rubber mat inside tray. Attach backstop slides to the sides of tray. On models EB1000 and EB1250, use two M8x16 cap head screws to attach the two back stop bars. Slide the stop collars onto to each back stop bar. Fit rubber mat.
9. Using M8x16 cap head screws attach the handle(s) to the bending beam. Before attaching the handle on models EB0625 and EB1000, slide it through the angle indicating ring. On model EB1250, slide stop collar to the top of the handle and tighten. Fit the handle with angle scale to the left side.
10. On model EB1250 move the bending beam 180 degree. Slide angle indicator unit on to right handle. Attach the two arms of the indicator spindle to anchor block. To ensure correct operation, securely fasten screws to switch mechanism.
11. Use solvent i.e. turpentine to remove the clear protective coating from the top of the unit and form the clamp bar.
12. Place the clamp bar on the magnet body. To engage the heads of the lifter pins push lifter handle back and then pull the handle forward.
13. To obtain excellent results follow the operating instructions.

3. OPERATING PROCEDURES

3.1 GENERAL CAUTIONARY IMPORTANT WARNINGS

Electromagnetic sheet metal bending machines are designed for ONE operator only, which includes the inserting of the sheet metal and operating the switches.

See specifications for clamping strength-please note that the force is several tones. All units are fitted with a two-handed interlocking system to prevent hands being accidentally trapped when clamping.

Safety procedures:

1. Safe pre-clamping is engaged
2. Full clamping is activated
3. Lower clamping bar to 5 mm of the bed
4. Magnet will engage

3.2 STANDARD BENDING

Preparation: switch on power. Check that the clamp bar is correctly positioned and that lifting pins are in place in the engaging holes at each end of the clamp bar.

Should lifting pins be locked-located handles below the machine, push hard back and release forward to lift the clamp bar slightly.

- ◆ Set the machine to suit the sheet metal thickness by rotating the 2 screws situated on the back edge of the clamp bar. Check the clearance by lifting the bending beam at 90 deg. And examine the gap. To achieve a perfect bend, set a fractionally larger gap, than the depth of the sheet metal, between the edge of the clamp bar and the face of the bending beam.
- ◆ Sheet metal under clamp bar-the backstop can be used if needed.
- ◆ Lift handles or push down the clamp bar onto the sheet metal. The machine will not turn ON until the clamp bar is within 5 mm above the surface bed due to the interlock. The interlock can be operated by locking down the lifting system if the clamp bar is unable to be lowered to 5 mm. This can occur when sheet metal is buckled.
- ◆ To apply pre-clamping force use the foot-switch or depress and hold any of the green start buttons.
- ◆ To activate the micro-switch for full clamping, pull one of the bending handles with your free hand. Release footswitch or start button.
- ◆ Pull on both handle and begin bending till the angle required is achieved. Assistance will be necessary when carrying out heavy duty bending. The tight handle has a beam angle, which graduates continuously. To allow for spring back of the sheet metal, bend a few degrees more than the angle that is required.
- ◆ The electrical circuit of the machine release a reverse pulse at the OFF stage allowing the clamp bar to release immediately.
- ◆ To release the sheet metal, flick the material upwards, which will fit the clamp bar to make ready for the next bend. It may be necessary to lift the clamp bar by using one of the lifting handles.

CAUTION

Do not insert small items under the clamp bar- a minimum bend of 15 mm is essential except when bending very lightweight soft metal. This will prevent damage to the clamp bar. To get the best performance do not clamp longer than is necessary due to the magnet having less clamping force when heated.

3.3 HOW TO USE THE BACKSTOPS

Make use of the backstops when handling volume bends that are all the same size. Set the backstops at the size required.

Backstops can be used with a bar (not supplied) laid against them, making a long surface to use as a reference. The extension piece from the bending beam could be used.

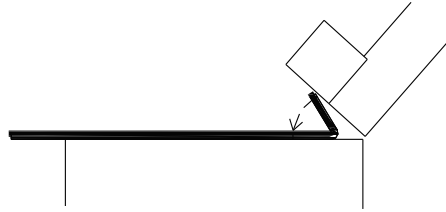
Use a strip of sheet metal of the same thickness as the work piece if a backstop is required

under the clamp bar.

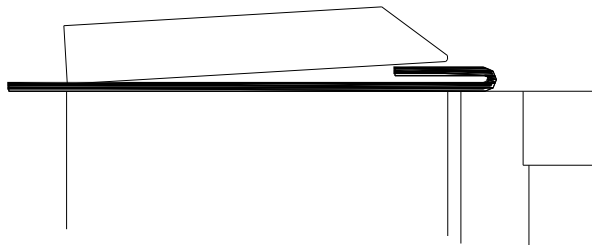
3.4 HOW TO FOLD A LIP

Folding the lip will depend on the sheet metal thickness and the length and width
Lightweight sheet metal up to 0.8 mm.

1. Carry out instruction for standard bending and continue to bend as far as possible.
2. Take away the clamp bar, leave the sheet metal on the machine and move 10 mm backwards, bring over the bending beam and compress the lip. No clamping is required. Thick sheet metal is not suitable for this application.



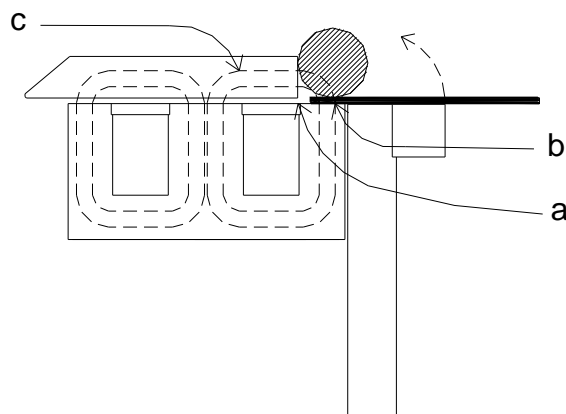
3. Further flattening can be accomplished when using thin lightweight material by following up with magnetic clamping.



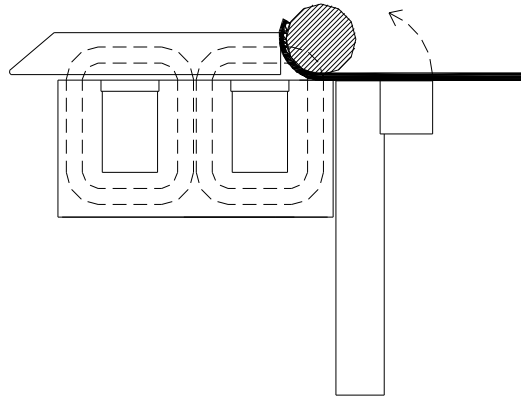
3.5 HOW TO MAKE A ROLLED EDGE

Wrap sheet around a round steel bar or pipe.

1. Position sheet metal clamp bar and round pipe / bar as indicated on drawing.
 - (1) To avoid weak clamping make sure that the clamp bar does not overlap the machines front pole (A).
 - (2) Ensure that the rolling pipe is resting on the front pole of the machine (B). it must not sit on the aluminum surface of the machine.
 - (3) The clamp bar provides a magnetic pathway (C) for the rolling bar.



2. Wrap the sheet metal around the rolling bar as far as possible

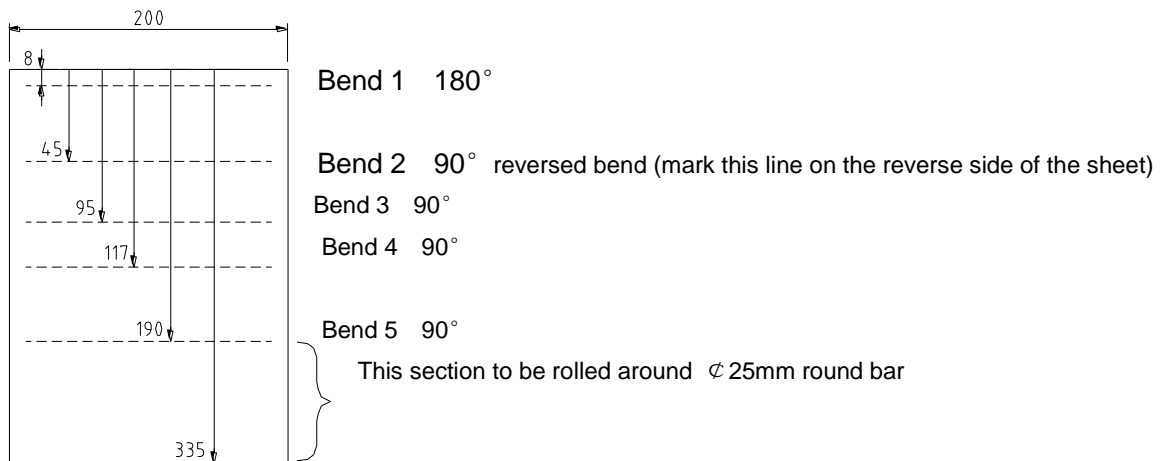


3. Repeat step 2 unit rolled edge is formed to required diameter.

3.6 HOW TO FORM A TEST PIECE

To learn how to work the machine with confidence it is recommended that test pieces are made.

Use a piece of 0.8 mm thick x 320 x 200 mm aluminum or mild steel sheet. Mark sheet as per drawing.



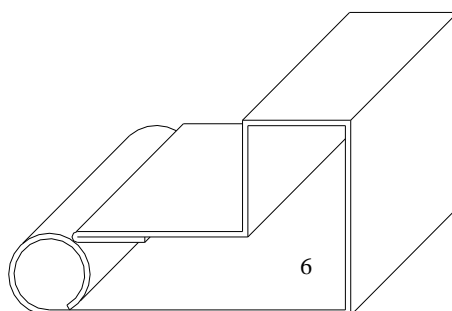
From a lip on the edge of the sheet metal (see: How to form a lip)

Turn sheet metal over and insert under the clamp bar with the folded lip end toward you. Tilt clamp bar and line up bend marked 2. bend to 90 degrees as shown in drawing below



Turn sheet metal over and continue with steps marked 3, 4 and 5 bent to 90 degrees.

Roll the remaining piece around a 25 mm diameter round bar (see How to make a rolled edge) see drawing below for completed job.

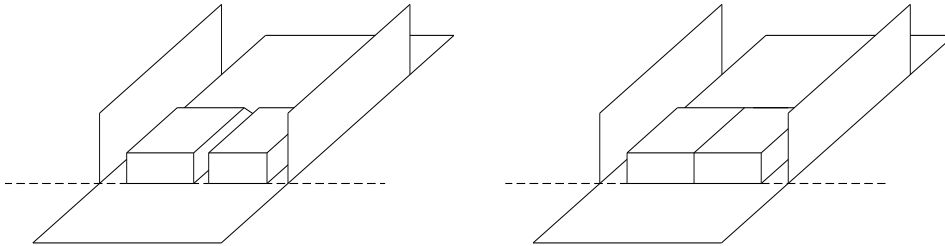


3.7 HOW TO MAKE A BOX USING SHORT CLAMP BARS

For ease of folding, make use of the short clamp bars to the shape folds into each other. Electrabrake is designed to assist you in the manufacture of a vast variety of box shapes.

3.7.1 BASIC BOXES

Use the long bar clamp to make the first two bends. Choose and insert one or two of the short clamp bars as indicated on drawing.

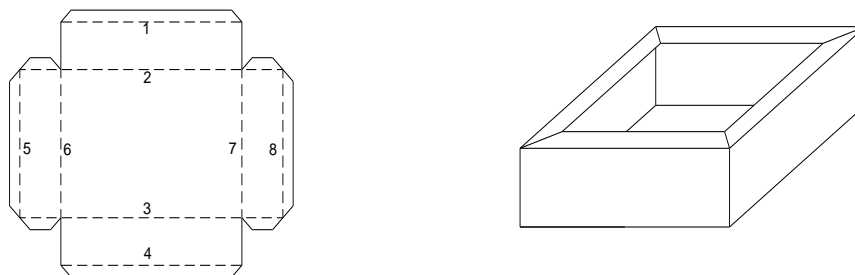


Select the largest clamp piece for bends up to 70 mm and for longer lengths use several clamp pieces to fit the required length.

Clamp pieces can be plugged together for repeat bending when making a single unit. A slotted clamp bar must be used for boxes or trays with shallow sides.

3.7.2 LIPPED BOXES

1. Use the set of standard short clamp bars to make rectangular lipped boxes i.e. 98 mm.
2. Choose the short clamp bar with at least a lip-width shorter than that of the box (Two or three may be necessary depending on length). Make folds 5, 6, 7 and 8. take care to guide the corner tabs on inside or outside of the box.



3.7.3 BOXES WITH INDIVIDUAL ENDS

Advantages:

Material saving

No corner notching

Cut without a guillotine

Fold with the regular full length clamp bar.

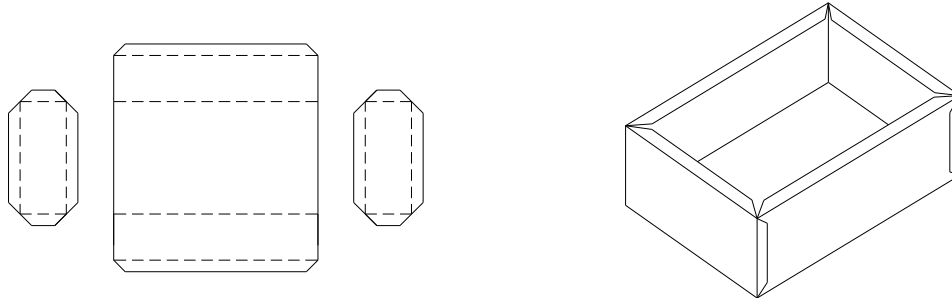
Disadvantages:

Extra folds to be carried out

Extra corners to join
The finished product shows more joins

Use the full length clamp bar for all folding.

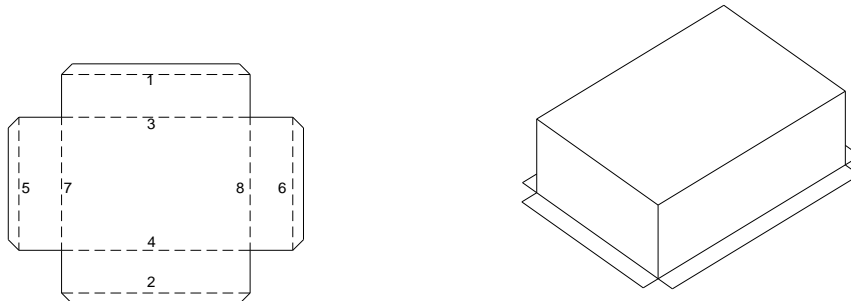
1. Set up sheet metal as per drawing below.
2. Form four folds in the sheet metal as shown on drawing.
3. For folds on side panels, as per drawing, use the narrow flange of the end piece of the clamp bar.
4. join the box.



3.7.4 FLANGED BOXES WITH PLAIN CORNERS

To make plain cornered boxes, the length and width should not exceed the clamp bar width of 98 mm. outside flanges are used when making top hat sections

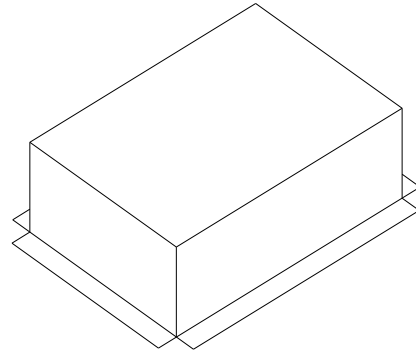
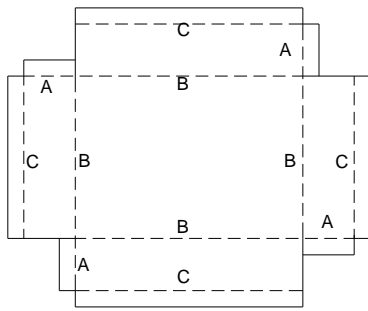
1. Mark up sheet metal as per drawing below.
2. Use the full length clamp bar and fold sections marked 1, 2, 3 & 4.
3. Form fold 5 by inserting the flange under clamp bar follow by folding 6.
4. Using slotted clamp bar form folds 3, 4, 7 and 8.



3.7.5 FLANGED BOX WITH CORNER TABS

Important Note: Folds must be formed in the correct sequence using one piece of sheet metal. It is suggested the deep boxes are manufactured with separate end piece.

1. Mark up sheet metal as be drawing below.
2. Form all tab folds to 90 degree, marked A at the one end of the full length clamp bar by inserting the tab under the clamp bar.
3. Use the same end of the clamp bar and fold B to 45 degree. Insert the side of the box instead of the bottom under the clamp bar.
4. Form the flange fold C to 90 degree, at the other end of the clamp bar.
5. Complete folds B to 90 degree. By using suitable short clamp bars.
6. Complete the box by joining the corners.



3.8 HOW TO USE A SLOTTED CLAMP BAR FORMING TRAYS

The slotted clamp bar is perfect for manufacturing shallow trays and pans.

Advantages:

The bending edges are aligned automatically to the front edge of the magnet body. The clamp bar automatically lifts to facilitate insertion and removal of the sheet metal whereas with the short each section must be lifted individually.

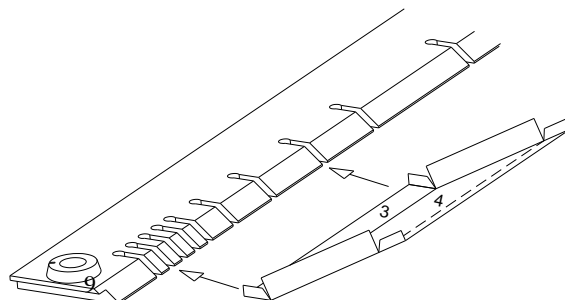
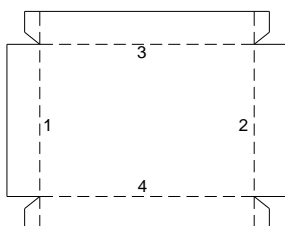
The slotted clamp bar folds shallow trays, however trays of unlimited depth and complex shapes can be manufactured with a short clamp bar.

The pitch of the slots has been calculated to enable the folding of various sizes of trays. Specification sheet indicate shortest and longest tray size that can be accommodated by the slotted clamp bar.

To fold shallow tray

1. First fold two opposite sides and the corner tabs by using the slotted clamp bar-ignore the slots they will have no effect on the finished folds.
2. Select two slots to fold the remaining two sides. Line up the left side of the tray with the left slot and check if there is a slot for the right side. Slide the tray along the left and try the next slot until a suitable slot is found. The edge of the tray should be under the clamp bar and between the two chosen slots.
3. To complete, fold the remaining sides.

Note: Trays that are almost as long as the clamp bar may need to use the end of the clamp bar in lieu of a slot.



3.9 HOW TO CHECK THE ACCURACY OF YOUR MACHINE

Critical aspects of the machine are that working surfaces of the bending beam, the bending edge clamp bar are straight and that both of these surfaces are parallel. This can be checked with a precision straight edge.

3.9.1 How to check using the machine

Swing bending beam up to 90 degree, and hold or lock it in position with a back stop clamp collar at the back of the angle slide on the handle. Check the gap between the working surface of the bending beam and the edge of the clamp bar. Set the gap at 1 mm on each side by using the clamp bar adjusters. A feeler guage or scrap piece of metal can be used.

The gap must be the same along the edge of the clamp bar. Variations can be within +/-0.2 mm, the gap must not exceed 1.2 mm and be less than 0.8 mm. should the adjustors not be the same at each end, they will have to be reset. See maintenance page 14.

Notes

The straightness of the elevated clamp bar is not important as this is flattened out in magnetic clamping when in use.

The gap between the magnet body and bending beam is about 2 to 3 mm. this does not affect the bending accuracy.

This machine produces folds on thinner gauges and non-ferrous metals such as aluminum, however, check the specification for heavier gauges. To fill in unused portion under the clamp bar, make use of scrap pieces of sheet metal to create uniformity of the bends in thicker gauges.

4. MAINTENANCE

4.1 ADJUSTERS

The adjuster screws at the end of the clamp bar control the thickness of the sheet metal between the bending beam and its edge.

The heads for the screws are divided into 3 by centre pop marks. Use these marks as a reference for repeat setting of the clamp bar. The bending gap will be approx 1 mm, if adjuster screws are both set so that the single pop mark is uppermost.

4.2 HINGE LUBRICATION

Grease all hinges once per month.

4.3 WORKING SRFACES

Bare working surface may become rusty or tarnished. Recondition by filling off and clean up surfaces with emery paper. Use an anti-rust spray.

5. TROUBLE SHOOTING

Prior to ordering a replacement electrical unit from the manufacturer please check the following:

- ◆ If the machine does not operate at all, check the pilot light in the ON/OFF switch.
- ◆ If the machine is hot and power is available, leave the machine to cool and try again.
- ◆ Do not pull the handle prior to starting – the start button must be pressed first.

- ◆ If the bending beam is moved prior pressing the start button begin again and make sure the handle is pushed fully back.
- ◆ Should the problem continue, the micro switch actuator may need to be adjusted.
- ◆ To check if the start button is faulty, try to start the machine with the foot switch.
- ◆ Check the connector and magnet at the electrical module.
- ◆ If the clamp bar snaps down on the release of the start button, this indicates that the 15 microfarad capacitor needs to be replaced.
- ◆ Should the machine cause blown fuses or trip your circuit breakers, it is likely that the bridge rectifier is blown.

5.1 FULL CLAMPING NOT OPERATING

If you are not achieving a full clamp, the angle micro switch may not be fully actuated. How to check that the angle micro switch is being fully actuated.

- ◆ The micro switch can be found on the electrical panel located at the end of the square brass section. The brass section is attached to the angle indicating mechanism.
- ◆ To access the electrical panel, the rear cover must be removed.
- ◆ When the bending beam is lifted this rotates the brass section which in turn depresses the micro switch. You should be able to hear the micro switch click on and off.
- ◆ Failing this, adjust the clutching force. This can be done by ensuring that two M8 cap head screws at either end of the actuator shaft are secured.
- ◆ This adjustment should ensure that the actuator rotates and clutches, however, if you are still unable to hear the click, the micro switch may need adjusting.
- ◆ The actuator can be adjusted by loosening the screw that secures it, making the adjustment, followed by re-tightening the screw.
- ◆ If the micro switch does not click on and off after you have made the above adjustments and rotated the bending beam to the maximum stops, then the switch may be fused and would need to be replaced. Call or email your distributor.

5.2 CLAMP BAR NOT BEING RELEASED

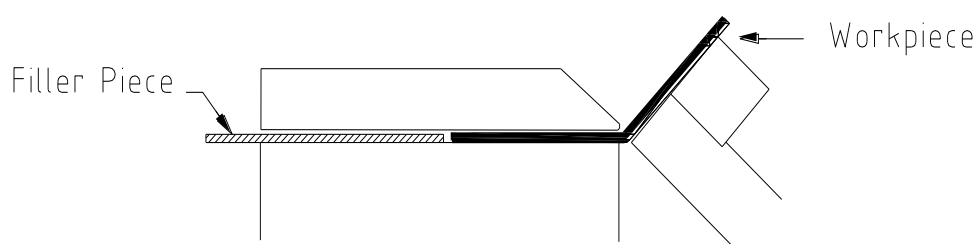
This is caused by the failure of the reverse pulse de-magnetising circuit.

Check for sticky contacts on the relay and clean.

The 6.8 power resistor or diodes could be faulty which will have to be replaced.

Problem with the bending of heavy gauge sheet metal

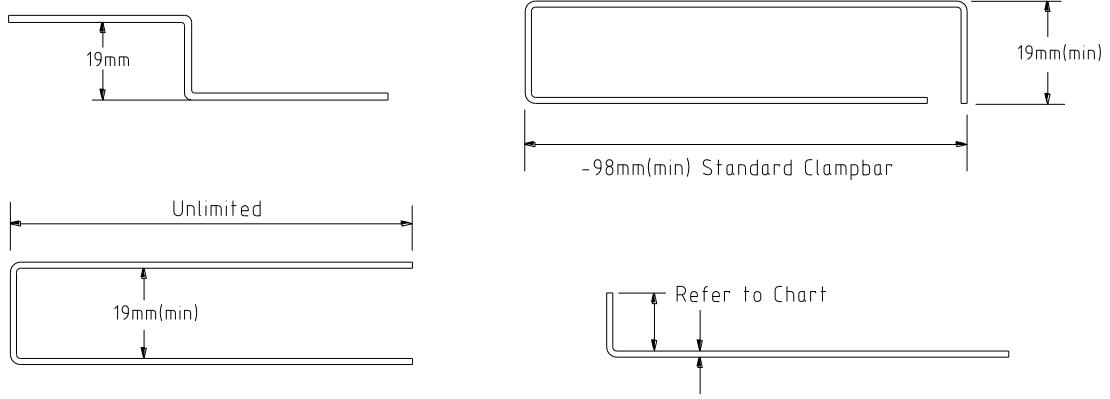
- ◆ Ensure that sheet metal thickness is within the specifications of the machine.
- ◆ It may occur if narrow lips are being bent over the full length of the machine, please note that the machine is not equipped to do this.
- ◆ Should the work piece not be level (i.e. have a welded seam or a joint) it may not be possible to bend the work piece. Ensure that all spaces under the clamp bar are filled with flat pieces of scrap metal.



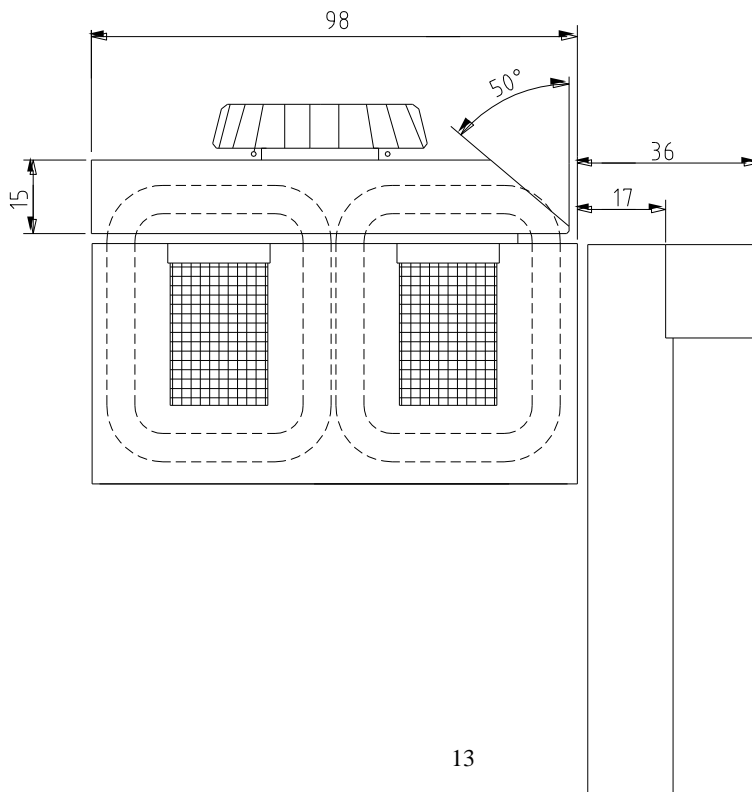
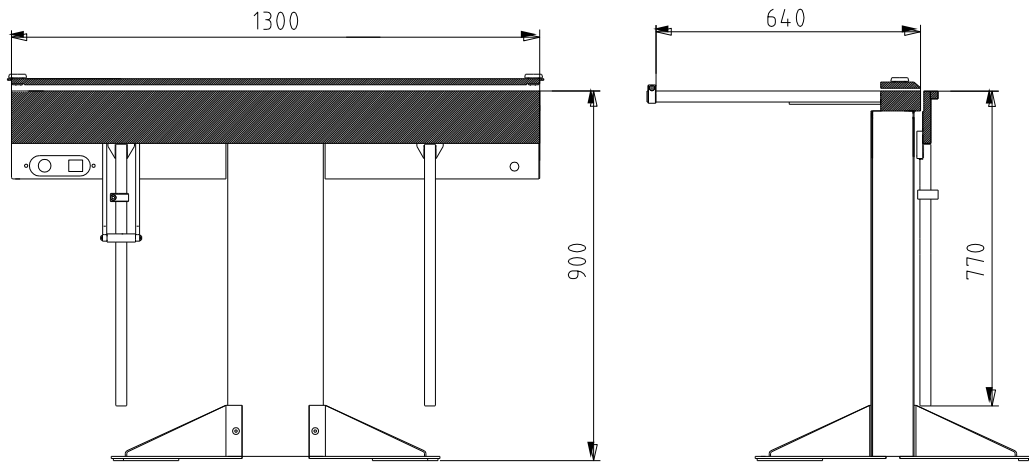
Voltage tests					
	AC		DC		
Reference point	Any BLUE wire		Any BLACK wire		
Test point	A	B	C	D	E
Light clamping condition	240V ac	25V ac	+25V dc	+25V dc	-300V dc
Full clamping condition	240V ac	240V ac	+215V dc	+215V dc	+215V dc

6. SPECIFICATION SHEET

Model	EB0625	EB1000	EB1250	EB2000	EB2500	EB3200
Weight of machine (kg)	72	110	150	270	315	380
Nominal capacity (length x thickness) (mm)	0625x1.6	1000x1.6	1250x1.6	2000x1.6	2500x1.6	3200x1.2
Clamping force (tons)	3	4.5	6	9	12	10
Electricity supply	1 phase, 220/240 vac, 10A			1 phase, 220/240 vac, 15A		
Duty cycle (%)	30					
Protection (°C)	Thermal cut-out 70°C					
Foot switch	No		Optional	Standard		
Bending-edge length (mm)	670	1050	1300	2090	2590	3290
Distance between lifters (mm)	630	1010	1260	2028	2528	3228
U-channel bends, minimum spacing (mm)	16***			19***		45***
Closed channel, minimum internal (mm)	99x27***			114x22***		114x45***
Z-reverse bends, minimum spacing (mm)	35**/16*		36**/18*			
Thickness capacities, full length (material thickness can increase depending on the length of bend)						
...Mild steel (mm)	1.6**/1.2*					1.2**/1.0*
...Aluminum (medium-hard) (mm)	1.6**/1.2*					1.2**/1.0*
...Copper, Zinc, Brass (medium-hard) (mm)	1.6**/1.2*					1.2**/1.0*
...Stainless steel (mm)	1.0**/0.9*					0.9**/0.8*
***with standard full length clamp bar	**with bending beam extension bar removed				*extension bar	



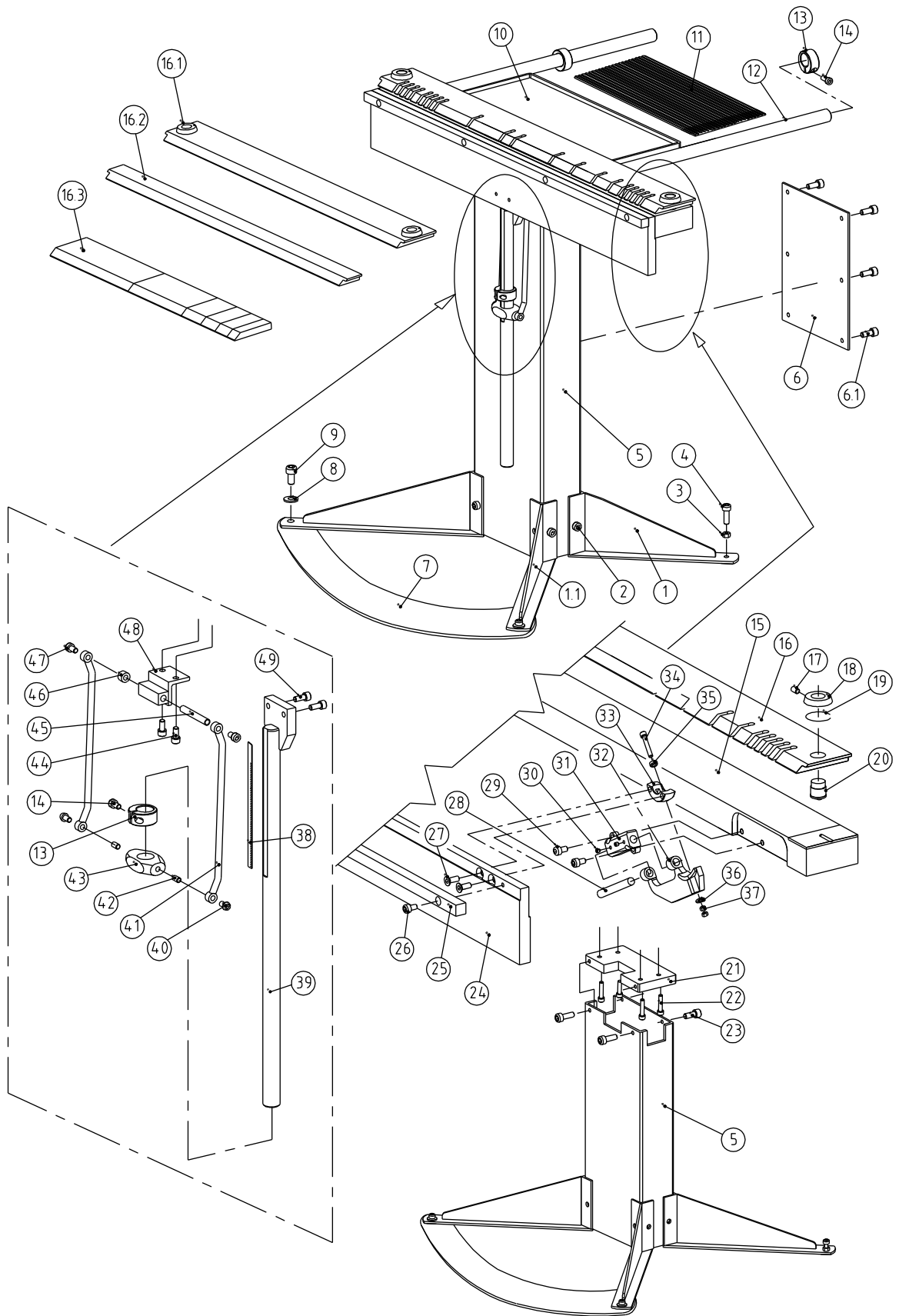
7. DIMENSIONAL SPECIFICATIONS



8.1 PART LIST FOR EB625

Item	Fig.No	Description	Qty	Item	Fig.No	Description	Qty
1	EB1000-007	Front feet	2	24	EB625-004	Folding board	1
1.1	EB1250-012	Back feet	2	25	EB625-008	Folding board strip	1
2	GB/T70.2	Screw M10X20	8	26	GB/T70.1	Screw M8X20	3
3	GB/T6170	Nut M8	2	27	GB/T70.3	Screw M8X20	4
4	GB/T70.1	Screw M8X25	2	28	GB/T119.2	Pin 12X100	2
5	EB1000-008	Stand	1	29	GB/T70.1	Screw M8X20	4
6	EB1000-009	Plate	1	30	GB/T77	Screw M5X4	4
6.1	GB/T70.1	Screw M5X10	6	31	EB1250-021	Fixed plate	2
7	EB1000-012	Foot pedal	1	32	EB1250-022	Connect body	2
8	HD10-307	Washer	2	33	EB1250-023	Ball seat	2
9	GB/T70.1	Screw M8X12	2	34	EB1250-025	Screw	2
10	EB625-005	Plate	1	35	EB1250-024	Ball washer	2
11	EB625-006	Rubber washer	1	36	GB/T1972	Spring 6.2X12.5	2
12	EB625-009	Back gauge	2	37	GB/T6170	Nut M6	4
13	EB1250-034	Limited block	3	38	EB1250-035	Graduated scale	1
14	GB/T70.1	Screw M8X20	3	39	EB1000-011	Folding bar	1
15	EB625-007	magnetic working table	1	40	GB/T70.2	Screw M8X20	2
16	EB625-001	Bending plate	1	41	EB1250-032	Connect bar	2
16.1	EB625-002	Bending plate	1	42	GB/T77	Screw M8X6	2
16.2	EB625-003	Bending plate	1	43	EB1250-036	Block	1
16.3	EB1250-005	Bending plate	1	44	GB/T70.1	Screw M8X20	2
17	GB/T77	Screw M6X8	4	45	EB1250-033	Shaft	1
18	EB1250-019	Graduated scale	4	46	EB1250-041	Cover	1
19	EB1250-020	Spring	4	47	GB/T70.1	Screw M8X20	2
20	EB1250-018	Shaft	4	48	EB1250-027	Stand	1
21	EB1000-010	Connected board	1	49	GB/T70.1	Screw M8X16	2
22	GB/T70.1	Screw M8X30	4				
23	GB/T70.1	Screw M8X20	4				

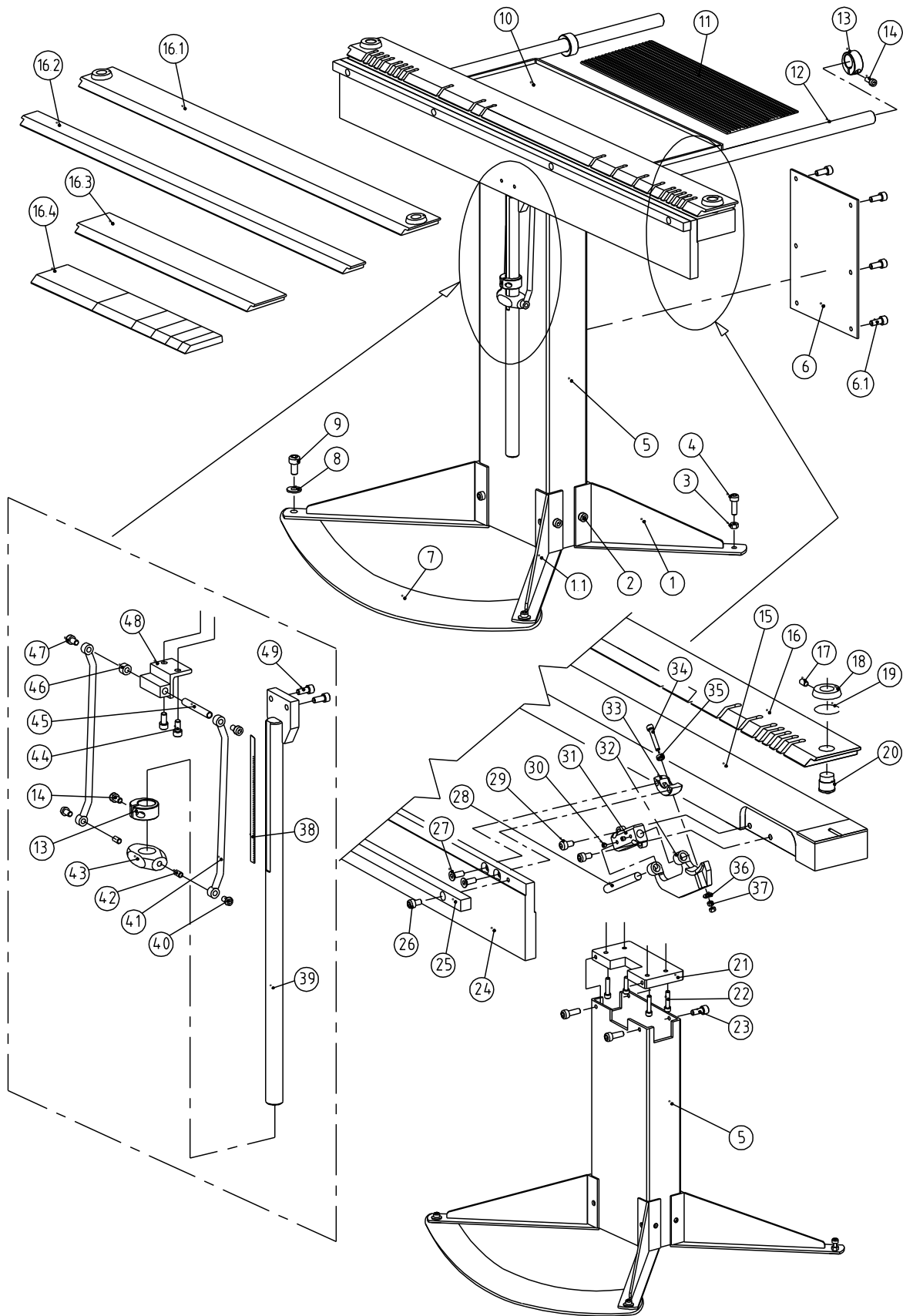
THE EXPLODED DRAWING FOR EB625



8.2 PART LIST FOR EB1000

Item	Fig.No	Description	Qty	Item	Fig.No	Description	Qty
1	EB1000-007	Front feet	2	24	EB1000-004	Folding board	1
1.1	EB1250-012	Back feet	2	25	EB1000-006	Folding board strip	1
2	GB/T70.2	Screw M10X20	8	26	GB/T70.1	Screw M8X20	4
3	GB/T6170	Nut M8	2	27	GB/T70.3	Screw M8X20	4
4	GB/T70.1	Screw M8X25	2	28	GB/T119.2	Pin 12X100	2
5	EB1000-008	Stand	1	29	GB/T70.1	Screw M8X20	4
6	EB1000-009	Board	1	30	GB/T77	Screw M5X4	4
6.1	GB/T70.1	Screw M5X10	6	31	EB1250-021	Fixed set	2
7	EB1000-012	Foot pedal	1	32	EB1250-022	Connect body	2
8	HD10-307	Washer	2	33	EB1250-023	Ball seat	2
9	GB/T70.1	Screw M8X12	2	34	EB1250-025	Screw	2
10	EB1250-007	Plate	1	35	EB1250-024	Ball washer	2
11	EB1250-008	Rubber washer	1	36	GB/T1972	Spring 6.2X12.5	2
12	EB1250-026	Back gauge	2	37	GB/T6170	Nut M6	4
13	EB1250-034	Limited block	3	38	EB1250-035	Graduated scale	1
14	GB/T70.1	Screw M8X20	3	39	EB1000-011	Folding bar	1
15	EB1000-005	Magnetic working table	1	40	GB/T70.2	Screw M8X20	2
16	EB1000-001	Bending board	1	41	EB1250-032	Connect bar	2
16.1	EB1000-002	Bending board	1	42	GB/T77	Screw M8X6	2
16.2	EB1000-003	Bending board	1	43	EB1250-036	Block	1
16.3	EB1250-004	Bending board	1	44	GB/T70.1	Screw M8X20	2
16.4	EB1250-005	Bending board	1	45	EB1250-033	Shaft	1
17	GB/T77	Screw M6X8	4	46	EB1250-041	Cover	1
18	EB1250-019	Graduated scale	4	47	GB/T70.1	Screw M8X20	2
19	EB1250-020	Spring	4	48	EB1250-027	Stand	1
20	EB1250-018	Fixed shaft	4	49	GB/T70.1	Screw M8X16	2
21	EB1000-010	Connect board	1				
22	GB/T70.1	Screw M8X30	4				
23	GB/T70.1	Screw M8X20	4				

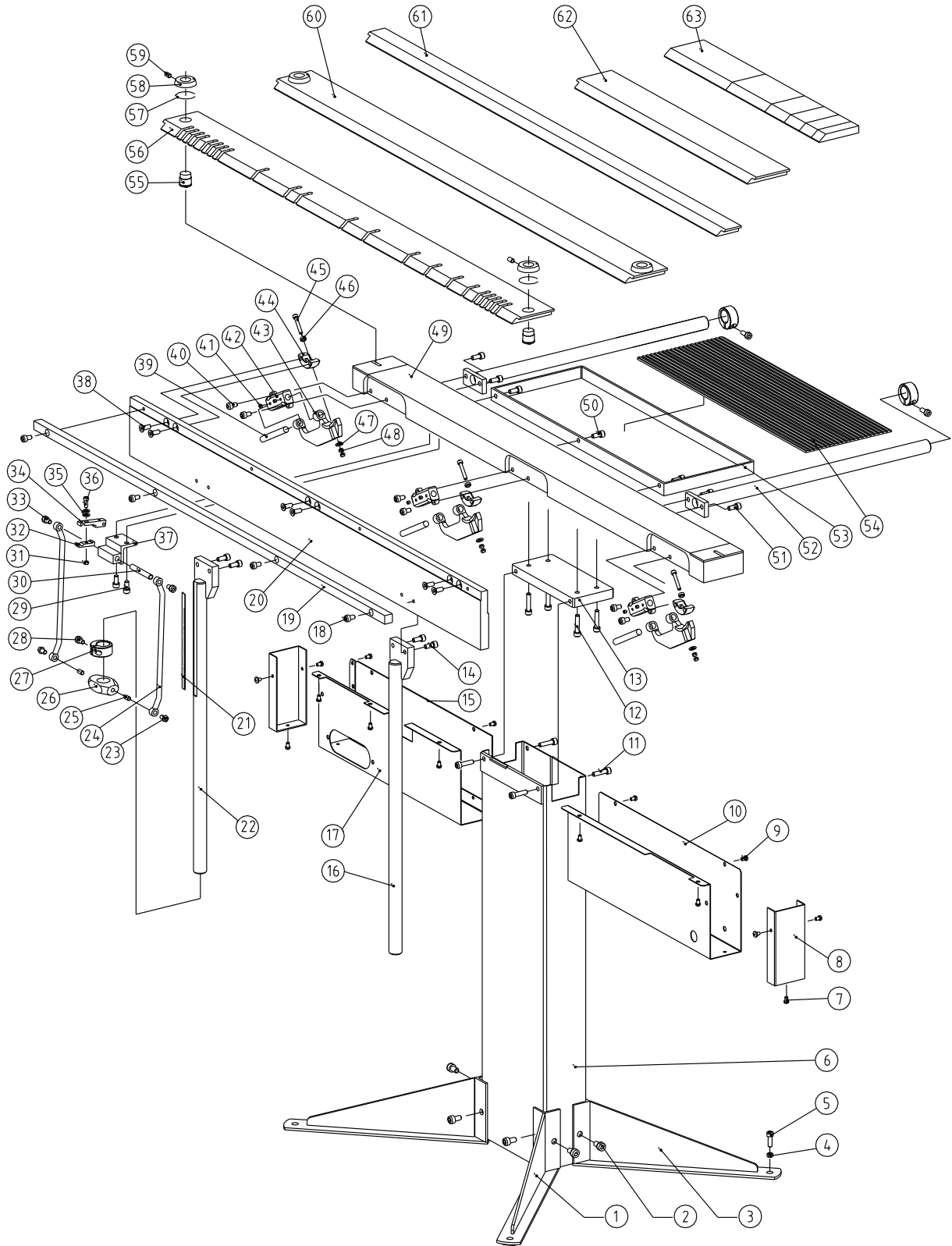
THE EXPLODED DRAWING FOR EB1000



8. PART LIST FOR EB1250

Item	Fig. No	Description	Qty	Item	Fig. No	Description	Qty
1	EB1250-011	Front feet	2	33	GB/T70.1	Screw M8X20	2
2	GB/T70.2	Screw M10X20	8	34	EB1250-028	Block	1
3	EB1250-012	Back feet	2	35	GB/T1972	Disc spring 6.2X12.5	2
4	GB/T6170	Nut M8	2	36	GB/T818	Screw M6X25	1
5	GB/T70.1	Screw M8X25	2	37	EB1250-027	Angle iron	1
6	EB1250-013	Stand	1	38	GB/T70.3	Screw M8X20	6
7	GB/T818	Screw M6X12	6	39	GB/T119.2	Straight pin 12X100	3
8	EB1250-037	Plate	2	40	GB/T70.1	Screw M8X20	6
9	GB/T818	Screw M6X12	4	41	GB/T77	Screw M5X4	6
10	EB1250-016	Right Shield	1	42	EB1250-021	Fixed set	3
11	GB/T70.1	Screw M8X20	4	43	EB1250-022	Hinge body	3
12	GB/T70.1	Screw M8X30	4	44	EB1250-023	Tee	3
13	EB1250-015	Connect plate	1	45	EB1250-025	Bolt	3
14	GB/T70.1	Screw M8X16	4	46	EB1250-024	Ball seat	3
15	EB1250-30	Cover	1	47	GB/T6170	Disc spring 6.2x12.5	1
16	EB1250-014	Right clamp handle	1	48	GB/T6170	Nut M6	2
17	EB1250-031	Left Shield	1	49	EB1250-009	Workbench	1
18	GB/T70.1	Screw M8X20	4	50	GB/T70.1	Screw M8X16	3
19	EB1250-010	Spoke	1	51	GB/T70.1	Screw M8X16	4
20	EB1250-006	Bending plate	1	52	EB1250-026	Back stop bar	2
21	EB1250-035	Graduated scale	1	53	EB1250-007	Tray	1
22	EB1250-017	Left clamp handle	1	54	EB1250-008	Rubber mat	1
23	GB/T70.2	Screw M8X20	2	55	EB1250-018	Fix shaft	4
24	EB1250-032	Connect plate	2	56	EB1250-001	Clamp bar 1	1
25	GB/T77	Screw M8X6	2	57	EB1250-020	Spring	4
26	EB1250-036	Slider	1	58	EB1250-019	Indicator dial	4
27	EB1250-034	Stop Block	3	59	GB/T77	Screw M6X8	4
28	GB/T70.1	Screw M8X20	3	60	EB1250-002	Clamp bar 2	1
29	GB/T70.1	Screw M8X20	2	61	EB1250-003	Clamp bar 3	1
30	EB1250-033	Shaft	1	62	EB1250-004	Clamp bar 4	1
31	GB/T6170	Nut M6	1	63	EB1250-005	Clamp bar 5	1
32	EB1250-029	Block	1				

THE EXPLODED DRAWING FOR EB1250



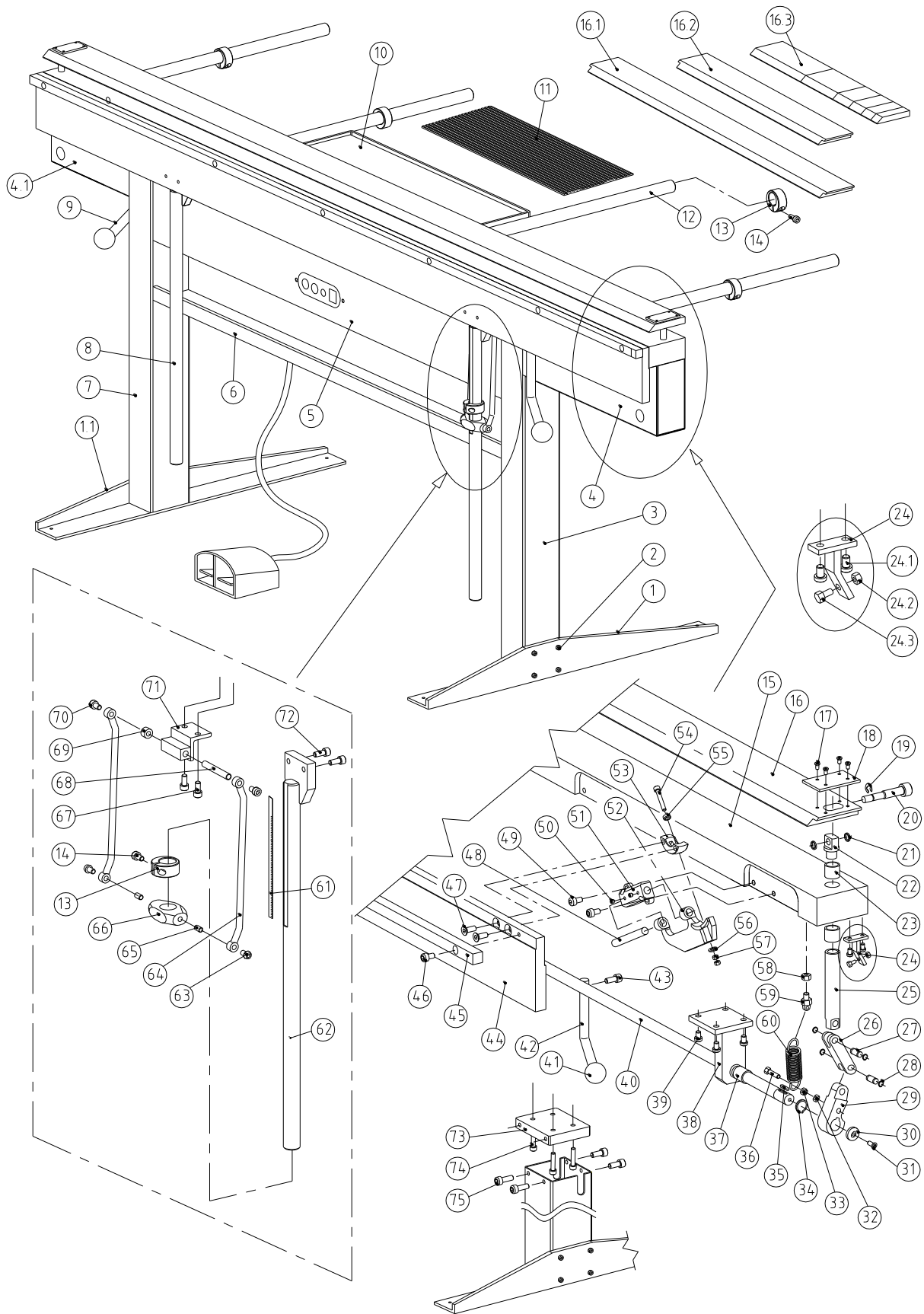
8.3-1 PART LIST FOR EB2000

Item	Fig.No	Description	Qty	Item	Fig.No	Description	Qty
1	EB2000-005	Right feet	1	35	GB/T1096	Key 6X20	2
1.1	EB2000-004	Left feet	1	36	GB/T5783	Bolt M6X35	2
2	GB/T70.1	Screw M8X16	8	37		Cover φ18Xφ20X20	4
3	EB2000-006	Right stand	1	38	EB2000-015	Stand	4
4	EB2000-008	Right cover	1	39	GB/T70.1	Screw M8X25	16
4.1	EB2000-001	Left cover	1	40	EB2000-016	Connect shaft	1
5	EB2000-017	Electrical box	1	41	JB/T7271.1	Ball seat	2
6	EB2000-018	Material box	1	42	EB2000-007	Right handle	1
7	EB2000-003	Left stand	1	43	GB/T70.1	Screw M8X16	2
8	EB1250-014	Right folding bar	1	44	EB2000-020	Folding board	1
9	EB2000-002	Left folding bar	1	45	EB2000-019	Folding board strip	1
10	EB1250-007	Plate	1	46	GB/T70.1	Screw M8X20	7
11	EB1250-008	Rubber pat	1	47	GB/T70.3	Screw M8X20	8
12	EB1250-026	Back gauge	4	48	GB/T119.2	Straight pin12X100	4
13	EB1250-034	Limited block	5	49	GB/T70.1	Screw M8X20	8
14	GB/T70.1	Screw M8X20	5	50	GB/T77	Screw M5X4	8
15	EB2000-013	Magnetic working table	1	51	EB1250-021	Fixed seat	4
16	EB2000-011	Bending board	1	52	EB1250-022	Hinge body	4
16.1	EB2000-012	Bending board	1	53	EB1250-023	Ball seat	4
16.2	EB1250-004	Bending board	1	54	EB1250-025	Bolt	4
16.3	EB1250-005	Bending board	1	55	EB1250-024	Ball washer	4
17	GB/T70.3	Screw M5X12	8	56	GB/T1972	Spring 6.2X12.5	4
18	EB2000-010	Cover board	2	57	GB/T6170	Nut M6	8
19	GB896	Washer 7	2	58	GB/T6170	Nut M6	2
20	EB2000-021	Adjust screw	2	59	EB2000-027	Spring screw	2
21	EB2000-022	Washer	4	60	EB2000-030	Spring	2
22	EB2000-023	Connect head	2	61	EB1250-035	Graduated scale	1
23		Cover φ18Xφ20X20	4	62	EB1250-017	Left folding bar	1
24	EB2000-024	Stand	2	63	GB/T70.2	Screw M8X20	2
24.1	GB/T70.1	Screw M6X16	4	64	EB1250-032	Connect bar	2
24.2	GB/T6170	Nut M6	2	65	GB/T77	Screw M8X6	2
24.3	GB/T5783	Screw M6X20	2	66	EB1250-036	Block	1
25	EB2000-026	Guard shaft	2	67	GB/T70.1	Screw M8X20	2
26	EB2000-029	Connect bar	2	68	EB1250-033	Shaft	1
27	EB2000-028	Pin shaft	4	69	EB1250-041	Set	1
28	GB/T894.1	Shaft washer 10	10	70	GB/T70.1	Screw M8X20	2
29	EB2000-025	Connect bar	2	71	EB1250-027	Stand	1
30	EB2000-031	Cover	2	72	GB/T70.1	Screw M8X16	4
31	GB/T70.3	Screw M6X16	2	73	EB2000-009	Connect board	2
32	GB/T6170	Nut M6	2	74	GB/T70.1	Screw M8X30	8
33	GB/T889.1	Fixed nut	2	75	GB/T70.1	Screw M8X20	8
34	GB/T894.1	Shaft washer 18	2				

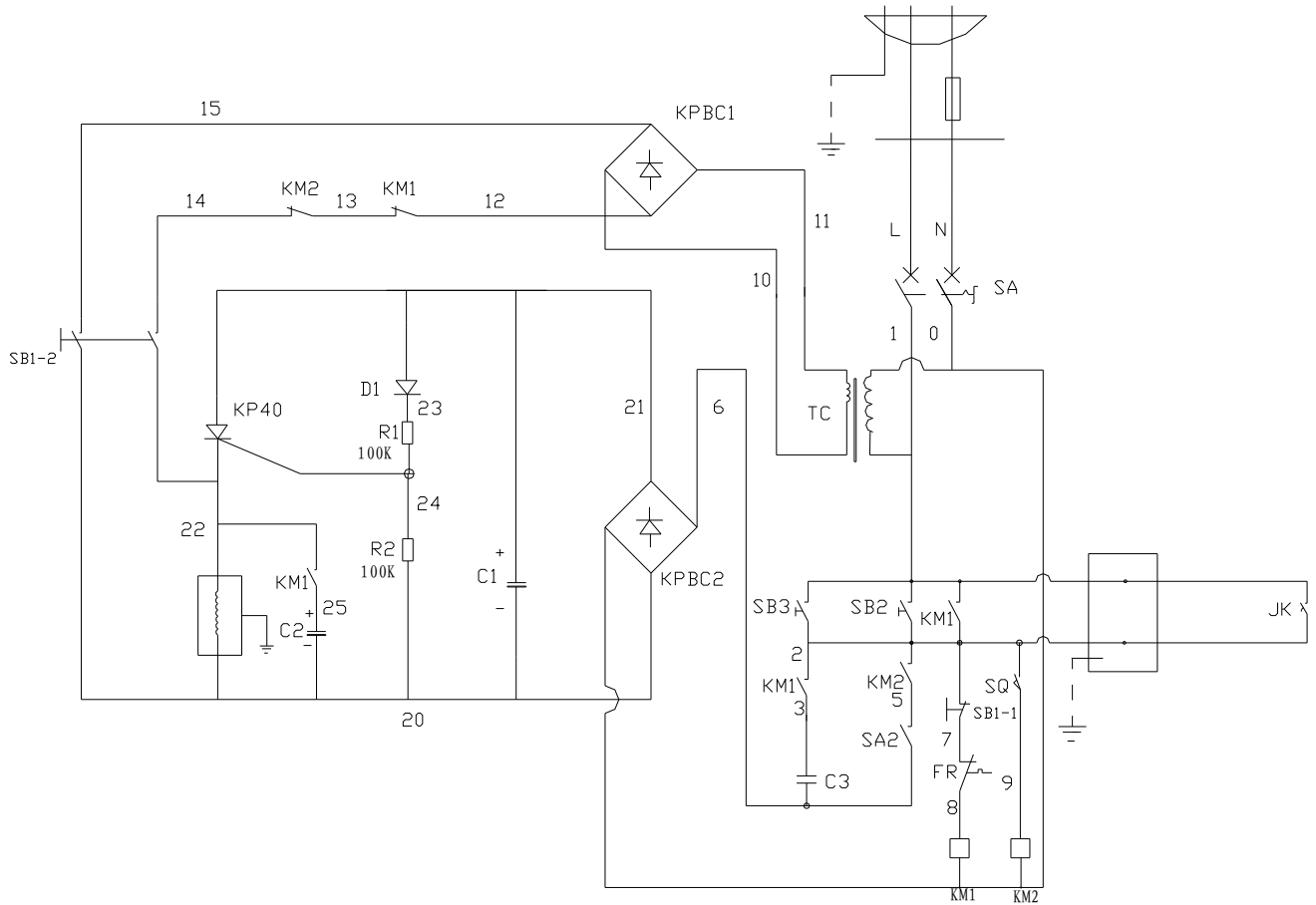
8.3-2 PART LIST FOR EB2500

Item	Fig.No	Description	Qty	Item	Fig.No	Description	Qty
1	EB2000-005	Right feet	1	35	GB/T1096	Key 6X20	2
1.1	EB2000-004	Left feet	1	36	GB/T5783	Bolt M6X35	2
2	GB/T70.1	Screw M8X16	8	37		Cover $\phi 18X\phi 20X20$	4
3	EB2000-006	Right stand	1	38	EB2000-015	Stand	4
4	EB2500-002	Right Shield	1	39	GB/T70.1	Bolt M8X25	16
4.1	EB2500-001	Left Shield	1	40	EB2500-003	Connect shaft	1
5	EB2000-017	Electrical box	1	41	JB/T7271.1	Handle ball	2
6	EB2000-018	Material box	1	42	EB2000-007	Right handle	1
7	EB2000-003	Left stand	1	43	GB/T70.1	Screw M8X16	2
8	EB1250-014	Right folding bar	1	44	EB2500-007	Folding board	1
9	EB2000-002	Left handle	1	45	EB2500-006	Folding board strip	1
10	EB1250-007	Set	1	46	GB/T70.1	Screw M8X20	8
11	EB1250-008	Rubber washer	1	47	GB/T70.3	Screw M8X20	10
12	EB1250-026	Back gauge	4	48	GB/T119.2	Pin 12X100	6
13	EB1250-034	Limited block	5	49	GB/T70.1	Screw M8X20	12
14	GB/T70.1	Screw M8X20	5	50	GB/T77	Screw M5X4	12
15	EB2500-005	Magnetic working table	1	51	EB1250-021	Fixed seat	6
16	EB2500-004	Bending board	1	52	EB1250-022	Hinge body	6
16.1	EB2000-012	Bending board	1	53	EB1250-023	Ball seat	6
16.2	EB1250-004	Bending board	1	54	EB1250-025	Screw	6
16.3	EB1250-005	Bending board	1	55	EB1250-024	Ball seat	6
17	GB/T70.3	Screw M5X12	8	56	GB/T1972	Spring 6.2X12.5	6
18	EB2000-010	Cover	2	57	GB/T6170	Nut M6	12
19	GB896	Block 7	2	58	GB/T6170	Nut M6	2
20	EB2000-021	Adjusted screw	2	59	EB2000-027	Spring bolt	2
21	EB2000-022	Washer	4	60	EB2000-030	Spring	2
22	EB2000-023	Connected head	2	61	EB1250-035	Graduated scale	1
23		Slider $\phi 18X\phi 20X20$	4	62	EB1250-017	Left folding bar	1
24	EB2000-024	Stand	2	63	GB/T70.2	Screw M8X20	2
24.1	GB/T70.1	Screw M6X16	4	64	EB1250-032	Connect bar	2
24.2	GB/T6170	Nut M6	2	65	GB/T77	Screw M8X6	2
24.3	GB/T5783	Bolt M6X20	2	66	EB1250-036	Block	1
25	EB2000-026	Guard shaft	2	67	GB/T70.1	Screw M8X20	2
26	EB2000-029	Connect bar	2	68	EB1250-033	Shaft	1
27	EB2000-028	Pin shaft	4	69	EB1250-041	Cover	1
28	GB/T894.1	Shaft washer 10	10	70	GB/T70.1	Screw M8X20	2
29	EB2000-025	Connect bar	2	71	EB1250-027	Stand	1
30	EB2000-031	Cover	2	72	GB/T70.1	Screw M8X16	4
31	GB/T70.3	Screw M6X16	2	73	EB2000-009	Connect board	2
32	GB/T6170	Nut M6	2	74	GB/T70.1	Screw M8X30	8
33	GB/T889.1	Fixed nut	2	75	GB/T70.1	Screw M8X20	8
34	GB/T894.1	Shaft washer 18	2				

THE EXPLODED DRAWING FOR EB2000 and EB2500



9. ELECTRICAL WIRING



Note: This manual is only for your reference. Owing to the continuous improvement of the machine, changes may be made at any time without obligation on notice.