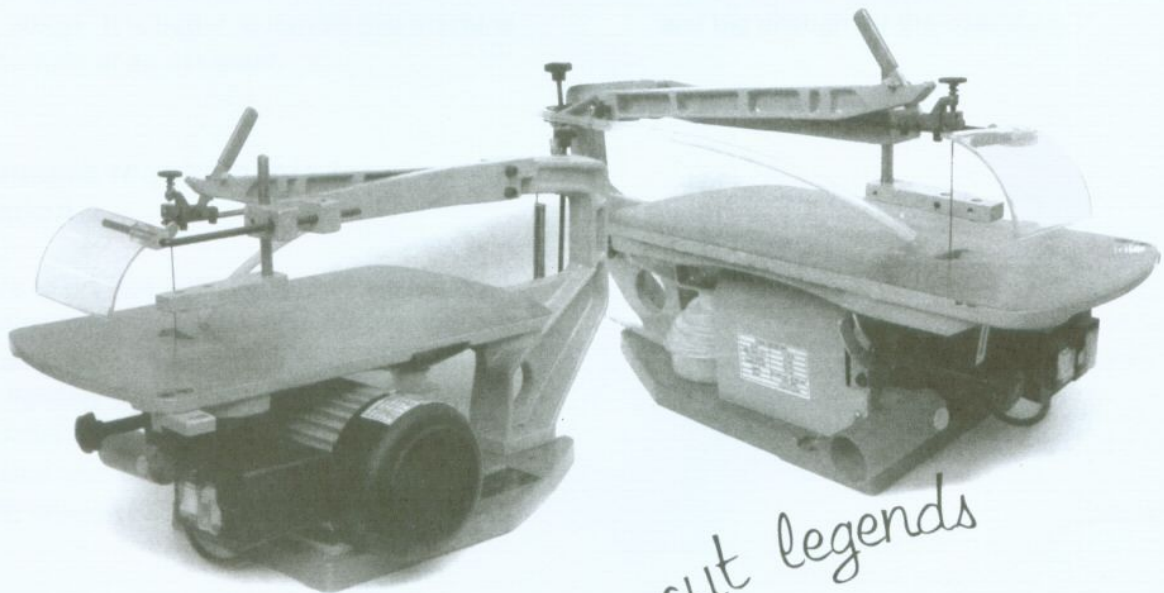


18" SCROLL SAW

INSTRUCTION MANUAL

Important:

In order to prevent accident,
please read manual before assembling and start-up.
Always keep the manual with the machine!



Fine cut legends

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SAFETY RULES FOR ALL POWER TOOLS	3
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Important Notice for CE

Handling of machine

1. The total weight of the machine must be ensured before handling.
2. The net weight of the machine without stand is about 30Kgs. It is better to handle this machine with the help of an assistant.

Noise level

1. The noise level of the machine is about 73.1dB(A) during the operation.
2. The place where machine install must be flat and big enough for the operation.

Environment requirements for installation

1. Be sure to provide sufficient light for operation: according to the codes or regulations published for local area. If you do not get the information about lighting, a light intensity of 300Lux is the least value to be supplied.
2. The place where machine install must be flat and big enough for the operation.

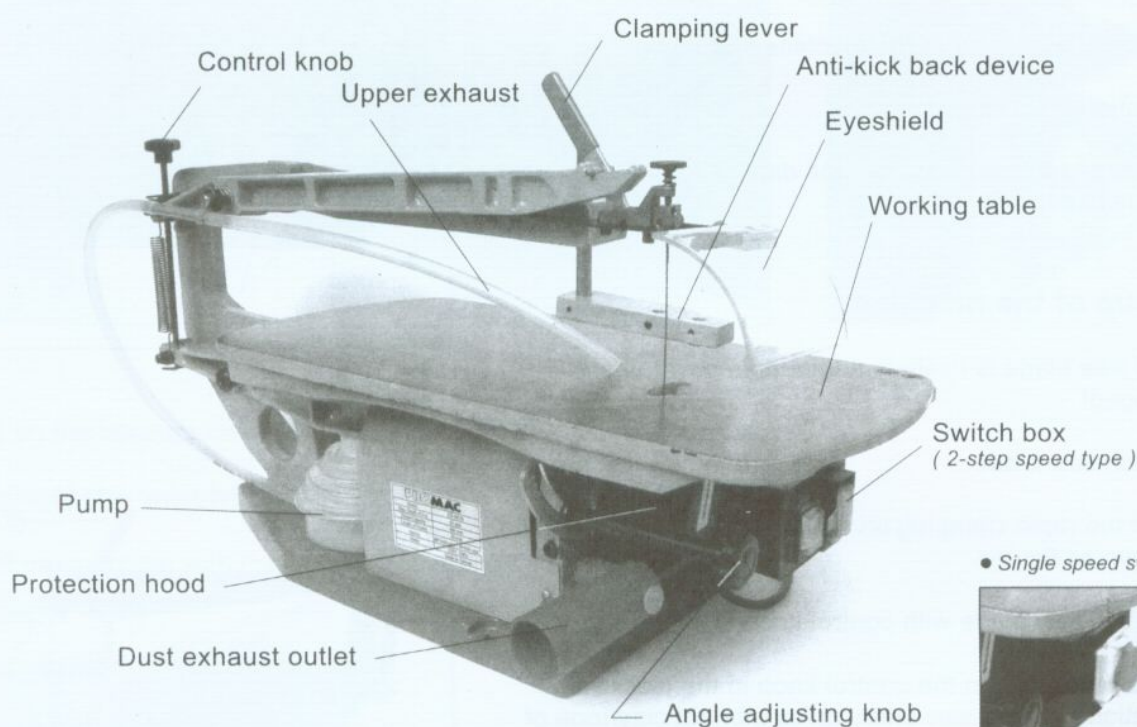
Safety Rules for All Power Tools

1. Read and become familiar with the entire instruction manual. Learn the tools applications, limitations and possible hazards.
2. Earth all tools. If the tool is equipped with a three-prong plug, it must be plugged into a three-contact electric outlet. The third prong is a ground to provide protection against accidental electrical shock. If an adapter is used to accommodate a two-contact outlet, the adapters grounding lug must be connected to a known ground. Never remove the third prong on a three-prong plug.
3. Check damaged parts. A guard or any other part that is damaged should be checked to ensure that it will operate properly and perform its intended function before the tool is used further. Check for proper alignment of moving parts and for possible of moving parts and for possible broken parts, loose mountings, or any other condition that could affect the tools operation. A guard or other damaged part should be properly repaired or replaced.
4. Disconnect power before servicing and when changing accessories such as blades, cutters.
5. Keep guards in place and in working order.
6. Protect your eyes from being injured by objects thrown by a power tool. Always wear safety glasses or safety goggles.
7. Wear a face mask or dust mask if the cutting operation produces dust.
8. Don't force the tool. It will give a better and safer performance when used on jobs for which it was designed.
9. Avoid accidental starting. Ensure that the power switch is in the OFF position before plugging in the power cord. Remove the switch when the tool is not being used.
10. Remove adjusting keys and wrenches. Ensure that keys and adjusting Wrenches are removed from the tool before turning it on.
11. Drugs, alcohol, and medication. Do not operate tool if you are under the influence of drugs, alcohol, or medication that could effect your ability to use the tool properly.
12. Use recommended accessories. Using improper accessories can be hazardous. If in doubt, check the instruction manual.
13. Never stand on a tool. Falls can result in injury.
14. Never leave a tool running unattended. Turn the power switch OFF. Don't leave the tool until it has come to a complete stop.
15. Always remove the power cord plug from the electric outlet when making adjustments, changing parts, cleaning, or working on the tool.
16. Avoid dangerous conditions. Don't use power tools in wet or damp areas or expose them to rain. Keep your work area clean and weltd. Do not use power tools in area where fumes from paint, solvents, or flammable liquids pose a potential hazard.
17. Keep visitors and children away. Other people should keep a safe distance from the work area, especially when the tool is operating.
18. Use the proper tool. Don't force a tool to do a job for which it was not designed.
19. Keep tools in top condition. Keep them clean and sharp for the best and safest performance. Follow the instructions for changing accessories and lubricating.
20. Secure all work. When practical use clamps or a vise to hold work. It is safer than using your hands and prevents round or odd-shaped pieces from turning.
21. Don't overreach. Keep proper footing and balance at all times. Wear oil-resistant rubber-soled footwear. Keep the floor clear of oil, scrap wood, and other debris.
22. Wear proper clothing and, if necessary, protective hair covering. Loose clothing or jewelry can get caught in moving parts.
23. Make the workshop childproof with padlocks, master switches or by removing starter keys.
24. Keep work area clear: cluttered areas and benches invite injuries.
25. Connect dust extraction equipment: If the tool is provided for the connection of dust extraction and collecting equipment, ensure these are connected and properly used.
26. Do not abuse the cord: Never yank the cord to disconnect it from the socket. Keep the cord away from heat, oil and sharp edges.
27. Use outdoor extension leads: When the tool is used outdoors, use only extension cords intended for outdoor use and so marked.
28. Have your tool repaired by a qualified person: This electric tool complies with the relevant safety rules. Repairs should only be carried out by qualified persons using original spare parts, otherwise this may result in considerable danger to the user.

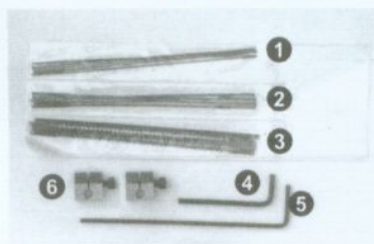
Technical Data

	Single speed type	2-speed type	Stepless variable speed type
Max. depth or cut	65 mm	65 mm	65 mm
Throat capacity	460 mm	460 mm	460 mm
Length of stroke	20 mm	20 mm	20 mm
Speeds	1400 RPM	700 / 1400 RPM	400~1400 RPM
Size of table	460 x 235 mm	460 x 235 mm	460 x 235 mm
Table tilts	45° (L) / 10° (R)	45° (L) / 10° (R)	45° (L) / 10° (R)
Motor power	120W	8P/120W 4P/150W	120W
Net weight	29 Kgs	29 Kgs	29 Kgs
Gross weight	32 Kgs	32 Kgs	32 Kgs
CUFT	685 x 360 x 380 mm	685 x 360 x 380 mm	685 x 360 x 380 mm
Machine dimension	620 x 285 x 310 mm	620 x 285 x 310 mm	620 x 285 x 310 mm

Getting to Know Your Machine



Standard accessories



- ① Saw blade 18t X 0.35 X 1.4 X130
- ② Saw blade 12.5t X 0.4 X 0.94 X130
- ③ Saw blade 9.5t X 0.6 X 1.62 X130
- ④ Hex. wrench 3mm
- ⑤ Hex. wrench 2.5mm
- ⑥ Saw blade clamp X2

• Single speed switch



• Stepless variable speed switch



Unpack / Set up

Unpack

1. Lift the machine as represented in the illustration from the packing cardboard.
2. Do not lift the machine at the upper rocker arm(A) only

Set up

1. Place the machine like that on a sturdy, vibration-free place.
2. The place where machine install must be flat and big enough for the operation.

Fasten the machine

Fix machine base to stand by 2 pieces of bolt (two drillings B), or by 3 M8 bolts (three holes C).

Site conditions

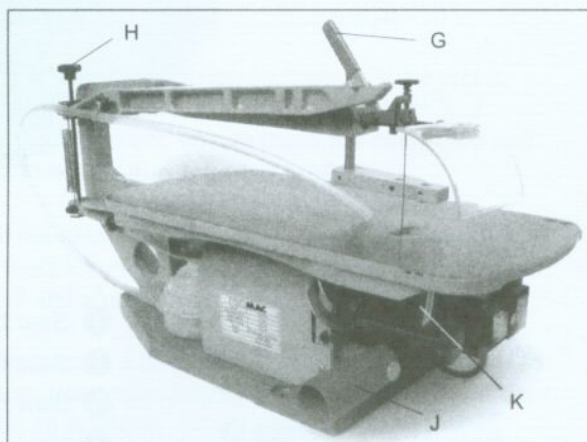
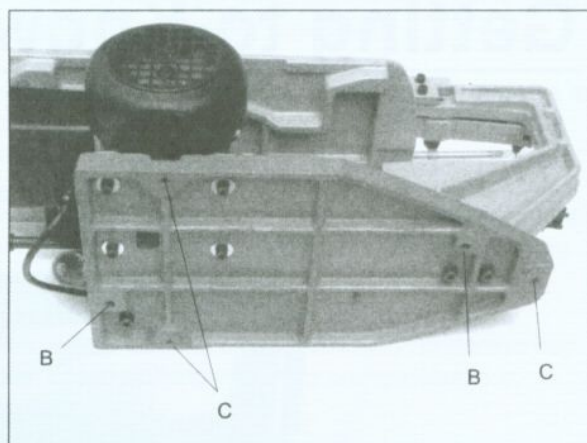
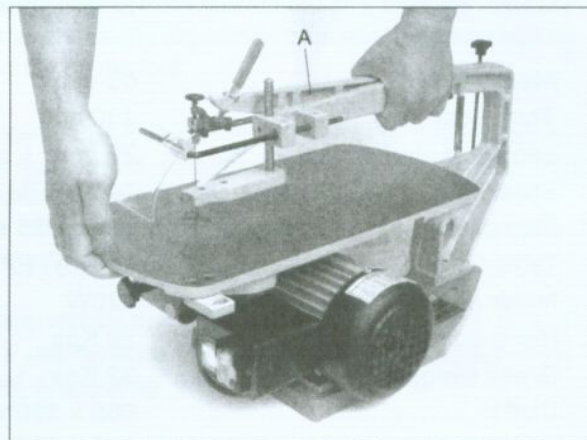
the place of assembly of the machine should be:

1. Vibration-free
2. Drying
3. Freely of aggressive gases and damp
4. Freely of mineral

Start-up of the machine

A wavy saw blade is useless and need a new to be exchanged!

1. Stretch saw blade
 - Push the rapid clamping lever G in the clamping position (shown as figure).
 - Spin the saw blade with control knob H.
 - Tricks it in addition the control knob in the clockwise direction until the saw blade gives a bright clay/tone of itself with the finger.
2. Ease saw blade
 - Easing the saw blade only with switched off machine!
 - Easing the saw blade by pulling the clamping lever G forward. Turn the control knob H about 2~3 revolutions against the clockwise direction



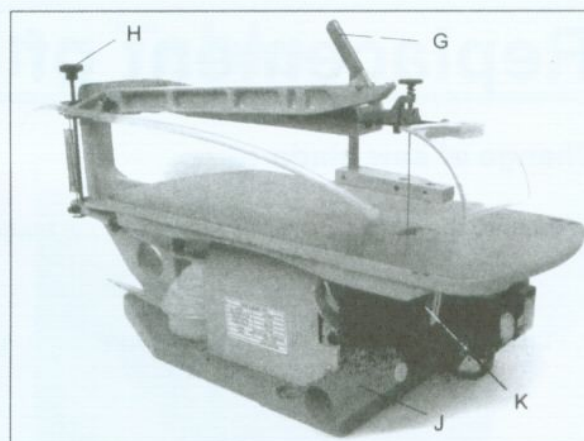
3. Dust exhaust

- Put one end of the vacuum cleaner hose into dust exhaust outlet.
- Paying attention which is upward folded the protection hood K.

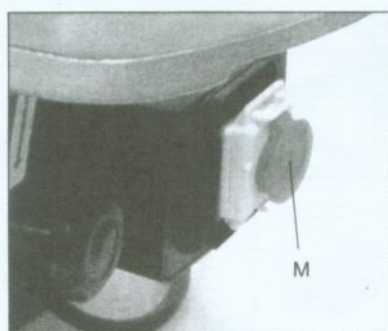
Switching on the machine

Note! The machine begins to work immediately after switching on!

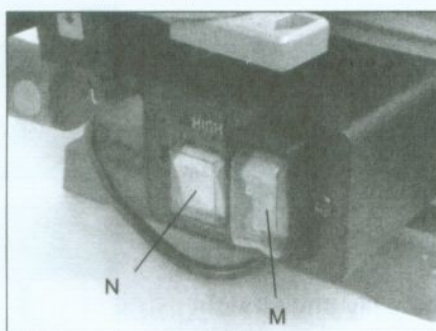
- Power supply plug into the plug socket and then switch on the machine with the power switch M by the switch jack down.
- Select the speed of saw blade by the switch N.
2-step speed type: -- in the " HIGH " position, the cutting speed is 1400 rpm (strokes per minute).
-- in the " LOW " position, the cutting speed is 700 rpm (strokes per minute).
stepless variable speed type: the cutting speed can be adjusted from 400 rpm to 1400 rpm by turning the knob N.



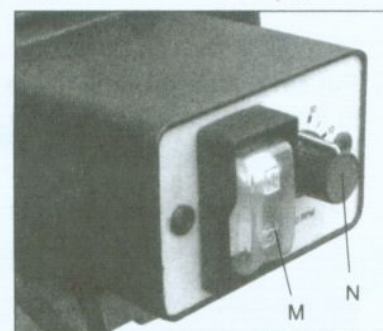
single speed type



2-step speed type



stepless variable speed type



- Switching on the vacuum cleaner.

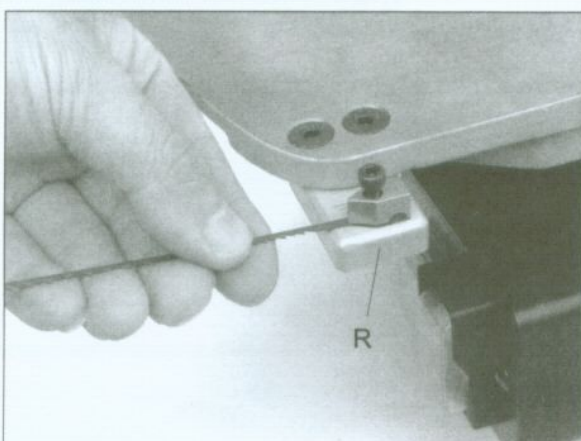
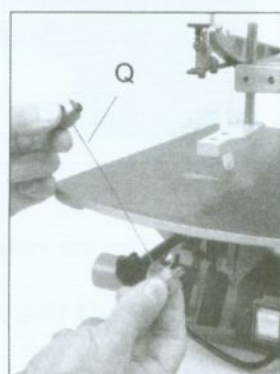
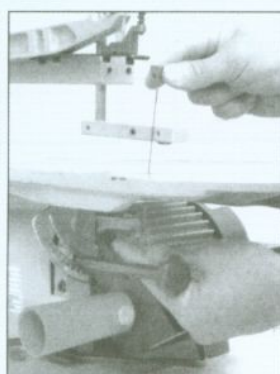
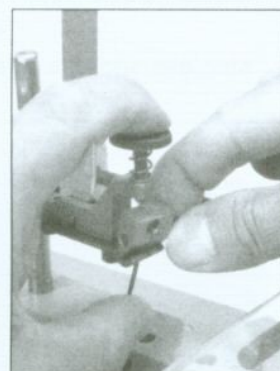
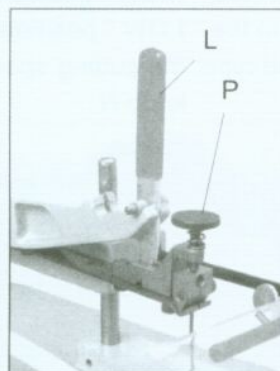
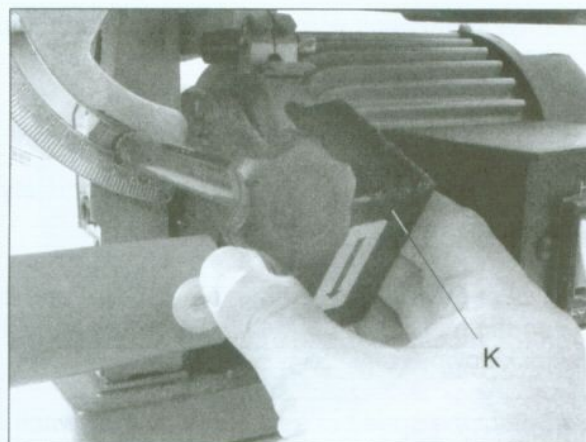
Switching off the machine

- Switch off the machine with the power switch M by the switch jack down.
- Switching off the vacuum cleaner.

Replacement of Saw Blade

Change of saw blade

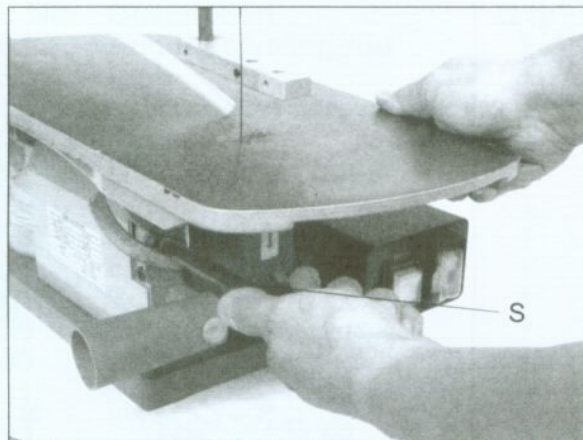
1. Remove the plug before carrying out saw blade change.
2. Flaps the protection hood K downward.
3. Removing your cuts if necessary and remainder stucco from the protection hood.
4. Pull the clamping lever L forward.
5. Loosen the Disc screw P.
6. Take off the saw blade set Q (with saw blade clamps).
7. Put saw blade clamp into the clamp inserting device R in front right of working table.
8. Replace a new saw blade on the clamp inserting device.
9. Put the new saw blade exactly centrically and straight into the clamp.
10. To clamp the other end of the saw blade in same order.
11. First set the lower clamp into the lower clamp seat, then set the upper clamp into the upper clamp seat.
12. Tightening the disc screw P to the clamp.
13. Push the clamping lever L backward.



Swivelling the Working Table

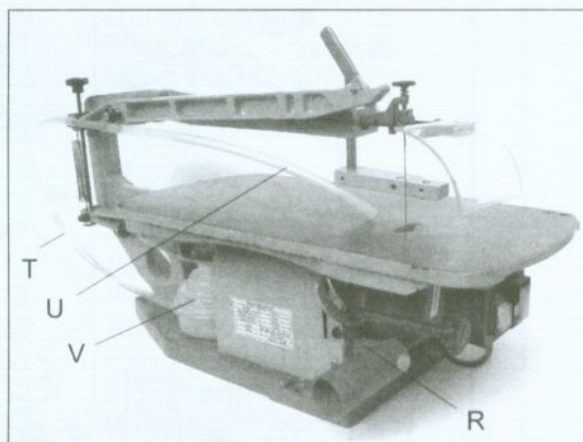
By the adjustment of the working table, you can work on a horizontal table surface also angle cuts to max. 45 degrees.

1. Remove the plug before carrying out adjusting the working table
2. Turn knob S approx.. 1 revolution against the clockwise direction.
3. Bend the working table into the desired angle and turn knob S again firmly.

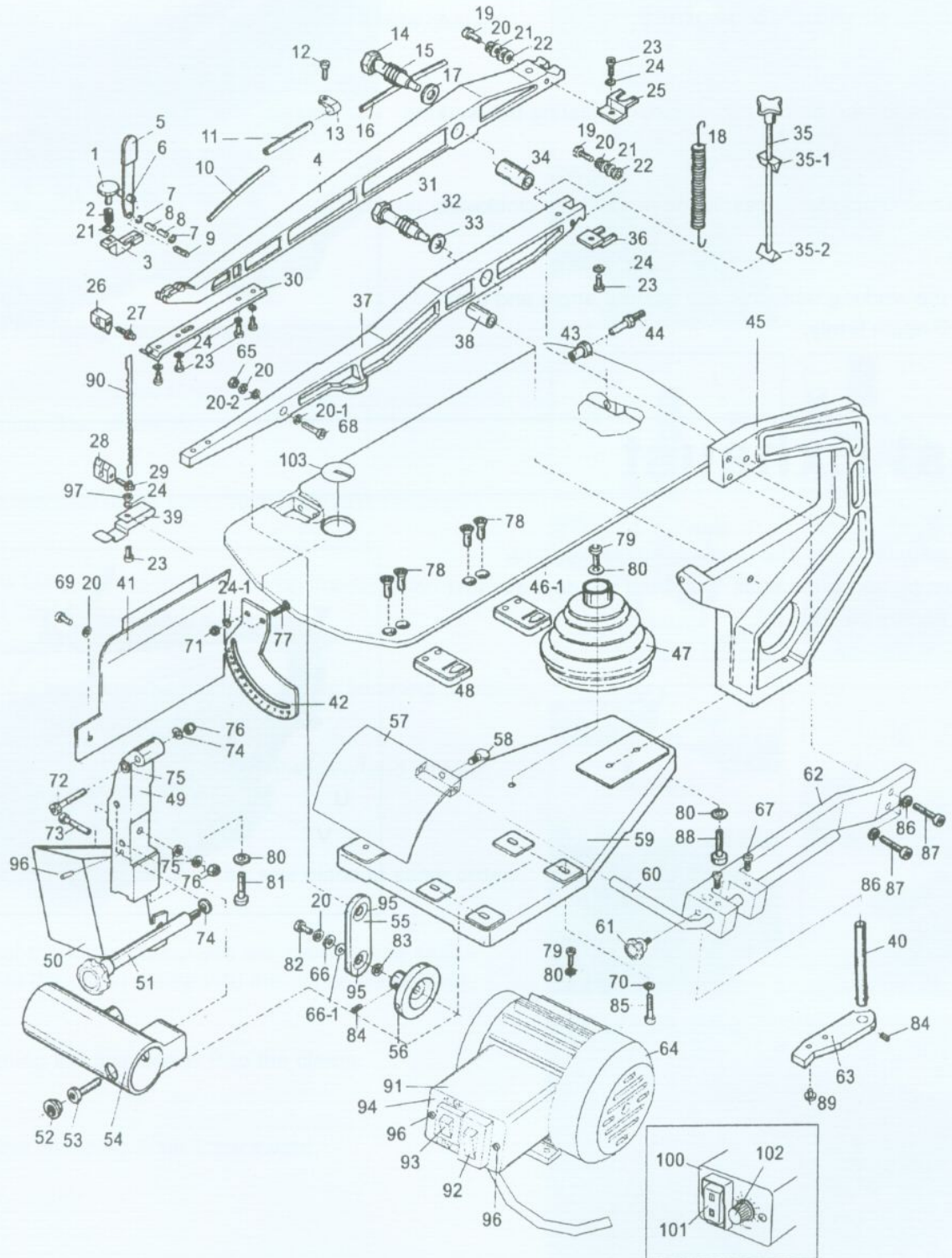


Dust Exhaust

Without exhaust work, The upper exhaust U can be free-blown by taking the hose T off from the dust exhaust outlet R and by pump V.



18" Scroll Saw



Stepless variable
Speed switch

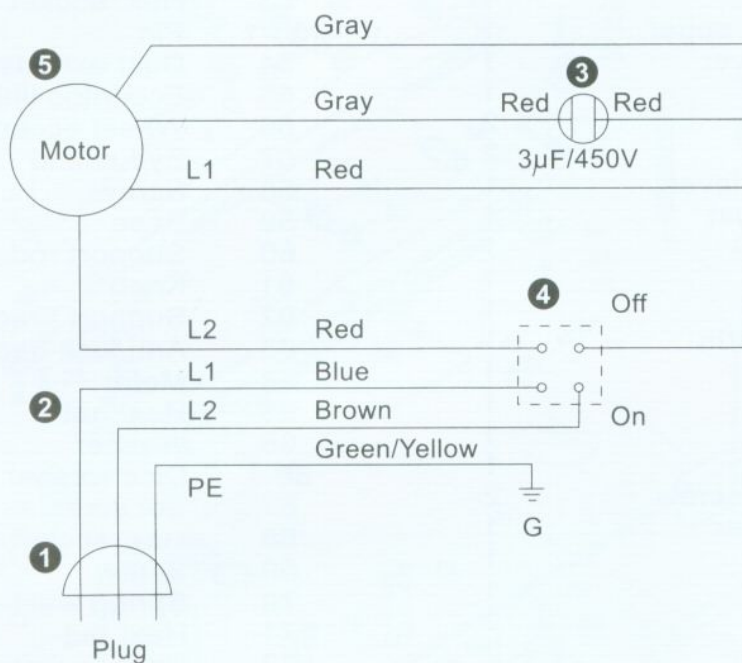
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Parts List

Ref. No.	Description	Q'ty	Ref. No.	Description	Q'ty
1	Fixing screw	1	51	Angle adjusting rod	1
2	Spring	1	52	Plug	1
3	Fixed seat	1	53	Hex. socket screw	1
4	Rocker arm, upper	1	53-1	Pin	2
5	Clamping lever	1	54	Dust exhaust outlet	2
6	Pin	1	55	Eccentric link	1
7	Nut	2	56	Wheel eccentric	1
8	Collar	2	57	Eye shield	1
9	Pin, tension lever	1	58	Screw	1
10	Upper exhaust	1	59	Base	1
11	Joint pipe	1	60	Support rod	1
12	Screw	1	61	Knob	1
13	Cable clamp	1	62	Support bracket	1
14	Pin, rocker arm	1	63	Anti-kick back guard	1
15	Spring	1	64	Motor	1
16	Bolwer tube	1	65	Hex. nut	2
17	Washer	1	66	Washer	1
18	Spring	1	66-1	Disc washer	1
19	Hex. socket screw	2	67	Set screw	1
20	Spring washer	1	68	Hex. socket screw	2
20-1	Disc washer	1	69	Screw	2
20-2	Washer	1	70	Spring washer	4
21	Roller	2	71	Hex. nut	4
22	Washer	2	72	Hex. socket screw	1
23	Hex. socket screw	4	73	Hex. socket screw	1
24	Spring washer	4	74	Washer	2
24-1	Spring washer	1	75	Washer	1
25	Seat, upper, regulating rod	1	76	Self locking nut	1
26	Saw blade clamp	2	77	Hex. socket flat screw	1
27	Hex. socket screw	1	78	Hex. socket flat screw	1
28	Saw blade clamp	1	79	Hex. socket screw	1
29	Hex. socket screw	1	80	Spring washer	1
30	Blade positioning plate	1	81	Hex. socket screw	1
31	Pin, rocker arm	1	82	Hex. screw	1
32	Spring	1	83	Washer	1
33	Washer	1	84	Set screw	1
34	Brass bush	1	85	Hex. socket screw	1
35	Regulating rod	1	86	Spring washer	1
35-1	Triangle pin, upper	1	87	Hex. socket screw	1
35-2	Triangle pin, lower	1	88	Hex. socket screw	1
36	Seat, lower, regulating rod	1	89	Screw	1
37	Rocker arm, lower	1	90	Saw blade	1
38	Brass bush\	1	91	Switch box	1
39	Spring plate	1	92	Main switch	1
40	Anti-kick back guard rod	1	93	2-step speed switch	1
41	Protecting plate	1	94	Switch panel	1
42	Scale	1	95	Bearing	2
43	Shaft sleeve	1	96	Tapping screw	2
44	Shaft, working table	1	97	Hex. nut	1
45	Bow	1	98	Switch panel	1
46	Working table	1	99	Power switch	1
47	Pump	1	100	Switch panel	1
48	Blade locking block	1	101	Main switch	1
49	Basic seat	1	102	Variable speed switch	1
50	Protection hood	1	103	Table insert	1

Electric Circuit Diagram (1)

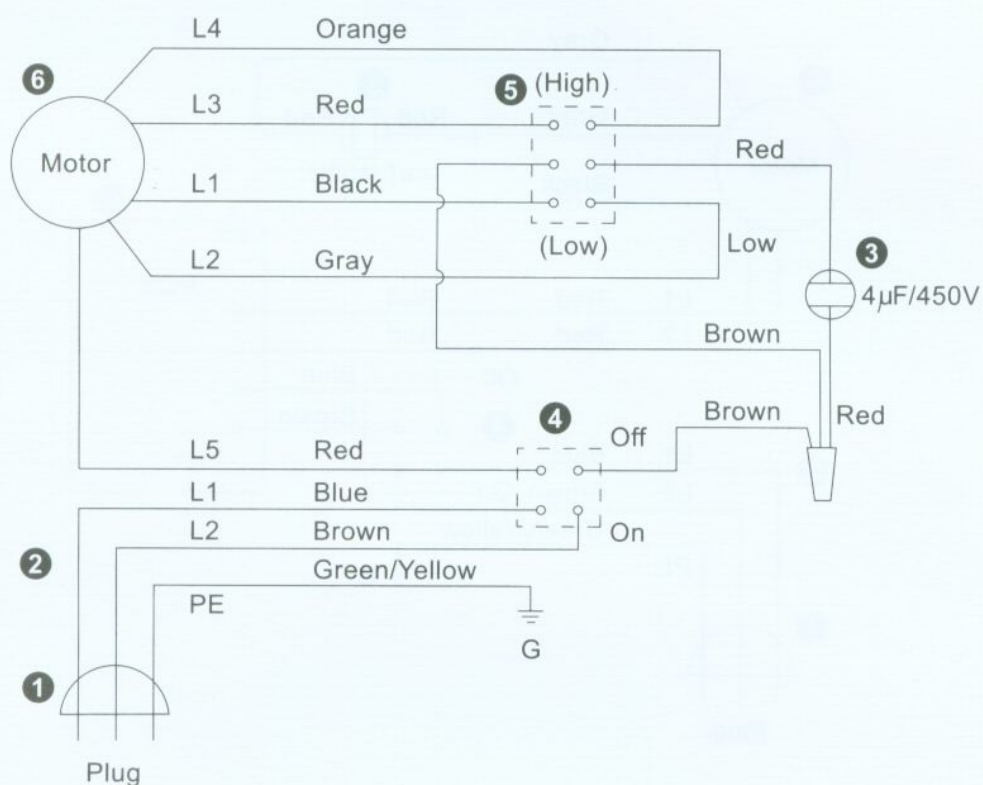
Single speed



Item	Description	Specification	Q'ty	Remark
1	Plug	-	1	KEMA (N) (S) (D) (FI) (ÖVE) (VDE) (S05) (CEBEC)
2	Cable	0.75mm ² x 3C x 6L H05VVF	1	VDE
3	Condenser	3 μF 450VAC	1	VDE
4	Power Switch	KJD12	1	VDE
5	Motor	230V/50Hz, 120W	1	CE

Electric Circuit Diagram (2)

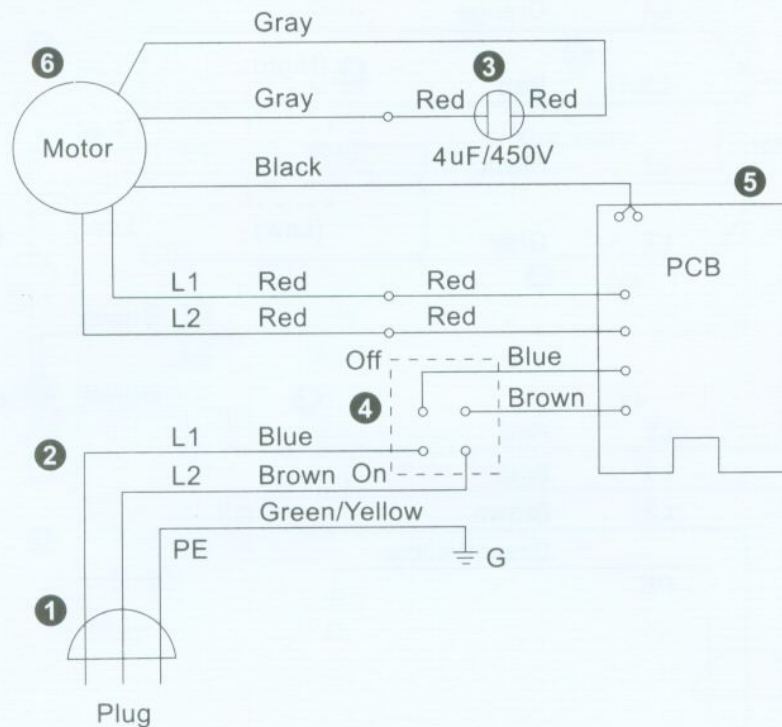
2-step speed



Item	Description	Specification	Q'ty	Remark
1	Plug	-	1	KEMA (N) S D FI ÖVE DE 509 CE BEC
2	Cable	0.75mm ² x 3C x 6L H05VVF	1	VDE
3	Condenser	4 µF 450VAC	1	VDE
4	Power Switch	KJD16	1	VDE
5	Poles Switch	TR26-2	1	VDE
6	Motor	230V / 50Hz 4P/150W ; 8P/120W	1	CE

Electric Circuit Diagram (3)

Stepless variable speed

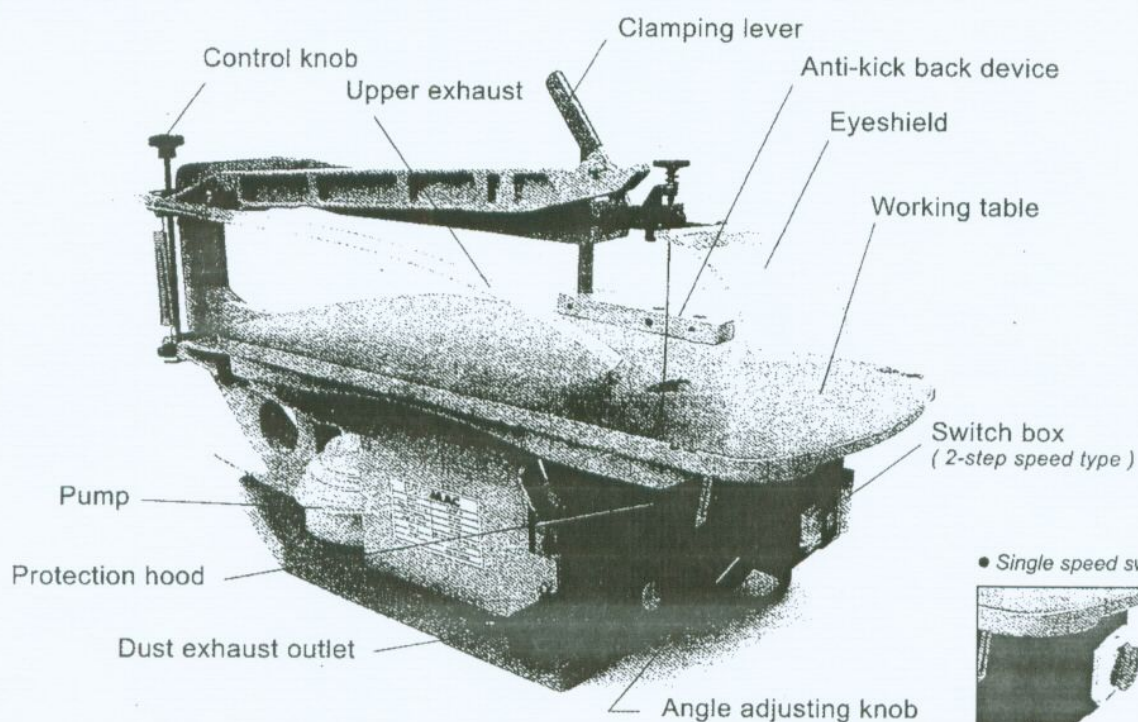


Item	Description	Specification	Q'ty	Remark
1	Plug	-	1	KEMA N S D FI ÖVE DE S09 CEBEC
2	Cable	0.75mm ² x 3C x 6L H05VVF	1	VDE
3	Condenser	4 μ F 450VAC	1	VDE
4	Power Switch	KJD16	1	VDE
5	PCB and Knob	PCB	1	-
6	Motor	230V / 50Hz 4P/120W	1	-

Technical Data

	Single speed type	2-speed type	Stepless variable speed type
Max. depth or cut	65 mm	65 mm	65 mm
Throat capacity	460 mm	460 mm	460 mm
Length of stroke	20 mm	20 mm	20 mm
Speeds	1400 RPM	700 / 1400 RPM	400~1400 RPM
Size of table	460 x 235 mm	460 x 235 mm	460 x 235 mm
Table tilts	45° (L) / 10° (R)	45° (L) / 10° (R)	45° (L) / 10° (R)
Motor power	120W	8P/120W 4P/150W	120W
Net weight	29 Kgs	29 Kgs	29 Kgs
Gross weight	32 Kgs	32 Kgs	32 Kgs
CUFT	685 x 360 x 380 mm	685 x 360 x 380 mm	685 x 360 x 380 mm
Machine dimension	620 x 285 x 310 mm	620 x 285 x 310 mm	620 x 285 x 310 mm

Getting to Know Your Machine



Standard accessories



- ① Saw blade 18t X 0.35 X 1.4 X130
- ② Saw blade 12.5t X 0.4 X 0.94 X130
- ③ Saw blade 9.5t X 0.6 X 1.62 X130
- ④ Hex. wrench 3mm
- ⑤ Hex. wrench 2.5mm
- ⑥ **Saw blade clamp (2 size)**
 **26-A*1 pc & 28-A*1 pc (0.5mm)
 For saw blade 18t & 12.5 t
 **26-B*1 pc & 28-B*1 pc (0.7mm)
 For saw blade 9.5t

• Single speed switch



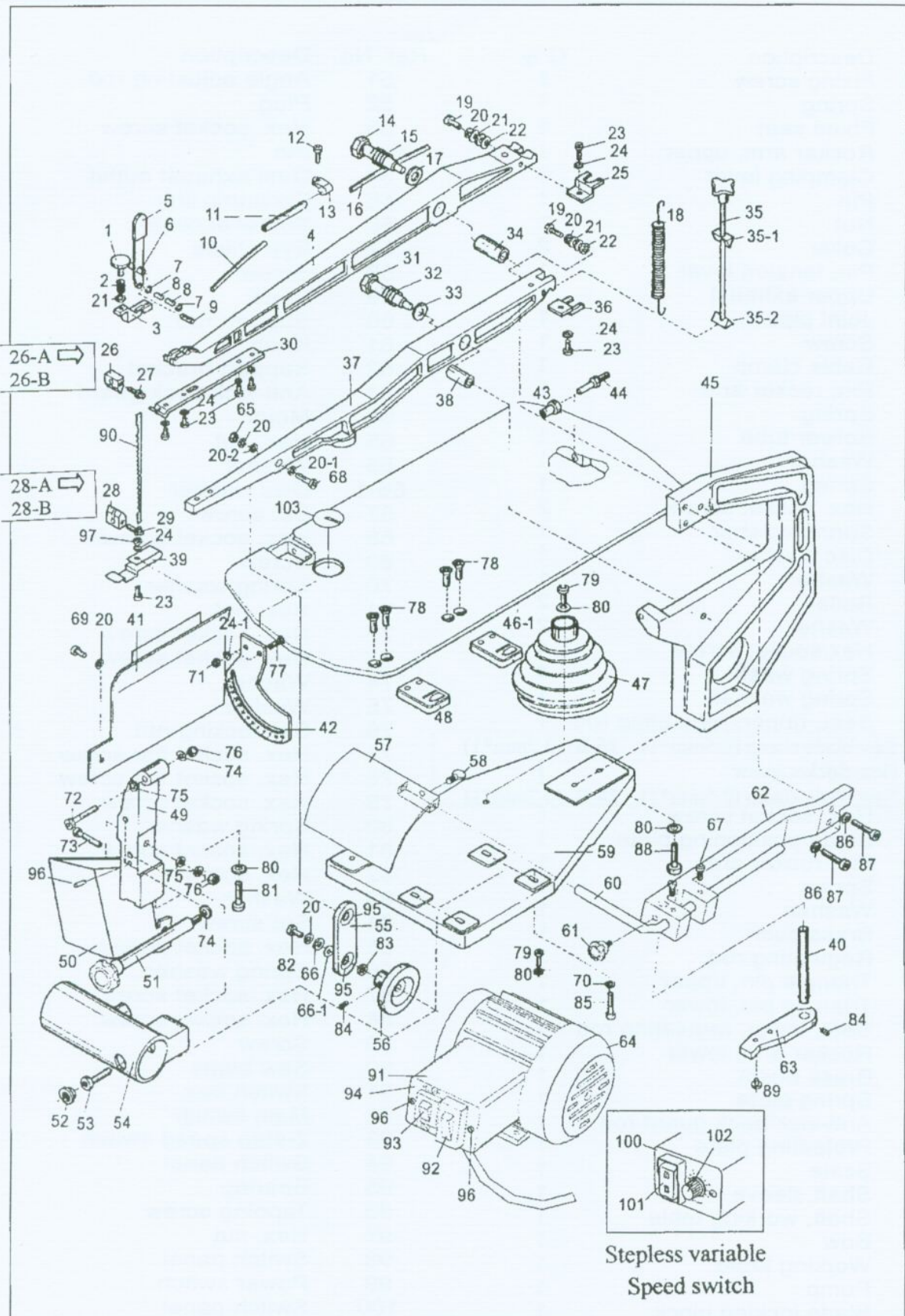
• Stepless variable speed switch



Parts List

Ref. No.	Description	Q'ty	Ref. No.	Description	Q'ty
1	Fixing screw	1	51	Angle adjusting rod	1
2	Spring	1	52	Plug	1
3	Fixed seat	1	53	Hex. socket screw	1
4	Rocker arm, upper	1	53-1	Pin	2
5	Clamping lever	1	54	Dust exhaust outlet	2
6	Pin	1	55	Eccentric link	1
7	Nut	2	56	Wheel eccentric	1
8	Collar	2	57	Eye shield	1
9	Pin, tension lever	1	58	Screw	1
10	Upper exhaust	1	59	Base	1
11	Joint pipe	1	60	Support rod	1
12	Screw	1	61	Knob	1
13	Cable clamp	1	62	Support bracket	1
14	Pin, rocker arm	1	63	Anti-kick back guard	1
15	Spring	1	64	Motor	1
16	Bolwer tube	1	65	Hex. nut	2
17	Washer	1	66	Washer	1
18	Spring	1	66-1	Disc washer	1
19	Hex. socket screw	2	67	Set screw	1
20	Spring washer	1	68	Hex. socket screw	2
20-1	Disc washer	1	69	Screw	2
20-2	Washer	1	70	Spring washer	4
21	Roller	2	71	Hex. nut	4
22	Washer	2	72	Hex. socket screw	1
23	Hex. socket screw	4	73	Hex. socket screw	1
24	Spring washer	4	74	Washer	2
24-1	Spring washer	1	75	Washer	1
25	Seat, upper, regulating rod	1	76	Self locking nut	1
26-A	Saw blade clamp (0.5mm*1)	26-B: (0.7mm*1)	77	Hex. socket flat screw	1
27	Hex. Socket screw	1	78	Hex. socket flat screw	1
28-A	Saw blade clamp (0.5mm*1)	28-B: (0.7mm*1)	79	Hex. socket screw	1
29	Hex. socket screw	1	80	Spring washer	1
30	Blade positioning plate	1	81	Hex. socket screw	1
31	Pin, rocker arm	1	82	Hex. screw	1
32	Spring	1	83	Washer	1
33	Washer	1	84	Set screw	1
34	Brass bush	1	85	Hex. socket screw	1
35	Regulating rod	1	86	Spring washer	1
35-1	Triangle pin, upper	1	87	Hex. socket screw	1
35-2	Triangle pin, lower	1	88	Hex. socket screw	1
36	Seat, lower, regulating rod	1	89	Screw	1
37	Rocker arm, lower	1	90	Saw blade	1
38	Brass bush\	1	91	Switch box	1
39	Spring plate	1	92	Main switch	1
40	Anti-kick back guard rod	1	93	2-step speed switch	1
41	Protecting plate	1	94	Switch panel	1
42	Scale	1	95	Bearing	2
43	Shaft sleeve	1	96	Tapping screw	2
44	Shaft, working table	1	97	Hex. nut	1
45	Bow	1	98	Switch panel	1
46	Working table	1	99	Power switch	1
47	Pump	1	100	Switch panel	1
48	Blade locking block	1	101	Main switch	1
49	Basic seat	1	102	Variable speed switch	1
50	Protection hood	1	103	Table insert	1

18" Scroll Saw



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