10-10-07

INSTRUCTION MANUAL

RBS315S

(W854)

BASATO 3 VARIO

Please read the manual carefully before operating this machine!

Fig. 1

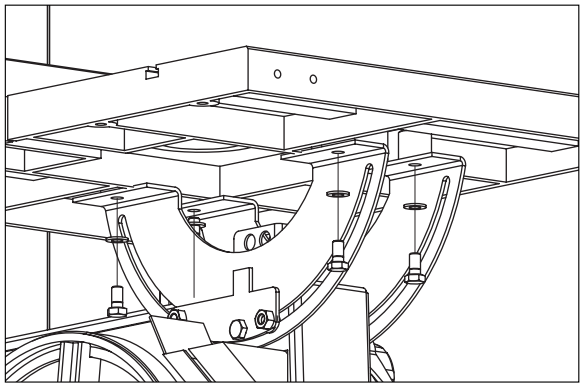
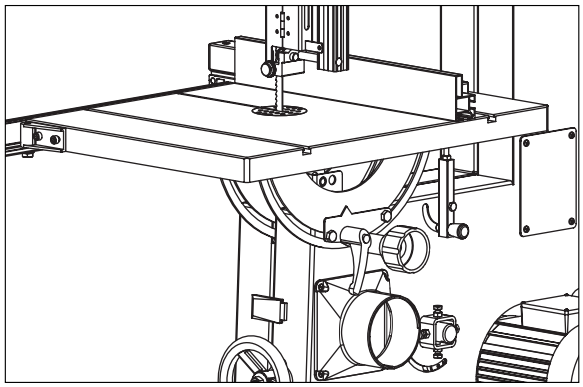


Fig. 2



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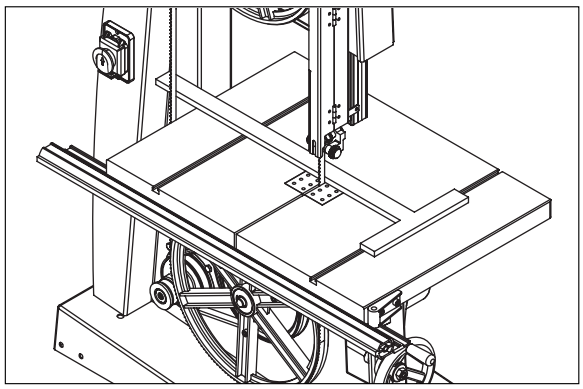

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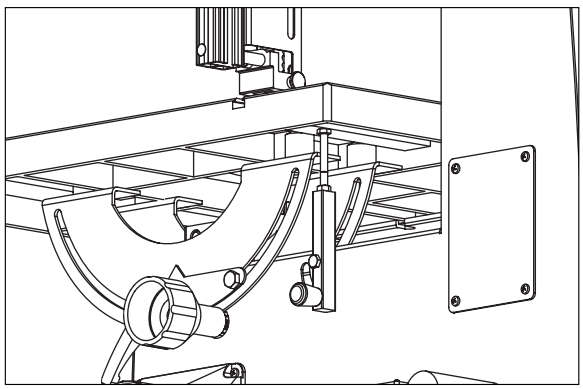
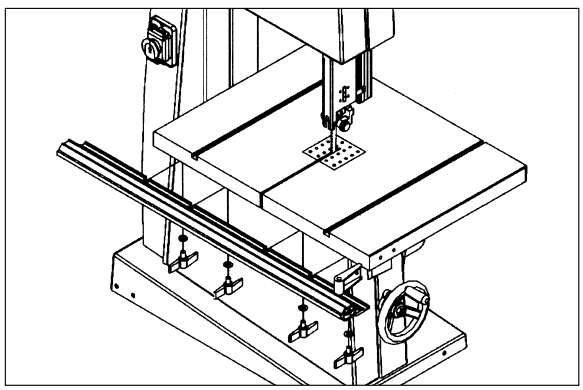


Fig. 5.1



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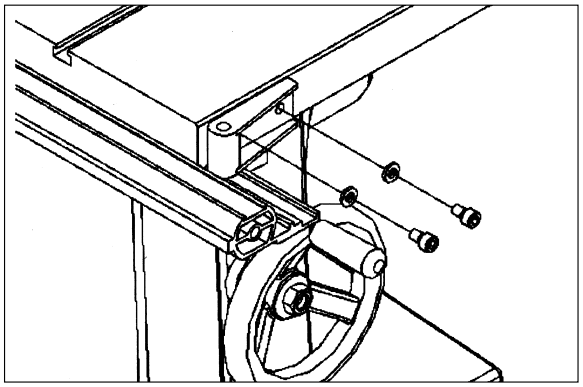

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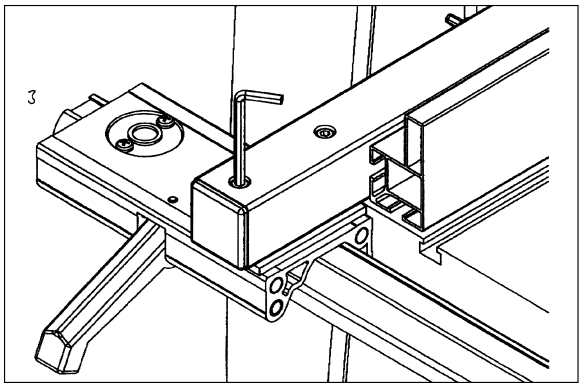

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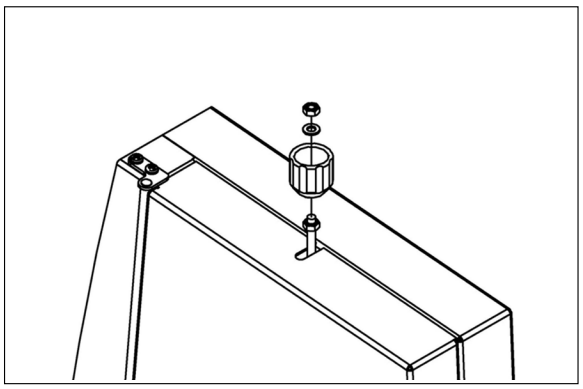

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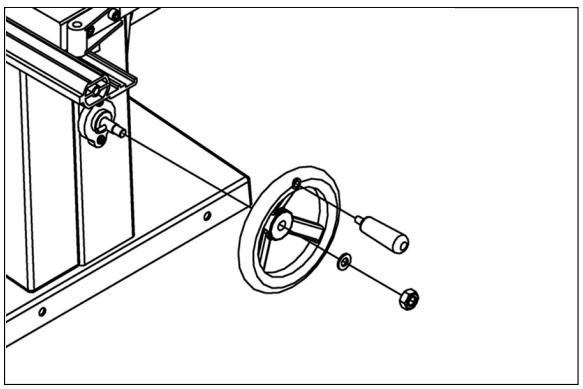
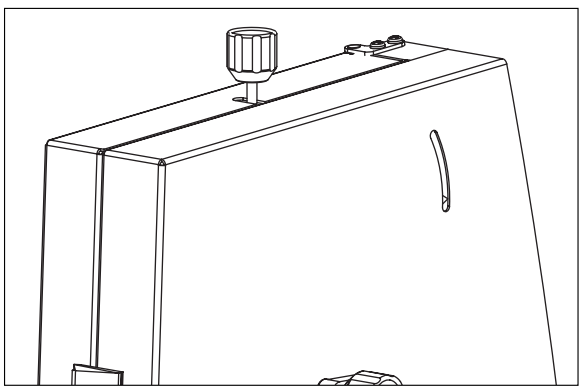
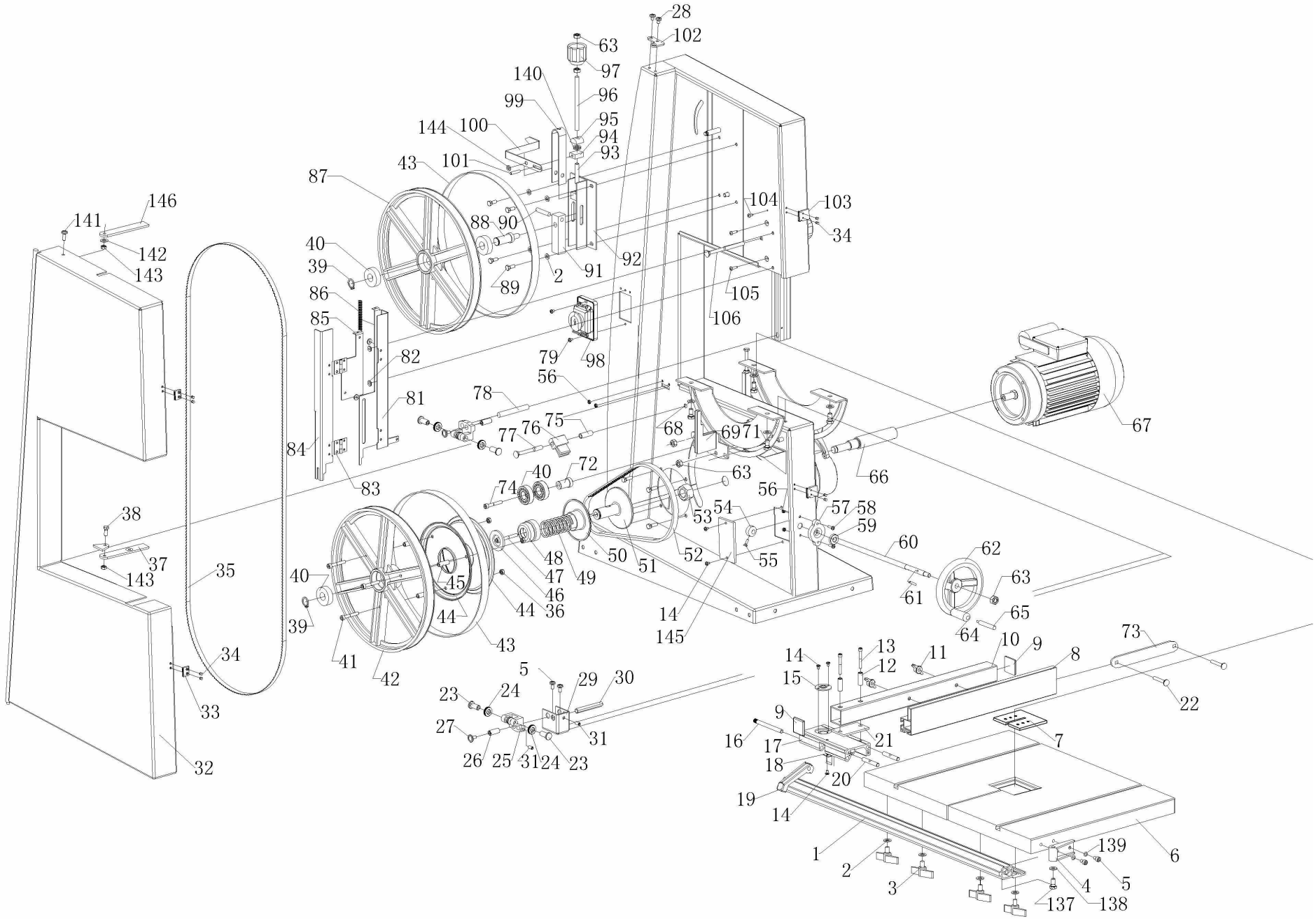


Fig. 8

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General notes

1. After unpacking, check all parts for any transport damage. Inform the supplier immediately of any faults.
2. Later complaints cannot be considered.
3. Make sure the delivery is complete.
4. Before putting into operation, familiarize yourself with the machine by carefully reading these instructions.
5. Use only **original scheppach accessories**, wearing or replacement parts. **You can find replacement parts at your scheppach dealer.**
6. When ordering, include our item number and the type and year of construction of the machine.

Dear customer,

We wish you much pleasure and success with your new **scheppach** machine.

NOTE:

In accordance with valid product liability laws, the manufacturer of this device shall not be responsible for damage to and from this device which results from:

1. Improper care.
2. Noncompliance with the Operating Instructions.
3. Repairs made by unauthorized persons.
4. The installation and use of any parts which are not original **scheppach** replacement parts.
5. Improper use and application.
6. Failure the electrical system as a result of noncompliance with the legal and applicable electrical directives and VDE regulations 0100, DIN 57113 / VDE 0113.

⚠ **We recommend that you read through the entire operating instructions before putting into operation.**

These operating instructions are to assist you in getting to know your machine and utilize its proper applications.

The operating instructions contain important notes on how you work with the machine safely, expertly, and economically, and how you can avoid hazards, save repair costs, reduce downtime and increase the reliability and service life of the machine.

In addition to the safety requirements contained in these operating instructions, you must be careful to observe your country's applicable regulations.

The operating instructions must always be near the machine. Put them in a plastic folder to protect them from dirt and humidity. They must be read by every operator before beginning work and observed conscientiously. Only persons who have been trained in the use of the machine and have been informed of the various dangers may work with the machine. The required minimum age must be observed.

In addition to the safety requirements contained in these operating instructions and your country's applicable regulations, you should observe the generally recognized technical rules concerning the operation of woodworking machines.

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Set-up

Prepare the workplace where the machine is to be placed. Insure sufficient room to allow safe work without malfunctions. The machine is designed to operate in closed rooms and must be placed stabily on firm level ground. Stability is insured by attachment to the ground with 4 screws (Fig. 14).

Transport

The machine may only be transported with suitable lifting devices (crane or fork lift). The connection point for the rope (crane) is on the upper band wheel cabinet.

Safety notes

⚠ **In these operating instructions we have marked the places that have to do with your safety with this sign.**

- Please pass on safety notes and instructions to all those who work on this machine.
- Personnel entrusted with work on the machine must have read the operating instructions and in particular the chapter on safety before beginning work. Reading the instructions after work has begun, is too late. This applies especially to persons working only occasionally on the rnachine, e.g. during setting up or rnaintenance.
- Observe all safety instructions and warnings attached to the machine.
- See to it that all safty instructions and warnings attached to the machine are complete and perfectly legible.
- Check all power supply lines. Do not use defective lines.
- Make sure that the machine stands stable on firm ground.
- Insure sufficient lighting in the work area and the area around the machine.
- Caution when working: There is a danger to fingers and hands from the rotating tool.

- When working on the machine, all safety mechanisms and covers must be mounted.
- Keep children away from the machine when it is connected to the power supply.
- Operating personal must be at least 18 years of age. Trainees must be at least 16 years of age, but may only operate the machine under adult supervision.
- Persons working on the machine may be not diverted from their work.
- The working space on the machine must be free of chips and wood scrap.
- Wear only close-fitting clothes. Remove rings, bracelets and other jewelry.
- Always wear safety goggles when working.
- Wear a cap or hair net to protect long hair.
- Wear suitable gloves to change the sawband.
- Do not wear work gloves when working on the saw.
- Observe the correct rotational speed setting on the machine.
- The safety mechanism on the machine may not be removed or rendered unusable.
- Cleaning, changing, calibrating, and setting of the machine may only be carried out when the motor is switched off. Pull the power supply plug and wait for the rotating tool to completely stop.
- Connection and repair work on the electrical installation may be carried out by a qualified electrican only.
- All protection and safety devices must be replaced after completing repair and maintenance procedures.
- Switch the machine off and pull power supply plug when rectifying any malfunctions.
- Use a suction unit to suck up wood shavings and sawdust. The current speed at the suction connection piece should be 20 m/s.
- Check the saw band guide and the saw band tension before starting up.
- Do not use nicked saw bands or those that have an altered form.
- Replace table inserts that have worn saw slots.
- When sawing round wood, make sure that the work piece does not turn.
- For sawing heavy or cumbersome pieces, use the appropriate working aids for bracing. (Special accessory roller stands).
- Place the upper saw band guide as closely as possible to the work piece.
- On slanted table plates, attach the longitudinal stop on the lower table plate half.
- Do not brake the saw band with side pressure after switching off.
- Remove work pieces that have become stuck only with the motor switched off and with the saw band at a standstill.
- Cut off the external power supply of the machine even if only minor changes of place are envisaged. Properly reconnect the machine to the supply mains before recommissioning.
- When leaving the work place, switch the motor off. Pull the power supply plug.

Use only as authorized

⚠ CE tested machines meet all valid EC machine guidelines as well as all relevant guidelines for each machine.

- All protective and safety device must be mounted on the machine before beginning work.
- The machine is designed to be operated by one person. The operator is responsible for all other persons in the working area.
- Observe all safety instructions and warnings attached to the machine.
- See to it that safety instructions and warnings attached to the machine are always complete and perfectly legible.
- The bandsaw with the supplied tools and accessories is designed exclusively for sawing wood, material similar to wood, and non-ferrous metals and steel.
- The maximum dimensions for workpieces to be processed is may not exceed the bench size in the standard version. Clearance width: 306 mm, Clearance height: 160 mm
- For larger workpiece dimensions which require tipping of the table top, the table extension or the dolly (special accessories) must be used.
- The band saw can also be used for sawing metal when it is equipped with a special saw band dolly (special accessory) and a operated at an adapted cutting speed. Metal allows with more than 80 % magnesium may not be processed due to the danger of fires.
- When used in enclosed rooms, the machine must be connected to a vacuum exhaust unit. Use the dust extractor to remove matchwood or saw dust. The vacuum support flow rate must be 20 m/s. Subatmospheric pressure 860 Pa.
- The automatic switching unit is available as a special accessory.
  Type ALV 2 Art. No. 7910 4010 230 V/50 Hz
  Type ALV 10 Art. No. 7910 4020 400 V/230 V/50 Hz
- The vacuum exhaust unit automatically switches on after a 2-3 second delay after the machine tool is turned on. This avoids overloading the circuit fuse.
- After turning off the machine tool, the vacuum exhaust unit remains on for an additional 2-3 seconds and is then automatically switched off. Remaining dust is thereby removed by vacuum exhaust, as required by German regulations governing hazardous materials. This results in savings in electricity consumption and reduces noise levels, as the vacuum exhaust unit is on only during machine tool operation.
- A suction device which conforms with commercial regulations must be used for suction in commercial areas.
- Do not switch off or remove suction units or dust extractors while the work machine is in operation.
- The machine must only be used in technically perfect condition in accordance with its designated use and the instructions set out in the operating manual, and only by safety-conscious persons who are fully aware of the risks involved in operating the machine. Any functional disorders, especially those affecting the safety of the machine, should therefore be rectified immediately.
- The safety, work and maintenance instructions of the manufacturer as well as the technical data given in the calibrations and dimensions must be adhered to.
- Relevant accident prevention regulations and other, generally recognized safety-technical rules must also be adhered to.
- The machine may only be used, maintained, and oper-

ated by persons familiar with it and instructed in its operation and procedures. Arbitrary alterations to the machine release the manufacturer from all responsibility for any resulting damages.

- The machine may only be used with original accessories and original tools made by the manufacturer.
- Any other use exceeds authorization. The manufacturer is not responsible for any damages resulting from unauthorized use; risk is the sole responsibility of the operator.

Scope of delivery

Band saw
Sawing table
Longitudinal stop
Dust bag connector
Operating instructions
Push stick
Accessory bag
Hexagonal spanner SW 0/13
Hexagon socket head wrench SW 4/SW 5

Special accessories - page GB 13

Specifications

Passage width	***306 mm***
Passage height	***160 mm***
Table size	***400 x 548 mm***
Cutting speed	***370 – 750 m/min***
Saw band length	***2360 mm***
Height up to tabletop	***515 mm***
Height up to tabletop with underframe	***1050 mm***
Overall height without underframe	***1150 mm***
Overall height with underframe	***1680 mm***
Overall width	***825 mm***
Overall depth	***540 mm***
Slewing range of the table	***-17°/+45°***
Overall weight without underframe	***69 kg***
Overall weight with underframe	***77 kg***

Motor	***Alternating current***
Rotary current	
Nominal consumption	***P1 (kW) 0,80***
0,72	
Delivery of power	***P2 (kW) 0,55***
0,55	

Noise parameters

The noise emission values determined according to EN 23746 for the sound level and according to EN 31202 (coefficient of correction k3 calculated according to Appendix A.2 of EN 31204) for the sound level at the workplace are as follows, based on the working conditions listed in ISO 7904 Appendix A:

Sound level in dB
Idle running LWA = 80.3 dB(A)
Operation LWA = 100.2 dB(A)
Sound level at the workplace in dB
Idle running LpAeq = 64.1 dB(A)
Operation LpAeq = 82.9 dB(A)

A measurement uncertainty allowance K = 4 dB applies to the mentioned emission values.

Machine description

Due to its perfected design, the machine offers a versatile application for processing wood and plastics in the workshop.

The upper and lower bandwheel is protected by a fixed guard and an articulated cover. Upon opening the cover, the machine is switched off. Switching on again is only possible with the cover closed. The non-cutting part of the sawbelt above the table top is covered by a guard fixed to the sawbelt guide, the latter being protected against inadvertant opening by the fixed guard of the upper band wheel. The non-cutting part of the sawbelt under the table top is protected by a fixed cover.

The swivelling range of the table from -20° to +47° allows versatile cutting possibilities (e.g.)

- **Longitudinal cuts**
- **Cross cuts**
- **Diagonal cuts**
- **Curved and irregular cuts**
- **Cuts for dovetails and tenons**
- **On-edge cuts of squared beams**

Please consult also the working hints in the operating instructions.

Completion

Assembly tools

1 engineer's wrench SW 10/13

For reasons of packaging technology, the tabletop, the handle, and the handwheel are not mounted.

Installation of the tabletop, Fig. 1

1. Open the case cover, and set the slewing segments to 30°.
2. Loosely screw the tabletop.
   4 hexagon head cap screws M 8 x 16
   4 serrated lock washers A 8,4

Fig. 2

Turn the tabletop into the 0° position, and tighten the clamping lever.

Fig. 3

Align the tabletop as follows:

1. Put a straight wood border with a length of approximately 50 cm on the table and put it against the upward and downward parts of the saw band.
2. Put a shifting square against the wood border and the groove edge of the table. Align the table, and fasten the two front hexagon head cap screws on the table.
3. Release the clamping lever of the slewing segments by means of a quarter turn, and pull the back segment outwards. Fasten the two back hexagon head cap screws on the table. Thus, you achieve a smooth slewability.

Fig. 4

1. Use the adjusting screw on the rear of the machine to align the table in a right angle to the saw band.
   – Use the shifting square –
2. Fix the adjusting screw by a locknut, and fasten the clamping lever.

Installation of the longitudinal stop, Fig. 5

1. Screw-in 4 wing screws with a shim for each screw approximately 5 mm into the tabletop **(Fig. 5.1)**.
2. Insert the guide tube into the table until the stop, and loosely tighten the wing screws.
3. Fasten the slewing part of the guide tube with two M6x12 screws and a lock washer on the table **(Fig. 5.2)**.
4. Tighten the wing nuts.
5. Put the longitudinal stop on the guide tube at the left of the saw band, and clamp it. The stop tube must be parallel to the table groove. A correction can be performed by releasing the two cylinder head screws **(Fig. 5.3)**.

Installation of the handle, Fig. 6

Mount the handle using a hexagon nut M8 and a washer 8 for the belt tensioning device.

Installation of the handwheel, Fig. 7

Mount the handwheel (ø 120 mm) with a M8 hexagon nut and a 8 washer for the progressively adjustable speed adjustment device.

Initial operation

Please observe the safety instructions prior to the initial operation of the machine. All protection devices and covers must be mounted when working with the machine.

Fig. 8

Release and remove the saw band. Insert a new saw band, and tension it slightly. Turn the band wheel manually in the cutting direction, and simultaneously perform the final tension of the saw band. The tension depends on the width of the saw band. Wide saw bands must be tensioned more strongly than narrow ones. An excessive tension results in the premature rupture of the saw band.

Side correction, Fig. 9

1. The saw band should run centrically on the band wheels.
2. Turn the upper band wheel manually in the cutting direction, and perform the side correction using the handle ①.
3. Tighten the knurled nut once the adjustment is complete.

Speed regulation, Fig. 10

Please use the handwheel exclusively during the operation of the device. A non-compliance may result in a damage of the device.

Turn the handwheel clockwise, decrease the cutting speed. Increase the cutting speed in the opposite direction within the **following speed range:**

Minimum speed **370 m/min.**

For the processing of aluminium, brass, copper, duroplastics as well as hard synthetic materials.

Maximum speed **750 m/min.**

For the processing of wood.

Saw band guide, Fig. 9

You can adjust the upper saw band guide up to a work piece height of 160 mm ③. The smallest possible distance to the work piece ensures the optimum band guide and a safe working!

Counterpressure bearing, Fig. 10

The counterpressure bearings ① absorb the feed pressure of the work piece.

Adjust the upper and lower counterpressure bearings in such a manner that they slightly strike against the saw band back.

Guiding rollers, Fig. 10

Adjust the upper and lower guiding rollers ② to the corresponding saw band width. The front edges of the guiding rollers may at maximum extend until the tooth root surface of the saw band. If the guiding rollers slightly touch the saw band, fix the position of the rollers with the knurled screw.

The saw band must not choke up!

Working information:

The following recommendations are examples of the safe use of band saws. See page K4.

The following safe working methods should be seen as an aid to safety. They cannot be applied suitably completely or comprehensively to every use. They cannot treat every possible dangerous condition and must be interpreted carefully.

- Connect the machine to a **suction unit** when working in closed rooms. A suction device which conforms with commercial regulations must be used for suction in commercial areas.
- Loosen the sawband when the machine is not in operation (e.g. after finishing work). Attach a notice on the tension of the saw band to the machine for the next user.
- Collect unused sawbands and store them safely in a dry place. Check for faults (teeth, cracks) before use. Do not use faulty sawbands!
- Wear suitable gloves when handling sawbands.
- All protective and safety devices must be securely mounted on the machine before beginning work.
- Never clean the sawband or the sawband guide with a hand-held brush or scraper while the sawband is running. Resin-covered sawbands impair working safety and must be cleaned regularly.
- For your own protection, wear protective glasses and hearing protection. Wear a hairnet if you have long hair. Roll up loose sleeves over the elbows.
- Always position the sawband guide as near the workpiece as possible when working.
- Insure sufficient lighting in the work area and around the machine.
- Always use the fence for straight cuts to keep the workpiece from tipping or slipping away.
- When working on narrow workpieces with manual feed, use the **push stick.**
- For diagonal cuts, place the saw bench in the appropriate position and guide the workpiece on the fence.

- To cut dove-tails and dove-tailed tenons or wedges swing the saw bench to the plus or minus position. Insure safe workpiece guidance.
- For arced and irregular cuts, push the workpiece evenly using both hands with the fingers together. Hold the workpiece with your hands on a safe area.
- Use a pattern for repeated arced or irregular cuts.
- Insure that the workpiece does not roll when cutting round pieces.
- Use the **traverse cutting gauge special accessory** for safety when making traverse cuts.
- To safely cut round plates, use the **circular cutting unit special accessory.**

Maintenance

Perform resetting, measuring, and cleaning work exclusively when the motor is turned off. Disconnect the mains plug, and wait until the rotating tool stands still.

All protection and safety devices must be immediately reinstalled once the repair and maintenance work is completed.

The built-in ball bearings are maintenance-free.

Recommendations:

1. Slightly re-lubricate the slewing segments of the table and the bend tensioning device.
2. Regularly clean the saw band. Wood leaves resin sediments. We recommend the deresinifying concentrate Pharmol HEK, item no. 61009700 for the cleaning.
3. Regularly check the guiding rollers and the counterpressure bearings. If required, readjust or disassemble them, and grease or exchange the parts.
4. Exchange worn-out table inserts (item no. 73240034).
5. Ensure that the tabletop is always free of resin.
6. Regularly lubricate the bearings of the speed handwheel.

Electrical Connection

The installed electric motor is connected and is ready to work.

The connection complies with the relevant **VDE and DIN regulations.**

The customer-side mains supply and the used extension line must meet these regulations.

Installations, repair, and maintenance work relating to the electric installation may only be performed by specialists.

Important Notes

The electric motor has been designed for the S 1 operating mode.

In case of an overload of the motor, it turns off automatically. After a cooling period (duration varies), you can turn on the motor again.

Defective Electric Connection Lines

Often, insulation damages occur on electrical connection lines.

Causes are:

1. Drag marks if connection lines are led through window or door clearances.
2. Kinks due to improper attachment or routing of the connection line.
3. Cuts caused by running over the connection line.
4. Insulation damages caused by pulling the connection line out of the wall socket.
5. Fissures caused by the ageing of the insulation.

Such defective electric connection lines must not be used and are hazardous due to the insulation damages.

Regularly check the electrical connection lines for damages. Please make sure that the connection lines are disconnected from the mains supply during the check.

Electrical connection lines must comply with the relevant VDE and DIN regulations. Only use connection lines labelled with H 07 RN. The labelling of the connection cable with the type specification is required.

AC motor Fig. 12

1. The supply voltage must be 230 V / 50 Hz.
2. Extension lines up to a length of 25 m must have a cross section of 1.5 square millimetres. Extension lines with a length of more than 25 m must have a minimum cross section of 2.5 square millimetres.
3. The mains connection is protected with a delay-action fuse of 16 A.

Rotary current motor Fig. 13

1. The supply voltage must be 400 V / 50 Hz.
2. Mains supply and extension line must be five-wire = 3 P + N + SL.
3. Extension lines must have a minimum cross section of 1.5 square millimetres.
4. The mains connection is protected with a maximum of 16 A.
5. In case of mains supply or change of location, the direction of rotation must be checked. If required, the polarity must be reversed.

If you have further questions, please specify the following:

1. Motor manufacturer
2. Kind of current of the motor
3. Data from the machine type plate
4. Data from the switch type plate

If you return the motor, always return the complete drive unit with the switch.

Troubleshooting

Failure →	Possible cause →	Solution
Saw blade gets loose after turning off the motor	a) Fastening nut tightened insufficiently	a) Tighten fastening nut, M20 left-handed thread
Motor does not start	a) Fastening nut tightened insufficiently	a) Check the mains fuse.
	b) Extension cable defect	b) See “Electrical Connection” in the operating manual, pages **11**
	c) Connections on the motor or switch defect	c) Have it checked by an electrician
	Brake does not bleed	
	d) Motor or switch defect	d) See “Electrical Connection” in the operating manual, pages **11**
Motor runs forward or backwards	Capacitor defect	Have it exchanged by an electrician
No motor output	Overload by dull saw	Insert a sharpened saw blade; motor can be turned on again
turns off automatically	blade, thermoprotection is triggered	after the cooling period
Burns on the cutting surface	a) Fastening nut tightened insufficiently	a) Insert a sharpened saw blade
	b) Wrong saw blade longitudinal cuts	b) Insert saw blade with 20 or 28 teeth for
c) with longitudinal cuts	c) Longitudinal stop not parallel	c) Exchange the longitudinal stop
d) with cross cuts	d) Slide carriage not parallel	Align the slide carriage with the saw blade

Fig. A

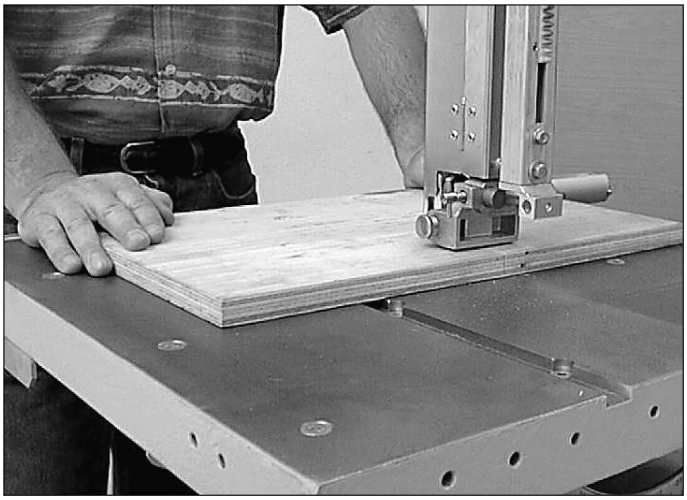


Fig. B

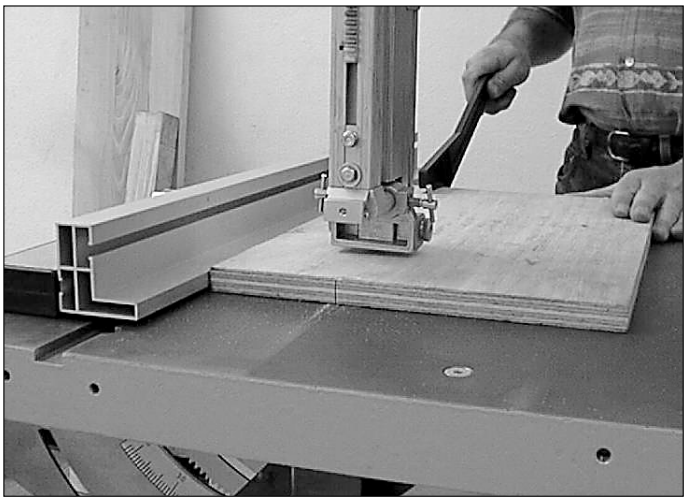


Fig. C

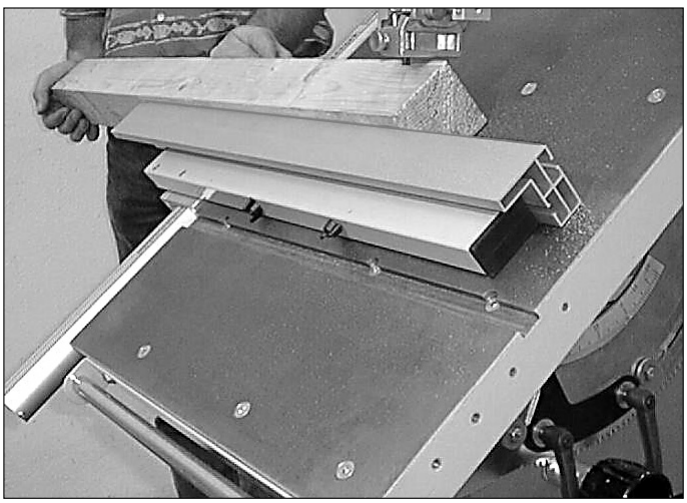


Fig. D

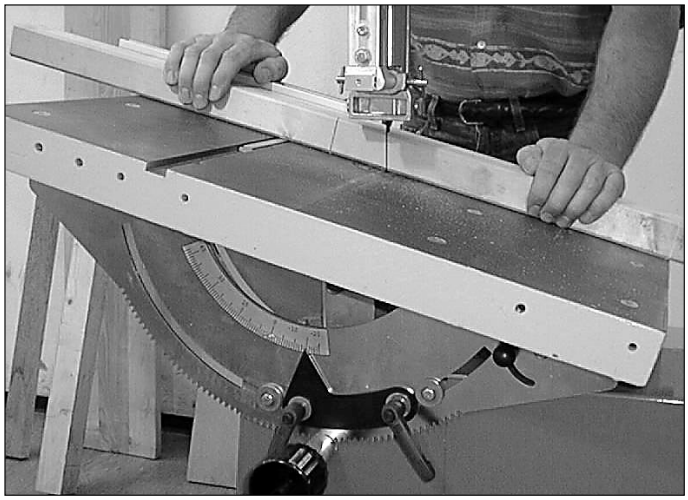


Fig. E

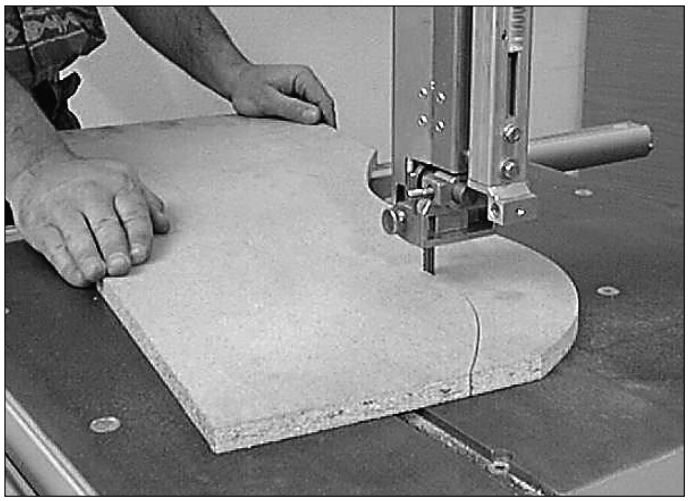
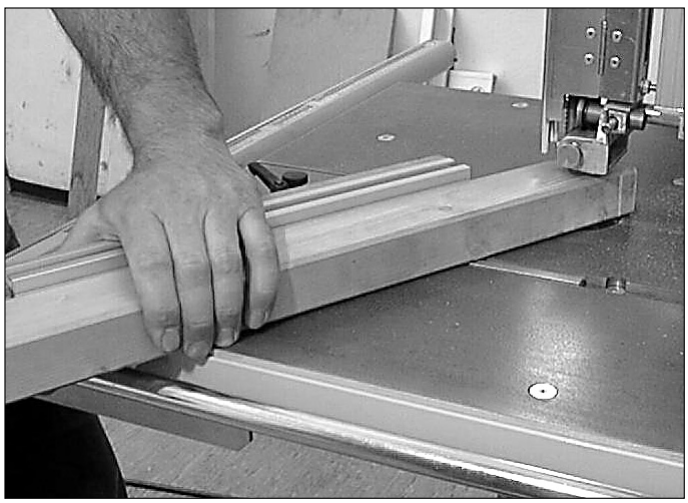
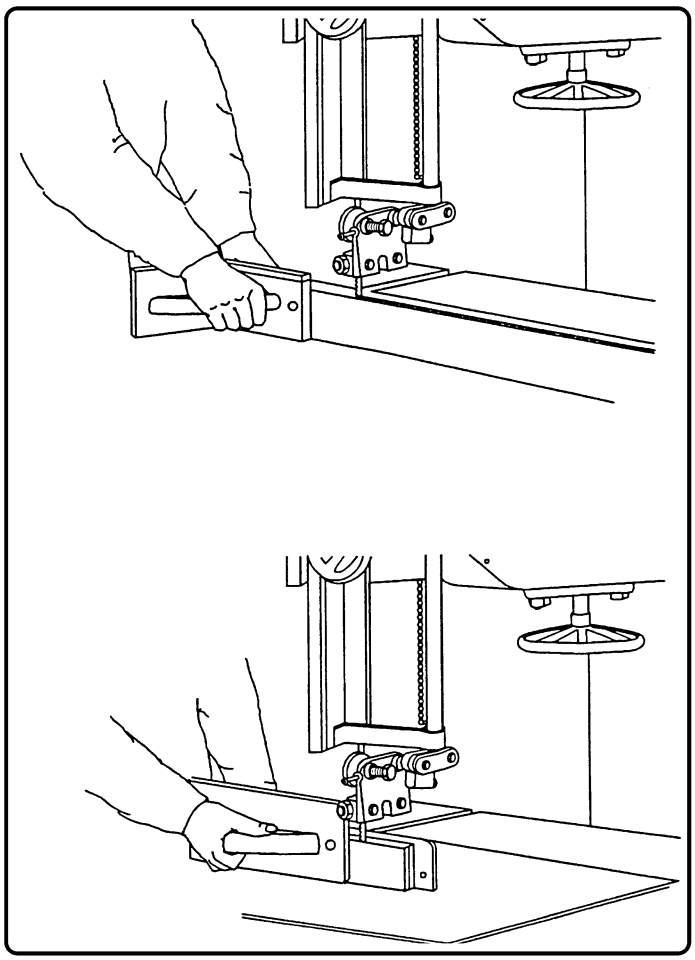
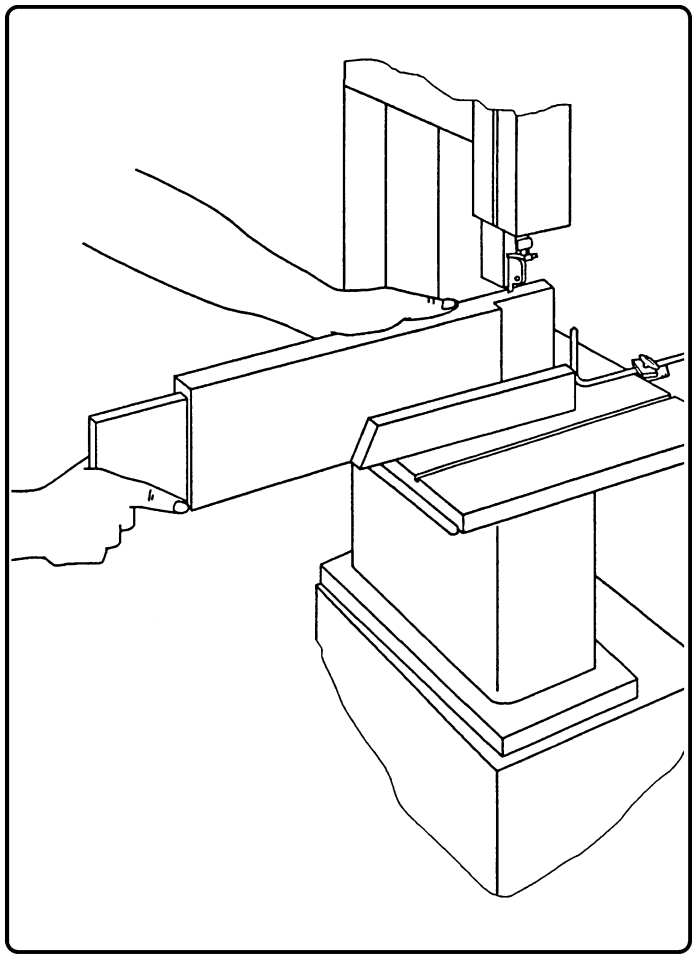
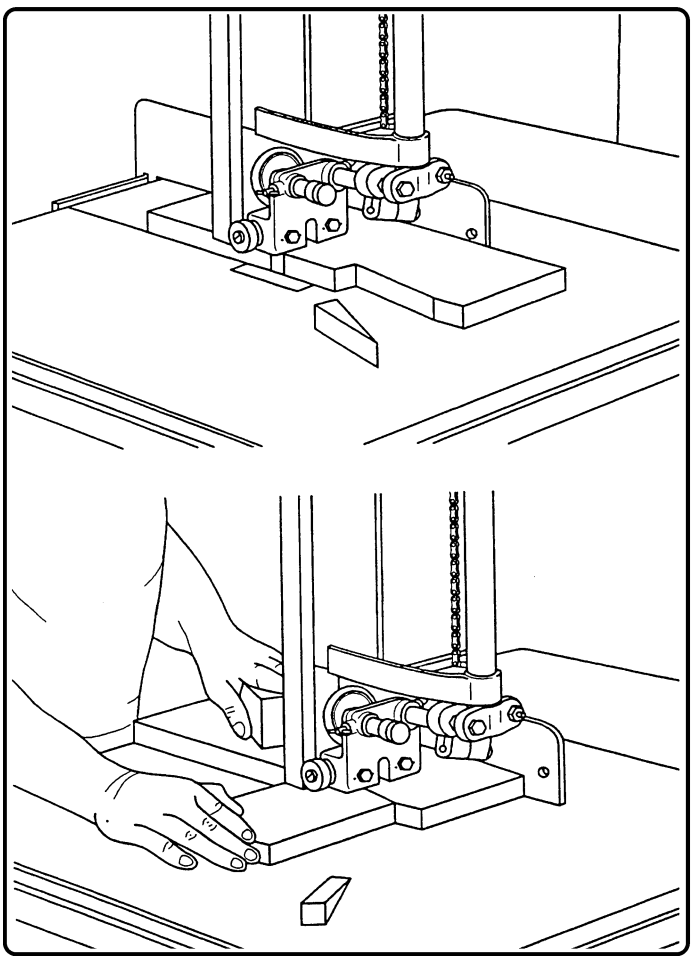


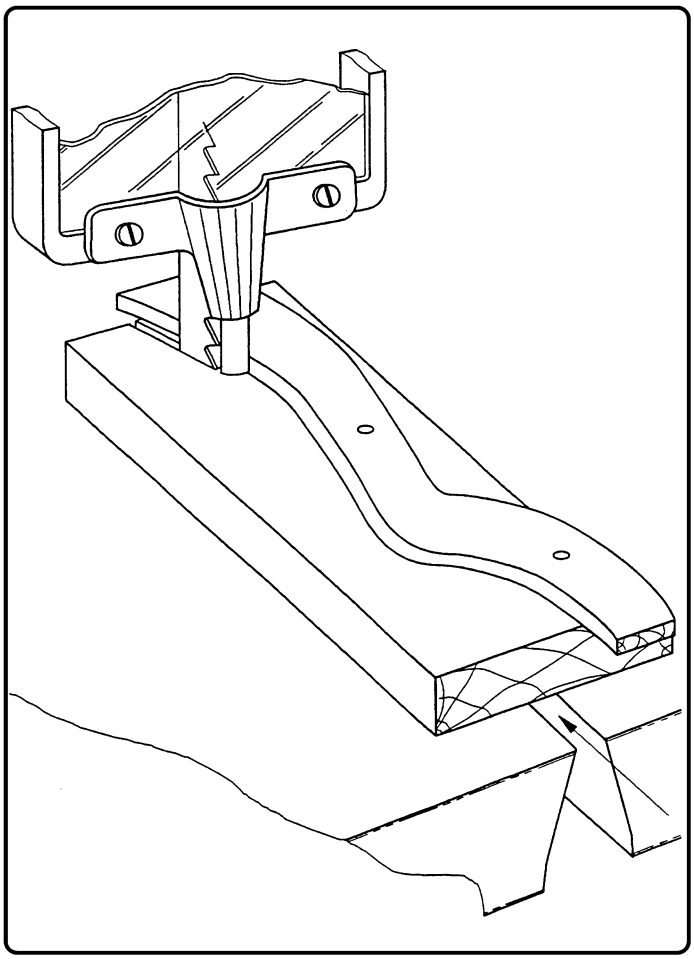
Fig. F











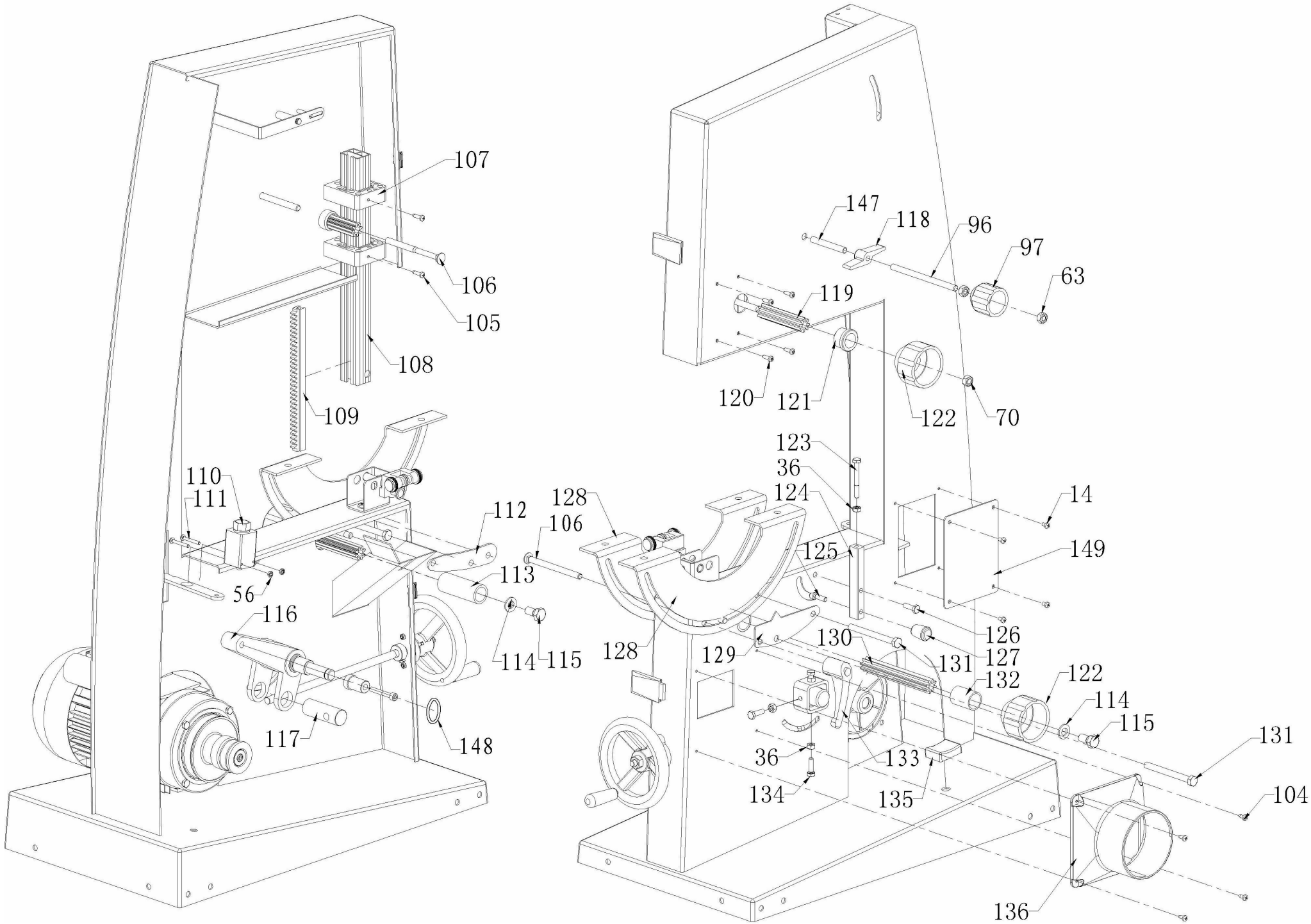

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Fig. 9

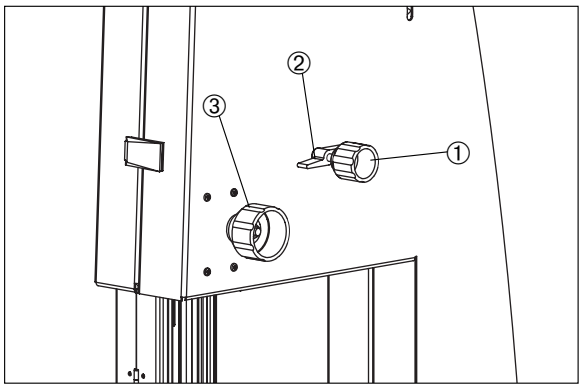

Fig. 10

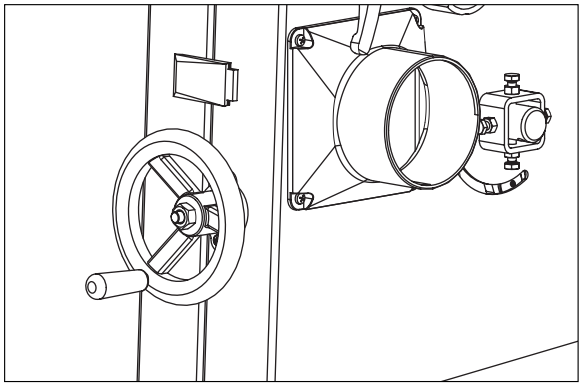

Fig. 11

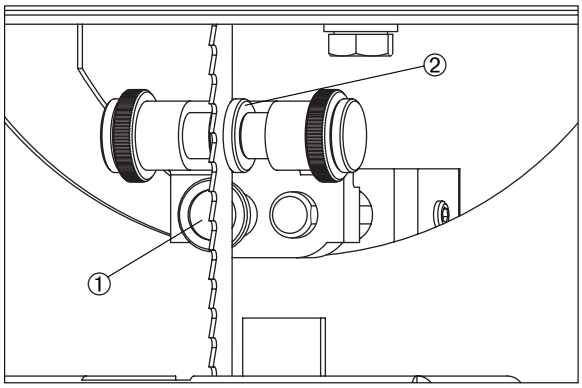

Fig. 12

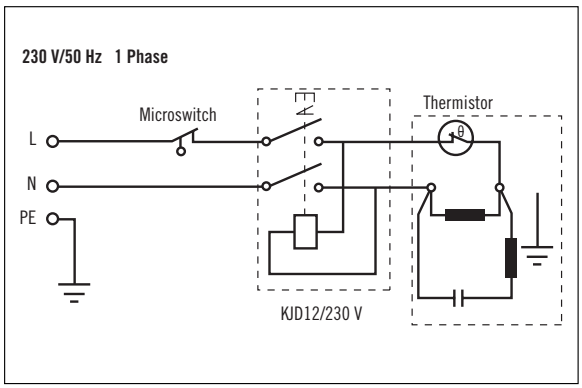

Fig. 13

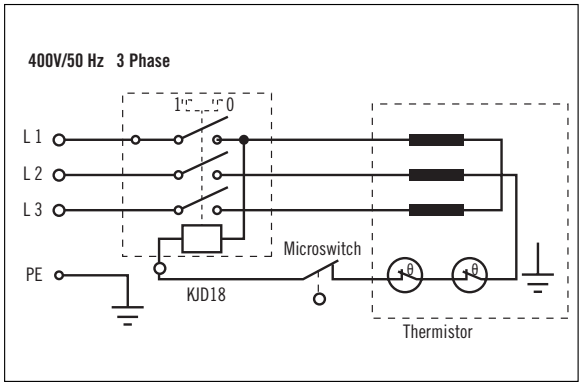

Fig. 14