

BANDSAW

BS250B

Instruction Manual

IMPORTANT

For your safety, read instructions carefully before assembling or using this product. Save this manual for future reference.



Original Instruction
V.1-201906

HEALTH AND SAFETY GUIDELINES

Always follow the instructions provided with the manual. Always wear safety glasses when using woodworking equipment. Always disconnect the power before adjusting any equipment. Failure to observe proper safety procedures and guidelines can result in serious injury.

WARNING: Do not allow familiarity (gained from frequent use of your machine and accessories) to become commonplace. Always remember that a careless fraction of a second is sufficient to inflict severe injury.



Always wear safety glasses when using woodworking equipment.



Always read the instructions provided before using woodworking equipment.

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1. GENERAL INFORMATION

1.1 FOREWORD

Some information and illustrations in this manual may differ from the machine in your possession, since all the configurations inherent in the machine complete with all the optionals are described and illustrated. Therefore, refer only to that information strictly connected with the machine configuration you have purchased.

With this manual we would like to provide the necessary information for maintenance and proper use of the machine. The distribution network is at your service for any technical problem, spare parts or any new requirement you may have for the development of your activity.

This manual must be read and understood before operating the machine. This will provide a better working knowledge of the machine, for increased safety and to obtain the best results.

To facilitate its reading, the manual has been divided into sections pointing out the most important operations. For a quick research of the topics, it is recommended to consult the index. To better stress the importance of some basic passages, they have been marked by some preceding symbols:



WARNING

Indicates imminent risks which may cause serious injury to the operator or other persons. Be careful and scrupulously follow the instructions.



CAUTION

A statement advising of the need to take care lest serious consequences result in harm to material items such as the asset or the product.

1.2 MACHINE IDENTIFICATION

There is an identification plate fixed to the machine, containing the manufacturer's data, year of construction, serial number and technical specifications.

1.3 CUSTOMER SERVICE RECOMMENDATIONS

Apply the machine to skilled and authorized technical staff to carry out any operation dealing with parts disassembly. Keep to the instructions contained in this manual for the correct use of the machine.



CAUTION

Only skilled and authorized staff shall use and service the machine after reading this manual. Respect the accident prevention regulations and the general safety and industrial medicine rules.

2. SAFETY PRECAUTIONS

2.1 SAFETY REGULATIONS



WARNING

Read carefully the operation and maintenance manual before starting, using, servicing and carrying out any other operation on the machine.

The manufacturer disclaims all responsibilities for damages to persons or things, which might be caused by any failure to comply with the safety regulations.

- The machine operator shall have all necessary prerequisites in order to operate a complex machinery.
- It is prohibited to use the machine when under the influence of alcohol, drugs or medication.
- All the operators must be suitably trained for use, adjustment and operation of the machine.
- The operators must carefully read the manual paying particular attention to the warning and safety notes. Furthermore, they must be informed on the dangers associated with use of the machine and the precautions to be taken, and must be instructed to periodically inspect the guards and safety devices.
- Before carrying out adjustment, repair or cleaning work, disconnect the machine from the electric power by setting the main switch to stop.
- After an initial bedding-in period or many hours of operation, the driving belts may slacken; this causes an increase in the tool stopping time (the stopping time must be less than 10 seconds). Immediately tighten them.
- The working area around the machine must be kept always clean and clear, in order to have an immediate and easy access to the switchboard.
- Never insert materials which are different from those which are prescribed for the machine utilization. The material to be machined must not contain any metal parts.
- Never machine pieces which may be too small or too wide with respect to the machine capacity.
- Do not work wood which has evident defects (cracks, knots, metal parts, etc.)
- Never place hands among the moving parts and/or materials.
- Keep hands clear from the tool; feed the piece with the aid of a pusher.
- Keep the tools tidy and far away from those not authorized persons.
- Never employ cracked nor unbalanced, neither not correctly ground tools.
- Never use the tools beyond the speed limit recommended by the producers.
- Carefully clean the rest surfaces of tools and make sure that they find perfectly horizontally positioned, and with no dents at all.
- Always wear gauntlets when handling the tools.
- Mount the tools in the right machining direction.
- Never start the machine before having correctly installed all the protections.
- Connect the dust suction hoods to an adequate suction system; suction must always be activated when the machine is switched on.
- Never open doors or protections when the machine or the system is operating.
- Many unpleasant experiences have shown that anybody may wear objects which could cause serious accidents. Therefore, before starting working, take any bracelet, watch or ring off.
- Button the working garment sleeve well around the wrists.
- Take any garment off which, by hanging out, may get tangled in the MOVING UNITS.
- Always wear strong working footwear, as prescribed by the accident-prevention regulations of all countries.
- Use protection glasses. Use appropriate hearing protection systems (headsets, earplugs, etc.) and dust protection masks.
- Never let unauthorized people repair, service or operate the machine.
- The manufacturer is not responsible for any damage deriving from arbitrary modifications made to the machine.
- Any transport, assembly and dismantling is to be made only by trained staff, who shall have specific skill for the specified operation.
- The operator must never leave the machine unattended during operation.
- During any working cycle break, switch the machine off.
- In case of long working cycle breaks, disconnect the general power supply.

2.2 RESIDUAL RISKS

Despite observance of all the safety regulations, and use according to the rules described in this manual, residual risks may still be present, among which the most recurring are:

- contact with tool
- contact with moving parts (belts, pulleys, etc..)
- recoil of the piece or part of it
- accidents due to wood splinters or fragments
- tool insert ejection
- electrocution from contact with live parts
- danger due to incorrect tool installation
- inverse tool rotation due to incorrect electrical connection
- danger due to dust inhalation in case of working without vacuum cleaner.

Bear in mind that the use of any machine tool carries risks.

Use the appropriate care and concentration for any type of machining (also the most simple).

The highest safety is in your hands.

2.3 SAFETY AND INFORMATION SIGNALS

This signals may be applied on the machine; in some cases they indicate possible danger conditions, in others they serve as indication.

Always take the utmost care.

SAFETY SIGNALS:



Risk of eye injury. Wear eye protection.



Wear hearing protection systems.



Danger of electric shock. Do not access the area when the machine is powered.



Carefully read and understand the manual before using the machine.

INFORMATION SIGNALS:

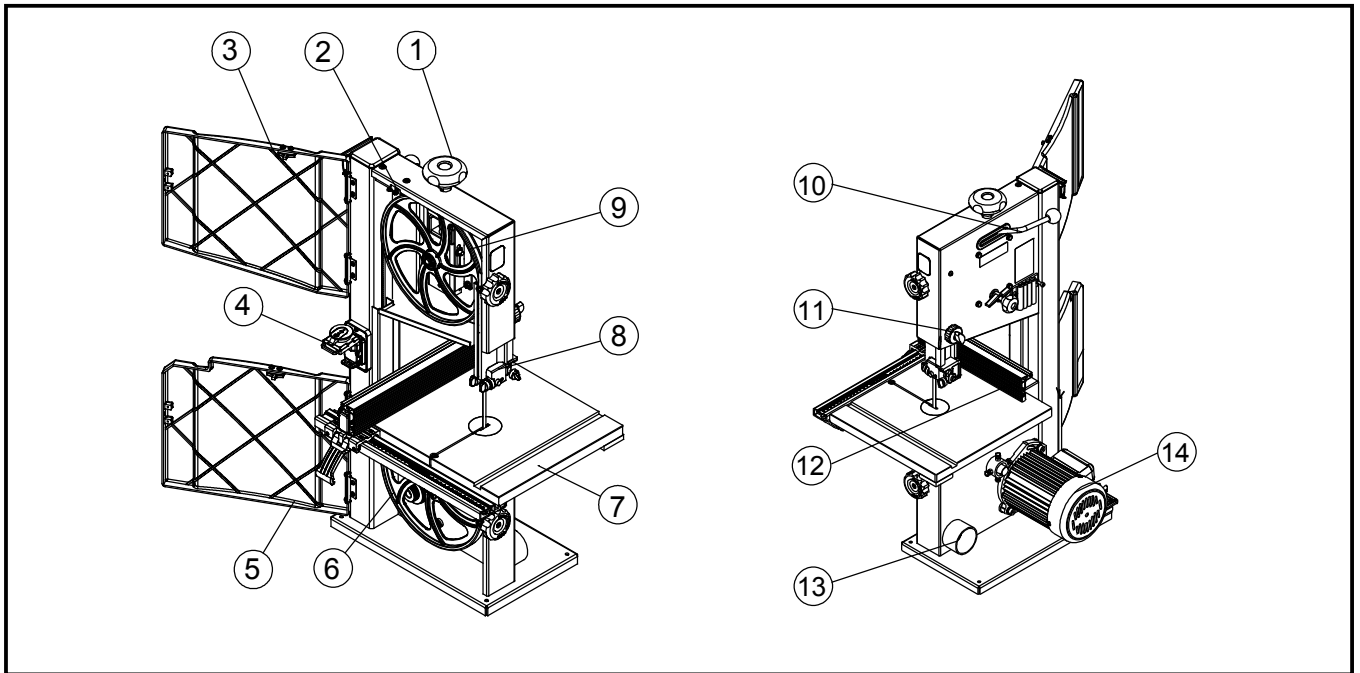
Indicate the technical characteristics, direction of rotation and inclination, block and release, etc.

Carefully following the directions to simplify the use and adjustment of the machine.

The signals are graphically described and do not require further explanation.

3. SPECIFICATIONS

3.1 MAIN COMPONENTS



- 1 - Blade tension knob
- 2 - Safety switch (Optional)
- 3 - Upper door
- 4 - Switch
- 5 - Lower door
- 6 - Lower wheel
- 7 - Table
- 8 - Blade guard

- 9 - Blade guard locking knob
- 10 - Upper wheel
- 11 - Lifting knob
- 12 - Rip fence
- 13 - Dust port
- 14 - Motor

3.2 TECHNICAL SPECIFICATION

SPECIFICATION	BS250B
Motor voltage	220V-240V/50Hz
Power	550W
Blade length	1790mm
Blade width	6-13mm
Max. cut depth	120mm
Throat width	245mm
Blade speed	460/1000m/min
Table size	350x318mm
Table tilt	0~45°
Table height to floor	368mm

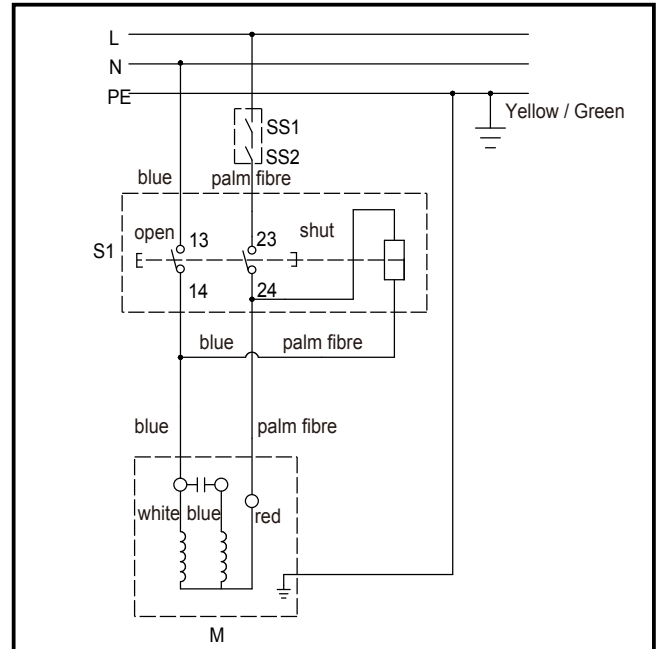
3.3 ELECTRICAL CONNECTION

- Electrical installation should be carried out by competent, qualified personnel.
- The mains connection should be made using the terminal box.
- Replacement of the power supply cable should only be done by a qualified electrician.



WARNING

To avoid electrocution or fire, any maintenance or repair to electrical system should be done only by qualified electricians using genuine replacement parts.



3.4 NOISE LEVEL

	No load	Load
Sound Pressure Level	< 80dB(A)	< 90dB(A)
Sound Power Level	< 90dB(A)	< 100dB(A)

The noise levels measured are emission levels and not necessarily the safe working level. Although there is a correlation between the emission levels and the exposure levels, this cannot be used reliably to determine whether or not further precautions are required. The factors which affect the actual level of operator exposure include the duration of exposure, the ambient characteristics and other sources of emission, for example, the number of machines and other adjacent machining. The permitted exposure values may also vary from country to country. Nevertheless, this information allows the user of the machine to better evaluate the dangers and risks.

Other factors which reduce exposure to noise are:

- correct tool choice
- tool and machine maintenance
- use of hearing protection systems (e.g. headsets, earplugs,...)



WARNING

Please use the hearing protection systems if the above mentioned noise levels exceed 95dB(A).

3.5 DUST EXTRACTION

If this band saw is operated indoors it is recommended to have it connected to a dust collector. The suction connector, supplied with the machine, has to be fitted to the dust ejection port of the saw for this purpose. The diameter of the suction connector is 60 mm.

- Workmen working in operations processing oak or beech timber were found to develop more often cancer of the mucous membrane of the nose (adenocarcinoma of the inner nose) than other workers.
- Experience shows that skin contact with oak or beech dust does not cause cancer



WARNING

Wood dust and chips, together with an ignition source and the oxygen in the ambient air, can cause fires and explosions, injuries and allergies.

3.6 SAFETY DEVICES (Optional)

The machine is equipped with two safety switches as the picture shown:

A - Safety Switch.

Stops the machine if the upper door or lower door is opened to perform operations on the blade.

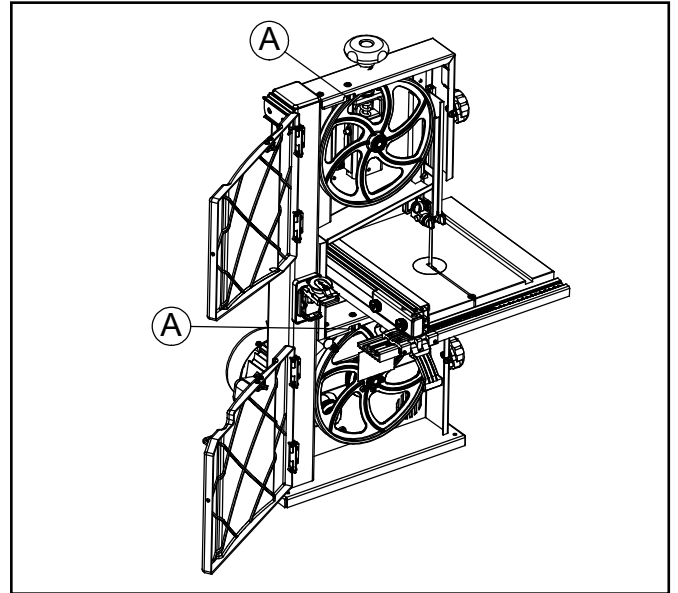


Fig.3.6

4. INSTALLATION

4.1 INSTALLATION ZONE CHARACTERISTICS



WARNING

It is prohibited to install the machine in explosive environments.

The installation zone must be selected evaluating the work space required depending on the dimension of the pieces to be machined, and taking into account that a free space of at least 800 mm must be left around the machine. It is also necessary to check the floor capacity and its surface, so that the machine base is evenly resting on its four supports. A power outlet and a chip-suction system connection shall be close to the selected machine setting and it must be conveniently lighted.

4.2 INSTALL OF LOOSE PARTS - INTRODUCTION

A few elements will be disassembled from the machine main structure due to packaging and shipping requirements. These loose parts should be installed as follows.



WARNING

Please tighten all bolts and nuts absolutely. Otherwise, may cause machine wobble or serious injury to the operator or other persons.

4.2.1 INSTALL UPPER TRUNNION

- Put the upper trunnion A on to the frame as the picture shown.
- Put the carriage bolt 1 through the slider B and upper trunnion A.
- Mount the wing nut C through the washer 2 onto the carriage bolt 1, and tighten.

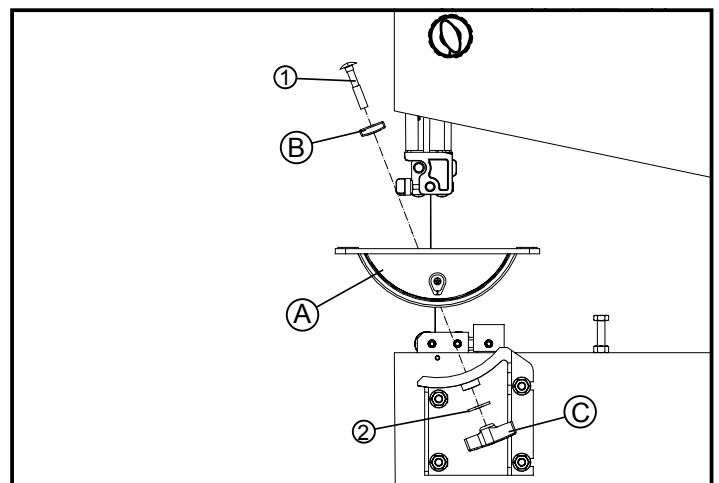


Fig.4.2.1

4.2.2 INSTALL TABLE

Tools Required for Assembly:

- Faucet spanner
- Put the table A onto the trunnion. Aline the mounting

on trunnion.

- Use four hex bolt 1 and four teeth washer 2 to mount the table A to trunnion.

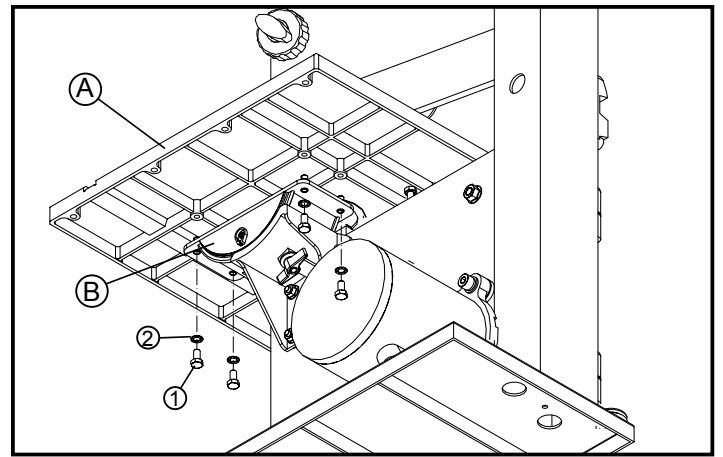


Fig.4.2.2

4.2.3 INSTALL LEVELING BOLT AND RIP FENCE

- Put the leveling bolt 1 through the table B.

- Install the guide rail C to table with star knob 5 and washer 4.

- Slide the rip fence assembly A along the guide rail to table.

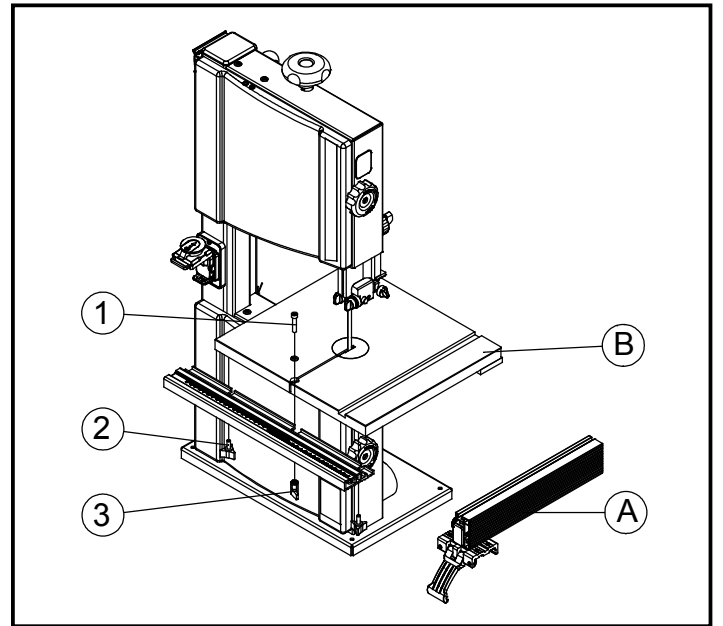


Fig.4.2.3

5. ADJUSTMENT AND OPERATION



WARNING

Handle the tools with protective gloves.

5.1 CENTERING TABLE AND TILTING

- Centering table can be adjusted. Loosen the four bolts which hold the lower table trunnion, and adjust freely. Place the blade in the middle of the faucet and make it be parallel to the slotted side of table.

- The table can be tilted from 0 to 45 degree. To tilt, loosen the wing nut A of the table trunnion. Tighten the wing nut again when we get the required angle.

- It is recommended to verify the correct angle setting by making trial cuts in scrap wood.

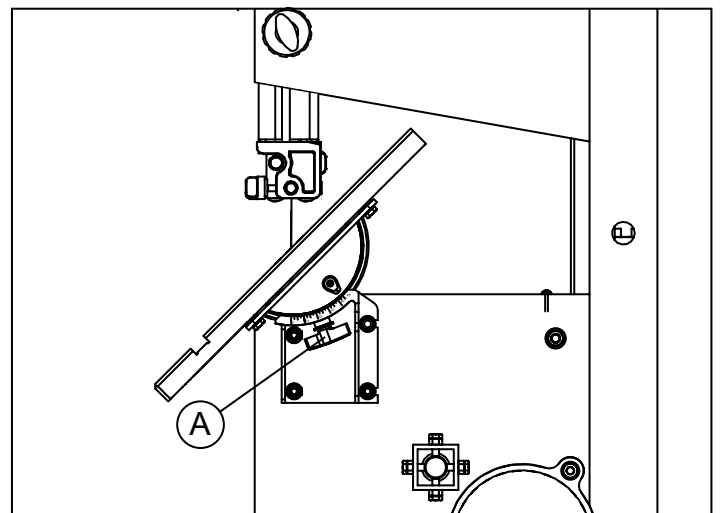


Fig.5.1

5.2 SETTING TABLE SQUARE WITH BLADE

- PLEASE REFER TO FIG.5.1

- Loosen the wing nut on the trunnion and check the table with a square and adjust the table at 90degree with the blade, then adjust the pointer to 0 degree.
- To tilt, loosen the wing nut of the table trunnion.

5.3 CHANGING AND SETTING THE BLADE

- This band saw is factory-equipped with a general purpose wood cutting blade, the blade set. To change the blade, remove the wing nut and screw from the table. Then slacken the blade tension by turning the hand A, take off the blade .

- Fit new blade. First, adjust handlebar A and make the blade tension. Second, revolve the upper wheel and adjust handlebar B. To place the blade in the middle or front of the cushion rubber. Then lock the special nut of handle B.

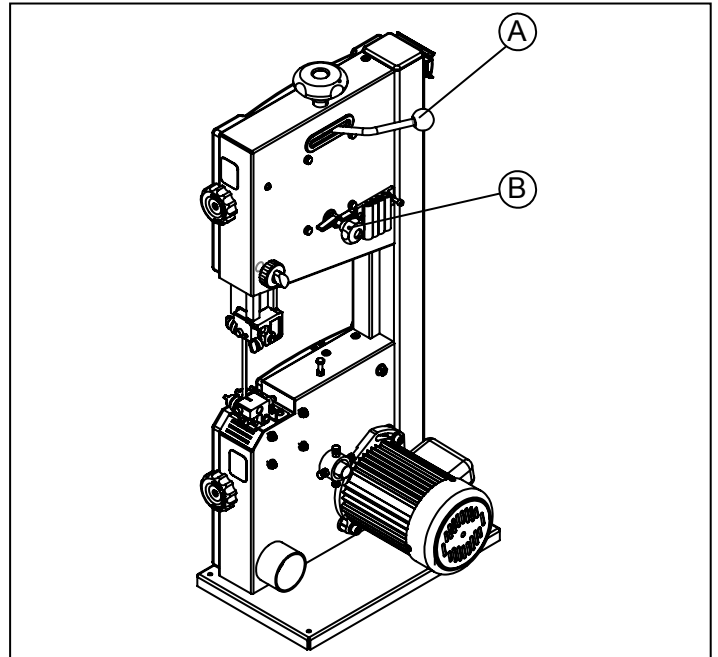
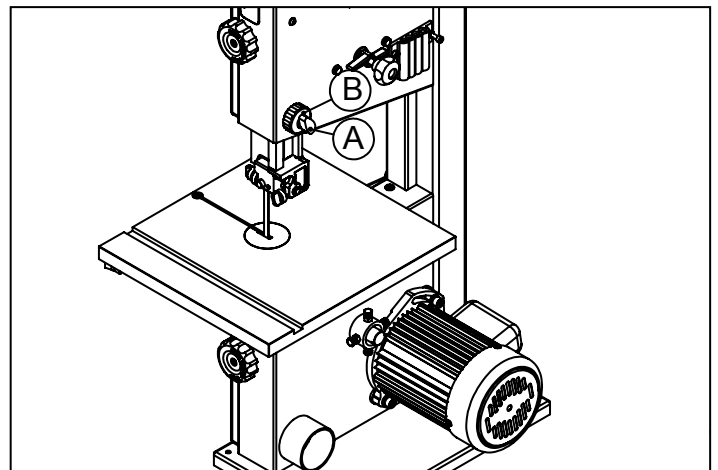


Fig..5.3

5.4 BLADE GUIDING

- The saw blades guide of this band saw ensure an exact guiding of the blade for clean cuts. When using narrow blades ensure that the lower blade guide positively supports the blade from both sides and the rear. Set the bearings of the upper blade guide to within approx. 0.5 mm of the blade ,or the guide bearings will be easily broken.



Fig;5.4

5.5 SETTING CUTTING HEIGHT

- The upper blade guide should always be set as close as practical against the work. To adjust, loosen the wing nut at the side of the upper wheel housing, and set the blade guide to the required height. Tighten wing nut after setting.

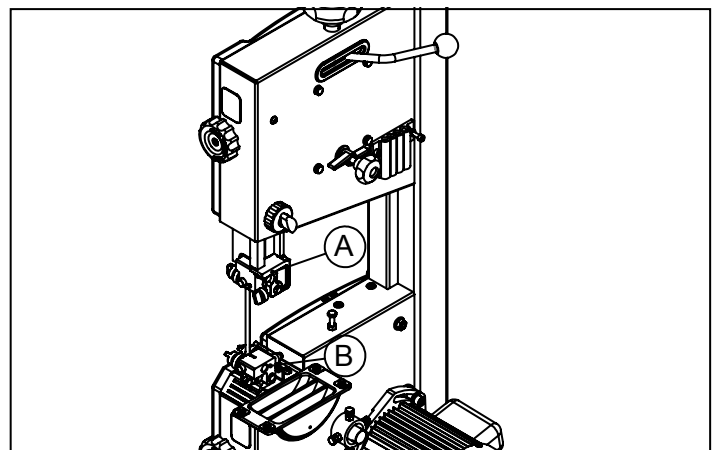


Fig..5.5

6. TROUBLE SHOOTING



WARNING

- For any information or problem contact your area dealer or our technical service center. The necessary interventions must be carried out by specialised technical personnel.

- Before carrying out any fault service or maintenance work, please always TRUN OFF THE SWITCH, UNPLUG POWER CABLE, WAIT FOR SAW BLADE TO COME TO STANDSTILL.

Trouble	Possible Cause	Solution
Saw stops or will not start	<ol style="list-style-type: none"> 1. Saw unplugged 2. Fuse blown or circuit breaker tripped 3. Cord damaged 	<ol style="list-style-type: none"> 1. Check plug connections 2. Replace fuse or reset circuit breaker 3. Replace cord
Does not make accurate 45° or 90° cuts	<ol style="list-style-type: none"> 1. Stop not adjusted correctly 2. Angle pointer not set accurately 3. Miter gauge out of adjustment 	<ol style="list-style-type: none"> 1. Check blade with square and adjust stop 2. Check blade with square and adjust pointer 3. Adjust miter gauge
Blade wanders during cut	<ol style="list-style-type: none"> 1. Fence not aligned with blade 2. Warped wood 3. Excessive feed rate 4. Incorrect blade for cut 5. Blade tension not set properly 6. Guide bearings not set properly 	<ol style="list-style-type: none"> 1. Check and adjust fence 2. Select another piece of wood 3. Reduce feed rate 4. Change blade to correct type 5. Set blade tension according to blade size 6. Review guide bearing adjustment on pages 8 & 9
Saw makes unsatisfactory cuts	<ol style="list-style-type: none"> 1. Dull blade 2. Blade mounted wrong 3. Gum or pitch on blade 4. Incorrect blade for cut 5. Gum or pitch on table 	<ol style="list-style-type: none"> 1. Replace blade 2. Teeth should point down 3. Remove blade and clean 4. Change blade to correct type 5. Clean table
Blade does not come up to speed	<ol style="list-style-type: none"> 1. Extension cord too light or too long 2. Low shop voltage 	<ol style="list-style-type: none"> 1. Replace with adequate size and length cord 2. Contact your local electric company
Saw vibrates excessively	<ol style="list-style-type: none"> 1. Base on uneven floor 2. Bad V-belt 3. Motor mount is loose 4. Loose hardware 	<ol style="list-style-type: none"> 1. Reposition on flat, level surface 2. Replace V-belt 3. Tighten motor mount hardware 4. Tighten hardware

7. DIAGRAMS & COMPONENTS

