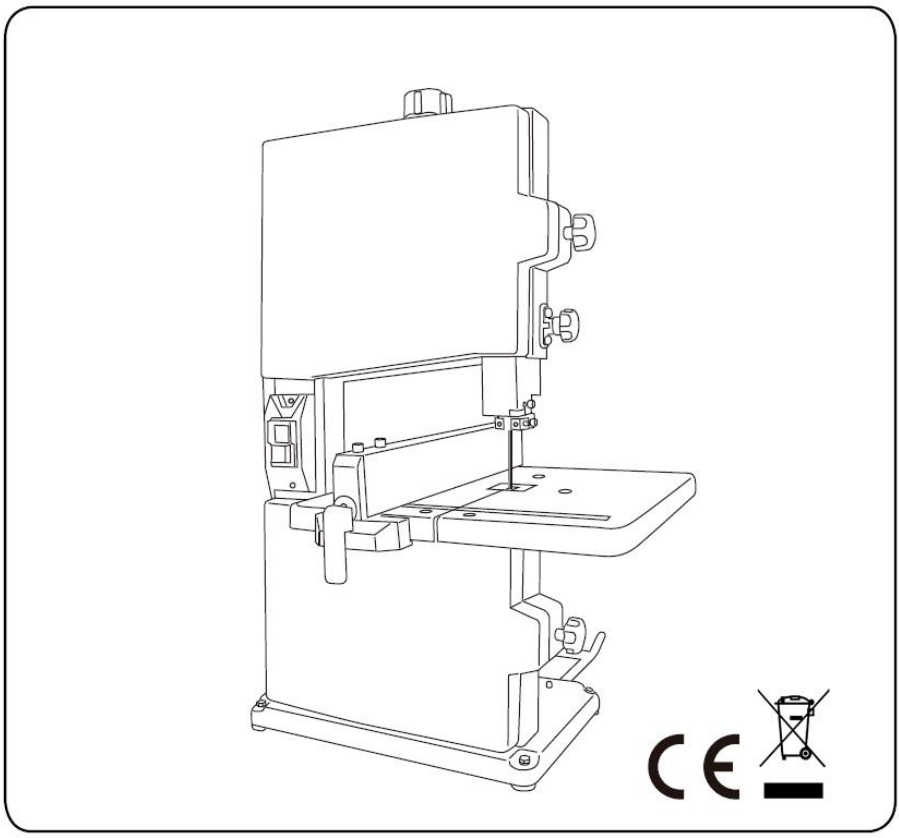
8”BAND SAW

Owner’s operating manual

Model: JDD-210



Specification

Voltage	230V~50Hz
Power input	250W
Blade Speed	16m/s
Blade size	1400*6.35*0.35mm
No. of teeth	6TPI
Table size	305*305mm
Table tilting range	0~45º
Max. cutting depth	80mm
Max. cutting width	200mm
Net weight	17Kg

General safety rules

Safety is a combination of common sense, staying alert and knowing how your band saw works.

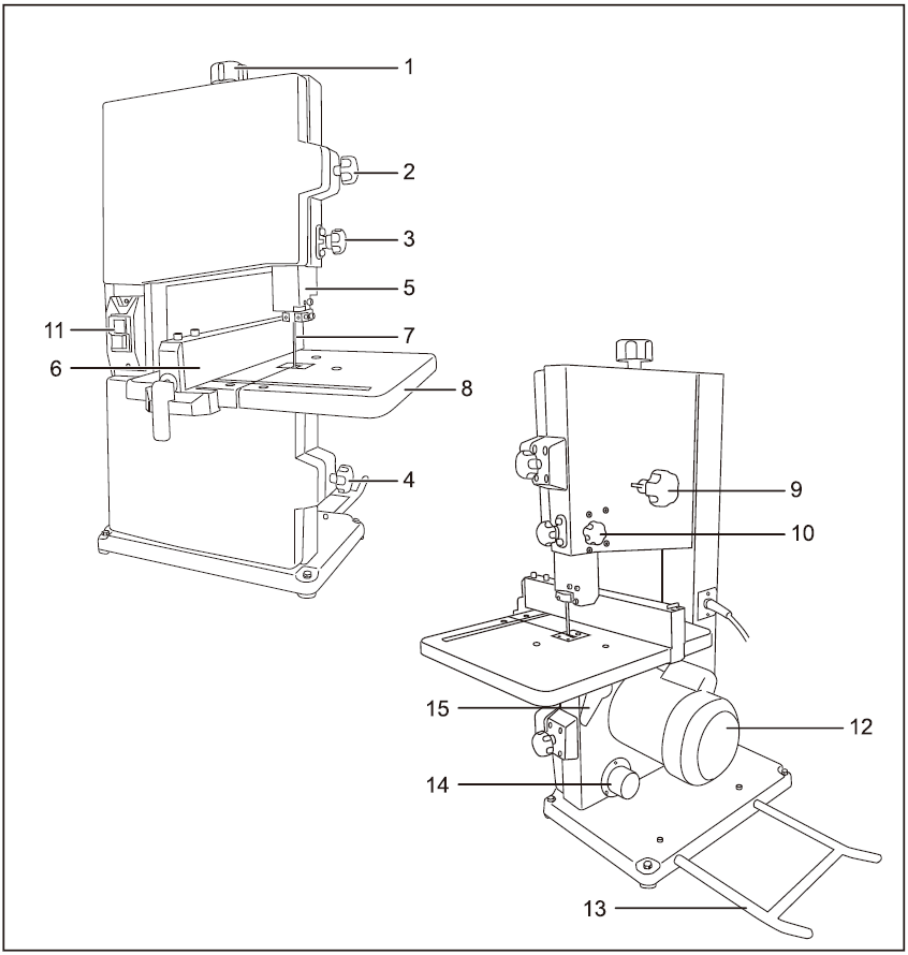
1. READ and become familiar with this entire instruction manual. LEARN the tool's applications, limitations, and possible hazards.
2. AVOID DANGEROUS CONDITIONS. DO NOT use power tools in wet or damp areas or expose them to rain. Keep work areas well-lit.
3. DO NOT use power tools in the presence of flammable liquids or gases.
4. ALWAYS keep your work area clean, uncluttered, and well-lit. DO NOT work on floor surfaces that are slippery with sawdust or wax.
5. KEEP BYSTANDERS AT A SAFE DISTANCE FROM the work area, especially when tool is operating. NEVER allow children near the tool.
6. DO NOT FORCE THE TOOL to do a job for which it was not designed.
7. DRESS FOR SAFETY. DO NOT wear loose clothing, gloves, neckties, or jewellery (rings, watches) when operating tool. They can get caught and draw you into moving parts. ALWAYS wear non-slip footwear, and tie back long hair.
8. WEAR A FACE MASK OR DUST MASK. Sawing produces dust.
9. ALWAYS remove the power cord plug from the electric outlet when making adjustments, changing parts, cleaning or working on the tool.
10. KEEP GUARDS IN PLACE AND IN WORKING ORDER.
11. AVOID ACCIDENTAL START-UPS. Turn the power switch to the OFF position before plugging in the power cord.

12. REMOVE ADJUSTING TOOLS. ALWAYS REMOVE ALL TOOLS from the band saw before turning it on.
13. NEVER LEAVE TOOL ON UNATTENDED. Turn the power switch to OFF.DO NOT leave tool until it has come to a complete stop.
14. NEVER STAND ON THE TOOL. Serious injury could result if the tool tips or you accidentally hit it. DO NOT store anything above or near the tool.
15. DON'T OVERREACH. Keep proper footing and balance at all times. Wear oil-resistant, rubber-soled footwear. Keep the floor clear of oil, scrap, and other debris.
16. MAINTAIN TOOLS PROPERLY. ALWAYS keep tools clean and in good working order. Follow instructions for lubricating and changing accessories.
17. CHECK FOR DAMAGED PARTS. Check for alignment of moving parts, moving parts that are jammed, breakage of parts, improper mounting, or any other conditions that may affect the operation. Any part that is damaged should be properly repaired or replaced before use.
18. MAKE WORKSHOP CHILDPROOF. Use padlocks, master switches, and ALWAYS remove starter keys.
19. DO NOT operate the tool if you are under the influence of any drugs, alcohol or medication that could affect your ability to use the tool properly.
20. WHEN SERVICING USE ONLY IDENTICAL REPLACEMENT PARTS. Double insulation does not take the place of normal safety precautions when operating this tool.
21. AVOID BODY CONTACT WITH GROUNDED SURFACES SUCH AS PIPES, RADIATORS, RANGES AND REFRIGERATORS. There is an increased risk of electrical shock if your body is grounded.

Specific safety rules for the band saw

1. To avoid injury from unexpected movement, make sure the saw is on a firm, level surface, properly secured to prevent rocking. Make sure there is adequate space for operations. Bolt the saw to a support surface to prevent slipping or sliding during operation.
2. Turn saw off and unplug the saw before moving it.
3. Use the correct size and style of blade.
4. Make sure the blade teeth point down and toward the table.

5. Blade guide, supports, bearings and blade tension must be properly adjusted to avoid accidental blade contact and to minimize blade breakage. To maximize blade support, always adjust the upper blade guide and blade guard so that it barely clears the workpiece.
6. Table lock handle should be tight.
7. Use extra caution with very large, very small or awkward workpieces.
8. Use extra supports to prevent workpieces from sliding off the table top. Never use another person in place of a table extension, or to provide additional support for the workpiece.
9. Workpieces should be secured so they don't twist, rock, or slip while being cut.
10. Plan intricate or small work carefully to avoid pinching the blade. Avoid awkward operations and hand positions to prevent accidental contact with the blade.
11. Small pieces should be secured with clamps or fixtures. Do not hold small pieces with your hand because your fingers might go under the blade guard.
12. Support round work properly (use a V block) to prevent it from rolling and the blade from biting.
13. Cut only one workpiece at a time. Make sure the table is clear of everything except the workpiece and its guides before you turn the saw on.
14. Always watch the saw run before each use. If there is excessive vibration or unusual noise, stop immediately. Turn the saw off. Unplug it immediately. Do not start the saw again until the problem has been located and corrected.
15. To free any jammed material, turn the switch off. Wait for all moving parts to stop before removing the jammed material.
16. Don't leave the work area until all moving parts have stopped. Shut off the power tomaster switches. Child proof the workshop!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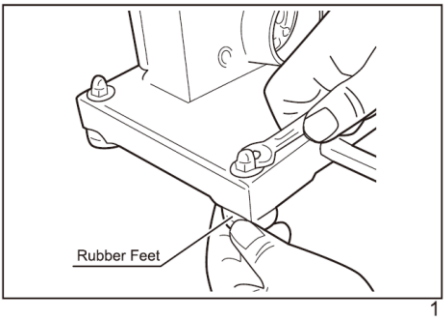
Rubber Feet

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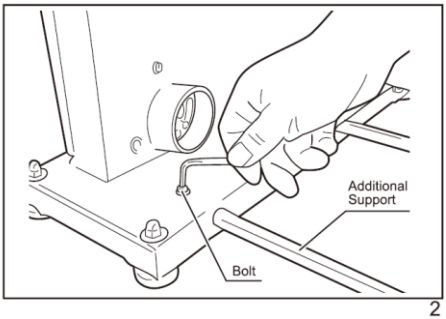
Additional
Support
Bolt

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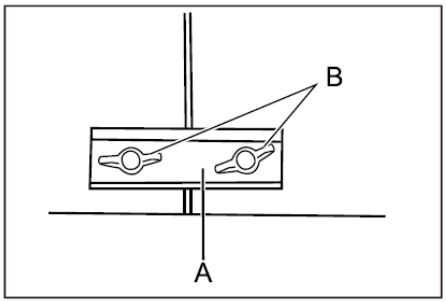
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A
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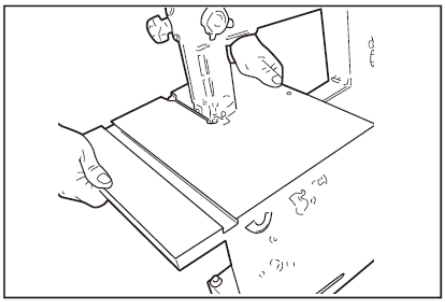
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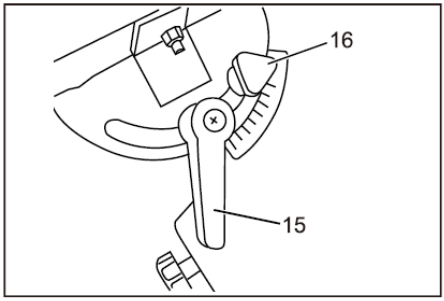
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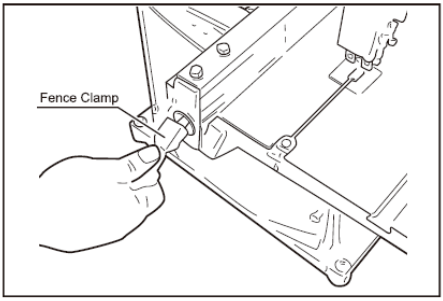
Fence Clamp
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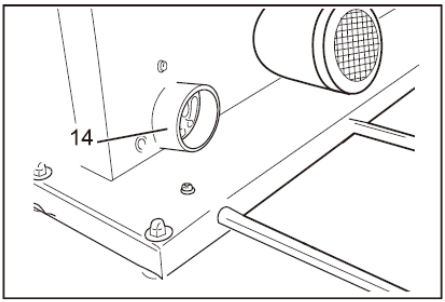
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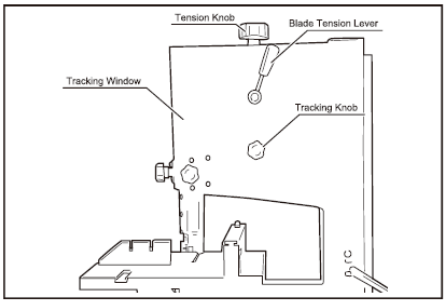
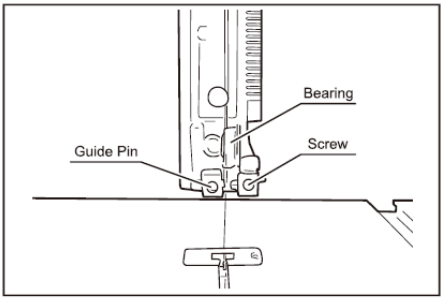
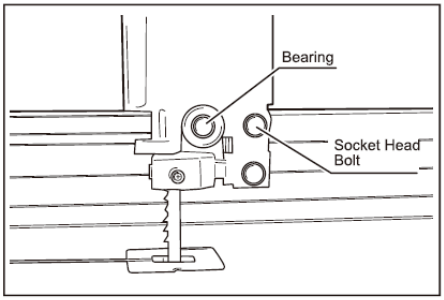
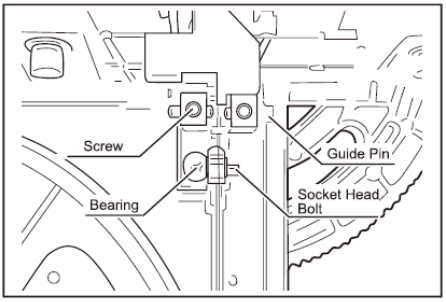

Tension Knob
Blade Tension Lever
Tracking Window
Tracking Knob
8


Bearing
Guide Pin
Screw
9


Bearing
Socket Head
Bolt
10



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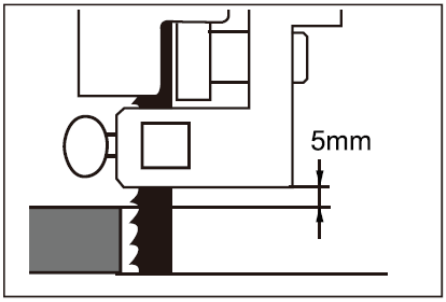

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Description

1. Sawblade tension knob
2. Upper door lock knob
3. Control wheel upper blade guide
4. Down door lock knob
5. Upper blade guard
6. Rip fence
7. Sawblade
8. Saw table
9. Tracking knob
10. Wheel locking blade guide
11. On/off switch
12. Motor assembly
13. Additional support
14. Dust extraction chute
15. Table tilt locking lever
16. Tilt adjustment knob

Unpacking

Carefully unpack the band saw and all of its parts, and compare them against the list below. Do not discard the carton or any packaging until the band saw is completely assembled.

Warning: if any part is missing or damaged, do not plug the band saw in until the missing or damaged part is replaced.

Assembly

If you notice any transport damage while unpacking, notify your supplier immediately.

Do not operate the machine!

Dispose of the packing in an environmentally friendly manner

Clean all rust protected surfaces with a mild solvent

Warning: Before assembling the band saw, remove the safety key and unplug the power cord from the electrical outlet. The power cord must remain unplugged when ever you are working on your band saw.

Rubber feet mounting(Fig.1)

Before cutting, assemble the four rubber feet to holes in the four corner of base with bolts (M6*30), big flat washers 6, and nuts (M6)

Mounting the additional support(Fig.2)

1. Insert the additional support into the corresponding two holes in the side of base.
2. Align the holes in the supporting and the surface of base.
3. Secure the supporting with two bolts and nuts.

Mounting the working table (Fig.3,4,5)

1. Remove the bolt and wing nut(B)from the hole located in the front edge of table. Remove the web panel(A).
2. Place the saw table (8) onto the machine housing from the rear. Secure the saw table using the washers. The tilt adjustment knob (16) and the table tilt locking lever (15).
3. To dismantle, proceed in reverse order.
4. Carefully slide the table over the blade, through the slot in the table.
5. Remove knob assembly from saw frame.
6. Position table assemble on saw frame. Re-install knob assembly.
7. Secure table in position with table tilt locking knob assembly.
8. Using a combination square, set table perpendicular to blade. Adjust table stop if necessary.
9. Set pointer at 0degree.
10. Tighten wing nut into web panel(A).

Install the fence (Fig.6)

1. Raise the clamp on the fence assembly to the up position.
2. Place the fence on the table so that the clamp is at the front of the table.
3. Lower the fence clamp in order to lock the fence in position on the table.
4. To move the fence, raise the clamp and slide the fence to the desired location. Lower the clamp in order to lock the fence in position.

Warning: The blade might bind in the workpiece. Operator could be injured and/or workpiece could be damaged.

Connect to a dust collection system (Fig.7)

A dust extraction chute is located on the motor side of the band saw. It can be connected directly to a dust collection system.

Operation

Caution: Always observe the following safety precaution.

1. Make sure that blade guides and thrust bearing are positioned and adjusted correctly to prevent sideways and rearward movement of the blade. Adjust upper guide to just clear workpiece.
2. Check to made sure blade is tensioned and tracking properly. Do not over tension the blade in order to under tensioning to eliminate back and forth, side to side blade movement as it cuts.
3. Use proper blade for the cutting operation.
4. After turning saw on, allow blade to come to full speed before attempting any cutting operation.
5. Support workpiece properly and use a smooth steady feed to guide work through the cut. Use push sticks or push blocks when required.
6. Keep hands away and out of line with moving parts.
7. Always wear eye protection.

You can start the machine with the green on button.

The machine lamp starts automatically when the motor is turned on.

The red button on the main switch stops the machine

Correct working position

In front of the machine standing in the direction of cutting.

Setup and adjustments

Warning: Setup and adjustment work man only be carried out after the machine is protected against accidental starting by pulling the mains plug.

Removing blade(Fig.8)

Warning: Disconnect band saw from power source when changing or adjusting blades. Wear leather gloves when handling band saw blades. Never wear gloves when operating saw.

1. Turn blade tension lever on the black of the tool clockwise all the way until it locks in position to release blade tension (see figure8)
2. Release two latches on the side of the tool and open upper and lower doors.

Note: When opening doors, make sure latches are completely free from tabs on frame.

Remove table locking insert located in the front of the table slot, take out the released blade and replace with another blade.

Installing blade

Note: Although most of the adjustments are not changed when blade is removed, every adjustment should be checked prior to using a newly installed blade.

1. Make sure blade teeth are pointing down towards table. Turn blade inside out if necessary.
2. Slip new blade into table slot and over the upper and lower blade wheels. Slide blade in between blade guards.
3. Tension blade by turning blade tensioning lever counterclockwise, as far as it will go (See Figure8). This is as spring loaded, Tensioning mechanism and it will automatically apply required tension to the blade.
4. Use the tension knob to make fine adjustments to blade tension.
5. Close the doors and fasten latches.

Note: When closing doors, make sure that the edges attempting to secure door. This is necessary for proper operation of dust collection system. The latches will not pull the doors and frame together.

1. Install table insert.
2. Track blade as described in the following sections.

Folding the saw blade

Hold the bandsaw blade in one hand. Let it hang down vertically and hold it to the floor with a foot. Turn your hand through 360º (a complete circle), as you move it down towards the floor.

Blade tracking adjustment (Fig.8,11)

Warning: Blade tracking shall never be performed when the machine is running.

1. Disconnect band saw from power source.
2. To check the blade tracking. Rotate drive wheel by hand in clockwise direction. View blade through tracking window.
3. Proper tacking is achieved when driver and idler wheels are aligned. Tracking knob on the back of the tool frame is sued to tilt upper wheel and align blade wheels.
4. If blade rides away from cabinet, turn knob clockwise. If blade rides toward cabinet, trun knob counterclockwise.
5. When blade is tracking properly, secure position by tightening nut.

Blade guide adjustment (Fig8.9.10.11)

Upper blade guides employ guide pins for side support and a ball bearing for rear support.

1. Loosen screws and adjust guide pins to sides of the blade (Fig.8.9). Use a feeler gauge to check that guide pins are 0.05mm away from blade
2. Lock adjustment by tightening screw.
3. Adjust ball bearing at rear of blade by loosening socket head bolt and repositioning shaft. (Fig.10)
4. Position ball bearing 0.05mm away from back of blade.
5. Secure position of bearing by tightening socket head bolt.
6. Adjust the height of upper guide to clear the workpiece by 6mm.Loosen upper guide knob and adjust height of upper guide until it clears workpiece by 6mm. Tighten upper guide knob.

Lower blade guide:

Lower blade guides employ guide pins for side support and bearing for rear support.

1. Loosen screws (Fig.11) and move guide pins away from blade sides.
2. Loosen socket head bolts and adjust lower guide bracket position so that rear of blade is positioned 0.05mm away from bearing.
3. Tighten socket head bolts.
4. Adjust guide pins to sides of the blade. Use a feeler gauge to check that guide pins are 0.05mm away from blade.
5. Lock adjustment by tightening screws.

Tilting of machine table (Fig.5)

The table tilts from 0º~45º to the right.

1. Turn the table tilt lock lever counterclockwise.
2. Turn the table tilt until the pointer is at the desired angle on the table tilt gauge.
3. Tighten the table tilt locking knob (C) in order to secure the table.

Test Run:

Turn the wheels by hand and inspect the adjustments made

Workpiece setup:

1. Bring the upper blade guide to a distance of approx. 5cm to the workpiece (Fig.12)
2. For your own safety, always set the saw guide as close to the workpiece as possible.

Blade selection

1. Blade vary depending on type of material, size of workpiece and type of cut that is being performed.
2. Characteristics which make blades different are width, thickness and pitch.

Blade Width

1. Width of blade describes distance from tip of a tooth to back of blade.
2. Width of blade affects rigidity of blade. A wider blade wanders less and produces a straighter cut.
3. Width of blade also limits the smallest radius which can be cut. A1/4” wide blade can cut about a 1/2” radius.

Blade Thickness

1. Blade thickness describles the distance between sides of blade. A thicker blade has more rigidity and stronger teeth.
2. A narrow thick blade is used to cut curves while a wide thin blade is used to make long, straight cuts.

Blade Pitch

1. Pitch describes number of teeth per inch or tooth size. A blade with more teeth per inch produces a smoother cut.
2. The type of material being cut determines number of teeth that should be in contact with the workpiece.
3. For soft materials, the proper blade has between 6 to 8 teeth per inch.
4. When cutting hard materials, where shocking is more detrimental, use a blade with 8 to 12 teeth per inch.
5. There should always be at least three teeth in contact with cut to avoid shocking blade.
6. Blade shocking occurs when pitch is too large and blade tooth encounters too much material. This can strip teeth from blade.
7. Blade manufactures are prepared to supply information about blades for specific applications.

Type of cut

1. Contour cutting is done by guiding workpiece free-handed to produce curved shapes.
2. Bevelled cutting is done by tilting saw table and using proper work guide method.
3. Regardless of which work guiding method is used, a workpiece which overhangs table by more than 5” needs proper support.

Contour Sawing

1. When contour sawing, use both hands to keep workpiece flat against table and guided along desired path.
2. Avoid positioning hands in line with blade. If hands slip. They could contact blade.
3. Try to stand to front of the saw and use hands over the portion of table that is to

right of blade and before cut.

4. Cut small corners by sawing around them. Saw to remove scrap until desired shape is obtained.

Bevel cutting

1. Perform bevel cutting by tilting table to desired degree.
2. Unlock table by loosening locking handle located on the backside of the unit.
3. Tilt table to desired position by rotating knob.
4. Lock table in position by tightening locking handle.

Maintenance and inspection

Note: Maintenance, cleaning and repair work may only be carried out after the machine is protected against accidental starting by pulling the mains plug;

1. Repair and maintenance work on the electrical system may only be carried out by a qualified electrician.
2. Clean the machine regularly.
3. Inspect the proper function of the dust extraction daily.
4. All protective and safety devices must be re-attached immediately after completed cleaning, repair and maintenance work.
5. Defective safety devices must be replaced immediately.
6. Inspect the correct blade tension regularly. Take away the blade tension if the machine is not in use for a longer time period.
7. Inspect the blade guide adjustment regularly.
8. Check bandsaw blades regularly for faults. Replace a defective sawblade immediately.

To clean the wheels:

The rubber type of the wheels must be cleaned regularly.

To tighten the belt:

Unplug the machine from power source.

Table insert:

Replace a worn table insert. The table insert may not project above table surface.

The table insert must be made out of cutable material (e.g. wood, plastic, aluminium)
The table insert may not project above table surface.

Saw blades:

The servicing of saw blades should only be performed by a trained person.
Only use sharp and properly set saw blades.
This section describes problem and malfunctions that you should be able to resolve yourself.

DANGER: Many accidents happen particularly in connection with problems and faults. Therefore please note:

1. Always unplug before servicing.
2. Check that all safety devices are operational again after each servicing.

SYMPTOM	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
Excessive blade breakage	Material not secure on table	Squarely place work on table
	Blade too coarse for material	Use finer pitch blade
	Teeth in contact with work before sawing	Place blade in contact with work after saw is started and has reached full speed
	Misaligned guides	Adjust blade guides properly
	Blade too thick for wheel diameter	Use thinner blade
	Cracking at weld	Replace blade
Premature blade dulling	Blade too coarse	Use finer tooth blade
	Inadequate feed pressure	Gently increase pressure
	Hard spots or scale in or on material	Reduce speed; increase rate of feed for scale and change blades for hard spots
	Blade installed backwards	Remove blade, twist inside out and reinstall blade
Crooked cuts	Work not square	Use miter gauge; adjust tilt of table at 90º

	Rate of feed too great	Reduce rate of feed
	Blade guides not adjusted properly	Move both guide blacks within 0.002” from blade (use gauge)
	Upper blade guide too far from workpiece	Adjust upper guide to just clear workpiece by 1/4”
	Dull blade	Replace blade
	Blade guide assembly loose or blade thrust bearing loose	Tighten blade thrust bearing within 0.002” behind blade back
Rough cuts Blade is twisting or unusual wear on side/back of blade	Too much feed	Reduce feed
	Blade too coarse Cut is binding blade	Replace with finer blade Decrease feed pressure.
	Blade guides/bearing worm	replace
	Blade guides or bearing not adjusted properly	Adjust blade guides; see ”operation”
	Blade guide brackets loose	Tighen properly
Teeth ripping from blade	Teeth too coarse for work	Use blade with finer teeth
	Rate of feed too great	Decrease feed rate
	Vibrating workpiece	Hold workpiece firmly
	Teeth filling with material	Use blade with coarser teeth
Motor running too hot	Blade tool coarse for work (typical when cutting pipe)	Use blade with finer teeth
	Blade too fine for work (typical when cutting slick or soft material)	Use blade with coarser teeth
	Excessive dirt and chips	Clean thoroughly
Sal will not start	Loose electrical connections	Check the up/down door if had be closed properly and re-colsed Or Have qualified electrician check electrical connections