



WOOD CUTTING BANDSAW 250MM



TSB10



www.thetoolshed.co.nz



OPERATION MANUAL

PRODUCT DETAILS

PRODUCT

Wood Cutting Band Saw 250mm

MODEL NO.

TSB10

DISTRIBUTED BY



NOTE:

This manual is only for your reference. Due to the continuous improvement of the ToolShed products, changes may be made at any time without obligation or notice.

WARRANTY

This product may be covered under the ToolShed warranty. For more information see our Terms & Conditions at www.thetoolshed.co.nz



CONTENTS:

Specifications..... 4

Identification 5

Safety Instructions..... 6

Assembly..... 9

Operation..... 12

Maintenance..... 14

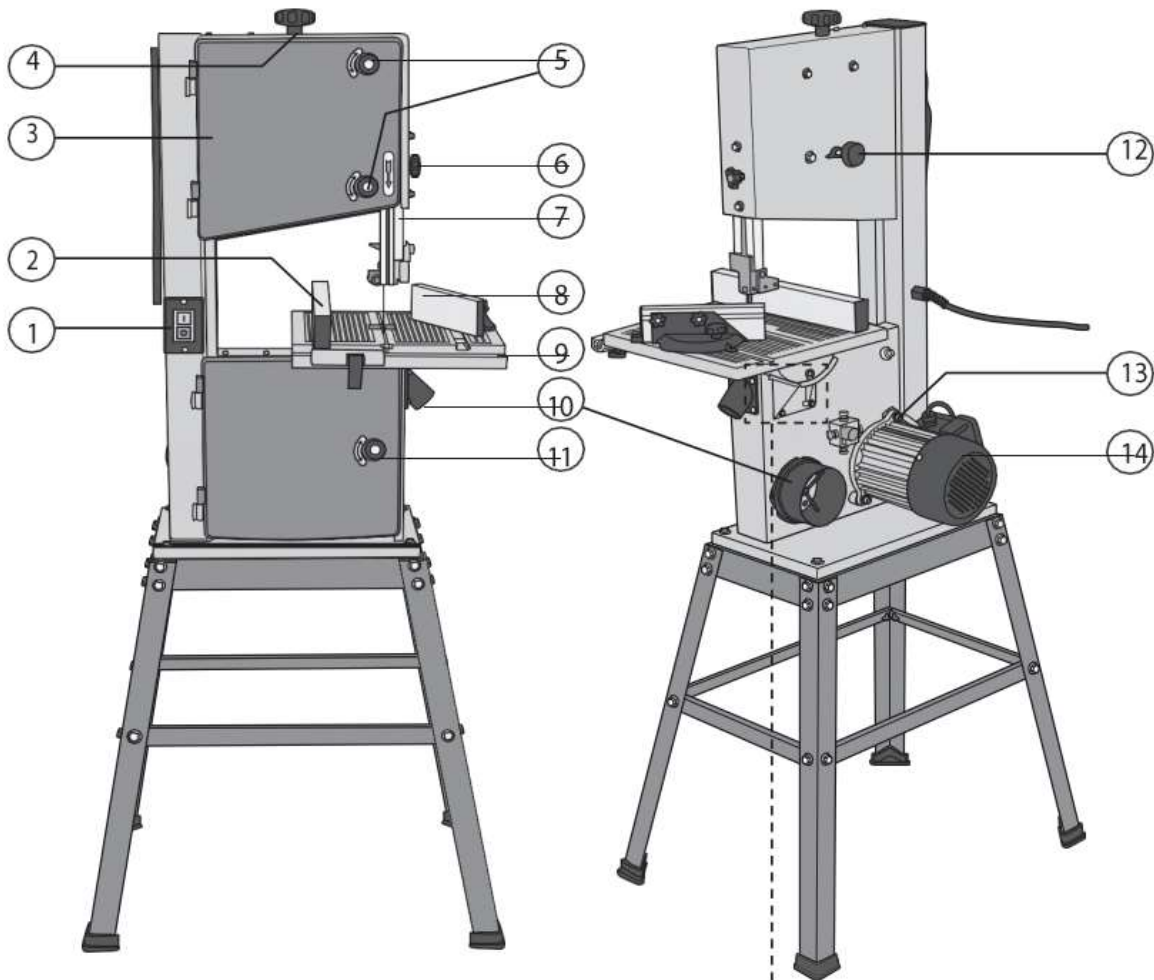
Troubleshooting 16



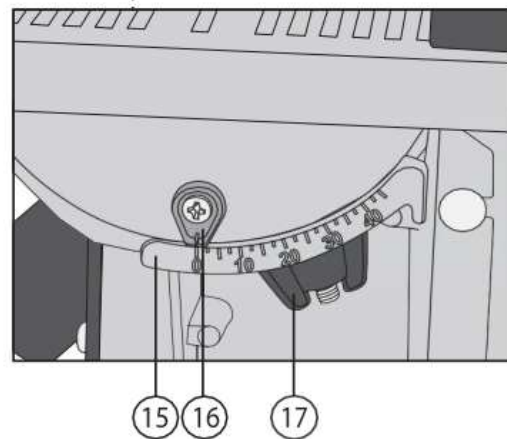
SPECIFICATIONS

Voltage	230v AC 50Hz
Power	420W
No-Load Idle Speed	1400rpm
Blade Length	1783mm
Blade Width	6-13mm
Blade Speed	660/960 m/min
Table Size	350mm x 330mm
Sound Pressure (LpA)	77.4 dB(A) K:3dB
Sound Power (LwA)	90.4dB(A) K:3dB
Weight	35kg

IDENTIFICATION



1. ON/OFF Button
2. Rip Fence
3. Upper Pulley Wheel Cover
4. Blade Tension Knob
5. Upper Blade Wheel Cover Screw
6. Blade Guide Adjustment Knob
7. Upper Blade Guide Assembly
8. Mitre Gauge
9. Table
10. Dust Extraction Port (x2)
11. Lower Blade Pulley Wheel Cover Screw
12. Blade Tracking Knob
13. Belt Tension
14. Motor



IMPORTANT INFORMATION

GENERAL SAFETY GUIDELINES



WARNING READ ALL SAFETY WARNINGS AND ALL INSTRUCTIONS. Failure to follow instructions and warnings could lead to serious injury, electric shock, or fire. Save ALL warnings and instructions for future reference.

WORK AREA SAFETY

- **Ensure that your work area is kept well-lit and clean.** Lack of visibility and clutter greatly increase the risk of accident.
- **Keep bystanders and children clear when operating a machine.** They can cause distraction or risk injury themselves.
- **Ensure you are not operating the machinery in the presence of flammable gases, dust, liquids, or anything that creates an explosive atmosphere.** Machinery can create sparks which can lead to ignition in these environments.

PERSONAL SAFETY

- **Always wear personal protective equipment.** Eye protection, ear protection, dust masks and other protective equipment will help to reduce the risk of personal injury.
- **Dress appropriately. Do NOT wear jewellery or loose clothing that can get caught in moving parts.** Keep hair, loose clothing, jewellery, and anything else that could be of risk away from moving parts or they could be caught.
- **Always remain alert and do NOT operate the machinery under the influences of any substances (drugs, medication, alcohol).** Losing focus could lead to injury while operating machinery.
- **Always keep proper footing and balance.** Overreaching can lead to slipping and falling which can result in injury.
- **Ensure the power switch is in the off position before connecting any battery or power source to the machinery.** This can lead to accidents as machinery can fire suddenly when it is not expected and lead to accident.
- **Use all provided dust collection and extraction attachments if included.** This with the use of dust masks can help keep you safe from dust and keep your work site clear while working.
- **Ensure loose parts such as a wrench or adjusting key are removed before starting the machinery.** Failure to remove these can result in serious injury.

ELECTRICAL SAFETY

- **Do NOT use the machinery in raining conditions or wet areas where the machine could get wet.** Water in the machine can lead to electric shock.
- **Only use the power tool or machinery when the plug correctly matches the power outlet.** Modifying plugs greatly increases the risk of electric shock.
- **Keep the power cord away from anything that could damage it such as sharp edges, moving parts or heat.** A damaged power cord increases the risk of electric shock.
- **Only operate outdoors with the use of an outdoor extension lead.** Not all extension leads are suited to outdoor use and using one which is not can greatly increase the risk of electric shock.



OPERATION MANUAL

- **Avoid body contact with grounded or earthed surfaces.** Surfaces such as radiators, ranges, pipes, and refrigerators can increase risk of electric shock due to your body being earthed or grounded.

MACHINERY USE AND CARE

- **Use the correct machine for the job.** Forcing a machine to do a job it was not designed for increases the risk of accident or injury.
- **Disconnect machinery from power or remove batteries before storing machinery or making any changes or adjustments to them.** This reduces or removes the risk of the machine accidentally firing which can help prevent injury or accident.
- **Check the machine for damage or any condition that could affect the way the machine.** An unrepared machine can lead to accident and injury. Only have your machine repaired with genuine parts from **The ToolShed**.
- **Only use the machinery with genuine parts or accessories that are designed to be used with the power tool and machinery.** Failure to do so could result in accident or injury or damage your machinery.
- **Store your machinery out of reach of children and away from untrained personnel when not in use.** Use by somebody untrained or a child could lead to accident or serious injury.

SERVICE

- **Have your machinery serviced with ToolShed replacement parts.** This will ensure that the safety of the machine is maintained.

ADDITIONAL SAFETY FOR WOOD CUTTING BANDSAW

- Never use damaged or deformed saw blades.
- Replace the table insert when it is worn or damaged.
- Do not clean the saw blade whilst it is in motion.
- Connect a dust extraction device to the band saw when sawing wood.
- Do not turn the saw on when one of the blade pulley wheel covers is open or if any of the blade guards are not in place.
- Make sure that you use the correct blade for the material that you are cutting.
- When transporting the saw, the upper blade guard should be lowered over the blade to protect it.
- When sawing cylindrical workpieces, a clamp should be used to prevent the workpiece from twisting.
- When sawing tall workpieces, a clamp should be used to prevent the workpiece from tipping over.
- The bandsaw must only be used with compatible accessories and only for the purpose for which it was designed.
- Do not allow children to use the machine.

THE MOST FREQUENT DANGERS WHEN USING A BANDSAW ARE

- Dangers associated with the moving saw blade such as sharp teeth.
- Off-cuts from the workpiece which can be ejected towards the user.
- Kickbacks from the workpiece.

WARNING: Despite the fact that the band saw has been fitted with all the necessary safety devices and conforms to relevant safety standards, the following hazards still exist:

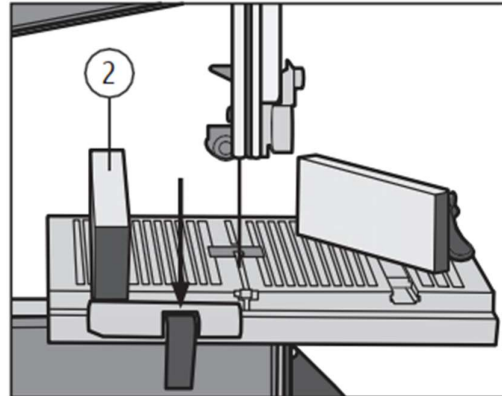
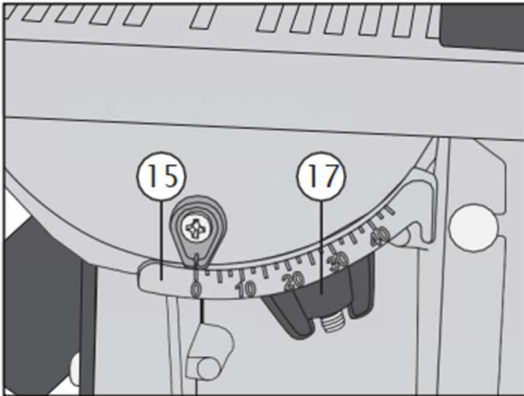
- Hearing damage caused by high noise levels.
- The risk of an accident in the unprotected area around the saw blade.
- The risk of injury when changing the saw blade.
- The risk of flying off cuts or wood chips.
- Trapped fingers.
- Workpiece kickback.
- The risk of inhalation of harmful dust.

ASSEMBLY

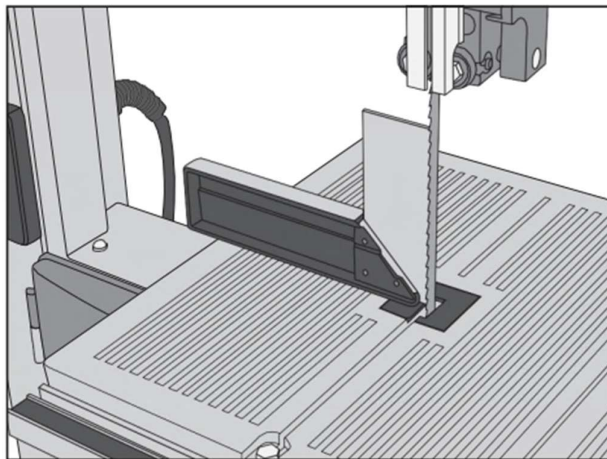
Note: Make sure that the band saw is disconnected from the mains before assembly.

FITTING THE TABLE AND RIP FENCE

1. Fit the table onto the trunnion (15) and secure it using the bolt and wing nut (17).
2. Fit the rip fence (2) and its rail onto the table.

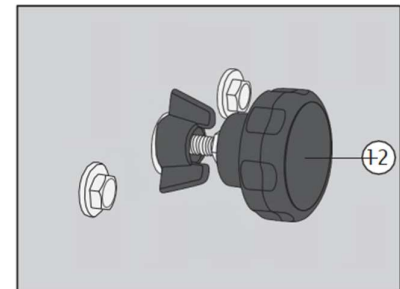
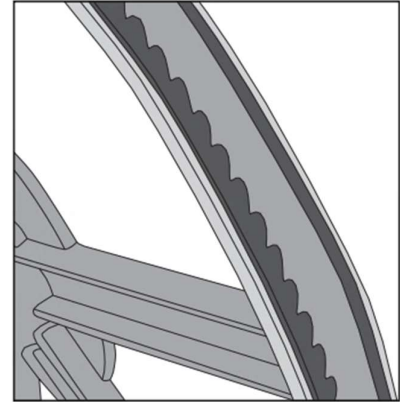
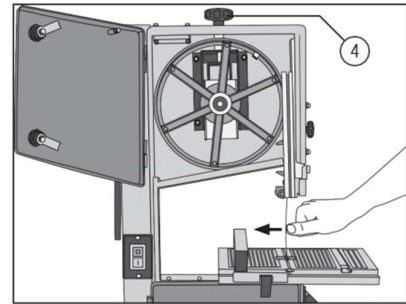
**SETTING UP THE TABLE**

1. Loosen the screw that secures the pointer and set the pointer to 0 degrees.
2. Place a set square against the table and blade.
3. Loosen the table locking wing nut and adjust it so that it is at a right angle to the blade. Tighten the wing nut again.



SETTING UP THE BLADE AND TENSION TRACKING

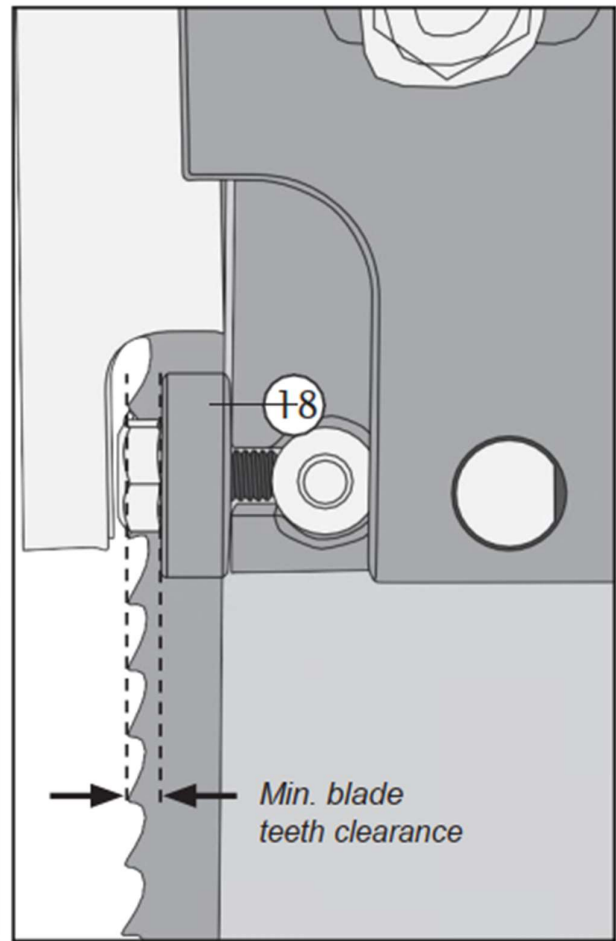
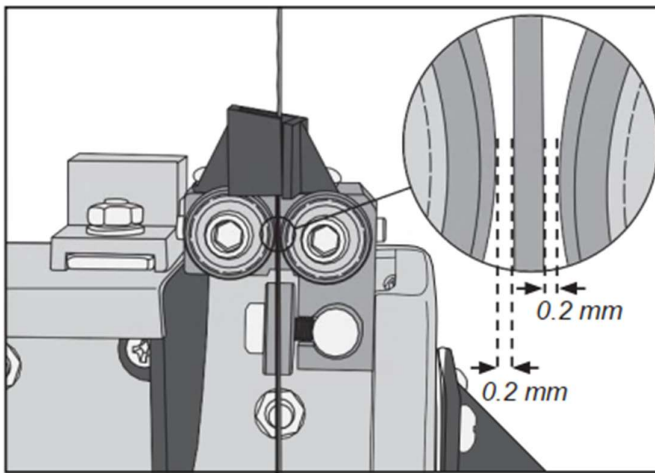
1. Open the upper and lower pulley wheel covers.
2. Adjust the blade tension using the tension knob (4). Turn the knob clockwise to increase the tension, anticlockwise to decrease the tension.
3. The saw blade is correctly tensioned if it can be moved approximately 10mm sideways with moderate hand pressure.
4. Slowly rotate the upper pulley by hand to make sure that the blade is centered on both blade pulley wheels.
5. If adjustment is necessary, loosen the wing nut on the tracking knob (12) and move the knob in or out until the blade runs true.



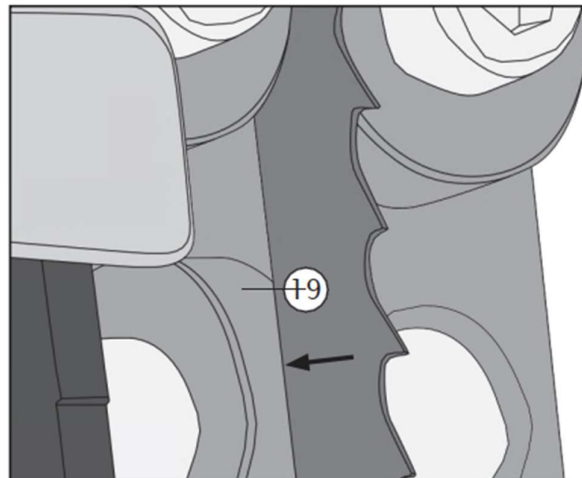
SETTING UP THE BLADE GUIDES

The blade guides minimize blade movement during sawing.

1. After the blade has been centered on the blade pulley wheels, make sure that the teeth of the blade do not line up with the guide pins (18). If they do, the entire guide pin post and support bearings can be moved back so that the teeth of the blade do not foul the guide pins.
2. The guide bearings should be 0.2mm from the side of the blade.



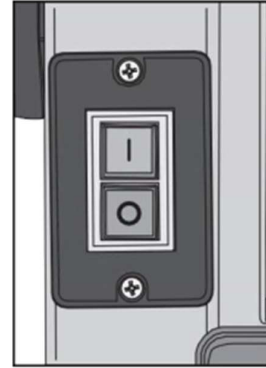
3. Rotate the wheel by hand and make sure that the joint of the blade passes through the guides.
4. Position the rear support bearing (19) as close to the back of the saw blade as possible without it coming into contact.



OPERATION

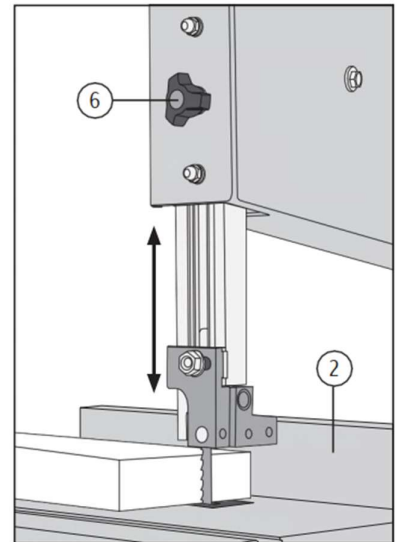
START / STOP BUTTON

This saw is fitted with a no-volt release switch which prevents the saw from automatically starting again following a power cut or if the mains plug is reconnected to the mains supply after the machine has been stopped by being unplugged with the ON/OFF switch set to ON. The saw is switched on by pushing the green (I) button and switch off by pressing the red (O) button.



SAWING

- The upper blade guide assembly should be lowered to as close a position to the workpiece as possible. To lower the assembly, loosen the locking knob (6) and slide the assembly down. Tighten the locking knob.
- Set the rip fence to the desired width. Plan the cut before starting to saw. When sawing a small workpiece, use a push stick to ensure that your hands do not come too close to the blade.
- Before sawing a large workpiece, make sure that there is enough room around the saw for the workpiece to be maneuvered safely. If necessary, you should make sure that the workpiece is supported to avoid undue stress on the table. Cut the material at a steady, even pace. A clear sign that the sawing is being forced too quickly is the motor changing pitch or slowing down.

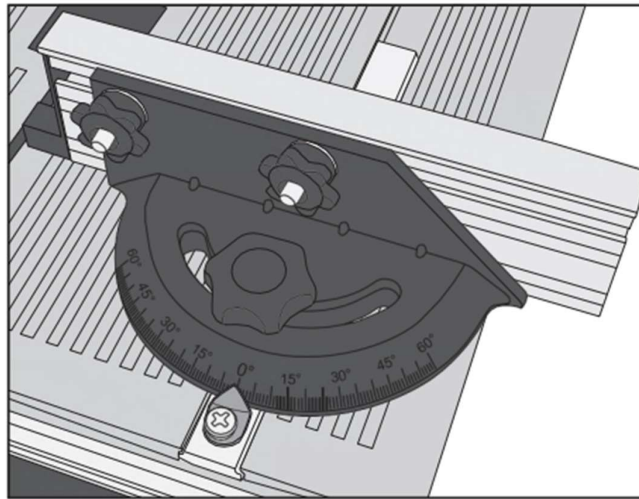


NOTE:

- Make sure that the saw blade is undamaged and is centered on the blade pulley wheels before starting to saw.
- Feed the workpiece into the blade carefully making sure not to exert too much pressure.
- Hold the workpiece in both hands if you can or use a push stick if the workpiece is too small.
- Always keep your hands well away from the saw blade and think through the cut before starting.
- For the best results, use a sharp saw blade.
- Select the correct saw blade for the thickness of the workpiece and type of cut. Thin and hard woods require finer toothed blades than thicker, softer woods.
- Tight radii require a narrower blade than straight cuts.
- Use the rip fence as a support when making straight cuts.
- Think about a cut before beginning to saw a workpiece. You might need to reposition the workpiece or turn it over. Mark out the cut on both sides of the workpiece if necessary.
- Never twist the workpiece without it being pressed against the saw blade, otherwise the workpiece can be stuck, or the blade can bend.
- Always unplug the band saw before making any adjustments or repairs and whenever the saw is not being used.

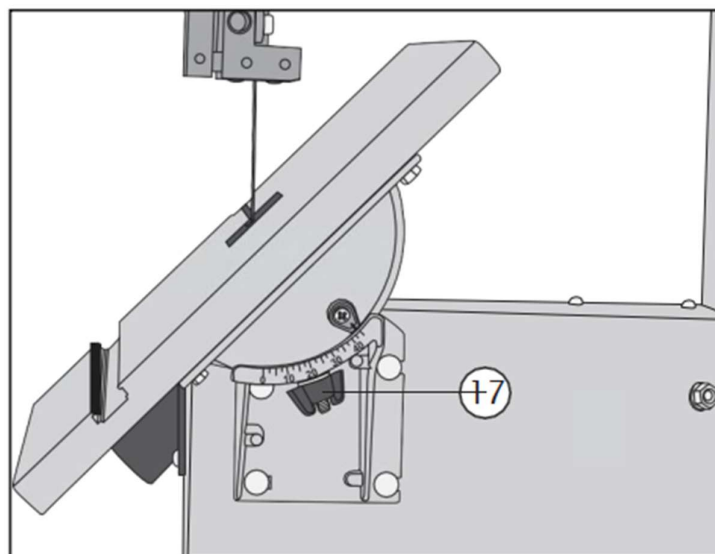
USING THE MITRE GAUGE

1. Make a practice cut with the gauge set to 0 degrees and then check the cut using a try square.
2. If adjustment is necessary, loosen the screw holding the pointer and move the pointer accordingly.
3. Set the desired angle on the mitre gauge and make the cut whilst holding the workpiece firmly against the mitre gauge.



TILTING THE TABLE – MAKING BEVEL CUTS

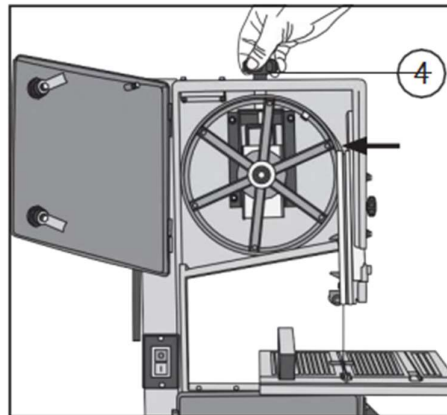
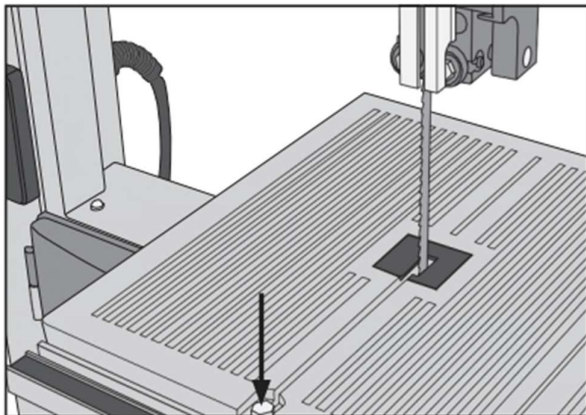
- Undo the wing nut (17), tilt the table to the desired angle and tighten the wing nut.



CARE AND MAINTENANCE

CHANGING THE SAW BLADE

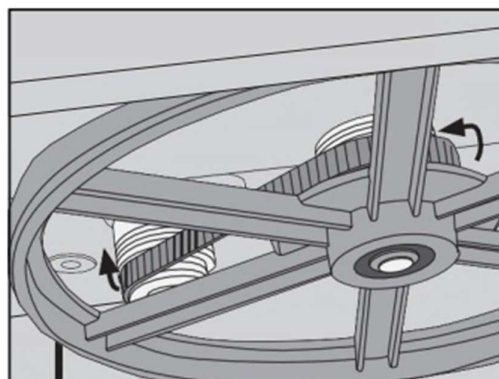
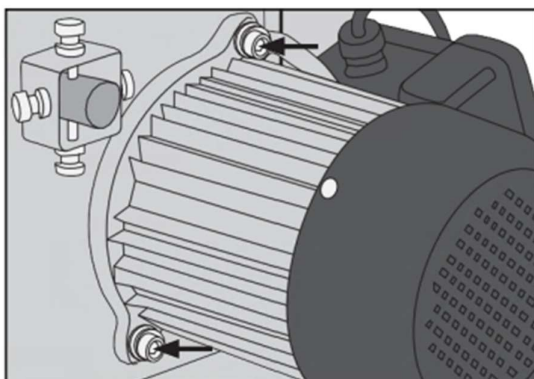
1. Open the upper and lower blade pulley wheel covers.



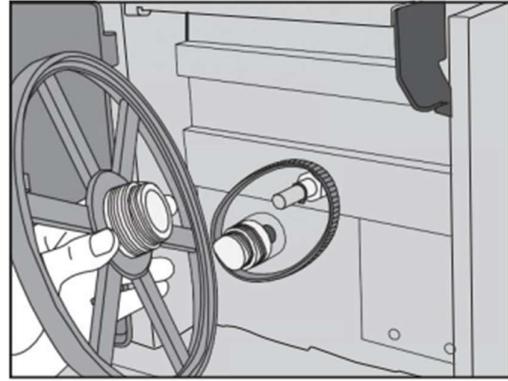
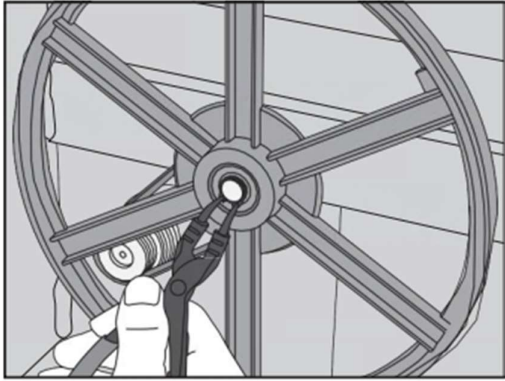
2. Remove the screw from the end of the saw blade.
3. Turn the blade tension knob (4) anticlockwise until the blade comes loose.
4. First put on a pair of work gloves and then carefully remove the blade from the saw, the teeth are very sharp.
5. Fit the new blade in reverse order making sure that the teeth are pointing downwards towards the table.
6. Tension the blade as directed in "Setting up the blade and tension tracking".
7. If necessary, adjust the blade guides as directed in "Setting up the blade guides".

CHANIGNG THE SPEED / DRIVE BELT

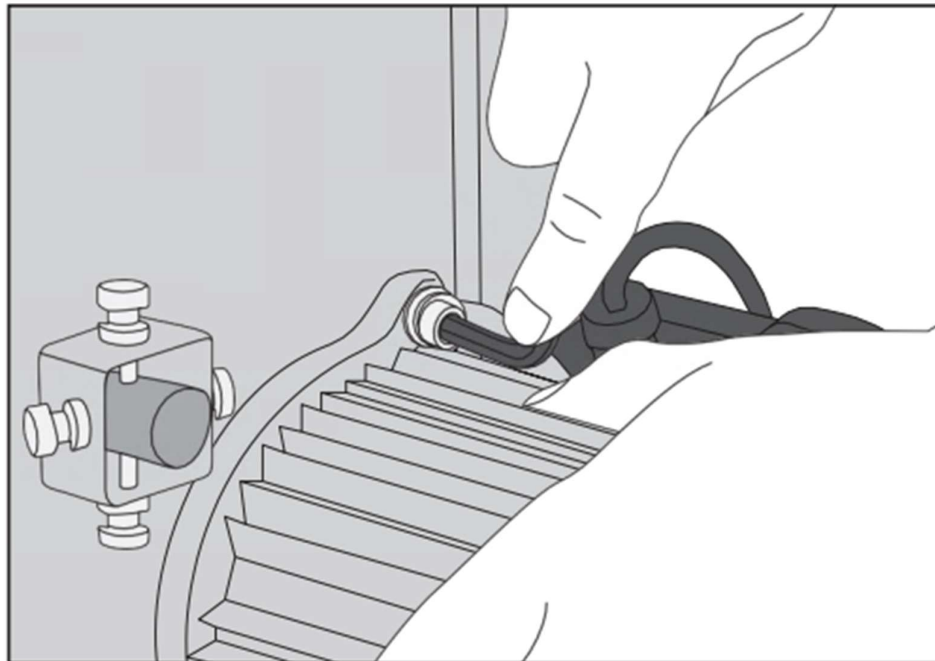
1. Remove the blade as directed in "Changing the saw blade".
2. The motor is fastened by two bolts on the back of the saw.



3. Undo the two bolts so the motor can be moved, and the belt loosened.
4. The blade speed can be changed by moving the drive belt between drive pulley wheels. The outer pulley wheels move the blade at 660 m/min and the inner wheels move the blade at 960 m/min.



5. To replace the drive belt, the lower blade pulley wheel must be removed. Find the circlip that holds the blade pulley wheel onto the shaft and remove it using a pair of circlip pliers.
6. Pull the blade pulley wheel off the shaft.
7. Place the new belt over the motor's drive pulley wheel and round the shaft which the blade pulley wheel is mounted on. Replace the blade pulley wheel and refit the circlip. Make sure that the drive belt is fully located in the grooves of either the inner or outer wheels.
8. Tension the belt by pivoting the motor back into place and secure it with the two bolts.



NOTE:

- Always unplug the band saw before making any adjustments or repairs and whenever the saw is not being used.
- Do not expose the machine to moisture.
- Keep the table clean and free of wood sap.
- Keep the band saw clean. Use a brush and dust extractor to remove dust and chips. Pay particular attention to the motor's air intakes and any openings where the dust can build up and prevent the blade from running freely.

TROUBLESHOOTING

Problem	Possible Cause	Solution
The machine does not start when the on/off switch is pushed.	No power supply to the wall socket.	Check fuses and cables.
	Faulty switch.	
	One of the covers is open.	Close the cover.
The saw blade does not move when the motor is on.	The blade tension is loose.	Turn off the motor and adjust the tension.
	The blade has come off one of the pulley wheels.	Open the covers and check.
	The saw blade has broken.	Replace the saw blade.
	The drive belt has broken.	Change drive belt.
The saw blade does not cut straight.	The cut was done free hand.	Use a fence to guide the workpiece.
	Feed speed too high.	Do not apply so much pressure.
	The saw blade is damaged or blunt.	Replace the saw blade.
	The blade guides are not set correctly.	Adjust the blade guides.
The saw blade does not cut or cuts very slowly.	The saw blade is blunt.	Change blade (6 TPI* for wood and soft materials, 14 TPI* for hard materials). *TPI = teeth per inch
	Blade fitted upside down.	Fit the blade correctly.
Sawdust builds up inside the machine.	This is completely normal.	Clean the saw regularly with a brush and dust extractor.
The saw does not cut at angles of 45 degrees or 90 degrees.	The table is not correctly set in relation to the blade.	Adjust the table.
	Blunt blade or too high a feed rate.	Replace the blade or reduce pressure on the workpiece.
The saw blade does not align centrally on the blade pulleys.	The blade pulley wheels are not in line, bad bearings.	Speak with your local ToolShed.
	The blade pulley wheels are not in line, incorrectly set.	Adjust the alignment using the knob on the back of the saw.
	Incorrect blade.	Change blade.