BS-X3453C
CARBATEC 14" (345MM) HEAVY-DUTY BANDSAW

INSTRUCTIONS MANUAL

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V2

carbatec®

3 YEAR WARRANTY

THANK YOU FOR CHOOSING carbatec

Carbatec has been a trusted brand for woodworking enthusiasts and professionals across Australia and New Zealand, since 1987.

Our quality woodworking products are designed and built to offer value and performance, making the latest features and technological advancements more accessible to Aussie woodworkers.

Backed by our no-fuss after-sales care and warranty support, you can trust Carbatec to keep you woodworking, as promised.

We look forward to sharing in your woodworking journey!

If you have any questions about our products or service, please call us on **1800 658 111** or email us at info@carbatec.com.au

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WHAT'S IN THE CRATE

1. Main Bandsaw Body
2. Cast Iron Table
3. Height Adjust Handwheel
4. Mitre Gauge
5. Fence and Rail
6. Mounting Hardware
7. This manual!

This bandsaw will require a minimal amount of assembly.

1. Remove parts from the crate and lay them on a clean work surface.
2. Remove any protective materials and coatings from all of the parts and the bandsaw. The protective coatings can be removed by spraying WD-40 on them and wiping it off with a soft cloth. This may need to be redone several times before all of the protective coatings are removed completely.

CAUTION

DO NOT use acetone, gasoline or lacquer thinner to remove any protective coatings.

WARNING

If any parts are missing, do not attempt to plug in the power cord and turn "ON" the bandsaw. The bandsaw can only be turned "ON" after all the parts have been obtained and installed correctly.

IMPORTANT

DUST COLLECTION: All woodworking machines require effective dust extraction to ensure quality work and longevity of the machine itself. Failure to connect your machine to a suitable dust collector may affect your warranty. The collector required for your machine will depend on several factors including the type of machine and its dust port connection, distance between collector and machine, type & frequency of use and the material being worked. We recommend a dust collector that will provide you a minimum airflow of 500-CFM when measured at the machine connection.

Key information can be found on the inspection panel, found on the rear of the machine.

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QUALITY INSPECTED

Model:
Voltage
Freq:
Phase:
Amp:
kW:
Speed:
Lot No.:
Serial No.:
Date:

Made in for:
CARBATEC PTY LTD
Brisbane - Australia

3 YEAR WARRANTY

Record the serial number and date of purchase in your manual for future reference.

SERIAL NUMBER:

.....

DATE OF PURCHASE:

.....

CONTENTS

NOTE: The specifications, photographs, drawings and information in this manual represent the current machine model when the manual was prepared. Changes and improvements may be made at any time, with no obligation on the part of Carbatec to modify previously delivered units. Reasonable care has been taken to ensure that the information in this manual is correct, to provide you with the guidelines for the proper safety, assembly and operation of this machine.

SAFETY INSTRUCTIONS

IMPORTANT! Safety is the single most important consideration in the operation of this equipment. The following instructions must be followed at all times. Failure to follow all instructions listed below may result in electric shock, fire, and/or serious personal injury. There are certain applications for which this tool was designed. We strongly recommend that this tool not be modified and/or used for any other application other than that for which it was designed. If you have any questions about its application, do not use the tool until you have contacted us and we have advised you.
The purpose of safety symbols is to attract your attention to possible dangers. The safety symbols and the explanations with them deserve your careful attention and understanding. The symbol warnings do not, by themselves, eliminate any danger. The instructions and warnings they give are no substitutes for proper accident prevention measures.

WARNING

Be sure to read and understand all safety instructions in this manual, including all safety alert symbols such as “DANGER,” “WARNING,” and “CAUTION” before using this tool. Failure to following all instructions listed below may result in electric shock, fire, and/or serious personal injury.

SYMBOL MEANING

	A safety alert symbol Indicates **DANGER, WARNING**, or **CAUTION.** May be used in conjunction with other symbols or pictographs.
DANGER	Indicates an imminently hazardous situation, which, if not avoided, will result in death or serious injury.
WARNING	Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.
CAUTION	Indicates a potentially hazardous situation, which, if not avoided, could result in minor or moderate injury.
NOTICE	(Without Safety Alert Symbol) Indicates a situation that may result in property damage.

Carbatec products bearing the Regulatory Compliance Mark (RCM) have been tested in accordance with applicable Australian/New Zealand Standards to ensure their compliance with all mandatory standards and regulations (applicable at time of original sale). Carbatec Pty Ltd are registered as a responsible supplier with relevant Australian government departments and our products are registered on the EESS & ACMA database.

GENERAL SAFETY

Operating a power tool can be dangerous if safety and common sense are ignored. The operator must be familiar with the operation of this machine. Read this manual to understand this machine. **DO NOT OPERATE** this machine **IF YOU DO NOT FULLY UNDERSTAND** the limitations of this tool. **DO NOT MODIFY** this machine in any way.

BEFORE USING THIS MACHINE

WARNING

To avoid serious injury and damage to the tool, read and follow all of the Safety and Operating Instructions before operating the machine.

WARNING

1. **SOME DUST CREATED BY USING POWER TOOLS CONTAINS CHEMICALS** known to cause cancer, birth defects, or other reproductive harm. Some examples of these chemicals are:
   - Lead from lead-based paints.
   - Crystalline silica from bricks, cement, and other masonry products.
   - Arsenic and chromium from chemically treated lumber

   Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

2. **READ** this entire manual. **LEARN** how to use the tool for its intended applications.

3. **GROUND ALL TOOLS.** If the tool is supplied with a 3-prong plug, it must be plugged into a 3-contact electrical receptacle. The third prong is used to ground the tool and provide protection against accidental electric shock.

4. **AVOID A DANGEROUS WORKING ENVIRONMENT.** Do not use electrical tools in a damp environment or expose them to rain.

5. **DO NOT USE** electrical tools in the presence of **FLAMMABLE** liquids or gases.

6. **ALWAYS KEEP THE AREA CLEAN,** well lit, and organized. Do not work in an environment with floor surfaces that are slippery from debris, grease, and wax.

7. **KEEP VISITORS AND CHILDREN AWAY.** Do not permit people to be in the immediate work area, especially when the electrical tool is operating.

8. **DO NOT FORCE THE TOOL** to perform an operation for which it was not designed. It will do a safer and higher quality job by only performing operations for which the tool was intended.

9. **WEAR PROPER CLOTHING.** Do not wear loose clothing, gloves, neckties, or jewellery. These items can get caught in the machine during operations and pull the operator into the moving parts. The user must wear a protective cover on their hair, if hair is long, to prevent it from contacting any moving parts.

10. **CHILDPROOF THE WORKSHOP AREA** by removing switch keys, unplugging tools from the electrical receptacles, and using padlocks.

GENERAL SAFETY

11. **ALWAYS UNPLUG THE TOOL FROM THE ELECTRICAL RECEPTACLE** when making adjustments, changing parts or performing any maintenance.

12. **KEEP PROTECTIVE GUARDS IN PLACE AND IN WORKING ORDER.**

13. **AVOID ACCIDENTAL STARTING.** Make sure that the power switch is in the "OFF" position before plugging in the power cord to the electrical receptacle.

14. **REMOVE ALL MAINTENANCE TOOLS** from the immediate area prior to turning "ON" the machine.

15. **USE ONLY RECOMMENDED ACCESSORIES.** Use of incorrect or improper accessories could cause serious injury to the operator and cause damage to the tool. If in doubt, check the instruction manual that comes with that particular accessory.

16. **NEVER LEAVE A RUNNING TOOL UNATTENDED**. Turn the power switch to the "OFF" position. Do not leave the tool until it has come to a complete stop.

17. **DO NOT STAND ON A TOOL.** Serious injury could result if the tool tips over, or you accidentally contact the tool.

18. **DO NOT STORE ANYTHING ABOVE OR NEAR** the tool where anyone might try to stand on the tool to reach it.

19. **MAINTAIN YOUR BALANCE.** Do not extend yourself over the tool. Wear oil resistant rubber soled shoes. Keep floor clear of debris, grease, and wax.

20. **MAINTAIN TOOLS WITH CARE**. Always keep tools clean and in good working order. Keep all blades and tool bits sharp, dress grinding wheels and change other abrasive accessories when worn.

21. **EACH AND EVERY TIME, CHECK FOR DAMAGED PARTS PRIOR TO USING THE TOOL.** Carefully check all guards to see that they operate properly, are not damaged, and perform their intended functions. Check for alignment, binding or breaking of moving parts. A guard or other part that is damaged should be immediately repaired or replaced.

22. **DO NOT OPERATE TOOL WHILE TIRED, OR UNDER THE INFLUENCE OF DRUGS, MEDICATION OR ALCOHOL.**

23. **SECURE ALL WORK.** Use clamps or jigs to secure the work piece. This is safer than attempting to hold the work piece with your hands.

24. **STAY ALERT, WATCH WHAT YOU ARE DOING, AND USE COMMON SENSE WHEN OPERATING A POWER TOOL**. A moment of inattention while operating power tools may result in serious personal injury.

25. **ALWAYS WEAR A DUST MASK TO PREVENT INHALING DANGEROUS DUST OR AIRBORNE PARTICLES,** including wood dust, crystalline silica dust and asbestos dust. Direct particles away from face and body. Always operate tool in well ventilated area and provide for proper dust removal. Use dust extraction system wherever possible. Exposure to dust may cause serious and permanent respiratory or other injury, including silicosis (a serious lung disease), cancer, and death. Avoid breathing dust, and

avoid prolonged contact with dust. Allowing dust to get into your mouth or eyes, or lay on your skin may promote absorption of harmful material. Always use properly fitting AS/NZS approved respiratory protection appropriate for the dust exposure, and wash exposed areas with soap and water.

26. **USE A PROPER EXTENSION CORD IN GOOD CONDITION.** Use of extension cords should be avoided where possible. When using an extension cord, be sure to have a cord heavy enough to carry the current your product will draw, and with compatible pin configuration and connections. NEVER use an extension cord rated at less than your machine. Longer run extensions will need heavier duty extension cords. Only connect your extension cord or machine to a receptacle that accepts your plug and never modify your plug to suit a receptacle.

BANDSAW SAFETY

WARNING

The device and packaging materials are not toys! Children must not be allowed to play with plastic bags, film and small parts! There is a risk of swallowing and suffocation!

NOTE: According to the applicable product liability law the manufacturer of this device is not liable for damages which arise on or in connection with this device in case of:

- Improper handling
- Non-compliance with the instructions for use
- Repairs by third party, non authorised skilled workers
- Installation and replacement of non-genuine spare parts
- Improper use

RECOMMENDATIONS:

- Read the entire text of the operating instructions prior to the assembly and operation of the device. These operating instructions are intended to make it easier for you to get familiar with your device and utilise its intended possibilities of use.
- The operating instructions contain important notes on how to work safely with your machine and how to avoid dangers, and increase the reliability and working life of the machine.
- Retain and store these instructions near the machine. The instructions must be read and carefully observed by each operator prior to starting the work.
- In addition to the safety notes contained in the present operating instructions and the special regulations of your country, the generally recognised technical rules for the operation of wood working machines must be observed.

BANDSAW SAFETY

INTENDED USE

- 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 recognised safety-technical rules must also be adhered to.
- The machine may only be used, maintained, and operated 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 tools made by or recommended by the manufacturer
- Any other use exceeds authorisation. The manufacturer is not responsible for any damages resulting from unauthorized use; risk is the sole responsibility of the operator.

SAFETY FOR BANDSAWS

- This bandsaw is intended for use in dry conditions, and for indoor use only.
- Do not cut pieces of material too small to hold by hand outside the blade guard.
- Avoid awkward hand positions where a sudden slip could cause a hand to move into the blade.
- Always use the blade guard to avoid possible injury due to blade breakage.
- Never leave the work area with the power connected, or before the machine has come to a complete stop.
- Do not perform layout, assembly or set up work on the table while the cutting tool is in operation.
- Never turn your bandsaw on before clearing the table of all objects: (tools, scraps of wood, etc) except for the workpiece and related feed or support devices for the operation planned.

REMAINING HAZARDS

The machine has been built using modern technology in accordance with recognised safety rules. Some remaining hazards, however, may still exist.

- Long hair and loose clothing can be hazardous when the work piece is rotating. Wear personal protective gear such as a hair net and tight fitting work clothes.
- Saw dust and wood chips can be hazardous. Always wear AS/NZS approved personal protective gear such as safety goggles, dust mask and hearing protection.
- The use of incorrect or damaged mains cables can lead to injuries caused by electricity.
- Even when all safety measures are taken, some remaining hazards which are not yet evident may still be present.
- Remaining hazards can be minimised by following the instructions in Safety Precautions, Proper Use and in the entire operating manual.
- Do not force the machine unnecessarily: excessive cutting pressure may lead to rapid deterioration of the blade and a decrease in performance in terms of finish and cutting precision.

- Avoid accidental starts: do not press the start button while inserting the plug into the socket.

ELECTRICAL SAFETY

⚠ WARNING

This tool must be grounded while in use to protect the operator from electric shock. IN THE EVENT OF A MALFUNCTION OR BREAKDOWN, grounding provides the path of least resistance for electric current and reduces the risk of electric shock. This tool may be equipped with an electric cord that has an equipment grounding conductor and a grounding plug. **The plug MUST Be plugged** into a matching electrical receptacle that is properly installed and grounded in accordance with **ALL** local codes and ordinances.

DO NOT MODIFY THE PLUG PROVIDED.
If it will not fit the electrical receptacle, have the proper electrical receptacle installed by a qualified electrician.

IMPROPER ELECTRICAL CONNECTION of the equipment grounding conductor can result in risk of electric shock. The conductor with the green insulation (with or without yellow stripes) is the equipment grounding conductor. DO NOT connect the equipment grounding conductor to a live terminal if repair or replacement of the electric cord or plug is necessary.

CHECK WITH A QUALIFIED ELECTRICIAN or service personnel if you do not completely understand the grounding instructions, or if you are not sure the tool is properly grounded.

Use only a 3-wire extension cord that has a 3-prong grounding plug and a 3-pole receptacle that accepts the tool's plug. Replace a damaged or worn cord immediately.

Power tools and machinery are intended for use on a circuit that has an electrical receptacle as shown in **FIGURE A** that shows a 10 Amp 3-wire electrical plug and corresponding electrical receptacle that has a grounding conductor.

If this particular tool has been designed and fitted with a two prong electrical plug, ensure it displays the 'Double Insulated' logo shown in **FIGURE B**, before connecting to a 3- wire receptacle.

⚠ WARNING

Never modify the standard fitted electrical plugs to fit your receptacle.


Fig. A

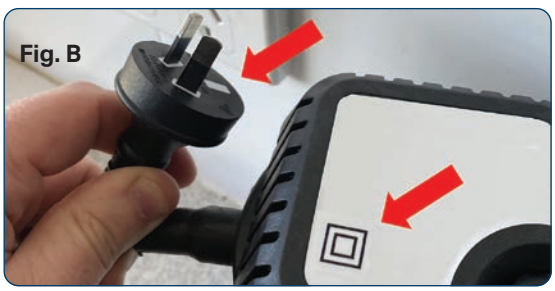
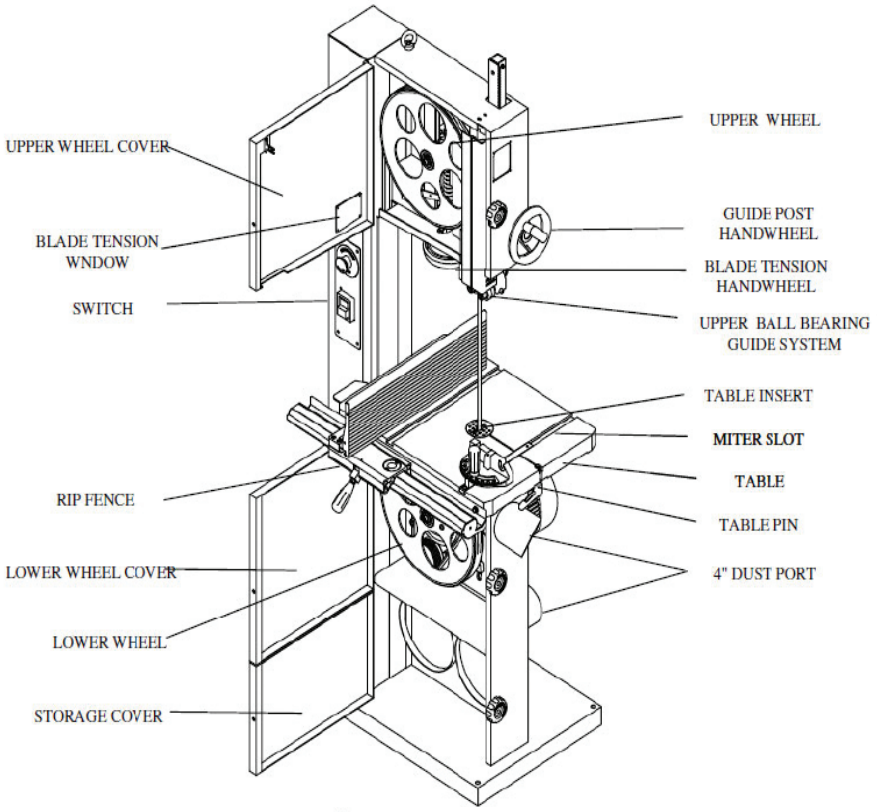
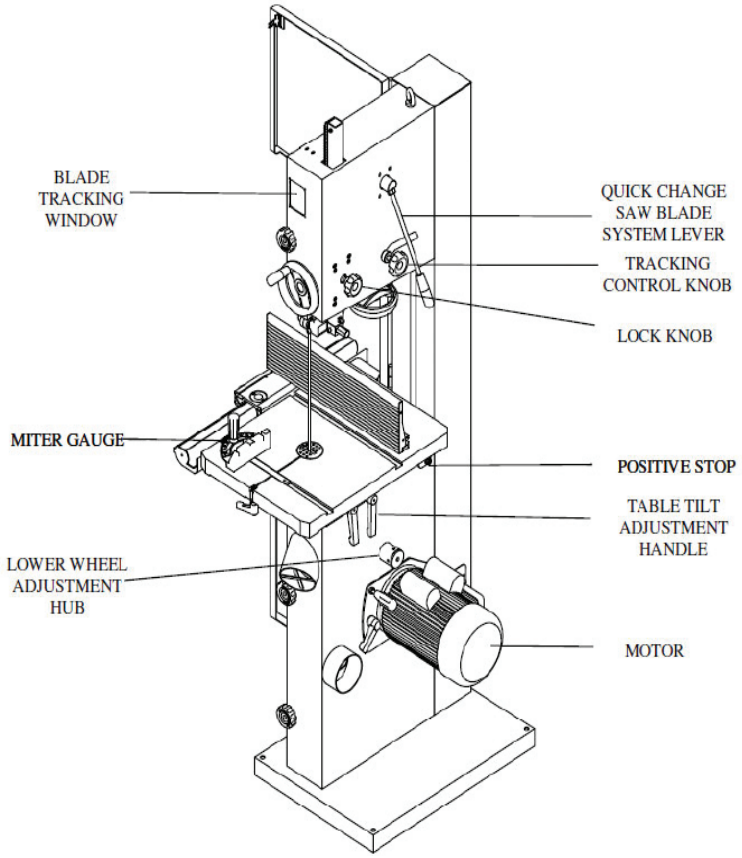


Fig. B

OVERVIEW


UPPER WHEEL COVER
BLADE TENSION WNDOW
SWITCH
RIP FENCE
LOWER WHEEL COVER
LOWER WHEEL
STORAGE COVER
UPPER WHEEL
GUIDE POST HANDWHEEL
BLADE TENSION HANDWHEEL
UPPER BALL BEARING GUIDE SYSTEM
TABLE INSERT
MITER SLOT
TABLE
TABLE PIN
4" DUST PORT


BLADE TRACKING WINDOW
MITER GAUGE
LOWER WHEEL ADJUSTMENT HUB
QUICK CHANGE SAW BLADE SYSTEM LEVER
TRACKING CONTROL KNOB
LOCK KNOB
POSITIVE STOP
TABLE TILT ADJUSTMENT HANDLE
MOTOR

SPECIFICATIONS

CODE	BS-X3453C
HORSE POWER	3 HP (2.2 kW, 15 A plug)
POWER REQUIREMENT	230 V, 1 PH, 50 HZ
SWITCH	NVR and Emergency Stop Switch
CUTTING HEIGHT	14"/360 mm
MAX. CUTTING WIDTH	13.5" (345 mm)
SAW BLADE (L)	121-¼" / 3080 mm
SAW BLADE (W)	⅛" to ¾" (3.2 to 19 mm)
SAW BLADE SPEED	655 M/min
TABLE SIZE	21-¾"×16" (555×410 mm) Solid Cast Iron
TABLE TILTING	Left-5° / Right-45°
WHEEL SIZE	14" (355 mm) Cast Iron
TABLE HEIGHT FROM GROUND	37" (940 mm)
DUST CHUTE DIAMETER	ø4"×2
BRAKING SYSTEM	Automatic Electronic
WARRANTY PERIOD	3 years
WORKSHOP FOOTPRINT (W x D x H)	740 × 850 × 1920 mm
PACKING SIZE (L×W×H)	930 × 540 × 2200 mm
SHIPPING / NETT WEIGHT	178 kg / 149 kg

ASSEMBLY

To reduce damage in transport, this Bandsaw will require a small amount of assembly and will require some heavy lifting. Ensure you have additional people to assist with lifting etc.

- After unpacking, the machine must be installed.
- Transport the bandsaw in its packing crate to a place near its final installation site before unpacking it.
- If the packaging shows signs of possible transport damage, take the necessary precautions not to damage the machine when unpacking.
- If any damage is discovered, the carrier and/or shipper must be notified of this fact immediately to establish any claim which might arise.

CAUTION

The machine is heavy.
DO NOT over-exert yourself while assembling the machine. Two or three people are required to safely assemble it.

To ensure the assembly process goes smoothly, first clean any parts that are covered or coated in heavy-duty rust preventative (if applicable).

A. PLACEMENT LOCATION

Consider anticipated workpiece sizes and additional space needed for auxiliary stands, work tables, or other machinery when establishing a location for this machine in the shop. See dimensions on page 13, for reference.

B. PLACING THE BANDSAW INTO POSITION

1. This machine comes packed upright in a wooden crate. For safe transit, it should remain upright and be moved by a forklift or pallet jack.

2. This bandsaw is provided with an eye bolt on the top, for lifting off the pallet/ skid into position, should you have the equipment available to do so.

3. If this method is unavailable, use a forklift or pallet jack to locate the machine into position.

4. The base of the machine is bolted to the pallet. These bolts will need to be removed to release the bandsaw. Once done, if lifting equipment is not available, several able bodies will be required to assist in “walking” the machine off the skid and onto the ground.

5. These four bolt holes can then be used to secure the machine to the ground for additional stability and security (hardware not included).

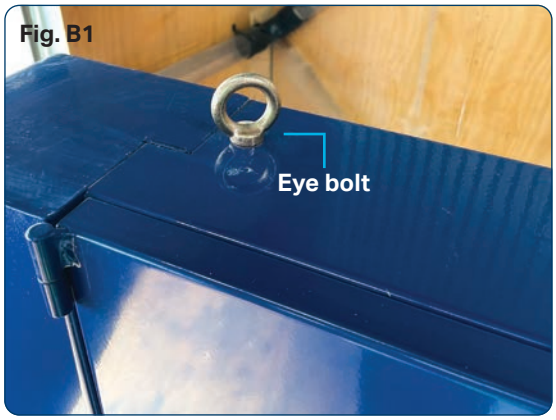
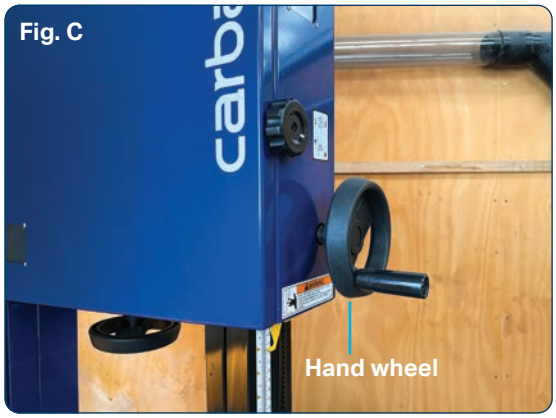


Fig. B1

ASSEMBLY

C. INSTALLING THE HAND WHEEL

1. The upper guide bearings and blade guard are rack and pinion height adjustable. The hand wheel for this adjustment needs to be installed on the side of the machine, taking care to align the locking grub screw with the flat of the shaft.
Fig. C



D. INSTALLING THE TABLE COMPONENTS

1. The table now needs to be installed. Thoroughly clean any protective grease from the table prior to installation. With the assistance of a second person, lift the table and align the table slot with the installed blade from the back. Slide the table through the slot, carefully locating the blade so it sits in the central table hole. Rotate the table anti-clockwise so the table slot now faces the outer right side of the machine (from the front) and lower onto the trunnion.

2. While one person maintains stability of the table, the other can work from underneath to align the mounting holes through the trunnion and install the M8 mounting bolts, fitted with the appropriate spring washers. (A) Once all four bolts are located and the table is aligned, lock it down.
Fig. D1

3. Install the table insert by pressing into place, then install the table levelling pin in the table slot at the side with the nut on top and the kip lever below. Tighten to ensure alignment of the split cast table. **Fig. D2** (A)

Fig. D2

E. ADJUSTING THE TABLE TILT

1. Loosen the lock lever. **Fig. E** (A)

2. Use the table tilt adjustment lever to adjust the angle of the table. **Fig. E** (B) This machine features a geared table adjustment for ease of use. Simply turn the adjustment handle, pull against the spring to reset your pivot for more adjustment, as required.

3. After adjusting, please secure the table with the lock lever before operating.

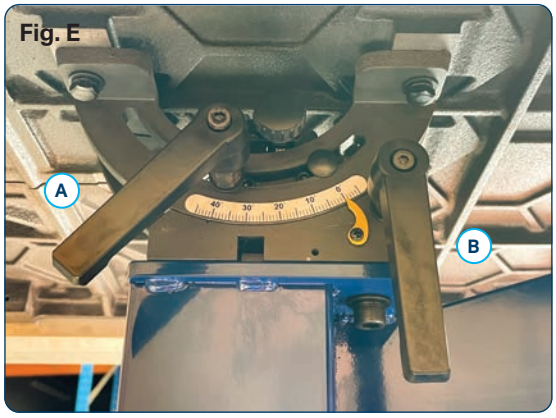


Fig. E

ASSEMBLY

F. ASSEMBLING THE RIP FENCE

1. Install the fence rail (A) to the table, using the two hex head bolts and washers provided.
Fig. F

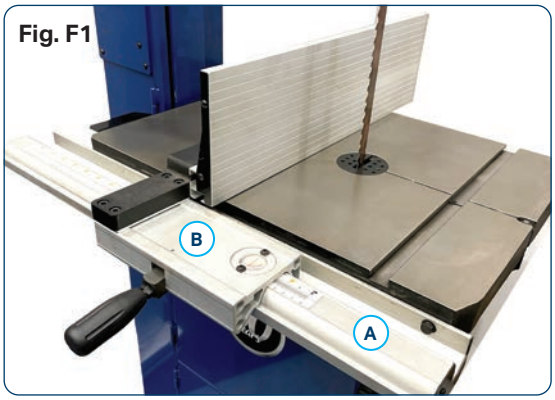
2. Install the rear supporting fence rail on the rear of the table, with the allen head bolts and washers provided.

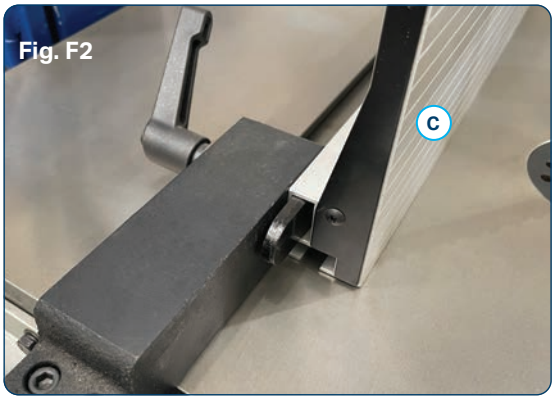
3. Place the fence base (B) on the fence rail (A), with the locking lever "up" in the unlocked position. Test slide the fence base, then push the lock lever down to secure the fence base in place.
Fig. F

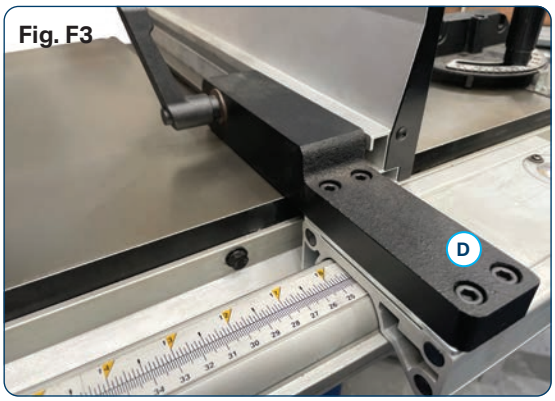
4. Slide the fence face (C) onto the fence base, via the T-slots in the alloy fence, until it covers the table from front to back. You may need to loosen the kip lever on the fence base back to do so. Note that this fence can be used in a high or low configuration (hi-lo style fence). Setup according to your own personal preference or project requirement.
Fig. F2 (C)

5. Adjust the "foot" that holds the fence base off the table, on the back rail. Turn this threaded foot until the base clears the table front to back, to ensure smooth operation.

6. Slide your fence until it is adjacent to the mitre slot. Your fence face should align with the slot in the table at the front and back. If not, adjust accordingly using the four mounting bolts of the fence base.
Fig. F3 (D)







7. Shim the fence rail if required. Now check the fence scale. Slide the fence over until the face of it just touches the outside set of the blade teeth in the locked position. Your hairline indicator needs to read "0" (zero) in this position. Adjust if required.

G. CHANGING BLADES

1. Ensure the machine is turned off and unplug the power cord (for additional safety and releasing the brake).

2. Remove the table insert and table pin.

3. Open the upper and lower doors.

4. Loosen the upper and lower blade guide systems and move them away from the blade.

5. Now release the quick action tension lever on rear of bandsaw, according to the sticker on the machine. **Fig. G** (A). The blade will now be loose, however, if it is not sufficiently loose to remove easily, you can also release more blade tension via the blade tension handwheel (B) between the table and the top door.

6. Carefully remove the blade through the slot in the frame column, then rotate the blade and guide through the table slot to remove. Install the new blade in the reverse order. Carefully guide through the table, then the frame slot and into the upper and lower ball bearing guide systems.

7. Place the blade in the MIDDLE of the upper and lower wheel and reapply tension via the quick lever and the blade tension wheel if required. Turn the top wheel by hand, watching the movement of the blade on the wheel. If the blade moves too far forward or back from the centre, adjust the tracking by releasing the lock lever and turning the wheel tilt knob (C) by small increments. Continue to turn the top wheel by hand while you adjust the wheel tilt, until the blade tracks in the middle of the wheel under full tension. Once achieved, lock the wheel tilt lever to prevent any change. **Fig. G** (C)

Fig. G

8. Now replace the table insert and table pin.

9. Reset your blade guide systems above and below the table. These should be adjusted so that the bearings are almost touching the blade. A rule-of-thumb guide is to set them at a piece-of-paper thickness away from the blade. This effectively means they are not pinching the blade and causing undue resistance, but will keep the blade from moving during cutting. The thrust bearing (behind the blade) can be set in a similar manner.

10. Close your bandsaw lower and upper wheel doors. Drop your blade cutting depth down to cover the blade and plug your machine in. Test your setup by turning the machine on, prior to cutting.

ASSEMBLY

H. ADJUSTING THE TENSION OF BLADE

1. Blade tension is set by a spring loaded tension mechanism on the upper wheel. Check the level of the tension device before any cutting operation and ensure your quick release lever **(Fig. H1 A)** is in the fully engaged position. The tension for various blade widths is indicated through the front window of the upper wheel cover. This should be used as a guide only, as correct blade tension will vary according to blade material, age and use of the machine and spring tension mechanism. A good rule-of-thumb is; with your blade guide systems set loose and away from the blade, you should only get approximately 6mm of deflection from vertical, when reasonable pressure is applied to the side of the blade with your finger. Any "blurry vibrations" in the blade while running, can often be relieved by blade tension adjustment. Correct blade tension is a learning curve of owning a bandsaw which will become easier with time, but is critical to cutting performance.

2. To adjust, turn the blade tension hand wheel **Fig. H1 B**, watching the saw tension guide **Fig. H2 C** as your first point of reference, for correct tension, indicated through the window of the upper wheel cover, or with the top wheel door open.

Fig. H1

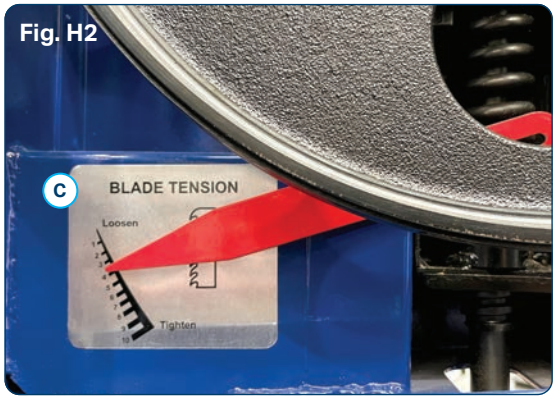


Fig. H2

I. ADJUSTING UPPER BLADE GUIDE ASSEMBLY

1. The side bearing guides should be set as close as possible to the blade, without touching it. An often quoted rule-of-thumb is the thickness of a piece of paper. However in metric terms, up to within approx. 0.5mm of the blade is the aim. This will provide the best support for keeping the blade straight, while not unduly pinching or impeding the blade operation, nor causing excessive heat build up. It is also important to ensure these bearings are set back from the front of the blade where the teeth are **Fig. I2**. The teeth have a "set" to them, meaning they are alternately splayed to provide a cutting kerf wider than the blade backing material, for clearance. If the bearings are set too close to the front, the teeth may contact the bearings, potentially causing damage to the bearing and the blade itself. Aim to set these bearings back from the teeth so they are in line with the flat face of the blade.

2. The thrust bearing is that found behind the blade and plays a critical role in ensuring the blade is not pushed backward during operation. In this model it features a slotted bearing. The inner face of the groove should be set as per the side bearings, just behind the blade by the same margin, though as it is recessed, this means the sides of the groove will be slightly covering the back of the blade. **Fig. I3**

3. Use the same settings for both the upper and lower blade guide systems. **Fig. I4**


Fig. I1

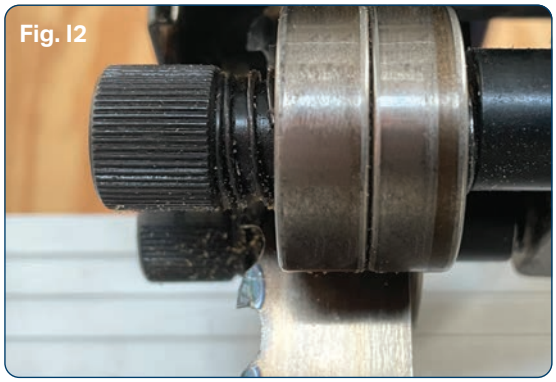


Fig. I2


Fig. I3

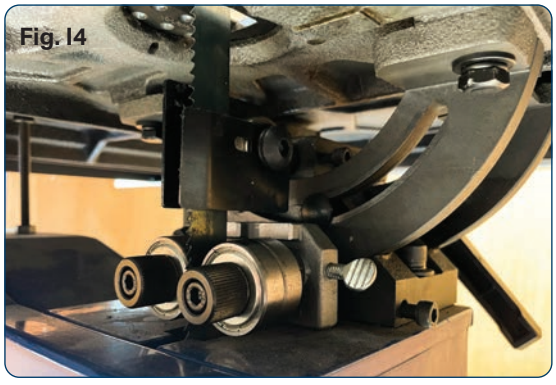


Fig. I4

ASSEMBLY

J. DUST COLLECTION

1. Dust collection is an important factor on any woodworking machine for personal safety and longevity of the machine. Failure to use adequate dust extraction may cause adverse health effects and void your machine warranty.

2. This bandsaw features two dust ports; one just below the table where the dust is created by the cut, with a second at the rear bottom to reduce build-up in the bottom door cavity. The upper dust chute is shrouded inside the machine, to guide as much dust as possible into the first port. Two small pieces of 4" flexible hose can be joined with a 4" Y-Junction, to feed a single line to your dust extractor. We recommend a minimum 500CFM dust extractor be used, preferably higher. **Fig. J**.


Fig. J

Fig. K

K. SETTING THE CUTTING HEIGHT

1. For safety and best performance, the upper blade guide should always be set as close as practical to the piece being cut. The blade guide height on this machine is rack-and-pinion operated. To adjust, loosen the hand wheel lock knob (**Fig. K** (A)) on the back of the machine. Then use the handwheel (**Fig. K2** (B)) to set the blade guide to the required height. Once set, remember to lock the height with the back knob once more.

Fig. K2

L. SAFETY DEVICES

1. This machine is fitted with a micro limit switch (see **Fig. L1**), inside the machine body upper and door. The bottom door cannot be opened without opening the top door first. This combination prevents the machine from being started with the door open, or stops the machine if the door is opened while it is operational.

2. This machine also features an emergency stop (see **Fig. L2**). This can help you stop the machine quickly and easily in the instance of an accident or dangerous situation. The Emergency Stop needs to be turned/twisted in a clockwise direction to release, if used, before the machine will operate once more.

Fig. L1

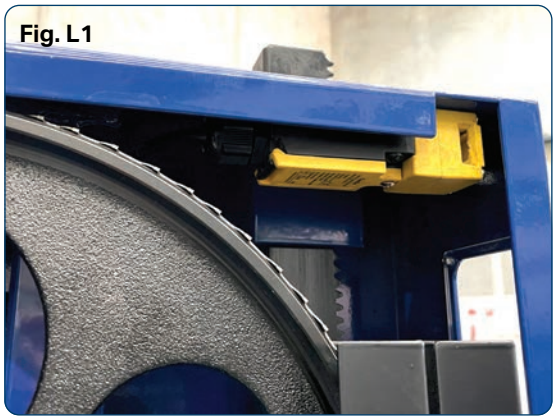


Fig. L2

REMINDER: Once completing assembly, please test run the machine to ensure it is properly connected to power and safety components are functioning correctly.
If you find an unusual problem during the test run, please stop the machine immediately.
Disconnect the machine from power and fix the problem before operating the machine again.

ASSEMBLY

N. TABLE PARALLEL ADJUSTMENT

1. Bandsaws require a split table to insert the blade. Cutting a slot in a cast iron table can allow each side of the table to move very slightly, according to environmental conditions. For this reason, various methods are employed to pull the table into alignment, such as a tapered hole and pin, to this model featuring a kip handle bolt. **Fig. N1**

2. Place a quality straight edge across the table front to back. **Fig. N2** Adjust the position of the table pin (the depth of the pin) to adjust the parallel height of each side. Check this using a feeler gauge - light is too thin! Tolerance for the table parallel is within 0.4mm.

3. When adjusting the table, the table edge can be higher than the middle position - about 0.4mm is acceptable. However, the edge should not be lower than the middle of the table. Inserting the table pin deeper will make the middle part of the table lower.

4. Check the table front to back and corner to corner to finish the table parallel adjustment. **Fig. N3**


Fig. N1


Fig. N2


Fig. N3

O. TABLE TILT 90˚ STOP

1. This model features a user set 90˚ stop, to allow quick resetting to the most common angle after using the tilt function. Using a quality square on your table against the blade (A), wind the stop bolt (B) until it touches the underside of the table and lock in position. **Fig. N4**

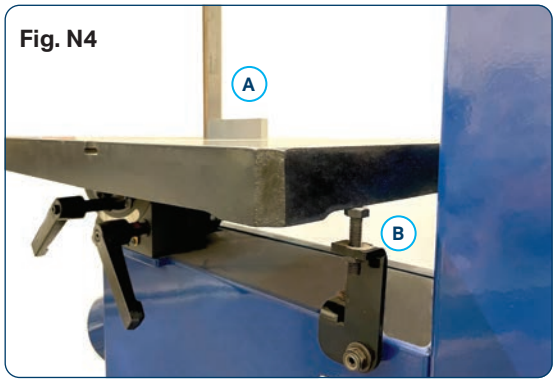


Fig. N4

O. MACHINE TESTING

Once assembly is complete, test run the machine to ensure it is properly connected to power and that its safety components are functioning correctly. If you find an unusual problem during the test run, immediately stop the machine, disconnect it from power, and fix the problem BEFORE operating the machine again.

DANGER

DO NOT start machine until all preceding setup instructions have been performed.
Operating an improperly set up machine may result in malfunction or unexpected results that can lead to serious injury, death, or machine/property damage.

1. Clear all setup tools away from machine.
2. Lock any swivel casters on base if required.
3. Connect dust collector to the machine.

OPERATION

P. OPERATION

The purpose of this overview is to provide the novice machine operator with a basic understanding of how the machine is used during operation.

CAUTION

If you are not experienced with this type of machine, we strongly recommend that you seek additional training outside of this manual. Read books, magazines or get formal training before beginning any projects.

Q. SETTING THE CUTTING HEIGHT

1. The upper blade guide should always be set as close as practical against the work, without touching - about 6mm. To adjust, loosen the knob at the rear of the upper wheel housing directly behind the large handwheel **Fig. Q** (A) Use this wheel to raise or lower the blade guide to the required height. Tighten locking knob after setting.

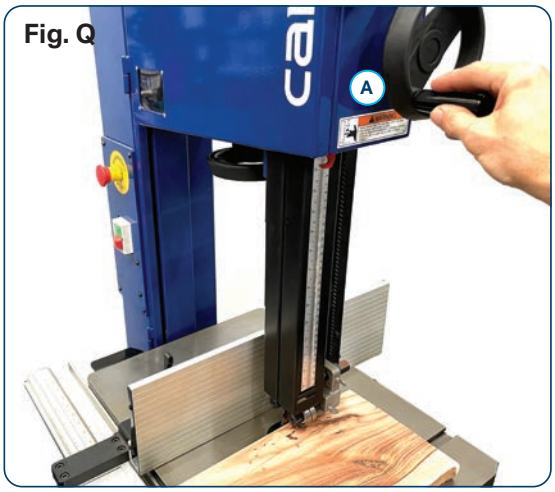


Fig. Q

R. SAW TABLE TILT

1. For bevel cuts the saw table tilts steplessly through 45°. To tilt, loosen the left kip lever on the table trunnions **Fig. R** (A), then use the kip lever on the right to wind the setting desired **Fig. R** (B) - this table features a rack and pinion gear tilt. Once set tighten the lock lever again.

2. It is recommended to verify the correct angle setting by making trial cuts in scrap wood before your project.

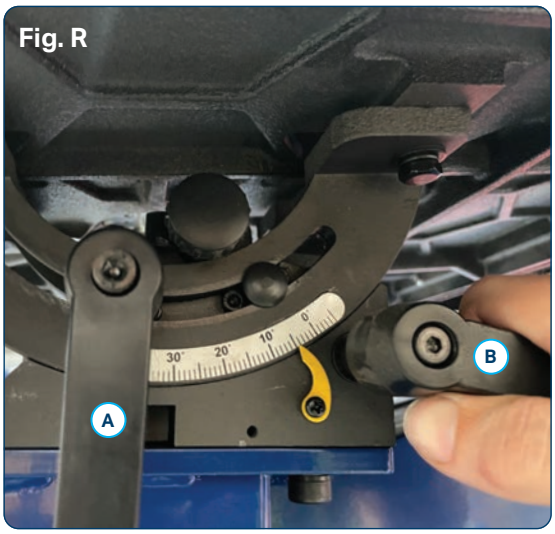


Fig. R

CAUTION

Ensure you are wearing AS/NZS approved PPE (dust mask or respirator, eye protection and hearing protection). Remember to avoid placing your hands anywhere near the cutting area, and make sure you have push sticks, push blocks in close proximity.

S. RIP CUTTING

Basic rip cutting operations are undertaken utilising the ripping fence. Set the distance between the blade and the fence (the ripping width).

1. Set the desired width by aligning fence to the markings on the included ripping guide (near the front of the fence), or by measuring between fence and blade, then lock the fence in position.
   Fig. S1

2. Set and lock the blade guide to a height approximately 6mm above your workpiece and adjust both the blade tension bearing guides (upper and lower) as shown in the setup instructions.
   Fig. S2

3. Start the machine, waiting until it is running at full speed, before presenting the timber to the blade.

4. Hold the timber positively against the fence, while then pushing the timber slowly forward into and through the blade. If the machine slows or labours under the load, slow your feeding speed to allow the machine to keep its blade speed as high as possible.
   Fig S3


Fig. S1


Fig. S2


Fig. S3

OPERATION

1. Continue feeding until your board is cut through. Controlling your cuts utilising feather boards will free up your hands, allowing you to safety reach around the rear to control the board exiting the blade.

2. Rip cutting can also be done with the table tilted to the required angle (as shown in setup and adjustments). Ensure you follow these same principles for bandsaw setup and use.
Fig. S4


Fig. S4

3. Turn the bandsaw off immediately after completing your cut, and wait for the blade to come to a complete stop before making adjustments or reaching anywhere near the blade.

T. RESAW CUTTING

1. Resaw work is a common job undertaken on a bandsaw. Set up for this work is as per rip cutting.

2. Adjust the blade guard to the required depth for the piece at hand, then set the rip fence to the desired cut width.

3. Feed the piece into the operational blade slowly using push sticks, blocks and featherboards as required.
Fig. T


Fig. T

U. CURVE OR FREE HAND CUTTING

Curve cutting is usually done with the fence removed from the machine, or locked out of the way. Ensure you have enough room to perform all your cuts before starting. Remember to avoid placing your hands anywhere near the cutting area, and make sure you have push sticks/push blocks in close proximity.

Curve cutting is usually performed with a predefined pattern or shape drawn onto your workpiece. A good practice is to clearly identify your waste material, from your good work, to avoid incorrectly placed cuts.

Depending on the radius of your curves, you may need to plan and perform several clearance cuts around and through your waste material. This will allow you to remove small sections so you may gain access to tighter areas. Selecting the right blade is also critical.

1. Set and lock the blade guide to a height approximately 6mm above your workpiece and adjust both the blade tension bearing guides (upper and lower) as shown in the setup instructions.

2. Start the machine, waiting until it is running at full speed, before presenting the timber to the blade.

3. Slowly advance the timber to the required line to begin cutting, slowly turning the timber to follow your pattern.

4. With smaller radius cuts, slow the feed speed down, and rotate the timber, watching and listening for excessive blade twist and burning. Retract or reverse the rotation and slowly nibble away at tight radius and complex corners.

5. If you find yourself in a difficult cut where you cannot continue, don't force the work through but switch off your saw, wait for it to stop and manually remove or reverse the board from the cut.

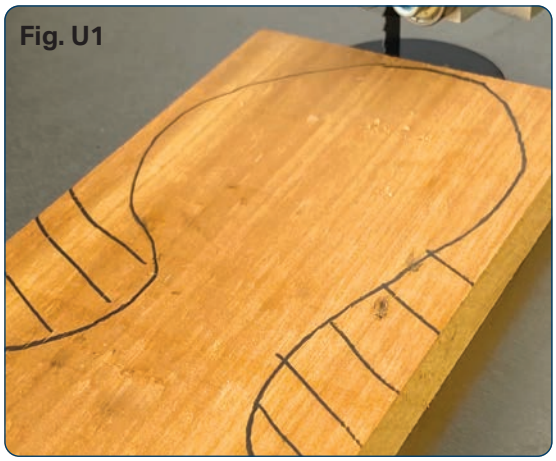


Fig. U1

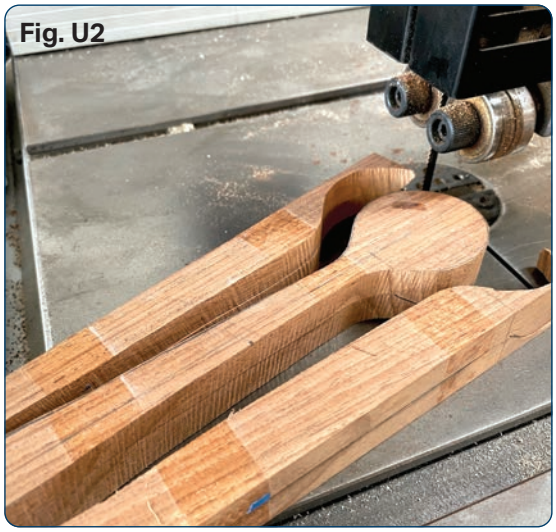


Fig. U2

OPERATION

6. Turn the bandsaw off immediately after completing your cut, and wait for the blade to come to a complete stop before making adjustments or reaching anywhere near the blade.

7. Complex curve cutting can also be done with the table tilted to the required angle (as shown in setup and adjustments), while gentle curves on deeper material can also be cut with wider blades.

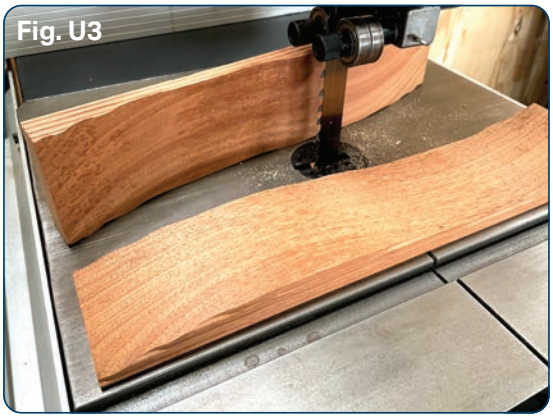


Fig. U3

V. MITER CUTS

1. Miter cutting can be undertaken utilising the included miter gauge, set to the desired angle. Simply place the timber against the mitre guage in it's track and slide through. Always check your angles on test pieces before you start a project. **Fig. V**


Fig. V

W. REPLACEMENT BLADES

Blade length on this machine is **3080mm**. A wide variety of blades to suit this machine are available from Carbatec - check them out online. The machine accepts blades from 3.2mm to 19mm (⅛" to ¾") wide. For best results it is important to understand how to select the right blade.

The amount of Teeth Per Inch (TPI) relates directly with the thickness of timber it is capable of cutting, and the finished surface. The fewer the amount of teeth, the more sanding will be needed to clean up the surface yet will cut quite quickly, and the more the teeth the cleaner the cut will be, yet will cut more slowly. Thicker timber is going to require a blade with less teeth to effectively clear waste and cut efficiently.

The width of the blade, which is measured from the back of the blade to the tip of the teeth, will determine the radius the blade is capable of cutting, the smaller the blade means the tighter the radius possible. Likewise, the larger the size, the more it is designed for ripping in straight lines and less capable of cutting arcs and curves, to the point where only straight cutting will be done.

For example, a 3mm x 14TPI blade will do very tight curves, in material up to approximately 12mm in thickness. It will leave a good edge, though will cut slowly.

MAINTENANCE

X. MAINTENANCE SCHEDULE

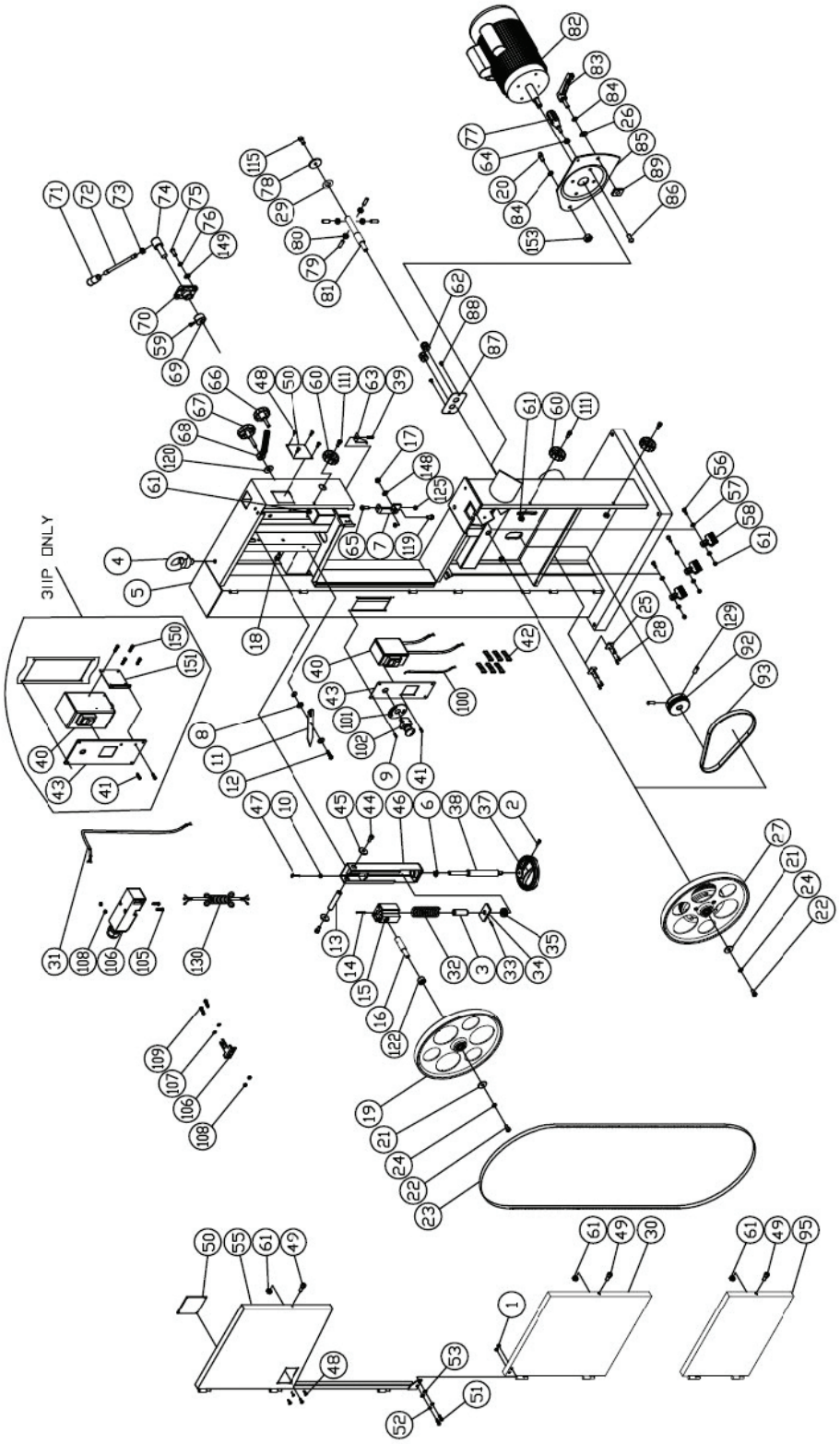
Maintenance of all woodworking machinery is important to keep them operating at their best, ensuring a long machine life, accurate machining and helping to prevent unexpected (or potentially dangerous) breakdowns.

Start by turning the machine off, removing from the power source to prevent accidental restarting.

- If you have an air compressor, carefully blow any sawdust and other debris away from the band saw. Ensure you are wearing AS/NZS approved PPE (dust mask or respirator, eye protection and hearing protection).
- Remove rust from the cast iron table areas using a liquid rust remover, or other cleaning product (avoid silicone based products that may cause issues with wood finishes later on). Take a clean cloth to wipe any cleaning residue, dirt or dust off the table. When it's dry, apply a surface protectant. Carbatec offer many products for machine cleaning and care.
- Check the cutting edges of the blades and replace if dull. Thoroughly clean the blades with either steel wool or a firm bristle brush if they are rusty or pitch covered, using a rust or pitch remover if required. Depending on the machine, it may be easier to remove the blade/s to do this. Clean any areas that hold or contact the blade (blade guides, tyres, blade seats, bearings and arbor etc). Replace worn components immediately.
- Check drive systems and drive belts or chains for wear or adjustment. Replace worn or cracked belts. If your machine has multiple belts, remember to change them all at the same time.
- Check all manual or automatic guards, doors, switches and machine interlocks for correct and safe operation. Replace as required.
- Check machine stability and ensure all bolts are tight.
- Ensure all guarding is in place and functional. Ensure all guides are properly set.

⚠ WARNING Dust exposure created while using machinery may cause cancer, birth defects, or long-term respiratory damage. Always wear goggles and a AS/NZS 1716:2012 compliant approved respirator when working with the bandsaw.

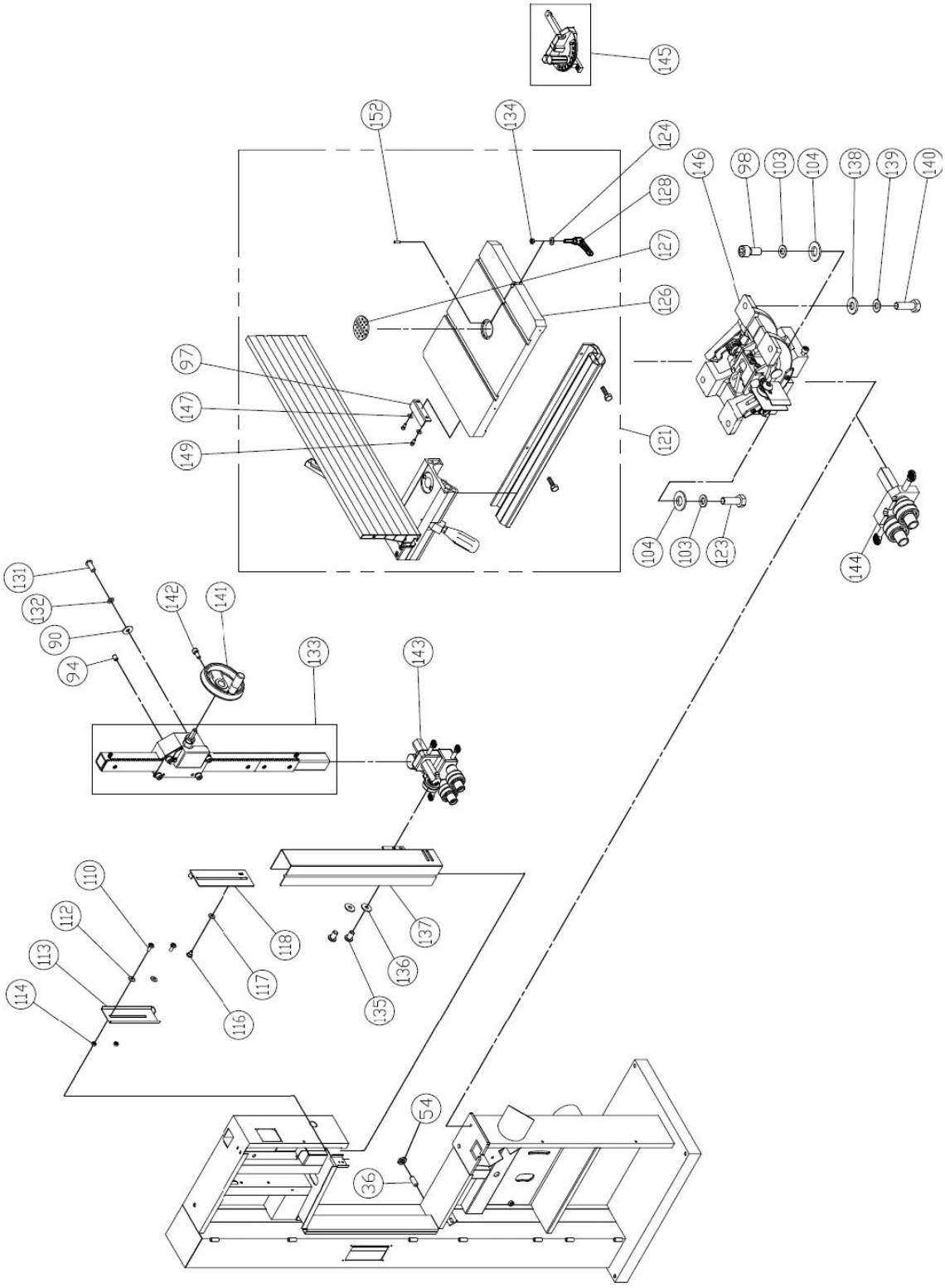
PARTS DIAGRAM



14" (345MM) HEAVY DUTY 3HP BANDSAW
BS-X3453C

ITEM	PART NO.	PARTS NAME	SIZE	Q'TY	NOTE
1	NF050800	NUT	M5	2	
2	SR060400	HEX SOCKET BOLT	M6x20	1	
3	135067	BUSHING		1	
4	995101	RING	M10	1	
5	130470	MACHINE BODY		1	2HP
	130475	MACHINE BODY		1	3HP
6	RE150000	RETAINING RING(E)	E15	1	
7	135529	TABEL SUPPORT PLATE		1	
8	WF061310	FLAT WASHER	M6xφ13	3	
9	SF059200	PAN HEAD BOLT W/FLANGE	M5x8	4	
10	NH061000	NUT	M6	1	
11	130378	POINTER		1	
12	135073	STEP SCREW	M4x5	1	
13	135012	UPPER SHAFT		1	
14	PS053600	SPRING PIN	φ5x36	1	
15	135017	UPPER WHEEL SHAFT HINGE		1	
16	130458	UPPER WHEEL SHAFT		1	
17	NL081300	NYLON NUT	M8	1	
18	SR069300	HEX SOCKET BOLT	M6x12	1	
19	AB130466	UPPER WHEEL ASM	φ14"	1	
20	SR100700	HEX HEAD BOLT	M10x35	1	
21	WF082320	FLAT WASHER	M8xφ23	2	
22	SR089400	HEX SOCKET BOLT	M8x16	2	
23	130479	SAW BLADE	3/8"x3079mmx0.65mm	1	
24	WS080000	SPRING WASHER	M8	2	
25	170736	SAW HOOK		2	
26	WF102030	FLAT WASHER	M10xφ20	1	
27	AB130463	LOWER WHEEL ASM	φ14"	1	
28	SP049200	PAN HEAD BOLT	M4x8	4	
29	130462	PLATE		1	
30	130472	LOWER COVER		1	
31	IC130363	SWITCH CORD	0.75x2Cx1.3M	1	
32	135032	SPRING		1	
33	PS031600	PIN	φ3x16	1	
34	135042	LOCATE BLOCK		1	
35	994301	BEARING	51201	1	
36	SS080600	SET SCREW	M8x30	1	
37	135002	HANDLE WHEEL		1	
38	130476	ADJUSTING BOLT		1	
39	SF059200	PAN HEAD BOLT W/FLANGE	M5x8	1	
40	136017B	BRAKE SWITCH	12A	1	2HP
	136017C	BRAKE SWITCH	16A	1	3HP

PARTS DIAGRAM

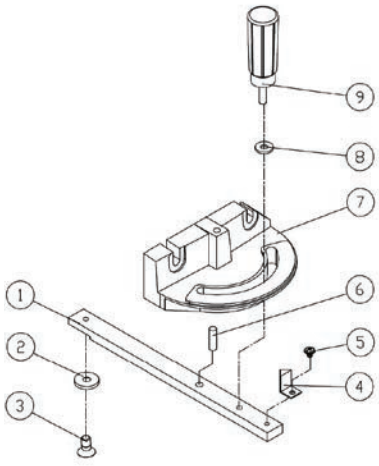


ITEM	PART NO.	PARTS NAME	SIZE	Q`TY	NOTE
41	ST039304	TAPPING SCREW	M3.5x12(AB)	2	2HP
	SF059300	PAN HEAD BOLT W/FLANGE	M5x12	2	3HP
42	136019	WIRE CONECTOR	224-201	6	
43	130480	SWITCH PLATE		1	2HP
	130481	SWITCH PLATE		1	3HP
44	SR089400	HEX SOCKET BOLT	M8x16	2	
45	WF083030	FLAT WASHER	M8xφ30	2	
46	135016	UPPER WHEEL SLDING BRACKET		1	
47	SR061000	HEX SOCKET BOLT	M6x50	1	
48	BR000044	RIVET	φ3.2x10	8	
49	SR060200	HEX SOCKET BOLT	M6x10	3	
50	135004	LIMPID PIECE		2	
51	SJ059400	HEX SOCKET BOTTOM HEAR SCREW	M6x10	2	
52	WS050000	SPRING WASHER	M5	2	
53	WF051210	FLAT WASHER	M5xψ12	2	
54	NL081300	NYLON NUT	M8	1	
55	130471	UPPER WHEEL COVER		1	
56	SH060500	HEX HEAD BOLT	M6x25	3	
57	WF061310	FLAT WASHER	M6xφ13	6	
58	135051	BRUSH		3	
59	SR060500	HEX SOCKET BOLT	M6x25	1	
60	135041	KNOB		3	
61	NL061000	NYLON NUT	M6	9	
62	136013	STRAIN RELIEF	PG13.5	2	
63	135567	HEIGHT POINTER		1	
64	NH081300	NUT	M8	1	
65	SH080700	HEX HEAD LOLT	M8x35	1	
66	135022	KNOB SCREW	M10x20	1	
67	135020	KNOB SCREW	M10x53	1	
68	135028	LOCATE HANDLE	M10	1	
69	135030	CAM		1	
70	135038	LOCATE BLOCK		1	
71	620021	KNOB		1	
72	620020	LEVER ROD		1	
73	NH121900	NUT	M12	1	
74	135036	SHAFT		1	
75	SJ080400	HEX SOCKET BOTTOM HEAD SCREW	M8x20	4	
76	WS080000	SPRING WASHER	M8	4	
77	198013	HANDLE	M8	1	
78	130377	PLATE		1	
79	SS080400	SET SCREW	M8x20	4	
80	NH081300	NUT	M8	4	

PARTS DIAGRAM

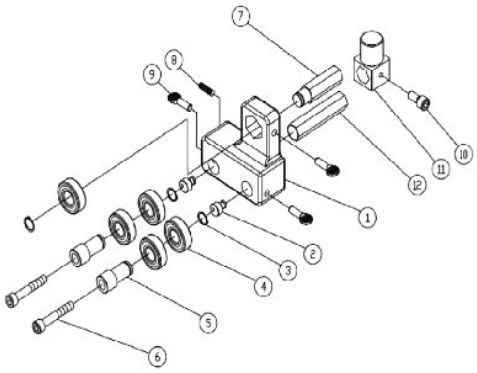
ITEM	PART NO.	PARTS NAME	SIZE	Q'TY	NOTE
81	130460	LOWER WHEEL SHAFT		1	
82	MH130470	MOTOR	1.5KW/230V/50Hz/1PH	1	
	MH130471	MOTOR	2.25KW/230V/50Hz/1PH	1	
83	200426	HANDLE		1	
84	WS100000	SPRING WASHER	M10	2	
85	135112	MOTOR FIXED PLATE		1	
86	SJ080400	HEX SOCKET BOTTOM HEAD SCREW	M8x20	4	
87	135081	PLATE		1	
88	ST049210	TAPPING SCREW	M4x8(B)	2	
89	135065	LOCATE BLOCK		1	
90	WF081818	FLAT WASHER	M8xφ18	4	
92	130355	MOTOR PULLEY		1	
93	LJ029090	MULTI-GROOVE BELT	290J9	1	
94	SS089100	SET SCREW	M8x8	4	
95	130453	TOOL BOX COVER		1	
97	130474	EXTEND PLATE		1	
98	SR100700	HEX SOCKET BOLT	M10x35	1	
100	IC130471	EMERGENCY SWITCH CORD	0.75x2Cx1M	1	
101	LM002004	EMERGENCY SWITCH LABELING		1	
102	994817A	EMERGENCY SWITCH		1	
103	WS100000	SPRING WASHER	M10	2	
104	WF102320	FLAT WASHER	M10xφ23	2	
105	SP040610	PAN HEAD BOLT	M4x30(大扁頭)	2	
106	130266	DOOR LATCH SWITCH(ASM)	AZD-S11	1	
107	WF040808	FLAT WASHER	M4xψ8	2	
108	NF040700	HEX NUT W/FLANGE	M4	4	
109	SP040200	PAN HEAD SCREW	M4x10	2	
110	SF050200	PAN HEAD BOLT W/FLANGE	M5x10	2	
111	SR060400	HEX SOCKET BOLT	M6x20	3	
112	135054	PLASTIC WASHER	ψ6xψ13 T=1.5	2	
113	130478	PROTECT COVER		1	
114	NL050800	NYLON LOCK HEX NUT	M5	2	
115	SR089400	HEX SOCKET BOLT	M8x16	1	
116	135073	STEP SCREW		1	
117	135054	PLASTIC WASHER	ψ6xψ13 T=1.5	1	
118	130477	SLIDING PLATE		1	
119	SH089400	HEX HEAD BOLT	M8x16	1	
120	WF102320	FLAT WASHER	M10xψ23	1	
121	QF130455	FENCE SET (ASM)		1	
122	130467	BUSHING		1	
123	SH100700	HEX HEAD BOLT	M10x35	1	
124	WF082030	FLAT WASHER	M8xψ20	1	
125	NH081304	HEX NUT	M8	2	

ITEM	PART NO.	PARTS NAME	SIZE	Q'TY	NOTE
126	130456	TABLE	21-3/4"x16"	1	
127	135010	TABLE INSERT		1	
128	135517	QUICK RELEASE HANDLE		1	
129	SS069300	SET SCREW	M6x12	2	
130	IC130470	POWER CORD	1.0x3Cx3.1M(SAA)	1	2HP
	IC130472	POWER CORD	1.5x3Cx2.2M(SAA)	1	3HP
131	SJ080400	HEX SOCKET BOTTOM HEAD SCREW	M8x20	4	
132	WS080000	SPRING WASHER	M8	4	
133	AB135530	GUIDE BRACKET(ASM)		1	
134	NH081300	NUT	M8	1	
135	SR059300	HEX HEAD BOLT	M5x12	2	
136	WF051320	FLAT WASHER	M5xψ12	2	
137	130473	BLADE GUARD COVER		1	
138	WF081820	FLAT WASHER	M8xφ18	4	
139	WS080000	SPRING WASHER	M8	4	
140	SH080500	HEX HEAD BOLT	M8x25	4	
141	135006	HANDLE WHEEL		1	
142	SR060400	HEX SOCKET BOLT	M6x20	1	
143	AB135092B	SAW BLADE ADJUSTMENT(ASM)		1SET	
144	AB135095C	SAW BLADE ADJUSTMENT(ASM)		1SET	
145	AB198101	MITER GAUGE ASS'Y		1SET	
146	AB135250	TRUNNION SUPPORT BRACKET(SET)		1SET	
147	WF061620	FLAT WASHER	M6xψ16	2	
148	WF081820	FLAT WASHER	M8xψ18	5	
149	SR069300	HEX SOCKET BOLT	M6x12	2	
150	ST039304	TAPPING SCREW	M3.5x12(AB)	4	3HP
151	136623	SWITCH LOCATE PLATE		1	3HP
152	SS050100	SET SCREW	M5x5	3	
153	NL101700	NYLON LOCK HEX NUT	M10	1	

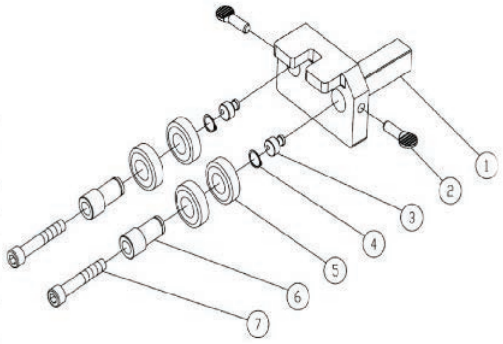


Item	Part NO	Description	Size	Q'ty
09	198105	HANDLE		1
08	198104	NYLON WASHER		1
07	198106	MITER GAUGE BODY		1
06	198107	STEEL PIN	ø6.5x10	1
05	SF059200	PAN HEAD BOLT W/FLANGE	M5x8	1
04	198103	POINTER		1
03	SN069200	COUNTER SUNK BOLT	M6x6	1
02	198102	GUIDE PIECE		1
01	198101	GUIDE BAR		1

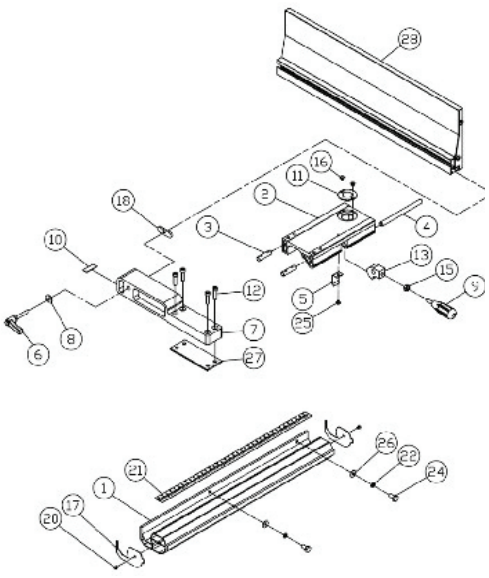
PARTS DIAGRAM



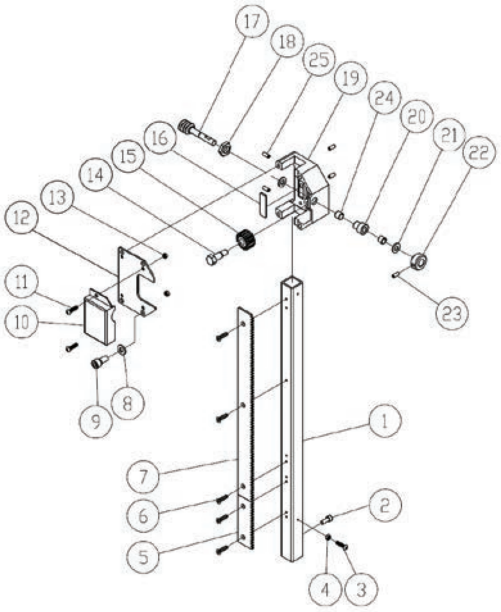
Item	Part NO	Description	Size	Q'ty
1	135091	UPPER BLADE GUIDE SUPPORT		1
2	135124	BIAS SHAFT		2
3	RS150000	RING	S15	3
4	BB620202A	BALL BEARING	6202ZZ	5
5	136445	HANDLE BUSHING		2
6	SR060703	HEX SOCKET BOLT	M6x35	2
7	135060	UPPER SPACING SLEEVE		1
8	SS060200	SET BOLT	M6x10	1
9	150013	THUMB SCREW	M6x16	3
10	SR069300	HEX SOCKET BOLT	M6x12	1
11	135057	UPPER GUIDE SUUPORT BLOCK		1
12	135053	ADJUST BAR		1



Item	Part NO	Description	Size	Q'ty
1	135125	LOWER BLADE GUIDE SUPPORT		1
2	150013	THUMB SCREW	M6x16	2
3	135124	BIAS SHAFT		2
4	RS150000	RETAINING RING	S15	2
5	BB620202A	BALL BEARING	6202ZZ	4
6	136445	HANDLE BUSHING		2
7	SR060700	HEX SOCKET BOLT	M6x35	2

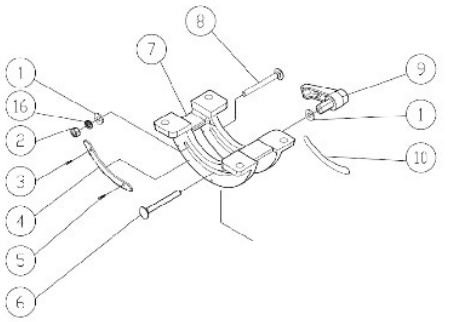


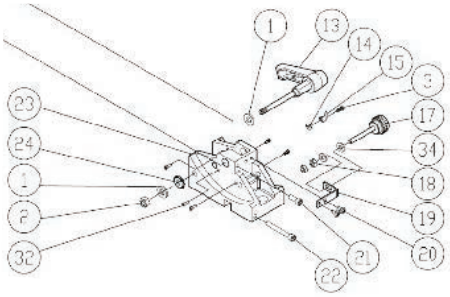
28	AC198071	FENCE(AL)	305	1
27	198003	BRACKET	T=3	1
26	WF06L300	FLAT WASHER	M6x13	2
25	SF049200	PAN HEAD BOLR W/FLANGE	M4x8	1
24	SH06C400	HEX HEAD BOLT	M6x20	2
22	WS060000	SPRING WASHER	M6	2
21	LA001336	SCALE		1
20	ST039300	TAPPING SCREW	M3.5x12	2
18	200527	MOVING PLATE		1
17	198014	GUARD PIECE		2
16	SF049100	PAN HEAD BOLR W/FLANGE	M4x6	2
15	NH08L300	NUT	M8	1
13	198004	FIXED LUMP		1
12	SR06C500	HEX SOCKET BOLT	M6x25	4
11	198007	CONVEX		1
10	136470-1	NYLON PIECE		1
09	198013	HANDLE		1
08	WF082300	FLAT WASHER	M8x23	1
07	130455	SUPPORT TUBE		1
06	130465	LOCK KNOB	M8x50	1
05	198006	SPRING WASHER		1
04	198005	SHAFT		1
03	198003	FIXED SHAFT		2
02	198002	ADJUST BASE		1
01	198018	FIXED BASE	640	1
Item	Part NO	Description	Size	Q'ty

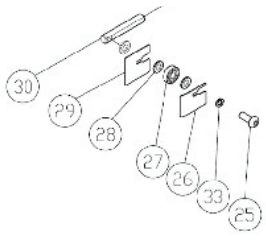


ITEM	PART NO	PARTS NAME	SIZE	Q'TY
1	135530	UPPER GUIDE TUBE		1
2	SR060200	HEX SOCKET BOLT	M6x10	2
3	SP040200	PAN HEAD BOLT	M4x10	1
4	NH040700	NUT	M4	1
5	136465	EXTEND GEAR		1
6	SN049200	COUNTER SUNK BOLT	M4x8	5
7	136466	RACK		1
8	WS080000	SPRING WASHER	M8	4
9	SR089400	HEX SOCKET BOLT	M8x16	4
10	136469	COVER		1
11	SF050200	PAN HEAD BOLT W/FLANGE	M5x10	2
12	135046	COVER		1
13	NH050800	NUT	M5	2
14	016320	FIXED SCREW		1
15	136484	GEAR		1
16	135062	FIXED PLATE		1
17	135033	WORM CYLINDER		1
18	136473	NUT		1
19	135050	GUIDE BRACKET		1
20	136453	BUSHING		1
21	200069	FIBER WASHER		2
22	135015	FIXED BUSHING		1
23	SS050100	SET SCREW	M5x5	2
24	BD101201	BUSHING BRARING	DU 10x12	2
25	990306	NYLON SET SCREW	M7x10	4

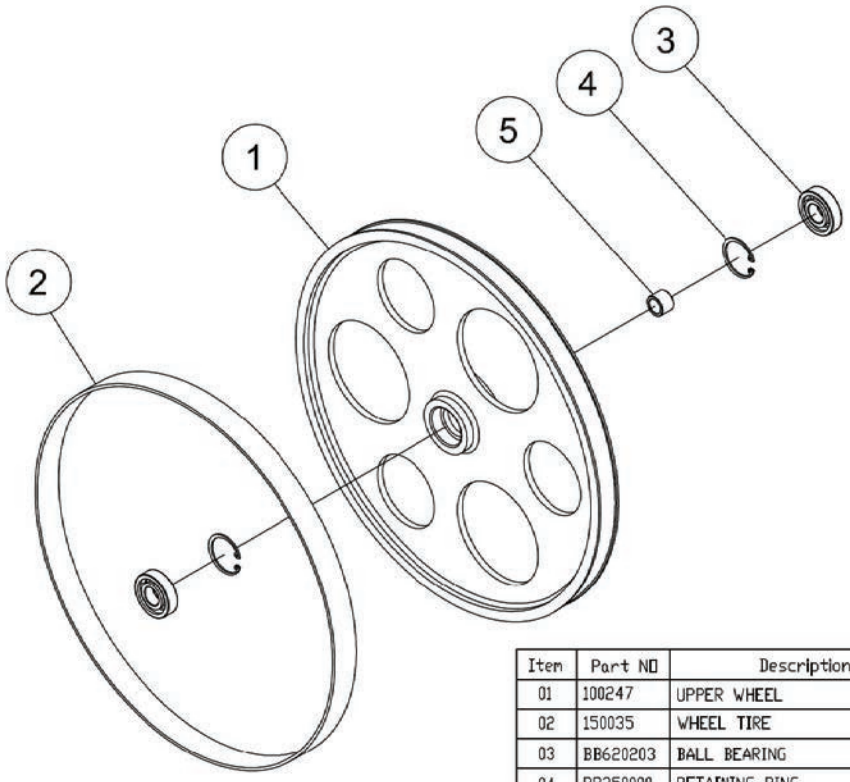
ITEM	PART NO	PARTS NAME	SIZE	Q'TY
1	WF081820	FLAT WASHER	M8xφ18	4
2	NL081300	NYLON NUT	M8	2
3	SP049100	PAN HEAD BOLT	M4x6	2
4	135052	GEAR PLATE		1
5	SN049100	COUNTER SUNK BOLT	M4x6	1
6	SC081700	CARRPIAGE BOLT	M8x85	1
7	135251	TRUNNION BLOCK		1
8	SC081600	CARRIAGE BOLT	M8x80	1
9	135044	HANDLE		1
10	LM001182	ANGLE LABEL		1
13	135069	DISAFFILIATE RAPIDLY		1
14	WF040808	FLAT WASHER	M4xφ8	1
15	135078	POINTER		1
16	WS080000	SPRING WASHER	M8	1
17	135254	ADJUST BOLT	M6	1
18	NH061000	NUT	M6	2
19	135253	ADJUST PLATE		1
20	SP059200	PAN HEAD BOLT W/FLANGE	M5x8	2
21	SR069400	HEX SOCKET BOLT	M6x16	1
22	SR061000	HEX SOCKET BOLT	M6x50	1
23	135250	TRUNNION SUPPORT BRACKET		1
24	135061	SMALL GEAR		1
25	SJ100600	HEX SOCKET BOTTON HEAD SCREW	M10x30	1
26	135123	RIGHT COVER		1
27	BB600002	BALL BEARING	6000ZZ	1
28	WF102020	FLAT WASHER	M10xφ20	3
29	135122	LEFT COVER		1
30	135252	ADJUST BLOCK		1
32	SR059130	HEX SOCKET BOLT	M5x6	6
33	WS100000	SPRING WASHER	M10	1
34	WF061310	FLAT WASHER	M6xφ13	2



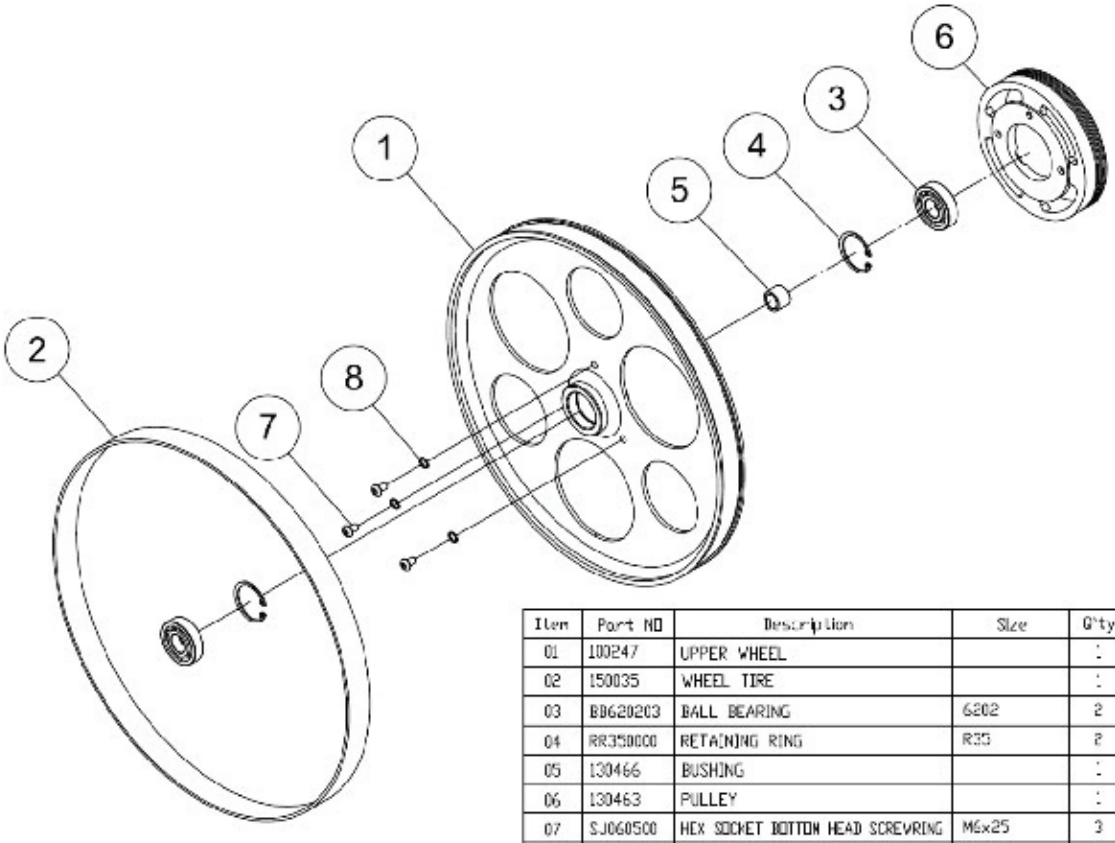




PARTS LIST



Item	Part NO	Description	Size	Q'ty
01	100247	UPPER WHEEL		1
02	150035	WHEEL TIRE		1
03	BB620203	BALL BEARING	6202	2
04	RR350000	RETAINING RING	R35	2
05	130466	BUSHING		1



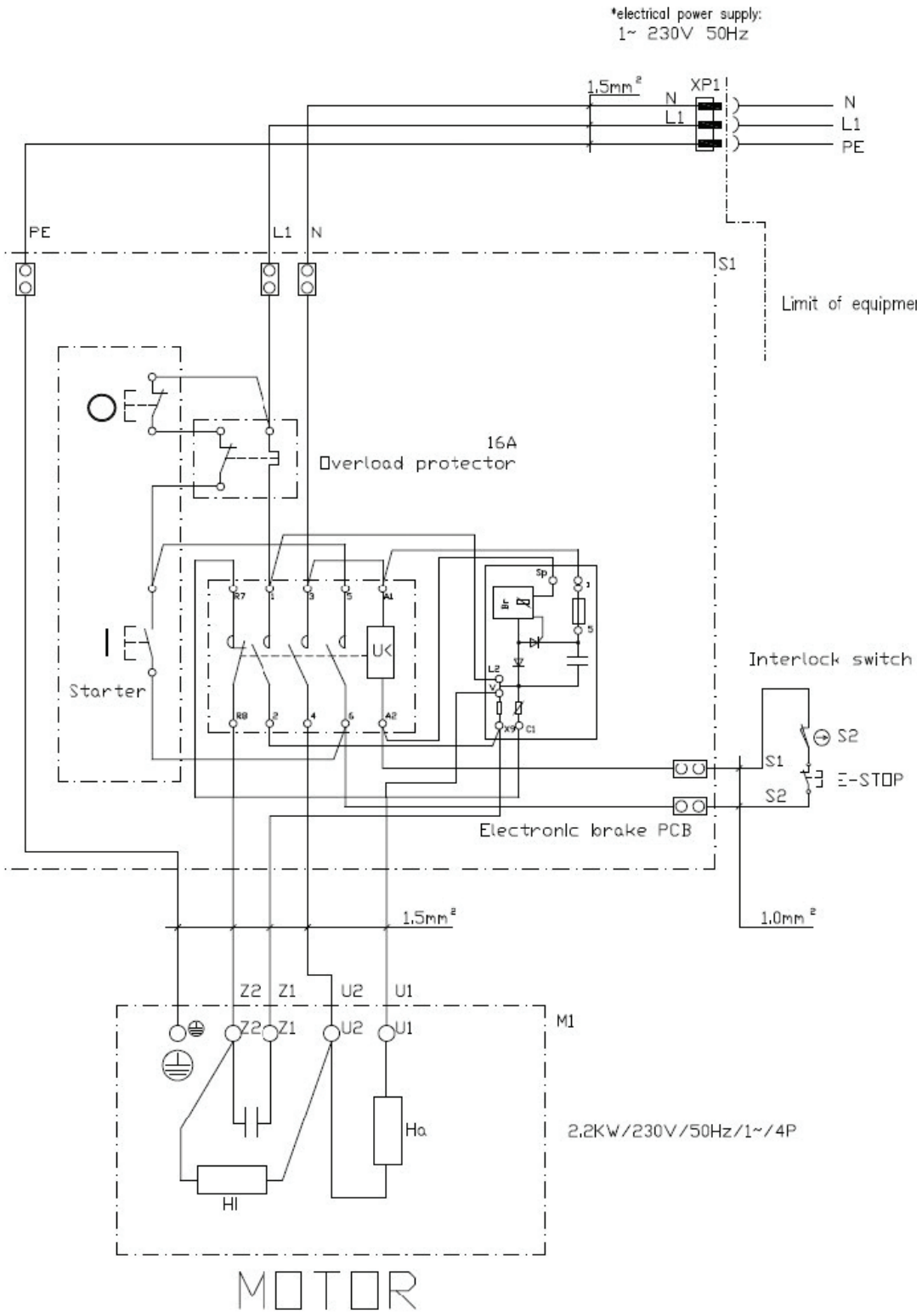
Item	Part NO	Description	Size	Q'ty
01	100247	UPPER WHEEL		1
02	150035	WHEEL TIRE		1
03	BB620203	BALL BEARING	6202	2
04	RR350000	RETAINING RING	R35	2
05	130466	BUSHING		1
06	130463	PULLEY		1
07	SJ060500	HEX SOCKET BOTTON HEAD SCREWRING	M6x25	3
08	WSD60000	SPRING WASHER	M6	3

TROUBLESHOOTING

TO PREVENT INJURY TO YOURSELF or damage to the bandsaw, turn the switch to the **"OFF"** position and unplug the power cord from the electrical receptacle before making any adjustments.

PROBLEM	LIKELY CAUSE(S)	SOLUTION(S)
The machine does not work when switched on.	1. No power supply.	Check the cable for breakage. Check the fuse.
	2. Defective switch.	Return the machine to your local dealer for repair.
The blade does not move with the motor running.	1. The blade tension has not been set.	Switch off the motor, properly adjust the tension according to the instructions.
	2. The blade has come off one of the wheels.	Open the hinged door and check.
	3. The saw blade has broken.	Replace the blade.
	4. The drive belt has snapped.	Replace the belt.
The blade does not cut in a straight line.	1. Fence for cutting not used.	Use a fence.
	2. Too fast feed rate.	Put light pressure on the workpiece. Make sure the blade does not bend.
	3. The blade teeth are dull or damaged.	Try a new blade.
	4. Blade guides not suitably adjusted.	Adjust the blade guides (see assembly instructions.)
The blade does not cut, or cuts very slowly.	1. The teeth are dull, caused by cutting hard material or long use.	Replace the blade.
	2. The blade was fitted the wrong way round, or inverted on uncoiling.	Check the direction of the teeth and fit the blade correctly.
Sawdust builds up inside the machine.	Proper dust extraction will minimise this, but dust accumulation over time is normal.	Clean the machine regularly. Open the hinged door and remove the sawdust with a vacuum cleaner/dust extractor.
Sawdust inside the motor housing.	Inadequate dust control in your general workshop environment and/or bandsaw.	Clean the ventilating slots of the motor with a vacuum cleaner. From time to time remove the sawdust to prevent it from being sucked into the housing.
The machine does not cut at 45° or 90° angles.	1. The table is not at right angles to the blade.	Adjust the table. using a quality square.
	2. The blade is dull, feed was too fast or it is the wrong blade for the job at hand.	Replace the blade or feed more slowly to put less pressure on the workpiece.
The blade cannot be properly positioned on the wheel/tyre.	1. The wheels are not in alignment. Defective bearing.	Return the machine to your local dealer for repair.
	2. The wheel alignment knob hasn't been properly adjusted.	Adjust the knob (see instructions.)
	3. Blade defect	Replace the blade.

WIRING DIAGRAM



3 YEAR WARRANTY

WARRANTY

A. We warrant that this Carbatec product will be free from defects caused by faulty workmanship or faulty materials for a period of 3 years from date of sale.

B. This warranty is in addition to other rights and remedies you may have under a law in relation to the goods.

C. This warranty does not apply in any of the following cases:

i. Defects arising from:

1. fair wear and tear;
2. corrosive atmosphere;
3. damage or injury caused by deliberate act, lack of care or failure to comply with the recommended care and maintenance for the goods;
4. improper use of the goods;
5. alterations or repairs (not made by us) to the goods;

ii. defects arising from an event outside of our control such as fire, flood, earthquake or other natural calamity, motor vehicle or other accident, strike, civil unrest, terrorism or war;

iii. to accessory items such as after-market jigs, accessories or other items which are not sold or serviced by us and which are not sold with or were not included with the main unit purchased; or

iv. to wearable parts such as drive belts/shafts, bearings, bandsaw tyres, motor brushes, blades or abrasive belts/discs or other cutting or machining implements.

v. damage caused to any electrical component, where connected to a power supply outside the country for which it was designed (namely Australia or New Zealand).

D. If this warranty applies and you have complied with the procedure below for making a claim, we will, at our election, either repair the goods (or those parts of the goods recognised as defective) or will provide a replacement within a reasonable time at our expense.

E. If this warranty applies, the procedure for making a claim is:

i. you must contact us by email;

ii. you must include in the email the following information:

1. a copy of the order or receipt for the goods;
2. the serial or batch number printed on the machinery manufacturing plate; and
3. a detailed description of the fault and how and when it arose; and
4. If the fault is a type covered by this warranty, we will then make arrangements with you for the return of the goods to us (for repair or replacement) at our cost using our transport providers or we may decide to attend at your premises to repair or replace the goods.

F. Our liability (and that of our resellers) under this warranty is wholly limited to repair or replacement of the goods (or those parts of the goods recognised as defective) in accordance with the procedure above and you have no right to other compensation, costs or damages under this warranty. But this does not mean that you may not have other rights under a law in relation to the goods.

G. If following our inspection of goods returned by you under this warranty it is found that this warranty does not apply and you are not otherwise entitled to repair or replacement by us, you must, if requested by us, reimburse our costs including parts, labour and freight.

H. This warranty is not transferable and only the person who purchased the goods may make a claim.

Where the goods have been exported outside Australia or New Zealand, the Company may not require the Purchaser to return any allegedly faulty or defective Product for evaluation. However, the Company has the right to request the return for evaluation at purchasers cost.

STATUTORY NOTICE

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

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carbatec®

3 YEAR WARRANTY