

HAFCO WOODMASTER



Edition : 1.0
Date: (03/26)

Instruction Manual

WOOD BAND SAW BP-355H

Order Code: (W4230)

MACHINE DETAILS

MACHINE.	WOOD BAND SAW
MODEL NO.	BP-355H
SERIAL NO.	
DATE OF MANF.	

IMPORTED BY

AUSTRALIA



www.machineryhouse.com.au

NEW ZEALAND



www.machineryhouse.co.nz

NOTE:

This manual is only for your reference. At the time of the compiling of this manual every effort to be exact with the instructions, specifications, drawings, and photographs of the machine was taken. Owing to the continuous improvement of the HAFCO WOODMASTER machine, changes may be made at any time without obligation or notice. Please ensure the local voltage is the same as listed on the specification plate before operating any electric machine.

SAFETY SYMBOLS:

The purpose of safety symbols is to attract your attention to possible hazardous conditions



Indicates a potentially hazardous situation causing injury or death



Indicates an alert against unsafe practices.

Note:

Used to alert the user to useful information

NOTE:

In order to see the type and model of the machine, please see the specification plate. Usually found on the back of the machine. See example (Fig.1)

Fig.1

HAFCO WOODMASTER	
PRODUCT SPECIFICATIONS	
Model: BP-355H	Voltage: 240V/50Hz
Capacity: 300mm	Motor: 2.3HP/1.7kW
Nett Weight: 130kg	FLC: 7.4A
MFG Date:	
Serial No:	<input type="text"/>
Imported by www.machineryhouse.com.au	Made in China www.machineryhouse.co.nz

CONTENTS:

1. GENERAL MACHINE INFORMATION	
1.1 Specifications	4
1.2 Packing List	4
1.3 Identification	5
2. SAFETY	
2.1 General Woodworking Machine Safety	6
2.2 Specific Safety For Dust Collectors	8
3. POWER SUPPLY	
3.1 Electrical Installation.....	9
3.2 Full Load Current	9
4. SETUP	
4.1 Unpacking	10
4.2 Clean Up.....	10
4.3 Site Preparation	10
4.4 Lifting Instructions	10
4.5 Assembly	11
4.6 Blade Tracking	14
4.7 Setting Upper and Lower Blade Guides.....	15
4.8 Aligning The Table To The Blade	16
4.9 Squaring The Table To The Blade.....	17
4.10 Mitre Fence.....	17
5. OPERATION	
5.1 Operational Overview	18
5.2 General Use / Operation.....	18
5.3 Removing The Blade	21
5.4 Blade Selection	23
6. MAINTENANCE	
6.1 Schedule.....	24
6.2 Troubleshooting	25
Spare Parts.....	27

1.1 SPECIFICATIONS

Order Code	W4230
Model	BP-355H
Wheel Diameter (Ø) (mm)	355
Throat Capacity (mm)	345
Height Capacity (mm)	300
Table Size (mm)	540 x 480
Table Tilt (deg)	0~45
Table Height From The Floor (mm)	1015
Frame Type	Steel
Dust Outlet (mm)	63 / 100
Motor Power (kW / hp)	1.7 / 2.5
Voltage / Amperage (V / amp)	240 / 10
Blade Codes	W4230A, W4230B, W4230F
Blade Speed (m / min)	800
Blade Size (L x W x T) (mm)	2920 x 6~19 x 0.9
Floor Space (W x D x H) (mm)	680 x 600
Gross Weight (kg)	155
Nett Weight (kg)	132

1.2 PACKING LIST

1. Mitre Gauge
2. Spanner
3. Hex Keys
4. Push Stick
5. Stand Fixing Bolts
6. Cast Iron Table
7. Fence Assembly
8. Stand Panels



1.3 IDENTIFICATION

Become familiar with the names and locations of the controls and features shown below to better understand the instructions when mentioned later in this manual.



A	Blade Tension Hand Wheel	G	Top Wheel Tracking
B	Upper Blade Guide Hand Wheel	H	Top Blade Guide Lock
C	Upper Blade Guide	I	Motor
D	Table	J	Table Tilt Mechanism
E	Fence Assembly	K	ON /OFF SWITCHES
F	Blade Quick Release	L	Blade Tension Window

2. IMPORTANT INFORMATION

2.1 GENERAL WOODWORKING MACHINE SAFETY

DO NOT use this machine unless you have read this manual or have been instructed in the use of this machine in its safe use and operation



WARNING!

This manual provides safety instructions on the proper setup, operation, maintenance and service of this machine. Save this manual, refer to it often, and use it to instruct other operators.

Failure to read, understand and follow the instructions in this manual may result in fire or serious personal injury—including amputation, electrocution, or death.

The owner of this machine is solely responsible for its safe use. This responsibility includes, but is not limited to proper installation in a safe environment, personnel training and authorization to use, proper inspection and maintenance, manual availability and comprehension of the application of the safety devices, integrity and the use of personal protective equipment.

The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.

Exposure to the dust created by power sanding, sawing, grinding, drilling and other construction activities may cause serious and permanent respiratory or other injury, including silicosis (a serious lung disease), cancer, and death. Avoid breathing the dust, and avoid prolonged contact with dust. 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 timber.

Always operate tool in well ventilated area and provide for proper dust removal. Use a dust collection system along with an air filtration system whenever possible. Always use properly fitting approved respiratory protection appropriate for the dust exposure, and wash exposed areas with soap and water.



Safety glasses must be worn at all times in work areas. Earmuffs should be worn if the work area is noisy.



Sturdy footwear must be worn at all times in work areas.



Gloves should NOT be worn when operating machinery. Should only be worn when handling the material



Long and loose hair must be contained with a net or under a hat

2.1 GENERAL WOODWORKING MACHINE SAFETY Cont.

DISCONNECT POWER FIRST. If using power, always disconnect the machine from power supply before making adjustments, or servicing the machine. This prevents any risk of injury from unintended startup or contact with live wires.

WEARING PROPER APPAREL. Do not wear clothing, apparel or jewellery that can become entangled in moving parts. Always tie back or cover long hair. Wear non-slip footwear to avoid accidental slips, which could cause loss of operating control.

HEARING PROTECTION. Always wear hearing protection when operating or observing loud machinery. Extended exposure to this noise without hearing protection can cause permanent hearing loss.

REMOVE ADJUSTING TOOLS. Tools left on machinery can become dangerous projectiles upon startup. Never leave hex keys, wrenches, or any other tools on machine. Always verify removal before starting!

USE CORRECT TOOL FOR THE JOB. Only use this tool for its intended purpose. Do not force the machine or its attachments to do a job for which they were not designed. Never make unapproved modifications. Modifying the machine or using it differently than intended may result in malfunction or mechanical failure that can lead to personal injury or death!

AWKWARD POSITIONS. Keep proper footing and balance at all times when operating machine. Do not overreach! Avoid awkward hand positions that make operating control difficult. This could increase the risk of accidental injury

GUARDS & COVERS. Guards and covers reduce accidental contact with moving parts or flying debris. Make sure they are properly installed, undamaged and working correctly.

TRAINED OPERATORS ONLY. Only allow trained or supervised people to use this machine. When the machine is not being used, disconnect the power to the machine to prevent unauthorized use—especially around children. Make the workshop safe.

FORCING MACHINERY. Do not force the machine. It will do the job safer and better at the rate for which it was designed.

NEVER STAND ON MACHINE. Serious injury may occur if the machine is tipped or if the cutting tool is unintentionally contacted

STABLE MACHINE. Unexpected movement during operation greatly increases risk of injury or loss of control. Before starting, verify the machine is stable and if using a mobile base it is locked in position.

UNATTENDED OPERATION. To reduce the risk of accidental injury, turn the machine OFF and ensure all moving parts have completely stopped before walking away. Never leave the machine running while unattended.

MAINTAIN WITH CARE. Follow all the maintenance instructions and lubrication schedules to keep the machine in good working condition. A machine that is improperly maintained could malfunction, leading to serious personal injury or death.

CHECK DAMAGED PARTS. Regularly inspect the machine for any condition that may affect the safe operation. Immediately repair or replace damaged or parts that are incorrectly fitted before operating.

CHILDREN & BYSTANDERS. Keep children and bystanders at a safe distance from the work area. Stop using machine if they become a distraction.



WARNING!

Machines are safeguarded to protect the operator from injury or death with the placement of guards. Machines must not be operated with the guards removed or damaged.

2.2 SPECIFIC SAFETY FOR WOODWORKING BAND SAWS

DO NOT use this machine unless you have been instructed in its safe use and operation and have read and understood this manual



Safety glasses must be worn at all times in work areas



Long and loose hair must be contained.



Gloves must not be worn when using this machine.



Sturdy footwear must be worn at all times in work areas



Close fitting work protective clothing must be worn



Rings and jewellery must not be worn.

PRE-OPERATIONAL SAFETY CHECKS

1. Ensure no slip/trip hazards are present in workspaces and walkways.
2. Locate and ensure you are familiar with the operation of the ON/OFF starter and E-Stop.
3. Check that all guards are in position.
4. Ensure push stick is available.
5. Lower the blade guide and guard to full effect.
6. Start the dust extraction unit before using the saw.
7. Faulty equipment must not be used. Immediately report suspect machinery.

OPERATIONAL SAFETY CHECKS

NOTE: Keep your fingers off the line of the cut at all times.

1. Never leave the machine running unattended.
2. The work piece should be fed forward evenly and held firmly on the table to ensure effective control during cutting whilst keeping hands in a safe position.
3. Use a push stick when feeding material past the blade.
4. Do not force a wide blade on a cut of small radius. Use relief cuts when cutting sharp curves.
5. Before making adjustments switch off the saw and bring the machine to a complete stand still.
6. Stop the machine before attempting to back the work away from the blade.
7. Stop the saw immediately if the blade develops a 'click'. Report it to your supervisor

AFTER OPERATION

1. Switch off the saw and reset all guards to a fully closed position.
2. Leave the machine in a safe, clean and tidy state.

DO NOT

- Attempting to cut very small items
- Cut cylindrical or irregular stock
- Leaving the machine running unattended

3. POWER SUPPLY

3.1 ELECTRICAL INSTALLATION

Place the machine near an existing power source. Make sure all power cords are protected from traffic, material handling, moisture, chemicals, or other hazards. Make sure there is access to a means of disconnecting the power source. The electrical circuit must meet the requirements for 240V.

NOTE : The use of an extension cord is not recommended as it may decrease the life of electrical components on your machine.

ELECTRICAL REQUIREMENTS

Nominal Voltage.....	240V
Cycle.....	50 Hz
Phase.....	Single Phase
Power Supply Circuit.....	10 Amps
Full Load Current.....	7.4 Amps

(Full load current rating is also on the specification plate on the motor.)

3.2 FULL-LOAD CURRENT RATING

The full-load current rating is the amperage a machine draws when running at 100% of the output power. Where machines have more than one motor, the full load current is the amperage drawn by the largest motor or a total of all the motors and electrical devices that might operate at one time during normal operations.

Full-Load Current Rating for these machine is available on the motor plate.

It should be noted that the full-load current is not the maximum amount of amps that the machine will draw. If the machine is overloaded, it will draw additional amps beyond the full-load rating and if the machine is overloaded for a long period of time, damage, overheating, or fire may be caused to the motor and circuitry.

This is especially true if connected to an undersized circuit or a long extension lead. To reduce the risk of these hazards, avoid overloading the machine during operation and make sure it is connected to a power supply circuit that meets the requirements.



4 SET-UP

4.1 UNPACKING

This machine was carefully packaged for safe transport. When unpacking, separate all enclosed items from packaging materials and inspect them for shipping damage. If items are damaged, please contact your distributor.

NOTE: Save all the packaging materials until you are completely satisfied with the machine and have resolved any issues with the distributor, or the shipping agent.

When unpacking, check the packing list to make sure that all parts shown are included. If any parts are missing or broken, please contact your distributor.

4.2 CLEAN - UP

The unpainted surfaces of the machine have been coated with a waxy oil to protect them from corrosion during shipment. Remove the protective coating with a solvent cleaner or a citrus based degreaser.

Optimum performance from your machine will be achieved when you clean all moving parts or sliding contact surfaces that are coated with rust preventive products.

It is advised to avoid chlorine based solvents, such as acetone or brake parts cleaner, as they will damage painted surfaces and strip metal should they come in contact. Always follow the manufacturer's instructions when using any type of cleaning product.

4.3 SITE PREPARATION

When selecting the site for the machine, consider the largest size of workpiece that will be processed through the machine and provide enough space around the machine for operating the machine safely. Consideration should be given to the installation of auxiliary equipment. Leave enough space around the machine to open or remove doors/covers as required for the maintenance and service as described in this manual.

It is recommended that the machine is anchored to the floor to prevent tipping or shifting. It also reduces vibration that may occur during operation.

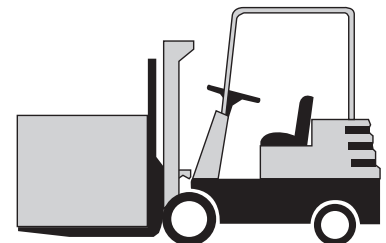
4.4 LIFTING INSTRUCTIONS



WARNING

This machine is extremely heavy.

Serious personal injury may occur if safe moving methods are not followed. To be safe, you will need assistance and power equipment when moving the shipping crate and removing the machine from the crate.



On the day that the machine arrives, make sure that a forklift or lifting device, with sufficient capacity is available to unload the machine from the vehicle. Ensure access to the chosen site is clear and that doors and ceilings are sufficiently high and wide enough to receive the machine.



WARNING!

Make sure everyone is away from the load before hoisting. The load must be under control when lowering loads suspended. Rigging and crane operation must be carried out by persons with approved qualifications.

4.5 ASSEMBLY

The machine must be fully assembled before it can be operated. First clean any parts that are coated in rust preventative to ensure the assembly process can proceed smoothly.

Stand Assembly

1. Fix the adjustable feet to each stand end panel, (Fig. 4.1)



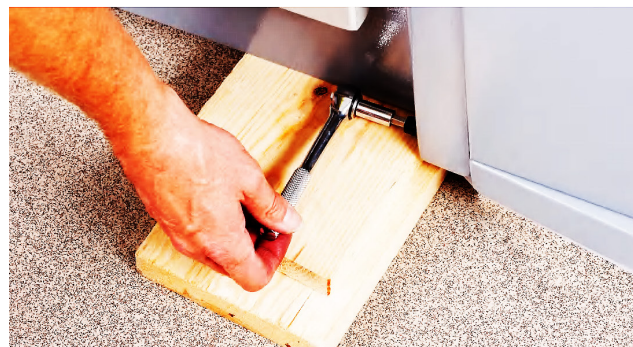
2. Fix the stand side panels to the end panels using the eight bolts, washer and nuts, (Fig. 4.2)



4.5 ASSEMBLY Cont.

Attaching the Stand to the Band Saw

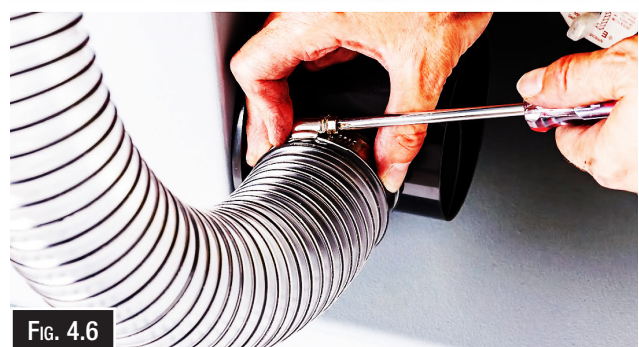
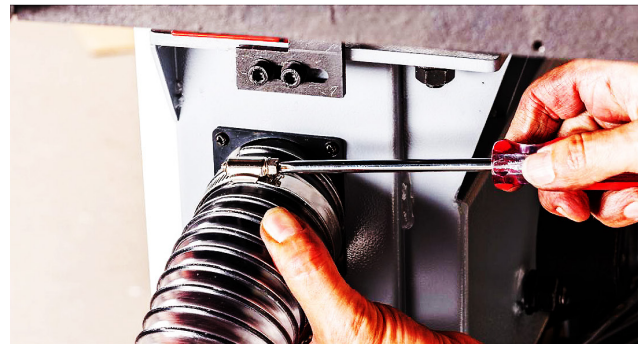
1. Lay the band saw on its back to attach the stand assembly to band saw with the four stand Hex bolts and washers, (Fig. 4.3)
2. Lift the band saw vertical, (Fig. 4.4)



3. Attach the dust outlet below the table with the four screws provided, (Fig. 4.5).



4. Attach each end of the hose to the table's dust extraction outlet's using the two ring clips, (Fig. 4.6)





WARNING!

Parts of this machine are heavy. You must have assistance when moving or lifting these parts.

4.5 ASSEMBLY Cont.

- Line-up the holes to the underside of the cast iron table with the ones in the trunnions and secure in place with four button head Hex bolts/washers, (Fig. 4.7).



FIG. 4.7

- Locate the table insert and place it into the centre of the table, (Fig. 4.8)

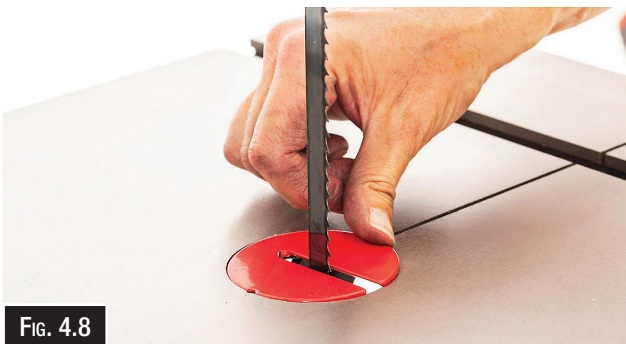


FIG. 4.8

- Find the fence locking assembly and slide it into position on the fence rail as shown, (Fig. 4.9)

- Loosen the two lift and shift handles on the fence locking assembly. Line-up the 'T' slot to the base of the fence and slide it over the mounting plate to the desired position. Nip-up the lift and shift handles to secure the fence, (Fig. 4.9).



FIG. 4.9

- Locate the Rise and Full handle wheel, loosen the two grub screws around the mounting boss. Line up the grub screws with the machined flats on the drive shaft and slide unit on. Nip-up the screws to secure in place. (Fig.4.10)



FIG. 4.10

- Find the threaded hole on the side of the bandsaw column. Screw in the holding screw into the column, hook the push stick over the screw, (Fig. 4.11)



FIG. 4.11

4.5 ASSEMBLY Cont.

Before altering blade tension ensure that the blade is roughly positioned in the middle of the wheels. To do this you will need to lower the top wheel slightly by using the tension lever. (Fig. 4.12).

- Turn the blade tension knob clockwise to tension the blade whilst rotating the top wheel slowly at first by hand. A gauge at the front of the upper wheel shows either tension ON or tension OFF, (Fig. 4.13). Around 1cm of blade movement is recommended.
- Changes in blade width will have an effect on blade tension. Keep in mind that too little blade tension can cause blade breakage. The best place to check blade tension is by pressing on the blade on the left. (Fig. 4.13)
- After a period of use it is recommended to recheck the blade tension and possibly readjust as band saw blades can stretch slightly in use.

NOTE: *If the band saw sits idle for a period of time, place the tension lever in a partial tension position. This will help prevent blade fatigue and tyre deformation. It also saves wear on the bearings and blade wheels.*

4.6 BLADE TRACKING

Do not adjust blade tracking with the machine running.

“Tracking” refers to how the blade is positioned on the wheels whilst running.

- The blade should track approximately in the centre of both wheels, as shown in (Fig. 4.14) Tracking on the Band saw should be checked periodically, included as part of every blade change.
- The blade must be properly tensioned before adjusting blade tracking. Make sure blade guides bearings are opened up, backed off and are well clear of the blade,
- Open the upper door and rotate clockwise by hand the upper wheel slowly. Observe the position of the blade on the wheel - it should be positioned in the centre, (Fig. 4.15)



Fig. 4.12

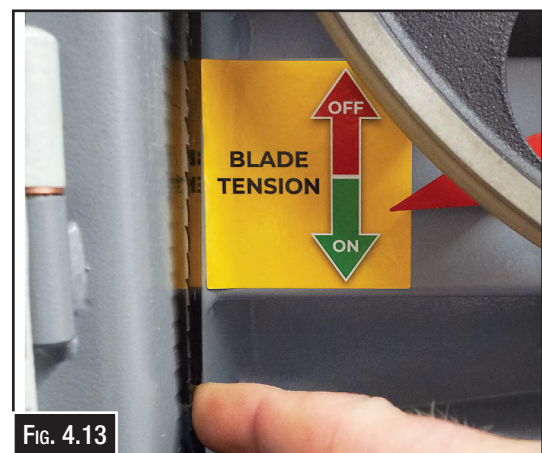


Fig. 4.13



Fig. 4.14

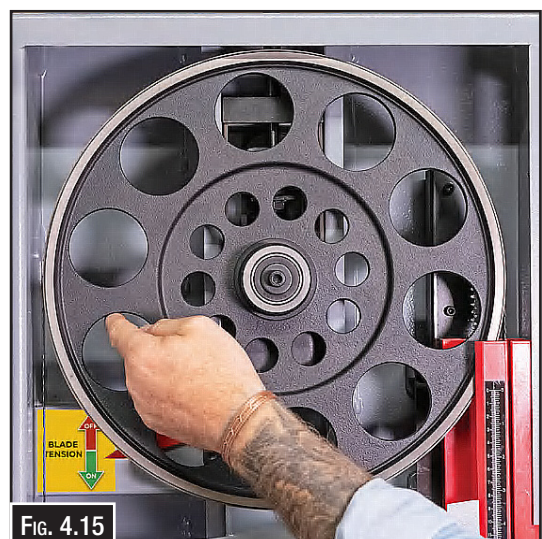


Fig. 4.15

4.6 BLADE TRACKING Cont.

If the blade tends to shift to one side or the other of the wheel, slight adjustment will need to be made, start by loosening the locking knob, (Fig. 4.16).

- If the blade is tracking toward the front edge of the wheel, rotate the tracking knob clockwise – the upper wheel will tilt toward the back and the blade will move to the centre of the wheel. If the blade is tracking toward the back edge of the wheel, rotate the tracking knob counterclockwise: the upper wheel will tilt toward the front and the blade will move toward the centre of the wheel, (Fig. 4.16).
- When the blade is tracking properly at the centre of the wheel, re-tighten the locking knob, (Fig. 4.16).
- Turn on the saw and verify proper tracking while the machine is running.
- If further tracking adjustments are needed, disconnect from power, and repeat instructions above.

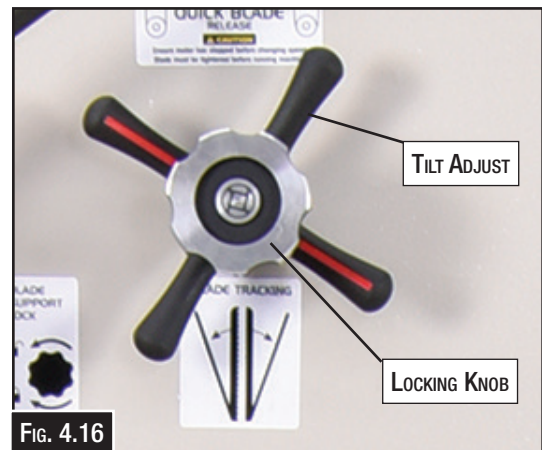


FIG. 4.16

4.7 SETTING UPPER AND LOWER BLADE GUIDES

Both top and bottom bearing blade guides will be set in exactly the same position.

DISCONNECT THE MACHINE FROM THE MAINS SUPPLY.

- The blade must be tensioned and tracked properly.
- Loosen the thumb screw and move guide block by turning the knob so that the front face of the guide bearings are approximately 2mm behind the gullet (curved area at base of tooth) of the blade, tighten thumb screw, (Fig. 4.17).
- Loosen the socket screw and position each guide bearing so that it is no more than 0.5mm away from the blade, very close but not quite touching the blade. A quick way to set this distance is to use feeler gauges between the blade and bearing, set at approximately 0.3mm thick, (Fig. 4.18).
- Tighten socket screw when adjustment is satisfactory.

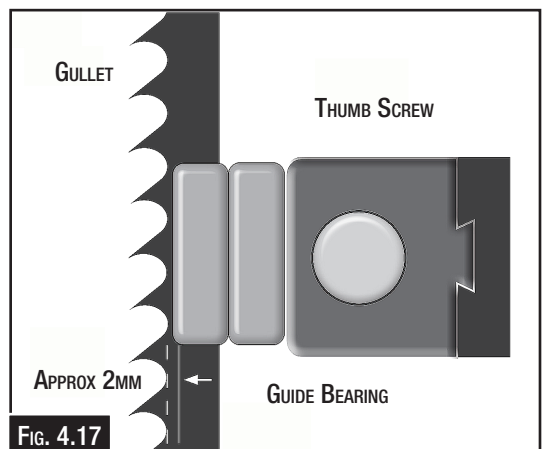


FIG. 4.17

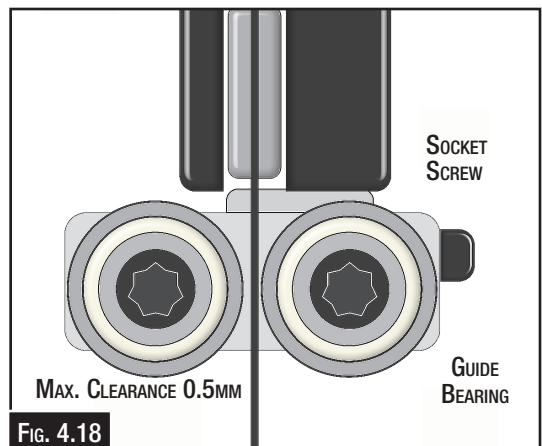


FIG. 4.18

! WARNING!

Blades are very sharp. If not careful serious injury can result from touching the blades with bare hands. Leather work gloves should be worn when handling these blades.

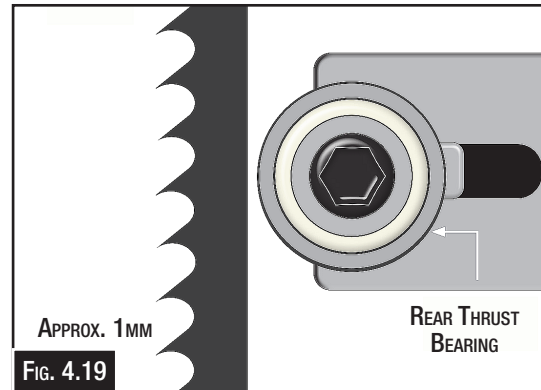
4.7 SETTING UPPER AND LOWER BLADE GUIDES Cont.

Upper and Lower Thrust Bearing Adjustment,

The thrust bearing supports the back edge of the blade during operation, and is set so that the blade will contact it only when the blade is under pressure during a cut.

To Adjust The Thrust Bearing:

- Loosen thumb screw and turn knob to move the thrust bearing in or out until the bearing is approximately 1mm behind the blade. When in place tighten the thumb screw, (Fig. 4.19).




4.8 ALIGNING THE TABLE TO THE BLADE

Place a straight edge along the side of the blade (1/2" width blade or wider), with very light pressure (do not deflect the blade). The straightedge should contact both the front and back of the blade but sit between the teeth, (Fig. 4.20).

- Measure carefully with a fine rule from the straightedge to the edge of the mitre slot, do this at the front and back of the table; the distance should be the same, (Fig. 4.21)
- If the mitre slot is not aligned with the blade, slightly loosen the four screws holding the trunnion to the table, (Fig. 4.22).
- Nudge the table as needed, until the mitre slot is aligned with blade (distances are the same front to back), (Fig 4.22).
- Tighten trunnion screws.

(NOTE: After this adjustment, the alignment of the fence to blade may need to be re-checked. See "Aligning Fence to Blade section".





WARNING

DO NOT operate any machine before it is fully assembled and all the safety guards have been fitted and secured. Failure to do so may cause death or severe injury.

4.9 SQUARING THE TABLE TO THE BLADE

Loosen table locking knobs and tilt table to the left (down flat) until it rests against the table stop screw. (Fig. 4.23).

- Use a square placed on the table and against the left hand side of the blade (Fig. 4.23) verify that the table is 90 degrees to the blade. Make sure the table insert is level with the table surface or removed to ensure an accurate reading.
- If an adjustment is necessary, tilt the table and tighten the table locking knobs.
- Loosen the lock nut and turn the table stop screw left or right to raise or lower the stop, raising or lowering the table height when in the down position, tighten lock nut down against the trunnion/table to hold table stop screw in place, (Fig. 4.24).
- Unlock the table and tilt it back on to the table stop screw to confirm the table is 90 degrees to the blade. Repeat this process as necessary until the table is at 90 degrees to the blade.
- Adjust the pointer indicates zero, (Fig. 4.24).

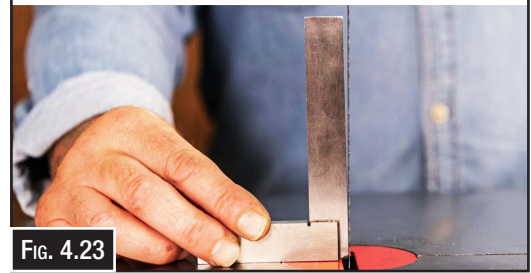


FIG. 4.23



FIG. 4.24

4.10 MITRE FENCE

Slide the mitre fence into the slot around half way along the table, (Fig. 4.25).

- Move the rip fence over close to the blade.
- Place a square against the mitre fence and rip fence and check they are square, (Fig. 4.25).

If adjustment is required, unlock the main handle then undo the two hex cap screws, pivot the mitre fence until it looks square against the rip fence, lock it in place, (Fig. 4.25).



FIG. 4.25



CAUTION!

The use of non machine accessories may be hazardous and could case damage to the machine or injury to the operator

5. OPERATION

5.1 OPERATION OVERVIEW

This overview purpose is to provide a novice machine operator with a basic understanding of how the machine is used during operation, and so that if the machine controls or components are mentioned later in this manual, it will be easy to understand. The overview is not intended to be an instructional guide and is only generic in nature. To learn more about the specific operation, read this entire manual and seek additional training from an experienced machine operator. Another source of information may be found in video's on websites or by reading trade magazines.

To complete an operation:

1. Examine the workpiece to make sure there is no knots and is suitable for cutting.
2. Adjust the table tilt if required, to the correct angle required for the cut.
3. Adjust the fence, to the width of the cut and then clamp it in place. If the mitre gauge, is used, it needs to be set to the angle required and locked in place.
4. Adjust the upper blade guide height to just clear the workpiece by loosening the guide post lock knob, (approximate 6mm clearance), then re-tighten the guide post lock knob.
5. Check to see that the workpiece can safely pass all the way through the blade without being obstructed by other objects.
6. Check what safety equipment should be worn, such as safety glasses and a respirator.
7. Start the dust collector before starting the blade.
8. Hold the workpiece firmly and flat against both the table and the fence (or mitre gauge), and then push the workpiece into the blade at a steady and controlled rate until the cut is complete. The operator must be very careful to keep fingers away from the blade and use a push stick to feed narrow workpieces.
9. Stop the band saw, and then the dust collector.

5.2 GENERAL USE / OPERATION

Firstly ensure that you have the right blade fitted for the intended cut - see the blade selection guide on

Make sure the blade is adjusted correctly tensioned and tracking, and that upper and lower guide bearings and thrust bearings are set in proper relation to the blade. Adjust guide post so that the guide bearings are just above the workpiece, about 20mm allowing minimum exposure to the blade but maximum support during the cut, (Fig. 5.1).

- If using the fence, move it into position and lock it to the fence rail. If you are using the mitre gauge for a crosscut, the rip fence would usually be moved safely out of the way, (Fig. 5.1).



5.2 GENERAL USE / OPERATION Cont.

- Turn on the band saw and allow a few seconds for the machine to reach full speed.
- Whenever possible, use a push stick, hold-down, jig, or similar device while feeding timber, to prevent your hands getting too close to the blade, (Fig. 5.2)
- Place the straightest edge of the workpiece against the fence for a rip cut; or against the mitre gauge for a crosscut. Push the workpiece slowly into the blade, while also keeping it pressed against the fence or held against the mitre gauge. Do not force the workpiece into the blade, always feed through at a slow and steady pace, (Fig. 5.3).

Tips:

- Make relief cuts whenever possible. A relief cut is an extra cut made through the waste portion of a workpiece up to the layout line. When that intersection is reached by the blade while following the layout line, the waste portion comes free. This helps prevent pinching of the back edge of the blade in the cut, (Fig. 5.4).
- When cutting, do not overfeed the blade; overfeeding will reduce blade life, and may cause the blade to break.
- Stand at the corner of the machine when making rip or re-saw cuts using the rip fence, this will help ensure that the timber stays in contact with the fence for the full cut, (Fig. 5.5).
- When cutting long timber the operator should use roller stands, support tables, or an assistant to help stabilize the workpiece, (Fig. 5.5).



FIG. 5.2



FIG. 5.3



FIG. 5.4

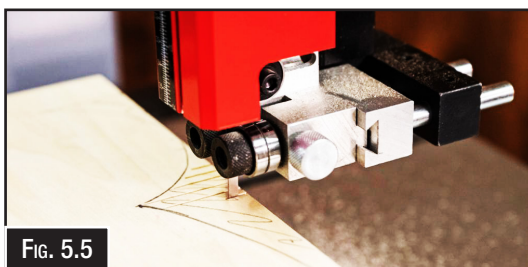


FIG. 5.5



CAUTION!

Always use a push stick when processing small items through the saw to prevent personal injuries

5.2 GENERAL USE / OPERATION Cont.

Ripping Cuts:

Ripping is cutting lengthwise down the workpiece, and with the grain. Always use a push stick or similar safety device when ripping narrow pieces. Rip cuts can also be made “freehand” following a pencil line but you will find far more accurate results if a fence is used, (Fig. 5.6).

Re-sawing:

- Re-sawing is the process of slicing timber to reduce its thickness, or to produce boards that are thinner than the original timber, such as veneers and book matching. The ideal blade for re-sawing is the widest one the machine can handle, as the wider the blade the better it can hold a straight line, a fairly coarse tooth (3-4 TPI) is recommended for this cut, (Fig. 5.7).
- Re-sawing is always performed using the rip fence, use a push stick and often a feather board to ensure straight safe cuts. Keeping your hands away from the blade, (Fig. 5.7).

Crosscutting:

- Crosscutting is cutting across the grain of the timber, usually whilst using the mitre gauge to feed the timber into the blade. The right hand should hold the workpiece steady against the mitre gauge, while the left hand pushes the mitre gauge past the blade. Cross cuts can also be made “freehand” following a pencil line but you will find far more accurate results if a mitre fence is used (Fig. 5.8).

Freehand Curve Cutting:

- Crosscutting is cutting across the grain of the timber, usually whilst using the mitre gauge to feed the timber into the blade. The right hand should hold the workpiece steady against the mitre gauge, while the left hand pushes the mitre gauge past the blade. Cross cuts can also be made “freehand” following a pencil line but you will find far more accurate results if a mitre fence is used (Fig. 5.8).
- Curve cutting is something all band saws do very well in both shallow and deep timber with the correct blade installed. An ideal curve cutting blade is a ¼” x 6 TPI - the narrower the blade the tighter curve it can cut.
- No fences are used making these cuts and usually no push sticks either so it is very important to ensure that your hands remain as far away from the blade as possible. If the timber is too small or the curve too tight then the cut is better made on a Scroll saw, (Fig. 5.9).



FIG. 5.6



FIG. 5.7



FIG. 5.8



FIG. 5.9

5.3 REMOVING THE BLADE

The blade needs to be removed when there are breakages or to fit the correct blade for the operation.

To Remove The Blade;

- DISCONNECT THE MACHINE FROM THE POWER
- Open the top and bottom doors
- Adjust the upper blade guide set so that it is around half way down, (Fig. 5.10).
- Remove the lower blade guards and back off both wheels so they are free of the blade. Place the blade through the right hand guard slot. (Fig. 5.10). Bring the left hand side of the blade through the slot and around towards the right hand side of the machine then guide the blade through the table slot.

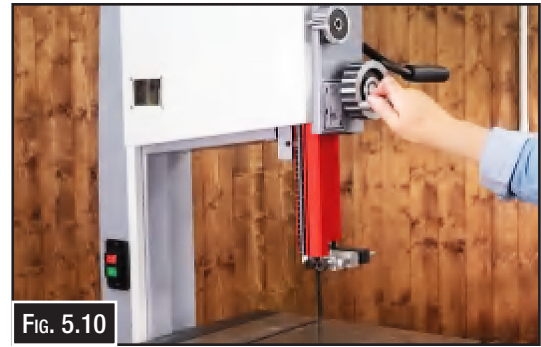


FIG. 5.10

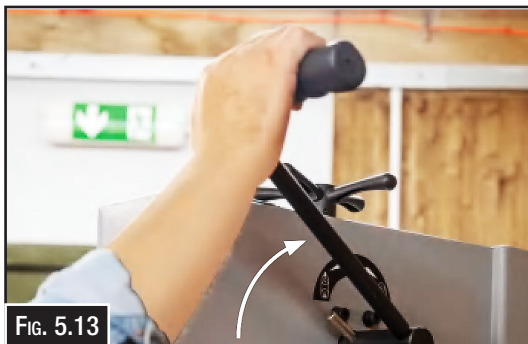


FIG. 5.13

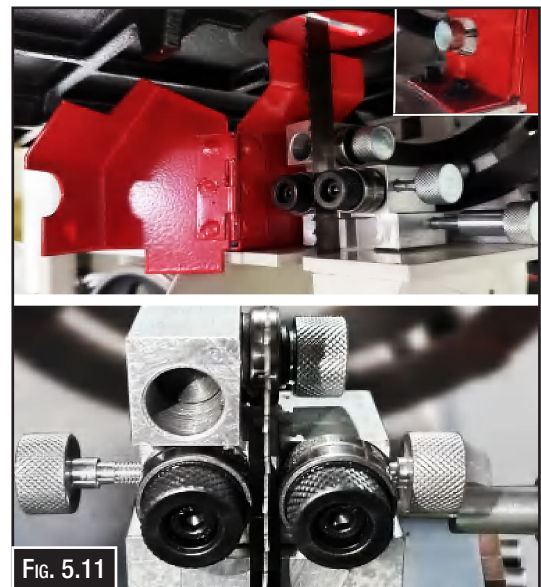


FIG. 5.11

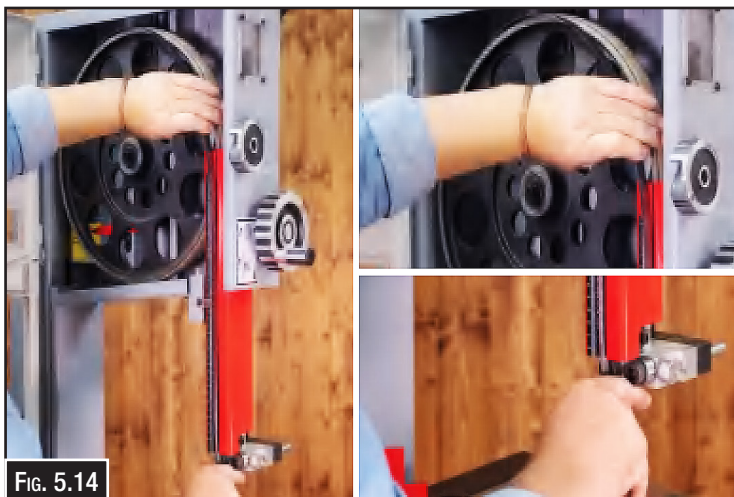


FIG. 5.14



FIG. 5.12



WARNING!

Blades are very sharp. If not careful serious injury can result from touching the blades with bare hands. Leather work gloves should be worn when handling these blades.

5.3 REMOVING THE BLADE Cont.

- Clean dirt from the tyres and remove any small off cuts that may be around the bottom blade guide set, (Fig. 5.15).
- Use the blade selection guide on pages 22 to ensure that you have the right blade for the job!

Fitting the new Blade:

- Slide the new blade through the table slot taking care not to twist or distort the blade, then guide the left hand side of the blade around toward the machine and through the slot at the spine of the machine, (Fig. 5.16).
- Guide the blade through the upper blade guard and both the top and bottom blade guides positioning the blade approximately in the middle of firstly the top and then the bottom of the wheel,(Fig. 5.17~19).
- Apply blade tension using the tension lever then fine tune using the tension / tracking guide
- Reattach the table insert, the table alignment pin and wooden plate then close the doors.

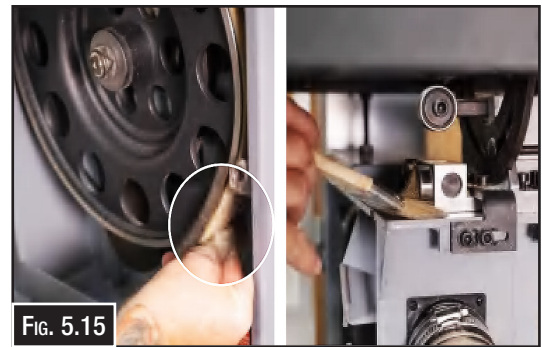


FIG. 5.15



FIG. 5.16

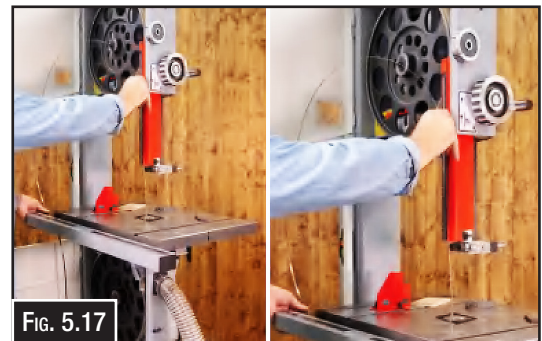


FIG. 5.17

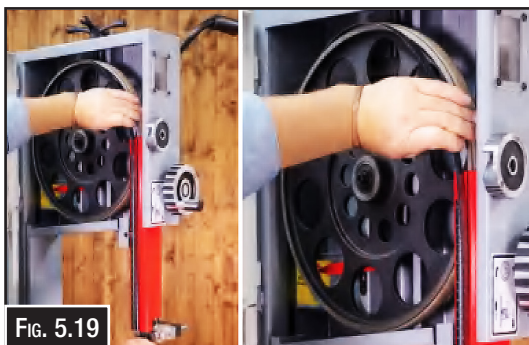


FIG. 5.19



FIG. 5.18



WARNING

Blades are sharp. Protect hands by wearing leather gloves to prevent injury.



CAUTION!

It must be determined by the operator that the materials being processed through the machine are NOT potentially hazardous to operator or personnel working nearby.

5.4 BLADE SELECTION

To select a wood band saw blade, consider the width for your cutting task (wider for straight cuts, narrower for curves), the teeth per inch (TPI) for cut finish and material thickness (higher TPI for thinner material and smoother cuts, lower TPI for faster cuts and thicker material), and the tooth configuration (regular, hook, skip, or variable) for specific applications. Ensure the blade is suitable for the specific material (wood) and the size of the stock being cut.

Band saw blades for wood are primarily made of high-carbon steel, and for more demanding applications, they can be made of bi-metal or have carbide-tipped teeth. The best material depends on the type of wood and the desired cutting performance.

You should always use the blade width recommended by your machine's manufacturer. For contour cutting, a narrower blade is needed for tighter curves

BLADE WIDTH AND CONTOUR CUTTING	
BLADE WIDTH IN INCHES	APPROX. MINIMUM RADIUS CUT (MM)
1/4"	38
3/8"	65
1/2"	125

Note: The actual minimum radius may vary based on some specific blade series and thickness, but narrower blades consistently allow tighter curves.

TEETH PER INCH (TPI) GUIDE		
MATERIAL THICKNESS	RECOMMENDED TPI	RESULT
Thick sections (e.g., re-sawing lumber >50mm)	2, 3, or 4TPI	Fast cut, rougher finish
Normal cutting (e.g., 20mm material)	4 TPI (faster cut) or 14 TPI (smoother finish)	Balance of speed and finish, most common range
Thin sections (e.g., plywood or boards up to 10mm)	10 or 14 TPI	Fine, clean finish
Very thin materials (<6mm)	18 to 32 TPI	Very fine finish, slow cutting speed

Tooth Type:

For band saw blades used on wood, the primary tooth types are Hook Tooth, Regular Tooth, and Skip Tooth, each suited for different tasks.

Hook tooth blades are aggressive and good for thick materials and re-sawing,

Regular tooth blades are general-purpose.

Skip tooth blades are ideal for soft materials and preventing clogging.

Variable pitch (or variable tooth) blades are also common, offering a good balance of speed and a smooth finish for general woodworking and intricate cuts.



6. MAINTENANCE



WARNING

Before maintaining or cleaning the machine, turn off the circuit breaker, or disconnect the machine from the power supply.

Post a sign to inform other workers that the machine is under maintenance.

For optimum performance from the machine, it is important that the machine is well cleaned and maintain. Follow the maintenance schedule listed in the following section and refer to any specific instructions given.

6.1 SCHEDULE

Daily Check

- Loose mounting bolts.
- Worn or damaged wires.
- Check/adjust lubrication.
- Any other unsafe condition

Cleaning

Cleaning the machine is relatively easy. Wipe down all unpainted and machined surfaces daily to keep them rust free and in top condition. This includes any surface that is vulnerable to rust if left unprotected. Use ISO 68 machine oil or any other quality metal lubricant.

Clean band saw regularly to remove any resinous deposits and sawdust.

Keep mitre slot, and guide bearings, clean and free of resin.

Keep blade clean and sharp. Check it periodically for cracks or other signs of wear.

The drive belt should be checked periodically. If it looks worn, frayed, glazed or otherwise damaged replace it.

Check that the cleaning brush over the band wheel is working properly, and remove any deposits from the band wheels to avoid vibration and blade breakage.

Do not let saw dust build up in the upper and lower wheel housings. Vacuum or blow out dust from inside cabinet. (Use proper dust mask equipment).

The table surface must be kept clean and free of rust for best results. If rust appears, it can often be removed with a mixture of household ammonia, good commercial detergent and #000 steel wool.

Alternatively, commercial rust removers can be found at many hardware stores.

Lubrication:

1. Periodically apply a light, non-hardening grease to rack and pinion system of guide post.
2. Grease sliding surfaces of the table trunnions.
3. Oil any pins, shafts, and joints. (Do not get oil on pulleys or belts.)
4. Clean and oil the tensioning mechanism if it becomes difficult to adjust.

Note: Bearings on the band saw are pre-lubricated and sealed, and do not require attention

6.3 TROUBLESHOOTING

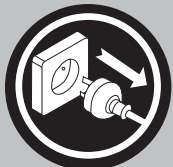
Review the troubleshooting and procedures in this section if a problem develops with your machine. If you need replacement parts then follow the procedure in the beginning of the spare parts section or if additional help with a procedure is required, then contact your distributor.

Note: Make sure you have the model of the machine, serial number, and manufacture date before calling.

SYMPTOMS	POSSIBLE CAUSE	POSSIBLE SOLUTION
Machine does not start, or power supply breaker trips immediately after startup.	<ol style="list-style-type: none"> 1. Master power switch is in the OFF position. 2. Switch disabling pin installed. 3. OFF button depressed/at fault. 4. Incorrect power supply voltage or circuit size. 5. Plug/receptacle at fault/wired incorrectly. 6. Power supply circuit breaker tripped or fuse blown. 7. Motor wires connected incorrectly. 8. Thermal overload relay has tripped/at fault. 9. Start capacitor at fault. 10. Centrifugal switch adjustment/contact points at fault. 11. Contactor not energized/at fault. 12. Wiring broken, disconnected, or corroded. 13. START/STOP switch or ON button at fault. 14. Motor or motor bearings at fault 	<ol style="list-style-type: none"> 1. Turn master key switch to ON position. 2. Remove switch disabling pin. 3. Rotate OFF button head to reset. Replace if at fault. 4. Ensure correct power supply voltage and circuit size. 5. Test for good contacts; correct the wiring. 6. Ensure circuit is free of shorts. Reset circuit breaker or replace fuse. 7. Correct motor wiring connections. 8. Reset. Adjust or replace if at fault. 9. Test/replace if at fault. 10. Adjust centrifugal switch/clean contact points. Replace either if at fault. 11. Test all legs for power; replace if necessary. 12. Fix broken wires or disconnected/corroded connections. 13. Replace switch/button. 14. Replace motor.
Machine is underpowered or stalls.	<ol style="list-style-type: none"> 1. Dull blade. 2. Workpiece material unsuitable for machine. 3. Feed rate/cutting speed too fast. 4. Workpiece crooked; fence loose or not adjusted. 5. Machine undersized for task. 6. Blade slipping on wheels or not properly tensioned. 7. Belt slipping/pulleys misaligned. 8. Motor wires connected incorrectly. 9. Plug/receptacle at fault/wired incorrectly. 10. Pulley slipping on shaft. 11. Motor overheated. 12. Run capacitor at fault. 13. Extension cord too long. 14. Contactor not energized/at fault. 15. Centrifugal switch/contact points at fault. 16. Motor or motor bearings at fault 	<ol style="list-style-type: none"> 1. Sharpen/replace blade. 2. Only cut wood/ensure moisture is below 20%. 3. Decrease feed rate/cutting speed. 4. Straighten or replace workpiece/adjust fence. 5. Use correct blade/reduce feed rate or depth of cut. 6. Adjust blade tracking and tension. 7. Clean/tension/replace belt ensure pulleys are aligned. 8. Correct motor wiring connections . 9. Test for good contacts/correct wiring. 10. Tighten/replace loose pulley/shaft. 11. Clean motor, let cool, and reduce workload. 12. Test/repair/replace. 13. Move machine closer to power supply; use shorter extension cord. 14. Test all legs for power; repair/replace if at fault. 15. Adjust centrifugal switch/clean contact points. Replace either if at fault. 16. Replace motor
Machine has vibration or noisy operation	<ol style="list-style-type: none"> 1. Motor or component loose. 2. Blade weld at fault/teeth broken. 3. Blade at fault. 4. V-belt worn, loose, pulleys misaligned or belt 5. Pulley loose. 6. Motor mount loose/broken. 7. Motor fan rubbing on fan cover. 8. Centrifugal switch needs adjustment/at fault. 9. Motor bearings at fault 	<ol style="list-style-type: none"> 1. Replace damaged/missing bolts/nuts; tighten if loose. 2. Replace blade 3. Replace warped/bent blade resharpen dull blade. 4. Inspect/replace belt. Re-align pulleys if necessary. 5. Secure pulley on shaft. 6. Tighten/replace. 7. Fix/replace fan cover; replace loose/damaged fan. 8. Adjust/replace if at fault. 9. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement
Band saw won't cut straight"	<ol style="list-style-type: none"> 1. Poor quality blades with uneven set, the blade is blunt or damaged. 2. The tooth count is too high for the material being cut 	<ol style="list-style-type: none"> 1. Replace the blade 2. Select a blade with a smaller tooth count

6.3 TROUBLESHOOTING Cont.

SYMPTOMS	POSSIBLE CAUSE	POSSIBLE SOLUTION
Blade or teeth break/crack	<ol style="list-style-type: none"> 1. Blade tension incorrect. 2. Blade incorrect for application. 3. Excessive feed rate/pressure. 4. Cutting corners too sharply. 5. Blade dull/weld at fault. 6. Blade tracking incorrectly. 7. Blade guides/support bearings not adjusted properly, allowing guides to hit blade teeth. 8. Blade guide height in wrong position. 9. Wheel tires worn or incorrectly installed. 10. Fence or miter slot out of alignment with blade. 11. Bad blade guide bearings/bearings on wheel 	<ol style="list-style-type: none"> 1. Adjust blade tension. 2. Use correct blade for application. 3. Reduce feed rate/pressure. 4. Use a wider arc on outside cuts, or use relief cuts to make tight inside cuts. 5. Replace blade. 6. Adjust blade tracking. 7. Adjust blade guides/support bearings properly, so guides cannot hit teeth during operation. . 8. Adjust upper blade guide so blade is as close to workpiece as possible. 9. Replace or re-install tire. 10. Align table and fence with blade. 11. Replace blade guides/bearings.
Blade slows, smokes, shows overheating or wear on one side	<ol style="list-style-type: none"> 1. Too much side pressure when feeding workpiece. 2. Blade contacting table insert. 3. Blade guides worn or not adjusted. 4. Blade installed backwards or inside out. 5. Wheels out of alignment. 6. Dull, bell-mouthed, or incorrect blade. 7. Fence not parallel with blade. 8. Table surface not parallel or square to blade. 9. V-belt loose or slipping. 	<ol style="list-style-type: none"> 1. Feed workpiece straight into blade. 2. Adjust blade guides to eliminate excess side pressure properly align table. 3. Adjust upper blade guides as close to workpiece as possible. 4. Check blade installation; make sure teeth face front of machine and point down in table throat. Re-install blade if necessary. 5. Adjust wheels so they are coplanar. 6. Replace blade. 7. Adjust fence/miter slot with blade. 8. Adjust the table trunnion position until blade and the table are parallel and square. 9. Tighten the V-belt. Replace the belt if worn or oily
Finished workpieces are rough or show scoring	<ol style="list-style-type: none"> 1. Blade overloaded and twists while cutting. 2. Blade TPI too coarse. 3. Blade loose and fluttering. 4. Blade tracking incorrect. 5. Blade has missing/bent teeth or faulty weld 	<ol style="list-style-type: none"> 1. Decrease feed rate. 2. Use correct blade for material and type of cut. 3. Increase blade tension as required. 4. Adjust blade tracking. 5. Replace blade
Backside of blade deformation/ cracking.	<ol style="list-style-type: none"> 1. Excessive feed rate/pressure. 2. Blade tension too high. 3. Incorrect blade guide alignment. 4. Blade guides are worn. 5. Blade tracking too far back; hitting lip of wheels 	<ol style="list-style-type: none"> 1. Reduce feed rate or pressure. 2. Adjust the blade tension. 3. Correct the blade guide alignment. 4. Replace the blades guides. 5. Adjust the tracking
Blade dulls prematurely	<ol style="list-style-type: none"> 1. Wrong blade tooth type or TPI. 2. Excessive feed pressure. 3. Blade is twisted. 4. Blade is slipping on wheel. 5. Blade guides hitting teeth and ruining tooth set. 	<ol style="list-style-type: none"> 1. Use blade with correct tooth type and TPI. 2. Reduce feed rate or pressure. 3. Re-install or replace the blade. 4. Adjust the blade tension and clean the wheel tire. 5. Properly adjust the blade guides and support bearings.
Finished workpieces are rough or show scoring.	<ol style="list-style-type: none"> 1. Blade overloaded and twists while cutting. 2. Blade TPI too coarse. 3. Blade loose and fluttering. 4. Blade tracking incorrect. 5. Blade has missing or bent teeth or faulty weld. 	<ol style="list-style-type: none"> 1. Decrease the feed rate. 2. Use the correct blade for the material and type of cut. 3. Increase the blade tension as required. 4. Adjust the blade tracking. 5. Replace the blade



WARNING!

Always disconnect the power to the machine before servicing or doing maintenance to the machine.

WOOD BAND SAW BP-355H

Order Code: (W4230)

The following section covers the spare parts diagrams and lists that were current at the time this manual was originally printed. Due to continuous improvements of the machine, changes may be made at anytime without notification.

HOW TO ORDER SPARE PARTS

1. Have your machines model number, serial number & date of manufacture on hand, these can be found on the specification plate mounted on the machine.
2. A scanned copy of your parts list/diagram with required spare part/s identified.

NOTE: SOME PARTS MAY ONLY BE AVAILABLE AS AN ASSEMBLY

3. Go to www.machineryhouse.com.au/contactus and fill out the inquiry form attaching a copy of scanned parts list.



WARNING!

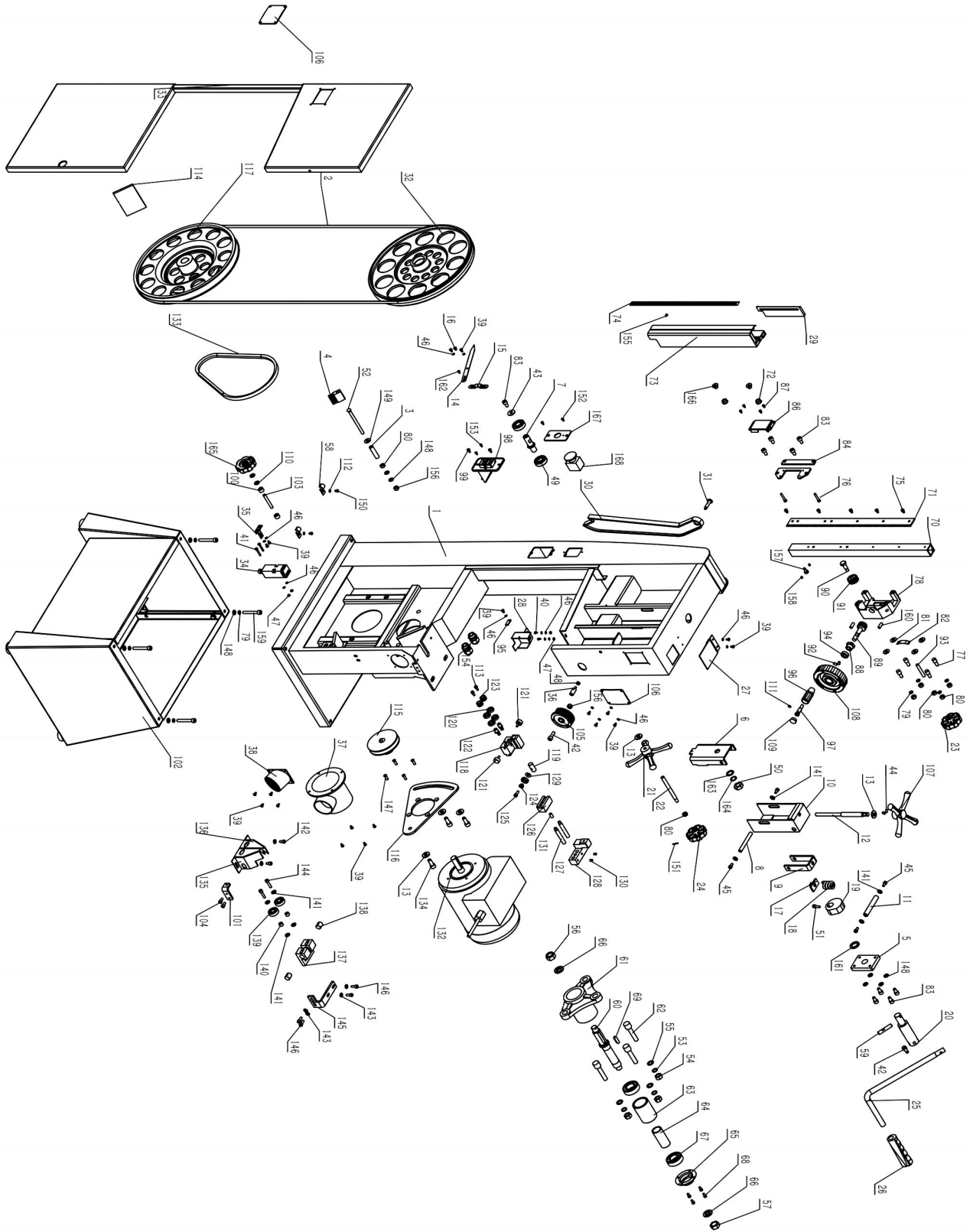
*Electricity is dangerous and could cause death.
All electrical work must be carried out by a qualified electrician.*



CAUTION!

It is impossible to cover all possible hazards Every workshop environment is different. These are designed as a guide to be used to compliment training and as a reminder to users prior to equipment use. Always consider safety first, as it applies to the individual working conditions.

PARTS DIAGRAM



PARTS LIST

ITEM	DESCRIPTION	QTY	ITEM	DESCRIPTION	QTY.
1	MACHINE MAIN BODY FRAME	1	54	HEX NUT M12	3
2	SAW BLADE	1	55	FLAT WASHER 12	3
3	SPACER BUSHING	1	56	NYLON LOCK HEX NUT M18X1.5	1
4	BRUSH	1	57	HEX NUT M18X1.5	1
5	ECCENTRIC BASE	1	58	CORD CLIP	2
6	UPPER WHEEL AXIS SEAT	1	59	SOCKET SET SCREW, CPP	1
7	UPPER WHEEL SHAFT	1	60	LOWER WHEEL SHAFT	1
8	TENSIONING SHAFT	1	61	LOWER WHEEL BRACKET	1
9	SPRING FRAME	1	62	BOLT	3
10	U-BRACKET	1	63	LARGE SPACER SLEEVE	1
11	QUICK TENSION SHAFT	1	64	SMALL SPACER SLEEVE	1
12	BLADE TENSION SHAFT	1	65	COVER	1
13	FLAT WASHER 10	5	66	FLAT WASHER 18	2
14	TENSION POINTER	1	67	BEARING	2
15	TENSION INDICATOR PLATE	1	68	SOCKET HEAD CAP SCREW M5X10	4
16	SLOTTED HEAD SCREW	1	69	KEY 8X7X20	1
17	NUT BOARD	1	70	UPPER GUIDE SQUARE TUBE	1
18	SPRING	1	71	UPPER GUIDE RACK	1
19	ECCENTRIC SHAFT	1	72	WASHER	2
20	SHAFT	1	73	BLADE GUARD	1
21	HANDLE	1	74	CUTTING HEIGHT SCALE	1
22	KNOB	1	75	SOCKET HEAD CAP SCREW M5X8	5
23	KNOB	1	76	SOCKET HEAD CAP SCREW M5X30	2
24	KNOB	1	77	BOLT	4
25	TENSION HANDLE	1	78	UPPER GUIDE MOUNT	1
26	GRIP	1	79	SPRING WASHER 8	8
27	GUARD BOARD	1	80	HEX NUT M8	7
28	GUARD BOARD	1	81	FLAT WASHER 8	4
29	ACTIVITY PROTECTIVE BOARD	1	82	UPPER GUIDE INSERT	1
30	PUSHER	1	83	SOCKET HEAD CAP SCREW M8X16	9
31	PUSHING SCREW	1	84	STEEL PLATE	1
32	UPPER WHEEL	1	85	COVER	1
33	DOOR	1	86	GEAR BOX COVER	1
34	TRAVEL SWITCH	1	87	SOCKET HEAD BUTTON SCREW M4X8	4
35	MICRO SWITCH KEY	1	88	THREAD TUBE	1
36	SHAFT	1	89	WORM	1
37	JOINT	1	90	GEAR SHAFT	1
38	DUST CHUTE	1	91	GEAR	1
39	PAN HEAD MACHINE SCREW M4X8	19	92	SOCKET SET SCREW M6X12	2
40	PAN HEAD MACHINE SCREW M4X10	2	93	SOCKET SET SCREW M8X50	1
41	PAN HEAD MACHINE SCREW M4X30	2	94	COLLAR	1
42	SOCKET HEAD CAP SCREW M8X25	2	95	TENSION POINTER	1
43	FLAT WASHER	1	96	HANDLE	1
44	GB T77 SOCKET SET SCREW M6X10	2	97	SCREW	1
45	SOCKET FLAT HEAD SCREW M6X12	4	98	ON/OFF SWITCH	1
46	FLAT WASHER 4	17	99	PAN HEAD MACHINE SCREW M5X10	2
47	HEX NUT M4	4	100	SLEEVE	2
48	HEX NUT M6	1	101	NUT PLATE	1
49	BALL BEARING	2	102	STAND BASE	1
50	HEX NUT M16	1	103	HEX SCK SET SCREW M8X65 M8X60	1
51	SOCKET FLAT HEAD SCREW M6X20	1	104	SOCKET HEAD CAP SCREW M6X8	2
52	ROUND SQ NECK BOLT M8 × 110	1	105	DOOR LOCK KNOB	1
53	SPRING 12	3	106	SIGHT GLASS	2

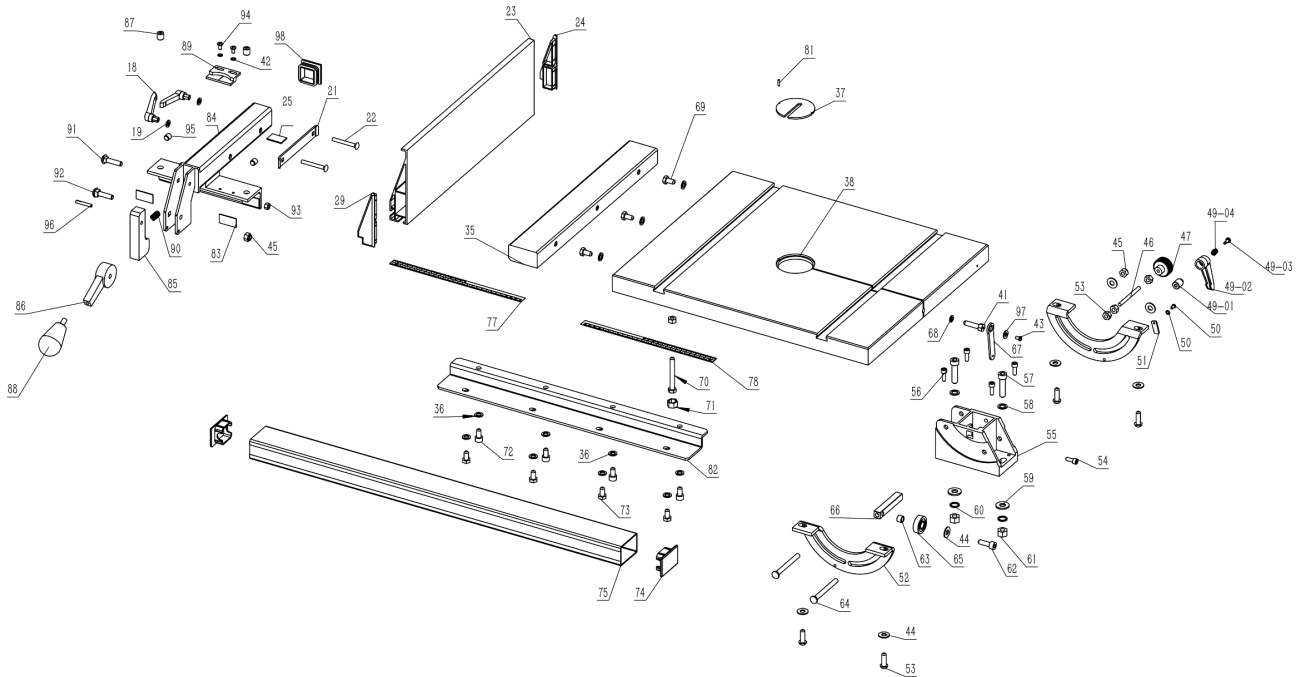
NOTE: SOME INDIVIDUAL PARTS MAY ONLY BE AVAILABLE AS AN ASSEMBLY

PARTS LIST

ITEM	DESCRIPTION	QTY	ITEM	DESCRIPTION	QTY.
107	HANDLE	1	154	STRAIN RELIEF	2
108	HANDLE WHEEL	1	155	PAN HEAD MACHINE SCREW M3X5	1
109	PLUG	1	156	HEX NUT, NYLON LOCK M8	2
110	FLAT WASHER 8	2	157	SOCKET FLAT HEAD SCREW M6X16	1
111	O-RING	1	158	SOCKET SET SCREW M5X6	2
112	FLAT WASHER 5	2	159	SOCKET HEAD CAP SCREW M8X60	4
113	SOCKET HEAD CAP SCREW M5X12	2	160	SCREW	2
114	WOOD INSERT	1	161	FLAT WASHER	1
115	MOTOR PULLEY	1	162	PAN HEAD MACHINE SCREW M4X14	1
116	MOTOR PLATE	1	163	FLAT WASHER	1
117	LOWER WHEEL	1	164	SPRING WASHER	1
118	UPPER GUIDE BASE	1	165	KNOB	1
119	BEARING NUT	1	166	WASHER A	2
120	BEARING 61900	5	167	SWITCH PANEL	1
121	LOCK KNOB	2	168	EMERGENCY STOP BUTTON	1
122	ECCENTRIC SHAFT,UPPER GUIDE	2			
123	BEARING BUSH	2			
124	BEARING SPACER BUSHING	1			
125	LEFT PROTECTIVE COVER M6X16	1			
126	DOWNWARD GUIDE SEAT	1			
127	LOWER GUIDE SLIDE SEAT	2			
128	BULLET PIN 2.5X18	1			
129	CROSS HD SELF TAPPING SCREW 3X10	1			
130	SWITCH PANEL M6X8	2			
131	EMERGENCY STOP BUTTON M8X16	1			
132	MOTOR	1			
133	V-BELT	1			
134	SOCKET HEAD CAP SCREW M10X30	3			
135	RIGHT GUARD	1			
136	LEFT GUARD	1			
137	LOWER GUIDE SEAT	1			
138	DOWNWARD GUIDE SEAT	2			
139	LOWER GUIDE SLIDE SEAT	2			
140	BULLET PIN 2.5X18	2			
141	CROSS HD SELF TAPPING SCREW 3X10	8			
142	SWITCH PANEL M6X12	2			
143	EMERGENCY STOP BUTTON	6			
144	SOCKET HEAD CAP SCREW M6X30	2			
145	LOWER GUIDE SLIDE SEAT	1			
146	SOCKET HEAD CAP SCREW M6X16	4			
147	COUNTERSUNK HEAD SCREW M6X16	4			
148	FLAT WASHER	10			
149	FLAT WASHER	1			
150	PAN HEAD MACHINE SCREW M5X8	2			
151	SPRING PIN 2.5X18	1			
152	COUNTERSUNK HEAD SCREW M4X8	4			
153	CROSS HD TAPPING SCREW 3X10	2			

NOTE: SOME INDIVIDUAL PARTS MAY ONLY BE AVAILABLE AS AN ASSEMBLY

TABLE SPARE - PARTS DIAGRAM

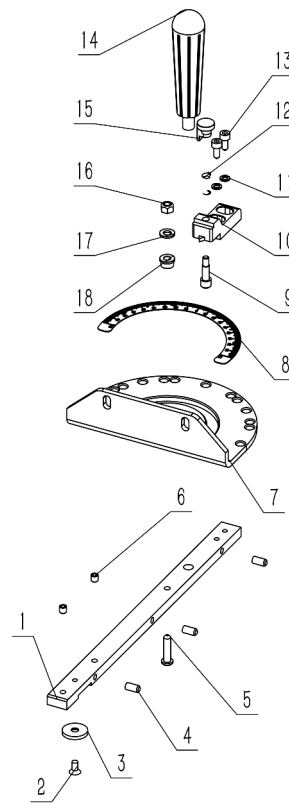


SPARE PARTS LIST

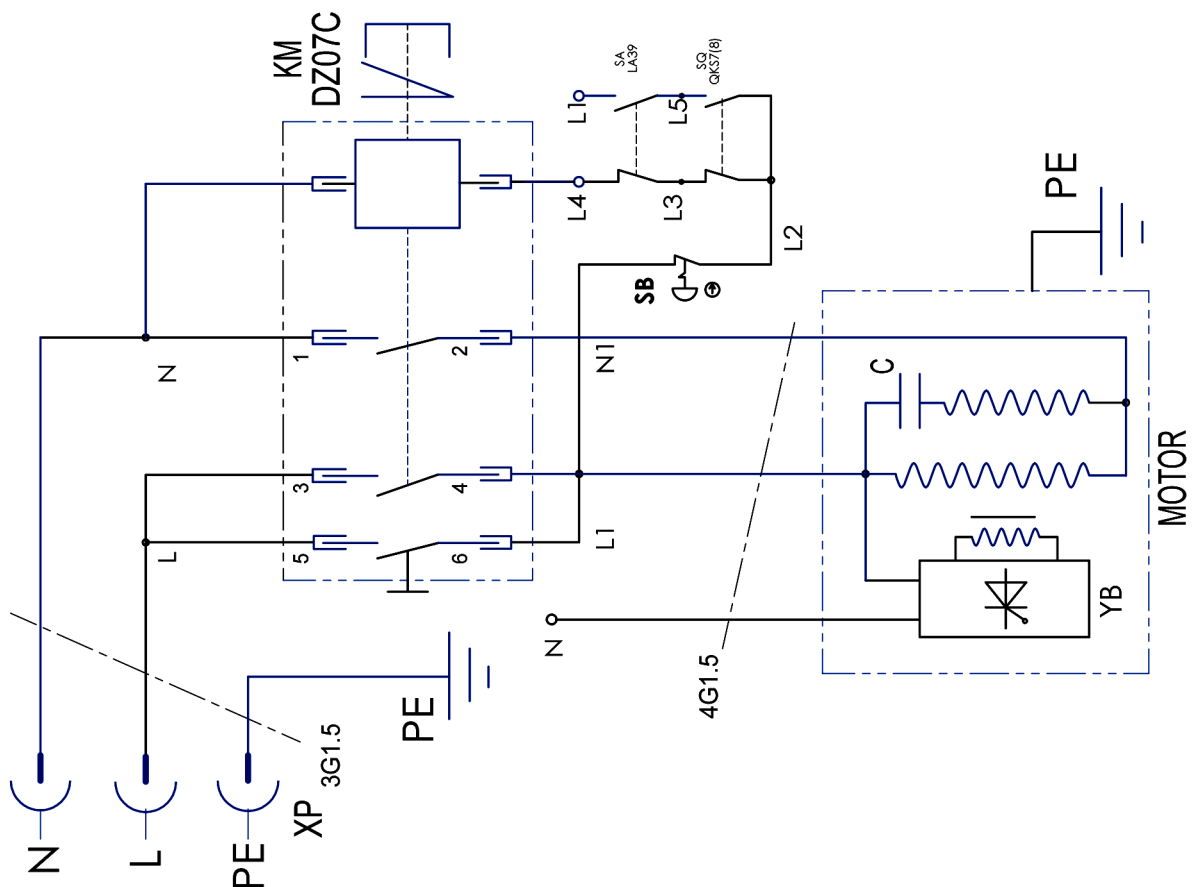
ITEM	DESCRIPTION	QTY	ITEM	DESCRIPTION	QTY.
18	RATCHET LEVER	2	65	BEARING 6201	1
19	WASHER 6	2	66	LOWER BEARING SQUARE POLE	1
21	LOCK BAR	1	67	TABLE PIN WRENCH	1
22	STEP BOLT M6X55	2	68	SPLIT WASHER 7	1
23	RIP FENCE	1	69	HEX BOLT M8X16	3
24	END CAP, RIP FENCE	1	70	HEX BOLT M8X65	1
25	PLATE	1	71	PROTECTION COVER	1
29	FRONT CAP, RIP FENCE	1	72	HEX SOCKET CAP HEAD BOLT M8X16	4
35	EXTENSION TABLE	1	73	HEX BOLT M8X12	4
36	WASHER 8	11	74	END CAP, FENCE RAIL	2
37	INSERT	1	75	FENCE RAIL	1
38	WORKTABLE	1	77	LEFT SCALE, FENCE RAIL	1
41	PIN	1	78	RIGHT SCALE, FENCE RAIL	1
42	WASHER 5MM	2	81	SPRING PIN 3X10	1
44	BIG WASHER 8MM	5	82	MOUNTING BRACKET, FENCE RAIL	1
45	SELF-LOCKING NUT M8	2	83	PAD	1
46	HEX SOCKET SET SCREW M6X70	1	84	SLIDING RAIL CARRIER	1
47	GEAR HANDLE	1	85	LOCKING BLOCK	1
49	ADJUSTABLE KNOB M8	1	86	LOCKING CAM	1
50	HEX SOCKET PAN HEAD SCREW M5X6	1	87	NYLON SCREW M12X12	2
51	POINTER	1	88	LOCKING HANDLE	1
52	UPPER TABLE TRUNNION	2	89	POINTER	1
53	HEX SOCKET PAN HEAD BOLT M8X20	4	90	SPRING	1
54	HEX SOCKET SET SCREW M6X18	1	91	SEMI-ROUND STEP BOLT M6X35	1
55	LOWER TABLE TRUNNION	1	92	SEMI-ROUND STEP BOLT M8X35	1
56	HEX SOCKET CAP HEAD BOLT M6X20	4	93	SELF-LOCKING NUT M6	1
57	HEX SOCKET CAP HEAD BOLT M10X40	2	94	RECESSED PAN HEAD SCREW M5X10	2
58	WASHER 10	2	95	HEX SOCKET SET SCREW M10X10	2
59	BIG WASHER 10	2	96	SPRING PIN 5X32	1
60	SPRING WASHER 10	2	97	BIG WASHER 5	1
61	HEX NUT M10	2	98	END CAP, FENCE BODY	1
62	HEX SOCKET CAP HEAD BOLT M8X25	1			
63	BEARING BUSHING	1			
64	STEP BOLT M8X85	2			

MITRE GAUGE - PARTS DIAGRAM

ITEM	DESCRIPTION	QTY
1	MITRE GAUGE GUIDE ROD	1
2	RECESSED COUNTERSUNK SCREW	1
3	RAIL WASHER	1
4	HEX SOCKET SET SCREW M6X12	3
5	HEX SOCKET PAN HEAD SCREW M6X20	1
6	HEX SOCKET SET SCREW M6X8	2
7	MITRE GAUGE BASE	1
8	SCALE	1
9	STOP PIN	1
10	BLOCK INDICATOR	1
11	SPRING WASHER 5MM	2
12	STOP SPRING	1
13	HEX SOCKET CAP HEAD BOLT M5X12	2
14	MITRE GAUGE KNOB	1
15	STOPPING KNOB	1
16	SELF-LOCKING NUT M6	1
17	WASHER 6MM	1
18	STOP PIN	1



WIRING DIAGRAM





ENVIRONMENT PROTECTION

Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment. When the product becomes completely unserviceable and requires disposal, drain any fluids (if applicable) into approved containers and dispose of the product and fluids according to local regulations.

Imported by

HARE & FORBES
MACHINERYHOUSE

Australian Distributor

Hare & Forbes
Machineryhouse
Sydney - Melbourne
Adelaide - Brisbane - Perth

Ph: 1300 202 200
www.machineryhouse.com.au

MACHINERYHOUSE

New Zealand Distributor

Machineryhouse
Auckland
Christchurch

Ph: 0800 142 326
www.machineryhouse.co.nz