

SETUP & OPERATION MANUAL

FEATURES

Sturdy welded steel frame & precision balanced wheels with replaceable tires.

Sturdy closed base steel stand.

Deluxe blade guide bearings included.

Precision metal miter gauge.

Two cutting speeds for excellent results in either hard or soft woods.

Deluxe dual-position rip fence system.

Hinged doors and easily accessible blade tension knob, for fast blade changes and adjustments.

Extra-large 21 1/2" x 15 3/4" cast-iron table.

Smooth running heavy-duty 1 HP motor.

Safety lock-out switch with removable key to prevent unauthorized use.

SPECIFICATIONS

- Wheel size
14" (350 mm)
- Wheel speeds (2)
436 & 909 rpm
- Blade speeds (2)
1575 & 3280 lin. fpm
- Maximum blade width
3/4" (19 mm)
- Minimum blade width
1/8" (3 mm)
- Blade length
100 3/4" (2560 mm)
- Table size
21 1/2" x 15 3/4" (548 x 400 mm)
- Table tilt
0° to 45° (right)
- Table height
39 3/8" (950 mm)
- Maximum width of cut
13 3/8" (340 mm)
- Maximum depth of cut
9" (230 mm)
- Dust port
4" (102 mm)
- Base dimensions (l x w)
22 7/8" x 17 3/8" (580 x 440 mm)
- Motor
1 HP, 120 V, 9.5 A
- Weight
194 lbs (88 kg)

14" WOOD CUTTING BANDSAW



MODEL #90-120





GENERAL® INTERNATIONAL

8360 Champ-d'Eau, Montreal (Quebec) Canada H1P 1Y3
Telephone (514) 326-1161 • Fax (514) 326-5555 • www.general.ca

THANK YOU for choosing this General® International model 90-120 14" Wood Cutting Bandsaw. This bandsaw has been carefully tested and inspected before shipment and if properly used and maintained, will provide you with years of reliable service. For your safety, as well as to ensure optimum performance and trouble-free operation, and to get the most from your investment, please take the time to read this manual before assembling, installing and operating the unit.

The manual's purpose is to familiarize you with the safe operation, basic function, and features of this bandsaw as well as the set-up, maintenance and identification of its parts and components. This manual is not intended as a substitute for formal woodworking instruction, nor to offer the user instruction in the craft of woodworking. If you are not sure about the safety of performing a certain operation or procedure, do not proceed until you can confirm, from knowledgeable and qualified sources, that it is safe to do so.

Once you've read through these instructions, keep this manual handy for future reference.

DISCLAIMER: The information and specifications in this manual pertain to the unit as it was supplied from the factory at the time of printing. Because we are committed to making constant improvements, General® International reserves the right to make changes to components, parts or features of this unit as deemed necessary, without prior notice and without obligation to install any such changes on previously delivered units. Reasonable care is taken at the factory to ensure that the specifications and information in this manual corresponds with that of the unit with which it

was supplied. However, special orders and "after factory" modifications may render some or all information in this manual inapplicable to your machine. Further, as several generations of this model of wood cutting Bandsaw and several versions of this manual may be in circulation, if you own an earlier or later version of this unit, this manual may not depict your unit exactly. If you have any doubts or questions contact your retailer or our support line with the model and serial number of your unit for clarification.

GENERAL® INTERNATIONAL WARRANTY

All component parts of General® International and Excalibur by General International® products are carefully inspected during all stages of production and each unit is thoroughly inspected upon completion of assembly.

Limited Lifetime Warranty

Because of our commitment to quality and customer satisfaction, General® International agrees to repair or replace any part or component which upon examination, proves to be defective in either workmanship or material to the original purchaser for the life of the tool. However, the Limited Lifetime Warranty does not cover any product used for professional or commercial production purposes nor for industrial or educational applications. Such cases are covered by our Standard 2-year Limited Warranty only. The Limited Lifetime Warranty is also subject to the "Conditions and Exceptions" as listed below.

Standard 2-Year Limited Warranty

All products not covered by our lifetime warranty including products used in commercial, industrial and educational applications are warranted for a period of 2 years (24 months) from the date of purchase. General® International agrees to repair or replace any part or component which upon examination, proves to be defective in either workmanship or material to the original purchaser during this 2-year warranty period, subject to the "conditions and exceptions" as listed below.

To file a Claim

To file a claim under our Standard 2-year Limited Warranty or under our Limited Lifetime Warranty, all defective parts, components or machinery must be returned freight or postage prepaid to General® International, or to a nearby distributor, repair center or other location designated by General® International. For further details call our service department at 1-888-949-1161 or your local distributor for assistance when filing your claim.

Along with the return of the product being claimed for warranty, a copy of the original proof of purchase and a "letter of claim" must be included (a warranty claim form can also be used and can be obtained, upon request, from General® International or an authorized distributor) clearly stating the model and serial number of the unit (if applicable) and including an explanation of the complaint or presumed defect in material or workmanship.

CONDITIONS AND EXCEPTIONS:

This coverage is extended to the original purchaser only. Prior warranty registration is not required but documented proof of purchase i.e. a copy of original sales invoice or receipt showing the date and location of the purchase as well as the purchase price paid, must be provided at the time of claim.

Warranty does not include failures, breakage or defects deemed after inspection by General® International to have been directly or indirectly caused by or resulting from; improper use, or lack of or improper maintenance, misuse or abuse, negligence, accidents, damage in handling or transport, or normal wear and tear of any generally considered consumable parts or components.

Repairs made without the written consent of General® International will void all warranty.

TABLE OF CONTENTS

Rules for safe operation	5
Electrical requirements	6
Identification of main parts and components	7
Unpacking	8
Basic functions	9
Cleaning	9
Placement within the shop	9
Assembly instructions	10 - 14
Assembling the cabinet	10 - 11
Attaching the machine to the cabinet	11
Installing the table and the 90° stop	11 - 12
Installing the rip fence system.....	13
Installing the push stick holder.....	13
Installing the belt tension handwheel.....	14
Basic adjustments and controls	14 - 20
Connecting to a power source.....	14
On/Off power switch.....	14
Choosing and changing blades.....	15 - 16
Adjusting blade tension	16
Adjusting blade tracking.....	17
Adjusting the upper blade guides	18
Adjusting the lower blade guides.....	18
Adjusting the upper thrust bearing.....	19
Adjusting the lower thrust bearing.....	19
Selecting and changing the blade speed	19 - 20
Adjusting the upper blade guard	20
Operating Instructions	21 - 22
Checklist before starting	21
Connecting to a dust collector.....	21
Cutting curves	21
Cutting circles.....	21
Using the miter gauge.....	22
Maintenance	22 - 23
Cleaning	22
Wheel tires.....	22
Motor	22
Lubrication.....	22
Changing the belt and aligning the pulleys.....	23
Parts list & diagram	24 - 28
Contact information	30

RULES FOR SAFE OPERATION

To help ensure safe operation, please take a moment to learn the machine's applications and limitations, as well as potential hazards. General® International disclaims any real or implied warranty and holds itself harmless for any injury that may result from the improper use of its equipment.

1. Do not operate the bandsaw when tired, distracted or under the effects of drugs, alcohol or any medication that impairs reflexes or alertness.
 2. The work area should be well lit, clean and free of debris.
 3. Keep children and visitors at a safe distance when the bandsaw is in operation; do not permit them to operate the bandsaw.
 4. Childproof and tamper proof your shop and all machinery with locks, master electrical switches and switch keys, to prevent unauthorized or unsupervised use.
 5. STAY ALERT! Give your work your undivided attention. Even a momentary distraction can lead to serious injury.
 6. Fine particulate dust is a carcinogen that can be hazardous to health. Work in a well-ventilated area. Wear face, eye, ear, respiratory and body protection devices.
 7. Do not wear loose clothing, gloves, bracelets, necklaces or other jewelry while the bandsaw is in operation.
 8. Be sure that adjusting wrenches, tools, drinks and other clutter are removed from the machine and/or the table surface before operating.
 9. Keep hands well away from the blade and all moving parts. Use a brush, not hands, to clear away chips and dust.
 10. Adjust and position the blade guard as close as possible to the workpiece.
 11. Adjust blade tension and tracking before starting to cut.
 12. Blade teeth must point down toward the table.
 13. Be sure that the blade has gained full operating speed before starting to cut.
 14. Always use a clean, properly sharpened blade. Dirty or dull blades are unsafe and can lead to accidents.
 15. Use suitable workpiece support if the workpiece does not have a flat surface.
 16. Do not work on long stock without adequate support on the out feed end of the table.
 17. Do not push or force stock into the blade. The bandsaw will perform better and more safely when working at the rate for which it was designed.
 18. Avoid working from awkward or off balance positions. Do not overreach and keep both feet on floor.
 19. Keep guards in place and in working order. If a guard must be removed for maintenance or cleaning be sure it is properly re-attached before using the saw again.
 20. Never leave the machine unattended while it is running or with the power on.
 21. Use of parts and accessories NOT recommended by **General® International** may result in equipment malfunction or risk of injury.
 22. Never stand on machinery. Serious injury could result if the tool is tipped over or if the blade is unintentionally contacted.
 23. Always disconnect the saw from the power source before servicing or changing accessories such as blades, or before performing any maintenance or cleaning, or if the machine will be left unattended.
 24. Make sure that the switch is in the "OFF" position before plugging in the power cord.
 25. Make sure the machine is properly grounded. If equipped with a 3-prong plug it should be used with a three-pole receptacle. Never remove the third prong.
 26. Do not use this bandsaw for other than its intended use. If used for other purposes, **General® International** disclaims any real or implied warranty and holds itself harmless for any injury, which may result from that use.
-



ELECTRICAL REQUIREMENTS



BEFORE CONNECTING THE MACHINE TO THE POWER SOURCE, VERIFY THAT THE VOLTAGE OF YOUR POWER SUPPLY CORRESPONDS WITH THE VOLTAGE SPECIFIED ON THE MOTOR I.D. NAMEPLATE. A POWER SOURCE WITH GREATER VOLTAGE THAN NEEDED CAN RESULT IN SERIOUS INJURY TO THE USER AS WELL AS DAMAGE TO THE MACHINE. IF IN DOUBT, CONTACT A QUALIFIED ELECTRICIAN BEFORE CONNECTING TO THE POWER SOURCE.

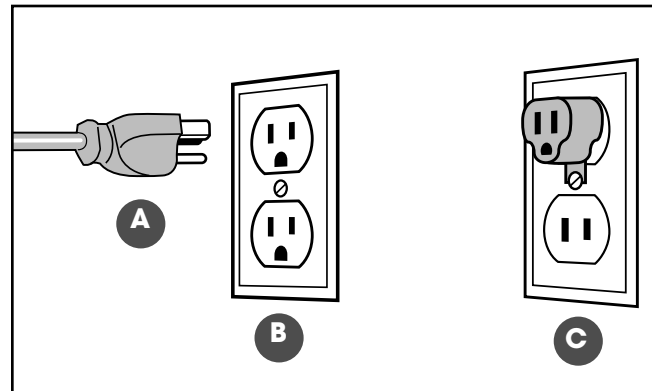
THIS TOOL IS FOR INDOOR USE ONLY. DO NOT EXPOSE TO RAIN OR USE IN WET OR DAMP LOCATIONS.

GROUNDING INSTRUCTIONS

In the event of an electrical malfunction or short circuit, grounding reduces the risk of electric shock. The motor of this machine is wired for 120 V single phase operation and is equipped with a 3-conductor cord and a 3-prong grounding plug **A** to fit a grounded type receptacle **B**.

Do not remove the 3rd prong (grounding pin) to make it fit into an old 2-hole wall socket or extension cord. If an adaptor plug is used **C**, it must be attached to the metal screw of the receptacle.

Note: The use of an adaptor plug is illegal in some areas. Check your local codes. If you have any doubts or if the supplied plug does not correspond to your electrical outlet, consult a qualified electrician before proceeding.



CIRCUIT CAPACITY

Make sure that the wires in your circuit are capable of handling the amperage draw from your machine, as well as any other machines that could be operating on the same circuit.

If you are unsure, consult a qualified electrician. If the circuit breaker trips or the fuse blows regularly, your machine may be operating on a circuit that is close to its amperage draw capacity. However, if an unusual amperage draw does not exist and a power failure still occurs, contact a qualified technician or our service department.

EXTENSION CORDS

If you find it necessary to use an extension cord with your machine, use only 3-wire extension cords that have 3-prong grounding plug and a matching 3-pole receptacle that accepts the tool's plug. Repair or replace a damaged extension cord or plug immediately. Make sure the cord rating is suitable for the amperage listed on the motor I.D. plate.

An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. The accompanying chart shows the correct size extension cord to be used based on cord length and motor I.D. plate amp rating. If in doubt, use the next heavier gauge. The smaller the number, the heavier the gauge.

TABLE - MINIMUM GAUGE FOR CORD

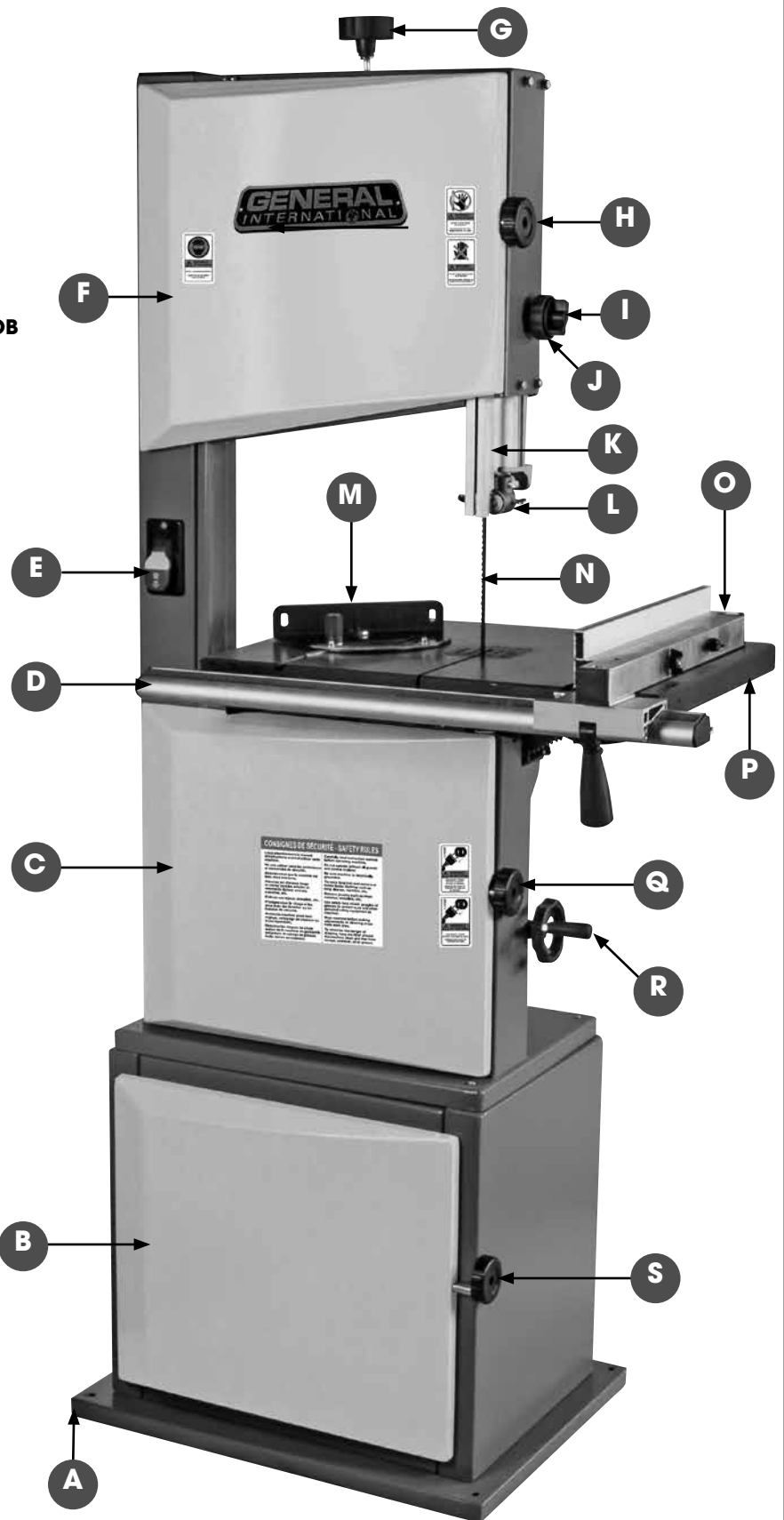
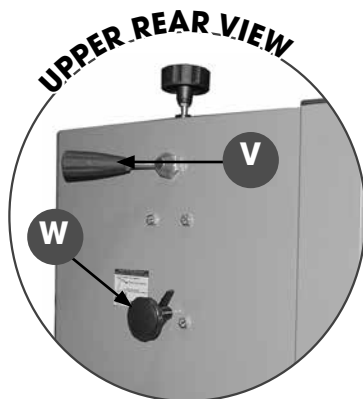
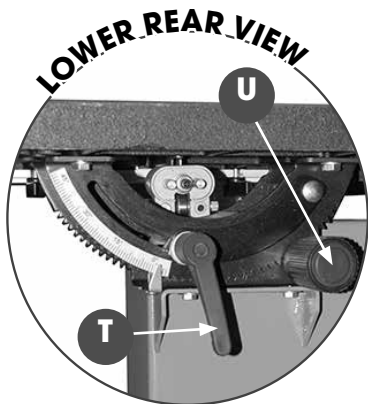
EXTENSION CORD LENGTH

AMPERES	50 feet	100 feet	200 feet	300 feet
< 5	18	16	16	14
6 to 10	18	16	14	12
10 to 12	16	16	14	12
12 to 16	14	12	*NR	*NR

*NR = Not Recommended

IDENTIFICATION OF MAIN PARTS AND COMPONENTS

- A. BASE
- B. CABINET DOOR
- C. LOWER WHEEL DOOR
- D. RIP FENCE RAIL
- E. SWITCH WITH REMOVABLE KEY
- F. UPPER WHEEL DOOR
- G. BLADE TENSION KNOB
- H. UPPER DOOR LOCK KNOB
- I. BLADE GUARD LOCK KNOB
- J. BLADE GUARD ADJUSTMENT KNOB
- K. BLADE GUARD
- L. UPPER BLADE GUIDE
- M. MITER GAUGE
- N. BLADE
- O. RIP FENCE
- P. TABLE
- Q. LOWER DOOR LOCK KNOB
- R. BELT TENSION KNOB
- S. CABINET DOOR LOCK KNOB
- T. TABLE TILT LOCK LEVER
- U. TABLE TILT ADJUSTMENT KNOB
- V. TENSION LEVER
- W. TRACKING ADJUSTMENT KNOB



UNPACKING

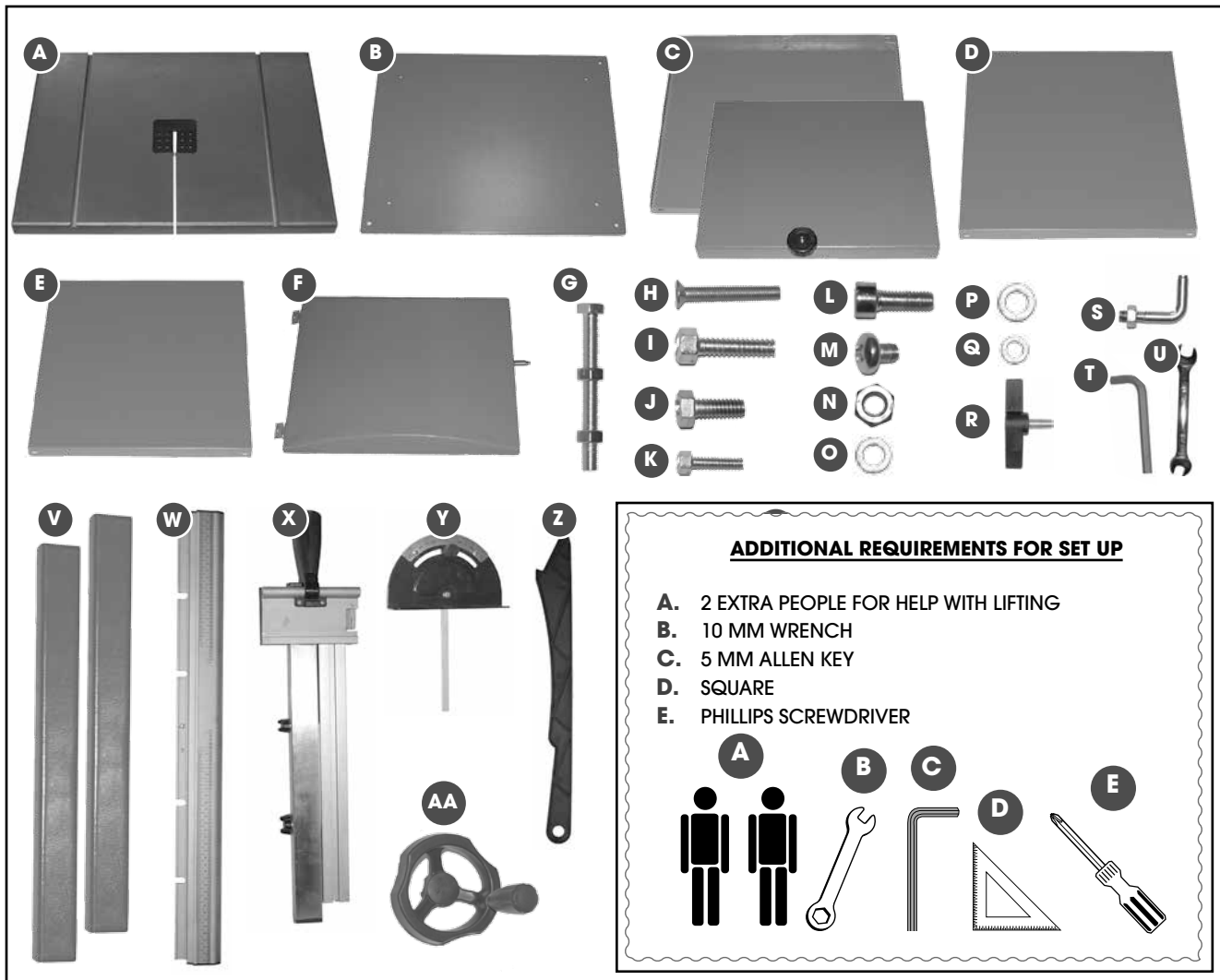
Carefully unpack and remove the unit and its components from the box and check for missing or damaged items as per the list of contents below.

NOTE: PLEASE REPORT ANY DAMAGED OR MISSING ITEMS TO YOUR GENERAL® INTERNATIONAL DISTRIBUTOR IMMEDIATELY.

LIST OF CONTENTS

	QTY		
A. TABLE.....	1	N. NUT.....	8
B. BASE.....	1	O. WASHER (LARGE).....	8
C. CABINET SIDE PANELS.....	2	P. WASHER (MEDIUM).....	24
D. REAR CABINET PANEL.....	1	Q. WASHER (SMALL).....	2
E. CABINET SHELF.....	1	R. KNOB.....	4
F. CABINET DOOR.....	1	S. PUSH STICK HANGER W/NUT.....	1
G. TABLE STOP.....	1	T. 3 MM ALLEN KEY.....	1
H. COUNTERSUNK SCREW.....	4	U. 10 - 13 MM WRENCH.....	1
I. HEX HEAD BOLT (M8X40)*.....	4	V. CROSS BRACE.....	2
J. HEX HEAD BOLT (M6X40).....	4	W. FENCE RAIL.....	1
K. HEX HEAD BOLT (M6X16).....	12	X. FENCE.....	1
L. CAP SCREW (M6X16).....	4	Y. MITER GAUGE.....	1
M. SCREW (M5X6).....	2	Z. PUSH STICK.....	1
		AA. BELT TENSION HANDWHEEL.....	1

*Use only to immobilize the machine against the floor.



BASIC FUNCTIONS

This 14" Wood Cutting Bandsaw is supplied with a 1/2" general purpose blade and is designed to accommodate blade widths from 1/8" to 3/4". Ideal blade length for this model 90-120 is 100 3/4" (2560 mm).

Note: *Generally speaking, because the upper wheel height is somewhat adjustable (to allow for blade tensioning), a blade length variation of plus or minus 1/2" from the "ideal blade length" can be accommodated.*

Maximum inboard width of cut is 13 3/8". For cutting thicker stock or for resawing, the maximum depth of cut (or max. workpiece height) is 9" (230 mm). An adjustable rip fence is supplied to serve as a straightedge to guide the workpiece for longer rip cuts. The fence can easily be removed and set aside when not required, for example when making curved cuts.

CLEANING

The protective coating on the saw table prevents rust from forming during shipping and storage. Remove it by rubbing with a rag dipped in kerosene, mineral spirits or paint thinner. (Dispose of potentially flammable solvent-soaked rags according to manufacturer's safety recommendations).

A putty knife, held flat to avoid scratching the surface, may also be used to scrape off the coating followed by clean-up with solvent. Avoid rubbing the saw's painted surfaces, as many solvent-based products will remove paint.

To prevent rust, apply a light coating of paste wax or use regular applications of any after-market surface protectant or rust inhibitor.



TIP: WITH A SCREWDRIVER, PUSH A SOLVENT-SATURATED RAG INTO THE T-SLOTS TO REMOVE THE GREASE.

PLACEMENT WITHIN THE SHOP / SAFETY ZONE

PLACEMENT WITHIN THE SHOP

This machine should be installed and operated only on a solid, flat and stable floor that is able to support the weight of the machine (194 lbs - 88 kg) and the operator.

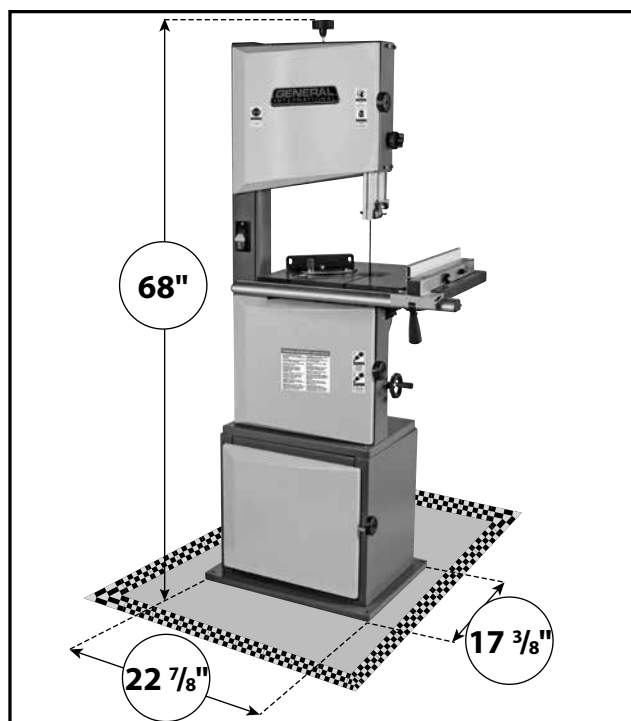
Using the dimensions shown as a guideline, plan for placement within your shop that will allow the operator to work unencumbered and unobstructed by foot traffic (either passing shop visitors or other shop workers) or other tools or machinery.

ESTABLISHING A SAFETY ZONE

For shops with frequent visitors or multiple operators, it is advisable to establish a safety zone around shop machinery. A clearly defined "no-go" zone on the floor around each machine can help avoid accidents that could cause injury to either the operator or the shop visitor.

It is advisable to take a few moments to either paint (using non-slip paint) or using tape, define on the floor the limits or perimeter of each machine's safety zone.

Take steps to ensure that all operators and shop visitors are aware that these areas are off limits whenever a machine is running for everyone but the individual operating the unit.

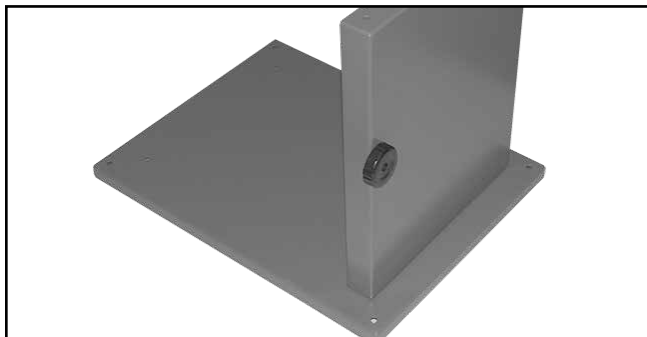


ASSEMBLY INSTRUCTIONS

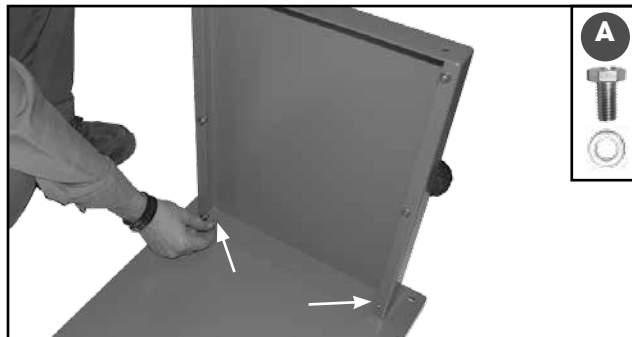


BEFORE ASSEMBLING, MAKE SURE THAT THE SWITCH IS IN THE "OFF" POSITION AND THAT THE POWER CORD IS UNPLUGGED. DO NOT PLUG IN OR TURN ON THE MACHINE UNTIL YOU HAVE COMPLETED THE ASSEMBLY AND INSTALLATION STEPS DESCRIBED IN THIS SECTION OF THE MANUAL.

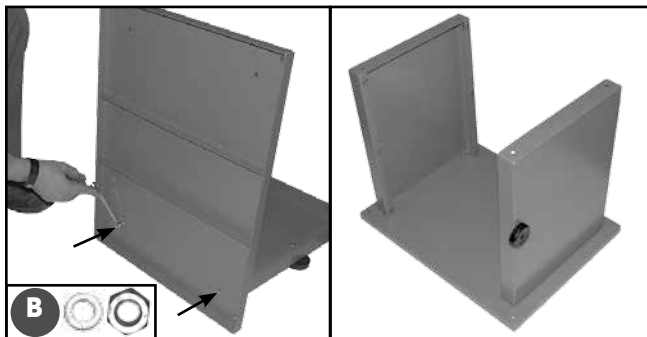
ASSEMBLING THE CABINET



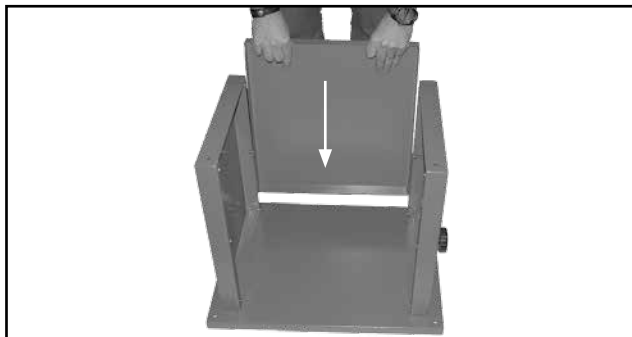
1. Set the right panel on the base.



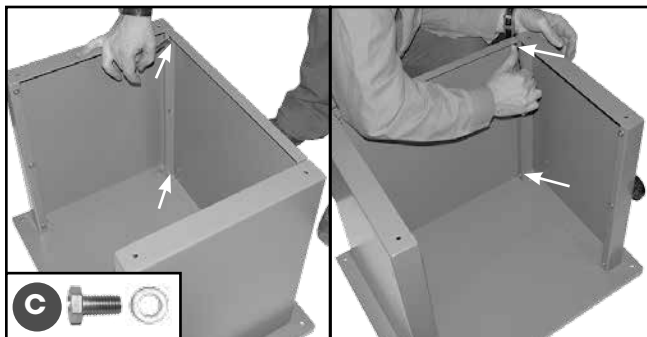
2. Align the holes in the panel with their corresponding holes in the base and insert a bolt with a flat washer **A**.



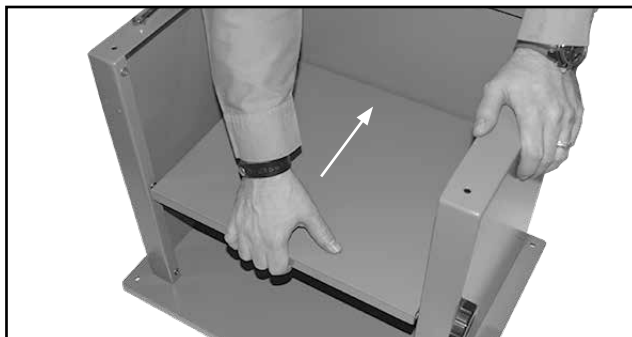
3. Attach the panel to the base using a nut and washer on each bolt **B** under the base with a 10 mm wrench. Repeat with the left panel.



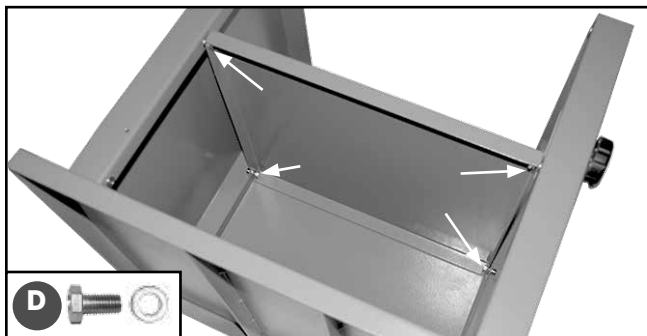
4. Slide the rear panel in place as shown.



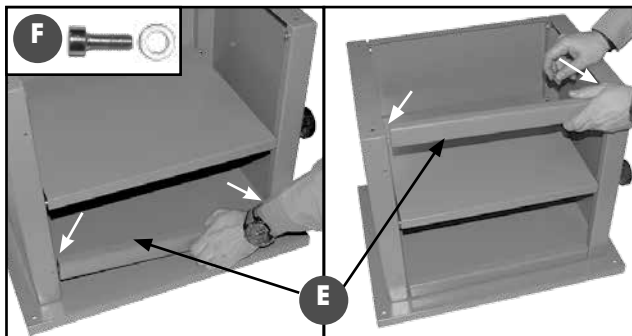
5. Secure the rear panel in place using 4 bolts with washers **C** and a 10 mm wrench.



6. Position the shelf as shown and align its mounting holes with the corresponding holes in the side panels.



7. Attach the shelf using 4 bolts with washers **D** and a 10 mm wrench.

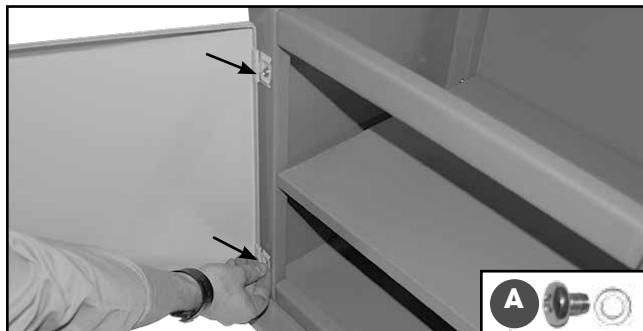


8. Install the lower and upper cross braces **E** to the panels as shown and secure using cap screws with washers **F** and a 5 Allen key.



BEFORE ASSEMBLING, MAKE SURE THAT THE SWITCH IS IN THE "OFF" POSITION AND THAT THE POWER CORD IS UNPLUGGED. DO NOT PLUG IN OR TURN ON THE MACHINE UNTIL YOU HAVE COMPLETED THE ASSEMBLY AND INSTALLATION STEPS DESCRIBED IN THIS SECTION OF THE MANUAL.

ASSEMBLING THE CABINET (CONTINUED)



- 9.** Attach the door using 2 screws with washers and a Phillips screwdriver.



- 10.** Place the assembled cabinet upright on a flat surface.

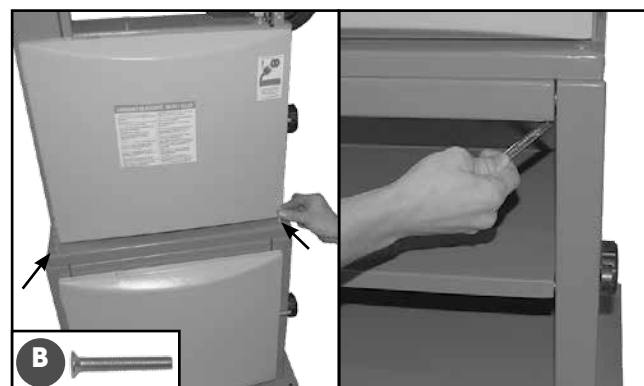
INSTALLING THE MACHINE ON THE CABINET



THE BANDSAW IS HEAVY. DO NOT OVER-EXERT. THE HELP OF ASSISTANTS WILL BE NEEDED FOR THE FOLLOWING STEP. DO NOT GRIP THE BANDSAW BY THE LOWER WHEEL COVER DOOR WHEN LIFTING. KEEP HANDS AWAY FROM BLADE AT ALL TIMES.

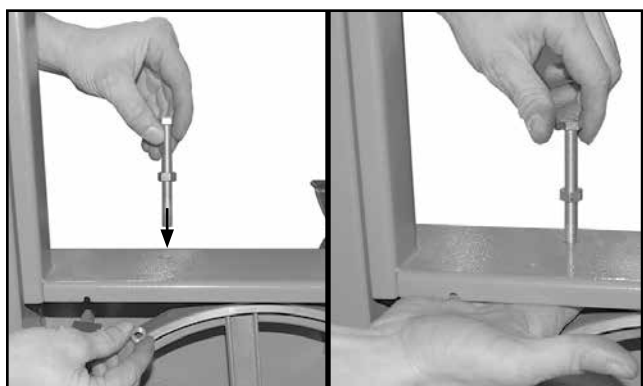


- 1.** Place the machine on the cabinet with the help of two assistants.

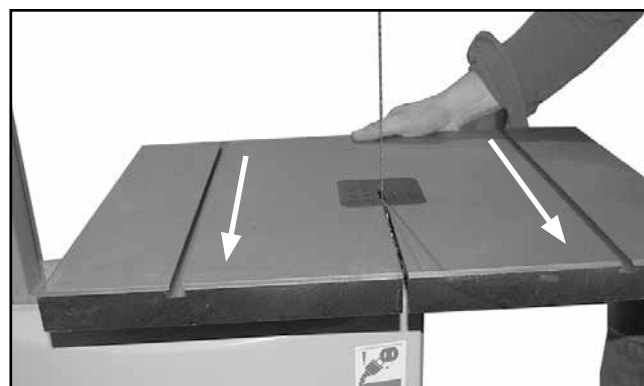


- 2.** Align the 4 mounting holes in the machine with their corresponding holes in the cabinet, then insert a countersunk screw **B** into each hole. Secure the machine to the base by tightening 4 nuts with washers under the machine inside the cabinet with a 10 mm wrench.

INSTALLING THE TABLE AND THE 90° STOP



- 1.** Insert the stop with the jam nut into the mounting hole in the frame, then tighten the nut under the frame by hand.

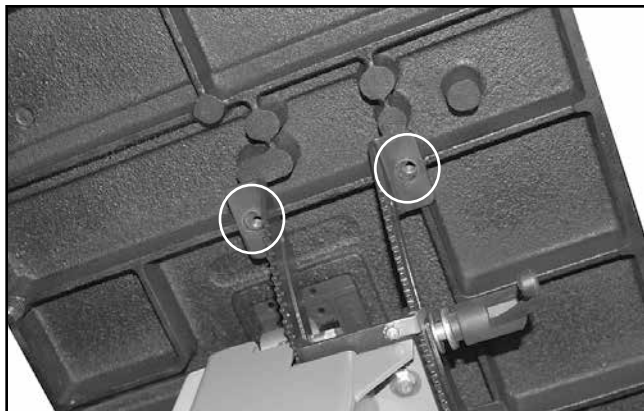


- 2.** Install the table on its base by guiding the blade through the table slot as shown.



BEFORE ASSEMBLING, MAKE SURE THAT THE SWITCH IS IN THE "OFF" POSITION AND THAT THE POWER CORD IS UNPLUGGED. DO NOT PLUG IN OR TURN ON THE MACHINE UNTIL YOU HAVE COMPLETED THE ASSEMBLY AND INSTALLATION STEPS DESCRIBED IN THIS SECTION OF THE MANUAL.

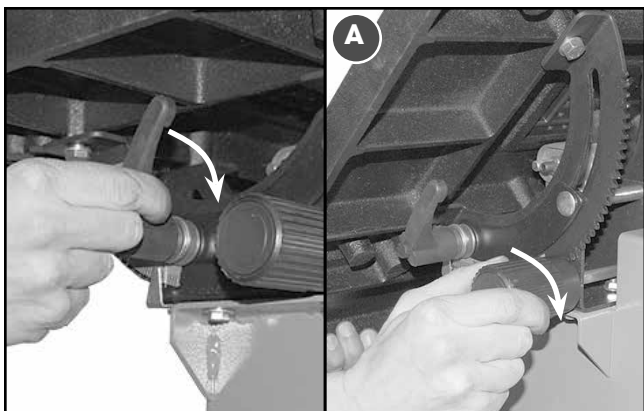
INSTALLING THE TABLE AND THE 90° STOP (CONTINUED)



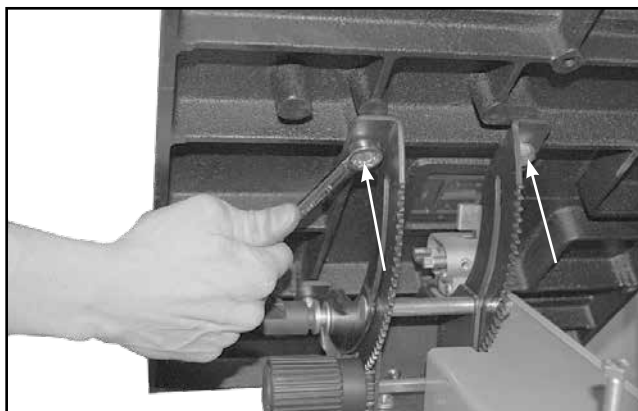
- 3.** Align the four mounting holes in the table with their corresponding holes in the trunnion.



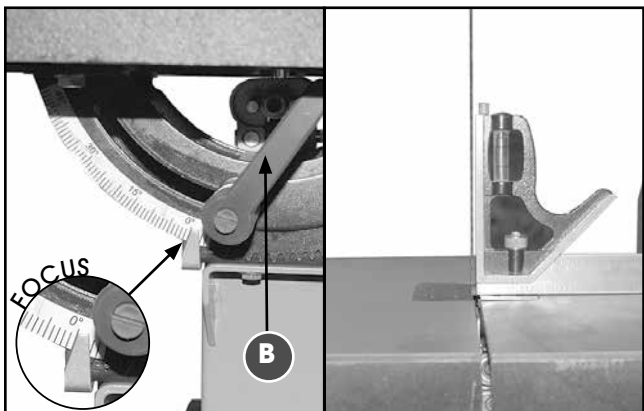
- 4.** Starting by the holes located in the right side of the table, tighten bolts with washers using a 13 mm wrench.



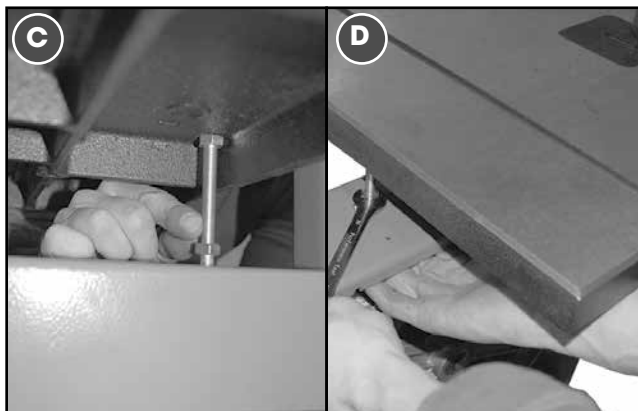
- 5.** To facilitate access to the other 2 mounting holes in the left side, loosen the table lock lever counter-clockwise and tilt the table by turning the knob **A**.



- 6.** Tighten the 2 others bolts with washers using a 13 mm wrench.



- 6.** Set the table in the horizontal position indicated by the "0" on the graduated scale. Place a combination square on the table against the blade, adjust the table until there is no space between the square and the blade, and then tighten the table tilt lock lever **B**.



- 7.** Loosen the table stop until its head touches the table **C**, and then tighten the jam nut **D** while holding the nut under the frame.

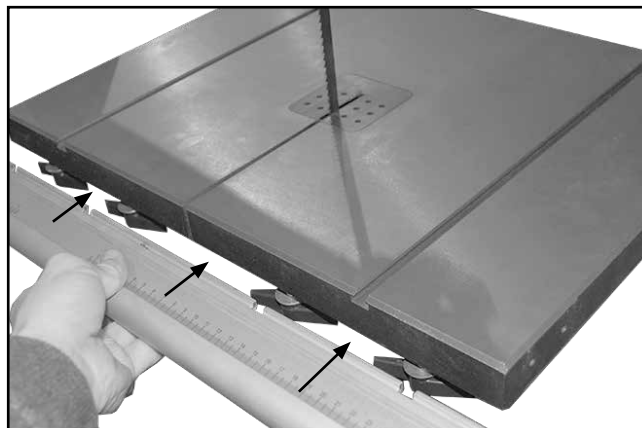


BEFORE ASSEMBLING, MAKE SURE THAT THE SWITCH IS IN THE "OFF" POSITION AND THAT THE POWER CORD IS UNPLUGGED. DO NOT PLUG IN OR TURN ON THE MACHINE UNTIL YOU HAVE COMPLETED THE ASSEMBLY AND INSTALLATION STEPS DESCRIBED IN THIS SECTION OF THE MANUAL.

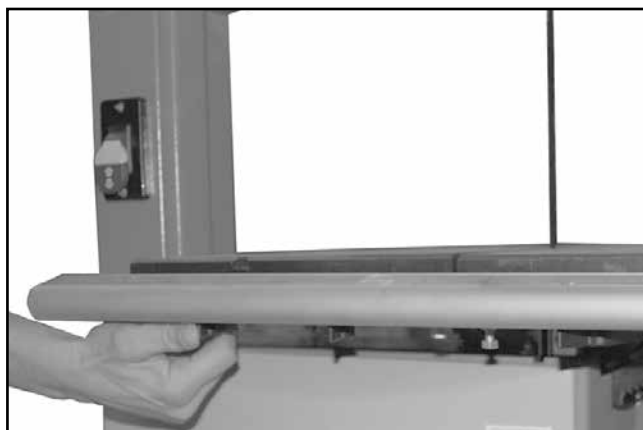
INSTALLING THE RIP FENCE



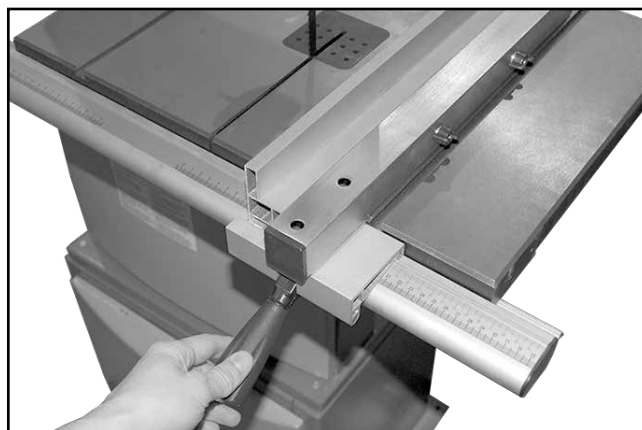
1. Slide a washer onto each lock knob and loosely screw the four lock knobs in the mounting holes in the underside of the table.



2. Fit the rail onto the lock knobs as shown.

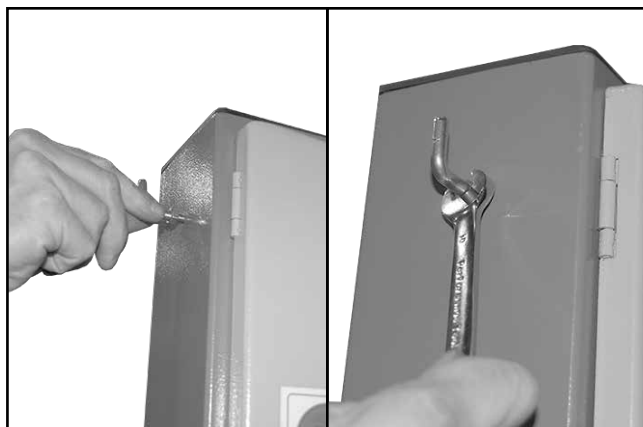


3. Secure the rail in place by tightening the lock knobs.



4. Push down on the handle and place the fence on the rail.

INSTALLATING THE PUSH STICK HOLDER



1. Thread the push stick holder in the mounting hole on the left side of the machine, and tighten the jam nut with a 10 mm wrench to secure it in place.



2. Hang the push stick to keep it handy.



BEFORE ASSEMBLING, MAKE SURE THAT THE SWITCH IS IN THE "OFF" POSITION AND THAT THE POWER CORD IS UNPLUGGED. DO NOT PLUG IN OR TURN ON THE MACHINE UNTIL YOU HAVE COMPLETED THE ASSEMBLY AND INSTALLATION STEPS DESCRIBED IN THIS SECTION OF THE MANUAL.

INSTALLATING THE BELT TENSION HANDWHEEL



1. Slide the handwheel on the arbor.



2. Secure the handwheel in place by tightening the set screw with a 3 mm Allen key.

BASIC ADJUSTMENTS & CONTROLS



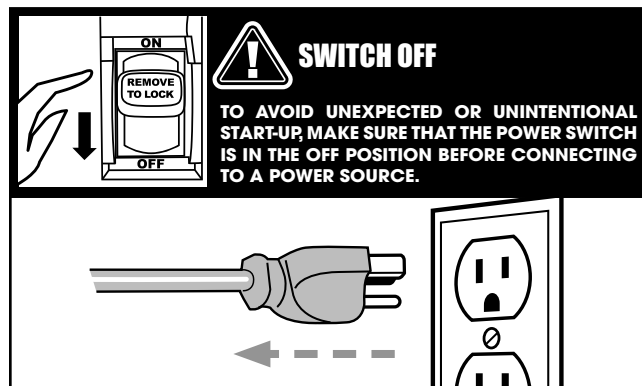
TO REDUCE THE RISK OF SHOCK OR FIRE DO NOT OPERATE THE UNIT WITH A DAMAGED POWER CORD OR PLUG. REPLACE DAMAGED CORD OR PLUG IMMEDIATELY. TO AVOID UNEXPECTED OR UNINTENTIONAL START-UP, MAKE SURE THE POWER SWITCH IS IN THE OFF POSITION BEFORE CONNECTING TO A POWER SOURCE.

CONNECTING TO A POWER SOURCE

Once the assembly steps have been completed, plug the power cord into an appropriate outlet.

Refer back to the section entitled "Electrical Requirements" and make sure all requirements and grounding instructions are followed.

When operations have been completed unplug the machine from the power source.



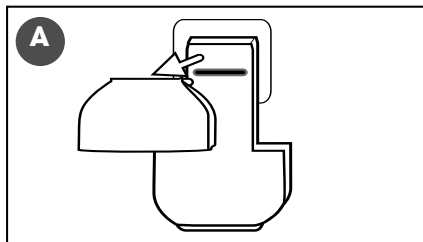
ON/OFF POWER SWITCH

The machine is equipped with a rocker type ON/OFF switch that is equipped with a lock-out key.

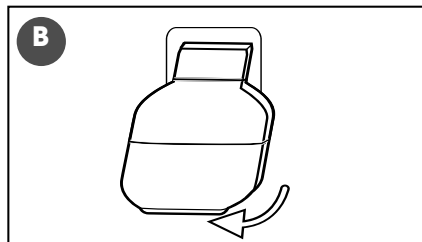
To prevent unwanted or unauthorized start-up or usage remove the lock-out key **A** and store it in a safe place.

To start the machine, insert the lock-out key and pull up the switch **B**.

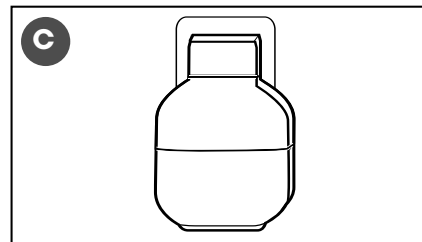
To stop the machine, push down on the power switch **C**. When the machine comes to a complete stop, remove the lock-out key **D** by gently pulling it outward.



A
LOCK-OUT KEY
(PREVENTS START-UP WHEN REMOVED)



B
POWER ON



C
POWER OFF



MAKE SURE THE MACHINE HAS BEEN TURNED OFF AND UNPLUGGED FROM THE POWER SOURCE BEFORE PERFORMING ANY MAINTENANCE OR ADJUSTMENTS.

CHOOSING AND CHANGING THE BLADE

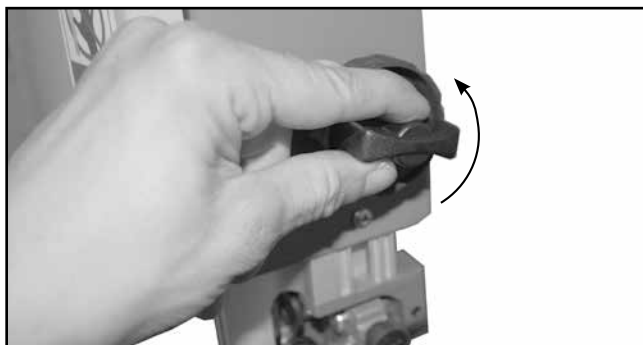
There are a variety of different types of bandsaw blades on the market to suit various cutting applications. The accompanying "Blade Selection" chart provides a general reference tool; your results may vary based on usage, experience and personal preference. Ask your local tool dealer for suggestions for 100 3/4" bandsaw blades in 1/8" to 3/4" widths, based on what is available in your area.

Some general guidelines to consider when choosing bandsaw blades:

Wider blades with coarse teeth are best suited to cutting straight lines, re-sawing and for sweeping curves, but will not turn tight corners. They will cut quickly and aggressively but do have a tendency to bind (get stuck in the cut) if turned too sharply. Narrower, thinner blades with finer teeth will cut more slowly but can turn much tighter corners for cutting more intricate work.

BLADE SELECTION	
OPERATION	RECOMMENDED BLADE
CROSS CUTTING	1/4", 3/8", 1/2"
MITERING	1/4", 3/8", 1/2"
BEVELING	1/4", 3/8", 1/2"
COMPOUND CUTTING	1/4", 3/8", 1/2"
CIRCLE CUTTING	See cutting circles
CURVE CUTTING	1/8", 1/4"

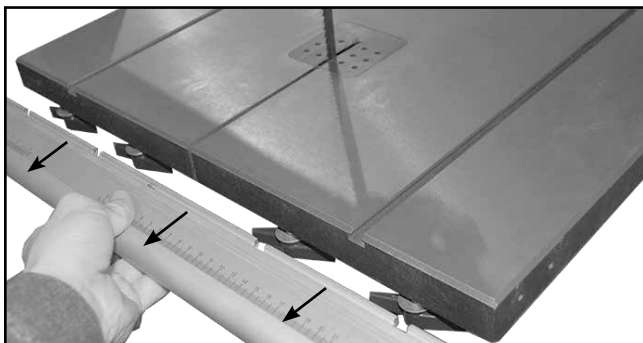
To change blades:



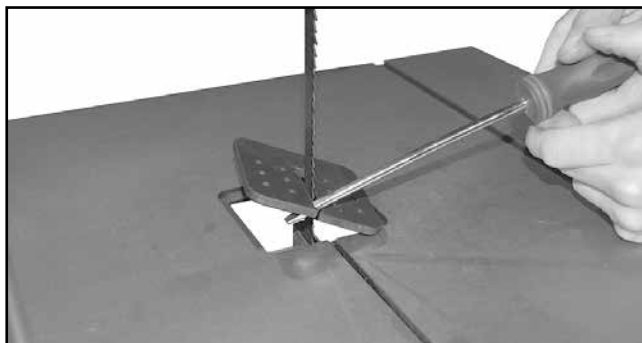
1. Loosen the blade guard lock knob as shown.



2. Lower the blade guard halfway by turning the knob A clockwise.



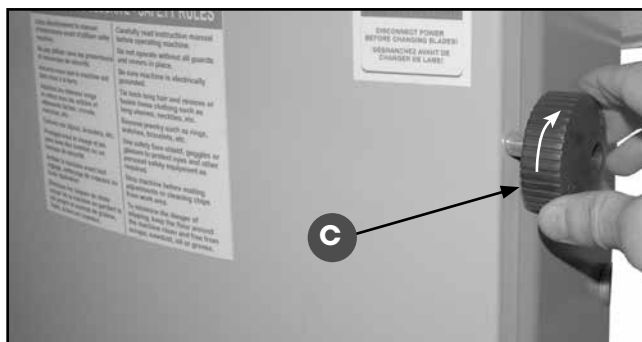
3. Loosen the four lock knobs, and remove the fence rail.



4. Remove the insert from the table using a screwdriver.



5. Open the upper door by turning the knob B clockwise.

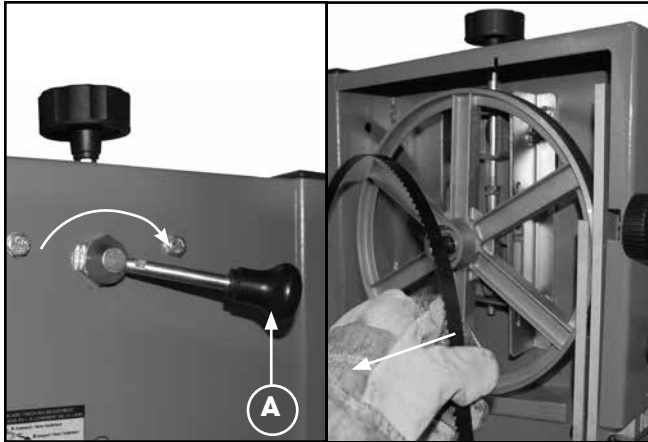


6. Open the lower door by turning the knob C clockwise.

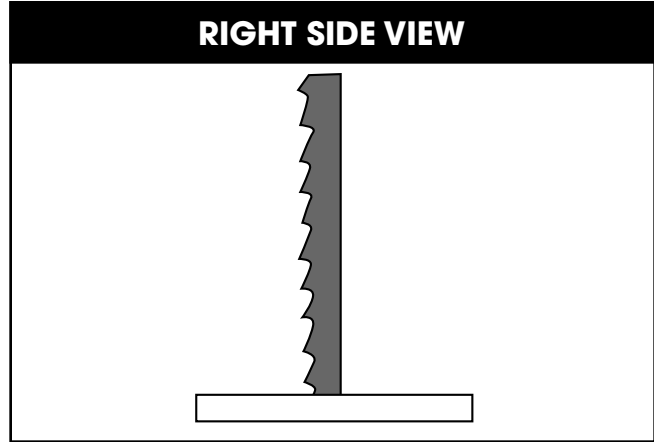


MAKE SURE THE MACHINE HAS BEEN TURNED OFF AND UNPLUGGED FROM THE POWER SOURCE BEFORE PERFORMING ANY MAINTENANCE OR ADJUSTMENTS.

CHOOSING AND CHANGING THE BLADE (CONTINUED)



7. Release the blade tension by turning the tension lever **A** to the right. Remove the blade carefully starting on the right as shown.



8. To install a blade, repeat the previous steps in reverse order, making sure that the blade is installed with the teeth pointing forward and down as shown.

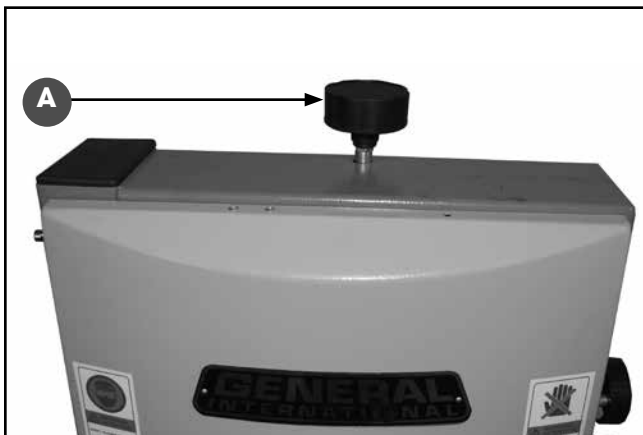
Note: With the blade installed proceed to the tensioning and tracking instructions.

ADJUSTING THE BLADE TENSION

A properly tensioned blade is critical to obtaining maximum performance from any bandsaw. A properly tensioned blade will last longer and be much less likely to break prematurely.

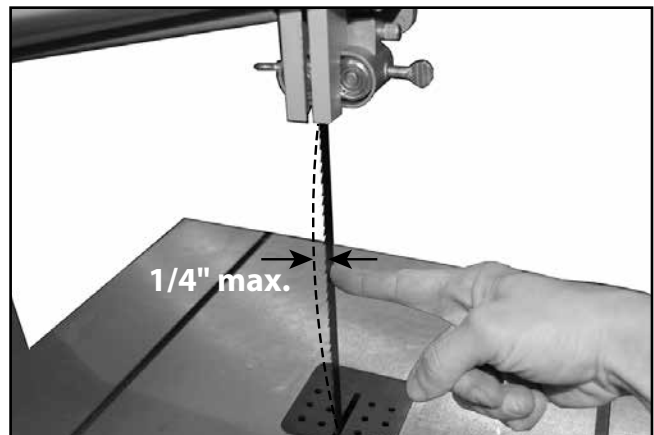
If the blade tension is too loose you will notice that the blade will have a tendency to drift or slip off-line when cutting and you will have more difficulty controlling your cuts. A blade that is tensioned too tightly will break prematurely.

To tension the blade, proceed as follows:



1. Turn the blade tension knob **A** clockwise, raising the upper wheel to tighten the blade. Turn the knob counter-clockwise to lower the upper wheel, loosening the blade.

Note: Changes in blade width and the type of material being cut will have an effect on the blade tension.



To make sure that the blade has been properly tensioned, apply gentle pressure on the blade, it should not move more than 1/4". If the deflection is more than 1/4", turn the tension knob half turn, then check the blade deflection. Repeat until the required tension.



MAKE SURE THE MACHINE HAS BEEN TURNED OFF AND UNPLUGGED FROM THE POWER SOURCE BEFORE PERFORMING ANY MAINTENANCE OR ADJUSTMENTS.

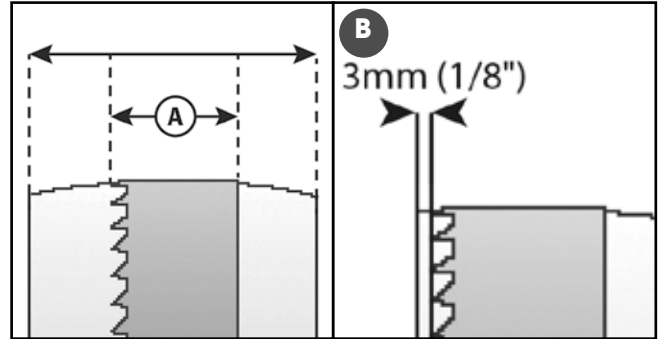
ADJUSTING BLADE TRACKING

Blade tracking means centering the blade on the wheels **A**. Ideally, the blade should stay relatively centered on both the upper and lower wheels.

Due to natural variations in castings, blade thickness or density and tire wear, absolute perfect centering alignment is rarely attainable. A slight misalignment of the blade on the wheels is inevitable and as long as it is kept to a minimum (following the steps listed below) will not hinder the performance of the saw.

This misalignment is controlled and kept to a minimum by adjusting the tilt angle of the upper wheel. When adjusting blade tracking to center the blade on the wheels and assuming that perfect centering is not attainable, it is preferable to have the blade slightly off-center towards the front of the wheels rather than towards the rear because the teeth on most bandsaw blades have alternating hook (one inner, one outer) – therefore if the blade is centered too far back on the wheel (or if the blade tension is too tight), inner hooked teeth will dig into the wheel tire and cause premature wear of the tire.

Nonetheless, to avoid having the blade come off of the wheels on it's own during operation, the front edge of the blades teeth should never be any closer than 3 mm (1/8") from the front edge of the wheel **B**.



To adjust the blade tracking:

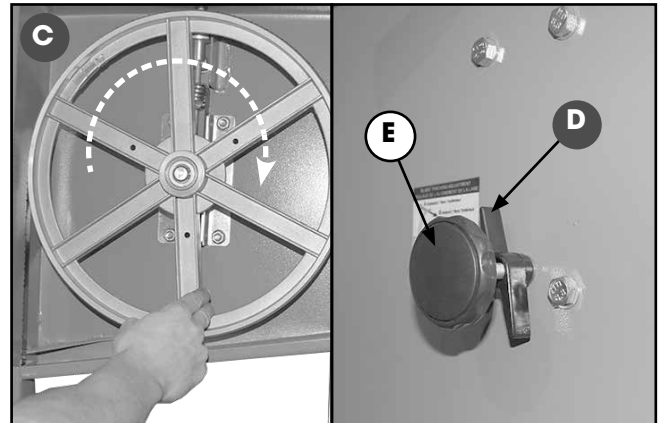
1. Open the upper door then rotate the wheel slowly forward by hand **C** and check the position of the blade on the wheel. The blade should remain as centered as possible on the wheel as it turns **A**.
2. If the blade tracking must be adjusted, loosen the wing nut **D** on the tracking adjustment knob **E**, then turn the knob:

Clockwise if the blade moves toward the front of the wheel. This tilts the top of the wheel to the back and moves the blade toward the center.

Counterclockwise if the blade moves toward the back edge. This tilts the top of the wheel to the front and moves the blade toward the center.

Note: Turn the tracking knobs in 1/2 turn increments, re-check and adjust again as needed.

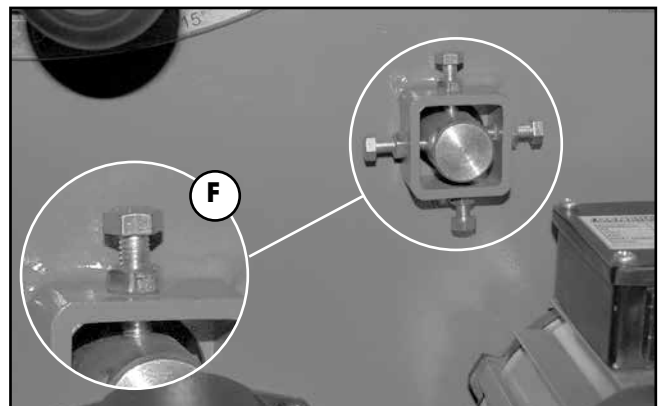
3. With the tracking set, retighten the wing nut **D**.



Note: The upper and lower wheels are factory set to allow for easy and optimal blade tracking adjustments using the primary blade tracking adjustment knob, which adjusts the angle of tilt of the upper wheel.

In extremely rare cases, if acceptable blade tracking cannot be attained through the primary adjustment it may eventually become necessary to make minor adjustments to the angle of tilt of the lower wheel.

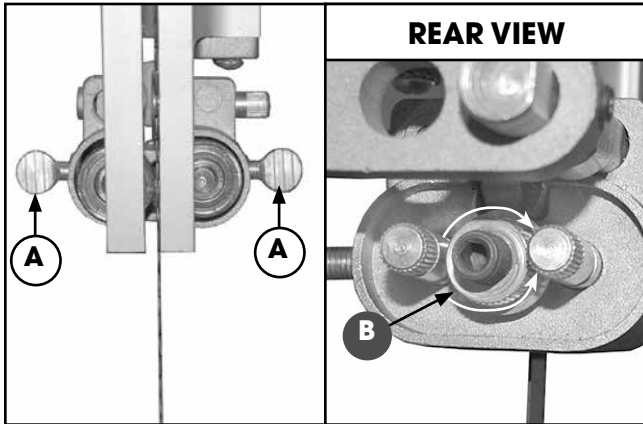
The four bolts **F may be adjusted in or out to tilt the lower wheel up/down or left/right as needed. Once the adjustment is finished, retighten the the jam nuts.**



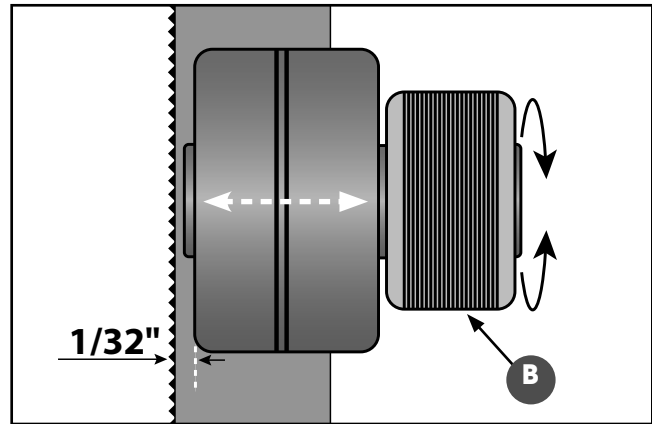


MAKE SURE THE MACHINE HAS BEEN TURNED OFF AND UNPLUGGED FROM THE POWER SOURCE BEFORE PERFORMING ANY MAINTENANCE OR ADJUSTMENTS.

ADJUSTING THE UPPER BLADE GUIDES

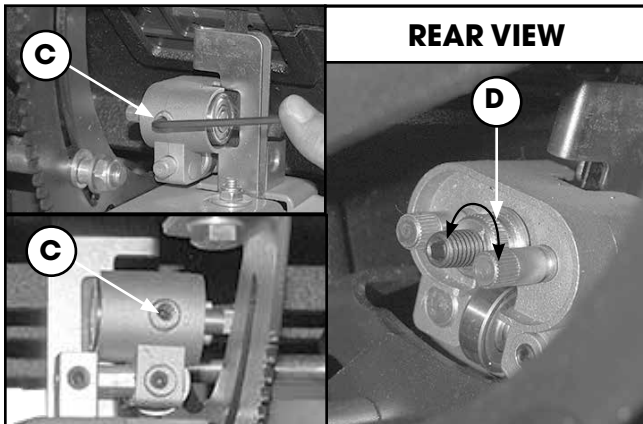


1. Loosen the two thumbscrews **A**.



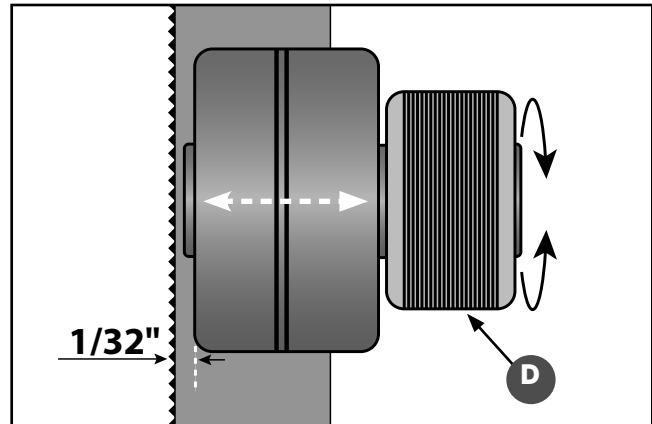
2. Adjust the guides by turning the knurled nut **B** so that the guides are at least $1/32''$ behind the teeth of the blade to avoid damage during cutting. Retighten the thumbscrews **A**.

ADJUSTING THE LOWER BLADE GUIDES



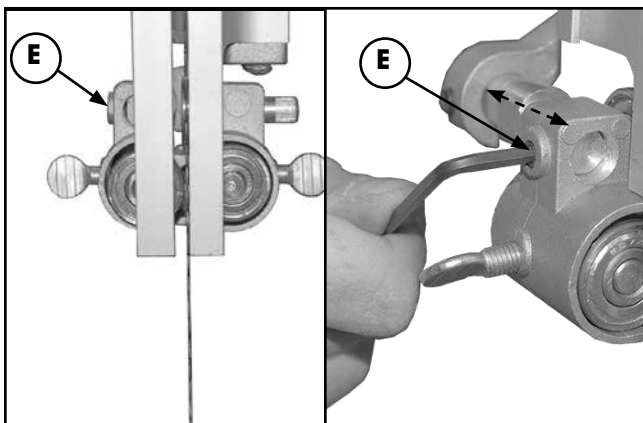
1. Loosen the set screws **C** located on each side of the blade guides using a 3 mm Allen key.

Note: To access the lower guide assembly, unlock and tilt the table.

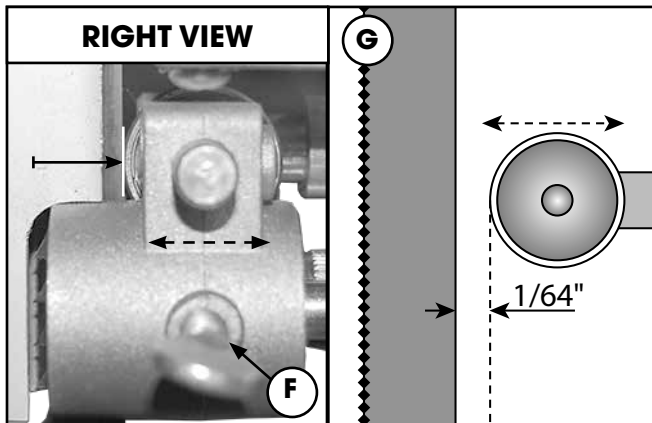


2. Adjust the guides by turning the knurled nut **D** so that the guides are at least $1/32''$ behind the teeth of the blade to avoid damage during cutting. Retighten the set screws **C**.

ADJUSTING THE UPPER THRUST BEARING



1. Loosen the set screws **E** using a 3 mm Allen key.

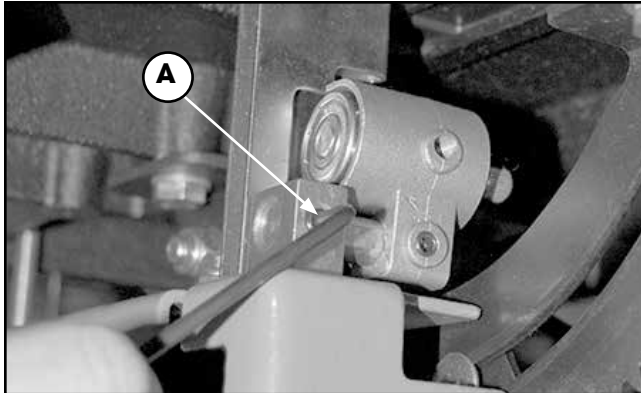


2. Then manually adjust the thrust bearing bracket **F** in or out until the bearing is $1/64''$ behind the blade **G**. Retighten the set screw **E**.

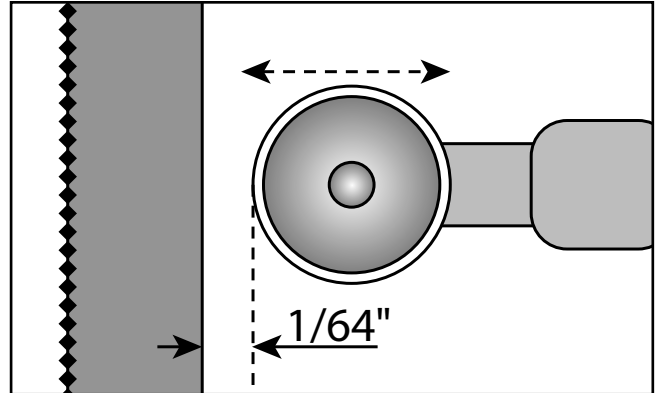


MAKE SURE THE MACHINE HAS BEEN TURNED OFF AND UNPLUGGED FROM THE POWER SOURCE BEFORE PERFORMING ANY MAINTENANCE OR ADJUSTMENTS.

ADJUSTING THE LOWER THRUST BEARING



1. Loosen the set screw **A** located under the table using a 3 mm Allen key.



2. Then manually adjust the thrust bearing bracket in or out until the bearing is $\frac{1}{64}$ " behind the blade. Retighten the set screw **A**.

SELECTING AND CHANGING THE BLADE SPEED

This bandsaw is equipped with 2 speed settings: High - 3280 Feet Per Minute (fpm) and Low- 1574 fpm, allowing you to achieve better results by selecting the appropriate speed based on the type of cut.

Some general guidelines to consider for selecting blade speed:

Thick material = Slower speed

Harder or denser material = Slower Speed

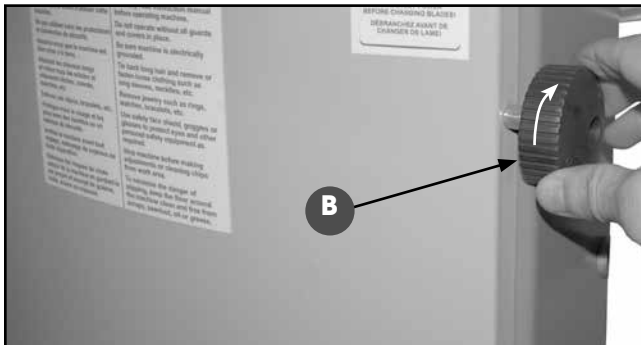
Blades with fine tooth pitch = Slower Speed

Thin material = Faster speed

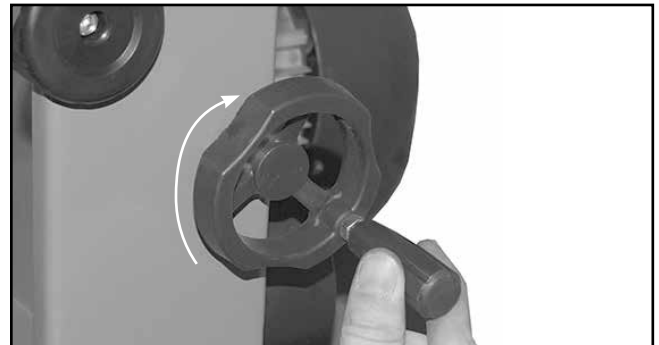
Soft material = Faster speed

Blades with few teeth per inch = Faster speed

To change blade speed:



1. Open the lower door.



2. Loosen the belt by turning the handwheel clockwise.



3. Push the belt while turning the wheel by hand until the belt slips off the pulley.

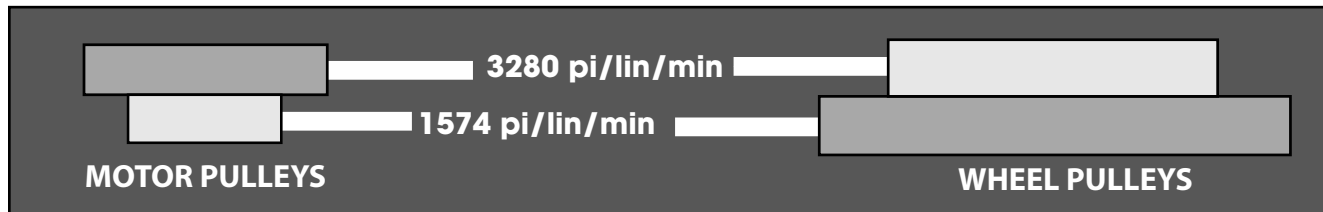


4. Place the belt on the motor pulley and on the wheel pulley as per the desired speed. See the diagram below.

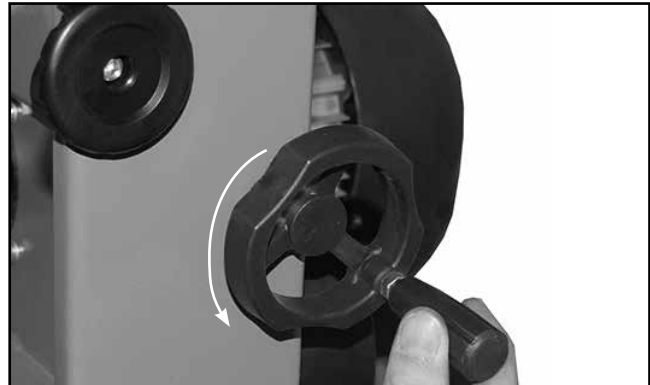


MAKE SURE THE MACHINE HAS BEEN TURNED OFF AND UNPLUGGED FROM THE POWER SOURCE BEFORE PERFORMING ANY MAINTENANCE OR ADJUSTMENTS.

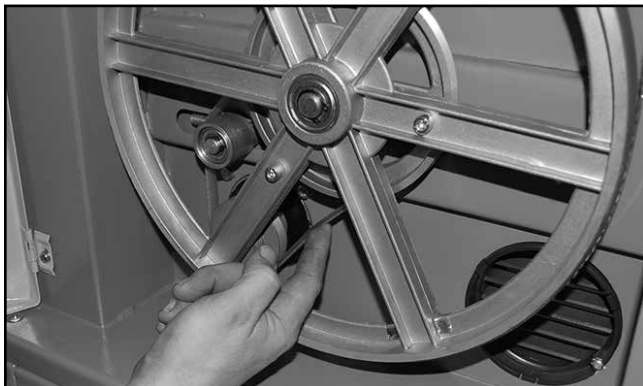
SELECTING AND CHANGING THE BLADE SPEED (CONTINUED)



- 5.** Make sure the belt is properly installed on the pulleys.



- 6.** Turn the tension handwheel counterclockwise until the required tension is achieved.



- 7.** Check the tension by pushing on the belt with your finger. The belt should not deflect more than 1/2".



- 8.** Close the lower door.

ADJUSTING THE UPPER BLADE GUARD

The upper blade guard should be adjusted based on the height of the workpiece. To reduce risks of injury, a minimum amount of blade should be exposed.

- Loosen lock knob **B** and turn knob **C** to raise or lower the guard, and set it 1/8" - 1/4" above the workpiece.
- Retighten the lock knob **B**, before turning on the saw.



OPERATING INSTRUCTIONS

CHECKLIST BEFORE STARTING



VERIFY ALL CHECK POINTS BEFORE STARTING. FAILURE TO COMPLY CAN RESULT IN SERIOUS INJURIES.

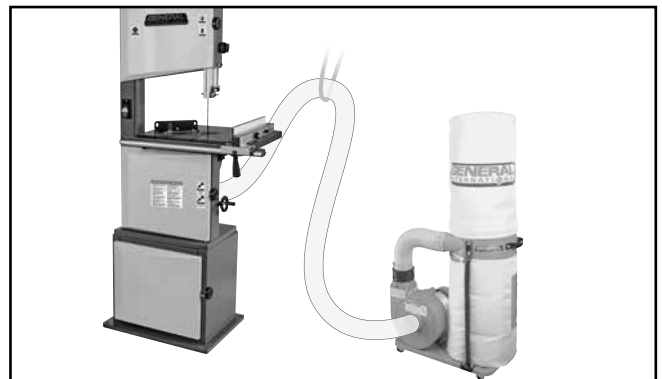
1. Make sure you and any assistants are wearing safe and appropriate workshop attire.
2. To reduce the risk of damage to the machine, as well as potential for personal injury, after initial set-up as well as before each use, make sure that everything is securely installed and that all fasteners and moving parts on this machine are locked in place before starting the machine.
3. Make sure to have on safety glasses as well as hearing or/and respiratory protection at all times when using the machine.
4. Use only recommended parts and accessories. The use of parts or accessories NOT recommended by GENERAL® INTERNATIONAL may result in a risk of injury or damage to the machine.
5. Be sure that adjusting wrenches, tools, drinks and other clutter are removed from the machine and/or the table surface before operating.

CONNECTING TO A DUST COLLECTOR

A dust port that fits 4" hose is provided to accommodate connection to a dust collector (not included).

Be sure to use appropriate sized hose and fittings (not included).

Check that all connections are sealed tightly to help minimize airborne dust. If you do not already own a dust collection system consider contacting your **General® International** distributor for information on our complete line of dust collection systems and accessories or visit our Web Site at www.general.ca.

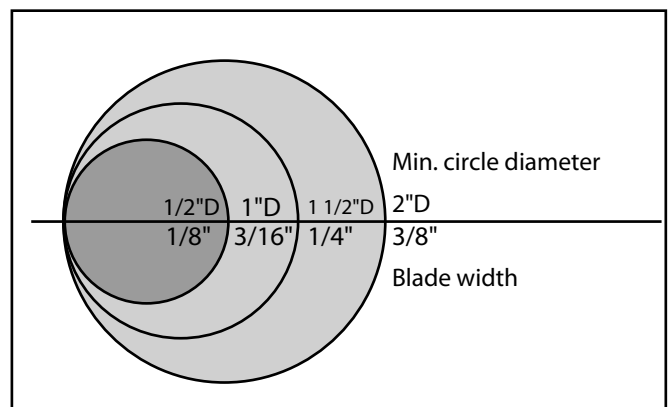


CUTTING CURVES

- When cutting curves, carefully turn the workpiece so the blade follows without twisting. If the curve is so sharp that you repeatedly back up and cut new kerf, use a narrower blade, or a blade with more set (teeth further apart). When a blade has more set, the workpiece turns easier but the cut is rougher.
- When changing a cut, do not withdraw the workpiece from the blade. The blade may get drawn off the wheels.
- To change a cut, turn the workpiece and cut your way out through the waste material area.
- When cutting long curves, make relief cuts as you go along.

CUTTING CIRCLES

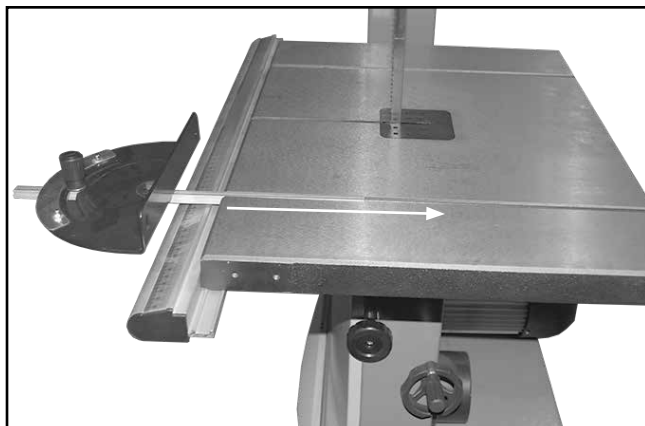
- Adjust the blade guard assembly to 1/8" above the workpiece.
- Use both hands while feeding the work into the blade. Hold the workpiece firmly against the table. Use gentle pressure. Do not force the work. Allow the blade to cut.
- The smallest diameter circle that can be cut is determined by the width of the blade. For example, a 1/4" wide blade will cut a minimum diameter of approximately 1 1/2".



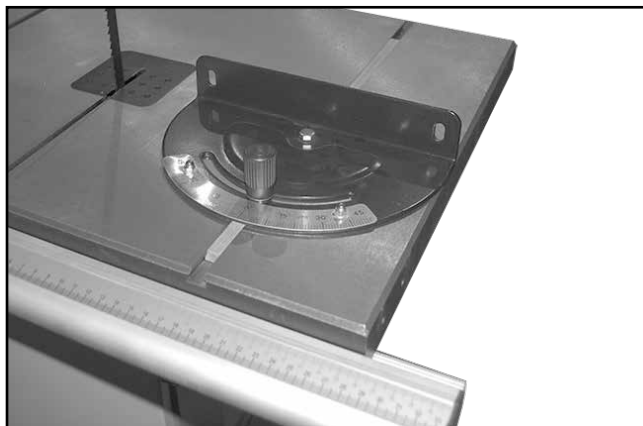


MAKE SURE THE MACHINE HAS BEEN TURNED OFF AND UNPLUGGED FROM THE POWER SOURCE BEFORE PERFORMING ANY MAINTENANCE OR ADJUSTMENTS.

USING THE MITER GAUGE



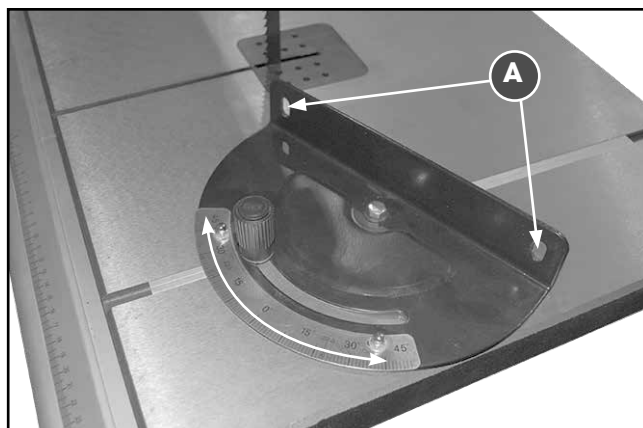
1. Insert the miter gauge into the "T" slot in the table as shown.



2. Position the miter gauge on the table.



3. Loosen the miter gauge lock knob.



4. Adjust the angle as per the angle indicator scale, and then retighten the lock knob.

Note: Use the mounting holes A to add an auxiliary fence if needed.

MAINTENANCE

CLEANING

Keep your band saw clean. Sawdust will accumulate under the table, base and in the wheel housings. This could cause difficulty tilting the table. Frequently blow out or vacuum up the sawdust. Do not allow dirt, pitch or gum to build up on the table, the guard, or blade guides. Clean as needed with gum and pitch remover.

Note: Do not immerse the bearings in the gum and pitch remover. Put a thin coat of paste wax on the table so that the wood slides easily while cutting.

WHEEL TIRES

Pitch and sawdust that build up on the tires should be removed with a stiff brush or scraped off with a piece of wood.

Note: To avoid damaging the tires do not use a sharp knife or any kind of solvent. When the tires become worn they should be replaced. When replacing the tires, stretch them around the wheels but do not glue them on.

MOTOR

Frequently blow or vacuum out any sawdust from the motor. Follow lubrication instruction on the motor label.

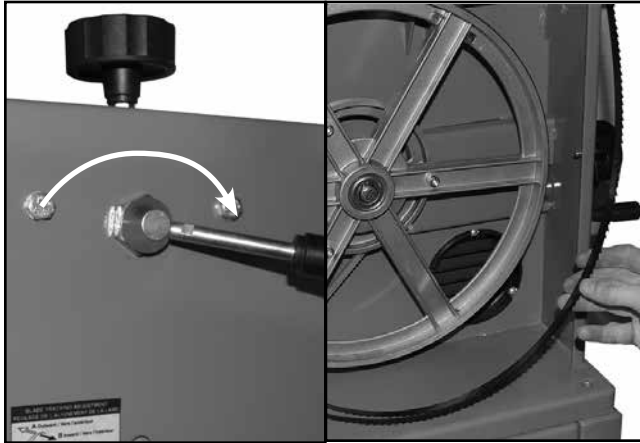
LUBRICATION

All of the bearings are sealed and permanently lubricated. They require no further lubrication.

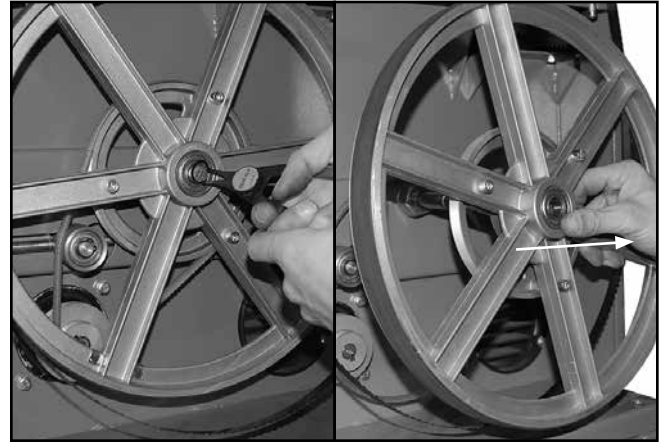


MAKE SURE THE MACHINE HAS BEEN TURNED OFF AND UNPLUGGED FROM THE POWER SOURCE BEFORE PERFORMING ANY MAINTENANCE OR ADJUSTMENTS.

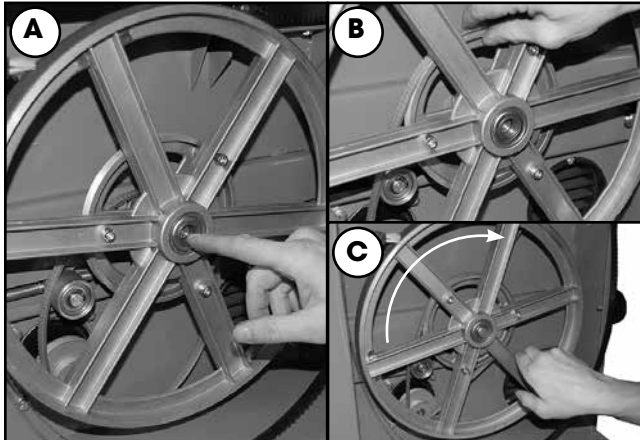
CHANGING THE BELT AND ALIGNING THE PULLEYS



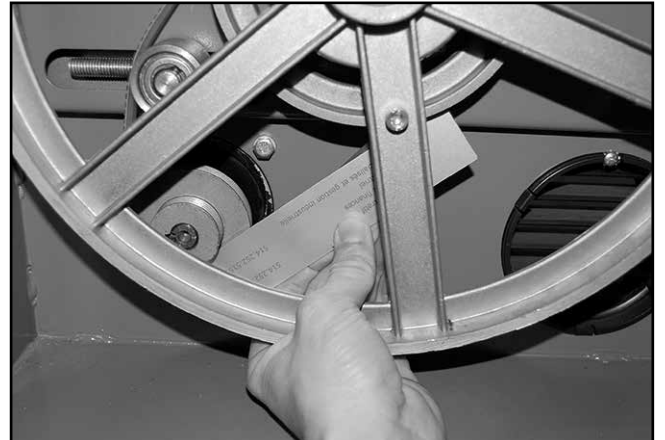
1. Release blade tension by turning the tension lever to the right, then remove the blade from the lower wheel only.



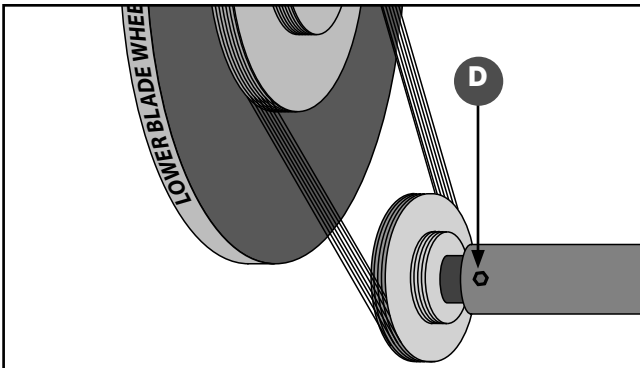
2. Loosen the belt, remove the retention ring, then remove the wheel and the used belt.



3. Install the new belt on the motor pulley. Slide the wheel onto the arbor while sliding the belt onto the edge of the wheel pulley **A** & **B**. Push the wheel all the way onto its arbor while turning it until the belt snaps into place **C**. Re-Install the retention ring and the blade.



4. Make sure the two pulleys are aligned by placing a straight edge in the front groove of both pulleys and behind the blade wheel.



5. To re-adjust the alignment, loosen the set screw **D** with a 3 mm Allen key. Adjust the pulley in or out on the shaft to align the edge of the two pulleys. When aligned, retighten the set screw **D**.

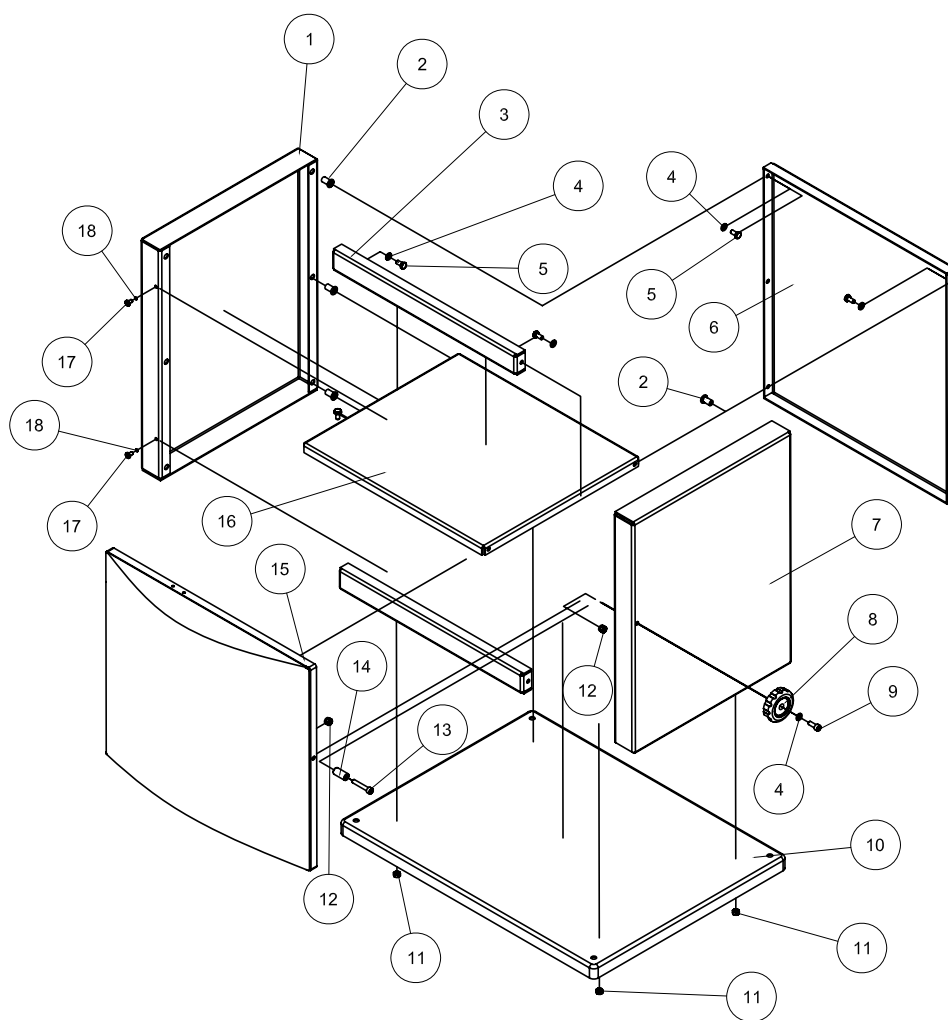


6. Retension the belt. The belt is properly tensioned when there is 1/2" deflection or less when pressed between the pulleys.

Note: Adjust the blade tension, tracking, and the upper and lower guides and the thrust bearings before operating the bandsaw.

DIAGRAM

CABINET

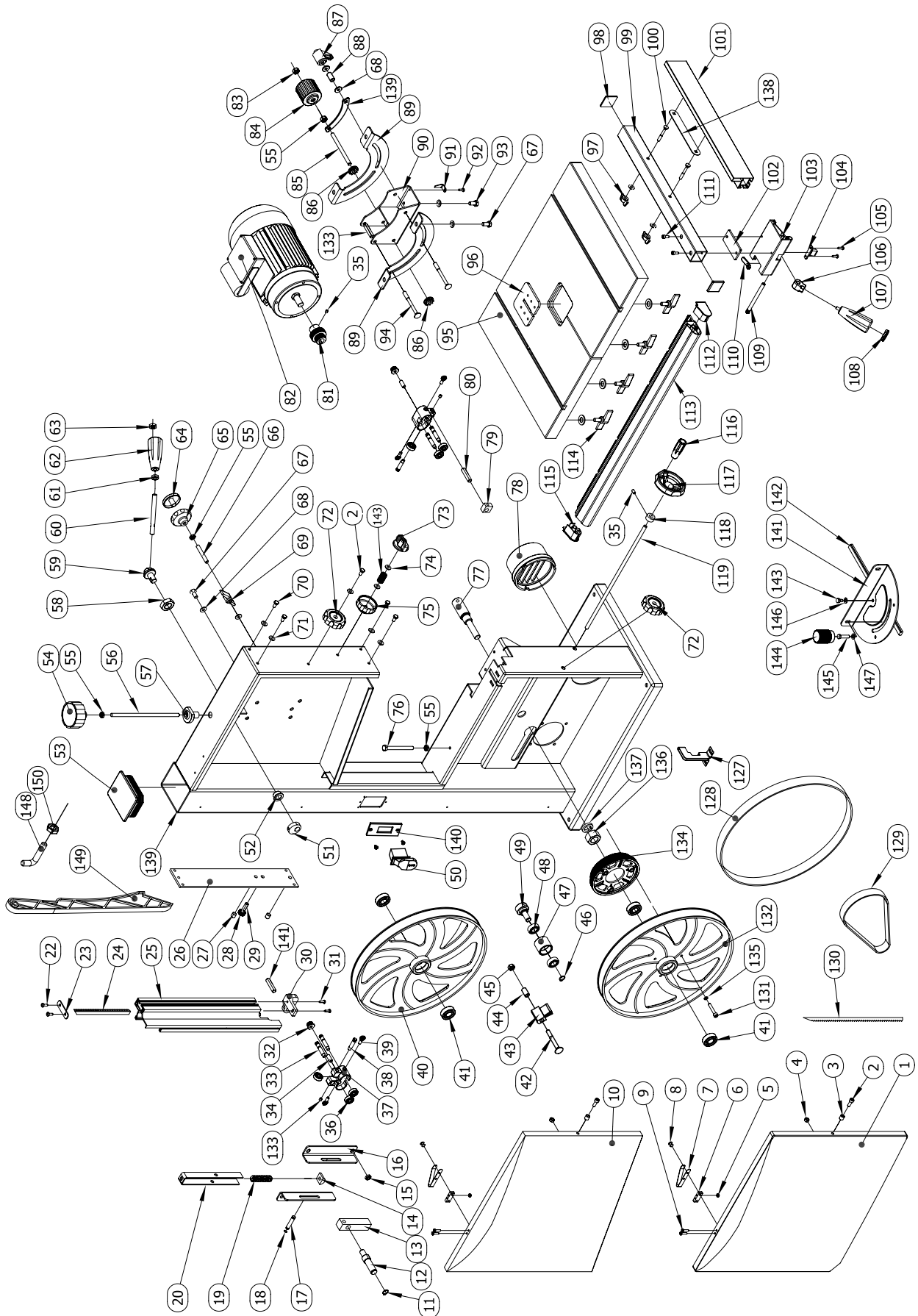


IMPORTANT: When ordering replacement parts, always give the model number, serial number of the machine and part number. Also a brief description of each item and quantity desired.

PART #	DESCRIPTION	SPECIFICATIONS	QTY
90120C-01	LEFT PANEL		1
90120C-02	THREADED INSERT	M6 X 13.5	12
90120C-03	CROSS BRACE		2
90120C-04	WASHER		21
90120C-05	BOLT	M6 X 16	16
90120C-06	REAR PANEL		1
90120C-07	RIGHT PANEL		1
90120C-08	KNOB		1
90120C-09	SCREW	M6 X 16	1
90120C-10	BASE PLATE		1
90120C-11	NUT	M6	4
90120C-12	NYLOCK NUT	M6	2
90120C-13	SCREW	M6 X 30	1
90120C-14	SLEEVE		1
90120C-15	DOOR		1
90120C-16	SHELF		1
90120C-17	SCREW	M5 X 6	2
90120C-18	WASHER		2

DIAGRAM

BANDSAW



PARTS LIST

BANDSAW

IMPORTANT: When ordering replacement parts, always give the model number, serial number of the machine and part number. Also a brief description of each item and quantity desired.

PART #	DESCRIPTION	SPECIFICATIONS	QTY
90120-01	LOWER DOOR		1
90120-02	CAP SCREW	M6 X 16	4
90120-03	SLEEVE		2
90120-04	NYLOCK NUT	M6	4
90120-05	NUT	M4	8
90120-06	BRACKET		2
90120-07	CLAMP FLAP		2
90120-08	RIVET	4 X 10	4
90120-09	SCREW	M4 X 16	4
90120-10	UPPER DOOR		1
90120-11	RETENTION RING		2
90120-12	UPPER BEARING SHAFT		1
90120-13	UPPER BEARING SUPPORT		1
90120-14	NUT		1
90120-15	FLANGE NUT	M8	4
90120-16	BLADE GUIDE PLATE		2
90120-17	SHAFT		1
90120-18	LOCK WASHER		2
90120-19	SPRING		1
90120-20	TENSION BRACKET		1
90120-22	SCREW	ST4.8 X 16	2
90120-23	COVER		1
90120-24	RACK		1
90120-25	BLADE GUARD		1
90120-26	BLADE GUARD SUPPORT		1
90120-27	PIN		2
90120-28	GEAR		1
90120-29	GEAR SHAFT		1
90120-30	BLADE GUIDE SUPPORT		1
90120-31	SCREW	ST4.8 X 22	2
90120-32	KNURLED NUT		2
90120-33	GUIDE SHAFT		4
90120-34	THREADED ROD	M8 X 30	2
90120-35	SET SCREW	M6 X 6	4
90120-36	BEARING	(627Z)	6
90120-37	BLADE GUIDE MOUNT		2
90120-38	SHAFT		2
90120-39	THUMBSCREW		4
90120-40	UPPER WHEEL		1
90120-41	BEARING	(6202Z)	4
90120-42	CARRIAGE BOLT	M8 X 16	4
90120-43	BRUSH		1
90120-44	SLEEVE		1
90120-45	FLANGE NUT	M8	1
90120-46	RETENTION RING		1
90120-47	TENSIONER ROLLER		1

PARTS LIST

BANDSAW

IMPORTANT: When ordering replacement parts, always give the model number, serial number of the machine and part number. Also a brief description of each item and quantity desired.

PART #	DESCRIPTION	SPECIFICATIONS	QTY
90120-48	BEARING	6202Z	2
90120-49	SHAFT		1
90120-50	SWITCH		1
90120-51	ECCENTRIC WHEEL		1
90120-52	SLEEVE		1
90120-53	END CAP		1
90120-54	KNOB		1
90120-55	NUT	M8	2
90120-56	THREADED ROD		1
90120-57	SLEEVE		1
90120-58	NUT	M20 X 1.5	1
90120-59	TENSION LEVER SEAT		1
90120-60	TENSION LEVER ARM		1
90120-61	NUT	M10	1
90120-62	TENSION LEVER HANDLE		1
90120-63	NUT	M10	1
90120-64	CAP		1
90120-65	KNOB		1
90120-66	HEX HEAD BOLT	M8 X 45	1
90120-67	HEX HEAD BOLT	M8 X 16	8
90120-68	WASHER		13
90120-69	WING NUT		5
90120-70	HEX HEAD BOLT	M6 X 10	4
90120-71	WASHER		8
90120-72	LOCK KNOB		2
90120-73	LOCK KNOB		1
90120-74	FLAT WASHER		2
90120-75	ADJUSTMENT KNOB		1
90120-76	HEX HEAD BOLT	M8 X 80	1
90120-77	LOWER WHEEL SHAFT		1
90120-78	DUST PORT		1
90120-79	LOWER BLADE GUIDE SUPPORT		1
90120-80	PIN		1
90120-81	MOTOR PULLEY		1
90120-82	MOTOR		1
90120-83	NUT	M8	1
90120-84	KNOB		1
90120-85	GEAR SHAFT		1
90120-86	GEAR		2
90120-87	LOCK HANDLE		1
90120-88	SLEEVE		1
90120-89	TABLE TRUNNION		2
90120-90	TABLE TRUNNION SUPPORT		1
90120-91	POINTER		1
90120-92	CAP SCREW	M4 X 6	1
90120-93	HEX HEAD BOLT	M6 X 6	4
90120-94	CARRIAGE BOLT		2

PARTS LIST

BANDSAW

IMPORTANT: When ordering replacement parts, always give the model number, serial number of the machine and part number. Also a brief description of each item and quantity desired.

PART #	DESCRIPTION	SPECIFICATIONS	QTY
90120-95	TABLE		1
90120-96	TABLE INSERT		1
90120-97	WING NUT		2
90120-98	END CAP		2
90120-99	FENCE BRACKET		1
90120-100	SQUARE NECK BOLT (M6X45)	M6 X 45	2
90120-101	FENCE		1
90120-102	PLATE		1
90120-103	FENCE CARRIER		1
90120-104	PLASTIC FENCE CLAMP		1
90120-105	SELF-TAPPING SCREW	ST3.5 X 9.5	2
90120-106	HANDLE PIVOT		1
90120-107	FENCE HANDLE		1
90120-108	END CAP		1
90120-109	SHAFT		1
90120-110	POINTER		1
90120-111	CAP SCREW	M6 X 35	2
90120-112	RIGHT END CAP		1
90120-113	RAIL		1
90120-114	WING BOLT		4
90120-115	LEFT END CAP		1
90120-116	HANDLE		1
90120-117	HANDWHEEL		1
90120-118	COLLAR		1
90120-119	BELT TENSION SHAFT		1
90120-127	BLADE GUARD		1
90120-128	RUBBER TIRE		2
90120-129	BELT		1
90120-130	BLADE		1
90120-131	CAP SCREW	M6 X 25	3
90120-132	LOWER WHEEL		1
90120-133	SLEEVE		2
90120-134	PULLEY		1
90120-135	LOCK WASHER		3
90120-136	NUT	M20 X 1.5	1
90120-137	LOCK WASHER		1
90120-138	MOUNTING PLATE		1
90120-139	PLATE		1
90120-140	SWITCH COVER		1
90120-141	MITER GAUGE		1
90120-142	MITER GAUGE BAR		1
90120-143	BOLT		1
90120-144	KNOB		1
90120-145	BOLT	M6 X16	1
90120-146	FLAT WASHER		1
90120-147	WASHER		1
90120-148	PUSH STICK HOLDER		1
90120-149	PUSH STICK		1
90120-150	NUT		1

NOTES



8360 Champ-d'Eau, Montreal (Quebec) Canada H1P 1Y3

Tel.: (514) 326-1161

Fax: (514) 326-5565 - Parts & Service / (514) 326-5555 - Order Desk
orderdesk@general.ca

www.general.ca

Follow us:

