



# 14" WOOD BANDSAW WITH 12" RESAW CAPACITY

03/2018



MODEL: KC-1502FXB

# INSTRUCTION MANUAL

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## WARRANTY INFORMATION

<p><b>2-YEAR</b> LIMITED WARRANTY FOR THIS 14" WOOD BANDSAW</p>	<p><b>KING CANADA TOOLS</b> OFFERS A 2-YEAR LIMITED WARRANTY FOR COMMERCIAL USE.</p>
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### **PROOF OF PURCHASE**

Please keep your dated proof of purchase for warranty and servicing purposes.

### **REPLACEMENT PARTS**

Replacement parts for this product are available at our authorized King Canada service centers across Canada.

### **LIMITED TOOL WARRANTY**

King Canada makes every effort to ensure that this product meets high quality and durability standards. King Canada warrants to the original retail consumer a 2-year limited warranty as of the date the product was purchased at retail and that each product is free from defects in materials. Warranty does not apply to defects due directly or indirectly to misuse, abuse, normal wear and tear, negligence or accidents, repairs done by an unauthorized service center, alterations and lack of maintenance. King Canada shall in no event be liable for death, injuries to persons or property or for incidental, special or consequential damages arising from the use of our products.

To take advantage of this limited warranty, return the product at your expense together with your dated proof of purchase to an authorized King Canada service center. Contact your retailer or visit our web site at [www.kingcanada.com](http://www.kingcanada.com) for an updated listing of our authorized service centers. In cooperation with our authorized serviced center, King Canada will either repair or replace the product if any part or parts covered under this warranty which examination proves to be defective in workmanship or material during the warranty period.

### **NOTE TO USER**

This instruction manual is meant to serve as a guide only. Specifications and references are subject to change without prior notice.

### **DIAGRAMME DES PIÈCES ET LISTES DES PIÈCES**

Pour obtenir les diagrammes et listes des pièces mise à jour, référez-vous à la section Pièces dans le site web King Canada.

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# GENERAL & SPECIFIC SAFETY INSTRUCTIONS



## 1. KNOW YOUR TOOL

Read and understand the owners manual and labels affixed to the tool. Learn its application and limitations as well as its specific potential hazards.

## 2. GROUND THE TOOL.

This tool is equipped with an approved 3-conductor cord and a 3-prong grounding type plug to fit the proper grounding type receptacle. The green conductor in the cord is the grounding wire. **NEVER** connect the green wire to a live terminal.

## 3. KEEP GUARDS IN PLACE.

Keep in good working order, properly adjusted and aligned.

## 4. REMOVE ADJUSTING KEYS AND WRENCHES.

Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.

## 5. KEEP WORK AREA CLEAN.

Cluttered areas and benches invite accidents. Make sure the floor is clean and not slippery due to wax and sawdust build-up.

## 6. AVOID DANGEROUS ENVIRONMENT.

Don't use power tools in damp or wet locations or expose them to rain. Keep work area well lit and provide adequate surrounding work space.

## 7. KEEP CHILDREN AWAY.

All visitors should be kept a safe distance from work area.

## 8. MAKE WORKSHOP CHILD-PROOF.

-with padlocks, master switches or by removing starter keys.

## 9. USE PROPER SPEED.

A tool will do a better and safer job when operated at the proper speed.

## 10. USE RIGHT TOOL.

Don't force the tool or the attachment to do a job for which it was not designed.

## 11. WEAR PROPER APPAREL.

Do not wear loose clothing, gloves, neckties or jewelry (rings, watch) because they could get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair. Roll up long sleeves above the elbows.

## 12. ALWAYS WEAR SAFETY GLASSES.

Always wear safety glasses (ANSI Z87.1). Everyday eyeglasses only have impact resistant lenses, that are **NOT** safety glasses. Also use a face or dust mask if operation is dusty.

## 13. DON'T OVERREACH.

Keep proper footing and balance at all times.

## 14. MAINTAIN TOOL WITH CARE.

Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.

## 15. DISCONNECT TOOLS.

Before servicing, when changing accessories or attachments.

## 16. AVOID ACCIDENTAL STARTING.

Make sure the switch is in the "OFF" position before plugging in.

## 17. USE RECOMMENDED ACCESSORIES.

Consult the manual for recommended accessories. Follow the instructions that accompany the accessories. The use of improper accessories may cause hazards.

## 18. NEVER STAND ON TOOL.

Serious injury could occur if the tool tips over. Do not store materials such that it is necessary to stand on the tool to reach them.

## 19. CHECK DAMAGED PARTS.

Before further use of the tool, a guard or other parts that are damaged should be carefully checked to ensure that they will operate properly and perform their intended function. Check for alignment of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other parts that are damaged should be properly repaired or replaced.

## 20. NEVER LEAVE MACHINE RUNNING UNATTENDED.

Turn power "OFF". Don't leave any tool running until it comes to a complete stop.

1. **Never place hands** directly in "line of cut".

2. **Keep all guards** in place at all times.

3. **Do not wear** loose clothing, gloves or jewelry. Secure long hair and button long sleeve shirts.

4. **Disconnect power** before servicing, setting up or adjusting.

5. **Do not** expose to rain.

6. **Do not** operate under the influence of drugs or alcohol, or when tired.

7. **Make sure** machine is properly adjusted, set up correctly, and rests securely on flat, level ground before starting motor.

8. **Make sure** the blade has come to a complete stop before making adjustments.

9. **Never reach under the table** while the blade is in motion.

10. **Use a push stick** when cutting narrow workpieces.

11. **Do not back workpiece away** when the blade is in motion. Turn the saw off and wait for the blade to come to a complete stop.



# ELECTRICAL INFORMATION AND CONTROL PANEL

## WARNING!

ALL ELECTRICAL CONNECTIONS MUST BE DONE BY A QUALIFIED ELECTRICIAN. FAILURE TO COMPLY MAY RESULT IN SERIOUS INJURY! ALL ADJUSTMENTS OR REPAIRS MUST BE DONE WITH THE BANDSAW DISCONNECTED FROM THE POWER SOURCE. FAILURE TO COMPLY MAY RESULT IN SERIOUS INJURY!

### GENERAL INFORMATION- 110V single phase operation

This wood bandsaw comes with a 1.5 HP dual voltage 110V/220V single phase motor. The motor is prewired for 110V operation.

**WARNING:** YOUR WOOD BANDSAW MUST BE CONNECTED TO A 110V-120V, 1 PHASE 15 AMP. MINIMUM ELECTRICAL SUPPLY. FAILURE TO CONNECT IN THIS WAY CAN RESULT IN INJURY FROM SHOCK OR FIRE.

This wood bandsaw is intended for use on an electrical circuit that has an outlet and a plug which looks like the one illustrated in Fig.1.

**WARNING:** DO NOT USE A TWO-PRONG ADAPTOR FOR THEY ARE NOT IN ACCORDANCE WITH LOCAL CODES AND ORDINANCES. NEVER USE IN CANADA.

### GROUNDING

Your wood bandsaw must be properly grounded. Not all outlets are properly grounded. If you are not sure if your outlet is properly grounded, have it checked by a qualified electrician. If it should malfunction or breakdown, grounding provides a path of least resistance for electric current, to reduce the risk of electric shock. This wood bandsaw is equipped with a cord having an equipment-grounding conductor and grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

**WARNING:** TO MAINTAIN PROPER GROUNDING, DO NOT REMOVE OR ALTER THE GROUNDING PRONG IN ANY MANNER.

**WARNING:** IF NOT PROPERLY GROUNDED, THIS WOOD BANDSAW CAN CAUSE ELECTRICAL SHOCK, PARTICULARLY WHEN USED IN DAMP LOCATIONS. TO AVOID SHOCK OR FIRE, IF THE POWER CORD IS WORN OR DAMAGED IN ANY WAY, HAVE IT REPLACED IMMEDIATELY.

### EXTENSION CORDS

The use of any extension cord will cause some loss of power. Use the table (Fig.2) to determine the minimum wire size (A.W.G-American Wire Gauge) extension cord needed. Use only 3-wire extension cords which have 3-prong grounding type plugs and 3-hole receptacles which accept the tool's plug.

For circuits that are further away from the electrical circuit box, the wire size must be increased proportionately in order to deliver ample voltage to the wood bandsaw motor. Refer to Fig.2 for wire length and size.

### CONTROL PANEL

The control panel (A) Fig.3 is located in the frame of the machine to the left of the table. The Power On light (B) turns on when the wood bandsaw is connected to a power source. To turn on the wood bandsaw, press the green "On" button (C). To stop the wood bandsaw, press the red emergency stop button (D). Once you push down on the emergency stop button (D), twist the button clockwise until it pops up, only then will you be able to restart the machine. The foot brake (E) can also be used to as an emergency shut-off.

### RESET BUTTON (OVERLOAD PROTECTOR)

This wood bandsaw comes with an overload reset button (F) Fig.3. If the motor overheats, a safety mechanism stops the motor automatically due to motor overheating or low voltage. Allow motor to cool down, then press the reset button and restart the motor. If the motor does not restart, wait an additional 5 minutes before restarting.

### 220V OPERATION

This bandsaw can be converted for 220V operation. An optional 220V conversion parts kit is available (model KW-220-1502). This kit includes 220V magnetic contactor, power on light and reset. It is highly recommended to get a qualified electrician to rewire the motor leads from 110V to 220V, install a 220V CSA or UL approved power cord (not included) and replace magnetic contactor and control panel components.

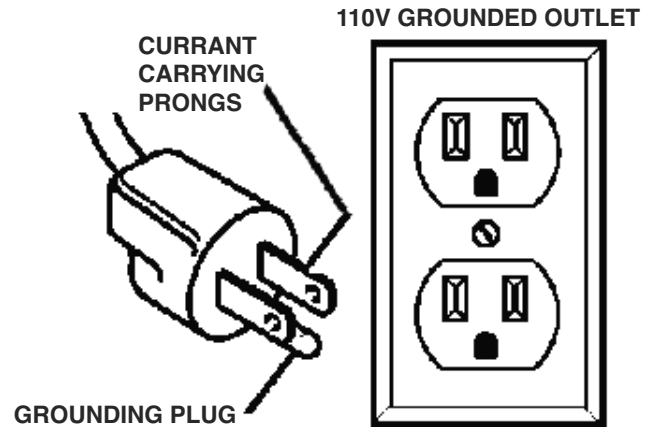


FIGURE 1

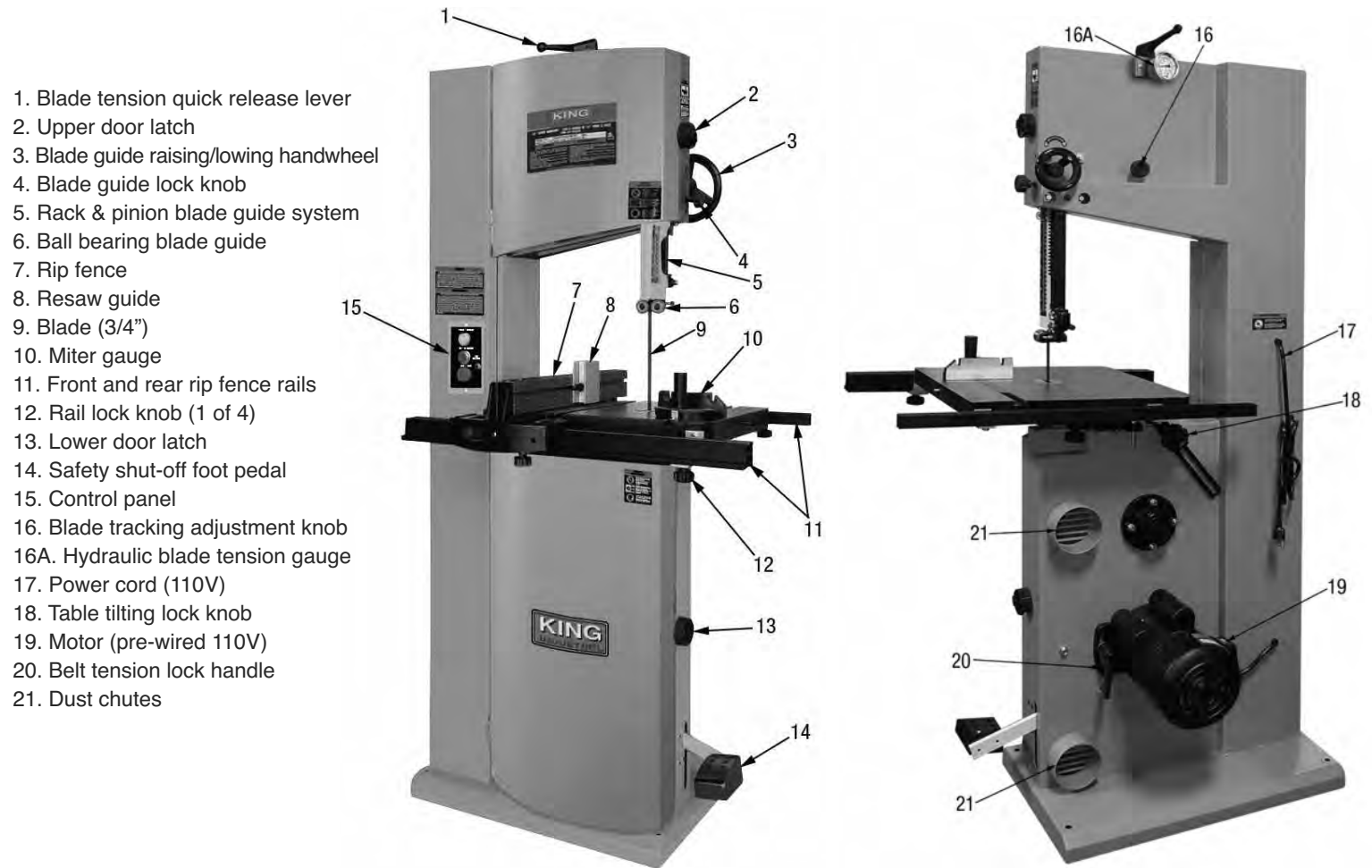
Tool's Amperage Rating	Cord Size in A.W.G.			
	Cord Length in Feet			
	25	50	100	150
3-6	18	16	16	14
6-8	18	16	14	12
8-10	18	16	14	12
10-12	18	16	14	12
12-16	14	12	-	-

FIGURE 2



FIGURE 3

# GETTING TO KNOW YOUR 14" WOOD BANDSAW



1. Blade tension quick release lever
2. Upper door latch
3. Blade guide raising/lowering handwheel
4. Blade guide lock knob
5. Rack & pinion blade guide system
6. Ball bearing blade guide
7. Rip fence
8. Resaw guide
9. Blade (3/4")
10. Miter gauge
11. Front and rear rip fence rails
12. Rail lock knob (1 of 4)
13. Lower door latch
14. Safety shut-off foot pedal
15. Control panel
16. Blade tracking adjustment knob
- 16A. Hydraulic blade tension gauge
17. Power cord (110V)
18. Table tilting lock knob
19. Motor (pre-wired 110V)
20. Belt tension lock handle
21. Dust chutes

## KING CANADA BLADES AVAILABLE FOR YOUR 14" WOOD BANDSAW

Model	Blade Size	TPI (Teeth/inch)
KBB-1514-6	1/4" x 112" x .025"	6
KBB-1538-6	3/8" x 112" x .025"	6
KBB-1512-4	1/2" x 112" x .025"	4
KBB-1534-3*	3/4" x 112" x .025"	3
KBB-1510-2	1" x 112" x .032"	2

\*Standard blade included

MODEL	KC-1502FXB
Cutting capacity frame to blade	13-5/8"
Table size	18" x 18"
Table height from floor	36 1/2"
Blade size	112" x (1/8" - 1") x .025"
Height of cut	12"
Motor	12.8/6.2 Amp.
Voltage	110V/220V, 1 phase, 60 Hz
Prewired	110V
Speed	2 (2300-3250) SFPM
Assembled dimensions (LxWxH)/weight	33" x 44-1/2" x 73" / 230 lbs
Package dimensions (LxWxH)/weight	27-1/2" x 19-5/8" x 72-7/8" / 295 lbs



# ASSEMBLY

## UNPACKING

Unpack and remove the bandsaw and all loose parts from the crate. The table is covered with a protective grease to prevent rusting during transport, clean it with a degreaser. To ensure sufficient stability and security, bolt the base of the bandsaw to the floor using the 4 mounting holes (mounting hardware not included).

## ASSEMBLY

### Installing handwheel handle

1. Attach handle (A) Fig. 4 to the handwheel (B).

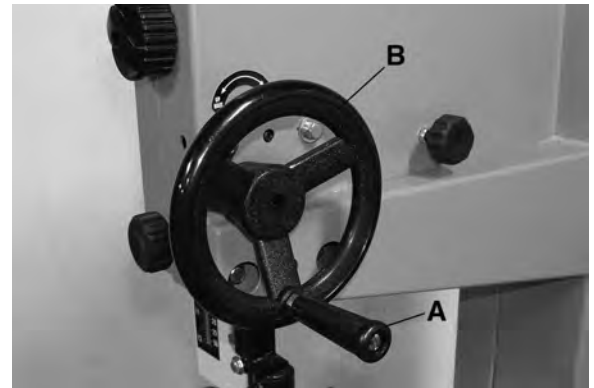


FIGURE 4

### Installing table

1. To mount the table, first mount the trunnion bracket (A) Fig.5 to the base using 2 hex. bolts and washers (B). Install the 2 short hex. bolts and nuts (C) and long table stop hex. bolt and nut (D) to the trunnion bracket as shown.
2. Remove table insert (B) Fig.9 and table pin (C) Fig.9 from the table. Slide the blade through the table and place the table trunnions onto the trunnion bracket by lowering both its long bolts into the mounting holes of the trunnion bracket, secure table to trunnion bracket using 2 lock knobs (E). Re-install the table insert and table pin.

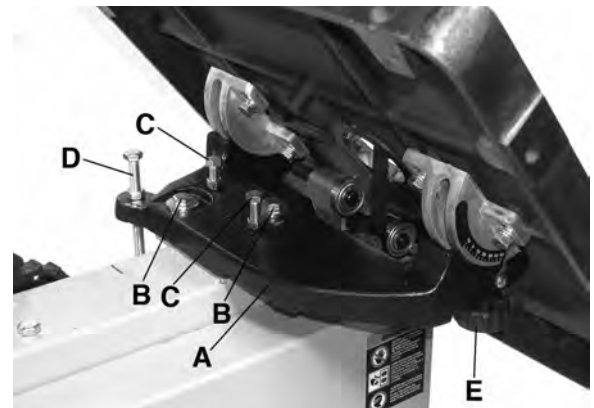


FIGURE 5

3. Mount the tilt bracket (A) Fig.6 to the side of the table using the bolts, spring washers and washers already mounted to the table.

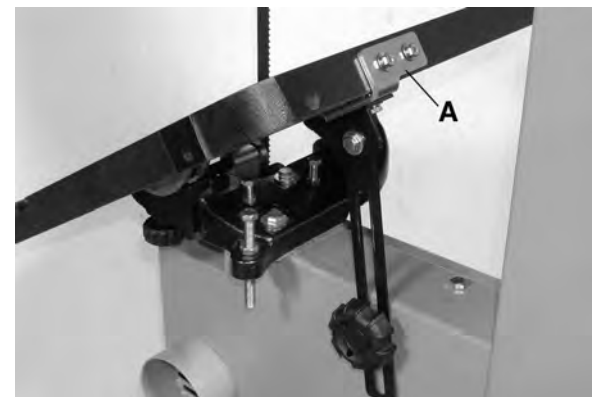


FIGURE 6

### Installing foot brake

1. Open the lower wheel cover, slide the foot pedal and mounting arm assembly (A) Fig.7 through the side opening of the base and mount it to the inner mounting bar (B) using 2 cap screws and spring washers (C). Firmly tighten using the supplied hex. key.

The foot brake (A) Fig.7, a safety device, allows user to immediately immobilize the blade and shut-off the bandsaw during operation. This mechanism should not be used as the primary method of stopping bandsaw, it should only be used in emergency situations and when stopping the blade quicker than the normal is required. Use the emergency stop button on the control panel as the primary method of stopping bandsaw.

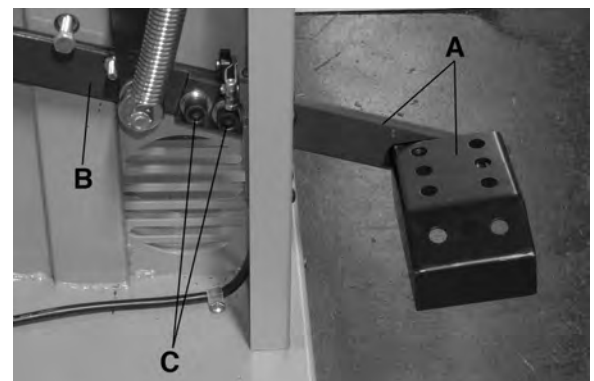


FIGURE 7

# ASSEMBLY & ADJUSTMENTS



## Installing rip fence system with resaw guide

1. Mount the large front rail mounting brackets (A) Fig.8 to the front of the table using hex. bolts.
2. Mount lock knobs (B) and flat square nuts (C) to the mounting brackets as shown.
3. Slide the square slot at the bottom of the front rail (D) onto both flat square nuts (C), tighten lock knobs (A) Fig.9 to secure the front rail in the desired position.

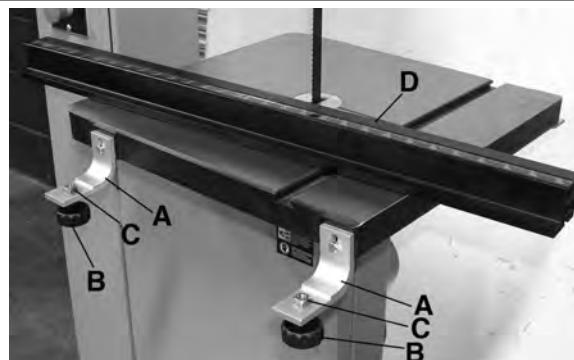


FIGURE 8

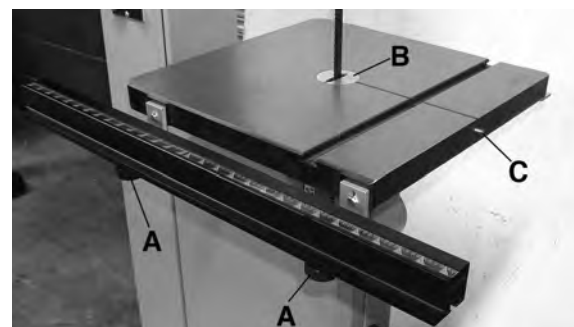


FIGURE 9

4. Mount the small rear rail mounting brackets (A) Fig.10 to the rear of the table using hex. bolts.
5. Mount lock knobs (B) Fig.10 and flat square nuts (C) to the mounting brackets as shown.

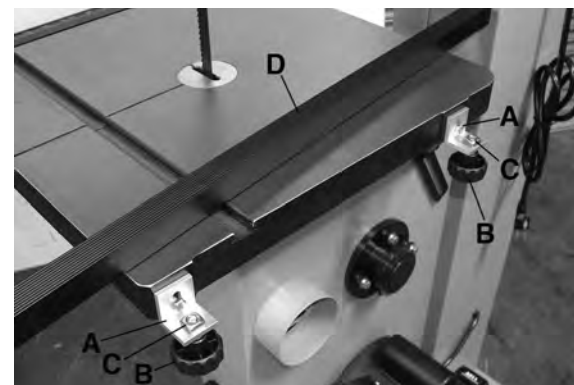


FIGURE 10

6. Slide the square slot at the bottom of the rear rail (D) Fig.10 onto both flat square nuts (C), tighten lock knobs (A) Fig.11 to secure the rear rail in the desired position.

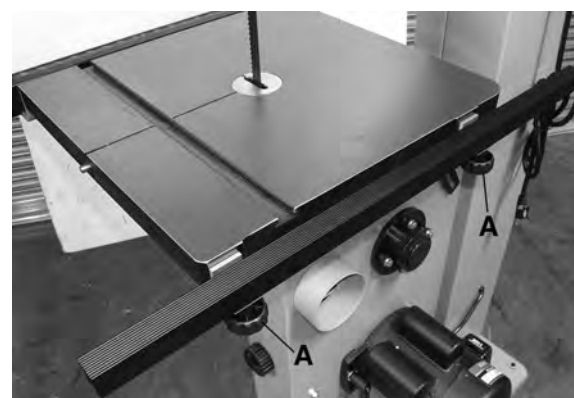


FIGURE 11



# ASSEMBLY, ADJUSTMENTS & OPERATION

## Installing rip fence system with resaw guide continued...

7. Position the rip fence (A) Fig.12 onto the front and rear rails. Lower the front handle (B) to lock rip fence into position.
8. Install the resaw guide (C) Fig.12 to the fence body using the 2 small lock knobs (D). Slide and position the resaw guide so that it is centered with the front edge of the blade and tighten lock knobs.

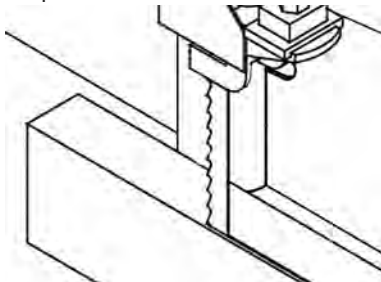
## Adjusting the height of the rip fence above the table top

The rip fence should be no more than 1mm above the table top. To adjust the height of the rip fence, loosen the front rail and rear rail mounting brackets (Fig. 8 and 10), adjust the height of the mounting brackets until the rip fence is positioned 1mm above the table top, retighten front rail and rear rail mounting brackets.

## Resaw guide

Resawing is a method of ripping a piece of lumber into thinner pieces as well as making book matched or slip matched panels. The curved resaw guide (C) Fig.12 is the best option for guiding wood through the bandsaw. The narrow line of contact makes it easy to compensate for a blade that "leads" or wanders off the cutting line when the stock is fed straight into it. You can get satisfactory results with this resaw guide "single point" method, but it demands very careful hand control.

Here's how you can resaw precisely and easily using resaw guide. Pencil a straight line down the edge of a square edged board. Start sawing along your layout line, guiding the board freehand. If the blade is leading, you will have to feed the board into the blade at a slight angle to keep cutting along the line and to compensate for blade drift. See illustration below.



## TILTING TABLE AND ADJUSTING 90 DEGREE TABLE STOP BOLT

1. Loosen lock knobs (A) Fig. 13 and lock knob (B) and position the table to the desired angle using the tilt scale (A) Fig.15. Retighten lock knobs.
2. To ensure that your 90° cuts are square and the tilt scale indicates the correct angle, a verification is needed. Place a square (A) Fig.14 on the table and against the blade (B) to see if the table is 90 degrees to the blade.
3. If it is not 90 degrees, loosen lock knobs (A) Fig. 13 and lock knob (B) and level the table at 90° to the blade. Retighten lock knobs.
4. If the tilt scale pointer (C) Fig.15 no longer lines up with the zero mark, loosen pan head screw (B), reposition pointer (C) to the zero mark and retighten pan head screw.
5. The table stop bolt (D) Fig.13 under the table should be adjusted. Loosen hex. nut (C) and unscrew table stop bolt (D) until it rests against the underside of the table. Tighten hex. nut to secure its position. This stop bolt allows user to accurately return the table to the 90° position after an operation which involved tilting the table.

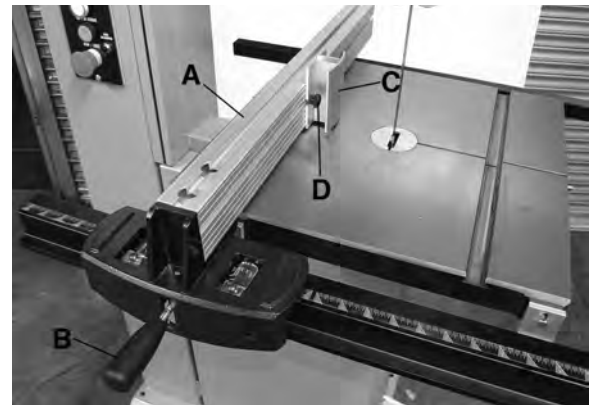


FIGURE 12

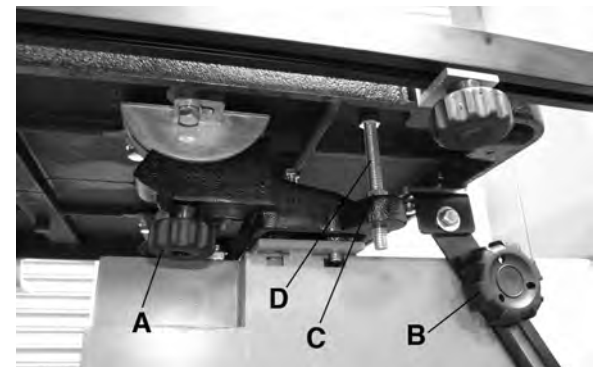


FIGURE 13

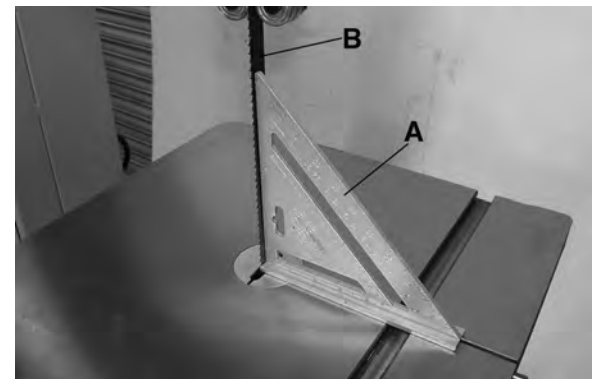


FIGURE 14

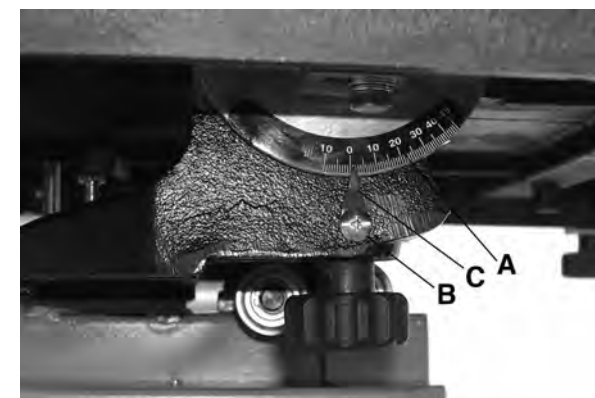


FIGURE 15



# ADJUSTMENTS & OPERATIONS



## REMOVING/INSTALLING BLADES

This bandsaw comes with a 112" long x 3/4" wide wood cutting bandsaw blade. A wide range of blade widths can be installed on this bandsaw, 1/8"- 3/8" wide blades can be used for small tighter radius curves, 1/2" - 1" wide blades can be used for larger radius curves or cutting thicker workpieces.

To remove and install different blade:

1. Make sure the power cord is disconnected from the power source.
2. Remove the table insert and table pin from the table.
3. Open upper and lower wheel covers.
4. Adjust the upper and lower ball bearing blade guides away from the blade for blade clearance. Using a hex. key, loosen set screw (A) Fig.16 and using a flat screwdriver, turn screw (B) a quarter of a turn towards the outside to move ball bearing away from blade. Repeat for the other side and the lower ball bearing blade guide below the table.
5. Loosen blade tension by lifting blade tension handle (A) Fig. 17, turn it counterclockwise to decrease blade tension.
6. Remove the blade by guiding it through the guards and table slot.

**Important:** When installing a new or different blade, make sure the teeth of the blade are pointing downwards before installation.

7. Guide the new blade through the guards and table slot, place blade in upper and lower ball bearing guide systems.
8. Place blade in the middle of the upper and lower wheels, tension the blade by turning blade tension handle (A) Fig.17 clockwise to tension and lowering handle to secure tension adjustment.
9. The blade tension must be set depending on the blade width, at the rear of the bandsaw is a hydraulic blade tension gauge (B) Fig.17. Turn the blade tension handle (A) clockwise until the tension reaches the recommended blade tension as indicated below.

Blade width	Recommended blade tension (kg/cm <sup>2</sup> )
1/4"	5-10 kg/cm <sup>2</sup>
3/8"	10-13 kg/cm <sup>2</sup>
1/2"	15-17 kg/cm <sup>2</sup>
3/4"	18-20 kg/cm <sup>2</sup>
1"	21-23 kg/cm <sup>2</sup>

10. Replace the table insert and table pin.

**Important:** To prolong the life, avoid deforming, weakening or stretching the blade when the bandsaw is not in use, always release blade tension at the end of each work day.

## ADJUSTING BLADE TRACKING

The blade should run centred on the upper and lower blade wheels. Depending on blade thickness and other factors, the blade might not track properly and may need a tracking adjustment.

To adjust tracking of the blade:

1. Make sure the power cord is disconnected from the power source.
2. Open upper wheel cover and turn the blade wheel by hand and observe the position of the blade on the wheel. Determine if the blade is moving towards the front or the rear of the wheel.
3. Loosen hex. nut (A) Fig.18 and turn the tracking adjustment knob (B) in small increments (1/2 turn at a time).
4. Turn the tracking adjustment knob (B) Fig.18 clockwise if the blade moves towards the front of the wheel. This adjustment tilts the top of the blade wheel towards the back and moves the blade toward the centre.
5. Turn the tracking adjustment knob (B) Fig,18 counterclockwise if the blade moves towards the rear of the wheel. This adjustment tilts the top of the blade wheel towards the front and moves the blade toward the centre.
6. Once adjustment is done, retighten hex. nut (A) Fig.18.

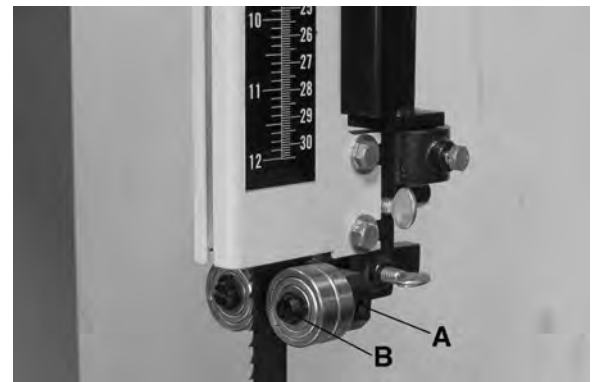


FIGURE 16

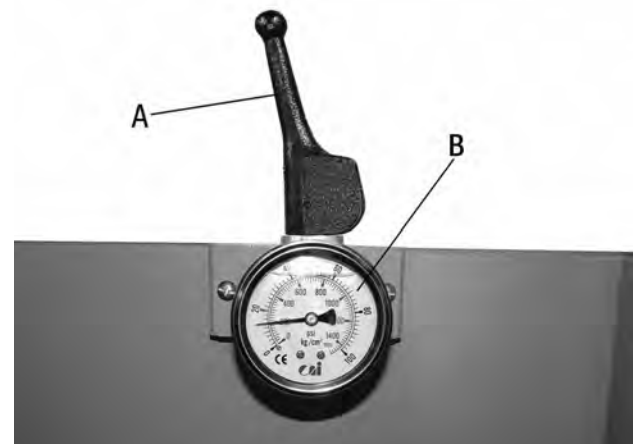


FIGURE 17

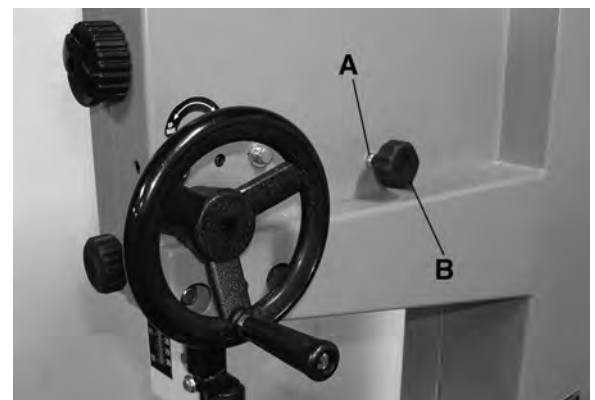


FIGURE 18



# ADJUSTMENTS & OPERATIONS

## ADJUSTING UPPER AND LOWER BALL BEARING BLADE GUIDES

This bandsaw comes with upper and lower ball bearing blade guides. These ball bearings guide the blade during operation, to prevent it from moving side-to-side and backwards. The side ball bearings should never touch the blade, the space between each ball bearing and blade should not exceed 0.02". If the guides are set closer than 0.02" from the blade, the blade might jam or cause excessive friction which will result in overheating and premature wear. The side ball bearings must also be set at least 1/32" behind the blade teeth.

Make sure the blade is properly tensioned and tracking properly before adjusting blade guides.

### To adjust the upper blade guide system:

1. Make sure the power cord is disconnected from the power source.
2. Loosen set screw (A) Fig.19 and using a flat screwdriver, turn screw (B) a quarter of a turn towards the inside to move the ball bearing to 0.02" (thickness of a sheet of paper) away from the blade. Retighten set screw (A).
3. Repeat step on the opposite side (A & B) Fig.20.
4. Loosen thumb screw (C) Fig.19, move the ball bearing post until the ball bearings are at least 1/32" behind the blade teeth as shown in illustration in Fig.20. Retighten thumb screw.
5. Loosen thumb screw (D) Fig.19, move the upper thrust bearing (A) Fig.20 0.02" away from the rear of the blade as shown in illustration in Fig.20. Retighten thumb screw.

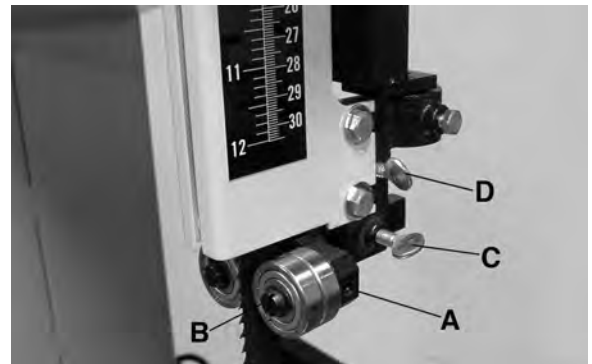


FIGURE 19

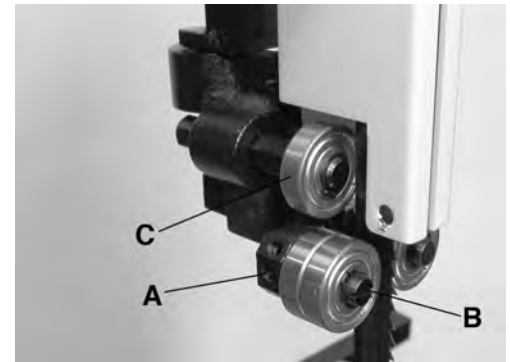
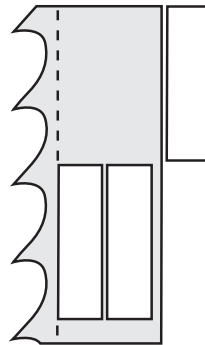


FIGURE 20

### To adjust the lower blade guide system:

Repeat steps 1 to 5 above for the lower blade guide system below the table.

## ADJUSTING THE SPEED OF THE SAW BLADE

This bandsaw comes with 2 different speed settings (low/high). The saw blade speed can be changed from 2300 SFPM to 3250 SFPM. The low speed is ideal for soft woods over 4" in height or hard woods over 2" in height. The high speed is ideal for soft woods under 4" in height or hard woods under 2" in height.

To change blade speed:

1. Loosen the belt tension lock handle (A) Fig.21 next to the motor and raise the motor assembly to release tension on drive belt (A) Fig.22, retighten lock handle. Loosening the belt will allow you to change the belt position on the motor and drive pulleys.
2. To obtain 2300 SFPM, install the drive belt on the frontmost set of pulley steps.
3. To obtain 3250 SFPM, install the drive belt on the rearmost set of pulley steps.
4. Once belt is positioned, it must be tensioned. Lower the motor assembly until proper belt tension is obtained and retighten belt tension lock handle (A) Fig.21.



FIGURE 21



FIGURE 22

# ADJUSTMENTS & OPERATIONS



## ADJUSTING THE UPPER BEARING BLADE GUIDE SYSTEM HEIGHT

The upper bearing blade guide system (C) Fig.23 should always be set as close as possible to the workpiece (1/8" to 1/4" above the workpiece as shown in Fig.24). To adjust, loosen upper bearing blade guide system lock knob (A) Fig.23, turn handwheel (B) counterclockwise to lower the upper bearing blade guide system or clockwise to raise the upper bearing blade guide system. Use the scale and indicator (D) as reference.

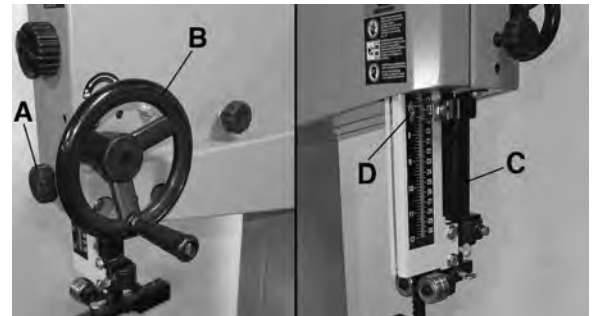


FIGURE 23



FIGURE 24

## DUST COLLECTION

It is recommended that the bandsaw be connected to a dust collector. This will avoid a dusty and undesired work environment. There are two 4" dust ports (A) Fig.25. 4" dust collection hoses must be attached to the dust ports using 4" steel clamps and then connected to a dust collector. A variety of dust collectors and accessories are available from King Canada, see your nearest King Canada products retailer for more information.



FIGURE 25