

# 14" -3 SPEED BAND SAW

KC-1433FXR SEE PAGE 12



"TRU-RIP"

MODEL: KC-1433FX & KC-1433FXR

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## IMPORTANT INFORMATION

2-YEAR

LIMITED WARRANTY FOR THIS 14" BAND SAW KING CANADA TOOLS

OFFERS A 2-YEAR LIMITED WARANTY FOR INDUSTRIAL USE.

#### **PROOF OF PURCHASE**

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

#### REPLACEMENT PARTS

Replacement parts for this tool are available at our authorized KING CANADA service centers across Canada. For servicing, contact or return to the retailer where you purchased your product along with your proof of purchase.

#### 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, negligence or accidents, repairs or 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 warranty, the product or part must be returned for examination by the retailer. Shipping and handling charges may apply. If a defect is found, KING CANADA will either repair or replace the product.

#### **PARTS DIAGRAM & PARTS LISTS**

Refer to the Parts section of the King Canada web site for the most updated parts diagram and parts list.

# GENERAL SAFETY INSTRUCTIONS FOR POWER TOOLS



#### 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.

Use padlocks, master switches or remove 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, they are **NOT** safety glasses. Also use a face or dust mask if cutting 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 swich 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.



# SPECIFIC SAFETY INSTRUCTIONS FOR BAND SAWS

Safety is a combination of common sense, staying alert and knowing how your band saw works. Read and understand the following safety rules before operating.

- Adjust the upper guide to just clear workpiece.
- Make sure that the blade is properly adjusted and tensioned before operating.
- Do not remove small jammed pieces until the blade has completely stopped.
- Hold workpiece firmly against the table. Do not saw a workpiece which does not have a flat surface unless it can be supported.
- Turn the machine off if the workpiece is to be backed out of an uncompleted cut.

#### **BEFORE EACH USE:**

#### Inspect your band saw.

- To reduce the risk of injury from accidental starting, turn the switch off, unplug the band saw and remove the switch key before changing the set-up, removing covers, guards or the blade.
- Check the alignment of moving parts, binding of moving parts, breakage of parts, band saw stability and any other conditions that may affect the way the band saw works.
- If any part is missing, bent or broken in any way, or if any
  electrical parts do not work properly, turn the band saw off and
  unplug the saw. Replace damaged or missing parts before using
  the band saw again.

# TO REDUCE THE RISK OF INJURY FROM JAMS, SLIPS, THROWN PIECES OR BROKEN BLADES.

#### Inspect your blade.

- Choose the right blade size, style and cutting speed for the material and the type of cutting you plan to do.
- Make sure the blade teeth point downward, towards the table.
- Make sure the blade guides and thrust bearings are properly adjusted.
- Make sure the blade tension is properly adjusted.
- To reduce the risk of accidental blade contact, minimize blade breakage and provide maximum blade support, always adjust

- the upper blade guide and blade guard to just clear the workpiece.
- Caution: Never cut metals with this band saw, only wood and wood products.

#### Use extra caution with large, very small or awkward workpieces.

- Use extra supports (tables, blocks, etc...) for any workpieces large enough to tip when not held down to the table top.
- NEVER use another person as a substitute for a table extension, or as additional support for a workpiece that is longer or wider than the basic band saw table, or to help feed, support or pull the workpiece.
- When cutting irregularly shaped workpieces, plan your work so
  it will not slip and pinch the blade. A piece of molding for
  example, must lie flat or be held by a fixture or jig that will not
  let it twist, rock or slip while being cut.
- Properly support round material such as dowel rods or tubing.
  They have a tendency to roll during a cut, causing the blade to
  "bite". To avoid this, always use a "V" block or clamp the work
  to the miter guage.
- Cut only one workpiece at a time.

#### WHENEVER THE BAND SAW IS RUNNING.

• Before starting your cut, watch the saw while it runs. If it makes an unfamiliar noise or vibrates a lot, stop immediately. Turn the saw off and unplug. Do not restart until you have found and corrected the problem.

#### Keep children away.

- Keep all visitors at a safe distance from the band saw.
- Make sure bystanders are clear of the table and the workpiece.

#### Don't force the tool.

- Let the blade reach full speed before cutting.
- It will do the job better and safer at its designed rate.
- Feed the workpiece into the blade only fast enough to let the blade cut without bogging down or binding.

## MOTOR SPECIFICATION AND GROUNDING



**WARNING:** To reduce the risk of electrical hazards, fire hazards or damage to the tool, use proper circuit protection. Your tool is prewired for 120V operation. Connect the tool to a power line with the appropriate voltage and a 15-amp branch circuit. Use a 15-amp time delay type fuse or circuit breaker. The AC motor used for this band saw is a non-reversible type, having the following specifications:

120V/240V MOTOR SPECIFICATIONSHorsepower1Volts120V/240VAmps.10A/5ARPM1720Hz60Phase1

#### GENERAL ELECTRICAL CONNECTION SAFETY

**DANGER:** To reduce the risk of electrocution:

- Use only identical replacement parts when servicing. Servicing should be performed by an authorized and qualified service technician.
- Do not use in rain or where the floor is wet. **This tool is intended for industrial use.**

**WARNING!** Do not allow your finger(s) to touch the terminals of the plug when installing or removing the plug to or from the wall outlet.

#### **GROUNDING**

In the event of a malfunction or breakdown, grounding provides a path of least resistance for electrical current. This reduces the risk of electric shock. The plug must be used in a matching outlet that is properly installed and grounded in accordance with all local codes.

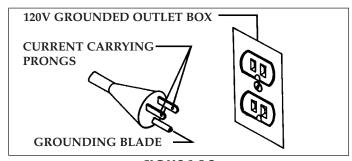
Do not modify the plug provided. If it will not fit into the outlet, have the proper outlet installed by a qualified technician, ensuring that it is grounded properly. Use only three wire extension cords with three pronged plugs (Fig.1A). Improper connection of the grounding wire can result in the risk of electric shock. The green wire is the ground wire. If the cord is damaged or worn, repair or

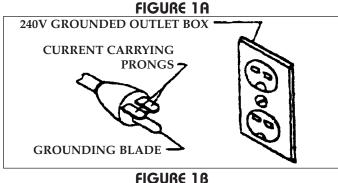
replace it before operating. If repair or replacement of the cord is necessary, make sure the ground wire is <u>NEVER</u> connected to a live terminal.

#### 240V OPERATION

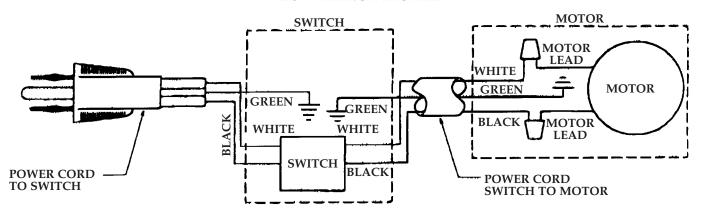
If 240V, single phase operation is desired, the following instructions must be followed:

- 1. Disconnect the machine from its power source.
- 2. The band saw comes with four motor leads that are connected for 120V operation. Reconnect these four motor leads for 240V operation, as indicated on the inside of the capacitor cover.
- 3. The 120V plug supplied with the band saw must be replaced with a CSA listed plug suitable for 240V operation. This plug is illustrated in Fig.1B. Contact your authorized service center or qualified electrician to install the plug and to change the connections from 120V to 240V. The band saw must comply with all local and national codes after the 240V plug is installed.





#### 120V WIRING DIAGRAM





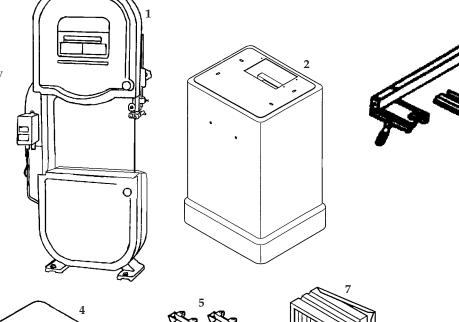
# UNPACKING

**WARNING!** Do not plug the machine into the wall or try to operate until the band saw is completely assembled, wired, all belts are aligned and tightened, and the blade is tensioned and tracking properly.

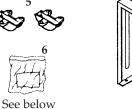
Carefully unpack the contents of the box and check that all items in Fig.2 are included. Do not discard any packing material until the band saw is fully assembled and operational.

#### **CONTENTS OF BOXES**

- 1. Band saw main frame
- 2. Cabinet stand w/motor
- 3. Rip Fence & bars
- 4. Table
- 5. Table support brackets
- 6. Hardware bag (see below for contents)
- 7. Pulley cover
- 8. Belts





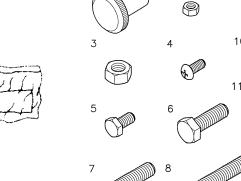


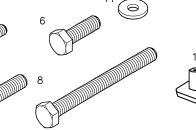


### FIGURE 2

#### **CONTENTS OF HARDWARE BAG**

- 1. 1 Knob
- 2. 4 Hex. nuts
- 3. 5 Hex. nuts
- 4. 6 Pan hd. bolts
- 5. 1 Hex. bolt
- 6. 2 Hex. bolts
- 7. 4 Hex. bolts
- 8. 1 Hex. bolt
- 9. 2 Pan hd. bolts w/flange
- 10. 8 Flat washers
- 11. 1 Flat washer
- 12. 8 Flat washers
- 13. 6 Spring washers
- 14. 2 Table support knobs





## **ASSEMBLY**



#### ASSEMBLING BANDSAW TO CABINET STAND

- 1. Set bandsaw on top of stand matching the holes of the bandsaw base and those of the cabinet stand.
- 2. Secure bandsaw to cabinet stand using 4 hex. bolts, 8 washers, 4 lock washers and 4 hex. nuts.

#### ASSEMBLING TABLE

- 1. Locate the trunnion bracket (A-Fig.3) and bolt it securely to the band saw using 2 hex. bolts and washers (B) as shown. The longest bolt (C) is used as a stop to support the table at 90° to the blade. To install, thread a nut onto the bolt and turn the bolt into the threaded hole in the left, rear of the trunnion bracket.
- 2. Thread the saw blade through the slot to the centre of the table, turn the table so the bolts dangling from its underside align with the holes in the trunnion bracket and lower it into place. Locate the two hand wheels (A-Fig.4) from the hardware bag, install and tighten into place.
- 3. **Table insert:** Place the table insert (B-Fig.4) in the hole in the table, make sure the pin in the table protrudes through the insert.
- 4. Adjusting table: The table as it sits should slide from side to side, if it does not, the bolts found on either side of the half round bracket should be loosened. Adjust the table so the blade sits in the middle of the slot in the table insert. Retighten the six bolts.
- 5. **Table top:** Adjust the long bolt that was threaded into the trunnion bracket (C-Fig.3), so that the table rests on it when it is 90° to the blade. Lock the bolt in place by tightening the nut down onto the trunnion bracket.

NOTE: This bolt must be removed if the table is tilted to the left.

6. The pin (C- Fig.4) that looks like a bolt with no threads, should be tapped into the hole in the right side of the table.

#### ASSEMBLING DUST CHUTE

1. The dust chute (D- Fig.4) is assembled to the lower wheel cover. Open lower wheel cover and using two pan hd. bolts (A- Fig.5), secure dust chute into place as shown in Fig.5.

#### "TRU-RIP" RIP FENCE SYSTEM ASSEMBLY

- 1. Assemble the fixed base (A Fig.6) to the cast iron table using 2 hex. bolts and spring washers (B).
- 2. Assemble the rear square tube (C) to the table using 2 cap screws.
- 3. Assemble the fence (D) to the fence body, then place the fence assembly on the fixed base and rear square tube, slide the fence on its guides until it is the required distance from the blade.
- 4. Check the scale, make sure the distance between the edge of the miter slot and both the front and rear of the rip fence are the same distance, adjust so both distances are equal.
- 5. Lock the fence by pushing down on the locking handle.

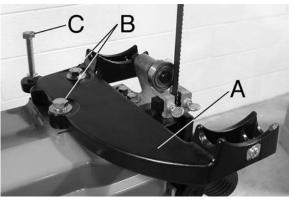


FIGURE 3

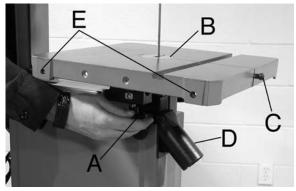


FIGURE 4

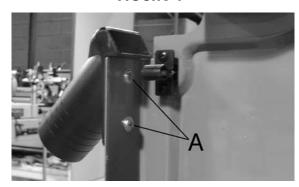


FIGURE 5

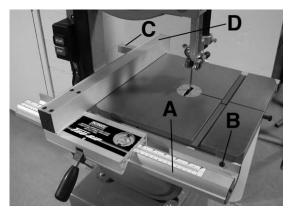


FIGURE 6



## **ASSEMBLY**

#### **INSTALLING V-BELTS**

1. Slip shorter of the two V-belts between pulleys A & B Fig.7 & 8. Slip longer of the two V-belts between pulleys B & C. If too much tension exists between the pulleys and the installation of V-belts is impossible, raise the motor plate to decrease the spacing between the pulleys. See "Adjustments" section for the proper V-belt tensioning before using band saw.

#### **INSTALLING BELT/PULLEY GUARD**

1. Place belt/pulley guard (E- Fig.8) over pulleys and rest on cabinet stand. Fix the belt/pulley guard to the cabinet stand using four hex. bolts and washers (F).

#### **INSTALLING BELT/PULLEY GUARD KNOB**

1. Using a pan hd. screw from the hardware bag, fix the belt/pulley guard knob as shown in Fig. 9.

#### CONNECTING THE SWITCH AND MOTOR PLUG

This bandsaw is supplied with a quick connect switch to motor plug which conveniently allows you to plug and unplug the bandsaw before or after any servicing without having to unplug the main power cord. Plug in the switch to motor plug as shown in Fig.10.

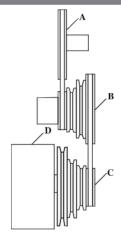


FIGURE 7

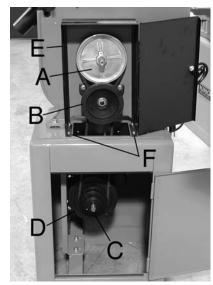


FIGURE 8



FIGURE 9



FIGURE 10

## ADJUSTMENTS & OPERATION



#### 90° TABLE ADJUSTMENT

Your bandsaw is equipped with an adjustable stop (bolt-A- Fig.12) assembled to the table trunnion (C) to insure that the table is perfectly set at  $90^{\circ}$  to the table.

To adjust;

- 1. Slightly tilt the table to the right. Make sure the stop (bolt) is lowered to avoid any interference with the table.
- 2. Place a square on the table and against the band saw blade. Tilt the table until it is  $90^{\circ}$  to the blade.
- 3. When the table is 90° to the blade, the stop (bolt) should come in contact with the bottom of the table. If an adjustment is necessary, loosen nut (B) and turn stop bolt until it contacts the table.
- 4. The pointer (C-Fig.11) may need adjusting after the table is set at 90°, unscrew pan hd. screw and reposition the pointer to the zero mark and tighten pan hd. screw.

It is necessary to remove the stop (bolt) when tilting the table to the left.

#### **TILTING TABLE**

1. The table on your bandsaw can be tilted 45° to the right and 15° to the left. To tilt the table, loosen the two lock knobs (B- Fig.11), tilt the table to the desired angle and retighten the two lock knobs.

#### ADJUSTING BLADE TENSION AND TRACKING BLADE

- 1. The slide bracket (C-Fig.13) allows you to increase or decrease the blade tension by turning the tension knob (A). With the blade on the wheels, turn the tension knob (A) raising or lowering the blade wheel until the desired blade tension is obtained. NOTE: Too much tension or strain could break the blade.
- 2. When the proper blade tension is set, slowly rotate blade wheels clockwise, checking that the blade travels in the center of the upper wheel protector.
- 3. If the blade slides toward the front edge, slightly turn knob (B) clockwise. This tilts the top blade wheel towards the back of the band saw and draws the blade towards the center of the wheel protector.
- 4. If the blade slides towards the back edge, slightly turn the knob (B) counterclockwise.

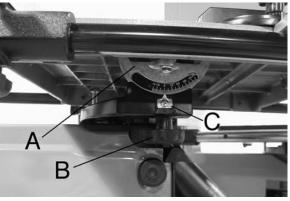


FIGURE 11

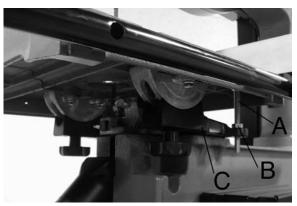


FIGURE 12

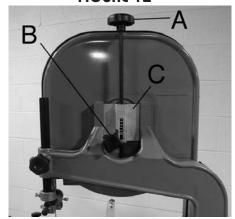


FIGURE 13



## ADJUSTMENTS & OPERATION

#### ADJUSTING UPPER BLADE GUIDE ASSEMBLY

1. Set upper blade guide assembly as closely as possible to the top of stock. To do so, loosen lock knob (A-Fig.14), raise or lower the upper blade guide assembly to the desired height.

# ADJUSTING UPPER BLADE GUIDES AND BLADE SUPPORT BEARING

- 1. After the blade is tensioned and tracking properly, adjust the upper blade guides (B-Fig.14) and support bearing. To adjust;
- 2. Loosen thumb screws (C-Fig.14). Move both guide blocks (B) within .002 inch to the blade. Do not pinch blade. Retighten thumb screws. Center the guide blocks (B) with the blade by moving the blade guide block support (D). Loosen thumb screw (E) then turn the lower adjustment nut (F) to fine tune this adjustment. Retighten thumb screw.
- 3. To adjust the upper blade support bearing located behind the blade guard, loosen the thumb screw on the opposite side of thumb screw E. Using the upper adjustment nut (F), move the support bearing to 1/64 inch behind the back of the blade.

NOTE: The upper blade support bearing prevents the blade from moving back too far and slipping off the wheels.

# ADJUSTING LOWER BLADE GUIDES AND BLADE SUPPORT BEARING

Adjust the lower blade guides and blade support bearing at the same time as the upper ones. To do so;

- 1. Loosen thumb screws (A-Fig.15) . Move both guide blocks (B) within .002 inch to the blade. Do not pinch blade. Retighten thumb screws.
- 2. To adjust the lower blade support bearing (C), loosen the thumb screw (D). Move the support bearing to 1/64 inch behind the back of the blade. Retighten thumb screw.

#### **CHANGING BLADES**

To change blades;

- 1. Open upper and lower wheel guards.
- 2. Release blade tension, remove table spreader pin and table insert.
- 3. Slip blade off wheel, guiding it through the table slot.
- 4. To install blade, reverse procedure.

#### **CHANGING SPEEDS**

To change speeds;

- 1. Install long belt (B) on pulley steps #4 to obtain 735 RPM.
- 2. Install long belt (B) on pulley steps #3 to obtain 1470 RPM.
- 3. Install long belt (B) on pulley steps #2 to obtain 2350 RPM.

Pulley step #1 on motor pulley (C) is not used.

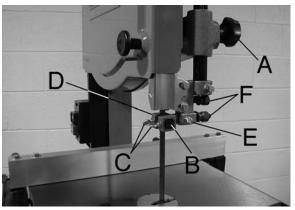


FIGURE 14

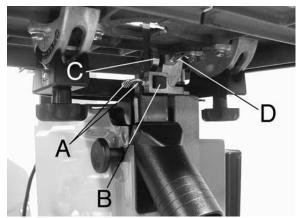


FIGURE 15

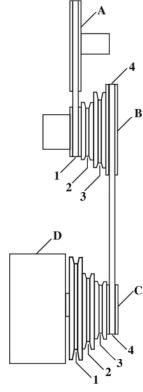


FIGURE 16

# MAINTENANCE & TROUBLESHOOTING



**WARNING:** For your own safety, turn the switch "OFF" and remove the plug from the power source before maintaining your band saw.

Note: Do not immerse the back-up 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.

#### **TIRES**

Pitch and sawdust that build up on the tires should be removed with a stiff brush or scrape the sawdust with a piece of wood. NOTE: To reduce the risk of damaging the tires, do not use a sharp knife or any kind of solvent.

When the tire becomes worn, they should be replaced. When replacing the tires, stretch them around the wheels but do not glue them on.

#### **GENERAL MAINTENANCE**

Keep your band saw clean. Remove the sawdust from the inside. Vacuum or blow out frequently.

Do not allow residue to build up on the table, the guides or the back-up bearings. Clean them with gum and pitch remover.

#### **MOTOR**

Frequently blow or vacuum out the sawdust from the motor.

CAUTION: To reduce the risk of eye injury from blowing debris, wear safety glasses when blowing out dust.

#### **LUBRICATION**

All of the ball bearings are packed with grease at the factory. They require no further lubrication.

#### **TROUBLESHOOTING**

PROBLEM	SOLUTION
The motor will not start.	<ol> <li>Band saw is not plugged in.</li> <li>A household circuit has blown a fuse or an open circuit breaker.</li> <li>Power cord is damaged. Replace.</li> <li>Switch is not in the "ON" position.</li> <li>Motor requires service.</li> </ol>
The band saw blade does not move although motor is running.	<ol> <li>Blade tension knob is not tight. Turn motor off, tighten knob and restart the band saw.</li> <li>Blade has slipped off pulley wheel. Open cover housing and check.</li> <li>Blade is broken. Replace.</li> </ol>
The blade will not cut or cuts slowly.	Contact has dulled teeth with hardened steels or long usage.     Replace.     Blade mounted backwards.
Sawdust fills inside the band saw.	This is normal, clean out periodically.     Remove cover housing. Use vacuum cleaner to remove dust.
Sawdust in motor housing.	Use a vacuum cleaner nozzle on air intake and exhaust grilles.     Keep workplace cleaner. Clean up excess sawdust frequently.
Unable to get the blade to track in the driver of wheel.	<ol> <li>Backing bearing is not properly adjusted.</li> <li>Tension wheel is not properly adjusted.</li> <li>Bad blade, replace.</li> </ol>



# 14" WOOD BANDSAW

**WITH RESAW GUIDE** 

## INSTRUCTIONS FOR KC-1433FXR

2-YEAR LIMITED WARRANTY FOR KING INDUSTRIAL MACHINERY

#### **PROOF OF PURCHASE**

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#### **REPLACEMENT PARTS**

Replacement parts for this improved 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 purshase to an authorized King Canada service center. Contact your retailer or visit our web site at 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.

#### 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 (A) Fig.1 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.

To install resaw guide;

- 1) Attach the resaw guide post (A) Fig.2 to the fence (B) using washer (C) and lock handle (D).
- 2) Slide and position the resaw guide post so that it is centered with the front edge of the blade and tighten lock handle.

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 an slight angle to keep cutting along the line and to compensate for blade drift. See Fig.1.

#### **PARTS DIAGRAM & PARTS LISTS**

Refer to the Parts section of the King Canada web site for the most updated parts diagram and parts list.

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www.kingcanada.com

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