

# 10" JOBSITE SAW WITH FOLDING STAND



# MODEL: KC-5100NS INSTRUCTION MANUAL

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# **WARRANTY INFORMATION**



#### 2-YEAR

# LIMITED WARRANTY FOR THIS 10" JOBSITE SAW

#### **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. Please use the 10 digit part numbers listed in this manual for all part orders where applicable.

#### **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 for an updated listing of our authorized service centers. In cooperation with our authorized service 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.

KING CANADA INC. DORVAL, QUÉBEC, CANADA H9P 2Y4

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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. KEEP GUARDS IN PLACE.

Keep in good working order, properly adjusted and aligned.

#### 3. REMOVE ADJUSTING KEYS AND WRENCHES.

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

#### 4. 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.

#### 5. 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.

#### 6. KEEP CHILDREN AWAY.

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

#### 7. MAKE WORKSHOP CHILD-PROOF.

Make workshop child-proof with padlocks, master switches or by removing starter keys.

#### 8. USE PROPER SPEED.

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

#### 9. USE RIGHT TOOL.

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

#### 10. 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.

#### 11. 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 operation is dusty.

#### 12. DON'T OVERREACH.

Keep proper footing and balance at all times.

#### 13. MAINTAIN TOOL WITH CARE.

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

#### 14. DISCONNECT TOOLS.

Before servicing, when changing accessories or attachments.

#### 15. AVOID ACCIDENTAL STARTING.

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

#### 16. USE RECOMMENDED ACCESSORIES.

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

#### 17. 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.

#### 18. CHECK DAMAGED PARTS.

Before further use of a tool, the guard or other parts 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.

#### 19. 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 YOUR JOBSITE SAW

#### 1. ALWAYS USE THE BLADE GUARD.

Always use the blade guard, riving knife and anti-kickback fingers on all "thru-sawing" operations. Thru-sawing operations are those when the blade cuts completely through the workpiece as in ripping or crosscutting.

#### 2. AVOID KICKBACKS.

Avoid kickbacks by keeping the blade sharp, the rip fence parallel to the saw blade and by keeping the riving knife, anti-kickback fingers and blade guard in place, aligned and functioning properly. Do not release work piece before passing it completely behind the saw blade. Do not rip a work piece that is twisted, warped or does not have a straight edge to guide it along the rip fence. Do not attempt to reverse out of a cut while the blade is still turning.

#### 3. ALWAYS HOLD THE WORK.

Always hold the work firmly against the miter gauge or fence.

#### 4. NEVER PERFORM FREE-HAND OPERATIONS.

Never perform any operations "free-hand" which means using your hands to support or guide the workpiece. Always use either the fence or the miter gauge to position and guide the workpiece.

#### 5. BE MINDFUL OF BODY POSITION.

Never stand or have any part of your body in line with the path of the saw blade.

#### 6. NEVER REACH BEHIND.

Never reach behind or over the cutting tool with either hand for any reason.

#### 7. MOVE THE RIP FENCE.

Move the rip fence out of the way when crosscutting.

#### 8. SUPPORT LARGE PANELS.

To minimize the risk of blade pinching and kickback, always support large workpieces.

#### 9. REMOVE ALL ACCESSORIES FROM TABLE.

Before transporting saw, remove all accessories (miter gauge, rip fence....). Failure to do so can result in an accident causing possible serious personal injury.

#### 10. NEVER USE RIP FENCE AS A CUT-OFF GAUGE.

Never use the fence as a cut-off gauge when you are crosscutting. Move the rip fence out of the way.

#### 11. STALLED BLADE.

Never attempt to free a stalled saw blade without first turning the saw OFF. If a work piece stalls the blade, turn the saw off for safety and also to prevent damaging the motor.

#### 12. PROVIDE ADEQUATE SUPPORT.

To the rear and sides of the table saw for wide or long workpieces.

#### 13. AVOID AWKWARD OPERATIONS.

Avoid awkward operations and hand positions where a sudden slip could cause your hand to move into the spinning blade.

#### 14. MOUNT TABLE SAW.

Mount your table saw on the supplied stand or mount it to a work bench before performing any cutting operations.

#### 15. NEVER CUT METALS.

Never cut metals or materials that may make hazardous dust.

#### 16. ALWAYS USE A PUSH STICK.

Always use a push stick, especially when ripping narrow work piece. One is supplied with this saw and a pattern for making a push stick is included in this manual.

## **ELECTRICAL INFORMATION**



#### **WARNING!**

ALL ADJUSTMENTS OR REPAIRS MUST BE DONE WITH THE SAW DISCONNECTED FROM THE POWER SOURCE. FAILURE TO COMPLY MAY RESULT IN SERIOUS INJURY!

#### **GENERAL INFORMATION- 120V single phase operation**

This jobsite saw comes with a 15 Amp. 120V single phase motor.

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

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

#### **DOUBLE INSULATION**

Double insulated tools are equipped with a polarized plug (Fig.1- one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully into the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install a polarized outlet. Do not alter or change the plug in any way. Double insulation eliminates the need for three wire grounded power cords and grounded power supply system.

#### **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 2-prong polarized extension cords which accept the tool's polarized 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 saw motor. Refer to Fig.2 for wire length and size.

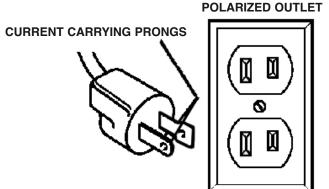


FIGURE 1

| Tool's             | Cord Size in A.W.G. |        |               |             |
|--------------------|---------------------|--------|---------------|-------------|
| Amperage<br>Rating | Cord<br>25          | l Leng | gth in<br>100 | Feet<br>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

#### **ON/OFF SWITCH**

The On/Off switch is located on the front of the Table Saw. Press the green ON button (A) to turn Table Saw On. Press the red OFF button (B) to turn Table Saw Off.

This Table Saw is equipped with an electromechanical safety switch with line voltage interruption. In case of a power failure, the Table Saw will need to be restarted using the switch.

#### **RESET BUTTON (OVERLOAD PROTECTOR)**

This table saw comes with an overload reset button (C) Fig.3 (above the On/Off Switch). When the table saw motor overheats, a safety mechanism stops the motor automatically due to motor overheating or low voltage. Press the reset button and restart the Table Saw. If the table saw does not restart, wait 5 minutes before restarting.

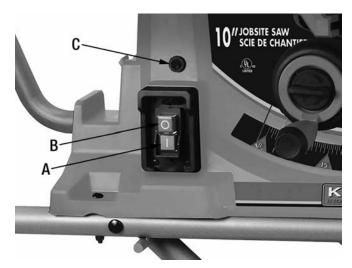
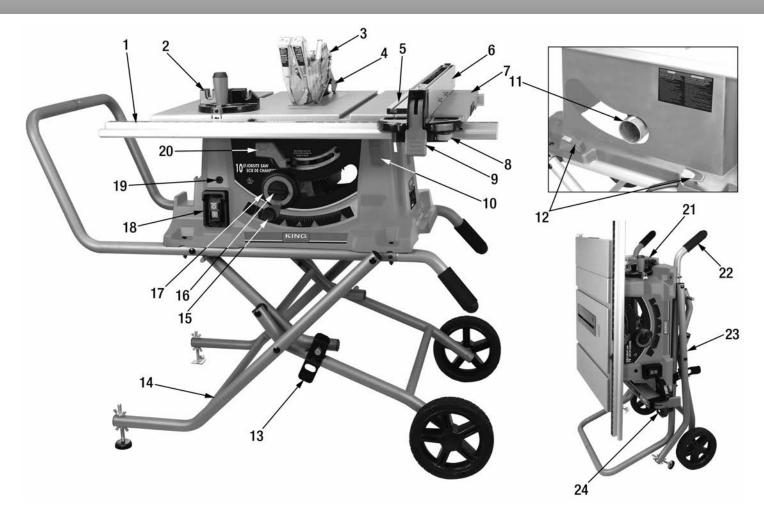


FIGURE 3



# **GETTING TO KNOW** YOUR JOBSITE SAW



- 1. Front rip fence rail with ruler
- 2. Miter gauge assembly
- 3. Blade guard assembly
- 4. Anti-kickback fingers assembly
- 5. Rip fence guide (horizontal)
- 6. Rip fence assembly
- 7. Retractable extension table
- 8. Rip fence micro-adjust wheel
- 9. Rip fence lock lever

- 10. Extension table lock/release lever
- 11. 2-1/2" dust chute
- 12. Power cord wrap posts
- 13. Stand release latch
- 14. Folding stand
- 15. Blade height adjustment handwheel
- 16. Blade height lock knob
- 17. Bevel angle micro-adjust wheel18. Electromechanical On/Off switch
- 19. Reset
- 20. Bevel angle lock/release lever
- 21. Storage (miter gauge, blade guard and push stick)
- 22. Carry handles (folded position)
- 23. Stand in folded position
- 24. Storage (rip fence, adjustment wrenches and additional blades-not included)

# **SPECIFICATIONS**

| MODEL              | KC-5100NS |
|--------------------|-----------|
| VOLTAGE            | 120V      |
| AMPERAGE           | 15A       |
| R.P.M              | 4,400     |
| Hz                 |           |
| PHASE              |           |
| BLADE DIAMETER     | 10"       |
| DIAMETER OF ARBOR  | 5/8"      |
| DEPTH OF CUT @ 45º |           |
| DEPTH OF CUT @ 90º | 3-1/2"    |



#### Assembly of folding stand

Follow these instructions to assemble folding stand.

- Insert both handles (A) Fig.4 into the large U-shaped bracket (B), make sure the screw hole in each handle matches with the screw hole on the U-shaped bracket. Align screw holes and secure handles using a small pan head screw.
- 2. Mount middle bracket (C) Fig.4 to U-shaped bracket (B) using carriage bolts, plastic spacers and nylon hex. nuts.
- 3. Mount foot bracket (D) Fig.4 to U-shaped bracket (B) using carriage bolts, plastic spacers and nylon hex. nuts.
- Mount wheel bracket (E) Fig.4 to foot bracket (D) and middle bracket (C) using carriage bolts, plastic spacers and nylon hex. nuts.
- 5. Remove the wheel cap (F) Fig.4 and remove mounting hardware inside wheel. Mount the 8" wheels (G) to wheel bracket (E) using large washers and nylon hex. nuts. Install wheel caps (F) once wheels are installed.
- 6. The stand is now completely assembled and should look like the stand shown in Fig.5.

#### Mounting of jobsite saw on folding stand

1. Position the jobsite saw on top of the stand (choose which orientation best suits you). Use 4 cap screws (H) and nylon hex. nuts (I) Fig.4 to secure jobsite saw to stand.



FIGURE 5

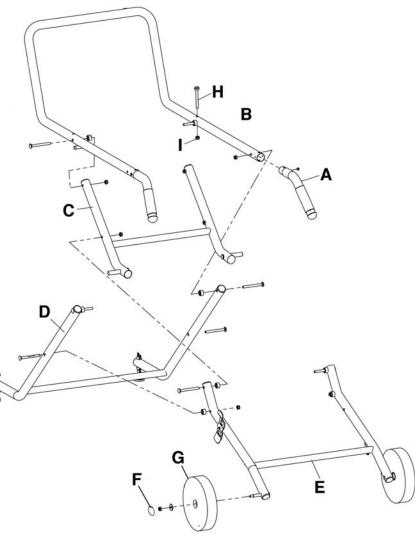
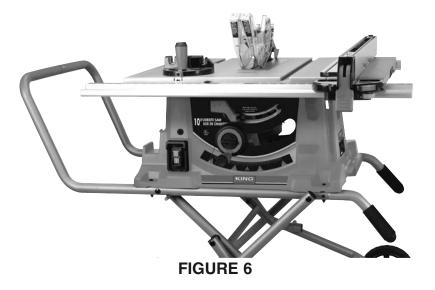


FIGURE 4





#### Accessory storage and folding/unfolding stand

**Note:** Before folding stand, remove all workpieces from the table. Remove and securely store all loose accessories such as the miter gauge, rip fence, blade guard, anti-kickback fingers and push stick. Lower saw blade below the table top. Fig.7 shows the stand in its folded position with all accessories in their storage areas.

#### Folding stand for storage and transportation purposes-

 Push the stand release latch (A) Fig.7 and at the same time, grasp the stand handles (B) and lift them up and away from the saw body. Push the jobsite saw until the release latch clicks and locks the stand. The stand and saw assembly can now be pivoted and rolled away.

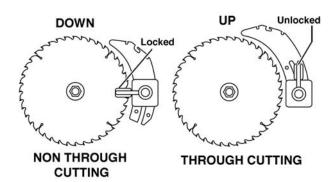
#### Unfolding stand for use at the jobsite-

 Push the stand release latch (A) Fig.7 and at the same time, grasp the stand handles (B) and pull them down towards you. Push down until the release latch clicks and locks the stand. The stand and saw assembly can now be used for cuts.

#### Adjusting riving knife

Remove the table insert (A) Fig.9 from the table top by pulling it upwards. Turn the blade height lock knob (A) Fig.8 counterclockwise to unlock. Turn the elevation handwheel (B) Fig.8 counterclockwise and raise the blade to its highest position above the table.

The riving knife (B) Fig.9 consists of a metal piece, slightly thinner than the blade, that helps to keep the blade kerf open to prevent kickback. This saw is shipped with the riving knife in the non-through cutting or "down" position, as shown in illustration below. The riving knife must be positioned in the through cutting or "up" position for all other operations.



- 1. Unlock the riving knife lock lever (C) Fig.9 by pivoting it upwards (vertical position).
- 2. Push the riving knife (B) towards the lock lever to disengage it from its positioning pins/slots.
- 3. Pull the riving knife upwards until its bottom mounting holes engage the positioning pins and the riving knife is above the saw blade.
- 4. Lock the lock lever (C) by pivoting it downwards (horizontal position). Once secured, make sure the riving knife is perfectly aligned with the center of the blade, if not, it is most likely due to misalignment of the positioning pins, readjust until alignment is obtained.
- 5. Reinstall the table insert.



FIGURE 7



FIGURE 8

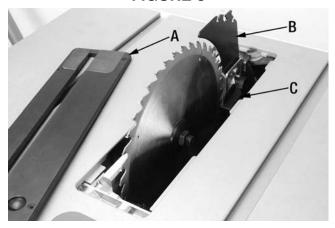


FIGURE 9



#### Aligning riving knife

IMPORTANT: If riving knife is correctly mounted yet it is not perfectly centered with the blade, proceed with the following adjustment.

1. Using a straight edge (Fig.10), check if the riving knife is aligned with the blade.

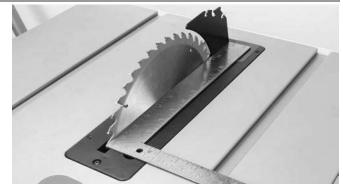


FIGURE 10

2. If an adjustment is necessary, loosen 2 cap screws (A) Fig.11 that hold the mounting bracket (C), the cap screws (A) are accessible through the holes shown in Fig.11, use a hex key (B) to loosen cap screws. Adjust the position of the riving knife bracket to the right or left until it is perfectly aligned with the blade. Retighten cap screws.

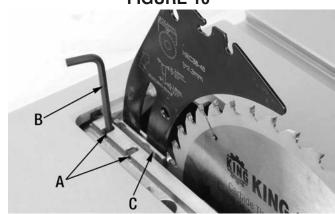


FIGURE 11

# MOUNTING BLADE GUARD AND ANTI-KICKBACK FINGERS TO RIVING KNIFE

#### Mounting blade guard

- 1. Make sure the blade is raised to its highest position and the riving knife is in the "up" position and secured.
- 2. Make sure the table insert (A) Fig.12 is installed in the table top opening.
- 3. Lower the back end shaft (B) into the middle slot (C) of the riving knife. Pull the blade guard lock lever (D) toward the front of the saw then pivot the blade guard towards the front of the saw. Once the blade guard is parallel to the table, lock the blade guard to the riving knife by pushing the lock lever down to the lock position. Lift the blade guard up to check if it was locked securely.

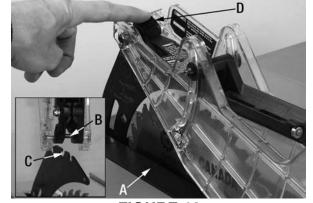


FIGURE 12

#### Mounting anti-kickback fingers

- 1. Align the anti kickback finger bracket slot (A) Fig.13 with the rear slot (B) of the riving knife.
- 2. Push the assembly down and lift the lever (C) to lock the anti-kickback finger assembly to the riving knife. Lift the assembly up to check if it was locked securely.

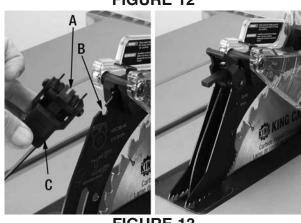
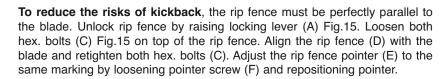


FIGURE 13



#### Mounting rip fence on table & adjustments

- Position the front of the rip fence (A) Fig.14 on the front rail (B). Lower the back end of the rip fence on the rear rail. Check to make sure the rip fence slides freely on the rails.
- 2. Lower rip fence locking lever (C) to automatically align and secure the rip fence in place.
- 3. This rip fence comes with a micro-adjust wheel (B) Fig.15 which allows the user to make small adjustments of the rip fence using only one hand. The rip fence lock lever (C) Fig.14 must be raised to the unlocked position to use this feature.





When ripping thin or narrow stock, it is recommended to install the included rip fence guide (A) Fig.16.

- Insert two carriage bolts (B) Fig.16 into the two lower holes in the rip fence body. On the other side of the rip fence, loosely secure the carriage bolts using washers and wing nuts.
- Slide the t-slot (C) of the guide (A) over the carriage bolts, position the guide in the desired location. Secure guide by tightening the wing nuts on the other side of the rip fence.

#### Mounting and adjusting miter gauge

When crosscutting and the blade is set at  $90^{\circ}$  or  $45^{\circ}$  to the table, the miter gauge can be used in either T-slot on the table. When crosscutting and the blade is tilted, use T-slot on right side of table where the blade is tilted away from your hands and miter gauge.

- To adjust the miter gauge, loosen lock handle (A) Fig.17 and set the miter gauge body with scale (B) so the indicator (C) aligns to the desired cutting angle, then retighten lock handle.
- 2. For best results, it is recommended to check the miter gauge for squareness against the saw blade. Place a square against the blade, loosen lock handle (A) and place the miter gauge against the square. Once the miter gauge body is perfectly square with the blade, retighten lock handle (A). If the pointer (C) requires alignment, loosen screw (D), reposition the pointer and retighten screw.



FIGURE 14

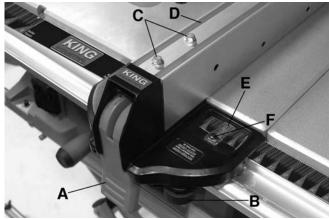


FIGURE 15

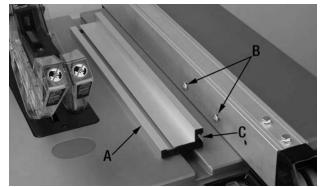


FIGURE 16

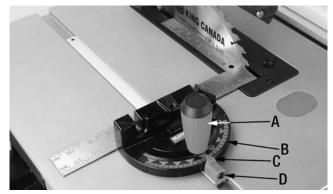


FIGURE 17

## **ADJUSTMENTS**



#### Adjusting the extendable extension table

The extension table allows the user to increase the length of the table for greater ripping capacity (maximum 25" rip to the right of blade). To use the extension table:

- 1. Unlock or remove the rip fence from the table.
- 2. Unlock the extension table (A) Fig.18 by raising the extension lock lever (A) Fig.19, slide the extension to the desired width. Use the scale on the front rail when a specific width is desired.
- Once the extension is in the desired position, lower the lock lever (A) to secure the extension in place. The rip fence can now be installed as shown in Fig.18.



FIGURE 18

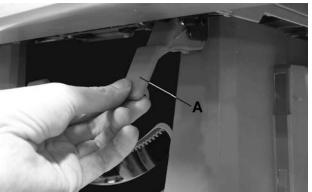


FIGURE 19

# Adjusting the blade height

The blade height should be set 1/8" to 1/4" higher (above) the top of the workpiece to cut.

- Turn the blade height lock knob (A) Fig.20 counterclockwise to unlock. Turn
  the elevation handwheel (B) counterclockwise to raise the blade or
  clockwise to lower the blade.
- 2. Once the blade is set in the desired height, turn blade height lock knob (A) clockwise to lock blade position.



Note: A 90° cut has a 0° bevel angle and a 45° cut has a 45° bevel angle.

- 1. Unlock the bevel locking lever (A) Fig.21 by pulling the lever all the way to the right.
- Push in and then turn the exterior handwheel (B) Fig.21 to adjust the blade bevel angle, turning it counterclockwise increases the bevel angle of the blade.
- 3. Angle detents at 15°, 22.5° and 30° are provided for quick adjustment, once one of these angles are reached you will hear and feel a click, which means you have reached the detent angle.
- 4. Once the desired bevel angle is achieved, lock the bevel locking lever (A) Fig.21 by pulling the lever all the way to the left.



FIGURE 20

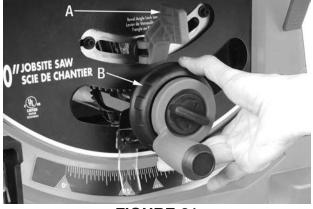


FIGURE 21



# **ADJUSTMENTS**

#### Adjusting the bevel angle indicator & table insert height

If the blade is at a  $90^{\circ}$  angle and the bevel indicator (B) Fig.23 does not indicate  $0^{\circ}$  on the scale, an adjustment can be made:

- 1. Place a combination square (A) Fig.22 on the table and up against the flat portion of the blade (B).
- 2. Unlock the bevel locking lever (A) Fig.21 by pulling the lever all the way to the right. Push in and then turn the exterior handwheel (B) Fig.21 until the blade is set at a perfect 90°. Lock the bevel locking lever.
- 3. Loosen the screw (A) Fig.23 which secures the bevel indicator (B). Readjust the position of the bevel indicator so it aligns with the 0° on the bevel scale. Retighten screw.

If the table insert (C) Fig.22 is not flush with the top of the table, an adjustment can be made:

1. Using the combination square as shown in Fig.22, adjust the 4 set screws (D) at each corner of the table insert, until table insert is flush with the table.



A plastic markable insert (A) Fig.24 located in front of the saw blade is provided for marking the location of the saw blade kerf (cut width) on the workpiece.

- 1. Place the miter gauge in the left T-slot and make sure the blade angle is exactly 90°.
- Place and firmly hold a workpiece against the miter gauge body and make a cross cut.
- Turn the saw Off, once the blade has come to a complete stop, pull the miter gauge back until the freshly cut workpiece is over the markable insert (A) Fig.24.
- 4. Using a sharp pencil, mark a line on the insert at the edge of the freshly cut workpiece. Repeat steps 1-4 but place the miter gauge in the right T-slot instead to make the second mark on the insert.

**Note:** Both these lines indicate the blade kerf made by the blade, if you change the blade the marks will need to be erased and the above steps will need to be repeated.

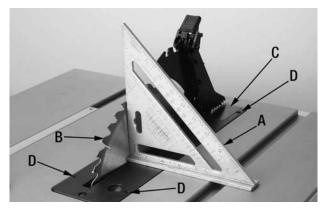


FIGURE 22

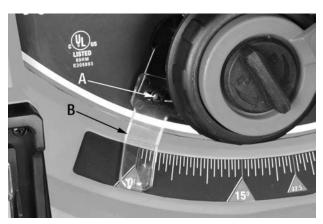


FIGURE 23

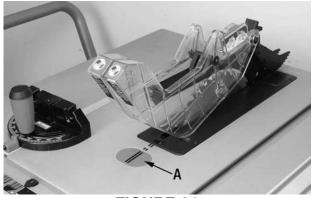


FIGURE 24

## **ADJUSTMENTS & OPERATION**



#### Installing/changing blade

Warning! Disconnect power cord from power source before installing/changing blade.

- 1. Uninstall the blade guard and anti-kickback fingers assembly from the riving knife. Then remove the table insert to gain access to the blade arbor.
- 2. Raise the blade to its highest position above the table.
- 3. Place the open end of one of the adjustment wrenches (A) Fig.25 on the flat portion of the inside blade flange (E-Fig.26, behind the blade) to prevent the saw arbor and blade from rotating. Then place the closed end of the second adjustment wrench (B) Fig.25 on arbor nut (A) Fig.26 and turn the arbor nut counterclockwise, remove arbor nut and outside blade flange (B) Fig.26.
- 4. Place new blade (C) on arbor (D) making sure the blade teeth point downwards towards the front of the table saw.
- 5. Replace outside blade flange (B) and arbor nut (A) Fig.26 on arbor shaft and tighten with arbor wrenches.
- Reinstall the table insert, then the blade guard and anti-kickback fingers assembly.

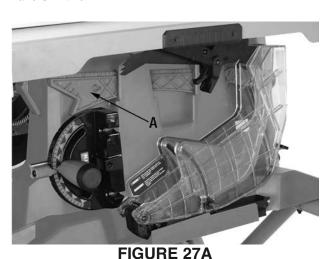
#### Safety precautions before operation

The operation of power tools involves a certain amount of hazard for the operator. Before attempting regular work we recommend you get the feel of operations using scrap lumber to check settings. Read entire instructions before you start to cut workpiece. Always pay attention to safety precautions to avoid personal injury.

#### Push stick & push stick construction

A push stick (A) Fig.27A is supplied with this table saw and should be used whenever possible. When not in use the push stick can be stored on the right side of the table saw cabinet as shown in Fig.27A.

If you loose or misplace the push stick, Fig.27B shows an illustration of how to make one yourself. It is recommended to use a good quality plywood or solid wood, 1/2" and 3/4" thick.



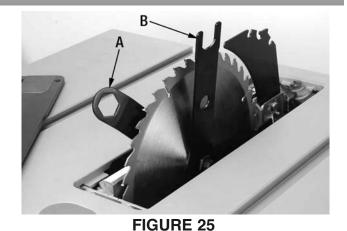


FIGURE 26

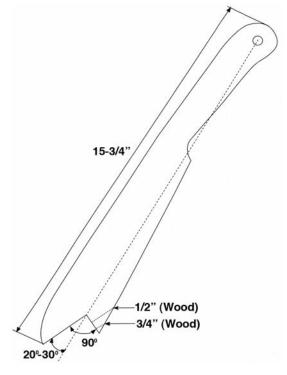


FIGURE 27B



### **OPERATION**

#### Operation

Plain sawing includes ripping and crosscutting, plus a few other standard operations of a fundamental nature. The methods on this page feature safety. As with all power tools there is a certain amount of hazard involved with the operation and use of the tool. Using the tool with the respect and caution demanded as far as safety precautions are concerned will considerably lessen the possibility of personal injury. However, if normal safety precautions are overlooked or completely ignored, personal injury to the operator can develop. It is good practice to make trial cuts using scrap material when setting up your saw for operation.

#### **Cross cutting**

Cross cutting requires the use of the miter gauge to position and guide the work. Place the work against the miter gauge and advance both the miter gauge and work toward the saw blade. The miter gauge may be used in either table T-slot, however, most operators prefer the left groove for average work. When bevel cutting (blade tilted), use the right side table T-slot so that it doesn't interfere with the tilted saw blade. The blade guard must be used. The guard has anti-kickback fingers and a riving knife to prevent the saw kerf from closing.

Start the cut slowly and hold the work firmly against the miter gauge and the table. One of the rules in running a saw is that you never hang onto or touch a free piece of work. Hold the supported piece, not the free piece that is cut off. The feed in crosscutting continues until the work is cut in two, then the miter gauge and work are pulled back to the starting point. Before pulling the work back it is good practice to give the work a little sideways shift to move the work slightly away from the saw blade.

Never pick up any short length of free work from the table while the saw is running. A smart operator never touches a cut-off piece unless it is at least a foot long. Never use the rip fence as a cut-off gauge when crosscutting.

#### Ripping

Ripping is the operation of making a lengthwise cut through a board, the rip fence is used to position and guide the work. One edge of the work rides against the rip fence while the flat side of the board rest on the table. Since the work is pushed along the fence, it must have a straight edge and make solid contact with the table. The blade guard must be used. The guard has anti-kickback fingers and a riving knife to prevent the saw kerf from closing.

Start the motor and advance the work holding it down and against the fence. Never, stand in the line of the saw cut when ripping. Hold the work with both hands and push it along the fence and into the saw blade. The work can then be fed through the saw blade with one or two hands.

When this is done the work will either stay on the table, tilt up slightly and be caught by the rear end of the guard or slide off the table to the floor. Alternately, the feed can continue to the end of the table, after which the work is lifted and brought back along the outside edge of the fence. The waste stock remains on the table and is not touched with the hands until the saw is stopped unless it is a large piece allowing safe removal.

#### Making a non-through cut

Non-through cuts can be made with the grain (ripping) or across the grain (cross cut). Non-through cuts are needed for cutting grooves, rabbets and dadoes. This is the only type of cut that the blade gets covered by the workpiece and is made without the blade guard and anti-kickback finger assemblies installed. Make sure the blade guard and anti-kickback finger assemblies are reinstalled after this type of cut is done.

For non-through cuts, position the riving knife in the "down" position, set the blade to the correct height and tighten the blade height lock knob. Turn on the saw and allow the blade to come up to speed, use push sticks to feed workpiece into blade.

# **OPERATION & MAINTENANCE**



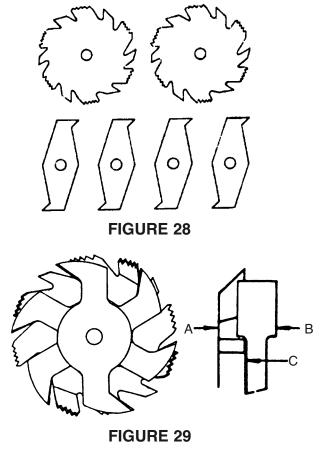
#### Using a dado blade set (optional) and dado insert

Dadoing is cutting a rabbet or a wide groove into the work. Most dado head sets are made up of two outside blades and four or five inside cutters, as shown in Fig. 28. Various combination of blades and cutters are used to cut grooves from 1/8" to 13/16" for use in shelving, making joints, tenoning, grooving, etc. The cutters are heavily swaged and must be arranged so that this heavy portion falls in the gullet of the outside blades, as shown in Fig. 29. The saw and cutter overlap is shown in Fig.29 (A) being the outside blade, (B) and inside cutter, and (C) a paper washer which can be used as needed to control the exact width of groove. A 1/4" groove is cut by using the two outside blades. The teeth of the blades should be positioned so that the raker on one saw is beside the cutting teeth on the other saw.

The dado head set is assembled to the saw arbor in the same manner as the saw blade. The blade guard and anti-kickback finger assemblies can not be used when dadoing operations and must be removed from the saw. The riving knife must be set in the "down" position and the included dado table insert must be used in place of the standard table insert.

NEVER USE THE DADO HEAD IN A BEVEL POSITION UNLESS YOU MAKE YOUR OWN DADO INSERT!

ALWAYS REINSTALL BLADE GUARD AND ANTI-KICKBACK FINGER ASSEMBLIES AFTER OPERATION IS COMPLETE!



#### **MAINTENANCE**

WARNING: For your own safety, turn switch "OFF" and remove plug from power source outlet before maintaining or lubricating your saw.

Do not allow sawdust to accumulate inside the saw. Frequently blow out any dust that may accumulate inside the saw cabinet and the motor. Clean your cutting tools with a Gum and Pitch Remover. The cord and tool should be wiped with a dry clean cloth to prevent deterioration from oil and grease.

**WARNING:** Certain cleaning agents and solvents can damage plastic parts. Some of these are: gasoline, carbon tetrachloride, chlorinated cleaning solvents, ammonia and household detergents which contain ammonia. Avoiding use of these and other types of cleaning agents will minimize the possibility of damage.

A coat of automobile type wax applied to the table will help keep the surface clean and allow workpieces to slide more freely. If the power cord is worn or cut, or damaged in any way, have it replaced immediately. Make sure the teeth of the ANTIKICKBACK fingers are always sharp. To sharpen:

- 1. Remove anti-kickback fingers assembly from the riving knife.
- 2. Using a small round file (Smooth Cut) sharpen the teeth.

**WARNING:** All repairs, electrical or mechanical, should be attempted only by trained repairmen. Use only identical replacement parts, any other may create a hazard.

#### **LUBRICATION**

The table saw has sealed lubricated bearings in the motor housing and the arbor assembly, they will not require any additional lubrication.



# **TROUBLESHOOTING**

| PROBLEM  | SOLUTION  |  |
|--|---|--|
| SAW WILL NOT START  1. Saw not plugged in. 2. Fuse blown or circuit breaker tripped. 3. Cord damaged.  | <ol> <li>Plug in saw.</li> <li>Replace fuse or reset circuit breaker.</li> <li>Have cord replaced by a certified electrician.</li> </ol>  |  |
| OVERLOAD KICKS OUT FREQUENTLY  1. Extension cord too light or too long.  2. Feeding stock too fast.  3. Blade in poor condition (dull, warped, gummed).  4. Blade binding due to misaligned rip fence. | <ol> <li>Replace with adequate size cord.</li> <li>Feed stock more slowly.</li> <li>Clean or replace blade.</li> <li>Check and adjust the rip fence. See rip fence instructions.</li> </ol> |  |
| 5. Blade binding due to warped wood. 6. Low house current.   | Select another piece of wood.     Contact your electrical company.  |  |
| DOES NOT MAKE ACCURATE 45° AND 90° RIP CUTS  1. Tilt angle pointer not set properly.   | Check blade with square and adjust pointer to zero.   |  |
| MATERIAL PINCHES BLADE WHEN RIPPING  1. Rip fence not aligned with blade.  2. Warped wood.   | Check and adjust rip fence.     Select another piece of wood.   |  |
| MATERIAL BINDS ON RIVING KNIFE  1. Riving knife not aligned correctly with blade kerf.   | Check and align riving knife with blade kerf.   |  |
| SAW MAKES UNSATISFACTORY CUTS  1. Dull blade. 2. Blade mounted backwards. 3. Gum or pitch on blade. 4. Incorrect blade for work being done. 5. Gum or pitch on table causing erratic feed.             | <ol> <li>Replace blade.</li> <li>Turn blade around.</li> <li>Remove blade and clean with turpentine and steel wool.</li> <li>Change the blade.</li> <li>Clean the table.</li> </ol>         |  |
| BLADE DOES NOT COME UP TO SPEED  1. Extension cord too light or too long.  2. Low house current.   | Replace with adequate size extension cord.     Contact your electric company.   |  |
| MACHINE VIBRATES EXCESSIVELY  1. Saw not mounted securely to stand.  2. Stand is on uneven floor.  3. Damaged saw blade.  4. Loose hardware.   | <ol> <li>Tighten all mounting hardware.</li> <li>Reposition on flat level surface.</li> <li>Replace blade.</li> <li>Tighten all nuts, bolts and set screws.</li> </ol>                      |  |
| BLADE DOES NOT RAISE OR TILT FREELY  1. Sawdust or dirt in raising or tilting mechanisms.  | Brush or blow out loose dust or dirt.   |  |
| HEIGHT/BEVEL HANDWHEEL HARD TO TURN  1. Gears are clogged with sawdust. 2. Handwheel is locked.  | Clean the gears.     Unlock the height lock knob or release bevel lever.  |  |

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