KING INDUSTRIAL

10” CABINET TABLE SAW WITH 30” RIP FENCE

MODEL: KC-10HCX

INSTRUCTION MANUAL

WARRANTY INFORMATION

2-YEAR LIMITED WARRANTY FOR THIS 10" CABINET TABLE SAW	**KING CANADA TOOLS OFFERS A 2-YEAR LIMITED WARRANTY FOR INDUSTRIAL USE.**

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 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.

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

www.kingcanada.com

GENERAL & SPECIFIC SAFETY INSTRUCTIONS FOR TABLE SAWS

BEING PREPARED

1) Wear proper apparel. Do not wear loose clothing, gloves, neckties, rings, bracelets or other jewelry that may get caught in moving parts of the machine.
2) Wear protective hair covering to contain long hair.
3) Wear safety shoes or boots with anti-slip soles.
4) Wear safety glasses. Everyday eye glasses have only impact resistant lenses. They are not safety glasses.
5) Wear face mask or dust mask if operation is dusty.
6) Be alert and think clearly at all times. Never operate power tools or machinery when you are tired, intoxicated or when taking medications that can cause drowsiness.

BEING PREPARED

1) Keep work area clean. Cluttered work areas invite accidents.
2) Do not use power tools or machinery in dangerous environments. Do not use in damp or wet locations. Do not expose to rain.
3) Work area should be properly illuminated with lights.
4) Keep visitors at a safe distance from work area.
5) Keep children out of work area. Make workshop childproof. Use padlocks, master switches or remove switch keys to prevent any unintentional use.
6) Keep power cords from coming in contact with sharp objects, oil, grease and hot surfaces.

MAINTAIN TOOL

1) Always unplug from power source prior to inspection.
2) Consult manual for specific maintenance and adjustment procedures.
3) Keep tool or machine lubricated and clean for safest operation.
4) Remove adjusting tools. Form habit of checking to see that adjusting tools are removed from the machine before turning tool or machine on.
5) Keep all parts in working order. Check to determine that the guard or other parts will operate properly and perform their intended function.
6) Check for damaged parts. Check for alignment of moving parts, binding, breakage, mounting and any other condition that may effect a tool's operation.
7) A guard or other part that is damaged should be properly repaired or replaced. Do not perform makeshift repairs (only use parts listed in this instruction manual to order replacement parts).
8) Maintain proper adjustment of rip fence and blade guard.
9) Never adjust the table saw while it is running. Disconnect power to avoid accidental start-up.
10) Replace damaged or worn power cords immediately.
11) Keep blade sharp for efficient and safest operation.

KNOW HOW TO USE TABLE SAW

1) Use the right tool for the job. Do not force table saw or attachment to do a job for which it was not designed..
2) Disconnect table saw when changing blade.
3) Avoid accidental start-up. Make sure the table saw is in the "Off" position before plugging in, turning on safety disconnect or activating breakers.
4) Do not force the table saw. It will work most efficiently at the rate for which it was designed.
5) Keep hands away from blade, moving parts and cutting surfaces.
6) Never leave table saw unattended. Turn the power Off, and do not leave the table saw until it comes to a complete stop.
7) Do not overreach. Keep proper footing and balance.
8) Never stand on the table saw. Serious injury could occur if the table saw is tipped or if the blade is accidentally contacted.
9) Know your table saw. Learn the table saw's operation, application and specific limitations.
10) Handle workpiece correctly. Press firmly against the table. Protect hands from possible injury.
11) Turn table saw Off if it jams. Blade will jam when it digs too deeply into workpiece.
12) Feed workpiece into blade slowly, letting the blade do the work.

Warning: For your own safety, do not operate your saw until it is completely assembled and installed according to the instructions in this manual.

STABILITY OF THE TABLE SAW

If there is a tendency for the table saw to tip over or move during certain cutting operations, such as cutting extremely heavy panels or long heavy boards, the table saw should be bolted down to the floor or a secure base. If you attach any kind of table extensions over 24" wide to either side of the table (in addition to the table extensions included), make sure you either bolt the table saw to the floor, or support the outer end of the extension to prevent all chances that the table saw tips over.

LOCATION

The table saw should be positioned so neither the operator nor a casual observer is forced to stand in line with the saw blade.

KICKBACKS

A kickback occurs during a rip operation when a part or all of the workpiece is thrown back violently towards the operator. Keep your face and body to one side of the saw blade, out of line with a possible kickback. Kickbacks and possible injury from them can usually be avoided by:

1) Maintain rip fence parallel to the saw blade.
2) Keep saw blade sharp. Replace or sharpen anti-kickback pawls when points become dull.
3) Keep blade guard, riving knife and anti-kickback pawls in place and operating properly. The riving knife must be in alignment with the saw blade and the anti-kickback pawls must stop a kickback once it has started. Check their action before ripping operation.
4) Do not rip workpiece that is twisted or warped, or does not have a straight edge to guide along the rip fence.
5) Do not release workpiece until you have pushed it all the way past the saw blade.
6) Use a push stick for ripping widths less than 6".

PROTECTION: EYES, HANDS, FACE, BODY, EARS

1) If any part of the table saw is missing, malfunctioning, or has been damaged or broken (such as the motor switch, electronic controls, other operating control, a safety device or power cord), cease operating immediately until the particular part is properly repaired or replaced.
2) Small loose pieces of wood or other objects that contact the rear of the revolving saw blade can be thrown back at the operator at excessive speed. This can usually be avoided by keeping the blade guard and riving knife in place for all thru-sawing operations (sawing completely through the workpiece) and by removing all loose pieces from the table with a long stick of wood immediately after they are cut off.
3) Use extra caution when the blade guard is removed for resawing, dadoing, or rabbeting, replace the guard as soon as that operation is completed.
4) Never turn the table saw On before clearing all tools and wood scraps from the table.

GENERAL & SPECIFIC SAFETY INSTRUCTIONS FOR TABLE SAWS

PROTECTION: EYES, HANDS, FACE, BODY, EARS continued...

5) Never place your face or body in line with the cutting tool (blade).
6) Never place your fingers or hands in the path of the saw blade or any other cutting tool.
7) For rip cuts, the following end of a workpiece to which a push stick or push board is applied must be square (perpendicular to the fence) in order that feed pressure applied to the workpiece by the push stick or board does not cause the workpiece to come away from the fence, and possibly cause a kickback.
8) During a rip cut, workpiece must be held down on the table and against the rip fence with a push stick or push board.

Push stick: A safety device used to push the workpiece through a cutting operation. Used most often when rip cutting thin workpieces. Push sticks are useful for keeping hands and fingers away from the saw blade during ripping, rabbeting and dadoing. Apply downward pressure and push workpiece through the cut and past the saw blade or cutting tool. Refer to the Operations & Maintenance section of this manual for instructions on how to fabricate a push stick if needed.

9) Never reach in back of the saw blade or cutting tool with either hand to hold down or support the workpiece, remove wood scraps, or for any other reason. Avoid awkward operations and hand positions where a sudden slip could cause fingers or hand to move into the saw blade or other cutting tool.
10) Do not perform layout, assembly, or setup work on the table while the saw blade or cutting tool is rotating.
11) Do not perform any operation freehand, always use either the rip fence or miter gauge to position and guide the workpiece.
12) Never use the rip fence when cross-cutting or the miter gauge when ripping. Do not use the rip fence as a length stop. Never hold onto or touch free-end of workpiece or a free-piece that is cut off, while the power is On and/or the saw blade is rotating.
13) Shut off table saw Off and disconnect power source when removing table insert, changing the saw blade or cutting tool, removing or replacing the blade guard, adjusting riving knife, changing riving knife, or making any type of adjustment.
14) Provide adequate support to the rear and sides of the table saw for wide or long workpieces.
15) Plastic and composite materials (like hardboard) may be cut on the table saw. However, since these are usually hard and slippery, the anti-kickback pawls may not stop a kickback. Therefore, be especially attentive to following proper setup and cutting procedures for ripping. Do not stand, or permit anyone else stand, in line with a potential kickback.
16) Do not remove small pieces of cutoff material that may become trapped inside the blade guard while the table saw is running. This could endanger your hands or cause kickback. Turn table saw Off and wait until blade stops.
17) Use extra care when ripping wood with twisted grain or wood that is twisted or bowed, it may rock on table and pinch saw blade.

KNOW YOUR CUTTING TOOLS

1) Dull, gummy, improperly sharpened saw blades or cutting tools can cause workpiece to stick, jam, stall table saw, or kickback at operator. Minimize potential injury by proper care and machine maintenance.
2) Never use grinding wheels, abrasive cut-off wheels, friction discs, wire wheels or buffing wheels with this table saw.

WARNING: Never attempt to free a stalled saw blade without first turning table saw Off.

ONLY USE ACCESSORIES DESIGNED FOR THIS TABLE SAW

1) Cross-cutting operations are worked more conveniently with greater safety if an auxiliary wood facing is attached to the miter gauge using holes provided. However, facing must not interfere with the proper functioning of the blade guard.
2) Make sure the teeth of the blade or cutting tool rotates towards you when standing in normal operating position. Also make sure the blade flange and arbor nut are installed properly. Keep the cutting tool as low as possible for the operation being performed. Keep all guards in place whenever possible.
3) Do not use any blade or other cutting tool marked for operating speed less than 4500 RPM. Never use a cutting tool larger in diameter than diameter for which it was designed. For greatest safety and efficiency when ripping, use maximum diameter blade for which it was designed, since under these conditions the riving knife is nearest to the blade.
4) Adjust table insert flush with the table top. Never operate saw unless proper table insert is installed.
5) Never feed material into the cutting tool from the rear of the table saw. An accident and serious injury could result.

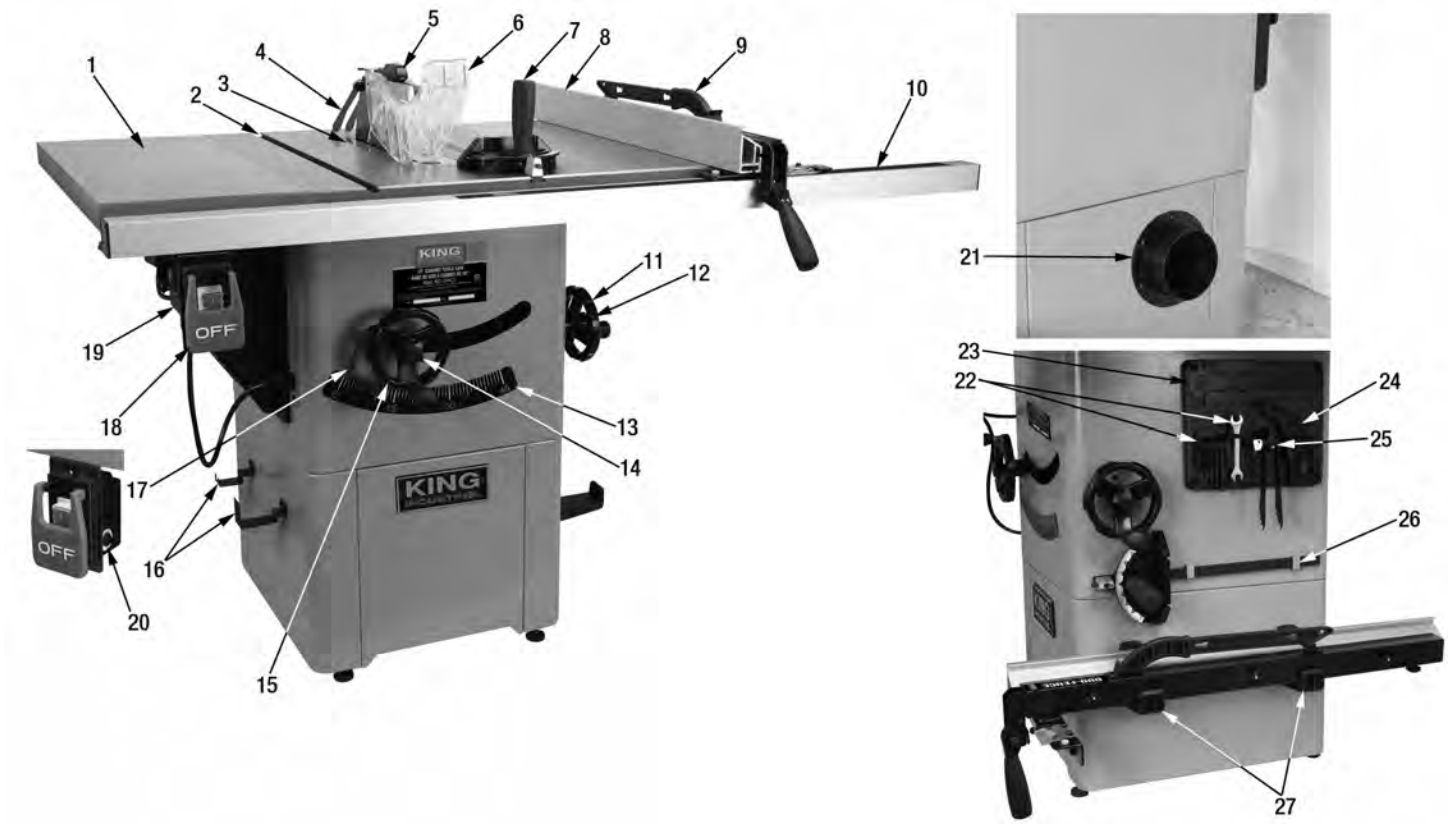
THINK SAFETY

Safety is a combination of operator common sense and alertness at all times when the table saw is being used. 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 saw table, or to assist in feeding, supporting, pulling the workpiece.

Do not pull the workpiece through the saw blade, position your body at the infeed side of the blade guard, start and complete your cut from that same side.

CAUTION: Follow safety instructions that appear on the side of the table saw.

GETTING TO KNOW YOUR
10” CABINET TABLE SAW & SPECIFICATIONS



1. Cast-iron table extension (1 of 2)
2. Cast-iron table T-slot (1 of 2)
3. Table insert (standard)
4. Anti-kickback fingers assembly
5. Laser guide
6. 2pc. blade guard with riving knife
7. Miter gauge
8. Rip fence system with aluminum guide
9. Push stick
10. Front rail
11. Blade tilting handwheel
12. Blade tilting handwheel lock knob
13. Angle scale
14. Blade raising handwheel lock knob
15. Blade raising handwheel
16. Blade guard storage hooks
17. Angle scale pointer
18. On/Off switch
19. Motor access cover with power cord wrap
20. Thermal overload reset
21. 4” dust chute
22. Blade adjustment wrench storage
23. Adjustment hex. keys and open end wrench storage
24. Riving knife (small) storage
25. Anti-kickback fingers assembly storage
26. Miter gauge storage
27. Rip fence storage hooks

SPECIFICATIONS

MODEL	KC-10HCX
Blade diameter	10”
Blade tilts	Left
Depth of cut at 45^0	2-3/16”
Depth of cut at 90^0	3-1/8”
Table size with extensions	44” x 27”
Diameter of arbor	5/8”
Arbor speed	4,500 RPM
Motor	1.75 HP, 15 Amp.@120V, 7.5 Amp.@240V
Voltage	120V/240V, 1 phase, 60 Hz
Prewired	120V
Assembled dimensions (LxWxH)/weight	61” x 39” x 42” / 258 lbs
Package dimensions (LxWxH)/weight	45-1/4” x 30-1/2” x 22-3/4” / 275 lbs

ELECTRICAL REQUIREMENTS & SWITCH OPERATION

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 MACHINE DISCONNECTED FROM THE POWER SOURCE. FAILURE TO COMPLY MAY RESULT IN SERIOUS INJURY!

POWER SUPPLY (120V)

WARNING: THIS TABLE SAW CAME PRE-WIRED FOR 120V OPERATION AND **MUST BE CONNECTED TO AN APPROPRIATELY GROUNDED 120V OUTLET AS SHOWN IN FIG.1 USING A DEDICATED 20 AMP. CIRCUIT.** FAILURE TO CONNECT THIS WAY COULD CAUSE OVERHEATING OF THE MOTOR AND TRIPPING OF THE THERMAL OVERLOAD, AND COULD RESULT IN INJURY FROM SHOCK OR FIRE.

GROUNDING

WARNING: IF OUTLET IS NOT PROPERLY GROUNDED, THIS TABLE SAW 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.

Not all outlets are properly grounded. If you are not sure if your outlet is properly grounded, have it checked by a qualified electrician. This Table saw must be grounded, if it should malfunction or breakdown, grounding provides a path of least resistance for electric current, which reduces the risk of electric shock.

WARNING: TO MAINTAIN PROPER GROUNDING OF YOUR TABLE SAW, DO NOT REMOVE OR ALTER THE GROUNDING PRONG IN ANY MANNER.

120V OPERATION

As received from the factory, your Table Saw is prewired to run on 120V. This Table saw is intended for use on a circuit that has an outlet and a plug which looks like the one illustrated in Fig.1.

240V OPERATION

The dual voltage motor included with this Table Saw can be rewired for 240V operation.
IMPORTANT: Electrical components such as the power cord, switch assembly (Optional accessory KW-240-10HCX), and motor/switch wires would need to be changed to 240V rated components to make the voltage change. Changing to 240V operation must be done by a qualified service technician or electrician.

EXTENSION CORDS

The use of an extension cord is not recommended with this Table saw. The use of any extension cord will cause some loss of power. If using an extension cord is unavoidable, use the following table in Fig.2 to determine the minimum wire size (A.W.G-American Wire Gauge) extension cord you will need. Use only 3-wire extension cords which have 3-prong grounding type plugs and 3-hole receptacles which accept the tool's plug.

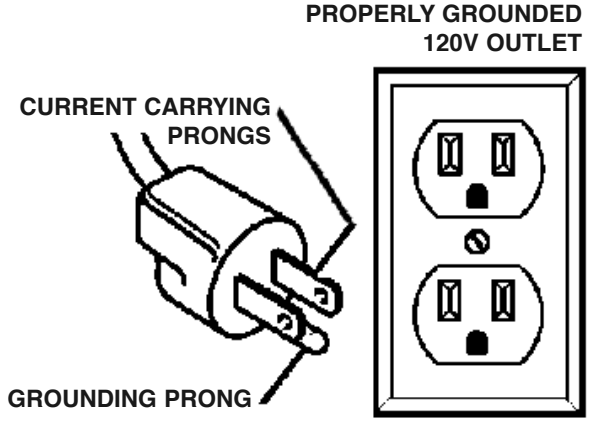


FIGURE 1

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

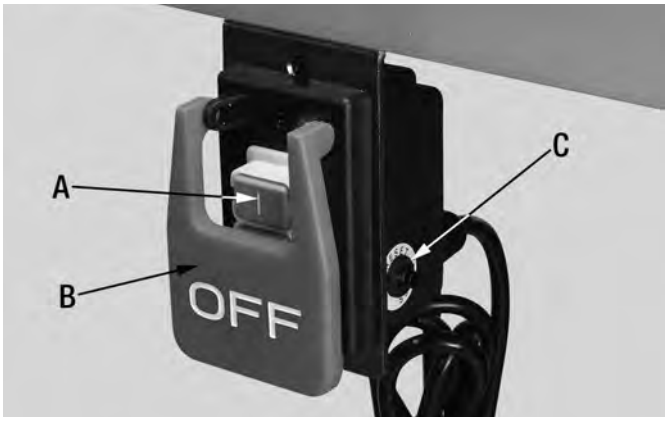


FIGURE 3

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 Table Saw motor. Refer to Fig.2 for wire length and size.

SWITCH & RESET BUTTON OPERATION

To start the Table Saw, press the green start button (A) Fig.3. To stop the Table Saw, press the red emergency stop button (B).

If the Table Saw becomes overloaded and the motor shuts off, let the motor cool down and then push the reset button (C) Fig.3 on the right side the On/Off switch to reset and restart. If overloading happens frequently, refer to the Troubleshooting section in this manual.

ASSEMBLY

UNPACKING AND CLEANING TABLE & EXTENSIONS

Open carton and remove all loose parts and the main assembly. To avoid any accidental starts, do not plug in power cord during the assembly and adjustment of this Table Saw. If any loose parts appear to be damaged, do not plug in power cord until the damaged parts are replaced, and the assembly and adjustment of the Table Saw is completed.

The table top and the two extension tables come with a protective coating, which prevents any rust from forming during transport. This protective coating must be removed before attempting to assemble this Table Saw. Remove protective coating using mild solvents, such as mineral spirits and a clean and soft cloth. Avoid getting mineral spirits directly on the paint or plastic parts of the Table Saw, as this type of solvent may deteriorate these finishes. Only clean the painted and plastic parts with soap and water. Applying a coat of paste wax on the table top and the extension tables is recommended.

WARNING: Never use highly volatile solvents, non flammable solvents are recommended to avoid any possible fire hazard.

ASSEMBLING STAND

1) Assemble the two side panels (A & B) Fig.4 to the front panel (C). Then assemble the rear panel (D) to the rear of the two side panels (A & B). Secure all the stand panels together using 8 carriage bolts, washers and hex. nuts.

INSTALLING ADJUSTMENT HANDWHEELS

1) To prevent scratching the table, position a piece of cardboard on the floor, then with the help of a second person, position the Table Saw upside down on its table as shown.

2) Slide a handwheel (A) Fig.5 onto the front height adjustment shaft on the front of the Table Saw. Make sure the handwheel slot engages the spring pin of the height adjustment shaft. Secure the handwheel with a washer and lock knob (B).

3) Slide the second handwheel (C) Fig.5 onto the blade angle adjustment shaft on the right side of the Table Saw. Make sure the handwheel slot engages the spring pin of the blade angle adjustment shaft. Secure the handwheel with a washer and lock knob (D).

REMOVING PACKING MATERIAL INSIDE CABINET

1) Turn the height adjustment handwheel (A) Fig.5 to raise the motor and remove the packing material (A) Fig.6 between the motor and the table.

INSTALLING 4" DUST CHUTE AND CONNECTING HOSE INSIDE CABINET

1) Install the 4" dust chute (A) Fig.7 as shown to the rear of the cabinet using 3 round allen head screws (B).

2) Inside the cabinet, there is a dust collection hose (C) Fig.7 which needs to be connected to the inner lip of the dust chute. Slide the hose over the lip of the dust chute and tighten clamp (D).

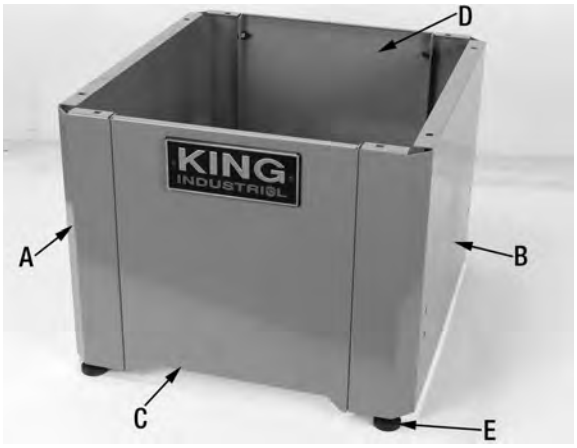


FIGURE 4

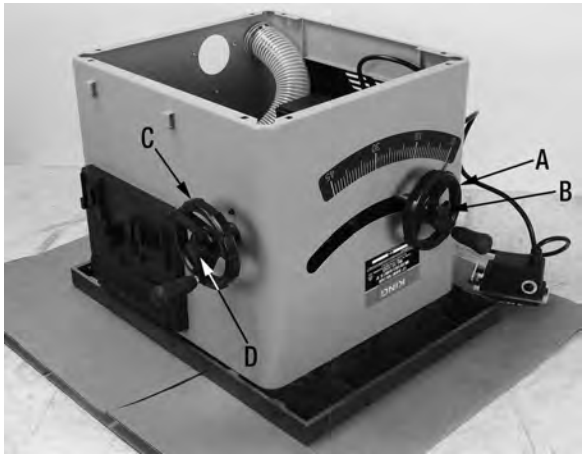


FIGURE 5

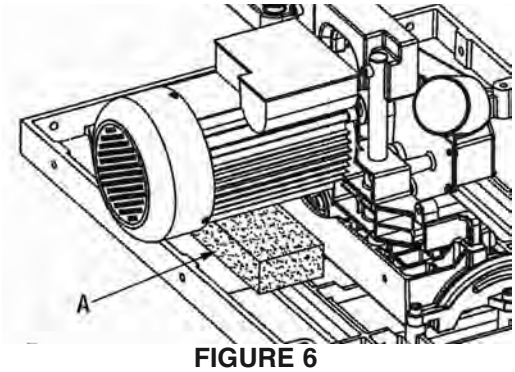


FIGURE 6

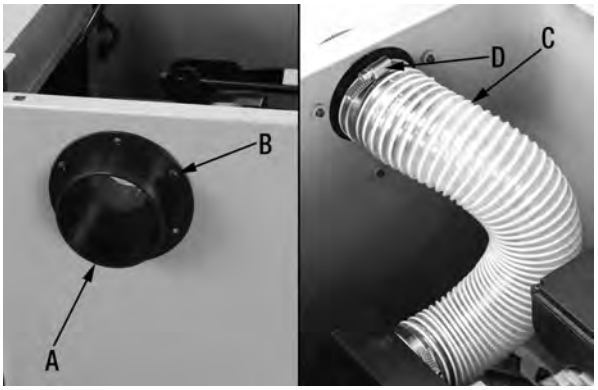


FIGURE 7

ASSEMBLY

ASSEMBLING STAND TO CABINET

1) With the Table Saw still positioned upside down on its table. Position the stand assembly upside down onto the cabinet as shown in Fig.8. Make sure the front of the stand is facing the front of the Table Saw. Secure the stand to the cabinet using 8 carriage bolts, washers and hex. nuts (A).

2) With the help of a second person, flip the entire Table Saw assembly upright onto the stand. If the floor is uneven, adjust the leveling feet (E) Fig.4 until the Table Saw is level and stable.

FIGURE 8

INSTALLING EXTENSION TABLES

Note: Before attempting to install the extension table on the left side of the Table Saw, it is recommended to remove the motor cover as shown in Fig.9 to gain additional space to simplify the assembly and adjustment of the left side extension table.

1) Install the first cast-iron extension table (A) Fig.9 to the cast-iron table using 3 cap screws, washers and spring washers (B). The help of a another person is recommended to simplify the assembly.

2) Position extension table so it is slightly above saw table surface. Make sure to align the beveled edge of the extension table with the beveled edge of the table. Tighten cap screws just enough to hold extension table in place but loose enough to change the height by tapping on it with a rubber mallet.

3) Position a straight edge (A) Fig.10 across the table and the extension table.

4) Move straight edge to several places along the extension table, as you continue to nudge the extension table level with the table. Brush your fingertips over the seam to ensure the transition feels smooth. As each area of extension table becomes flush with the table, tighten cap screw under that area. Make sure the beveled edge of the extension table remains flush with the beveled edge of the table.

5) If the extension table is flush with the edge of the table, but sags down at the extremity of the extension table, an adjustment can be made to level the extension table. Adjust the 3 adjustment set screws (C) Fig.9 in or out under the extension table until the extension table is perfectly level with the table.

6) Fully tighten cap screws once extension table is perfectly flush and level with the table top. Repeat for the second extension.

7) If you removed the motor cover (A) Fig.11, it is recommended to reinstall it.

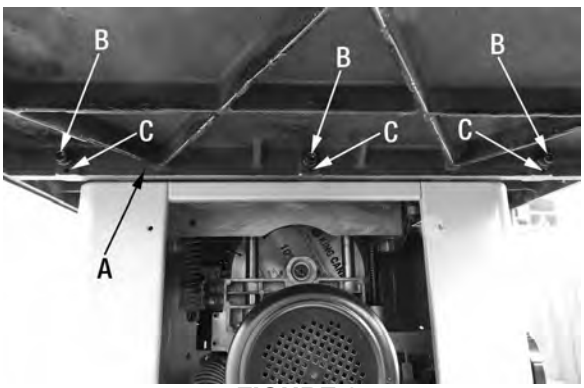


FIGURE 9

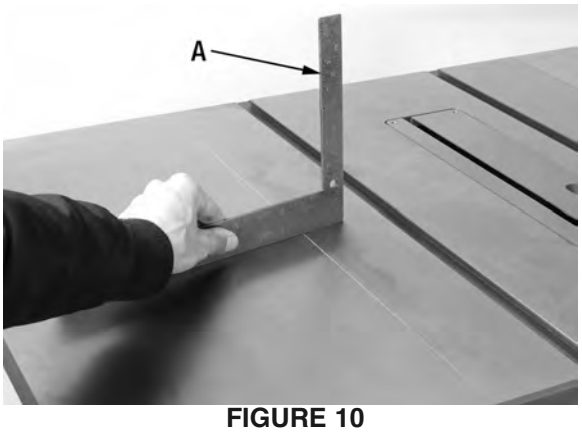


FIGURE 10

INSTALLING BLADE GUARD STORAGE HOOKS

1) Install the blade guard storage hooks (B) Fig.11 to the left side of the cabinet using 4 pan head screws (C).

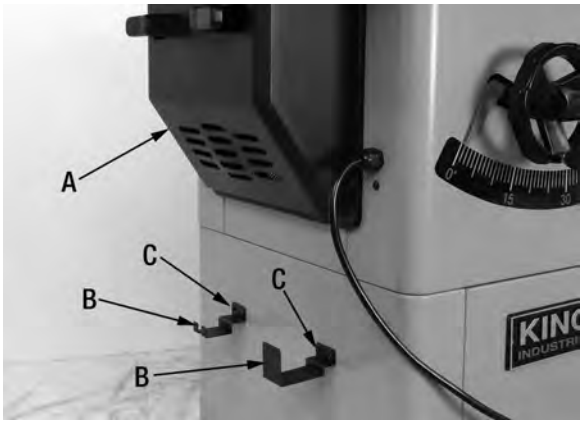


FIGURE 11

INSTALLING RIP FENCE RAILS (REAR & FRONT) & ON/OFF SWITCH

Rear rails:

1) This Table Saw comes with a short rear rail (A) Fig.12 and a long rear rail (B) which get installed to the rear of the table and the extension tables.

2) While standing behind the Table Saw, install the short rear rail (A) Fig.12 to the right side of the table and extension table as shown, using 3 cap screws (C), washers and hex. nuts.

3) Now install the long rear rail (B) Fig.12 to the opposite side of the table and extension table as shown, using 3 cap screws, washers and hex. nuts.

FIGURE 12

Front rails:

1) This Table Saw comes with a short front rail (A) Fig.13 which is also used to support the On/Off switch.

2) Install 6 hex. bolts (B) Fig.13, washers and hex. nuts to the extension tables and the main table. Do not tighten, the hex. bolts need to slide into a slot in the front rail.

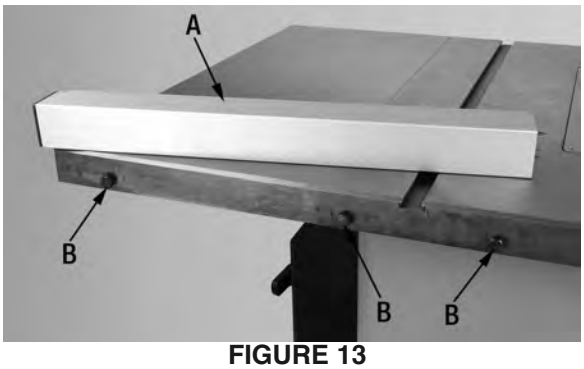


FIGURE 13

3) Slide the upper slot (A) Fig.14 of the short front rail (B) over 3 of the hex. bolts (C) on the left side of the Table Saw. Do not completely tighten the hex. nuts at this point as the position of the front rails will need to be adjusted, refer to section "**ADJUSTING RIP FENCE RAILS AND EXTENSION TABLES**" further in this manual.

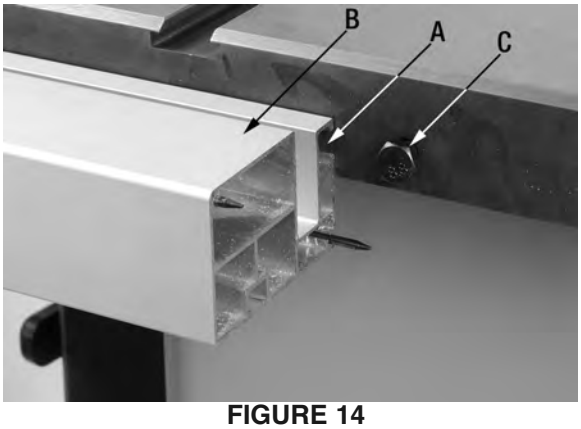


FIGURE 14

4) Install the On/Off switch assembly (A) Fig.15 onto the short front rail (B). The switch bracket comes with 2 hex. bolts and square head nuts installed to the mounting bracket. Slide the square head nuts (C) of the mounting bracket of the On/Off switch assembly into the bottom slot (D) of the rail. Position the On/Off switch assembly in the desired position and tighten hex. bolts.

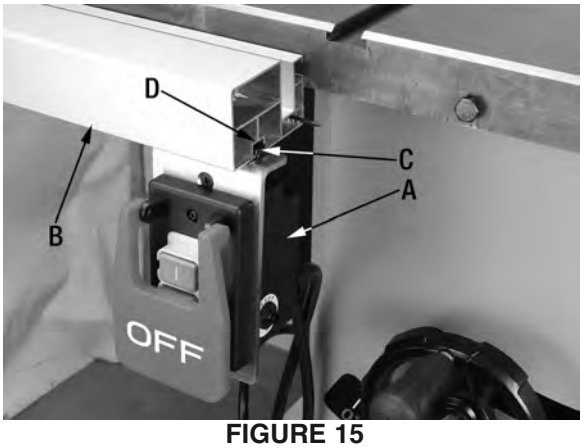


FIGURE 15

INSTALLING RIP FENCE RAILS (REAR & FRONT) & ON/OFF SWITCH

Front rails (continued):

5) Now install the long front rail (A) Fig.16 to the opposite side of the table and extension table following the same steps as the short front rail. Slide the upper slot of the long front rail over 3 of the hex. bolts on the right side of the Table Saw. Do not completely tighten the hex. nuts at this point as the position of the front rails will need to be adjusted, refer to section "**ADJUSTING RIP FENCE RAILS AND EXTENSION TABLES**" further in this manual.
6) Both the short and long front rails (A & B) Fig.16 now need to be fitted together. This is achieved by inserting the positioning pins (C) of the short front rail into the holes in the long front rail.

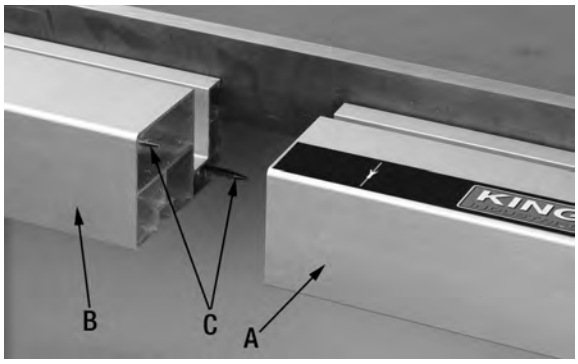


FIGURE 16

INSTALLING RIVING KNIFE, ANTI-KICKBACK FINGERS & BLADE GUARD

Riving knife:

1) From the inside of the table opening, lift the riving knife lock lever (A) Fig.17.
2) Insert the riving knife (B) Fig.17 into the slot of the locking blocks (C). Make sure riving knife goes all the down into the slot. To secure the riving knife, lower riving knife lock lever (A).

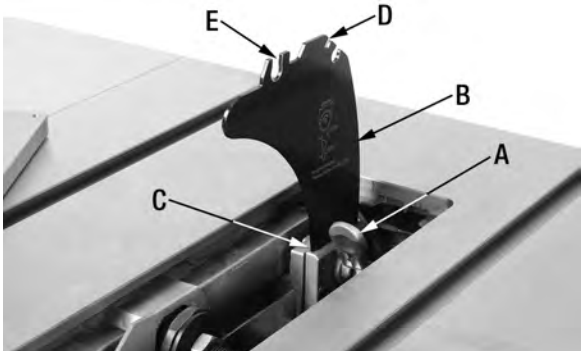


FIGURE 17

Anti-kickback fingers assembly:

1) The anti-kickback fingers assembly (A) Fig.18 needs to be installed to the riving knife.
2) Align the spring pin (B) Fig.18 with riving knife notch (D) Fig.17 and the bolt with the riving knife notch (E) Fig.17.
3) Completely lower the assembly down onto the notches, then fold over the latch (C) Fig.18 to secure the anti-kickback fingers assembly.

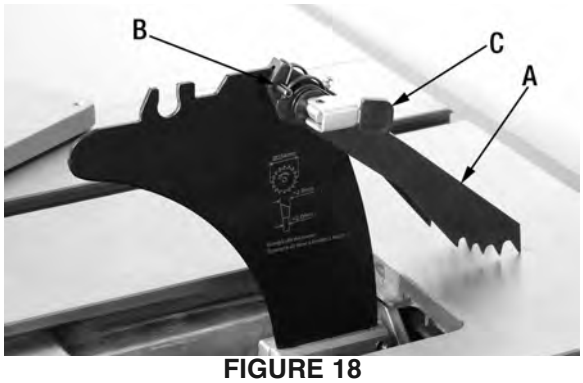


FIGURE 18

Blade guard assembly:

1) The blade guard assembly (A) Fig.19 needs to be installed to the riving knife. But first, the two AA batteries need to be installed to operate the laser guide.
2) Remove both small self-tapping screws (B) Fig.19, then remove the battery cover (C). Install batteries in the correct orientation, and reinstall battery cover.
3) Align the bushings (D) Fig.19 of the blade guard with the notch (E) Fig. 17 of the riving knife. The bushings have a beveled edge and must be located in the centre of the notch to lock properly.
4) Lower the blade guard assembly down onto the notch, then fold over the latch (E) Fig.19 to secure the blade guard assembly.
5) The blade guard body (F) Fig.19 should be set parallel to the table, if an adjustment is needed, adjust set screws (G) as necessary.

Non through-cut operations- For non through-cut operations with a 10" blade, the smaller riving knife (E) Fig.24 must be installed. The riving knife gets installed the same way as the blade guard riving knife.

For safety reasons, the highest point of the riving knife should never exceed the highest point of the blade teeth, generally 1/8" to 3/16" (1-5mm). See Adjustments section for more information.

WARNING!

SOME CUTTING OPERATIONS (DADO BLADE, MOLDING CUTTERHEAD) WON'T ALLOW USE OF THE BLADE GUARD OR RIVING KNIFE. USE EXTREME CAUTION DURING THESE OPERATIONS AS THE BLADE OR CUTTERHEAD WILL BE EXPOSED AND COULD CAUSE SERIOUS INJURY.

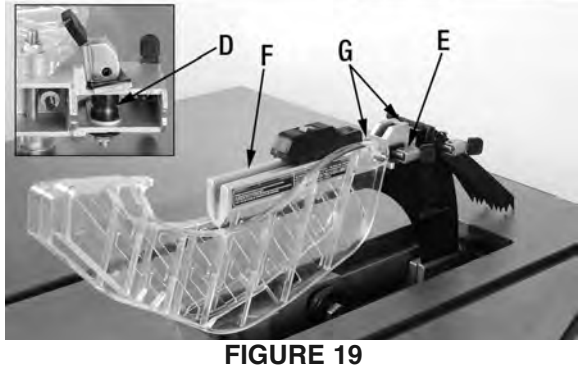


FIGURE 19

ASSEMBLY

INSTALLING BLADE

1) **Make sure the Table Saw is Off and the power cord is disconnected.**
2) Remove the arbor nut (A) Fig.20 by turning it counterclockwise, then remove the blade flange (B). If the arbor nut is too tight to remove by hand, push spindle lock (C) towards the right to lock spindle shaft and use the supplied blade wrench to loosen arbor nut.
3) Place the supplied blade (A) Fig.21 or a different blade (10" blade with 5/8" arbor) on the arbor shaft making certain the teeth point down towards the front of the saw (as shown). Reinstall the blade flange (B) and arbor nut (C).
4) Push the spindle lock (A) Fig.22 towards the right and turn blade by hand until the spindle lock engages the flat of the inner blade flange and locks the blade. Using the provided blade wrench (D) Fig.21, securely tighten the arbor nut by pushing the wrench away from you (clockwise to tighten). Remove the wrench.

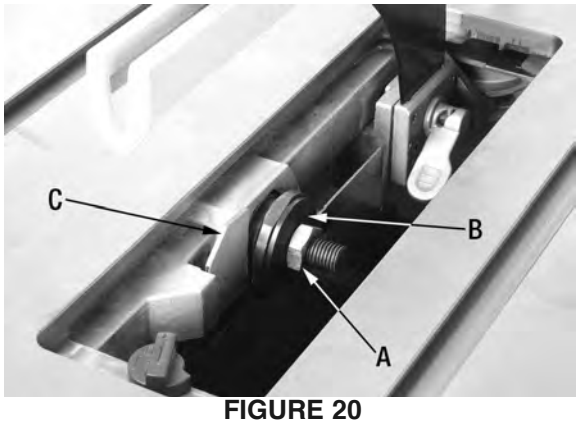


FIGURE 20

INSTALLING/ADJUSTING TABLE INSERT

1) Install the standard table insert (A) Fig.23 into the opening in the table top. Once in position, turn lock knob (B) to lock table insert.
2) The table insert may need to be adjusted flush with the table top. To check the adjustment, place a square on top of the table insert and the table top as shown in Fig.23.
3) Using a hex. key, adjust all 4 set screws (C) at each corner of the table insert until the table insert is perfectly flush with the table top.

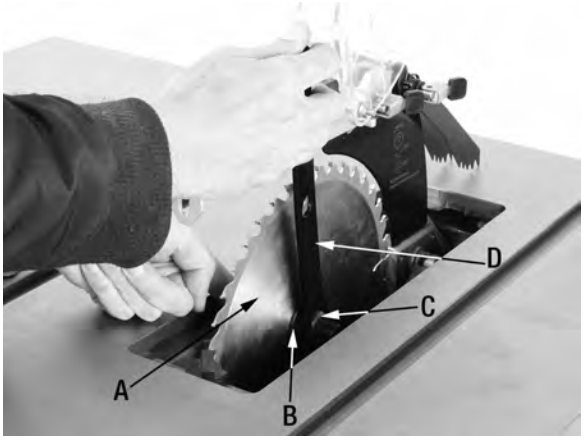


FIGURE 21

INSTALLING RIP FENCE STORAGE HOOKS & TOOLS

1) Install the rip fence storage hooks (A) Fig.24 to the right side of the cabinet using 2 cap screws.
2) Install hex. keys (B) Fig.24, blade wrench (C), open end wrench (D) and small riving knife (E) in the provided tools storage compartment (F).

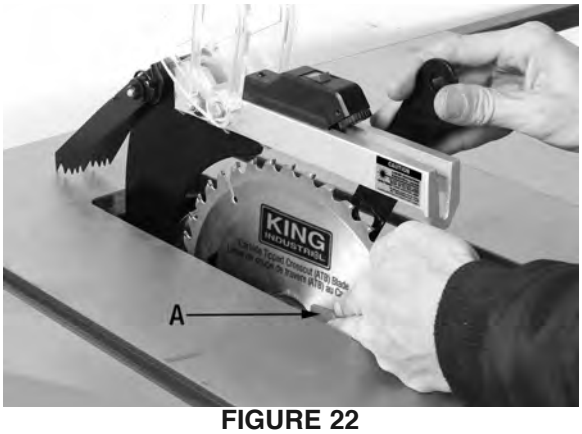


FIGURE 22

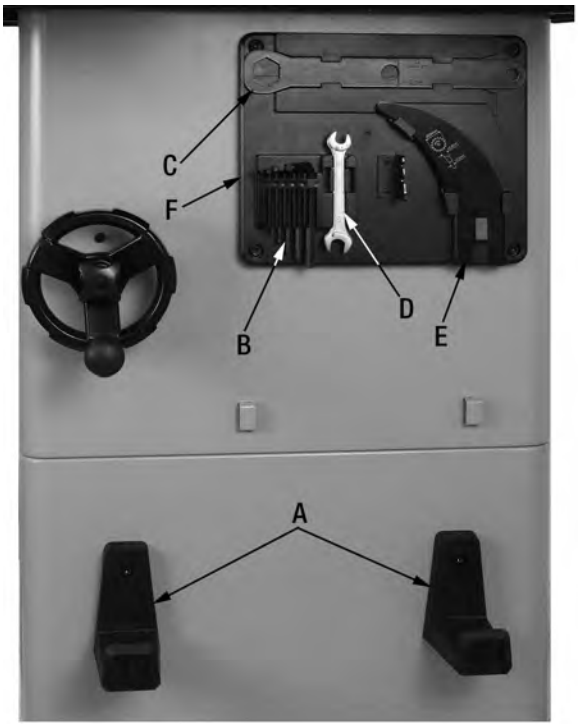


FIGURE 24

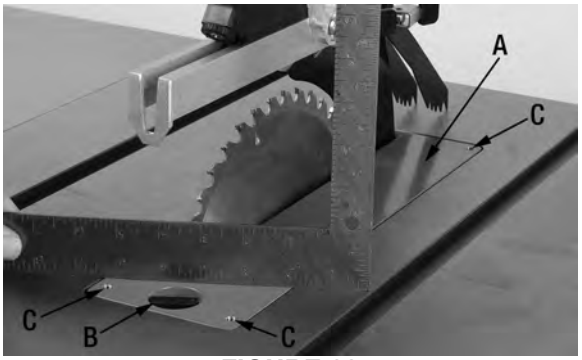


FIGURE 23

ADJUSTING RIP FENCE FRONT RAILS AND EXTENSION TABLES

The rip fence rails were previously installed, but still require adjustment to align the "0" mark of the rail scale with the blade, and they need to be secured to the tables. The alignment of the extension tables also needs final adjustments.

1) Position the rip fence (A) Fig.25 onto the table, placing the front end into the front rail slot. Raise the blade guard components, remove anti-kickback fingers assembly (C) and slide the rip fence completely up against the blade as shown. Do not lock rip fence by lowering front handle (B), the rail must be able to move.

2) The front rail (A) Fig.26 must be positioned so the "0" mark (C) aligns with the red line of the indicator window (B). Lightly tap one end of the front rail until the "0" mark aligns with the red line of the indicator window.

3) Once the long front rail is perfectly positioned, tighten the 2 hex. nuts which secure the rail to the cast-iron table. Do not tighten the hex. nut which secures the rail to the extension table, further adjustment is needed.

4) Push the short front rail against the long front rail to assure to two rails are properly connected together, then tighten the 2 hex. nuts which secure the rail to the cast-iron table. Do not tighten the hex. nut which secures the rail to the extension table, further adjustment is needed.

5) The extension tables were previously set flush and level with the main table, but the adjustment should be rechecked to make sure the extension table is perfectly flush with the table (front and rear). Place a straight edge on the table and on one of the extension tables and verify the adjustment.

6) Adjust extension table flush with the table and tighten the hex. nut under the front rail, then tighten the corresponding cap screw and hex. nut at the rear of the rear rail. Repeat this step for the second extension table.

7) Once the extension tables are set flush with the main table, make sure that all hardware is tightened on the front rail and rear rail.

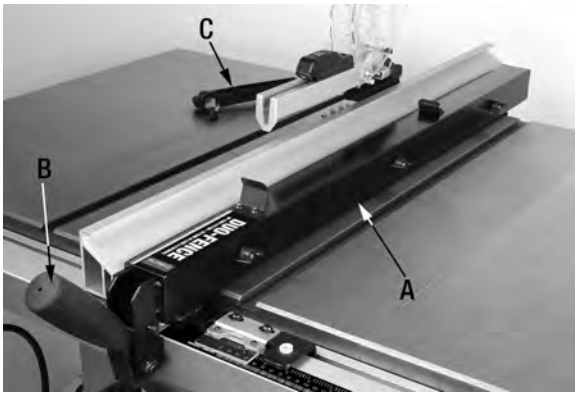


FIGURE 25

FIGURE 26

INSTALLING/ADJUSTING MITER GAUGE

1) The miter gauge shown in Fig.27 normally gets positioned on the left side of the blade by sliding the miter gauge bar into the table T-slot. To operate the miter gauge, loosen lock knob (A) Fig.27, pull and hold the positive stop pin (B) and pivot the miter gauge body (C) to the desired angle, push the positive stop pin (B) back in and retighten lock knob (A).

2) If you desire a preset positive stop such as 0^0 or 45^0 setting, loosen lock knob (A) Fig.27, pull and hold the positive stop pin (B) and slightly pivot the miter gauge body (C). Once you get close to the desired angle, push the positive stop pin back in, continue to rotate the miter gauge body towards the desired angle, the positive stop pin will engage that positive stop position, once the preset angle is set, retighten lock knob (A).

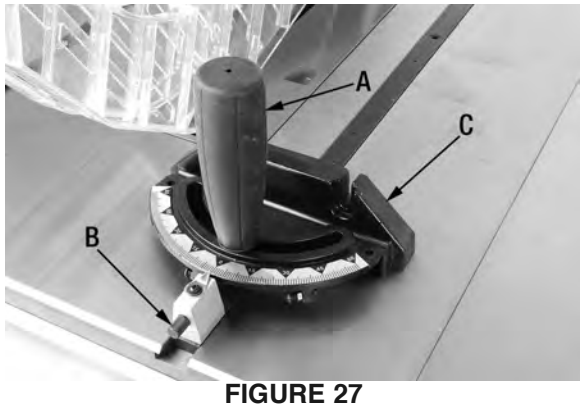


FIGURE 27

BLADE RAISING/TILTING MECHANISM

WARNING! Never try to force the tilting mechanism past the 45º or 90º stops. This may cause blade misalignment.

1) To raise or lower the blade, loosen lock knob (A) Fig.28 and turn handwheel (B) on the front of the Table Saw until the desired height is reached. Retighten lock knob. Generally speaking, the blade should be adjusted about 1/8" above the top surface of your workpiece.

2) To tilt the blade, loosen lock knob (C) Fig.28 and turn handwheel (D) on the right side of the Table Saw until the desired angle is reached. Refer to the angle pointer (E) and scale as a guide for setting the angle of the blade.

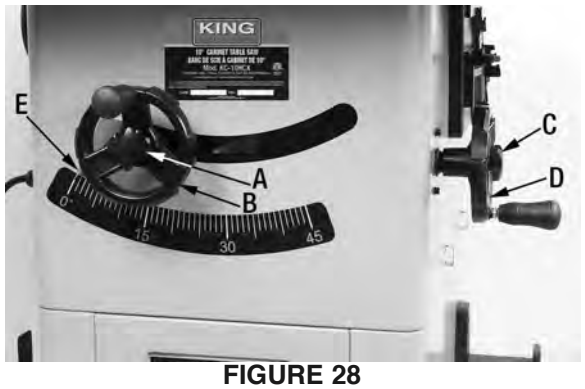


FIGURE 28

ADJUSTING BLADE TILT POSITIVE STOPS

1) Raise blade to maximum height by turning blade height handwheel (B) Fig.8 clockwise.

2) Set blade 90º to the table by turning the blade tilting handwheel (D) Fig.28 counterclockwise as far as it will go. Do not force beyond stop.

3) Place a combination square (A) Fig.29 on the table and verify that blade is set at a perfect 90º to table. Make sure the combination square is placed flat against blade surface and not touching a blade tooth.

If adjustment is needed:
4) Remove motor cover on left side of the Table Saw.

5) Loosen set screw (A) Fig.30 in the 90° stop collar (B), and position stop collar to allow further movement of shaft bracket.

6) Turn blade tilting handwheel until blade is exactly 90º to the combination square.

7) Turn stop collar until it comes in contact with the shaft bracket, and retighten set screw (A).

8) Set blade 45º to table by turning blade tilting handwheel (D) Fig.28 clockwise as far as it will go. Do not force beyond stop.

9) Place a combination square on the table and verify that blade is set at a perfect 45º to table. Make sure the combination square is placed flat against blade surface and not touching a blade tooth.

If adjustment is needed:
10) Loosen set screw (C) Fig.30 in the 45° stop collar (D), and position stop collar to allow further movement of shaft bracket.

11) Turn blade tilting handwheel until blade is exactly 45º to the combination square.

12) Turn stop collar until it comes in contact with the shaft bracket, and retighten set screw (C).

ADJUSTING RIVING KNIFE ALIGNMENT

To prevent the risk of workpiece kickback, the blade and the riving knife must be aligned. This should be checked every time the blade guard and riving knife is installed or when a new blade is installed.

1) Disconnect machine from power source.

2) Remove blade guard and anti-kickback pawls.

3) Place a straight edge (A) Fig.31 on table so it rests against blade and riving knife. Rotate blade so that top of blade tooth touches straight edge.

Lateral alignment:
If an adjustment is needed:
1) Lift riving knife lever (A) Fig.32 and remove the riving knife, making note as to which direction riving knife needs to be moved to align it with the blade.

2) Using a 3mm hex. key, adjust the 4 set screws (B) Fig.32. Adjust any of the set screws required to bring riving knife in alignment with saw blade.

3) Reinsert and secure riving knife by lowering riving knife lever (A) and check alignment.

4) Repeat steps until alignment is correct.

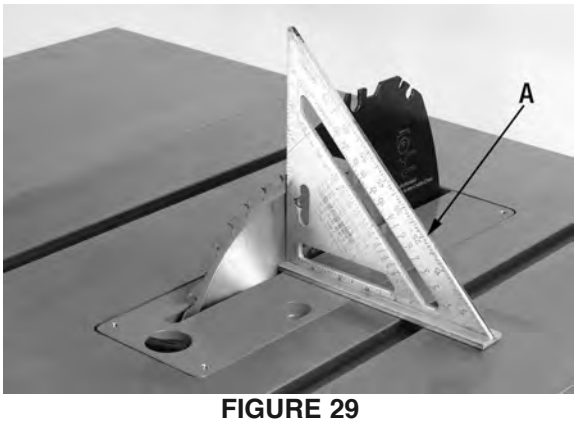


FIGURE 29

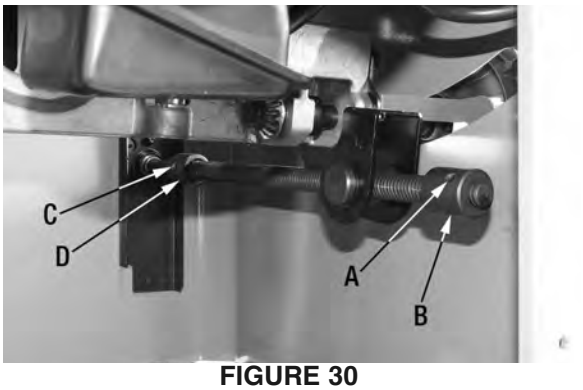


FIGURE 30

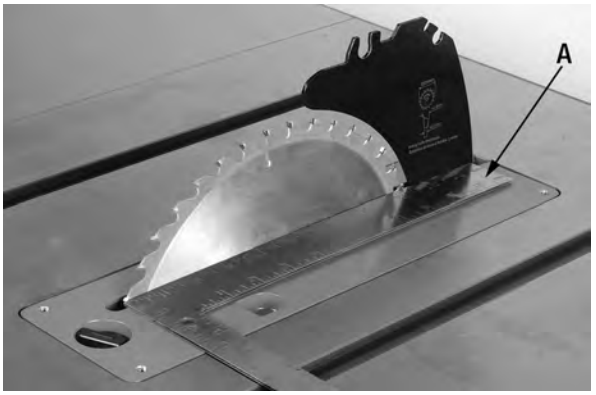


FIGURE 31

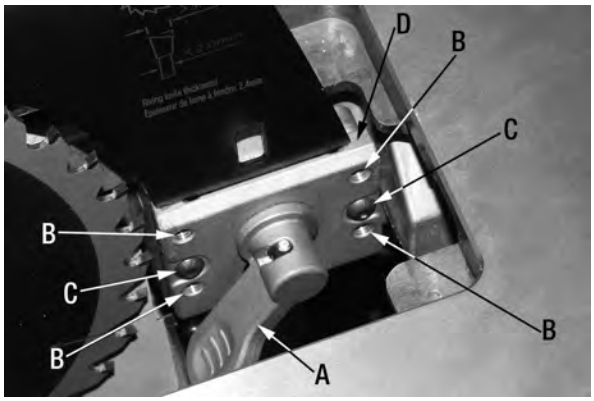


FIGURE 32

ADJUSTING RIVING KNIFE ALIGNMENT continued...

Blade proximity alignment:

The gap between the blade and the riving knife must be between 3mm (0.12”) and 8mm (0.32”). Refer to Fig.33. If an adjustment is needed, note whether blade-to riving knife gap needs to be increased or decreased.

Adjust as follows:

1) Disconnect machine from power source.

2) Remove blade guard, anti-kickback fingers assembly, table insert and riving knife.

3) Use 3mm hex. key to loosen two pan head allen screws (C) Fig.32. This will allow the clamp plate (D) to slide back and forth on the fixed base. Slide clamp plate (D) toward or away from saw blade as required. Attempt to make the gaps as even as possible.

4) Retighten two pan head allen screws (C).

5) Reinstall riving knife, engage riving knife lever (A) and check that saw blade/riving knife gap is between 3 to 8mm.

ADJUSTING RIP FENCE

The rip fence must be perfectly aligned with the table T-slot, to verify this, align the edge of the rip fence with the table T-slot and lower the locking lever to lock in into place. Check to see if the edge of the rip fence and the table T-slot are parallel. If they are not parallel, unlock the rip fence and turn it upside down. Adjust the set screws (A) Fig.34 in or out, verify your adjustment, repeat if necessary.

Look at the fence from the left or right side of the saw. There should be a small space between the table surface and the fence bottom, to prevent the fence from dragging on the saw table. This space should be equal along the entire length of the fence. if an adjustment is needed, follow these steps:

1) Lock fence on guide rail.

2) If this space is not equal at the rear of the fence, loosen the hex. nut (A) Fig.35 under the adjustment foot (B) and turn the adjustment foot as needed to raise or lower the rear of the fence. Retighten the hex. nut and reposition the fence to check the spacing. Adjust as needed.

3) If the front of the fence needs adjusting, rotate the two nylon adjustment set screws (C) Fig.35 an equal amount.

4) Continue these two above adjustment methods until the fence-to-table spacing is correct and even.

5) This rip fence comes with an aluminum guide (A) Fig.36 which can be positioned in a horizontal or vertical position. The aluminum guide is secured to the rip fence body with T-slot plates and bolts (B) positioned in the respective slot of the aluminum guide, and locked in place by tightening the 3 lock knobs (C).

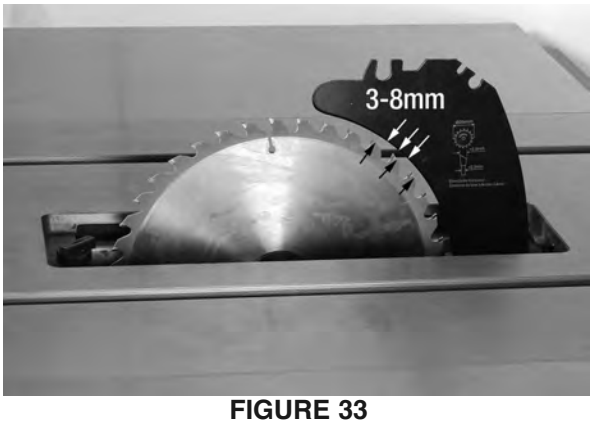


FIGURE 33

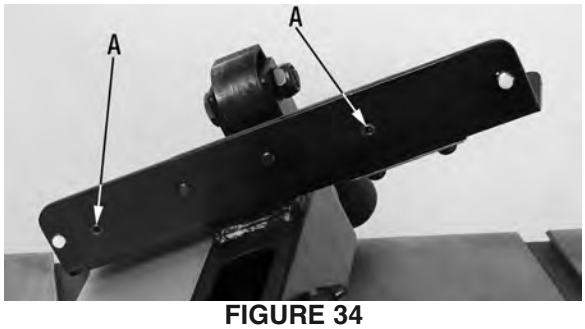
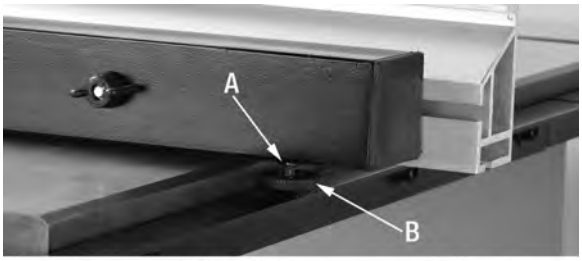


FIGURE 34



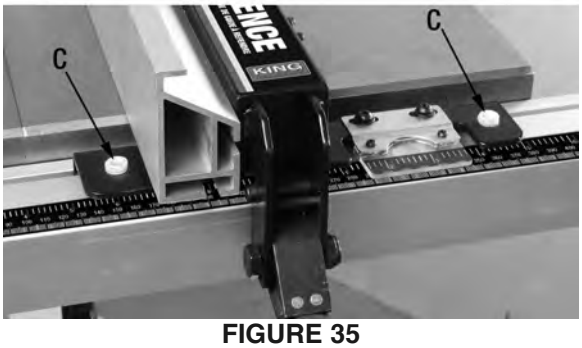


FIGURE 35

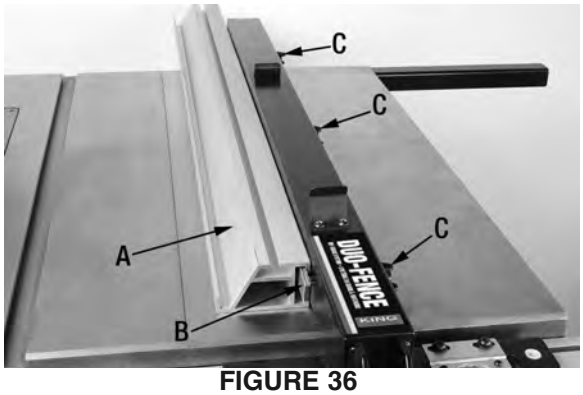


FIGURE 36

ADJUSTMENTS & OPERATION

ADJUSTMENTS

CHECKING BLADE & TABLE ALIGNMENT

This Table Saw is shipped from the factory with the table adjusted so the miter gauge T-slots are parallel with the blade. To ensure continued best results, periodically the blade and table alignment should be checked.

1) Measure the distance between the miter gauge T-slot and the front of the blade. Then measure the distance between the miter gauge T-slot and the rear of the blade, if the distance is equal, the blade is perfectly parallel with the miter gauge T-slot and no adjustment is needed.
2) If the measurement is not equal and an adjustment is needed, first remove the left side motor cover and the right side tool storage compartment to gain access to both sides of the internal cabinet parts.
3) The position of the rear trunnion (A) Fig.37 and the front trunnion (B) needed to be adjusted, loosen 4 trunnion cap screws (C), adjust blade parallel to miter gauge T-slot. Reverify your adjustment measuring the front and rear of the blade to make sure the distance is the same. Once adjustment is perfect, retighten 4 cap screws to secure adjustment.

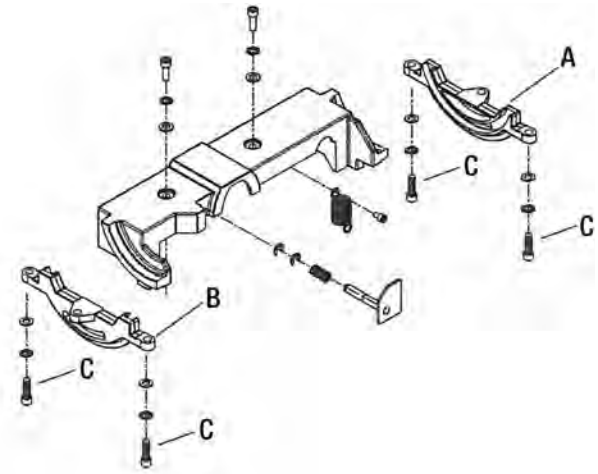


FIGURE 37

USING & ADJUSTING BLADE GUARD LASER GUIDE

This Table Saw is equipped with a laser guide (A) Fig.38 which indicates the cut line. To use the laser guide, press the laser switch (B) towards the front to turn it on. If the laser guide does not appear to be in line with the cut line of the blade, an adjustment can be made:

1) Loosen both set screws (C) Fig.38 on each side of the laser guide using a hex. key, turn the laser guide adjustment dial (D) until the laser guide is perfectly aligned with the blade. Retighten both set screws.

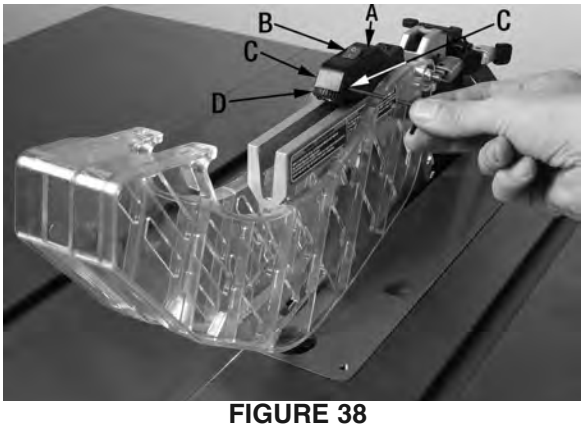


FIGURE 38

OPERATION

DUST COLLECTION

This Table Saw comes with a 4" dust chute (A) Fig.39 at the rear of the cabinet, allowing for the connection to a dust collector.

It is highly recommended to use this Table Saw with a dust collector connected to the Table saw 4" dust chute. This will limit air borne dust and accumulation of saw dust inside the cabinet, which can represent a potential fire hazard.

Be sure to use appropriate size hose and fittings (not included) and check that all connections are sealed tightly to minimize airborne dust.

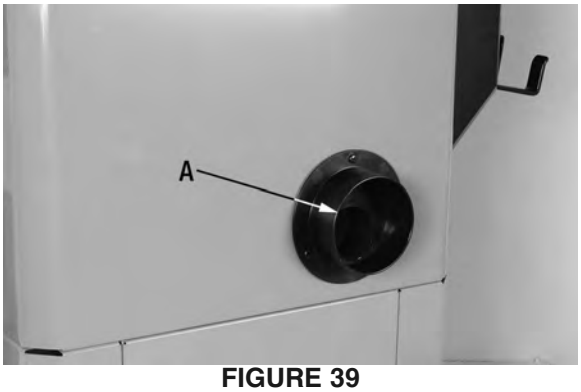


FIGURE 39

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.

OPERATION- TYPES OF CUTS

Plain sawing includes ripping and crosscutting, plus a few other standard operations of a fundamental nature. The methods on this page and the following 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.

CROSSCUTTING

Crosscutting 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, as shown in Fig.40. The miter gauge may be used in either table slot, however, most operators prefer the left groove for average work. When bevel cutting (blade tilted), use the table groove that does not cause interference of your hand or miter gauge with the saw blade guard.

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 fence as a cut-off gauge when crosscutting. Never use the miter gauge in combination with the rip fence.

FIGURE 40

RIPPING

Ripping is the operation of making a lengthwise cut through a board, and 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 saw 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 as shown in Fig.41. 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.

FIGURE 41

USING OPTIONAL 8" DADO BLADE SET & OPTIONAL 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.42.

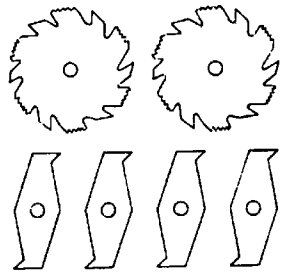


FIGURE 42

Various combination of saws 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.43. The saw and cutter overlap is shown in Fig.43 (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 with riving knife and anti-kickback fingers assembly can not be used when dadoing operations and must be removed from the saw. A Dado table insert must be used (optional accessory, model KW-166) in place of the standard table insert.

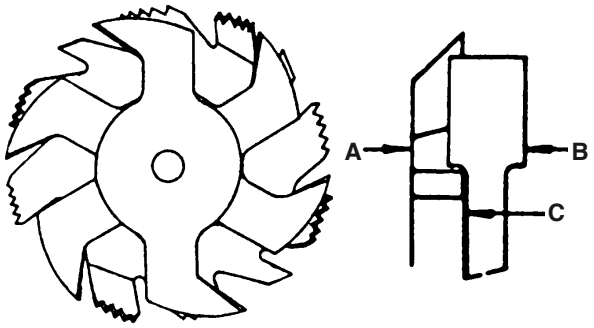
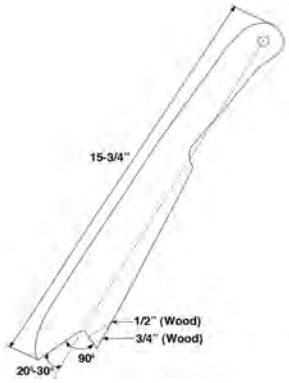


FIGURE 43

NEVER USE THE DADO HEAD IN A BEVEL POSITION UNLESS YOU MAKE YOUR OWN DADO INSERT! ALWAYS REINSTALL BLADE GUARD WITH RIVING KNIFE AND ANTI-KICKBACK FINGERS ASSEMBLY AFTER OPERATION IS COMPLETE!

PUSH STICK CONSTRUCTION

A push stick is supplied with this Table Saw and should be used whenever possible. If you misplace the push stick, illustration below shows how to make one yourself. It is recommended to use a good quality plywood or solid wood, 1/2" and 3/4" thick.



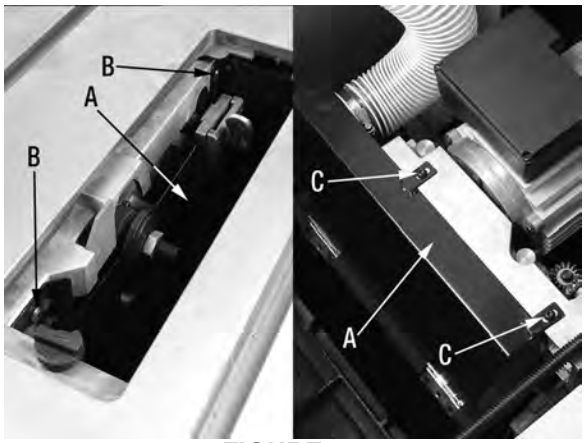


FIGURE 44

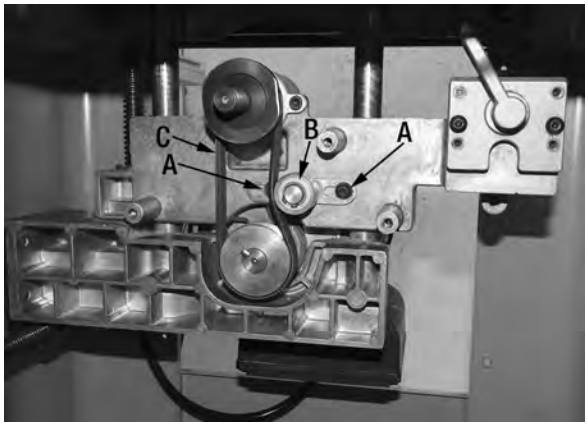


FIGURE 45

REPLACING RIBBED BELT

MAKE SURE THE POWER CORD IS DISCONNECTED FROM THE POWER SOURCE.

To remove the ribbed belt (C) Fig.45, first remove table insert, blade guard and riving knife assembly and the blade from the saw as shown and follow the following instructions:

1) From the right side of the cabinet, remove the tool storage compartment (F) Fig.24 by removing the 4 cap screws which hold it in place. This will give you access to the internal parts.
2) To access the ribbed belt (C) Fig.45, remove the dust shroud (A) Fig.44 by removing 4 round allen head screws (B & C) using a hex. key. There are 2 round allen head screws (B) accessible from the top opening, the other 2 round allen head screws (C) are accessible from inside the cabinet.
3) The ribbed belt (C) Fig.45 is tensioned by a tensioner (B). Loosen both round head allen screws (A), move tensioner (B) to the right to release tension, and remove the ribbed belt (C) from motor pulley and blade arbor.
4) Install new ribbed belt, once installed, tension the belt by moving the tensioner (B) up against the belt, tighten both round head allen screws (A).
5) Reinstall dust shroud (A) Fig.44.

STORAGE

This Table saw comes with convenient storage when the saw is not being used or when a component of the saw is not being used it can be stored under the Table Saw.

- Miscellaneous tools- Tools storage compartment (A) Fig.46.
- Miter gauge storage (B).
- Rip fence storage (C) (aluminum guide in horizontal position).
- Blade guard storage (D).

MAINTENANCE

This Table Saw requires very little maintenance other than minor lubrication and cleaning. The inside of the cabinet should be periodically cleaned to remove all accumulation of saw dust.

LUBRICATION

The Table Saw has sealed lubricated bearings in the motor housing and the arbor assembly, they will not require any additional lubrication. Use a wire brush to clean off the worm gears and trunnions and apply a white lithium grease to keep them lubricated.

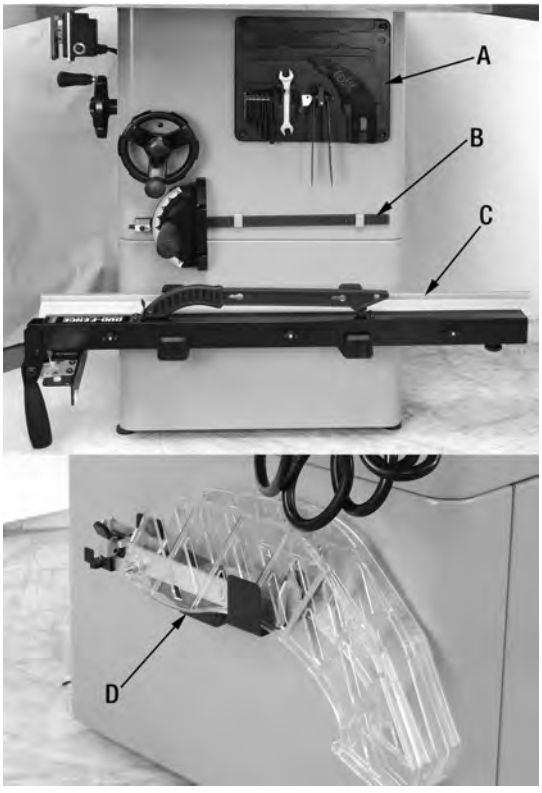


FIGURE 46

TROUBLESHOOTING

PROBLEM	SOLUTION
SAW WILL NOT START 1. Saw not plugged in. 2. Fuse blown or circuit breaker tripped. 3. Cord damaged.	 1. Plug in saw. 2. Replace fuse or reset circuit breaker. 3. Have cord replaced by a certified electrician.
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. 5. Blade binding due to warped wood. 6. Low house current.	 1. Replace with adequate size extension cord. 2. Feed stock more slowly. 3. Clean or replace blade. 4. Check and adjust the rip fence. See rip fence instructions. 5. Select another piece of wood. 6. Contact your electrical company.
DOES NOT MAKE ACCURATE 45^0 AND 90^0 RIP CUTS 1. Positive stop(s) not adjusted properly. 2. Tilt angle pointer not set properly.	 1. Check blade with square and adjust positive stop(s). 2. Check blade with square and adjust pointer to zero.
MATERIAL PINCHES BLADE WHEN RIPPING 1. Rip fence not aligned with blade. 2. Warped wood.	 1. Check and adjust rip fence. 2. Select another piece of wood.
MATERIAL BINDS ON RIVING KNIFE 1. Riving knife not aligned correctly with blade.	 1. Check and align riving knife.
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.	 1. Replace blade. 2. Turn blade around. 3. Remove blade and clean with turpentine and steel wool. 4. Change the blade. 5. Clean the table with turpentine and steel wool.
BLADE DOES NOT COME UP TO SPEED 1. Extension cord too light or too long. 2. Low house current. 3. Motor not wired for correct voltage.	 1. Replace with adequate size extension cord. 2. Contact your electric company. 3. Refer to motor and /or nameplate.
MACHINE VIBRATES EXCESSIVELY 1. Table not mounted securely to cabinet stand. 2. Stand is on uneven floor. 3. Damaged saw blade. 4. Bad belt. 5. Belt not tensioned properly. 6. Bent pulley. 7. Improper motor mounting. 8. Loose hardware.	 1. Tighten all mounting hardware. 2. Reposition on flat level surface or adjust leveling feet. 3. Replace blade. 4. Replace belt. 5. Adjust belt tension. 6. Replace pulley. 7. Check and adjust motor mounting. 8. Tighten all nuts, bolts and set screws.
BLADE DOES NOT RAISE OR TILT FREELY 1. Sawdust or dirt in raising or tilting mechanisms.	 1. Brush or blow out loose dust or dirt.

PARTS DIAGRAM & PARTS LISTS

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