

### 6" JOINTER



**MODEL: KC-150C** 

### INSTRUCTION MANUAL

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# IMPORTANT INFORMATION 6" JOINTER

2-YEAR

LIMITED WARRANTY FOR THIS 6" JOINTER KING CANADA TOOLS

OFFERS A 2-YEAR LIMITED WARANTY FOR NON-COMMERCIAL USE.

#### **PROOF OF PURCHASE**

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

#### REPLACEMENT PARTS

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

#### **LIMITED TOOL WARRANTY**

KING CANADA makes every effort to ensure that this product meets high quality and durability standards. KING CANADA warrants to the original retail consumer a 2-year limited warranty as of the date the product was purchased at retail and that each product is free from defects in materials. Warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence or accidents, repairs or alterations and lack of maintenance. KING CANADA shall in no event be liable for death, injuries to persons or property or for incidental, special or consequential damages arising from the use of our products. To take advantage of this warranty, the product or part must be returned for examination by the retailer. Shipping and handling charges may apply. If a defect is found, KING CANADA will either repair or replace the product.

#### PARTS DIAGRAM & PARTS LISTS

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

# GENERAL SAFETY INSTRUCTIONS FOR POWER TOOLS



#### 1. KNOW YOUR TOOL

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

#### 2. GROUND THE TOOL.

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

#### 3. KEEP GUARDS IN PLACE.

Keep in good working order, properly adjusted and aligned.

#### 4. REMOVE ADJUSTING KEYS AND WRENCHES.

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

#### 5. KEEP WORK AREA CLEAN.

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

#### 6. AVOID DANGEROUS ENVIRONMENT.

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

#### 7. KEEP CHILDREN AWAY.

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

#### 8. MAKE WORKSHOP CHILD-PROOF.

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

#### 9. USE PROPER SPEED.

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

#### 10. USE RIGHT TOOL.

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

#### 11. WEAR PROPER APPAREL.

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

#### 12. ALWAYS WEAR SAFETY GLASSES.

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

#### 13. DON'T OVERREACH.

Keep proper footing and balance at all times.

#### 14. MAINTAIN TOOL WITH CARE.

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

#### 15. DISCONNECT TOOLS.

Before servicing, when changing accessories or attachments.

#### 16. AVOID ACCIDENTAL STARTING.

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

#### 17. USE RECOMMENDED ACCESSORIES.

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

#### 18. NEVER STAND ON TOOL.

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

#### 19. CHECK DAMAGED PARTS.

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

### 20. NEVER LEAVE MACHINE RUNNING UNATTENDED.

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



## ADDITIONAL SAFETY INSTRUCTIONS FOR YOUR JOINTER

### READ AND UNDERSTAND INSTRUCTION MANUAL BEFORE OPERATING JOINTER

#### 1. DO NOT ALTER OR MISUSE THE TOOL.

These tools are precision built. Any alteration or modification not specified is misuse and may result in dangerous conditions.

#### 2. AVOID GASEOUS AREAS.

Do not operate electric tools in gaseous or explosive environnements. Motors in these tools normally spark and may result in dangerous conditions.

#### 3. BEFORE CONNECTING TO THE POWER SOURCE.

Make sure the voltage supplied is the same as that specified on the nameplate of the tool. A power source with a voltage greater than that specified for the tool can result in serious injury to the operator, as well as damage to the tool. If in doubt, DO NOT PLUG IN TOOL. Using a power source with a voltage less than the nameplate rating is harmful to the motor.

#### 4. STABILITY OF THE JOINTER.

Your jointer must be bolted securely to a stand or a workbench. In addition, if there is any tendency for the jointer to tip over or move during certain operations, such as cutting long, heavy boards, bolt your jointer stand or workbench to the floor.

#### 5. LOCATION.

This jointer saw is intended for indoor use only.

#### 6. MISSING OR MALFUNCTIONING PARTS.

If any part of the jointer is missing, malfunctioning, has been damaged or broken...such as the motor switch, or other operating control, a safety device or the power cord...cease operating immediately until the particular part is properly repaired or replaced.

#### 7. CLEARING THE TABLE OF ALL OBJETS.

Never turn your jointer on before clearing the table of all objects (tools, scraps of wood...) except for the workpiece and related feed and support devices for the operation planned.

#### 8. AVOID AWKWARD HAND POSITIONS.

A sudden slip could cause a hand to move into the blade.

#### 9. FEEDING SPEED.

Do not feed the material too fast while cutting. Only feed the material fast enough so that the blade will cut. Keep fingers away from the blade.

- **10. DO NOT** perform any layout, assembly or setup work on the table while the jointer is operating.
- **11. Never** perform a jointing or planing operation with cutterhead or drive guard removed.
- **12.** Never make a jointing or planing cut deeper than 1/8".
- **13.** Always use hold downs or push blocks for jointing material narrower than 3" or planing material thinner than 3".
- 14. Never joint or plane material less than 10" long.
- 15. ALWAYS KEEP HANDS AND FINGERS AWAY FROM CUTTERHEAD.
- **16. Disconnect machine** from power source before making repairs or adjustments.
- **17. Do not operate** while under the influence of drugs, alcohol, or medication.



#### ASSEMBLY INSTRUCTIONS

WARNING: FOR YOUR OWN SAFETY, DO NOT CONNECT THE JOINTER TO THE POWER SOURCE UNTIL THE JOINTER IS COMPLETELY ASSEMBLED AND YOU HAVE READ AND UNDERSTOOD THE ENTIRE OWNER'S MANUAL.

#### ASSEMBLING STAND

- 1. Assemble two 11-3/4" long top end braces (A) Fig. 1, two 15-3/4" long top side braces (B), two 16-1/2 long lower end braces (C), and two 20-1/2" long side braces (D) to four legs (E) as shown, using the thirty-two 1/2" long carriage bolts, flat washers, and hex nuts. Only tighten hex nuts fingertight at this time. IMPORTANT: The top lips of two upper end braces (A) must fit on top of the top lips of two upper side braces (B).
- 2. Assemble four rubber feet (F) Fig. 1, to the bottom of each leg (E) as shown.

#### ASSEMBLING DUST CHUTE TO STAND

- 1. The front of the stand is indicated by switch opening (B) Fig. 2, making the outfeed end of the stand (C) and the infeed (A).
- 2. Assemble dust chute (D) Fig. 2 to outfeed end of stand (C) as shown, using four 1/2″ long carriage bolts (F), flat washers, and hex nuts. Only tighten hex nuts fingertight at this time.

#### ASSEMBLING MOTOR AND SWITCH TO STAND

- 1. The motor (B) Fig. 3, is assembled to the bottom of the dust chute using the four 1-1/4" long carriage bolts (A), flat washers, lock washers, and hex nuts as shown. Do not completely tighten hex nuts at this time as the motor must be adjusted for proper alignment and belt tension later.
- 2. Assemble the switch (C) Fig. 3, to the inside of switch opening (D) using the two 3/8'' long screws (E) Fig. 4, and flat washers as shown.

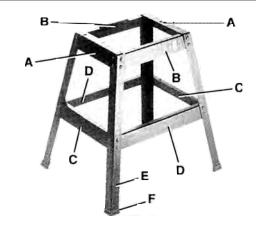


FIGURE 1

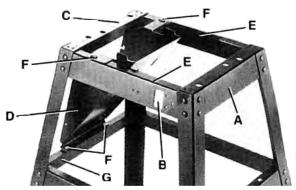


FIGURE 2

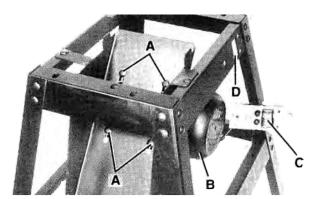


FIGURE 3

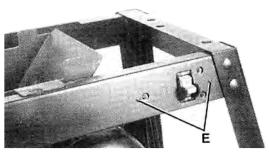


FIGURE 4



#### ASSEMBLING JOINTER TO STAND

- 1. WARNING: JOINTER WEIGHT IS APPROXIMATELY 175 LBS. CARE MUST BE TAKEN WHEN LIFTING JOINTER ONTO STAND. A MINIMUM OF TWO PEOPLE WILL BE REQUIRED TO LIFT THE MACHINE.
- 2. The infeed end of the jointer is fastened to the two holes (A) Fig. 5, and the outfeed end of the jointer is fastened to hole (B) on the top end braces. **NOTE:** Dust chute (C) is on outfeed end of jointer. Line up the three threaded holes on the bottom of the jointer with the three holes (A) and (B) in the stand end braces.
- 3. Using the supplied wrench, fasten the jointer to the top of stand using the three lock washers and special studs. Two of the special studs are shown at (D) Fig. 6, for the infeed end of the machine, and one special stud is shown at (D) Fig. 7, for the outfeed end of the machine.
- 4. Once the jointer is completely secured to stand, push downward on the top of jointer until the stand adjusts to the floor surface. Then, using the supplied wrench, tighten all stand hardware.

#### ASSEMBLING DUST CHUTE COVER

1. Assemble dust chute cover (A) Fig. 10, to dust chute (B) using two wing screws (C). IMPORTANT: Top of dust chute cover (A) must be inside top end brace (D) of stand and should completely cover the top of the dust chute. **WARNING:** During operation, the dust chute cover (A) must always be assembled as shown and should only be removed for cleaning.

#### ASSEMBLING DUST COLLECTOR ADAPTER

If the machine is to be connected to a dust collection system, a dust collector adapter with a 4'' O.D. opening is supplied with the jointer. To assemble the adapter:

- 1. Remove two wing screws (C) Fig. 10, from dust chute cover (A).
- 2. Assemble adapter (E) Fig. 11, over dust chute (A). Align two holes in dust chute (A) with holes in adapter (E) and fasten with two wing screws (C) which were removed in **STEP 1**.

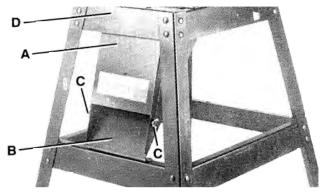


FIGURE 10

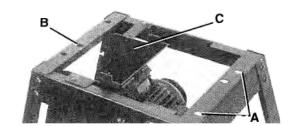


FIGURE 5

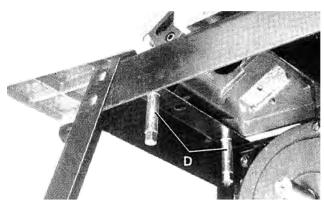


FIGURE 6

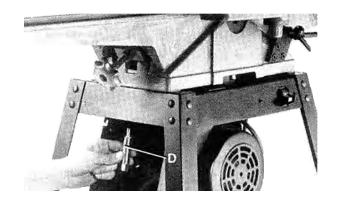


FIGURE 7

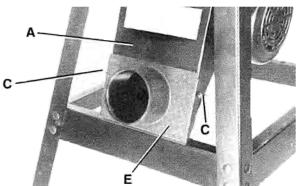


FIGURE 11



#### ASSEMBLING MOTOR PULLEY

1. Assemble motor pulley (A) Fig. 12, to motor shaft with the hub of the pulley in the outer position as shown. Make sure key (B) is inserted in the keyway of the motor pulley and shaft.

### ASSEMBLING BELT, ALIGNING PULLEYS, AND ADJUSTING BELT TENSION

- 1. Loosen two screws, one of which is shown at (A) Fig. 13, and remove cutterhead pulley guard (B).
- 2. Place the belt in groove of cutterhead pulley (C) Fig. 14, and motor pulley (D).
- 3. Make certain the motor pulley (D) Fig. 14, is aligned with cutterhead pulley (C). If necessary, the motor pulley (D) can be moved in or out on the motor shaft to provide proper alignment. Then tighten two set screws (C) Fig. 16.
- 4. Correct belt tension is obtained when there is approximately 1" deflection at the center span of the belt, using light finger pressure.
- 5. If an adjustment is required for belt tension, the motor can be raised or lowered to obtain the correct belt tension. Then tighten motor mounting hardware after tension is applied, making sure alignment of the pulleys is not disturbed.
- 6. Replace cutterhead pulley guard (B) Fig. 14, which was removed in STEP 1.

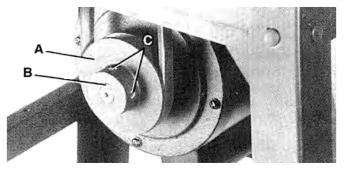


FIGURE 12

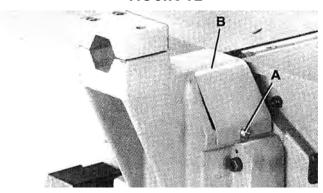


FIGURE 13

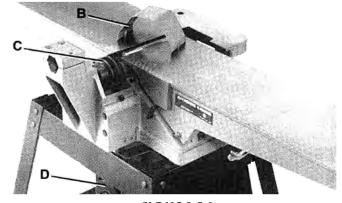


FIGURE 14

#### ASSEMBLING MOTOR PULLEY AND BELT GUARD

1. Assemble the motor pulley and belt guard (A) Fig. 15, to the jointer base using the four 1/2" long screws, two of which are shown at (B), and four lock washers. WARNING: MAKE CERTAIN MOTOR PULLEY IS NOT CONTACTING GUARD.

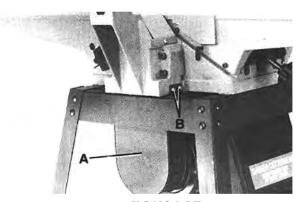


FIGURE 15



#### **ASSEMBLING FENCE**

- 1. Insert hexagon rod (A) Fig. 16, of fence assembly into bracket (B) on jointer as shown.
  - **NOTE:** If fence does not slide in and out easily, loosen two screws (X) Fig. 16, and adjust bracket (B). Then tighten two screws (X).
- 2. Assemble rear cutterhead guard (C) Fig. 17, to end of hexagon rod using the 5/8″ long screw (D) and washer (E).
- 3. Thread fence locking handle assembly (F) Fig. 18, and flat washer (G) into hole (Z) Fig. 17. Lock handle (F) Fig. 18, is spring-loaded and can be repositioned by pulling out the handle and repositioning it onto the serrated nut located under the handle.
- 4. Thread face tilting handle (H) Fig. 18, to threaded hole in back of fence as shown.

#### ASSEMBLING CUTTERHEAD GUARD

- 1. Remove set screw (A) Fig. 19, from post (B) of cutterhead guard (C).
- 2. Assemble cutterhead guard (C) Fig. 19, to the jointer by inserting post (B) down through the hole in the infeed table. **NOTE:** A spring is supplied in knob assembly (D) that returns the guard (C) over the cutterhead after a cut has been made. Turn knob (D) to provide tension on the spring before inserting post (B). Make certain the spring engages in the slot of the post. If spring tension is too much or too little, adjust the spring accordingly by removing the guard and rotating knob (D).
- 3. Thread set screw (A) Fig. 20, which was removed in **STEP 1**, back into post (B) to keep cutterhead guard (C) in position during jointer operation.
- 4. Fig. 20 illustrates the cutterhead guard (C) assembled to the infeed table.

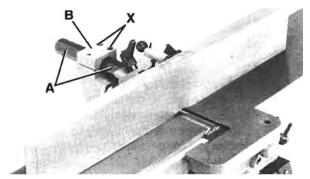


FIGURE 16

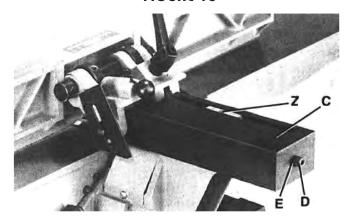
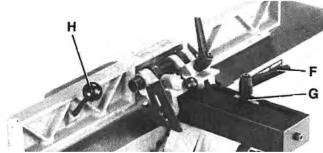


FIGURE 17



FIGUR€ 18

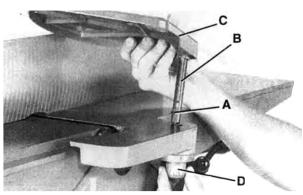


FIGURE 19

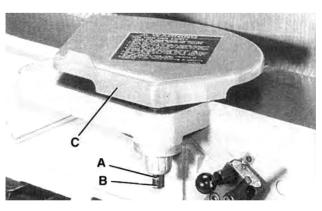


FIGURE 20

## ELECTRICAL REQUIREMENTS 6" JOINTER



#### **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 JOINTER DISCONNECTED FROM THE POWER SOURCE. FAILURE TO COMPLY MAY RESULT IN SERIOUS INJURY!

#### POWER SUPPLY

**WARNING:** YOUR JOINTER MUST BE CONNECTED TO A 20-AMP, BRANCH CIRCUIT AND USE A 20-AMP TIME DELAY FUSE OR CIRCUIT BREAKER. FAILURE TO CONNECT IN THIS WAY CAN RESULT IN INJURY FROM SHOCK OR FIRE.

Your jointer must be properly grounded. Not all outlets are properly grounded. If you are not sure if your outlet is properly grounded, have it checked by a qualified electrician.

**WARNING:** IF NOT PROPERLY GROUNDED, THIS JOINTER 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.

#### **GROUNDING**

This jointer must be grounded. If it should malfunction or breakdown, grounding provides a path of least resistance for electric current, to reduce the risk of electric shock. This jointer is equipped with a cord having an equipment-grounding conductor and grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances. **WARNING:** TO MAINTAIN PROPER GROUNDING OF YOUR JOINTER, DO NOT REMOVE OR ALTER THE GROUNDING PRONG IN ANY MANNER.

#### **CHANGING VOLTAGE**

The motor supplied with your King Canada 6" jointer is a dual voltage, 110/220V, single phase motor which is wired for 110V operation. If you desire to operate the machine at 220V, the following instructions must be followed:

#### 1. DISCONNECT THE MACHINE FROM THE POWER SOURCE.

- 2. The motor supplied with this jointer is supplied with six motor leads that are connected for 110V operation, as shown in Fig. 21. Reconnect these six motor leads for 220V operation, as shown in Fig. 22.
- 3. The 110V plug, supplied with the motor, must be replaced with a 220V plug that has two flat, current-carrying prongs in tandem, and one round or "U" shaped longer ground prong, as shown in Fig. 23. This plug is used only with proper mating 3-conductor grounded receptacle, as shown in Fig. 23.

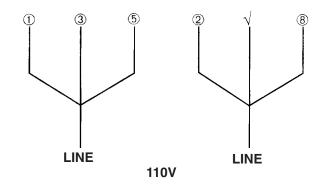
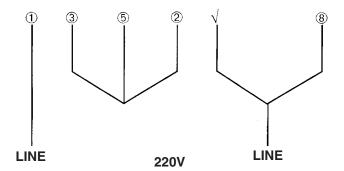


FIGURE 21



**FIGUR€ 22** 

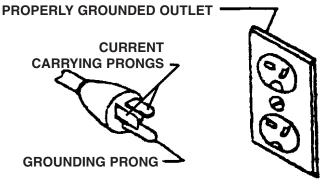


FIGURE 23



#### STARTING AND STOPPING JOINTER

The On/Off switch (A) Fig. 24, is located on the top side brace of the stand. To turn the machine "ON", move the switch (A) to the up position. To turn the machine "OFF", move the switch (A) to the down position.



FIGURE 24

#### LOCKING SWITCH IN THE "OFF" POSITION

We suggest that when the jointer is not in use, the switch should be locked in the "OFF" position. This can be done by grasping the switch toggle (B) Fig. 25, and pulling it out of the switch as shown. With the switch toggle (B) removed, the switch will not operate. However, should the switch toggle be removed while the machine is running, it can be turned "OFF" once, but cannot be restarted without inserting the switch toggle (B).

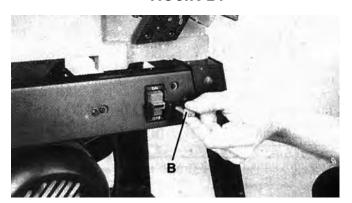


FIGURE 25

#### **INFEED TABLE ADJUSTMENTS**

- 1. To raise or lower the infeed table, loosen table lock handle (A) Fig. 26, turn the table raising and lowering handwheel (B) until the table is at the desired position and tighten table lock handle (A).
- 2. **NOTE:** When raising or lowering the infeed table a plunger located on other end of index stop (C) Fig. 27, automatically stops the table at 1/8" depth of cut. To move the table past this point it is necessary to pull out index stop (C) and move the table up or down. **IMPORTANT:** Always make sure table lock handle (A) is tightened before operation. The table lock handle (A) is spring-loaded and can be repositioned by pulling out the handle and repositioning it on the serrated nut located under the handle.
- 3. The depth of cut of the infeed table (position of table in relationship with the cutting circle) can be read with the pointer (D) Fig. 27, and scale (E). Maximum table depth adjustment with this 6" jointer is 1/2".

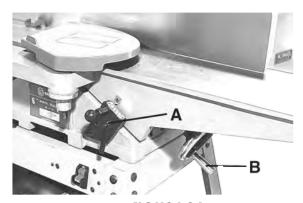


FIGURE 26

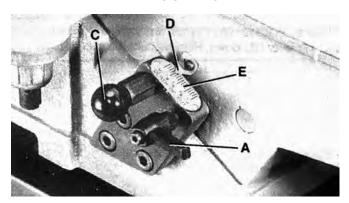


FIGURE 27



#### INFEED TABLE POSITIVE STOPS

1. Positive stops are provided to limit the height and depth of the infeed table. To adjust the stops, simply loosen two lock nuts (F) and (G) Fig. 28, and turn the two adjusting screws (J) and (K) as required. Then retighten the lock nuts (F) and (G). A good suggestion is to set the upper positive stop (J) for your finish or final cut. This means that you will be able to rapidly set the infeed table for a finish or final cut without checking the scale and pointer. Also the lower positive stop (K) can be set for the maximum 1/2" depth of cut or if you desire to limit the depth of cut, adjust the stop screw (K) accordingly.

#### **OUTFEED TABLE ADJUSTMENTS**

For most jointing operations the outfeed table must be exactly level with the knives at their highest point of revolution. This means that the knives must be parallel to the outfeed table and project equally from the cutterhead. To move the outfeed table up or down, loosen lock screw (A) Fig. 29, and turn handwheel (B). When the outfeed table is exactly level with the knives at their highest point of revolution, tighten the lock screw (A).

#### KNIFE AND OUTFEED TABLE ADJUSTMENTS

In order to do accurate work, the knives must be exactly level with the outfeed table. To check and adjust, proceed as follows:

- 1. DISCONNECT MACHINE FROM POWER SOURCE.
- 2. Loosen lock lever (A) Fig. 30, and lower the infeed table by turning handwheel (B). Remove cutterhead guard (C).
- 3. Place a steel straight edge on the outfeed table, extending over the cutterhead as shown in Fig. 31.
- 4. CAREFULLY rotate the cutterhead by turning the belt by hand. The knives should just touch the straight edge.
- 5. If the knife is high or low at either end, slightly turn the four screws (D) Fig. 32, in the knife locking bar clockwise to loosen using the wrench (E) supplied. Then adjust the height of the knife by turning the knife raising screws (F) Fig. 33, counterclockwise to lower and clockwise to raise the knife. NOTE: If the knife is to be lowered it will be necessary to carefully push down on the knife after screws (F) have been turned.
- 6. Repeat these procedures for adjusting the two remaining knives if necessary.

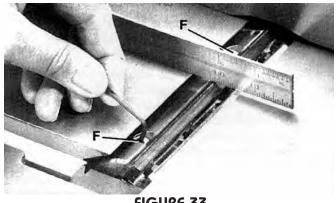


FIGURE 33

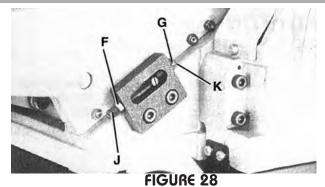
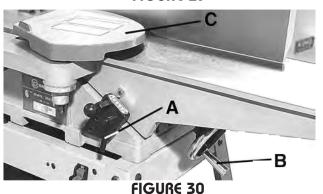


FIGURE 29



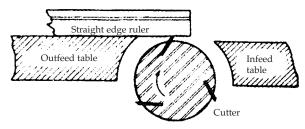


FIGURE 31

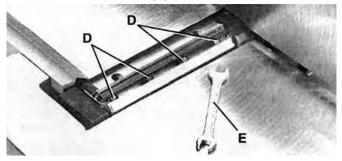


FIGURE 32



7. If the knives are set too low, the result will be as shown in Fig. 34, and the finished surface will be curved.

8. If the knives are set too high, the work will be gouged at the end of the cut, as shown in Fig. 35.

9. As a final check, run a piece of work slowly over the knives for 6" to 8". The wood should rest firmly on both tables as shown in Fig. 36, with no open spaces under the finished cut.

#### ADJUSTING TABLE GIBS

"Gibs" are provided to take up all play between the mating dovetail ways of the base and the infeed and outfeed tables. The "gib" for the infeed table is shown at (A) Fig. 37, and the "gib" for the outfeed table is shown at (B) Fig. 38. Proper "gib" adjustment is necessary for the proper functioning of the jointer. The "gibs" were adjusted at the factory and should require no further adjustment. If, however, it becomes necessary to adjust the "gibs" proceed as follows:

- 1. To adjust the infeed table or outfeed table "gibs", loosen three lock nuts (F) Fig. 37, for the infeed table or two lock nuts (G) Fig. 38, for the outfeed table. For the infeed table, make sure the table locking lever is loose. For the outfeed table, make sure the table locking screw (E) Fig. 38, is loose.
- 2. Tighten or loosen three gib adjustment screws (C) Fig. 37, as necessary for the infeed table or two gib adjustment screws (D) Fig. 38, as necessary for the outfeed table; starting with the lower screw first and as you proceed to the top screw, gently raise the outboard edge of the table that is being adjusted. This will offset any tendency for the table casting to "droop or sag" and permit the gib to be adjusted to a secure fit. After the gibs have been adjusted, tighten the lock nuts (F) Fig. 37, (G) Fig. 38, table locking screw (E) Fig. 38, and infeed table locking lever.

**IMPORTANT:** Do not leave the adjusting screws too loose. It should take a little bit of effort to move the tables up or down. Jointers are finishing machines and you can't expect to get good accuracy or finish if the tables are set loose and sloppy.

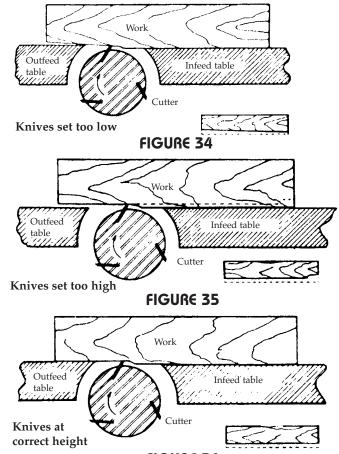


FIGURE 36

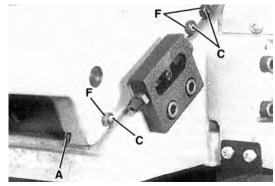
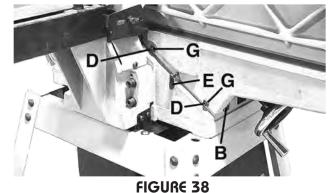


FIGURE 37





#### FENCE OPERATION

The fence can be moved across the table and can tilt 45° right or left at any position on the table a follows:

- 1. To move the fence across the table, loosen lock handle (A) Fig. 39, slide fence to the desired position on the table and tighten lock handle (A). As the fence is moved across the table, the rear cutterhead guard (B) covers and guards the cutterhead in back of the fence. **NOTE:** Lock handle (A) is spring-loaded and can be repositioned by pulling up on the handle and repositioning it on the serrated nut located underneath the hub of the handle.
- 2. To tilt the fence to the right or left loosen lock handle (C) Fig. 40, and pull out and turn plunger (D) to release the positive stop. A tilting lever (E) is provided on the back of the fence to assist in tilting the fence. **NOTE:** Lock handle (C) is spring loaded and can be repositioned by pulling out the handle and repositioning it on the serrated nut located underneath the hub of the handle.
- 3. Tilt the fence to the desired angle, in or out, and tighten lock handle (C) Fig. 40. **IMPORTANT:** When cutting bevels and the angle is small there is little difference whether the fence is tilted in or out; however, at angle is approaching 45° it may become difficult to hold the work securely against the fence when the fence is tilted out. In these cases, we suggest that the fence be tilted toward the table, as shown in Fig. 40. The fence will form a V-shape with the tables and the work is easily pressed into the pocket while passing through the knives.

#### ADJUSTING FENCE POSITIVE STOPS

The fence on this jointer is equipped with positive stops that allow you to rapidly tilt the fence to the  $90^{\circ}$  and  $45^{\circ}$  angles to the table in the inward or outward position. To check and adjust the positive stops, proceed as follows:

- 1. Position the fence at 90° to the table. Make sure the end of plunger (A) Fig. 41, is engaged in notch (B) in index collar as shown, and tighten lock handle (C).
- 2. Place a square (D) Fig. 42, on the table and against the fence and check if fence is  $90^{\circ}$  to table.
- 3. If an adjustment is necessary, loosen set screw (E) Fig. 41, in the index collar and loosen fence locking handle (C).
- 4. Tilt the fence until you are certain the fence is 90° to the table and tighten lock handle (C) Fig. 41, and set screw (E).
- 5. Loosen lock handle (C) Fig. 43, pull out and turn plunger (A) and tilt fence out as far as it will go. Then tighten lock handle (C).
- 6. Using square (D) Fig. 43, check to see if the fence is at a 45° outward angle from the table, as shown.
- 7. If an adjustment is necessary, loosen lock handle (C) Fig. 43. Loosen lock nut (F) and turn adjusting screw (G) until fence is tilted 45° outward. Then tighten lock nut (F).

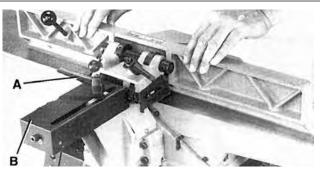


FIGURE 39

FIGURE 40

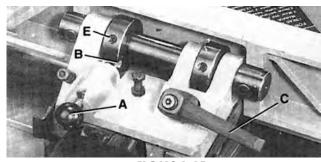


FIGURE 41

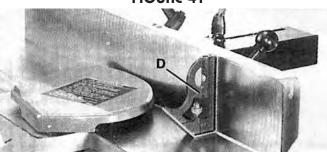


FIGURE 42

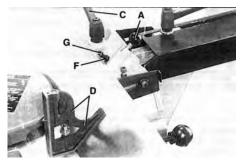


FIGURE 43



- 8. Loosen lock handle (C) Fig. 44, and tilt fence inward as far as possible, as shown, and tighten lock handle (C).
- 9. Using a square (D) Fig. 44 check to see if the fence is at a 45° inward angle to the table, as shown.

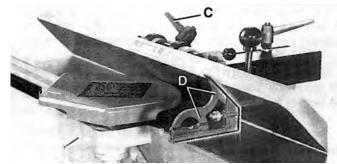


FIGURE 44

10. If an adjustment is necessary, loosen lock nut (H) Fig. 45, and turn adjusting screw (J) until fence is tilted 45° in. Then tighten lock nut (H).



FIGURE 45

#### ADJUSTING FENCE

Two guards, one of which is shown at (A) Fig. 46, are provided on each side of the fence bracket to close up the opening between the fence bracket (B) and the fence (C) limiting access to the cutterhead. When the fence is tilted, the guard (A) Fig. 47, can be pushed to the rear as shown. After the fence has been returned to the 90° position, simply push the guard (A) Fig. 47, forward to close up the opening. Fig. 46 illustrates the guard (A) properly adjusted.

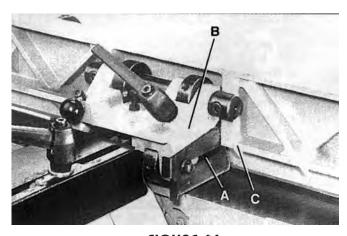


FIGURE 46

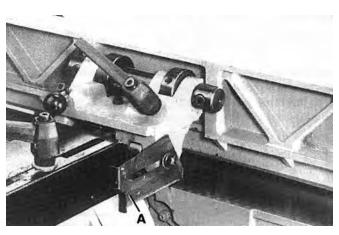


FIGURE 47



#### REMOVING, REPLACING AND RESETTING KNIVES

If the knives are removed from the cutterhead for replacement or regrinding, care must be used in removing, replacing and resetting them as follows:

- 1. DISCONNECT THE MACHINE FROM ITS POWER SOURCE.
- 2. Move the fence to the rear and remove the cutterhead guard. WARNING: BE EXTREMELY CAREFUL THAT YOUR HANDS DO NOT COME IN CONTACT WITH THE KNIVES.
- 3. Using wrench (A) Fig. 48, slightly loosen the four locking screws (B) in each knife slot by turning the screws (B) clockwise. This relieves stress in the cutterhead.
- 4. Loosen screws (B) Fig. 48, further and remove knife and knife locking bar.
- 5. Fig. 49 illustrates the knife (C) and knife locking bar (D) removed from the cutterhead. Remove the remaining two knives and locking bars, in the same manner.
- 6. Using hex. key (E) Fig. 49, lower the two knife adjustment blocks by turning screws (F) counterclockwise in all three slots of the cutterhead.
- 7. Before replacing knives make certain the knife locking bars are thoroughly clean and free of gum and pitch.
- 8. Replace the knife locking bars (D) Fig. 49 and knives (C) into each slot in the cutterhead. WARNING: CARE MUST BE TAKEN WHEN INSERTING THE KNIVES AS THE CUTTING EDGES ARE VERY SHARP. Push the knife down as far as possible and snug up the screws (B) Fig. 48, by turning each screw counterclockwise just enough to hold the knife in position. Replace the remaining two knives in the same manner. NOTE: KNIVES MUST BE INSTALLED CORRECTLY AS SHOWN IN FIG. 50.
- 9. The knives are adjusted correctly when the cutting edge of the knife extends out  $0.060^\circ$  from the cutterhead diameter.
- 10. Carefully rotate the cutterhead (G) Fig. 51, until the round portion of the cutterhead is on top as shown.
- 11. Place a 0.060" feeler gage (H) Fig. 51, on the cutterhead and using a straight edge (J) on the rear table adjust the height of the rear table until it is 0.060" above the cutting head diameter, as shown.
- 12. Lock the rear table in position and remove the feeler gage.
- 13. Lower the infeed table and place a straight edge (J) Fig. 52, on the outfeed table extending over the cutterhead as shown.
- 14. Rotate the cutterhead by hand until the knife is at its highest point at each end of the cutterhead. To raise the knife, use hex. key (E) Fig. 52, and turn raising screw clockwise until the knife just touches the straight edge (J) on each end and center of the cutterhead when the knife is at its highest point. When you are certain the knife is adjusted properly, tighten the four locking screws (B) by turning them counterclockwise.
- 15) Adjust the remaining two knives in the same manner. **WARNING!** MAKE CERTAIN THAT ALL KNIVES ARE SECURELY FASTENED IN CUTTERHEAD BEFORE TURNING ON POWER.
- 16. Replace cutterhead guard and reposition guide.

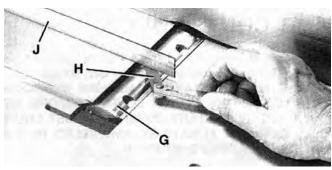


FIGURE 51

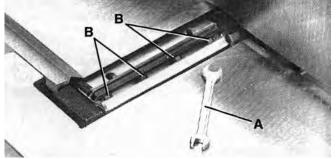


FIGURE 48

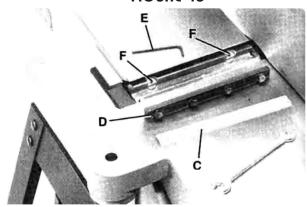


FIGURE 49

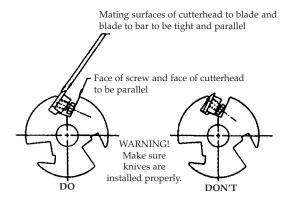


FIGURE 50

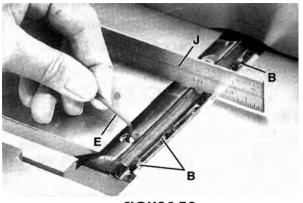


FIGURE 52