



10" BENCHTOP JOINTER WITH HELICAL CUTTERHEAD



MODEL: KC-10HJC

INSTRUCTION MANUAL

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WARRANTY INFORMATION

**2-YEAR
LIMITED WARRANTY
FOR THIS 10" BENCHTOP JOINTER**

**KING CANADA TOOLS
OFFERS A 2-YEAR LIMITED WARRANTY
INTENDED 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 product are available at our authorized King Canada service centres 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 centre, 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 centre. Contact your retailer or visit our web site at www.kingcanada.com for an updated listing of our authorized service centres. In cooperation with our authorized service centre, King Canada will either repair or replace the product if any part or parts covered under this warranty which examination proves to be defective in workmanship or material during the warranty period.

NOTE TO USER

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

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

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GENERAL & SPECIFIC SAFETY RULES



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.

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 eye-glasses only have impact resistant lenses, they are **NOT** safety glasses. Also use a face or dust mask if cutting operation is dusty.

13. DON'T OVERREACH.

Keep proper footing and balance at all times.

14. MAINTAIN TOOL WITH CARE.

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

15. DISCONNECT TOOLS.

Before servicing, when changing accessories or attachments.

16. AVOID ACCIDENTAL STARTING.

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

17. USE RECOMMENDED ACCESSORIES.

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

18. NEVER STAND ON TOOL.

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

19. CHECK DAMAGED PARTS.

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

20. NEVER LEAVE MACHINE RUNNING UNATTENDED.

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

21. USE PROPER EXTENSION CORD.

Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. Table in Fig.2 shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.

22. SECURE WORK.

Use clamps or a vise to hold work when practical. It's safer than using your hand and it frees both hands to operate tool.

23. DIRECTION OF FEED.

Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.

SPECIFIC SAFETY RULES FOR JOINTERS WITH HELICAL CUTTERHEAD

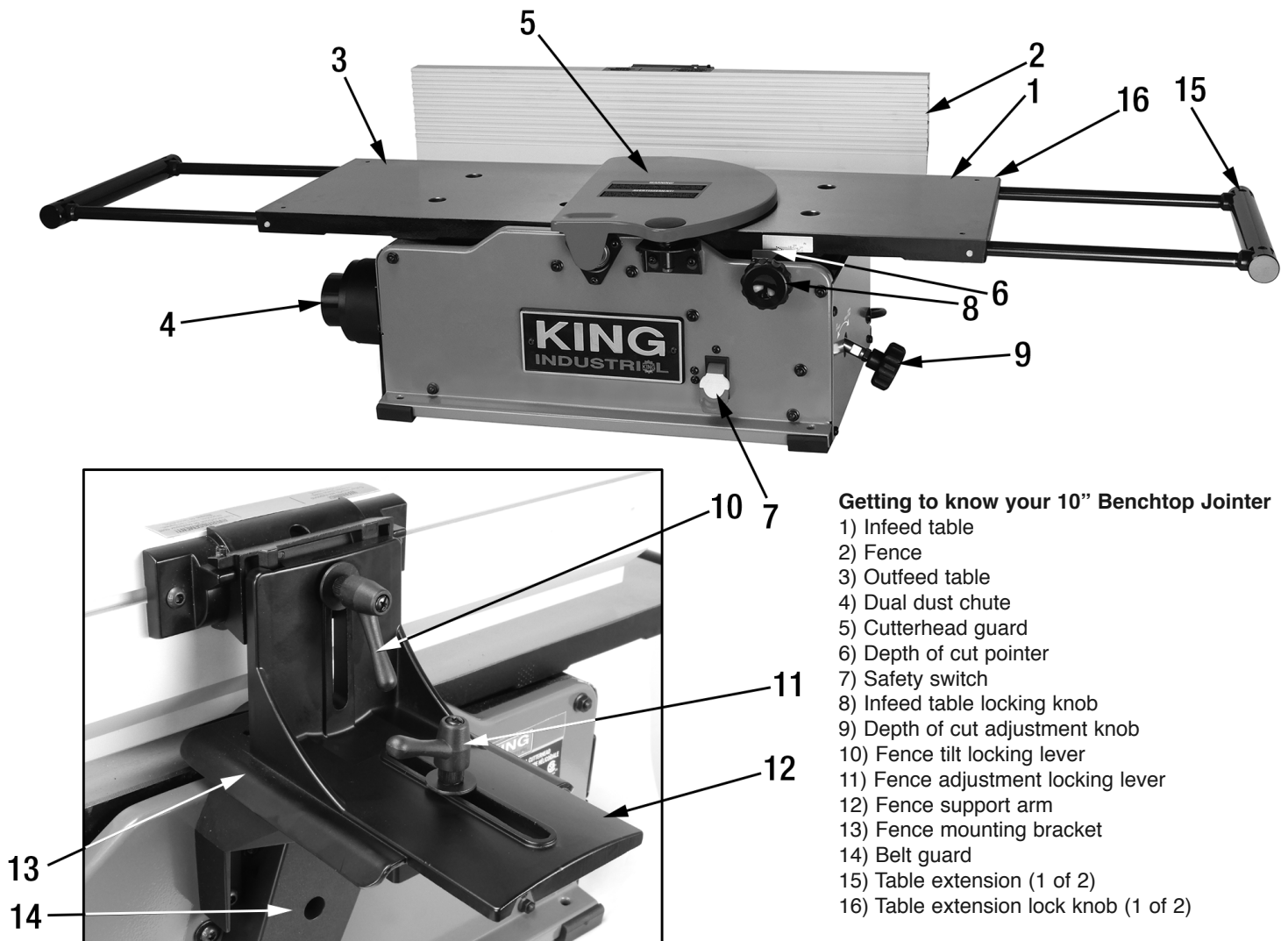
Safety is a combination of common sense, staying alert and knowing how your jointer works. Read and understand the following safety rules before operating.

1. For your own safety, read the entire instruction manual before operating the wood lathe.
2. Be sure that the cutterhead inserts are securely installed in the cutterhead.
3. Always use clean, properly sharpened inserts. Dirty or dull inserts are unsafe and can lead to accidents.
4. Do not push or force stock into the cutterhead. The jointer will perform better and more safely when working at the rate for which it was designed.

5. Be sure that the cutterhead has gained full operating speed before starting to joint.
6. Keep hands well away from cutterhead and all moving parts. Use the supplied push blocks to feed stock, and a brush, not hands, to clear away chips and dust.
7. Do not operate this jointer when tired, distracted, or under the effects of drugs, alcohol or any medication that impairs reflexes or alertness.
8. Keep guards in place and in working order. If a guard must be removed for maintenance or cleaning be sure it is properly re-attached before using the tool again.



GETTING TO KNOW YOUR 10" BENCHTOP JOINTER



Getting to know your 10" Benchtop Jointer

- 1) Infeed table
- 2) Fence
- 3) Outfeed table
- 4) Dual dust chute
- 5) Cutterhead guard
- 6) Depth of cut pointer
- 7) Safety switch
- 8) Infeed table locking knob
- 9) Depth of cut adjustment knob
- 10) Fence tilt locking lever
- 11) Fence adjustment locking lever
- 12) Fence support arm
- 13) Fence mounting bracket
- 14) Belt guard
- 15) Table extension (1 of 2)
- 16) Table extension lock knob (1 of 2)

Specifications

MODEL	KC-10HJC
Capacity	10"
Depth of cut capacity	1/8"
Cutterhead speed	12,000 RPM
Table size with extensions	10" x 53-1/2"
Fence size	4-3/8" x 24"
Motor	1 HP, 12 Amp.
Voltage	120V, 1 phase, 60 Hz
Assembled dimensions (LxWxH)/weight	53-1/2" x 20-1/2" x 13-1/4" / 74 lbs
Packaging dimensions (LxWxH)/weight	36-1/2" x 17-1/4" x 13" / 82 lbs

ELECTRICAL INFORMATION



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

WARNING: YOUR JOINTER MUST BE CONNECTED TO A 110V-120V, 15-AMP CIRCUIT BREAKER. FAILURE TO CONNECT IN THIS WAY CAN RESULT IN INJURY FROM SHOCK OR FIRE.

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.

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

WARNING: IF NOT PROPERLY GROUNDING, 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.

110V-120V OPERATION

As received from the factory, your Jointer is ready to run for 110V-120V operation. This Jointer is intended for use on a circuit that has an outlet and a plug which looks like the one illustrated in Fig.1.

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

EXTENSION CORDS

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

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

SAFETY SWITCH

This machine is supplied with a safety switch (A) Fig.3 equipped with a removable safety key (B). To turn the machine ON make sure the yellow safety key is inserted and pull the switch up, to the ON position. To turn the machine OFF push the switch to the OFF position. To prevent unauthorized use of your machine remove the safety key and store it in a secure location.

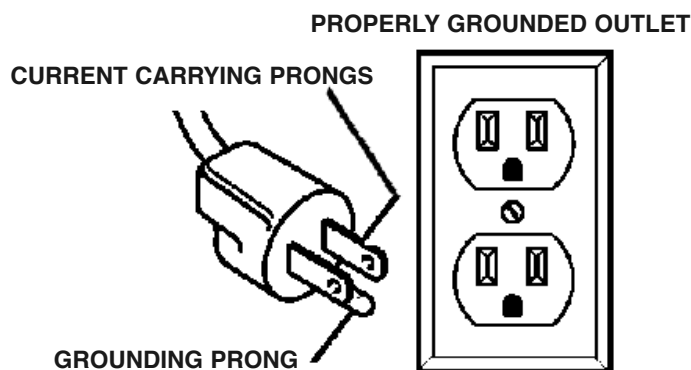


FIGURE 1

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

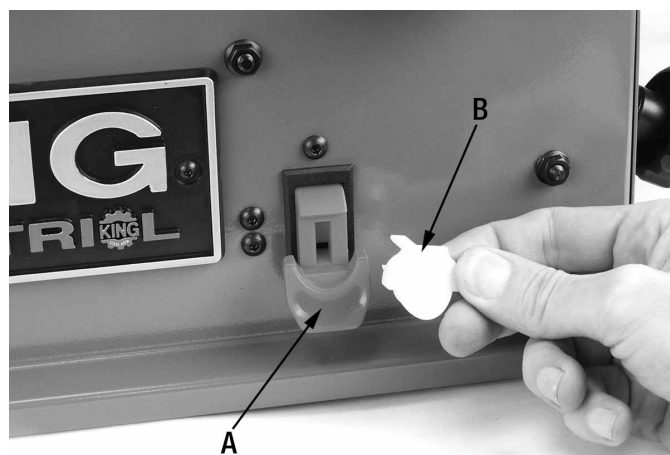


FIGURE 3



ASSEMBLY

WARNING! TO REDUCE THE POTENTIAL FOR PERSONAL INJURY AND/OR DAMAGE TO THE MACHINE, BEFORE ASSEMBLING MAKE SURE THE MACHINE IS TURNED OFF AND THE PLUG IS NOT CONNECTED TO A POWER SOURCE. DO NOT TURN ON OR PLUG IN THE MACHINE UNTIL INSTRUCTED TO DO SO AFTER ALL ASSEMBLY STEPS IN THIS MANUAL HAVE BEEN COMPLETED.

Assembling the fence

- 1) Attach the fence support arm (A) Fig.4 to the rear of the cabinet (B) using 4 round head allen screws (C).
- 2) Fit two round head allen screws through the holes in the fence mounting bracket (A) Fig.5 and loosely thread a square nut (B) onto the end of each round head allen screw.
- 3) Slide the t-slot in the rear of the fence (C) onto the square nuts (B).
- 4) Center the fence (C) on the mounting bracket (A) and secure it by tightening the 2 round head allen screws.
- 5) Sit the fence bracket (A) Fig.6 on the support arm (B). Slip the threaded end of the fence lock handle (C), with flat washer (D), through the bracket and support arm. Thread a square nut (E), flat end up, onto the threaded end of the lock handle and tighten the lock handle to secure the fence assembly to the support arm.

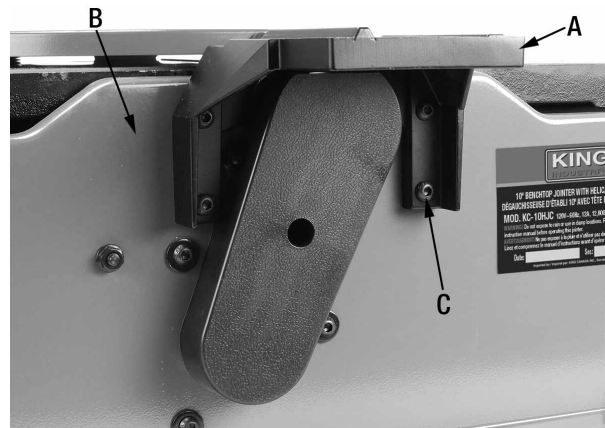


FIGURE 4

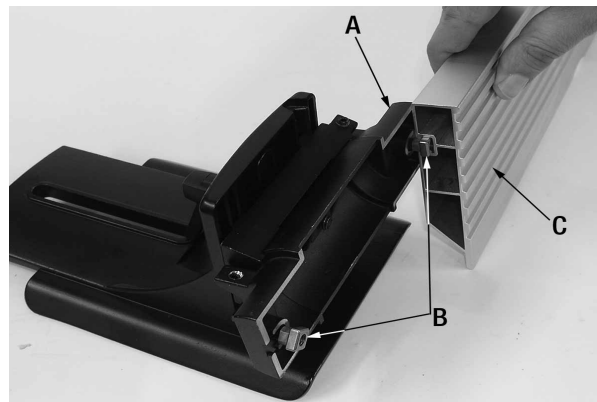


FIGURE 5

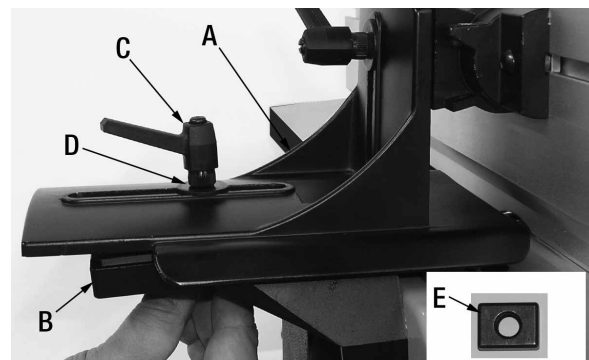


FIGURE 6

Attach the dust chute

- 1) Loosen the four screws (A) Fig.7, position and secure the dust chute assembly (B) to the cabinet under the outfeed table as shown using the same four screws. Insert the 2-1/2" dust port fitting (C) into opening as shown if required.

Note: The 2 1/2" and 4" dust port adaptor allows you to connect the machine to your shop dust collection system (not included). Be sure to use correct size hoses and fittings (not included). If you do not already own a dust collection system, contact your King Canada retailer or visit our website at www.kingcanada.com for information on our complete line of dust collectors and accessories.



FIGURE 7

OPERATION & ADJUSTMENTS



Fence Adjustments - Front to Back

The fence can be moved across the table to expose as much or as little of the cutterhead as needed depending on the width of the workpiece.

- 1) Loosen the fence adjustment lock handle (A) Fig.8 by turning handle counter-clockwise.
- 2) Manually adjust the fence (B) across the table to the desired position.
- 3) Retighten the fence adjustment lock handle (A) by turning handle clockwise. Make sure this is done before jointing the workpiece.



FIGURE 8

Fence Tilt

Most jointing operations are done with the fence in the vertical position, 90° to the table. The fence can also be tilted back as far as 45° when needed.

- 1) Adjust the fence front to back positioning as per the instructions above.
- 2) Loosen the fence tilt lock handle (A) Fig.9 by turning handle counterclockwise.
- 3) Lift the fence (B) slightly above the table and tilt it to the desired position.
- 4) The adjustable positive stop (C) can be used to quickly set the fence to 45°.
- 5) With the fence set to the desired angle, retighten the fence tilt lock handle (A) by turning handle clockwise. Make sure this is done before jointing the workpiece.

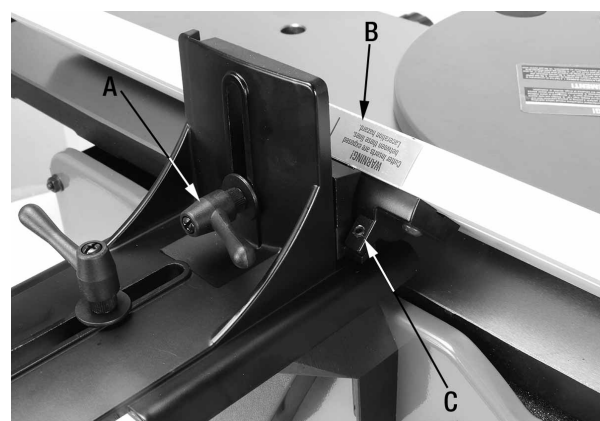


FIGURE 9

ADJUSTING THE FENCE POSITIVE STOPS

90° Positive Stop Adjustment

- 1) With the fence set against the 90° stop (A) Fig.10, place a square (B) against the table and fence as shown. If the fence is not square to the table, a fine-tune adjustment of the 90° stop will be required.
- 2) Loosen the fence tilt lock handle (C).
- 3) Using a square (B) as a guide, manually set the fence (D) square to the table.
- 4) Hold the fence in place and adjust the 90° stop set screw (E) until it touches the fence bracket (F).
- 5) Retighten the fence tilt lock handle once the adjustment has been completed.

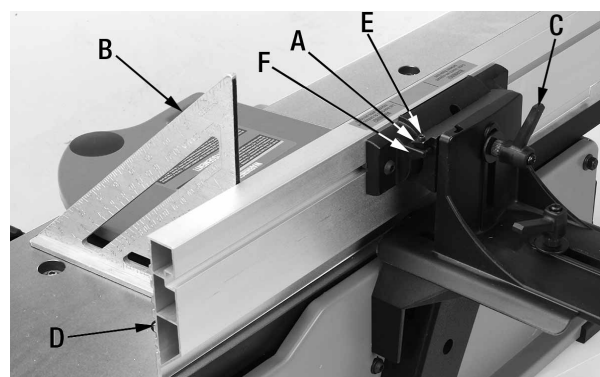


FIGURE 10

45° Positive Stop Adjustment

- 1) With the fence set against the 45° stop (A) Fig.11, place a square (B) against the table and fence as shown. If the fence is not 45° to the table, a fine-tune adjustment of the 45° stop will be required.
- 2) Loosen the fence tilt lock handle (C).
- 3) Using your square as a guide, manually set the fence (D) 45° to the table.
- 4) Hold the fence in place and adjust the 45° stop set screw (E) until it touches the fence bracket (F).
- 5) Retighten the fence tilt lock handle once the adjustment has been completed.

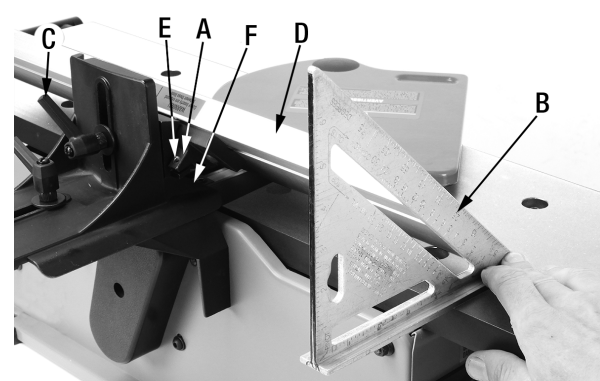


FIGURE 11



OPERATION & ADJUSTMENTS

Infeed Table Height/Depth of Cut Adjustment

Note: The outfeed table is factory-set to the height of the cutterhead inserts and unless it becomes misaligned, it requires no regular adjustments.

The infeed table height is adjustable and can be raised or lowered to set the depth of cut. The depth of cut pointer (A) Fig.12 though not designed for precision measurements, can be used as a reference.

Note: The higher the table in relation to the cutterhead the shallower the cut. The lower the table in relation to the cutterhead the deeper the cut.

To adjust infeed table height:

- 1) Loosen the infeed table lock knob (B) Fig.12.
- 2) Turn the depth of cut adjustment knob (C) in the required direction to raise or lower the table height to the desired approximate depth of cut.
- 3) With infeed table at the correct height for the desired depth of cut retighten the table height lock knob.

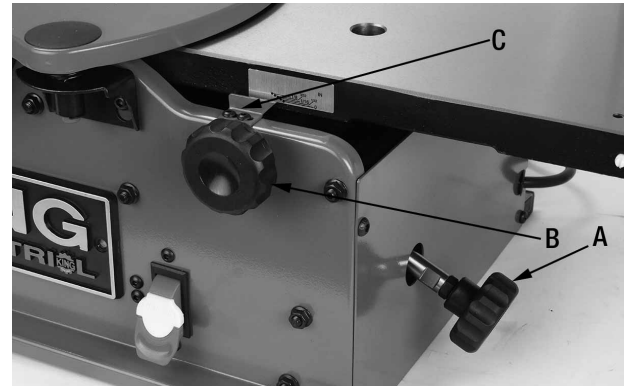


FIGURE 12

Re-set the Depth of Cut Pointer

The depth of cut indicator is designed to provide a non-precision reference. The pointer is factory set to read 0 when the infeed table is at its highest point, level with the top of the cutterhead. To re-set the pointer should it become misaligned:

- 1) Loosen the infeed table lock knob (B) Fig.12 and use the depth of cut adjustment knob (C) to set the infeed table to its highest point, level with the top of the cutterhead.
- 2) Place a straight edge across the tables and cutterhead to validate the infeed table is level with the cutterhead.
- 3) Using a hex. key, loosen the round head allen screws (A) Fig.13 which hold the depth of cut pointer (B) to the cabinet, manually adjust the pointer to read 0 and then retighten the screws (A).

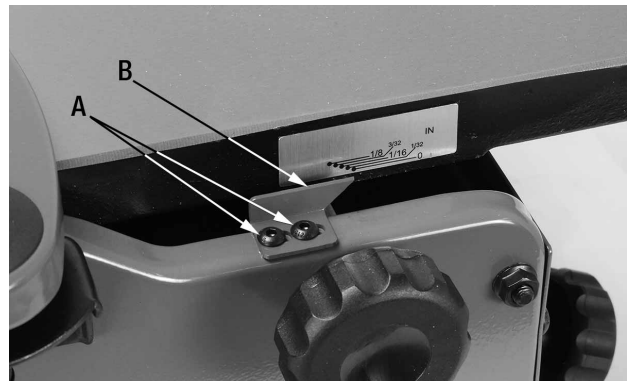


FIGURE 13

Table extensions

The table extensions support long workpieces on the infeed and outfeed side, to adjust:

- 1) Loosen the lock knob (A) Fig.14 at the back of the table and pull out the table extension (B) as far as desired. Retighten lock knob. Repeat for the other end of the table.

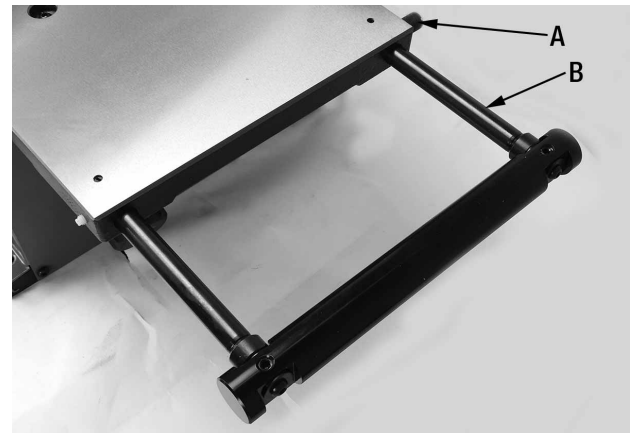


FIGURE 14

Basic Jointing Operations

WARNING! TO REDUCE THE POTENTIAL FOR PERSONAL INJURY AND/OR DAMAGE TO THE MACHINE, VERIFY ALL STEPS IN THE FOLLOWING CHECKLIST BEFORE STARTING JOINTING OPERATIONS

Checklist before beginning jointing operations

- 1) Make sure the cutterhead guard is working properly and snaps firmly back against the fence to cover the cutterhead and inserts.
- 2) Make sure the fence has been set to the desired position and is firmly locked in place.
- 3) Inspect all boards to be jointed for foreign objects, loose knots, or other potential hazards.
- 4) Put on safety glasses and wear hearing and respiratory protection at all times during jointing operations.
- 5) Inspect the power cord, plug, and switch for damage before plugging in and turning on the jointer - DO NOT OPERATE THE JOINTER WITH A DAMAGED POWER CORD, PLUG, OR SWITCH.
- 6) Roll up long sleeves, tie back or secure long hair, and remove all jewelry or any other objects that have the potential to become caught in the cutterhead or other moving parts, potentially causing serious personal injury.

OPERATION & MAINTENANCE



WARNING! TO REDUCE THE POTENTIAL FOR PERSONAL INJURY KEEP HANDS WELL AWAY FROM THE CUTTERHEAD DURING JOINTING OPERATIONS - USE PUSH BLOCKS WHENEVER POSSIBLE.

Face Jointing

- 1) Set the infeed table height for the desired depth of cut. Note: 1/16" to 1/32" is recommended depending on the width of the board.
- 2) Set and lock the fence at 90°.
- 3) To limit cutterhead exposure and reduce the risk of serious injury position and lock the fence over the tables to expose the cutterhead no more than 1/2" wider than the board to be jointed.
- 4) Plug in and turn on the jointer.
- 5) Place the cupped or concave face of your board against the table and tight to the fence, and using the included push blocks guide the board along the table and over the cutterhead.
- 6) Turn off the jointer and inspect the face of the board - repeat the jointing steps as needed until the face is flat.

Edge Jointing

- 1) Set the infeed table height for the desired depth of cut. Note: 1/8" to 1/16" is recommended depending on the width of the board.
- 2) Set and lock the fence at 90°.
- 3) To limit cutterhead exposure and reduce the risk of serious injury position and lock the fence in place over the tables to expose the cutterhead no more than 1/2" wider than the board to be jointed.
- 4) Plug in and turn on the jointer.
- 5) Place the cupped or concave edge of your board against the table and tight to the fence, and guide the board along the table and over the cutterhead.
- 6) Turn off the jointer and inspect the edge of the board, repeat the jointing steps as needed until the edge is flat.

Bevel Jointing

Bevel joining is done similar to edge jointing but with the fence set to a desired angle other than 90° to the table.

MAINTENANCE

WARNING! TO REDUCE THE POTENTIAL FOR PERSONAL INJURY MAKE SURE THE MACHINE IS TURNED OFF AND HAS BEEN UNPLUGGED BEFORE PERFORMING ANY MAINTENANCE OPERATIONS.

Regular Maintenance

To ensure optimum performance and longer service life of your jointer the following basic maintenance steps should be practiced regularly:

- 1) Inspect the power cord and plug for damage before each use. Never operate the jointer with a damaged power cord or plug. To reduce the risk of electric shock, unexpected start-up, and/or damage to the motor, replace a damaged power cord or plug immediately.
- 2) Test the ON/OFF switch before each use. Never operate the jointer with a damaged/ malfunctioning switch. To reduce the risk of electric shock, unexpected start-up, and/or damage to the motor, replace a damaged/malfunctioning switch immediately.
- 3) Keep the jointer and its tables clean and free of debris, sawdust, woodchips, glue. Vacuum or brush off loose debris and wipe down the machine regularly with a damp rag.
- 4) Regularly inspect freshly jointed boards for signs of worn or damaged cutterhead inserts. Replace worn/damaged cutterhead inserts immediately.



MAINTENANCE

WARNING! TO REDUCE THE POTENTIAL FOR PERSONAL INJURY MAKE SURE THE MACHINE IS TURNED OFF AND HAS BEEN UNPLUGGED BEFORE PERFORMING ANY PERIODIC MAINTENANCE OPERATIONS.

Periodic Maintenance as Required

Over time with use and wear some or all of the following periodic maintenance operations may be required:

Replacing/Rotating Cutterhead Inserts

The cutterhead is equipped with 20 cutter inserts with 4 cutting surfaces each. To maintain even wear and smooth jointing results, always rotate or replace all 20 inserts each time replacement is needed.

NOTE: Original King Canada replacement cutter inserts (model KW-104) can be ordered through your local retailer.

- 1) For unobstructed access to the cutterhead, use the supplied hex. key to loosen the round head allen screws (A) Fig.15 that secure the cutterhead guard (B) to the front of the jointer, then remove and set aside the cutterhead guard assembly.
- 2) Use the supplied hex. key (A) Fig.16 to immobilize the cutterhead shaft (B) as shown while removing each of the inserts (C) with the supplied Torx wrench (D).
- 3) Before replacing or rotating the inserts take a moment to clean the screw housing, inserts (if rotating rather than replacing), and screws with a solvent such as lacquer thinner. Cutter inserts get torqued to 48-50 in/lbs (not ft/lbs!).

Note: There is an etched reference mark on each insert to help keep track of which cutting surface to use. Make sure to rotate all inserts so that the reference mark sits in the same position on all inserts.

Belt Replacement

- 1) To replace the drive belt remove the pan head allen screw (A) Fig.18 and remove the belt cover (B).
- 3) Slowly rotate one of the pulleys by hand while pulling outward on the belt to remove it from the pulleys.
- 4) Install a new belt (A) Fig.18 onto the lower pulley first, then stretch part of the belt onto the upper pulley and rotate the pulley by hand to seat the belt fully on the pulleys.
- 5) Re-install the belt cover before plugging in and operating the jointer.

Leveling/Aligning the Tables (parallelogram table adjustment system)

The jointer tables are aligned and leveled at the factory but in some rare cases one or both tables may become misaligned and require adjustment. Each table is equipped with adjustment screws to allow for table leveling and alignment.

NOTE: It is a very difficult adjustment to make. We highly recommend that any parallelogram adjustment to the tables be done by a qualified service technician.



FIGURE 15

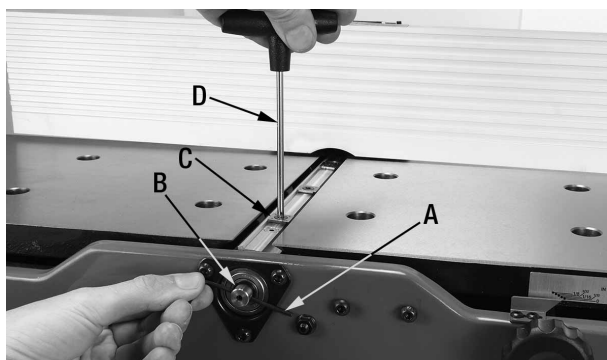


FIGURE 16

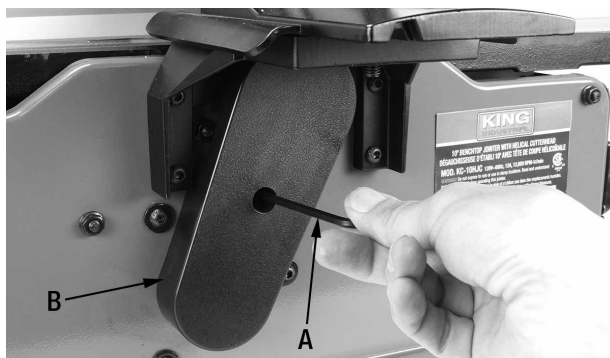


FIGURE 17

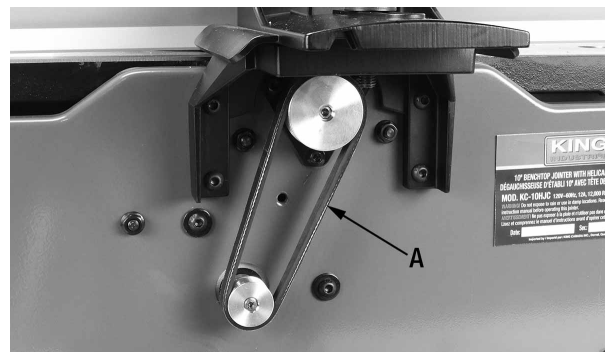


FIGURE 18

PARTS DIAGRAM & PARTS LISTS

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