



KING KING CANADA

10" COMPOUND MITER SAW WITH LASER GUIDE



MODEL: 8324N

INSTRUCTION MANUAL

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WARRANTY INFORMATION



**2-YEAR
LIMITED WARRANTY
10" COMPOUND MITER SAW**

**KING CANADA TOOLS
OFFERS A 2-YEAR LIMITED WARRANTY
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 centers across Canada.

LIMITED TOOL WARRANTY

King Canada makes every effort to ensure that this product meets high quality and durability standards. King Canada warrants to the original retail consumer a 2-year limited warranty as of the date the product was purchased at retail and that each product is free from defects in materials. Warranty does not apply to defects due directly or indirectly to misuse, abuse, normal wear and tear, negligence or accidents, repairs done by an unauthorized service center, alterations and lack of maintenance. King Canada shall in no event be liable for death, injuries to persons or property or for incidental, special or consequential damages arising from the use of our products.

To take advantage of this limited warranty, return the product at your expense together with your dated proof of 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.

PARTS DIAGRAM & PARTS LISTS

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

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

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GENERAL SAFETY INSTRUCTIONS FOR POWER TOOLS

VOLTAGE WARNING: Before connecting the tool to a power source (receptacle, outlet, etc.) be sure the voltage supplied is the same as that specified on the nameplate of the tool. A power source with voltage greater than that for the specified tool can result in **SERIOUS INJURY** to the user - as well as damage to the tool. If in doubt **DO NOT PLUG IN THE TOOL**. Using a power source with voltage less is harmful to the motor.

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. Do not leave tools or pieces of wood on the machine while operating.

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 AND VISITORS AWAY.

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

8. MAKE WORKSHOP CHILD-PROOF.

Use padlocks, master switches or remove starter keys.

9. USE PROPER SPEED.

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

10. USE RIGHT TOOL.

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

11. WEAR PROPER APPAREL.

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

12. ALWAYS WEAR SAFETY GLASSES.

Always wear safety glasses (ANSI Z87.1). Everyday 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.

ADDITIONAL SAFETY INSTRUCTIONS FOR YOUR COMPOUND MITER SAW



1. **WARNING: USE ONLY CROSS-CUTTING SAW BLADES. WHEN USING CARBIDE TIPPED BLADES, DO NOT USE BLADES WITH DEEP GUILLETS AS THEY CAN DEFLECT AND CONTACT GUARD.**
2. **WARNING:** Do not operate the miter saw until it is completely assembled and installed according to the instructions.
3. **IF YOU ARE NOT** thoroughly familiar with the operation of compound miter saws, obtain advice from your supervisor, instructor or other qualified person.
4. **DO NOT** perform any operation freehand. Secure or clamp workpiece firmly against fence.
5. **WARNING:** Keep hands out of path of saw blade. If the workpiece you are cutting would cause your hand to be within 4" of the saw blade, the workpiece should be clamped in place before making cut.
6. **BE SURE** blade is sharp, runs freely and is free of vibration.
7. **ALLOW** the motor to come up to full speed before starting cut.
8. **KEEP** motor air slots clean and free of chips.
9. **ALWAYS MAKE SURE** all clamp handles are tight before cutting even if the table is positioned in one of the positive stops.
10. **BE SURE** blade and flanges are clean and that arbor bolt is tightened securely.
11. **ONLY USE** blade flanges specified for your saw.
12. **NEVER** use blades larger or smaller in diameter than 10".
13. **NEVER** apply lubricants to the blade when it is running.
14. **ALWAYS** check the blade for cracks or damage before operating. Replace cracked or damaged blade immediately.
15. **NEVER** use blades recommended for operation at less than 6000 RPM.
16. **USE** the blade guard at all times.
17. **ALWAYS** keep the lower blade guard in place and operating properly.
18. **NEVER** reach around or behind saw blade.
19. **MAKE SURE** blade is not contacting workpiece before switch is turned on.
20. **NEVER** lock the switch in the "ON" position.
21. **IMPORTANT:** After completing cut, release power switch and wait for coasting blade to stop before returning saw to raised position.
22. **TURN OFF** tool and wait for saw blade to stop before moving workpiece or changing settings.
23. **DO NOT** remove jammed or cut-off pieces until blade has stopped.
24. **NEVER** cut ferrous metals or masonry.
25. **NEVER** re-cut small pieces.
26. **PROVIDE** adequate support to the sides of the saw table for long workpieces.
27. **NEVER** use the miter saw in an area with flammable liquids or gases.
28. **NEVER** use solvents to clean plastic parts. Solvents could possibly dissolve or otherwise damage the material. Only a soft damp cloth should be used to clean plastic parts.
29. **DISCONNECT** power by unplugging tool before changing blade or servicing.
30. **DISCONNECT** saw from power source before leaving it.
31. **MAKE SURE** the work area is cleaned before leaving the machine.



ELECTRICAL INFORMATION & SPECIFICATIONS

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

POWER SUPPLY

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

GROUNDING

This machine must be grounded. If it should malfunction or break-down, grounding provides a path of least resistance for electric current, to reduce the risk of electric shock. This machine 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 machine 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, DO NOT REMOVE OR ALTER THE GROUNDING PRONG IN ANY MANNER.

WARNING: IF NOT PROPERLY GROUNDED, THIS MACHINE 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.

110-120V OPERATION

As received from the factory, your machine is ready to run for 110-120V operation. This machine 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

following table 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 motor. Refer to Fig.2 for wire length and size.

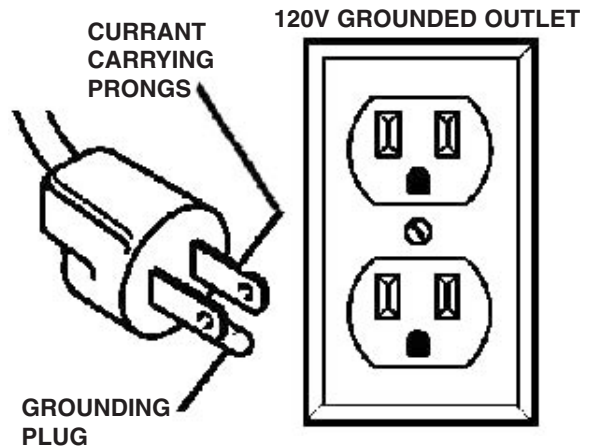


FIGURE 1

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

TOOL SPECIFICATIONS

Model	8324N
Voltage	110V-120V
Input power	15 Amp.
No load speed	4,800 RPM
Blade size.....	10" x 80 teeth
Arbor size	5/8"
Miter table angles	0°, 15°, 22.5°, 30°, 45° left and right
Crosscut 90°.....	2-3/4" x 5-7/8"
Miter 45°.....	2-3/4" x 4-5/16"
Bevel 45°	1-1/2" x 5-7/8"
Compound (Miter & Bevel 45°)	1-1/2" x 4-5/16"

ASSEMBLY



UNPACKING

Due to modern mass production techniques, it is unlikely that your King Canada power tool is faulty or that a part is missing. If you find anything wrong, do not operate the tool until the parts have been replaced or the fault has been rectified. Failure to do so could result in serious personal injury.

1. Remove all loose parts from the carton.
2. Remove the packing materials from around the saw.
3. Carefully lift the saw from the carton and place it on a level work surface.
4. The saw has been shipped with the saw head locked in the down position. To release the saw head, push down on the top of the saw arm, pull then turn the the saw head release knob (A, fig.8).

WARNING: Do not lift the saw while holding on to the guards. Use the top mounted carrying handle.

ASSEMBLY

Your compound miter saw comes almost completely assembled, only the dust bag, table lock knob, rear base support, extension wings and vise must be assembled.

ASSEMBLING DUST BAG

1. Pinch the dust bag clamps (B) Fig.3 and then slide dust bag assembly (A) over dust spout on rear of upper guard assembly, as shown.

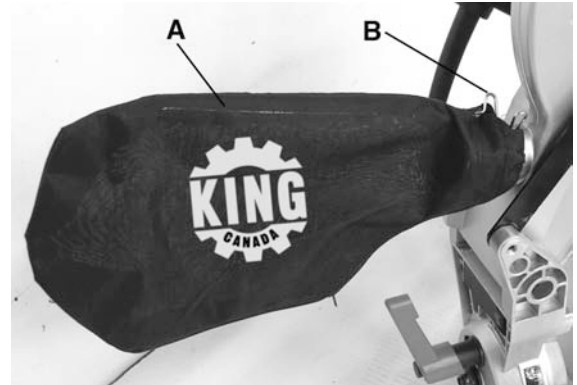


FIGURE 3

ASSEMBLING TABLE LOCK KNOB

1. Assemble the table lock knob (A) Fig.4 to the front support bracket (B).
2. Thread shaft into the opening.
3. Tightening the table lock knob will lock the table into position.

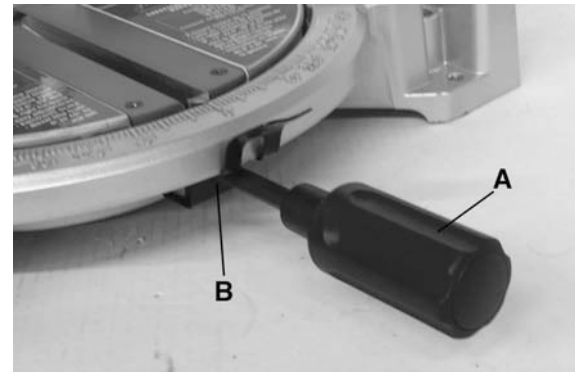


FIGURE 4

REAR BASE SUPPORT ASSEMBLY

The rear base support (A) Fig.5 gets installed by inserting it into the mounting holes at the rear of the base. Push it in completely and secure it into place by tightening the pan head screw (B) under the base.

EXTENSION WING ASSEMBLY

The extension wings (A) Fig.6 are installed by inserting them into the mounting holes on each side of the base. Push them in completely and secure them into place by tightening the top mounted flat head screws (B) on the top of the table on each side of the base.

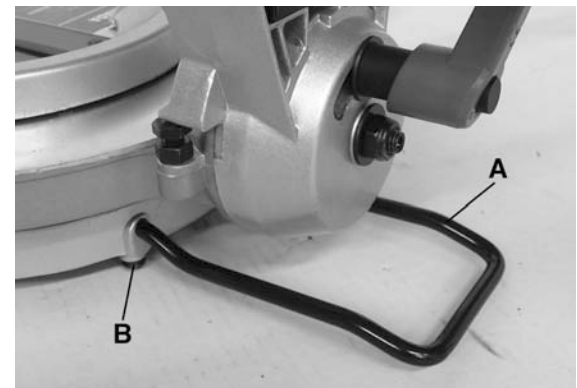


FIGURE 5

WISE ASSEMBLY

The vertical vise assembly (C) Fig. 6 can be installed in two positions, either the left or right side of the fence. Insert the vise rod (C) into the hole in the fence and tighten the vise lock knob (D) on the back to secure the vise rod.

FASTENING COMPOUND MITER SAW TO SUPPORTING SURFACE

Before operating your compound miter saw, make sure it is firmly mounted to a workbench or other supporting surface. Four holes in the base are provided, one of which is shown at (E) Fig.6, for fastening the saw to a supporting surface.

When frequently moving the saw from place to place, we suggest that the saw be mounted to a 1/2" or 3/4" piece of plywood. The saw can then be easily moved and the plywood clamped to the supporting surface using "C" clamps.

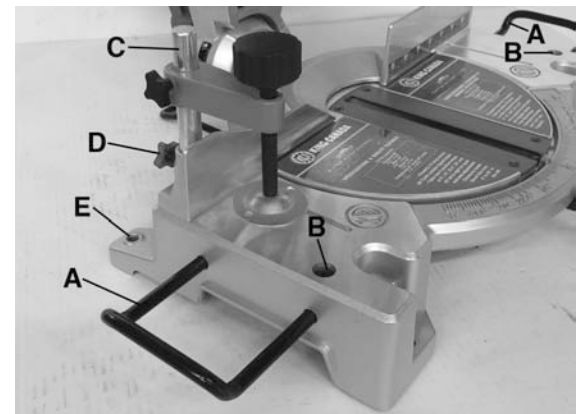


FIGURE 6



OPERATING CONTROLS

STARTING AND STOPPING SAW

To turn the saw "ON" press in the safety button (A) Fig.7 and then pull the large trigger switch (B). To turn the saw "OFF" release trigger switch.

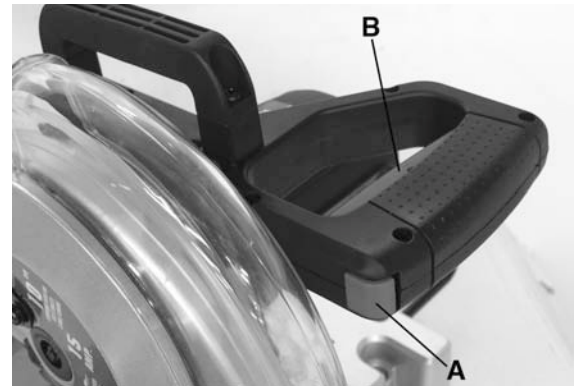


FIGURE 7

LOCKING CUTTING ARM IN THE DOWN POSITION.

When transporting the miter saw, the cutting arm should always be locked in the down position. First fully lower the cutting arm, then pull and turn simultaneously the head lock mechanism (A) Fig.8 until the cotter pin is lined up with the gap and release. It may be necessary to raise the cutting arm until the head lock shaft locks the head into place.

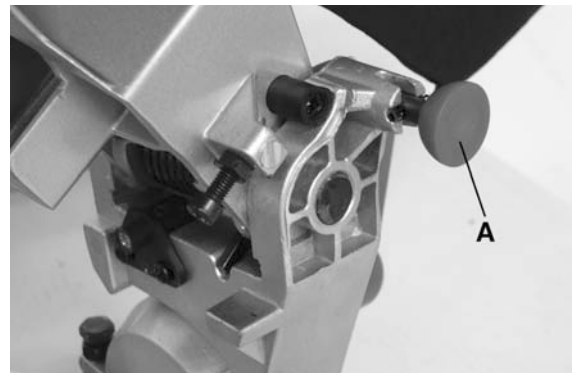


FIGURE 8

ROTATING TABLE FOR MITER CUTTING

Your compound miter saw will cut any miter angle from a straight 90 degree cut-off to 45 degrees right and left. Simply loosen table lock knob (A) Fig.9, press the lock lever (B) down and turn the table using the table lock knob until the pointer arrow (C) aligns with the desired setting on the miter scale (D). Then retighten table lock knob (A). **WARNING: LOCK KNOB (A) MUST BE TIGHTENED FOR ALL CUTTING OPERATIONS.**

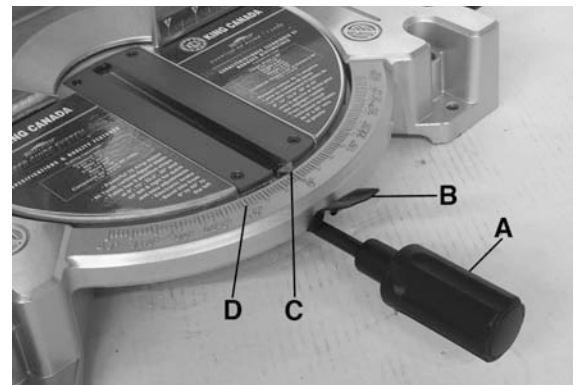


FIGURE 9

Your compound miter saw table contains positive stops at 0, 15, 22-1/2, 30 and 45 degrees right and left positions.

TILTING CUTTING ARM FOR BEVEL CUTTING

Loosen bevel cutting lock knob (A) Fig.10, tilt cutting arm to the desired bevel angle and retighten lock knob (A). **WARNING: LOCK KNOB (A) MUST BE TIGHTENED DURING ALL CUTTING OPERATIONS.**

The bevel angle of the cutting arm is determined by the position of the pointer (B) Fig.10, on the scale (C).

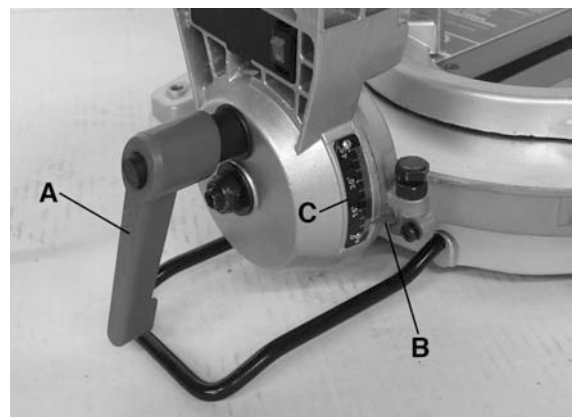


FIGURE 10

ADJUSTMENTS



ADJUSTING FENCE 90 DEGREES TO BLADE

1. **DISCONNECT THE SAW FROM THE POWER SOURCE.**
2. Place the cutting arm in the 90 degree straight cut-off position, as shown in Fig.11, and tighten the table lock knob.
3. Using a square (A) Fig.11, place one end of the square against the blade and the other end against the fence, as shown.
4. Check to see if the fence is 90 degrees to the blade.
5. If an adjustment is necessary, loosen the 3 hex. bolts found at the rear of the fence and adjust until it is 90 degrees to the blade. Then retighten all hex. bolts.



FIGURE 11

ADJUSTING 90 AND 45 DEGREE BEVEL STOPS

These positive stops enable you to rapidly position the blade at the 90 degree and 45 degree bevel positions.

1. **DISCONNECT THE SAW FROM THE POWER SOURCE.**
2. Adjust the cutting arm so that the blade is at 90 degrees to the table, as shown in Fig.12, and tighten the bevel lock handle.
3. Using a square (A) Fig. 12, place one end of the square on the table and the other end against the blade. Check to see if the blade is at 90 degrees to the table.
4. If an adjustment is necessary, loosen bevel lock handle (B) Fig.13, and tilt cutting arm until the blade is 90 degrees to the table. NOTE: It may be necessary to loosen locknut (C) and bolt (D) to accomplish this. Adjust bolt (D) height until it comes in contact with head (E). Retighten hex. nut (C).
5. A bevel angle pointer adjustment may be needed, loosen pointer screw (H) Fig.14 and position pointer (I) Fig.14 to the 0 mark.
6. Tilt the cutting arm all the way to the left position and tighten the bevel lock handle.
7. Using a combination square, check to see if the blade is 45 degrees to the table.
8. If an adjustment is necessary, loosen bevel lock handle (B) Fig. 14, and tilt the cutting arm until the blade is 45 degrees to the table. NOTE: It may be necessary to loosen locknut (E) and hex. bolt (F) to accomplish this. Adjust hex. bolt (F) height until it comes in contact with head (G). Retighten hex. nut (E).

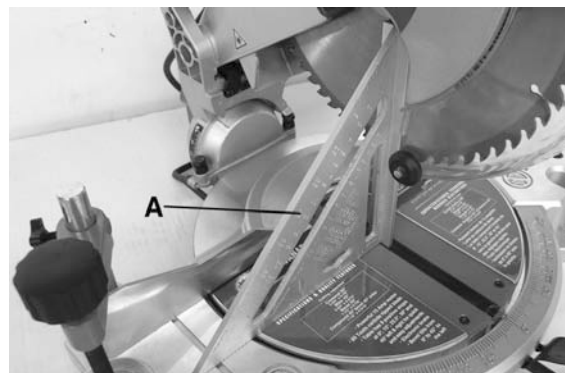


FIGURE 12

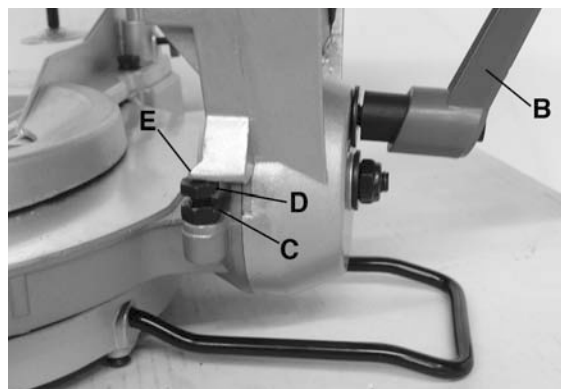


FIGURE 13

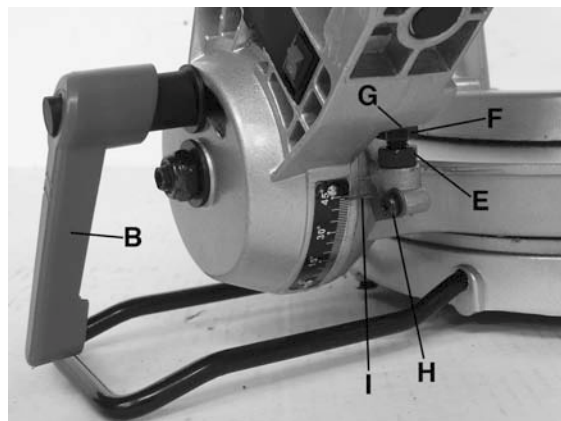


FIGURE 14



ADJUSTMENTS & CHANGING BLADE

LASER GUIDE SYSTEM

Your compound miter saw comes equipped with a laser guide system which allows quick and accurate set-ups and cuts. This laser guide system is battery powered, therefore we suggest that the laser guide be turned off while not in use to save battery life.

USING THE LASER GUIDE SYSTEM

Warning! Do not stare directly into the laser beam.

1. Mark the line of the cut on the workpiece.
2. Adjust the miter and/or bevel angles of the cut as required.
3. Before clamping the workpiece in position using the vertical vise, turn on the laser guide system using the laser switch (A) Fig.15 and align the line of cut on the workpiece with the laser guide.
4. Plug in the machine and start the motor.
5. When the blade is at its maximum speed (approx. 2 sec.) lower the blade through the workpiece.
6. Switch off the laser guide system on completion of the cut.

ADJUSTING LASER GUIDE SYSTEM

If your laser guide does not seem to be aligned with the blade kerf, a small adjustment can be made.

1. Loosen pan head screws (A) Fig.16 under the laser guide.
2. Place a scrap piece of wood on the table and clamp it. Lower blade against the wood piece.
3. Move the laser assembly (B) until the laser beam is aligned with the saw blade (blade kerf) and retighten pan head screws.

CHANGING LASER GUIDE SYSTEM BATTERIES

The laser guide system supplied with your miter saw is battery operated, it requires two AAA (supplied). Only turn on the laser guide system after you have placed and are about to clamp the workpiece on the table. To change the batteries:

1. Open the laser battery cover (B) Fig.15.
2. Replace both AAA batteries.
3. Close the battery cover.

CHANGING BLADE

WARNING: USE ONLY CROSS-CUTTING SAW BLADES. WHEN USING CARBIDE TIPPED BLADES, MAKE SURE THEY HAVE A 0 DEGREE OR A NEGATIVE HOOK ANGLE. DO NOT USE BLADES WITH DEEP GULLETS AS THEY CAN DEFLECT AND CONTACT GUARD. USE ONLY 10" DIAMETER SAW BLADES RATED FOR 6000 RPM OR HIGHER WITH AN 5/8" ARBOR.

1. Make sure that the electrical plug is removed from the main supply socket.
2. Push down on the saw arm and pull and turn on the release knob (A) Fig.8 to disengage the saw arm.
3. Raise the saw arm to its highest position.
4. Remove the pan head screw, collar and washers (A) Fig.17 and swing the pivot arm (B) backwards as to not interfere with the removal and installation of the blade.
5. Pivot blade guard upwards as shown, remove special screws (C & D) Fig.17 which secure the plate under the rotating blade guard. Remove blade guard from saw.

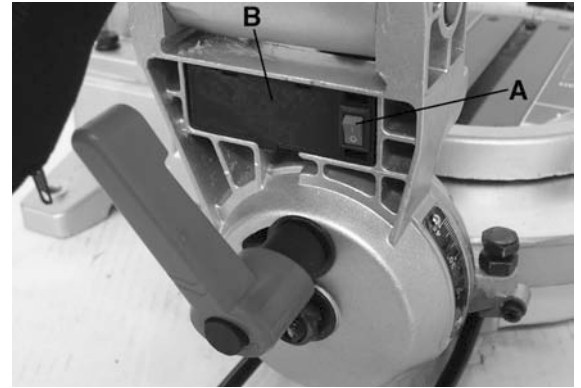


FIGURE 15

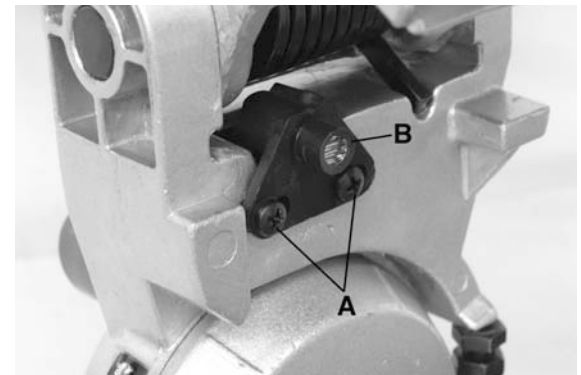


FIGURE 16

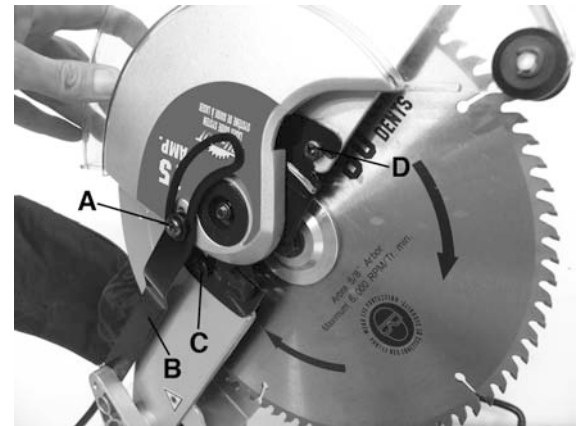


FIGURE 17

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CHANGING BLADE & MAINTENANCE



CHANGING THE BLADE continued...

6. Press the spindle lock button (A) Fig.18 using one hand. Rotate the blade until the spindle locks.
7. Using a 13mm wrench, remove the arbor bolt (A) Fig.19. (Loosen in a clockwise direction as the arbor bolt has a left hand thread).
8. Remove the outer blade flange (B) and the blade (C).
9. Wipe a drop of oil onto the inner blade flange and the outer blade flange removed just previously.
10. Fit the new blade onto the spindle taking care that the inner blade flange (A) Fig.20 sits behind the blade.

CAUTION: Always install the blade with the blade teeth and the arrow printed on the side of the blade pointing downwards. The direction of the blade rotation is also stamped with an arrow on the upper blade guard.

11. Replace the outer blade flange.
12. Depress the spindle lock and replace the arbor bolt.
13. Using a wrench, tighten the blade bolt securely. (Counter-clockwise).
14. Reinstall the blade guard assembly and pivot arm, secure them using the same hardware removed just previously.

MAINTENANCE

To maintain product SAFETY and RELIABILITY, repairs, any other maintenance or adjustment should be performed by your nearest authorized service center. All the ball bearings are sealed and lubricated for life and will require no maintenance.

Cleaning

- After use, wipe off chips and dust adhering to the tool with a cloth or the like.
- Keep the blade guard clean.

BRUSH INSPECTION AND REPLACEMENT

CAUTION: BEFORE INSPECTING THE BRUSHES, DISCONNECT THE MACHINE FROM THE POWER SOURCE.

Brush life varies. It depends on the load on the motor. Check the brushes after the first 50 hours of use for a new machine or after a new set of brushes has been installed.

After the first check, examine them after about 10 hours of use until such time that replacement is necessary.

The brush holders are located on the motor housing opposite each other. Fig.21 illustrates one of the brushes removed for inspection. When the carbon on either brush is worn to 3/16" in length or if either spring or shunt wire is burned or damaged in any way, replace both brushes.

To remove brush, undo brush cap (A) Fig.21 with flat head screwdriver. Remove carbon brush (B) from brush holder (C). If the brushes are found serviceable after removing, reinstall them in the same position as removed. If a brush needs replacement, replace both brushes.



FIGURE 18

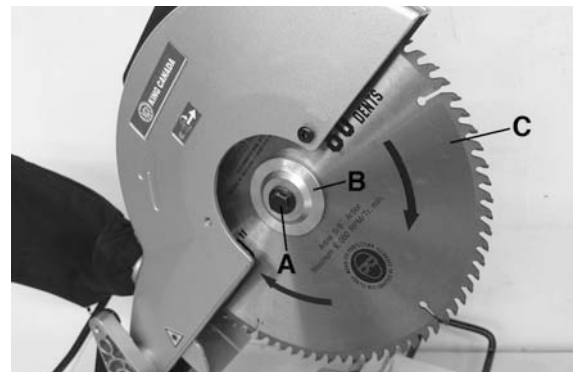


FIGURE 19



FIGURE 20



FIGURE 21