

# 8 1/4" Compound Miter Saw (Model 36-040)



PART NO. 899852 (012)  
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**ESPAÑOL: PÁGINA 17**

# SAFETY RULES

Woodworking can be dangerous if safe and proper operating procedures are not followed. As with all machinery, there are certain hazards involved with the operation of the product. Using the machine with respect and caution will considerably lessen the possibility of personal injury. However, if normal safety precautions are overlooked or ignored, personal injury to the operator may result. Safety equipment such as guards, push sticks, hold-downs, featherboards, goggles, dust masks and hearing protection can reduce your potential for injury. But even the best guard won't make up for poor judgment, carelessness or inattention. Always use common sense and exercise caution in the workshop. If a procedure feels dangerous, don't try it. Figure out an alternative procedure that feels safer. **REMEMBER:** Your personal safety is your responsibility.

This machine was designed for certain applications only. Delta Machinery strongly recommends that this machine not be modified and/or used for any application other than that for which it was designed. If you have any questions relative to a particular application, **DO NOT** use the machine until you have first contacted Delta to determine if it can or should be performed on the product.

**Technical Service Manager  
Delta Machinery  
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## **WARNING: FAILURE TO FOLLOW THESE RULES MAY RESULT IN SERIOUS PERSONAL INJURY**

**1. FOR YOUR OWN SAFETY, READ INSTRUCTION MANUAL BEFORE OPERATING THE TOOL.** Learn the tool's application and limitations as well as the specific hazards peculiar to it.

**2. KEEP GUARDS IN PLACE** and in working order.

**3. ALWAYS WEAR EYE PROTECTION.**

**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.

**6. DON'T USE IN DANGEROUS ENVIRONMENT.** Don't use power tools in damp or wet locations, or expose them to rain. Keep work area well-lighted.

**7. KEEP CHILDREN AND VISITORS AWAY.** All children and visitors should be kept a safe distance from work area.

**8. MAKE WORKSHOP CHILDPROOF** – with padlocks, master switches, or by removing starter keys.

**9. DON'T FORCE TOOL.** It will do the job better and be safer at the rate for which it was designed.

**10. USE RIGHT TOOL.** Don't force tool or attachment to do a job for which it was not designed.

**11. WEAR PROPER APPAREL.** No loose clothing, gloves, neckties, rings, bracelets, or other jewelry to get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair.

**12. ALWAYS USE SAFETY GLASSES.** Wear safety glasses. Everyday eyeglasses only have impact resistant lenses; they are not safety glasses. Also use face or dust mask if cutting operation is dusty. These safety glasses must conform to ANSI Z87.1 requirements. Note: Approved glasses have Z87 printed or stamped on them.

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

**14. DON'T OVERREACH.** Keep proper footing and balance at all times.

**15. MAINTAIN TOOLS IN TOP CONDITION.** Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.

**16. DISCONNECT TOOLS** before servicing and when changing accessories such as blades, bits, cutters, etc.

**17. USE RECOMMENDED ACCESSORIES.** The use of accessories and attachments not recommended by Delta may cause hazards or risk of injury to persons.

**18. REDUCE THE RISK OF UNINTENTIONAL STARTING.** Make sure switch is in "OFF" position before plugging in power cord.

**19. NEVER STAND ON TOOL.** Serious injury could occur if the tool is tipped or if the cutting tool is accidentally contacted.

**20. CHECK DAMAGED PARTS.** Before further use of the tool, a guard or other part that is damaged should be carefully checked to ensure that it will operate properly and perform its intended function – check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.

**21. DIRECTION OF FEED.** Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.

**22. NEVER LEAVE TOOL RUNNING UNATTENDED. TURN POWER OFF.** Don't leave tool until it comes to a complete stop.

**23. DRUGS, ALCOHOL, MEDICATION.** Do not operate tool while under the influence of drugs, alcohol or any medication.

**24. MAKE SURE TOOL IS DISCONNECTED FROM POWER SUPPLY** while motor is being mounted, connected or re-connected.

**25. THE DUST GENERATED** by certain woods and wood products can be injurious to your health. Always operate machinery in well ventilated areas and provide for proper dust removal. Use wood dust collection systems whenever possible.

**26. ⚠️ WARNING: SOME DUST CREATED BY POWER SANDING, SAWING, GRINDING, DRILLING, AND OTHER CONSTRUCTION ACTIVITIES** contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- lead from lead-based paints,
- crystalline silica from bricks and cement and other masonry products, and
- arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

**SAVE THESE INSTRUCTIONS**

# ADDITIONAL SAFETY RULES FOR MITER SAWS

1. **USE ONLY CROSS-CUTTING SAW BLADES. WHEN USING CARBIDE TIPPED BLADES, DO NOT USE BLADES WITH DEEP GULLETS AS THEY CAN DEFLECT AND CONTACT GUARD.**
2. **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. **KEEP HANDS OUT OF PATH** of saw blade. If the workpiece you are cutting would cause your hand to be within hazard zone 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 screw is tightened securely.
11. **USE** only blade flanges supplied for your saw.
12. **NEVER** use blades larger or smaller in diameter than 8-1/4" inches.
13. **NEVER** apply lubricants to the blade when it is running.
14. **ALWAYS** check the blade for cracks or damage before operation. Replace cracked or damaged blade immediately.
15. **NEVER** use blades recommended for operation at less than 6000 RPM.
16. **DO NOT** operate the saw without guards in place.
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. **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** recut 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 before changing blades or servicing.
30. **DISCONNECT** saw from power source and clean the machine before leaving it.
31. **MAKE SURE** the work area is cleaned before leaving the machine.
32. **THE USE** of attachments and accessories not recommended by Delta may result in the risk of injuries.
33. **SHOULD** any part of your miter saw be missing, damaged or fail in any way, or any electrical component fail to perform properly, shut off switch and remove plug from power supply outlet. Replace missing, damaged or failed parts before resuming operation.
34. **ADDITIONAL INFORMATION** regarding the safe and proper operation of this product is available from the National Safety Council, 1121 Spring Lake Drive, Itasca, IL 60143-3201, in the Accident Prevention Manual for Industrial Operation and also in the Safety Data Sheets provided by the NSC. Please also refer to the American National Standard Institute ANSI O1.1 Safety Requirements for Woodworking Machinery and the U.S. Department of Labor OSHA 1910.213 Regulations.
35. **SAVE THESE INSTRUCTIONS.** Refer to them often and use them to instruct others.

# UNPACKING

Your new Miter Saw is shipped complete in one container. Carefully unpack the saw and all loose items from the shipping container. Fig. 2, illustrates the contents of the container:

- A - Miter Saw
- B - Lower Guard Assembly
- C - Dust Bag
- \* - Extra Switch Lock Key (Not Shown)

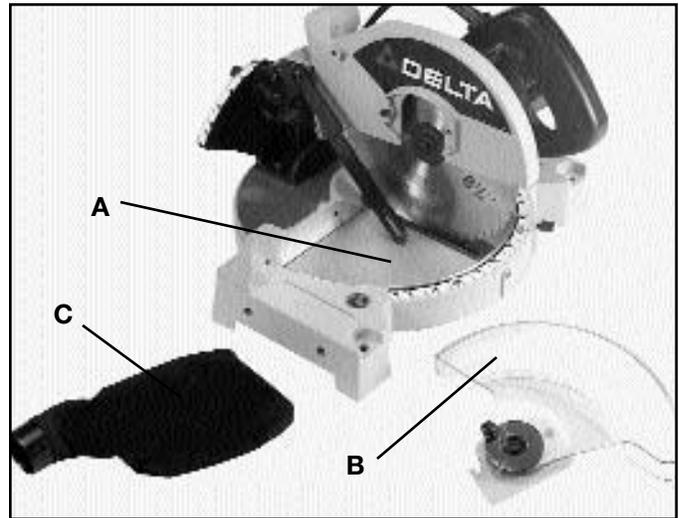


Fig. 2

## ASSEMBLY INSTRUCTIONS

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

### MOVING CUTTING ARM TO THE UP POSITION

1. Pull pin (A) Fig. 3, to the out position releasing the cutting arm (B) and allow cutting arm (B) to move to the up position, as shown in Fig. 4.

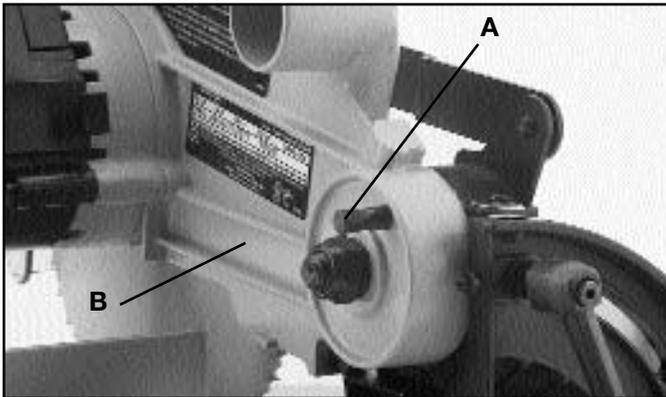


Fig. 3

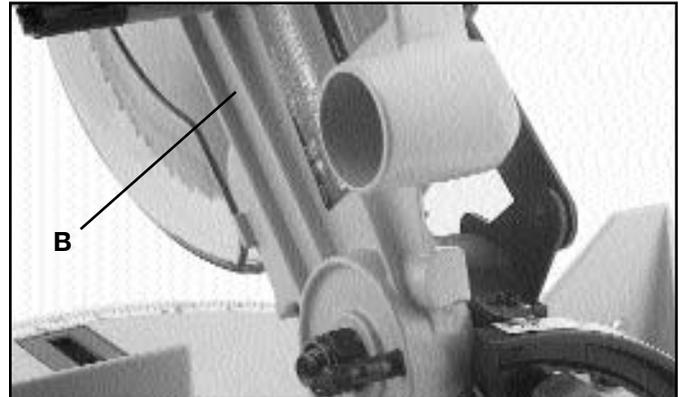


Fig. 4

### ASSEMBLING LOWER BLADE GUARD

1. Hook one end of guard lifting lever (A) Fig. 5, on stud (B), as shown.
2. Loosen screw (D) Fig. 6, and remove screw (C)

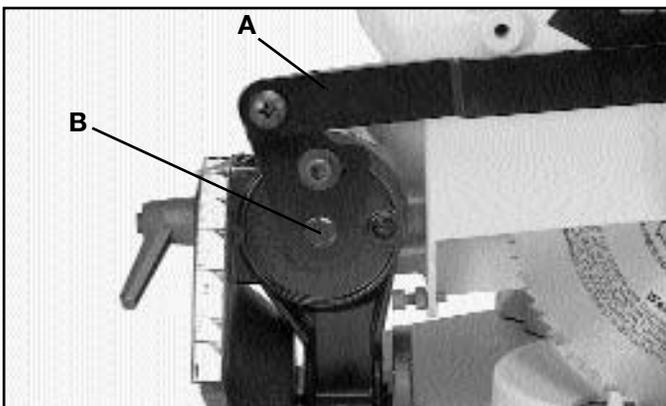


Fig. 5

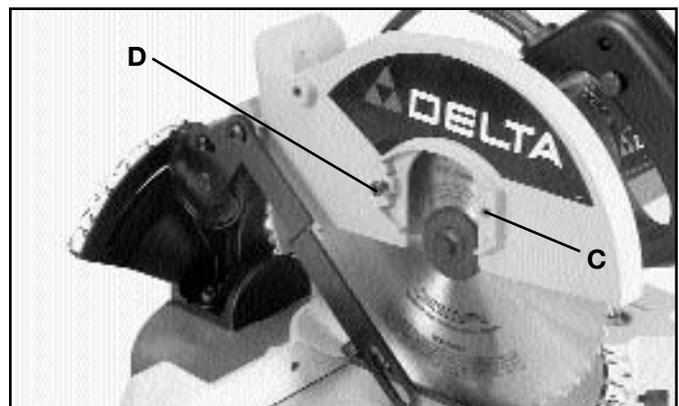


Fig. 6

3. Slide slotted end (E) Fig. 7, of lower guard mounting bracket under screw head (D). Make sure screw and spacer (K) is engaged with slot (L) in guard lifting lever and rotate lower guard mounting bracket (F) until hole (G) in bracket lines up with threaded hole (H) in upper guard.

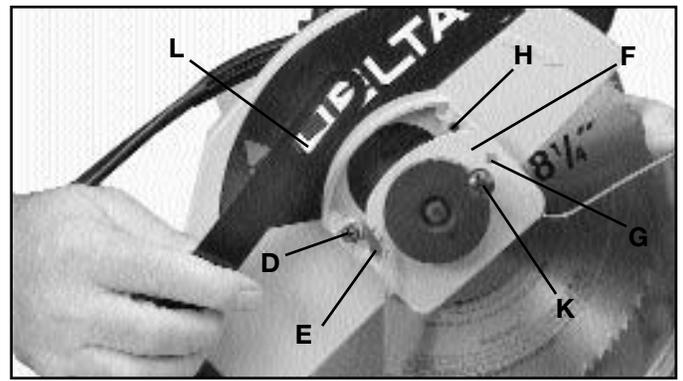


Fig. 7

4. Replace screw (C) Fig. 8, that was removed in **STEP 2**. Tighten screw (D) and screw (C).

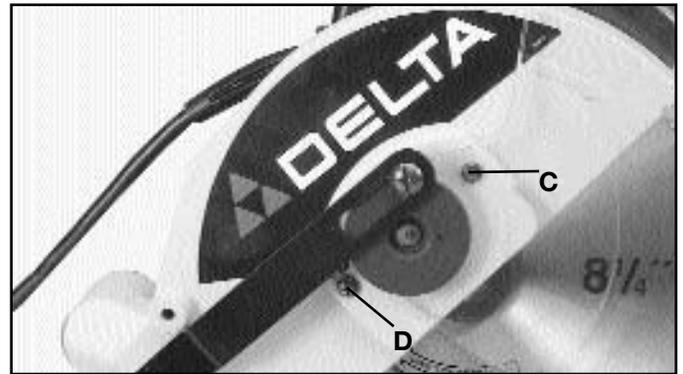


Fig. 8

## ASSEMBLING DUST BAG

Assemble dust bag assembly (A) Fig. 9, to dust spout (B) on rear of upper guard assembly, as shown.

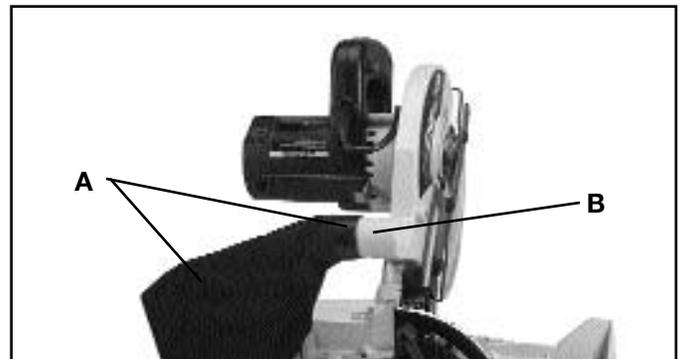


Fig. 9

## FASTENING COMPOUND MITER SAW TO SUPPORTING SURFACE

**CAUTION:** Before operating your compound miter saw, make sure it is firmly mounted to a sturdy work bench or other supporting surface. Four holes are provided, two of which are shown at (A) Fig. 10, 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.

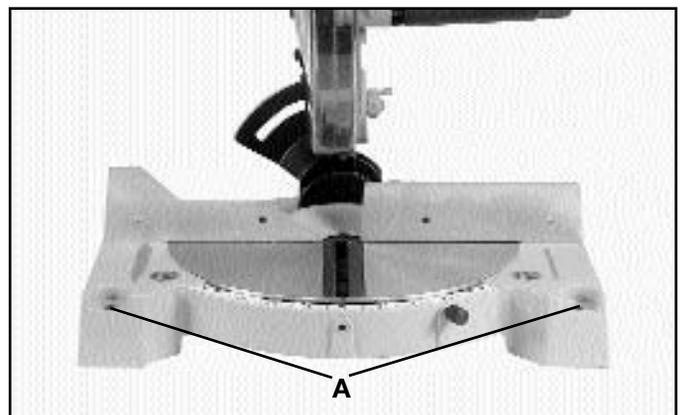


Fig. 10

# **CONNECTING SAW TO POWER SOURCE**

## **POWER CONNECTIONS**

A separate electrical circuit should be used for your tools. This circuit should not be less than #12 wire and should be protected with a 20 Amp time lag fuse. Before connecting the motor to the power line, make sure the switch is in the "OFF" position and be sure that the electric current is of the same characteristics as indicated on the tool. All line connections should make good contact. Running on low voltage will damage the motor.

## **MOTOR SPECIFICATIONS**

Your miter saw is wired for 110-120 volt, 60 HZ alternating current. Before connecting the miter saw to the power source, make sure the switch is in the "OFF" position. The motor provides a no-load speed of 5200 RPM.

## **DOUBLE-INSULATED TOOLS**

### **REPLACEMENT PARTS**

When servicing, use only identical replacement parts.

### **POLARIZED PLUGS**

To reduce the risk of electric shock, this equipment has a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install the proper outlet. Do not change the plug in any way.

# EXTENSION CORDS

Use proper extension cords. 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 of the saw. An undersized cord will cause a drop in line voltage, resulting in loss of power and overheating. Fig. 11B, shows the correct gauge to use depending on the cord length. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.

| <b>MINIMUM GAUGE EXTENSION CORD</b>                      |              |                                      |                                |
|--|--------------|--------------------------------------|--------------------------------|
| RECOMMENDED SIZES FOR USE WITH STATIONARY ELECTRIC TOOLS |              |                                      |                                |
| <b>Ampere Rating</b>                                     | <b>Volts</b> | <b>Total Length of Cord in Feet</b>  | <b>Gauge of Extension Cord</b> |
| 0-6  | 120          | up to 25                             | 18 AWG                         |
| 0-6  | 120          | 25-50                                | 16 AWG                         |
| 0-6  | 120          | 50-100                               | 16 AWG                         |
| 0-6  | 120          | 100-150                              | 14 AWG                         |
| 6-10   | 120          | up to 25                             | 18 AWG                         |
| 6-10   | 120          | 25-50                                | 16 AWG                         |
| 6-10   | 120          | 50-100                               | 14 AWG                         |
| 6-10   | 120          | 100-150                              | 12 AWG                         |
| 10-12  | 120          | up to 25                             | 16 AWG                         |
| 10-12  | 120          | 25-50                                | 16 AWG                         |
| 10-12  | 120          | 50-100                               | 14 AWG                         |
| 10-12  | 120          | 100-150                              | 12 AWG                         |
| 12-16  | 120          | up to 25                             | 14 AWG                         |
| 12-16  | 120          | 25-50                                | 12 AWG                         |
| 12-16  | 120          | GREATER THAN 50 FEET NOT RECOMMENDED |                                |

Fig. 11B

# OPERATING INSTRUCTIONS

## FOREWORD

Delta Model 36-040 is a 8<sup>1</sup>/<sub>44</sub>" compound miter saw designed to cut wood. Compound angle and bevel cutting is easy and accurate. It can crosscut up to 2<sup>1</sup>/<sub>48</sub>" x 5<sup>1</sup>/<sub>48</sub>", miter at 45° both left and right 2<sup>1</sup>/<sub>48</sub>" x 3<sup>1</sup>/<sub>42</sub>", bevel at 45° left 1<sup>1</sup>/<sub>42</sub>" x 5<sup>1</sup>/<sub>48</sub>", and compound 45° x 45°, 1<sup>1</sup>/<sub>42</sub>" x 3<sup>1</sup>/<sub>42</sub>". It has positive miter ball detent stops at 0, 15, 22.5, 30, and 45 degrees both left and right, and bevel stops at 0 and 45 degrees left.

## UNPACKING AND CLEANING

Carefully unpack the tool and all loose items from the shipping container(s). Remove the protective coating from all unpainted surfaces. This coating may be removed with a soft cloth moistened with kerosene (do not use acetone, gasoline or lacquer thinner for this purpose). After cleaning, cover the unpainted surfaces with a good quality paste wax.

## OPERATING CONTROLS

### STARTING AND STOPPING SAW

**IMPORTANT:** Before starting the saw, lower the cutting arm and make certain the saw blade does not come in contact with the front edge or rear edge of the table insert on its full downward travel. The downward travel of the cutting arm has been set at the factory; however, sometimes due to rough handling during shipment or extended use, a minor adjustment to the setting may become necessary. If the saw blade contacts the table insert, refer to section “**ADJUSTING DOWNWARD TRAVEL OF SAW BLADE.**”

To turn the saw “ON” push in on switch lock key (A) Fig. 12, and depress switch trigger (B). To turn the saw “OFF” release switch trigger (B).

### LOCKING SWITCH IN THE “OFF” POSITION

**IMPORTANT:** When the saw is not in use, the switch must be locked in the “OFF” position.

**⚠ WARNING: MAKE CERTAIN THE MACHINE IS DISCONNECTED FROM THE POWER SOURCE BEFORE REMOVING AND REASSEMBLING SWITCH LOCK KEY.**

To lock the switch (B) Fig. 12, in the “OFF” position, pull or gently pry out and remove switch lock key (A) from saw handle.

To activate the switch (B) Fig. 12, insert switch lock key (A) firmly back into handle.

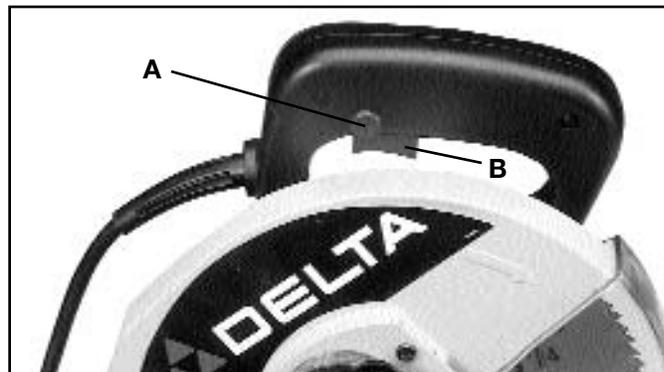


Fig. 12

### 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. 13, and using the switch handle as a grip, rotate the cutting arm until the pointer (B) aligns with the desired setting on the miter scale (C). Then tighten table lock knob (A).

**⚠ WARNING: LOCK KNOB (A) MUST BE TIGHTENED FOR ALL CUTTING OPERATIONS.**

Your compound miter saw contains positive stops for the table at the 0, 22-1/2, 30 and 45 degree right and left positions. Two triangle indicators (D) Fig. 14, are also provided to rapidly set the table at the 31-5/8 degree right and left miter angle for cutting crown moulding, as explained later in this manual.

### TILTING CUTTING ARM FOR BEVEL CUTTING

Loosen bevel cutting lock handle (A) Fig. 15, tilt cutting arm to the desired bevel angle and tighten lock handle (A). **NOTE:** Lock handle (A) is spring-loaded and can be re-positioned by pulling out on the handle and repositioning it on the serrated stud located underneath the handle.

**⚠ WARNING: LOCK HANDLE (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. 15, on the large scale (C). A triangle indicator (D) is provided to rapidly position the cutting arm at the 33-7/8 degree left bevel angle which is used for cutting crown moulding, as explained later in this manual.

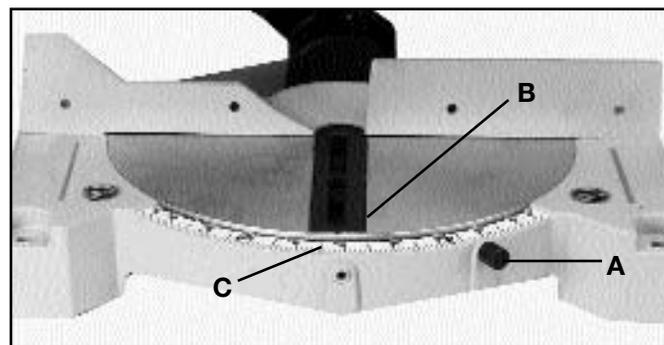


Fig. 13

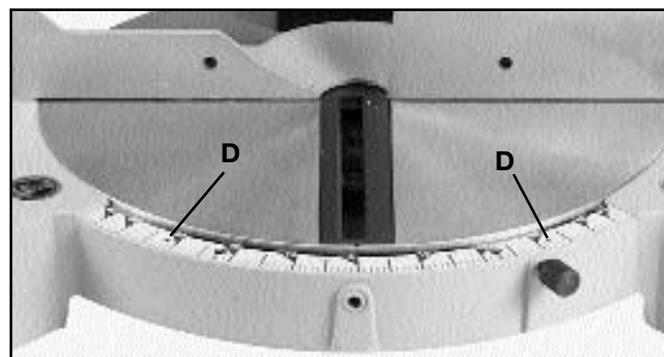


Fig. 14

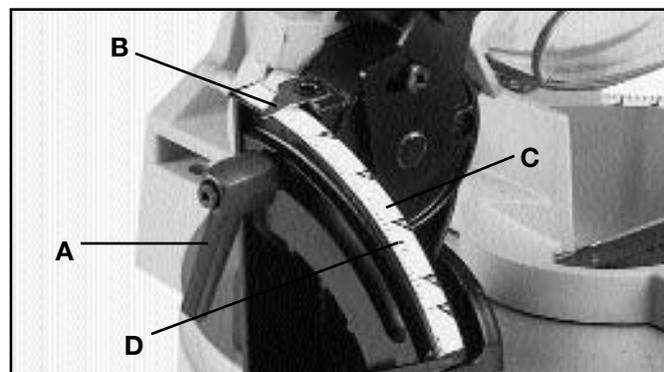


Fig. 15

## LOCKING CUTTING ARM IN THE DOWN POSITION

When transporting the miter saw, the cutting arm should always be locked in the down position. This can be accomplished by lowering the cutting arm and pushing in on arm locking pin (A) Fig. 16.

## ADJUSTMENTS

### ADJUSTING DOWNWARD TRAVEL OF SAW BLADE ARM

Lower the saw blade arm as far as it will go and check to see if the saw blade comes in contact with the table insert. If the saw blade (A) Fig. 17, contacts the front edge or the rear edge of table insert (B) on its downward travel, proceed with the following adjustment.

1. **MAKE CERTAIN THE MACHINE IS DISCONNECTED FROM THE POWER SOURCE.**
2. Loosen lock nut (C) Fig. 18, and turn adjustment knob (D) right or left.
3. Lower the saw blade arm and check the adjustment.  
**NOTE:** There should be a slight clearance between the saw blade (A) Fig. 17, and table insert (B) as shown. Repeat **STEP 2**, if necessary.
4. Tighten lock nut (C) Fig 18, after adjustment is made.

### ADJUSTING FENCE 90 DEGREES TO BLADE

1. **DISCONNECT THE MACHINE FROM THE POWER SOURCE.**
2. Place the cutting arm in the 90 degree straight cut-off position, as shown in Fig. 19, and tighten the table lock knob (A).
3. Lower the saw blade, as shown in Fig. 19.
4. Using a square (B) Fig. 19, place one end of the square against the fence and the other end against the blade, as shown.
5. Check to see if the blade is at 90 degrees to the fence.
6. If an adjustment is necessary, loosen the two screws (C) Fig. 20, and adjust the fence until it is 90 degrees to the blade. Then tighten two screws (C).

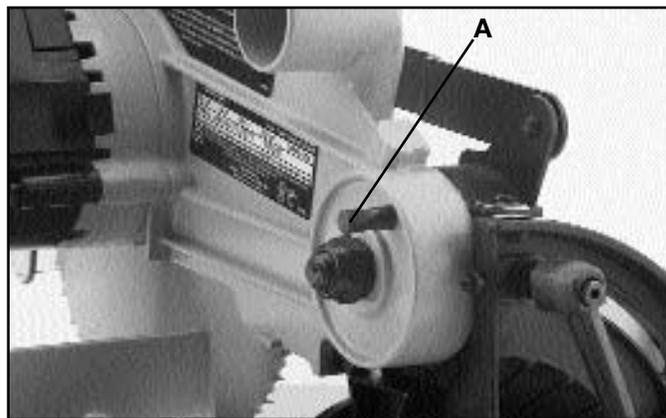


Fig. 16

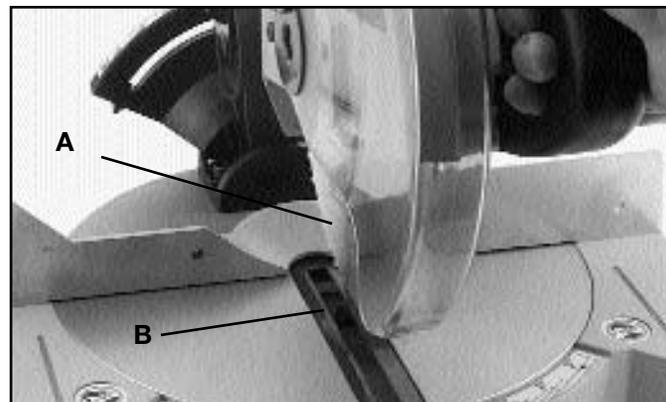


Fig. 17

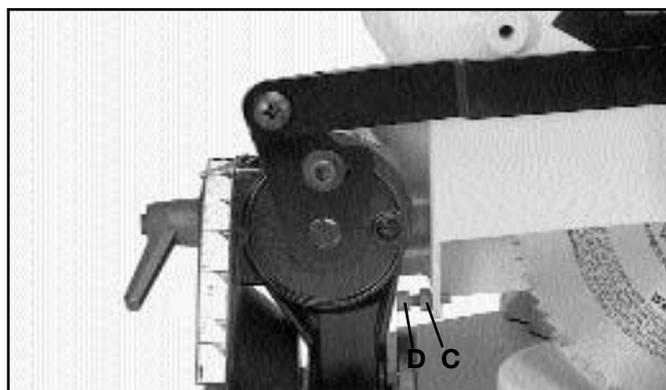


Fig. 18

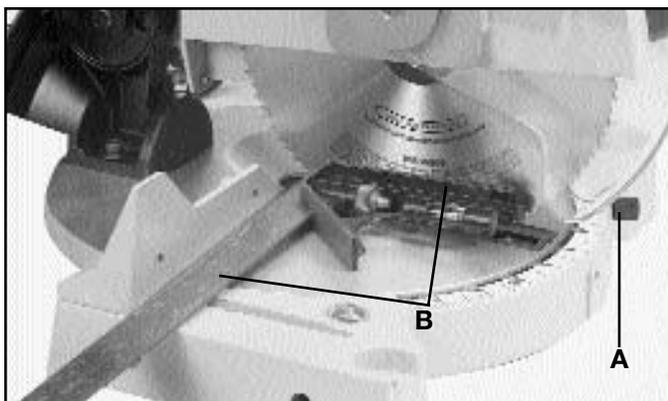


Fig. 19

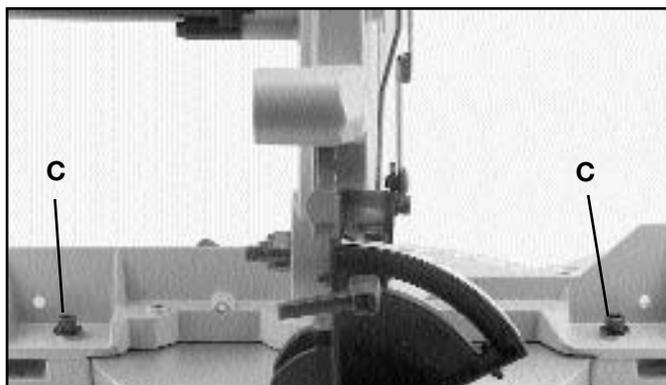


Fig. 20

## ADJUSTING 90 AND 45 DEGREE BEVEL STOPS

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

2. Move the cutting arm to the 90 degree bevel stop position, as shown in Fig. 21, and tighten the bevel lock handle.

3. Using a square (A) Fig. 21, 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, as shown.

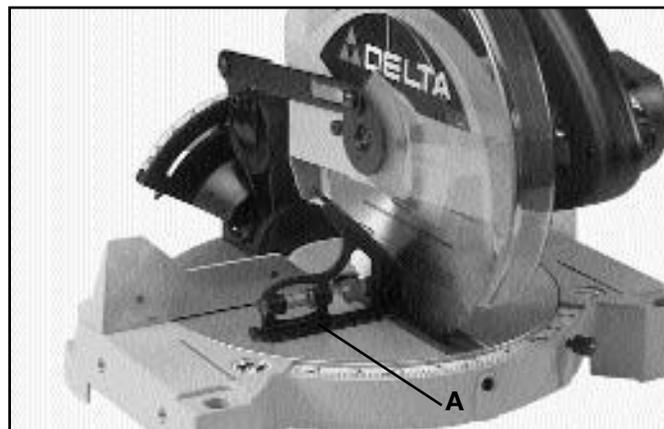


Fig. 21

4. If an adjustment is necessary, loosen bevel lock handle (B) Fig. 22, and tilt cutting arm until the blade is at 90 degrees to the table. **NOTE:** It may be necessary to loosen locknut (C) and set screw (D) to accomplish this. Then tighten bevel lock handle (B).

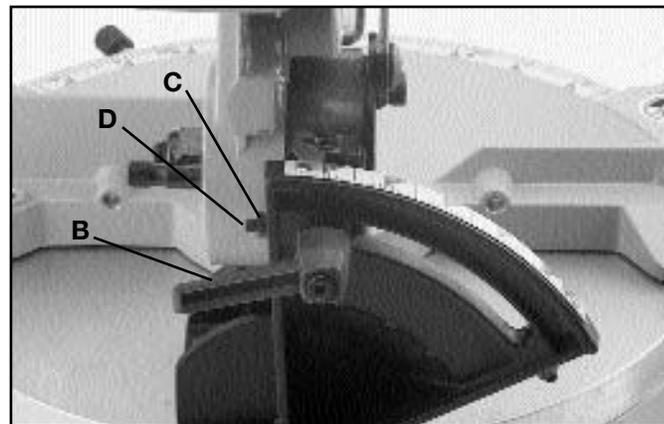


Fig. 22

5. Loosen nut (C) Fig. 22, and tighten set screw (D) until it bottoms. Then tighten locknut (C).

6. Tilt the cutting arm all the way to the left miter position and tighten the bevel lock handle.

7. Using a combination square (A) Fig. 23, check to see if the blade is at 45 degrees to the table, as shown.

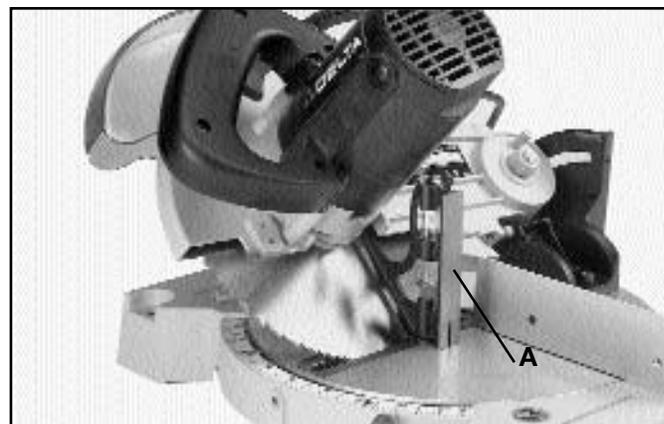


Fig. 23

8. If an adjustment is necessary, loosen bevel lock handle (B) Fig. 24, and tilt the cutting arm until the blade is at 45 degrees to the table. **NOTE:** It may be necessary to loosen locknut (E) and set screw (F) to accomplish this. Then tighten bevel lock handle (B).

9. Loosen locknut (E) Fig. 24, and tighten set screw (F) until it bottoms. Then tighten locknut (E).

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

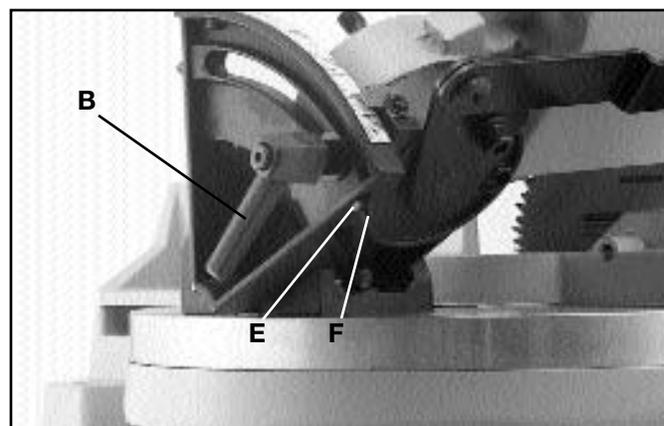


Fig. 24

## ADJUSTING SPRING PRESSURE OF TABLE POSITIVE STOP

The rotating table has positive stops at the 90 degree straight cut-off position and 22-1/2, 30 and 45 degree right and left miter positions. To adjust the spring pressure of the positive stops, tighten or loosen screw (A) Fig. 25. **NOTE:** Do not tighten screw (A) to the point where it becomes difficult to rotate the table.

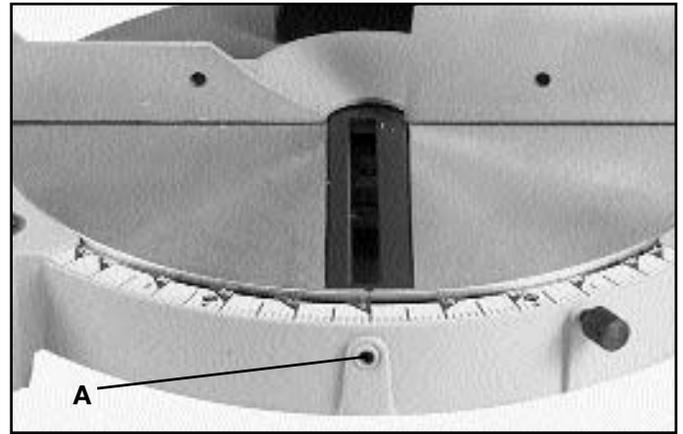


Fig. 25

## OPERATING HINTS

1. Before cutting, make certain the miter and bevel angles are set and firmly locked in place.
2. Before cutting, determine that the workpiece is the right size for the saw.
3. Place the workpiece on the table and hold it firmly against the fence.
4. For best results, cut at a slow, even cutting rate.
5.  **WARNING:** Keep hands out of path of saw blade. If the workpiece you are cutting would cause your hand to be within hazard zone of the saw blade, the workpiece should be clamped in place before making cut.
6. Never attempt any freehand cutting (wood that is not held firmly against the fence and table).

# MAINTENANCE

## CHANGING THE BLADE

**⚠ WARNING: USE ONLY CROSS-CUTTING SAW BLADES. WHEN USING CARBIDE TIPPED BLADES, DO NOT USE BLADES WITH DEEP GULLETS AS THEY CAN DEFLECT AND CONTACT GUARD. USE ONLY 8-1/4" DIAMETER SAW BLADES RATED FOR 6000 RPM OR HIGHER WITH 5/8" ARBOR HOLES.**

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

2. Loosen screws (B) and (C) Fig. 28, and rotate lower blade guard assembly to the up position.

3. Press in on arbor lock (D) Fig. 29, to keep the arbor from turning, and unscrew and remove arbor screw (E). **NOTE:** Turn arbor screw (E) clockwise to remove.

4. Remove outside blade flange (F) Fig. 30, and saw blade (G).

5. To install new blade make sure inside blade flange (H) Fig. 31, is completely on arbor with the flats in the flange engaged with the flats on the arbor.

6. Install new blade (J) Fig. 32, outside blade flange (F) and arbor screw (E). Turn arbor screw counterclockwise to tighten while pressing in on arbor lock to keep the arbor from turning. **IMPORTANT:** Make sure flats in outside blade flange are engaged with flats on arbor shaft and that teeth of saw blade are pointing down at the front, as shown in Fig. 30.

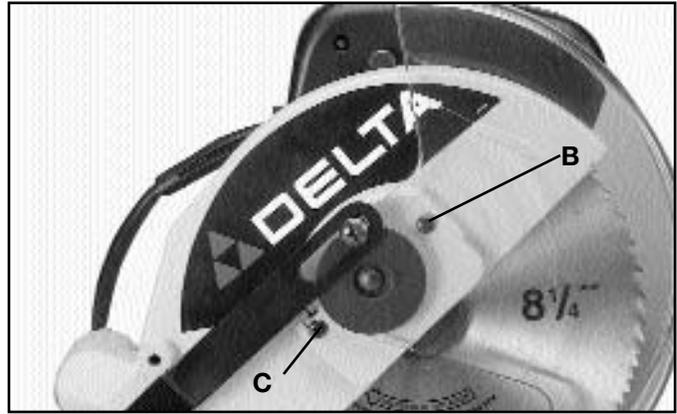


Fig. 28

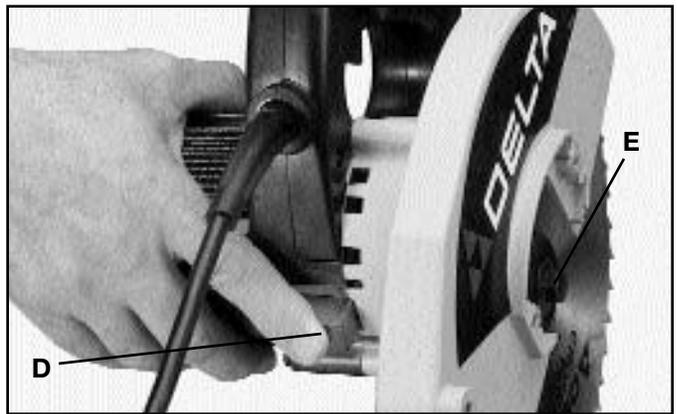


Fig. 29



Fig. 30



Fig. 31

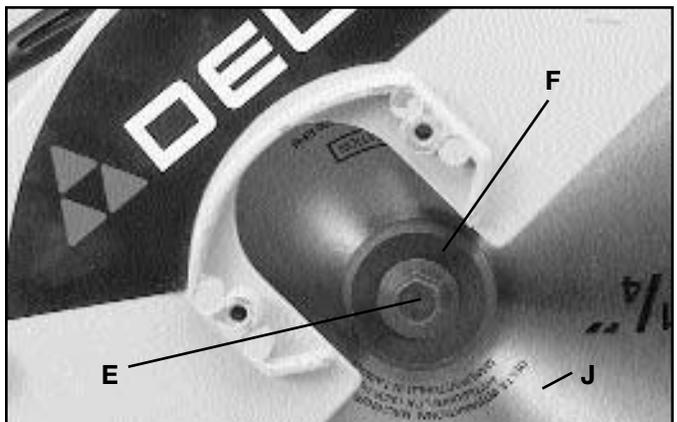


Fig. 32

# CUTTING ALUMINUM

Aluminum extrusions such as used for making aluminum screens and storm windows can easily be cut with your compound miter saw. When cutting aluminum extrusions, or other sections that can be cut with a saw blade and are within the capacity of the machine, position the material so the blade is cutting through the smallest cross-section, as shown in Fig. 33. The wrong way to cut aluminum angles is illustrated in Fig. 34. Be sure to apply a stick wax (similar to Johnson's stick wax #140) to the blade before cutting any aluminum stock. This stick wax is available at most industrial mill supply houses. The stick wax provides proper lubrication and keeps chips from adhering to the blade.

**⚠ WARNING: NEVER APPLY LUBRICANT TO THE BLADE WHILE THE MACHINE IS RUNNING.**

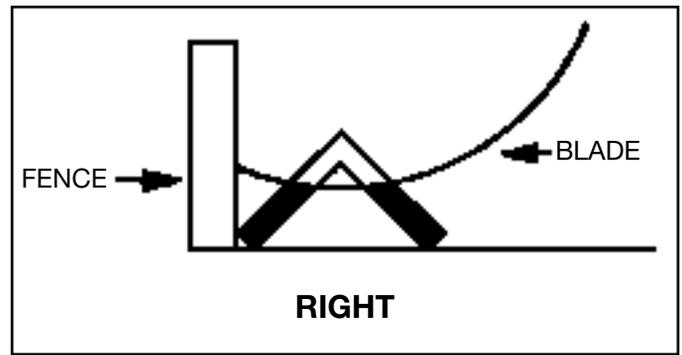


Fig.33

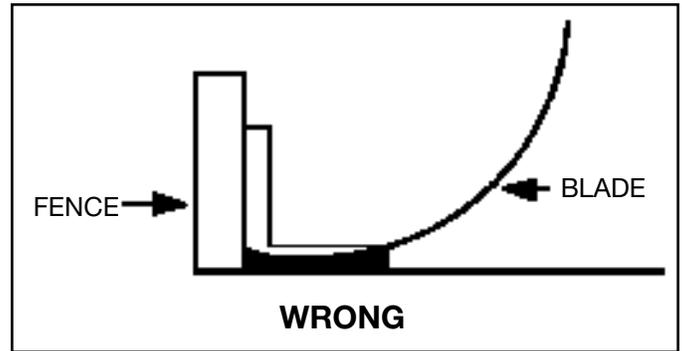


Fig. 34

# CUTTING BOWED MATERIAL

When cutting flat pieces, first check to see if the material is bowed. If it is, make sure the material is positioned on the table as shown in Fig. 35.

If the material is positioned the wrong way, as shown in Fig. 36, the workpiece will pinch the blade near the completion of the cut.

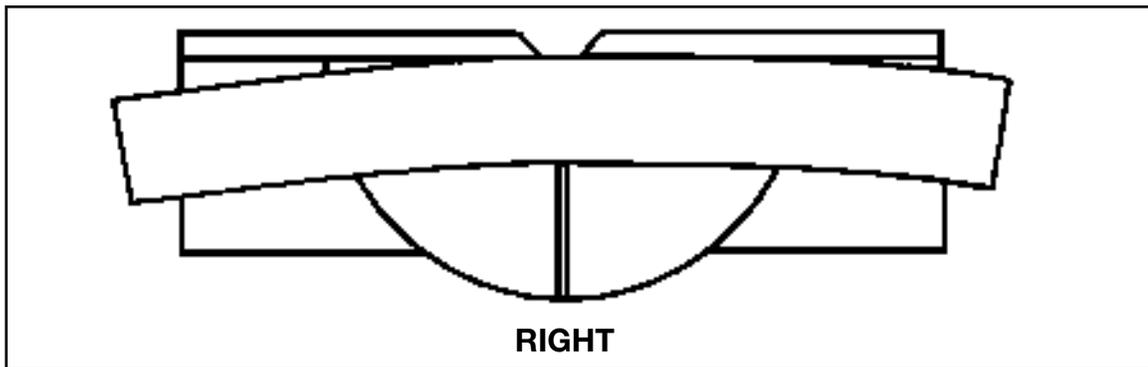


Fig. 35

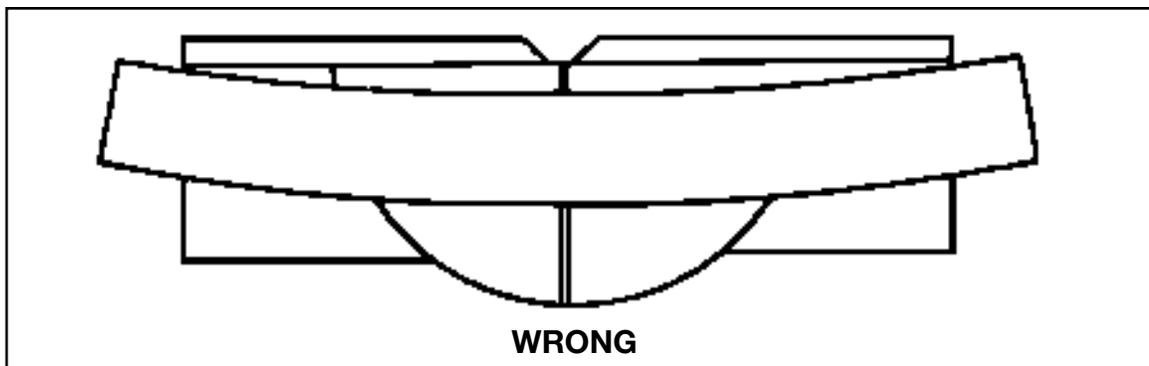


Fig. 36

## CUTTING CROWN MOULDING

One of the many features of your saw is the ease of cutting crown moulding. The following is an example of cutting both inside and outside corners on 52/38 degree wall angle crown moulding. **NOTE:** When cutting 45 degree wall angle crown moulding the following procedure for inside and outside corners is the same with the exception that the bevel position will always be at 30 degrees and the miter position will be 35-1/4 degrees to the right or left.

1. Move the table to the 31-5/8 degree right miter position and lock the table in position. **NOTE:** A triangle indicator is provided on the miter scale to find this angle quickly.

2. Tilt the saw blade to the 33-7/8 degree left bevel position and tighten bevel lock handle. **NOTE:** A triangle indicator is provided on the bevel scale to find this angle quickly.

3. Place the crown moulding on the table with the **CEILING EDGE** of the moulding against the fence, and make the cut, as shown in Fig. 37. **NOTE:** The piece of crown moulding used for the outside corner will always be on the right hand side of the blade, as shown at (A) Fig. 37. The piece of crown moulding used for the inside corner will always be on the left hand side of the blade, as shown at (B) Fig. 37.

4. To make the matching halves of the inside and outside corners simply rotate the table to the 31-5/8 degree left miter position and tighten table lock handle. **NOTE:** A triangle indicator is provided on the miter scale to find this angle quickly.

5. Place the crown moulding on the table with the **WALL EDGE** of the crown moulding against the fence as shown in Fig. 38, then make the cut. Again, the piece of crown moulding used for the outside corner will always be on the right side of the blade, as shown at (C) Fig. 38. The piece of crown moulding used for the inside corner will always be on the left side of the blade, as shown at (D) Fig. 38.

6. Fig. 39, illustrates the two outside corner pieces; (A) being the piece cut at (A) Fig. 37, and (C) being the piece cut at (C) Fig. 38.

7. Fig. 40, illustrates the two inside corner pieces; (B) being the piece cut at (B) Fig. 37, and (D) being the piece cut at (D) Fig. 38.

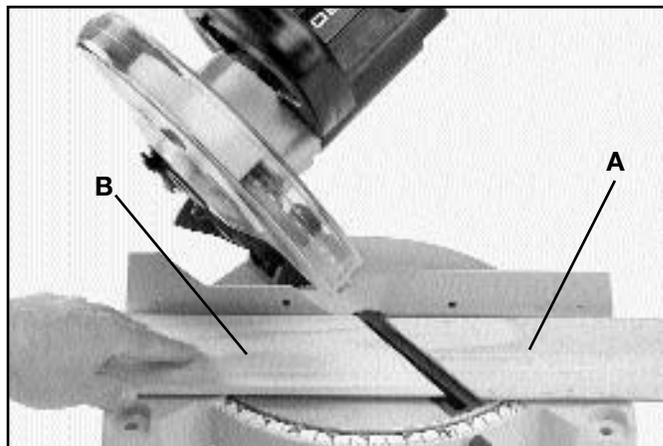


Fig. 37

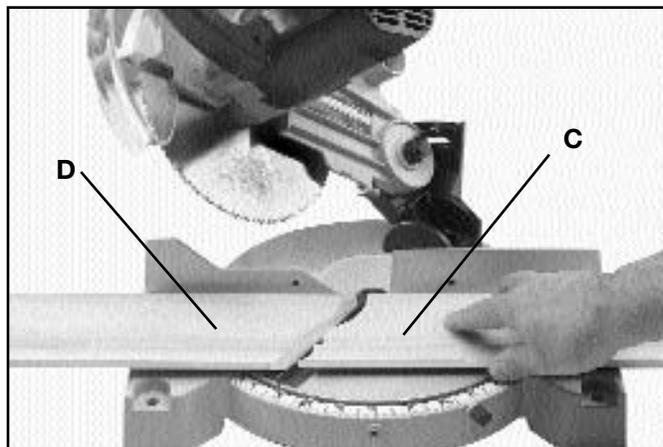


Fig. 38

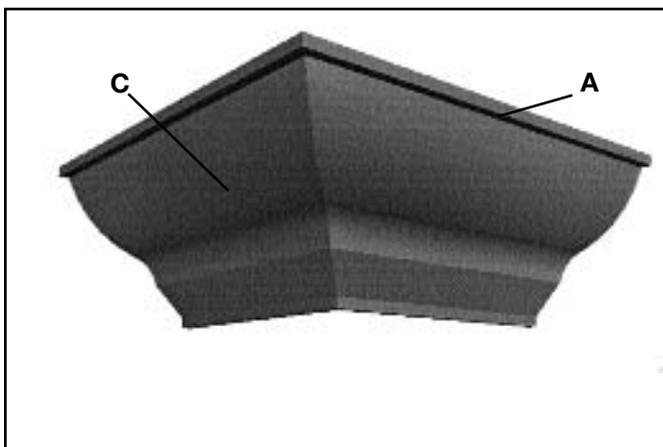


Fig. 39

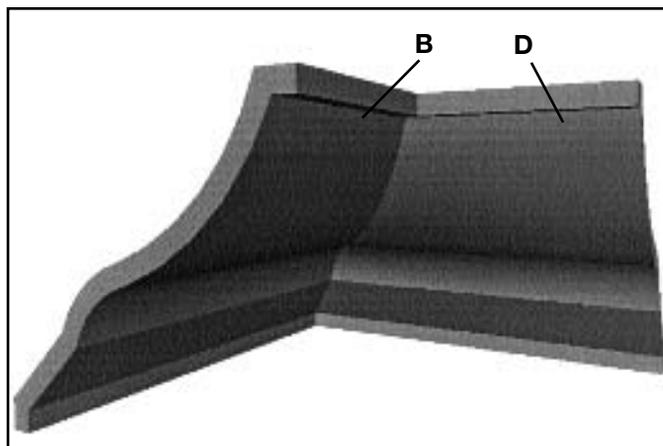


Fig. 40

## 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 (A) Fig. 41, are located on the motor housing opposite each other. Fig. 42, 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. If the brushes are found serviceable after removing, reinstall them in the same position as removed.



Fig. 41



Fig. 42

## TABLE HAZARD AREA

**⚠ WARNING: THE AREA INSIDE THE TWO RED LINES (A) FIG. 43, ON THE TABLE IS DESIGNATED AS A HAZARD ZONE. NEVER PLACE YOUR HANDS INSIDE THIS AREA WHILE THE TOOL IS BEING OPERATED.**

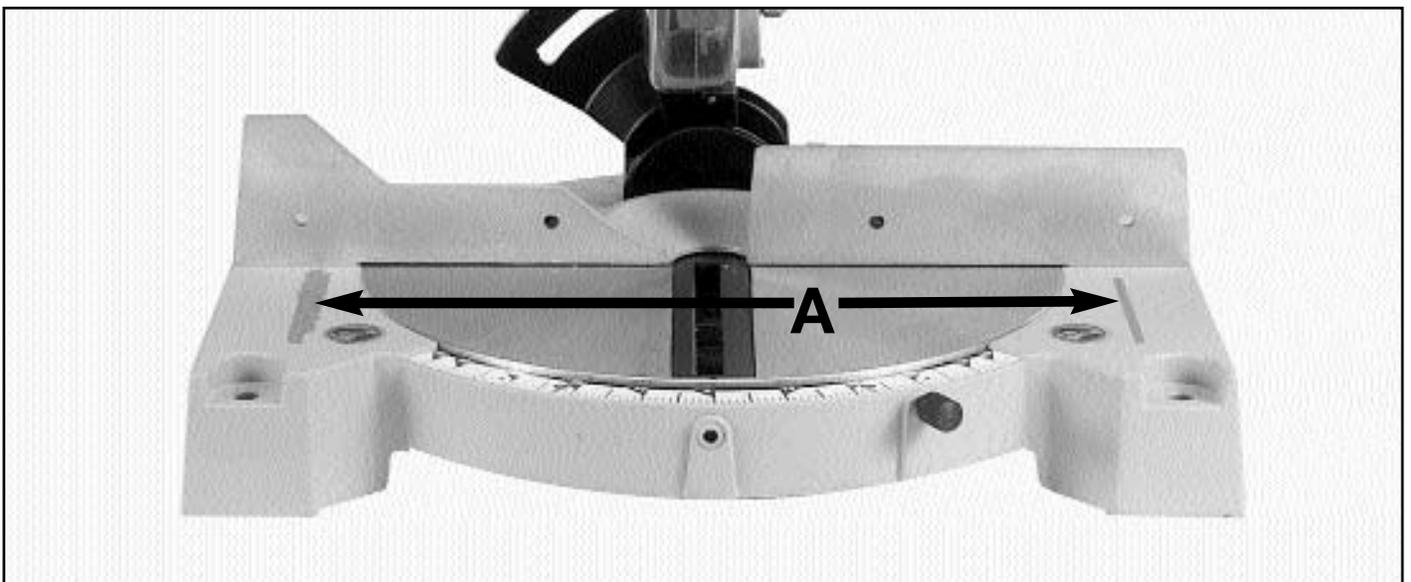


Fig. 43

# ACCESSORIES

A complete line of accessories is available from your Delta Supplier, Porter-Cable Delta Factory Service Centers, and Delta Authorized Service Stations. Please visit our Web Site [www.deltamachinery.com](http://www.deltamachinery.com) for a catalog or for the name of your nearest supplier.

 **WARNING:** Since accessories, other than those offered by Delta, have not been tested with this product, use of such accessories could be hazardous. For safest operation, only Delta recommended accessories should be used with this product.

36-221  
36-224

**WORK CLAMP  
EXTENSION BAR AND STOP**



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