10″ Compound Power Miter Saw

(Model 36-075)

INSTRUCTION MANUAL

DATED 1-21-98

PART NO. 1349819

DELTA

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DELTA

Delta Building Trades and Home Shop Machinery Two Year Limited Warranty

Delta will repair or replace, at its expense and at its option, any Delta machine, machine part, or machine accessory which in normal use has proven to be defective in workmanship or material, provided that the customer returns the product prepaid to a Delta factory service center or authorized service station with proof of purchase of the product within two years and provides Delta with reasonable opportunity to verify the alleged defect by inspection. Delta may require that electric motors be returned prepaid to a motor manufacturer's authorized station for inspection and repair or replacement. Delta will not be responsible for any asserted defect which has resulted from normal wear, misuse, abuse or repair or alteration made or specifically authorized by anyone other than an authorized Delta Service facility or representative. Under no circumstances will Delta be liable for incidental or consequential damages resulting from defective products. This warranty is Delta's sole warranty and sets forth the customer's exclusive remedy, with respect to defective products; all other warranties, express or implied, whether of merchantability, fitness for purpose, or otherwise, are expressly disclaimed by Delta.

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.

DELTA INTERNATIONAL MACHINERY CORP.
MANAGER OF TECHNICAL SERVICES
246 ALPHA DRIVE
PITTSBURGH, PENNSYLVANIA 15238
(IN CANADA: 644 IMPERIAL ROAD, GUELPH, ONTARIO N1H 6M7)

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. **GROUND ALL TOOLS**. If tool is equipped with three-prong plug, it should be plugged into a three-hole electrical receptacle. If an adapter is used to accommodate a two-prong receptacle, the adapter lug must be attached to a known ground. Never remove the third prong.

5. **REMOVE ADJUSTING KEYS AND WRENCHES**. Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it "on."

6. **KEEP WORK AREA CLEAN**. Cluttered areas and benches invite accidents.

7. **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.

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

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

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

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

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

13. **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.

14. **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.

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

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

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

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

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

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

21. **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.

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

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

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

25. **MAKE SURE TOOL IS DISCONNECTED FROM POWER SUPPLY** while motor is being mounted, connected or reconnected.

26. **WARNING:** 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.

ADDITIONAL SAFETY RULES FOR COMPOUND MITER SAWS

1. **WARNING: USE ONLY CROSS-CUTTING SAW BLADES. WHEN USING CARBIDE TIPPED BLADES, MAKE SURE THEY HAVE A NEGATIVE HOOK ANGLE. DO NOT USE BLADES WITH DEEP GULLETS 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 inches 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 specified for your saw.

12. **NEVER** use blades larger or smaller in diameter than ten 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. **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** 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 01.1 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

1. Remove the miter saw and all loose items from the carton. **IMPORTANT: DO NOT LIFT THE MITER SAW BY THE SWITCH HANDLE AS THIS MAY CAUSE MISALIGNMENT. ALWAYS LIFT THE MACHINE BY THE BASE OR CARRYING HANDLE**. Fig. 2, illustrates the machine and all loose items after they have been removed from the carton.

1 - Miter Saw

2 - Dust Bag

3 - Wrenches for changing the blade

4 - Table lock handle

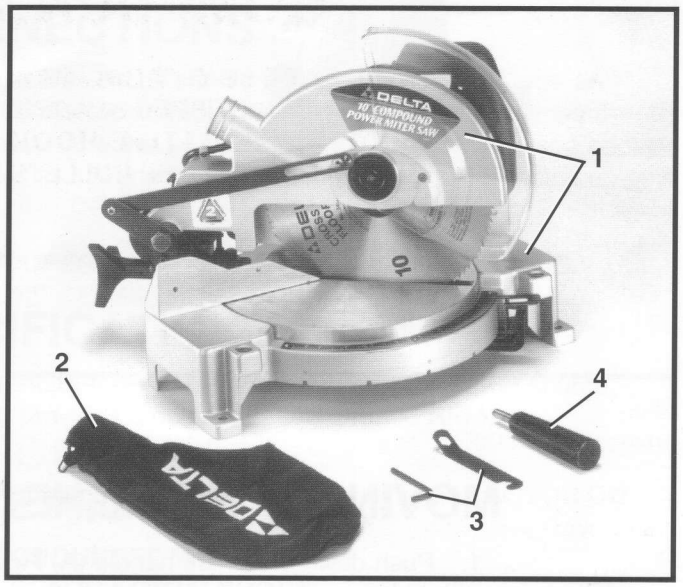


Fig. 2

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.

ASSEMBLING TABLE LOCK HANDLE

1. Thread table lock handle (A) Fig. 3, into the threaded hole (B) of the arm bracket (C).

2. Figure 4, illustrates the table lock handle (A) assembled to the saw.

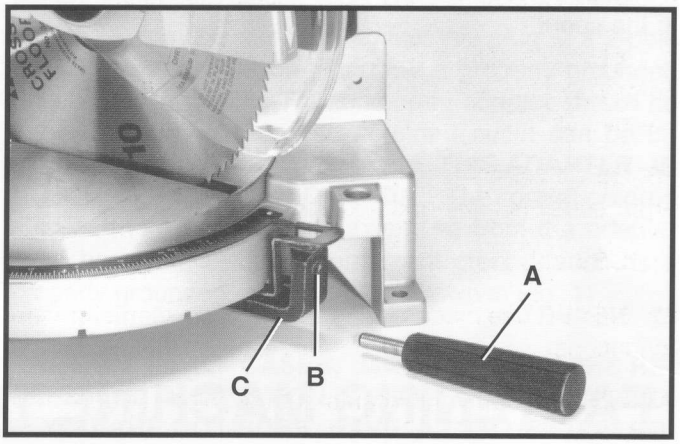


Fig. 3

ROTATING TABLE TO 90 DEGREE POSITION

1. Loosen table lock handle (A) Fig. 4, one or two turns and depress index lever (B) to release 45 degree positive stop.

2. Rotate table to the left until index stop engages with the 90 degree positive stop as shown in Fig. 5. Then tighten table lock handle (A).

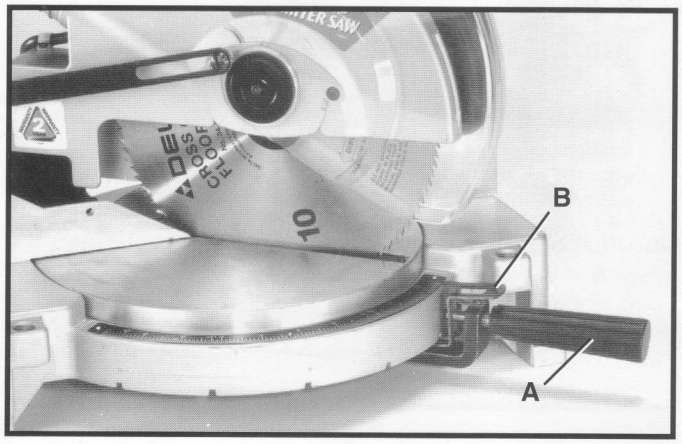


Fig. 4

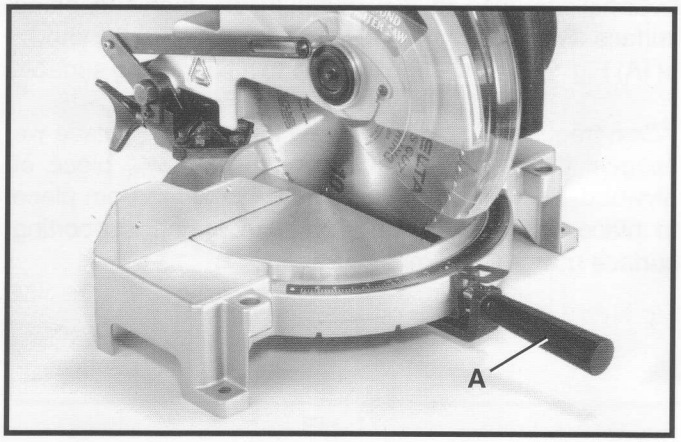


Fig. 5

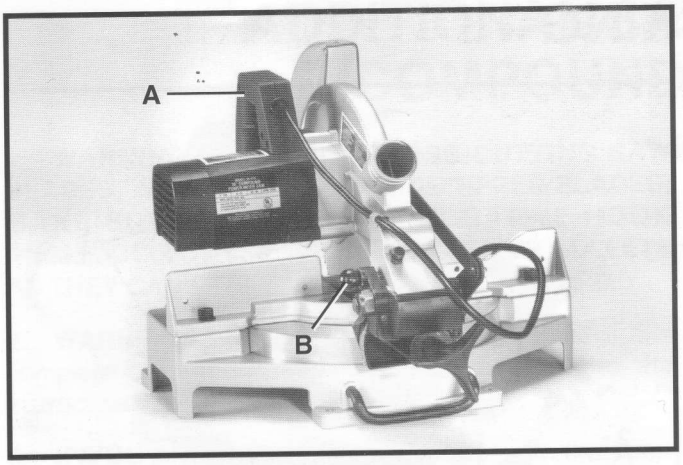


Fig. 6

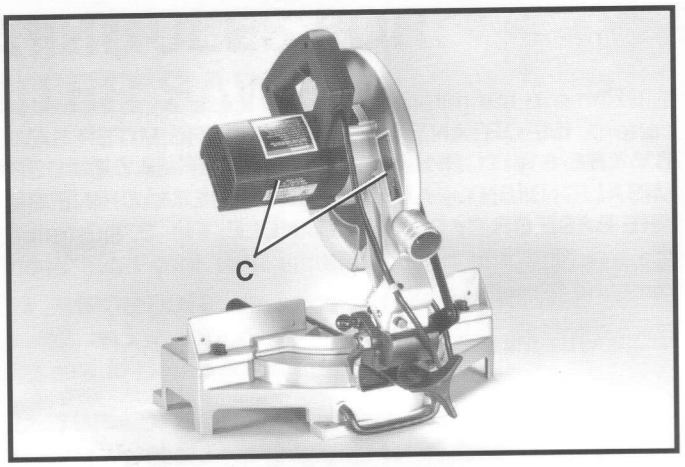


Fig. 7

MOVING CUTTINGHEAD TO THE UP POSITION

1. Push down on switch handle (A) Fig. 6, and pull out cuttinghead lock knob (B).
2. The cuttinghead (C) can then be moved to the up position, as shown in Fig. 7.

ASSEMBLING DUST BAG

1. Assemble dust bag (A) Fig. 8, to the dust spout (B) making sure the wire ring (C) is engaged with the groove in the spout.

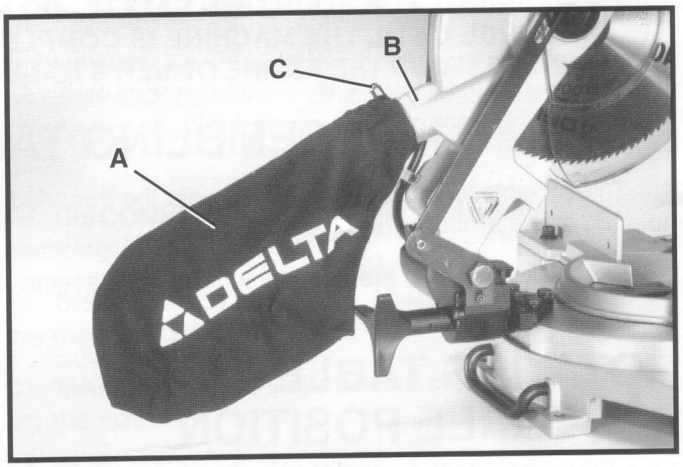


Fig. 8

FASTENING MACHINE TO SUPPORTING SURFACE

Before operating your compound miter saw, make sure it is firmly mounted to a workbench or other supporting surface. Four holes are provided, two of which are shown at (A) Fig. 9, 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 3/4″ piece of plywood. The saw can then be easily moved from place to place and the plywood clamped to the supporting surface using "C" clamps.

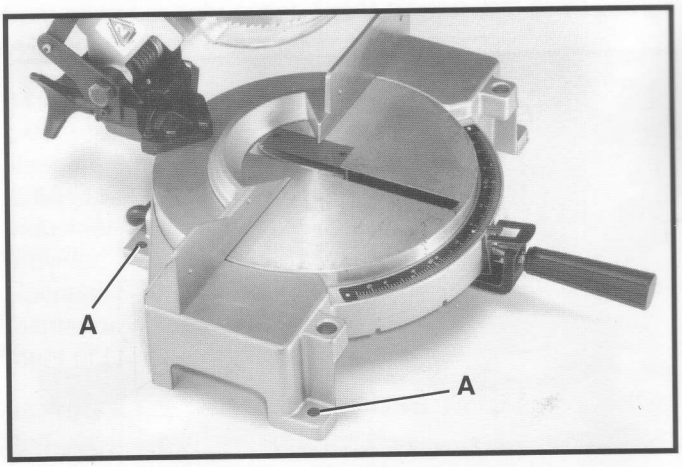


Fig. 9

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 fuse. Have a certified electrician replace or repair a worn cord immediately. 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 stamped on the motor nameplate. Running on low voltage will damage the motor.

WARNING: DO NOT EXPOSE THE TOOL TO RAIN OR OPERATE THE TOOL IN DAMP LOCATIONS.

MOTOR SPECIFICATIONS

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

GROUNDING INSTRUCTIONS

CAUTION: THIS TOOL MUST BE GROUNDED WHILE IN USE TO PROTECT THE OPERATOR FROM ELECTRIC SHOCK.

In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. The motor is equipped with an electric cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.

Do not modify the plug provided - if it will not fit the outlet, have the proper outlet installed by a qualified electrician.

Improper connection of the equipment-grounding conductor can result in risk of electric shock. The conductor with insulation having an outer surface that is green with or without yellow stripes is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment grounding conductor to a live terminal.

Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded.

Use only 3-wire extension cords that have 3-prong grounding type plugs and 3-hole receptacles that accept the tool's plug, as shown in Fig. 10.

Repair or replace damaged or worn cord immediately.

This tool is intended for use on a circuit that has an outlet and a plug that looks like the one shown in Fig. 10. A temporary adapter, which looks like the adapter illustrated in Fig. 11, may be used to connect this plug to a 2-pole receptacle, as shown in Fig. 11, if a properly grounded outlet is not available. The temporary adapter should be used only until a properly grounded outlet can be installed by a qualified electrician. **THIS ADAPTER IS NOT APPLICABLE IN CANADA**. The green-colored rigid ear, lug, and the like, extending from the adapter must be connected to a permanent ground, such as a properly grounded outlet box, as shown in Fig. 11.

CAUTION: IN ALL CASES, MAKE CERTAIN THE RECEPTACLE IN QUESTION IS PROPERLY GROUNDED. IF YOU ARE NOT SURE, HAVE A CERTIFIED ELECTRICIAN CHECK THE RECEPTACLE.

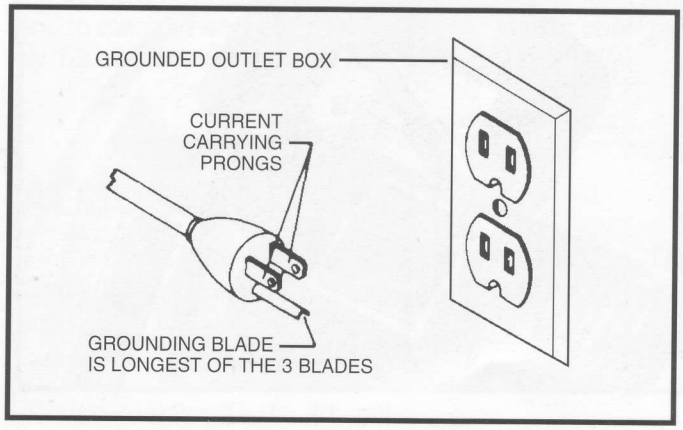


Fig. 10

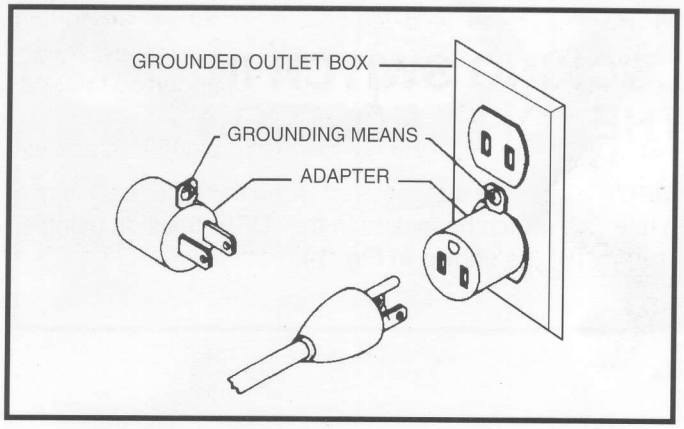


Fig. 11

EXTENSION CORDS

Use proper extension cords. Make sure your extension cord is in good condition and is a 3-wire extension cord which has a 3-prong grounding type plug and a 3-pole receptacle which will accept the tool's plug. 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. 12, shows the correct gage to use depending on the cord length. If in doubt, use the next heavier gage. The smaller the gage number, the heavier the cord.

TOTAL LENGTH OF CORD IN FEET	GAGE OF EXTENSION CORD TO USE
0 - 25	14 AWG
26 - 50	12 AWG
Over 50	Not Recommended

Fig. 12

OPERATING CONTROLS AND ADJUSTMENTS

STARTING AND STOPPING MACHINE

To start the machine, depress switch trigger (A) Fig. 13. To stop the machine, release the switch trigger.

This miter saw is equipped with an automatic electric blade brake. As soon as the switch trigger (A) Fig. 13, is released, the electric brake is activated and stops the blade in seconds.

DANGER: A TURNING SAW BLADE CAN BE DANGEROUS. AFTER COMPLETING CUT, RELEASE SWITCH TRIGGER (A) FIG. 13, TO ACTIVATE BLADE BRAKE. KEEP CUTTINGHEAD DOWN UNTIL BLADE HAS COME TO A COMPLETE STOP.

WARNING: THE TORQUE DEVELOPED DURING BRAKING MAY LOOSEN THE ARBOR SCREW. THE ARBOR SCREW SHOULD BE CHECKED PERIODICALLY AND TIGHTENED IF NECESSARY.

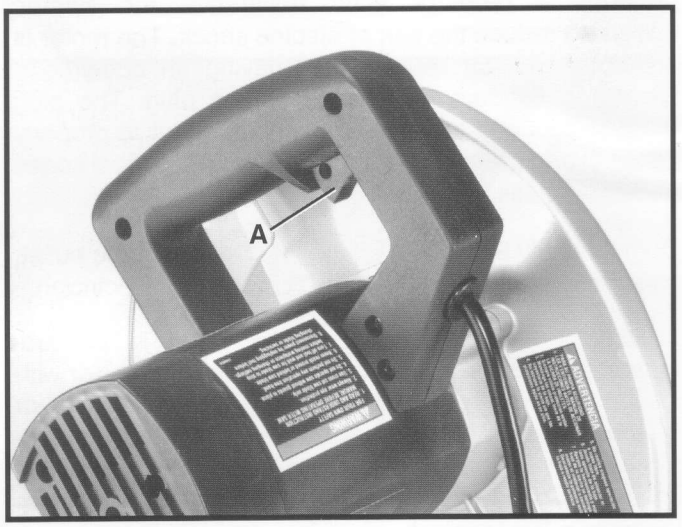


Fig. 13

LOCKING SWITCH IN THE "OFF" POSITION

IMPORTANT: We suggest that when the miter saw is not in use, the switch be locked in the "OFF" position using a padlock (B), as shown in Fig. 14.

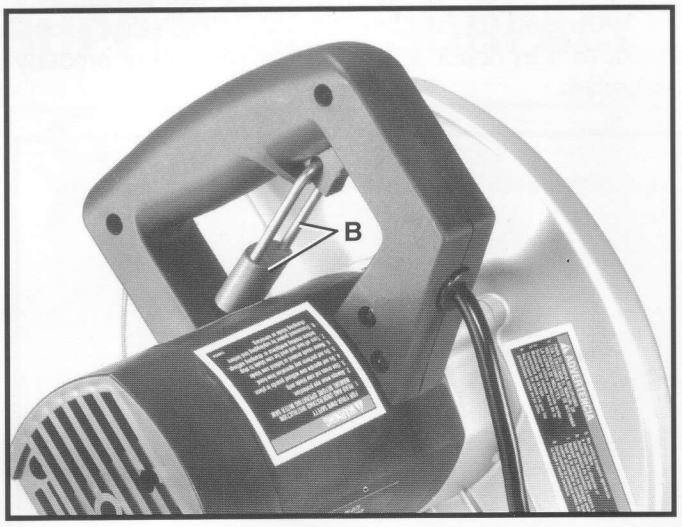


Fig. 14

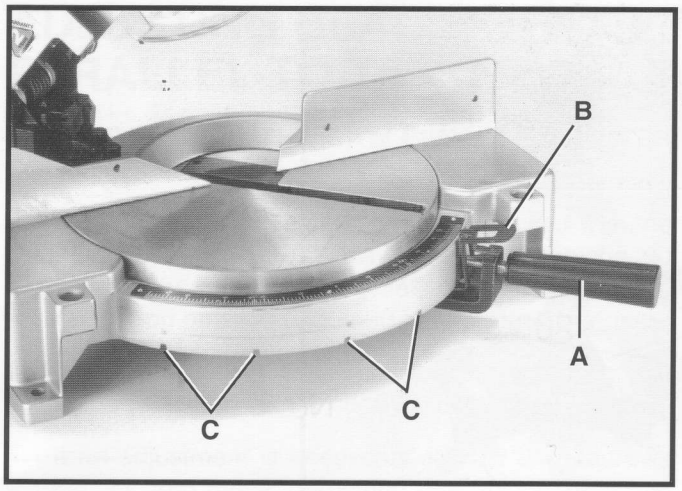


Fig. 15

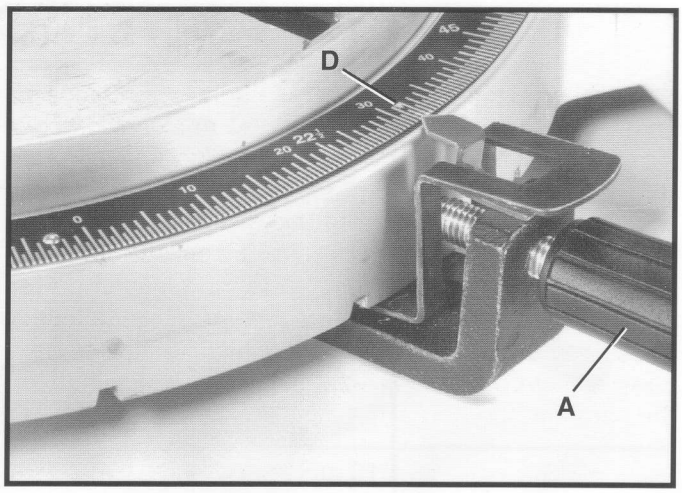


Fig. 16

ROTATING TABLE FOR MITER CUTTING

Your miter saw will cut any angle from a straight 90 degree cut to 47 degrees right and left. Simply loosen lock handle (A) Fig. 15, one or two turns, depress index lever (B) and move the control arm to the desired angle. **THEN TIGHTEN LOCK HANDLE (A)**.

The miter saw is equipped with positive stops at the 0, 22-1/2, and 45 degree right and left positions. Simply loosen lock handle (A) Fig. 15, and move the control arm until the bottom of the index lever (B) engages into one of the positive stops, four of which are shown at (C). **THEN TIGHTEN LOCK HANDLE (A)**. To disengage the positive stop, depress index lever (B).

In addition, a triangle indicator (D) Fig. 16, is provided on the miter scale at the 31-5/8 right and left miter positions for cutting crown moulding. Refer to the **"CUTTING CROWN MOULDING"** section of this manual.

IMPORTANT: ALWAYS TIGHTEN LOCK HANDLE (A) FIG. 16, BEFORE CUTTING.

POINTER AND SCALE

A pointer (E) Fig. 17, is supplied which indicates the actual angle of cut. Each line on the scale (F) represents 1/2 degree. In effect, when the pointer is moved from one line to the next on the scale, the angle of cut is changed by 1/2 degree.

ADJUSTING POINTER

If it becomes necessary to adjust the pointer (E) Fig. 17, simply loosen screw (G), adjust the pointer accordingly and tighten screw (G).

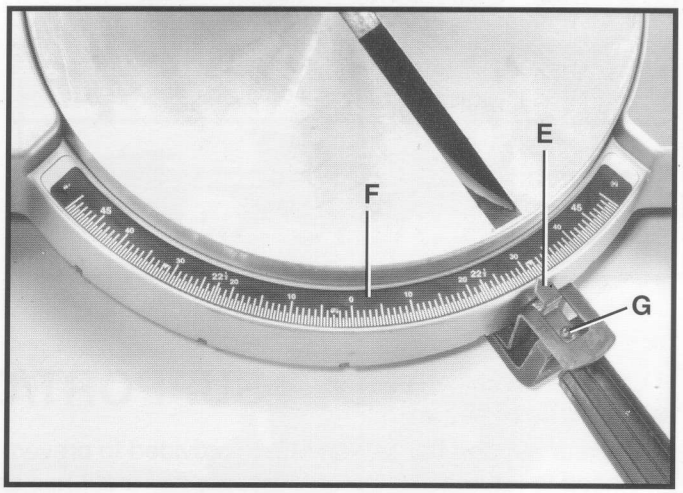


Fig. 17

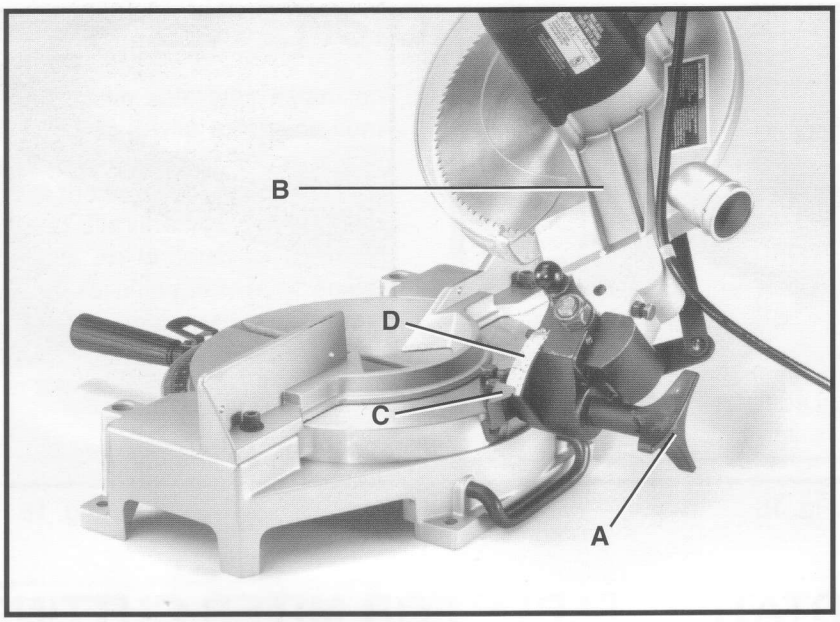


Fig. 18

TILTING CUTTINGHEAD FOR BEVEL CUTTING

The cuttinghead of your compound miter saw can be tilted to cut any bevel angle from a 90 degree straight cut off to a 45 degree left bevel angle by loosening bevel lock handle (A) Fig. 18, tilting cutting arm (B) to the desired angle and tightening lock handle (A).

Positive stops are provided to rapidly position the saw blade at 90 and 45 degrees to the table. Refer to the section of this manual titled **"ADJUSTING 90 AND 45 DEGREE BEVEL STOPS."** The bevel angle of the cutting arm is determined by the position of the pointer (C) Fig. 18, on the scale (D).

In addition, a triangle indicator is provided on the bevel scale at the 33-7/8 degree bevel angle for cutting crown moulding. Refer to the **"CUTTING CROWN MOULDING"** section of this manual.

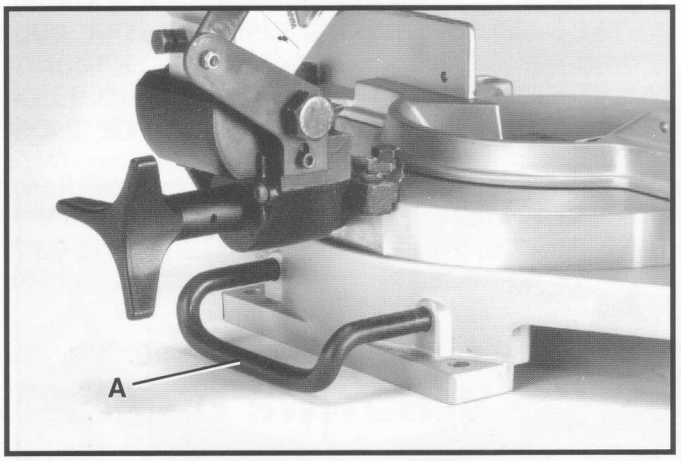


Fig. 19

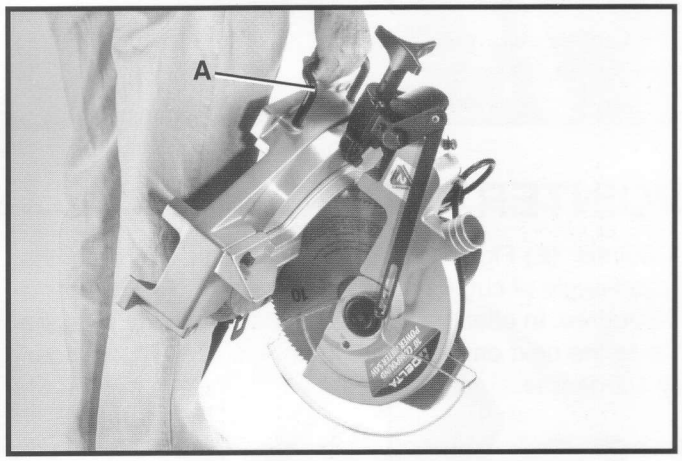


Fig. 20

REAR SUPPORT/CARRYING HANDLE

A rear support bar (A) Fig. 19, is provided to prevent the miter saw from tipping to the rear when the cutting-head is returned to the up position after a cut has been made. For maximum support the bar (A) should be pulled out as far as possible.

The support bar (A) also acts as a carrying handle, as shown in Fig. 20, when transporting the saw.

ADJUSTING BLADE PARALLEL TO TABLE SLOT

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

2. **NOTE:** This adjustment should be checked with the cutting arm moved all the way to the right (blade 90 degrees to the table) and the table in the 90 degree straight cut-off position (blade 90 degrees to the fence).

3. Lower the cutting arm. The saw blade (A) Fig. 21, should be parallel to the left edge (B) of the table opening.

4. If an adjustment is necessary, loosen three screws (C) Fig. 21, and move the cutting arm until the blade is parallel with the left edge (B) of the table opening. Then tighten the three screws (C).

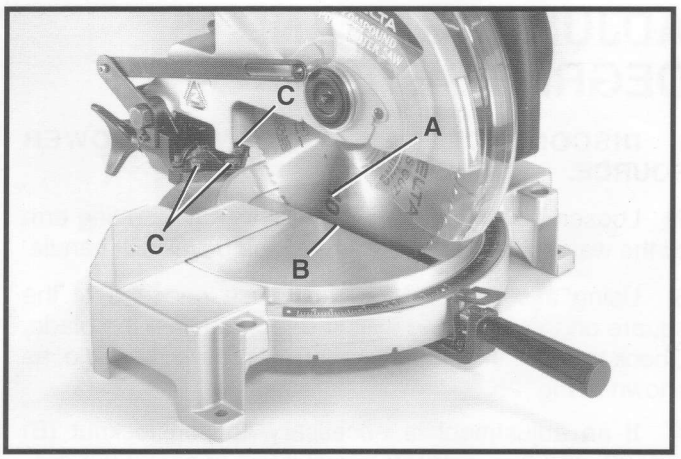


Fig. 21

ADJUSTING FENCE 90 DEGREES TO BLADE

If the fence (A) Fig. 22, is ever removed from the saw it should be adjusted so it is 90 degrees to the blade when it is replaced, as follows:

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

2. This adjustment should be made only after the blade has been adjusted parallel to table opening, as previously explained.

3. Using a square (B) Fig. 22, place one end of the square against the fence (A) and the other end against the slot in the table as shown.

4. If an adjustment is necessary, loosen the two screws (C) Fig. 23, and adjust fence 90 degrees to the table opening. Then tighten the two screws (C).

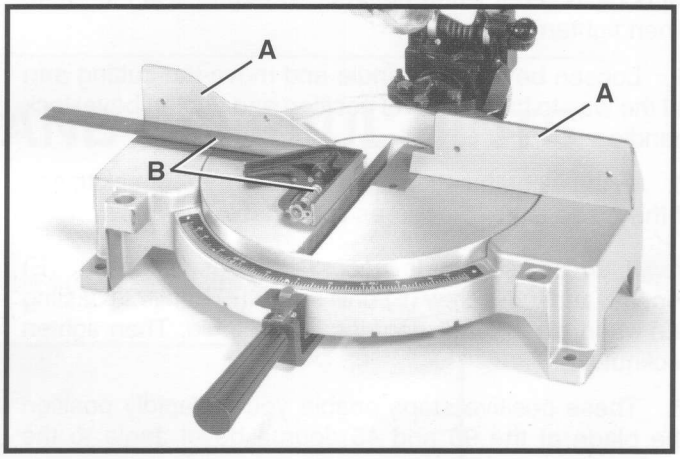


Fig. 22

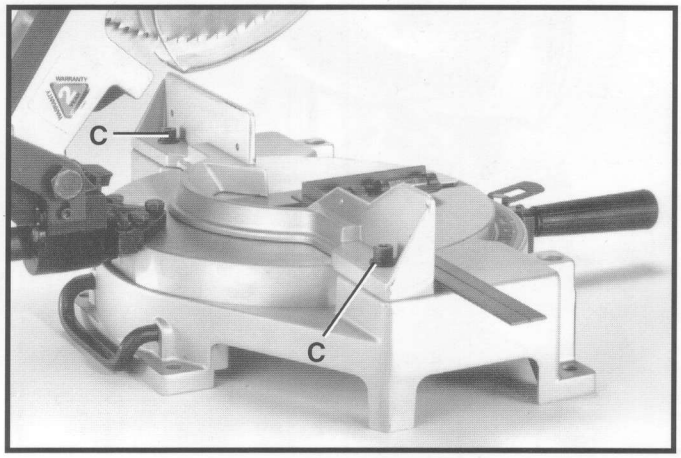


Fig. 23

ADJUSTING DOWNWARD TRAVEL OF SAW BLADE

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

2. The downward travel of the saw blade can be limited to prevent the saw blade from contacting any metal surfaces of the machine. This adjustment is made by loosening locknut (A) Fig. 24, and turning adjusting screw (B) in or out.

3. When making this adjustment, **MAKE SURE THE MACHINE IS DISCONNECTED FROM THE POWER SOURCE** and lower the blade as far as possible. Rotate the blade by hand to make certain the teeth do not contact any metal surfaces and adjust if necessary.

4. After the downward travel of the saw blade has been adjusted, tighten locknut (A)

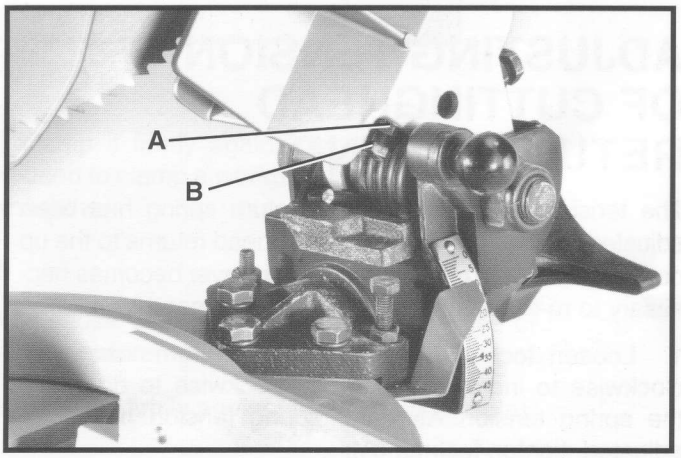


Fig. 24

ADJUSTING 90 AND 45 DEGREE BEVEL STOPS

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

2. Loosen bevel lock handle and move the cutting arm all the way to the right, then tighten the bevel lock handle.

3. Using a square (A) Fig. 25, 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 in Fig. 25.

4. If an adjustment is necessary, loosen locknut (B) Fig. 26, and turn screw (C) until head of screw (C) contacts casting (D) when blade is 90 degrees to the table. Then tighten locknut (B).

5. Loosen bevel lock handle and move the cutting arm all the way to the left bevel position and tighten bevel lock handle.

6. Using a combination square (A) Fig. 27, check to see if the blade is at 45 degrees to the table, as shown.

7. If an adjustment is necessary, loosen locknut (E) Fig. 28, and turn screw (F) until screw (F) contacts casting (G) when blade is 45 degrees to the table. Then tighten locknut (E).

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

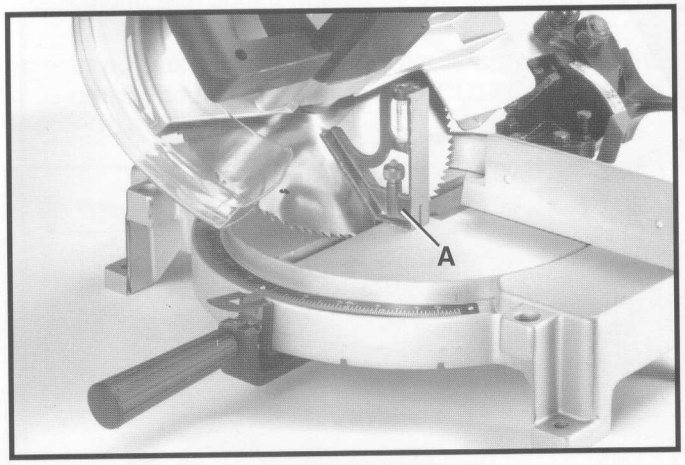


Fig. 27

ADJUSTING TENSION OF CUTTINGHEAD RETURN SPRING

The tension of the cuttinghead return spring has been adjusted at the factory so the cuttinghead returns to the up position after a cut has been made. If it ever becomes necessary to re-adjust the spring tension, proceed as follows:

1. Loosen locknut (A) Fig. 28A, and turn screw (B) clockwise to increase or counterclockwise to decrease the spring tension. After the spring tension has been adjusted, tighten locknut (A).

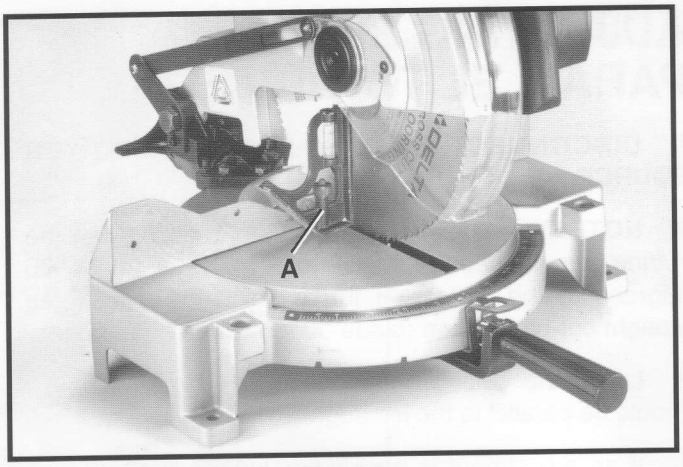


Fig. 25

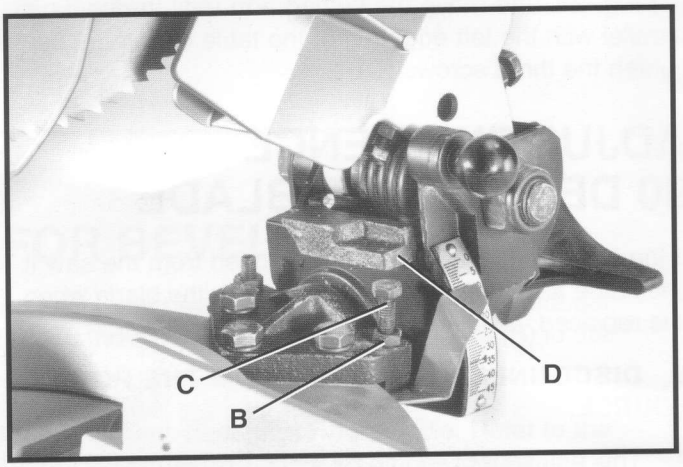


Fig. 26

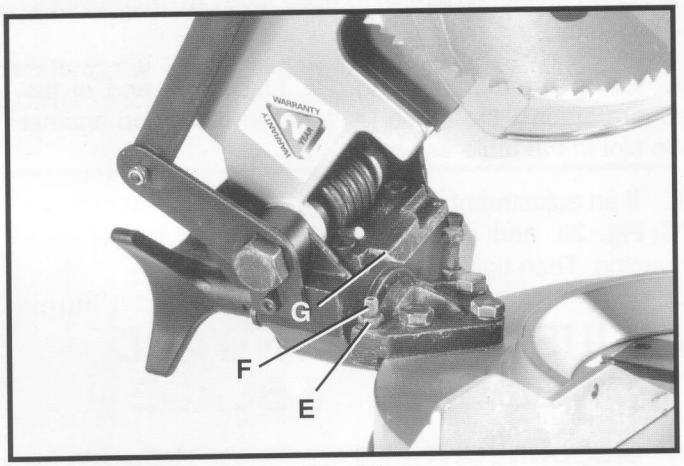


Fig. 28

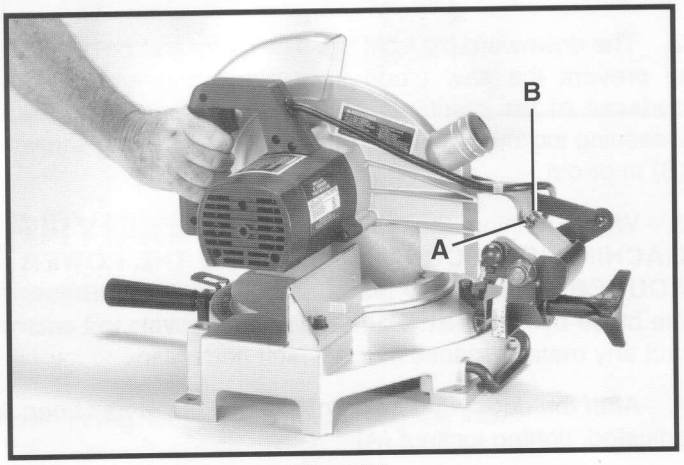


Fig. 28A

LOCKING CUTTINGHEAD IN THE DOWN POSITION

When transporting the saw, the cuttinghead should always be locked in the down position. This can be accomplished by lowering the cutting arm (A) Fig. 29, and pushing in plunger (B) until other end of plunger (B) engages with hole in cutting arm. **IMPORTANT: NEVER CARRY THE COMPOUND MITER SAW BY THE SWITCH HANDLE. THIS MAY CAUSE MISALIGNMENT. ALWAYS LIFT THE MACHINE BY THE BASE.**

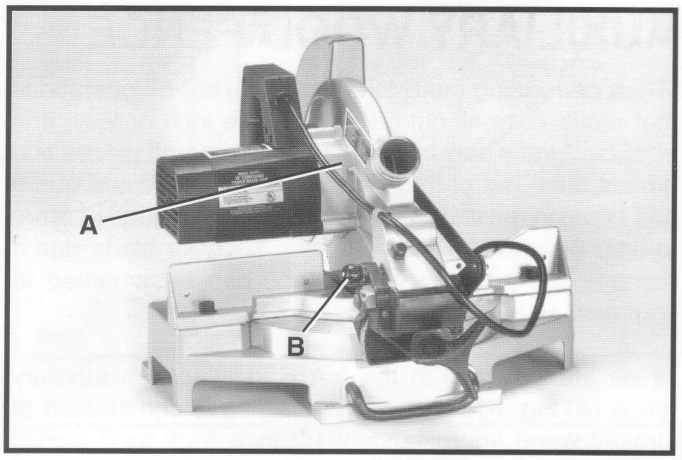


Fig. 29

TYPICAL OPERATIONS AND HELPFUL HINTS

1. Before cutting, make certain the cutting arm and table are at their correct settings and firmly locked in place.

2. Before cutting, determine that the workpiece is the right size for the saw.

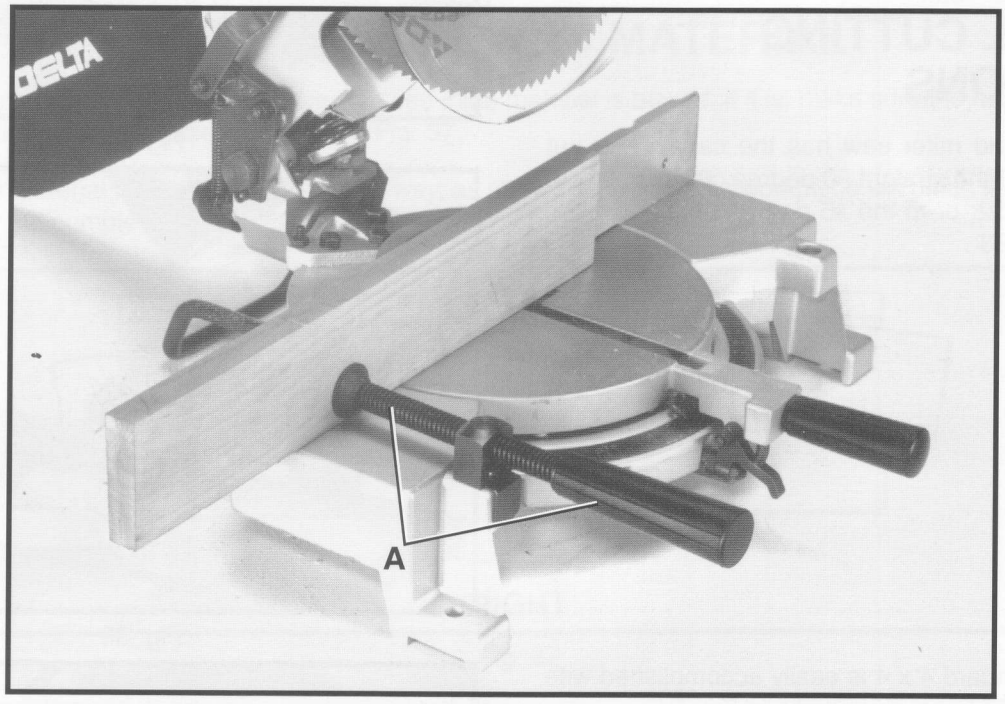


Fig. 30

3. Place the workpiece on the table and hold or clamp it firmly against the fence. Fig. 30, illustrates the accessory 36-221 work clamp (A) being used to clamp a workpiece to the fence. The clamp (A) can also be used on the right side of the machine.

4. For best results, cut at a slow, even cutting rate.

5. **WARNING:** If the workpiece you are cutting would cause your hand to be within 4 inches of the saw blade, the workpiece should be clamped in place before making cut. See Fig. 30.

6. Never attempt any freehand cutting (wood that is not held firmly against the fence and table).

AUXILIARY WOOD FENCE

When performing multiple or repetitive cut-off operations that result in small cut-off pieces, one inch or less, it is possible for the saw blade to catch the cut-off pieces and project them out of the machine or into the blade guard and housing, possibly causing damage or injury. In order to limit the possibility of personal injury or blade guard damage, an auxiliary wood fence can be mounted to your saw as follows:

Holes are provided in the fence to attach an auxiliary fence (A) Fig. 31. This auxiliary fence is constructed of straight wood approximately 1/2 inch thick by 3 inches high by 20 inches long. **NOTE:** The auxiliary fence (A) is used **ONLY** with the saw blade in the 0 degree bevel position (90 degrees to the table). When bevel cutting (blade tilted) the auxiliary fence will have to be removed.

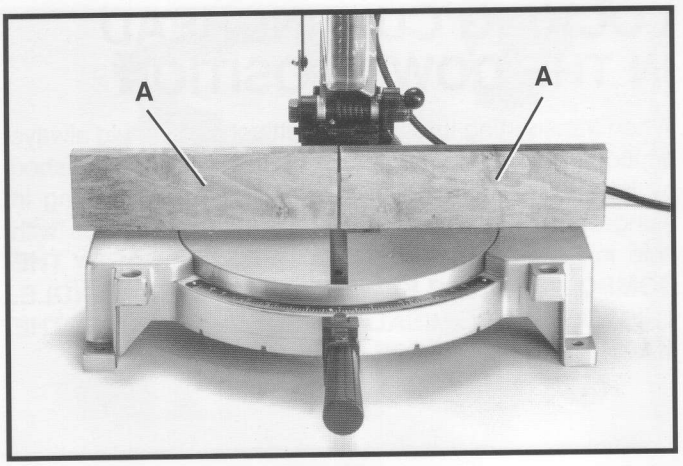


Fig. 31

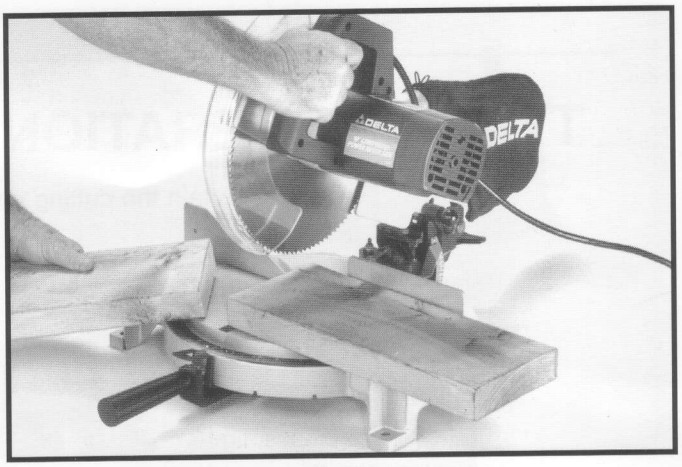


Fig. 32

GENERAL CUTTING OPERATIONS

1. Your compound miter saw has the capacity to cut standard 2 x 6's at the straight 90 degree cut-off position, as shown in Fig. 32, or at the 45 degree bevel position, as shown in Fig. 33.


Fig. 33

2. Cutting a standard 4 x 4 is easily accomplished with your compound miter saw, as shown in Fig. 34.

Fig. 34

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. 35. The wrong way to cut aluminum angles is illustrated in Fig. 36. 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. **NEVER APPLY LUBRICANT TO THE BLADE WHILE THE MACHINE IS RUNNING.**

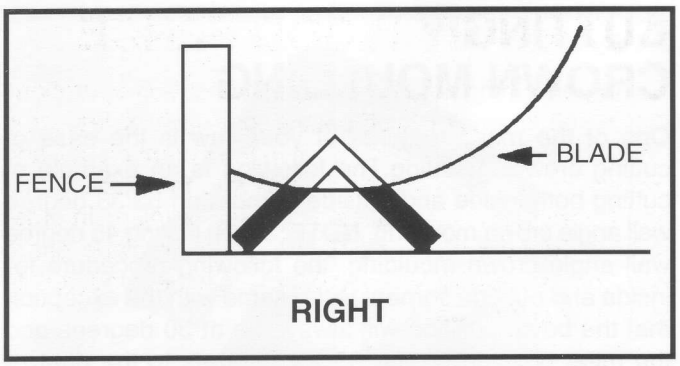


Fig. 35

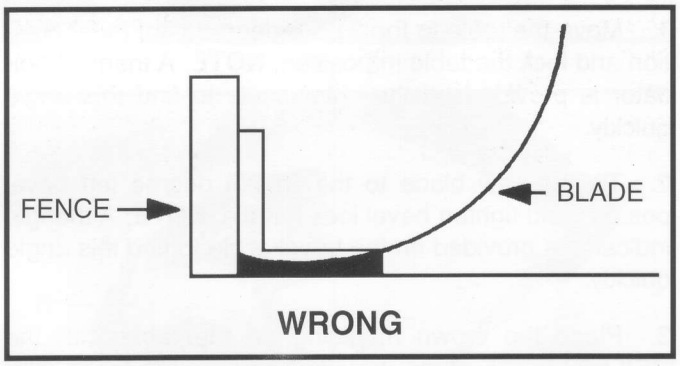


Fig. 36

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. 37.

If the material is positioned the wrong way, as shown in Fig. 38, the workpiece will pinch the blade near the completion of the cut.

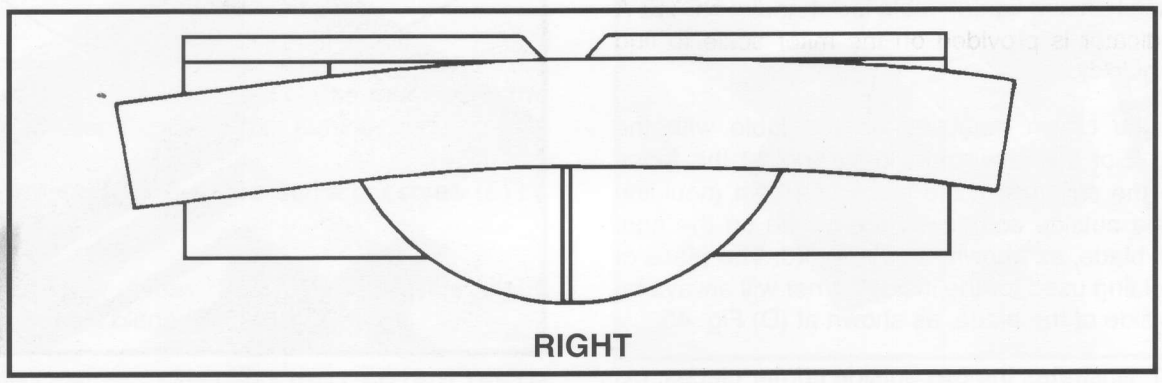


Fig. 37

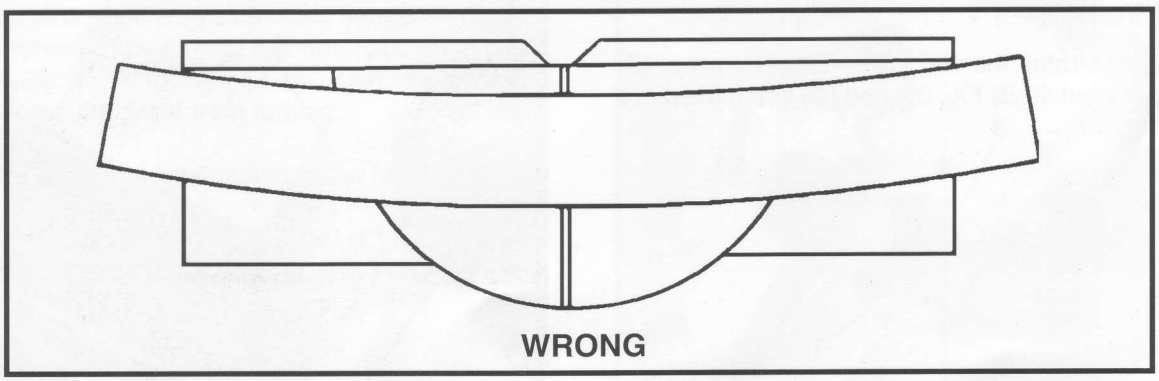


Fig. 38

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 53/38 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. 39. **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. 39. 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. 39.

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 and 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. 40. 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. 40.

6. Fig. 41, illustrates the two outside corner pieces; (A) being the piece cut at (A) Fig. 39, and (C) being the piece cut at (C) Fig. 40.

7. Fig. 42, illustrates the two inside corner pieces; (B) being the piece cut at (B) Fig. 39, and (D) being the piece cut at (D) Fig. 40.

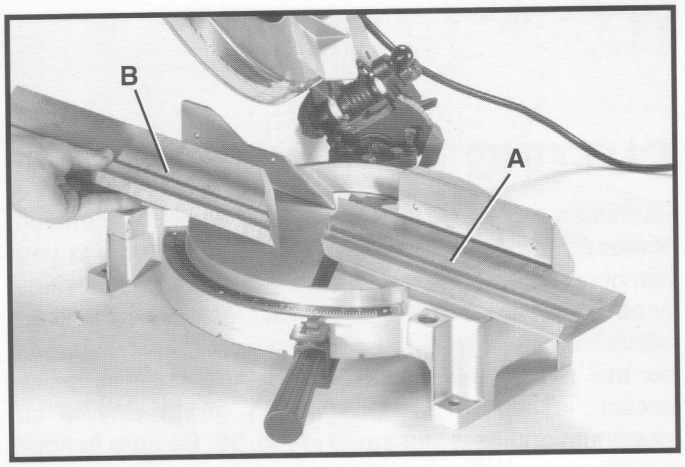


Fig. 39

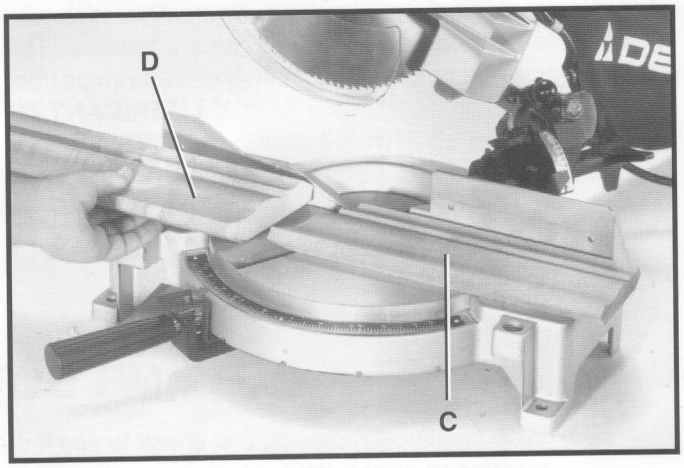


Fig. 40

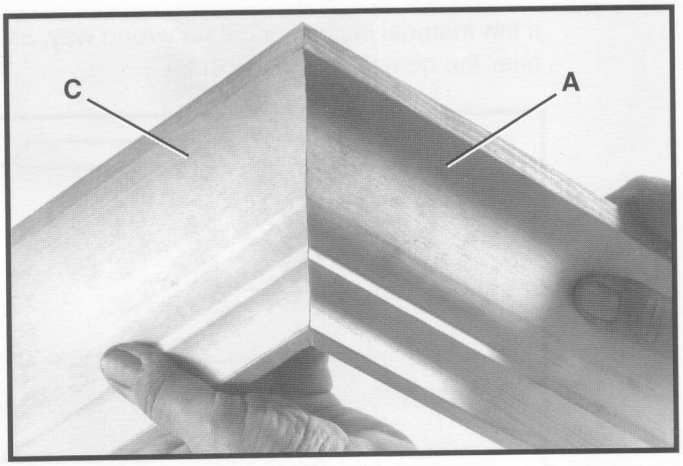


Fig. 41

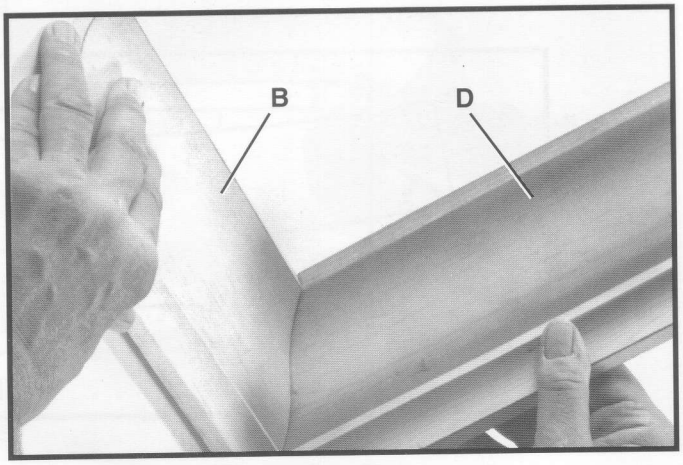


Fig. 42

MAINTENANCE

CHANGING THE BLADE

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

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

2. Loosen screw (A) Fig. 43, and rotate cover (B) to the rear as shown in Fig. 44.

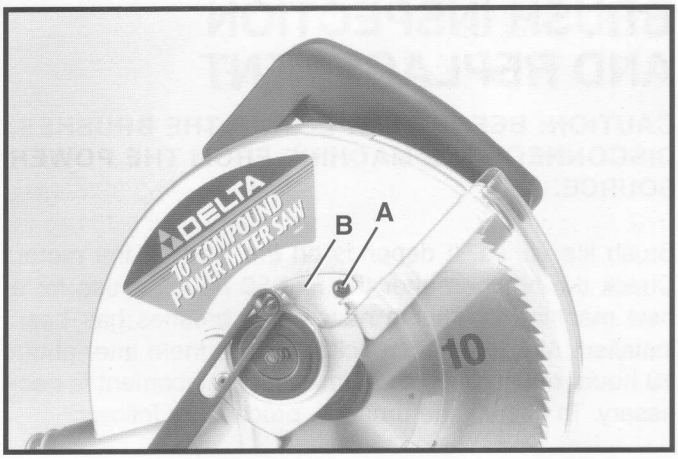


Fig. 43

Fig. 44

3. To remove the saw blade, insert hex wrench (C) Fig. 45, into the hex hole located on the rear end of the arbor shaft, to keep the shaft from turning.

4. Using wrench (D) Fig. 46, loosen arbor screw (E) by turning it clockwise.

5. Remove arbor screw (E) Fig. 46, outside blade flange (F) and saw blade (G) from saw arbor.

6. Assemble new saw blade **MAKING CERTAIN TEETH OF SAW BLADE ARE POINTING DOWN AT THE FRONT** and reassemble outside blade flange (F) Fig. 46, and arbor screw (E) by turning it counterclockwise using wrench (D) Fig. 46. At the same time use hex wrench (C) Fig. 45, to keep the arbor from turning.

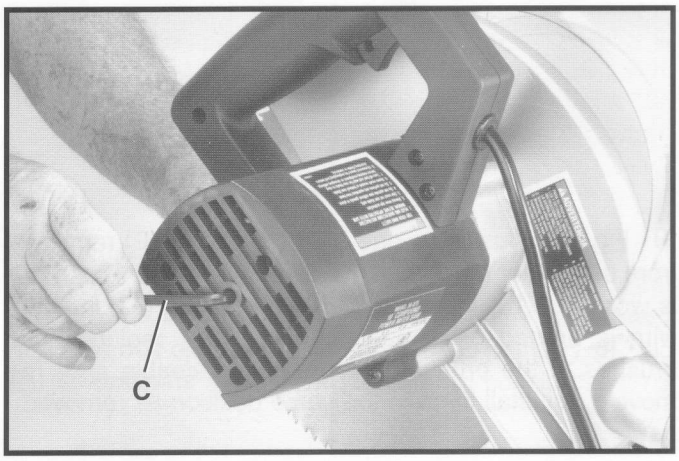


Fig. 45

7. Replace cover that was rotated to the rear in **STEP 2**.

8. **WARNING: REMOVE WRENCHES (C) FIG. 45, AND (D) FIG. 46, BEFORE TURNING ON THE POWER**.

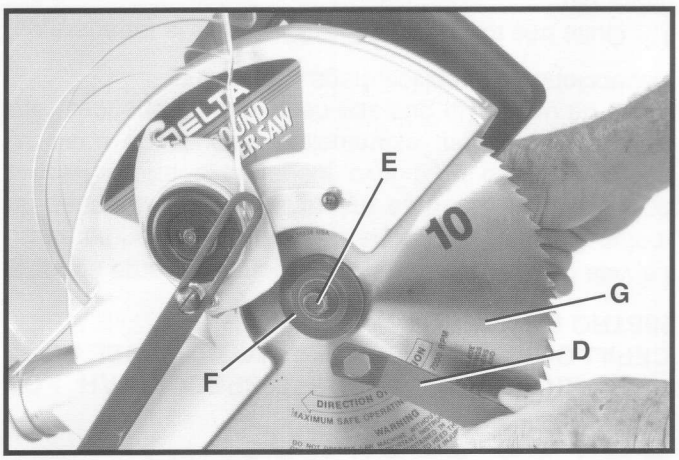


Fig. 46

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. To inspect the brushes, proceed as follows:

1. Remove three screws (A) Fig. 47, and remove motor cover (B).

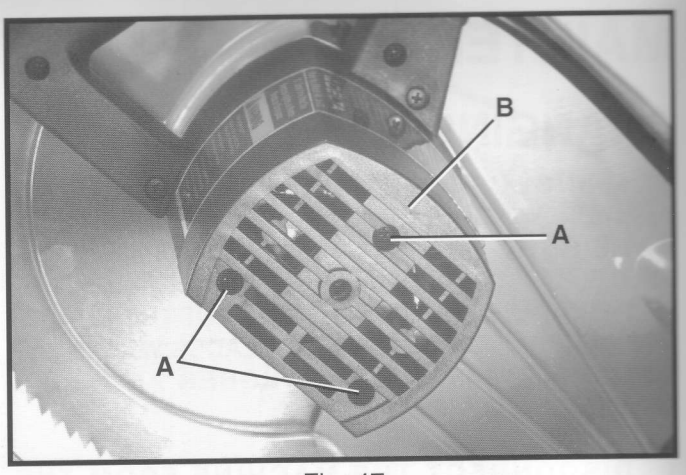


Fig. 47

2. The brushes are located in the two holders (C) Fig. 48. Remove spade type terminal connector (D) and pull out brush holders (C).

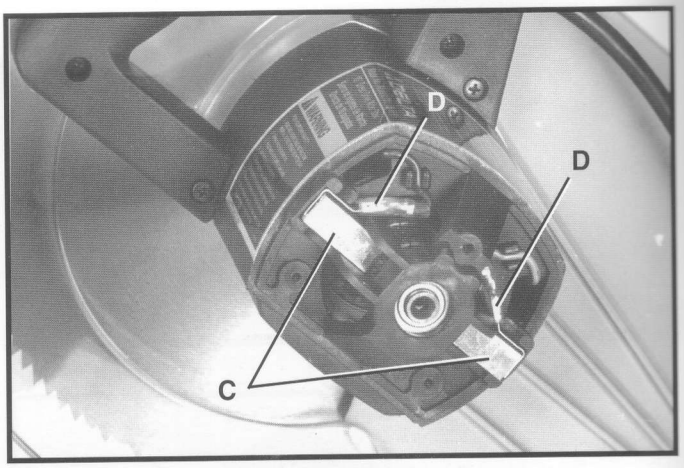


Fig. 48

3. Fig. 49, illustrates one of the brushes (E) removed from the holder (C). When the carbon on either brush (E) is worn to 3/16″ in length or if either spring (F) 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.

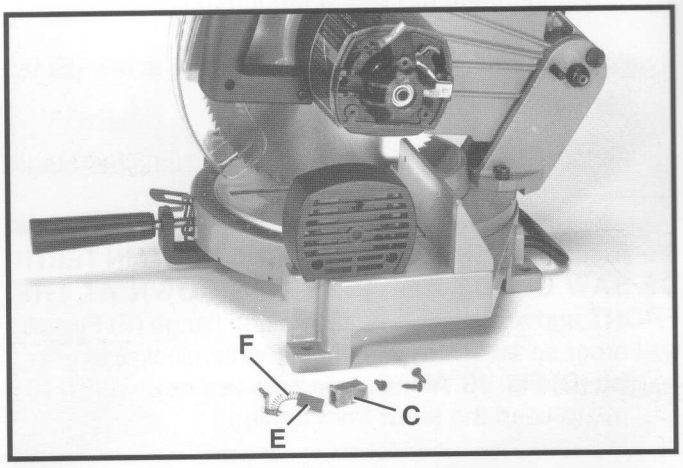
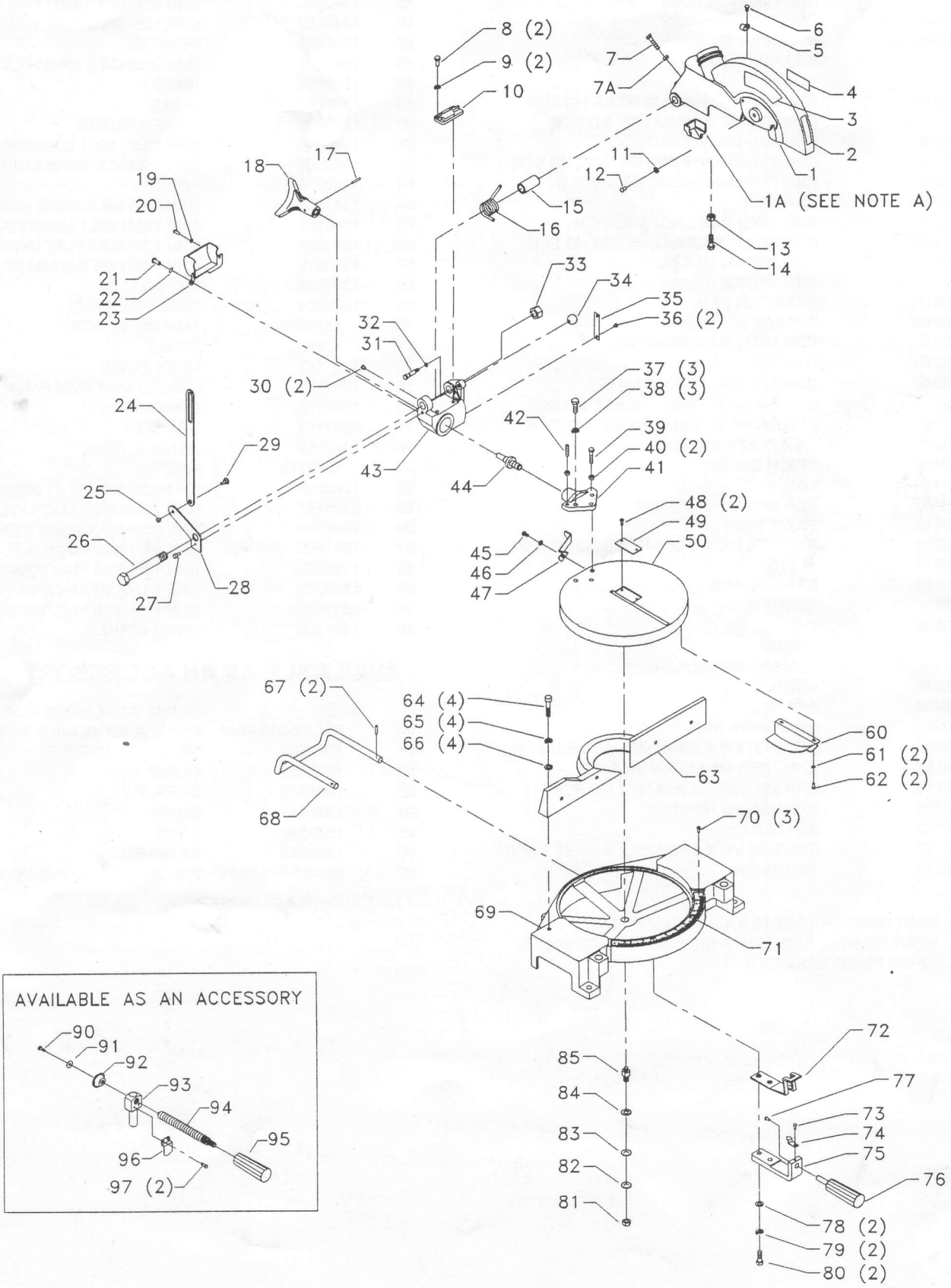


Fig. 49

DELTA
A Pentair Company

36-075
10" COMPOUND POWER MITER SAW

MB-4D
Part No. 1349818
Revised: 1/16/97



REPLACEMENT PARTS

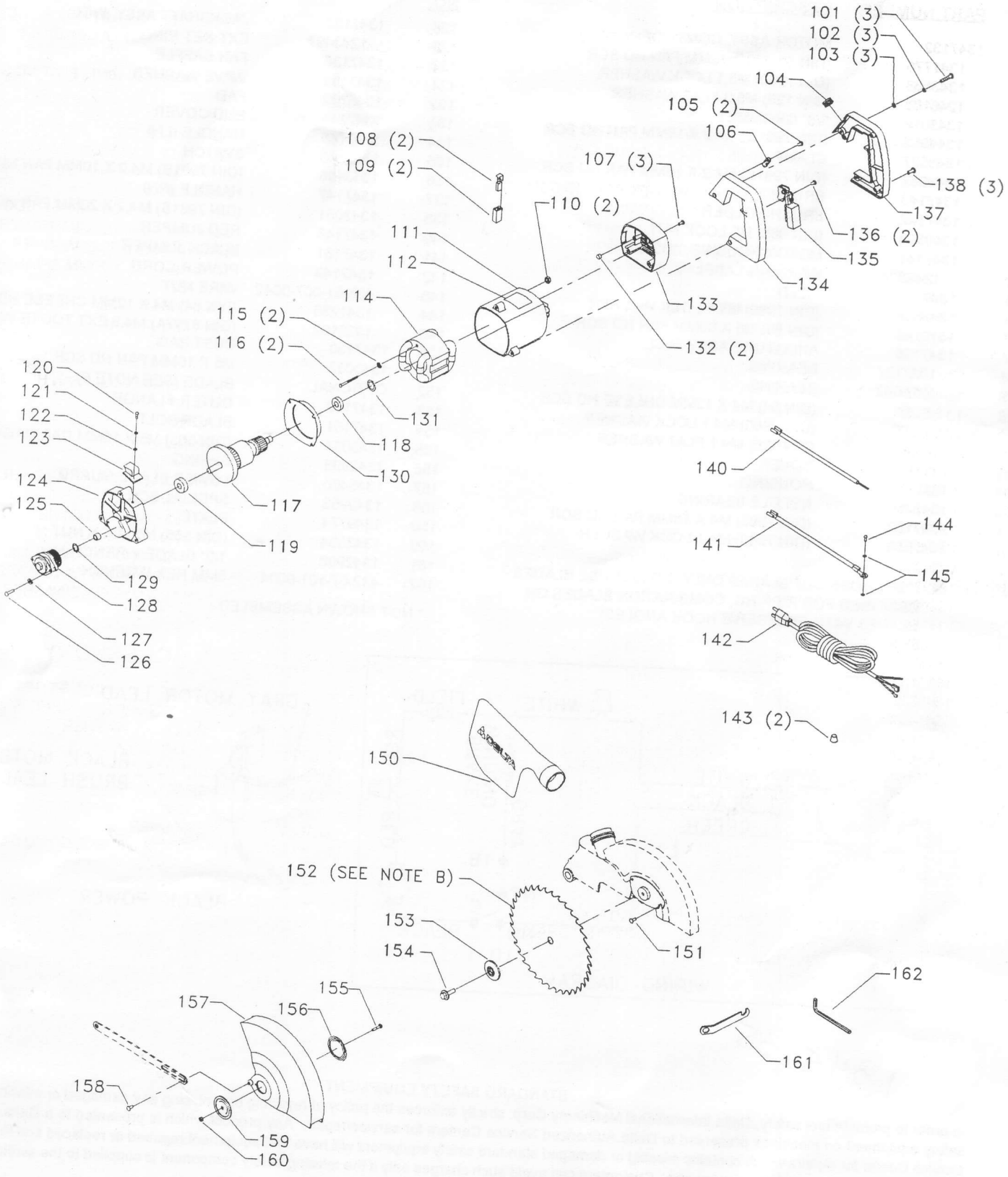
REF. NO.	PART NUMBER	DESCRIPTION
1	1349821	UPPER ARM ASSY, *INCL:*
1A	1349910	DUST DEFLECTOR *(SEE NOTE A)*
2	1349826	DIRECTION ARROW
3	1349822	NAMEPLATE
4	1349823	WARNING LABEL
5	1342930	CLAMP
6	1243394	(DIN 84) M5 X 10MM CHEESE HD SCR
7	1246016	(DIN 933) M8 X 25MM HEX HD SCR
7A	1243398	(DIN 934) M8 HEX NUT
8	1246004	(DIN 912) M6 X 16MM HEX SOC HD SCR
9	1243520	(DIN 7980) M6.1 LOCK WASHER
10	1349809	BRACKET
11	1243525	(DIN 7980) M4.1 LOCK WASHER
12	1341235	(DIN 84) M4 X 12MM CHEESE HD SCR
13	1243456	(DIN 934) M6 HEX NUT
14	1246015	(DIN 933) M6 X 20MM HEX HD SCR
15	1349817	SPRING SLEEVE
16	1349816	SPRING
17	1310311	(DIN 1481) M4 X 22MM SPRING PIN
18	1349815	HANDLE
19	1343545	(DIN 125) M4.1 FLAT WASHER
20	1243501	(DIN 84) M4 X 10MM CHEESE HD SCR
21	1246045	(DIN 84) M6 X 10MM CHEESE HD SCR
22	1340608	M6.4 FLAT WASHER
23	1349493	PINCH GUARD
24	1349490	LINK
25	1343504	(DIN 985) M5 LOCK NUT
26	1349813	PIVOT BOLT
27	1246051	(DIN 912) M5 X 12MM HEX SOC HD SCR
28	1349812	PLATE
29	1349953	SPECIAL SCR
30	1349811	BUMPER
31	1345533	PIN
32	1345534	O-RING
33	1313165	(DIN 985) M16 LOCK NUT
34	1345535	KNOB
35	1345482	SCALE
36	1310016	5MM DRIVE SCR
37	1246053	(DIN 912) M8 X 25MM HEX SOC HD SCR
38	1246157	(DIN 7980) M8.1 LOCK WASHER
39	1246175	(DIN 931) M6 X 30MM HEX HD SCR
40	1243456	(DIN 934) M6 HEX NUT
41	1349772	BRACKET
42	1246127	(DIN 916) M6 X 30MM HEX SOC SET SCR
43	1349773	TRUNNION
44	1349810	STUD
45	1342455	(DIN 85) M5 X 10MM PAN HD SCR
46	1246102	(DIN 125) M5.3 FLAT WASHER
47	1345467	POINTER
48	1246117	(DIN 963) M4 X 10MM FLAT HD SCR
49	1349808	INSERT
50	1349807	TABLE
60	1349806	LOWER GUARD
61	1243525	(DIN 7980) M4.1 LOCK WASHER
62	1243501	(DIN 84) M4 X 10MM CHEESE HD SCR
63	1349805	FENCE
64	1243530	(DIN 912) M8 X 30MM HEX SOC HD SCR
65	1246157	(DIN 7980) M8.1 LOCK WASHER
66	1243526	(DIN 125) M8.4 FLAT WASHER
67	1330410	(DIN 1481) M5 X 20MM SPRING PIN
68	1347123	EXT BRACE
69	1349804	BASE ASSY, *INCL:*
70	1310016	5MM DRIVE SCR
71	1349803	SCALE
72	1347115	LOCK PLATE
73	1310159	(DIN 85) M4 X 6MM PAN HD SCR
74	1347116	POINTER
75	1347117	BRACKET
76	1347118	HANDLE, *INCL:*
77	1347119	PAD
78	1243526	(DIN 125) M8.4 FLAT WASHER
79	1246157	(DIN 7980) M8.1 LOCK WASHER
80	1246016	(DIN 933) M8 X 25MM HEX HD SCR
81	1341996	(DIN 985) M10 LOCK NUT
82	1243502	(DIN 125) M10 FLAT WASHER
83	1343275	(DIN 137A) M10.5 WAVE WASHER
84	1243502	(DIN 125) M10 FLAT WASHER
85	1347120	PIVOT STUD

AVAILABLE AS AN ACCESSORY

*	36-221	CLAMP ASSY, *CONST OF:*
90	901-02-010-0561	#10-32 X 3/8" ROUND HD SCR
91	1340608	M6.4 FLAT WASHER
92	1345550	CLAMP CUP
93	1345549	SUPPORT
94	1345547	SHAFT
95	1345546	KNOB
96	1345548	RETAINER
97	901-02-010-0561	#10-32 X 3/8" ROUND HD SCR

* NOT SHOWN ASSEMBLED

NOTE A: PART NUMBER 1349910 (DUST DEFLECTOR), MUST BE SECURED WITH A SILICON TYPE ADHESIVE WHEN BEING SERVICED.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132 (2)
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134
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136 (2)
137
138 (3)
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143 (2)
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152 (SEE NOTE B)
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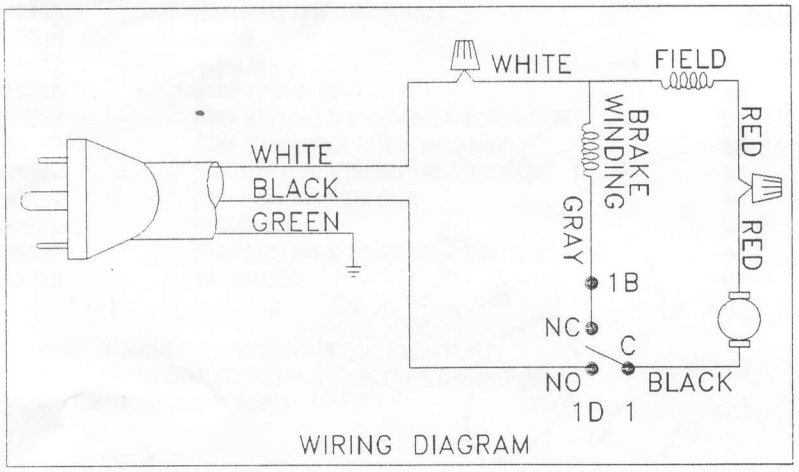
REPLACEMENT PARTS

REF. NO.	PART NUMBER	DESCRIPTION
*	1347132	MOTOR ASSY, *CONST OF:*
101	1341770	(DIN 85) M5 X 72MM PAN HD SCR
102	1343538	(DIN 7980) M5.1 LOCK WASHER
103	1246102	(DIN 125) M5.3 FLAT WASHER
104	1343019	3/8" GROMMET
105	1344952	(DIN 7981B) M4.2 X 16MM PAN HD SCR
106	1343527	CLAMP
107	1344952	(DIN 7981B) M4.2 X 16MM PAN HD SCR
108	1347143	BRUSH
109	1347142	BRUSH HOLDER
110	1343504	(DIN 985) M5 LOCK NUT
111	1347141	MOTOR HOUSING, *INCL:*
112	1349824	WARNING LABEL
114	1347140	FIELD
115	1343538	(DIN 7980) M5.1 LOCK WASHER
116	1310148	(DIN 85) M5 X 60MM PAN HD SCR
117	1347136	ARMATURE ASSY, *INCL:*
118	1347137	BEARING
119	1310042	BEARING
120	1341235	(DIN 84) M4 X 12MM CHEESE HD SCR
121	1243525	(DIN 7980) M4.1 LOCK WASHER
122	1343545	(DIN 125) M4.1 FLAT WASHER
123	1347135	COVER
124	1347134	HOUSING
125	1343259	NEEDLE BEARING
126	1347162	(DIN 7985) M4 X 18MM PAN HD SCR
127	1243525	(DIN 7980) M4.1 LOCK WASHER

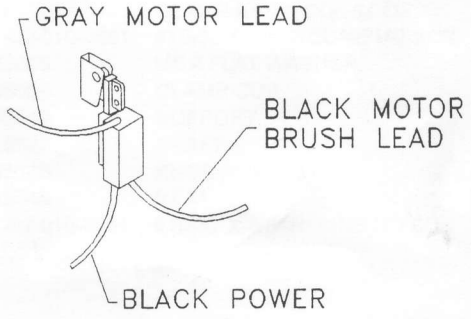
NOTE B: USE CROSS CUT BLADES ONLY! DO NOT USE BLADES DESIGNED FOR RIPPING, COMBINATION BLADES OR BLADES WITH EXCESSIVE HOOK ANGLES!

REF. NO.	PART NUMBER	DESCRIPTION
128	1347133	JACKSHAFT ASSY, *INCL:*
129	1243497	EXT RET RING
130	1347138	FAN BAFFLE
131	1347139	WAVE WASHER
132	1345702	PAD
133	1347144	END COVER
134	1347145	HANDLE *(LH)*
135	1347146	SWITCH
136	1340406	(DIN 7981B) M4.2 X 10MM PAN HD SCR
137	1347147	HANDLE *(RH)*
138	1343051	(DIN 7981B) M4.2 X 20MM PAN HD SCR
140	1347148	RED JUMPER
141	1347161	BLACK JUMPER
142	1347149	POWER CORD
143	438-01-007-0042	WIRE NUT
144	1341235	(DIN 84) M4 X 12MM CHEESE HD SCR
145	1320102	(DIN 6797A) M4.3 EXT TOOTH WASHER
150	1347160	DUST BAG
151	1343053	M5 X 10MM PAN HD SCR
152	OPTIONAL	BLADE *(SEE NOTE B)*
153	1347150	OUTER FLANGE
154	1347151	BLADE BOLT
155	1343054	(DIN 603) M5 X 10MM CARRIAGE HD SCR
156	1342998	SPRING
157	1345460	LOWER BLADE GUARD
158	1349953	SPECIAL SCR
159	1349774	PLATE
160	1343504	(DIN 985) M5 LOCK NUT
161	1342906	1/2" BLADE WRENCH
162	432-07-101-0004	5MM HEX WRENCH

* NOT SHOWN ASSEMBLED



WIRING DIAGRAM



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STANDARD SAFETY EQUIPMENT

In order to promote tool safety, Delta International Machinery Corp. strictly enforces the policy of repairing or replacing any damaged or missing standard safety equipment on machines presented to Delta Authorized Service Centers for service/repair. Any product which is presented to a Delta Authorized Service Center for repairs which contains missing or damaged standard safety equipment will have that equipment repaired or replaced and the customer will be charged for any such service/repairs. Customers can avoid such charges only if the missing safety component is supplied to the service center at the time of repair.

This parts list is provided to aid in obtaining service parts. Copies of the instruction and maintenance literature can be obtained through the Delta Technical Publications Department or through your local service outlet.