10"Motorized Miter Box



Part No. 1340209

ADELTA

TABLE OF CONTENTS

SAFETY RULES FOR ALL TOOLS
ADDITIONAL SAFETY RULES FOR THE MITER BOX4
UNPACKING4
ASSEMBLY INSTRUCTIONS Moving Cuttinghead To The Up Position
FASTENING MITER BOX TO SUPPORTING SURFACE
DUST CHUTE6
CONNECTING MITER BOX TO POWER SOURCE Power Connections
OPERATING CONTROLS Starting And Stopping Machine
ADJUSTMENTS Adjusting Fence 90 Degrees To Blade
MAINTENANCE Changing The Blade 13 Belt Replacement 14 Table Insert 15 Brush Inspection And Replacement 15
TYPICAL OPERATIONS AND HELPFUL HINTS General Cutting Operations
ACCESSORIES
DELTA PARTS DISTRIBUTION CENTERS
FACTORY SERVICE CENTERS24
AUTHORIZED SERVICE CENTERS25
TROUBLE SHOOTING GUIDE

WARNING: FAILURE TO FOLLOW THESE RULES MAY RESULT IN SERIOUS PERSONAL INJURY.

As with all machinery there are certain hazards involved with operation and use of the machine. 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.

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 for which it was designed. If you have any questions relative to its application DO NOT use the machine until you have written Delta Machinery and we have advised you.

DELTA INTERNATIONAL MACHINERY CORP. MANAGER OF TECHNICAL SERVICES 246 ALPHA DRIVE PITTSBURGH, PA 15238

SAFETY RULES FOR ALL TOOLS

- 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. **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.
- 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."
- 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.
- 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. Nonslip foot wear is recommended. Wear protective hair covering to contain long hair.
- 12. **ALWAYS USE SAFETY GLASSES.** Also use face or dust mask if cutting operations is dusty. Everyday eyeglasses only have impact resistant lenses; they are NOT safety glasses.

- 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.** Consult the owner's manual for recommended accessories. The use of improper accessories may cause hazards.
- 18. **AVOID ACCIDENTAL 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 reconnected.

ADDITIONAL SAFETY RULES FOR THE MITER BOX

- 1. **ALWAYS** hold the work firmly against the fence and table. Do not perform any operation freehand.
- 2. **BE SURE** blade is sharp, runs freely and is free from vibration.
- 3. **ALLOW** the motor to come up to full speed before starting cut.
- 4. **RELEASE** the trigger switch before applying the brake.
- 5. **IMPORTANT USE THE BRAKE** to bring the blade to a complete stop before reaching out to pick up a piece of work, a piece of scrap, or anything else which is in or near the cutting path of the blade.
- 6. **USE THE BRAKE** to bring the saw blade to a complete stop before leaving the machine unattended.
- 7. **ALWAYS MAKE SURE** the table clamp handle is tight before cutting.
- 8. **BE SURE** blade and flanges are clean and arbor nut is tightened securely.
- 9. USE the blade guard at all times.
- 10. **NEVER** use blades larger or smaller in diameter then recommended.
- 11. **NEVER** apply lubricants to the blade when it is running.

- 12. **NEVER** use blades recommended for operation at less than 5500 rpm.
- 13. **ALWAYS** check the blade for cracks or damage before operation. Replace cracked or damaged blade immediately.
- 14. USE only blade flanges specified for the miter box.
- 15. KEEP hands out of path of saw blade.
- 16. **NEVER** reach around saw blade.
- 17. **MAKE** sure blade is not contacting workpiece before switch is turned on.
- 18. **NEVER** lock the switch in the "ON" position.
- 19. **MAKE SURE** blade comes to a complete stop before removing or securing workpiece, changing work piece angle or changing the angle of the blade.
- 20. **NEVER** use the miter box without the table insert.
- 21. **NEVER** use the miter box in an area with flamable liquids or gases.
- 22. **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.
- 23. **SHUT OFF POWER** and stop the blade before servicing or adjusting tool.

UNPACKING

1. Remove the miter box and all loose items from the carton. IMPORTANT: DO NOT LIFT THE MITER BOX BY THE SWITCH HANDLE OR TABLE CONTROL HANDLE AS THIS MAY CAUSE MISALIGNMENT. ALWAYS LIFT THE MACHINE BY THE BASE.

NOTE: The scale, nameplates and pointer are supplied with a plastic protective coating. These protective coatings can be removed by peeling them off.

ASSEMBLY INSTRUCTIONS

MOVING CUTTINGHEAD TO THE UP POSITION

1. The miter box is shipped with the cuttinghead (A) locked in the down position, as shown in Fig. 2.

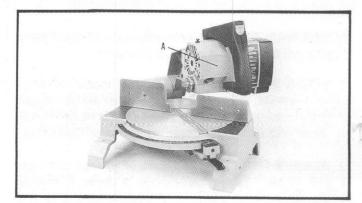


Fig. 2

2. To move the cuttinghead to the up position, release lock lever (B) Fig. 3.

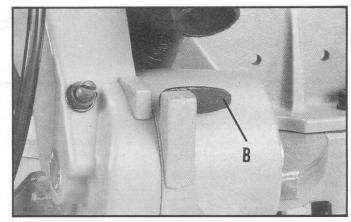


Fig. 3

ASSEMBLING TABLE LOCK HANDLE

1. Thread table lock handle (A) into the control arm, as shown in Fig. 4.

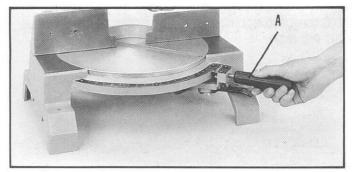


Fig. 4

ASSEMBLING BLADE GUARD

1. Assemble blade guard (A) to the motor housing using the three screws (B) and bracket (C) Fig. 5.

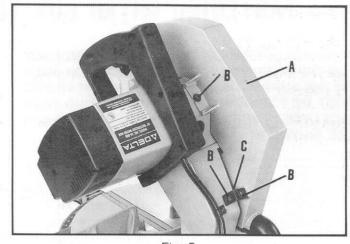


Fig. 5

ASSEMBLING SAW BLADE

- 1. IMPORTANT: MAKE CERTAIN MITER BOX IS DISCONNECTED FROM THE POWER SOURCE, BEFORE INSTALLING SAW BLADE.
- 2. Rotate arbor shaft access cover (A), to the up position as shown in Fig. 6.
- 3. Assemble saw blade (B), flange (C), and nut (D) to the arbor shaft, as shown in Fig. 6. IMPORTANT: MAKE CERTAIN TEETH OF SAW BLADE (B) ARE POINT-NG IN THE SAME DIRECTION AS THE DIRECTION-AL ARROW (E) ON THE SAW GUARD.
- 4. **NOTE:** Arbor nut (D) Fig. 6, has a left hand thread. Turn the arbor nut (D) counterclockwise by hand as far as possible.

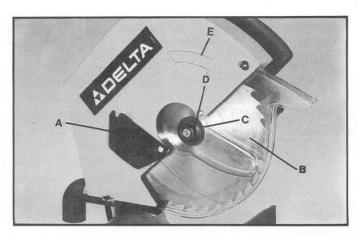


Fig. 6

5. To tighten arbor nut, insert hexagon wrench (E) Fig. 7, into hex hole in end of arbor shaft, to keep the shaft from turning, and tighten arbor nut (D) Fig. 8, using wrench (F).

6. IMPORTANT: MAKE CERTAIN WRENCHES (E) FIG. 7 AND (F) FIG. 8, ARE REMOVED AND THAT ARBOR SHAFT ACCESS COVER (A) FIG. 8, IS PUT BACK INTO THE DOWN POSITION BEFORE TURNING ON THE POWER.



Fig. 7

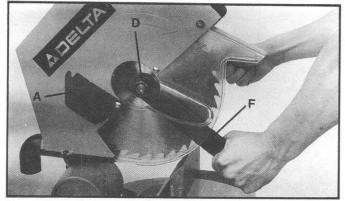


Fig. 8

FASTENING MITER BOX TO SUPPORTING SURFACE

IF DURING OPERATION THERE IS ANY TENDENCY FOR THE MITER BOX TO TIP OVER, SLIDE OR WALK ON THE SUPPORTING SURFACE, THE MITER BOX MUST BE SECURED TO THE SUPPORTING SURFACE USING THE FOUR HOLES, THREE OF WHICH ARE SHOWN AT (A) FIG. 9.

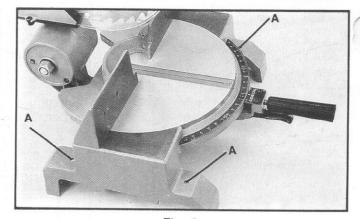


Fig. 9

DUST CHUTE

A dust chute (A) Fig. 10, is provided on the back of the saw guard. The diameter of the opening of the dust chute is $1\frac{1}{2}$ " O.D. and can be connected to a dust collection system.

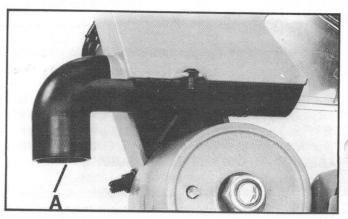


Fig. 10

CONNECTING MITER BOX 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. If an extension cord is used, use only 3-wire extension cords which have 3-prong grounding type plugs and 3-pole receptacles which accept the tools plug. For distances up to 100 feet use #12 wire. For distances up to 150 feet use #10 wire. Have a certified electrician replace or repair damaged or 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 motor nameplate. All line connections should make good contact. Running low voltage will injure the motor.

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. This tool 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.

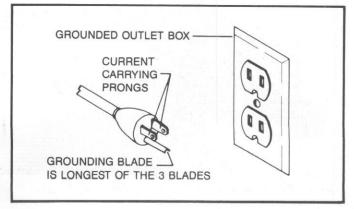
Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded.

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. 11.

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. 11, A temporary adapter, which looks like the adapter illustrated in Fig. 12, may be used to connect this plug to a 2-pole receptacle, as shown in Fig. 12, 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. 12.

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.



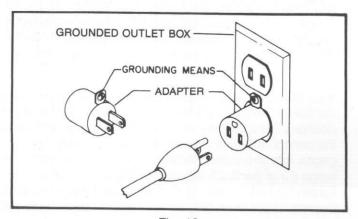


Fig. 11

Fig. 12

OPERATING CONTROLS

STARTING AND STOPPING MACHINE

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

Your miter box is equipped with a blade brake. As soon as the cut is completed, release the switch trigger (A) and press down on the brake button (B), Fig. 13, until the blade comes to a complete stop. The brake button (B) is conveniently located on the top of the handle for easy thumb operation.

DANGER: A COASTING SAW BLADE CAN BE DANGEROUS. APPLY BRAKE IMMEDIATELY TO STOP SAW BLADE WHEN THE SWITCH IS RELEASED TO THE "OFF" POSITION.

WARNING: THE TORQUE DEVELOPED DURING BRAKING MAY LOOSEN THE ARBOR NUT. THE ARBOR NUT SHOULD BE CHECKED PERIODICALLY AND TIGHTENED IF NECESSARY, ESPECIALLY AFTER BRAKING.

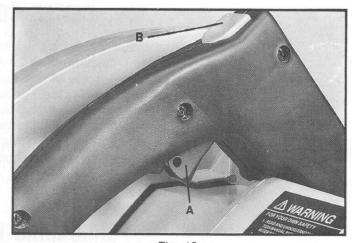


Fig. 13

LOCKING SWITCH IN THE "OFF" POSITION

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

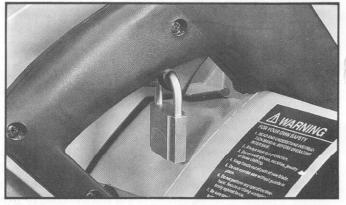


Fig. 14

TABLE CONTROLS

Your miter box will cut any angle from a straight 90 degree cut-off to 47 degrees right and left. Simply loosen lock handle (A) Fig. 15, depress index lever (B) and move the control arm to the desired angle. Then tighten lock handle (A).

Your miter box also contains positive stops for the table control arm at the 0, 22-1/2 and 45 degree, right and left positions. Simply lossen lock handle (A) Fig. 15, and move the control arm until the spring loaded positive stop engages into the indent located directly underneath the ledge (C) at the 0, 22-1/2 and 45 degree postions. Then tighten the lock handle (A). To disengage the positive stop, depress index lever (B). Always tighten lock handle (A) before cutting.

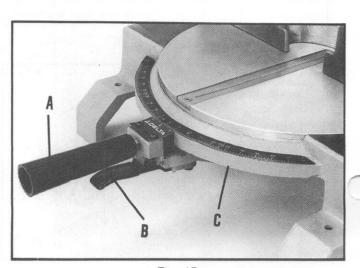


Fig. 15

SCALE AND POINTER

The center line (A) Fig.16, on the pointer indicates the actual angle of cut. Each line on the scale (B) represents 1/2 degrees. In effect, when the center line (A) is moved from one line to the next on the scale the angle of cut is changed by 1/2 degree.

The pointer is provided with two additional lines (C) and (D) Fig.16. This allows you to move the control arm 1/4 degree. For example, assume the center line (A) is pointing to the 10 degree mark on the scale, as shown, and you want to change the angle of cut 1/4 degree to the right. Move the control arm until the right line (D) lines up with the next line on the scale. The angle of cut will then be changed 1/4 degree to the right. If you were changing the angle of cut 1/4 degree to the left, use the left line (C) in the same manner.

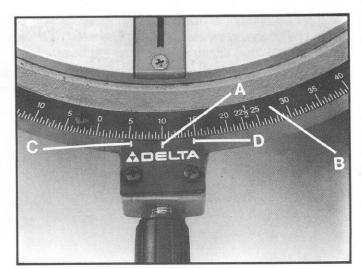


Fig. 16

LOCKING CUTTINGHEAD IN THE DOWN POSITION

When transporting the miter box, the cuttinghead should always be locked in the down position. This can be accomplished by lowering the cuttinghead and moving the locking lever (A) to the locked position, as shown in Fig.17. NEVER CARRY THE MITER BOX BY THE SWITCH HANDLE OR TABLE CONTROL HANDLE AS THIS MAY CAUSE MISALIGNMENT. ALWAYS LIFT THE MACHINE BY THE BASE.

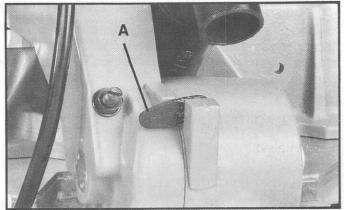


Fig. 17

ADJUSTMENTS

ADJUSTING FENCE 90 DEGREES TO BLADE

- 1. Move the table control arm so that the blade is at 90 degrees to the fence and the spring loaded positive stop is engaged into the indent located directly underneath the 0 degree mark on the scale. Then lock the control arm in this position.
- 2. Disconnect saw from power source.
- 3. Lower the saw blade into the slot in the table insert and using a square, place one end of the square against the fence and the other end against the saw blade, as shown in Fig. 18. Check to see if the fence is at 90 degrees to the blade.

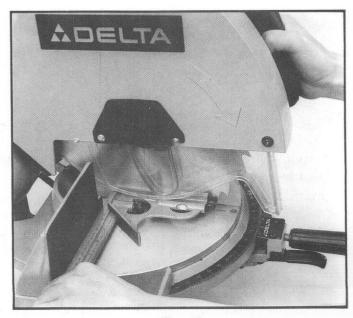


Fig. 18

4. If an adjustment is necessary, the fence can be adjusted by loosening the two screws, one of which is shown at (A) Fig.19 that attach the fence to the base.

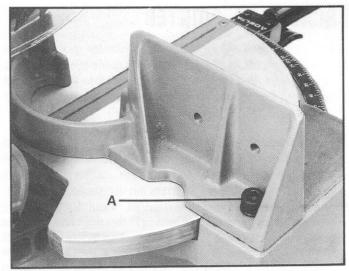


Fig. 19

ADJUSTING TABLE POSITIVE STOPS

1. Move the control arm to the center of the scale until the spring loaded positive stop engages into the factory drilled indent located directy under the 0 degree mark on the scale and tighten the lock handle (A) Fig. 20.

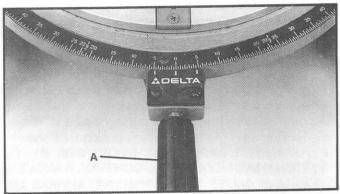


Fig. 20

2. Make a cut on a piece of wood, as shown in Fig, 21.

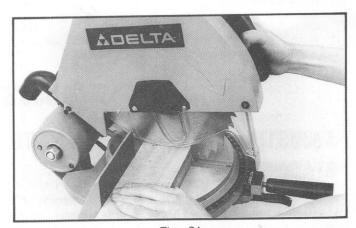


Fig. 21

3. Using a square, check to see if the piece of wood was cut at 90 degrees, as shown in Fig. 22.

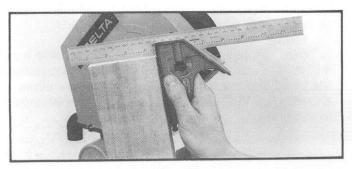


Fig. 22

- 4. If an adjustment is necessary, loosen the arm lock handle (A) Fig. 23, and the two screws (B). Then tap the arm (C) to the right or left as necessary, and tighten the two screws (B).
- 5. Make another test cut and if further adjustment is necessary, repeat the above instructions.

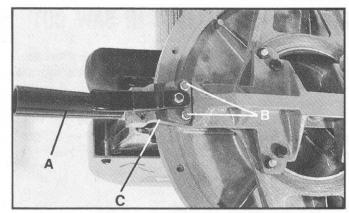


Fig. 23

- 6. When you are certain the cut is at 90 degrees, adjust the pointer so that the center line (D) Fig. 24, points to the 0 mark on the scale, by loosening the two screws (E).
- 7. Once the 90 degree positive stop is adjusted, the positive stops at 22½ and 45 degrees right and left will also be adjusted.

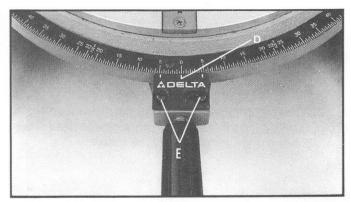


Fig. 24

ADJUSTING DOWNWARD TRAVEL OF SAW BLADE

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 lock nut (A) Fig. 25, and turning the adjusting screw (B) in or out until the blade lowers to the desired position. Then tighten the lock nut (A).

When making this adjustment, disconnect the machine 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.

ADJUSTING SPRING TENSION OF CUTTINGHEAD ARM ASSEMBLY

The spring tension of the cuttinghead arm assembly is adjusted at the factory in order that the saw blade returns to the up position. If it is ever necessary to re-adjust the spring tension, proceed as follows:

1. Loosen locknut (C) Fig. 25, and turn adjusting screw (D) clockwise to increase or counterclockwise to decrease the spring tension. After tension is adjusted, tighten locknut (C).

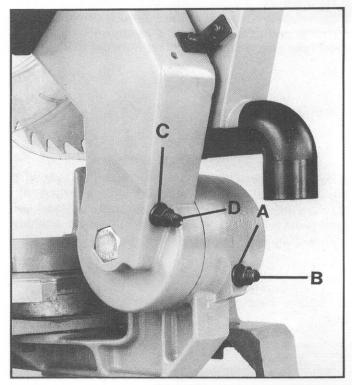


Fig. 25

REMOVING "HEELING" IN SAW CUT

Your saw is provided with an adjustment to allow the arbor to be set parallel with the pivot shaft at the rear of the machine. The saw blade should be perpendicular to the table surface, and also should be at right angles to the pivot shaft. Even though the blade may be perfectly aligned at 90° to the table, the blade may not be at right angle to the pivot shaft. This condition is called "heeling".

To check and adjust, proceed, as follows:

- 1. Clamp a piece of scrap material (about 3" to 3½" in height) to the fence, and make a 90° cut. Shut off the motor but do not return the saw blade to the up position.
- 2. Refer to Fig. 26, and also observe the cut you have just made.
- 3. If a condition exists similar to the top drawing shown in Fig. 26, the blade is not at right angle to the pivot shaft and an adjustment is necessary, as follows:
- 4. Disconnect machine from power circuit.
- 5. Remove the saw blade, and blade guard.
- 6. Re-assemble the saw blade, lower the blade and with a square, place one end of the square on the table and the other end against the blade, as shown in Fig. 27, to determine how much adjustment must be made.
- 7. Remove the saw blade.
- 8. To adjust, loosen the three screws (A) Fig. 28, and shift the cuttinghead (B). Then tighten the three screws (A). Re-assemble the saw blade and re-check until you are certain the saw blade is not "heeling" and is entering the work as shown in the bottom drawing of Fig. 26.
- 9. Replace the blade guard before operating the miter box.

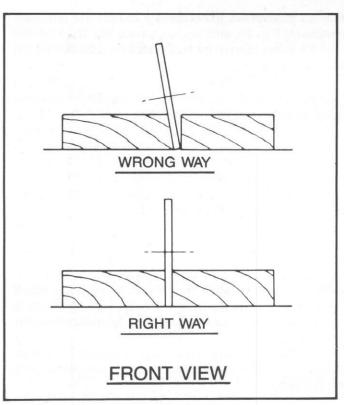


Fig. 26

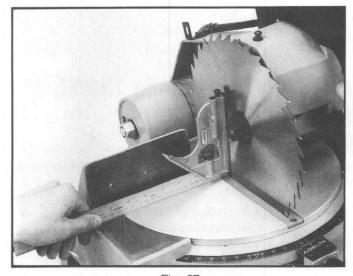


Fig. 27

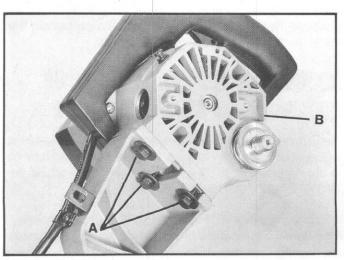


Fig. 28

ADJUSTING SLIDING FIT BETWEEN ARM ASSEMBLY AND TABLE BRACKET

To adjust the sliding fit between the arm assembly (A) Fig. 29, and the table bracket (B), tighten or loosen the adjusting nut (C). Correct adjustment is when a good snug sliding fit is obtained without any side movement between these two parts. This adjustment should not be too tight that it restricts the sliding movement or too loose that it affects the accuracy of the saw cut.

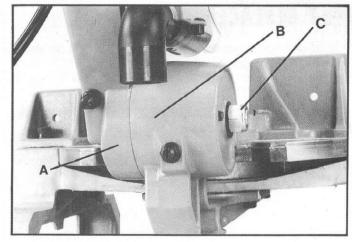


Fig. 29

ADJUSTING SLIDING FIT BETWEEN MOVABLE TABLE AND BASE

If it ever becomes necessary to adjust the sliding fit between the movable table and the base, loosen locknuts that fasten the four nylon adjusting screws (A) Fig. 30, and with a screwdriver, turn the nylon adjusting screws (A) until a good snug sliding fit is obtained. Then tighten the four locknuts.

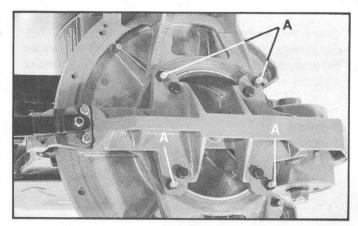


Fig. 30

MAINTENANCE

CHANGING THE BLADE

1. DISCONNECT THE MACHINE FROM THE POWER SOURCE.

- 2. To remove the saw blade, insert the hexagon wrench (A) Fig. 31, into the hex hole located on the end of the arbor shaft, to keep the shaft from turning. Rotate arbor shaft access cover (F) Fig. 32, to the up position, as shown. Using wrench (B), loosen arbor nut (C) Fig. 32, by turning it clockwise.
- 3. Remove arbor nut, flange and blade from arbor shaft.
- 4. Assemble new blade, flange and nut on the arbor and tighten the arbor nut (C) Fig. 32, by turning it counterclockwise. At the same time keep the arbor from turning using wrench (A) Fig. 31.
- 5. Make certain wrenches (A) Fig. 31 and (B) Fig. 32, are removed and that arbor shaft access cover (F) Fig. 32, is put back into the down position before turning on the power.

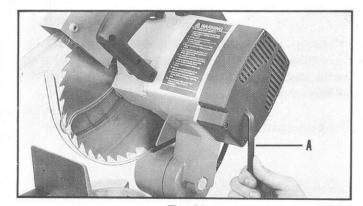


Fig. 31

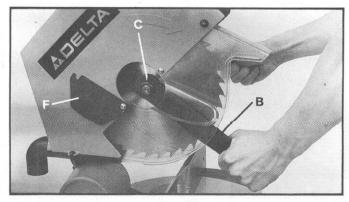


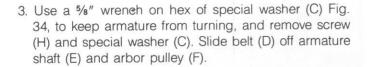
Fig. 32

BELT REPLACEMENT

Should you find it necessary to replace the belt on your miter box, proceed as follows:

1. DISCONNECT THE MACHINE FROM THE POWER SOURCE.

2. Remove the four screws (A) Fig. 33, and cover (B) from the end of the motor housing.



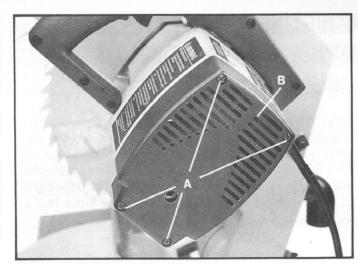


Fig. 33

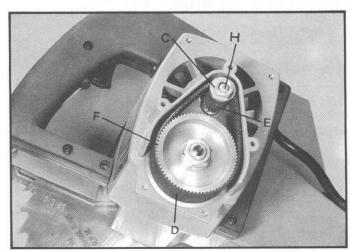


Fig. 34

- 4. Place new belt (D) Fig. 35, on teeth of arbor pulley (F) and armature shaft (E) as shown. Push in belt (D) and at the same time turn arbor pulley (F) until belt is completely engaged.
- 5. Replace special washer (C) and screw (H) Fig. 34.

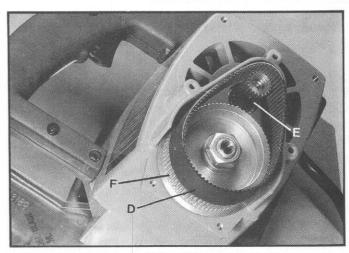


Fig. 35

TABLE INSERT

The blade slot (A) Fig. 36, in the table insert (B) was cut at the factory with the same thickness blade that is supplied with your saw, and acts as a chip breaker preventing splintering of the wood at the bottom of the cut.

If it is desired to use blades of various thicknesses with your miter box we suggest you obtain additional inserts and cut the slot into the insert with that particular blade. You will then have an insert that is matched with the blade.

If desired, inserts can be constructed using standard 1/4" thick plywood.

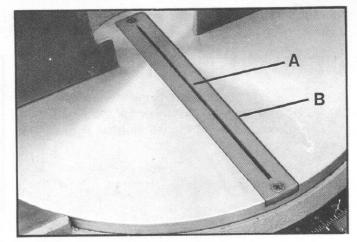


Fig. 36

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. 37, are located on the motor housing opposite each other. Fig. 38, 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.

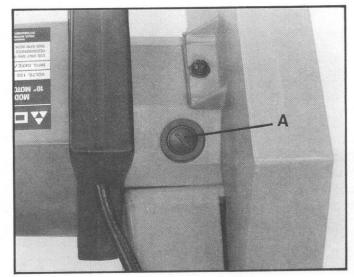


Fig. 37



Fig. 38

TYPICAL OPERATIONS AND HELPFUL HINTS

GENERAL CUTTING OPERATIONS

Your miter box has the capacity to cut standard $2\times4s$ at the 45 degree right, and left miter angles. Fig. 39, illustrates cutting a 2×4 at the 45 degree right miter position.

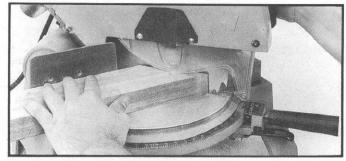


Fig. 39

A standard 2×6 can easily be cut at the 90 degree straight cut-off position, as shown in Fig. 40.

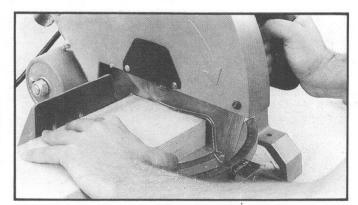


Fig. 40

Cutting a standard 4×4 is easily accomplished with your miter box, as shown in Fig. 41. One pass cutting (trim) can be done up to 7" in length. Longer cut-off requires turning stock over for second cut.

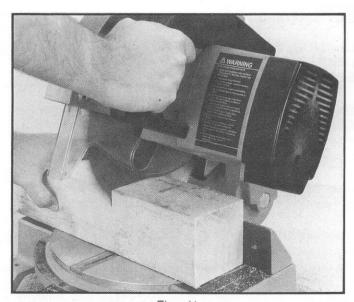


Fig. 41

Cutting various sizes of plastic pipe is an easy job for the miter box, as shown in Fig. 42.

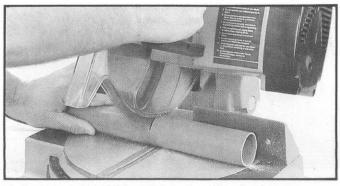


Fig. 42

CUTTING ALUMINUM

Aluminum extrusions such as used for making aluminum screens and storm windows can easily be cut with your miter box. 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. 43. The wrong way to cut aluminum angles is illustrated in Fig. 44. 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.**

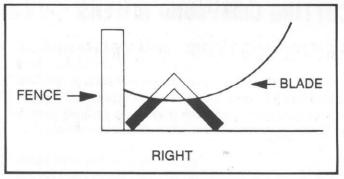


Fig. 43

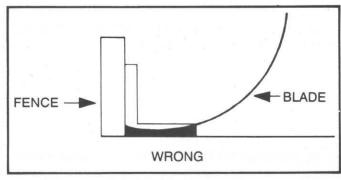


Fig. 44

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. 45.

If the material is positioned the wrong way, as shown in Fig. 46, the work piece will pinch the blade near the completion of the cut.

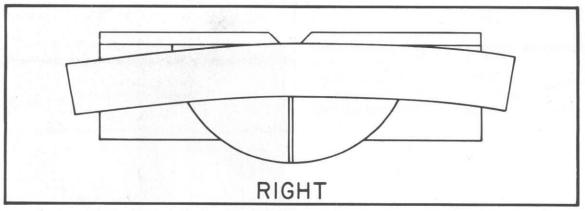


Fig. 45

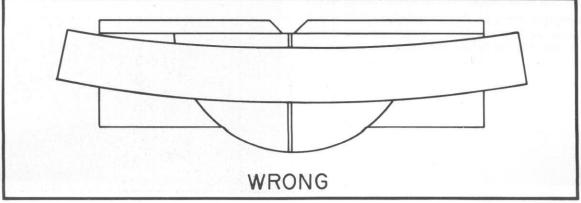


Fig. 46 ₁₇

CUTTING COMPOUND MITERS

Fig. 47, illustrates a filler block that can easily be constructed for use in cutting compound miters. Compound miters are used mostly for shadow box picture frames, etc. The face of the filler block is shown at 45 degrees to the fence and table. If a different work angle tilt is desired, simply vary the angle of the filler block face accordingly.

Although Fig. 47, illustrates the face of the filler block 3-5/8" wide, this dimension will vary depending on the material being cut.

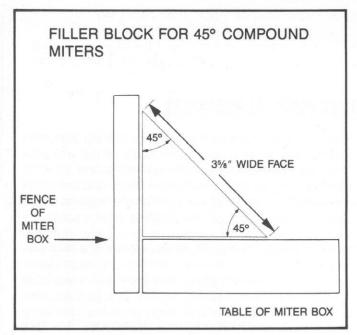


Fig. 47

Fig. 48, illustrates the filler block for compound miters fastened to the miter box fence with the center portion of the filler block (45 degree right and left angle) removed after it was cut-out on the saw.

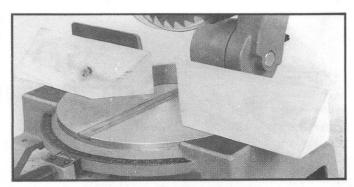


Fig. 48

Before attaching the filler blocks to the fence make sure there is clearance between the edge (A) of the movable blade guard and the edge (B) of the filler block, as shown in Fig. 49. This clearance between the blade guard and the filler block must be at both the right and left miter angles.

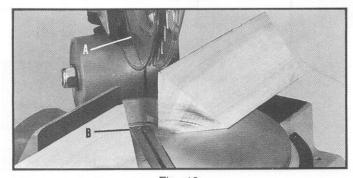


Fig. 49

Then attach the filler blocks to the fence using wood screws (C) through the two holes provided on each fence half, as shown in Fig. 50. This enables you to easily remove the filler blocks when not in use and quickly re-assemble them to the fence when needed.

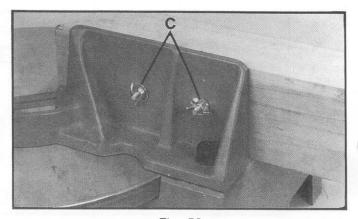


Fig. 50

Fig. 51, illustrates making a compound miter cut at the 45 degree right miter position. The 45 degree left compound miter cut, shown at (A) Fig. 51, was previously cut with the saw blade at the 45 degree left miter position.

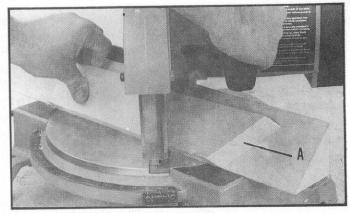


Fig. 51

The two compound miter cuts that were just made are shown in Fig. 52.

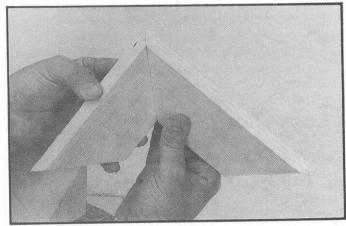


Fig. 52

CUTTING CROWN MOULDINGS

There are several methods that can be used to cut crown mouldings on the miter box.

The method shown in Fig. 53, illustrates the contact surfaces (the surfaces that contact the wall and ceiling) of the crown moulding held firmly against the fence and table of the miter box. This method is acceptable when making a small number of cuts but would not be pratical for a production application as it may be difficult to firmly hold the work in this position.

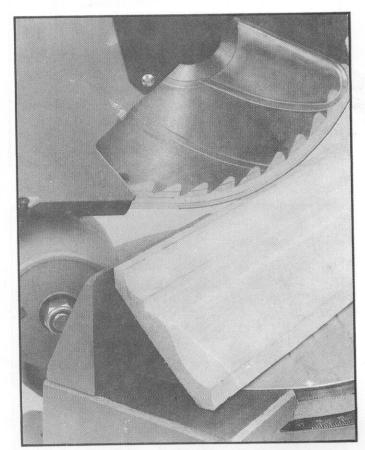


Fig. 53

When a large number of repetitive cuts of crown moulding are required we suggest the use of filler blocks, as shown in Fig. 54 through Fig. 57. The majority of crown mouldings have contact surfaces at 52 and 38 degrees to the rear surface of the moulding and these angles must be utilized when jointing the face of the filler block. For crown mouldings with different angles, appropriate filler blocks can be produced.

Fig. 54 and Fig. 55, illustrate the filler block fastened to the miter box fence with the face of the filler block extending outward from the top of the fence and down to the surface of the table. When the filler block is positioned in this manner, the crown moulding must be positioned on the table in the upside down position. This means that the surface of moulding that contacts the ceiling is against the table.

Fig. 56, and Fig. 57, illustrate the filler block fastened to the miter box fence with the face of the filler block extending inward toward the fence from the top to the bottom. When the filler block is positioned in this manner, the crown moulding is placed on the table in the same position as it would be when nailed between the ceiling and wall.

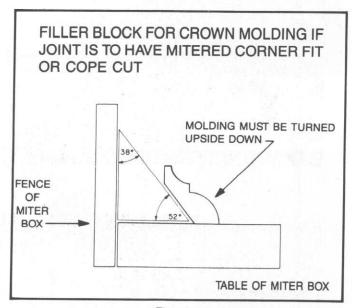


Fig. 54

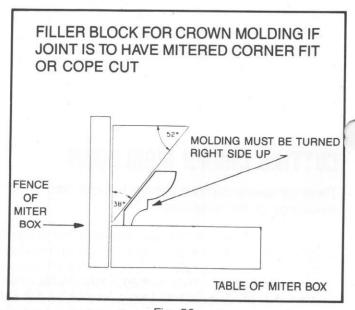


Fig. 56

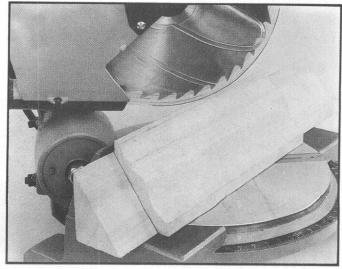


Fig. 55

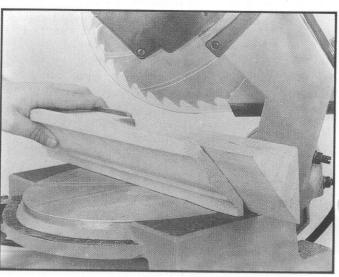


Fig. 57

When attaching the filler block to the fence make sure there is clearance between the edge (A) of the movable blade guard and the edge (B) of the filler block, as shown in Fig. 58. This clearance between the blade guard and the filler block must be at both the right and left miter angles.

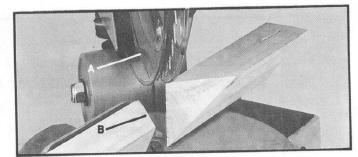


Fig. 58

Then fasten the filler blocks to the fence using wood screws (C) through the two holes provided on each fence half, as shown in Fig. 59. This enables you to easily remove the filler blocks when not in use and quickly reassemble then to the fence when needed.

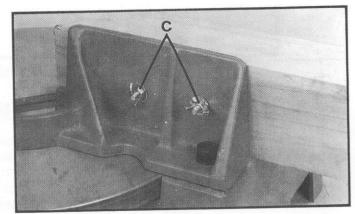


Fig. 59

Fig. 60 illustrates the miter box arm in the 45 degree right miter position and the filler blocks fastened to the fence so that the moulding will be in the same position as it would be when nailed between the ceiling and wall. When making this cut the moulding (A) on the left of the saw blade will be for an outside corner and the moulding (B) on the right of the saw blade will be for an inside corner. To cut the mating pieces for mouldings (A) and (B) Fig. 60, simply rotate the miter box arm to the 45 degree left miter position and make the cut, as shown in Fig. 61. In this case the moulding (C) on the left of the saw blade will be for an inside corner and the moulding (D) on the right of the saw blade will be for an outside corner.

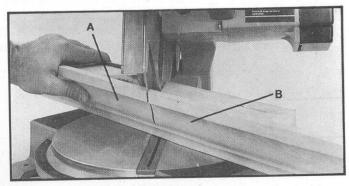


Fig. 60

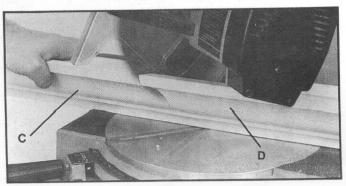


Fig. 61

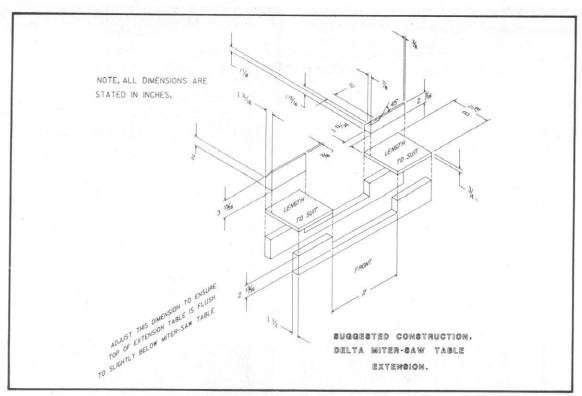


Fig. 62

CONSTRUCTING TABLE EXTENSIONS FOR YOUR MITER BOX

The drawing shown in Fig. 62, illustrates an auxilliary table extension that can be easily constructed for use with your miter box. The overall length of the table extension can vary depending on your preference.

Fig. 63, illustrates the table extension assembled. The two tables (B) are nailed to the two base supports (A) and the fences (C) and (D) are fastened to the table with screws from underneath the table. The cut-out (E) on the right hand fence is necessary for motor clearance.

The miter box is fastened to the two base supports (A) Fig. 63, using four screws, two of which are shown at (F). Shims can be placed between the mounting legs of the miter box base and the two base supports (A) Fig. 63, in order to make sure that the miter box tables (G) are in alignment with the wooden table extensions (B). Make certain the wood fences (C) and (D) Fig. 63, are in alignment with the miter box fences (H).

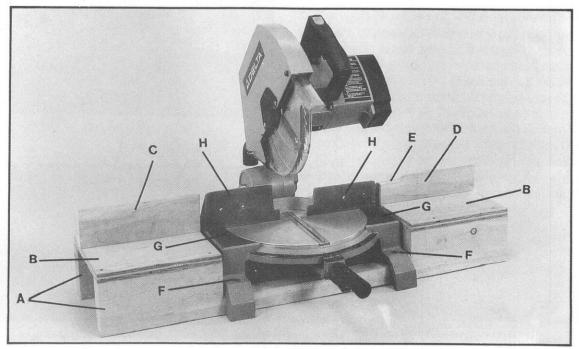


Fig. 63

CONSTRUCTING WORK SUPPORT EXTENSIONS FOR YOUR MITER BOX

One of the unique features of your miter box is the ease with which you can construct work supports. Fig. 64 illustrates the miter box mounted to two standard $2\times6's$ (B) using four screws through the four holes in the mounting legs (A). The length of the $2\times6's$ (B) can vary depending on your preference. The distance from the top of the $2\times6's$ to the miter box table will be 3-1/2''. This enables you to nail standard $2\times4's$ to the $2\times6's$, as shown in Fig. 64. The top of the $2\times4's$ will than be in alignment with the table of the miter box. If desired, you can fasten fence extensions (C) Fig. 65, to the work supports making sure they are in alignment with the fences (D) of the miter box.

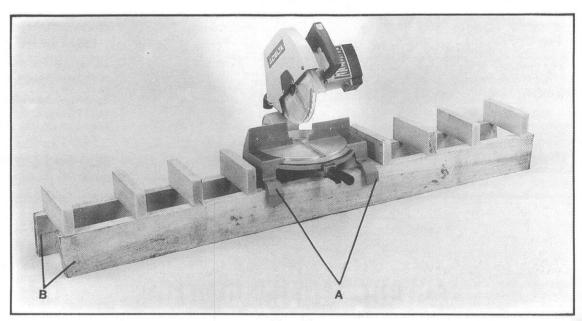


Fig. 64

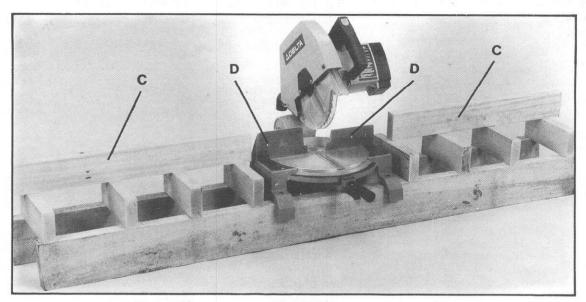


Fig. 65

ACCESSORIES

Cat. No. 34-105 10" Flat Ground Combination Saw Blade

Cat. No. 35-614 10" ×48 Alternate Top Bevel Grind-Carbide Tipped Saw Blade Cat. No. 35-619 10" ×60 Triple Chip and Flat Grind-All Purpose Carbide Tipped Saw Blade

Cat. No. 35-625 10" ×80 Triple Chip and Flat Grind-Super Finish Carbide-Tipped Saw Blade

PARTS, SERVICE OR WARRANTY ASSISTANCE

All Delta machines and accessories are manufactured to high quality standards and are serviced by a network of factory service centers and authorized service stations listed in your owner's manual. To obtain additional information regarding your Delta quality product or to obtain parts, service or warranty assistance, please call Delta's toll-free 'hotline' telephone number -- see the map for the 800 number for your location.

Delta maintains two modern, efficient Parts Distribution Centers, each maintaining an inventory of over 10,000 parts. One center is located at Memphis, Tennessee and the other at Van Nuys, California for customers west of the Rockies.

Highly qualified and experienced Customer Service Representatives are standing by to assist you on weekdays from 8:00 A.M. to 5:00 P.M. Memphis (or Van Nuys) time.



Memphis, TN 38118 4290 Raines Road Phone: (901) 363-8800

HOTLINE

800-223-PART (In Tennessee 800-238-PART)

Van Nuys, CA 91406 16259 Stagg Street Phone: (818) 989-1242

HOTLINE 800-233-PART

(In California 800-235-PART)

FACTORY SERVICE CENTERS

ALABAMA

Birmingham 35209 Porter-Cable Corporation 131 W. Oxmoor Road, Suite 105 205-942-6345

CALIFORNIA

Los Angeles 90007 Porter-Cable Corporation 2400 S. Grand Avenue 213-749-0386 Orange 92668 Porter-Cable Corporation 385 North Anaheim Blvd. 714-634-4111 San Leandro 94577 Porter-Cable Corporation 3039 Teagarden Street P.O. Box 1913 415-357-9762

COLORADO

Denver 80207 Porter-Cable Corporation 4900 E. 39th Avenue 303-388-5803

CONNECTICUT

Manchester 06040 Porter-Cable Corporation 57 Tolland Turnpike 203-646-1078

FLORIDA

Hialeah 33014 Porter-Cable Corporation 16373 NW 57th Avenue 305-624-2523

Orlando 32803 Porter-Cable Corporation 1807 1/2 Winter Park Road 305-644-8100 Tampa 33609 Porter-Cable Corporation 4536 W. Kennedy Blvd. 813-877-9585

GEORGIA

Forest Park 30050 Porter-Cable Corporation 4017 Jonesboro Road 404-363-8000

ILLINOIS

Addison (Chicago)60101 Porter-Cable Corporation 311 Laura Drive 312-628-6100

LOUISIANA

Kenner 70062 Porter-Cable Corporation 2440-0 Veterans Memorial Hwy. 504-469-7363

MARYLAND

Baltimore 21205 Porter-Cable Corporation 4714 Erdman Avenue 301-483-3100 Hyattsville 20781 Porter-Cable Corporation 4811 Kenilworth Avenue 301-779-8080

MASSACHUSETTS

Boston (Allston) 02134 Porter-Cable Corporation 414 Cambridge Street 617-782-1700

MICHIGAN

Grand Rapids 49506 Porter-Cable Corporation 2750 Birchcrest Drive S.E. 616-949-9040

Southfield (Detroit) 48075 Porter-Cable Corporation 18650 W. Eight Mile Road 313-569-4333

MINNESOTA

Minneapolis 55429 Porter-Cable Corporation 4315 68th Avenue North 612-561-9080

MISSOURI

North Kansas City 64116 Porter-Cable Corporation 1141 Swift Avenue P.O. Box 12393 816-221-2070 St. Louis 63139 Porter-Cable Corporation 2348 Hampton Avenue 314-968-8950

NEW JERSEY

Union 07083 Porter-Cable Corporation 945 Ball Avenue 201-964-1730

NEW YORK

Flushing 11365 Porter-Cable Corporation 175-25 Horace Harding Expwy 212-225-2040 Syracuse 13224 Porter-Cable Corporation 2740 Erie Boulevard E.

315-445-1922 **NORTH CAROLINA**

Charlotte 28209 Porter-Cable Corporation 4612 South Boulevard 704-525-4410

OHIO

Cleveland 44146 Porter-Cable Corporation 5188 Richmond Road 216-675-1244 Columbus 43215 Porter-Cable Corporation 4560 Indianola Avenue

614-263-0929 OREGON

Portland 97212 Porter-Cable Corporation 51 N.E. Hancock 503-288-6888

PENNSYLVANIA

Bensalem 19020 Porter-Cable Corporation Expressway 95 Industrial Center 3599 Meadow Lanes 215-638-4114

RHODE ISLAND

Providence 02914 Porter-Cable Corporation 1009 Waterman Avenue 401-434-3620

TEXAS

Dallas 75220 Porter-Cable Corporation 10714 N. Spemmons Freeway 214-353-2996

Houston 77092 Porter-Cable Corporation 5201 Mitchelldale, Suite B-9

713-682-0334 San Antonio 78218 Porter-Cable Corporation 2600 N.E. Loop 410 512-654-1061

UTAH

Salt Lake City 84115 Porter-Cable Corporation 2990 S.W. Temple 801-487-4953

VIRGINIA

Richmond 23220 Porter-Cable Corporation 1705 Dabney Road 804-257-7348

WASHINGTON

Renton 98055 Porter-Cable Corporation 268 Southeast 43rd Street 206-251-6680

WISCONSIN

Milwaukee 53222 Porter-Cable Corporation 10700 W. Burleigh Street 414-774-3650

AUTHORIZED SERVICE CENTERS

ALASKA

Anchorage 99503 Alaska Tool & Equip Service 3207 Artic Boulevard 907-562-6151

Fairbanks 99706 Fairbanks Aero Services, Inc. Box 60590 907-479-6666

ARIZONA

Phoenix 85014 Glenn's Tool Service 4036 North 13th Way 602-264-6203

Tuscon 85719 Electric Motor Company 1028 Broadway 602-622-8877

ARKANSAS

Fort Smith 72901 Prock Equipment, Inc. 3200 Towson Avenue 501-783-5260

Little Rock 72202 Electric Tool Service 1419 West 10th Street 501-374-8180

CALIFORNIA

El Cajon 92021 Best Impact Service 354 Walter Way 714-442-5591

Eureka 95501 Senn Electric Co. 1801 Fairfield Street 707-443-0416

Fresno 93703 R&R Machinery & Electric Inc. 191 E. Home Avenue 209-233-1213

Modesto 95351 Stanislaus Electric Mtr. Wrks. 504 River Road 209-523-8269

Redding 96001 Electric Tool and Motor 2710 Reservoir Lane 916-243-7455

Sacramento 95814 Construction Ind. Serv. Co 1211 C Street 916-444-2525

Santa Rosa 95401 Acme Electric Tool Repair 742 Wilson Street 707-546-5862

San Diego 92105 Tool Repair 4075 ElCajon Blvd. 619-284-8200

CONNECTICUT

New Haven 06513 New Haven Electric Mach Co 190 Fulton Terrace 203-469-1323

FLORIDA

Ft. Lauderdale 33334 Master Repair Inc 1031 NE 43rd Place 305-566-5833 Holly Hill 32017(Orlando) Volusia Power Tool Repair Ctr. 246 Riverside Drive 904-258-1311

Jacksonville 32205 North Florida Machy & Tool Repair 230-B Englewood Avenue, South 904-387-4455 Pensanda 32581

Pensacola 32581 Electric Mtr. Svc Inc. 3810 Hopkins St. 904-433-5492

GEORGI/

Savannah 31402 White Hardware Congress & Whitaker 912-233-5777

HAWAII

Hilo 96702 Hawaii Planing Mill Ltd. 380 Kanoelehua Avenue 808-935-0875

Honolulu 96819 Slim's Power Tools Inc. 1626 Republican Street 808-841-0902

Honolulu 96817 John Grinnon Co. Inc. 345 N. Nimitz Hwy. 808-538-73333

Kahulul 96732 Maui Power Tool Service 251 H2 Lalo Street 808-877-3440

IDAHO

Boise 83705 Air Equipment Company 2350 South Orchard Street 208-342-2464

Idaho Falls 83401 Rossiters Electric Motor 1501 South Capital Avenue 208-529-3665

Wade Tool Service 513 Thain 208-746-2421 Twin Falls 83301 Ellis Repair 2380 Kimberly Road 208-734-4400

Lewiston 83501

ILLINOIS

Bloomington 61701 Electric Motor Repair 1106 East Bell 309-827-4691

INDIANA

Elkhart 46515 Thunander Corporation 1923 Markle Avenue 219-295-4131

Goshen 46526 C&L Electric Motor Repair 1405 Chicago Avenue 219-533-2643

Indianapolis 42641 Macco Equipment Co. Inc. 3129 Kentucky Avenue 317-248-1444

Indianapolis 46220 Standiford Assoc., Inc. Suite 6, P.O. Box 20543 5335 N. Tacoma Ave. 317-257-1368

IOWA

Davenport 52803 Industrial Engr. Equip. Co. 1958 River Street 319-323-9721 Des Moines 50309

Des Moines 50309 Puckett Electric Tools Inc. 1011 Keo Way 515-244-4189

KANSAS

Wichita 67213 Richmond Electric 911 Maple 316-264-2344

LOUISIANA

Baton Rouge 70806 Baton Rouge Rental Srv. 5101 Government Street 504-924-2959

MAINE

Portland 04104 M and W Electric 38 Portland Street 207-772-2057

MASSACHUSETTS

Springfield 01105 Saw Center 472 Main Street 413-734-2045

MICHIGAN

Petroskey 49770 Ed's Electric Appliance Srv. P.O. Box 505 S. U.S. Hwy 31 616-347-9599

MISSISSIPPI

Jackson 39204 Flannigan Electric Co. Inc. 1820 S. West St. Ext. P.O. Box 8657 601-354-2756

MONTANA

Billings 59101 Allen's Electric Tool Repair 431 St. John's 406-248-3865

Black Eagle 59414 Mosch Electric Motors 2513 17th Street, North 406-453-2481

Missoula 59806 City Electric Electro Service Center Div 1919 Harve 406-549-4115

NEBRASKA

Omaha 68127 Kel-Welco Distributing Inc. 8222 H. Street 402-592-1250 Omaha 68102 Thacker Electric Co. 2209 Cuming Street

402-341-2264 Omaha 68102 Tool Warehouse 2215 Cuming Street 402-341-6167

NEVADA

Las Vegas 89109 Tool Service Inc. 3229 Industrial Road 702-734-9161

Reno 89504 Landa Electric Co. 140 Manuel Street 702-329-0633

NEW JERSEY

Jersey City 07304 Rudolf Bass Inc. 45 Halladay Street 201-433-3800

NEW MEXICO

Albuquerque 87107 Bill's Service Center 2836 Girard, N.E. 505-844-7474

Albuquerque 87108 J-M Tool Repair Co 116 Tennessee NE 505-255-2304

NEW YORK

Buffalo 14210 S S Electric Repair Shop, Inc. 2470 Seneca Street 716-823-1232

Kingston 12401 Fowler & Keith Supply Co. 104 Smith Avenue 914-331-0004 New York 10013 Rudolf Bass Inc. 175 Lafayette Street 212-226-4000

Riverhead 11901 Riverhead Tool Company 523 Pulaski Street 516-727-5510

Rochester 14608 Jackson Saw & Knife Co. 517 State Street 716-546-7485

Rochester 14609 O G Schwarz 430 Atlantic Avenue 716-482-9282

Schenectady, 12303 Barrett Elec, Service Co 112 Henry Street 518-374-4416 Vestal 13850

Vestal 13850 Cascade Electric Inc. 416 Commerce Road 607-729-5278

NORTH DAKOTA

Bismark 58501 Acme Electric Motor Inc. 1009 Basin Avenue 701-258-1267 Fargo 58107 Acme Electric Motor Inc.

Box 2048 701-235-8060 Grand Forks 58201 Acme Electric Motor Inc. 1705 13th Avenue North

701-746-6481 Minot 58701 Acme Electric Motor Co. 525 20th Avenue, So.East 701-839-2263

OHIO

Barberton 44203 Viking Akron Tool & Supply Co. 2915 New Park Drive 216-753-1063

Cincinnati 45215 Professional Tool Service 10265 Spartan Drive, Bldg. H 513-772-1490

Dayton 45432 Authorized Tool Service Co. 3787 Dayton Xenia Road 513-429-5593 North Canton 44720

N. Canton Repair Shop 110 6th Street E 216-455-3529 Toledo 43613

Toledo 43613 Electric Tool and Equipment 3156 Upton Avenue 419-474-7537

Toledo 43606 Power Tool Sales & Serv. 2934 Douglas Road 419-473-0962

West Milton 45383 Conken Equipment Co. 4950 Frederick Garland Rd. 513-836-9833

Youngstown 44512 Moff Master Power Tools 5228 Market Street 216-783-2130

OREGON

Eugene 97402 Jim's Tool Service 515 Wilson Street 515-344-1513

Medford 97501 Ken's Saw Shop 1838 Delta Waters Road 503-779-1490

Medford 97504 Precision Power Tool Repair Inc. 3001 Crater Lake Avenue 503-770-5541

PENNSYLVANIA

Allentown 18103 Curio Electric Repair 825 S. 5th 215-432-9923 Harrisburg 17105 Stationary Equip Sales & Service P.O. Box 10242 717-545-8043 Monroeville 15146 Professional Tool Service 700 Seco Road

412-373-7440 Philadelphia 19106 Swanger Brothers 116 North 3rd Street 215-925-6139

Monroeville Industrial Park

SOUTH CAROLINA

Charleston 29411 Charleston Supply Co. 5555 King Street Ext. 803-722-8851 Charleston 29407 Delta Flectric Motors

Delta Electric Motors 1906 Meeting Street 803-577-5670 Columbia 29203

Columbia 29203 Mann Electric Repair Co. 3600 Main Street 803-252-77777

Greenville 29602 Poe Corporation P.O. Box 168 803-271-9000

SOUTH DAKOTA

Sioux Falls 57106 Stan Houston Equipment Co. 501 S. Marrion Road 605-336-3727

TENNESSEE

Knoxville 37917 Shop Equipment Service Co. 2706 North Broadway 615-688-3574 Memphis 38116 Express Tool Service Inc.

Express Tool Service Inc 1004 E. Brooks Road 901-332-1353 Nashville 37210

Hermitage Tool Inc. 947 4th Avenue South 615-254-0820 Nashville 37203 K & K Tools 606 Demonbreun Street

615-255-9541 TEXAS

Abilene 79604 Abilene Lumber Co., Inc. 2025 Industrial Blvd. 915-698-4465

Amarillo 79105 G E Jones Electric Co. 204 North Polk Street 806-372-5505

Austin 78758 The Tool Box 9904 Gray Boulevard 512-836-5483

Corpus Christi 78405
Corpus Christi Power Tool & Repair
3009 Agnes
512-883-1117

Corpus Christi 78405 Otto Dukes Machinery Co. 2588 Morgan Street 512-883-0921 El Paso 79950 Francis Wagner Co. 1225 Texas Avenue 915-533-2235 Fort Worth 76111

Fort Worth 76111 Modern Tool Repair 2704 E. Belknap 817-834-1111

Haltom City 76117 C&D Tool Repair Service 2532 Carson Avenue 817-834-2277 Lubbock 79405

Lubbock 79405 Lubbock Electric Co. Inc. 1108 34th Street 806-744-2336

Mission 78572 City Power Pool 703 E. 9th 512-581-3272

512-581-3272 Weslaco 78596 Weslaco Tool 316 E. 4th Street 512-968-9156

VIRGINIA

Charlottesville 22901 Allen Desper Repair Service P.O. Box 1612 1132 E. Market Street 804-293-7913

Norfolk 23517 Bryan Electric Company Inc. 424 W. 25th Street 804-625-0378

Roanoke 24013 Roanoke Armature Co. 110 8 1/2 Street S.E. 703-345-8741

WASHINGTON

Kennewick 99336 Tool Repair Company 419A West Entiat 509-586-6145

Spokane 99202 Spokane Power Tool E. 801 Trent Avenue 509-489-4202

Yakima 98901 Cooper Electric Motor Service 205 S. 4th Avenue 509-452-9550

WEST VIRGINIA

Huntington 25701 Lawter Electric Motor Co. 202 Adams Avenue 304-522-8297

Wheeling 26003 Kennedy Hardware 3300 McCulloch Street 304-233-3600

WISCONSIN

LaCrosse 54601 A-Line Machine Tool Co. 415 LaCrosse St. 608-785-1515

Electric Motors Unlimited

1000 Jonathan Drive 608-271-2311

Madison 53713

WYOMING Casper 82601 Casper Saw Shop 147 S. McKinley 307-237-3279

PUERTO RICO

Sierra Bayamon 00619 B&M Electric Tool Repair Center Calle 49 Bloque 51 Casa 27 Avenue West Main 809-787-2287



TROUBLE SHOOTING GUIDE

BE SURE TO FOLLOW SAFETY RULES AND INSTRUCTIONS

TROUBLE!! SAW WILL NOT START WHAT'S WRONG?

- 1. Saw not plugged in
- 2. Fuse blown or circuit breaker tripped
- 3. Cord damaged

TROUBLE!! SAW MAKES UNSATISFACTORY CUTS WHAT'S WRONG?

- 1. Dull blade
- 2. Blade mounted backwards
- 3. Gum or pitch on blade
- 4. Incorrect blade for work being done

TROUBLE!! BLADE DOES NOT COME UP TO SPEED

WHAT'S WRONG?

- 1. Extension cord too light or too long
- 2. Low house current

TROUBLE!! MACHINE VIBRATES EXCESSIVELY WHAT'S WRONG?

- 1. Saw not mounted securely to stand or work bench
- 2. Stand or bench on uneven floor
- 3. Damaged saw blade

TROUBLE!! DOES NOT MAKE ACCURATE 45° AND 90° CUTS

WHAT'S WRONG?

- 1. Positive stop not adjusted correctly
- 2. Blade is "heeling"
- 3. Fence not square with blade

TROUBLE!! MATERIAL PINCHES BLADE WHAT'S WRONG?

1. Cutting bowed material in wrong position

TROUBLE!! SAW BLADE CUTS TOO DEEPLY INTO TABLE

WHAT'S WRONG?

1. Adjustable stop not set correctly

TROUBLE!! SAW DOES NOT RETURN TO UP POSITION

WHAT'S WRONG?

- 1. Spring tension out of adjustment
- 2. Sliding fit too tight

WHAT TO DO ...

- 1. Plug in saw. See page 7
- 2. Replace fuse or reset circuit breaker
- 3. Have cord replaced by a Delta Authorized Service Center

WHAT TO DO ...

- 1. Replace blade. See page 13
- 2. Turn blade around. See page 5 and 13
- 3. Remove blade and clean with turpentine and coarse steel wool
- 4. Change the blade. See pages 5, 13 and 23

WHAT TO DO ...

- 1. Replace with adequate size cord. See page 7
- 2. Contact your electric company

WHAT TO DO ...

- 1. Tighten all mounting hardware. See page 6
- 2. Reposition on flat level surface See page 6
- 3. Replace blade. See page 13

WHAT TO DO ...

- 1. Check and adjust positive stop. See page 10
- 2. Check and adjust cuttinghead. See page 12
- 3. Check and adjust fence. See page 9

WHAT TO DO ...

1. Position bowed material as shown on page 17

WHAT TO DO ...

1. Check and adjust stop screw. See page 11

WHAT TO DO ...

- 1. Adjust return spring tension. See page 11
- 2. Adjust sliding fit. See page 13



INSTRUCTIONS FOR CONSTRUCTING AUXILIARY TABLE AND FENCE FOR CERTAIN MITER BOX APPLICATIONS.

When performing multiple or repetitive cut-off operations on a miter box that result in <u>small</u> 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. <u>THIS SITUATION CAN OCCUR ON ANY MITER BOX</u>; especially when hardwoods such as oak, walnut or maple are being cut.

In order to limit the possibility of personal injury or blade guard damage, the following precautions should be observed when cutting off small cut-off pieces.

- 1. Always wear eye protection.
- 2. Use only recommended blades with a negative tooth rake configuration. We suggest Delta 35-619 10" x 60 triple chip and flat grind or 35-625 10" x 80 triple chip and flat grind blades.
- 3. To prevent build up of cut-off pieces behind the fence and blade, construct an auxiliary work support fence and table as shown in the following instructions.
- 4. Keep cutting area clear of scrap and debris.
- For the Delta 34-080 miter box, construct the fence and table support by following the dimensions shown in Fig. 1.

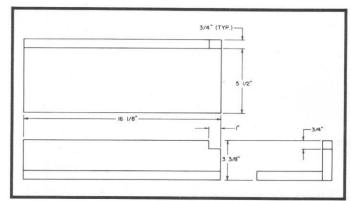


Fig. 1

Figure 2 illustrates the fence and table support assembled.

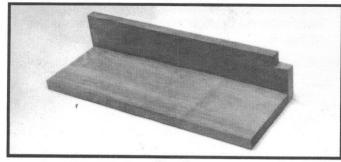


Fig. 2

Fasten the support to the fence of the miter box utilizing the four holes located on the miter box fence, as shown in Figure 3. We recommend for ease of removal and assembly of the support, hanger bolts and wing nuts be used.

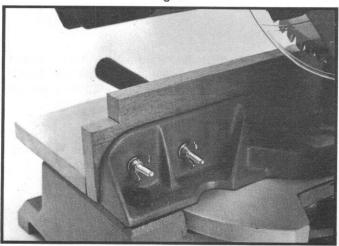


Fig. 3

4. When using the auxiliary fence and table for straight 90 degree cuts, cut a slot in the wooden fence and table, as shown in Fig. 4.

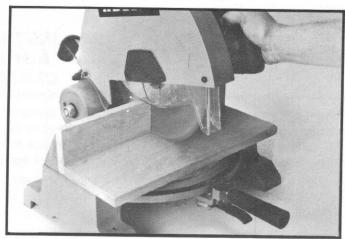


Fig. 4

 Figure 5 illustrates making a trim cut at 90 degrees on a piece of oak flooring. Notice that the cut-off piece remains in front of the fence where it can be safely removed before the next cut is made.

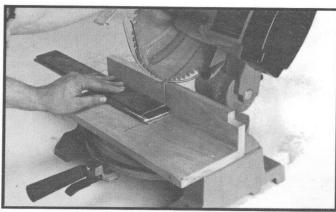


Fig. 5

If the auxiliary fence and table is to be used for cutting 45 degree right or left miters, an additional fence and table should be constructed and a 45 degree right hand miter cut made in the fence and table, as shown in Fig. 6.

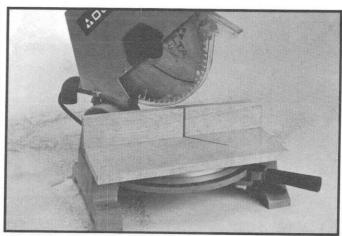
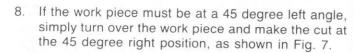


Fig. 6

7. Figure 7 illustrates making a trim cut at the 45 degree right miter position. Again notice that the cut-off piece remains in front of the fence where it can be safely removed before the next cut is made.



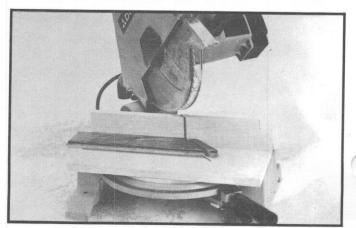
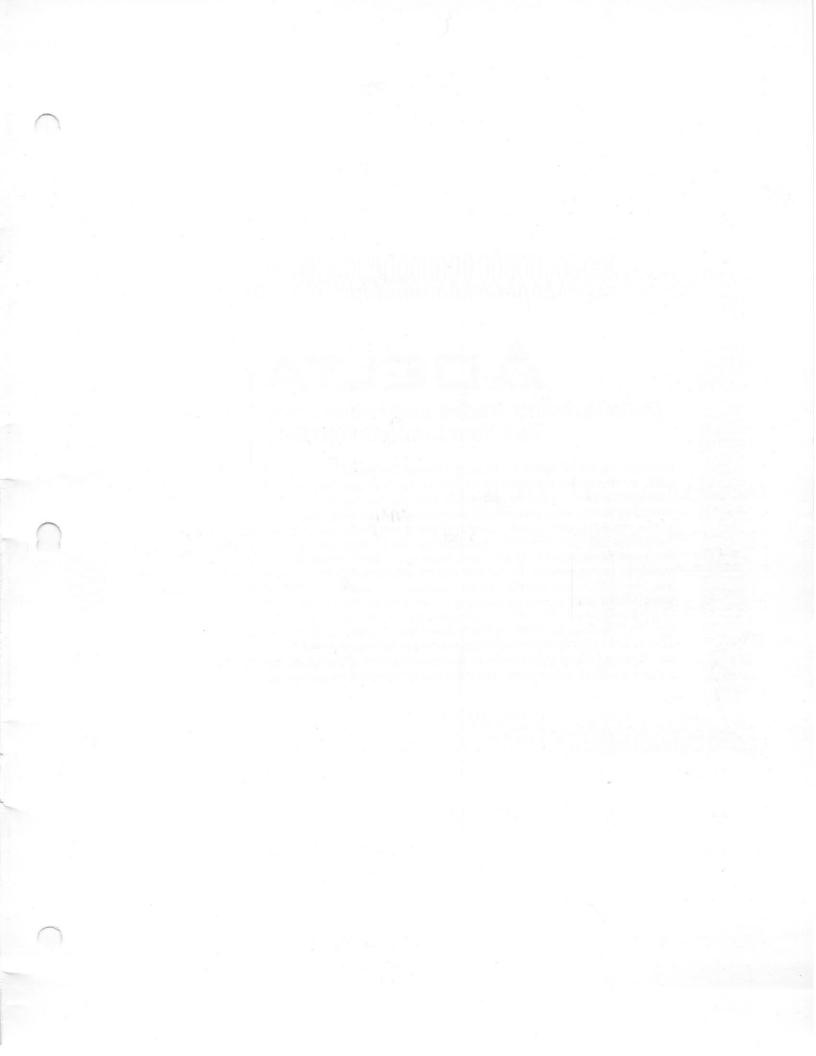
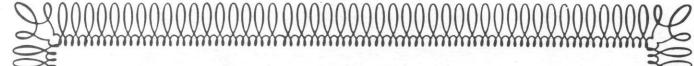


Fig. 7



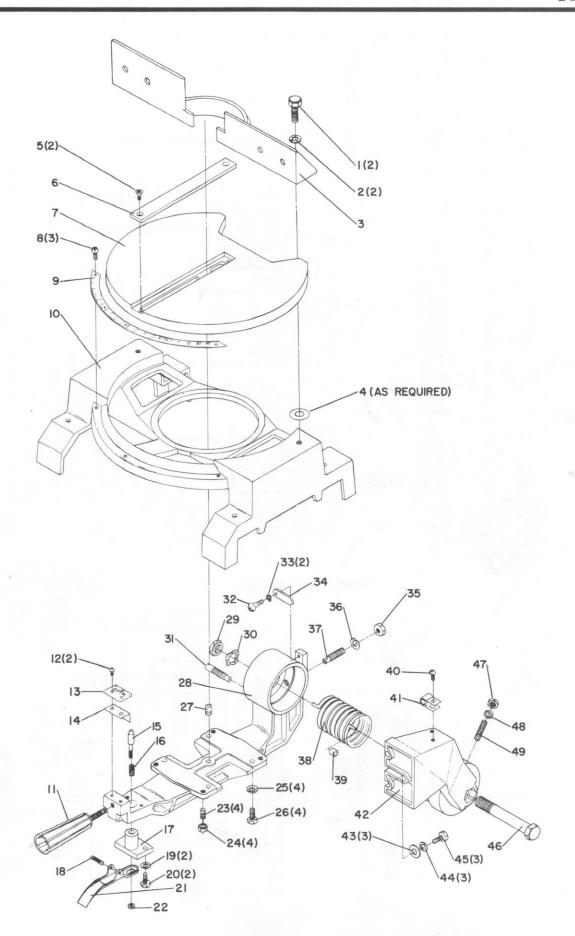


ADELTA

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.

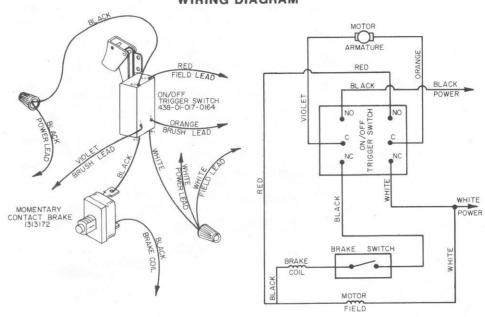
Part No. 1313201 Dated 7-25-86

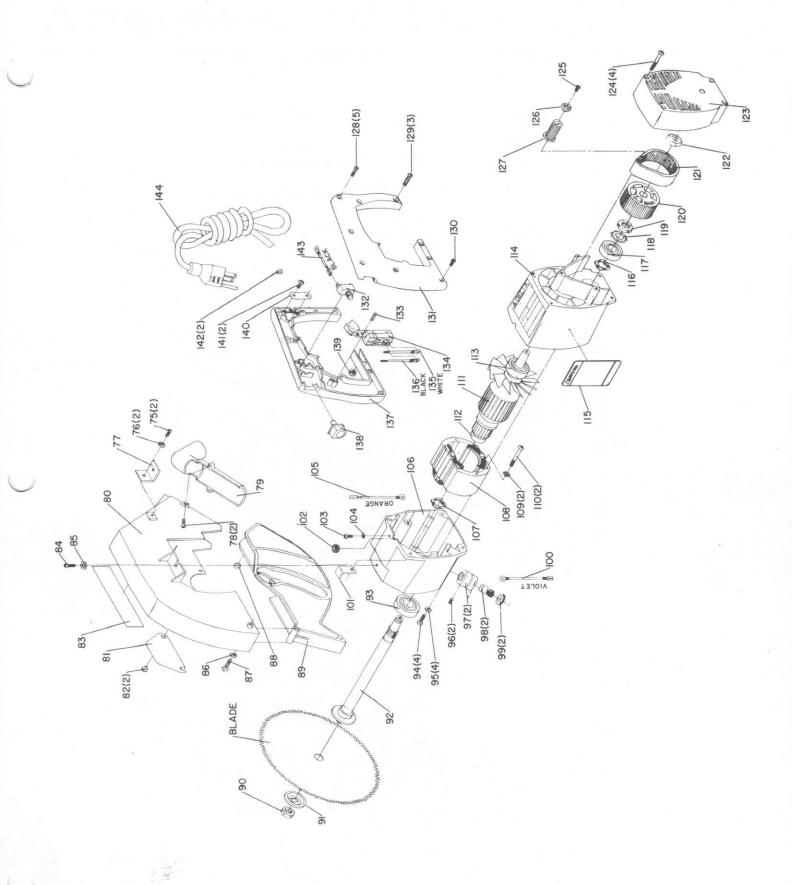


REPLACEMENT PARTS

Ref. No.	Part No.	Description
1	1240618	(DIN 933) M10 x 25mm Hex Hd. Cap Scr.
2	904-02-020-1704	3/8" Lockwasher
3	1313158	Fence
4	131096	Shim Washer
5	1310135	(DIN 963) M4 x 8mm Slot. Flat Hd.Mach.Scr.
6	1313155	Table Insert
7	1313154	Table
8	1310155	(DIN 84) M5 x 8mm Slot.Cheese Hd.Mach.Scr.
9	1313153	Scale
	1313152	Base
10		Swivel Handle
11	1313151	(DIN 84) M5 x 8mm Slot.Cheese Hd.Mach.Scr.
12	1310155	Pointer Plate
13	1313145	
14	1313144	Spring Plate
15	1313143	Plunger Pin
16	1313142	Spring
17	1313146	Plunger Housing
18	1313149	Pin
19	904-02-020-1702	1/4" Lockwasher
20	1246015	(DIN 933) M6 x 20mm Hex Hd. Cap Scr.
21	1313147	Plunger Handle w/Cover
22	1313148	(DIN 985) M6 Lock Nut
23	1313199	Nylon Headless Set Scr.
24	1243398	(DIN 934) M8 Hex Nut
25	904-02-010-1703	5/16" Lockwasher
26	1246016	(DIN 933) M8 x 25mm Hex Hd. Cap Scr.
27	1313141	Dowel Pin
28	1313140	Swivel Support
29	1313165	(DIN 985) M6 Lock Nut
30	1313164	(DIN 137, Form B) 16mm Wave Washer
31	1313163	Slot. Set Screw
32	1313193	M6 Shoulder Screw
33	1313194	(DIN 137, Form B) 8mm Wave Washer
34	1313150	Latch
35	1243496	(DIN 934) M10 Hex Nut
36	904-02-020-1704	3/8" Lockwasher
1100000	1313166	Slot Set Screw
37		Torsion Spring
38	1313159	Bushing
39	1313160	(DIN 84) M6 x 12mm Slot.Cheese Hd.Mach.Scr
40	1246002	
41	1313168	Cable Clamp
42	1313161	Upper Arm
43	904-01-010-1605	5/16" Flat Washer
44	904-02-010-1703	5/16" Lockwasher
45	1246016	(DIN 933) M8 x 25mm Hex Hd. Cap Scr.
46	1310109	(DIN 933) M6 x 130mm Hex Hd. Cap Scr.
47	1243496	(DIN 934) M10 Hex Nut
48	904-02-020-1704	3/8" Lockwasher
49	1313167	Slot Set Screw

WIRING DIAGRAM





REPLACEMENT PARTS

Ref. No.	Part No.	Description
75	1246002	(DIN 84) M6 x 12mm Slot.Cheese Hd.Mach.Scr.
76	904-02-020-1702	1/4" Lockwasher
77	1313182	Bracket
78	1313180	(DIN 7513B) M5 x 12mm Slot. Pan Hd. Scr.
78 79	1313181	Dust Spout
80	1313157	Blade Guard Assembly, Incl:
81	1313184	Arbor Access Cover
82	1313185	Rivit
83	1313183	Nameplate
84	1246002	(DIN 84) M6 x 12mm Slot.Cheese Hd.Mach.Scr.
85	904-01-010-1604	1/4" Flat Washer
86	904-02-020-1702	1/4" Lockwasher
87	1310153	(DIN 84) M6 x 55mm Slot.Cheese Hd.Mach.Scr.
88	1313188	Rubber Bumper
89	1313189	"See Thru" Guard
90	904-01-201-2567	5/16-18 L.H. Arbor Nut
91	1313186	Arbor Flange
*	1313111	
92	1313139	Motor Assembly, Const. of: Arbor Shaft
93	1313116	Bearing
94	1310157	(DIN 85) M6 x 20mm Slot.Pan Hd. Scr.
95	904-02-020-1702	1/4" Lockwasher
96	1310172	Special Screw
97	1313112	Brush Holder
98	1313113	Brush
99	1313114	Brush Cap
100	1313133	Jumper Wire-Violet
101	1313137	L-Bracket
102	1313132	Rubber Cable Bushing
103	1310159	(DIN 85) M4 x 6mm Slot.Pan Hd. Scr.
104	1310210	(DIN 6797) A4 Ext. Tooth Lockwasher
105	1313134	Jumper Wire-Orange
106	1313117	Front Housing
107	1313118	Wave Spring Washer
108	1313138	Field Assembly
109	904-03-030-1795	3/16" Ext. Tooth Lockwasher
110	1310148	(DIN 85) M5 X 60mm Slot. Pan Hd. Scr.
111	1313125	Armature Assembly, Incl:
112	1313120	Bearing
113	920-04-020-5330	
		Bearing Pear Hausing
114	1313123	Rear Housing
116	1313136	Warning Label
	1313124	Wave Spring Washer
117	920-04-020-5330	Bearing
118	1313126	(DIN MB) 03 Lockwasher
119	1313127	(DIN KM) SKF Shaft Nut
120	1313162	Driven Pulley
121	34-083	Positive Drive Belt
122	1310188	(DIN 934) M14 Hex Nut
123	1313131	Pulley Cover
124	1310158	(DIN 85) M5 x 45mm Slot. Pan Hd. Scr.
125	1310163	(DIN 85) M5 x 16mm Slot Pan Hd. Scr.
126	1313202	Special Nut
127	1313196	Drive Pulley
128	1313174	(DIN 7513B) M5 x 25mm Slot. Pan Hd.Scr.
129	1310146	(DIN 85) M5 x 30mm Slot. Pan Hd. Scr.
130	1313192	(DIN 7513B) M5 x 20mm Slot. Pan Hd. Scr.
131	1313170	Motor Handle-Right
132	1313172	Brake Switch
133		
	1313156	(DIN 7513B) M5 x 10mm Slot.Pan Hd. Scr. Power Switch
134	438-01-017-0164	
135	1313177	Jumper Wire-White
136	1313176	Jumper Wire-Black
137	1313169	Motor Handle-Left
138	1313171	Brake Button
139	1243395	(DIN 934) M5 Hex Nut
140	1313195	Cable Clamp
141	1313156	(DIN 7513B) M5 X 10mm Slot.Pan Hd.Scr.
142	1313175	Wire Nut
143	1313191	Jumper Wire-Black
144	1313178	Power Cord
**	422-30-101-0002	8mm Hex Wrench

NOT SHOWN ASSEMBLED NOT SHOWN