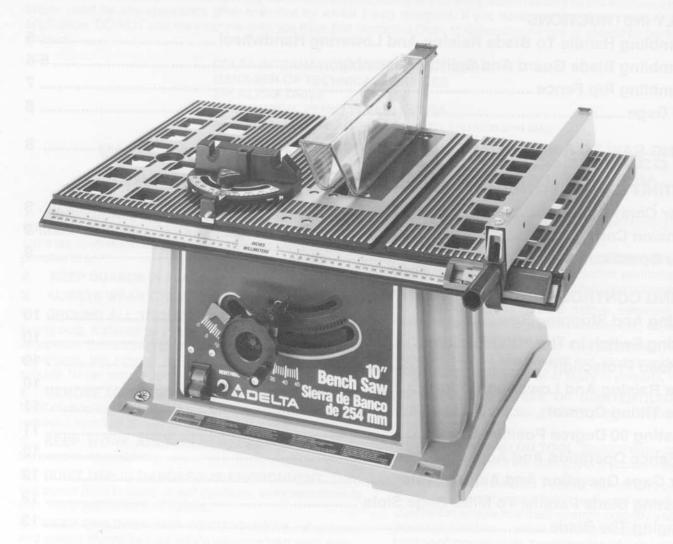
# 10" Motorized Bench Saw

(Model 36-510 Type II)



DATED 11-13-95

PART NO. 1346981

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## **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.

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

- 1. FOR YOUR OWN SAFETY, READ INSTRUCTION MANUAL BEFORE OPERATING THE TOOL. Learn the tool's application and limitations as well as the specific hazards peculiar to it.
- KEEP GUARDS IN PLACE and in working order.
- 3. ALWAYS WEAR EYE PROTECTION.
- 4. **GROUND ALL TOOLS**. If tool is equipped with threeprong 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."
- 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.
- 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 (must comply with ANSI Z87.1). 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.

- 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 START-ING.** Make sure switch is in "OFF" position before plugging in power cord.
- 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.
- DIRECTION OF FEED. Feed work into a blade or cuttler 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 CIRCULAR SAWS

- 1. **ALWAYS** use blade guard, splitter with kickback fingers for every operation for which it can be used, including "thru-sawing" operations. Thru-sawing operations are those when the blade cuts completely through the work piece as in ripping or cross-cutting.
- 2. **ALWAYS** hold the work firmly against the miter gage or fence.
- 3. **ALWAYS** use a push stick for ripping narrow stock. Refer to ripping applications in instruction manual where the push stick is covered in detail. See push stick pattern included in this instruction manual.
- 4. **NEVER** perform any operation "free-hand" which means using your hands to support or guide the work piece. Always use either the fence or the miter gage to position and guide the work.
- NEVER stand or have any part of your body in line with the path of the saw blade. KEEP your hands out of the line of the saw blade.
- NEVER reach behind or over the cutting tool with either hand for any reason.
- 7. **MOVE** the rip fence out of the way when cross-cutting.
- 8. **NEVER** use the fence as a cut-off gage when cross-cutting.
- DIRECTION OF FEED. Feed work into a blade or cutter against the direction or rotation of the blade or cutter only.
- 10. WHEN cutting moulding, NEVER run the stock between the fence and the moulding cutterhead.
- 11. **NEVER** attempt to free a stalled saw blade without first turning the saw **OFF**. Turn off switch immediately to prevent motor damage.
- 12. **THE USE** of attachments and accessories not recommended by Delta may result in risk of injuries.
- 13. **PROVIDE** adequate support to the rear and sides of the saw table for wide or long work pieces.

- 14. AVOID KICKBACKS (work thrown back toward you) by:
  - Keeping blade sharp.
  - B. Keeping rip fence parallel to the saw blade.
  - Keeping splitter and anti-kickback fingers and guard in place and operating.
  - D. Not releasing the work before it is pushed all the way past the saw blade.
  - E. Not ripping work that is twisted or warped or does not have a straight edge to guide along the fence.
- 15. **AVOID** awkward operations and hand positions where a sudden slip could cause your hand to move into the cutting tool.
- 16. 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.
- 17. **PERMANENTLY** mount the saw to a supporting surface before performing any cutting operations.
- 18. **NEVER** cut metals or material which may make hazardous dust.
- 19. **ALWAYS** use in a well ventilated area. Remove sawdust frequently. Clean out sawdust from the interior of the saw to prevent a potential fire hazard.
- 20. **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 Standards Institute ANSI 01.1 Safety Requirements for Woodworking Machinery and the U.S. Department of Labor OSHA 1910.213 Regulations.
- 21. **SAVE THESE INSTRUCTIONS** Refer to them frequently and use them to instruct other users.

## UNPACKING

Your new saw is shipped complete in one container. Carefully unpack the saw and all loose items from the shipping container.

## **ASSEMBLY INSTRUCTIONS**

## ASSEMBLING HANDLE TO BLADE RAISING AND LOWERING HANDWHEEL

1. Insert the 1-1/2" long phillips head screw (A) Fig. 2, into the large end of handle (B) and lightly tighten nut (C) onto screw, as shown.

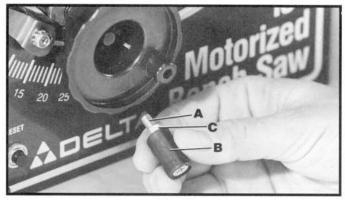


Fig. 2

- 2. Thread screw (A) Fig. 3, into tapped hole in handwheel, as shown.
- 3. When properly assembled, the handle (B) Fig. 3, will rotate freely with only a small amount of play.

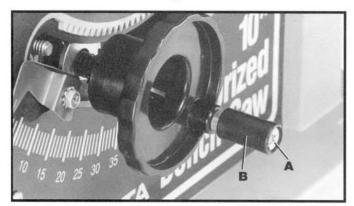


Fig. 3

### ASSEMBLING BLADE GUARD AND SPLITTER ASSEMBLY

- 1. WARNING: WHEN ASSEMBLING THE BLADE GUARD AND SPLITTER ASSEMBLY, MAKE CERTAIN THE SAW IS DISCONNECTED FROM THE POWER SOURCE.
- 2. IMPORTANT: THE BLADE GUARD AND SPLITTER ASSEMBLY MUST BE PROPERLY ALIGNED TO THE SAW BLADE IN ORDER TO PREVENT KICKBACK.
- 3. Position the blade 90 degrees to the table and lock in place.
- 4. Remove two screws from splitter bracket (B) Fig. 4. Fasten the splitter support bracket (A) Fig. 4, to splitter bracket (B) using two 1/2 inch-long screws (C) which were removed from splitter bracket (A) earlier, and 1/4 inch external tooth lockwashers as shown. **NOTE:** Do not completely tighten screws (C) at this time.

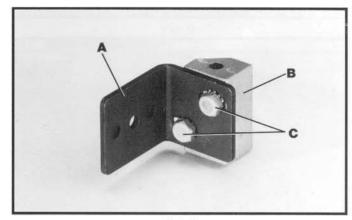
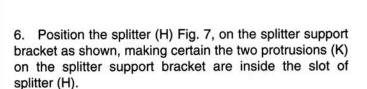
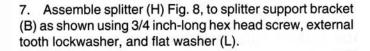


Fig. 4

5. Position recessed end (E) Fig. 5, of splitter bracket (B) against end of pivot rod (F) and fasten in place using the 2-1/4 inch-long hex head screw (G) Fig. 6, 1/4 inch internal tooth lockwasher and 1/4 inch flat washer. Just snug up screw (G) at this time.





8. Fasten splitter (H) Fig. 8A, to splitter support bracket using flat washer, external tooth lockwasher and wing nut (M). **NOTE:** Before tightening wing nut (M) make certain there is at least a 1/8" gap between the bottom edge of splitter (N) and top surface of table (P) and that protrusions, "pins" (K) Fig. 8A, are inside the slot of splitter assembly (H).

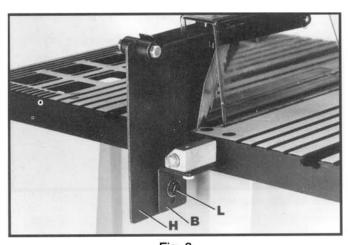


Fig. 8

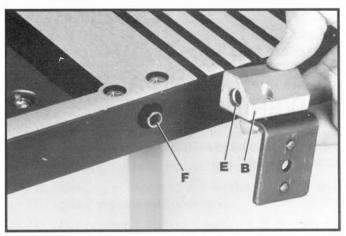


Fig. 5

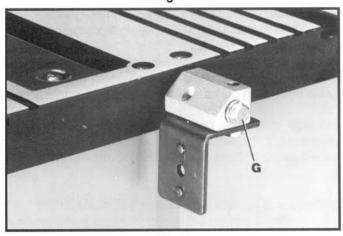


Fig. 6

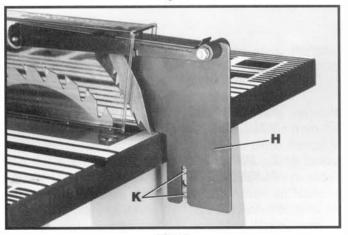


Fig. 7

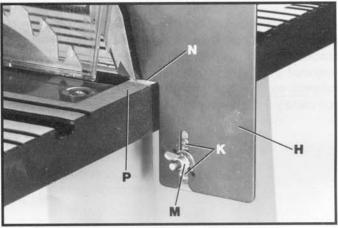


Fig. 8A

9. Using a straight edge, check to see if the splitter (H) Fig. 8B, is aligned with the saw blade (R). If an adjustment is necessary, the splitter (H) can be moved left or right and rotated.

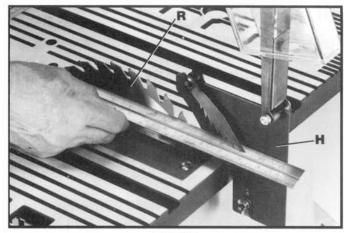


Fig. 8B

10. When you are certain the splitter is properly aligned with the saw blade, tighten the two screws (C) Fig. 8C, that fasten the splitter support bracket to the splitter bracket and tighten screw (G) that fastens the splitter bracket to the pivot rod.

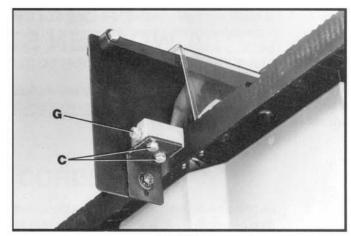


Fig. 8C

## ASSEMBLING RIP FENCE

- 1. Remove and discard shipping nut (A) Fig. 9, from threaded rod (C) on front end of fence clamp bracket and thread fence locking handle (B) onto threaded rod (C).
- 2. Fig. 10, illustrates the fence locking handle (B) assembled to the front of the fence.
- 3. Place the fence on the table as shown in Fig. 11. Hold the casting on front of the rip fence firmly against the front edge of the table and tighten the lock handle (B) Fig. 11 securely.

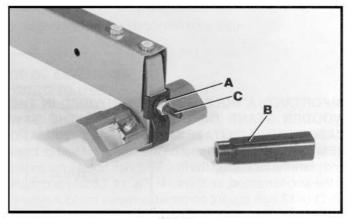


Fig. 9

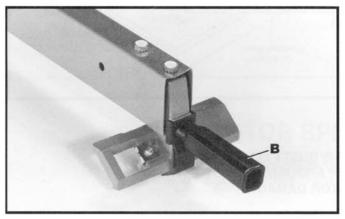


Fig. 10

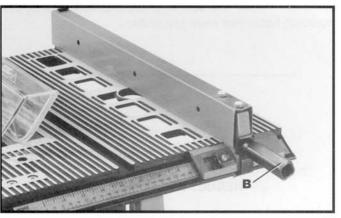


Fig. 11

## **MITER GAGE**

The miter gage is shipped completely assembled. Simply position the bar of the miter gage into one of the two miter gage slots located in the table top, as shown in Fig. 12.

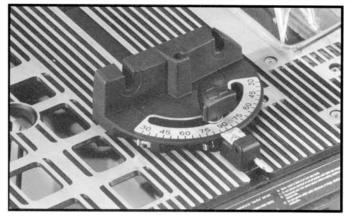


Fig. 12

## FASTENING SAW TO A WOODEN STAND OR BENCH

The saw **MUST** be properly secured to a sturdy workbench, stand or cabinet using the four mounting holes, two of which are shown at (A) Fig. 13.

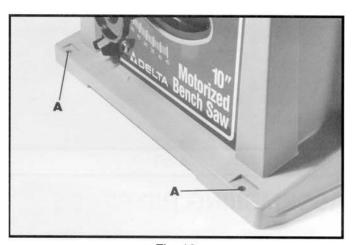


Fig. 13

IMPORTANT: A HOLE MUST BE PROVIDED IN THE WOODEN STAND OR BENCH BELOW THE SAW CABINET TO FACILITATE SAWDUST FALL-THRU AND REMOVAL. Square the saw on the stand, cabinet or base and mark the location of the four 5/16 inch holes to be drilled in the wooden stand, as shown in Fig. 14. Locate and mark an 11 or 12 inch square centered between the four mounting holes and cut out and remove the square, as shown in Fig. 14. This opening will allow sawdust to fall through the saw base. Fasten the saw to the workbench utilizing the mounting holes that were just drilled.

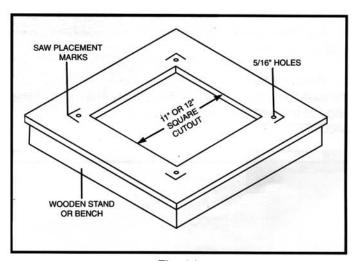


Fig. 14

IMPORTANT: FAILURE TO PROVIDE THIS SAW DUST FALL-THRU AND REMOVAL HOLE WILL ALLOW SAW DUST TO BUILD-UP AROUND THE MOTOR WHICH MAY RESULT IN A FIRE HAZARD OR CAUSE MOTOR DAMAGE.

## **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 damaged or 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 motor nameplate Running on low voltage will injure the motor.

Your new Bench Saw is double insulated to provide added safety. WHEN SERVICING USE ONLY IDENTICAL REPLACEMENT PARTS which can be obtained from any authorized Delta Service Center.

To reduce the risk of electric shock, your Bench Saw has a two prong polarized plug (one blade is wider than the other) supplied with the power cord. The plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install the proper outlet. **DO NOT CHANGE OR MODIFY THE PLUG IN ANY WAY.** 

### **EXTENSION CORDS**

Use proper size extension cords. Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current to your saw. An undersized cord will cause a drop in line voltage resulting in a loss of power and overheating. Fig. 15, shows the size cord to use depending cord length.

If in doubt, use the next heavier gage. The smaller the gage number, the larger the cord size.

GAGE OF EXTENSION CORD TO USE
14 AWG
12 AWG
Not Recommended

Fig. 15

## 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.

## OPERATING CONTROLS AND ADJUSTMENTS

# STARTING AND STOPPING SAW

The on/off switch (A) Fig. 18, is located on the front of the saw cabinet. To turn the saw "ON" move the switch (A) to the up position. To turn the saw "OFF," move the switch (A) to the down position

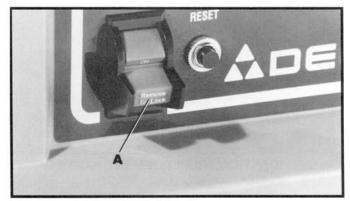


Fig. 18

# LOCKING SWITCH IN THE "OFF" POSITION

We suggest when the saw is not in use the on/off switch be locked in the "OFF" position. This can be done by grasping the switch toggle (B) and pulling it out of the switch as shown in Fig. 19. With the switch toggle (B) removed the switch will not operate. However, should the switch toggle be removed while the saw is running, it can be turned "OFF," but cannot be restarted without inserting the switch toggle (B) back into the switch.

### OVERLOAD PROTECTION

Your saw is equipped with a reset overload relay button (C) Fig. 19. If the motor shuts off or fails to start due to overloading (cutting stock too fast, using a dull blade, using the saw beyond its capacity, etc.) or low voltage, turn the switch to the "OFF" position. Let the motor cool three to five minutes and push the reset button (C), which will reset the overload device. The motor can then be turned on again in the usual manner.

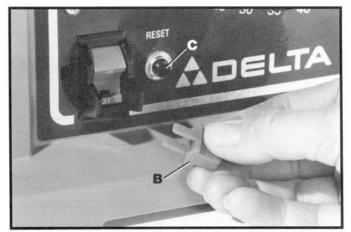


Fig. 19

# BLADE RAISING AND LOWERING CONTROL

To raise or lower the saw blade, turn handwheel (A) Fig. 20. Turning the handwheel clockwise lowers the blade and turning the handwheel counterclockwise raises the blade. WARNING: THE BLADE TILTING LOCK HANDLE (B) FIG. 20, MUST BE LOCKED DURING ALL CUTTING OPERATIONS.

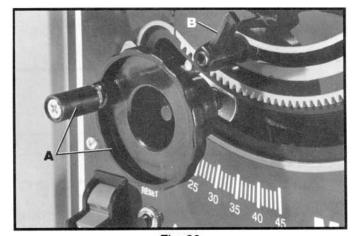


Fig. 20

### **BLADE TILTING CONTROL**

Two methods are available for tilting the saw blade and are as follows:

RAPID BLADE TILTING - Loosen blade tilting lock handle (A) Fig. 21, move the handwheel assembly (B) until the blade is at the desired angle and tighten lock handle (A).

FINE ADJUSTMENT BLADE TILTING - Loosen blade tilting lock handle (A) Fig. 22. Push in handwheel (B) until teeth on hub of handwheel engage with teeth (C) on front of saw cabinet. Turn handwheel (B) to tilt the saw blade to the desired angle and tighten lock handle (A).

NOTE: The lock handle (A) Figs. 21 and 22, is spring-loaded and can be repositioned by pulling out on the handle and repositioning it on the serrated stud located underneath the handle. WARNING: THE BLADE TILTING LOCK HANDLE (A) FIGS. 21 AND 22, MUST BE LOCKED DURING ALL CUTTING OPERATIONS.

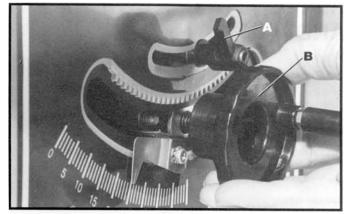


Fig. 21

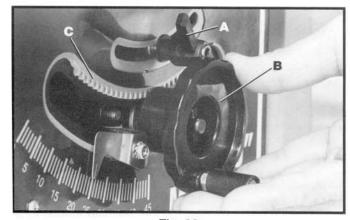


Fig. 22

### **ADJUSTING 90 DEGREE POSITIVE STOP**

Your saw is equipped with a positive stop for rapid and accurate positioning of the saw blade at 90 degrees to the table. To adjust the positive stop, proceed as follows:

- 1. DISCONNECT THE SAW FROM THE POWER SOURCE.
- 2. Raise the saw blade to its maximum height.

#### TO ADJUST POSITIVE STOP AT 90 DEGREES

- Loosen the blade tilting lock handle, move the blade tilting mechanism as far as possible to the left and tighten the blade tilting lock handle.
- 4. Place a square (A) Fig. 23, on the table with one end of the square against the blade, as shown, and check to see if the blade is at 90 degrees to the table. If it is not, loosen screw (B) a few turns and move the blade tilting mechanism until the blade is at 90 degrees to the table. Then tighten blade tilting lock handle and tighten screw (B) until it bottoms.

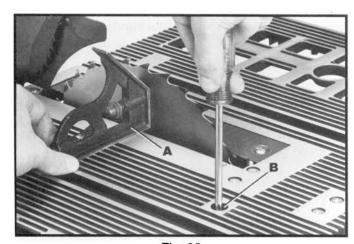


Fig. 23

## RIP FENCE OPERATION AND ADJUSTMENTS

- 1. To move the rip fence (A) Fig. 24, along the table, loosen fence lock handle (B), slide the fence to the desired location on the table and tighten fence lock handle (B) to lock the fence in position.
- 2. A pointer (C) Fig. 24, is supplied to indicate the distance the fence is positioned away from the saw blade. If an adjustment to the pointer (C) is required, loosen the screw that fastens the pointer to the fence bracket and adjust the pointer accordingly.
- 3. IMPORTANT: THE RIP FENCE MUST BE PROP-ERLY ALIGNED TO THE MITER GAGE SLOT IN ORDER TO PREVENT KICKBACK WHEN RIPPING.
- 4. The saw blade is set parallel to the miter gage slot at the factory and the fence must be parallel to the miter gage slot in order to do accurate work and prevent kickback when ripping. To check the alignment:
- 5. Position the fence at one edge of the miter gage slot, as shown in Fig. 24. Clamp the fence to the table by tightening the lock handle (B). The edge of the fence should then line up parallel with the miter gage slot.
- 6. If an adjustment is necessary, proceed as follows:
- 7. Loosen the two screws (D) Fig. 24, and loosen lock handle (B). Then while holding the fence bracket (E) firmly against the front of the saw table move the rear end of the fence (A) until it is parallel with the miter gage slot. Then tighten two screws (D) and lock handle (B).

## MITER GAGE OPERATION AND ADJUSTMENTS

When straight cross-cutting (blade set 90 degrees to the table) the miter gage (A) Fig. 25, can be used in either table slot. When bevel cross-cutting (blade tilted) only use the miter gage in the right table slot where the blade is tilted away from the miter gage and your hands.

This miter gage is equipped with individually adjustable index stops at 90 degrees and 45 degrees right and left. Adjustment to the index stops can be made by loosening lock nuts (B) Fig. 26, and tightening or loosening the three adjusting screws (C) until they contact the other end of stop pin (D) when the miter gage is at 90 and 45 degrees to the saw blade.

To operate the miter gage, simply loosen lock knob (E) Fig. 26, and move the body of the miter gage to the desired angle. When the stop pin (D) is pushed in, the miter gage body will stop at 90 degrees and 45 degrees right and left. To rotate the miter gage body past these points, pull out stop pin (D).

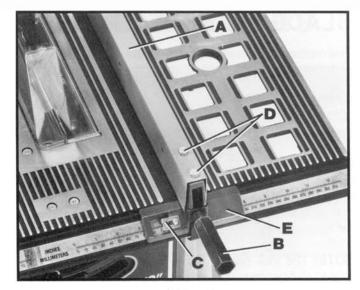


Fig. 24

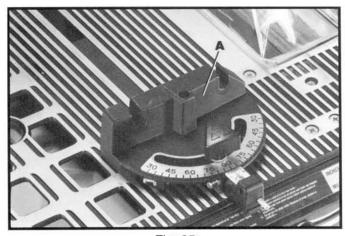


Fig. 25

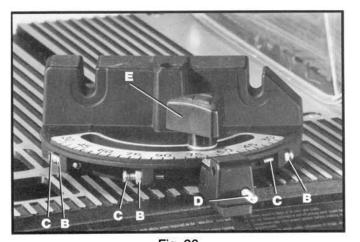


Fig. 26

## ADJUSTING BLADE PARALLEL TO MITER GAGE SLOTS

The blade was adjusted parallel to the miter gage slots at the factory. In order to insure accurate cuts and help prevent kickback when cutting, this adjustment should be rechecked and if necessary, readjusted as follows:

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

- 2. Raise the blade to its highest position and adjust the blade so it is 90 degrees to the table.
- 3. Select a tooth on the saw blade that is set to the left. Mark this tooth with a pencil or marker.
- 4. Using a combination square, place the body (A) Fig. 27, of the square against the miter gage slot and adjust the blade (B) of the square until it just touches the marked tooth, as shown.
- 5. Rotate the blade and check the same marked blade tooth at the rear of the saw table in the same manner, as shown in Fig. 28.
- 6. If the front and back measurements, shown in Figs. 27 and 28, are not identical, loosen four screws (C) Fig. 29. Carefully grasp and move the saw blade until the blade is parallel to the miter gage slot. Then tighten four screws (C) Fig. 29, securely. **NOTE:** If sufficient adjustment cannot be achieved by loosening screws (C), screws (D) may also be loosened if absolutely necessary to make the adjustment.

## CHANGING THE BLADE

- 1. WARNING: WHEN CHANGING THE BLADE, MAKE CERTAIN THE SAW IS DISCONNECTED FROM THE POWER SOURCE. USE ONLY 10"BLADES WITH A 5/8" ARBOR RATED FOR 7500 RPM OR HIGHER FOR THE SAW.
- 2. Raise the saw blade to its maximum height and remove the table insert (A) Fig. 30.
- 3. Using the open end wrench (B) Fig. 30, place open end of wrench on flats on inside blade flange to keep the saw arbor from rotating and remove arbor nut (C) with wrench (D). Turn nut (C) counterclockwise to remove. Remove outside blade flange (E) and saw blade (F).
- 4. Assemble new blade, making certain teeth of blade are pointing down at the front of the saw table and assemble the outside blade flange (E) Fig. 30, and arbor nut (C). Tighten nut (C) with wrench (D) by turning nut clockwise while holding arbor steady with other wrench (B).
- 5. Replace table insert.

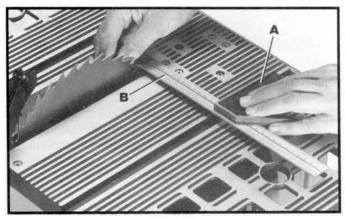


Fig. 27

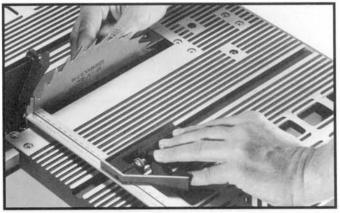


Fig. 28

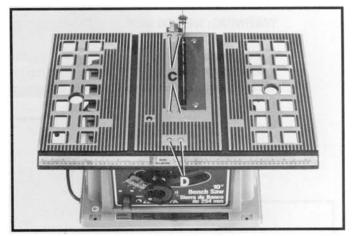


Fig. 29

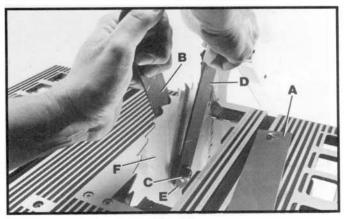


Fig. 30

## OPERATION

Common sawing operations include ripping and cross-cutting plus a few other standard operations of a fundamental nature. As with all power tools, there is a certain amount of hazard involved with the operation and use of the tool. Using the tool with the respect and caution demanded as far as safety precautions are concerned, will considerably lessen the possibility of personal injury. However, if normal safety precautions are overlooked or completely ignored, personal injury to the operator can result. The following information describes the safe and proper method for performing the most common sawing operations. Additional information on table saw operations can be obtained from the Delta "Getting the Most Out of Your Table Saw" How-To-Book, Catalog No. 11-400.

### **CROSS-CUTTING**

Cross-cutting requires the use of the miter gage to position and guide the work. Place the work against the miter gage and advance both the gage and work toward the saw blade, as shown in Fig. 31. The miter gage may be used in either table slot. When bevel cutting (blade tilted), use the table groove that does not cause interference of your hand or miter gage with the saw blade guard. The saw guard must always be used.

Start the cut slowly and hold the work firmly against the miter gage and the table. One of the rules in running a saw is that you never hang onto or touch a free piece of work. Hold the supported piece, not the free piece that is cut off. The feed in cross-cutting continues until the work is cut in two, and the miter gage and work are pulled back to the starting point. Before pulling the work back it is good practice to give the work a little sideways shift to move the work slightly away from the saw blade. Never pick up any short length of free work from the table while the saw is running. A smart operator never touches a cut-off piece unless it is at least a foot long.

#### WARNING: NEVER USE THE FENCE AS A CUT-OFF GAGE WHEN CROSS-CUTTING.

For added safety and convenience the miter gage can be fitted with an auxiliary wood-facing. This auxiliary wood-facing can be fastened to the front of the miter gage by using two wood screws through the slots provided in the miter gage body and into the wood-facing.

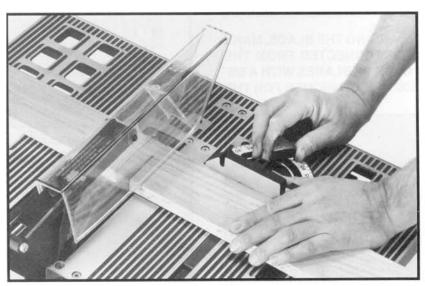


Fig. 31

### RIPPING

Ripping is the operation of making a length-wise cut through a board, as shown in Fig. 32, and the rip fence (A) is used to position and guide the work. One edge of the work rides against the rip fence while the flat side of the board rests on the table. Since the work is pushed along the fence, it must have a straight edge and make solid contact with the table. The saw guard must always be used. The guard has anti-kickback fingers to prevent kickback and a splitter to prevent the saw kerf from closing and binding the blade.

Start the motor and advance the work, holding it down and against the fence. Never stand in the line of the saw cut when ripping. Hold the work with both hands and push it along the fence and into the saw blade as shown in Fig. 32. The work can then be fed through the saw blade with one or two hands. After the work is beyond the saw blade and anti-kickback fingers the hand is removed from the work. When this is done the work will either stay on the table, tilt up slightly and be caught by the rear end of the guard or slide off the table to the floor. Alternately, the feed can continue to the end of the table, after which the work is lifted and brought back along the outside edge of the fence. The cut-off stock remains on the table and is not touched with the hand until the saw blade is stopped, unless it is a large piece allowing safe removal. When ripping boards longer than three feet, it is recommended that a work support be used at the rear of the saw to keep the workpiece from falling off the saw table.

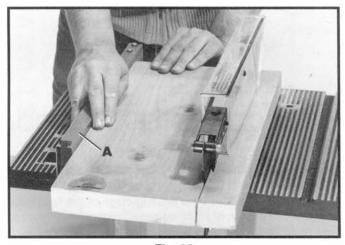


Fig. 32

If the ripped work is less than 4 inches wide, a push stick should always be used to complete the feed, as shown in Fig. 33. The push stick can easily be made from scrap material as explained in the section "CONSTRUCTING PUSH STICK." When ripping stock 2 inches or narrower, assemble an auxiliary wood facing to the fence, as explained in the section "USING AUXILIARY WOOD FACING ON RIP FENCE" and use a push stick.

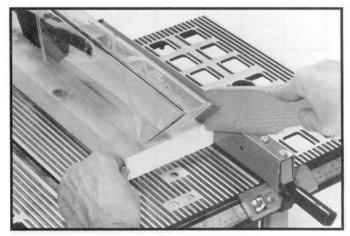


Fig. 33

## USING AUXILIARY WOOD FACING ON RIP FENCE

It is necessary when performing some special operations to add wood facing (A) Fig. 34, to one or both sides of the rip fence, as shown. The wood facing is attached to the fence with wood screws through the holes in the fence. 3/4 inch stock is suitable for most work although an occasional job may require 1 inch facing.

A wood facing should be used when ripping material such as thin paneling to prevent the material from catching between the bottom of the rip fence and the saw table surface.

Further information on the safe and proper operation of table saws is available in the Delta "Getting the Most Out of Your Table Saw" How-To-Book, Catalog No. 11-400. Additional information on table saw safety is also available by writing to:

NATIONAL SAFETY COUNCIL 1121 Spring Lake Drive Itasca, IL 60143-3201

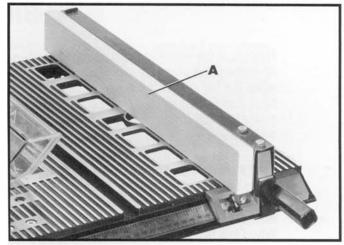


Fig. 34

### CONSTRUCTING A FEATHERBOARD

Fig. 35, illustrates dimensions for making a typical featherboard. The material which the featherboard is constructed of, should be a straight piece of wood that is free of knots and cracks. Featherboards are used to keep the work in contact with the fence and table and help prevent kickbacks. Clamp the featherboards to the fence and table so that the leading edge of the featherboards will support the workpiece until the cut is completed. An 8" high flat board can be clamped to the rip fence and the featherboard can be clamped to the 8" high board. Use featherboards for all non "thru-sawing" operations where the guard and splitter assembly must be removed. Always replace the guard and splitter assembly when the non thru-sawing operation is completed.

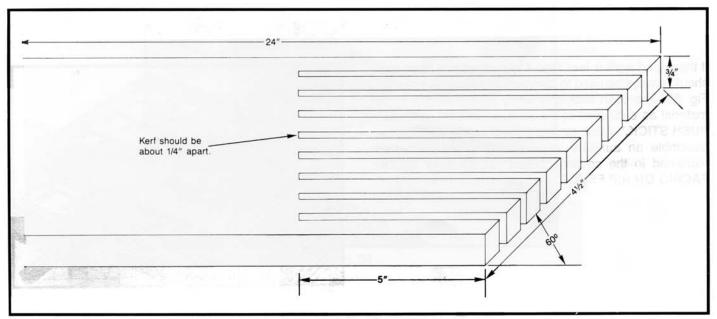
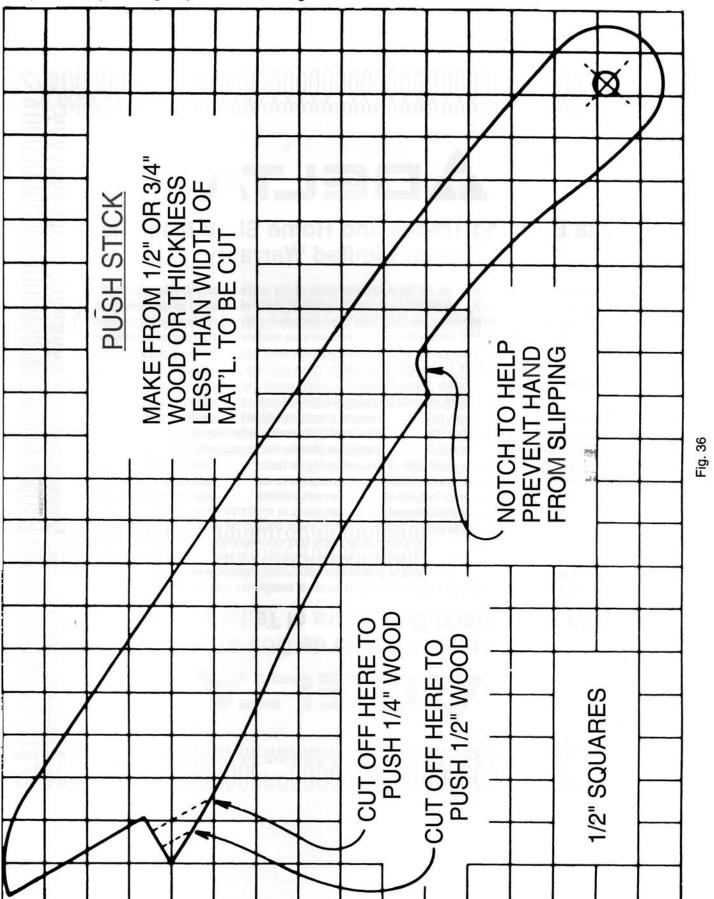


Fig. 35

### CONSTRUCTING A PUSH STICK

When ripping work less than 4 inches wide, a push stick should be used to complete the feed and could easily be made from scrap material by following the pattern shown in Fig. 36.



## CCESSORIES

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