

10" Table Saw

(Model 34-670)



DATED 9-19-95

PART NO. 1340213
© Delta International Machinery Corp. 1995

DELTA

TABLE OF CONTENTS

SAFETY RULES FOR ALL TOOLS	3
ADDITIONAL SAFETY RULES FOR CIRCULAR SAWS	4
UNPACKING AND CLEANING	5
ASSEMBLY INSTRUCTIONS	5
Assembling Stand	5
Assembling Saw To Stand	5
Assembling Blade Raising And Tilting Handwheels	6
Assembling Extension Wings	6
Assembling Saw Blade	7
Assembling Guide Rails	7-8
Assembling Rip Fence To Guide Rails	8
Assembling Blade Guard And Splitter Assembly	9
EXTENSION CORDS	
CONNECTING SAW TO POWER SOURCE	
Power Connections	10
Motor Specifications	10
Grounding Instructions	10
FASTENING STAND TO SUPPORTING SURFACE	11
OPERATING CONTROLS AND ADJUSTMENTS	
Starting And Stopping Saw	11
Locking Switch In The "Off" Position	11
Overload Protection	11
Blade Raising Mechanism	11
Blade Tilting Mechanism	11
Adjusting 90 And 45 Degree Positive Stops	12
Rip Fence Operation And Adjustments	13
Miter Gage Operation And Adjustments	13
Adjusting Table Insert	14
OPERATIONS	
Cross-Cutting	15
Ripping	15
Using Accessory Moulding Cutterhead	16
Using Accessory Dado Head	17
Using Auxiliary Wood Facing On Rip Fence	18
Constructing A Featherboard	18
Constructing Push Stick	19
MAINTENANCE	
Changing The Blade	20
Brush Inspection And Replacement	20
Belt Replacement	21
WARRANTY	

SAFETY RULES

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

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

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

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

1. **FOR YOUR OWN SAFETY, READ INSTRUCTION MANUAL BEFORE OPERATING THE TOOL.** Learn the tool's application and limitations as well as the specific hazards peculiar to it.
2. **KEEP GUARDS IN PLACE** and in working order.
3. **ALWAYS WEAR EYE PROTECTION.**
4. **GROUND ALL TOOLS.** If tool is equipped with three-prong plug, it should be plugged into a three-hole electrical receptacle. If an adapter is used to accommodate a two-prong receptacle, the adapter lug must be attached to a known ground. Never remove the third prong.
5. **REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it "on."
6. **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents.
7. **DON'T USE IN DANGEROUS ENVIRONMENT.** Don't use power tools in damp or wet locations, or expose them to rain. Keep work area well-lighted.
8. **KEEP CHILDREN AND VISITORS AWAY.** All children and visitors should be kept a safe distance from work area.
9. **MAKE WORKSHOP CHILDPROOF** - with padlocks, master switches, or by removing starter keys.
10. **DON'T FORCE TOOL.** It will do the job better and be safer at the rate for which it was designed.
11. **USE RIGHT TOOL.** Don't force tool or attachment to do a job for which it was not designed.
12. **WEAR PROPER APPAREL.** No loose clothing, gloves, neckties, rings, bracelets, or other jewelry to get caught in moving parts. Nonslip footwear is recommended. Wear protective hair covering to contain long hair.
13. **ALWAYS USE SAFETY GLASSES.** Wear safety glasses (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.
15. **DON'T OVERREACH.** Keep proper footing and balance at all times.
16. **MAINTAIN TOOLS IN TOP CONDITION.** Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
17. **DISCONNECT TOOLS** before servicing and when changing accessories such as blades, bits, cutters, etc.
18. **USE RECOMMENDED ACCESSORIES.** The use of accessories and attachments not recommended by Delta may cause hazards or risk of injury to persons.
19. **REDUCE THE RISK OF UNINTENTIONAL STARTING.** Make sure switch is in "OFF" position before plugging in power cord.
20. **NEVER STAND ON TOOL.** Serious injury could occur if the tool is tipped or if the cutting tool is accidentally contacted.
21. **CHECK DAMAGED PARTS.** Before further use of the tool, a guard or other part that is damaged should be carefully checked to ensure that it will operate properly and perform its intended function - check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
22. **DIRECTION OF FEED.** Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.
23. **NEVER LEAVE TOOL RUNNING UNATTENDED. TURN POWER OFF.** Don't leave tool until it comes to a complete stop.
24. **DRUGS, ALCOHOL, MEDICATION.** Do not operate tool while under the influence of drugs, alcohol or any medication.
25. **MAKE SURE TOOL IS DISCONNECTED FROM POWER SUPPLY** while motor is being mounted, connected or reconnected.
26. **WARNING:** The dust generated by certain woods and wood products can be injurious to your health. Always operate machinery in well ventilated areas and provide for proper dust removal. Use wood dust collection systems whenever possible.

ADDITIONAL SAFETY RULES FOR CIRCULAR SAWS

1. **WARNING:** Do not operate your saw until it is completely assembled and installed according to the instructions.
2. **IF YOU ARE NOT** thoroughly familiar with the operation of circular saws, obtain advice from your supervisor, instructor, or other qualified person.
3. **ALWAYS** use blade guard, splitter and anti-kickback fingers for every operation for which it can be used, including all thru-sawing. Thru-sawing operations are those when the blade cuts completely through the workpiece as in ripping or cross-cutting.
4. **ALWAYS** hold the work firmly against the miter gage or fence.
5. **NEVER** use the fence as a cut-off gage when cross-cutting.
6. **MOVE** the rip fence out of the way when cross-cutting.
7. **NEVER** perform any operation "free-hand" which means using your hands to support or guide the workpiece. Always use either the fence or miter gage to position and guide the work.
8. **ALWAYS** use a push stick for ripping narrow stock. Refer to ripping applications in instruction manual where the push stick is covered in detail.
9. **AVOID** kickbacks (work thrown back toward you) by:
 - A. Keeping blade sharp.
 - B. Keeping rip fence parallel to the saw blade.
 - C. 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.
10. **AVOID** awkward operations and hand positions where a sudden slip could cause your hand to move into the cutting tool.
11. **ALWAYS** keep hands and fingers away from the blade.
12. **NEVER** stand or have any part of your body in line with the path of the saw blade.
13. **NEVER** reach behind or over the cutting tool with either hand for any reason.
14. **DIRECTION OF FEED.** Feed work into blade or cutter against the direction or rotation of the blade or cutter only.
15. **DO NOT** feed the material too fast while cutting. Feed the material only fast enough so that the blade will cut.
16. **NEVER** attempt to free a stalled saw blade without first turning the saw "OFF."
17. **NEVER** start the saw with the workpiece pressed against the blade.
18. **NEVER** turn the saw "ON" before clearing the table of all objects (tools, scraps of wood, etc.).
19. **ALWAYS STOP** the saw before removing scrap pieces from the table.
20. **NEVER** perform layout, assembly or set-up work on the table while the saw is operating.
21. **PROVIDE** adequate support to the rear and sides of the saw table for wide or long workpieces.
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. **SHOULD** any part of your circular saw be missing, damaged, or fail in any way, or any electrical components fail to perform properly, shut off switch and remove plug from power supply outlet. Replace missing, damaged or failed parts before resuming operation.
24. **THE USE** of attachments and accessories not recommended by Delta may result in the risk of injuries.
25. **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 Operations 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.
26. **SAVE THESE INSTRUCTIONS.** Refer to them often and use them to instruct others.

UNPACKING AND CLEANING

Carefully unpack the saw, stand and all loose items from the carton. Remove the protective coating from the saw table surface. This coating may be removed with a soft cloth moistened with kerosene (do not use acetone, gasoline or lacquer thinner for this purpose). After cleaning, cover the table surface with a good quality paste wax.

ASSEMBLY INSTRUCTIONS

WARNING: FOR YOUR OWN SAFETY, DO NOT CONNECT THE SAW TO THE POWER SOURCE UNTIL THE SAW IS COMPLETELY ASSEMBLED AND YOU HAVE READ AND UNDERSTOOD THE ENTIRE OWNERS MANUAL.

ASSEMBLING STAND

1. Assemble the two top side braces (A) Fig. 4, which are 16-1/2" long, and the two top front and rear braces (B), which are 19" long, to the four legs (C) using the sixteen 5/8" long carriage bolts, flat washers and hex nuts supplied. **NOTE:** The top lips of the two top side braces (A) must fit on top of the top lips of the front and rear braces (B). The side braces (A) have holes on top for mounting the saw to the stand. Only tighten hex nuts finger-tight at this time.

2. Assemble the two bottom side braces (D) Fig. 4, which are 20" long, and the two front and rear braces (E), which are 22-1/2" long, to the four legs (C) using the sixteen 5/8" long carriage bolts, flat washers and hex nuts supplied. Only tighten hex nuts finger-tight at this time.

3. Assemble the four rubber feet (F) Fig. 4, to the bottom of each leg (C) as shown.

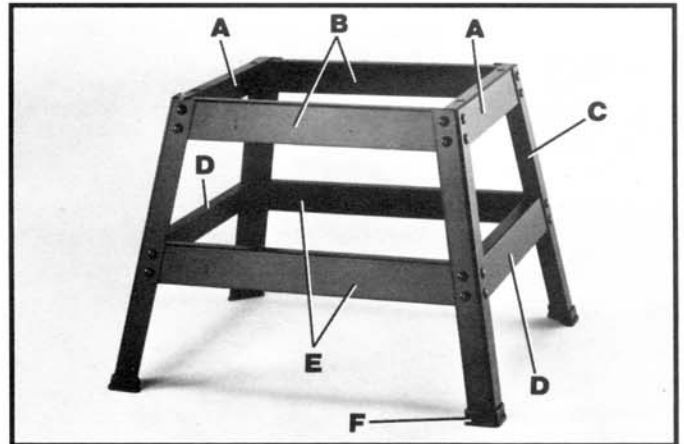


Fig. 4

ASSEMBLING SAW TO STAND

1. Position the saw (B) on the stand as shown in Fig. 5, lining up the four holes on the bottom of sides of the saw cabinet with the four holes in the two top side braces, one of which is shown at (A).

2. Fasten the saw to the stand using the four 5/8" long hex head screws, flat washers and hex nuts supplied.

3. After saw is assembled to stand, firmly tighten all stand mounting hardware.

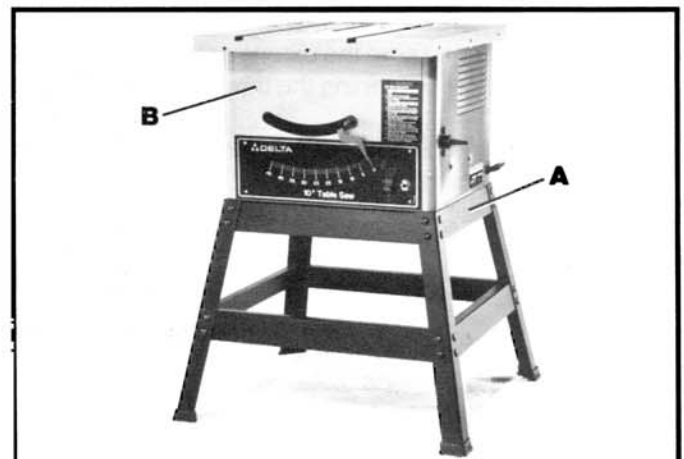


Fig. 5

ASSEMBLING BLADE RAISING AND TILTING HANDWHEELS

1. Assemble the blade raising handwheel (A) Fig. 6, to the blade raising screw (B) making sure the slots (C) in the hub of the handwheel are engaged with the roll pins (D) on the raising screw shaft.

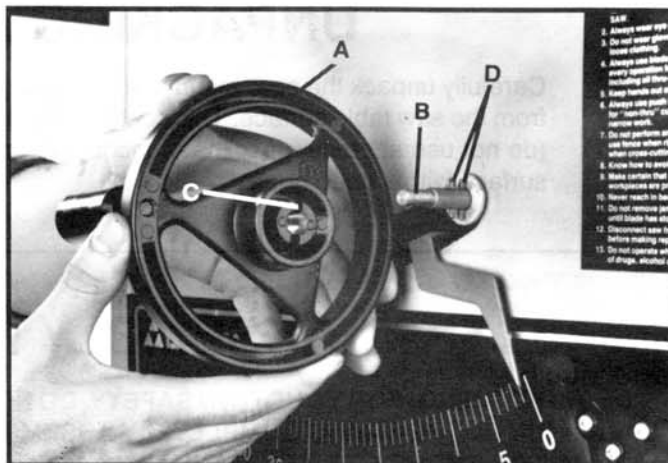


Fig. 6

2. Screw lock knob (E) Fig. 7, on end of raising screw shaft.

3. Assemble tilting screw handwheel (F) and lock knob (G) Fig. 7, to the blade tilting screw shaft in the same manner, as shown in Fig. 7.

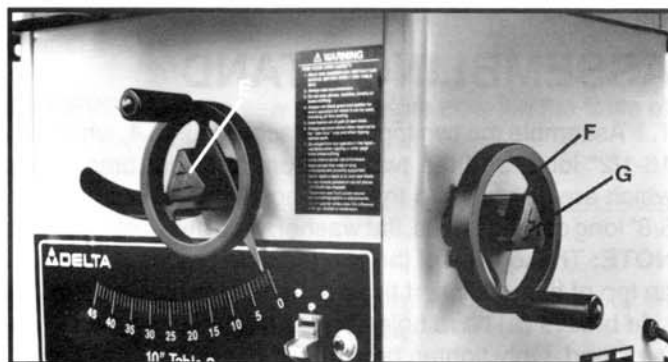


Fig. 7

ASSEMBLING EXTENSION WINGS

1. Assemble extension wing (A) Fig. 8, to the saw table using the three screws and washers (B). With a straight edge (C) Fig. 9, make sure the extension wing is level with the saw table before tightening the three screws (B) Fig. 8.

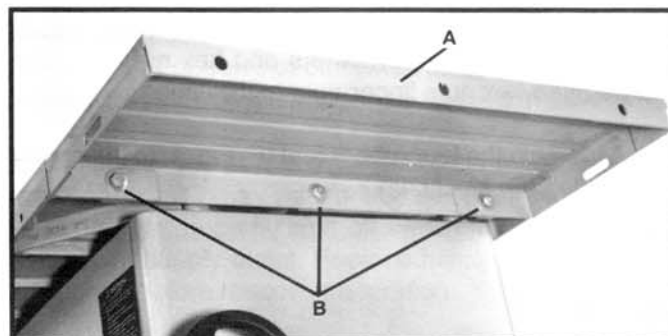


Fig. 8

2. Assemble the other extension wing to the opposite end of the table in the same manner.

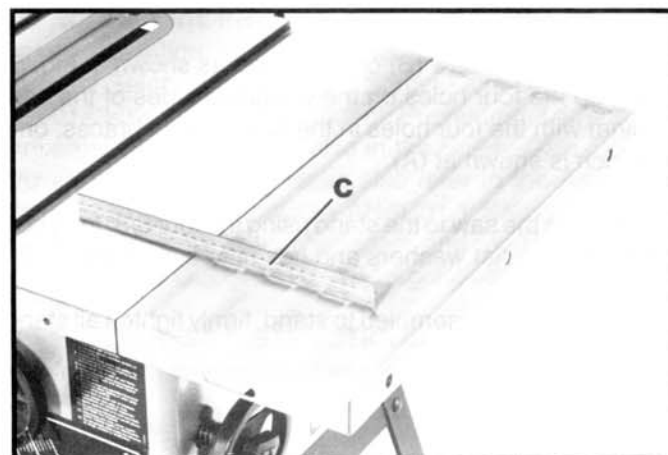


Fig. 9

ASSEMBLING SAW BLADE

1. Make certain the saw is disconnected from the power source.
2. Remove the table insert (A) Fig. 10.
3. Raise the saw blade arbor (B) Fig. 10, to its maximum height by turning the blade raising handwheel counterclockwise and remove the arbor nut (E) and flange (D) from the saw arbor.
4. Assemble the saw blade (C) to the saw arbor making sure the teeth of the blade point down at the front of the table, as shown in Fig. 10, and assemble the flange (D) and arbor nut (E) to the saw arbor and tighten arbor nut (E) as far as possible by hand, being sure that the saw blade is against the inner blade flange.
5. Using the open end wrench (F) Fig. 10 and Fig. 11, supplied, place the wrench (F) on the flats on the saw arbor to keep the arbor from turning and tighten arbor nut (E) using the remaining wrench (G) Fig. 11, by turning the nut counterclockwise.
6. Replace table insert (A) Fig. 11, making certain that it is flush with table surface.

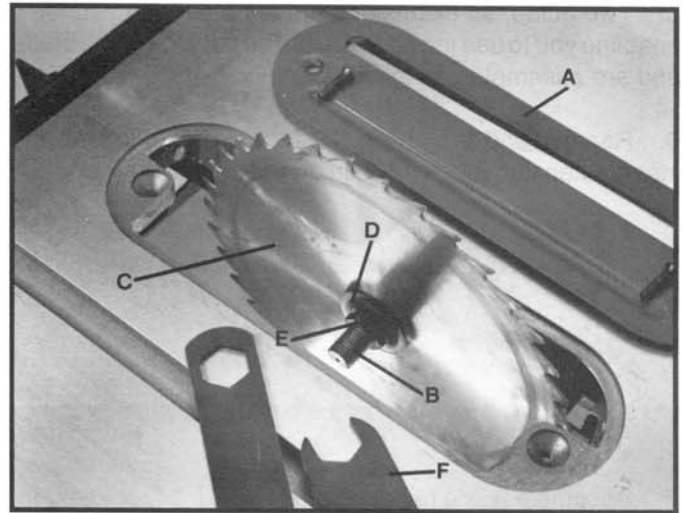


Fig. 10

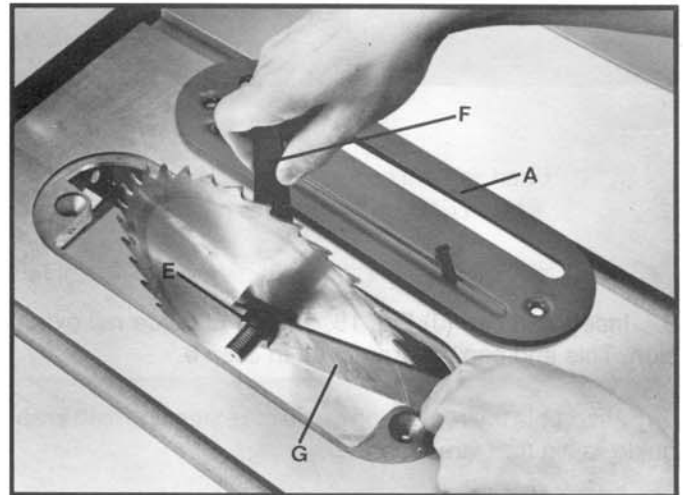


Fig. 11

ASSEMBLING GUIDE RAILS

1. The guide rail (A) Fig. 12, with graduations is to be assembled to the front of the saw table with the graduations up.
2. Insert the two special screws (B) Fig. 12, through the two holes (C) in the guide rail and place spacers (D) between the guide rail (A) and saw table. Thread the two special screws (B) into the tapped holes in the saw table. Do not completely tighten the two screws (B) at this time.
3. Insert special screw (E) Fig. 12, through hole (F) in guide rail and place spacer (G) between guide rail and extension wing. Fasten with flat washer, lock washer and nut (H). Tighten three screws (B) and (E) to fasten guide rail to table and extension wing.
4. Assemble the remaining guide rail to the rear of the table in the same manner.

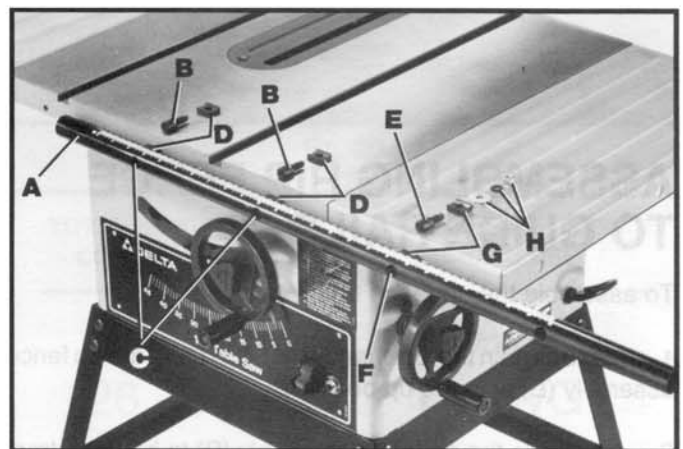


Fig. 12

5. Two guide rail extensions are supplied with your saw enabling you to use the rip fence on the left side of the blade and are assembled as follows:

6. Remove end cap (J) Fig. 13, from end of guide rail and insert extension plug (K) in guide rail, as shown.

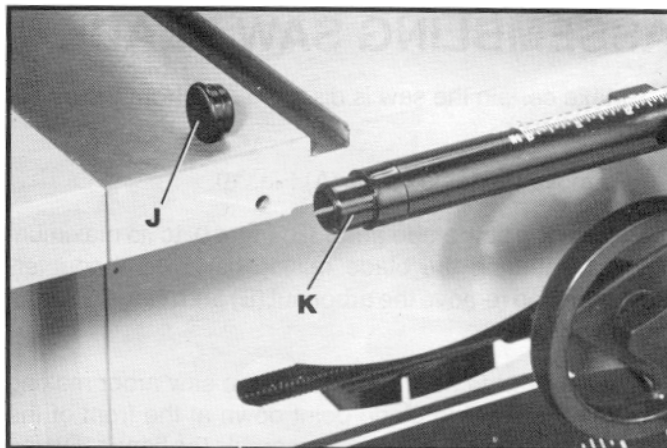


Fig. 13

7. Assemble guide rail extension (L) Fig. 14, onto extension plug (K) and fasten guide rail extension (L) to saw table and wing using two special screws (O), two spacers (M) and one flat washer, lock washer and nut (N), as shown.

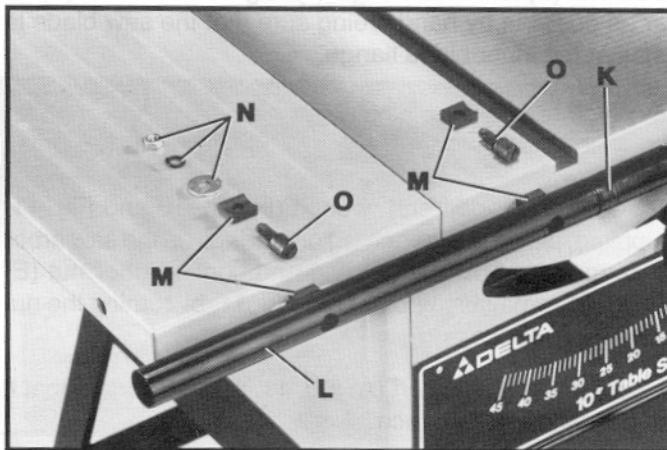


Fig. 14

8. Insert end cap (J) Fig. 15, on end of guide rail extension. This end cap was removed in Step 6.

9. Assemble the remaining guide rail extension to the rear guide rail in the same manner.

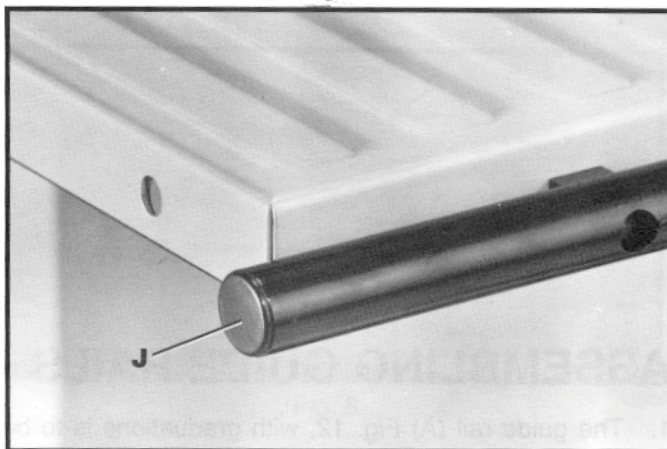


Fig. 15

ASSEMBLING RIP FENCE TO GUIDE RAILS

To assemble the rip fence to the guide rails:

1. Make certain the lock handle (A) Fig. 16, of the rip fence assembly (B) is in the up position.

2. Assemble the rip fence assembly (B) to both the front and rear guide rails, as shown in Fig. 16.

3. Lock the rip fence (B) Fig. 16, on the guide rails (C) by pushing down on lock handle (A).

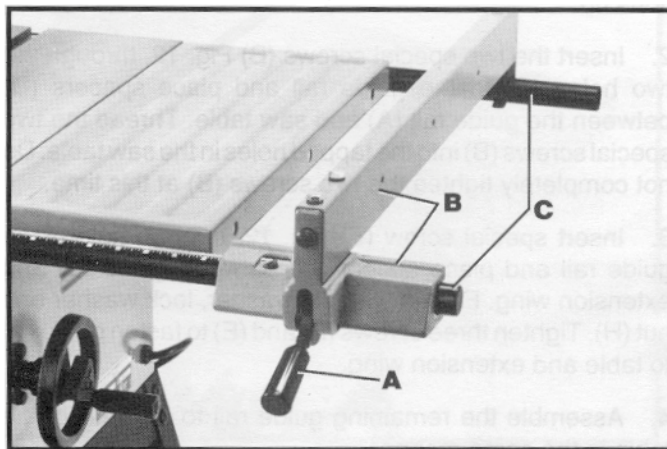


Fig. 16

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. Assemble splitter bracket (A) to the end of the guard support rod using the two hex nuts and flat washers (B), as shown in Fig. 17.

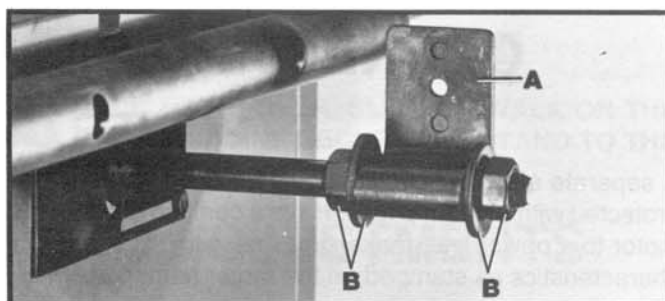


Fig. 17

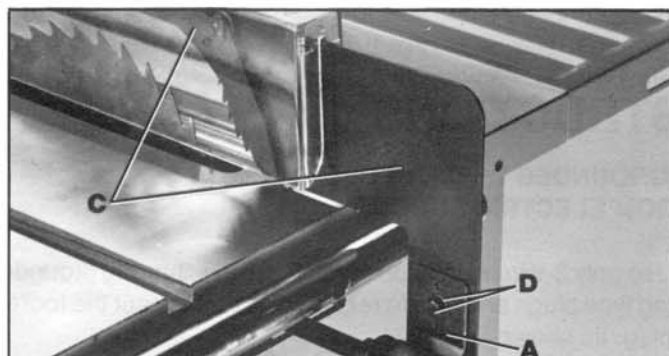


Fig. 18

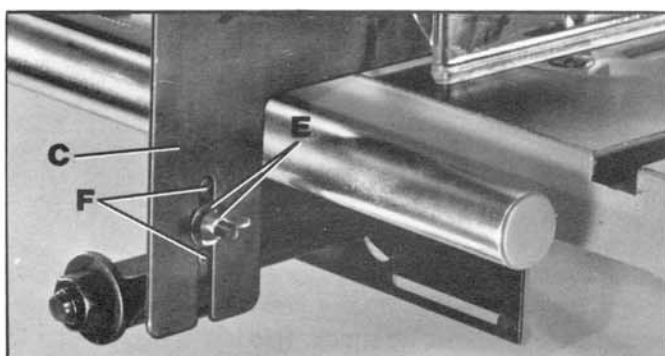


Fig. 19

3. Assemble the blade guard and splitter assembly (C) to the splitter bracket (A) using the hex head screw, star washer and flat washer (D) Fig. 18, and wing nut, star washer and flat washer (E) Fig. 19.

4. **NOTE:** Make certain the two protrusions, "pins" (F) Fig. 19, are engaged with the channel of the splitter assembly (C) before tightening wing nut (E).

5. Check the alignment of the splitter (C) Fig. 20, to the saw blade using a straight edge as shown. If alignment is necessary, loosen nut (B), align splitter (C) and retighten nut (B).

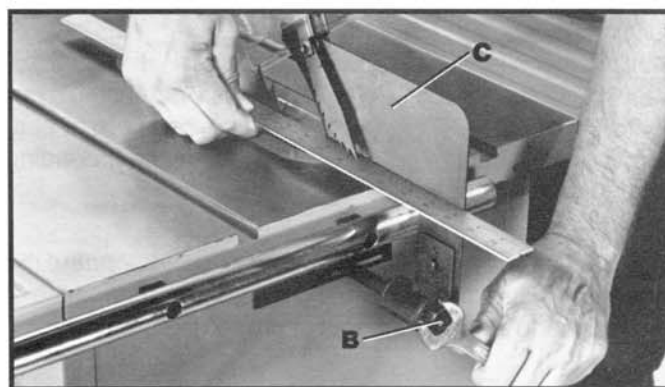


Fig. 20

EXTENSION CORDS

Use proper extension cords. Make sure your extension cord is in good condition and is a 3-wire extension cord which has a 3-prong grounding type plug and a 3-pole receptacle which will accept the tool's plug. When using an extension cord, be sure to use one heavy enough to carry the current of the saw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. Fig. 20A, shows the correct gage to use depending on cord length. If in doubt, use the next heavier gage. The smaller the gage number, the heavier the cord.

TOTAL LENGTH OF CORD IN FEET	GAGE OF EXTENSION CORD TO USE
0 - 25	14 AWG
26 - 50	12 AWG
51 - 100	Not Recommended
101 - 150	Not Recommended

Fig. 20A

CONNECTING SAW TO POWER SOURCE

POWER CONNECTIONS

A separate electrical circuit should be used for your tools. This circuit should not be less than #12 wire and should be protected with a 20 Amp fuse. Have a certified electrician replace or repair a worn cord immediately. Before connecting the motor to a power line, make sure the switch is in the "OFF" position and be sure that the electric current is of the same characteristics as stamped on the motor nameplate. Running on low voltage will damage the motor.

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

MOTOR SPECIFICATIONS

Your saw is wired for 110-120 volt, 60 HZ alternating current. Before connecting the saw to the power source, make sure the switch is in the "OFF" position.

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. 21.

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. 21. A temporary adapter, which looks like the adapter illustrated in Fig. 22, may be used to connect this plug to a 2-pole receptacle, as shown in Fig. 22, 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. 22.

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.

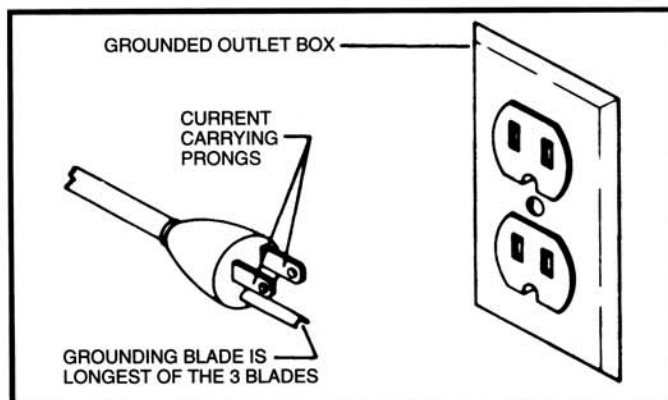


Fig. 21

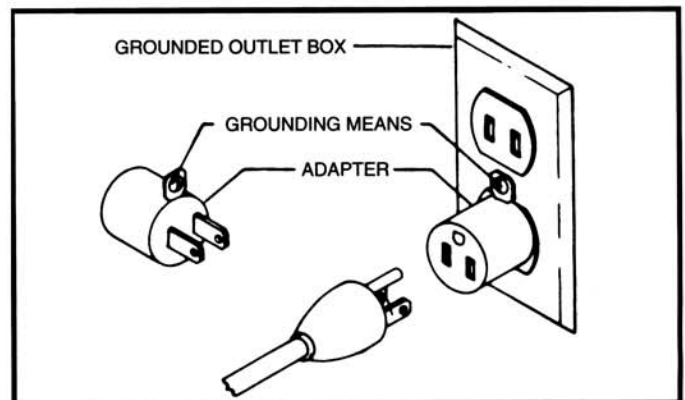


Fig. 22

FASTENING STAND TO SUPPORTING SURFACE

IF DURING OPERATION THERE IS ANY TENDENCY FOR THE TOOL TO TIP OVER, SLIDE OR WALK ON THE SUPPORTING SURFACE, REMOVE THE RUBBER FEET FROM THE STAND AND SECURE THE STAND TO THE FLOOR.

OPERATING CONTROLS AND ADJUSTMENTS

STARTING AND STOPPING SAW

The switch (A) is located on the front panel of the saw cabinet, as shown in Fig. 23. To turn the saw "ON" move the switch to the up position. To turn the saw "OFF" move the switch (A) to the down position.

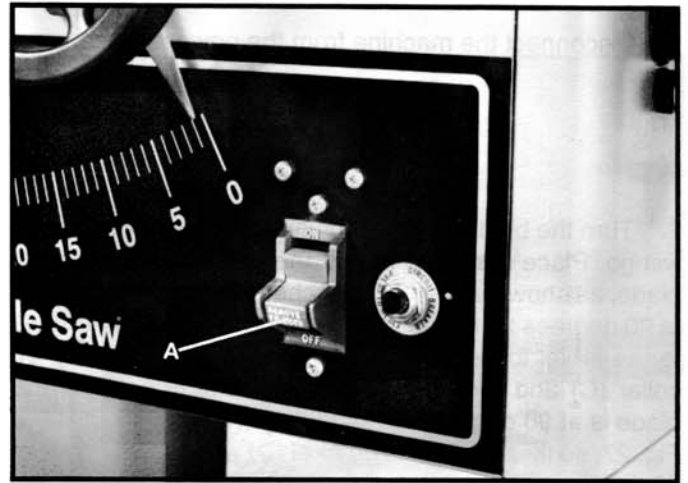


Fig. 23

LOCKING SWITCH IN THE "OFF" POSITION

We suggest that when the saw is not in use, the 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. 24. 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" once, but cannot be restarted without inserting the switch toggle (B).

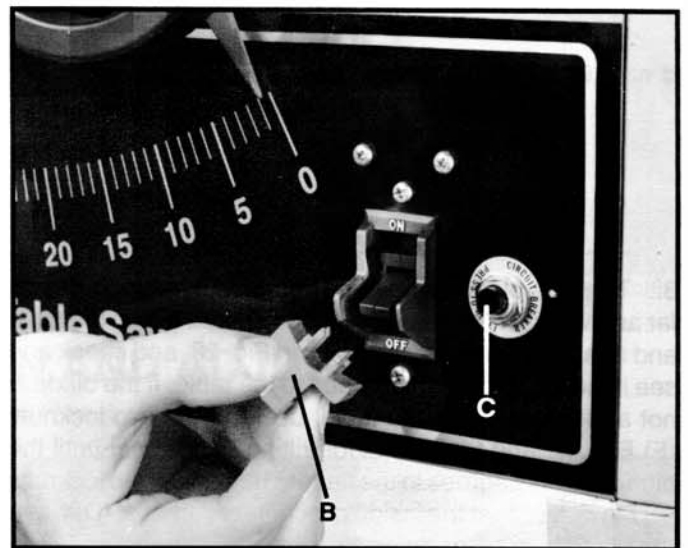


Fig. 24

OVERLOAD PROTECTION

Your saw is equipped with a reset overload relay button (C) Fig. 24. 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.

BLADE RAISING MECHANISM

To raise or lower the saw blade, loosen lock knob (A) and turn the blade raising handwheel (B) Fig. 25. When the desired blade height is obtained, tighten lock knob (A).

BLADE TILTING MECHANISM

To tilt the saw blade for bevel cutting, loosen lock knob (C) and turn the tilting handwheel (D) Fig. 25. When the desired blade angle is obtained, tighten lock knob (C).



Fig. 25

ADJUSTING 90 AND 45 DEGREE POSITIVE STOPS

Your saw is equipped with positive stops that will position the saw blade at 90 and 45 degrees to the table. To check and adjust the positive stops, proceed as follows:

1. Disconnect the machine from the power source.
2. Turn the blade tilting handwheel clockwise as far as it will go. Place a square (A) on the table and against the blade, as shown in Fig. 26, and check to see if the blade is at 90 degrees to the table. If the blade is not at 90 degrees to the table, loosen two set screws (B) Fig. 27, back off collar (C) and turn the blade tilting handwheel until the blade is at 90 degrees to the table. Then adjust collar (C) Fig. 27, so that it contacts bracket (D) when the blade is at 90 degrees to the table and tighten the two set screws (B).
3. Turn the blade tilting handwheel counterclockwise as far as it will go. Place a combination square (E) on the table and against the blade, as shown in Fig. 28, and check and see if the blade is at 45 degrees to the table. If the blade is not at 45 degrees to the table, back off the two locknuts (F) Fig. 27, and turn the blade tilting handwheel until the blade is at 45 degrees to the table. Then adjust the locknuts (F) Fig. 27, so that the inside nut contacts bracket (D) when the blade is at 45 degrees to the table.

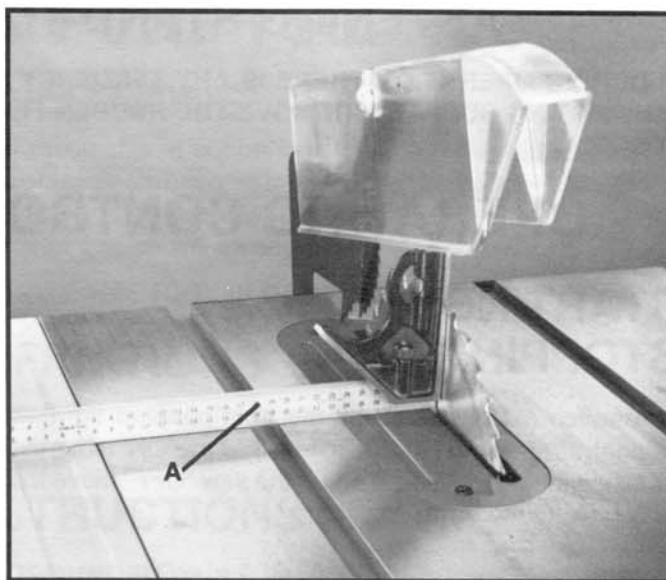


Fig. 26

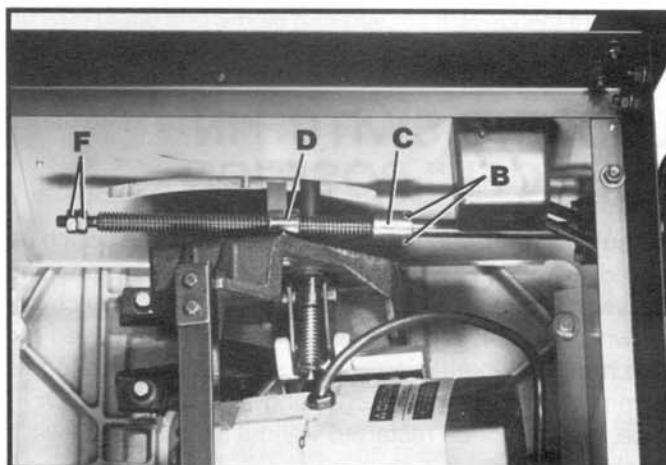


Fig. 27

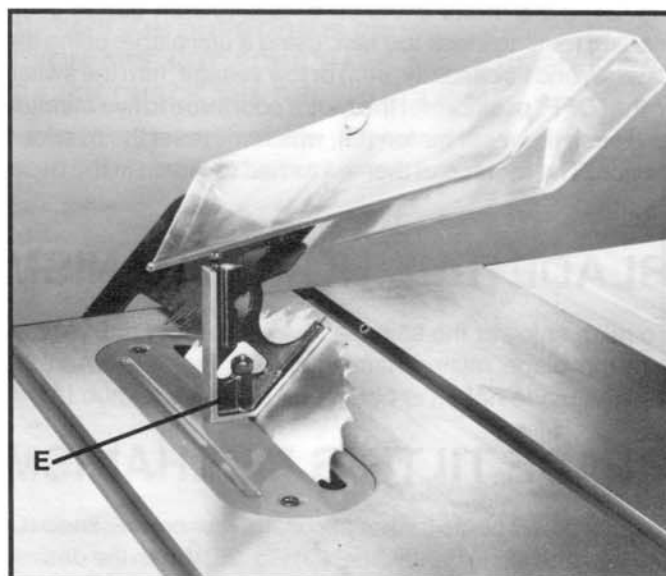


Fig. 28

RIP FENCE OPERATION AND ADJUSTMENTS

IMPORTANT: THE RIP FENCE MUST BE PROPERLY ALIGNED TO THE MITER GAGE SLOT IN ORDER TO PREVENT KICKBACK WHEN RIPPING.

1. To move the fence (A) Fig. 29, along the guide rails, lift up on the fence locking lever (B), slide the fence to the desired location on the guide rails and push down on the locking lever (B) to lock the fence in position.

2. A pointer (C) Fig. 29, 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 pointer to fence bracket and adjust the pointer accordingly.

3. The blade flange is set parallel to the miter gage slot at the factory and the fence must be adjusted so it is parallel to the miter gage slot, as follows:

4. Position the fence at one edge of the miter gage slot, as shown in Fig. 29. Clamp the fence to the guide rails by pushing the locking lever (B) to the down position. The edge of the fence should then line up parallel with the miter gage slot. If an adjustment is necessary, proceed as follows:

5. Loosen the two screws (D) Fig. 29, and move the rear end of the fence until the fence is parallel to the miter gage slot. Then tighten the two screws (D).

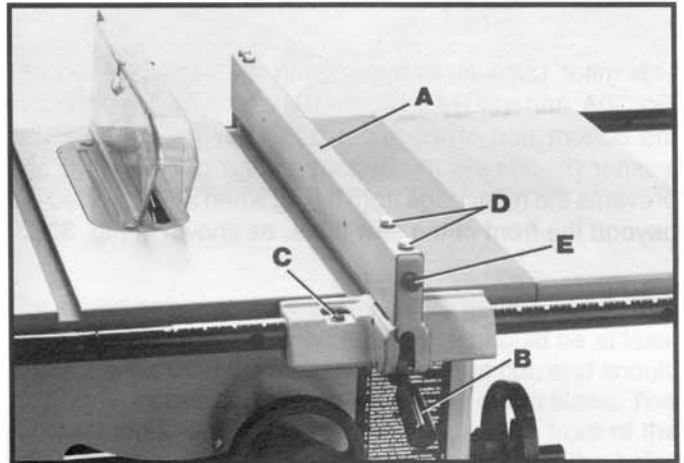


Fig. 29

6. Clamping action of locking lever (B) Fig. 29, can be adjusted by tightening or loosening screw (E).

MITER GAGE OPERATION AND ADJUSTMENTS

Your 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 (A) Fig. 30, and tightening or loosening the three adjusting screws (B) against the stop link (C).

To operate the miter gage, simply loosen lock handle (D) Fig. 30, and move the body of the miter gage (E) to the desired angle. The miter gage body will stop at 90 degrees and 45 degrees both right and left. To rotate the miter gage body past these points, the stop link (C) must be flipped out of the way.

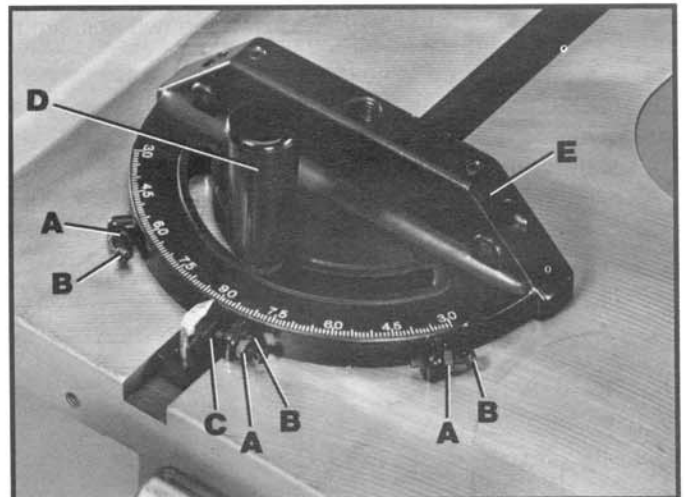


Fig. 30

The miter gage is equipped with a special washer (F) Fig. 30A, and a flat head screw (G) which are assembled to the bottom end of the miter gage bar (H). The special washer (F) rides in the T-slotted miter gage slot (J) and prevents the miter gage from falling when it is extended out beyond the front of the saw table, as shown in Fig. 30B.

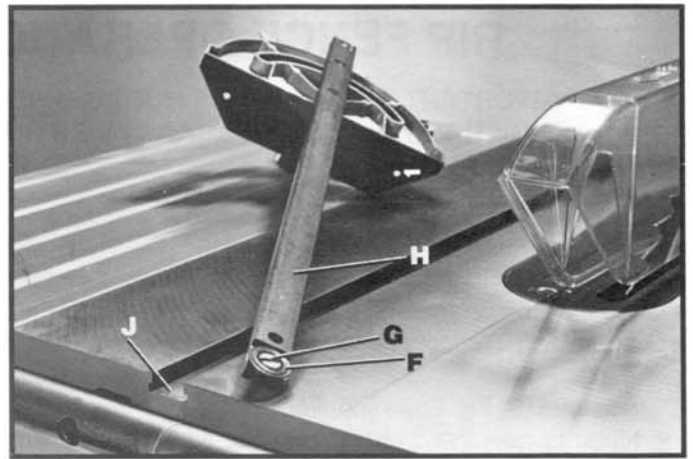


Fig. 30A

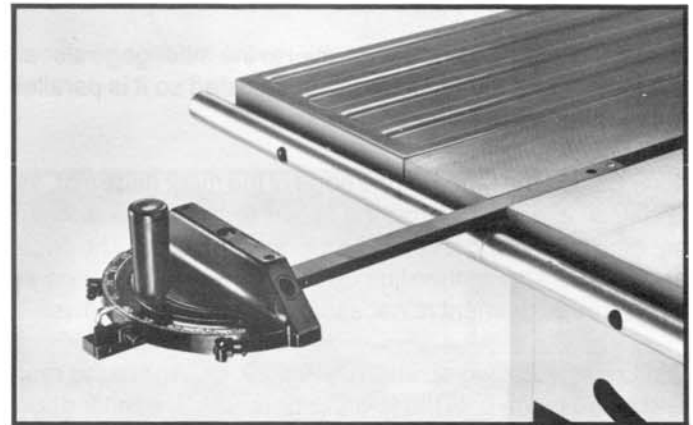


Fig. 30B

ADJUSTING TABLE INSERT

The table insert (A) Fig. 31, should be adjusted so it is flush with the saw table surface. Place a straight edge or square (B) on the saw table extending over the insert, as shown. If an adjustment to the insert is necessary, tighten or loosen the two adjusting screws (C).

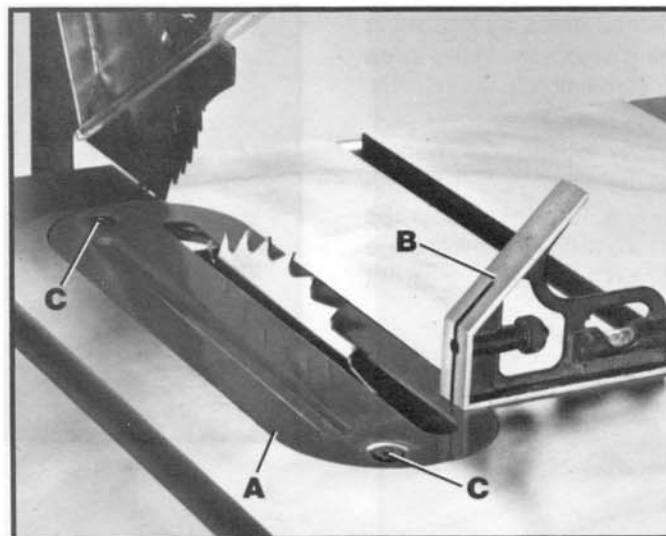


Fig. 31

OPERATIONS

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. 32. 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.

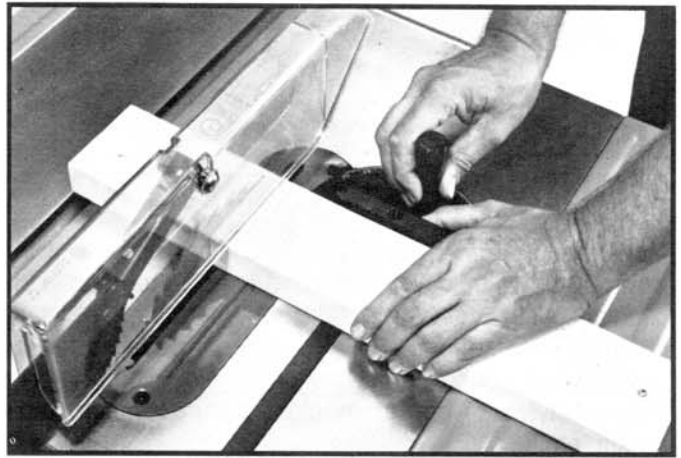


Fig. 32

For added safety and convenience the miter gage can be fitted with an auxiliary wood facing that should be at least 1 inch higher than the maximum depth of cut, and should extend 12 inches or more on either side of the blade. This auxiliary wood-facing can be fastened to the front of the miter gage by using two wood screws through the holes provided in the miter gage body and into the wood facing.

RIPPING

Ripping is the operation of making a lengthwise cut through a board, as shown in Fig. 33, 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. 33. 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 along the outside edge of the fence. The cut-off stock remains on the table and is not touched with the hands 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.

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. 34. The push stick can easily be made from scrap material as explained in the section "**CONSTRUCTING PUSH STICK.**" When ripping 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.

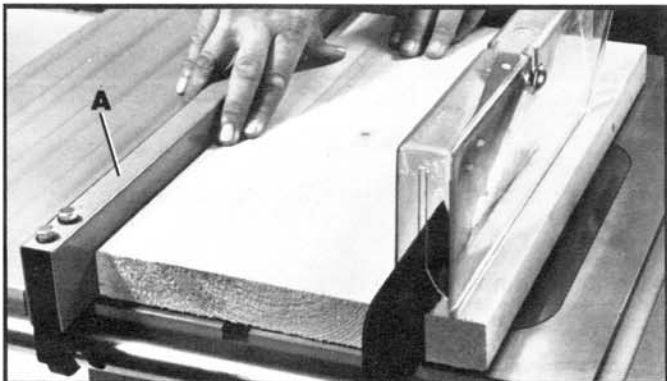


Fig. 33

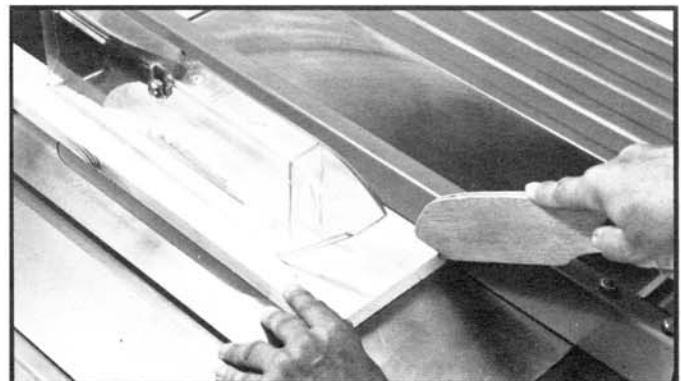


Fig. 34

USING ACCESSORY MOULDING CUTTERHEAD

Moulding is cutting a shape on the edge or face of the work. Cutting mouldings with a moulding cutterhead in the circular saw is a fast, safe and clean operation. The many different knife shapes available make it possible for the operator to produce almost any kind of mouldings, such as various styles of corner moulds, picture frames, table edges, etc.

The moulding head consists of a cutterhead in which can be mounted various shapes of steel knives, as shown in Fig. 35. Each of the three knives in a set is fitted into a groove in the cutterhead and securely clamped with a screw. The knife grooves should be kept free of sawdust which would prevent the cutter from seating properly.

The moulding cutterhead (A) Fig. 36, is assembled to the saw arbor in the same manner as the saw blade. The guard, splitter and anti-kickback finger assembly cannot be used when moulding and must be removed from the saw. In place of the guard, auxiliary jigs or fixtures and push sticks and featherboards should be used. Also, the accessory moulding cutterhead table insert (B) Fig. 36, must be used in place of the standard table insert.

It is necessary when using the moulding cutterhead to add wood-facing (C) to one or both sides of the rip fence, as shown in Fig. 37. The wood-facing is attached to the fence with wood screws through the holes provided in the fence. 3/4 inch stock is suitable for most work although an occasional job may require 1 inch facing.

Position the wood-facing over the cutterhead with the cutterhead below the surface of the table. Turn the saw on and raise the cutterhead. The cutterhead will cut its own groove in the wood-facing. Fig. 37, shows a typical moulding operation. **NEVER USE MOULDING CUTTERHEAD IN A BEVEL POSITION.**

WARNING: NEVER RUN THE STOCK BETWEEN THE FENCE AND THE MOULDING CUTTERHEAD AS IRREGULAR SHAPED WOOD WILL CAUSE KICKBACK.

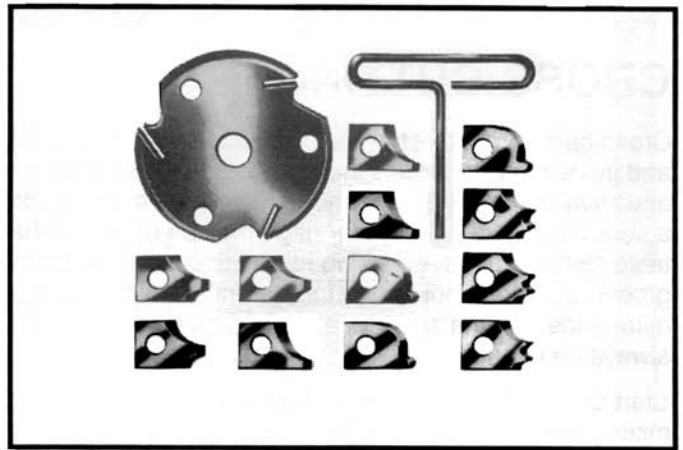


Fig. 35

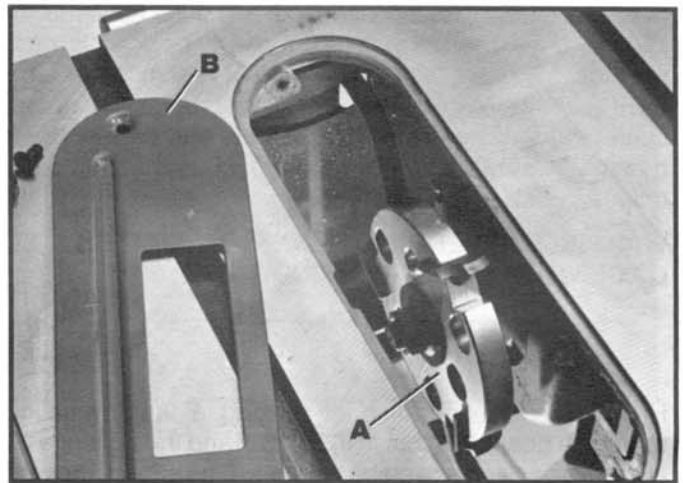


Fig. 36

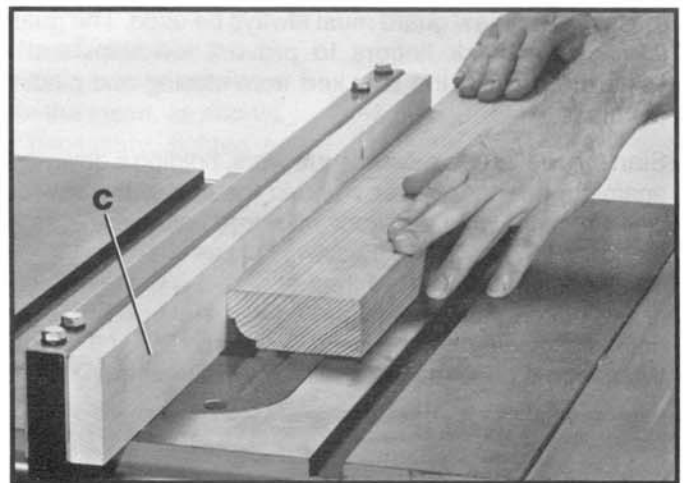


Fig. 37

When moulding end grain, the miter gage is used. The feed should be slowed up at the end of the cut to prevent splintering.

In all cuts, attention should be given the grain, making the cut in the same direction as the grain whenever possible.

IMPORTANT: ALWAYS INSTALL BLADE GUARD AFTER OPERATION IS COMPLETE.

USING ACCESSORY DADO HEAD

Dadoing is cutting a rabbet or wide groove into the work. Most dado head sets are made up of two outside saws and four or five inside cutters, as shown Fig. 38. Various combinations of saws and cutters are used to cut grooves from 1/8" to 13/16" wide for use in shelving, making joints, tenoning, grooving, etc. The cutters are heavily swaged and must be arranged so that this heavy portion falls in the gullets of the outside saws, as shown in Fig. 39. The saw and cutter overlap is shown in Fig. 40, (A) being the outside saw, (B) an inside cutter, and (C) a paper washer or washers which can be used as needed to control the exact width of groove. A 1/4" groove is cut by using the two outside saws. The teeth of the saws should be positioned so that the raker on one saw is beside the cutting teeth on the other saw.

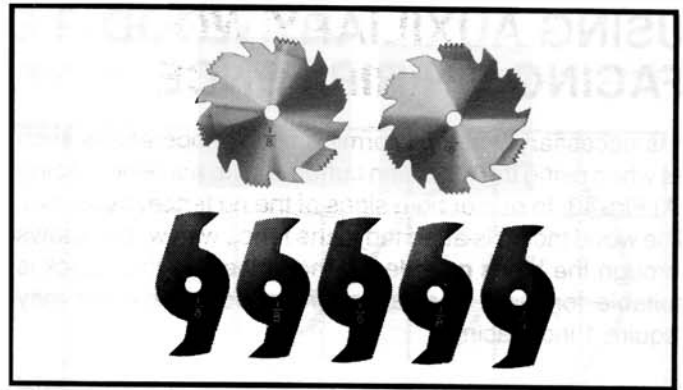


Fig. 38

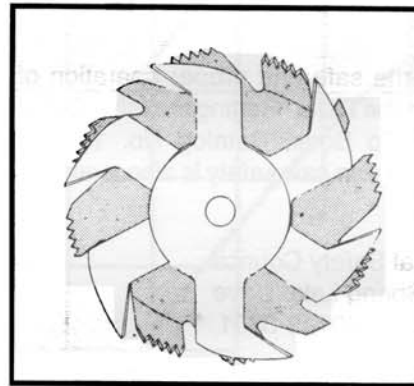


Fig. 39

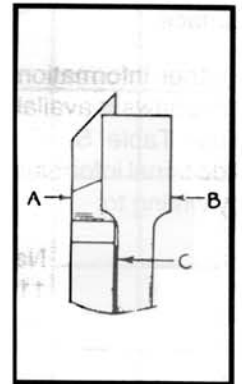


Fig. 40

The dado head set (D) Fig. 41, is assembled to the saw arbor in the same manner as the saw blade. The guard, splitter and anti-kickback finger assembly cannot be used when dadoing and must be removed from the saw. In place of the guard, auxiliary jigs or fixtures and push sticks and featherboards should be used. Also, the accessory dado head table insert (E) Fig. 41, must be used in place of the standard table insert. Fig. 42, shows a typical dado operation using the miter gage as a guide.

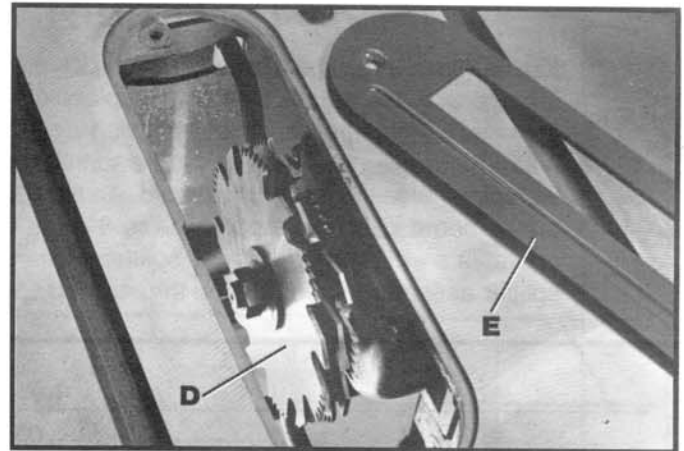


Fig. 41

WARNING: NEVER USE THE DADO HEAD IN A BEVEL POSITION.

IMPORTANT: ALWAYS INSTALL BLADE GUARD AFTER OPERATION IS COMPLETE.

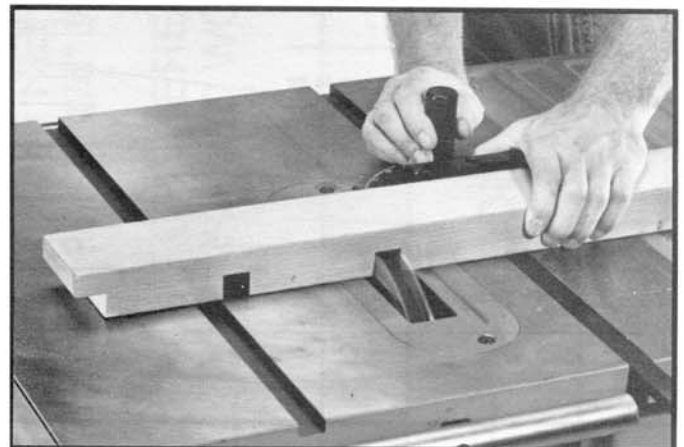


Fig. 42

USING AUXILIARY WOOD FACING ON RIP FENCE

It is necessary when performing special operations such as when using the moulding cutterhead to add wood facing (A) Fig. 43, 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 provided 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 thin material such as 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

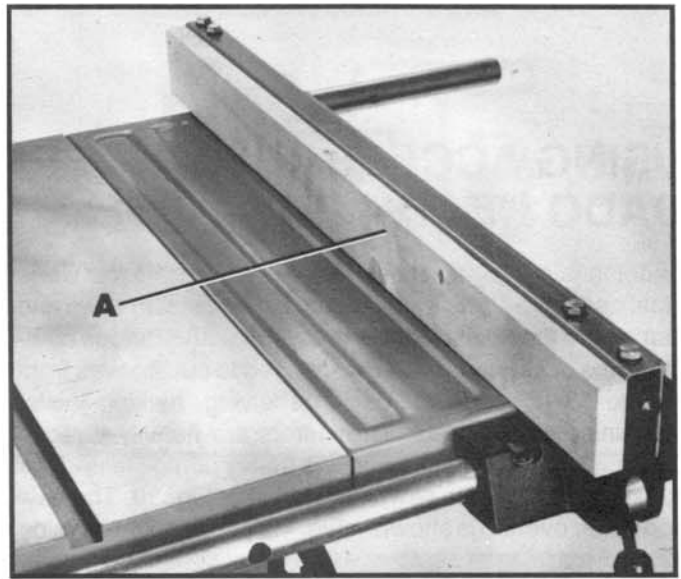


Fig. 43

CONSTRUCTING A FEATHERBOARD

Fig. 44, 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.

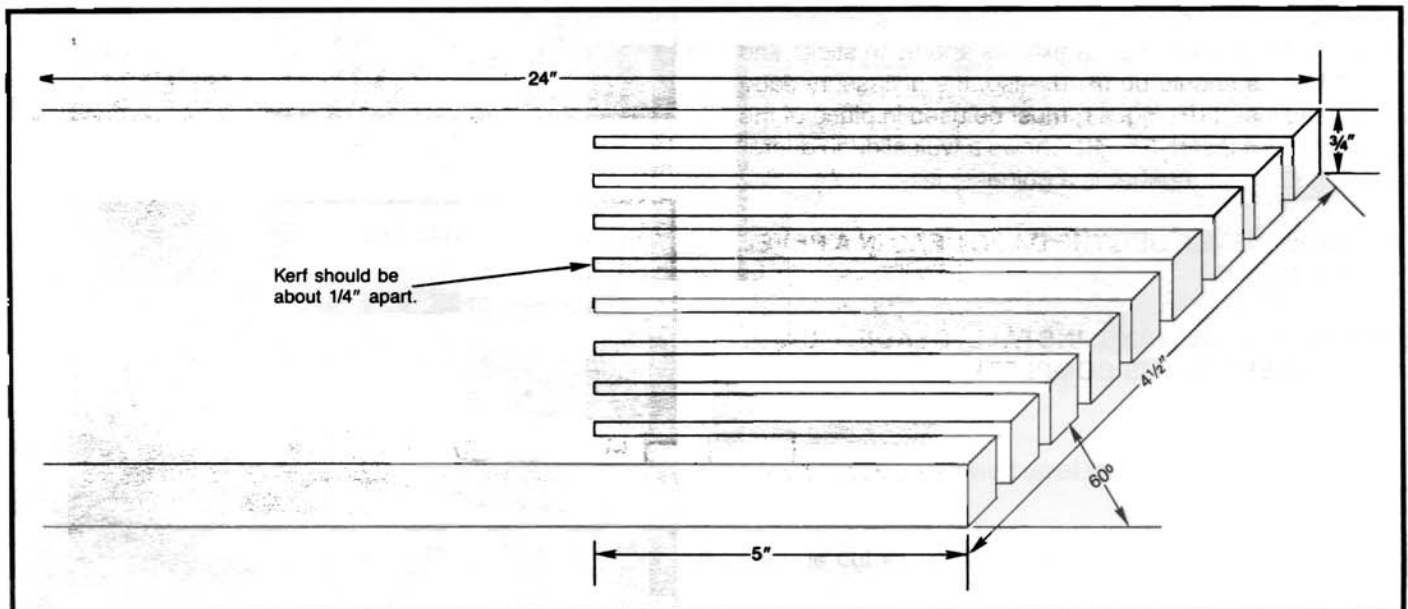


Fig. 44

CONSTRUCTING 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. 45.

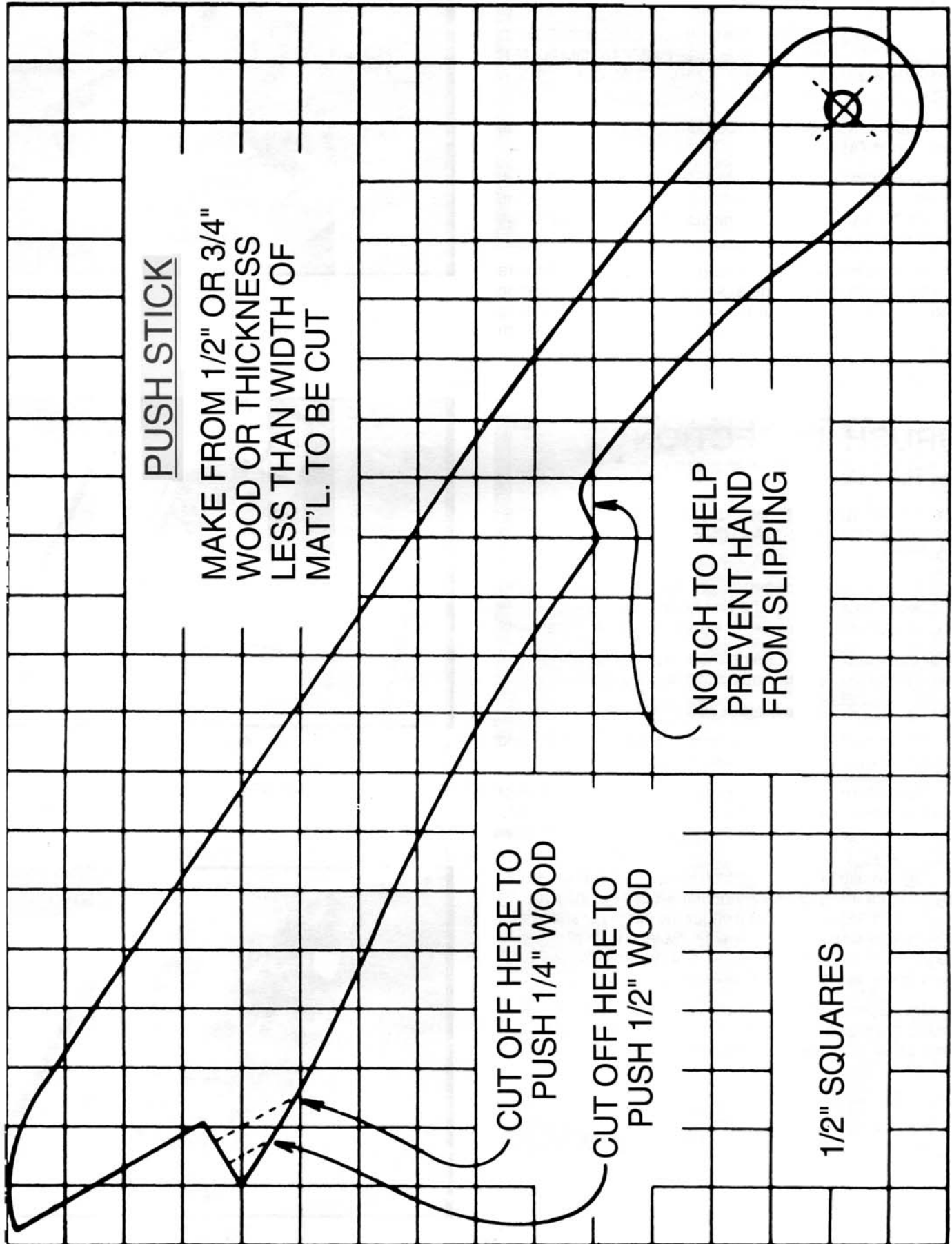


Fig. 45

MAINTENANCE

CHANGING THE BLADE

1. **MAKE CERTAIN THE MACHINE IS DISCONNECTED FROM THE POWER SOURCE. USE ONLY 10" DIAMETER SAW BLADES RATED FOR 7500 RPM OR HIGHER WITH 5/8" ARBOR HOLES.**

2. Raise saw blade to its maximum height and remove the table insert (A) Fig. 46.

3. Using the open end wrench (B) Fig. 46, place wrench on flats on saw arbor and remove arbor nut (C) using wrench (D) by turning nut clockwise. Remove blade flange and saw blade.

4. Assemble new blade making certain teeth of blade are pointing down at the front, assemble outside blade flange and nut (C). Tighten nut (C) with wrench (D) by turning nut counterclockwise while holding arbor steady with wrench (B).

5. Replace table insert (A) Fig. 46.

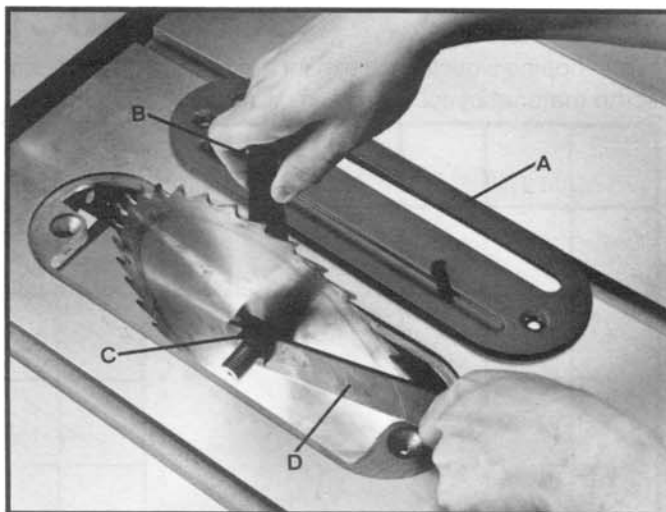


Fig. 46

BRUSH INSPECTION AND REPLACEMENT

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

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

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

To inspect the brushes, proceed as follows:

1. Disconnect the machine from the power source and remove the table insert and saw blade.

2. Raise the motor to its maximum height and tilt the arbor to 45 degrees. One brush holder is shown at (A) Fig. 47.

3. Fig. 48, illustrates the brush holder (A) and brush (B) removed for inspection. When the carbon on the brush (B) is worn to 3/16" in length or if either the 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.

4. To inspect the other brush, the saw must be turned upside down and placed on a flat non-scratch surface. The other brush is located 180 degrees from brush (A) Fig. 47.

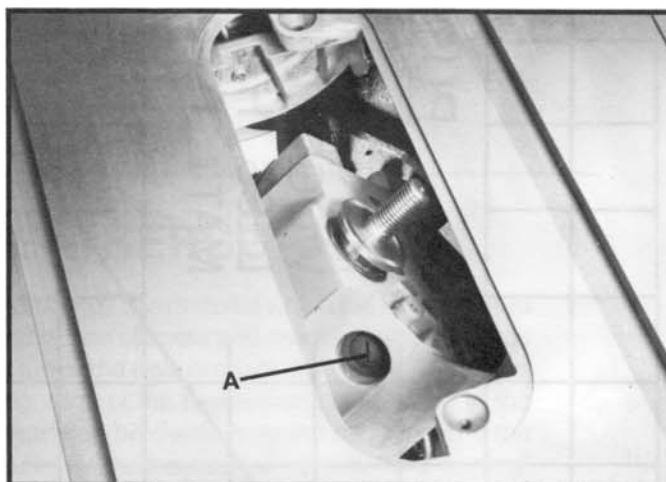


Fig. 47

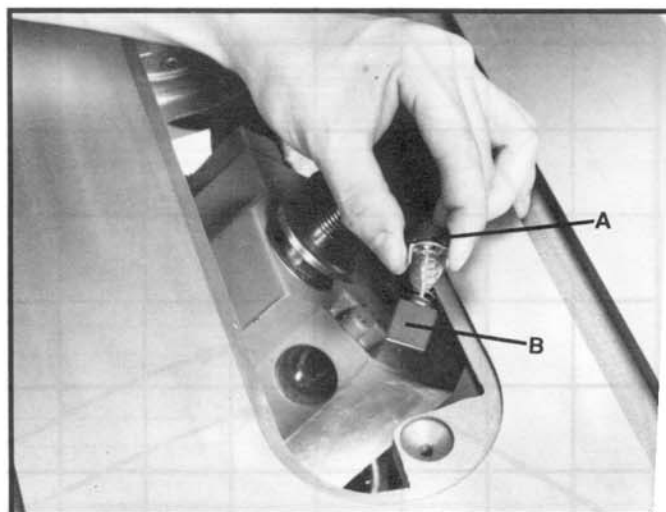


Fig. 48

BELT REPLACEMENT

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

1. DISCONNECT THE MACHINE FROM THE POWER SOURCE.

2. Raise the saw blade to its maximum height and remove the blade guard and splitter, table insert and saw blade. Tilt the arbor to the 45 degree tilt position.

3. Turn the saw upside down and place it on a flat non-scratch surface.

4. Remove the four screws (A) Fig. 49, and cover (B) from the end of the motor housing.

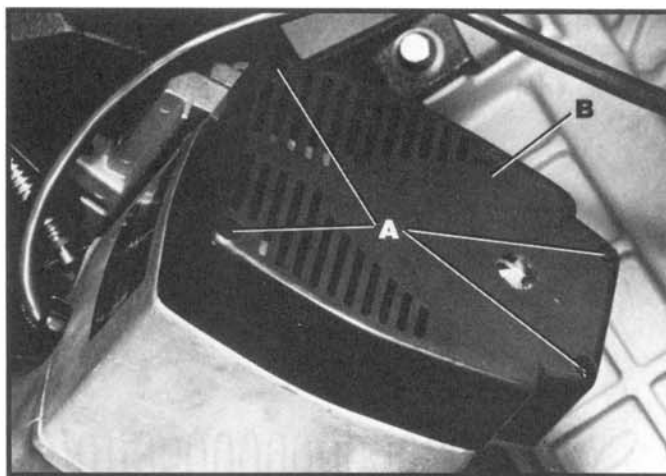


Fig. 49

5. Remove the screw and washer (C) Fig. 50. Slide belt (D) off the motor shaft (E) and arbor pulley (F).

6. Place new belt (D) Fig. 51, on teeth of arbor pulley (F) and motor shaft (E) as shown. Push in belt (D) and at the same time turn arbor pulley (F) until the belt is completely engaged.

7. Replace screw and washer (C) Fig. 50, and cover that were removed in **STEP 4**.

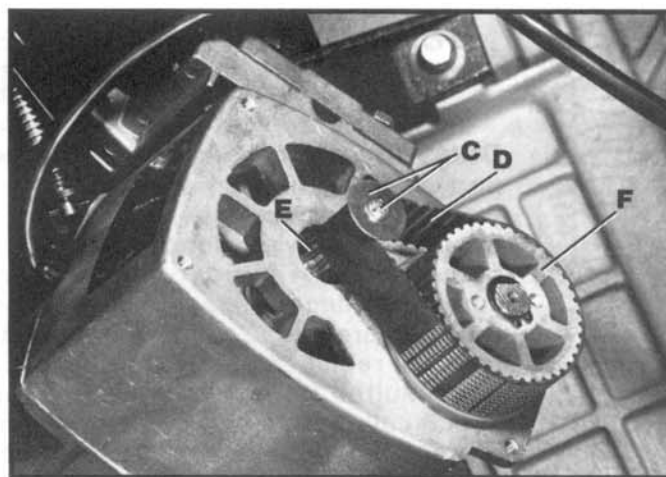


Fig. 50

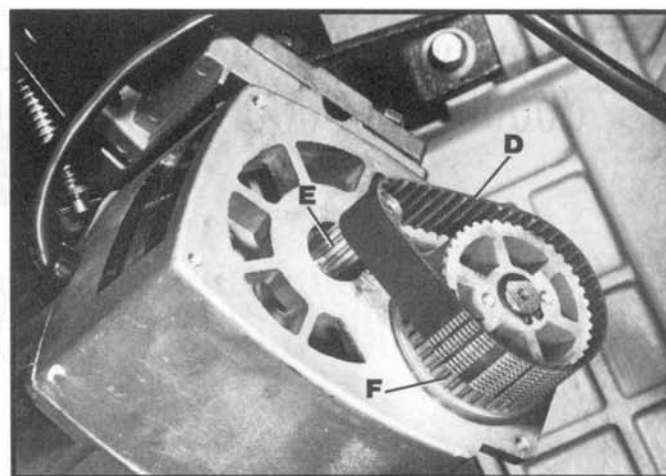


Fig. 51



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.

PORTER-CABLE • DELTA SERVICE CENTERS (CENTROS DE SERVICIO DE PORTER-CABLE • DELTA)

Parts and Repair Service for Porter-Cable • Delta Machinery are Available at These Locations
(Obtenga Refaccion de Partes o Servicio para su Herramienta en los Siguietes Centros de Porter-Cable • Delta)

ARIZONA

Tempe 85282 (Phoenix)
2400 West Southern Avenue
Suite 105
Phone: (602) 437-1200
Fax: (602) 437-2200

CALIFORNIA

Ontario 91761 (Los Angeles)
3949A East Guasti Road
Phone: (909) 390-5555
Fax: (909) 390-5554

San Leandro 94577 (Oakland)
3039 Teagarden Street
Phone: (510) 357-9762
Fax: (510) 357-7939

COLORADO

Arvada 80003 (Denver)
8175 Sheridan Blvd., Unit S
Phone: (303) 487-1809
Fax: (303) 487-1868

FLORIDA

Davie 33314 (Miami)
4343 South State Rd. 7 (441)
Unit #107
Phone: (954) 321-6635
Fax: (954) 321-6638

Tampa 33609
4538 W. Kennedy Boulevard
Phone: (813) 877-9585
Fax: (813) 289-7948

GEORGIA

Forest Park 30297 (Atlanta)
5442 Frontage Road,
Suite 112
Phone: (404) 608-0006
Fax: (404) 608-1123

ILLINOIS

Addison 60101 (Chicago)
400 South Rohlwing Rd.
Phone: (630) 424-8805
Fax: (630) 424-8895

Woodridge 60517 (Chicago)
2033 West 75th Street
Phone: (630) 910-9200
Fax: (630) 910-0360

MARYLAND

Elkridge 21075 (Baltimore)
7397-102 Washington Blvd.
Phone: (410) 799-9394
Fax: (410) 799-9398

MASSACHUSETTS

Braintree 02185 (Boston)
719 Granite Street
Phone: (781) 848-9810
Fax: (781) 848-6759

Franklin 02038 (Boston)
Franklin Industrial Park
101E Constitution Blvd.
Phone: (508) 520-8802
Fax: (508) 528-8089

MICHIGAN

Madison Heights 48071 (Detroit)
30475 Stephenson Highway
Phone: (248) 597-5000
Fax: (248) 597-5004

MINNESOTA

Minneapolis 55429
5522 Lakeland Avenue North
Phone: (763) 561-9080
Fax: (763) 561-0653

MISSOURI

North Kansas City 64116
1141 Swift Avenue
Phone: (816) 221-2070
Fax: (816) 221-2897

St. Louis 63119
7574 Watson Road
Phone: (314) 968-8950
Fax: (314) 968-2790

NEW YORK

Flushing 11365-1595 (N.Y.C.)
175-25 Horace Harding Expwy.
Phone: (718) 225-2040
Fax: (718) 423-9619

NORTH CAROLINA

Charlotte 28270
9129 Monroe Road, Suite 115
Phone: (704) 841-1176
Fax: (704) 708-4625

OHIO

Columbus 43214
4560 Indianola Avenue
Phone: (614) 263-0929
Fax: (614) 263-1238

Cleveland 44125
8001 Sweet Valley Drive
Unit #19
Phone: (216) 447-9030
Fax: (216) 447-3097

OREGON

Portland 97230
4916 NE 122 nd Ave.
Phone: (503) 252-0107
Fax: (503) 252-2123

PENNSYLVANIA

Willow Grove 19090
520 North York Road
Phone: (215) 658-1430
Fax: (215) 658-1433

TEXAS

Carrollton 75006 (Dallas)
1300 Interstate 35 N, Suite 112
Phone: (972) 446-2996
Fax: (972) 446-8157

Houston 77038
4321 Sam Houston Parkway,
West
Suite 180
Phone: (281) 260-8887
Fax: (281) 260-9989

WASHINGTON

Auburn 98001(Seattle)
3320 West Valley HWY, North
Building D, Suite 111
Phone: (253) 333-8353
Fax: (253) 333-9613

Authorized Service Stations are located in many large cities. Telephone **800-438-2486** or **731-541-6042** for assistance locating one. Parts and accessories for Porter-Cable-Delta products should be obtained by contacting any Porter-Cable-Delta Distributor, Authorized Service Center, or Porter-Cable-Delta Factory Service Center. If you do not have access to any of these, call **800-223-7278** and you will be directed to the nearest Porter-Cable-Delta Factory Service Center. Las Estaciones de Servicio Autorizadas están ubicadas en muchas grandes ciudades. Llame al **800-438-2486** ó al **731-541-6042** para obtener asistencia a fin de localizar una. Las piezas y los accesorios para los productos Porter-Cable-Delta deben obtenerse poniéndose en contacto con cualquier distribuidor Porter-Cable-Delta, Centro de Servicio Autorizado o Centro de Servicio de Fábrica Porter-Cable-Delta. Si no tiene acceso a ninguna de estas opciones, llame al **800-223-7278** y le dirigirán al Centro de Servicio de Fábrica Porter-Cable-Delta más cercano.

CANADIAN PORTER-CABLE • DELTA SERVICE CENTERS

ALBERTA

Bay 6, 2520-23rd St. N.E.
Calgary, Alberta
T2E 8L2
Phone: (403) 735-6166
Fax: (403) 735-6144

BRITISH COLUMBIA

8520 Baxter Place
Burnaby, B.C.
V5A 4T8
Phone: (604) 420-0102
Fax: (604) 420-3522

MANITOBA

1699 Dublin Avenue
Winnipeg, Manitoba
R3H 0H2
Phone: (204) 633-9259
Fax: (204) 632-1976

ONTARIO

505 Southgate Drive
Guelph, Ontario
N1H 6M7
Phone: (519) 767-4132
Fax: (519) 767-4131

QUÉBEC

1515 ave.
St-Jean Baptiste, Suite 160
Québec, Québec
G2E 5E2
Phone: (418) 877-7112
Fax: (418) 877-7123

1447, Begin
St-Laurent, (Montréal),
Québec
H4R 1V8
Phone: (514) 336-8772
Fax: (514) 336-3505

The following are trademarks of PORTER-CABLE-DELTA (Las siguientes son marcas registradas de PORTER-CABLE S.A.): Auto-Set®, BAMMER®, B.O.S.S.®, Builder's Saw®, Contractor's Saw®, Contractor's Saw II™, Delta®, DELTACRAFT®, DELTAGRAM™, Delta Series 2000™, DURATRAC™, Emc2™, FLEX®, Flying Chips™, FRAME SAW®, Homecraft®, INNOVATION THAT WORKS®, Jet-Lock®, JETSTREAM®, 'kickstand®, LASERLOC®, MICRO-SET®, Micro-Set®, MIDI LATHE®, MORTEN™, NETWORK™, OMNIJIG®, POCKET CUTTER®, PORTA-BAND®, PORTA-PLANE®, PORTER-CABLE®&(design), PORTER-CABLE®PROFESSIONAL POWER TOOLS, Posi-Matic®, Q-3®&(design), QUICKSAND®&(design), QUICKSET™, QUICKSET II®, QUICKSET PLUS™, RIPTIDE™&(design), SAFE GUARD II®, SAFE-LOC®, Sanding Center®, SANDTRAP®&(design), SAW BOSS®, Sawbuck™, Sidekick®, SPEEDMATIC®, SPEEDTRONIC®, STAIR EASE®, The American Woodshop®&(design), The Lumber Company®&(design), THE PROFESSIONAL EDGE®, THE PROFESSIONAL SELECT®, THIN-LINE™, TIGER®, TIGER CUB®, TIGER SAW®, TORQBUSTER®, TORQ-BUSTER®, TRU-MATCH™, TWIN-LITE®, UNIGUARD®, Unifence®, UNIFEEDER™, Unihead®, Uniplane™, Unirip®, Unisaw®, Univise®, Versa-Feeder®, VERSA-PLANE®, WHISPER SERIES®, WOODWORKER'S CHOICE™.

Trademarks noted with ™ and ® are registered in the United States Patent and Trademark Office and may also be registered in other countries. Las Marcas Registradas con el signo de ™ y ® son registradas por la Oficina de Registros y Patentes de los Estados Unidos y también pueden estar registradas en otros países.