Sidekick Builder's Saw™
8 1/4" Bench Saw
(Model 36-275)

INSTRUCTION MANUAL

DATED 6-14-96

PART NO. 1346908

DELTA

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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 possiblity 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.

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 cuttter 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.

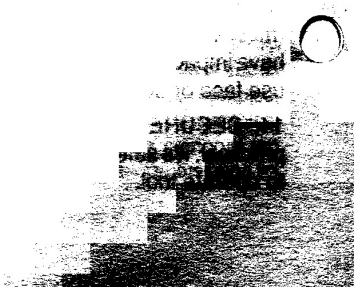
22. **NEVER** use solvents to clean plastic parts. Solvents could possibly dissolve or otherwise damage the material. Only a soft damp cloth should be used to clean plastic parts.

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

Your new saw is shipped complete in one container. Carefully unpack the saw and all loose items from the shipping container. Fig. 2, illustrates the saw and all loose items removed from the container. The two allen wrenches, four spacer blocks and three splitter shims are supplied in a plastic envelope and the miter gage, rip fence, blade wrenches and blade guard are fastened to the sides of the saw cabinet. Carefully remove these items. A plastic protective coating is provided over the front panel of the saw. Remove this protective coating after unpacking.

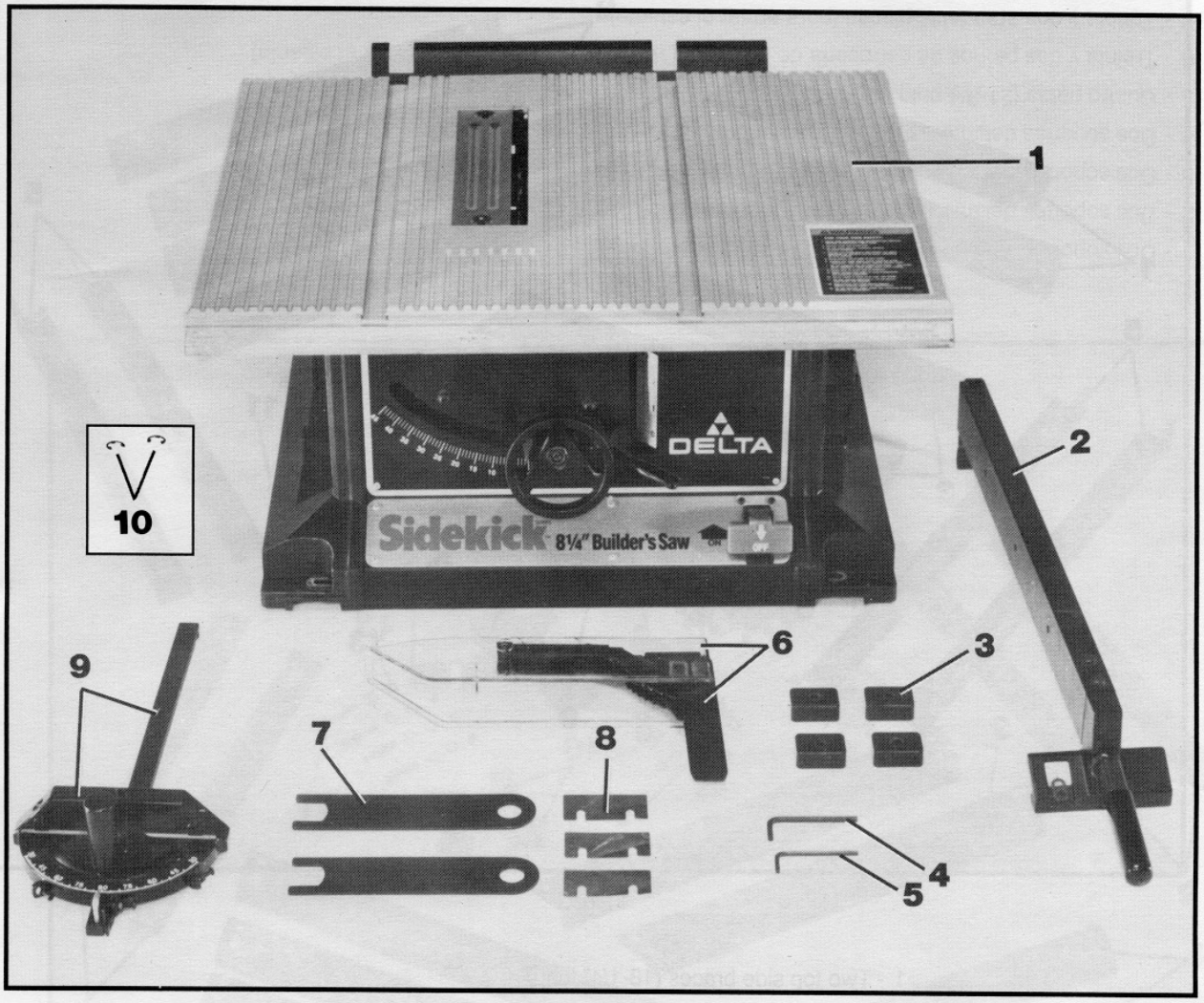


Fig. 2

1 - Table Saw
2 - Rip Fence
3 - Four Spacer Blocks
4 - 5mm Allen Wrench
5 - 4mm Allen Wrench
6 - Blade Guard and Splitter Assembly
7 - Two Blade Wrenches
8 - Three Splitter Shims
9 - Miter Gage
10 - Two Retaining Rings

ASSEMBLING ACCESSORY 36-277 STEEL STAND

1. If you purchased the accessory 36-277 steel stand for use with your saw, carefully unpack and separate the stand and all loose items from the shipping container. Fig. 3, illustrates all the items supplied with the accessory 36-277 stand.

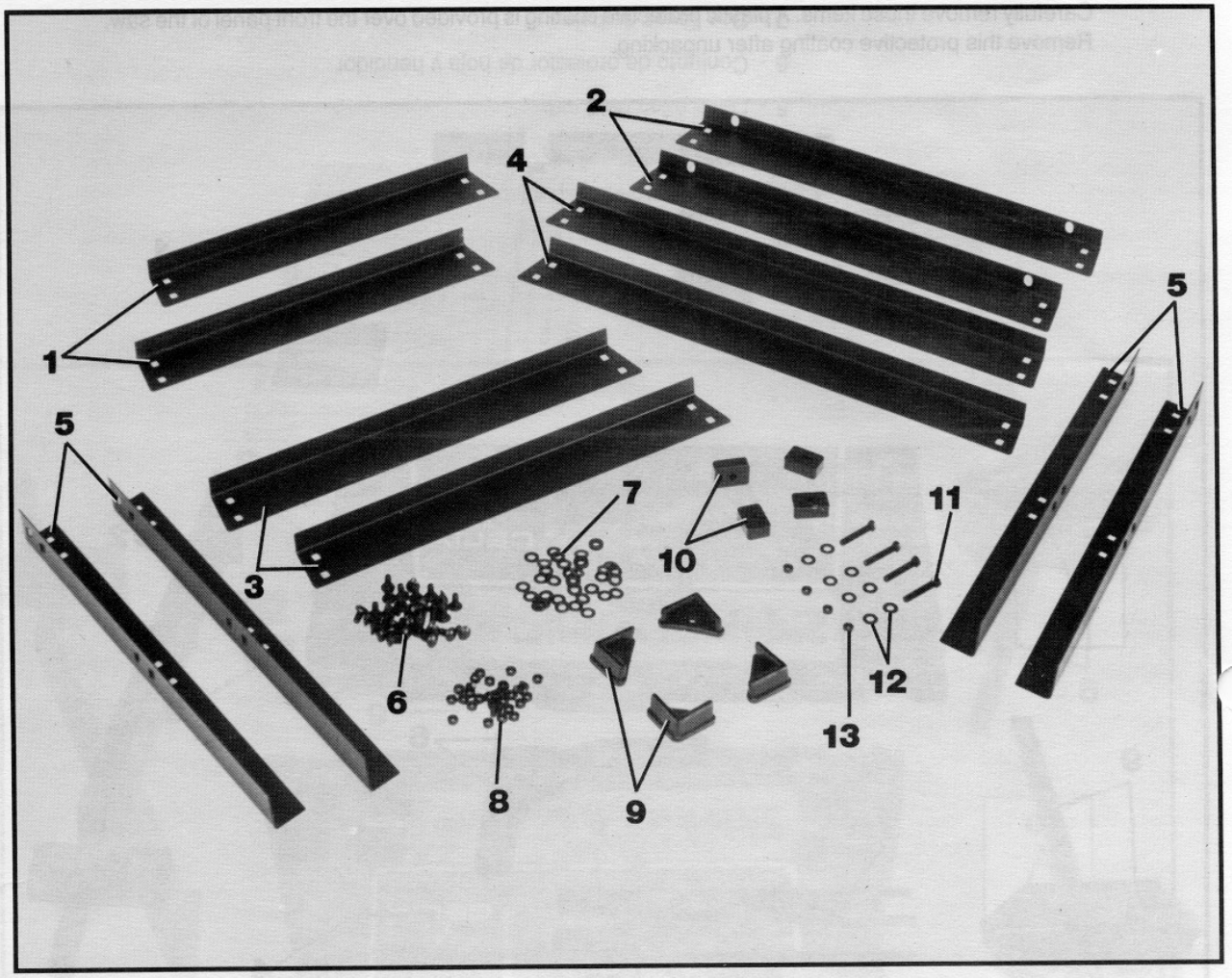


Fig. 3

1 - Two top side braces (18-1/4" long)
2 - Two top front and rear braces (22-1/2" long)
3 - Two bottom side braces (21-1/2" long)
4 - Two bottom front and rear braces (25-3/4" long)
5 - Four legs (21-3/4" long)
6 - Thirty-two 1/2" long carriage bolts (for assembling stand)
7 - Thirty-two flat washers (for assembling stand)
8 - Thirty-two hex nuts (for assembling stand)
9 - Four feet for bottom of stand legs
10 - Four spacer blocks (for use when saw is mounted to stand)
11 - Four 1-3/4" long hex head screws (for mounting saw to stand)
12 - Eight flat washers (for mounting saw to stand)
13 - Four hex nuts (for mounting saw to stand)

2. Assemble the two top side braces (A) Fig. 4, which are 18-1/4" long and the two top front and rear braces (B), which are 22-1/2" long, to the four legs (C) using the sixteen carriage bolts, flat washers and hex nuts supplied. **NOTE:** The top lips of the two front and rear braces (B) must be positioned on top of the top lips of the two side braces (A). The front and rear braces (B) have holes on top for mounting the saw to the stand. Only tighten the hex nuts finger-tight at this time.

3. Assemble the two bottom side braces (D) Fig. 4, which are 21-1/2" long and the two bottom front and rear braces (E), which are 25-3/4" long, to the four legs (C) using the sixteen carriage bolts, flat washers and hex nuts supplied. Only tighten the hex nuts finger-tight at this time.

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

5. Place the stand on a flat surface and push down on the top of the stand. Firmly tighten all stand mounting hardware.

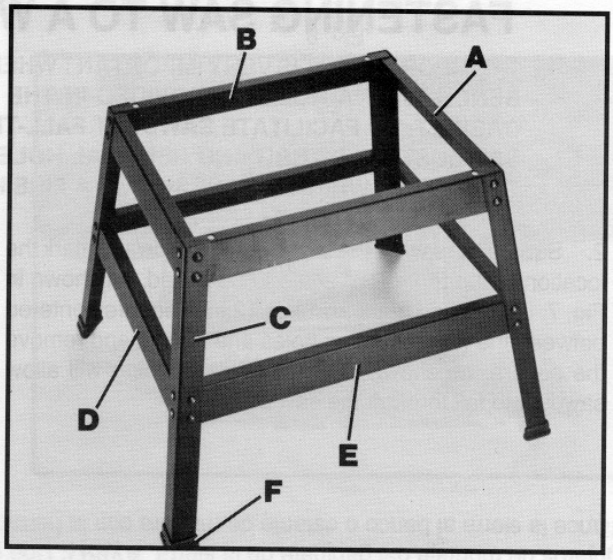


Fig. 4

FASTENING SAW TO A SUPPORTING SURFACE

The 8-1/4" Builder's Saw is designed to be used with the accessory 36-277 steel stand, a wooden stand or bench or with two saw horses and must be properly secured to the supporting surface using the four mounting holes located in the base of the saw cabinet as follows:

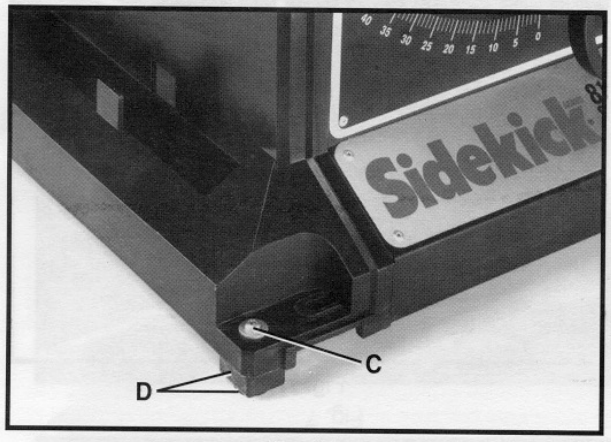


Fig. 4A

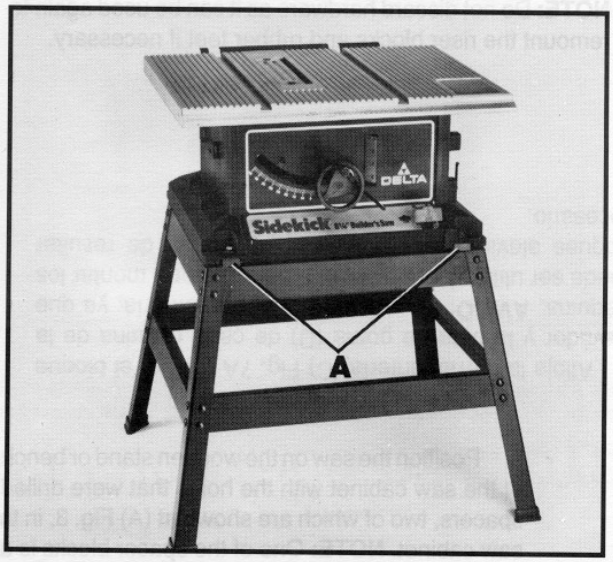


Fig. 5

FASTENING SAW TO ACCESSORY 36-277 STEEL STAND

1. Loosen hardware (C) Fig. 4A and remove riser block and rubber foot (D) from each corner of the machine. **NOTE:** Do not discard hardware as it can be used again to remount the riser blocks and rubber feet if necessary.

2. Position the saw on the stand, as shown in Fig. 5. Line up the holes on the bottom of the saw cabinet with the holes on the top of the stand. **IMPORTANT:** Insert the four spacer blocks, two of which are shown at (A) Fig. 5, in the space provided under the four mounting holes of the saw cabinet and over the four holes in the top of the stand. **NOTE:** One of the spacer blocks is also shown at (A) Fig. 6. Fasten the saw to the stand using the four 1-3/4" long hex head screws, one of which is shown at (B) Fig. 6, eight flat washers and four hex nuts supplied.

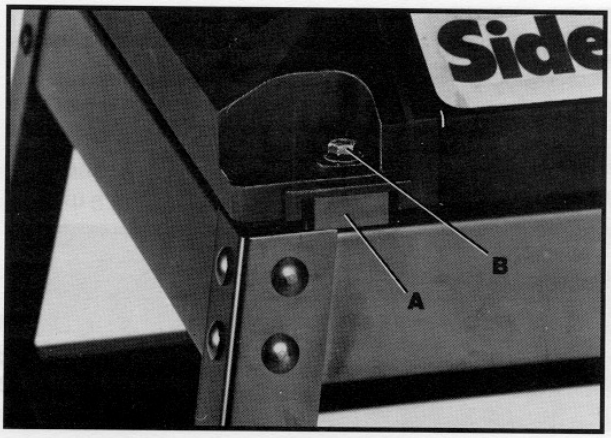


Fig. 6

FASTENING SAW TO A WOODEN STAND OR BENCH

1. **IMPORTANT: IT IS VERY IMPORTANT WHEN FASTENING THE SAW TO A WOODEN STAND OR BENCH THAT A HOLE IS PROVIDED IN THE WOODEN STAND OR BENCH, BELOW THE SAW CABINET, TO FACILITATE SAWDUST FALL-THRU AND REMOVAL. FAILURE TO PROVIDE THIS SAWDUST FALL-THRU AND REMOVAL HOLE WILL ALLOW SAWDUST TO BUILD UP AROUND THE MOTOR WHICH MAY RESULT IN A FIRE HAZARD OR CAUSE MOTOR DAMAGE.**

2. Square the saw on the supporting surface and mark the location of the four 5/16" holes to be drilled, as shown in Fig. 7. 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. 7. This opening will allow sawdust to fall through the saw base.

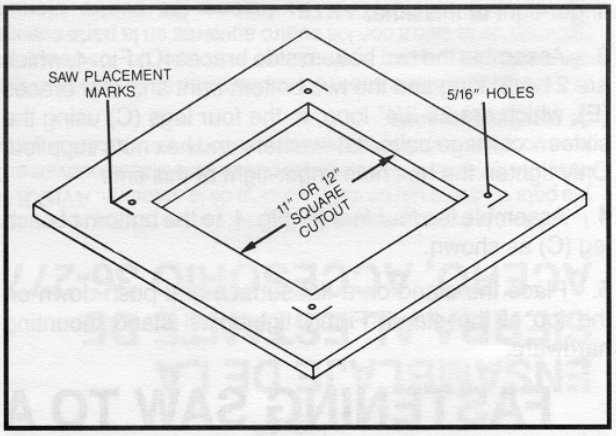


Fig. 7

3. Loosen hardware (C) Fig. 7A and remove riser block and rubber foot (D) from each corner of the machine. **NOTE:** Do not discard hardware as it can be used again to remount the riser blocks and rubber feet if necessary.

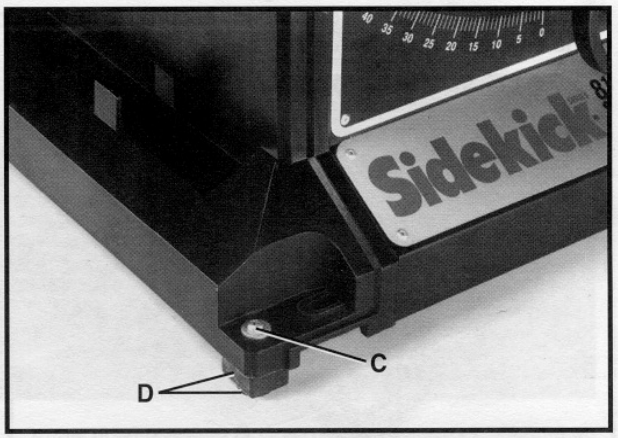


Fig. 7A

3. Position the saw on the wooden stand or bench, as shown in Fig. 8. Line up the four holes on the bottom of the saw cabinet with the holes that were drilled on the top of the stand. **IMPORTANT:** Insert the four spacers, two of which are shown at (A) Fig. 8, in the space provided under the four mounting holes of the saw cabinet. **NOTE:** One of the spacer blocks is also shown at (A) Fig. 9. Fasten the saw to the wooden stand or bench with suitable hardware (B), not supplied.

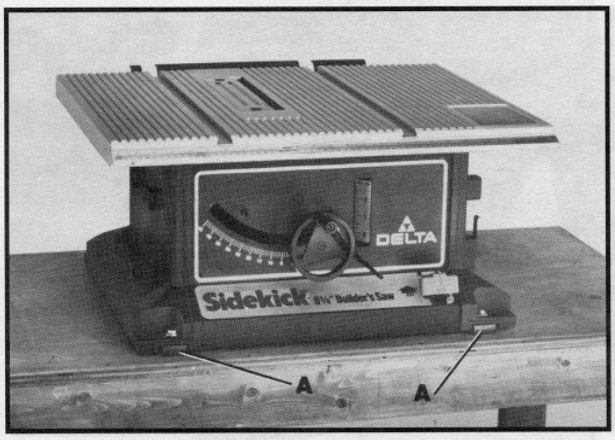


Fig. 8

Fig. 9

FASTENING SAW TO TWO SAW HORSES

1. When fastening the saw to two saw horses, as shown in Fig. 11, position the four grooves located on the base of the saw cabinet over the 2 x 4's of the saw horse and fasten in place with suitable hardware (A) Fig. 10, not supplied. **NOTE:** The spacer blocks supplied with the saw are not used.

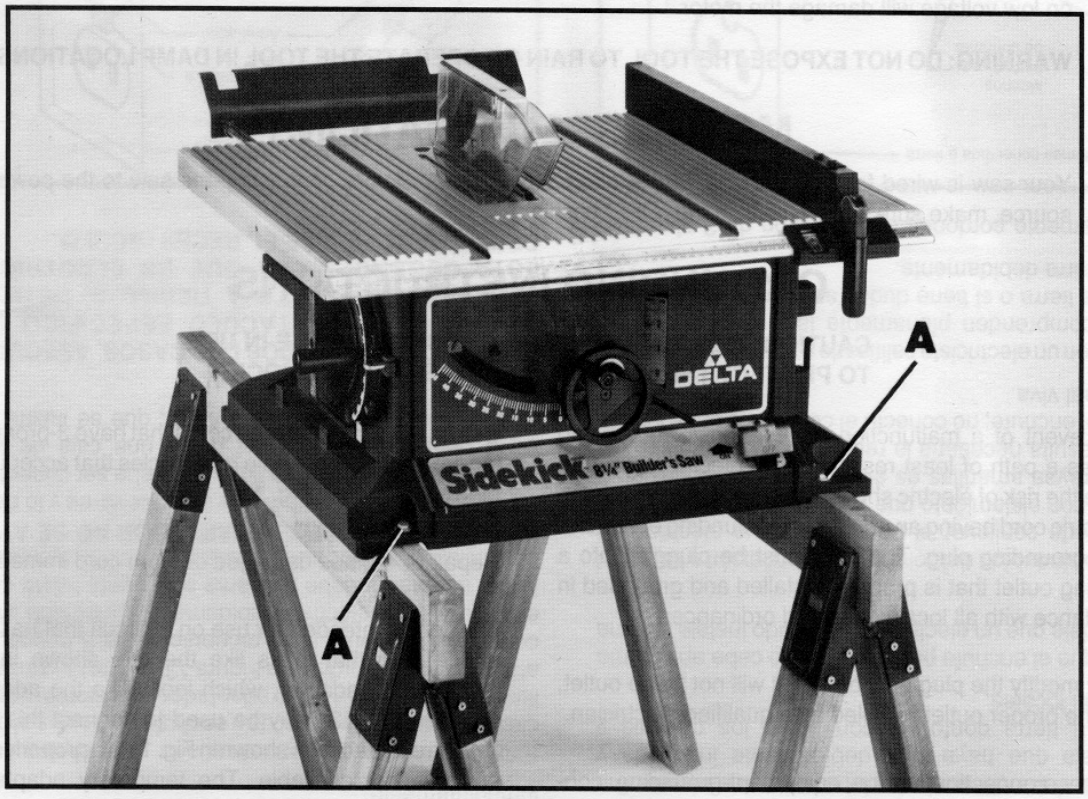


Fig. 10

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. 11, 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. 11

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. 12.

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. 12. A temporary adapter, which looks like the adapter illustrated in Fig. 13, may be used to connect this plug to a 2-pole receptacle, as shown in Fig. 13, 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. 13.

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.

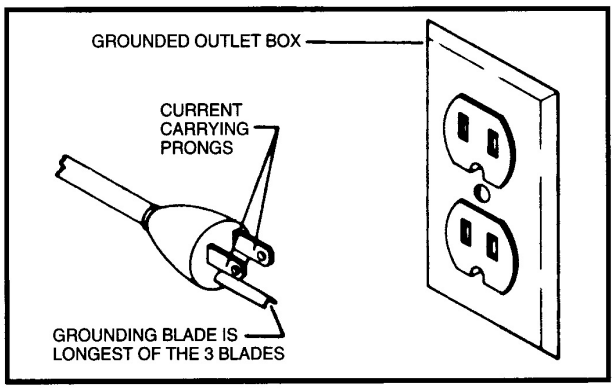


Fig. 12

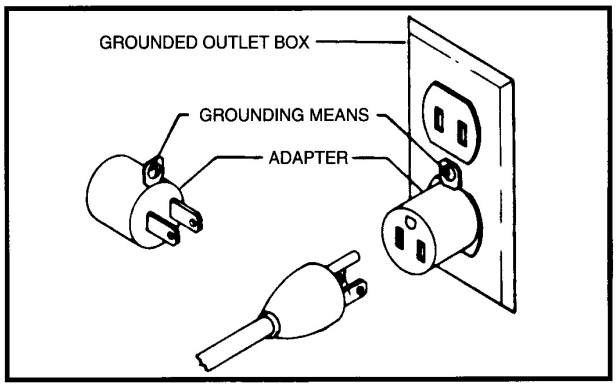


Fig. 13

ASSEMBLY INSTRUCTIONS

ASSEMBLING RETAINING RINGS TO REAR SUPPORT BARS

1. Two retaining rings, one of which is shown at (A) Fig. 13A, are supplied with your saw. The retaining rings (A) are to be assembled to the groove (B) located in each rear support rod (C). The retaining rings limit the inward travel of the rear support bars (C).

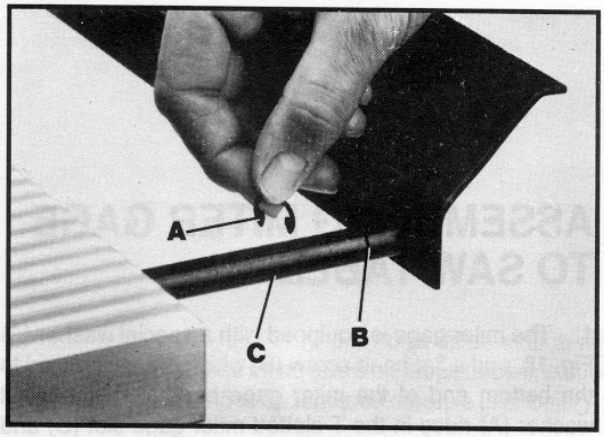


Fig. 13A

ASSEMBLING BLADE GUARD AND ADJUSTING SPLITTER HOLDER

1. **MAKE SURE THE SAW IS DISCONNECTED FROM THE POWER SOURCE.**

2. Insert splitter end (A) Fig. 14, of blade guard into splitter holder (B). Push splitter (A) down into holder until you hear a click which fastens the splitter in place. **NOTE:** It is important that the splitter (A) be in the vertical position and pushed straight down into the splitter holder (B) during the assembly procedure.

3. Fig. 15, illustrates the blade guard in place.

4. **NOTE:** The splitter holder (B) Fig. 14, has been adjusted at the factory so that the splitter will be aligned with the saw blade which is supplied with the saw. When changing to blades with different widths it may be necessary to adjust the splitter holder (B) Fig. 14, as follows:

5. Remove table insert and saw blade.

6. Loosen the two screws (C) Fig. 16, that attach the splitter holder (B) Fig. 17, to the saw frame (E).

7. Three additional splitter shims, one of which is shown at (D) Fig. 17, are supplied with your saw and can be used as required between the splitter holder (B) and the frame (E) in order to align the splitter with the saw blade.

8. After adjustment is completed, tighten the two screws (C) Fig. 16.

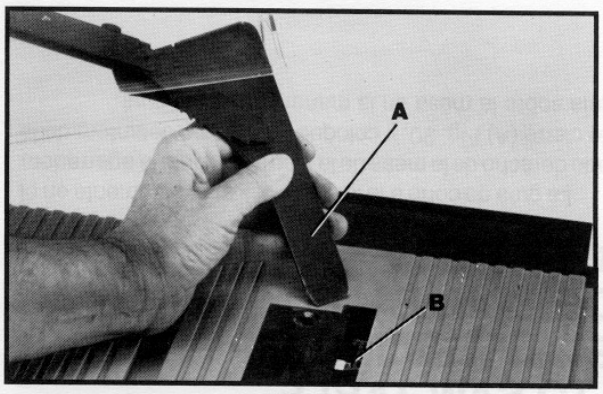


Fig. 14

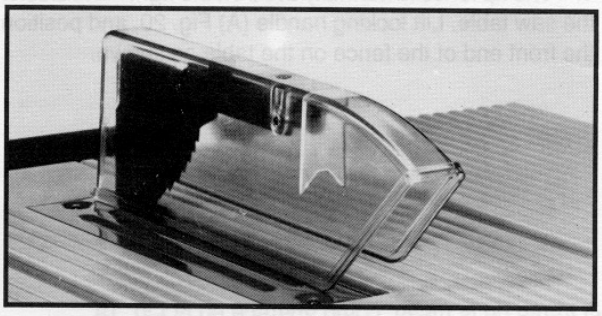


Fig. 15

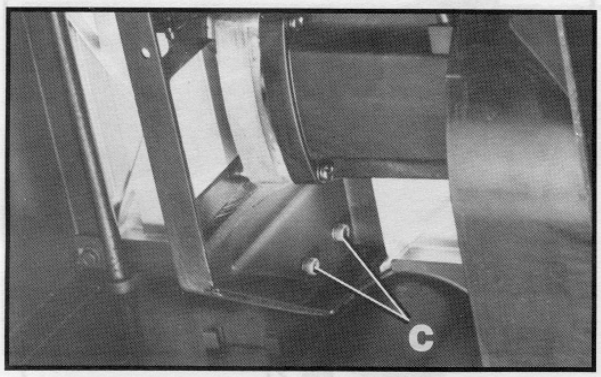


Fig. 16

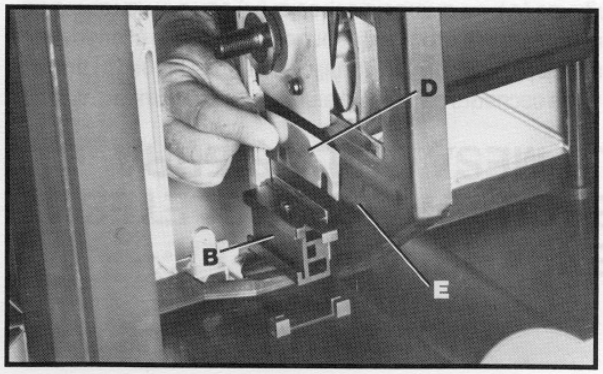


Fig. 17

ASSEMBLING MITER GAGE TO SAW TABLE

1. The miter gage is equipped with a special washer (A) Fig. 18, and a flat head screw (B) which are assembled to the bottom end of the miter gage bar (C). The special washer (A) rides in the T-slotted miter gage slot (D) and prevents the miter gage from falling when it is extended out beyond the front of the saw table, as shown in Fig. 19.

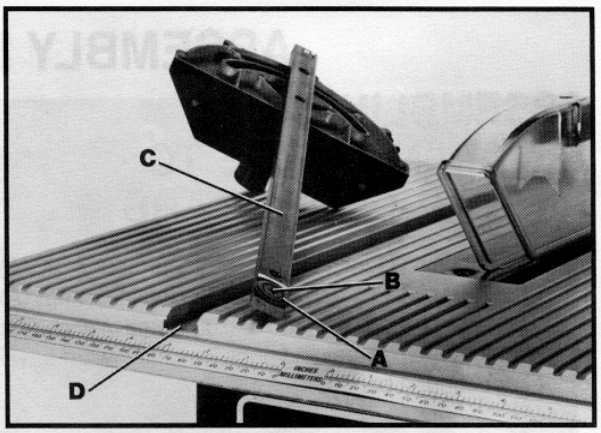


Fig. 18

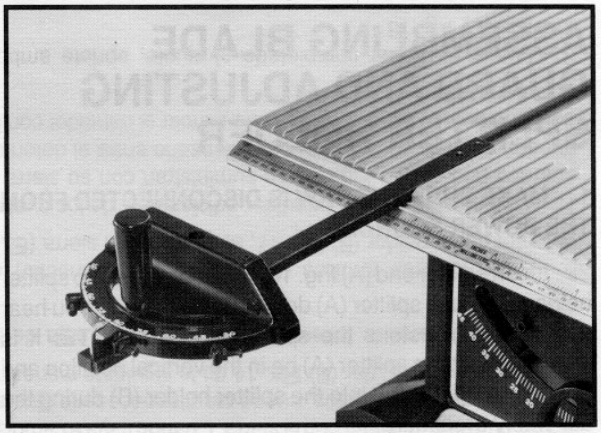


Fig. 19

ASSEMBLING RIP FENCE TO SAW TABLE

1. The rip fence is normally used on the right hand side of the saw table. Lift locking handle (A) Fig. 20, and position the front end of the fence on the table as shown.

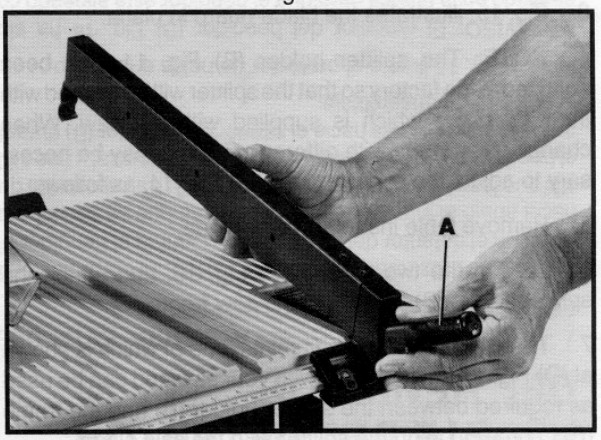


Fig. 20

2. Place rear end of fence down on the table and push down on locking handle (A) Fig. 21, to lock fence in place.

Fig. 21

OPERATING CONTROLS AND ADJUSTMENTS

STARTING AND STOPPING SAW

1. The on-off switch is located underneath the switch shield (A) Fig. 22. To turn the saw "ON", lift up switch shield (A) and move switch trigger to the up position.

Fig. 22

2. Fig. 23, illustrates the switch trigger (B) in the "ON" position. Move the switch shield (A) down so that it rests on the switch trigger (B), while the switch trigger (B) is in the up "ON" position, as shown in Fig. 24.

Fig. 23

3. To turn the saw "OFF", simply push down the switch shield (A) Fig. 24.

Fig. 24

LOCKING SWITCH IN THE "OFF" POSITION

1. **IMPORTANT:** We suggest that when the saw is not in use, the on-off switch trigger (B) be locked in the "OFF" position using a padlock (C) through the two holes in the switch plate, as shown in Fig. 25.

Fig. 25

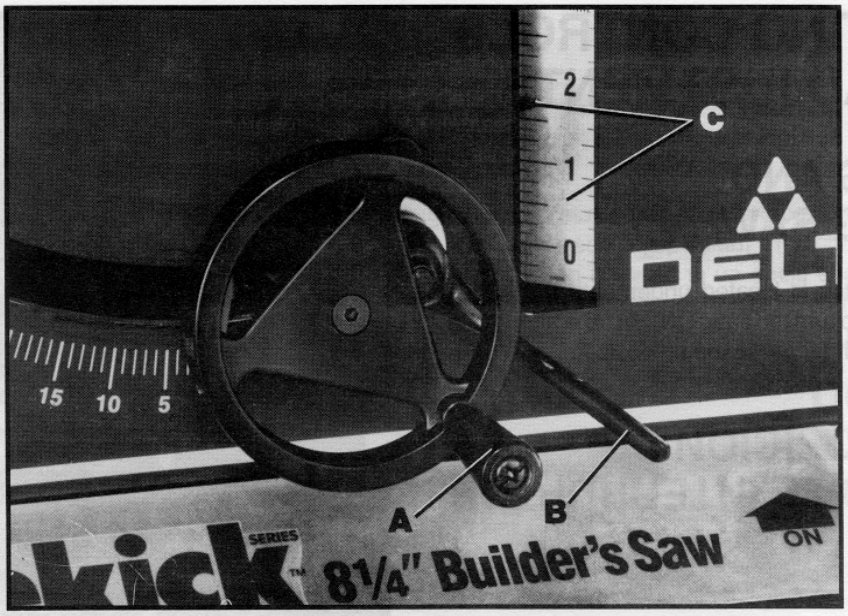


Fig. 26

BLADE RAISING AND LOWERING CONTROL

1. To raise or lower the saw blade, turn handwheel (A) Fig. 26. Turning the handwheel clockwise raises the blade and turning the handwheel counterclockwise lowers the blade. **WARNING: THE BLADE TILTING LOCK HANDLE (B) FIG. 26, MUST BE LOCKED DURING ALL CUTTING OPERATIONS.**

2. An English/Metric scale and pointer (C) Fig. 26, is provided to indicate the distance the saw blade is raised above the table surface.

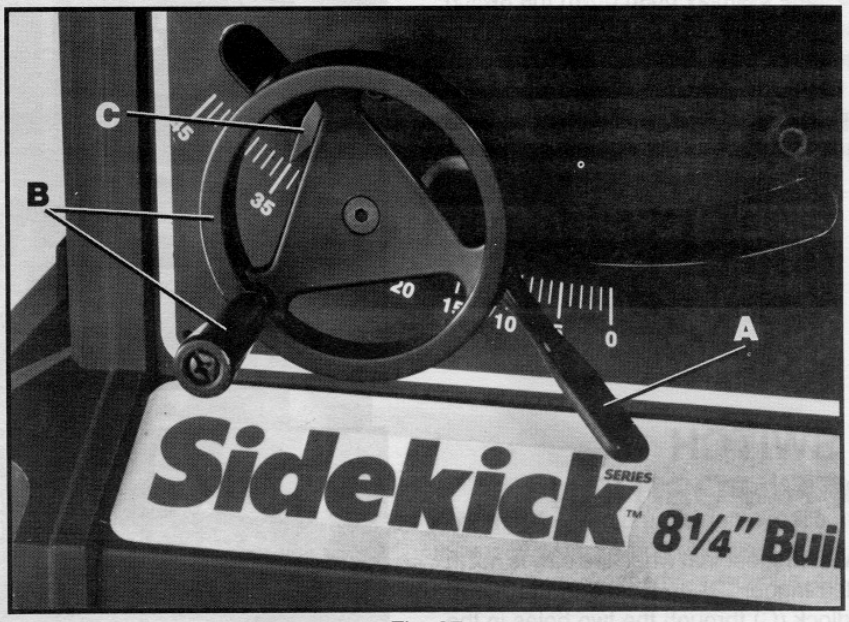


Fig. 27

BLADE TILTING CONTROL

1. To tilt the saw blade, loosen blade tilting lock handle (A) Fig. 27, move handwheel (B) until the blade is at the desired angle and tighten lock handle (A). **NOTE**: A pointer (C) is provided to indicate the degree of tilt. **WARNING: THE BLADE TILTING LOCK HANDLE (A) MUST BE LOCKED DURING ALL CUTTING OPERATIONS.**

CHANGING POSITION OF THE BLADE TILTING LOCK HANDLE

If the blade tilting lock handle (A) Fig. 28, is turned clockwise as far as possible and the locking mechanism is not fully locked, the handle can be repositioned as follows:

1. Remove screw (B) Fig. 28, and handwheel (C).

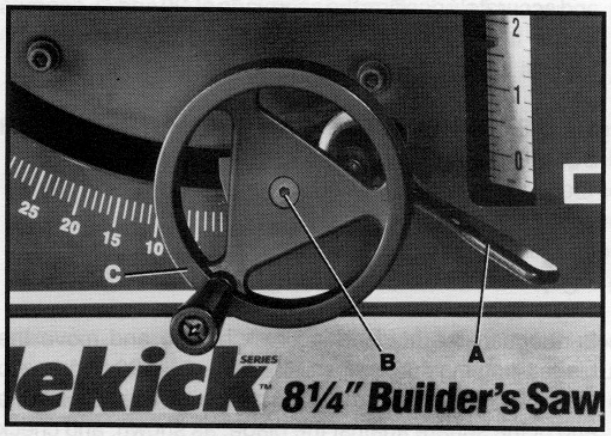


Fig. 28

2. Remove locknut (D) Fig. 29, and lock handle (E).

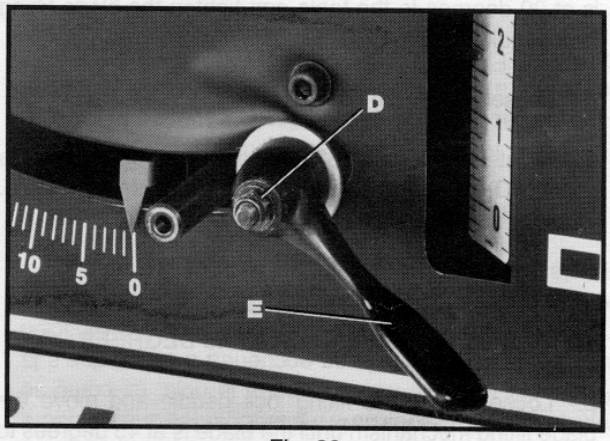


Fig. 29

3. Reposition hub of handle (E) Fig. 30, on nut (F) and replace locknut that was removed in **STEP 2** and handwheel and screw that were removed in **STEP 1**.

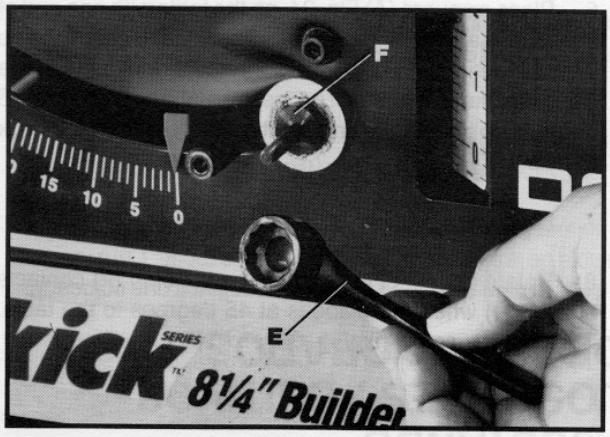


Fig. 30

ADJUSTING 90 AND 45 DEGREE POSITIVE STOPS

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

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

TO ADJUST POSITIVE STOP AT 90 DEGREES

2. Loosen the blade tilting lock handle and move the blade tilting mechanism until the blade is at 90 degrees to the table. Place a square (A) Fig. 31, 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. Move the blade tilting mechanism further if necessary until the blade is at 90 degrees to the table and tighten the blade tilting lock handle.

3. Loosen screw (B) Fig. 32.

4. Rotate stop (C) Fig. 33, until end of stop (C) contacts spacer (D) when the blade is at 90 degrees to the table. Then tighten screw (B) Fig. 32.

TO ADJUST POSITIVE STOP AT 45 DEGREES

5. Loosen the blade tilting lock handle and move the blade tilting mechanism until the blade is at 45 degrees to the table.

6. Place a square (A) Fig. 34, on the table with one end of the square against the blade, as shown, and check to see if the blade is at 45 degrees to the table. Move the blade tilting mechanism further if necessary until the blade is at 45 degrees to the table and tighten the blade tilting lock handle.

7. Loosen screw (E) Fig. 32.

8. Rotate stop (F) Fig. 33, until end of stop (F) contacts spacer (D) when the blade is at 90 degrees to the table. Then tighten screw (E) Fig. 32.

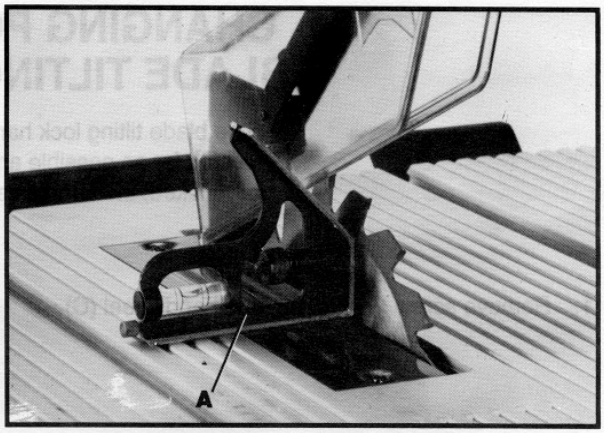


Fig. 31

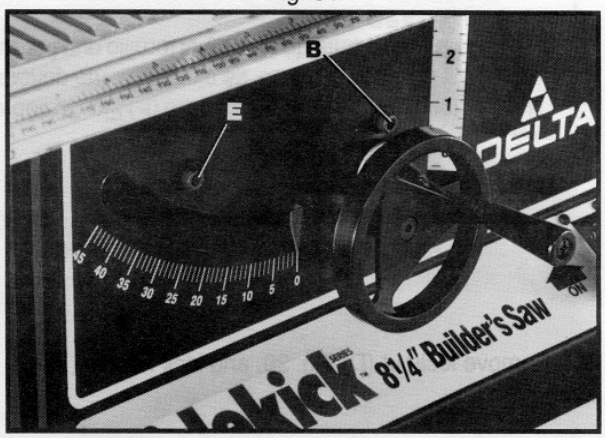


Fig. 32

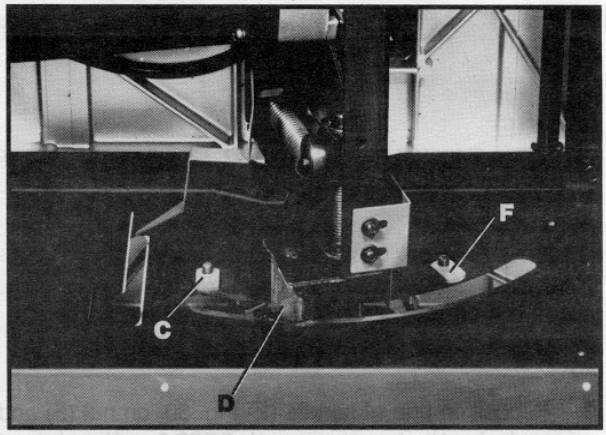


Fig. 33

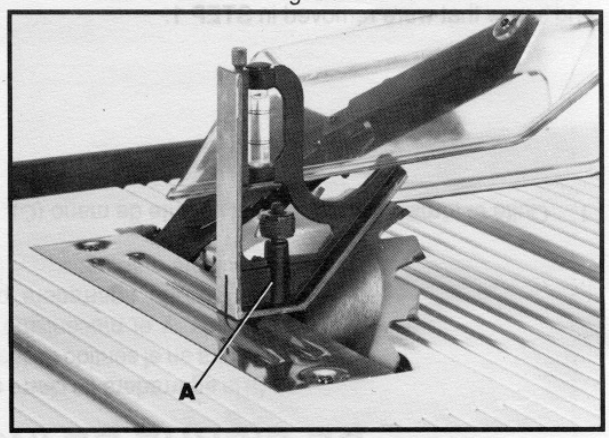


Fig. 34

ADJUSTING TABLE INSERT

1. The table insert (A) Fig. 35, 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 is necessary, tighten or loosen the two adjusting screws (C).

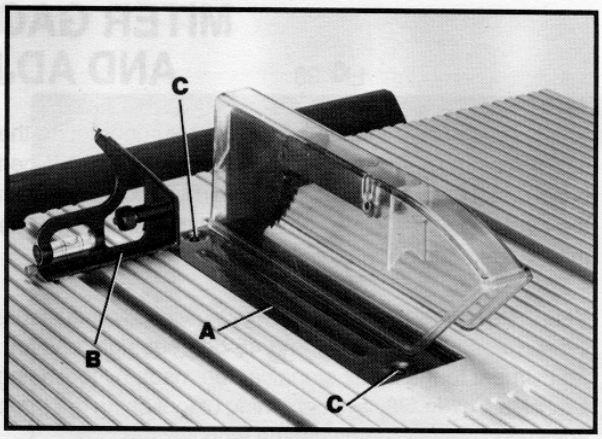


Fig. 35

RIP FENCE OPERATION AND ADJUSTMENTS

1. To move the rip fence (A) Fig. 36, along the table, lift up fence locking lever (B), slide the fence to the desired location on the table and push down fence locking lever (B) to lock the fence in position.

2. A pointer is supplied to indicate the distance the fence is positioned away from the saw blade. If an adjustment to the pointer is required, loosen the screw (C) Fig. 36, that fastens the pointer to the fence bracket and adjust the pointer accordingly.

3. **IMPORTANT: THE RIP FENCE MUST BE PROPERLY 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 end of the miter gage slot, as shown in Fig. 36. Clamp the fence to the table by pushing down the locking lever (B). The edge of the fence should then line up parallel with the miter gage slot.

6. If an adjustmnent is necessary, proceed as follows:

7. Loosen the two screws (D) Fig. 36, and lift up locking lever (B). Then while holding the fence bracket (F) firmly against the table and rail, move the rear end of the fence (A) until it is parallel with the miter gage slot. Then tighten two screws (D) and push down locking lever (B).

8. The clamping action of the fence (A) Fig. 36, can be adjusted by lifting up locking lever (B) and turning nut (E) Fig. 37, clockwise to increase or counterclockwise to decrease the clamping action of the fence.

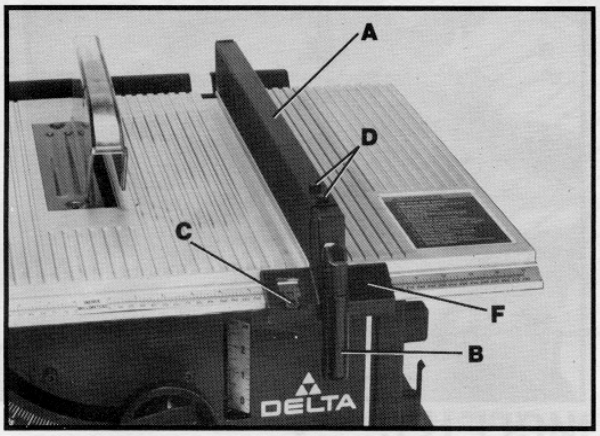


Fig. 36

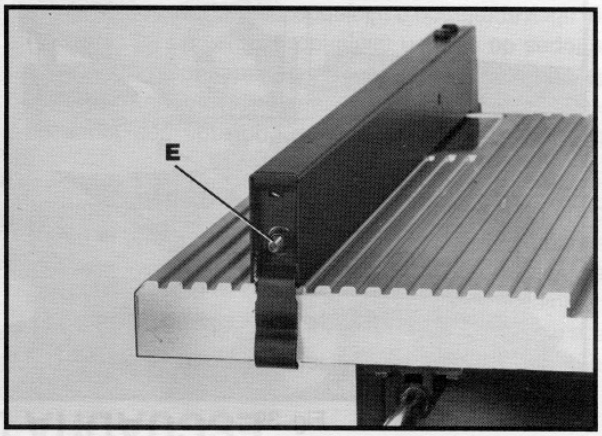


Fig. 37

MITER GAGE OPERATION AND ADJUSTMENTS

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

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. 38, 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. 38, 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.

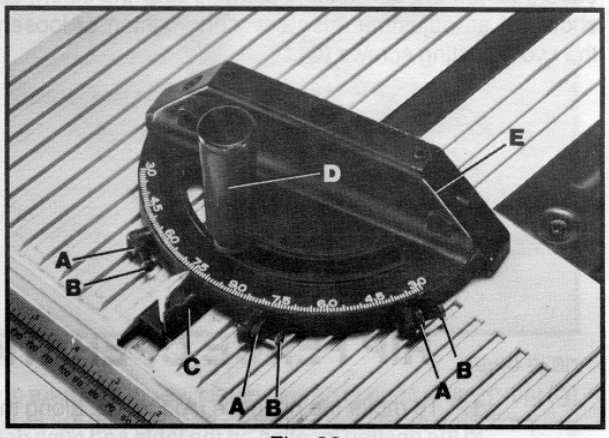


Fig. 38

REMOVING BLADE GUARD

IMPORTANT: The blade guard, splitter and anti-kickback fingers **MUST ALWAYS** be used for all "thru-sawing" operations. Thru-sawing operations are those when the blade cuts completely through the workpiece as in ripping or cross-cutting. Certain operations where the blade or cutting tool does not cut completely through the workpiece, such as in dadoing, require that the blade guard be removed as follows:

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

2. Lower saw blade and insert end of wrench (A) Fig. 39, into slot (B) on back of saw cabinet.

3. Push in on wrench (A) Fig. 40, until splitter lock is released. Then remove blade guard (C) as shown. **NOTE:** It is important that the splitter be in the vertical position and is pulled straight up during the removal procedure.

4. **IMPORTANT: ALWAYS REPLACE BLADE GUARD (C) FIG. 40, AFTER THE NON THRU-SAWING OPERATION IS COMPLETE.** Refer to the section of this manual entitled **"ASSEMBLING BLADE GUARD"** when replacing the blade guard.

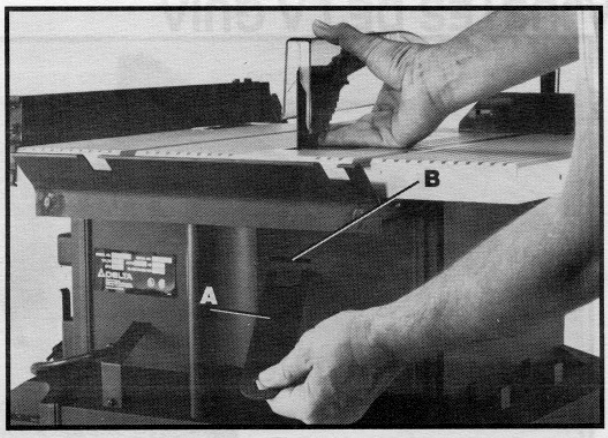


Fig. 39

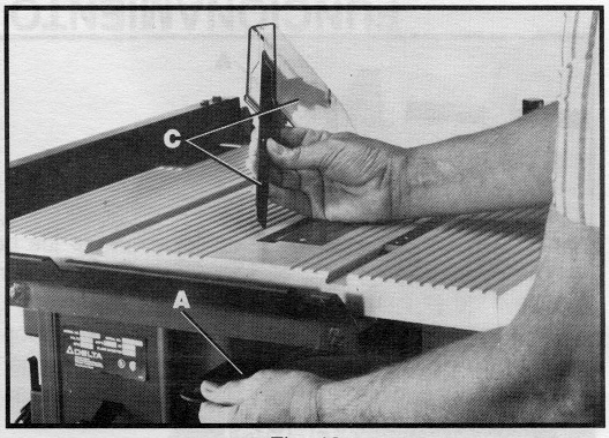


Fig. 40

REAR WORK SUPPORT

The rear work support (A) Fig. 41, slides in or out at the rear of the saw table. The top of the support (A) is the same height as the saw table and supports the workpiece while it is being cut and prevents it from falling off the rear of the table.

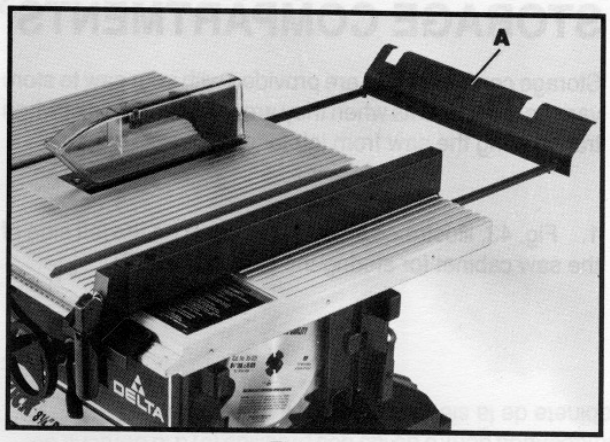


Fig. 41

CHANGING THE BLADE

1. **WARNING: WHEN CHANGING THE BLADE, MAKE CERTAIN THE SAW IS DISCONNECTED FROM THE POWER SOURCE. USE ONLY 8-1/4" DIAMETER SAW BLADES RATED FOR 6000 RPM OR HIGHER WITH 5/8" ARBOR HOLES.**

2. Remove blade guard (F) Fig. 42.

3. Raise the saw blade to its maximum height and remove table insert (E) Fig. 42.

4. Using one of the wrenches (A) Fig. 42, place open end of wrench on flats on inside blade flange to keep saw arbor from rotating and remove arbor nut (B) using other wrench. Turn nut (B) clockwise to remove. Remove outside blade flange (C) and saw blade (D).

5. Assemble new blade making certain teeth of blade are pointing down at the front of the saw table and assemble outside blade flange (C) Fig. 42, and arbor nut (B). Tighten nut (B) with wrench by turning nut counterclockwise while holding arbor steady with other wrench.

6. Replace table insert (E) Fig. 42, and blade guard (F). **IMPORTANT:** If splitter of blade guard (F) needs to be re-aligned with the new saw blade, refer to section **"ASSEMBLING BLADE GUARD AND ADJUSTING SPLITTER HOLDER"** on page 11.

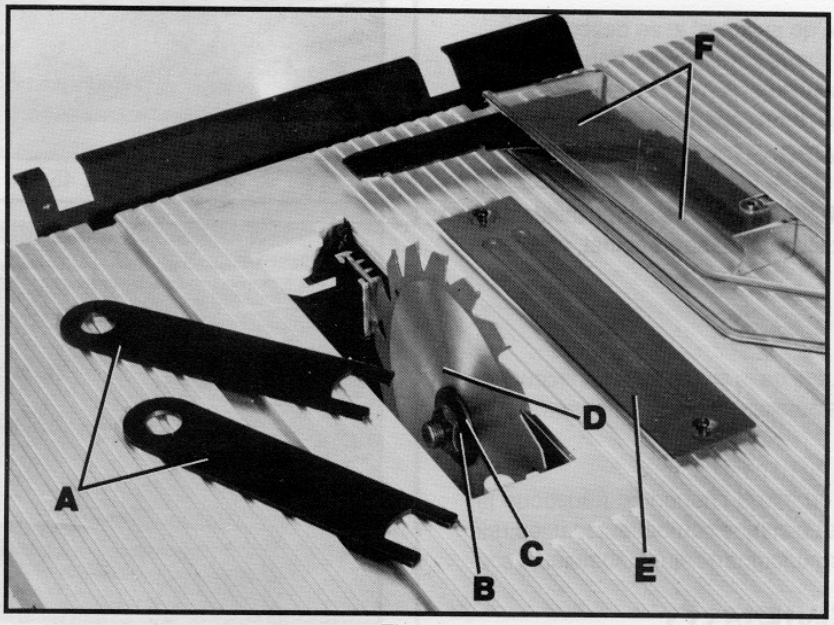


Fig. 42

STORAGE COMPARTMENTS

Storage compartments are provided with your saw to store various components when they are not being used or when transporting the saw from job to job.

1. Fig. 43, illustrates clips (A) provided on the left side of the saw cabinet for storing the blade guard (B).

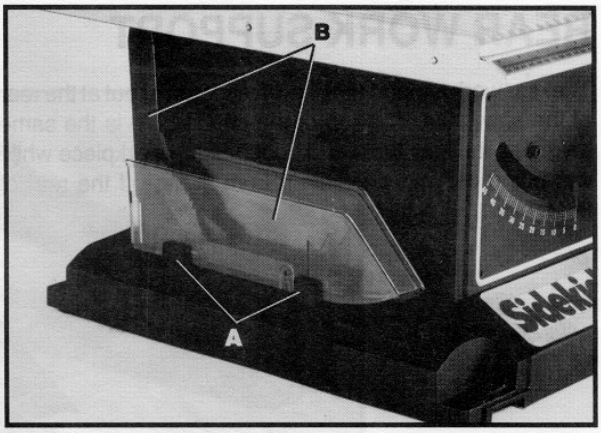


Fig. 43

2. The miter gage bar (C) Fig. 44, is inserted into the two holders (D) on the left side of the saw cabinet. **NOTE:** The miter gage head (E) can be rotated to conform with the angle of the blade guard (B). Also, the miter gage bar (C), can be inserted into the two holders (D) from the rear of the saw if desired.

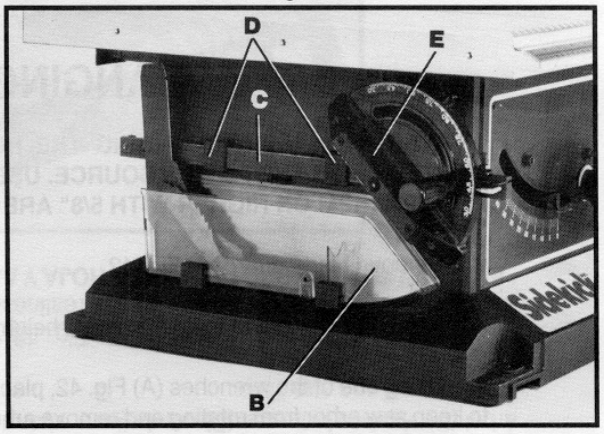


Fig. 44

3. Spaces are provided on the right side of the saw cabinet to store saw blades (F) Fig. 45, and blade wrenches (G) as shown.

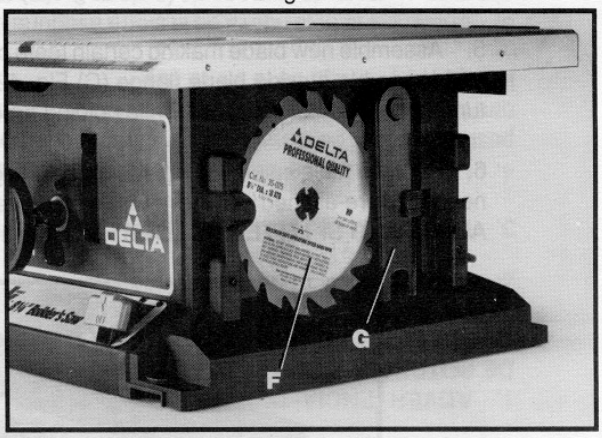


Fig. 45

4. The rip fence (H) Fig. 46, can be stored inside the two clips (J) on the right side of the saw cabinet, as shown.

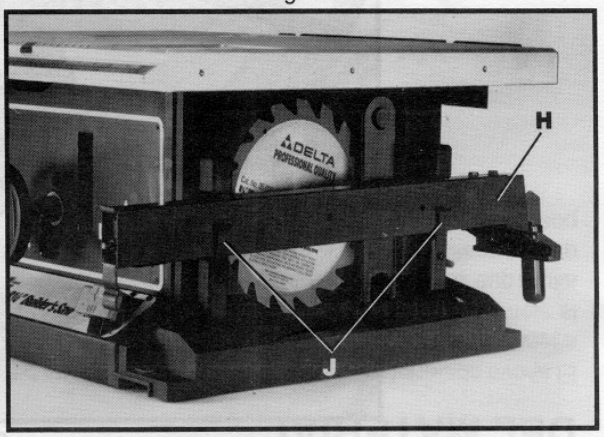


Fig. 46

5. The allen wrench (K) Fig. 47, supplied with your saw can be stored in the two holes (L) on the rear of the saw cabinet and the saw power cord (M) can be inserted in the bracket (N) as shown.

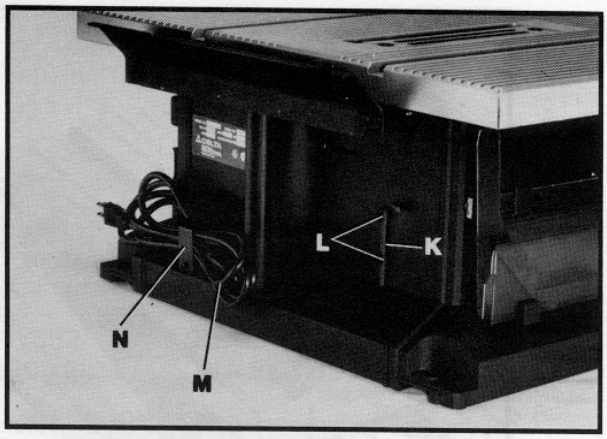


Fig. 47

CARRYING HANDLE

A carrying handle (A) Fig. 48, is provided on the rear of the saw. This handle makes transporting the saw an easy operation as shown.

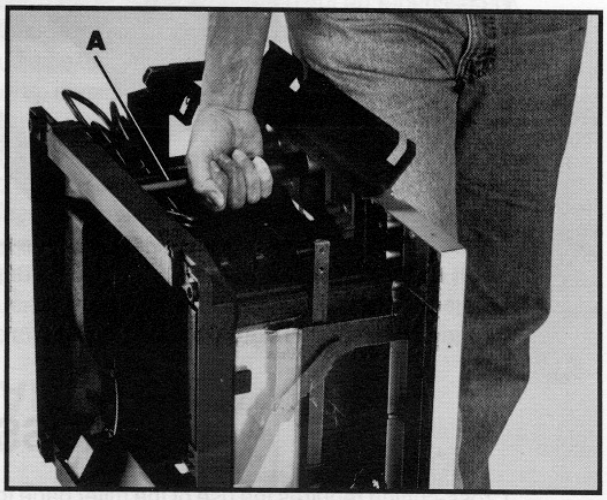


Fig. 48

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.

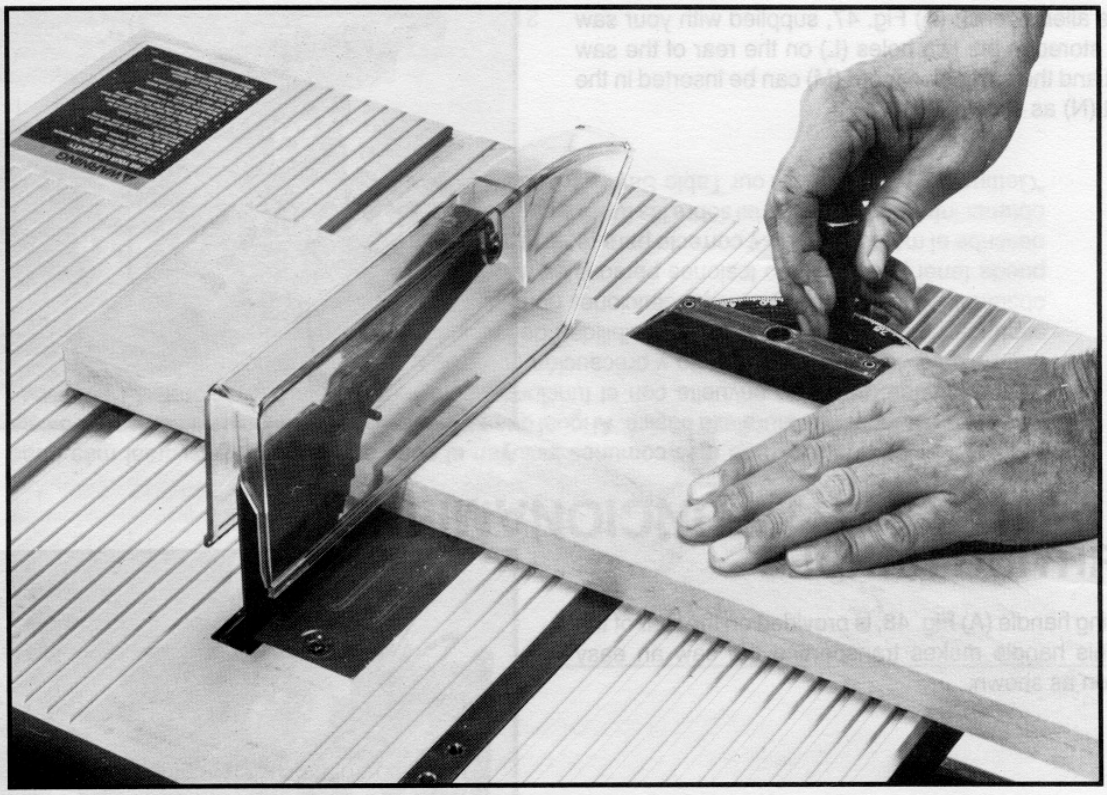


Fig. 49

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. 49. 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 holes provided in the miter gage body and into the wood-facing.

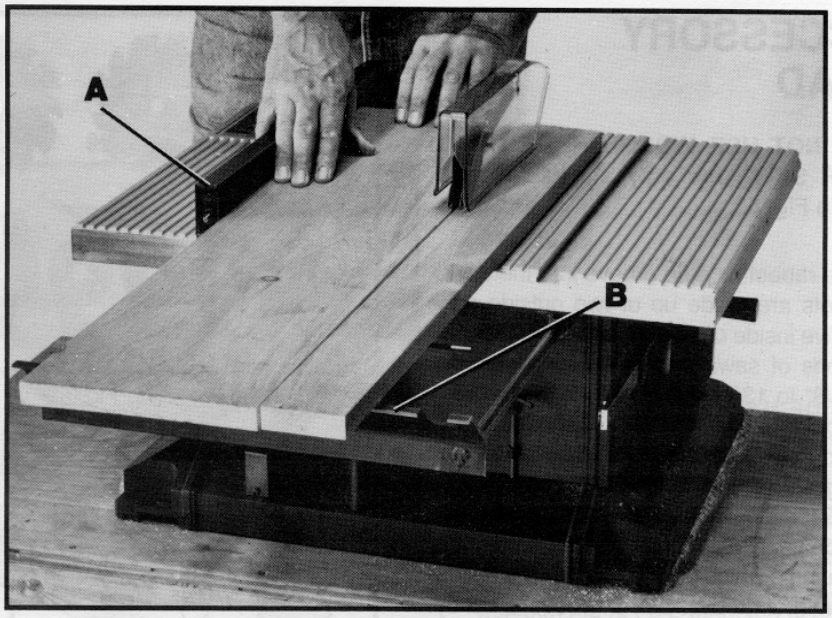


Fig. 50

RIPPING

Ripping is the operation of making a length-wise cut through a board, as shown in Fig. 50, 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. Also note that the rear work support (B) Fig. 50, has been pulled out and supports the work at the rear of the saw table.

Start the motor and advance the work, holding it down 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. 50. 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 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 the work support (B) Fig. 50, 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. 51. 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.

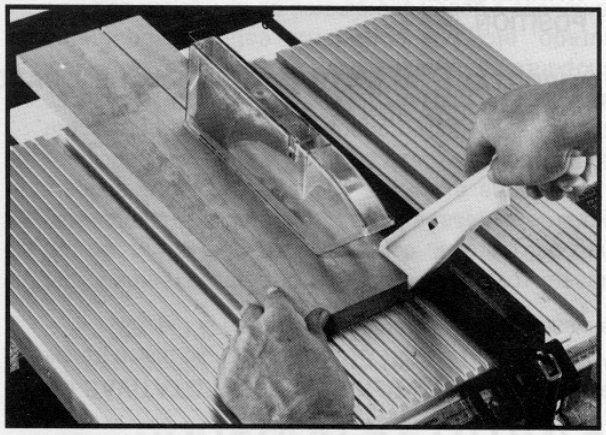


Fig. 51

USING ACCESSORY DADO HEAD

IMPORTANT: DO NOT USE WOBBLE-TYPE DADO HEADS ON YOUR SAW. Use only stackable dado heads, as shown in Fig. 52.

Dadoing is cutting a rabbet or wide groove into the work. Most dado head sets are made up of two outside saw blades and four or five inside cutters, as shown in Fig. 52. 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 saw, as shown in Fig. 53. The saw and cutter overlap is shown in Fig. 54, (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.

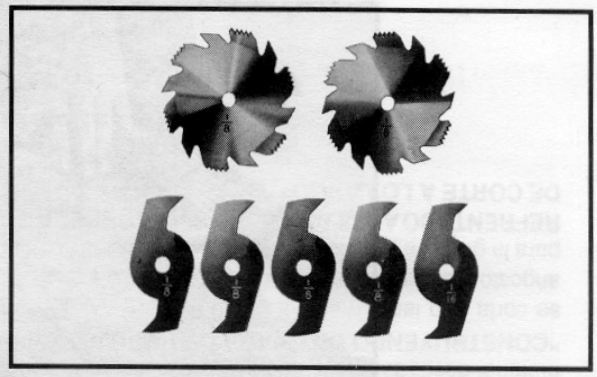


Fig. 52

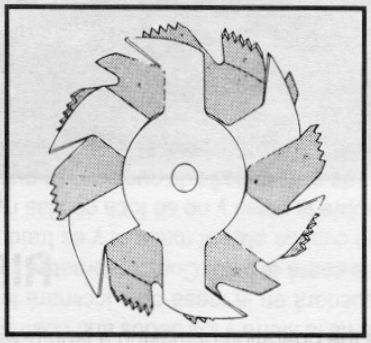


Fig. 53

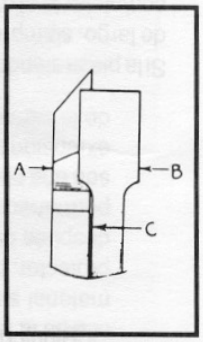


Fig. 54

The dado head set (D) Fig. 55, is assembled to the saw arbor in the same manner as the saw blade. The inside and outside blade flanges are not used. 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. 55, must be used in place of the standard table insert. Fig. 56, shows a typical dado operation using the miter gage as a guide.

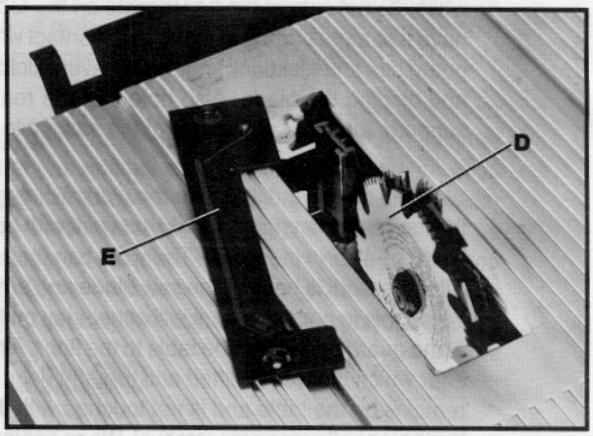


Fig. 55

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

IMPORTANT: ALWAYS INSTALL BLADE GUARD AFTER OPERATION IS COMPLETE.

Fig. 56

USING AUXILIARY WOOD FACING ON RIP FENCE

It is necessary when performing some special operations to add wood facing (A) Fig. 57, 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:

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1121 Spring Lake Drive
Itasca, IL 60143-3201

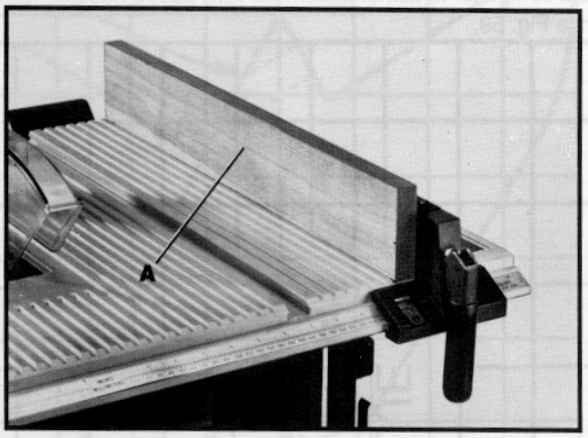


Fig. 57

CONSTRUCTING A FEATHERBOARD

Fig. 58, 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.

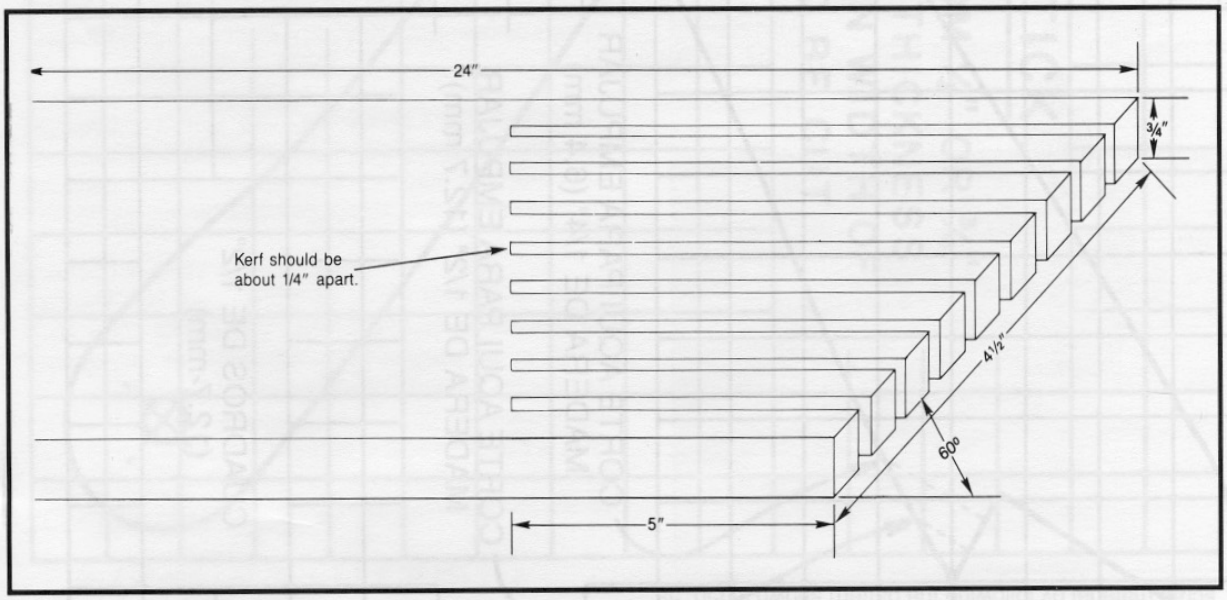


Fig. 58

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. 59.

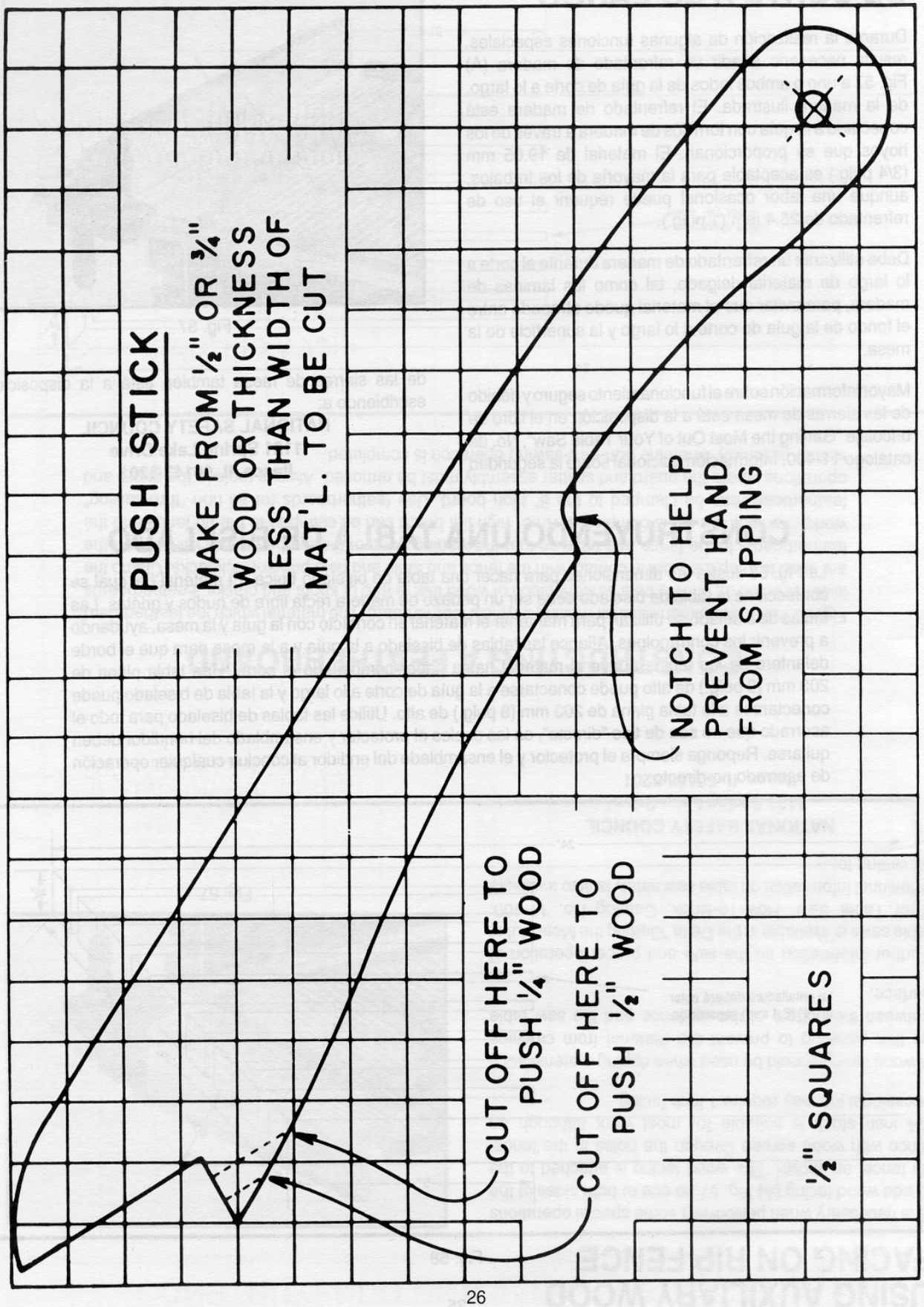
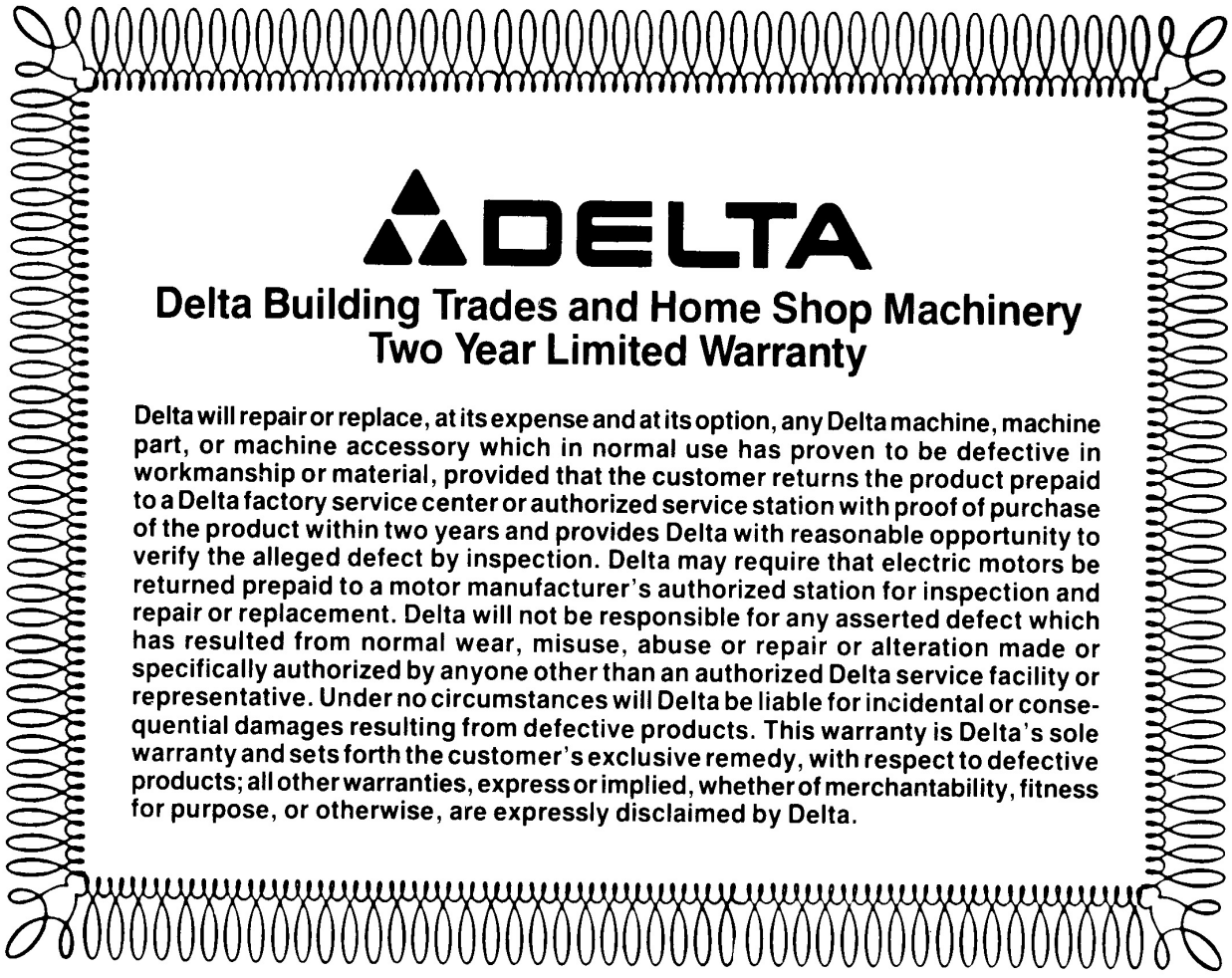


Fig. 59



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