

Platinum Edition 10" Contractor's Saw with 30" Unifence^{fi} (Model 36-475)



REVISED 6-14-99

PART NO. 422-19-651-0042
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SAFETY RULES

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

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

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

5. KEEP WORK AREA CLEAN. Cluttered areas and benches invite accidents.

6. DON'T USE IN DANGEROUS ENVIRONMENT. Don't use power tools in damp or wet locations, or expose them to rain. Keep work area well-lighted.

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

8. MAKE WORKSHOP CHILDPROOF with padlocks, master switches, or by removing starter keys.

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

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

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

12. ALWAYS USE SAFETY GLASSES. Wear safety glasses. Everyday eyeglasses only have impact resistant lenses; they are not safety glasses. Also use face or dust mask if cutting operation is dusty.

13. SECURE WORK. Use clamps or a vise to hold work when practical. It's safer than using your hand and frees both hands to operate tool.

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

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

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

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

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

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

20. CHECK DAMAGED PARTS. Before further use of the tool, a guard or other part that is damaged should be carefully checked to ensure that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.

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

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

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

24. MAKE SURE TOOL IS DISCONNECTED FROM POWER SUPPLY while motor is being mounted, connected or re-connected.

25. 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 SAW S

1. ALWAYS use blade guard and splitter with anti-kickback for every operation for which it can be used, including thru-sawing operations. Thru-sawing operations are those when the blade cuts completely through the workpiece as in ripping or cross-cutting.

2. ALWAYS hold the work firmly against the miter gage or fence.

3. ALWAYS use a push stick for ripping narrow stock. Refer to ripping applications in instruction manual where the push stick is covered in detail. See push stick pattern included in this instruction manual.

4. NEVER perform any operation free-hand which means using your hands to support or guide the workpiece. Always use either the fence or miter gage to position and guide the work.

5. NEVER stand or have any part of your body in line with the path of the saw blade. KEEP your hands out of the line of the saw blade.

6. NEVER reach behind or over the cutting tool with either hand for any reason.

7. MOVE the rip fence out of the way when cross-cutting.

8. NEVER use the fence as a cut-off gage when cross-cutting.

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

10. WHEN cutting moulding, NEVER run the stock between the fence and the moulding cutterhead.

11. NEVER attempt to free a stalled saw blade without first turning the saw OFF. Turn off switch immediately to prevent motor damage.

12. THE USE of attachments and accessories not recommended by Delta may result in risk of injuries.

13. PROVIDE adequate support to the rear and sides of the saw table for wide or long workpieces.

14. 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.

15. AVOID awkward operations and hand positions where a sudden slip could cause your hand to move into the cutting tool.

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

17. PERMANENTLY mount the saw to a supporting surface before performing any cutting operations.

18. NEVER cut metals or material which may make hazardous dust.

19. ALWAYS use in a well-ventilated area. Remove sawdust frequently. Clean out sawdust from the interior of the saw to prevent a potential fire hazard.

20. DO NOT expose your saw to rain or use in a damp location.

21. 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 O1.1 Safety Requirements for Woodworking Machinery and the U.S. Department of Labor OSHA 1910.213 Regulations.

22. SAVE THESE INSTRUCTIONS. Refer to them frequently and use them to instruct others.

UNPACKING AND CLEANING

Carefully unpack the table saw and all loose items from the shipping containers. Remove the protective coating from the machined surfaces of the saw. This coating may be removed with a soft cloth moistened with kerosene (do not use acetone, gasoline or lacquer thinner for this purpose). Fig. 2, illustrates the components of the table saw. Fig. 3, illustrates the components of the saw stand. Fig. 4, illustrates the components of the Unifence[®]

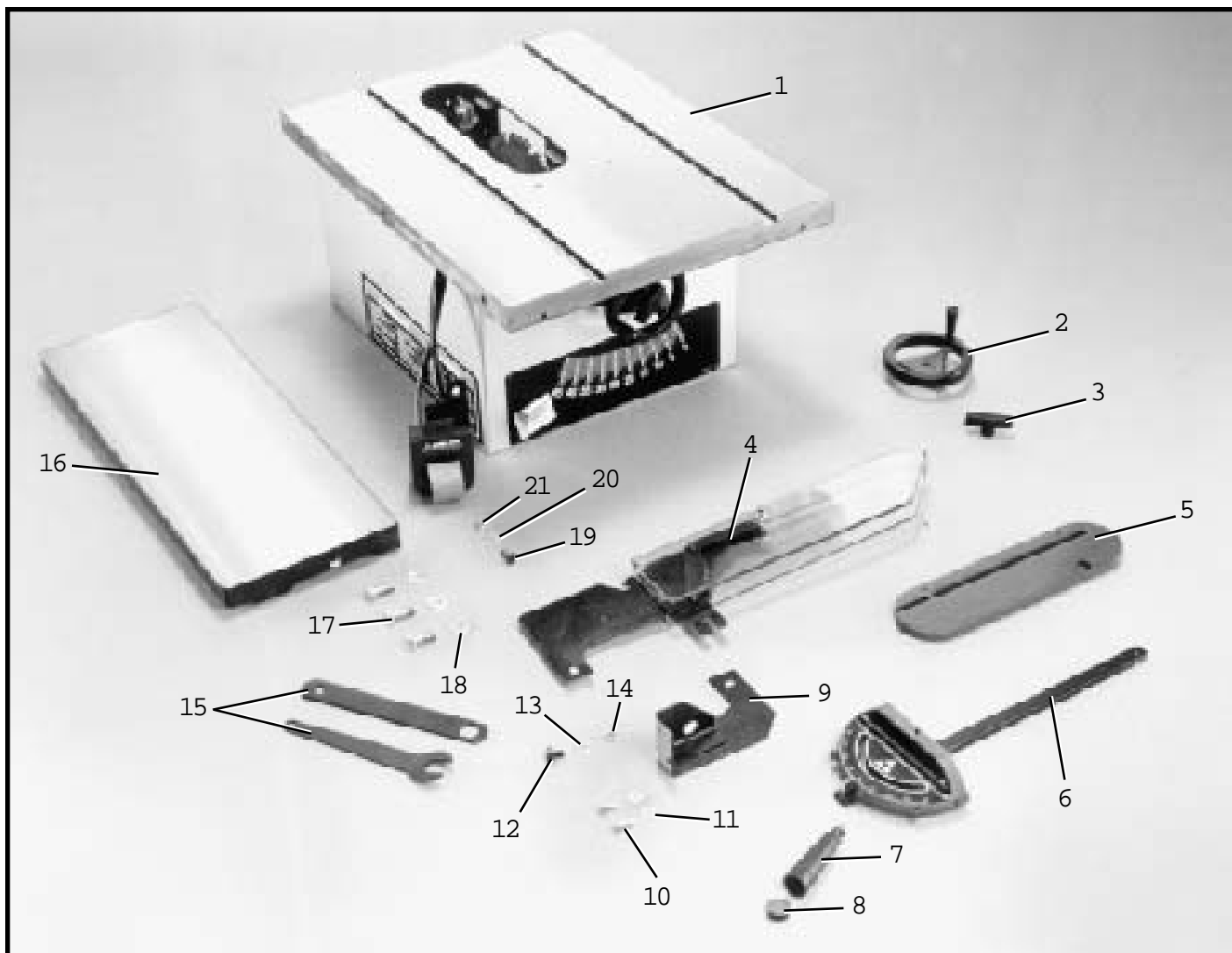


Fig. 2

- | | |
|--------------------------------------|---|
| 1. Contractor s Saw | 12. 5/16-18 x 5/8†Carriage Head Screw |
| 2. Blade Tilting Handwheel | 13. 5/16†Flat Washer |
| 3. Handwheel Lock Knob | 14. 5/16-18 Hex Nut |
| 4. Blade Guard and Splitter Assembly | 15. Arbor Wrenches (2) |
| 5. Table Insert | 16. Cast Iron Extension Table |
| 6. Miter Gage | 17. 7/16-20 x 1-3/4†Hex Head Screws
for assembling extension table (3) |
| 7. Miter Gage Handle | 18. Flat Washers for assembling
extension wing (3) |
| 8. Miter Gage Handle Cap | 19. 1/4-20 x 3/4†Flat head Screw |
| 9. Splitter Mounting Bracket | 20. Flat Washer |
| 10. 1/4-20 x 3/4†Hex Head Screws (2) | 21. Hex Nut |
| 11. 1/4†Flat Washers (2) | |

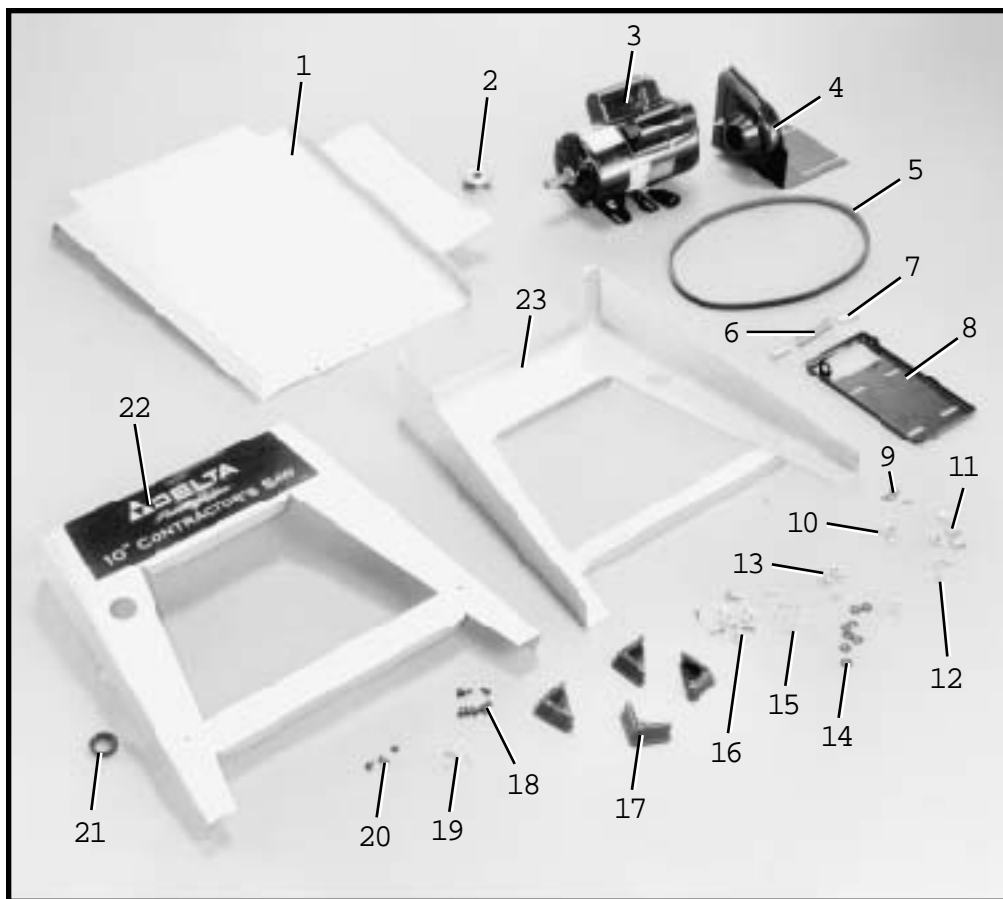


Fig. 3

1. Combination Dust Chute/
Support Panel
2. Motor Pulley
3. Motor
4. Pulley Guard
5. Drive Belt
6. Spring
7. Pins (2) for Mounting Motor
8. Motor Mounting Plate
9. Lockwashers (4)
10. Flat Washers (4)
11. 5/16-18 x 3/4" Carriage
Head Screws (4)
12. Hex Nuts (4)
13. 5/16" Hex Nuts (8)
14. 5/16" Lockwashers (8)
15. 5/16" Flat Washers
16. 5/16-18 x 5/8" Hex Head
Screws (8)
17. Rubber Feet (4)
18. #10-32 x 12 Screws (8)
19. #10 Keps Nuts (8)
20. #10-1/2" Sheet Metal
Screws (3)
21. Grommet
22. Front Leg Panel
23. Rear Leg Panel

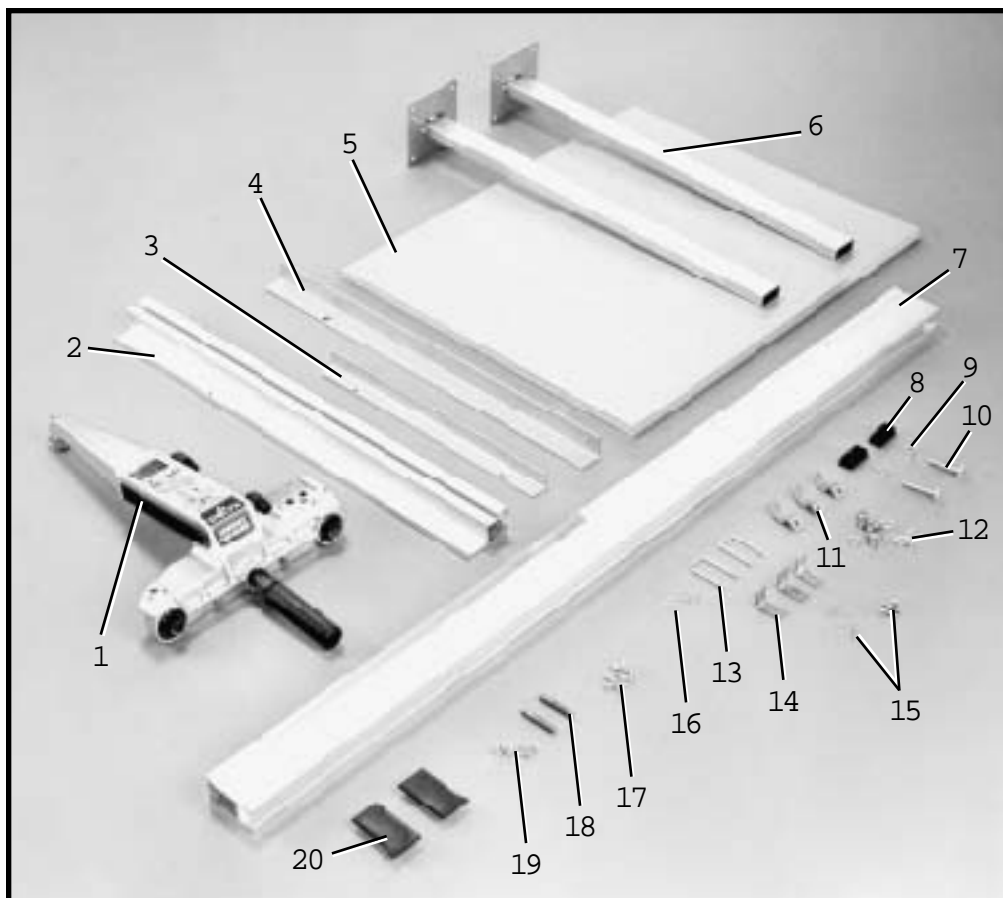


Fig. 4

1. Unifence Body
2. Fence
3. Shelf Support Bracket
4. Front Table Support
5. Table Board
6. Table Legs (2)
7. Front Guide Rail
8. Leg Adapter (2)
9. Flat Washers (2)
10. Leveling Screws (2)
11. Z-Brackets (2)
12. 7/16-20 x 3/4" Hex Head
Screws, Lockwashers,
and Flat Washers (3 ea.)
13. U-Bolts (2)
14. Angle Brackets (3)
15. 1/4-20 x 3/4" Carriage Head
Screws, Flat Washers, and
1/4-20 Hex Nuts (3 ea.)
16. Flat Washers and 1/4-20
Hex Nuts for U-Bolts (4 ea.)
17. #8 x 13/16" Hex Washer
Head Screws (14)
18. Threaded Studs for
Guide Rail (2)
19. 3/8" x 24 Hex Nuts (2)
20. Guide Rail End Caps (2)

ASSEMBLY INSTRUCTIONS

ASSEMBLING SAW STAND

1. Assemble the dust chute and support panel (A) Fig. 5, to the inside of the front stand panel (B) with three #10 x 1/2" sheet metal screws (C), four #10-32 x 1/2" screws (D), and four hex nuts (E). Fig. 6, illustrates the dust chute and support panel (A) assembled to the front of stand (B). NOTE: The front stand panel will have the saw identity labels facing you. Do not completely tighten the stand hardware at this time. Also, make certain the dust chute/support panel (A) Fig. 6, is located under the lip of front stand panel (B).

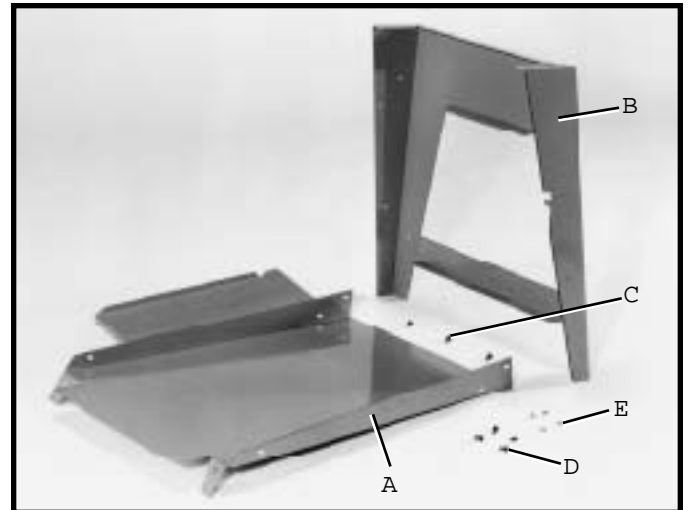


Fig. 5

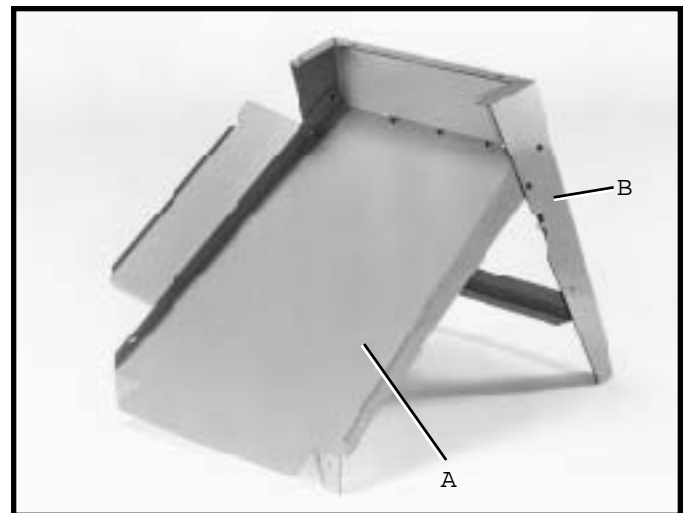


Fig. 6

2. Assemble the other end of dust chute and support panel (A) Fig. 7, to rear stand panel (F) as shown with four #10-32 x 1/2" screws and hex nuts, three of which are shown at (D). NOTE: Do not completely tighten stand hardware at this time.

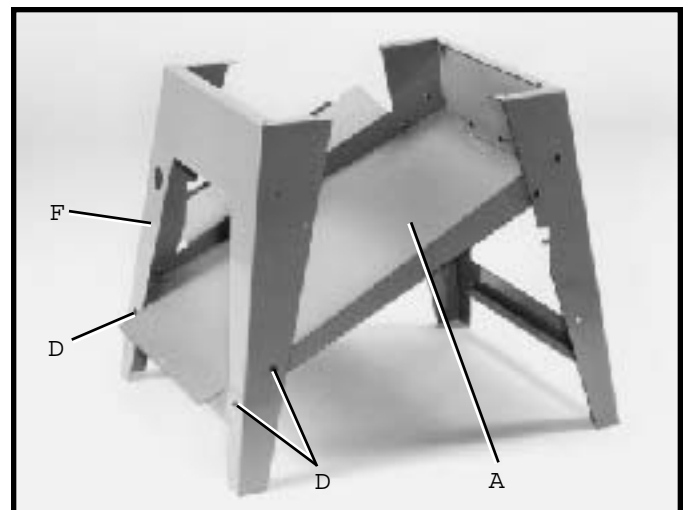


Fig. 7

ASSEMBLING SAW TO STAND

1 Fig. 8, illustrates the stand (B) completely assembled.

2 Assemble rubber foot (A) Fig. 8, onto the end of each stand leg (B). Insert grommet (C) into hole (D) in stand leg.

3 Carefully place saw (E) Fig. 9, onto saw stand (B). Align eight holes in the top of stand (B) with mounting holes in the bottom of saw (E) and fasten with eight screws, flat washers, lockwashers, and hex nuts (F) Fig. 8.

4 Fig. 9, illustrates the saw (E) assembled to the saw stand (B). Carefully push down on the top of the saw until the stand legs are positioned firmly on the floor surface and securely tighten all saw and stand mounting hardware. Notice that panel (G) is not only a support for a stand, but also serves as a dust chute.

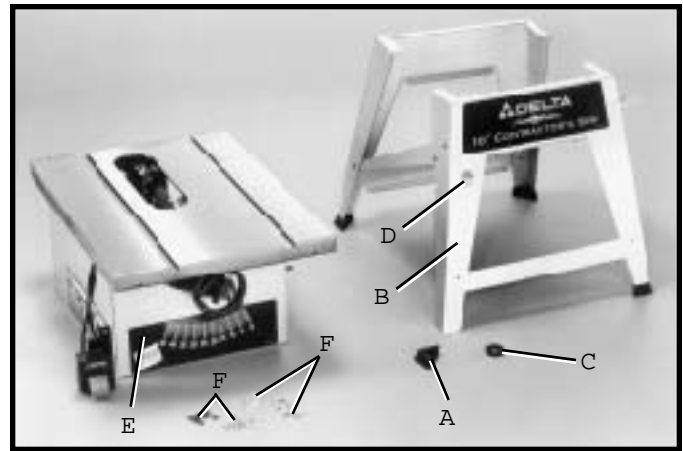


Fig. 8

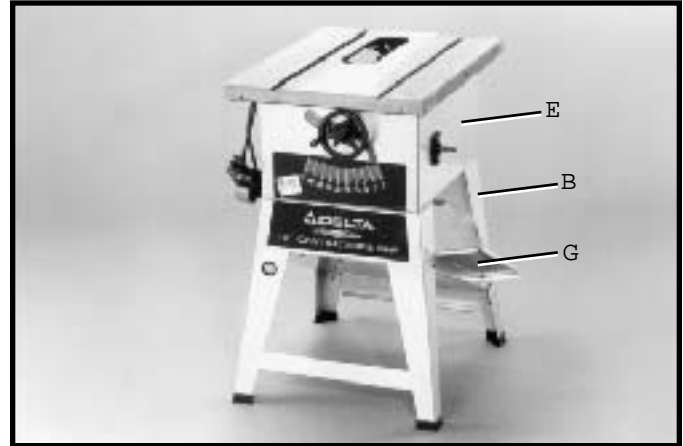


Fig. 9

ASSEMBLING BLADE TILTING HANDWHEEL

1 Assemble blade tilting handwheel (A) Fig. 10, to shaft (B). Make certain slot (C) in handwheel is engaged with roll pin (D) on the shaft.

2 Thread locking lever (E) Fig. 11, onto shaft.

3 Fig. 11, illustrates the blade tilting handwheel (A) and locking lever (E) assembled to the saw.

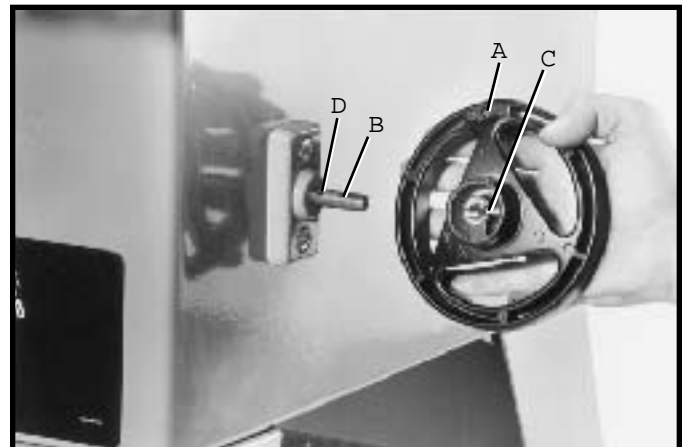


Fig. 10

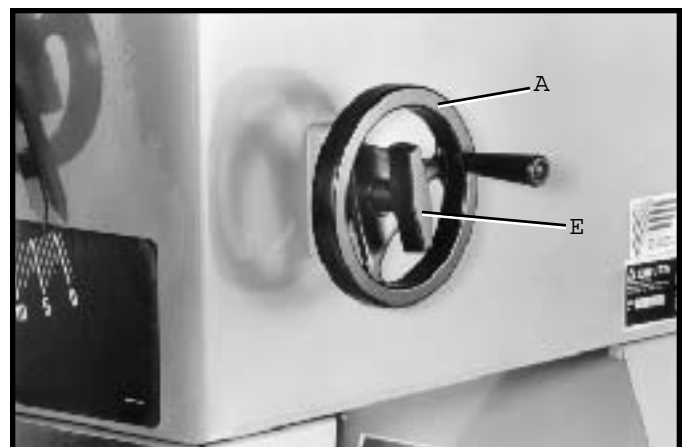


Fig. 11

MOTOR

The motor shipped with your saw is a 1-1/2 H.P., Ball Bearing, Capacitor Start/Capacitor Run, 115/230 Volt motor.

This motor has been specially selected to best supply power to your machine and the relative safety of the machine is enhanced by its use. We, therefore, strongly suggest that only this motor be used, as the use of other motors may be detrimental to the performance and safety of the saw.

ASSEMBLING MOTOR TO MOTOR MOUNTING PLATE

WARNING: WHEN ASSEMBLING THE MOTOR TO THE MOTOR MOUNTING PLATE, MAKE CERTAIN THE SAW IS DISCONNECTED FROM THE POWER SOURCE.

- 1 Assemble the motor (A) to the motor mounting plate (B) as shown in Fig. 12, using four carriage bolts, flat washers, star washers, and hex nuts (C).

NOTE: Do not completely tighten the hex nuts at this time.

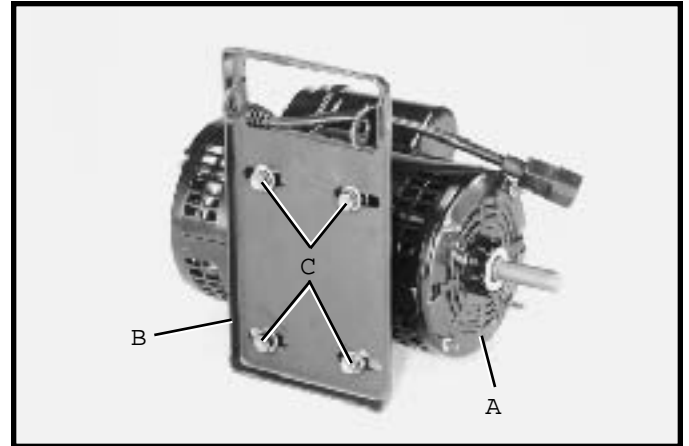


Fig. 12

ASSEMBLING MOTOR AND MOTOR MOUNTING PLATE TO SAW

WARNING: WHEN ASSEMBLING THE MOTOR AND MOTOR MOUNTING PLATE TO THE SAW, MAKE CERTAIN THE SAW IS DISCONNECTED FROM THE POWER SOURCE.

- 1 Insert two pins (X) Fig. 13, into holes (D) in each side of bracket (B). Assemble spring (Y) onto ends of pins (B) as shown.
- 2 Position motor and motor mounting plate (A) Fig. 13, below bracket (B) to allow bracket arm to slide through large opening in motor mounting plate (A).
- 3 Depress plungers (X) Fig. 14, on both sides of bracket (B) and rotate motor mounting plate (A) until plungers (X) are engaged in holes (D) Fig. 13, of motor mounting plate (A).

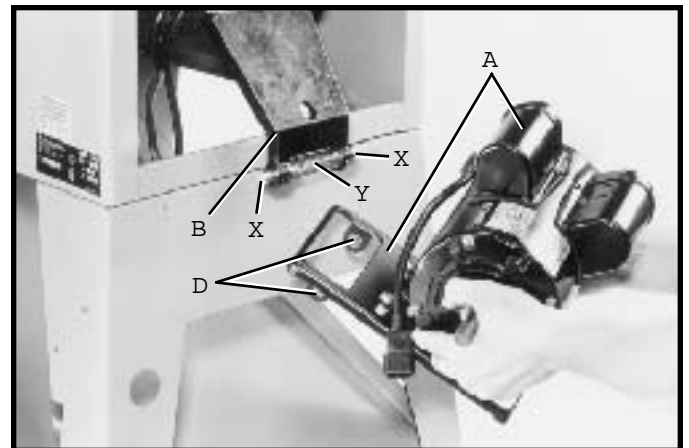


Fig. 13

- 4 Fig. 15, illustrates the motor and motor mounting plate assembled to the rear of the saw.

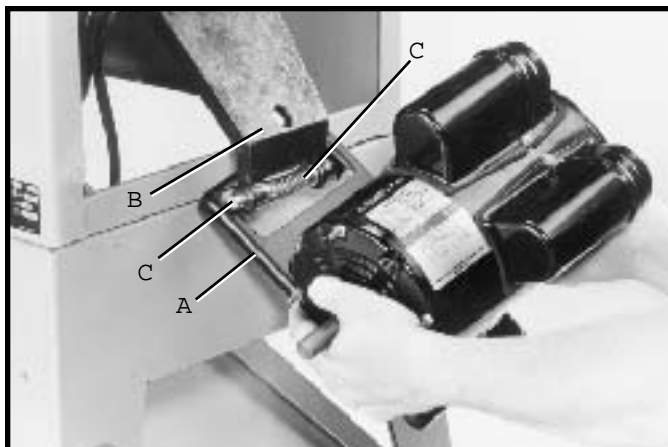


Fig. 14



Fig. 15

ASSEMBLING MOTOR PULLEY, BELT AND PULLEY GUARD, AND DRIVE BELT

WARNING: WHEN ASSEMBLING MOTOR PULLEY, BELT AND PULLEY GUARD, AND DRIVE BELT, MAKE CERTAIN THE MOTOR IS DISCONNECTED FROM THE POWER SOURCE.

1. Remove the motor shaft key that is taped to the motor.

2. Insert the key (A) Fig. 16, in the keyway on the motor shaft. Assemble the motor pulley (B) on the motor shaft as shown, with the hub of the pulley facing out. Tighten set screw (C) against key (A) in motor shaft.

3. Remove wing nut and external tooth lockwasher (D) Fig. 17, and outer cover (E) from belt and pulley guard (G).

4. Slide the belt and pulley guard bracket (G) Fig. 18, between the motor plate (M) and motor mounting plate (L), as shown.

5. Position belt and pulley guard bracket (G) Fig. 19, so the motor pulley (B) is centered and through the hole in the belt and pulley guard bracket, as shown. Tighten the four hex nuts that fasten the motor to the motor mounting plate.

6. Using a straight edge, align the motor pulley with the arbor pulley. If necessary, adjust the motor pulley (B) Fig. 19, in or out on the motor shaft.

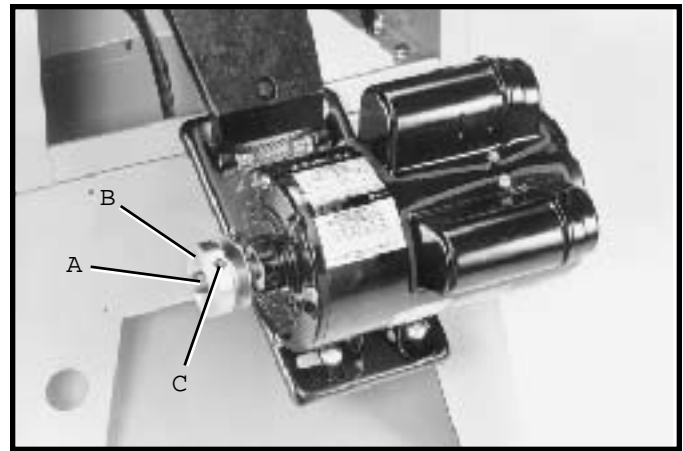


Fig. 16

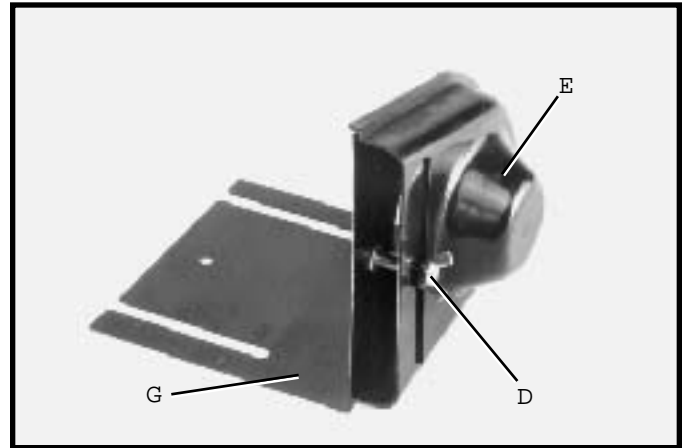


Fig. 17

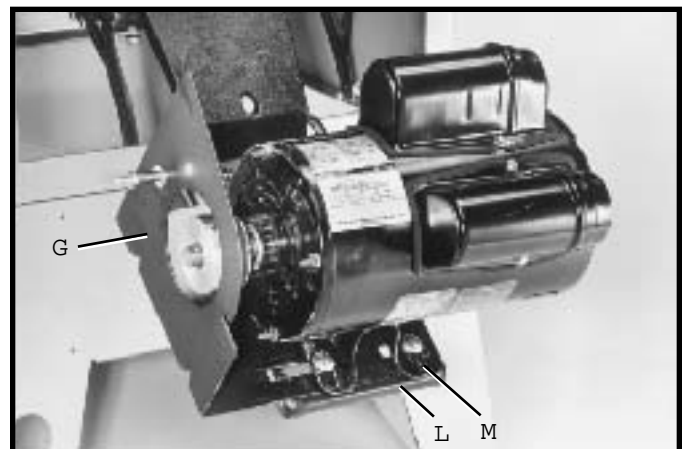


Fig. 18

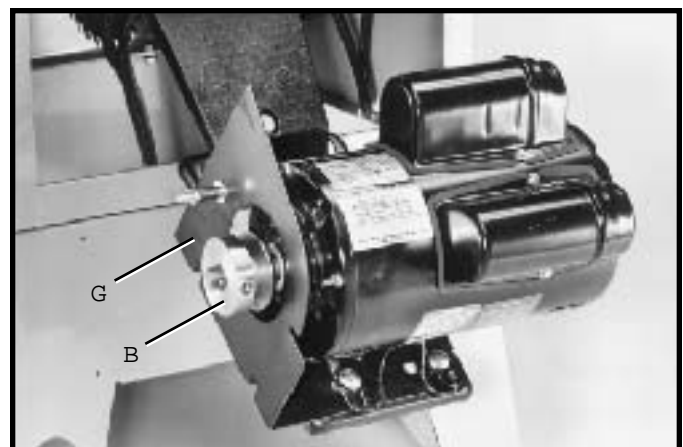


Fig. 19

7. Lift the motor and assemble the drive belt (H) Fig. 20, to the arbor pulley and motor pulley (B). The weight of the motor will provide the correct belt tension.

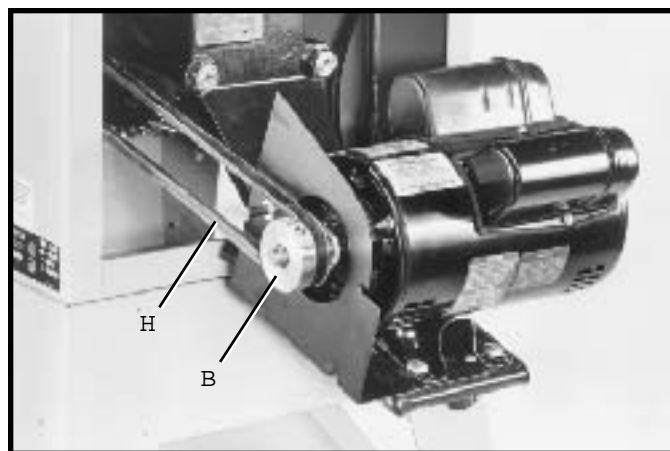


Fig. 20

8. **WARNING:** IMMEDIATELY AFTER ASSEMBLING THE BELT, RAISE THE SAW BLADE TO ITS MAXIMUM HEIGHT AND TILT THE SAW BLADE TO 45 DEGREES. CHECK TO SEE IF THE MOTOR END BELL (J) FIG. 21, IS BELOW THE TOP OF THE TABLE SURFACE (K). IF THE MOTOR END BELL (J) IS ABOVE THE TOP OF THE TABLE SURFACE, THE MOTOR MUST BE MOVED TO THE LEFT UNTIL YOU ARE CERTAIN THE END BELL (J) OF THE MOTOR IS BELOW THE TOP OF THE TABLE SURFACE. THEN RE-ALIGN THE MOTOR PULLEY TO THE ARBOR PULLEY.

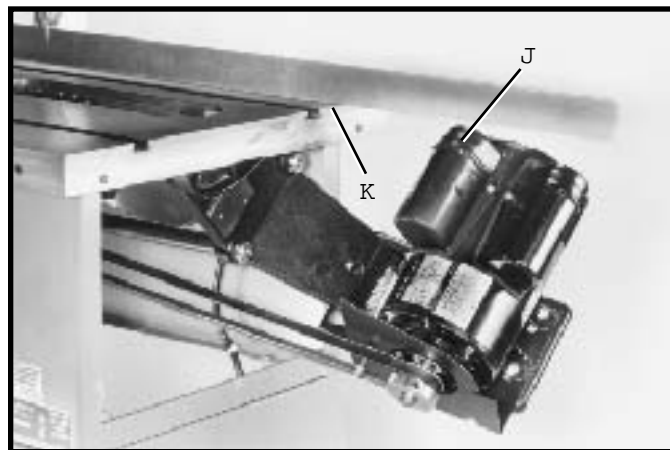


Fig. 21

9. Assemble the outer cover (E) Fig. 22, of the belt and pulley guard assembly, which was removed in STEP 3, and fasten with external tooth lockwasher and wing nut (D). **IMPORTANT:** Make certain the outer cover does not interfere with the drive belt and the motor pulley.

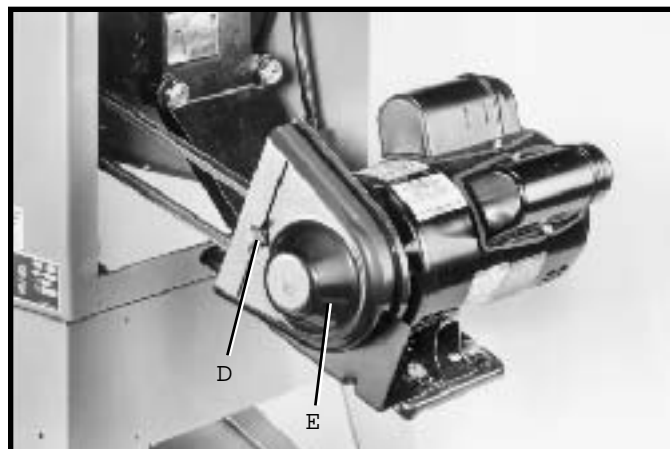


Fig. 22

CONNECTING MOTOR CORD TO SWITCH ASSEMBLY

WARNING: BEFORE CONNECTING MOTOR CORD TO THE SWITCH ASSEMBLY, MAKE CERTAIN THE SAW IS DISCONNECTED FROM THE POWER SOURCE.

1. Insert the pronged motor plug (A) Fig. 23, into the female receptacle (B) of switch-to-motor cord (C).

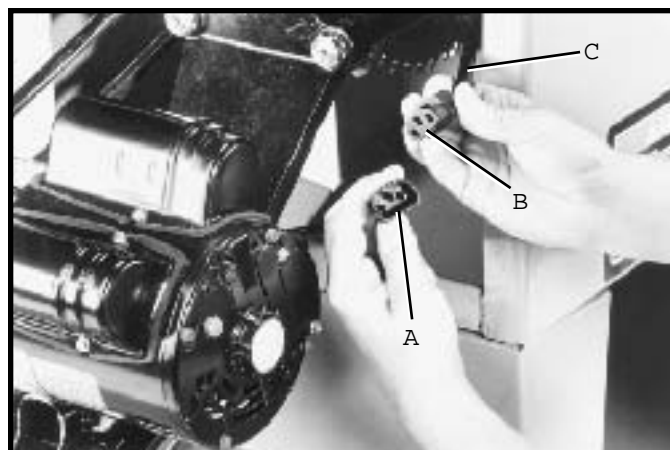


Fig. 23

2 Fig. 24, illustrates the motor cord connected to the switch assembly.



Fig. 24

ASSEMBLING BLADE GUARD AND SPLITTER ASSEMBLY

WARNING: MAKE CERTAIN THE SAW IS DISCONNECTED FROM THE POWER SOURCE.

1 Fasten the rear splitter mounting bracket (A) Fig. 25, to the rear trunnion using the two 3/4" hex head screws (B) and flat washers. Do not completely tighten the two screws (B) at this time.

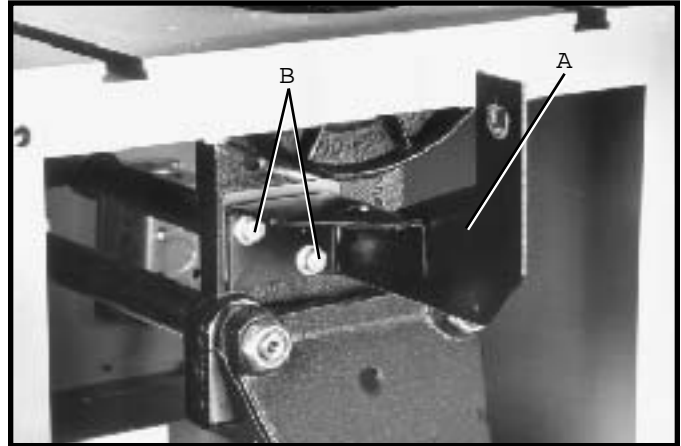


Fig. 25

2 With wrenches supplied, remove the saw blade from the saw. Refer to section CHANGING THE SAW BLADE on page 28, of this manual. Raise saw arbor to its highest position.

3 Remove screw and large washer (C) Fig. 26, from the inside splitter mounting bracket.

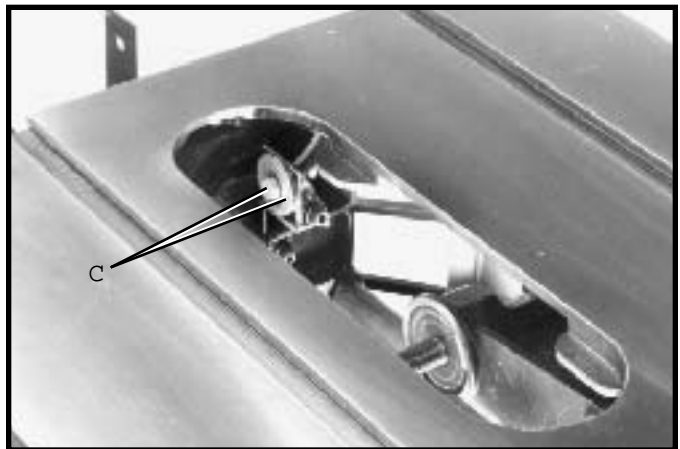


Fig. 26

4 Using a straight edge, check to see if the top and bottom of the inside splitter bracket (D) Fig. 27, is aligned with the inner arbor flange (E), as shown.

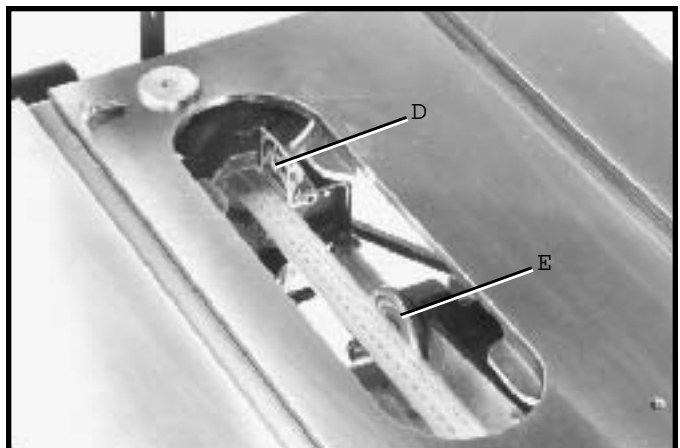


Fig. 27

5. If an alignment is necessary, loosen the two screws (F) Fig. 28, align bracket (D) with the arbor flange (E) and tighten screws (F).

6. Loosely assemble large washer and screw (C) Fig. 28, to the inside splitter bracket. This screw and washer was removed in STEP 3.

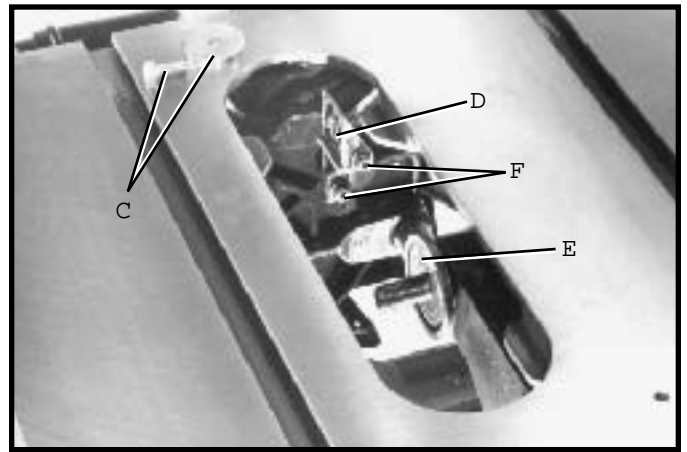


Fig. 28

7. Assemble the blade guard and splitter assembly (G) Fig. 29, between the large washer (C) and the splitter bracket and tighten screw (H) with wrench supplied.

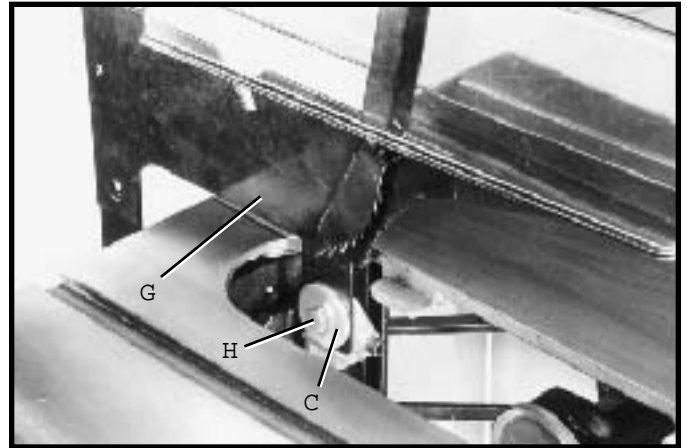


Fig. 29

8. Fasten the rear of the blade guard and splitter bracket assembly (G) Fig. 30, to the rear splitter mounting bracket using 5/8" carriage bolt (J), flat washer, and hex nut. IMPORTANT: The splitter (G) Fig. 30, has a notch (L) cut in the top edge as shown. This feature will enable the blade guard to stay in the raised position to make blade changing a little easier. Simply raise the front of blade guard (M) Fig. 31, until the rear edge of the blade guard slips into notch (L) of splitter (G); the blade guard will stay in this position.

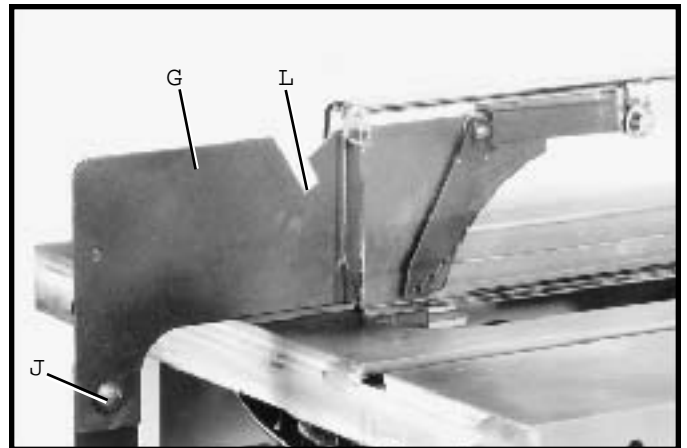


Fig. 30

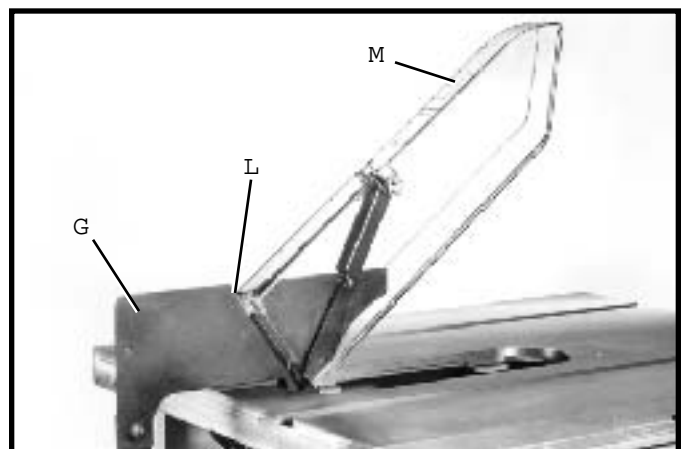


Fig. 31

9. With the blade guard (L) Fig. 32, in the raised position, assemble the saw blade (K) on the saw arbor with two arbor wrenches supplied.

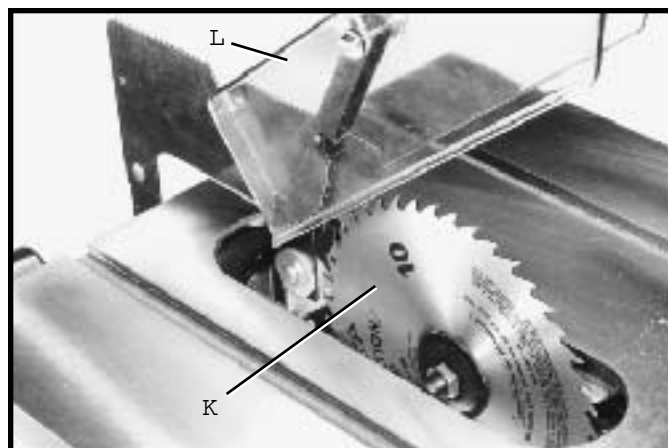


Fig. 32

10. Using a straight edge, check to see if the saw blade is aligned with the rear of the splitter (G), as shown in Figs. 33 and 34. If alignment is necessary, loosen the screws (A) Fig. 34, align splitter (G) with the saw blade, and tighten two screws (A).

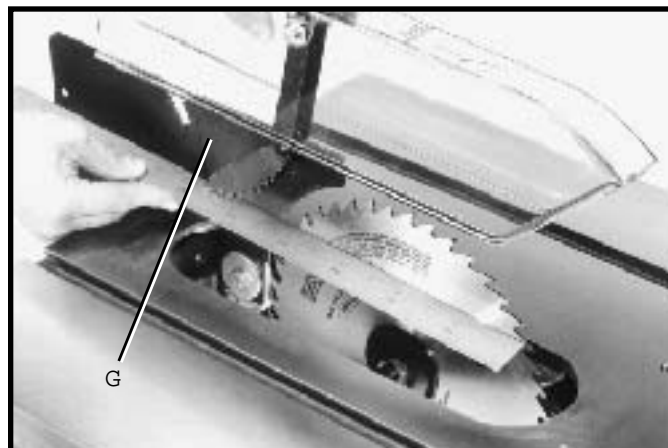


Fig. 33

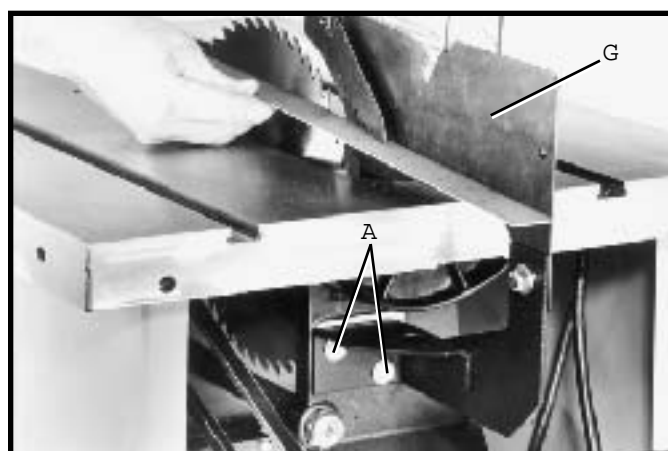


Fig. 34

11. Lower saw blade and install table insert (P) Fig. 35, in the saw table as shown. **IMPORTANT:** When installing the table insert, always make certain to hold on to the blade guard (L). The insert will automatically release the holding action on the splitter and lower the blade guard when it is installed in the table opening.



Fig. 35

ASSEMBLING EXTENSION WING

1 Assemble extension wing (A) Fig. 36, to the saw table using three 7/16-20 x 1-1/4" screws (B) and lock-washers (C) as shown in Fig. 37.

2 With a straight edge (D) Fig. 36, make certain the extension wing (A) is level with the saw table before tightening three screws (B) Fig. 37.

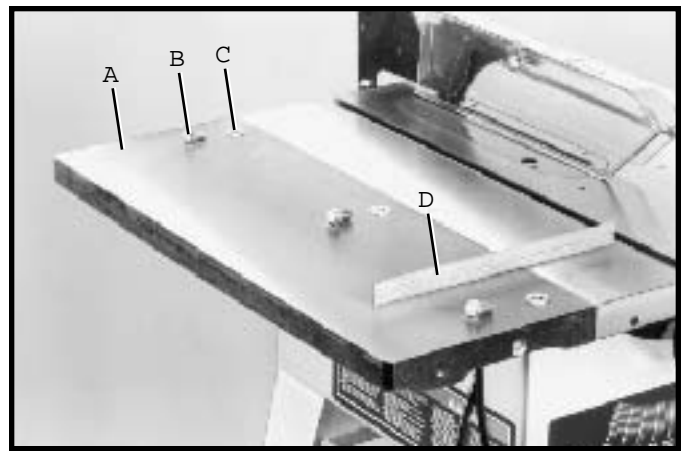


Fig. 36

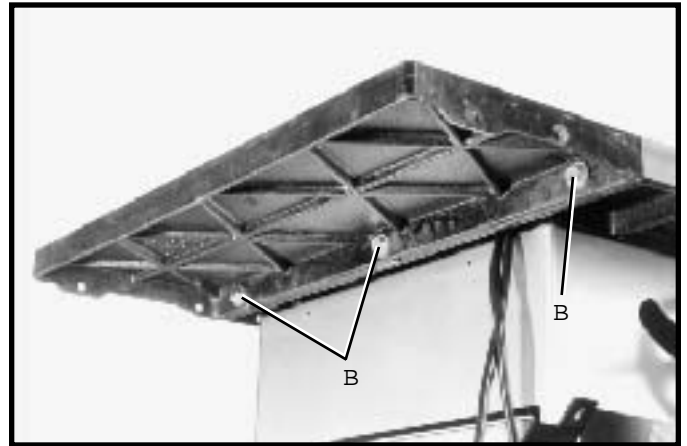


Fig. 37

ASSEMBLING SWITCH TO EXTENSION WING

1 Assemble switch (A) Fig. 38, behind the lip of extension wing (B) with 1/4-20 x 3/4" flat head screw (C), flat washer, and locknut.

2 Fig. 39, illustrates the switch assembled to the extension wing.

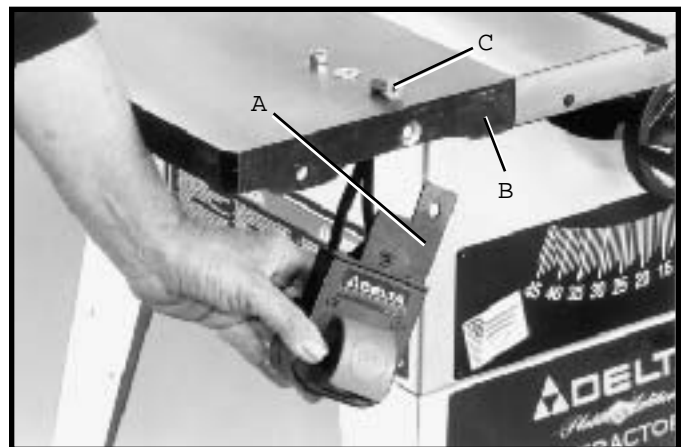


Fig. 38



Fig. 39

ASSEMBLING TABLE MOUNTING BRACKETS TO SAW TABLE

1 Assemble Z-brackets (A) Fig. 40, to the three tapped holes at the inside edge on the right side of saw table (B), using three 7/16-20 x 3/4" hex head screws (C) with flat washers and lockwashers.

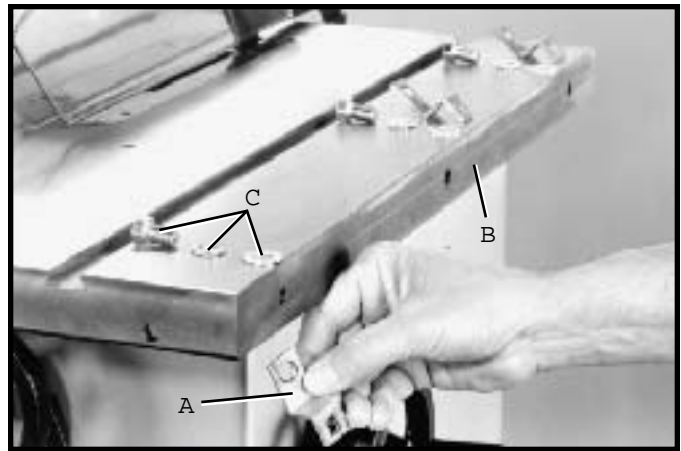


Fig. 40

2 Using a square (D) Fig. 41, make certain the Z-brackets (A) are perpendicular to the saw table as shown. Also, lift upward on Z-brackets (A) while tightening screws (C) to eliminate any play.

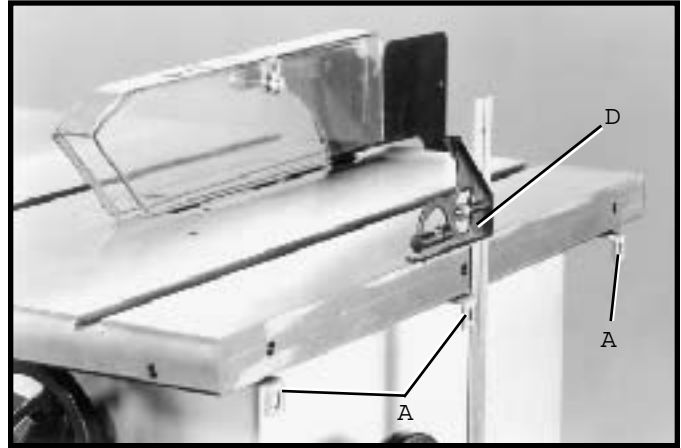


Fig. 41

3 Fig. 42, illustrates the Z-brackets assembled to the saw blade.

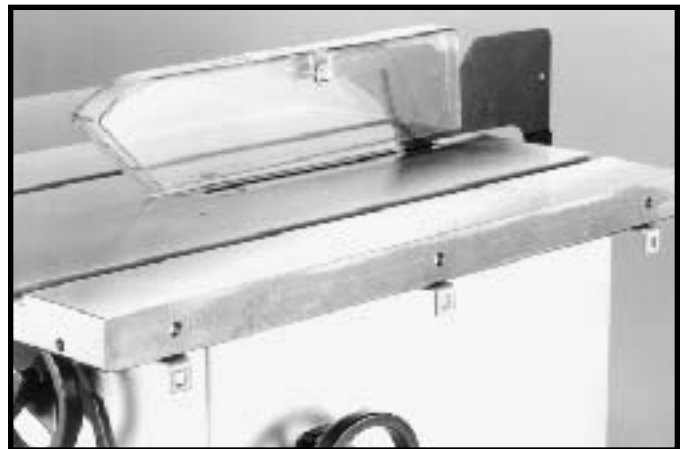


Fig. 42

4 Assemble angle bracket (E) Fig. 43, onto Z-bracket (A) using 1/4-20 x 3/4" carriage bolt (F) with flat washer and hex nut. **IMPORTANT:** The longer leg of angle bracket (E) must be secured to Z-bracket (A). Assemble the remaining two angle brackets to the edge of the table in the same manner.

5 Using a square (G) Fig. 44, set the angle brackets so they are approximately 3/4" from the top of the saw table. Final adjustments to angle brackets will be made later.

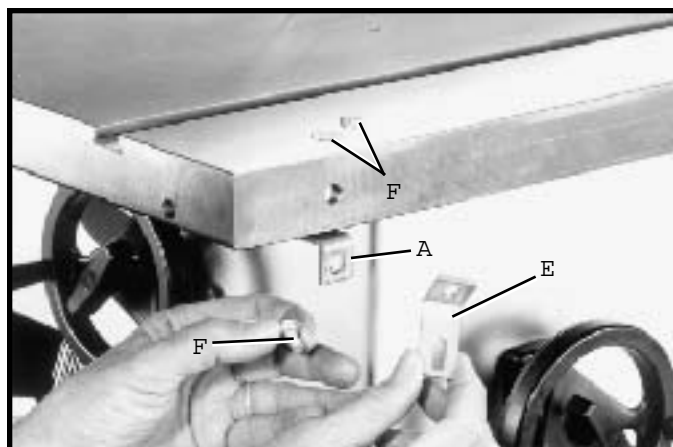


Fig. 43

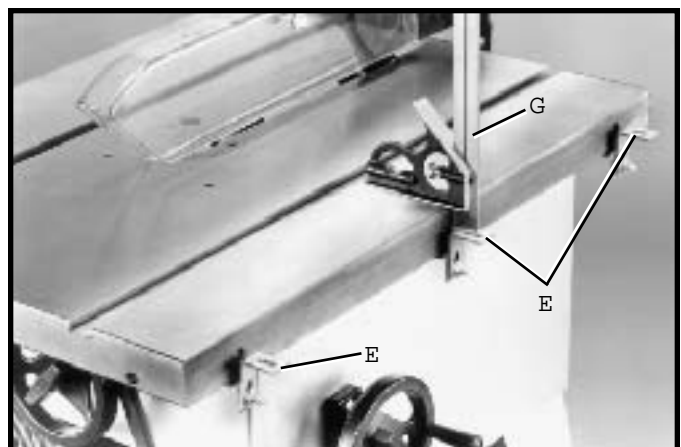


Fig. 44

ASSEMBLING TABLE LEGS AND FRONT TABLE SUPPORT

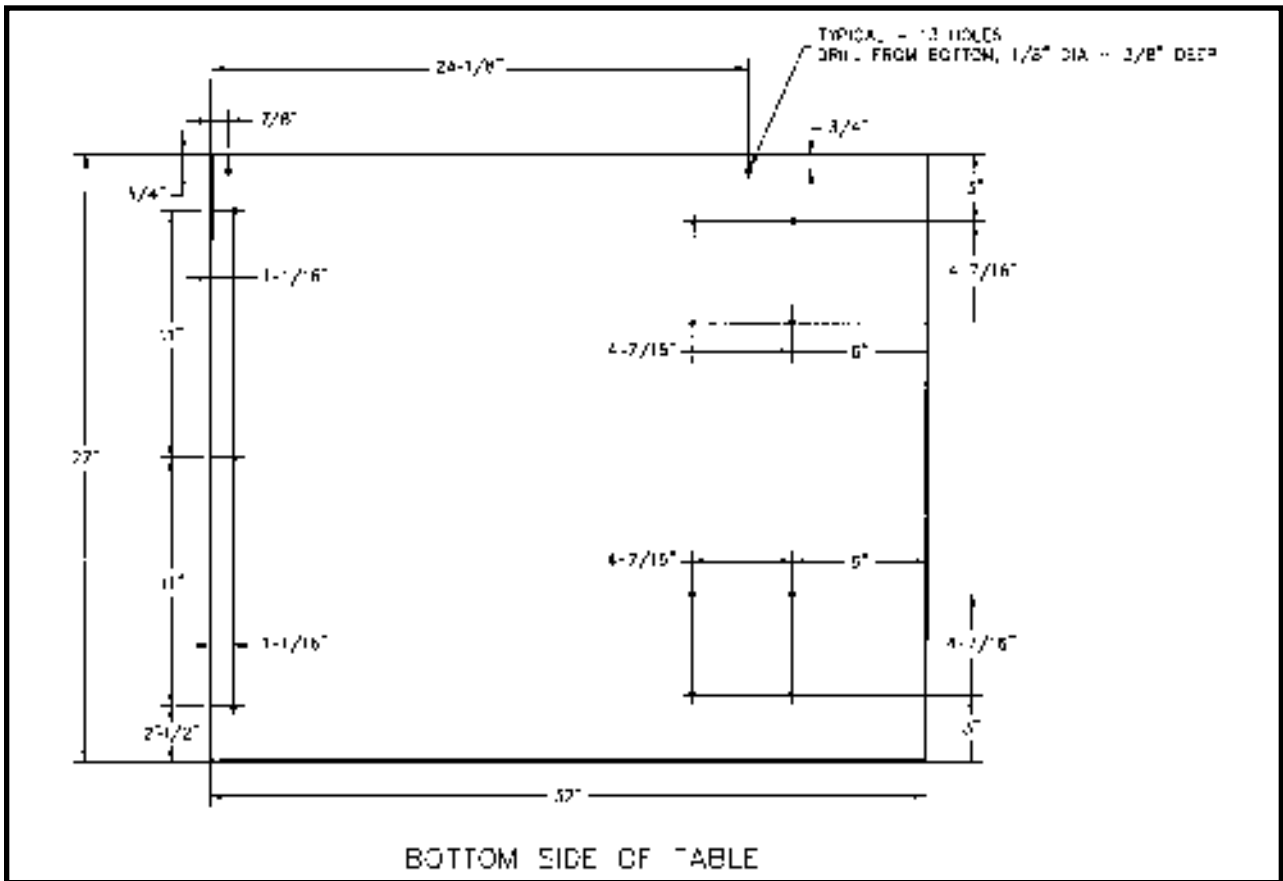


Fig.45

1. The table board supplied will require thirteen 1/8" diameter x 3/8" deep holes to be drilled in the bottom of the table board at the locations illustrated in Fig. 45.

2. Assemble table leg (A) Fig. 46, to table board (B) using four #8 x 7/8" long wood screws (C) as shown. Assemble remaining table leg to the table in the same manner. CAUTION: DO NOT OVER-TIGHTEN LEG MOUNTING SCREWS. Over-tightening screws in particle board may cause them to strip.

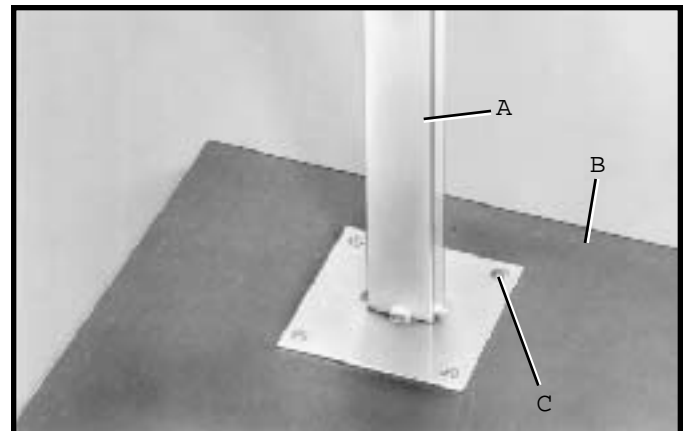


Fig. 46

3. Fasten front table support (D) Fig. 47, to the bottom of table using two 7/8" long wood screws (E) as shown. CAUTION: DO NOT OVER-TIGHTEN SCREWS (E). Over-tightening screws in particle board may cause them to strip. Do not completely tighten the two screws (E) at this time, as adjustment is necessary.

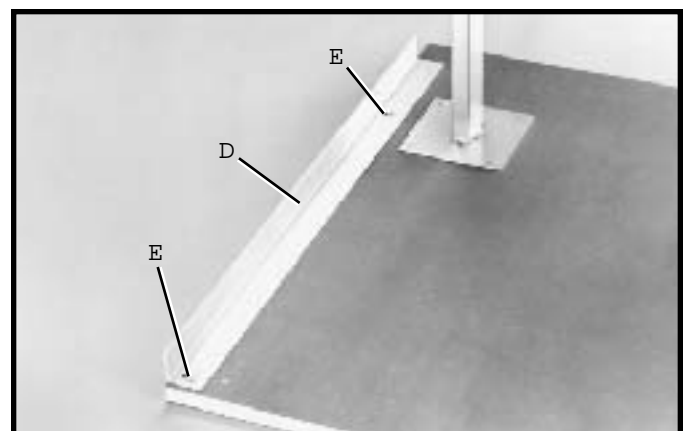


Fig. 47

4. Insert foot adapter (T) Fig. 48, into the bottom of each leg (A). Assemble the 3/8" jam nut (V) Fig. 48, approximately 3/4 of the way onto leveling screw (W) and place a flat washer (X) on the leveling screw. Thread the leveling screw (W) Fig. 48, into foot adapter. Fig. 49, illustrates the foot leveling assembly on the table leg. Assemble the remaining foot assembly to the other table leg in the same manner. NOTE: Height adjustments can be made later.

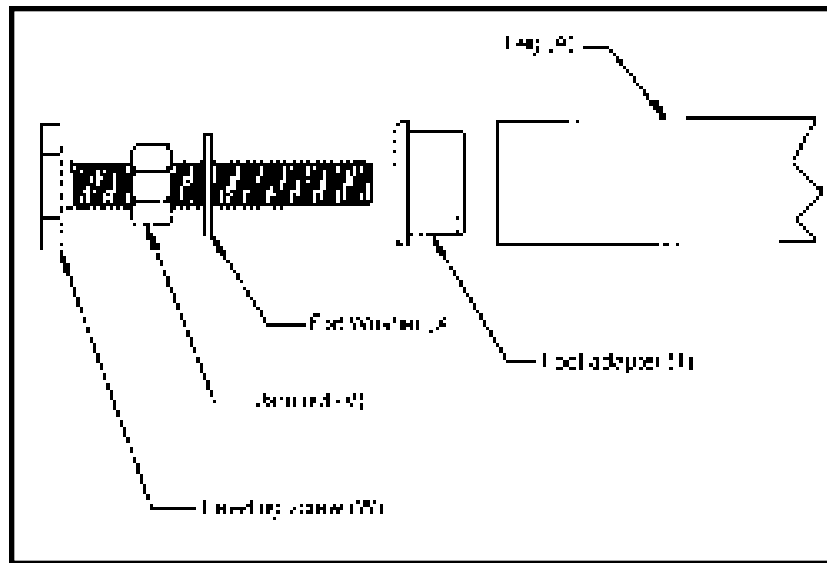


Fig. 48



Fig. 49

5. Assemble shelf support bracket (M) Fig. 50, to the table legs (A) using two U-clamps (N), flat washers, and hex nuts (P). NOTE: Height adjustments to the bracket can be made later.

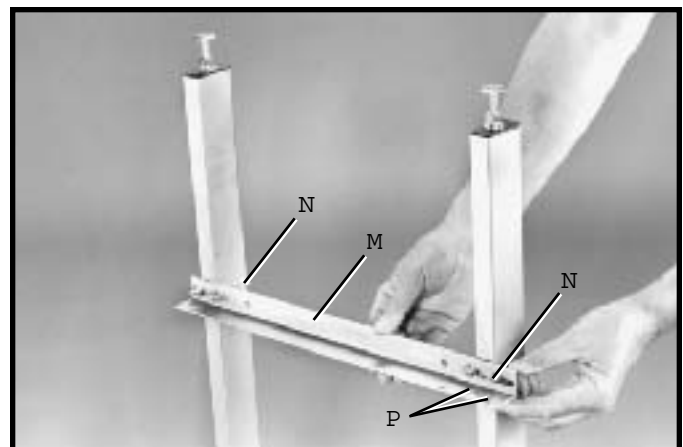


Fig. 50

ASSEMBLING UNIFENCE TABLE TO SAW

1 Position table board (A) Fig. 51, onto angle brackets (B).

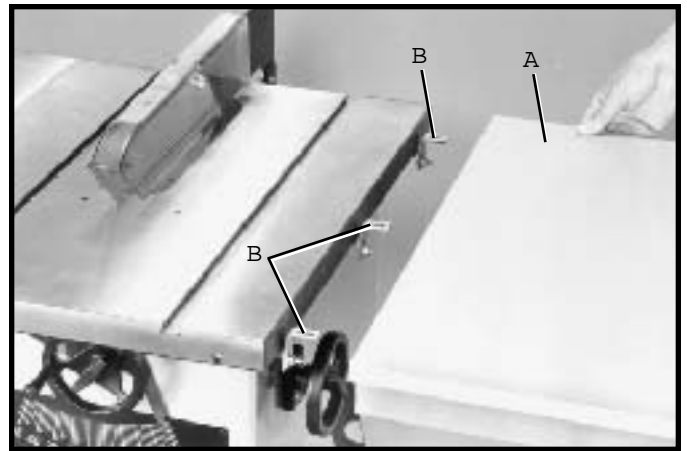


Fig. 51

2 While holding table board firmly against the saw table, fasten table to three angle brackets (B) Fig. 52, using three #8 x 7/8" long wood screws (C). CAUTION: DO NOT OVER-TIGHTEN TABLE MOUNTING SCREWS. Over-tightening screws in particle board may cause them to strip.

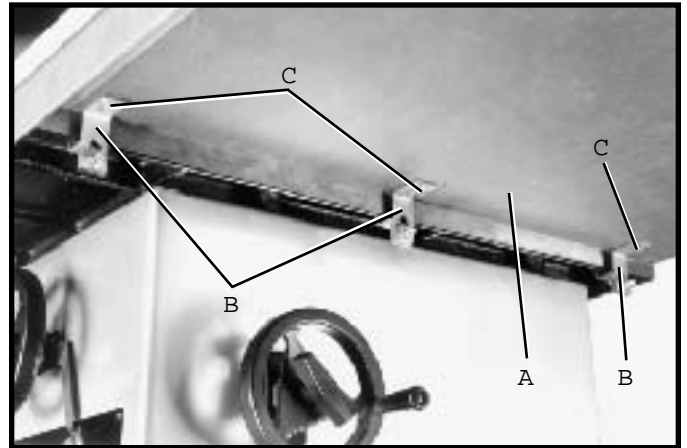


Fig. 52

3 Using a straight edge (D) Fig. 53, make certain the surface of the Unifence table (A) is level with the saw table (F) by adjusting the height of the two leveling screws (E) Fig. 54, at the base of the table legs and adjusting the height of angle brackets (B) Fig. 55. Once the Unifence table is level with the saw table, tighten three hex nuts (G) Fig. 55, and position hex nuts (H) Fig. 54, against the bottom of the table legs to hold the leveling screws in position.

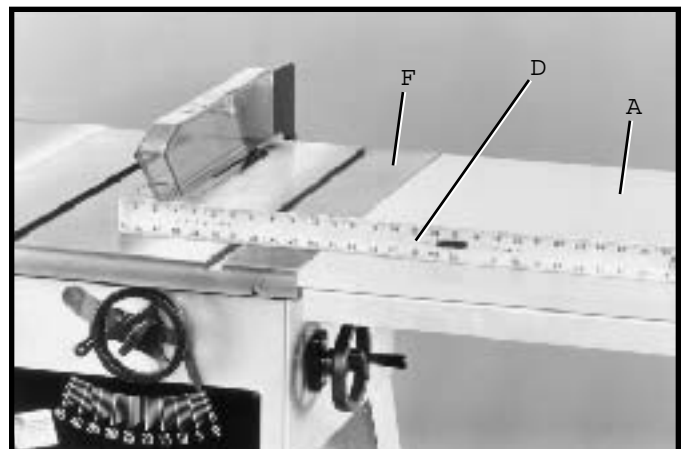


Fig. 53

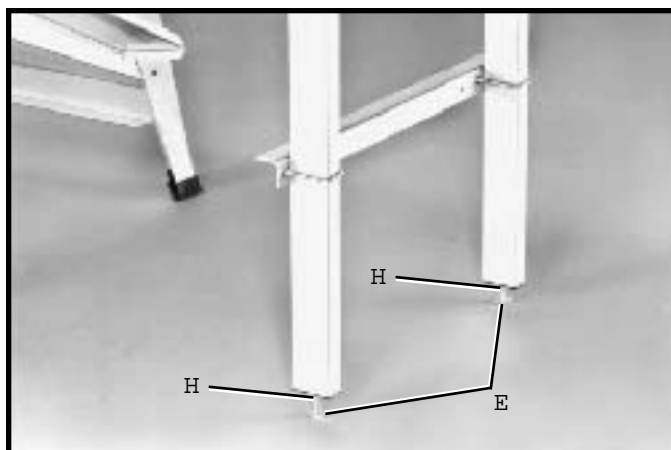


Fig. 54

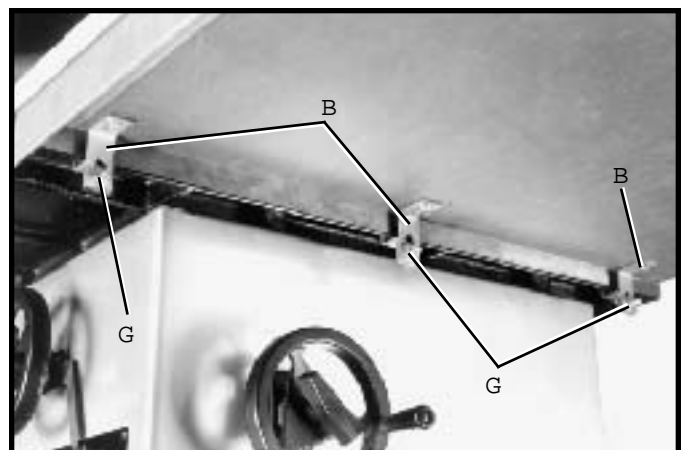


Fig. 55

ASSEMBLING UNIFENCE GUIDE RAIL

1. Locate the cardboard template (A) Fig. 56, from the packing material of the Unifence.
2. Place two 3/8"-24 hex nuts, one of which is shown at (B) Fig. 56, in position on the two tabs of the template (A).
3. Insert template (A) Fig. 56, into the channel at the end of guide rail (C) as shown, until the hex nuts (B) line up with two holes (D) in guide rail.

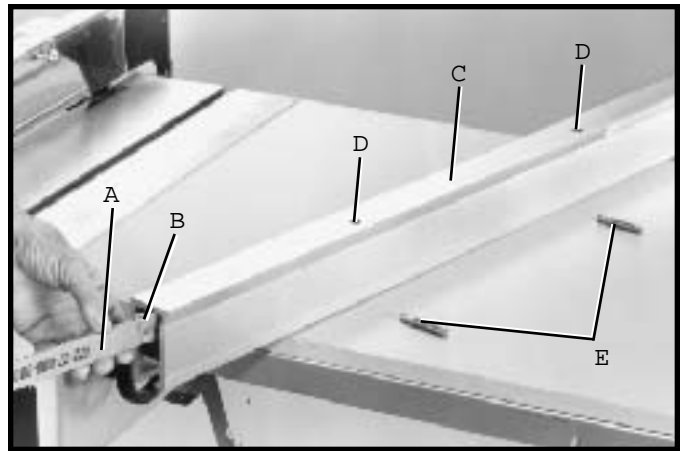


Fig. 56

4. Locate two double-threaded studs (E) Figs. 56 and 57, and thread the short finer threads as shown, into the hex nuts (B) Fig. 56, located on the template (A) inside the channel of the guide rail. Remove the cardboard template from the inside of the guide rail.

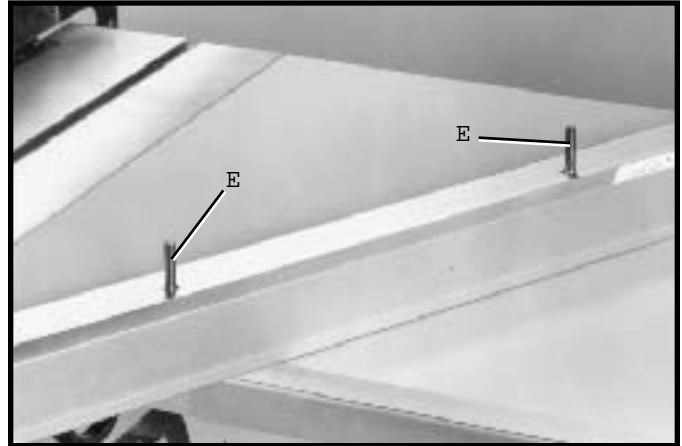


Fig. 57

5. Assemble the guide rail to the saw table by inserting two studs (E) Fig. 58, into the two matching holes (F) in the front of the saw table. Fasten guide rail (C) Fig. 58, to the saw table with two flat washers and hex nuts (G).

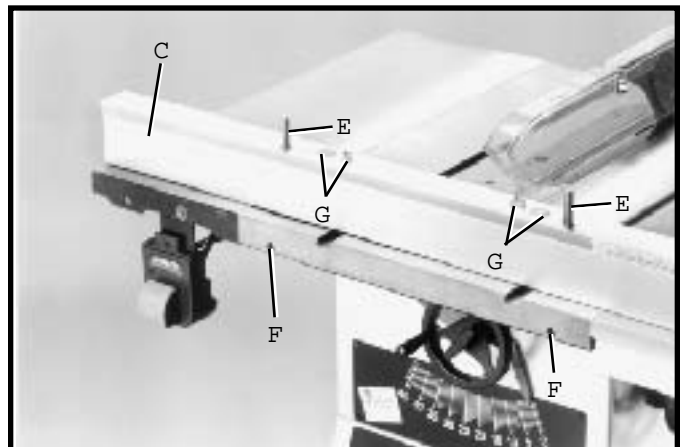


Fig. 58

6. Adjust the guide rail (C) Fig. 59, parallel with the saw table surface by placing a square (H) on the saw table at both the left and right front ends of the table, with the rule of the square against the flat surface on top of the guide rail. The guide rail (C) Fig. 59, can be adjusted up or down slightly at either end. After you are certain the guide rail is parallel with the table surface, firmly tighten the two hex nuts that fasten the guide rail to the table.

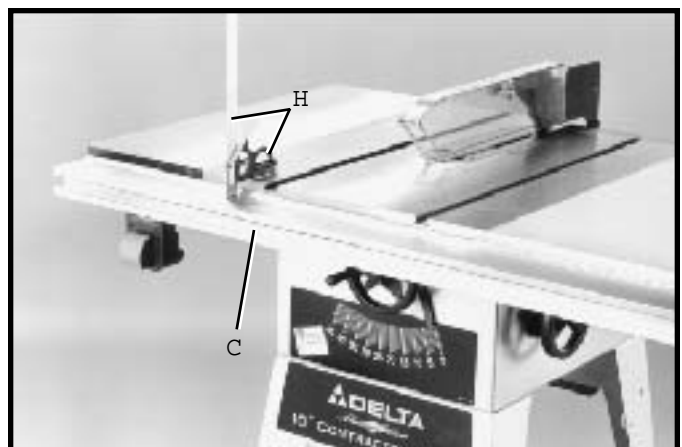


Fig. 59

7. Move the square (H) Fig. 60, to the end of the Unifence table and check to make certain the same distance is kept from the top surface of the extension table (K) to the top surface of the guide rail (C). Move the front table support (L) Fig. 61, against the guide rail (C), and fasten with 1/4-20 x 5/8" long screw and flat washer (M). Tighten two wood screws, one of which is shown at (N) Fig. 61, that fasten the Unifence table to the guide rail.

8. Using a rubber mallet (P) Fig. 62, or a hammer and a block of wood, gently tap end cap (R) into both ends of the guide rail. NOTE: To avoid damage to the guide rail, DO NOT use a metal hammer directly against the guide rail.



Fig. 60

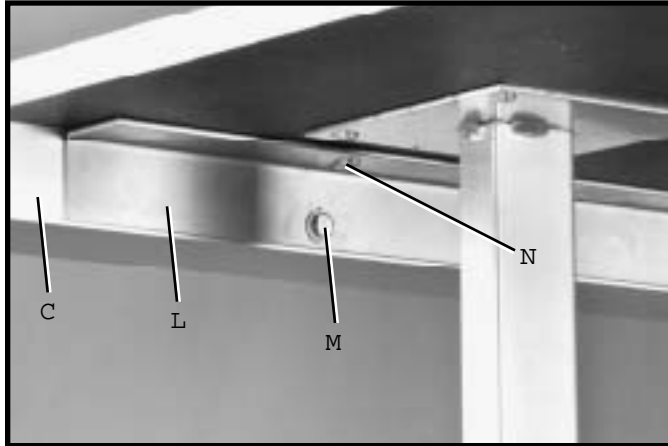


Fig. 61

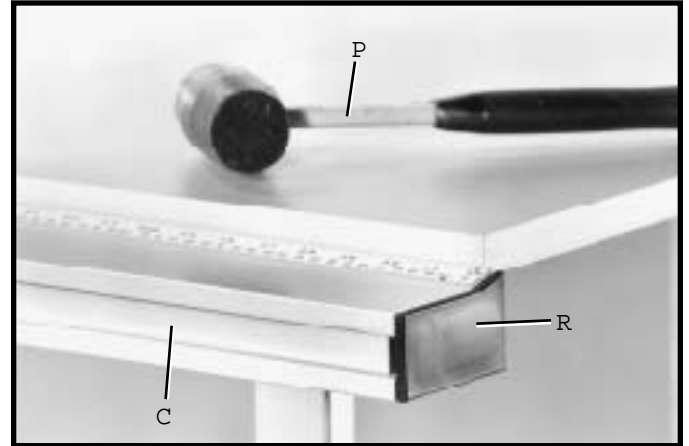


Fig. 62

ASSEMBLING CURSOR TO UNIFENCE BODY

1. Remove two screws and flat washers (A) Fig. 63, and assemble the cursor (B) to the Unifence body (C). Replace the two screws and flat washers (A).

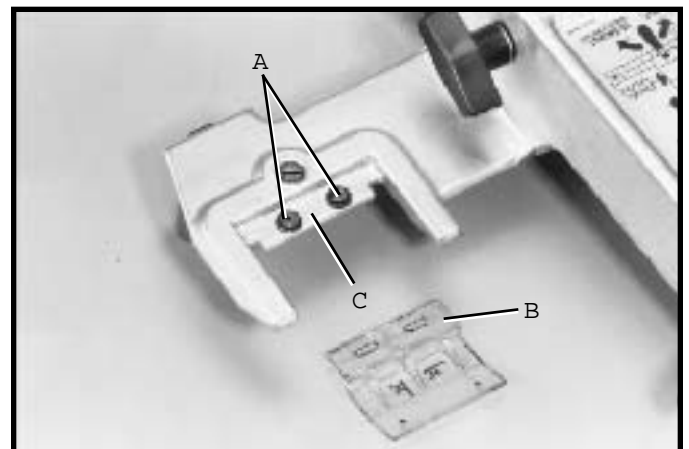


Fig. 63

2. Fig. 64, illustrates the cursor (B) assembled to the Unifence body. Adjustment to the cursor (B) will be made later.

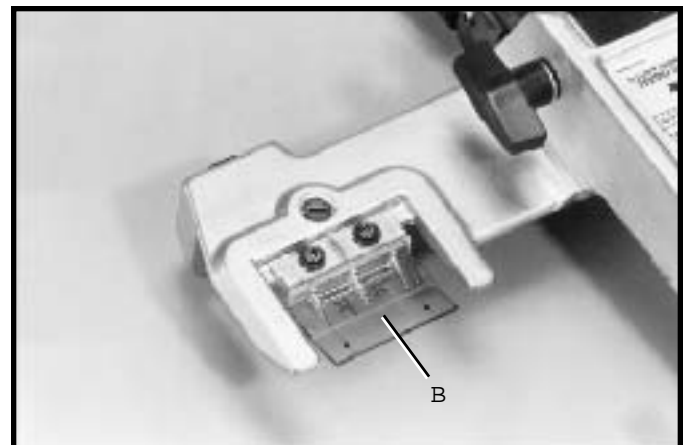


Fig. 64

ASSEMBLING UNIFENCE BODY TO GUIDE RAIL

1 Turn fence body (A) Fig. 65, upside down and lay it on a table or bench. Push handle (B) in against fence body. Make certain the surface (C) of clamp bracket is parallel to the face (D) of the fence body, and that the inside edge (E) of the clamp bracket is parallel to surface (F) of the fence body. Turn handle (B) Fig. 65, if necessary.

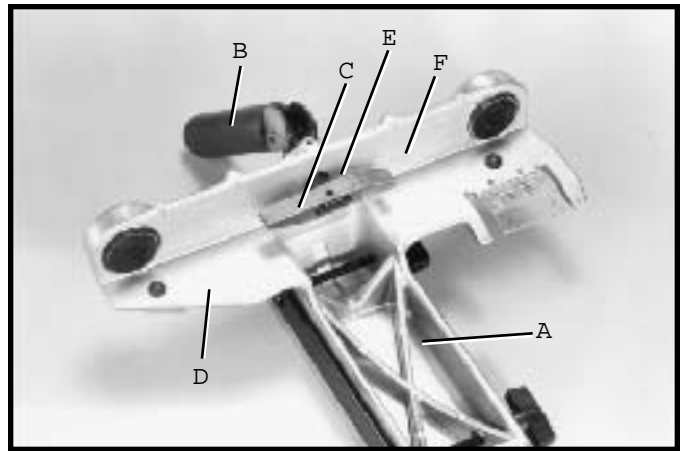


Fig. 65

2 Place fence body (A) Fig. 66, onto the guide rail as shown, making sure clamp bracket is inserted into channel (G) on rail. Notice that the clamp handle (B) is turned to the left indent position.

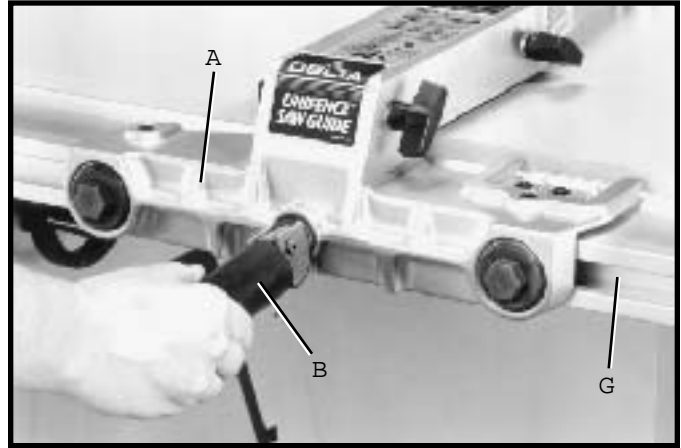


Fig. 66

3 Turn handle (B) Fig. 67, to the right indent position as shown. This will prevent fence clamp from sliding out of the channel (G).

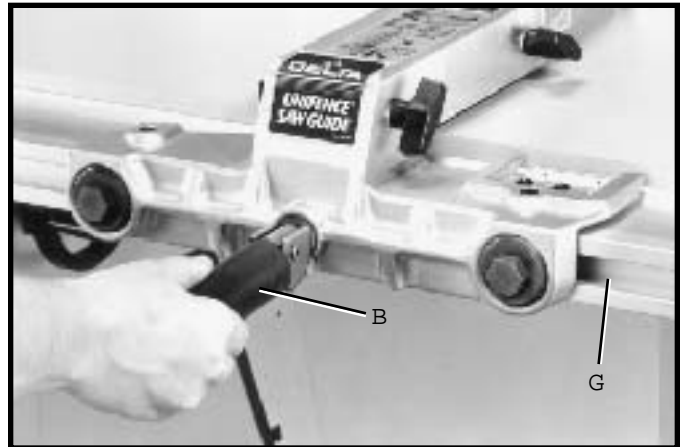


Fig. 67

4 Lock fence body (A) to the guide rail by pushing down on handle (B) as shown in Fig. 68.

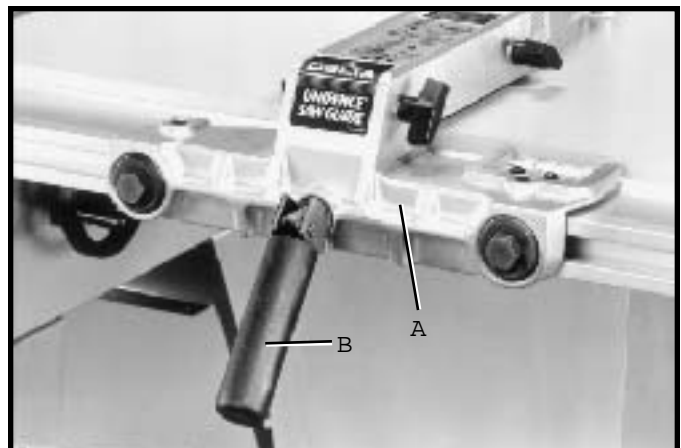


Fig. 68

ASSEMBLING UNIFENCE TO UNIFENCE BODY

1 The fence (A) can be assembled to clamp plate (B) in either the horizontal position as shown in Fig. 69, or the vertical position as shown in Fig. 70. Make certain the two lock knobs (C), are loose and slide fence (A) onto clamp plate (B) as shown. Then tighten the two lock knobs (C).

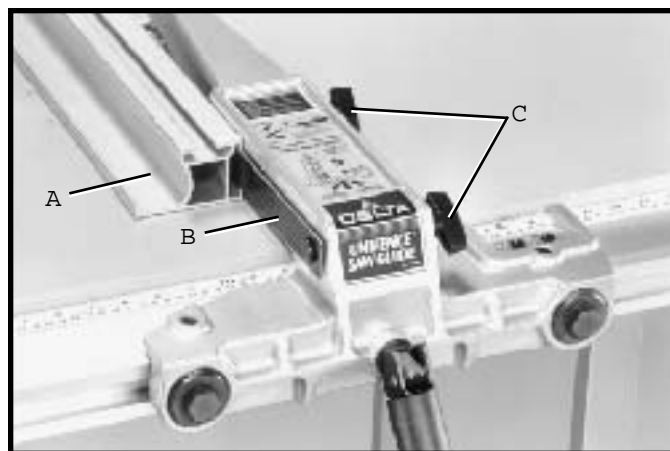


Fig. 69

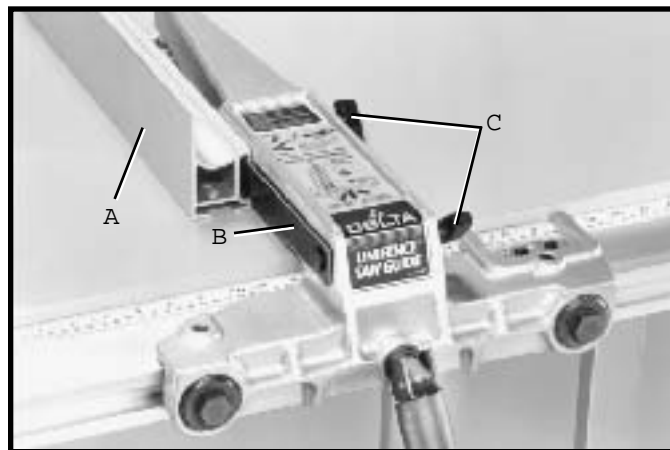


Fig. 70

2 For most normal ripping operations, the bottom of the fence should be positioned slightly above the table surface. Loosen two lock knobs (C) Fig. 71, and place a thin object such as a ruler (D) between the table and fence, as shown. Then tighten two lock knobs (C).

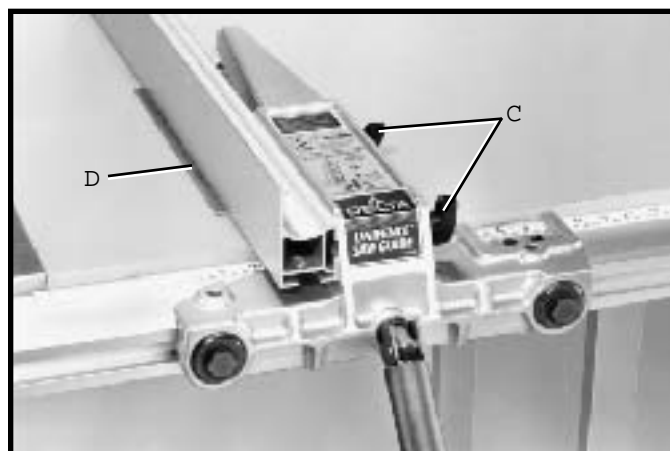


Fig. 71

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.

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-hole 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. 72 shows the correct size 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
120 VOLT	240 VOLT	
25	50	14 AW G
50	100	12 AW G
100	200	Not Recommended
150	300	Not Recommended

Fig. 72

GROUNDING INSTRUCTIONS

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

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

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

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

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

Use only 3-wire extension cords that have 3-prong grounding type plugs and 3-hole receptacles that accept the tool s plug, as shown in Fig. 73.

Repair or replace damaged or worn cord immediately.

120 VOLT SINGLE PHASE OPERATION

1. This tool must be grounded while in use to protect the operator from electric shock. The motor recommended for use with your saw is shipped wired for 120 volts and is intended for use on a circuit that has an outlet which looks like the one illustrated in Fig. 73. The tool is supplied with a three prong grounding type plug which is also illustrated in Fig. 73.

2. If a properly grounded outlet is not available, a temporary adapter, shown in Fig. 74, may be used for connecting the 3-prong grounding type plug to a 2-prong receptacle. The temporary adapter should be used only until a properly grounded outlet can be installed by a qualified electrician. The green colored rigid ear, lug, or the like extending from the adapter must be connected to a permanent ground such as a properly grounded outlet box cover. Whenever the adapter is used, it must be held in place with a metal screw.

NOTE: In Canada, the use of a temporary adapter is not permitted by the Canadian Electric Code.

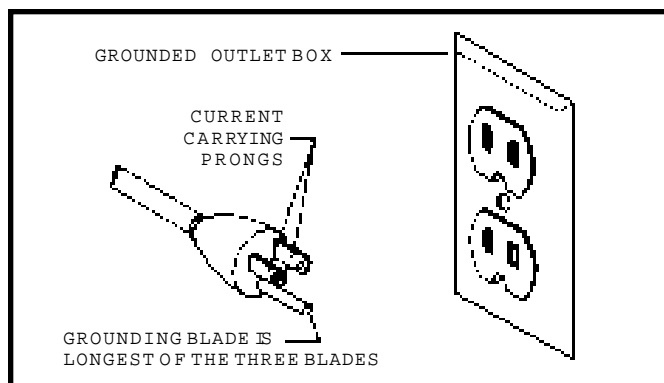


Fig. 73

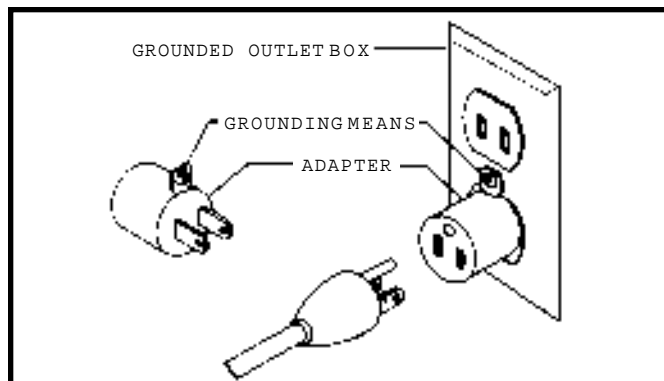


Fig. 74

240 VOLT, SINGLE PHASE OPERATION

The motor supplied with your saw is a dual voltage, 120/240 volt motor. If it is desired to operate your saw at 240 volts, single phase, it is necessary to reconnect the motor leads in the motor junction box by following the instructions given on the motor nameplate. **WARNING: MAKE SURE MOTOR IS DISCONNECTED FROM POWER SOURCE BEFORE RECONNECTING MOTOR LEADS.** It is also necessary to replace the 120 volt plug, supplied with the motor, with a UL/CSA Listed plug suitable for 240 volts and the rated current of the saw as illustrated in Fig. 75. Contact your local Authorized Delta Service Center or qualified electrician for proper procedures to install the plug. The saw must comply with all local and national electrical codes after the 240 volt plug is installed.

The saw with a 240 volt plug should only be connected

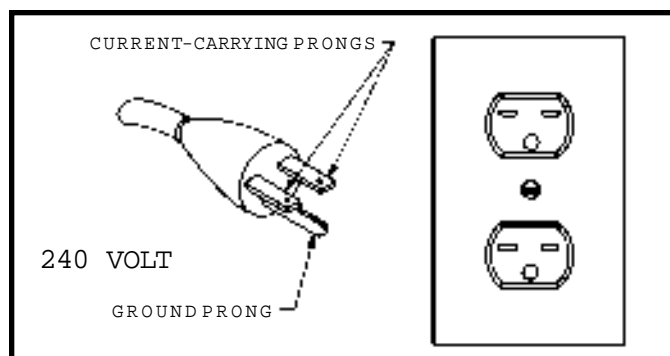


Fig. 75

to an outlet having the same configuration as the plug illustrated in Fig. 75. No adapter is available or should be used with the 240 Volt plug.

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.

FASTENING STAND TO SUPPORTING SURFACE

IF DURING OPERATION THERE IS ANY TENDENCY FOR THE SAW TO TIP OVER, SLIDE OR WALK ON THE SUPPORTING SURFACE, THE SAW STAND CAN BE SECURED TO THE FLOOR SURFACE. THE RUBBER FEET OF THE STAND FEATURE HOLES WHICH ALLOW EASY MOUNTING WITHOUT REMOVING THE SAW FROM THE STAND.

OPERATING CONTROLS AND ADJUSTMENTS

STARTING AND STOPPING SAW

1. The on/off switch is located underneath the switch shield (A) Fig. 76. To turn the saw ON, move switch trigger (B) to the up position.
2. To turn the saw OFF, simply push down on switch shield (A) Fig. 77.

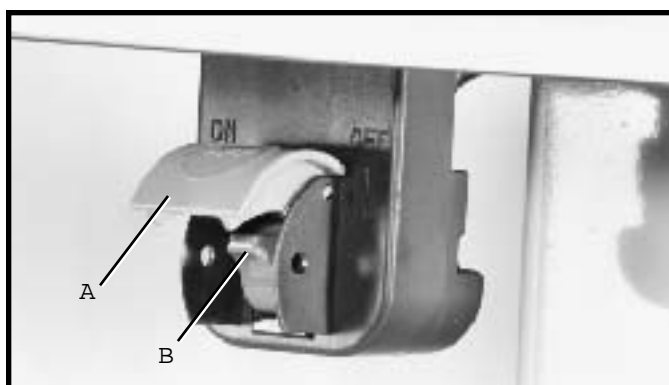


Fig. 76

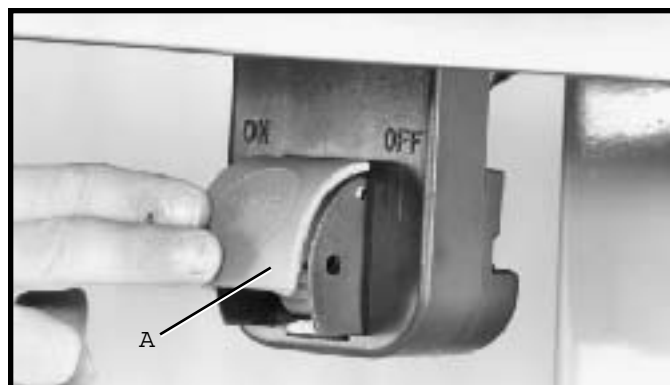


Fig. 77

LOCKING SWITCH IN THE OFF POSITION

We suggest that when the saw is not in use, the on/off switch trigger (B) Fig. 78, be locked in the OFF position using a padlock (C) through the two holes in the switch plate, as shown.

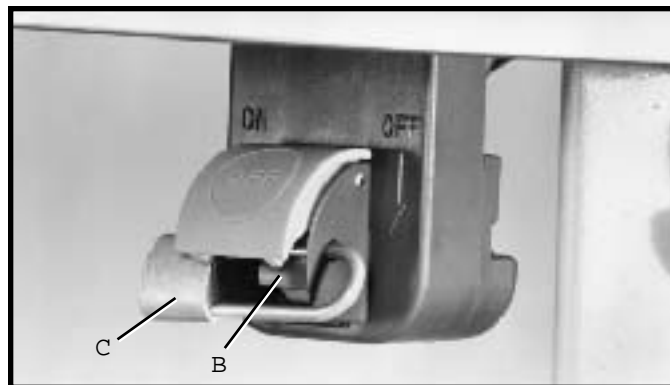


Fig. 78

OVERLOAD PROTECTION

The motor recommended for use with your saw is equipped with a reset overload relay button (A) Fig. 79. 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 (A), which will reset the overload device. The motor can then be turned on again in the usual manner.

RAISING AND LOWERING THE BLADE

To raise the saw blade, loosen lock knob (A) Fig. 80, and turn the blade raising handwheel (B) clockwise. When the blade is at the desired height, tighten lock knob (A).

To lower the blade, loosen lock knob (A) Fig. 80, and turn the handwheel (B) counterclockwise. NOTE: One full turn of the handwheel will change blade height approximately 1/4".

TILTING THE BLADE

To tilt the saw blade for bevel cutting, loosen lock knob (C) Fig. 80, and turn the tilting handwheel (D). When the desired blade angle shown on scale and pointer (E) is obtained, tighten lock knob (C).

ADJUSTING 90 DEGREE AND 45 DEGREE POSITIVE STOPS

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

1. WARNING: When adjusting the positive stops, make certain the machine is disconnected from the power source.
2. Raise the saw blade to its highest position.
3. Set the blade at 90 degrees to the table by turning the blade tilting handwheel counterclockwise as far as it will go.
4. Using a combination square (A) Fig. 81, check to see if the blade is at 90 degrees to the table surface as shown.
5. If the blade is not at 90 degrees to the table, loosen set screw (B) Fig. 81 with supplied wrench (C), and turn the blade tilting handwheel until you are certain the blade is at 90 degrees to the table. Turn set screw (B) clockwise until it bottoms.
6. Adjust the pointer (D) Fig. 82, to point to the zero degree mark on the scale by loosening screw (E), adjusting pointer (D), and tightening screw (E).
7. Turn the blade tilting handwheel clockwise as far as it will go and using a combination square, check to see if the blade is at 45 degrees to the table.
8. If the blade is not at 45 degrees to the table, loosen set screw (F) Fig. 82, and turn blade tilting handwheel until you are certain the blade is 45 degrees to the table. Turn set screw (F) clockwise until it bottoms.

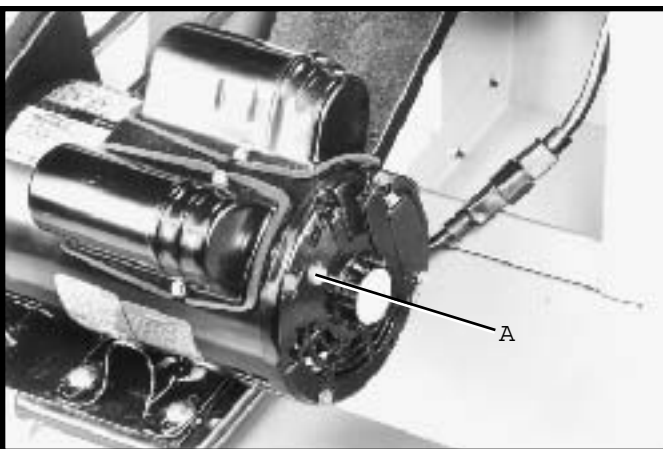


Fig. 79

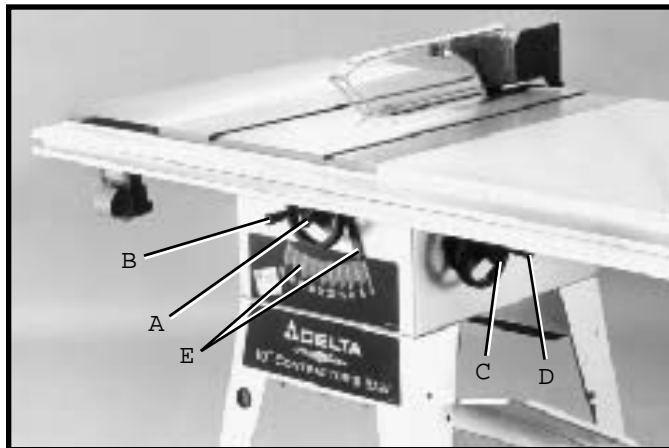


Fig. 80

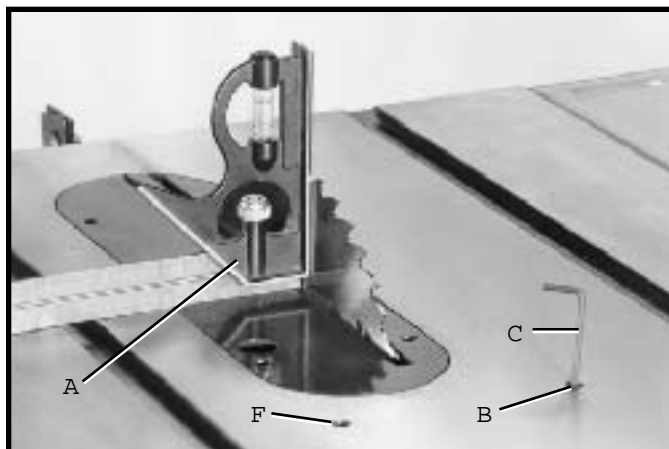


Fig. 81

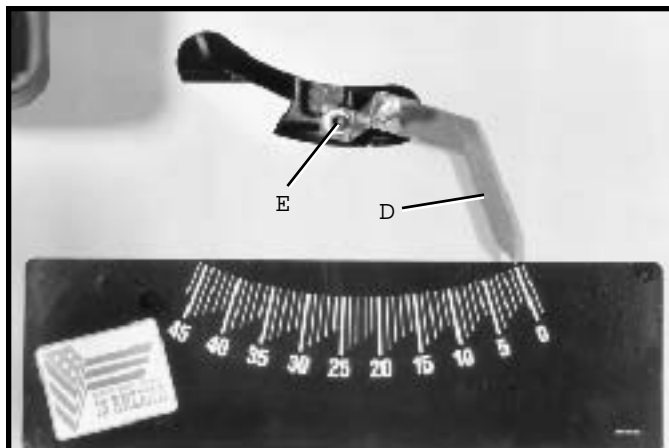


Fig. 82

BACKLASH ADJUSTMENTS FOR BLADE RAISING AND BLADE TILTING MECHANISMS

After a period of extended use, if any play is detected in the blade raising or blade tilting mechanisms, the following adjustments should be made.

1. Make certain the machine is disconnected from the power source.
2. NOTE: The machine has been turned upside down and the blade removed for clarity and safety.
3. Adjusting blade raising mechanism - Loosen lock-nut (A) Fig. 83, and turn eccentric sleeve (B) until all play is removed in mechanism and tighten locknut (A).
4. Adjusting blade tilting mechanism - Loosen lock-nut (C) Fig. 83, and turn eccentric (D) until all play is removed in mechanism and tighten locknut (C).

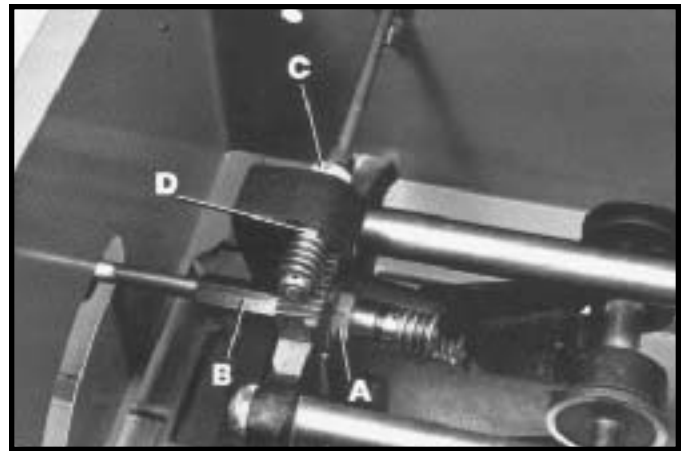


Fig. 83

MITER GAGE OPERATION AND ADJUSTMENT

1. Insert the miter gage bar into the miter gage slot and assemble the washer and lock handle (A) Fig. 84, to the miter gage bar as shown. Insert cap (K) into top of handle (A).

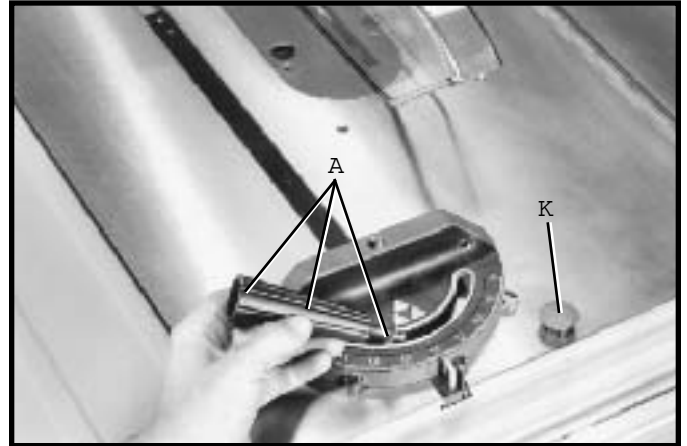


Fig. 84

2. The miter gage is equipped with adjustable index stops at 90 degrees and 45 degrees right and left. Adjustment to the index stops can be made by tightening or loosening the three adjusting screws (B) Fig. 85.

3. To rotate the miter gage, loosen lock knob (A) Fig. 85, and move the body of the miter gage (C) to the desired angle.

4. 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 (D) Fig. 85, must be moved up and out of the way.

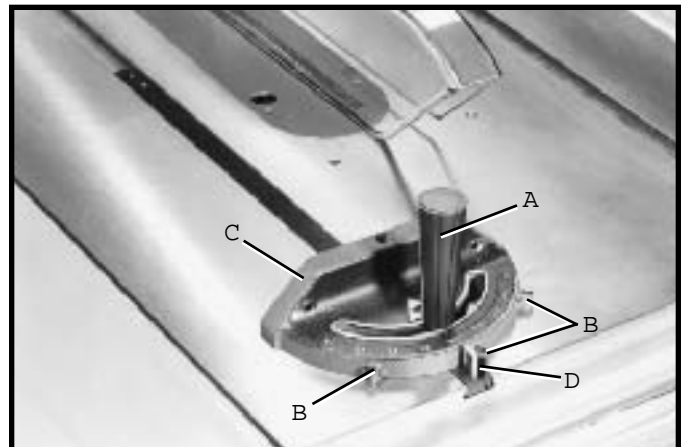


Fig. 85

5. The miter gage is equipped with a special washer (E) Fig. 86, and flat head screw (F), which are to be assembled to the end of the miter gage bar.

6. The head of the miter gage pivots on a special tapered screw (G) that fastens the head to the miter gage bar. If the miter gage head does not pivot freely, or pivots too freely, it can be adjusted by loosening set screw (H) Fig. 86, and turning the screw (G), in or out. Be certain to tighten screw (H) after adjustment is made.

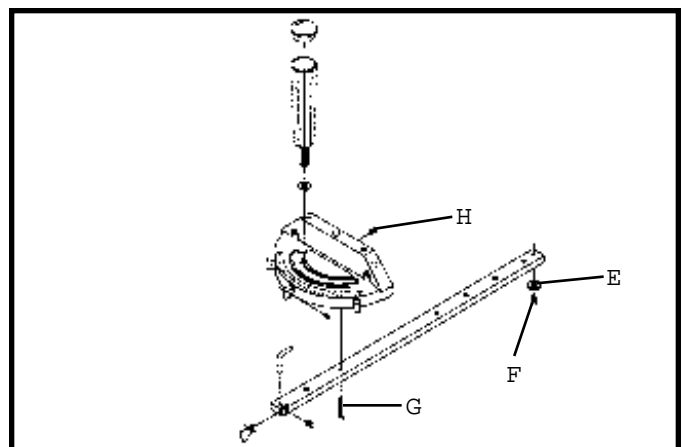


Fig. 86

ADJUSTING TABLE INSERT

MAKE CERTAIN THE MACHINE IS DISCONNECTED FROM THE POWER SOURCE.

Place a straight edge across the table at both ends of the table insert as shown in Fig. 87. The table insert (A) should always be level with the table. If an adjustment is necessary, turn the adjusting screws (B), as needed. Four adjusting screws (B) are supplied in the table insert. The table insert is equipped with a convenient finger hole (C) for easy removal.

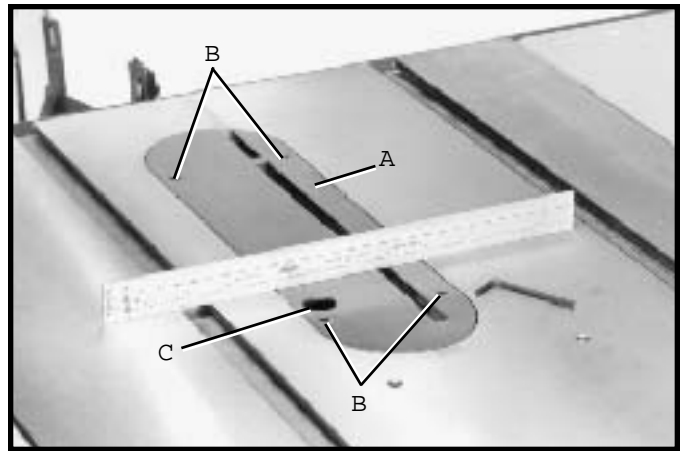


Fig. 87

CHANGING THE SAW BLADE

1. MAKE CERTAIN THE MACHINE IS DISCONNECTED FROM THE POWER SOURCE.
2. NOTE: Two $\frac{7}{8}$ " wrenches are supplied with the saw for changing the saw blade: a box end wrench (A) Fig. 69, and open end wrench (B). Use only 10" saw blades with $\frac{5}{8}$ " arbor holes and rated for 3000 RPM or higher.
3. Remove table insert (C) Fig. 69, and raise saw blade to its maximum height.
4. Place the open end wrench (B) Fig. 70, on the flats of the saw arbor to keep the arbor from turning, and using wrench (A), turn the arbor nut toward the front of the saw. Remove arbor nut, blade flange, and saw blade.
5. Assemble the new blade, making certain the teeth point down at the front of the saw table, and assemble outside blade flange and arbor nut. With wrench (B) Fig. 70, on the flats of the arbor to keep it from turning, tighten arbor nut by turning wrench (A) counterclockwise.
6. Replace table insert.

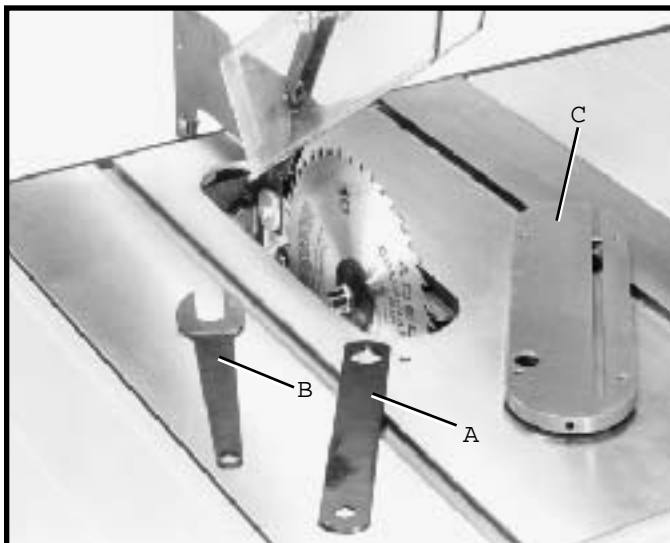


Fig. 88



Fig. 89

STORING THE MITER GAGE , RIP FENCE , AND ARBOR WRENCHES

- 1 When not in use, the miter gage (A) Fig. 90, can be stored through the hole located at the front side of the stand as shown.
- 2 The rip fence (B) Fig. 90, can be conveniently stored out-of-the-way on the stamped ledges on the right side of the saw stand.
- 3 Arbor wrenches (C) Fig. 91, can be stored on one of the two notched legs.

DUST CHUTE

The saw stand support panel (D) Fig. 91, also serves as a natural built-in dust chute. This dust chute (D) allows the sawdust to conveniently escape out the rear of the saw stand and away from the work area.

FENCE OPERATION

- 1 Before operating fence, make sure the fence is adjusted parallel to miter gage slot, as explained later on in this manual.
- 2 For most normal ripping operations of standard size lumber, the fence is used in the vertical position, as shown in Fig. 92.
- 3 When ripping thin stock, it is sometimes more convenient to use the fence in the horizontal position, as shown in Fig. 93.

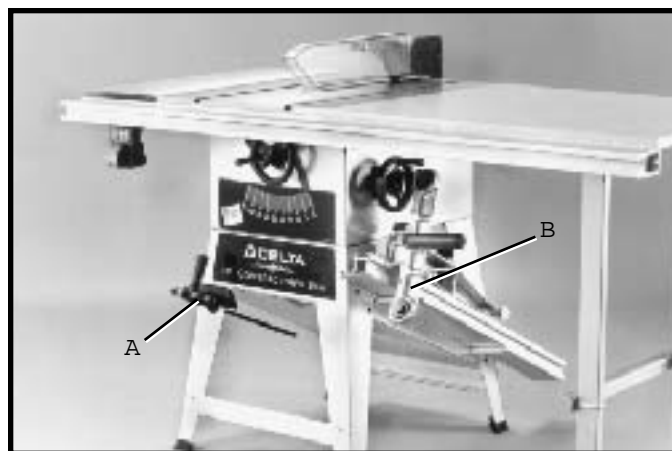


Fig. 90

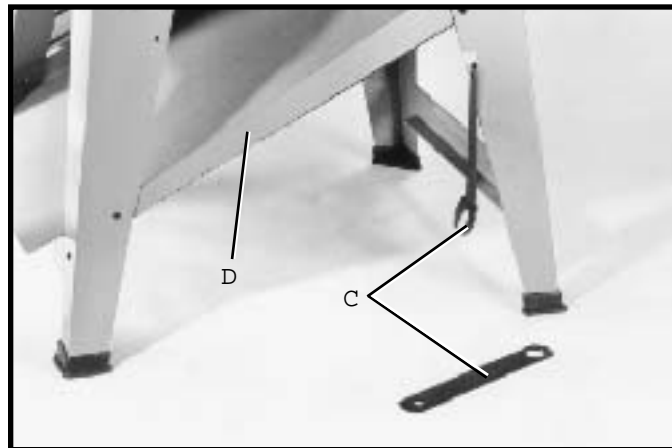


Fig. 91

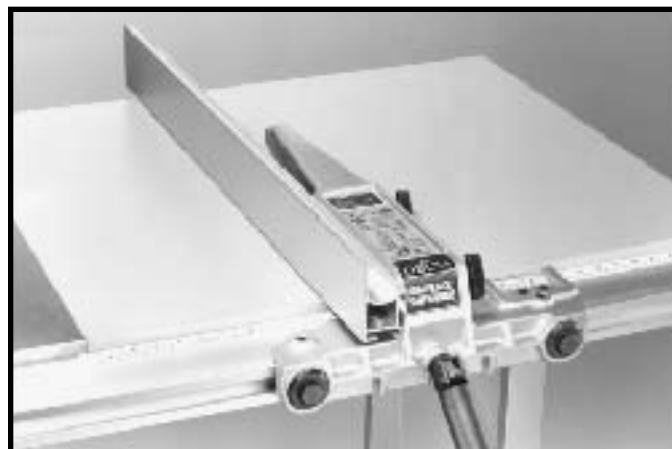


Fig. 92



Fig. 93

4 To move the fence along the guide rail, simply lift up clamp lever (A), as shown in Fig. 94, slide fence to desired position on the rail, and push down on clamp lever (A) to lock fence in place.

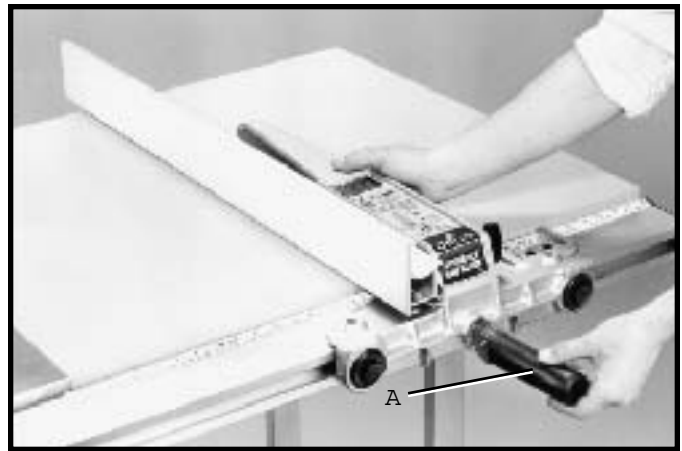


Fig. 94

5 The distance the fence is positioned away from the blade is indicated by the two witness lines (B) and (C) Fig. 95, located on the cursor (D). The witness lines (B) and (C) easily indicate the distance the fence is positioned away from the saw blade. Witness line (B) indicates the distance the fence is away from the blade when the fence is in the horizontal position, and witness line (C) indicates the distance the fence is away from the blade when the fence is in the vertical position. If it is necessary to adjust cursor (D), make a test cut with the fence in either the vertical or horizontal position, measure the distance of the finished cut and move the cursor (D) by loosening the two screws (E) Fig. 95. After adjustment is completed tighten the two screws (E).

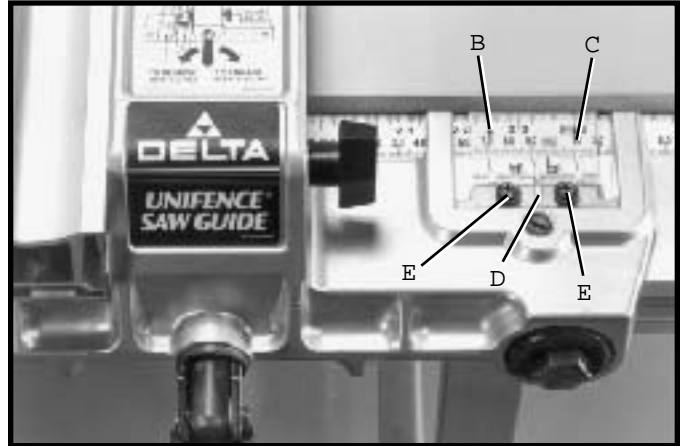


Fig. 95

6 To remove the fence and fence body assembly (F) Fig. 96, from the guide rail, lift up on fence clamping lever (A) and turn lever (A) to the left indent position. The fence assembly (F) can then be pulled straight off the guide rail and removed, as shown in Fig. 96.

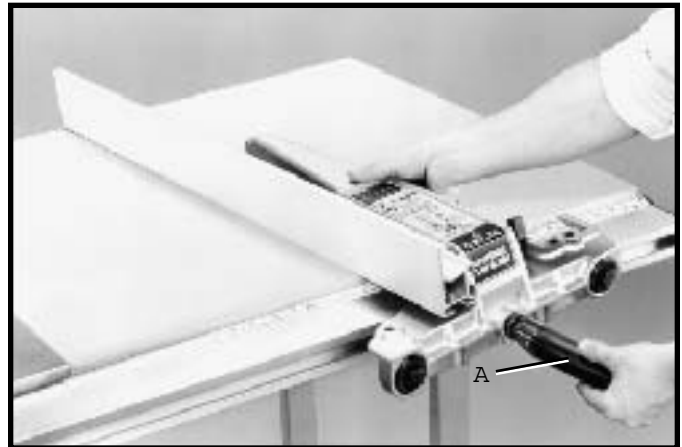


Fig. 96

ADJUSTING FENCE PARALLEL TO MITER GAGE SLOTS

The fence (A) Fig. 97, should be adjusted so it is parallel to miter gage slots (B). To check and adjust, move the fence (A) until the bottom front edge of the fence is in line with the edge of the miter gage slot as shown, and push down on fence clamping lever (C). Check to see if the fence is parallel to the miter gage slot the entire length of the table. If the rear of the fence must be moved, slightly tighten or loosen one of the adjustment plugs (D) or (E) Fig. 97, using the adbor wrench or 7/8 wrench, until the fence is parallel with the miter gage slot. **IMPORTANT: DO NOT OVERTIGHTEN ADJUSTMENT PLUGS (D) AND (E) FIG. 59. VERY LITTLE MOVEMENT OF THESE ADJUSTMENT PLUGS IS NECESSARY WHEN ADJUSTING THE FENCE PARALLEL WITH THE MITER GAGE SLOT.**

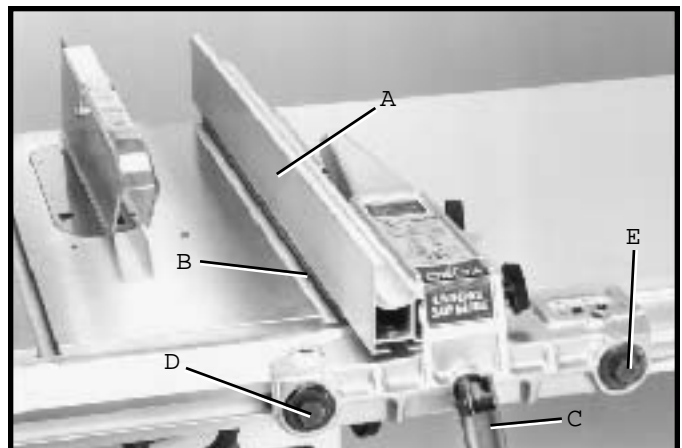


Fig. 97

ADJUSTING FENCE 90 DEGREES TO TABLE

The fence must be adjusted so that the face of fence (A) Fig. 98, is 90 degrees to the table. To check if the fence is 90 degrees to the table, place a square (B) on the table with one end of the square against the fence, as shown. If an adjustment is necessary, tighten or loosen one of two screws (C) or (D) using the wrench supplied, until the fence is 90 degrees to the table. IMPORTANT: VERY LITTLE MOVEMENT OF THESE SCREWS (C) AND (D) IS NECESSARY TO MAKE THIS ADJUSTMENT.

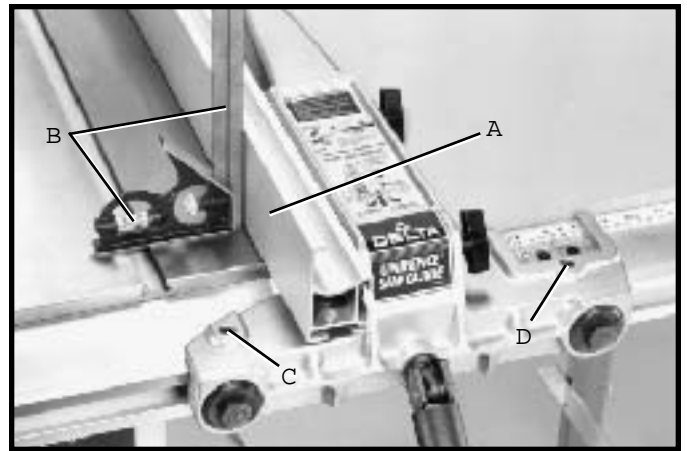


Fig. 98

ADJUSTING CLAMPING ACTION OF FENCE LOCKING HANDLE

When the fence locking handle (A) is pushed to the down position, as shown in Fig. 99, the fence body (B) should be completely clamped to the guide rail. If the fence body (B) is not completely clamped to the guide rail when the handle (A) is in the position shown in Fig. 99, lift up on locking handle (A) Fig. 100, and slightly tighten two adjustment plugs (C) using arbor wrench or 7/8" wrench. Adjustment plugs (C) should be tightened an equal amount. Check to see if the fence body (B) is completely fastened to the rail by pushing down on locking lever (A). Adjust further if necessary. IMPORTANT: AFTER ADJUSTING THE CLAMPING ACTION OF THE FENCE LOCKING HANDLE, CHECK TO SEE IF THE FENCE IS PARALLEL TO THE MITER GAGE SLOT AND ADJUST IF NECESSARY.

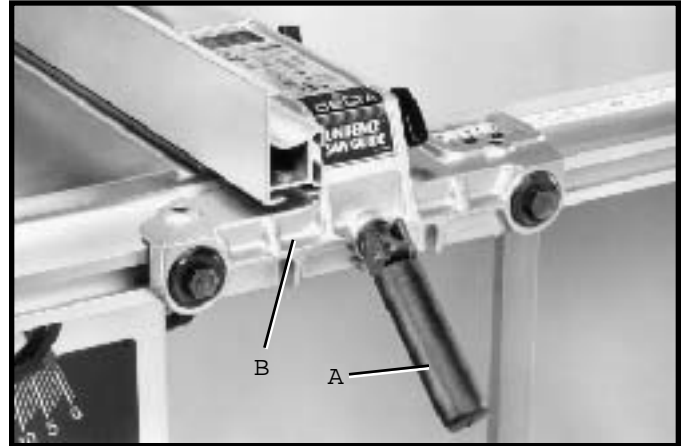


Fig. 99

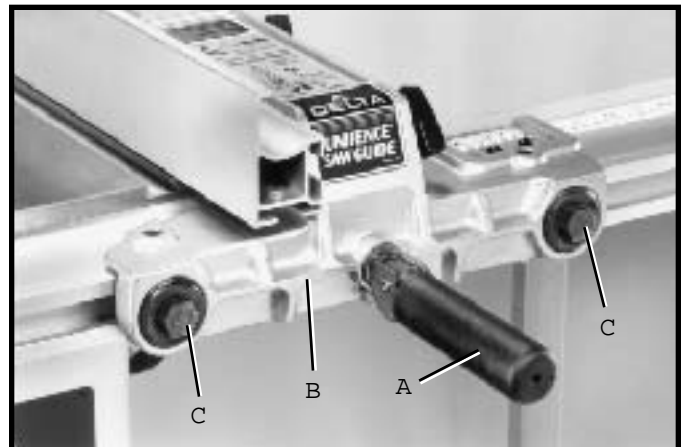


Fig. 100

REPOSITIONING MOTOR FOR STORAGE

When the saw is not in use, the motor can be repositioned so it hangs straight down at the rear, enabling you to move the saw against a wall. This can be accomplished by removing the belt and repositioning the motor and motor mounting plate, as shown in Fig. 101.

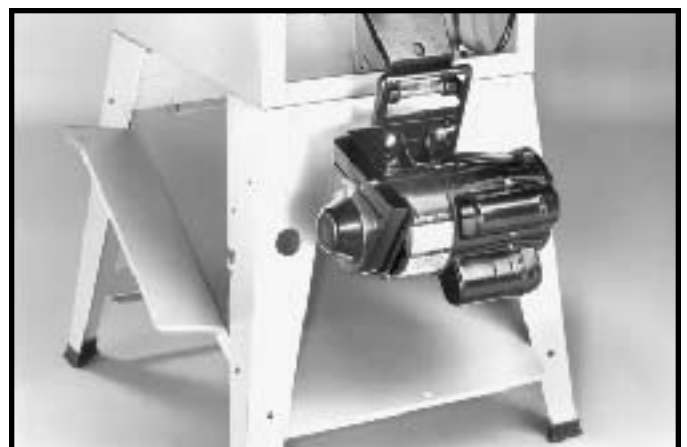


Fig. 101

OPERATIONS

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.

NOTE: THE USE OF ATTACHMENTS AND ACCESSORIES NOT RECOMMENDED BY DELTA MAY RESULT IN THE RISK OF INJURY TO PERSONS.

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. 102. The miter gage may be used in either table slot. When bevel cutting (blade tilted), use the left miter gage slot so that the blade tilts away from the miter gage and your hands.

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.

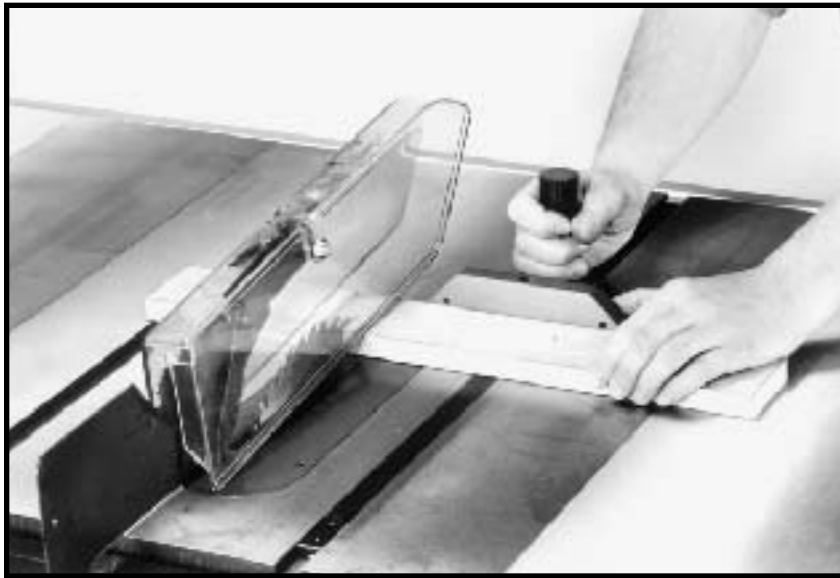


Fig. 102

For added safety and convenience the miter gage can be fitted with an auxiliary wood-facing (C), as shown in Fig. 103, that should be at least 1 inch higher than the maximum depth of cut, and should extend out 12 inches or more to one side or the other depending on which miter gage slot is being used. This auxiliary wood-facing (C) can be fastened to the front of the miter gage by using two wood screws (A) through the holes provided in the miter gage body and into the wood-facing.

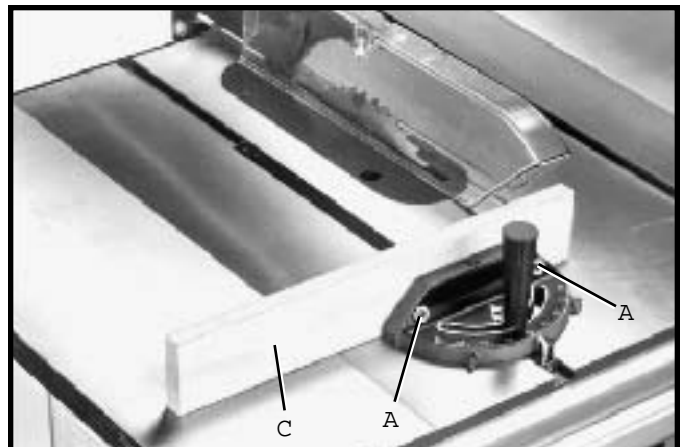


Fig. 103

USING THE FENCE AS A CUT-OFF GAGE

The fence can be used as a cut-off gage when cross cutting a number of pieces to the same length. IMPORTANT: WHEN USING THE FENCE AS A CUT-OFF GAGE, IT IS VERY IMPORTANT THAT THE REAR END OF THE FENCE BE POSITIONED IN FRONT OF THE SAW BLADE.

When using the fence as a cut-off gage, simply position the fence (A) to the front as shown in Fig. 104, or purchase the accessory 34-878, 12 long fence (B), as shown in Fig. 105. Fig. 106, illustrates a typical operation using the accessory 34-878 12 long fence (B) as a cut-off gage.

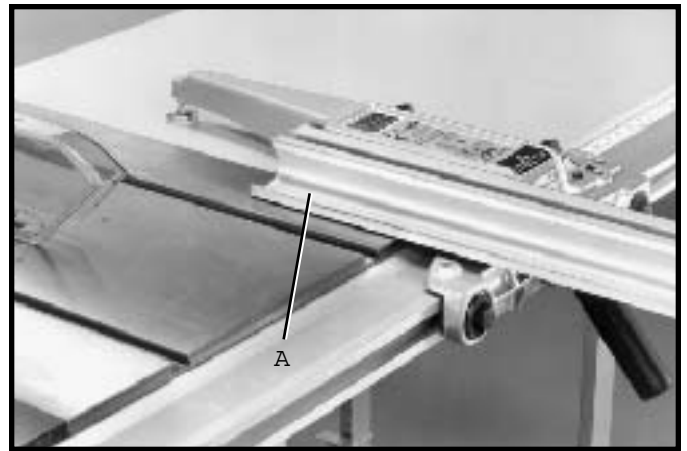


Fig. 104

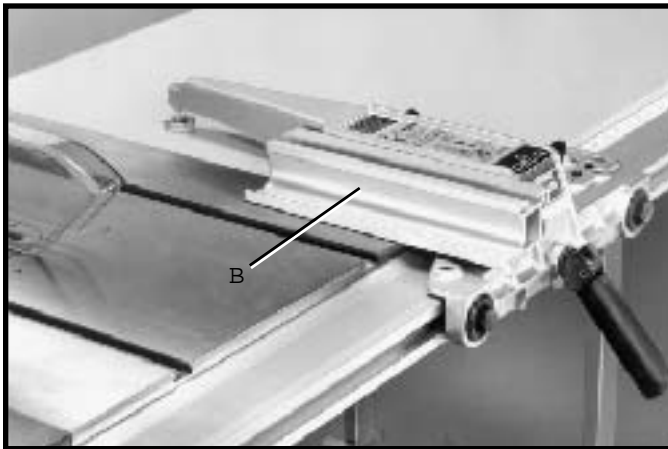


Fig. 105



Fig. 106

RIPPING WITH THE UNIFENCE

Ripping is the operation of making a lengthwise cut through a board, as shown in Fig. 107, 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 blade guard must be used. On Delta saws, the guard has anti-kickback fingers to prevent kickback and a splitter to prevent the saw kerf from closing and binding the blade.

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. 107. 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 end of the rear 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.



Fig. 107

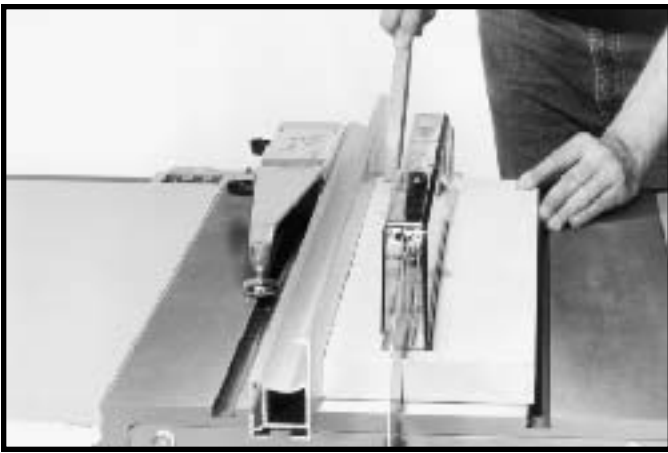


Fig. 108

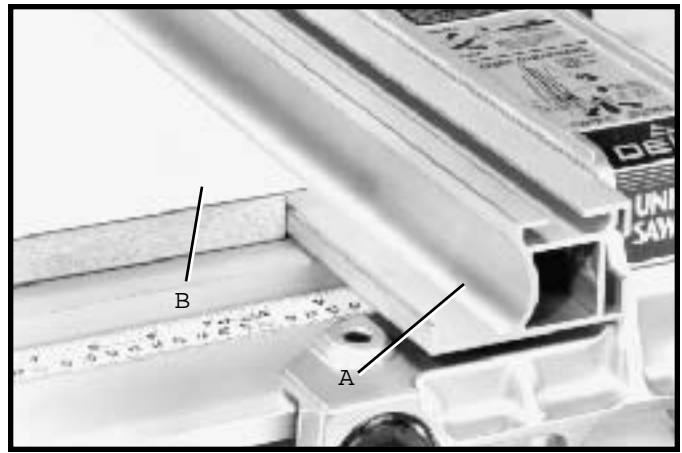


Fig. 109

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. 108. 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 THE UNIFENCE** and use a push stick.

When ripping material with a veneer facing that extends over the material, the fence (A) should be in the horizontal position with the veneer (B) extending over the lip of the fence, as shown in Fig. 109.

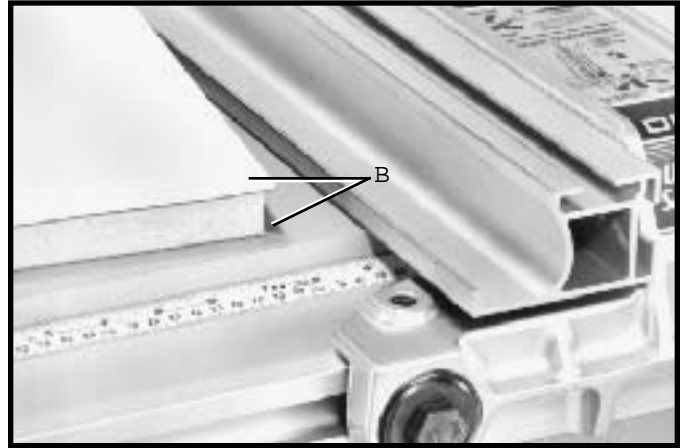


Fig. 110

When ripping material with a veneer facing and the material is not thick enough for the veneer to extend over the lip of the fence or if the veneer facing (B) is on both sides of the material, as shown in Fig. 110, the fence can be positioned slightly above the surface of the table. The veneer can be placed between the fence and the table or the veneer can straddle the fence with the material

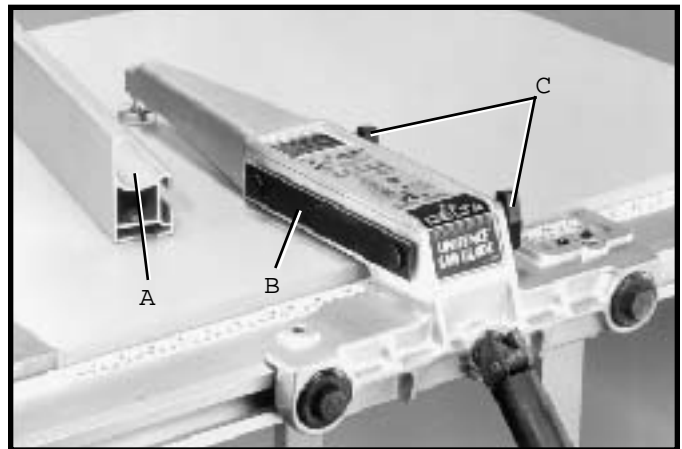


Fig. 111

RIPPING ON LEFT SIDE OF SAW BLADE

In some cases it may be desirable to use the fence on the left side of the saw blade. This is easily accomplished by repositioning the fence (A) Figs. 111 and 112, fence clamp bar (B), and lock knobs (C) so that the fence (A) will be attached to the right side of the fence body, as shown in Fig. 112. The complete fence assembly (D) Fig. 112, can easily be moved to the left side of the saw table.

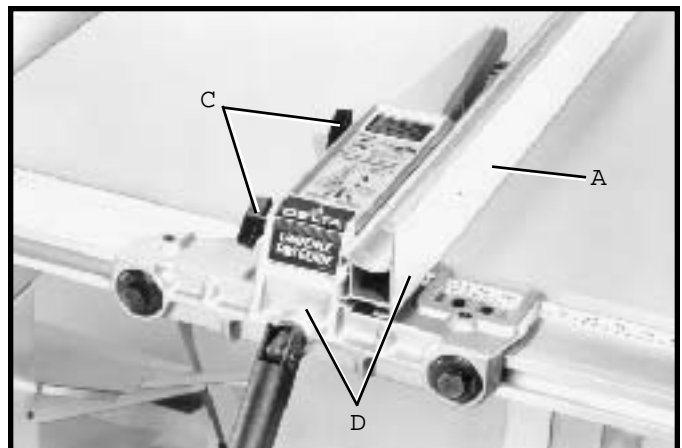


Fig. 112

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. 113. 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.

IMPORTANT: For certain cutting operations such as dadoing and moulding where you are not cutting completely through the workpiece, the blade guard and splitter assembly cannot be used. Simply loosen screws (G) and (H) Fig. 114. Lift up and swing blade guard and splitter assembly (W) Fig. 115, to the rear of the saw as shown in Fig. 115. **CAUTION:** Always return and fasten the blade guard and splitter assembly to its proper operating position for normal thru-sawing operations.

The moulding cutterhead (A) Fig. 116, is assembled to the saw arbor as shown. Also, the accessory moulding cutterhead table insert (B), must be used in place of the standard table insert.

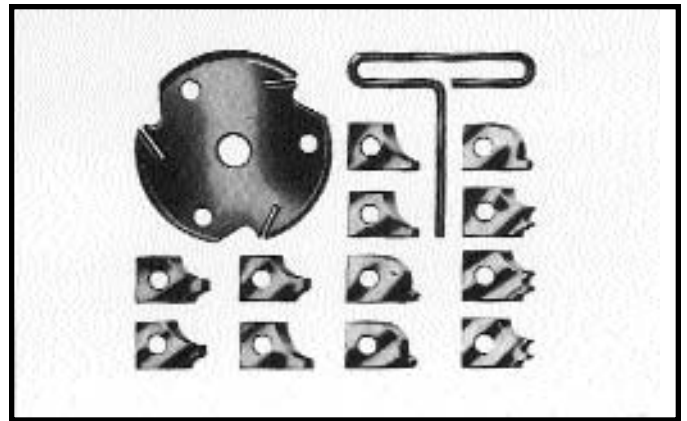


Fig. 113

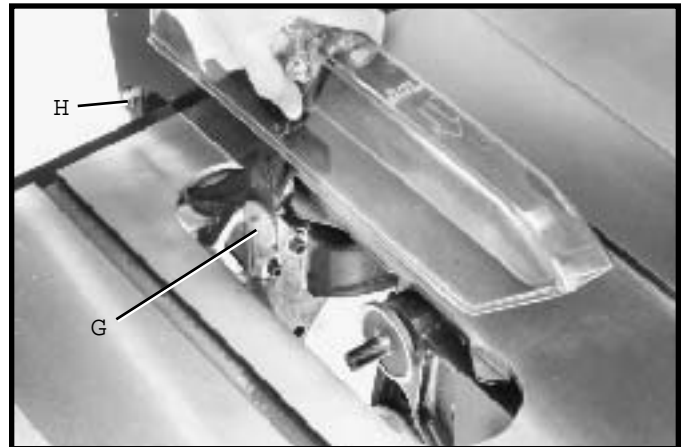


Fig. 114

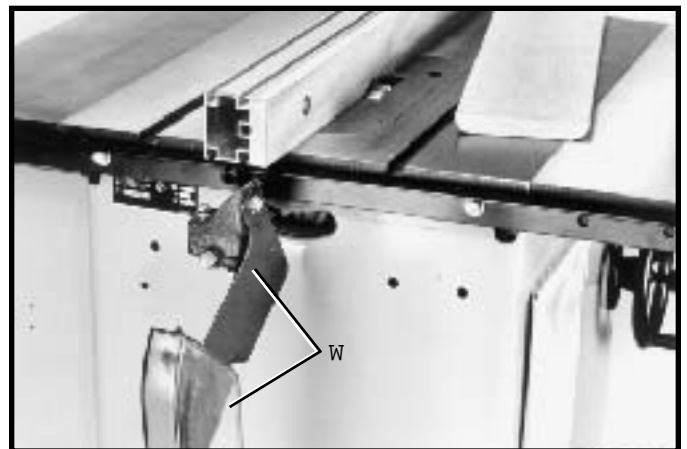


Fig. 115

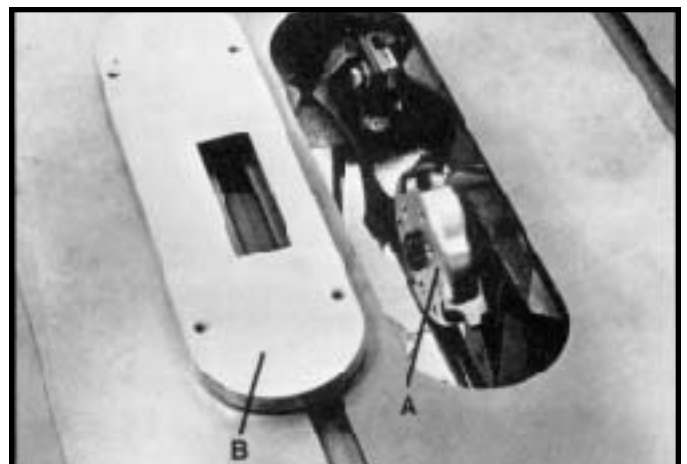


Fig. 116

It is necessary when using the moulding cutterhead to add wood-facing (C) to the face of the rip fence, as shown in Fig. 117. The wood-facing is attached to the fence with wood screws through holes which must be drilled 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. 117, shows a typical moulding operation. NEVER USE MOULDING CUTTER-HEAD IN A BEVEL POSITION.

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

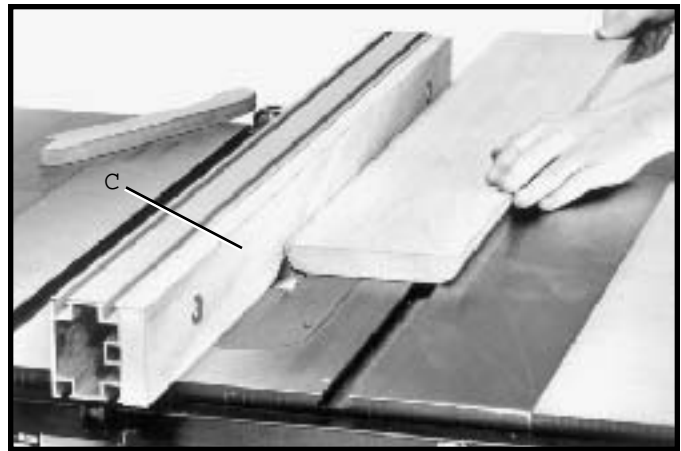


Fig. 117

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.

ALWAYS INSTALL BLADE GUARD AFTER OPERATION IS COMPLETE.

USING ACCESSORY DADO HEAD

IMPORTANT: THE BLADE GUARD AND SPLITTER ASSEMBLY CANNOT BE USED WHEN DADOING OR MOULDING AND MUST BE REMOVED OR SWUNG TO THE REAR OF THE SAW AS DESCRIBED ON PAGE 28 OF THIS MANUAL.

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 in Fig. 118. Various combinations of saws and cutters are used to cut grooves from 1/8" to 13/16" 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. 119. The saw and cutter overlap is shown in Fig. 120, (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.

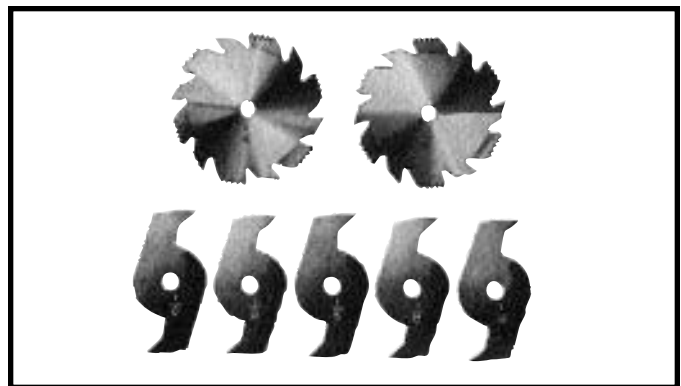


Fig. 118



Fig. 119

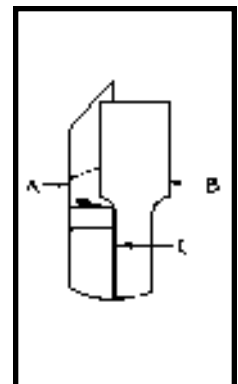


Fig. 120

The dado head set (D) Fig. 121, is assembled to the saw arbor as shown. IMPORTANT: The blade guard and splitter assembly cannot be used when dadoing and must be removed or swung to the rear of the saw as explained previously in this manual. Auxiliary jigs, fixtures, push sticks and feather boards should also be used. Also, the accessory dado head table insert (E) Fig. 121, must be used in place of the standard table

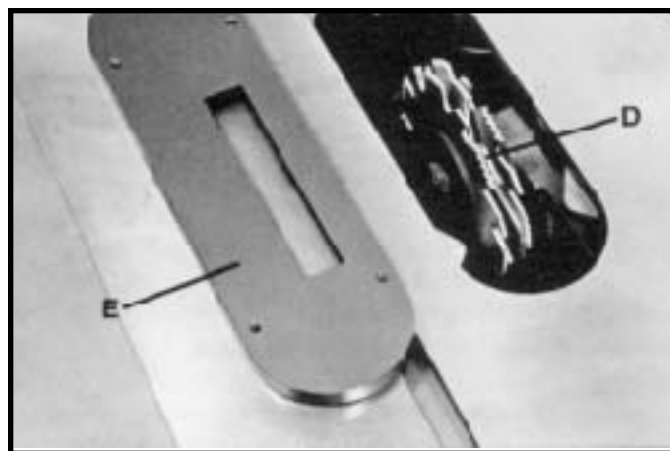


Fig. 121

Fig. 122, shows a typical dado operation using the miter gage as a guide.

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

IMPORTANT: ALWAYS INSTALL BLADE GUARD AFTER OPERATION IS COMPLETED.



Fig. 122

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. 123, to one side of the rip fence as shown. The wood facing is attached to the fence with wood screws through holes drilled in the fence. 3/4-inch stock is suitable for most work, although an occasional job may require one-inch facing.³⁸

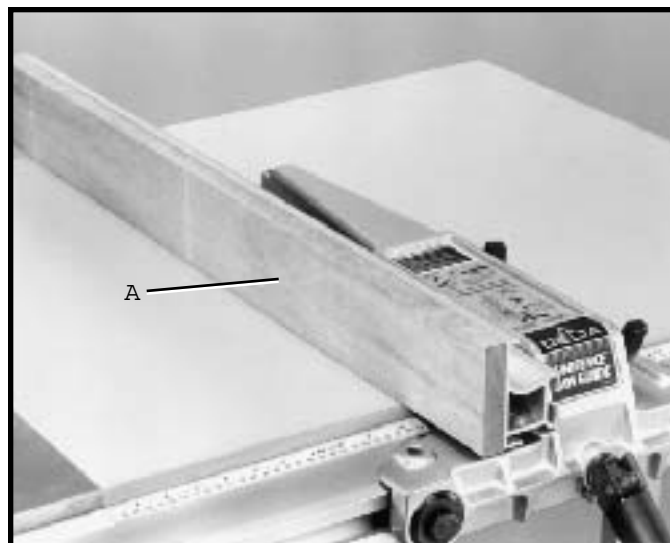


Fig. 123

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. 124.

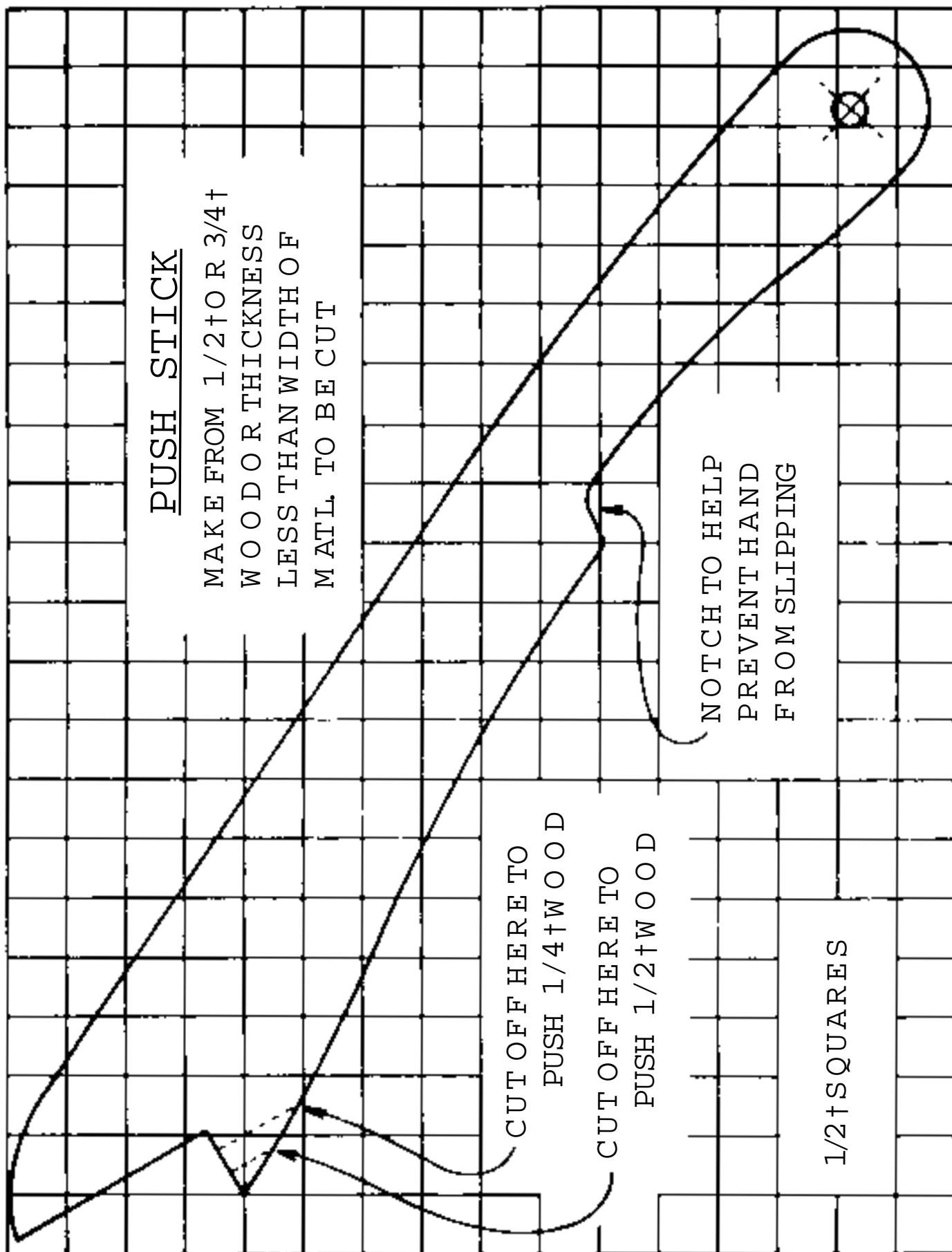


Fig. 124



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