

Platinum Unisaw with 52" Unifence (Model 36-955)



36-955 consists of:
36-941 Base unit
8" Round Left wing
8" Square Right wing
36-947 Platinum Table Boards
36-949 Platinum 52" Unifence
with Fence Stop
36-904 Platinum T-slot rail

Platinum Unisaw with 50" Commercial Biesemeyer Fence System (Model 36-957)



36-957 consists of:
36-941 Base unit
8" Round Left wing
8" Square Right wing
78-971 Biesemeyer Rail System
78-972 Commercial Fence
with a set of legs
78-973 Platinum Right Side Table

DATED 7-20-00

PART NO. 422-04-651-0054
Copyright © 2000 Delta Machinery



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.

Technical Service Manager
Delta Machinery
4825 Highway 45 North
Jackson, TN 38305
(IN CANADA: 505 SOUTHGATE DRIVE, GUELPH, ONTARIO N1H 6M7)

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

1. **FOR YOUR OWN SAFETY, READ INSTRUCTION MANUAL BEFORE OPERATING THE TOOL.** Learn the tool's application and limitations as well as the specific hazards peculiar to it.
2. **KEEP GUARDS IN PLACE** and in working order.
3. **ALWAYS WEAR EYE PROTECTION.**
4. **GROUND ALL TOOLS.** If tool is equipped with three-prong plug, it should be plugged into a three-hole electrical receptacle. If an adapter is used to accommodate a two-prong receptacle, the adapter lug must be attached to a known ground. Never remove the third prong.
5. **REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it "on."
6. **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents.
7. **DON'T USE IN DANGEROUS ENVIRONMENT.** Don't use power tools in damp or wet locations, or expose them to rain. Keep work area well-lighted.
8. **KEEP CHILDREN AND VISITORS AWAY.** All children and visitors should be kept a safe distance from work area.
9. **MAKE WORKSHOP CHILDPROOF** - with padlocks, master switches, or by removing starter keys.
10. **DON'T FORCE TOOL.** It will do the job better and be safer at the rate for which it was designed.
11. **USE RIGHT TOOL.** Don't force tool or attachment to do a job for which it was not designed.
12. **WEAR PROPER APPAREL.** No loose clothing, gloves, neckties, rings, bracelets, or other jewelry to get caught in moving parts. Nonslip footwear is recommended. Wear protective hair covering to contain long hair.
13. **ALWAYS USE SAFETY GLASSES.** Wear safety glasses. 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 people.
19. **REDUCE THE RISK OF UNINTENTIONAL STARTING.** Make sure switch is in "OFF" position before plugging in power cord.
20. **NEVER STAND ON TOOL.** Serious injury could occur if the tool is tipped or if the cutting tool is accidentally contacted.
21. **CHECK DAMAGED PARTS.** Before further use of the tool, a guard or other part that is damaged should be carefully checked to ensure that it will operate properly and perform its intended function — check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
22. **DIRECTION OF FEED.** Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.
23. **NEVER LEAVE TOOL RUNNING UNATTENDED. TURN POWER OFF.** Don't leave tool until it comes to a complete stop.
24. **DRUGS, ALCOHOL, MEDICATION.** Do not operate tool while under the influence of drugs, alcohol or any medication.
25. **MAKE SURE TOOL IS DISCONNECTED FROM POWER SUPPLY** while motor is being mounted, connected or reconnected.
26. **WARNING: SOME DUST CREATED BY POWER SANDING, SAWING, GRINDING, DRILLING, AND OTHER CONSTRUCTION ACTIVITIES** contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:
 - lead from lead-based paints,
 - crystalline silica from bricks and cement and other masonry products, and
 - arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

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 guard, splitter and anti-kickback fingers on all “thru-sawing” operations. 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. **WHEN** cutting mouldings, **NEVER** run the stock between the fence and the moulding cutterhead.
23. **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.
24. **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.
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 191 0.213 Regulations.

SAVE THESE INSTRUCTIONS. Refer to them often and use them to instruct others.

FOREWORD

The Platinum Edition 10" Unisaw is available with either the 52" Unifence Saw guide, or the 50" commercial Biesemeyer Fence system.

The Platinum Edition 10" Unisaw is a very powerful machine. The motor is single phase, 3 horse power, 230 volt motor that turns the circular blade at 4000 RPMs.

The Unisaw is a versatile machine, in that it can do precision ripping, cross-cutting, dadoing, moulding and tenoning.

MACHINE DATA

Diameter of Arbor	5/8" (16 mm)
Diameter of Blade	10" (254 mm)
Speed: (with 3450 rpm Motor)	4000 rpm
Capacities:	
Maximum depth of cut	3-1/8" (79 mm)
Maximum rip to right of blade with Unifence Saw Guide with Biesemeyer Commercial Saw Fence System	52" (1321 mm) 50" (1270 mm)
Maximum rip to left of blade	12" (305 mm)
Maximum thickness of cut at 45°	2-1/8" (54 mm)
Distance; front of table to center of blade	16 13/16" (427 mm)
Table in front of saw blade at maximum depth of cut	12-1/4" (311 mm)
Maximum width of dado	13/16" (21 mm)

Table:	
Height	34" (864 mm)
Size 20" x 27" (508 x 686 mm)	
Size with Extension Wings	36" x 27" (914 x 686 mm)
Size with Extension Wing and Unifence Table Board	76" x 27" (1930 x 686 mm)
Biesemeyer Table Board	74" x 27" (1880 x 686 mm)
T-Slot Miter Gage Groove	3/8" x 3/4" (10 x 19mm)

Overall Dimensions:	
Height	36-3/4" (933 mm)
Width with Wing and 52" Unifence Guide Bar	83" (2108 mm)
50" Biesemeyer Guide Bar	84" (2134 mm)
Depth with Unifence Rip Fence	43" (1092 mm)
Depth with Biesemeyer Rip Fence	42" (1067 mm)

UNPACKING AND CLEANING

Carefully unpack the saw and fence system from the shipping containers. Clean all loose parts and remove the protective coating from the machined surfaces of the saw table. This coating may be removed with a soft cloth moistened with kerosene (do not use acetone, gasoline, or lacquer thinner for this purpose). Figures 1 and 2, illustrate the saw and all loose items supplied with the machine. Figs. 3, 4, and 5, illustrate the items supplied with the fence system. IMPORTANT: The saw is shipped with the saw arbor in the 45 degree position. Loosen locking knob (A) Fig. 1, and turn handwheel (B) until the saw arbor is in the 90 degree position and remove the styro-foam packing from inside the saw cabinet. Tighten locking knob (A).

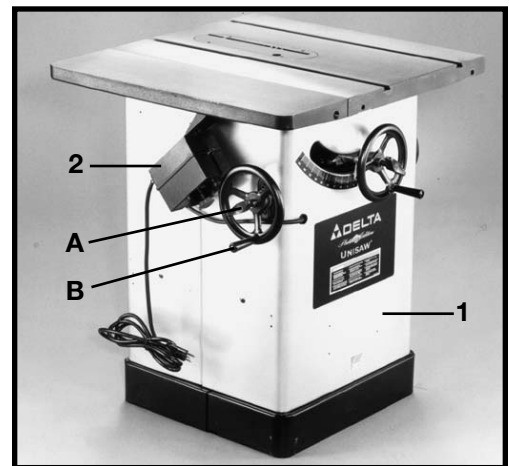


Fig. 1

UNISAW

1. Unisaw
2. Switch
3. Motor cover
4. Blade guard and splitter bracket
5. Support rod
6. 5/8" Internal tooth washer
7. 5/8-18 Jam nut
8. Upper bracket for splitter
9. Lower bracket for support rod
10. 5/16" I.D. Flat washers (2)
11. 5/16" I.D. Lockwashers (3)
12. 5/16-18 x 1" hex head cap screws (4)
13. Arbor wrenches (2)
14. 1/4" and 3/8" hex wrenches
15. Miter gage
16. Flat washer for miter gage
17. Handle for miter gage handle
18. Cap for miter gage handle
19. Storage hook for arbor wrenches
20. #10 x 1/2" hex washer head screws (10)
21. Hanger for miter gage
22. Hangers for rip fence (2)
23. Flat head screw for mounting switch
24. Flat washer for mounting switch
25. Hex nut for mounting switch
26. Gasket for motor cover
27. Cable tie
28. Latch for motor cover

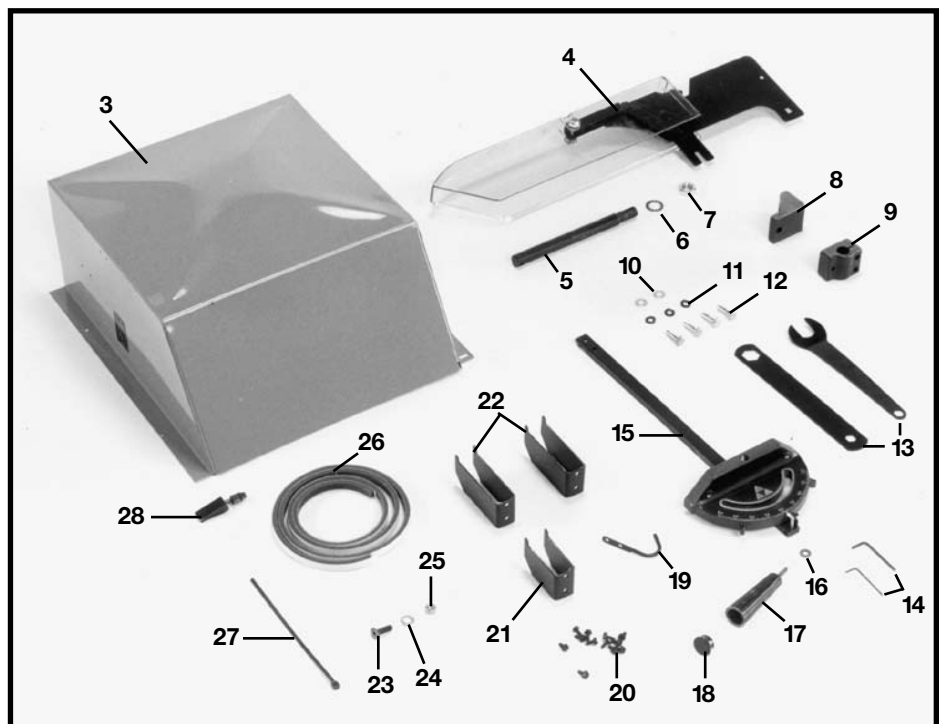


Fig. 2

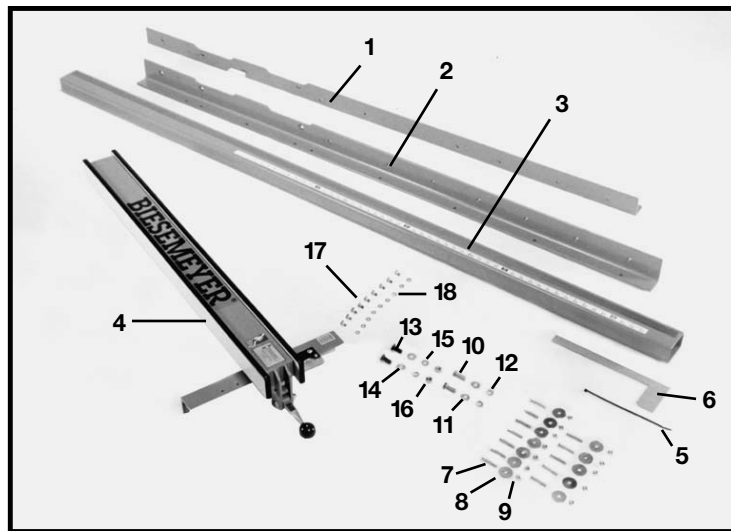


Fig. 3



Fig. 4

BIESEMEYER FENCE SYSTEM

NOTE: A common hardware package is used for several different models, therefore you may have leftover hardware.

- 1 - Rear Rail
- 2 - Front Rail
- 3 - Guide Tube
- 4 - T-Square® Fence Assembly
- 5 - Cable Strap
- 6 - Template for aligning front rail to saw table

for fastening front and rear rails to right extension table

- 7 - 1-1/2" long flat head Phillips screws (12)
- 8 - 1-1/4" O.D. Flat Washers (12)
- 9 - 1/4-20 hex nuts (12)

for fastening rear rail to saw table

- 10 - 3/8-24 x 1-1/4" long hex head cap screws (2)
- 11 - 7/8" O.D. flat washers (2)
- 12 - Lock washers (2)

for fastening front rail to saw table

- 13 - 3/8-16 x 1-1/4" long flat head Phillips screws (2)
- 14 - 7/8" O.D. flat washers (2)
- 15 - Lock washers (2)
- 16 - 3/8-16 hex nuts (2)

for fastening guide tube to front rail

- 17 - 1/2" long hex screws (9)
- 18 - Lock washers (9)

leg hardware

- 19 - Legs (2)
- 20 - 5/8" long wood screws #8 (8)
- 21 - 1/4-20 x 1-1/2" long flat head phillips screws (4)
- 22 - 1/4" flat washers (4)
- 23 - 1/4-20 hex nuts (4)

UNIFENCE SAW GUIDE 52" CAPACITY

1. Unifence body (1)
2. Fence (1)
3. Leg & shelf support brackets (4)
4. Legs (2)
5. Table support brackets (2)
6. Unifence cursor (1)
7. Unifence guide rail (1)
8. #8 x 7/8" wood screws (17)
9. Z brackets (3)
10. Angle brackets (3)
11. Guide rail end caps (2)
12. 7/16-20 x 3/4" bolt, lockwasher, flat washer, (3)
13. 1/4-20 x 3/4" bolt, flat washer, nut, (2)
14. 3/8-24 x 1" bolt, flat washer, nut, (4)
15. 5/16-18 x 2-3/4" bolt, flat washer, lockwasher, flat washer, nut, (4)
16. Rail stop (1)
17. Leveling screw, nut, (2)
18. Table (1)
19. Shelf (1)

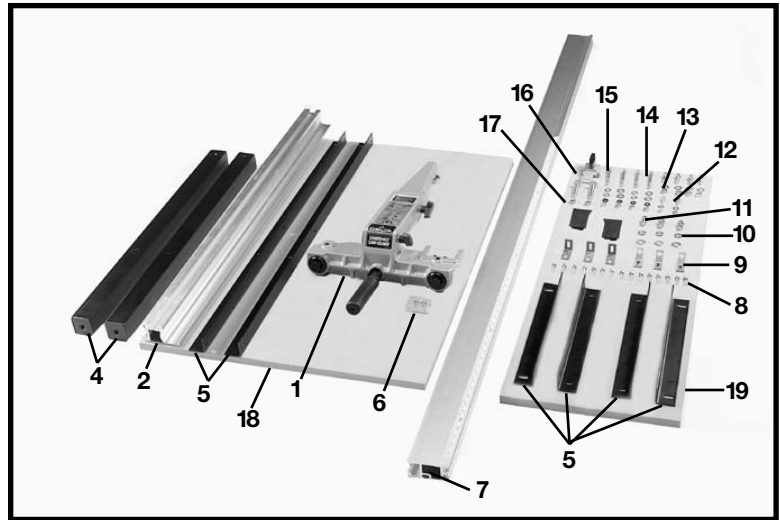


Fig. 5

ASSEMBLY INSTRUCTIONS

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

ASSEMBLING ON/OFF SWITCH

1. The on/off switch (A) Fig. 6, is shipped attached to a mounting bracket at the left side of the machine.
2. Remove screw and flat washer (B) Fig. 6, that is holding the switch and bracket to the machine. Remove the switch from the side of the machine. Replace screw and flat washer (B). **WARNING: DO NOT REMOVE SCREWS (B) AND (C) AT THE SAME TIME.**
3. Loosely assemble switch and switch bracket (A) Fig. 7, to the inside front lip of extension table with hex flat head screw (D), flat washer (E), and hex nut (F) through hole (G).
4. Attach the side of switch bracket (A) Fig. 8, to the inside of extension table at the front of the saw using the 5/8 x 1-1/4" screw and flat washer (C), which were removed in STEP 3. Tighten screws (C) and (D).

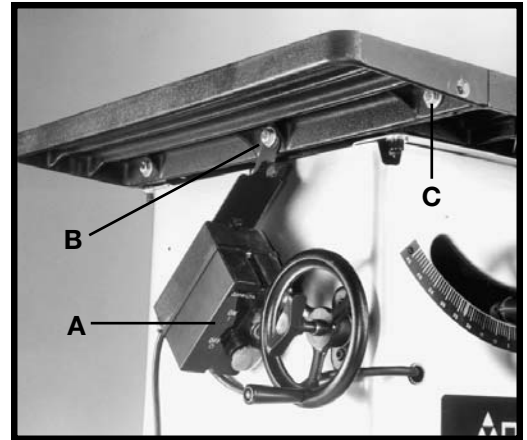


Fig. 6

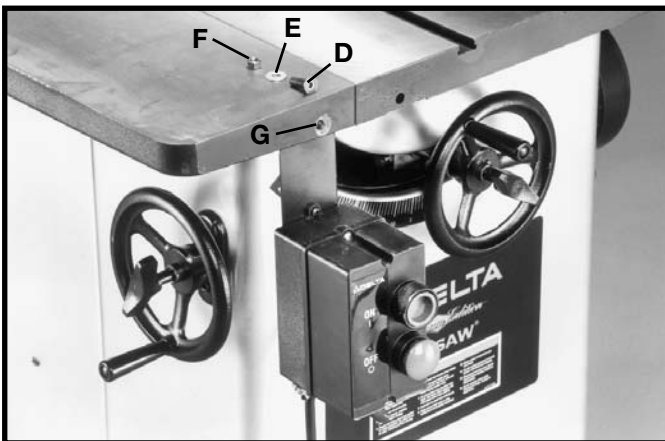


Fig. 7

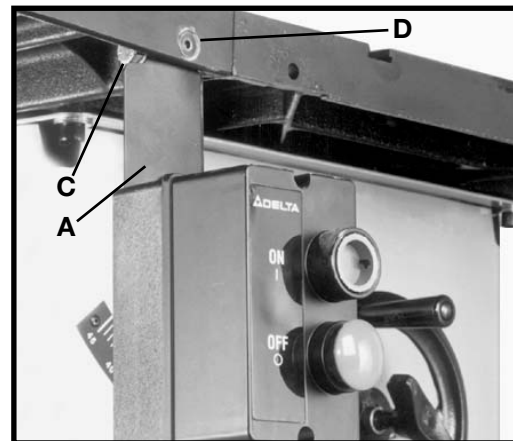


Fig. 8

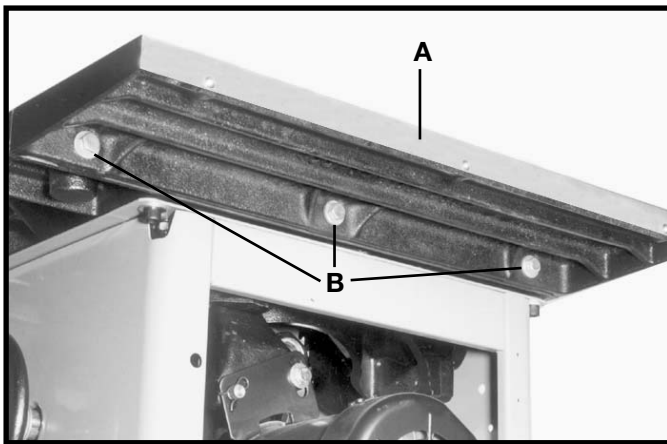


Fig. 9

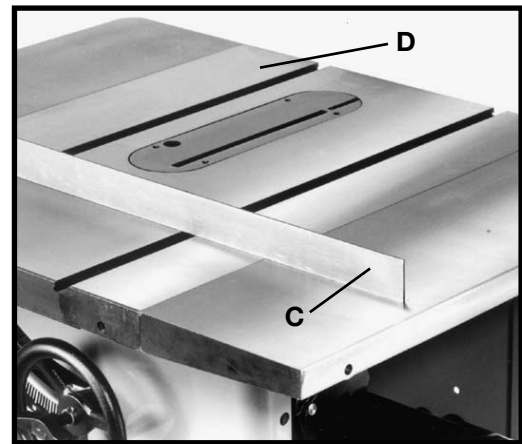


Fig. 10

ASSEMBLING EXTENSION WING TO SAW TABLE

Assemble extension wing (A) Fig. 9, to the right hand side of the saw table using three 1-1/4 inch-long hex head screws (B) and flat washers supplied. Use a straight edge (C) Fig. 10, to make certain the extension wing is level at the front and rear of the saw table before tightening three screws (B) Fig. 9. NOTE: Make certain the left extension wing (D) is also level with saw table in the same manner.

BIESMEYER FENCE ASSEMBLY

ASSEMBLING GUIDE RAILS

1. Assemble the front rail (A) Fig. 11, to front of saw table using the two 3/8-16 x 1-1/4" long flat head Phillips screws (B), 7/8" flat washers, lockwashers and 3/8-16 hex nuts supplied. Screws (B) are inserted through the two holes in the front rail, as shown and through the two through holes in the front of the saw table and fastened to the table with the flat washers, lockwashers and hex nuts. **IMPORTANT:** Do not completely tighten front rail mounting hardware at this time.

Using template (D) Figures 12 and 13, to check and adjust front rail at both ends of the saw table as shown, to make sure rail (A) is level with table surface and tighten rail mounting hardware (B). **IMPORTANT: Template (D) must be on the saw table when checking, not on extension wing.**

3. Assemble rear rail (E) Fig. 14, to rear of saw table using the two 3/8-24 x 1-1/4" long hex head screws (F), 7/8" O.D. flat washers, and lockwashers as shown. NOTE: When mounting, the two screws (F) are threaded into the threaded holes in the saw table, as shown.

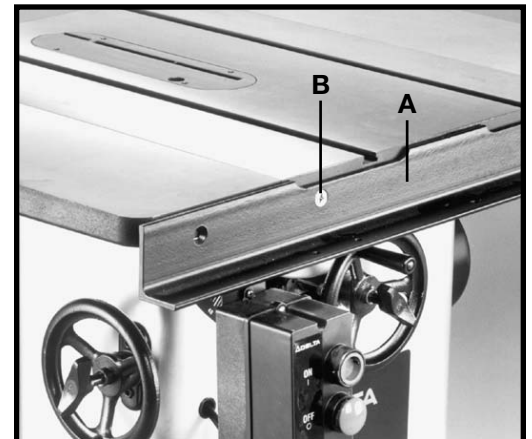


Fig. 11

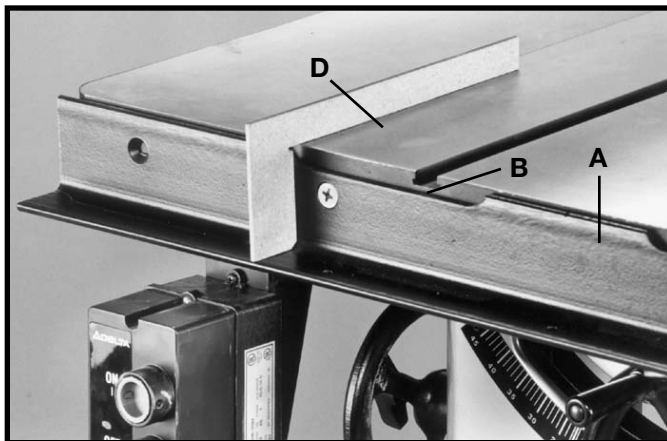


Fig. 12

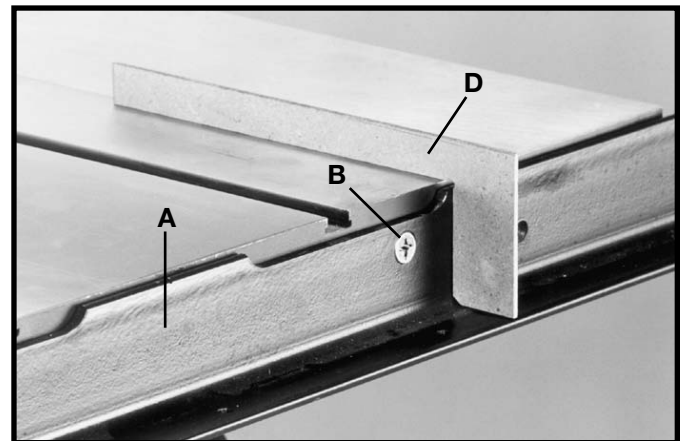


Fig. 13

4. Make certain top edge of rail (E) Fig. 14 is below table surface and that top edge of cut-outs (G) are below miter gage slots before tightening screws (F).

ASSEMBLING TABLE LEGS TO EXTENSION TABLE

1. Position the two legs (H) Fig. 15, at the two far corners of the inside of one end of the extension table, as shown, and mark the position of the eight holes to be drilled into the bottom of the table. **IMPORTANT: If your saw will be used with a mobile base underneath the saw base and table legs, the position of the legs may have to be changed to fit onto the mobile base.** Remove the two legs (H) and using a 1/16" drill bit, drill the eight holes 1/2" deep. Replace the two legs and fasten to the bottom of the table using the eight 3/4" long wood screws (I) supplied.

2. Figure 16 illustrates one of the legs (H) fastened to the bottom of the extension table with the four wood screws (I). Using a 1/4" drill bit, drill two through holes through the end piece (J) of the table, measuring the holes from the outside frame of the table. The holes are to be drilled 1-3/4" from the top (laminated side), and 1-3/8" and 4-3/8" from the side.

3. Fasten the leg bracket (L) Fig. 17, to the end piece (J) of the table using the two 1-1/2" long flat head Phillips screws, flat washers and hex nuts (M) Figs. 16 and 17. Fasten the remaining leg to the extension table in the same manner.

ASSEMBLING EXTENSION TABLE TO FRONT AND REAR RAILS

1. Place table assembly (N) Fig. 18, in position between the two rails, as shown. Make sure end of table (N) is flush against extension wing (P). Using a straight edge make sure table (N) is in the same plane and level with saw table (P). Lightly tap table up or down and adjust leveling screws (R) Fig. 19, in bottom of legs to accomplish this. When the table (N) Fig. 18, is level and in the same plane with saw table (P), drill 1/4" through holes (S) Fig. 18 through the front and rear of the extension table using the holes provided in rails as template.

2. After the holes have been drilled in the edge of the front and rear extension table board, fasten both front and rear rail to table using the 1-1/2" flat head Phillips screws, flat washers, and hex nuts (M) Fig. 16.

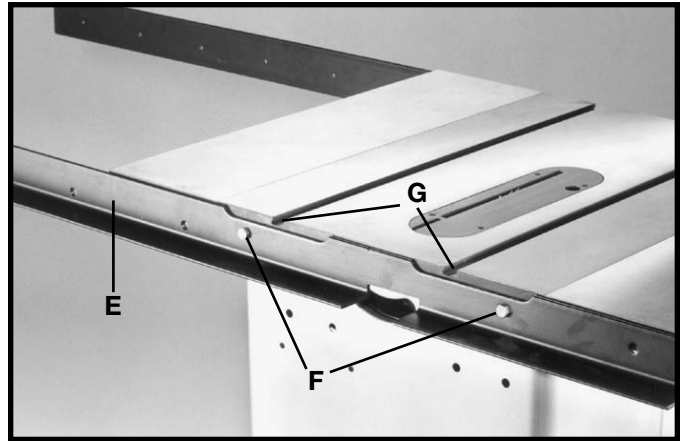


Fig. 14

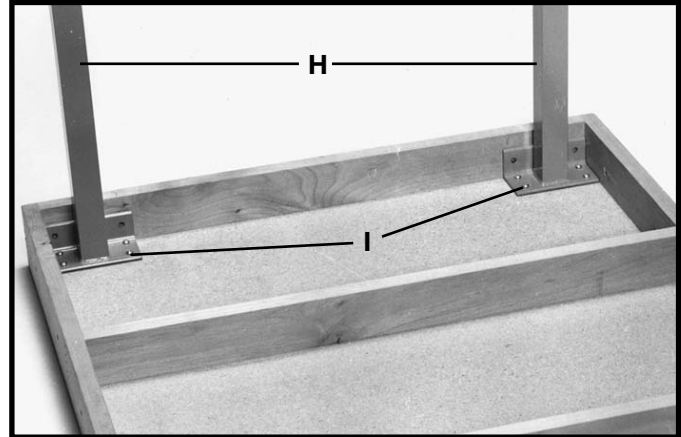


Fig. 15

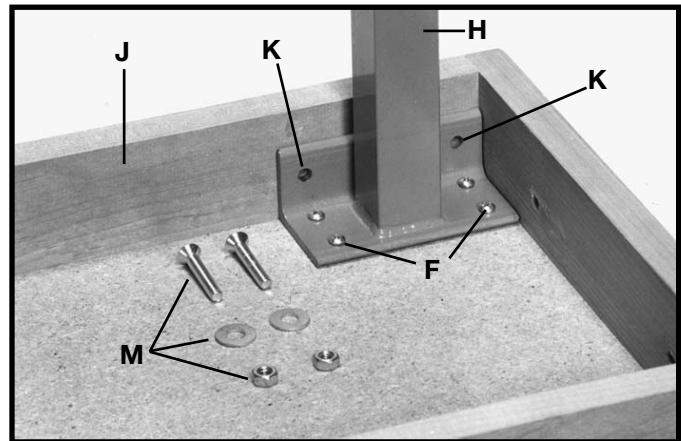


Fig. 16

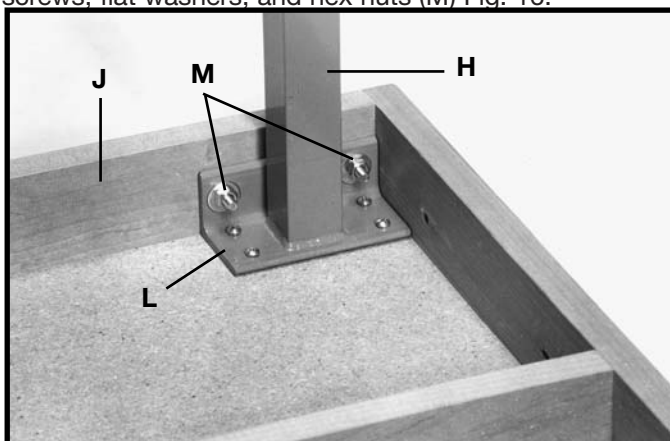


Fig. 17

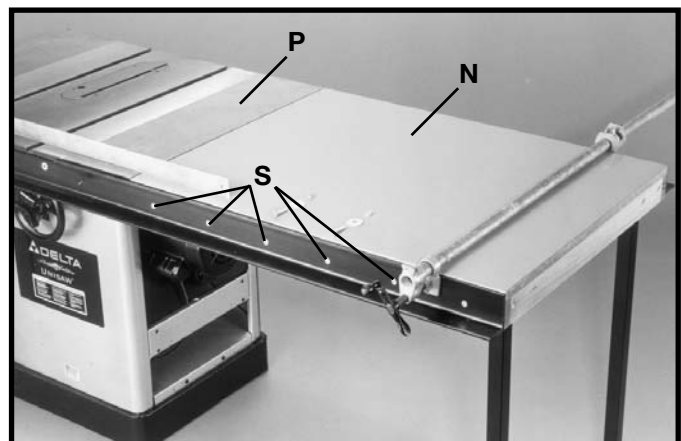


Fig. 18

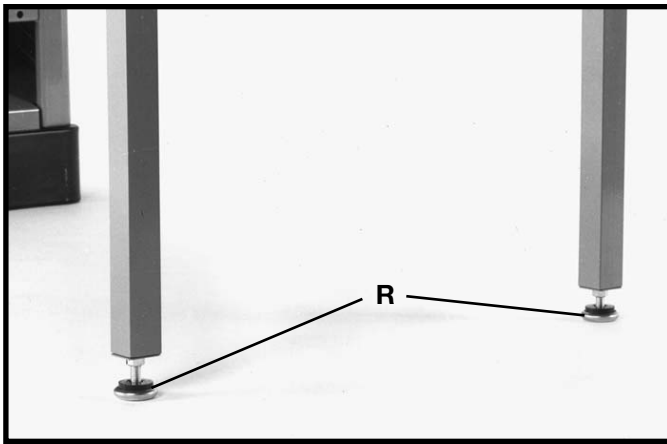


Fig. 19

ASSEMBLING GUIDE TUBE TO FRONT RAIL

1. Lay the guide tube (B) Fig. 20, on the saw table as shown, and line up the threaded holes (C) on bottom of guide tube (B) with the through holes (D) on the front rail (A).
2. Position the guide tube (B) Fig. 21, on the front rail and fasten the guide tube to the rail using the 1/2" long hex screws (G) and lockwashers in all of the holes.

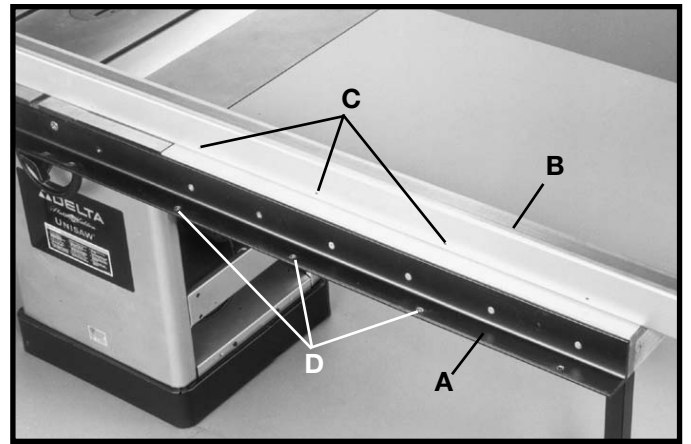


Fig. 20

ASSEMBLING BLADE GUARD AND SPLITTER ASSEMBLY

CAUTION: MAKE CERTAIN THE MACHINE IS DISCONNECTED FROM THE POWER SOURCE.

1. Remove the table insert Fig. 22. Raise the saw arbor, by turning the locking handle on the front of the saw, counter clockwise and then turn the wheel on the front of the saw clockwise as far as it will go, and remove the saw blade from the machine by following the instructions in section "REMOVING THE SAW BLADE".
2. The inside splitter mounting bracket (A) Fig. 23, is assembled to the inside of the saw and aligned with the inside blade flange (B) at the factory.
3. To check the alignment, remove screw and fastener plate (C). Using a straight edge (D) Fig. 24, check to see if the splitter bracket (A) is aligned with the inside blade flange (B). Check both the top and bottom of bracket (A) with the top and bottom of flange (B).

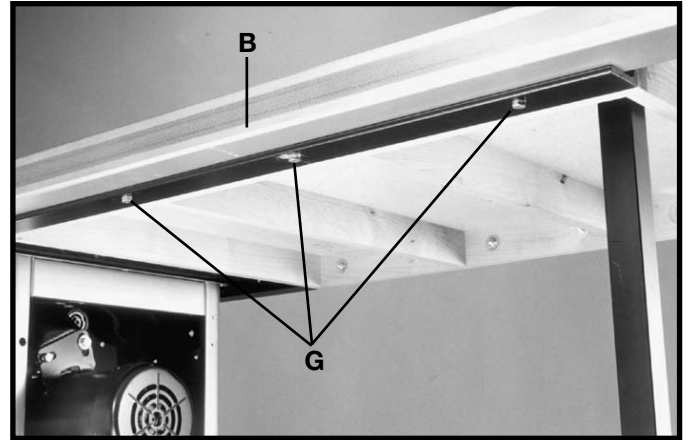


Fig. 21

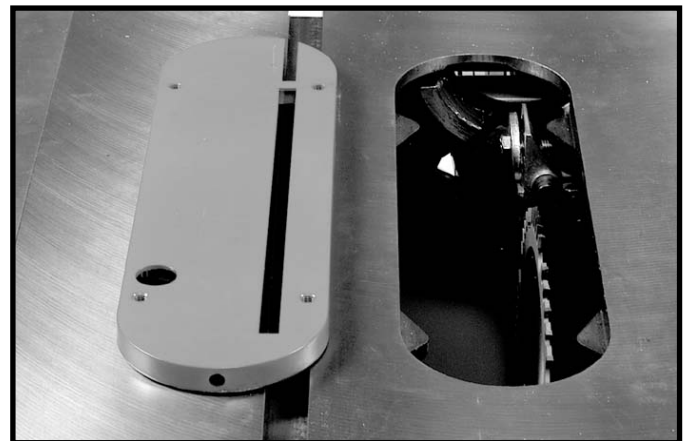


Fig. 22

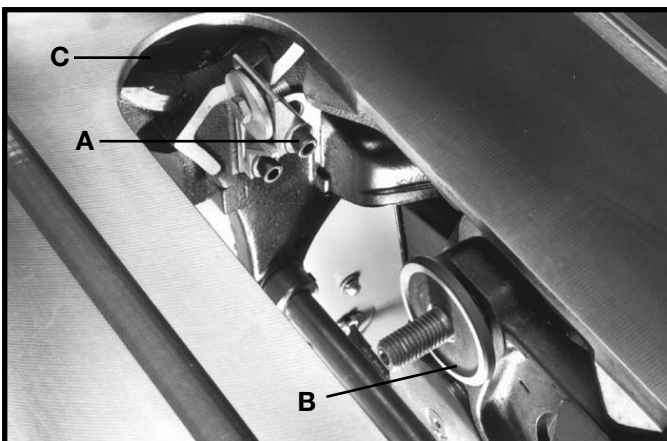


Fig. 23

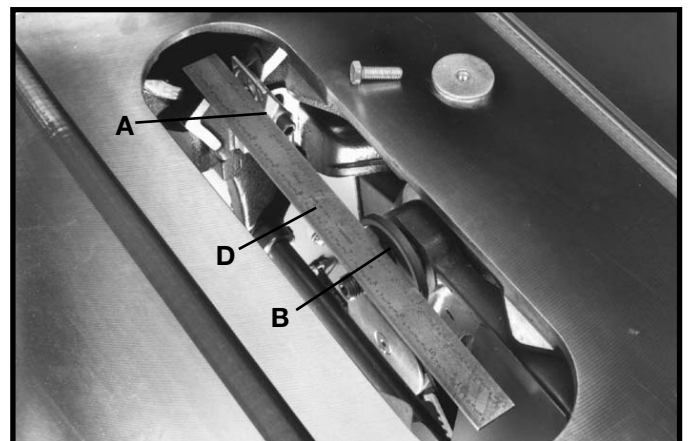


Fig. 24

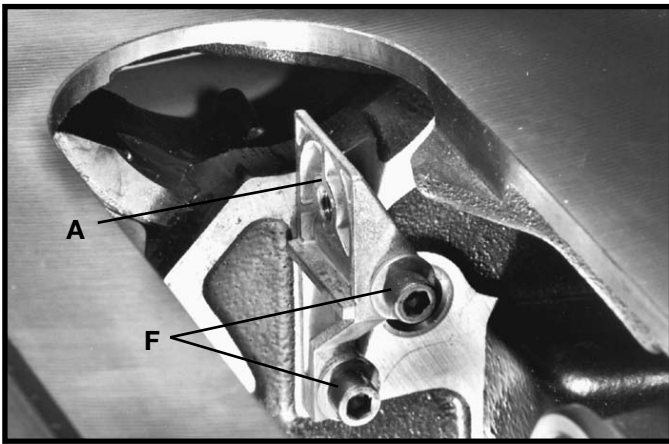


Fig. 25

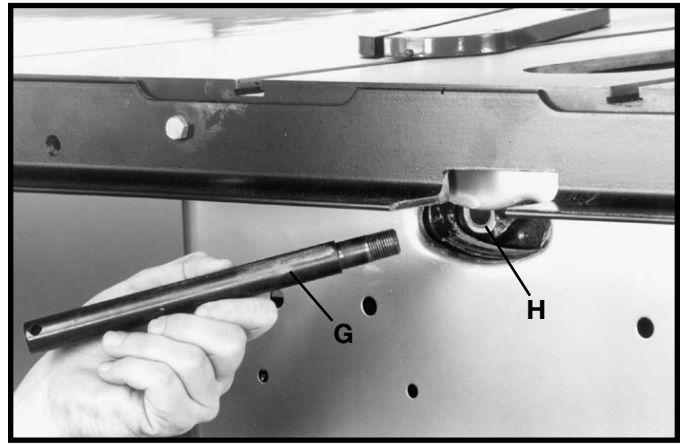


Fig. 26

4. If an adjustment is necessary, loosen two screws (F) Fig. 25, and adjust splitter bracket (A) until it is aligned with the inside blade flange (B) Fig. 23. Tighten two screws (F). Loosely assemble screw and fastener plate (C), which were removed in STEP 2.

5. Insert threaded end of support rod (G) Fig. 26, through slot in rear of saw and into hole in rear trunnion (H). Fasten support rod (G) to trunnion with star washer and hex nut (J) Fig. 27. **NOTE:** Thread nut (J) Fig. 27, onto threads of support rod (G) as much as possible by hand.

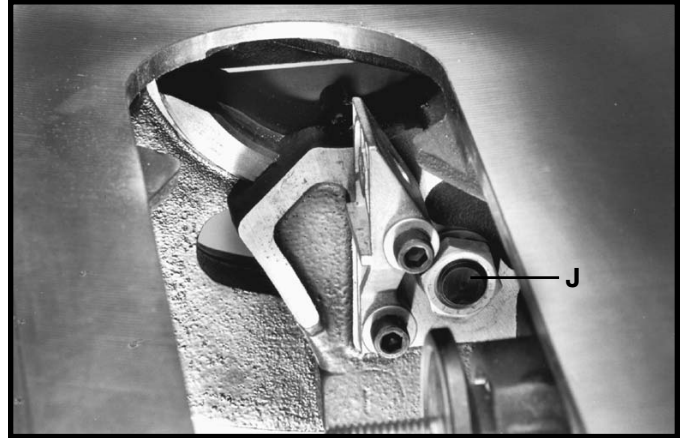


Fig. 27

6. Using a wrench to hold the hex nut (J) Fig. 27, tighten rod (G) Fig. 28, with a small screwdriver (K) or similar device through the hole in the end of the rod as shown.

7. Assemble lower bracket (L) Fig. 29, to rod (G) and loosely tighten with two one-inch long hex head screws (S) and lockwashers from underneath bracket (L).

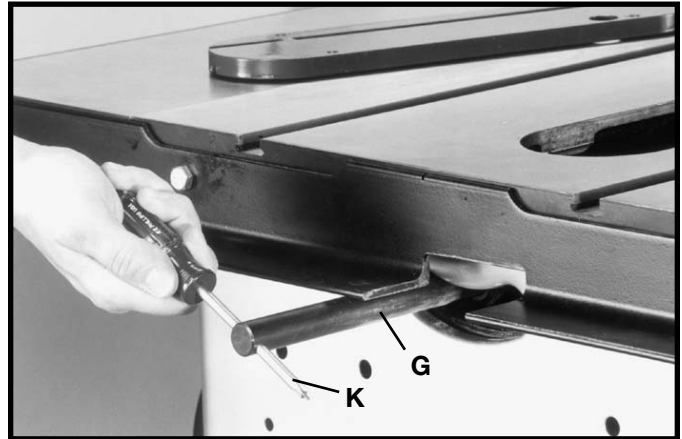


Fig. 28

8. Assemble upper splitter bracket (M) Fig. 30, to lower bracket (L) using one-inch long hex head screw (N) with lockwasher and flat washer. **NOTE:** Do not tighten screw (N) at this time.

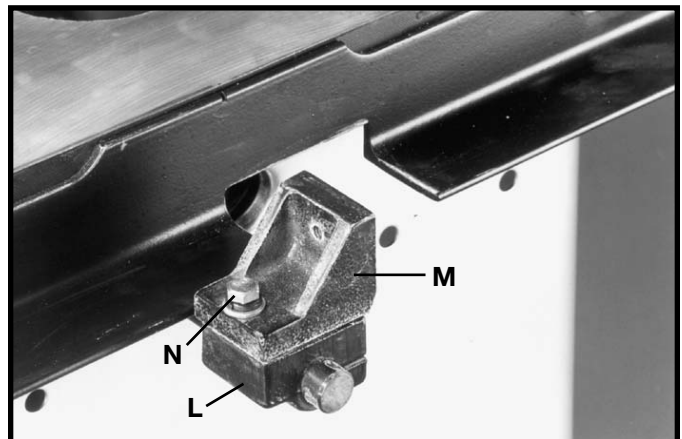


Fig. 30

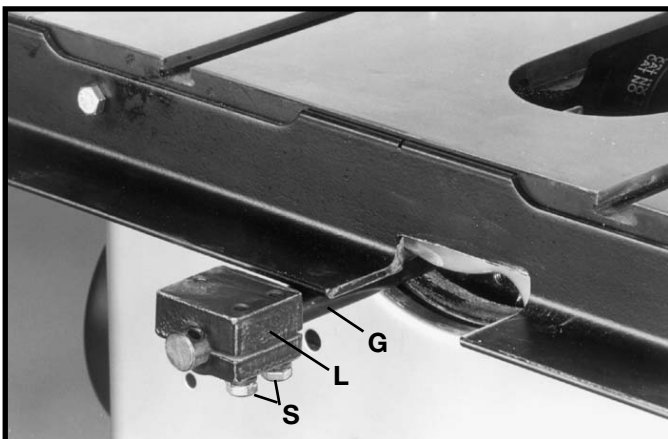


Fig. 29

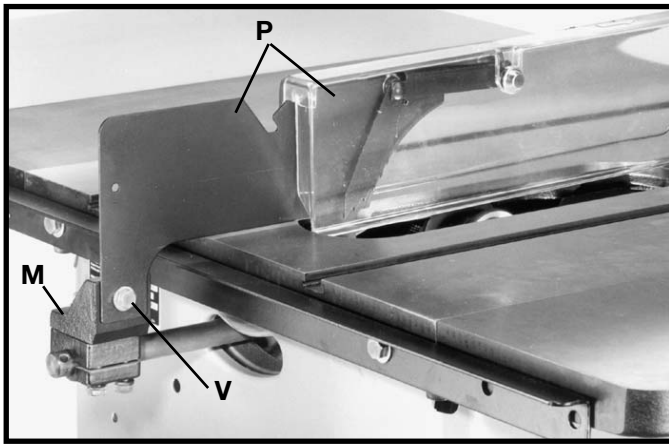


Fig. 31



Fig. 32

9. Loosely fasten splitter and blade guard assembly (P) Fig. 31, to bracket (M) using one-inch long screw (V) and flat washer. Insert the front end of splitter (P) Fig. 32, inside the splitter mounting bracket behind splitter fastener plate and screw (C). Push splitter down as far as possible, making certain the bottom edge of splitter (P) is parallel with the table surface. Tighten screw (C).

10. **IMPORTANT:** The splitter (P) Fig. 33, features a notch (W) cut into the top edge. Simply raise the front of the clear blade guard (P) Fig. 33, until the rear edge of the guard slips into notch (W) of the splitter. This notch enables the blade guard to stay in the raised position and makes changing blades easier.

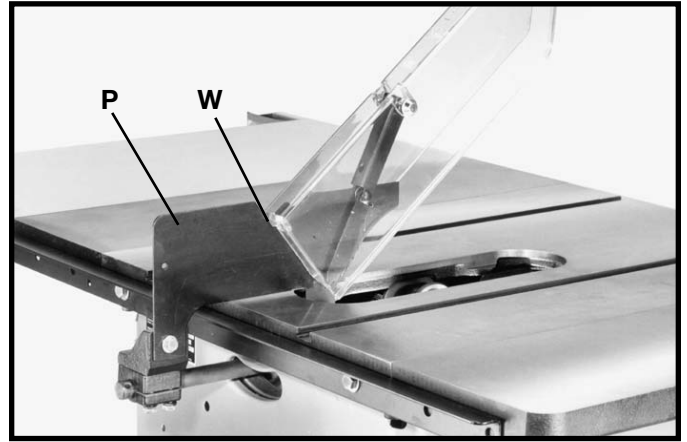


Fig. 33

11. Reassemble the saw blade, making certain the teeth are pointing down at the front of the saw table as shown in Fig. 34, and assemble the outside blade flange and arbor nut (X). With open end wrench (Y) on the flats of the arbor to keep it from turning, tighten arbor nut by turning box end wrench (Z) counterclockwise.

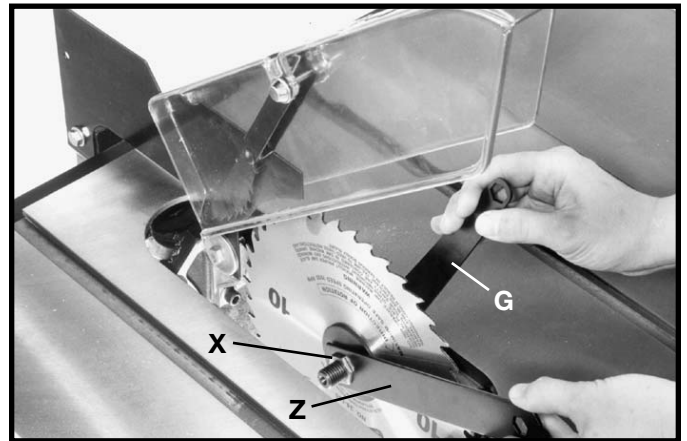


Fig. 34

12. Using a straight edge (A) Fig. 35, make certain the saw blade (B) is aligned with the splitter (P). Using a square (C) Figs. 36 and 37, make certain saw blade (B) Fig. 36, and splitter (P) Fig. 37, are 90 degrees to the table surface. Once you are certain the splitter is aligned to the saw blade and table, tighten all splitter mounting hardware (D) Fig. 37 and recheck alignment.

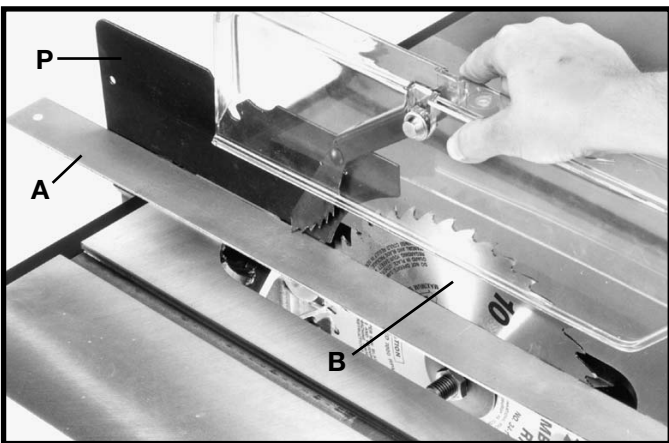


Fig. 35

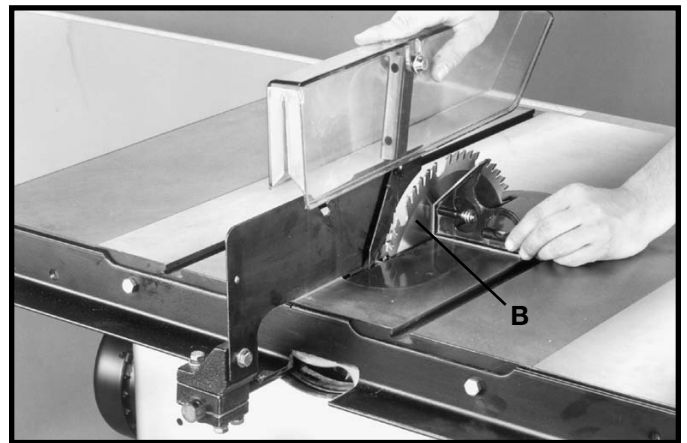


Fig. 36

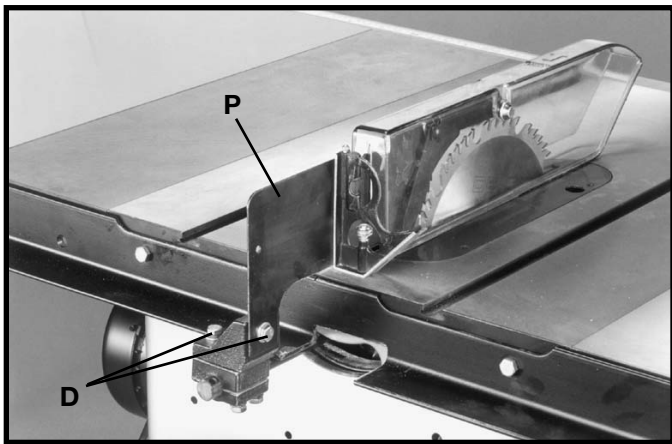


Fig. 37

13. Holding the clear blade guard, lower the saw blade and assemble the table insert (E) Fig. 38, into the opening on the saw table.

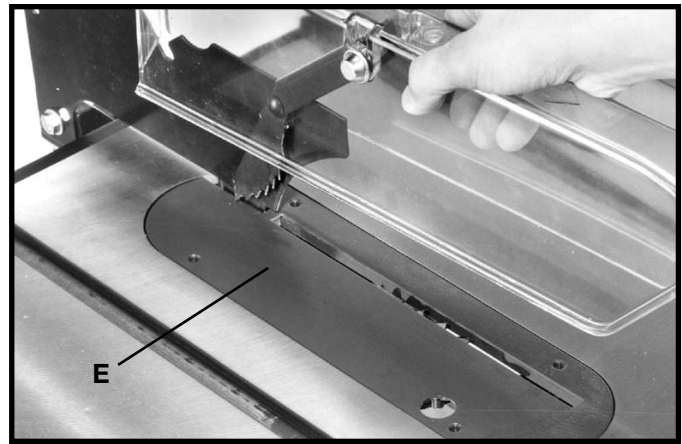


Fig. 38

FASTENING MOTOR CORD TO SAW FRAME

1. **IMPORTANT:** Turn the blade tilting handwheel counterclockwise as far as it will go until the saw blade is in the 45 degree position.
2. **IMPORTANT:** Turn the blade raising and lowering handwheel counterclockwise until the blade is at its lowest position.
3. Fasten motor cord (A) Fig. 39 to the saw frame cross member (B), using the cable tie (C) supplied with the saw. **CAUTION:** Before tightening the cable tie, make certain that cord (A) is free of any interference from the motor or saw blade at all possible positions of the motor.
4. After the cable tie is tightened, cut off excess tail of cable tie (C) Fig. 39.

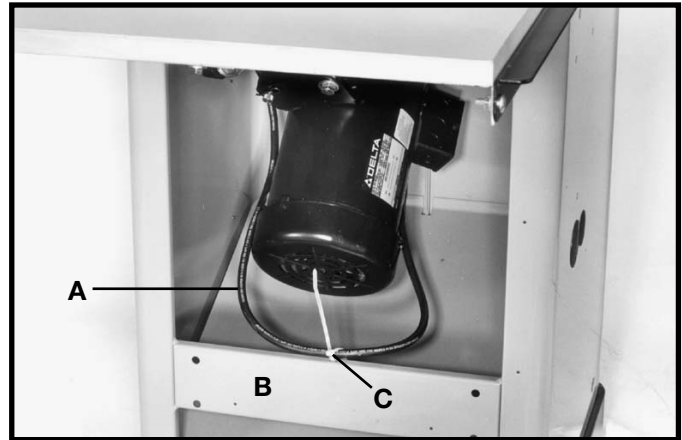


Fig. 39

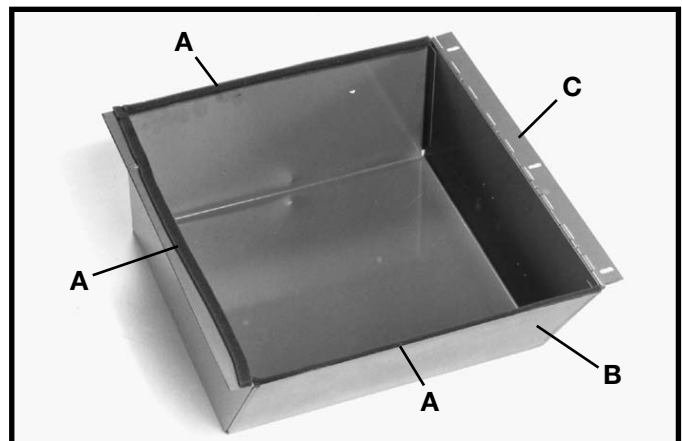


Fig. 40

ASSEMBLING MOTOR COVER

1. Remove the protective paper from the adhesive gasket material supplied with the machine and apply gasket (A) Fig. 40, to three sides of the back of the motor cover (B), as shown. **NOTE:** Do not apply gasket to the hinged side (C) of the motor cover (B).
2. Assemble hinged side (C) Fig. 41, of motor cover (B) to right side of saw cabinet using four 1/2" long self-tapping screws (D), as shown.

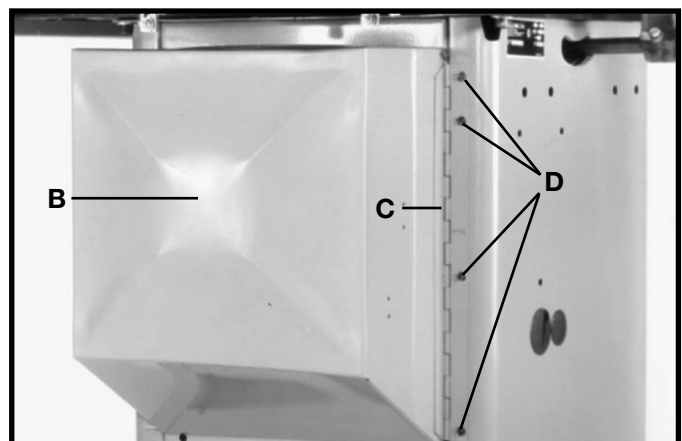


Fig. 41

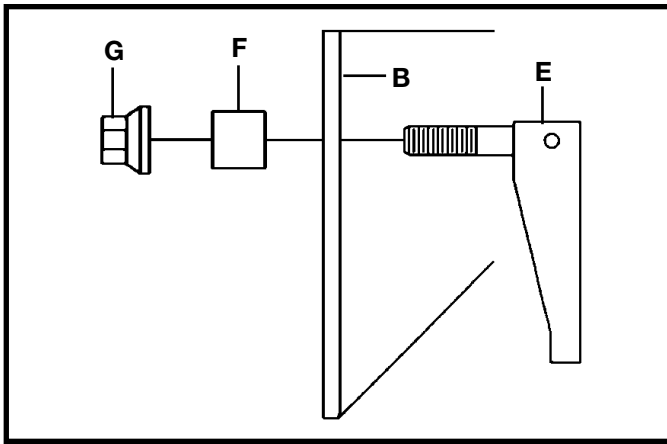


Fig. 42

3. Insert locking lever (E) Fig. 42, through the hole in left edge of motor cover (B). Assemble spacer (F) over threads of lever (E), and fasten lever to motor cover with lock nut (G).

4. With locking lever (E) Fig. 43, in the raised position, swing the free end of motor cover (B) toward the front of the cabinet until end (H) of locking lever enters and engages with the pre-drilled hole (J) in the cabinet.

5. Push down on lever (E) Fig. 44, to lock motor cover (B) in position on the saw cabinet.

To open motor cover (B) Fig. 44, pull up on lever (E), and swing motor cover outward.

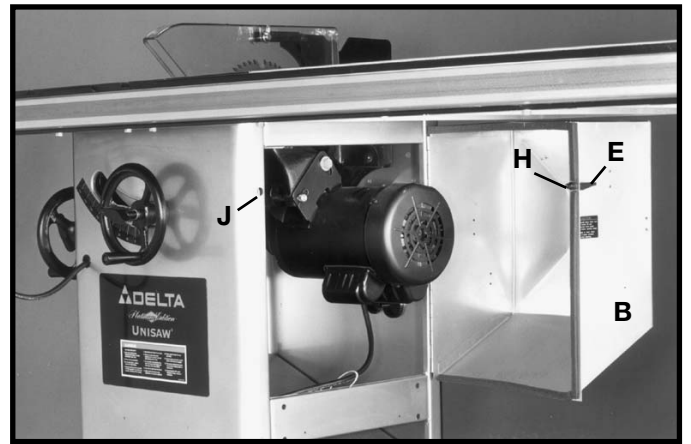


Fig. 43

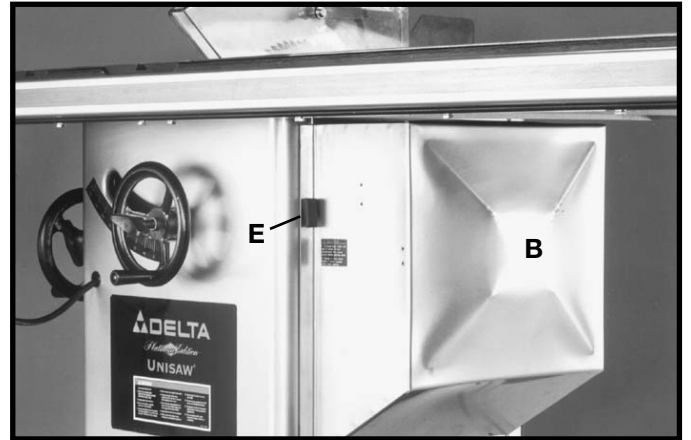


Fig. 44

ASSEMBLING MITER GAGE AND WRENCH HOLDER BRACKETS

1. Assemble the miter gage holder bracket (A) Fig. 45, and wrench holder bracket (B) to the four thru-holes on the front of the motor cover using the four 1/2" self-tapping screws supplied, two of which are shown at (C).

2. Fig. 46, illustrates the miter gage and wrenches stored on the two holder brackets.

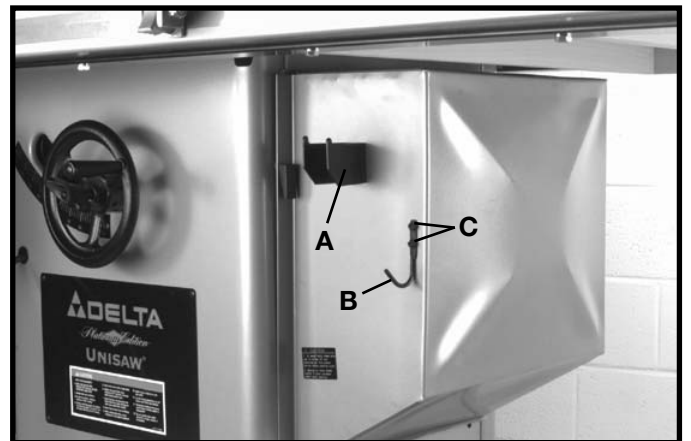


Fig. 45

ASSEMBLING RIP FENCE HOLDER BRACKETS

1. Assemble the rip fence holder brackets (A) and (B) Fig. 47, to the four holes located in the left hand side of the saw cabinet using four 1/2" long self-tapping screws supplied.



Fig. 46

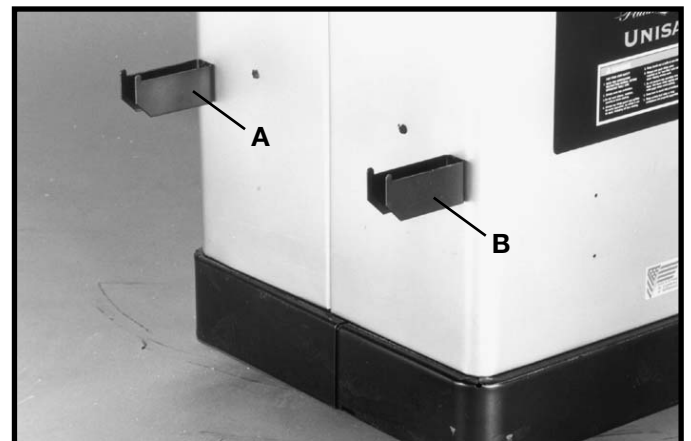


Fig. 47



Fig. 48

2. Figure 48 illustrates the Biesemeyer fence (C), (when not in use) positioned on the two holder brackets.

ATTACHING LITERATURE HOLDER TO SAW CABINET

A literature holder (A) Fig. 49, is supplied with your saw to provide storage and protection for the machine's instruction manual, parts list, etc., so they may be readily available for reference. Two push rivets (B) are supplied to attach the literature holder to the left side of the saw cabinet, as shown.

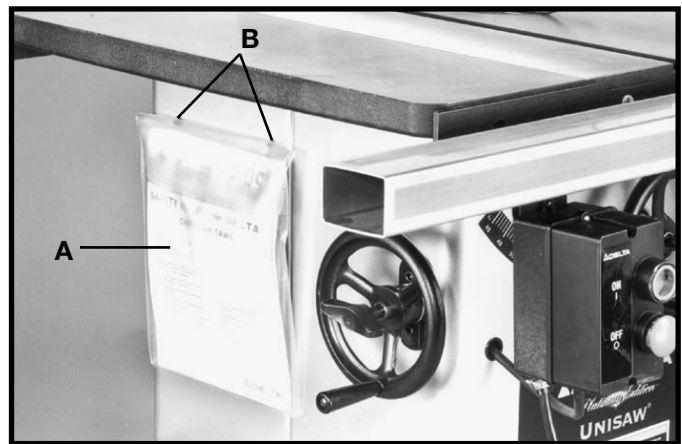


Fig. 49

FENCE OPERATION

IMPORTANT: Before operating fence, make sure the fence is adjusted parallel to the miter gage slot, as explained later on in this manual.

1. To place the fence on the guide rail, lift up clamp (A) Fig. 50, and place the fence over the rail and gently push fence onto rail (B) Fig. 50.

2. To move the fence along the guide rail, simply lift up clamp lever (A) as shown in Fig. 50, slide fence to desired position on rail, and push down on clamp lever (A) as shown in Fig. 51, to lock fence in position. NOTE: A magnet (B) Fig. 51, is provided to hold clamp handle (A) in the up position when moving the fence.

3. The distance the fence is positioned away from the blade is indicated by the witness line (C) Fig. 52, located on the cursor (D). If it is necessary to adjust the cursor (D), make a test cut with the fence locked in position. Measure the width of the finished cut and adjust the cursor (D) by loosening the two screws (E), adjusting the cursor (D) until the witness line (C) is aligned with the same marking on the scale as the finished cut. Then tighten the two screws (E).

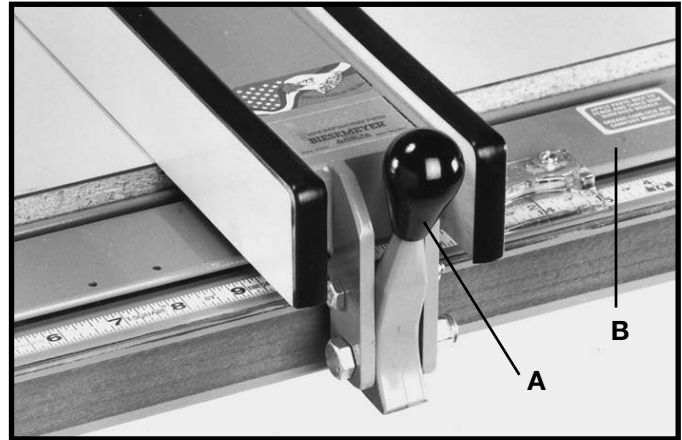


Fig. 50

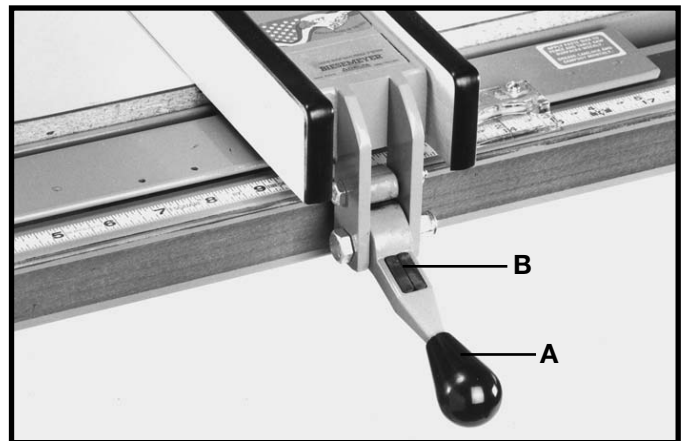


Fig. 51

FENCE LUBRICATION

1. Apply paste wax to fence and guide tube sliding surfaces weekly.

2. Apply grease to cam lock (A) Fig. 53, and cam foot (B) occasionally to prevent wear.

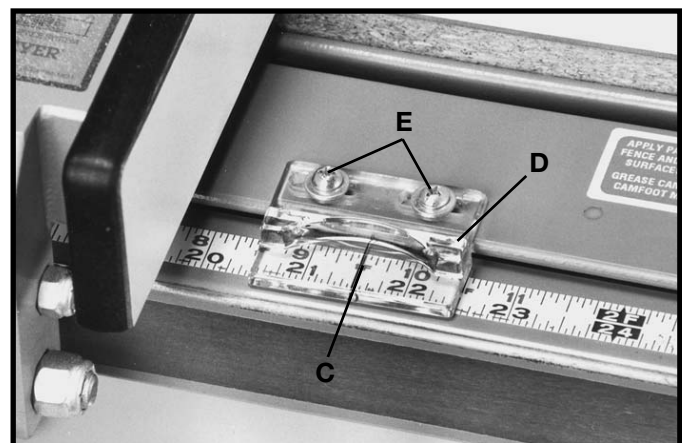


Fig. 52

ADJUSTING FENCE PARALLEL TO MITER GAGE SLOTS

NOTE: Delta table saws have been aligned at the factory so that the miter gage slots in the table are parallel with the saw blade. It is recommended, however, to check and make certain this alignment is correct before adjusting the fence parallel to the miter gage slot as follows:

The fence (A) Fig. 54, must be adjusted so it is parallel to the miter gage slots (B). To check and adjust, move fence (A) until the bottom edge of the fence is in line with the edge of one of the miter gage slots as shown, and push down on the fence clamping lever (C). Check to see if the fence (A) is parallel to the miter gage slot, the entire length of the table. If an adjustment must be made, lift up fence locking lever (C) and raise fence up off the guide tube, as shown in Fig. 55. Slightly tighten or loosen one of the two adjusting screws (D) or (E) Fig. 55, using a 3/16" allen wrench (F), not supplied. Replace the fence on the guide tube and check again to see if the edge of the fence is parallel with the miter gage slot the entire length of the slot. Repeat this adjustment until you are sure the fence is parallel with the miter gage slot.

IMPORTANT: VERY LITTLE MOVEMENT OF SCREWS (D) AND (E) IS NECESSARY TO ADJUST THE FENCE PARALLEL WITH THE MITER GAGE SLOT.

ADJUSTING CLAMPING ACTION OF FENCE LOCKING HANDLE

When the fence locking handle (A) is pushed to the down position, as shown in Fig. 56, the fence assembly (B) should be completely clamped to the guide tube (C). If the fence assembly (B) is not completely clamped to the guide tube (C) when the handle (A) is pushed down, as shown in Fig. 56, lift up handle (A) and raise fence assembly (B) up off the guide tube (C). Slightly tighten the two adjusting screws (D) and (E) Fig. 57, using the 3/16" allen wrench (F) not supplied. Adjusting screws (D) and (E) Fig. 57, should be tightened an equal amount. Replace fence onto the guide tube and recheck to see if the fence assembly (B) Fig. 56, is completely tightened to the guide tube (C) with the locking handle (A) pushed down. 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.

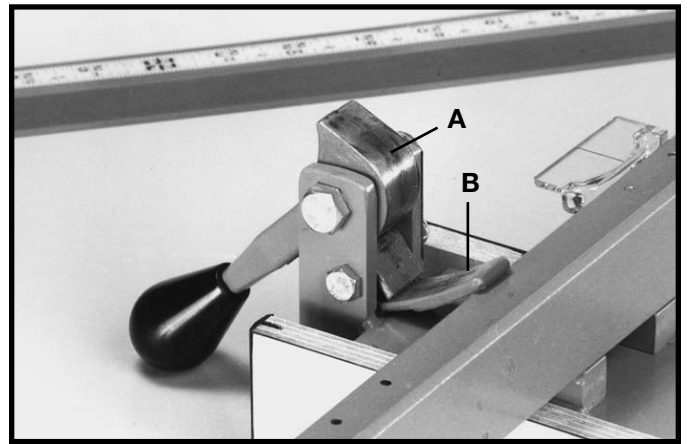


Fig. 53

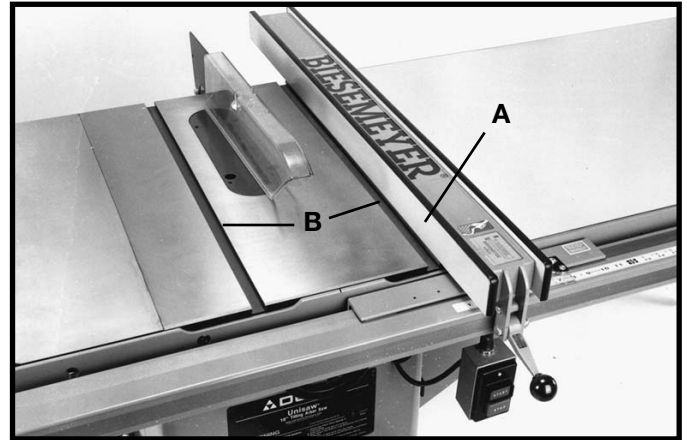


Fig. 54

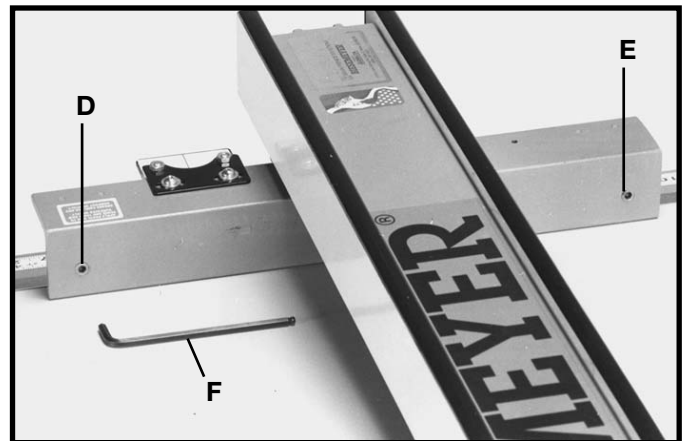


Fig. 55

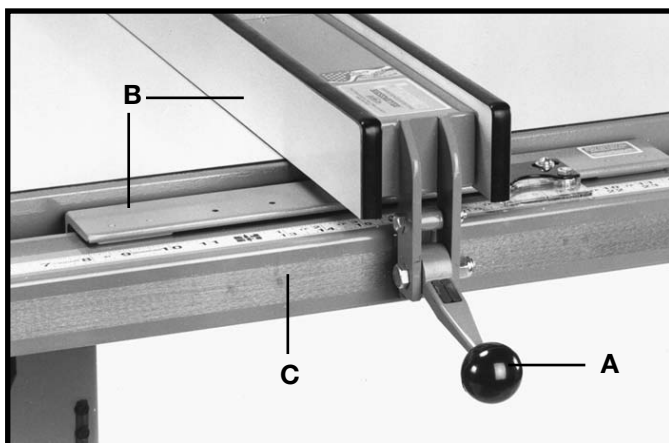


Fig. 56

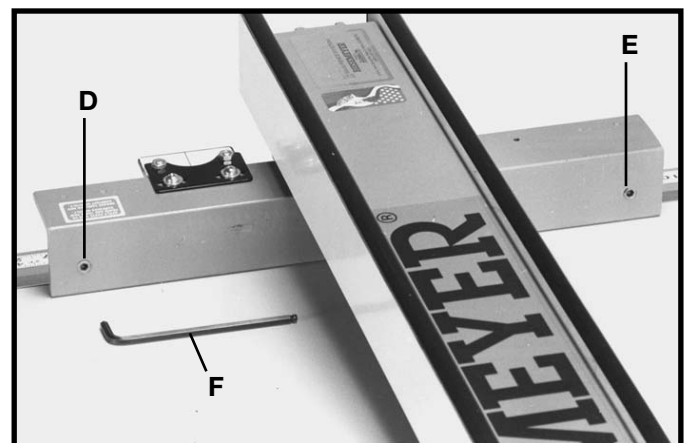


Fig. 57

UNIFENCE ASSEMBLY

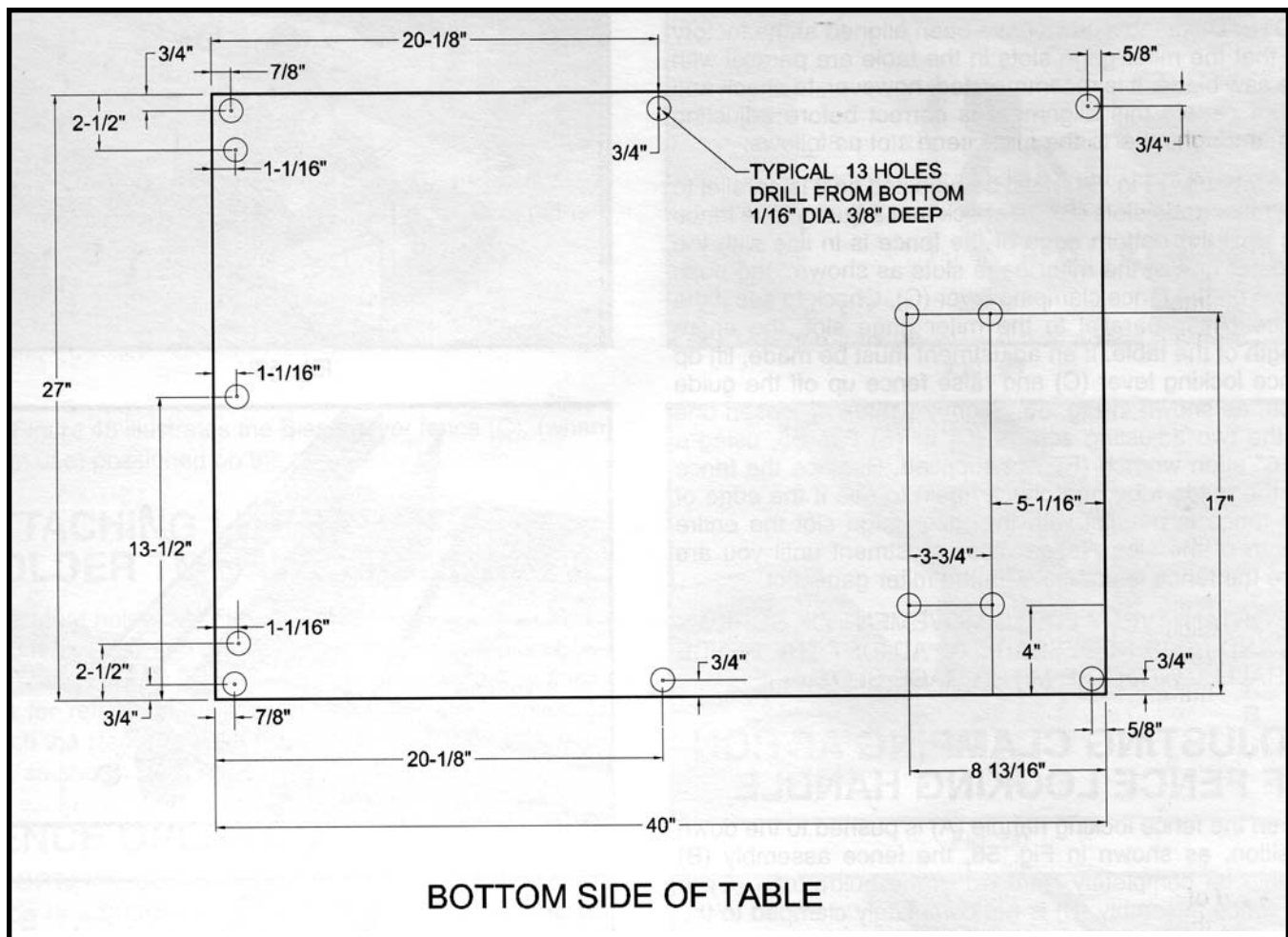


Fig. 58

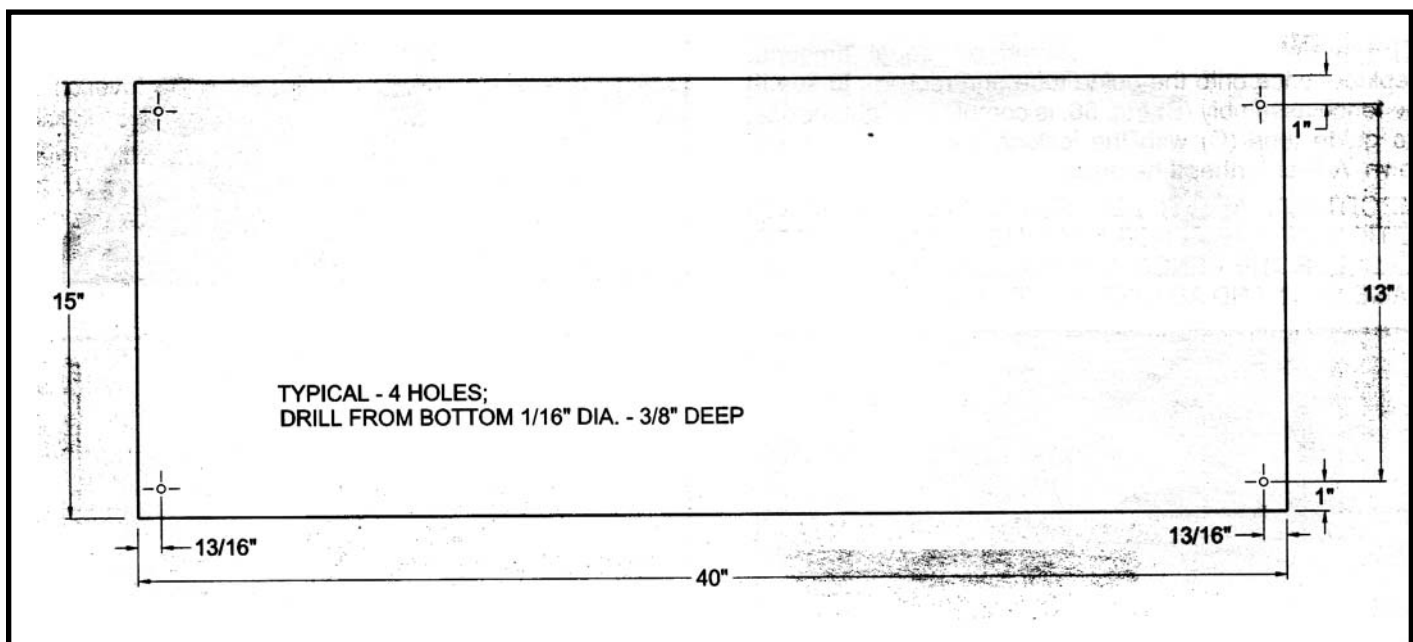


Fig. 59

ASSEMBLING TABLE AND SHELF TO SAW CABINET

1. The table board supplied will require thirteen 1/16" diameter x 3/8" deep holes to be drilled in the bottom of the table board at the locations illustrated in Fig. 58. **NOTE:** The table board should be positioned so that the edge with no veneer is on the side that will be attached to the extension wing.

2. The shelf board supplied will require four 1/16" diameter x 3/8" deep holes to be drilled in the bottom of the board at the locations illustrated in Fig. 59.

3. Assemble table leg support brackets (A) Fig. 60, at the locations drilled in STEP 1, to the table board using four #8 x 7/8 inch-long wood screws supplied. **NOTE:** The sides of table supports (A) Fig. 60, with narrow slots, should be against the table. **CAUTION: DO NOT OVER-TIGHTEN MOUNTING SCREWS.** Over-tightening screws in particle board may cause them to strip.

4. Assemble two legs (C) Fig. 61, to the support brackets (A) using two 5/16-18 x 2-3/4" hex head screws, four 11/32" flatwashers, two 5/16" lock washers, and 5/16" hex nuts. **NOTE:** The four flat washers will be positioned underneath the heads of each screw and under each lockwasher. **CAUTION:** Do not completely tighten hardware at this time.

5. Assemble shelf bracket (D) Fig. 61, to two legs (C) as shown, using two 5/16-18 x 2-3/4" hex head screws, four 11/32" flat washers, two 5/16" lockwashers, and two 5/16-18 hex nuts. **IMPORTANT:** The side of support (D) with the wide slots should be fastened against the legs. Tighten all mounting hardware used to assemble the legs.

6. Assemble the two leveling screws and locking nuts (E) Fig. 61, to the bottom of the legs.

7. Fasten the front and rear table supports (F) and (G) Fig. 62, to the bottom of the table as shown using six #8 x 7/8" long screws (H) supplied (four of which are shown). **NOTE:** The slots closer to the angles in the supports (F) and (G) should be against the table. Make certain the ends of the table supports do not extend out past the table. The rear support (G) Fig. 62, can be fastened to the bottom of the table by tightening screws (H). At this time, however, the screws (H) holding the front support (F) should not be completely tightened. **CAUTION: DO NOT OVER-TIGHTEN MOUNTING SCREWS.** Over-tightening screws in particle board may cause them to strip.

8. Assemble Z-brackets (J) Fig. 63, to the inside edge on right side of extension wing (K) as shown, using three 7/16-20x 3/4 hex head screws, lockwashers, and flat washers (L). Place lockwasher, washer, z-bracket onto screw and thread screw from the inside of the extension wing and tighten securely. **NOTE:** Using a square (M) Fig. 64, make certain that Z-brackets (J) are perpendicular to the saw table as shown. Also, lift upward on Z-brackets while tightening screws to eliminate any play.

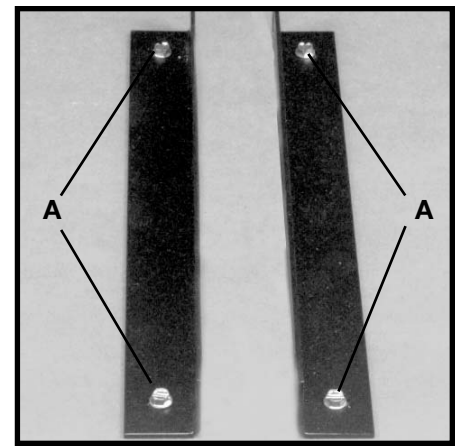


Fig. 60

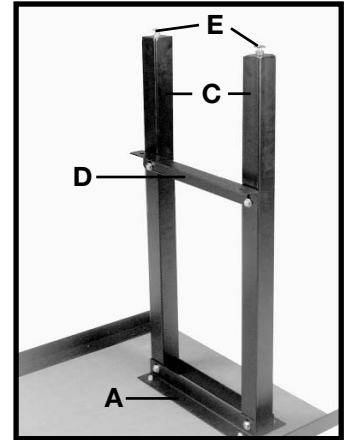


Fig. 61

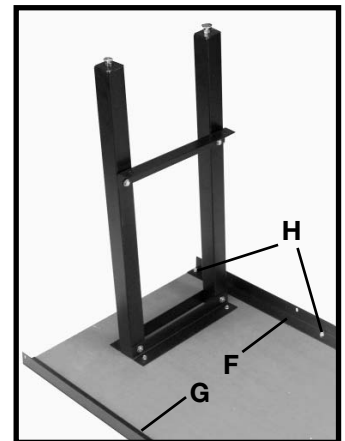


Fig. 62

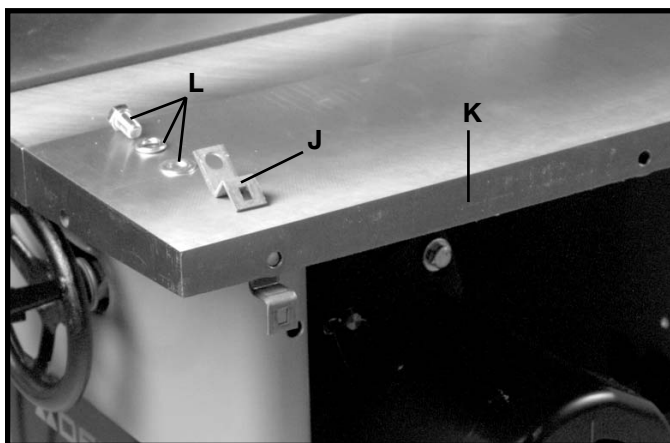


Fig. 63

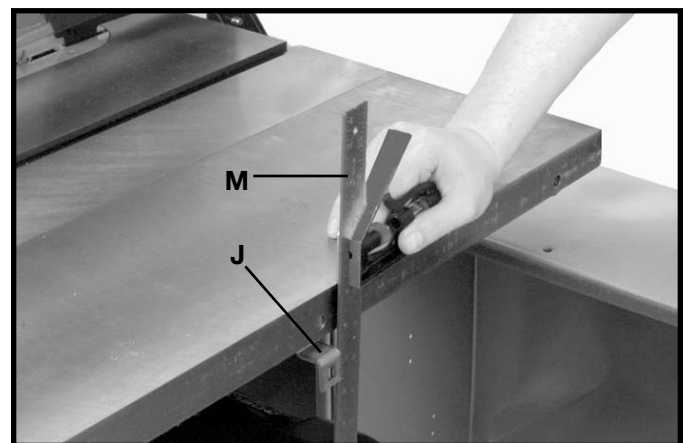


Fig. 64

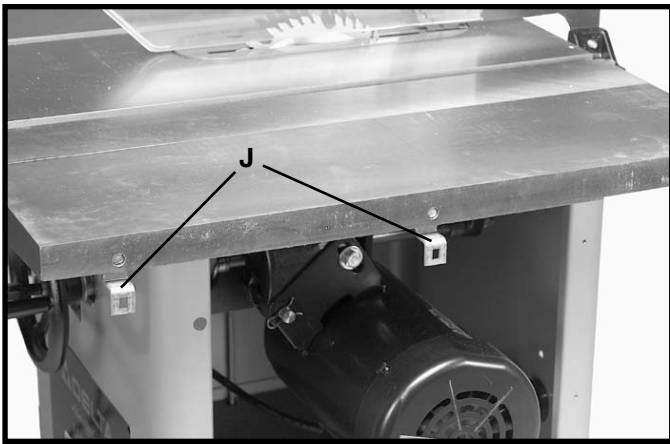


Fig. 65

9. Fig. 65, illustrates Z-brackets (J) properly assembled to extension wing.

10. Assemble angle brackets (N) Fig. 66, onto three Z-brackets (J), two of which are shown, using three 1/4"-20 x 3/4" carriage bolts, flat washers and hex nuts (P).

NOTE: The longer leg of angle brackets (N) Fig. 66, must be secured to Z-brackets (J).

NOTE: Do not completely tighten hardware at this time.

11. Fig. 67, illustrates angle brackets (N) properly assembled to Z-brackets (J).

12. Position table board (R) Fig. 68, on top of angle brackets (N) as shown.

13. While holding table board (R) Fig. 69, tightly against extension wing (K), fasten table (R) to brackets (N) Fig. 68, from underneath the table using three #8 x 7/8 inch-long wood screws (P). **CAUTION: DO NOT OVER-TIGHTEN TABLE MOUNTING SCREWS.** Over-tightening screws in particle board may cause them to strip.

14. Using a straight edge (S) Fig. 69, make certain the Unifence table surface is level with the saw table by adjusting two leveling screws located on the bottom of table legs and adjusting angle brackets (N) Fig. 70, use a level, side to side and front to back to make sure the table is level. Then tighten three hex nuts (P). **IMPORTANT:** Front edge of Unifence table must be flush with or slightly behind front edge of saw table.

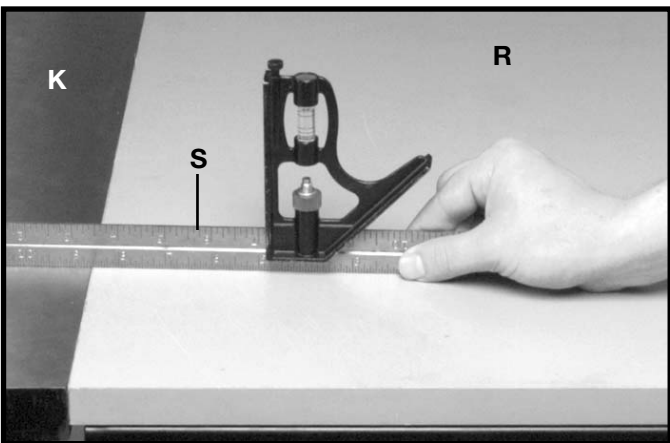


Fig. 69

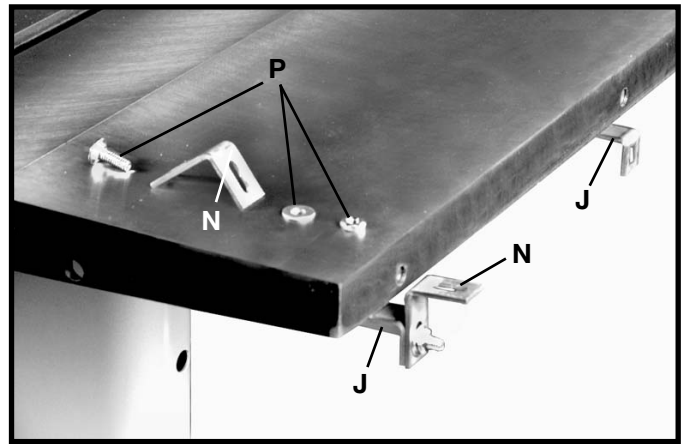


Fig. 66

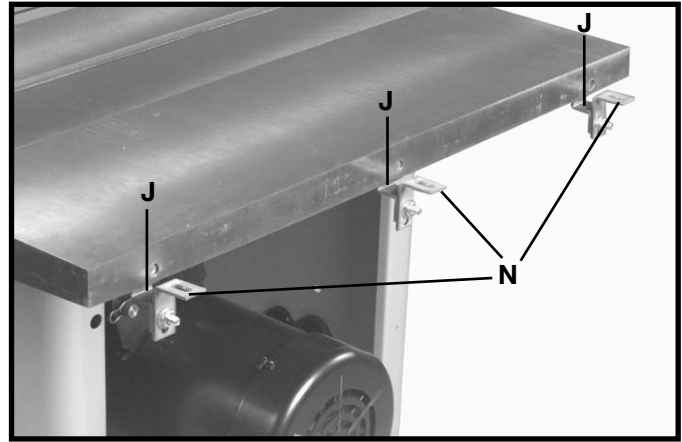


Fig. 67

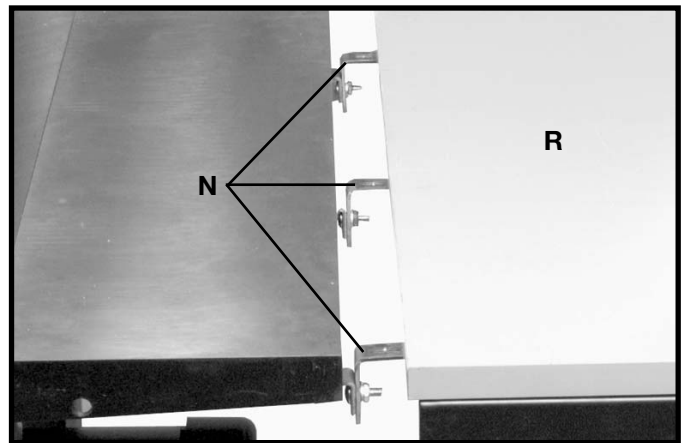


Fig. 68

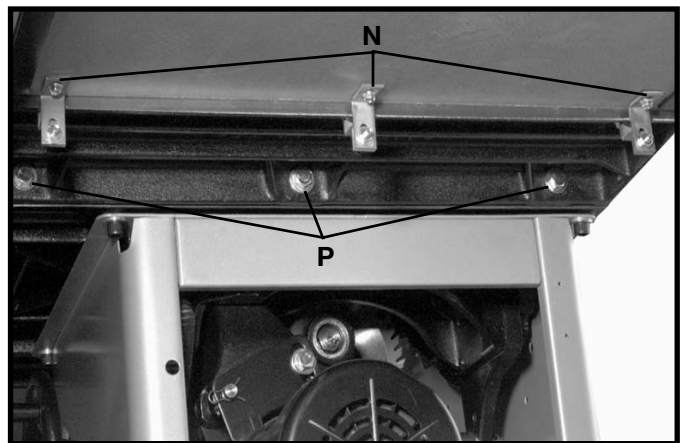


Fig. 70

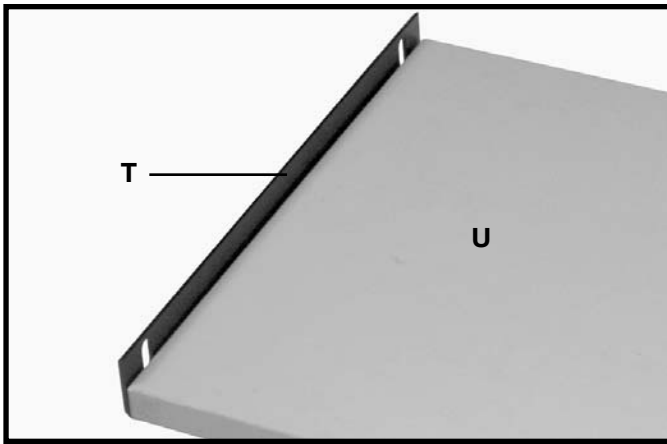


Fig. 71

15. Fasten lower shelf bracket (T) Fig. 71, to one end of lower shelf (U) using two #8 x 7/8 inch-long wood screws supplied as shown in Fig. 71. **IMPORTANT:** The side of the bracket (T) Fig. 71, with the narrow slots should be against the table.

16. Fasten bracket (T) Figs. 71 and 72, to saw cabinet as shown using two 1/4-20 x 5/8" hex head screws, four flat washers, two lockwashers, and hex nuts. Place a flat washer onto a screw and insert screw through bracket and mounting hole in saw cabinet, then place another flat washer onto the screw followed by a lockwasher and then tighten a hex nut onto bolt, repeat this same procedure for the other hole.

17. Fasten the other end of lower shelf (U) Fig. 72, to the lower shelf bracket, which was assembled to the two legs earlier using two #8 x 7/8 inch-long wood screws.

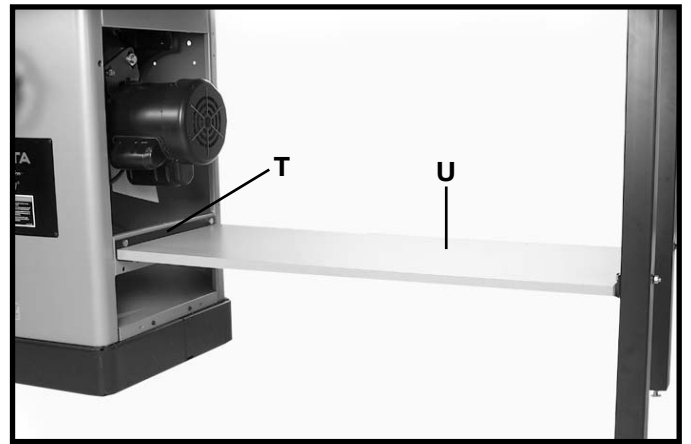


Fig. 72



Fig. 73

ASSEMBLING UNIFENCE GUIDE RAIL TO TABLE

1. Locate the Guide Rail and mounting hardware from the packing material of the Unifence.

2. The guide rail has end caps inserted into each end of the rail. Remove the left end cap (B) Fig. 74A, by inserting a flathead screwdriver (C) into the channel in front of the guide rail and press outward against the inside of the end cap (B) as shown. The end cap (B) will pop out. Note: Do not attempt to remove the end cap by forcing the screwdriver between the end cap and the end of the rail. This will damage both the cap and the rail.

3. Insert two 3/8-24 x 1" hex head bolts into the two holes (F), in the front of saw table and place flat washer and nut onto bolt from underneath the saw table. Screw bolts into nuts two full turns, leaving bolt head extended approximately 1/2" from the table. Note: Make sure to use only the two holes shown at (F).

4. Insert two 1/4-20 x 3/4" hex head bolt into the front support of the extension table (E) Fig. 74B and place flat washer and nut onto bolt from underneath the extension table. Screw bolt into nut two complete turns, leaving bolt head extended approximately 1/4" from the extension table.

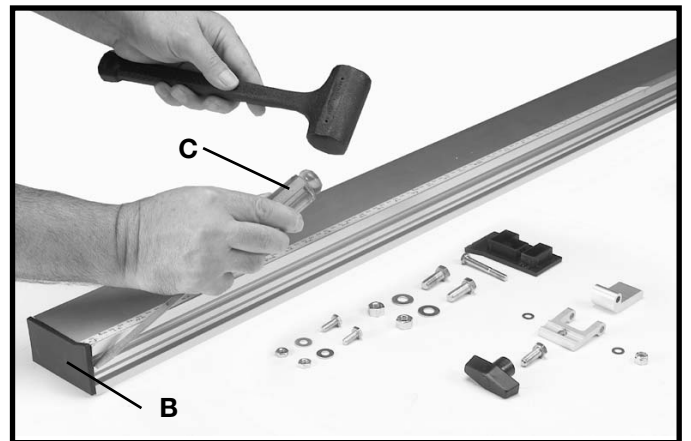


Fig. 74A

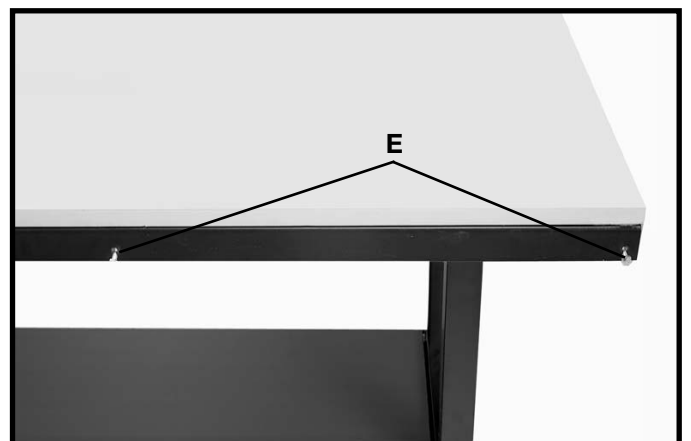


Fig. 74B

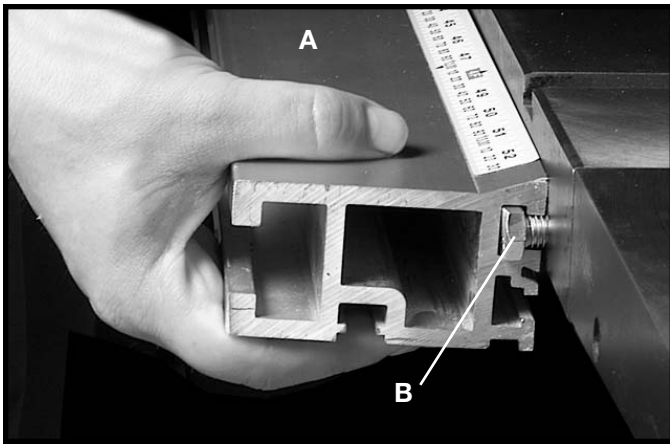


Fig. 75

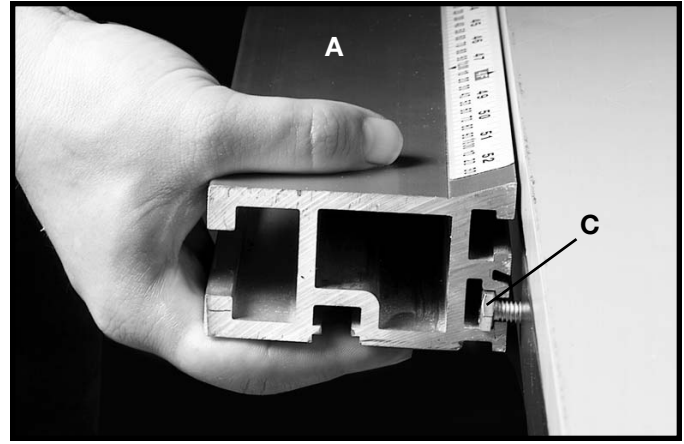


Fig. 76

5. From either end, slide the T-Slot guide rail (A) Fig. 75, onto the hex head of the bolts partially inserted in step 2 and 3 above. **Note: The bolt heads on the saw table slide into the upper t-slot (B) Fig. 75 and the bolt head on the extension table slide into the lower t-slot (C) Fig. 76.**

6. Slide the guide rail along until the “0” on the Unifence scale is aligned with the right edge of the saw table. Snug the hex nuts on the saw and extension table but do not tighten at this time.

7. Adjust the guide rail (C) Fig. 77, 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. 77, can be adjusted up or down 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.

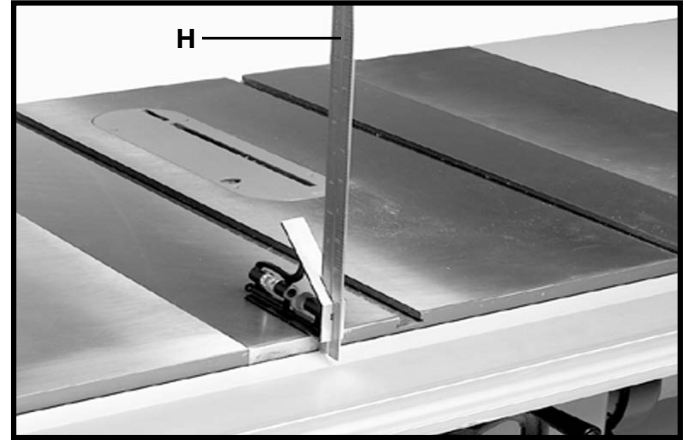


Fig. 77

8. Move the square (H) Fig. 78, to the end of the Unifence table and check to make certain the same distance is maintained 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. 79, against the guide rail (C), and fasten with 1/4-20 nut and flat washer (M). Tighten two wood screws, one of which is shown at (N) Fig. 79, that fasten the Unifence table to the guide rail.

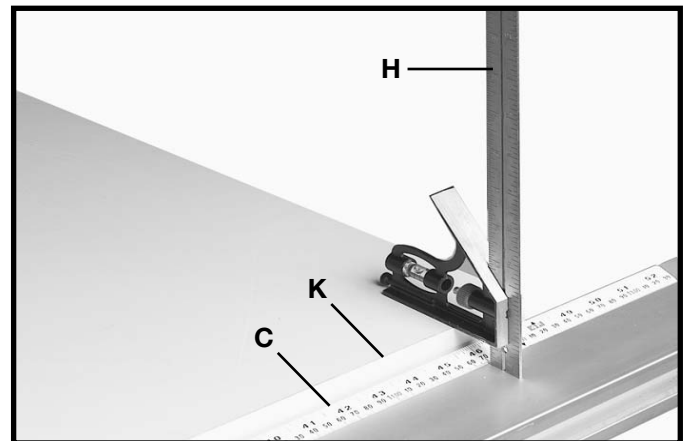


Fig. 78

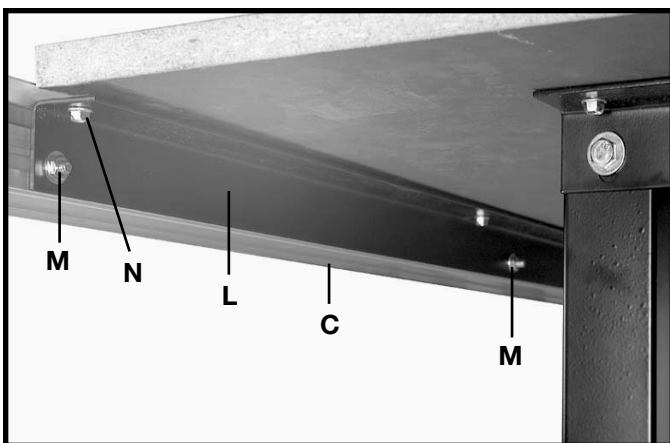


Fig. 79

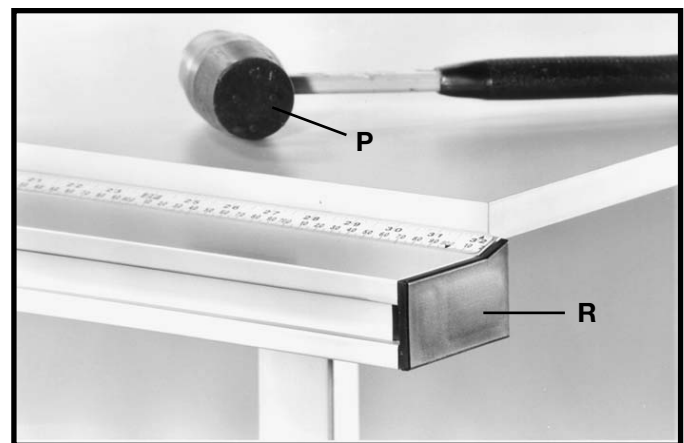


Fig. 80

ASSEMBLING RAIL STOP

1. Insert 1/4-20x2" bolt (A) through hole into one side of bracket (B) Fig. 81.
2. Place one washer (C), on bolt (A), and slide bolt through flip stop (D) Fig. 81.
3. Place the other washer (C), on bolt (A), and slide bolt (A) through other side of bracket (B) Fig. 81.
4. Screw nut (E) onto bolt (A) and tighten.
5. Insert bolt (F) through bracket (B) as shown and screw knob (G) onto bolt (F) approximately 3 complete turns. Fig. 81.
6. To attach rail stop to unifence see Fig. 82.
7. Using a rubber mallet (P) Fig. 80, 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.

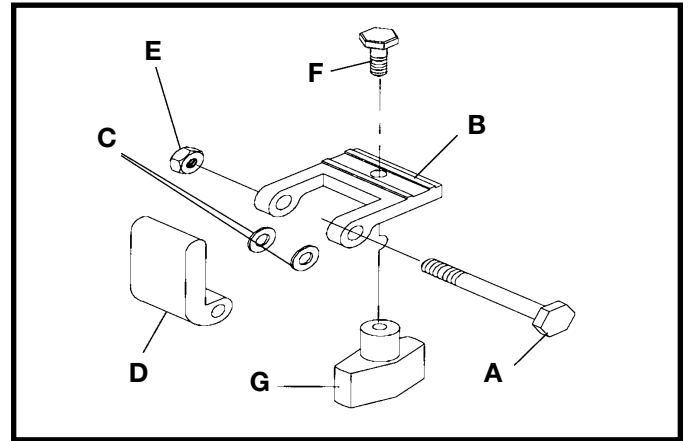


Fig. 81

ADJUSTING RAIL STOP

1. The Rail Stop Assembly Fig. 82, can be adjusted to any number of positions along the guide rail providing a quick stop setting for the Unifence body by loosening knob (G) and sliding the stop along the rail to the desired position and re-tighten.
2. Any number of stops can be purchased and installed to provide time saving quick stop adjustment for the Unifence body.
3. If flip stop does not retract fully the bolt (F) Fig. 82, may have to be repositioned in the rail slot to allow the flip stop to retract fully. If bolt (F) needs to be repositioned, just slide the bolt out of the rail and turn the head of the bolt one third of a turn (one flat) and slide back into rail, repeat this until the bolt is in the right position for the flip stop to retract fully. Fig. 82A.

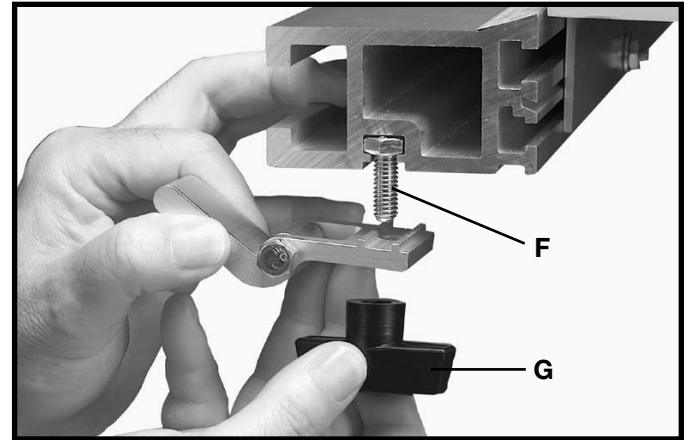


Fig. 82

ASSEMBLING CURSOR TO UNIFENCE BODY

1. Remove two screws and flat washers (A) Fig. 83, and assemble the cursor (B) to the Unifence body (C). Replace the two screws and flat washers (A).
2. Fig. 84 illustrates the cursor (B) assembled to the Unifence body. Adjustment to the cursor (B) will be made later.



Fig. 82A

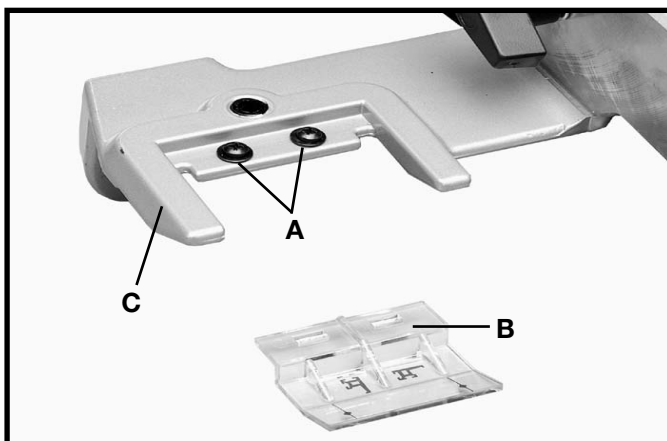


Fig. 83

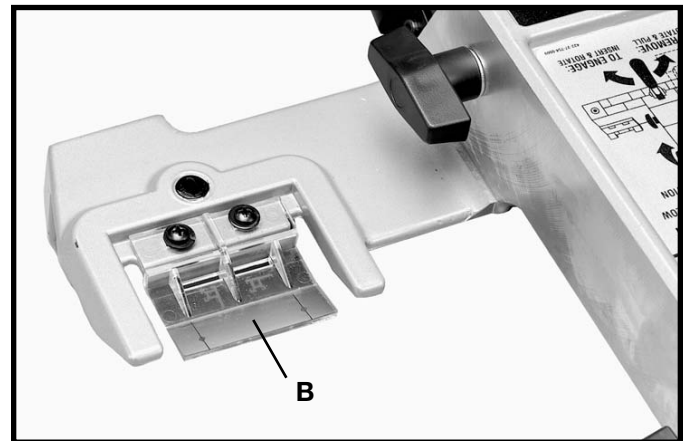


Fig. 84

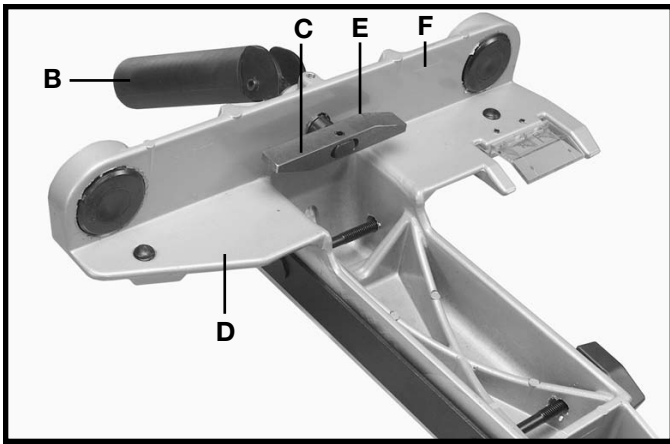


Fig. 85

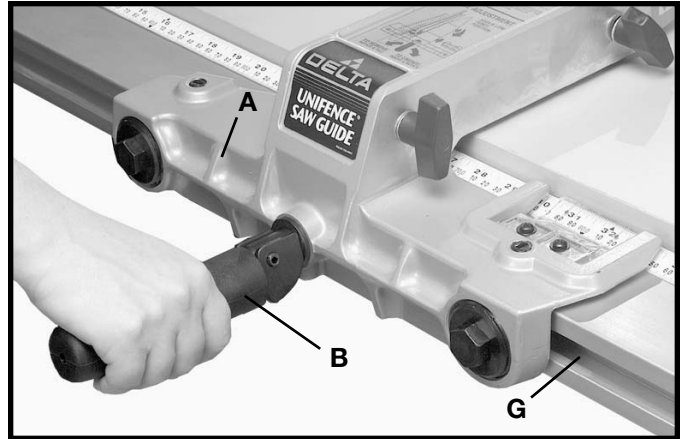


Fig. 86

ASSEMBLING UNIFENCE BODY TO GUIDE RAIL

1. Turn fence body (A) Fig. 85, 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 (E) of the fence body, and that the inside edge (F) of the clamp bracket is parallel to surface (F) of the fence body. Turn handle (B) Fig. 85, if necessary.
2. Place fence body (A) Fig. 86, 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.
3. While pushing in on handle, turn to the right indent position as shown in Fig. 87. This will prevent fence clamp from sliding out of the channel (G).
4. Lock fence body (A) to the guide rail by pushing down on handle (B) as shown in Fig. 88.

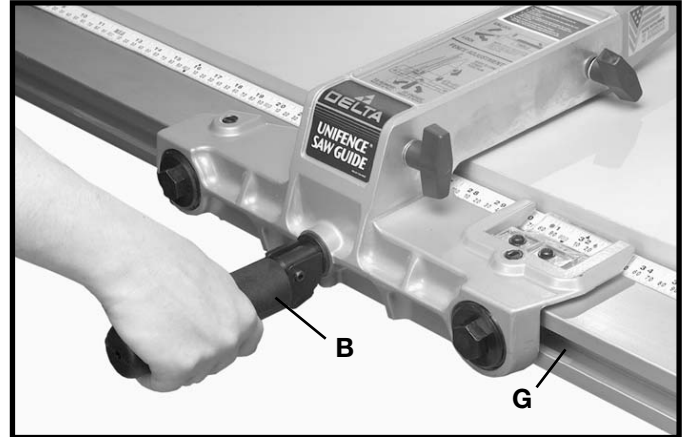


Fig. 87

ASSEMBLING FENCE TO UNIFENCE BODY

1. The fence (A) can be assembled to clamp plate (B) in either the horizontal position as shown in Fig. 89, or the vertical position as shown in Fig. 90. Make certain the two lock knobs, one of which is shown at (C), are loose and slide fence (A) onto clamp plate (B) as shown. Then tighten the two lock knobs (C).

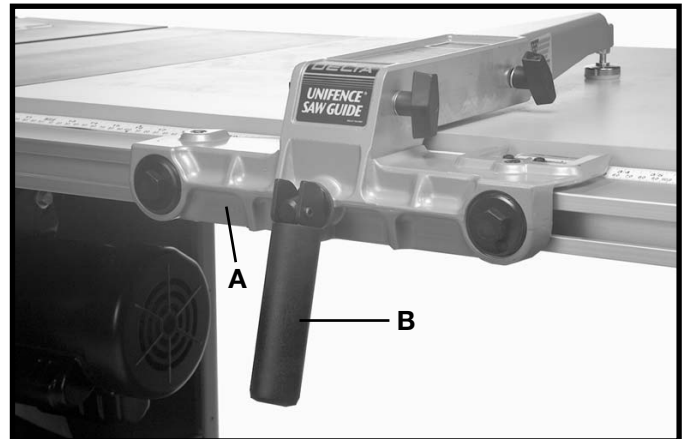


Fig. 88

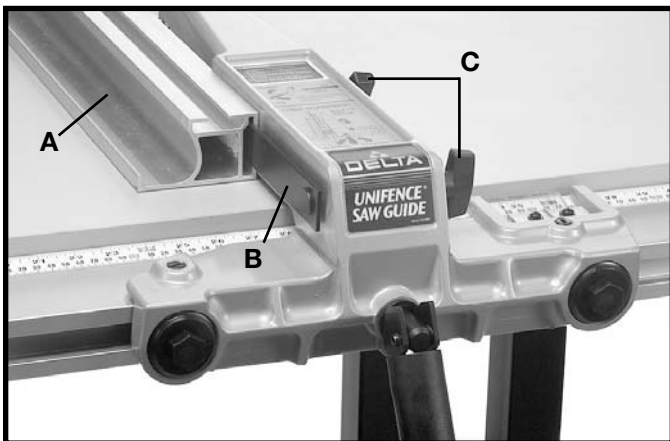


Fig. 89

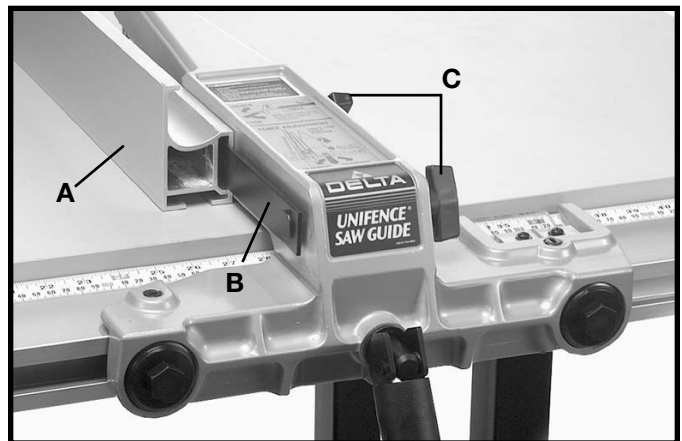


Fig. 90

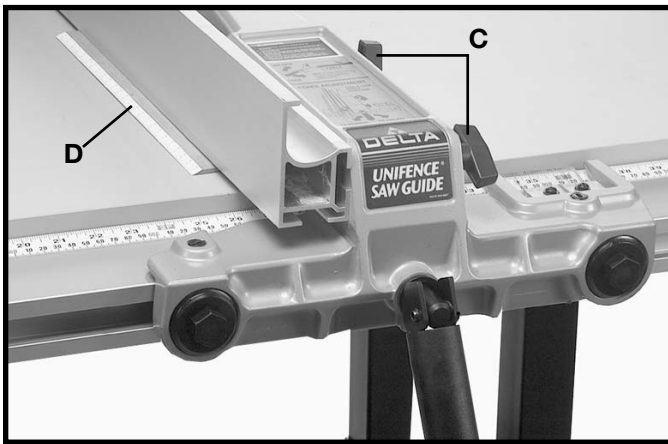


Fig. 91



Fig. 92

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. 91, and place a thin object such as a ruler (D) between the table and fence, as shown. Then tighten two lock knobs (C).

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.

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.

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 (O). 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 (O), 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 (O) by loosening the two screws (E) Fig. 95. After adjustment is completed tighten the two screws (E).



Fig. 93



Fig. 94

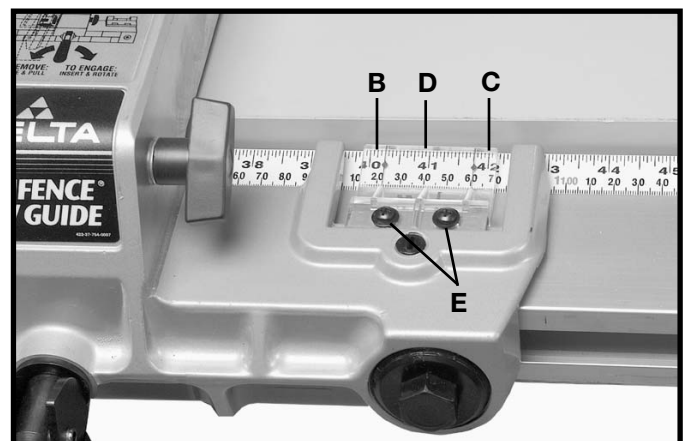


Fig. 95

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.

RIPPING WITH THE UNIFENCE

Ripping is the operation of making a lengthwise cut through a board, as shown in Fig. 97, 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 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. 97. 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.

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. 98. 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. 99.

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. 100, 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 solidly against the fence, as shown.

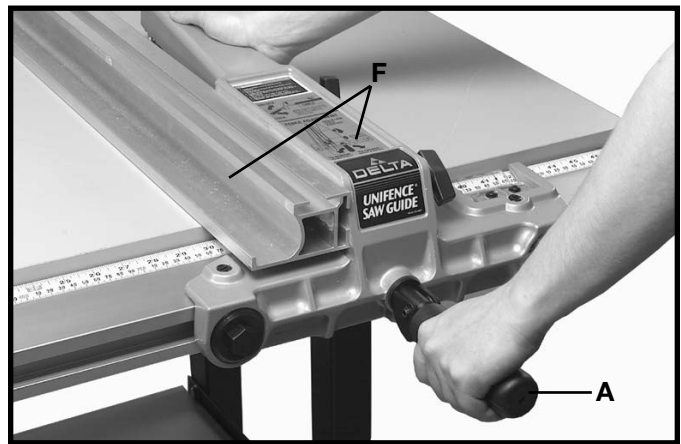


Fig. 96

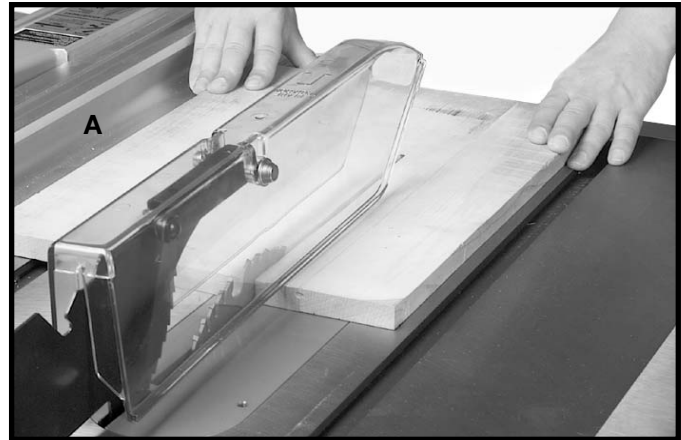


Fig. 97

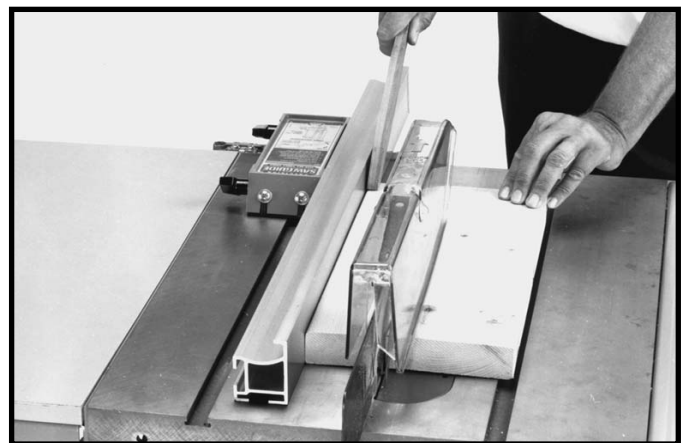


Fig. 98

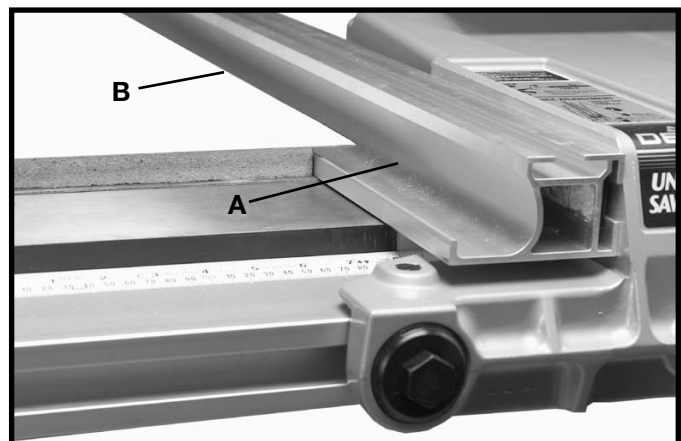


Fig. 99

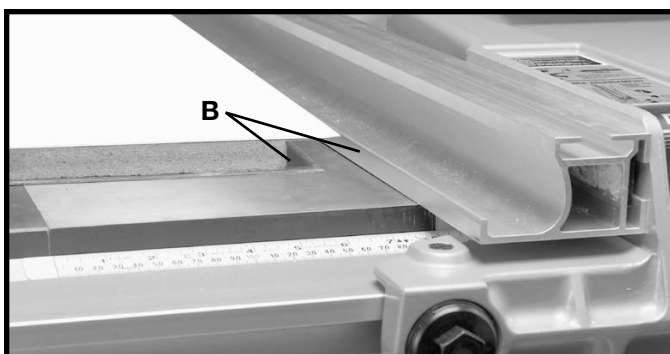


Fig. 100

ADJUSTING FENCE PARALLEL TO MITER GAGE SLOTS

The fence (A) Fig. 101, 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. 101, using the arbor wrench or a 7/8" wrench, until the fence is parallel with the miter gage slot. **IMPORTANT: DO NOT OVER-TIGHTEN PLUGS (D) AND (E) FIG. 101. VERY LITTLE MOVEMENT OF THESE PLUGS IS NECESSARY WHEN ADJUSTING THE FENCE PARALLEL WITH THE MITER GAGE SLOT.**

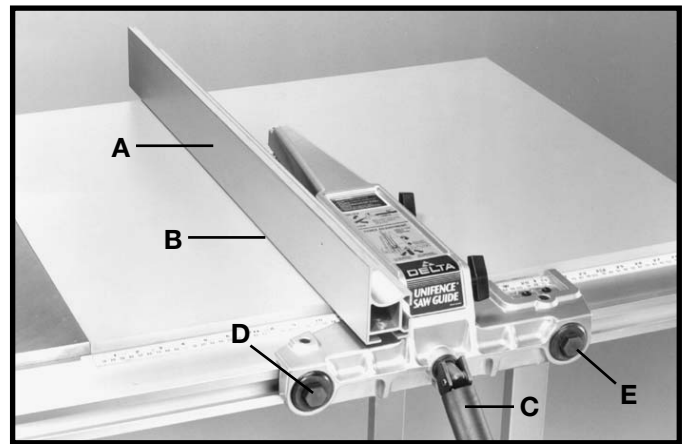


Fig. 101

ADJUSTING FENCE 90 DEGREES TO TABLE

The fence must be adjusted so that the face of fence (A) Fig. 102, 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) until the fence is 90 degrees to the table.

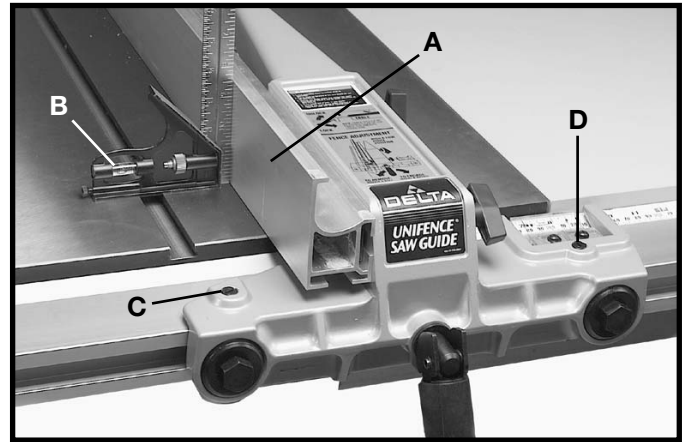


Fig. 102

IMPORTANT: VERY LITTLE MOVEMENT OF THESE SCREWS (C) AND (D) IS NECESSARY TO MAKE THIS ADJUSTMENT.

ADJUSTING CLAMPING ACTION OF FENCE LOCKING HANDLE

When the fence locking handle (A) is pushed to the down position, as shown in Fig. 103, 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. 103, lift up on locking handle (A) Fig. 104, and slightly tighten two adjustment plugs (C) using the 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.**

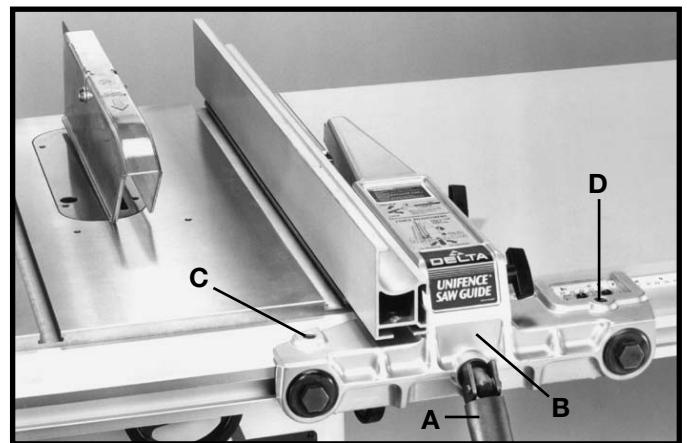


Fig. 103

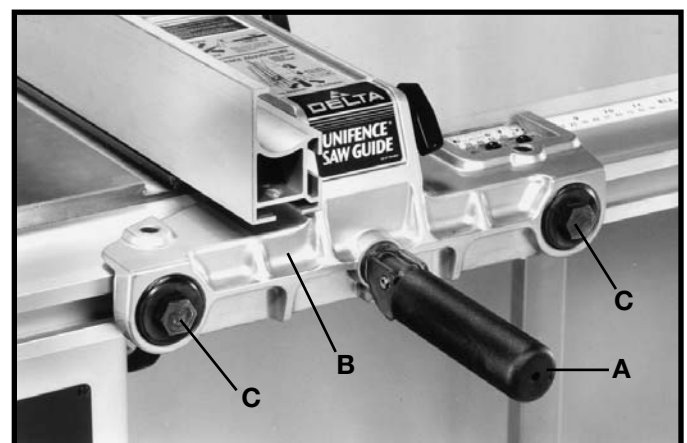


Fig. 104

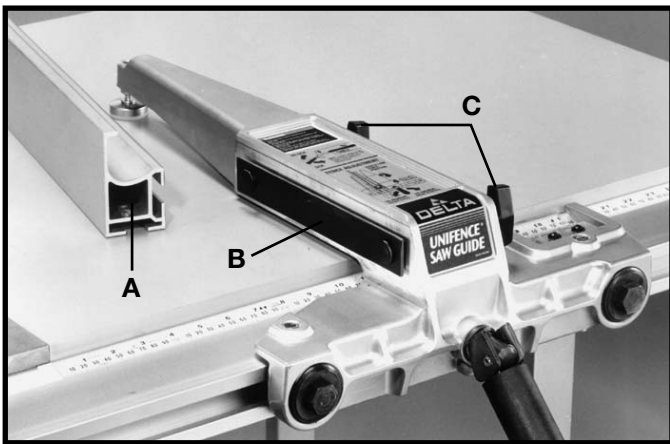


Fig. 105

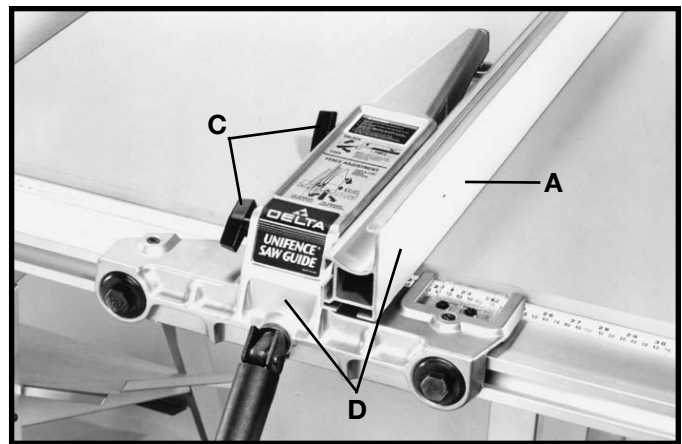


Fig. 106

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) Figures 105 and 106, 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. 106. The complete fence assembly (D) Fig. 106, can easily be moved to the left side of the saw table.

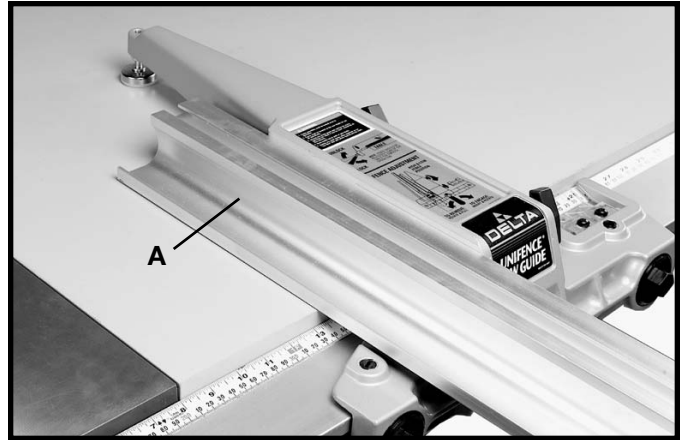


Fig. 107

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. 107, or purchase a 12" long fence (B), as shown in Fig. 108. A typical operation using the 12" long fence (B) as a cut-off gage is shown in Fig. 109.



Fig. 108

USING AUXILIARY WOOD FACING ON THE UNIFENCE

It is necessary when performing special operations such as when using the moulding cutterhead to add wood facing (A) Fig. 110, 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. A suitable stock size for most work is 3/4", although an occasional job may require one inch facing.



Fig. 109

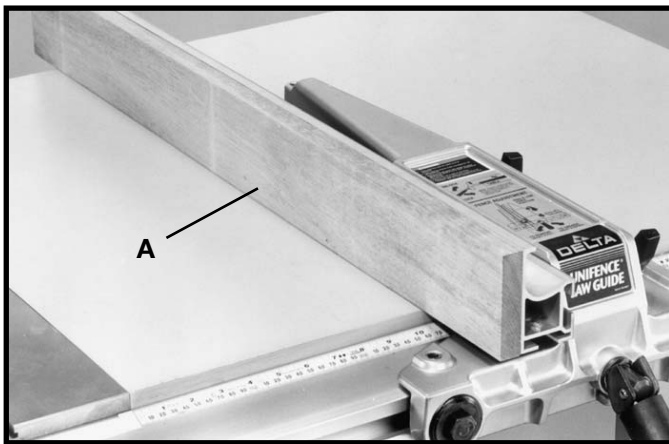


Fig. 110

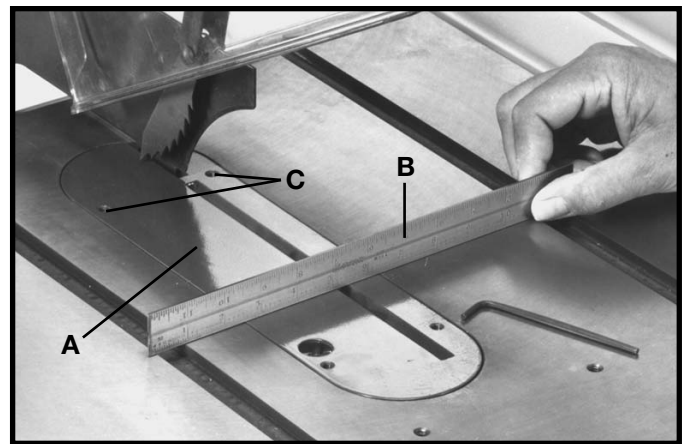


Fig. 111

ADJUSTING TABLE INSERT

Place a straight edge (B) across the table at both ends of the table insert as shown in Fig. 111. The table insert (A) should always be level with the table. If an adjustment is necessary, turn the adjusting screws (C), as needed. Four adjusting screws (C) are supplied.

CONNECTING SAW TO POWER SOURCE

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. 112.

Repair or replace damaged or worn cord immediately.

SINGLE PHASE OPERATION THREE HORSEPOWER MOTORS

The motors supplied with single phase, 3 horsepower Unisaws are designed to be operated from a 220-240 volt power system.

The single phase Unisaws are intended to be used on a circuit that has an electrical outlet that looks like the one illustrated in Fig. 112. The tool has a plug similar to the plug illustrated in Fig. 112. Make certain the tool is connected to an outlet having the same configuration as the plug (NEMA L-15R). No adapter is available, or should be used with the tool. **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.**

The single phase, three horsepower Unisaw motors are single voltage motors and cannot be connected to operate at a voltage other than 220-240 volts.

If you desire to operate the single phase 3 horsepower Unisaw with an extension cord, use a proper extension cord and make certain it is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. Fig. 113, shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gage. The smaller the gage number, the heavier the cord.

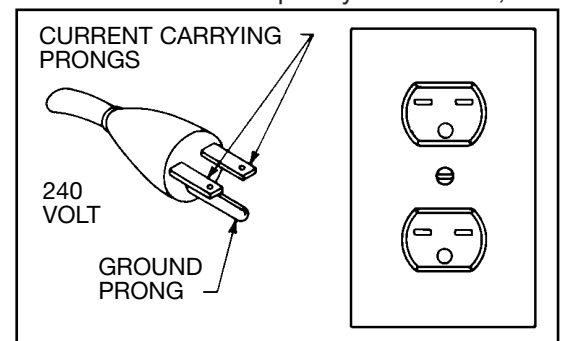


Fig. 112

TOTAL LENGTH OF CORD IN FEET	GAGE OF EXTENSION CORD TO USE
50	14 AWG
100	12 AWG
Over 100	Not recommended

Fig. 113

OPERATING CONTROLS AND ADJUSTMENTS

STARTING AND STOPPING THE SAW

To apply power to the machine, push "ON" button (A) Fig. 114. To stop the machine, push "OFF" button (B).

LOCKING SWITCH IN THE "OFF" POSITION

IMPORTANT: When the saw is not in use the switch should be locked in the OFF position using a padlock (A) Fig. 115, with a 3/16" diameter shackle to prevent unauthorized use of the saw.

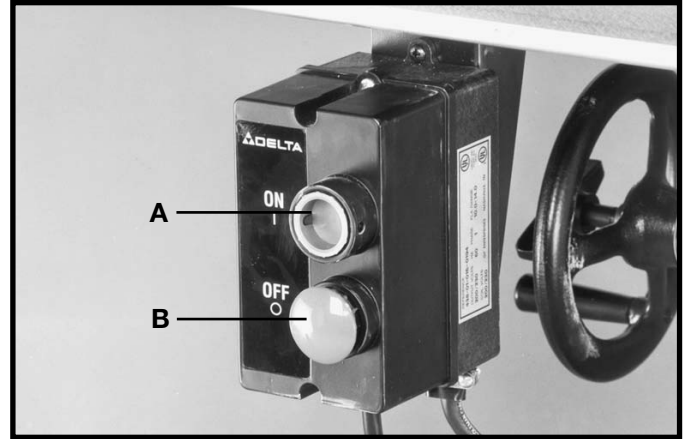


Fig. 114

BLADE RAISING MECHANISM

The saw blade is raised and lowered with the front handwheel (A) Fig. 116. With the exception of hollow ground blades, the blade should be raised 1/8" to 1/4" above the top surface of the material being cut. With hollow ground blades, the blade should be raised the maximum to provide greater clearance. To raise the saw blade, loosen lock knob (B) Fig. 116, and turn the handwheel (A), clockwise. To lower the saw blade, turn handwheel (A) counterclockwise.

The saw blade is locked at any height by turning the lock knob (B) Fig. 116, clockwise. Due to the wedge action of this locking device, only a small amount of force is required to lock the blade raising mechanism securely. Any added force merely puts unnecessary strain on the locking device. Limit stops for raising or lowering are permanently built into the mechanism and need no further adjustment.

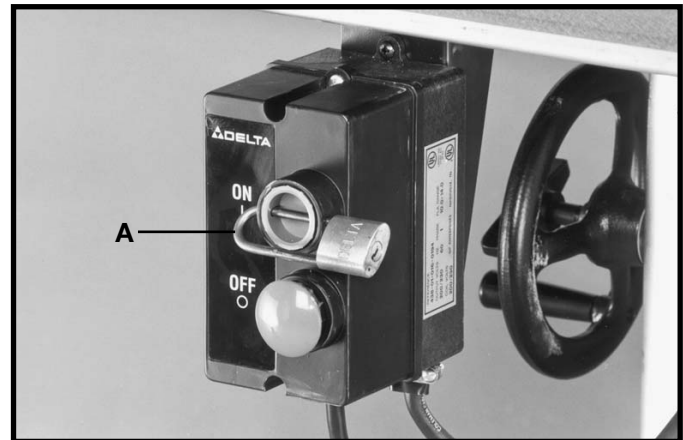


Fig. 115

BLADE TILTING MECHANISM

The blade tilting mechanism allows the blade to be tilted up to 45 degrees to the right.

To tilt the saw blade to the desired angle, loosen lock knob (D) Fig. 116, and turn handwheel (C). A pointer indicates the angle of tilt on scale (E), which is marked in one-degree increments. To lock the saw blade in the desired angle of tilt, tighten lock knob (D).

IMPORTANT: ALWAYS LOCK THE BLADE IN POSITION BEFORE APPLYING POWER TO THE SAW.



Fig. 116

ADJUSTING 90 AND 45 DEGREE POSITIVE STOPS

Positive stops are provided to quickly and accurately position the blade at 90 and 45 degrees to the table. To check and adjust the positive stops, proceed as follows:

DISCONNECT SAW FROM POWER SOURCE.

1. Raise the saw blade all the way to the top and turn the blade tilting handwheel clockwise as far as it will go.
2. Using a square, check to see if the blade is 90 degrees to the table. If an adjustment is necessary, turn the blade tilting handwheel counterclockwise. Loosen locknut (A) Fig. 117, and tighten or loosen adjusting screw (B) until head of screw (B) contacts casting on front trunnion when the blade is at 90 degrees to the table. Then tighten locknut (A).
3. Check to see if the tilt indicator pointer points to the zero mark on the scale. Adjust if necessary.
4. Turn the blade tilting handwheel counterclockwise as far as it will go. Using a square, check to see if the blade is at 45 degrees to the table. If an adjustment is necessary, turn the blade tilting handwheel clockwise until the adjusting screw (D) Fig. 118, and locknut (C) are in view, in the opening in the front of the saw cabinet, as shown. Loosen locknut (C) and tighten or loosen adjusting screw (D) until head of screw (D) contacts casting on front trunnion when the blade is at 45 degrees to the table. Then tighten locknut (C).

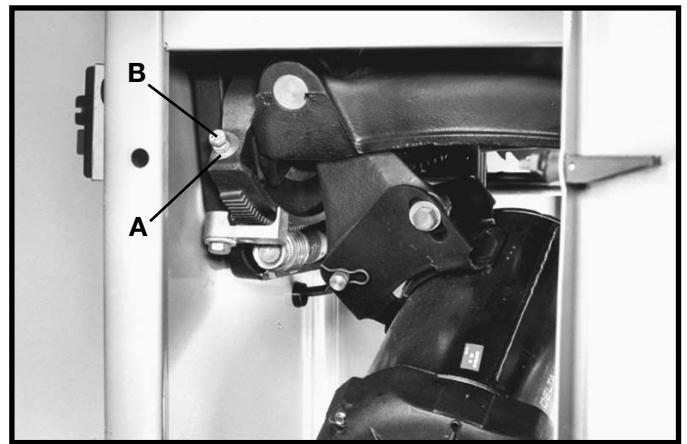


Fig. 117

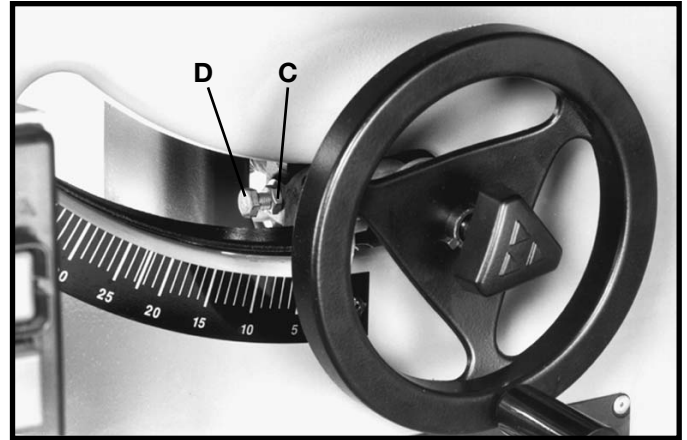


Fig. 118

ADJUSTING TABLE

The saw table has been aligned at the factory so the miter gage slots are parallel to the saw blade; however, it is recommended to check the alignment before initial operation as follows:

1. DISCONNECT THE MACHINE FROM THE POWER SOURCE.
2. Place a combination square (A) Fig. 119, on the table with one edge of the square in the miter gage slot, as shown, and adjust the square so the rule just touches one of the teeth on the saw blade at the forward position, as shown in Fig. 119. Lock the square in this position.
3. Rotate the saw blade so that the same tooth you used in STEP 2 is in the rear position, as shown in Fig. 120, and check this distance. Both the front and rear measurements should be identical.
4. If an adjustment is necessary, loosen the four screws that hold the table to the saw cabinet.
5. Shift the table until a position is found which brings the saw blade in the center of the table insert slot, and parallel to the miter gage slot.
6. Tighten the four screws that were loosened in STEP 4.

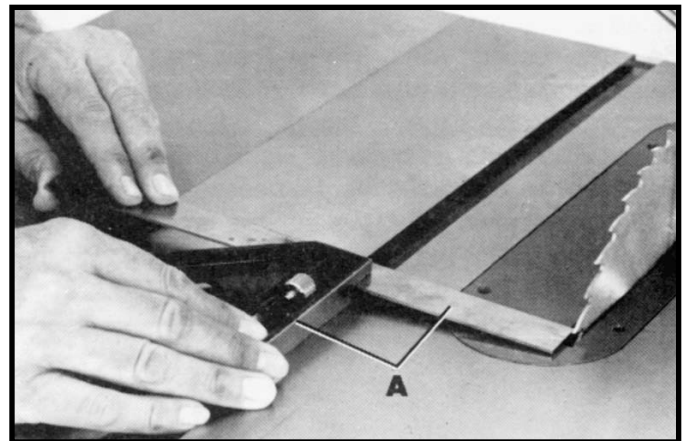


Fig. 119

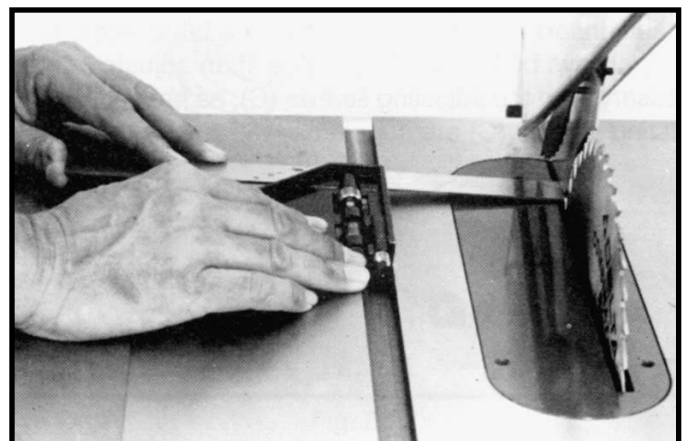


Fig. 120

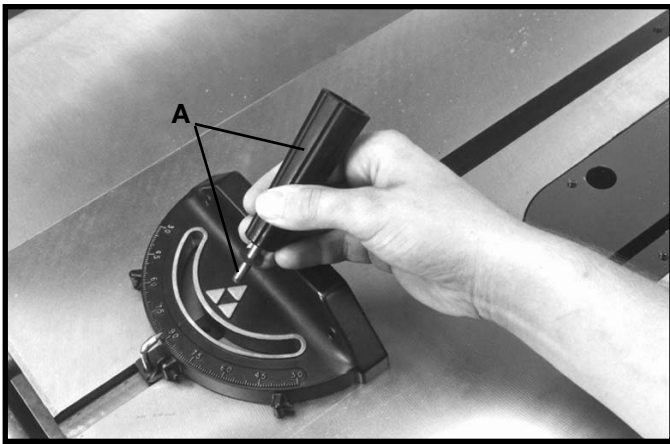


Fig. 121

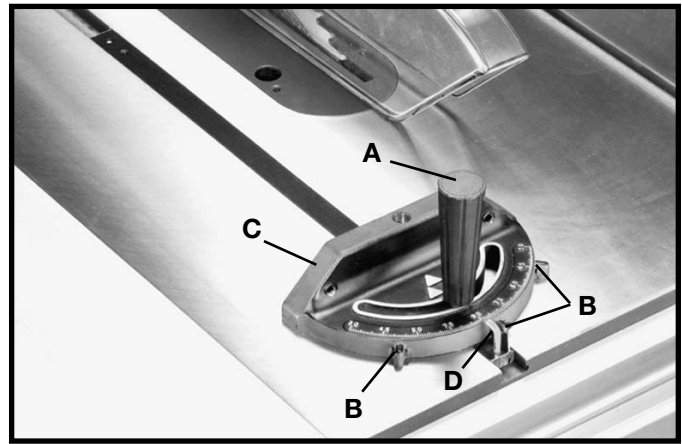


Fig. 122

MITER GAGE OPERATION AND ADJUSTMENT

Insert the miter gage bar into the miter gage slot and assemble the washer and lock handle (A) Fig. 121, to the miter gage bar as shown.

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. 122.

To rotate the miter gage, loosen lock knob (A) Fig. 122, and move the body of the miter gage (C), 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 (D) Fig. 122, must be moved up and out of the way.

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. 123, and turning the screw (G) in or out. Be certain to tighten screw (H) after adjustment is made.

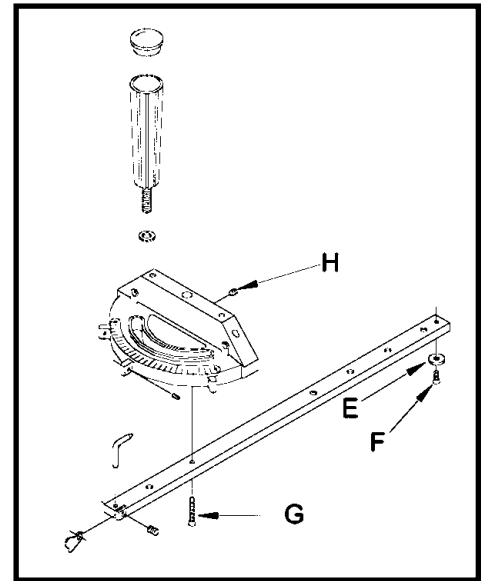


Fig. 123

MAINTENANCE

CHANGING THE SAW BLADE

1. MAKE CERTAIN THE MACHINE IS DISCONNECTED FROM THE POWER SOURCE.
2. NOTE: Two wrenches are supplied with the saw for changing the saw blade; a box end wrench and open end wrench.
3. Remove table insert and raise saw blade to its maximum height.
4. Place the open end wrench (B) Fig. 124, on the flats of the saw arbor to keep the arbor from turning, and using wrench (A), turn the arbor nut (C) clockwise. Remove arbor nut, blade flange and saw blade.
5. Assemble the new blade, making certain the teeth are pointing down at the front of the saw table and assemble outside blade flange and arbor nut. With wrench (B) Fig. 124, on the flats of the arbor to keep it from turning, tighten arbor nut by turning wrench (A) counterclockwise.
6. Replace table insert.

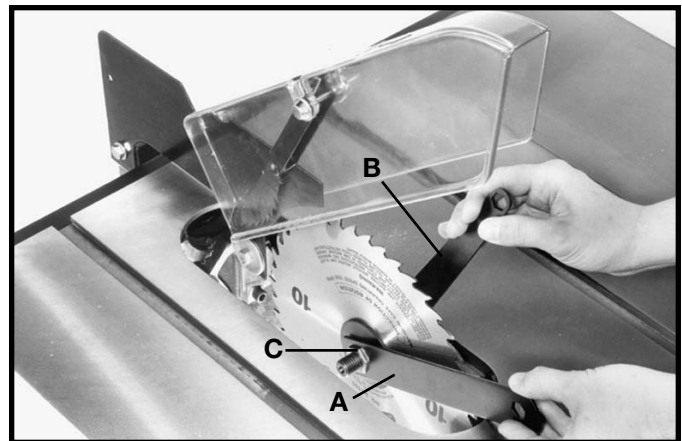


Fig. 124

NOTE: Use only 10" saw blades with 5/8" arbor holes, rated for at least 3450 RPMs.

REPLACING BELTS AND ADJUSTING BELT TENSION

1. DISCONNECT THE MACHINE FROM THE POWER SOURCE.
2. Open motor cover door to gain access to the motor.
3. Place a block of wood (C) Fig. 125, between the motor and saw cabinet as shown. NOTE: It may be necessary to raise the saw arbor in order to insert the wooden block. Lower the saw arbor until the motor contacts the wood.
4. Loosen bolt (D) Fig. 125, and continue to lower the saw arbor until all tension is removed from the belts (E). Tighten bolt (D).
5. Raise the saw arbor slightly and remove the block of wood (C) Fig. 125.
6. Lower the saw arbor. Remove the belts (E) Fig. 125, one at a time from the motor pulley.
7. Remove the belts (E) Fig. 126, one at a time from the arbor pulley (F).
8. Assemble the three new belts, one at a time in the grooves of the arbor pulley (F) Fig. 126, and onto the motor pulley.
9. When the new belts are assembled on the arbor pulley (F) Fig. 126 and the motor pulley, loosen screw (D) Fig. 125, and carefully let the motor rest on the belts.
10. Correct belt tension is when there is approximately 1/4 deflection in the center span of the pulleys, using light finger pressure. After tension is applied, tighten screw (D) Fig. 125.

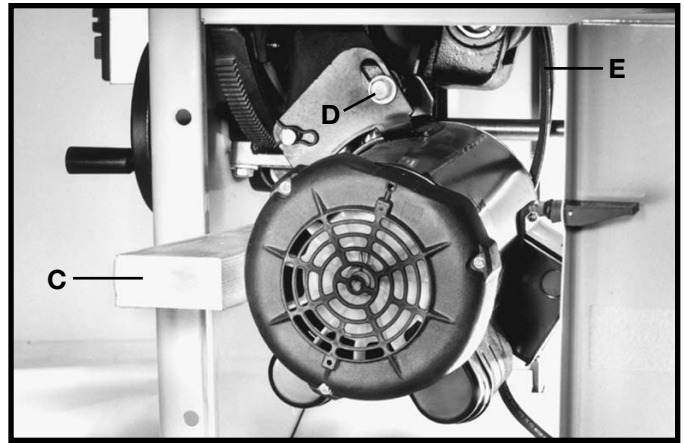


Fig. 125

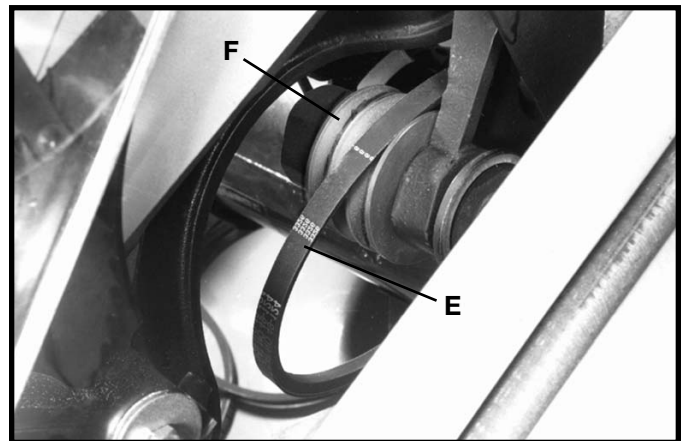


Fig. 126

PROTECTING CAST IRON TABLE FROM RUST

To clean and protect cast iron tables from rust, you will need the following materials: 1 pushblock from a jointer, 1 sheet of medium Scotch-Brite™ Blending Hand Pad, 1 can of WD-40®, 1 can of degreaser, 1 can of TopCote® Aerosol. Apply the WD-40 and polish the table surface with the Scotch-Brite pad using the pushblock as a holddown. Degrease the table, then apply the TopCote® accordingly.

OPERATION

Common sawing operations include ripping and crosscutting 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. 127. 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.

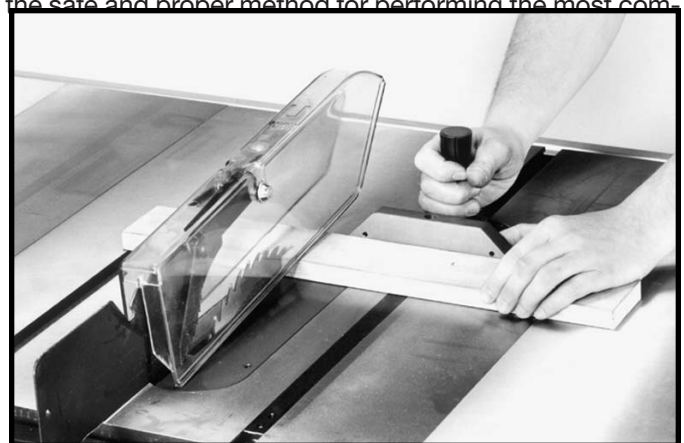


Fig. 127

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.

For added safety and convenience the miter gage can be fitted with an auxiliary wood-facing (C), as shown in Fig. 128, 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.

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

When cross-cutting a number of pieces to the same length, a block of wood (B), can be clamped to the fence and used as a cut-off gage as shown in Fig. 129. It is important that this block of wood always be positioned in front of the saw blade as shown. Once the cut-off length is determined, secure the fence and use the miter gage to feed the work into the cut.

This block of wood allows the cut-off piece to move freely along the table surface without binding between the fence and the saw blade, thereby lessening the possibility of kickback and injury to the operator.

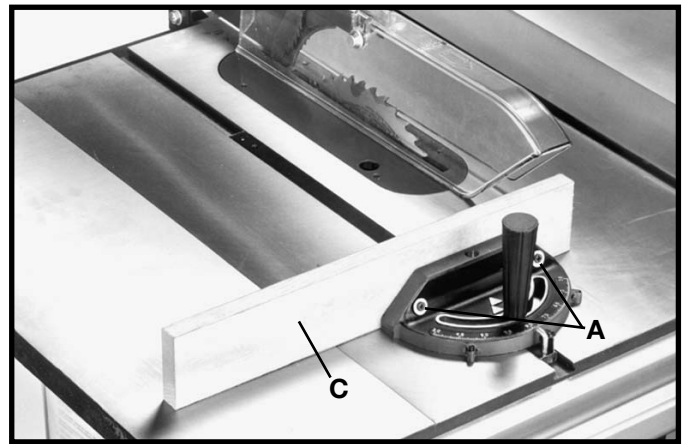


Fig. 128

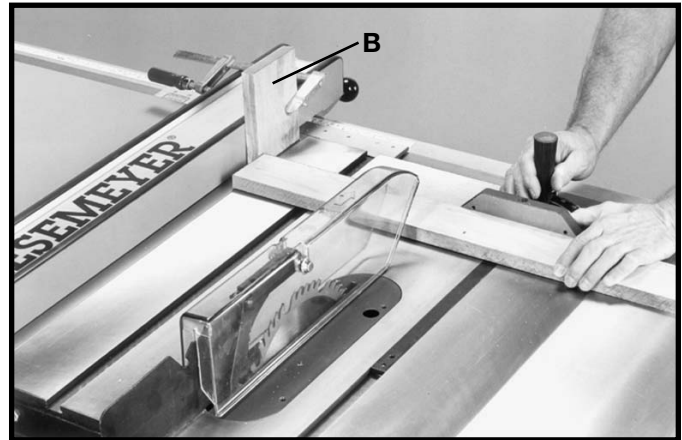


Fig. 129

RIPPING

Ripping is the operation of making a lengthwise cut through a board, as shown in Fig. 130, 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 be used. The guard has anti-kickback fingers to prevent wood kickback, and a splitter to prevent the wood kerf from closing behind the blade.

Start the motor and advance the work holding it down and against the fence. Never stand in the line of the saw cut when ripping. Hold the work with both hands and push it along the fence and into the saw blade as shown in Fig. 130. 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 a work support be used at the rear of the saw to keep the workpiece from falling off the saw table.

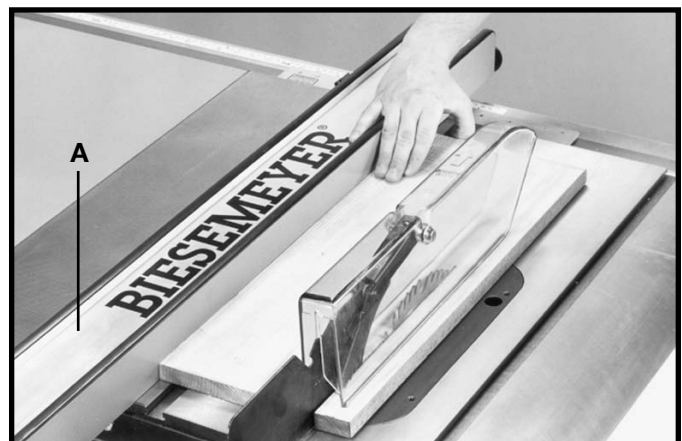


Fig. 130

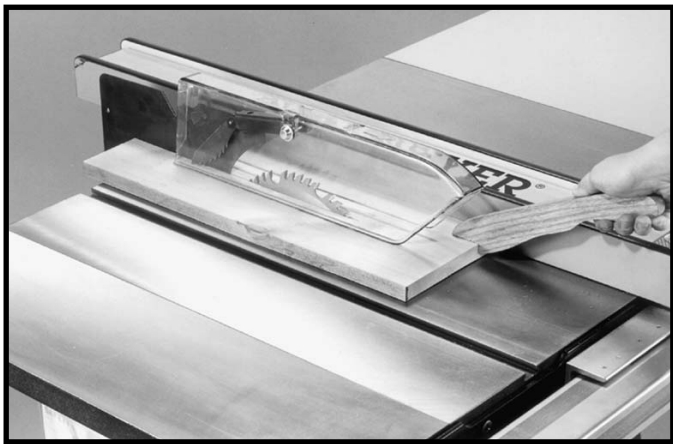


Fig. 131

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. 131. The push stick can easily be made from scrap material as explained in the section "CONSTRUCTING A 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.

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. 132. 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. 133. Lift up and swing blade guard and splitter assembly (W) Fig. 134, to the rear of the saw as shown in Fig. 134. **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. 135, 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.

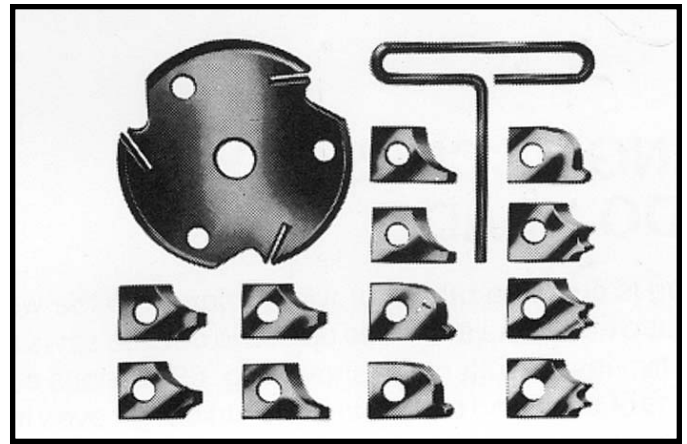


Fig. 132

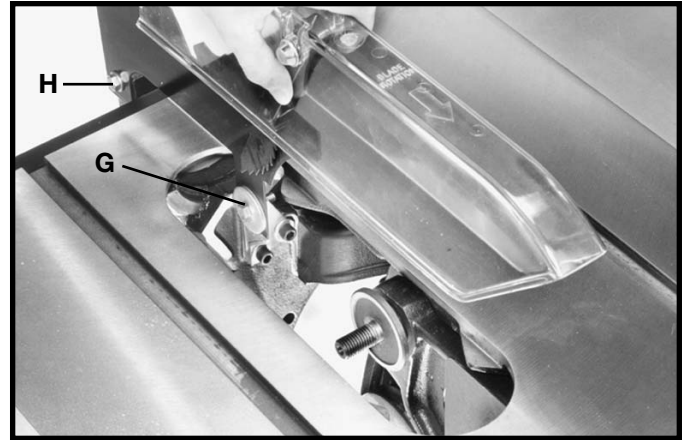


Fig. 133

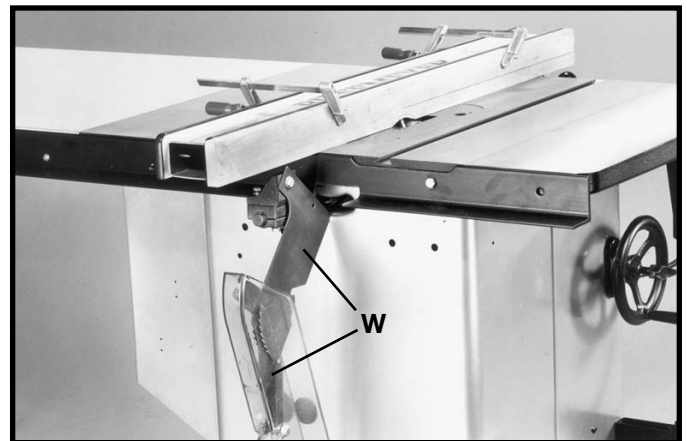


Fig. 134

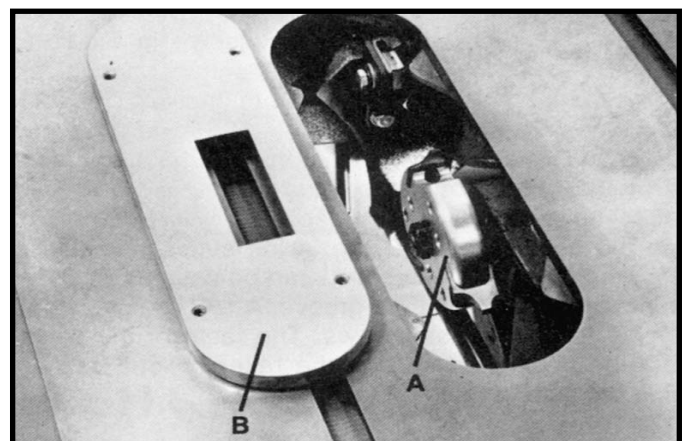


Fig. 135

It is necessary when using the moulding cutterhead to add wood-facing (C) to the face of the rip fence, as shown in Fig. 136. The wood-facing is attached to the fence with two clamps, as shown. 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. 136, 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.

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.

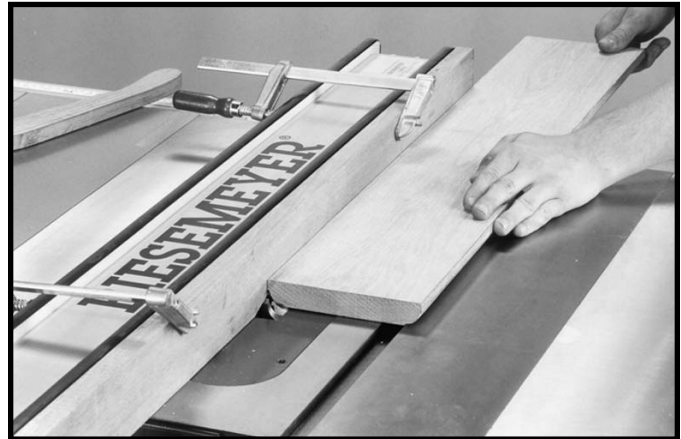


Fig. 136

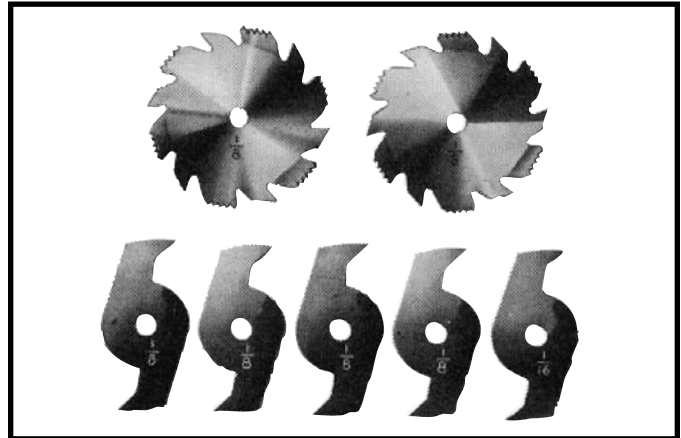


Fig. 137

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.

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. 137. 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. 138. The saw and cutter overlap is shown in Fig. 139, (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.

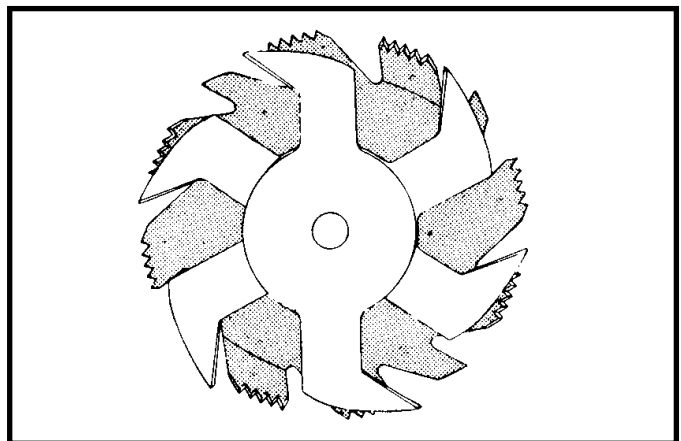


Fig. 138

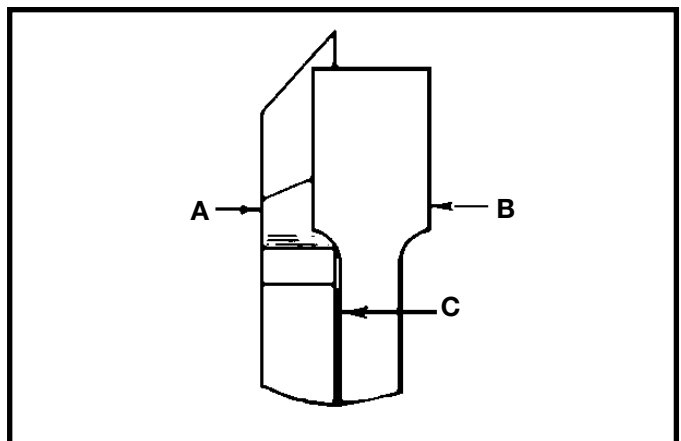


Fig. 139

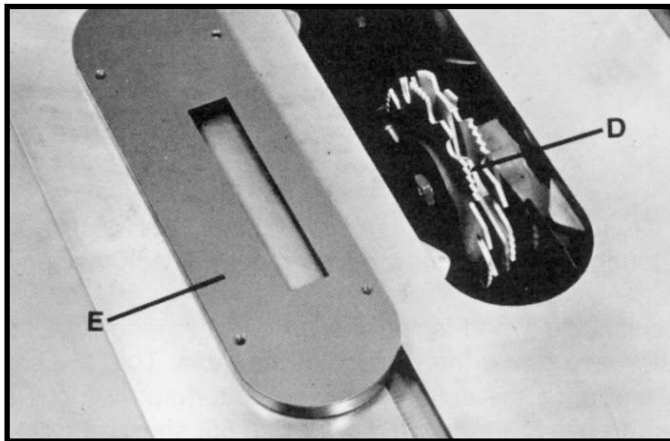


Fig. 140

The dado head set (D) Fig. 140, 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. 140, must be used in place of the standard table insert.

Fig. 141, 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.

USING AUXILIARY WOOD FACING ON RIP FENCE

It is necessary when performing special operations such as moulding to add wood facing (A) Fig. 142, to one or both sides of the rip fence, as shown. The wood facing is attached to the fence with two clamps (B). 3/4 inch stock is suitable for most work although an occasional job may require 1 inch facing.

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

ATTACHING ENGRAVED NAMEPLATE

1. The saw has four pre-drilled holes (A) Fig. 143, located in the front of the cabinet to attach the engraved nameplate.

2. Attach nameplate (B) Fig. 144, to the front of the cabinet using four #6 self-tapping screws (C) supplied.

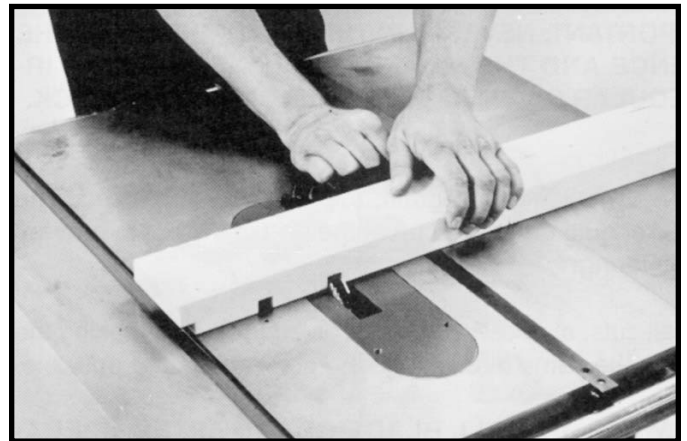


Fig. 141

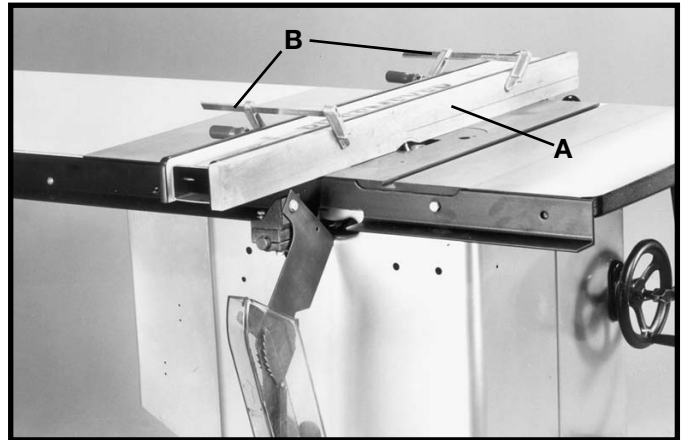


Fig. 142



Fig. 143

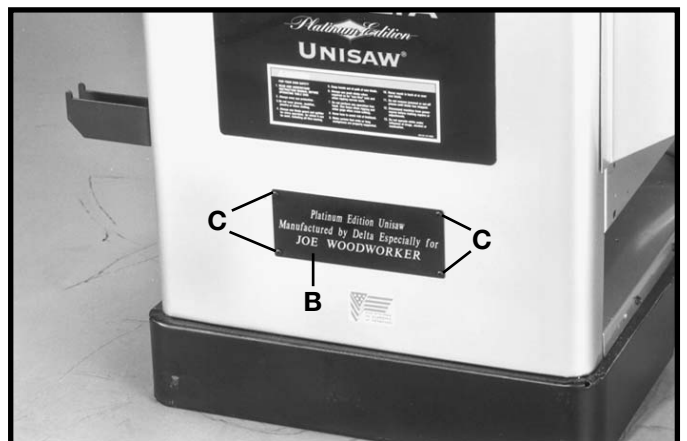


Fig. 144



PARTS, SERVICE OR WARRANTY ASSISTANCE

All Delta Machines and accessories are manufactured to high quality standards and are serviced by a network of Porter-Cable/Delta Factory Service Centers and Delta Authorized Service Stations. To obtain additional information regarding your Delta quality product or to obtain parts, service, warranty assistance, or the location of the nearest service outlet, please call 1-888-848-5175.



Two Year Limited Warranty

Delta will repair or replace, at its expense and at its option, any Delta machine, machine part, or machine accessory which in normal use has proven to be defective in workmanship or material, provided that the customer notifies his supplying distributor of the alleged defect within two years from the date of delivery to him, of the product and provides Delta Machinery with reasonable opportunity to verify the defect by inspection. Delta Machinery may require that electric motors be returned pre-paid to the supplying distributor or authorized service center for inspection and repair or replacement. Delta Machinery will not be responsible for any asserted defect which has resulted from misuse, abuse or repair or alteration made or specifically authorized by anyone other than an authorized Delta service facility or representative. Under no circumstances will Delta Machinery be liable for incidental or consequential damages resulting from defective products. This warranty is Delta Machinery's sole warranty and sets forth the customer's exclusive remedy, with respect to defective products; all other warranties, express or implied, whether of merchantability, fitness for purpose, or otherwise, are expressly disclaimed by Delta.