## Limited Edition 3H.P. Left Tilt Unisaw® with 52" Unifence® (Model 36-842)

36-842 Consists of: 36-869 Base Unit 36-937 10" Cast Iron Wings (2) 36-918 (52") Unifence Assembly 36-947 Gray table boards 36-904 Unifence front rail with stop 35-617 Carbide blade 50-289 Mobile Base 36-862 Zero Clearance Insert



#### Limited Edition 3 H.P. Left Tilt Unisaw<sup>®</sup> with 50" Commercial Biesemeyer<sup>®</sup> Fence System (Model 36-844)



36-844 Consists of: 36-869 Base Unit 36-937 10" Cast Iron Wings (2) 78-995 50" Biesemeyer Rail System 78-924 Gray Table Board 35-617 Carbide Blade 50-289 Mobile Base 36-862 Zero Clearance Insert 78-996 Commercial Fence with Legs

## Limited Edition 5 H.P. Left Tilt Unisaw® with 50" Commercial Biesemeyer® Fence System (Model 36-845)



36-845 Consists of: 34-855 Base Unit 36-937 10" Cast Iron Wings (2) 78-995 50" Biesemeyer Rail System 78-924 Gray Table Board 35-617, 35-611, 35-616, Carbide Blades 36-862 Zero Clearance Insert 78-996 Commercial Fence with Legs 78-969 Rear Support Table

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please call 1-800-223-7278 (In Canada call 1-800-463-3582).

## ENERAL 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.

#### (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.

KEEP GUARDS IN PLACE and in working order.

ALWAYS WEAR EYE PROTECTION. 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. These safety glasses must conform to ANSI Z87.1 requirements. NOTE: Approved glasses have Z87 printed or stamped on them.

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

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

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

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

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

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

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

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

12. 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.

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

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

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

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

17. REDUCE THE RISK OF UNINTENTIONAL STARTING. Make sure switch is in "OFF" position before plugging in power cord. In the event of a power failure, move switch to the "OFF" position.

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

Technical Service Manager

Delta Machinery 4825 Highway 45 North Jackson, TN 38305

19. 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.

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

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

22. STAY ALERT, WATCH WHAT YOU ARE DOING, AND USE COMMON SENSE WHEN OPERATING A POWER TOOL. DO NOT USE TOOL WHILE TIRED OR UNDER THE INFLUENCE OF DRUGS, ALCOHOL, OR MEDICATION. A moment of inattention while operating power tools may result in serious personal injury.

23. MAKE SURE TOOL IS DISCONNECTED FROM **POWER SUPPLY** while motor is being mounted, connected or reconnected.

24. THE DUST GENERATED by certain woods and wood products can be injurious to your health. Always operate machinery in well ventilated areas and provide for proper dust removal. Use wood dust collection systems whenever possible.

WARNING: SOME DUST CREATED BY 25. 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.

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

### **ADDITIONAL SAFETY RULES FOR TABLE SAWS**



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

- 1. DO NOT OPERATE THIS MACHINE until it is assembled and installed according to the instructions.
- 2. OBTAIN ADVICE FROM YOUR SUPERVISOR, instructor, or another qualified person if you are not familiar with the operation of this machine.
- 3. FOLLOW ALL WIRING CODES and recommended electrical connections.
- 4. USE THE GUARDS WHENEVER POSSIBLE. Check to see that they are in place, secured, and working correctly.

#### 5. AVOID KICKBACK by:

- A. keeping blade sharp and free of rust and pitch.
- B. keeping rip fence parallel to the saw blade.
- C. using saw blade guard and spreader for every possible operation, including all through sawing.
- D. pushing the workpiece past the saw blade prior to release.
- E. never ripping a workpiece that is twisted or warped, or does not have a straight edge to guide along the fence.
- F. using featherboards when the anti-kickback device cannot be used.
- G. never sawing a large workpiece that cannot be controlled.
- H. never using the fence as a guide when crosscutting.
- I. never sawing a workpiece with loose knots or other flaws.
- 6. ALWAYS USE GUARDS, SPLITTER, AND ANTI-KICKBACK FINGERS except when otherwise directed in the manual.
- 7. REMOVE CUT-OFF PIECES AND SCRAPS from the table before starting the saw. The vibration of the machine may cause them to move into the saw blade and be thrown out. After cutting, turn the machine off. When the blade has come to a complete stop, remove all debris.
- 8. NEVER START THE MACHINE with the workpiece against the blade.
- 9. HOLD THE WORKPIECE FIRMLY against the miter gauge or fence.

- 10. **NEVER** run the workpiece between the fence and a moulding cutterhead.
- 11. NEVER perform "free-hand" operations. Use either the fence or miter gauge to position and guide the workpiece.
- 12. USE PUSH STICK(S) for ripping a narrow workpiece.
- 13. AVOID AWKWARD OPERATIONS AND HAND POSITIONS where a sudden slip could cause a hand to move into the blade.
- 14. KEEP ARMS, HANDS, AND FINGERS away from the blade.
- 15. NEVER have any part of your body in line with the path of the saw blade.
- 16. **NEVER REACH AROUND** or over the saw blade.
- 17. NEVER attempt to free a stalled saw blade without first turning the machine "OFF".
- 18. PROPERLY SUPPORT LONG OR WIDE workpieces.
- 19. NEVER PERFORM LAYOUT, assembly or set-up work on the table/work area when the machine is runnina.
- 20. TURN THE MACHINE "OFF" AND DISCONNECT THE MACHINE from the power source before installing or removing accessories, before adjusting or changing set-ups, or when making repairs.
- 21. TURN THE MACHINE "OFF", disconnect the machine from the power source, and clean the table/work area before leaving the machine. LOCK THE SWITCH IN THE "OFF" POSITION to prevent unauthorized use.
- 22. ADDITIONAL INFORMATION regarding the safe and proper operation of this tool is available from the Power Tool Institute, 1300 Summer Avenue, Cleveland, OH 44115-2851. Information is also available from the National Safety Council, 1121 Spring Lake Drive, Itasca, IL 60143-3201. Please refer to the American National Standards Institute ANSI 01.1 Safety Requirements for Woodworking Machines and the U.S. Department of Labor OSHA 1910.213 Regulations.

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

#### **POWER CONNECTIONS**

A separate electrical circuit should be used for your machines. This circuit should not be less than #12 wire and should be protected with a 20 Amp time lag fuse. If an extension cord is used, use only 3-wire extension cords which have 3-prong grounding type plugs and matching receptacle which will accept the machine's plug. Before connecting the motor to the power line, make sure the switch is in the "OFF" position and be sure that the electric current is of the same characteristics as indicated on the machine. All line connections should make good contact. Running on low voltage will damage the motor.



#### WARNING: DO NOT EXPOSE THE MACHINE TO RAIN OR OPERATE THE MACHINE IN DAMP LOCATIONS. MOTOR SPECIFICATIONS

Your machine is wired for 230 volt, 60 HZ alternating current. Before connecting the machine to the power source, make sure the switch is in the "OFF" position.

#### **GROUNDING INSTRUCTIONS**

## WARNING: THIS MACHINE MUST BE GROUNDED WHILE IN USE TO PROTECT THE OPERATOR FROM ELECTRIC SHOCK.

#### 1. All grounded, cord-connected machines:

In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This machine is equipped with an electric cord having an equipmentgrounding 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.

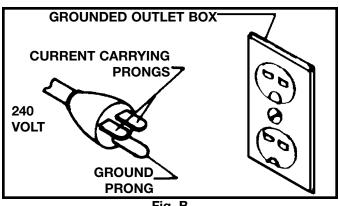
Do not modify the plug provided - if it will not fit the outlet, have the proper outlet installed by a qualified electrician.

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 equipmentgrounding 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 machine is properly grounded.

Use only 3-wire extension cords that have 3-prong grounding type plugs and matching 3-conductor receptacles that accept the machine's plug, as shown in Fig. B.

Repair or replace damaged or worn cord immediately.



2. Grounded, cord-connected machines intended for use on a supply circuit having a nominal rating between 150 - 250 volts, inclusive:

This machine is intended for use on a circuit that has an outlet that looks like the one illustrated in Fig. B. The machine has a grounding plug that looks like the plug illustrated in Fig. B. Make sure the machine is connected to an outlet having the same configuration as the plug. No adapter is available or should be used with this machine. If the machine must be reconnected for use on a different type of electric circuit, the reconnection should be made by qualified service personnel; and after reconnection, the machine should comply with all local codes and ordinances.

WARNING: IN ALL CASES, MAKE SURE THE RECEPTACLE IN QUESTION IS PROPERLY GROUNDED. IF YOU ARE NOT SURE HAVE A QUALIFIED ELECTRICIAN CHECK THE RECEPTACLE. NEVER REMOVE GROUNDING PRONG FROM POWER PLUG.

#### **EXTENSION CORDS**

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

MINIMUM GAUGE EXTENSION CORD RECOMMENDED SIZES FOR USE WITH STATIONARY ELECTRIC MACHINES			
Ampere	Volts	Total Length	Gauge of
Rating		of Cord in Feet	Extension Cord
0-6	230	up to 50	18 AWG
0-6	230	50-100	16 AWG
0-6	230	100-200	16 AWG
0-6	230	200-300	14 AWG
6-10	230	up to 50	18 AWG
6-10	230	50-100	16 AWG
6-10	230	100-200	14 AWG
6-10	230	200-300	12 AWG
10-12	230	up to 50	16 AWG
10-12 10-12 10-12 10-12	230 230 230	50-100 100-200 200-300	16 AWG 14 AWG 12 AWG
12-16	230	up to 50	14 AWG
12-16	230	50-100	12 AWG
12-16	230	GREATER THAN 100 F	EET NOT RECOMMENDED

Fig. D

## **OPERATING INSTRUCTIONS**

#### FOREWORD

The Limited Edition 10" Left Tilt Unisaw is available with either the 52" Unifence Saw guide, or the 50" Commercial Biesemeyer Fence system. The Limited Edition 10" Left Tilt Unisaw is a very powerful machine. The motor supplied with the Unisaw, is single phase 230 volt motor, that turns the circular blade at 4000 RPM. The Left Tilt Unisaw is a versatile machine, in that it can do precision ripping, cross-cutting, dadoing, moulding and tenoning.

## **UNPACKING AND CLEANING**

Carefully unpack the machine and all loose items from the shipping container(s). Remove the protective coating from all unpainted surfaces. This coating may be removed with a soft cloth moistened with kerosene (do not use acetone, gasoline or lacquer thinner for this purpose). After cleaning, cover the unpainted surfaces with a good quality household floor paste wax. Figures 1 and 2, illustrate the saw and all loose items supplied with the machine. Figs. 3, 4, 5, and 6, illustrate the items supplied with the fence system.

#### NOTICE: THE MANUAL COVER PHOTO ILLUSTRATES THE CURRENT PRODUCTION MODEL. ALL OTHER ILLUSTRATIONS ARE REPRESENTATIVE ONLY AND MAY NOT DEPICT THE ACTUAL COLOR, LABELING OR ACCESSORIES.

## 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. 1/8" and 5/64" hex wrenches
- 15. Miter gage
- 16. Flat washer for miter gage
- 17. Handle for miter gage handle
- 18. Cap for miter gage handle
- 19. Dust chute adapter
- 20. #10 x 1/2" hex washer head screws (8)
- 21. Extension Wing (2)
- 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. Handwheel
- 29. Locknob
- 30. 7/16-20x11/4" Hex head screw (6)
- 31. 7/16" Lockwasher (6)
- 32. Fiber washer (for handwheel)
- 33. Key (for handwheel)

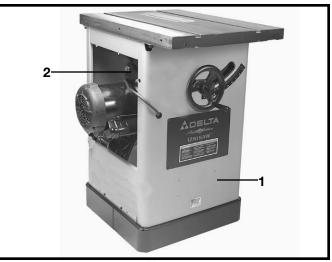


Fig. 1

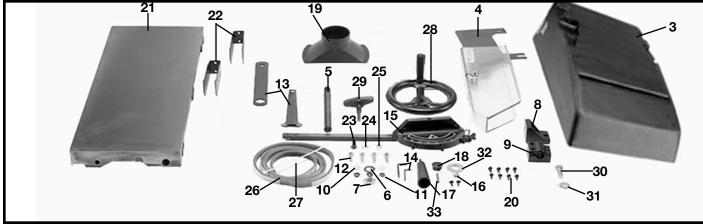


Fig. 2

#### 52" UNIFENCE

- 1. Unifence body (1)
- 2. Fence (1)
- 3. Shelf support bracket (2)
- 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)

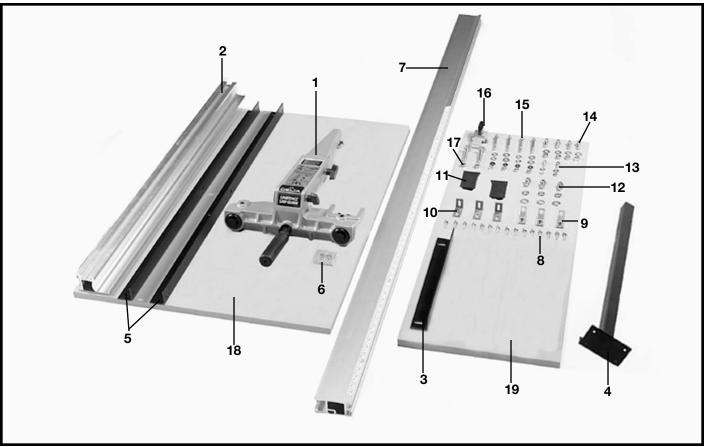
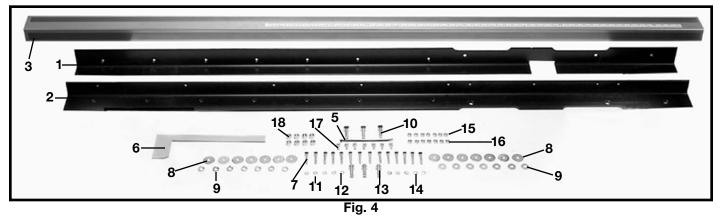


Fig. 3

## 50" COMMERCIAL BIESEMEYER FENCE SYSTEM & OUTFEED TABLE



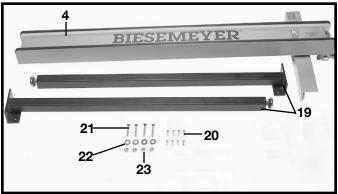


Fig. 5

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

#### Fig. 4

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

## for fastening front and rear rails to right extension table

#### Fig. 4

- 7  $\frac{1}{4}$ -20x1<sup>1</sup>/<sub>2</sub>" long flat head Phillips screws (12) 8 -  $\frac{1}{4}$ " O.D. Flat Washers (12)
- 9 <sup>1</sup>/<sub>4</sub>-20 hex nuts (12)

## for fastening rear rail to saw table Fig. 4

10 -  $\frac{3}{8}$ -24 x 1<sup>1</sup>/4" long hex head cap screws (2) 11 -  $\frac{7}{8}$ " O.D. flat washers (2) 12 - Lock washers (2)

## for fastening front rail to saw table Fig. 4

13 -  $\frac{3}{8}$ -16 x 1<sup>1</sup>/4" long flat head Phillips screws (2) 14 -  $\frac{7}{8}$ " O.D. flat washers (2) 15 - Lock washers (2) 16 -  $\frac{3}{8}$ -16 hex nuts (2)

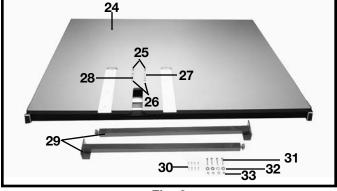


Fig. 6

## for fastening guide tube to front rail Fig. 4

- 17  $\frac{1}{2}$  long hex screws (9)
- 18 Lock washers (9)

#### leg hardware

#### Fig. 5

- 19 Legs (2)
- 20 5/8" long wood screws #8 (8)
- 21 1/4-20 x 11/2" long flat head phillips screws (4)
- 22 1/4" flat washers (4)
- 23 1/4-20 hex nuts (4)

#### Model 36-845 ONLY

#### rear extension table

- Fig. 6 24 – Table board
- 25 10-32 hex head screw (2)
- 26 10-32 nut (2)
- 27 Flat washer (4)
- 28 Lock washer (2)
- 29 Legs (2)
- 30 5/8" long wood screws #8 (8)
- 31 1/4-20 x 11/2" long flat head phillips screws (4)
- 32 1/4" flat washers (4)
- 33 1/4-20 hex nuts (4)

### LIMITED EDITION UNISAW ASSEMBLY INSTRUCTIONS

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

#### ASSEMBLING BLADE TILTING MECHANISM HANDLE

1. Install fiber washer (A) Fig. 6A, on the blade tilting mechanism shaft (B). Install key (C), into shaft keyway.

2. Place handwheel (D) on shaft (B) Fig. 6A. Make sure the groove (E), in the handwheel lines up with the key (C).

3. Push the handwheel snugly against the fiber washer and tighten the set screw.

4. Install lock knob (F) Fig. 7, into threaded end of the shaft (B). Hand-tighten lock knob at this time. (Do not over tighten - see "Blade Raising Mechinism")

## ASSEMBLING EXTENSION WINGS

Assemble the extension wings (A) Fig. 8 and Fig. 10, to the saw table using the six 7/16"-20x1<sup>1</sup>/4" hex head screws (B) and 7/16" lockwashers supplied. Use a straight edge (C) Fig. 9, to make sure the extension wings (A) are level with the saw table before tightening the screws (B) Fig. 8 and Fig. 10. **NOTE: MAKE SURE FRONT EDGE OF WING IS FLUSH TO OR SLIGHTLY BEHIND THE FRONT EDGE OF THE TABLE.** 

NOTE: When assembling the left extension wing, do not install the front screw and washer at this time, it will be installed when assembling the on/off switch.

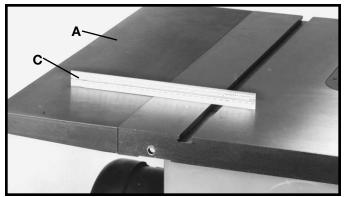


Fig. 9

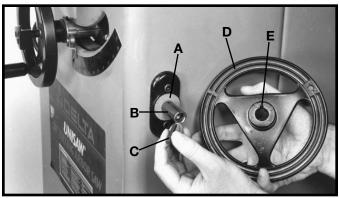
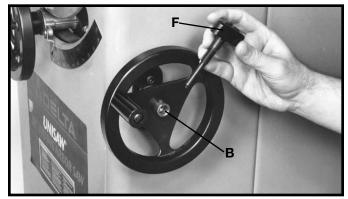


Fig. 6A





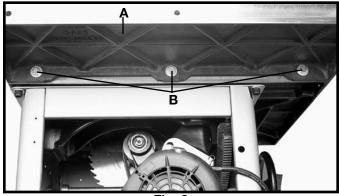
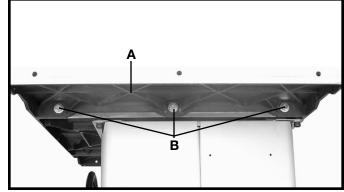


Fig. 8





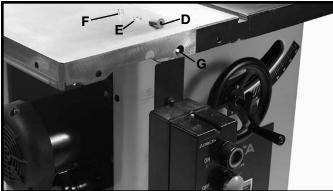


Fig. 11

#### ASSEMBLING ON/OFF SWITCH

1. Loosely assemble switch and switch bracket (A) Fig. 12, to the inside front lip of the left extension wing with 5/16-18x1" hex flat head screw (D), 5/16" flat washer (E), and 5/16-18 hex nut (F) through hole (G) Fig. 11.

2. Attach the side of switch bracket (A) Fig. 12, to the inside of extension wing at the front of the saw using the  $7/16"-20x1^{1/4}"$  screw and 7/16" lockwasher.

3. Tighten screws (C) and (D), Fig. 12, securely.

#### ASSEMBLING BLADE GUARD AND SPLITTER ASSEMBLY

#### 1. DISCONNECT MACHINE FROM POWER SOURCE.

2. **Remove the table insert and saw blade** from the machine by following instructions under section **"REMOVING SAW BLADE."** 

3. The inside splitter mounting bracket (A) Fig. 13, is assembled to the inside of the saw and aligned at the factory. To check the alignment of the bracket (A) to the inside arbor flange, remove screw and splitter fastener plate (B) Fig. 13.

4. Using a straight edge (C) Fig. 14, check to see if the splitter bracket (A) is aligned with the inside blade flange (D). Check both the top and bottom of bracket (A) with top and bottom of flange (D).

5. If an adjustment is necessary, loosen two screws (F) Fig. 15, and adjust splitter bracket (A) until it is aligned with the blade flange; tighten two screws (F). Loosely reassemble screw and plate removed in STEP 3.

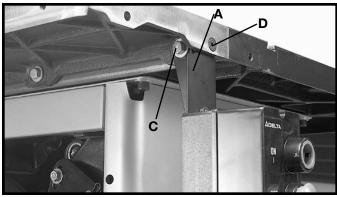


Fig. 12

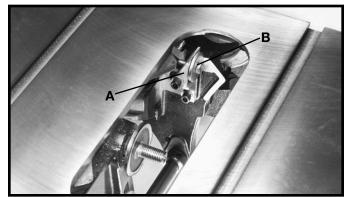


Fig. 13

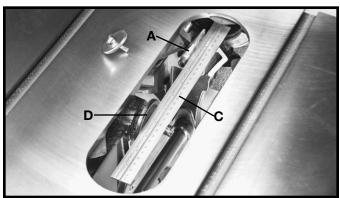


Fig. 14

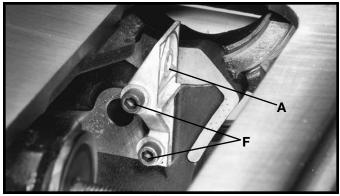


Fig. 15

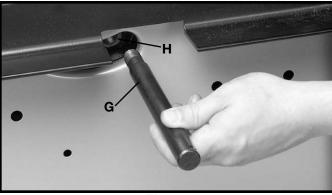


Fig. 16



Fig. 17

6. Insert threaded end of support rod (G) Fig. 16, through slot in back of saw and through hole (H) Fig. 16, in rear trunnion. Fasten support rod (G) Fig. 16, to trunnion using star washer and 5/8-18 nut (J) Fig. 17. **NOTE:** Thread nut (J) onto threaded end of support rod as far as possible by hand. Using a wrench to hold nut (J) Fig. 17, tighten rod (G) Fig. 18, using a small screwdriver (K) or similar device through hole in end of rod (G) as shown.

7. Assemble lower bracket (L) Fig. 19, to rod (G) and hand tighten the 2 one inch-long hex head screws (S) and lockwashers (T), from underneath bracket (L).

8. Assemble splitter bracket (M) Fig. 20, to lower bracket (L), using one flat washer (P), lockwasher (O), and one inch-long hex head screw (N). Do not fully tighten screw (N) at this time.

9. Fasten splitter and guard assembly (P) Fig. 21, to bracket (M) using one inch-long hex head screw (V) and

flat washer (T).

Fig. 18

Fig. 19

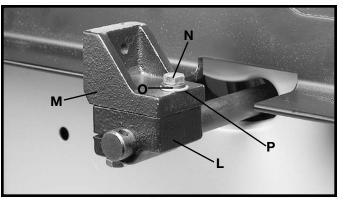


Fig. 20

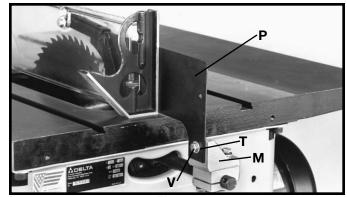


Fig. 21

10. Assemble splitter (P) Fig. 22, inside the splitter mounting bracket as shown. Push splitter (P) down as far as possible, making certain bottom edge (T) of splitter (P) is parallel with table surface, and tighten screw (B).

11. Reassemble the saw blade (U) Fig. 22.

12. Using a straight edge (A) Fig. 23, and square (B) Fig. 24, align splitter (P) with the saw blade and table by moving brackets (M) and (L) until the splitter (P) is in perfect alignment with the blade and square with the table. After alignment is made, tighten hex head screw (N), and two screws (S) Fig. 24.

13. **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. Loosen screws (B) and (V) Fig. 25. Lift up and swing blade guard and splitter assembly to the rear of the saw. **CAUTION:** Always return the blade guard and splitter assembly to its proper operating position for normal thru-sawing operations.

14. **IMPORTANT:** The splitter (P) Fig. 26, features a notch (W) cut into the top edge. Raise the front of the clear blade guard (Q) Fig. 26, 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.

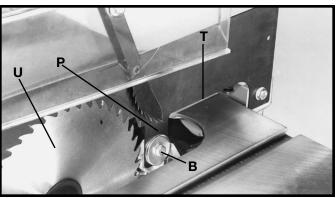


Fig. 22

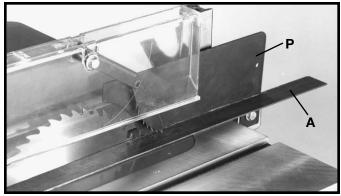


Fig. 23

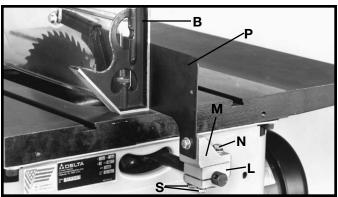


Fig. 24

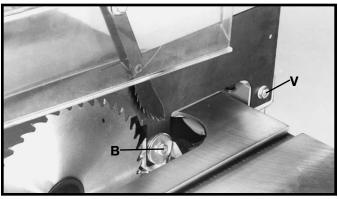


Fig. 25

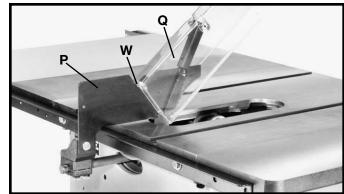


Fig. 26

#### **MOTOR COVER**

#### Removing the motor cover

To remove the motor cover, push motor cover to one side to depress clips, and rotate motor cover away from the cabinet.

#### Attaching the motor cover

Place the motor cover (A) in the opening of the Unisaw as shown in Fig. 31. Place the rear motor cover clips inside the motor opening and push the front of the motor cover until all 4 motor cover clips are engaged with the motor cover opening in the Unisaw.

Fig. 32 shows the motor cover attached to the Unisaw.

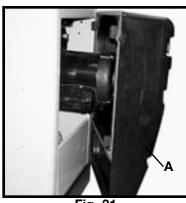


Fig. 31

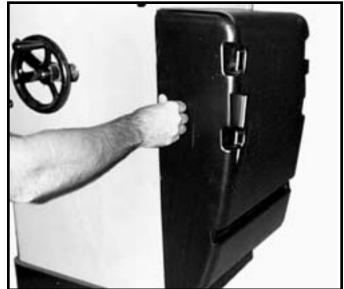
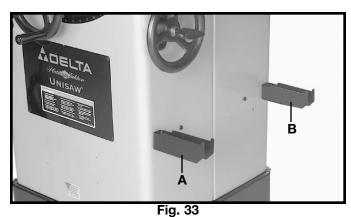


Fig. 32

#### ASSEMBLING RIP FENCE HOLDER BRACKETS

Assemble the rip fence holder brackets (A) and (B) Fig. 33, to the four holes located in the right hand side of the saw cabinet using four  $#10 \times 1/2$ " sheet metal screws supplied. Figure 34 illustrates the Biesemeyer fence (C), (when not in use), positioned on the two holder brackets.



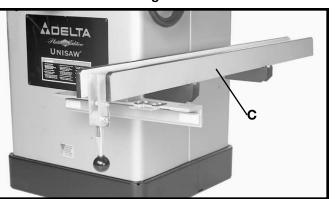


Fig. 34

#### ASSEMBLING DUST CHUTE ADAPTER

The Unisaw is supplied with a dust chute connector to provide a means of connecting a dust collector to the machine. Align the four holes in the dust chute adapter (A) Fig. 34A,with the four holes in the back of the saw cabinet (B) and attach the dust chute adapter with four  $\#10 \times 1/2"$  sheet metal screws.

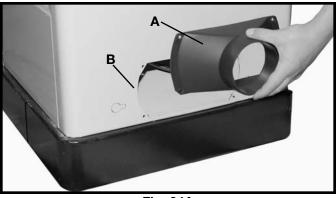


Fig. 34A

## ASSEMBLY INSTRUCTIONS FOR MODEL 36-842 52" UNIFENCE

#### ASSEMBLING UNIFENCE TABLE AND SHELF BOARD

1. Fig. 35 shows the hole location for mounting the Unifence table legs to the table board.

2. Lay the table upside down on the floor or bench, as shown in Fig. 36.

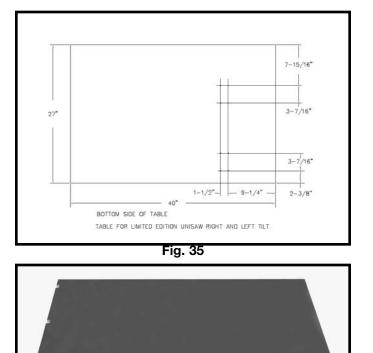


Fig. 36

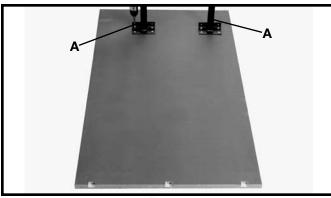


Fig. 37

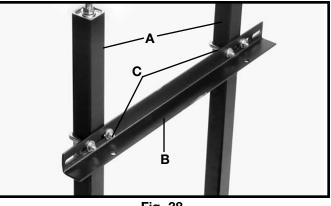


Fig. 38

3. Assemble the two table legs (A) Fig. 37 to the bottom of the table using eight #8x7/8" wood screws.

4. Assemble shelf support bracket (B) Figs. 38 & 51, to the table legs (A) using two U-clamps (C), 1/4" flat washers, and 1/4-20 hex nuts. NOTE: Height adjustments to the bracket will be made later.

5. Insert foot adapter (T) Fig. 39, into the bottom of each leg (A), using a rubber mallet. Assemble the 3/8" jam nut (V) approximately 3/4 of the way onto leveling screw (W). Thread the leveling screw (W) into foot adapter. Fig. 40 illustrates the foot leveling assembly on the table leg. Assemble the remaining foot assembly to the other table leg in the same manner. NOTE: Height adjustments can be made later.

6. Fasten the front (F) and rear (G) table supports Fig. 41, to the bottom of the table as shown using four #8x7/8" long wood screws (H) supplied. NOTE: Pilot holes can be drilled in the particle board using a 1/16" drill bit, drilling a 1/2" deep, to help attaching the front and rear table supports.

NOTE: At this time, the screws (H) holding the front support (F) should not be completely tightened.

NOTE: The slots closer to the angles in the supports (F) and (G) should be against the table.

**NOTE:** Do not put fasteners in location (I) at this time.

NOTE: Make certain the ends of the table supports do not extend out past the table. The rear support (G) Fig. 41, can be fastened to the bottom of the table by tightening screws (H).

CAUTION: DO NOT OVER-TIGHTEN MOUNTING SCREWS. Over-tightening screws in particle board may cause them to strip.

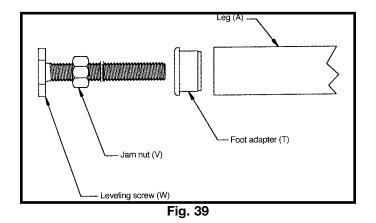




Fig. 40

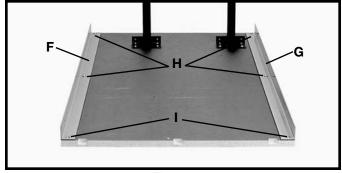


Fig. 41

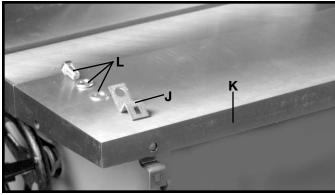


Fig. 42

7. Assemble Z-brackets (J) Fig. 42, 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. 43, 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.

8. Fig. 44, illustrates Z-brackets (J) properly assembled to extension wing.

9. Assemble angle brackets (N) Fig. 45, onto three Z-brackets (J), one of which is shown, place a flat washer (R) onto the  $1/4-20 \times 3/4$ " carriage bolt (P), insert the carriage bolt through the angle bracket (N), and the Z bracket (J), and thread the 1/4-20 hex nut (S) onto the carriage bolt.

NOTE: The longer leg of angle brackets (N) Fig. 45, must be secured to Z-brackets (J).

NOTE: Do not completely tighten hardware at this time.

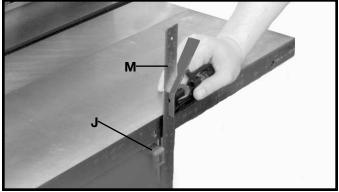


Fig. 43

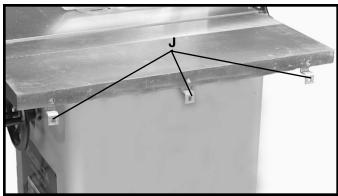


Fig. 44

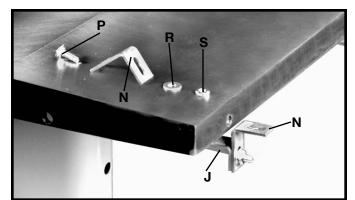


Fig. 45

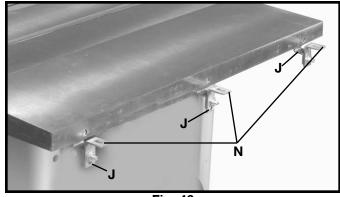


Fig. 46

10. Fig. 46, illustrates angle brackets (N) properly assembled to Z-brackets (J).

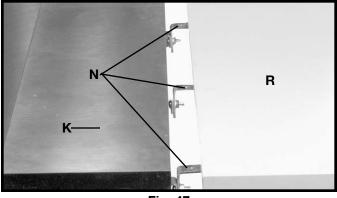


Fig. 47

11. Position table board (R) Fig. 47, on top of angle brackets (N) as shown.

12. While holding table board (R) Fig. 47, tightly against extension wing (K), fasten table (R) to brackets (N) Fig. 47, from underneath the table using three #8 x 7/8 inch-long wood screws (Q) Fig. 49. **CAUTION: DO NOT OVER-TIGHTEN TABLE MOUNTING SCREWS. NOTE:** Pilot holes can be drilled in the particle board using a 1/16" drill bit, drilling a 1/2" deep, to help attaching the table brackets.

13. Using a straight edge (S) Fig. 48, make certain the Unifence table surface is level with the saw table. This can be done by adjusting two leveling screws (S) Fig. 51, located on the bottom of table legs and adjusting angle brackets (N) Fig. 49, 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.

14. Fasten lower shelf bracket (T) Fig. 50, to one end of lower shelf (U) using two  $#8 \times 7/8$  inch-long wood screws supplied as shown in Fig. 50. **IMPORTANT:** The side of the bracket (T) Fig. 50, with the narrow slots should be against the table.

15. Fasten bracket (T) Figs. 50 and 51, to saw cabinet as shown using two  $1/4-20 \times 5/8$ " hex head screws and two 1/4" flat washers. Place a flat washer onto a screw and insert screw through bracket and thread into mounting hole in saw cabinet, and tighten securley. Repeat this same procedure for the other hole.

16. Fasten the other end of lower shelf (U) Fig. 51, to the lower shelf bracket, which was assembled to the two legs earlier using two  $\#8 \times 7/8$  inch-long wood screws.

17. Place a level on the lower shelf (U) Fig. 51, and adjust the "U" bolts, that hold the shelf bracket to the table legs, until the shelf is level.

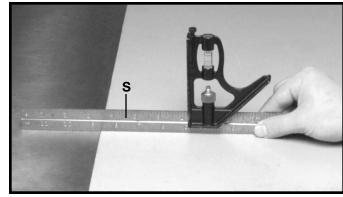


Fig. 48

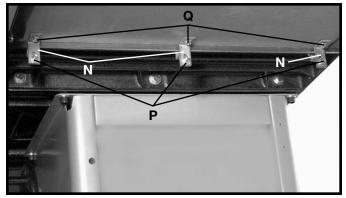


Fig. 49

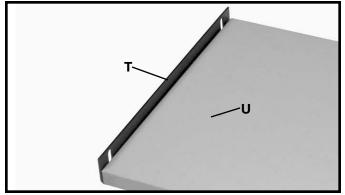


Fig. 50

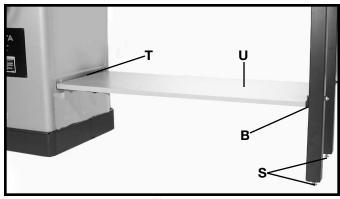


Fig. 51

#### 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 end cap (B) Fig. 52, by inserting a flathead screwdriver (C) into the channel in 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 3/8-24x1" hex head bolts into the two holes (F) Fig. 53, 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 1/4-20x3/4" hex head bolts (E) Fig. 54 into the front support of the extension table 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.

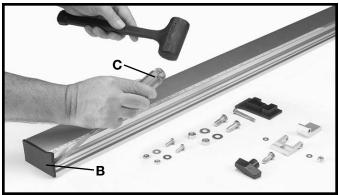


Fig. 52

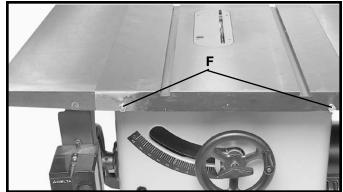


Fig. 53

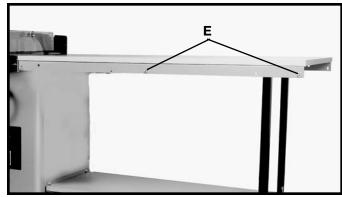


Fig. 54

5. Slide the T-Slot guide rail (A) Fig. 55, onto the hex head of the bolts partially inserted in steps 3 and 4 above. Note: The bolt heads on the saw table slide into the upper t-slot (B) Fig. 55 and the bolt heads on the extension table slide into the lower t-slot (C) Fig. 56.

6. Slide the guide rail along until the "0" on the Unifence scale is aligned with the right edge of the saw table. Turn nuts by hand until they are finger tight.

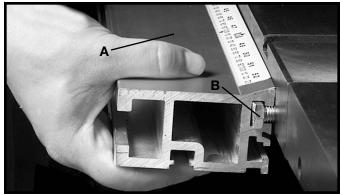


Fig. 55

7. Adjust the guide rail parallel with the saw table surface by placing a square on the saw table at both the left and right front ends of the table. The guide rail 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.

8. Move the square (H) Fig. 58, 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. 59, against the guide rail (C), and tighten the 1/4-20 nuts (M). Tighten two wood screws, one of which is shown at (N) Fig. 59, that fasten the Unifence table to the guide rail support.

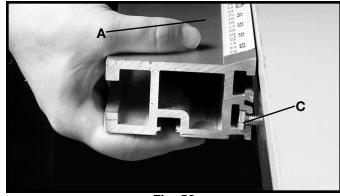


Fig. 56

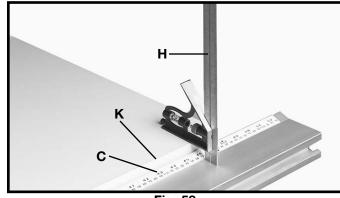


Fig. 58

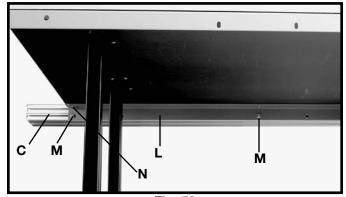


Fig. 59

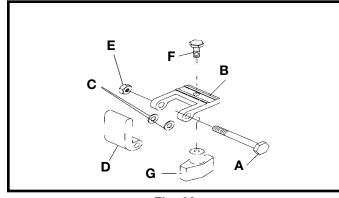


Fig. 60

#### ASSEMBLING UNIFENCE FLIP STOP

1. Insert 1/4-20x2" bolt (A) through hole into one side of bracket (B) Fig. 60.

2. Place one washer (C), on bolt (A), and slide bolt through flip stop (D) Fig. 60.

3. Place the other washer (C), on bolt (A), and slide bolt (A) through other side of bracket (B) Fig. 60.

4. Screw locknut (E) onto bolt (A) and tighten until the flip stop will pivot and stay in the "UP" position.

5. Insert bolt (F) through bracket (B) as shown and screw knob (G) onto bolt (F) approximately 3 complete turns. Fig. 60.

6. To attach rail stop to unifence see Fig. 62.

7. Using a rubber mallet (P) Fig. 61, or a hammer and a block of wood, gently tap end cap (R) into both ends of the guide rail. **NOTE:** Do not hit the rail with a metal hammer as it may damage the rail.

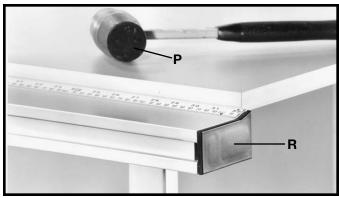


Fig. 62

Fig. 61

#### SETTING FLIP STOP

1. The Flip Stop Assembly Fig. 62, can be set 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, Delta Cat. No. 36-899, can be purchased and installed to provide time saving quick stop settings for the Unifence body.

3. If flip stop does not retract fully the bolt (F) Fig. 62, 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, as shown in Fig. 63.

#### ASSEMBLING CURSOR TO UNIFENCE BODY

1. Remove two screws and flat washers (A) Fig. 64, and assemble the cursor (B) to the Unifence body (C). Replace the two screws and flat washers (A).

2. Fig. 65 illustrates the cursor (B) assembled to the Unifence body. The cursor (B) will be adjusted later.



Fig. 63

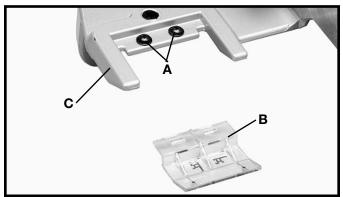


Fig. 64

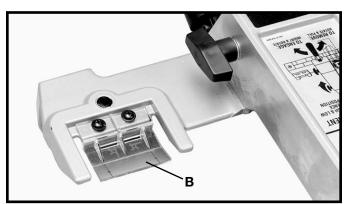


Fig. 65

#### ASSEMBLING UNIFENCE BODY TO GUIDE RAIL

1. Turn fence body (A) Fig. 66, upside down and lay it on a table or bench. Pull handle (B) out against fence body. Make certain the surface (C) of clamp bracket is parallel to the face (D) of the fence body, and that the inside edge (E) of the clamp bracket is parallel to surface (F) of the fence body. Turn handle (B) Fig. 66, if necessary.

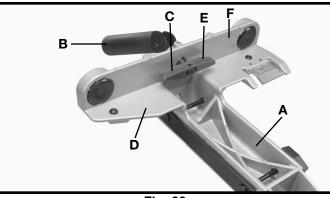


Fig. 66

2. Place fence body (A) Fig. 67, 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. After pushing in on handle (B), turn to the right indent position as shown in Fig. 68. This will prevent fence

clamp from sliding out of the channel (G).

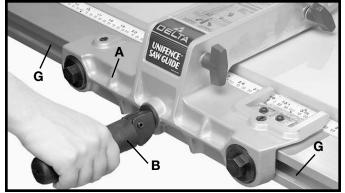


Fig. 67

Fig. 68

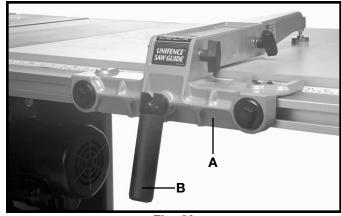
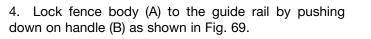


Fig. 69



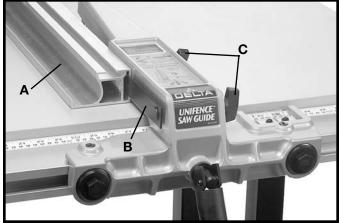


Fig. 70

#### 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. 70, or the vertical position as shown in Fig. 71. 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).

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. 72, 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. 73.

3. When ripping thin stock, it is sometimes more convenient to use the fence in the horizontal position, as shown in Fig. 74.

4. To move the fence along the guide rail, lift up clamp lever (A), as shown in Fig. 75, slide fence to desired position on the rail, and push down on clamp lever (A) to lock fence in place.



Fig. 74

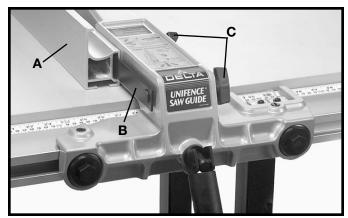


Fig. 71

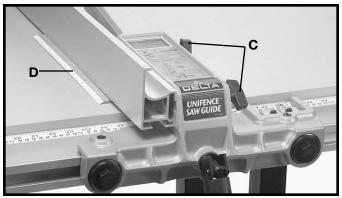


Fig. 72

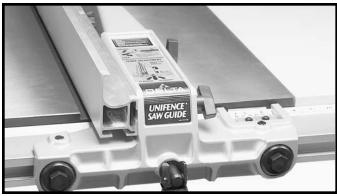


Fig. 73



Fig. 75

5. The distance the fence is positioned away from the blade is indicated by the two witness lines (B) and (C) Fig. 76, located on the cursor (D). Witness line (B) indicates the distance the fence is away from the blade when the fence is in the horizontal position, and witness line (C) indicates the distance the fence is away from the blade when the fence is in the vertical position. If it is necessary to adjust cursor (D), make a test cut with the fence in either the vertical or horizontal position, measure the distance of the finished cut and move the cursor (D) by loosening the two screws (E) Fig. 76. After adjustment is completed tighten the two screws (E).

6. To remove the fence and fence body assembly (F) Fig. 77, 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.

#### RIPPING WITH THE UNIFENCE

Ripping is the operation of making a lengthwise cut through a board, as shown in Fig. 78, and the rip fence (A) is used to position and guide the work. One edge of the work rides against the rip fence while the flat side of the board rests on the table. Since the work is pushed along the fence, it must have a straight edge and make solid contact with the table. The saw blade guard must be used. On Delta saws, the guard has anti-kickback fingers to prevent kickback and a splitter to prevent the saw kerf from closing and binding the blade.

Never stand in the line of the saw cut when ripping. Hold the work with both hands and push it along the fence and into the saw blade as shown in Fig. 78. 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. 79. The push stick can easily be made from scrap material as explained in the section **"CONSTRUCTING A PUSH STICK."** When ripping material under 2 inches in width, a flat pushboard is a valuable accessory since ordinary type sticks may interfere with the blade guard. That flat pushboard can be made as shown in Fig. 79A.

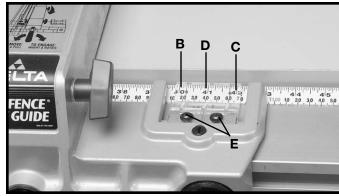


Fig. 76

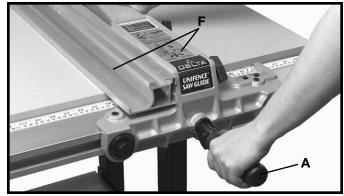


Fig. 77

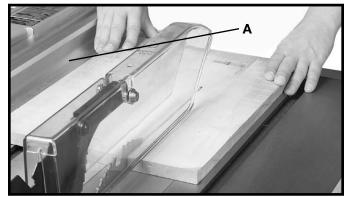


Fig. 78



Fig. 79

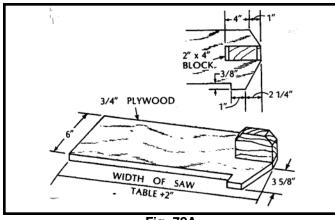


Fig. 79A

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. 80.

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. 81, 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.

#### ADJUSTING FENCE PARALLEL TO MITER GAGE SLOTS

The fence (A) Fig. 82, 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. 82, 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. 82. VERY LITTLE MOVEMENT OF THESE PLUGS IS NECESSARY WHEN ADJUSTING THE FENCE PARALLEL WITH THE MITER GAGE SLOT.** 

#### ADJUSTING FENCE 90 DEGREES TO TABLE

The fence must be adjusted so that the face of fence (A) Fig. 83, 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.

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

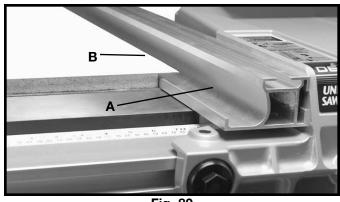


Fig. 80

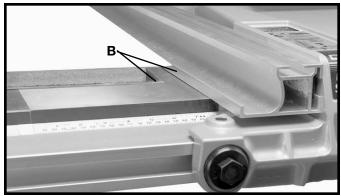


Fig. 81

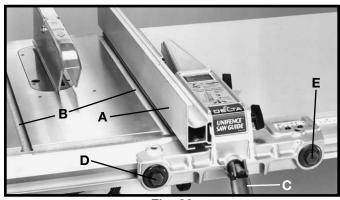


Fig. 82

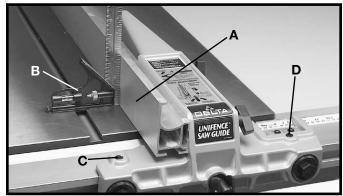


Fig. 83

#### ADJUSTING CLAMPING ACTION OF FENCE LOCKING HANDLE

When the fence locking handle (A) is pushed to the down position, as shown in Fig. 84, 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. 84, lift up on locking handle (A) Fig. 85, 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 GAUGE SLOT AND ADJUST IF NECESSARY.** 

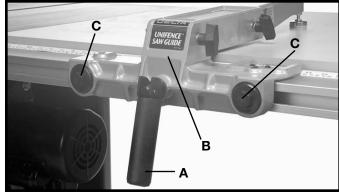


Fig. 84

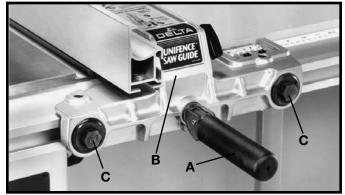


Fig. 85

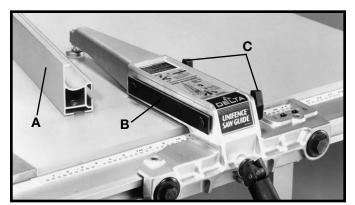


Fig. 86

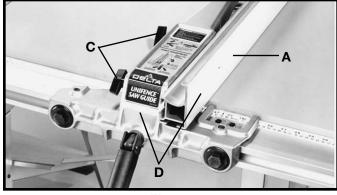


Fig. 87

#### 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 accomplished by repositioning the fence (A) Figures 86 and 87, 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. 87. The complete fence assembly (D) Fig. 87, can easily be moved to the left side of the saw table.



Fig. 88

## USING THE FENCE AS A CUT-OFF GAGE

## WARNING: WHEN USING YOUR UNIFENCE AS A CUT-OFF GAGE, MAKE SURE IT IS PROPERLY SET UP AS DESCRIBED HERE.

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 so that the work piece is clear of the fence before it contacts the saw blade.

When using the fence as a cut-off gage, position the fence (A) to the front as shown in Fig. 88, or purchase a 12" long fence (B), (Delta Cat. No. 34-878), as shown in Fig. 89. A typical operation using the 12" long fence (B) as a cut-off gage is shown in Fig. 90.

#### 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. 91, to one side of the rip fence as shown. The wood facing is attached to the fence with wood screws through holes that you must drill in the fence. A suitable stock size for most work is 3/4", although an occasional job may require one inch facing.



Fig. 89

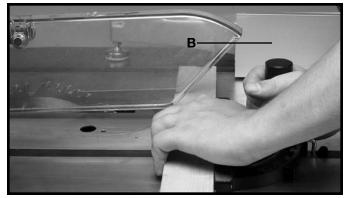


Fig. 90

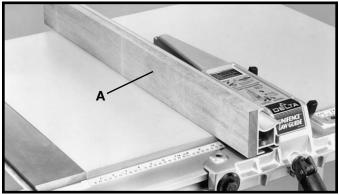


Fig. 91

## ASSEMBLY INSTRUCTIONS FOR MODELS 36-844 & 36-845 50" COMMERCIAL BIESEMEYER FENCE

### **ASSEMBLING GUIDE RAILS**

1. Assemble the front rail (A) Fig. 92, 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.

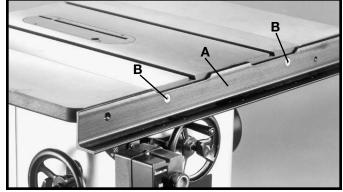


Fig. 92

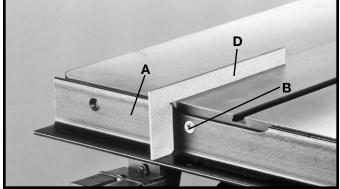


Fig. 93

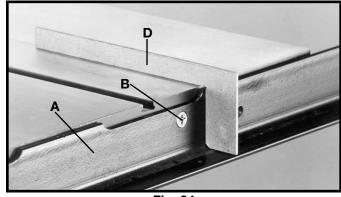


Fig. 94

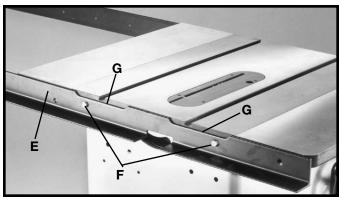


Fig. 95

2. Using template (D) Figures 93 and 94, to check and adjust front rail at both ends of the saw table as shown, to make sure rail (A) is parallel with table surface and tighten rail mounting hardware (B). **IMPORTANT:** Template (D) must be on the saw table when checking, not on extension wing.

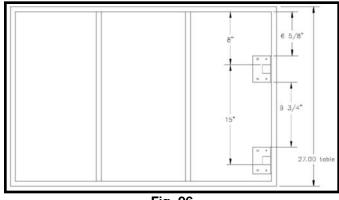
3. Assemble rear rail (E) Fig. 95, to rear of saw table by placing a lockwasher onto a  $3/8-24 \times 1-1/4$ " long hex head screw (F), then place a 7/8" O.D. flat washer onto the hex head screw, and insert the screw through the rail and thread the screw into the tapped hole in the saw.

4. Make certain top edge of rail (E) Fig. 95 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

**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, see Fig. 96.

#### TABLE BOARD HOLE LOCATION FOR SAW WITH MOBILE BASE



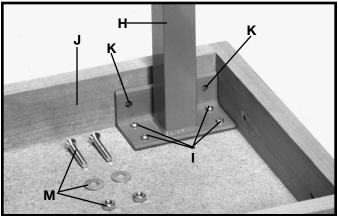


1. Position the two legs (H) Fig. 97, at the two far corners of the inside of one end of the extension table, as shown, and mark the position of the eight holes to be drilled into the bottom of the table.

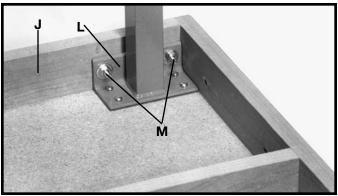
Remove the two legs (H) and using a 1/16" drill bit, drill the eight holes 1/2" deep. Replace the two legs and fasten to the bottom of the table using the eight 3/4" long wood screws (I) supplied.

2. Figure 98 illustrates one of the legs (H) fastened to the bottom of the extension table with the four wood screws (I). Drill through the two holes (K) and through end piece (J) of the table with a 1/4" drill bit.

Fig. 97









3. Fasten the leg bracket (L) Fig. 99, 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. 98 and 99. 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. 100, 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. 101, in bottom of legs to accomplish this. When the table (N) Fig. 100, is level and in the same plane with saw table (P), drill 1/4" through holes (S) Fig. 100 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. 98.

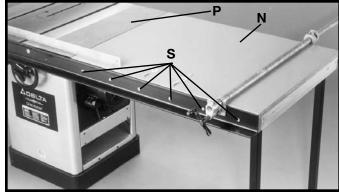


Fig. 100

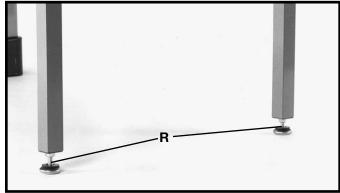


Fig. 101

#### ASSEMBLING GUIDE TUBE TO FRONT RAIL

1. Lay the guide tube (B) Fig. 102, 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).

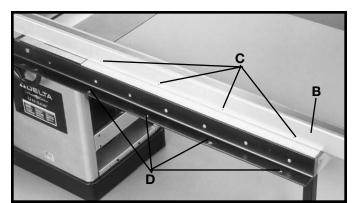


Fig. 102

2. Position the guide tube (B) Fig. 103, 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.

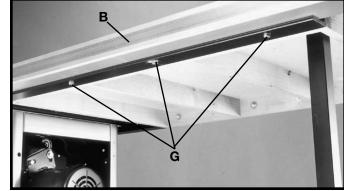


Fig. 103

#### REAR SUPPORT TABLE MOUNTING INSTRUCTIONS FOR MODEL 36-845 ONLY

1. Position the two legs (H) Fig. 104, 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. 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  $3/_4$ " wood screws (I) supplied.

#### NOTE: POSITION THE TABLE LEGS ON THE END OF THE REAR SUPPORT TABLE OPPOSITE OF THE CUTOUTS FOR THE MITER GAGE SLOTS.

2. Figure 105 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 3/4" from the bottom, and  $1^{1}/4"$  and  $4^{1}/4"$  from the side.

3. Fasten the leg bracket (L) Fig. 106, to the end piece (J) of the table using the two  $1^{1}/_{2}$ " flat head Phillips screws, flat washers and hex nuts (M) Figs. 105 and 106. Fasten the remaining leg to the extension table in the same manner.

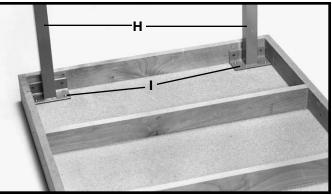


Fig. 104

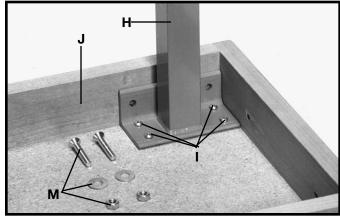


Fig. 105

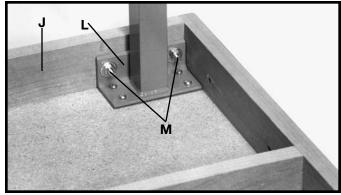


Fig. 106

4. Position the table onto the rear rail, making sure there is clearance for the miter gage slots and blade guard, and mark each end of the table board on the rear rail. **NOTE: DRILL THE HOLES 1/4" BACK FROM THE EDGE OF THE RAIL, AND 71/2" FROM EACH EDGE OF THE REAR TABLE SO THAT THERE WILL BE PROPER CLEARANCE FOR ATTACHING THE HARDWARE.** 

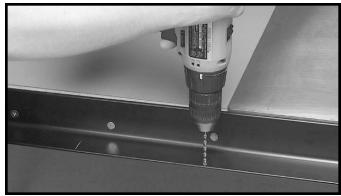


Fig. 107

5. Use a  ${}^{3}/{}_{16}{}^{"}$  drill bit to drill the two holes in the rear rail, approximately  $7{}^{1}/{}_{2}{}^{"}$  from each corner of the table board, Fig. 107 & 108 (marked in step 4).

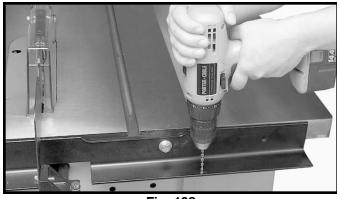


Fig. 108

6. After the holes are drilled in the rear rail, position the table board back onto the rear rail, and up against the rear rail, and drill through the holes in the rear rail through the table board, Fig. 109 (shown from underneath the rear guide rail and the table).

7. Fasten the rear table board to the rear rail with two 10-32x1" hex head screws, 3/16" lockwashers, 3/16" flat washers, and 10-32 nuts, Fig. 110 (shown from underneath the rear guide rail and the table).

8. Level the table by adjusting the table legs (R) in the rear table board, Fig. 111. NOTE: THE OUTFEED TABLE SHOULD BE BELOW THE SAW TABLE HEIGHT TO PREVENT WORK PIECES FROM BINDING AGAINST THE OUTFEED TABLE.

9. Fig. 111A shows the rear support table mounted to the saw.



Fig. 109

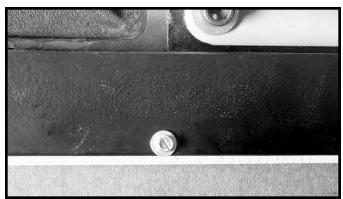


Fig. 110

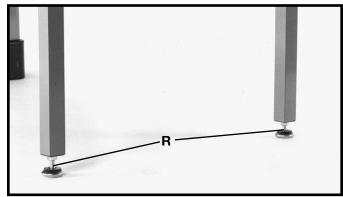


Fig. 111



Fig. 111A

#### **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. 112, and place the fence over the rail and gently push fence onto rail (B) Fig. 112.

2. To move the fence along the guide rail, lift up clamp lever (A) as shown in Fig. 112, slide fence to desired position on rail, and push down on clamp lever (A) as shown in Fig. 113, to lock fence in position. **NOTE:** A magnet (B) Fig. 113, 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. 114, 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).

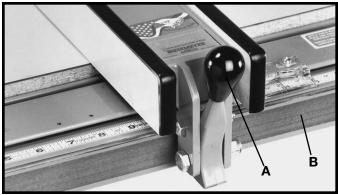


Fig. 112

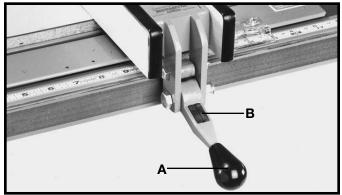


Fig. 113

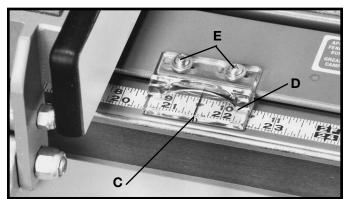


Fig. 114

#### FENCE LUBRICATION

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

2. Apply grease to cam lock (A) Fig. 115, and cam foot (B) occasionally to prevent wear.

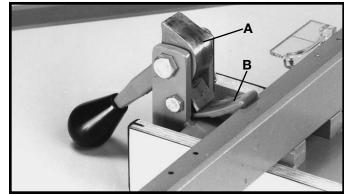


Fig. 115

#### 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. 116, 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. 117. Slightly tighten or loosen one of the two adjusting screws (D) or (E) Fig. 117, 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.

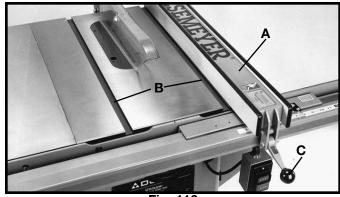


Fig. 116

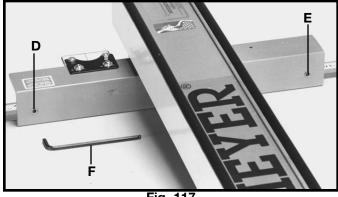


Fig. 117

#### ADJUSTING CLAMPING ACTION OF FENCE LOCKING HANDLE

When the fence locking handle (A) is pushed to the down position, as shown in Fig. 118, 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. 118, 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. 117, using a 3/16" allen wrench (F) not supplied. Adjusting screws (D) and (E) Fig. 117, using a a (E) Fig. 117. should be tightened an equal amount. Replace fence onto the guide tube and recheck to see if the fence assembly (B) Fig. 118, 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.

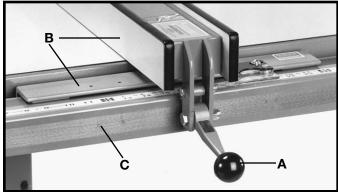


Fig. 118

## OPERATING CONTROLS AND UNISAW ADJUSTMENTS

## STARTING AND STOPPING THE SAW

To turn the saw "ON", push the "ON" button (A) Fig. 119. To stop the machine, push the "OFF" button (B).

#### LOCKING SWITCH IN THE "OFF" POSITION

**IMPORTANT:** When the machine is not in use, the switch should be locked in the "OFF" position using a padlock (A) Fig. 120, (Delta Cat. No. 50-325), with a 3/16" diameter shackle to prevent unauthorized use.

### **OVERLOAD PROTECTION**

Your saw is supplied with overload protection. If the motor shuts off or fails to start due to overloading (cutting stock too fast, using a dull blade, using the saw beyond its capacity, etc.) or low voltage, let the motor cool three to five minutes. The overload will automatically reset itself and the machine can then be started again by pressing the "ON" button.

**IMPORTANT:** If the motor continually shuts off due to overloading, the cause of overloading must be corrected. If this happens, it is recommended that you contact a qualified electrician.

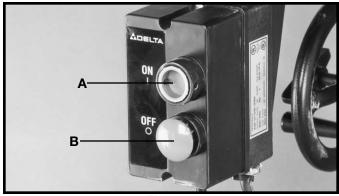


Fig. 119

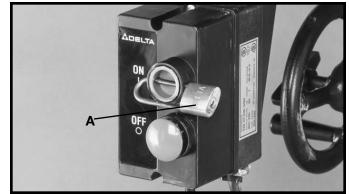


Fig. 120

#### BLADE RAISING MECHANISM

The saw blade is raised and lowered with the front handwheel (A) Fig. 121. 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. 121, 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. 121, 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.

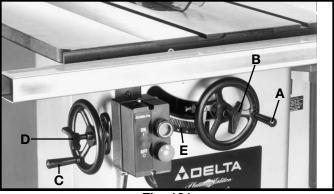


Fig. 121

#### **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. 121, 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 TURNING THE SAW "ON".

#### 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:

#### 1. DISCONNECT MACHINE FROM POWER SOURCE.

2. Raise the saw blade all the way to the top and turn the blade tilting handwheel clockwise as far as it will go.

3. 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. 122, 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).

4. Check to see if the tilt indicator pointer points to the zero mark on the scale. Adjust if necessary.

5. 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. 123, 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).

#### 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 MACHINE FROM POWER SOURCE.

2. Place a combination square (A) Fig. 124, 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. 124. 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. 125, 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.

7. Tilt the blade to  $45^{\circ}$  and turn the saw blade by hand, to insure that the saw blade does not contact the table insert.

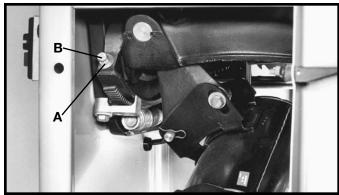


Fig. 122

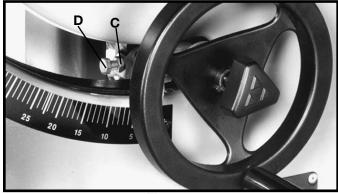


Fig. 123

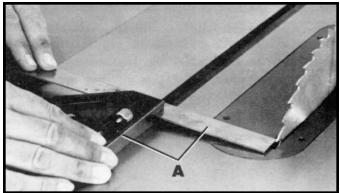


Fig. 124

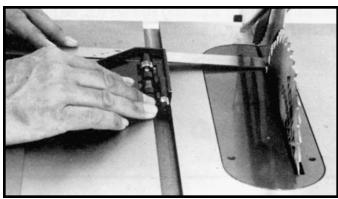


Fig. 125

### ADJUSTING TABLE INSERT

Place a straight edge (B) across the table at both ends of the table insert as shown in Fig. 126. The table insert (A) should always be level with the table. If an adjustment is necessary, turn the adjusting screws (C), as needed with allen wrench supplied. **NOTE: THE MITER GAGE HANDLE CAN BE USED TO STORE THE ALLEN WRENCHES WHEN NOT IN USE. REMOVE THE TOP CAP OF THE MITER GAGE HANDLE FOR THE ALLEN WRENCH STORAGE COMPARTMENT.** 

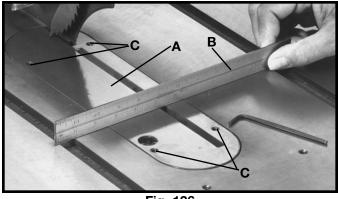


Fig. 126

#### MITER GAGE OPERATION AND ADJUSTMENT

Insert the miter gage bar into the miter gage slot and assemble the washer and lock handle (A) Fig. 127, 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. 128.

To rotate the miter gage, loosen lock knob (A) Fig. 128, 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. 128, must be moved up and out of the way.

The head of the miter gage pivots on a special tapered screw (G) Fig. 129, 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. 129, with allen wrench supplied, and turning the screw (G) in or out. Be certain to tighten screw (H) after adjustment is made.

Your miter gage is equipped with a plate (E) Fig. 129, which fits into the T-Slot groove in the table. This allows the miter gage to be pulled off the front edge of the table without falling. This allows for a longer cut off capacity in front of the blade.

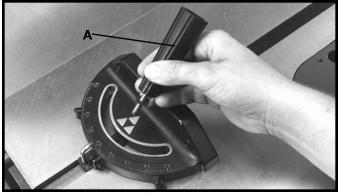


Fig. 127

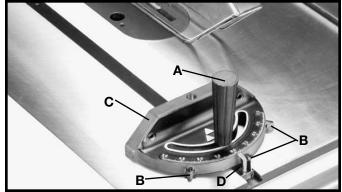
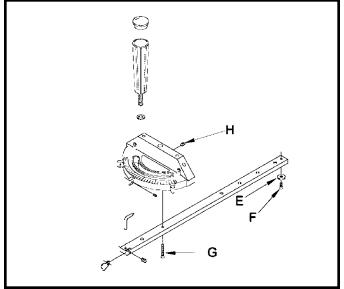


Fig. 128





# MAINTENANCE

# CHANGING THE SAW BLADE

## 1. DISCONNECT MACHINE FROM 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. 130, 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. 130, on the flats of the arbor to keep it from turning, tighten arbor nut by turning wrench (A) counterclockwise.

6. Replace table insert.

## REPLACING BELTS AND ADJUSTING BELT TENSION

1. DISCONNECT MACHINE FROM POWER SOURCE.

2. Remove motor cover door to gain access to the motor.

3. Place a block of wood (C) Fig. 131, 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. 131, 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. 131.

6. Lower the saw arbor.

7. Remove the belts (E) Fig. 132, 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. 132, and onto the motor pulley.

9. When the new belts are assembled on the arbor pulley (F) Fig. 132 and the motor pulley, loosen screw (D) Fig. 132, 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. 131.

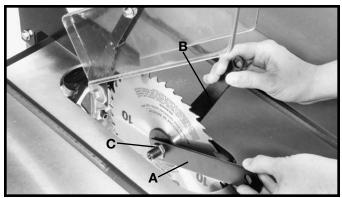


Fig. 130

NOTE: Use only 10" saw blades with 5/8" arbor holes, rated for at least 4000 RPM.

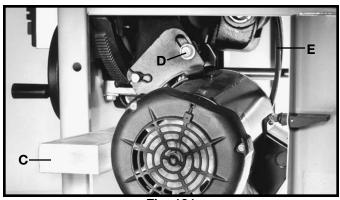


Fig. 131

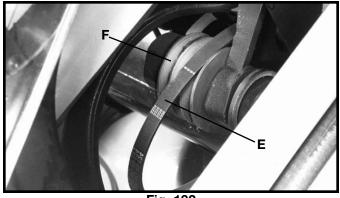


Fig. 132

## **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<sup>™</sup> Blending Hand Pad, 1 can of WD-40<sup>®</sup>, 1 can of degreaser, 1 can of TopCote<sup>®</sup> 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<sup>®</sup> accordingly.

# **OPERATIONS**

Common sawing operations include ripping and crosscutting plus a few other standard operations of a fundamental nature. As with all power machines, there is a certain amount of hazard involved with the operation and use of the machine. Using the machine 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. 133. The miter gage may be used in either table slot. When bevel cutting (blade tilted), use the left miter gage slot so that the blade tilts away from the miter gage and your hands.

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

For added safety and convenience the miter gage can be fitted with an auxiliary wood-facing (C), as shown in Fig. 134, 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. 135. 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. 133

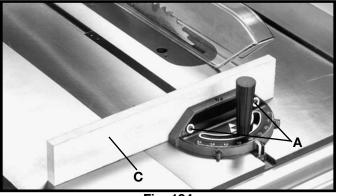


Fig. 134

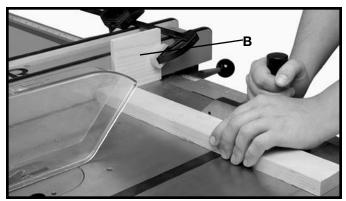


Fig. 135

## RIPPING

Ripping is the operation of making a lengthwise cut through a board, as shown in Fig. 136, 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 and binding 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. 136. 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.

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. 137. The push stick can easily be made from scrap material as explained in the section **"CONSTRUCTING A PUSH STICK."** When ripping material under 2 inches in width, a flat pushboard is a valuable accessory since ordinary type sticks may interfere with the blade guard. That flat pushboard can be made as shown in Fig. 79A.

## 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.

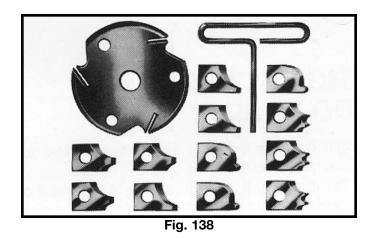
The moulding head consists of a cutterhead in which can be mounted various shapes of steel knives, as shown in Fig. 138. Each of the three knives in a set is fitted into a groove in the cutterhead and securely clamped with a screw. The knife grooves should be kept free of sawdust, which would prevent the cutter from seating properly.



Fig. 136



Fig. 137



**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. 139. Lift up and swing blade guard and splitter assembly (W) Fig. 140, to the rear of the saw as shown in Fig. 140. **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. 141, 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.

It is necessary when using the moulding cutterhead to add wood-facing (C) to the face of the rip fence, as shown in Fig. 142. 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. 142, 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 IRRE-GULAR 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 COMPETE.

## 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. 143. 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. 144. The saw and cutter overlap is shown in Fig. 145, (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.

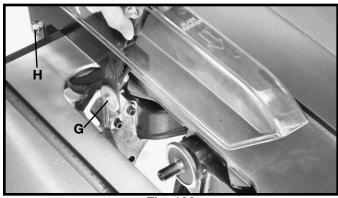


Fig. 139

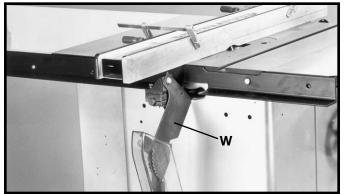


Fig. 140

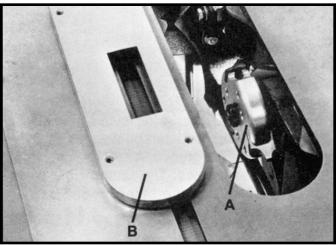
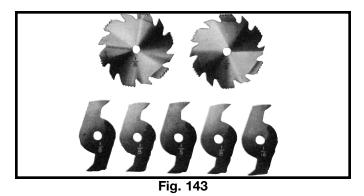


Fig. 141



Fig. 142



The dado head set (D) Fig. 146, 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. 146, must be used in place of the standard table insert.

Fig. 147, 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. 147A, 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.

## 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. 147B, to one side of the rip fence as shown. The wood facing is attached to the fence with wood screws through holes you drill in the fence. A suitable stock size for most work is 3/4", although an occasional job may require one inch facing.

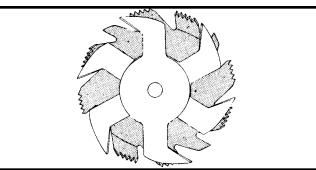


Fig. 144

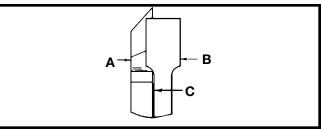


Fig. 145

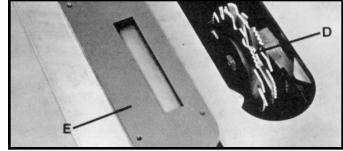


Fig. 146

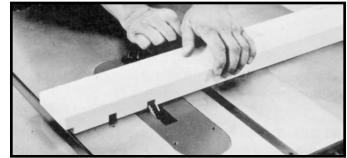


Fig. 147

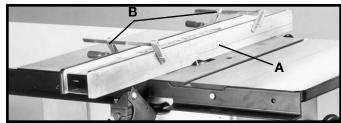
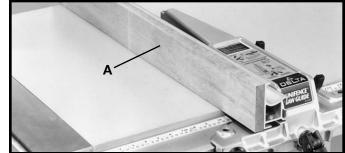
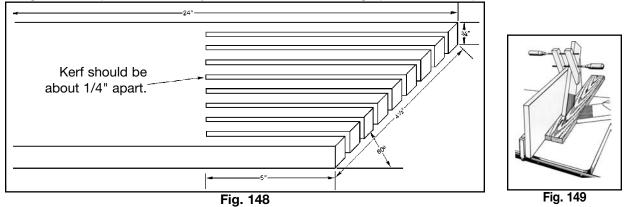


Fig. 147A



## **CONSTRUCTING A FEATHERBOARD**

Fig. 148, illustrates dimensions for making a typical featherboard. The material which the featherboard is constructed of, should be a straight piece of wood that is free of knots and cracks. Featherboards are used to keep the work in contact with the fence and table and help prevent kickbacks. Clamp the featherboards to the fence and table so that the leading edge of the featherboards will support the workpiece until the cut is completed. <u>Use featherboards for all non "thru-sawing" operations where the guard and spreader assembly must be removed (see Fig. 149). Always replace the guard and spreader assembly when the non thru-sawing operation is completed.</u>



# **BLADE GUARD ACCESSORIES**

## **Deluxe Uniguard® Blade Guard**

The Delta Model 34-976 Uniguard Blade Guard with Splitter and Anti-kickback Fingers Fig. 150, is an accessory that can be used in place of the standard blade guard that is supplied with the Unisaw. The Delta Model 34-976 Uniguard Blade Guard can be mounted to the Unisaw, the Unisaw with a 52" Unifence, or 30" Unifence.

**78-953** Uniguard Strap Kit. Kit replaces the rear angle rail of Biesemeyer 30" and 50" Commercial Fence Systems and Home Shop Fence Systems up to 52" for mounting the No. 34-976 Delta Uniguard Blade Guard. Mounting hardware included.

## Biesemeyer® T-Square® Table Saw Blade Guard System

The Biesemeyer Model 78-960 Biesemeyer T-Square Table Saw Blade Guard System Fig. 151, is an accessory that can be used in place of the standard blade guard that is supplied with the Unisaw.

# Catalog Listing Blesemeyer T-Square Blade Guard Systems

**78-960** 10" System for Home Shop 52" and Commercial 50" Fence Systems. With T-arm assembly, blade guard, splitter, installation bracket, mounting hardware and instruction manual.

**78-955** 10" System for Home Shop 28", 40" and Commercial 26", 30" and 38" Fence Systems. Same as 78-960 except for fence systems 40" and under.



Fig. 150



Fig. 151

# ACCESSORIES

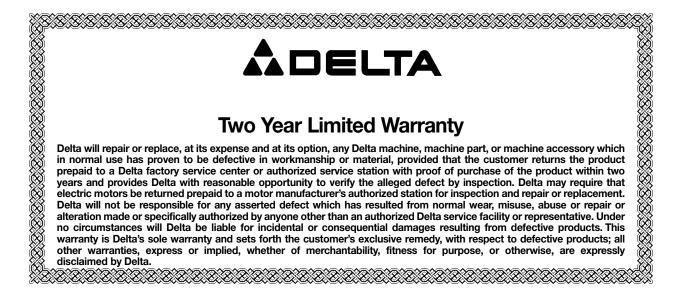
A complete line of accessories is available from your Delta Supplier, Porter-Cable • Delta Factory Service Centers, and Delta Authorized Service Stations. Please visit our Web Site **www.deltamachinery.com** for a catalog or for the name of your nearest supplier.

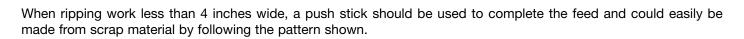


**WARNING:** Since accessories other than those offered by Delta have not been tested with this product, use of such accessories could be hazardous. For <u>safest operation</u>, only Delta recommended accessories should be used with this product.

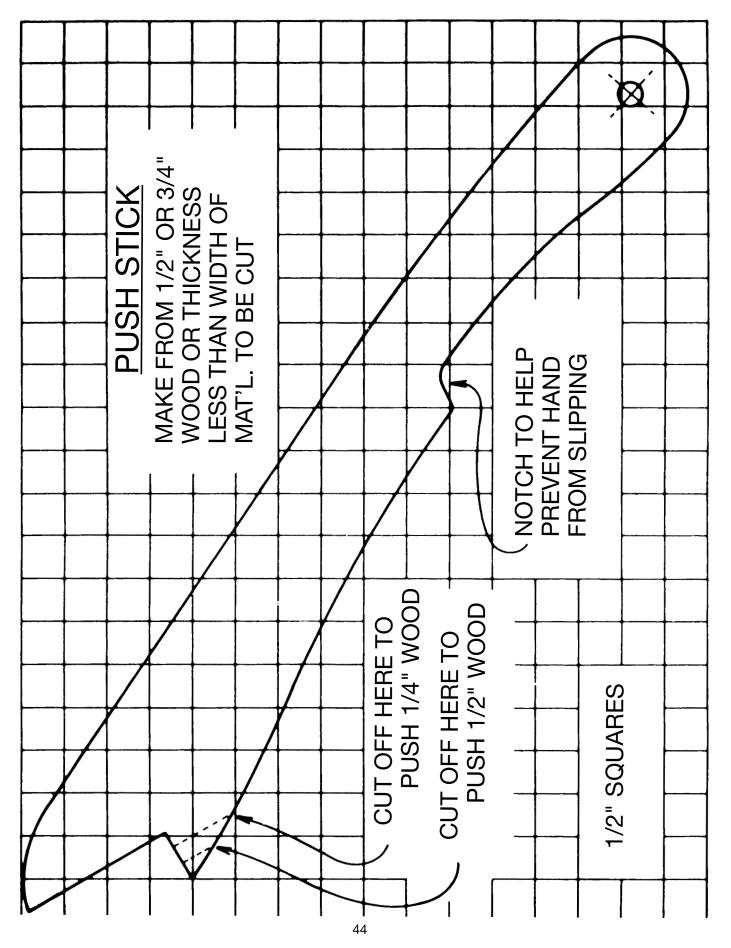
# ADELTA PARTS, SERVICE OR WARRANTY ASSISTANCE

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 1-800-223-7278 (In Canada call 1-800-463-3582).





CONSTRUCTING A PUSH STICK



# **NOTES**

# **NOTES**

# **NOTES**

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

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

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

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#### ONTARIO

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