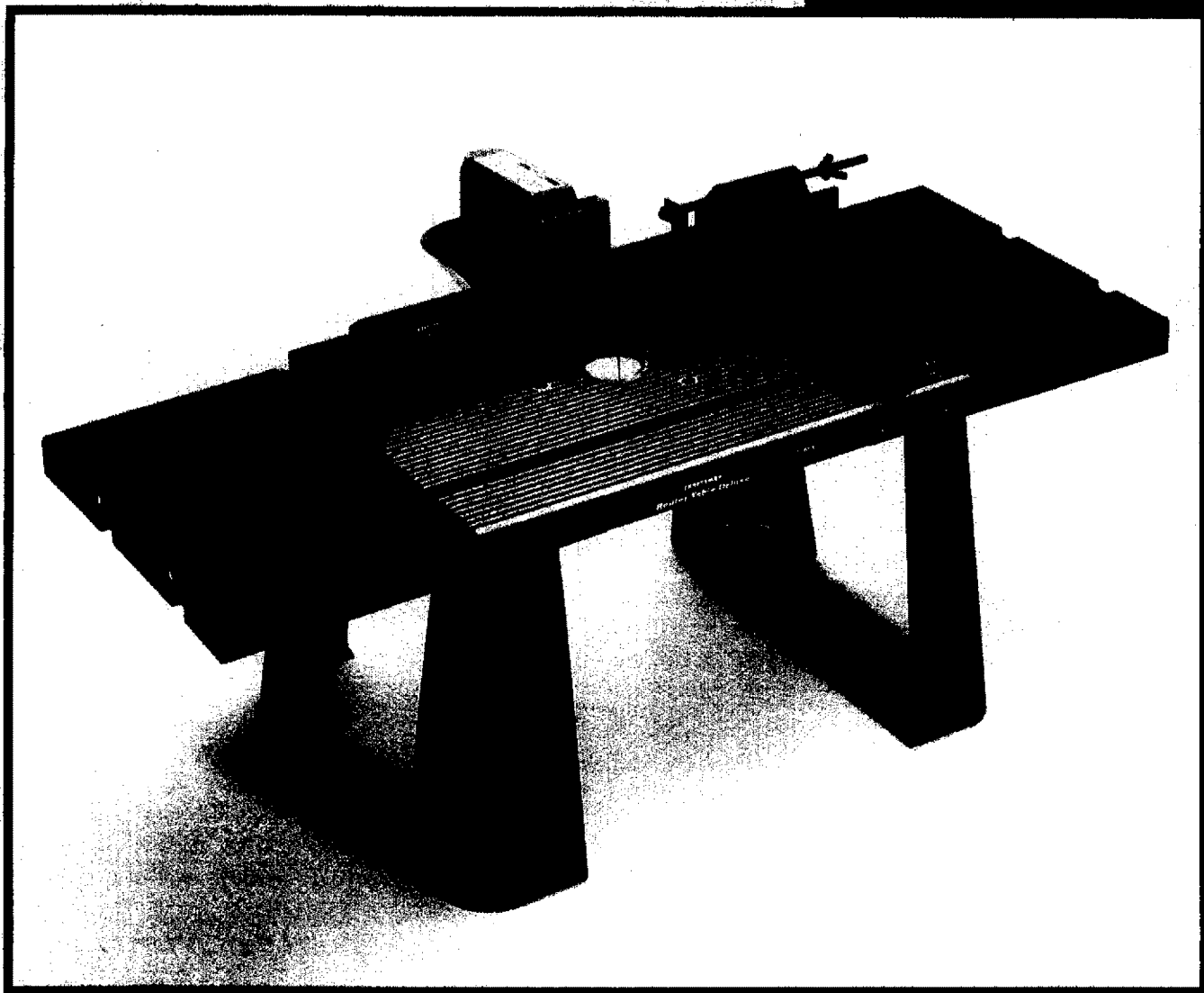


# **CRAFTSMAN<sup>®</sup>**

## ***Deluxe Router Table Multi-Function/Unitized Fence***

***Instructions  
For Assembly  
And Operation  
Of Your  
Model No. 25481***



**CAUTION: Read All Instructions Carefully  
(Router Not Included)**

**Sold By:  
SEARS, ROEBUCK And CO.  
3333 Beverly Road,  
Hoffman Estates, IL 60179  
Made In U.S.A.**

Part No. 49LCN-59

Printed In U.S.A.



**FAILURE TO HEED ALL SAFETY AND OPERATING INSTRUCTIONS AND WARNINGS REGARDING USE OF THIS PRODUCT CAN RESULT IN SERIOUS BODILY INJURY.**

# GENERAL SAFETY INSTRUCTIONS FOR POWER TOOLS

## 1. KNOW YOUR POWER TOOL

Read the owner's manual carefully. Learn its application and limitations as well as the specific potential hazards peculiar to this tool.

## 2. GROUND ALL TOOLS (UNLESS DOUBLE INSULATED)

If tool is equipped with an approved 3-conductor cord and a 3-prong grounding type plug, it should be plugged into a three hole electrical receptacle. If adapter is used to accommodate a two-prong receptacle, the adapter wire must be attached to known ground, (usually the screw securing receptacle cover plate). Never remove third prong. Never connect green ground wire to a terminal.

## 3. KEEP GUARDS IN PLACE

In working order, and in proper adjustment and alignment.

## 4. REMOVE ADJUSTING KEYS AND WRENCHES

Form a habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.

## 5. KEEP WORK AREA CLEAN

Cluttered areas and benches invite accidents. Floor must not be slippery due to wax or sawdust.

## 6. AVOID DANGEROUS ENVIRONMENT

Don't use power tools in damp or wet locations or expose them to rain. Keep work area well lighted. Provide adequate surrounding work space.

## 7. KEEP CHILDREN AWAY

All visitors should be kept a safe distance from work area.

## 8. MAKE WORKSHOP KID-PROOF

Use padlocks, master switches, or remove starter keys.

## 9. DON'T FORCE TOOLS

It will do the job better and safer at the rate for which it was designed.

## 10. USE RIGHT TOOL

Don't force tool or attachment to do a job it was not designed for.

## 11. WEAR RIGHT APPAREL

Do not wear loose clothing, gloves, neckties or jewelry (rings, wrist watches) to get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair. Roll long sleeves above the elbow.

## 12. USE SAFETY GOGGLES (Head Protection)

Wear Safety goggles (must comply with ANSI Z87.1) at all times. Also, use face or dust mask, if cutting operation is dusty, and ear protectors (plugs or muffs) during extended periods of operation.

## 13. SECURE WORK

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

## 14. DON'T OVERREACH

Keep proper footing and balance at all times.

## 15. MAINTAIN TOOLS WITH CARE

Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.

## 16. DISCONNECT TOOLS

Before servicing, when changing accessories such as blades, bits, cutters, etc.

## 17. AVOID ACCIDENTAL STARTING

Make sure switch is in "OFF" position before plugging in.

## 18. USE RECOMMENDED ACCESSORIES

Consult the owner's manual for recommended accessories and follow the instructions. The use of improper accessories may cause hazards.

## 19. NEVER STAND ON TOOL

Serious injury could occur if the tool is tipped or if the cutting tool is accidentally contacted. Do not store materials above or near the tool making it necessary to stand on the tool to reach them.

## 20. CHECK DAMAGED PARTS

Before further use of the tool, any 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 any other part that is damaged should be properly repaired or replaced.

## 21. DIRECTION OF FEED

Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.

## 22. NEVER LEAVE TOOL RUNNING UNATTENDED

Turn power off. Don't leave tool until it comes to a complete stop.

# GENERAL SAFETY INSTRUCTIONS FOR THE ROUTER TABLE WITH UNITIZED FENCE.

## 1. ALWAYS USE EYE PROTECTION

The operation of any power tool can result in foreign objects being thrown into the eyes, which can result in severe eye damage. Always wear safety goggles before commencing power tool operation. Safety goggles are available at Sears retail or catalog stores.

## 2. KEEP HANDS CLEAR OF BITS AND WORKING AREA

## 3. MAKE AND USE A PUSH STICK TO MOVE SMALL WORKPIECES ACROSS THE CUTTING AREA.

## 4. KEEP ROUTER CLEAN AFTER EVERY USE, CLEAN SAW DUST OFF THE ROUTER.

## 5. YOUR ROUTER TABLE IS PROVIDED WITH A DUST COLLECTING ATTACHMENT. ALWAYS USE SHOP VAC FOR ALL ROUTING OPERATIONS REQUIRING USE OF FRONT SIDE OF UNITIZED FENCE. (FRONT SIDE IS THE SIDE WITH THE CRAFTSMAN LABEL).

NOTE: Motors used on wood-working tools are particularly susceptible to the accumulation of sawdust and wood chips and should be "vacuumed" frequently to prevent interference with normal motor ventilation.

## 6. CHECK FUNCTION OF GUARD BEFORE EACH USE. REMOVE ALL DUST AND CHIPS FROM GUARD AREA AS NEEDED TO MAINTAIN GUARD FUNCTION.

## 7. NEVER PUT YOUR FINGERS UNDER THE GUARD WHEN THE ROUTER IS PLUGGED IN.

## 8. ALWAYS USE THE ROUTER TABLE FENCE TO GUIDE THE WORK. DO NOT WORK FREE HAND.

When using pilot type bits, keep the fences as close to the pilot as possible to provide additional backup and additional guidance and to avoid chances of an accident and possible personal injury.

## 9. ALWAYS FEED AGAINST THE ROTATION OF THE CUTTER WHEN ROUTING ON THE ROUTER TABLE. FEED WORKPIECES IN THE DIRECTION OF THE ARROW AS SHOWN ON THE LABEL ON THE SIDE OF THE FENCE BEING USED (WHEN FACING THE TABLE FRONT).

## 10. FOR ALL EDGE CUTTING AND END CUTTING OPERATIONS, USE FRONT SIDE OF UNITIZED FENCE. USE BACK SIDE OF FENCE ONLY FOR ROUTING OPERATIONS AWAY FROM EDGE ON THE UNDERSIDE OF WORKPIECE SUCH AS GROOVING, FLUTING, VEINING, CROWN MOLDING, ETC.

## 11. WHEN END CUTTING ON WORKPIECES 4" WIDE OR LESS, CLAMP AND HOLD AND FEED THE WORKPIECE WITH THE PUSH BLOCK USING BOTH HANDS, AS SHOWN IN FIG. #23. KEEP FINGERS CLEAR OF BIT WHEN MOVING WORKPIECE ACROSS THE CUTTING AREA. NEVER PLACE YOUR HANDS LOWER THAN THE TOP OF RETRACTABLE GUARD.

## 12. ROUTER BITS ARE EXTREMELY SHARP.

Be extra careful when working around them.

## 13. SOME ROUTERS, WHEN USED IN AN UPSIDE DOWN POSITION (SUCH AS ON A ROUTER TABLE), WILL FALL (OR DROP) OUT OF THE ROUTER BASE WHEN THE BASE CLAMP IS LOOSENED. IT IS THEREFORE ABSOLUTELY NECESSARY TO SUPPORT THE ROUTER MOTOR FROM BELOW WHEN THE BASE CLAMP IS LOOSENED TO MAKE ADJUSTMENTS, OR FOR ANY OTHER REASON.

## 14. ALWAYS LOOK UNDER THE TABLE AT THE SWITCH WHEN TURNING THE ROUTER ON/OFF AND TOUCH NOTHING BUT THE SWITCH. NEVER REACH UNDER THE TABLE WHEN ROUTER IS RUNNING FOR ANY OTHER REASON.

NOTE: It is far more safe and convenient to use a "Craftsman # 25183 Router Table Switch package". This switch provides a key operated ON/OFF button which allows fast and easy access when and if it becomes necessary to turn the router "OFF" quickly. The key can be removed to render the switch inoperable to unauthorized people.

## 15. MOUNT ROUTER TABLE FIRMLY AND SECURELY TO A WORK SURFACE BEFORE USE. FAILURE TO DO SO COULD CAUSE TABLE TO TIP OVER OR SLIDE DURING OPERATION RESULTING IN PROPERTY DAMAGE AND/OR SERIOUS BODILY INJURY.

## 16. BEFORE MAKING ANY CUT, UNPLUG ROUTER AND RETRACT GUARD TO MAKE ABSOLUTELY SURE THAT RETRACTABLE GUARD CLEARS THE ROUTER BIT, AND THE GUARD IS FUNCTIONING NORMALLY. SEE FIG. #16.

## 17. WARNING: ROUTER VIBRATIONS SOMETIMES CAN CAUSE FASTENERS FOR THE TABLE, THE ROUTER AND THE UNITIZED FENCE TO GET LOOSE! PERIODICALLY CHECK FASTENERS TO MAKE SURE THEY ARE TIGHT AND SECURE.

# INTRODUCTION

How often have you needed a large guiding surface on a router table? Your Craftsman Router Table with Unitized Fence comes with the following:

- A unique 4" high unitized fence designed to assist end grain routing for making tenons, sliding dovetails and tongue and groove joints along with most edge and face cutting operations.
- A specially designed push block with quick clamp for back up and clamping boards up to 4" width for end grain routing.
- An accurate and quick adjusting jointing fence adjustable to proper jointing depth of cut.
- Reversing feature of unitized fence designed to enable routing operations like grooving, fluting, veining and crown molding etc. up to 2½" away from the edge towards the middle of the board.
- Two guards for operation on either side of the unitized fence.
- Dust collecting attachment for most shop vacuum hook ups.
- Extensions that provide a large work surface.

If order to facilitate handling and minimize any damage that might occur during shipment, your new router table is packaged unassembled. We know you are anxious to see what your new tool will do, but a few minutes spent now carefully reading the following instructions will result in less frustration and more enjoyable operation later.

Start by checking and accounting for all the loose parts. If any parts are missing, contact your local Craftsman retail or hardware store outlet for replacement.

## OPTIONAL ROUTER TABLE ACCESSORIES

#25326 CRAFTSMAN UNIVERSAL ADAPTER PLATE, for mounting non-Craftsman 1/4" shank routers to Craftsman router accessories.

#25183 CRAFTSMAN ROUTER TABLE POWER SWITCH, for turning router and other accessories "on" and "off" from the front of the router table.

#25468 CRAFTSMAN GUIDE MASTER Router Table Push Shoe, aids in push shoe and hold down operations, accurate measurement and router table setup, transforms into a miter gauge, and gives quick set up for 1/2" sliding dovetail joints.

#25489 CRAFTSMAN ROUTER TABLE FLOOR STAND, places router tables at convenient working height, has adjustable floor levelers, and two steel shelves for storage.

## UNPACKING AND CHECKING CONTENTS

Refer to Parts List on Page 16

**!** YOU MUST READ AND UNDERSTAND ALL THE INSTRUCTIONS COMPLETELY BEFORE ATTEMPTING TO ASSEMBLE AND OPERATE YOUR ROUTER/ROUTER TABLE.

## TOOLS REQUIRED

- A small and medium size screwdriver.
- A small or medium size adjustable wrench.
- An electrical or hand drill with 1/8" drill bit.
- Hammer

# ASSEMBLY OF EXTENSIONS AND LEGS

1. To assemble the EXTENSIONS and LEGS to ROUTER TABLE, place table, top side down, on a smooth, flat surface, and position the LEGS and EXTENSIONS relative to the TABLE as shown in Figure 1. Insert the #10-32 x  $\frac{1}{2}$ " screw through the LEG and install lock washer and nut. This is to be done for each table leg.

2. Make sure all screws and nuts are securely tightened.

3. Turn the table top side up and check to see that the EXTENSIONS are even with or slightly below the table top.

4. In no case should the EXTENSIONS be higher than the table, or else they may interfere with the workpiece during routing causing a condition that can result in possible serious injury.

5. If the extensions are higher than the top of the table, loosen the screws holding the EXTENSIONS and reposition them so they are even with or slightly lower than the top of table. **SECURELY TIGHTEN ALL SCREWS AND NUTS AGAIN.**

6. To double check, slide a flat piece of wood along the top of the table both directions. Make sure that the end of the wood moves freely without contacting the edge of the EXTENSION next to table.

**! DO NOT PLACE HEAVY OBJECTS OR PRESS HEAVILY ON THE EXTENSIONS OR ELSE THEY MAY BE DAMAGED CAUSING A CONDITION THAT MAY CAN RESULT IN POSSIBLE SERIOUS BODILY INJURY DURING ROUTING.**

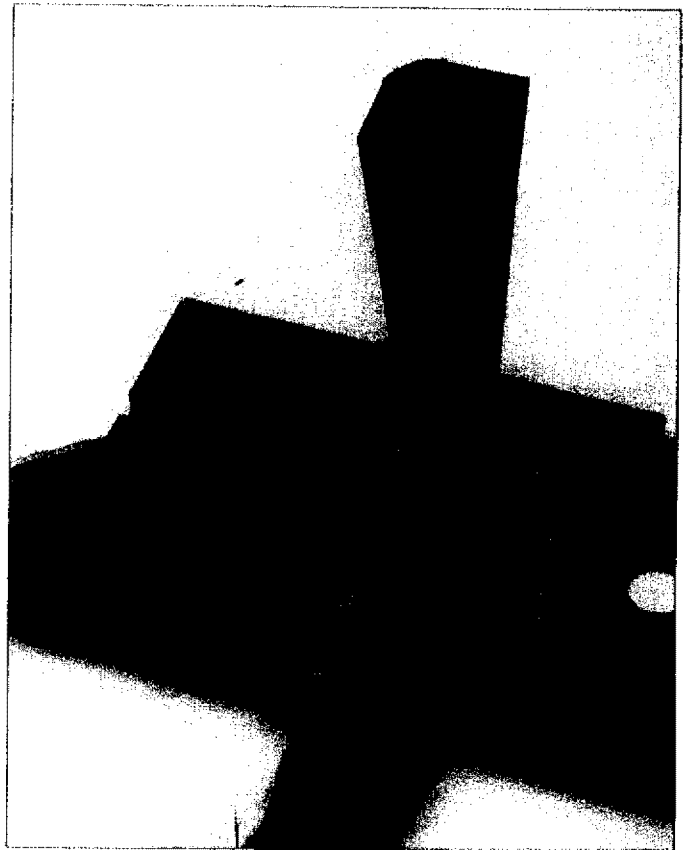


FIGURE 1

# MOUNTING ROUTER TO TABLE

ALWAYS UNPLUG ROUTER BEFORE MOUNTING (The table will accept Craftsman 3 hole 6 in. diameter base).

## ATTACHING CRAFTSMAN ROUTERS WITH THREE HOLE BASE PLATES

1. Remove the router base plate (back plate) from the router.

2. While holding the router upside down, position it to the underside within the center ring of the table top, as shown in Fig. #2.

3. Rotate the router until the three mounting holes in the router base line up with three of the holes in the table top (It will be helpful if you orient the router such that you can easily reach the ON/OFF switch from the front of the table. Craftsman<sup>®</sup> 25183 Router Table Switch Package provides easy access to ON/OFF button).

4. Insert three #10-32 x  $\frac{1}{2}$ " long flat head machine screws (provided) through holes in the table top (See Fig. #2) and tighten securely into the router base.



FIGURE 2

# SELECTING AND INSTALLING TABLE INSERTS

1. With the desired bit in the router, select a table insert which has a center hole slightly larger than the diameter of the router bit. Note: For bits larger than approximately  $1\frac{1}{8}$ " diameter, do not use an insert.
2. The table inserts are designed to be snapped into the router table. Slide the large tang under the edge of the large hole in the router table as shown in Fig. #3. Using your thumb, press down on the insert until the small tang snaps into position.
3. To remove the insert, place the blade of a small screwdriver into the slot (with the small tang) and pry the insert out of the router table.

**!** BEFORE ASSEMBLING AND ATTACHING UNITIZED FENCE TO TABLE, MAKE SURE THAT ROUTER IS UNPLUGGED AND THE BIT IS BELOW THE TOP SURFACE OF THE TABLE.

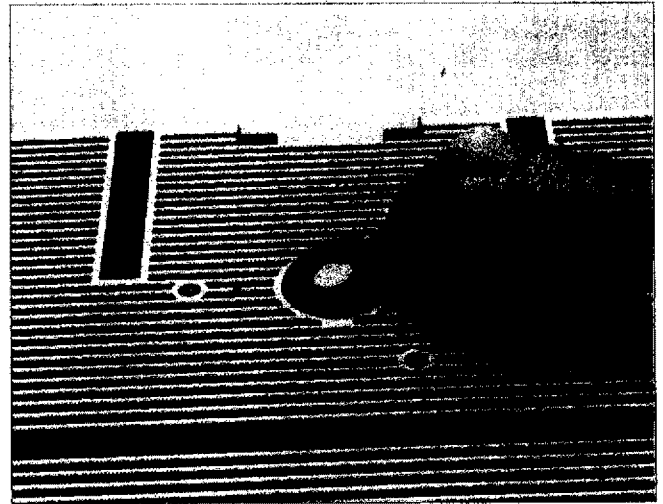


FIGURE 3

## ASSEMBLY OF UNITIZED FENCE

### ASSEMBLY OF JOINTING FENCE TO UNITIZED FENCE

1. Slide jointing fence through rectangular opening in the cavity provided on the unitized fence (ribs on the unitized fence will slide in the grooves on the underside of jointing fence). See Fig. #4a & #4b.
  2. Insert  $\frac{1}{4}$ -20 x 1" long hex head bolt through the hole in the unitized fence (from the underside) and the slot in the jointing fence.
  3. While holding the head of the bolt in the hex recess on the underside of unitized fence, place a flat washer over the bolt and screw small  $\frac{1}{4}$ -20 knob on bolt.
- When knob is loosened, the jointing fence can slide back and forth in the cavity for proper jointing adjustment.



FIGURE 4a



FIGURE 4b

## ASSEMBLY OF RETRACTABLE GUARD TO UNITIZED FENCE

1. Place the unitized fence upside down on a flat surface as shown in Fig. #5a & #5b.
  2. Orient the retractable guard as shown in Fig. #5a & #5b. Position and hold the spring over its hub such that formed end of spring wraps over the guard as shown in Fig. #5a & #5b.
  3. While holding the spring over the hub, and formed end over the guard, position and press the straight leg of spring against surface 'X' to align hole in hub over boss on unitized fence (see Fig. #5a & #5b). Slip the guard over the boss. Spring will now be trapped between the guard and the fence. (Spring diameter is bigger than the hub diameter. You will need to use both hands to hold spring in proper position.)
  4. Tightly secure retractable guard in place using self threading #8-10 x  $\frac{3}{16}$ " long pan head platform screw and a flat washer as shown in Fig. #5a & #5b.
  5. Swing guard a few times in the direction of arrow to see that it retracts out freely by itself and returns to its normal position over the router table hole. See Fig. #5a & #5b.
- NOTE:** If the guard does not retract out freely, loosen screw just enough until it does retract out freely and snaps back to normal forward position by itself.
6. Turn the unitized fence right side up.

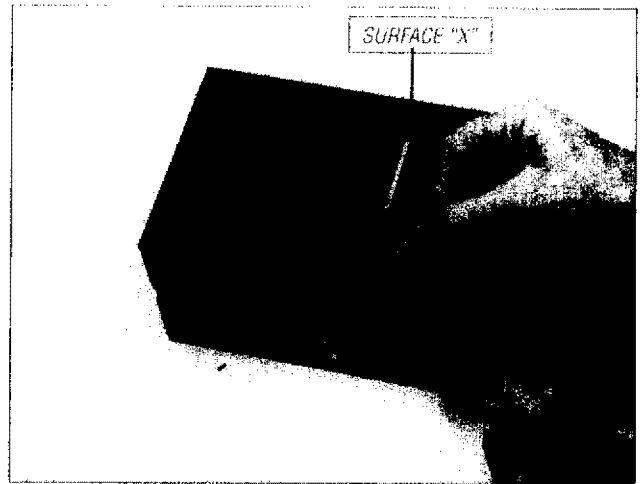


FIGURE 5a

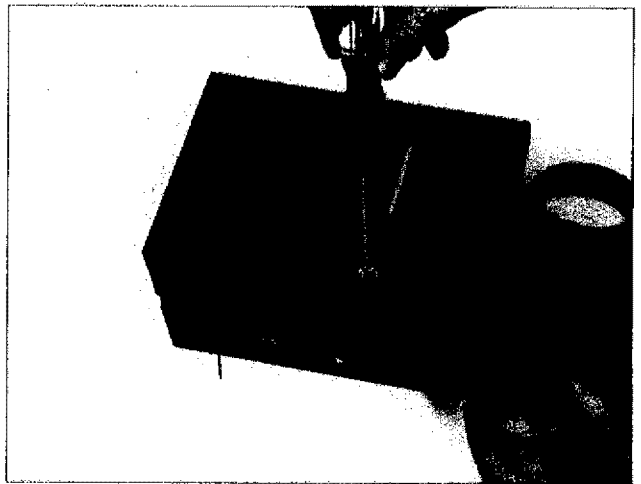


FIGURE 5b

## ATTACHMENT OF UNITIZED FENCE ASSEMBLY TO TABLE

**!** ALWAYS UNPLUG ROUTER BEFORE  
ATTACHING FENCE TO AND REMOVING  
FROM TABLE.

1. Assemble unitized fence assembly to table as shown in Fig. #6.
2. Insert one of the  $\frac{1}{4}$ -20 x  $1\frac{1}{2}$ " long hex head bolts through the hole in the table top (from the underside) and the slot in the fence.
3. While holding the head of the bolt in the hex recess on the underside of the tabletop, place a flat washer over the bolt and install a large  $\frac{1}{4}$ -20 knob onto the bolt to loosely secure the fence.
4. Repeat for the other slot.

**NOTE:** The unitized fence assembly can be attached to table with either side facing the front. To use other side, just remove the knobs and turn the fence around.



FIGURE 6

## ASSEMBLY OF PUSH BLOCK

1. Screw the small end of clamp rod into threaded hole in clamp plate until the plate bottoms on its shoulder (make sure clamp plate is oriented such that letter "C" is facing outwards as shown in Fig. #7).
2. Tightly secure clamp plate to clamp rod using  $\frac{1}{4}$ " helical lock washer and a hex nut.
3. Insert the opposite threaded end of clamp rod through hole in push block, and install a flat washer and a wing nut on to it.

**!** **ROUTER VIBRATIONS SOMETIMES CAN CAUSE 1/4-28 HEX NUT AND CLAMP PLATE TO GET LOOSE! PERIODICALLY CHECK FASTENERS AND CLAMP PLATE TO MAKE SURE THEY ARE TIGHT AND SECURE.**

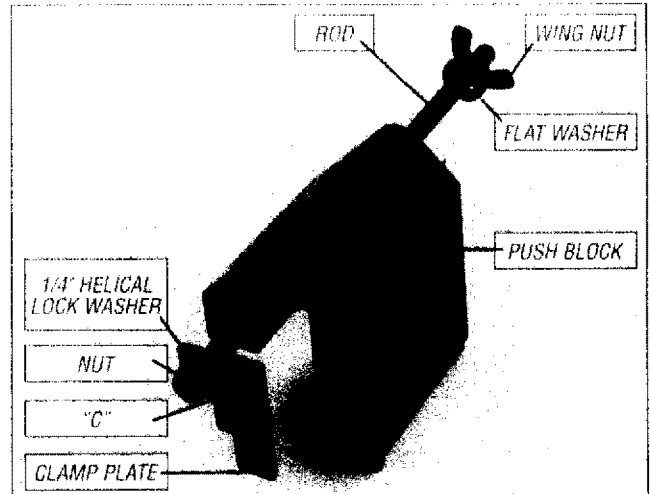


FIGURE 7

# ASSEMBLY OF PUSH BLOCK & GUARD TO UNITIZED FENCE

## ASSEMBLY OF PUSH BLOCK

Clamp plate, when free, tries to swing in the direction of arrow (See Fig. #8) due to its weight.

1. Mount push block assembly on the unitized fence by supporting clamp plate against the face of the fence and aligning retaining rib on push block with the groove in the face of unitized fence.
2. Slide push block assembly back and forth along entire length of unitized fence to see that it slides freely.

- NOTE: a. Remove dust and chips from sliding surfaces of push block and unitized fence as needed to maintain good sliding motion.
- b. Occasional application of furniture spray wax on sliding surfaces of PUSH BLOCK ONLY will greatly improve the sliding motion.

FOR ROUTING ON ENDS (TENONS, SLIDING DOVETAILS, ETC.) WORKPIECE IS HELD AGAINST FACE OF UNITIZED FENCE AND CLAMPED BETWEEN CLAMP PLATE AND SURFACE 'S' OF PUSH BLOCK. SEE FIG. #8.

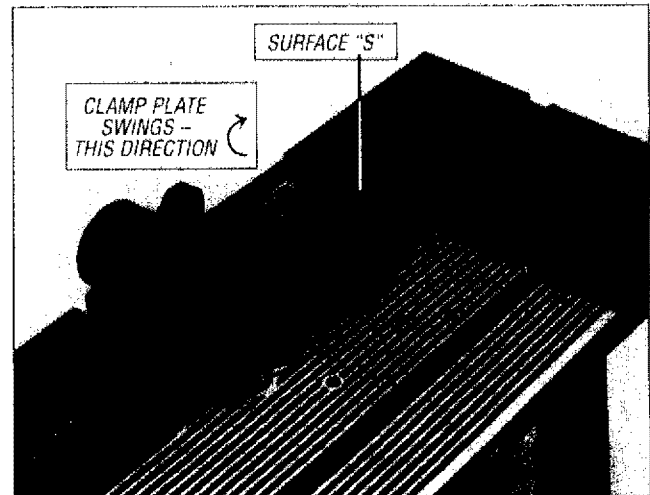


FIGURE 8

## ASSEMBLY OF RED GUARD

1. Assemble guard to unitized fence as shown in Fig. #9.
2. While holding the guard at a slight angle, as shown, insert tab on one side of guard into the hole inside the slot on the fence.
3. Hold the guard against this slot, straighten it into a vertical position, and insert the opposite tab into the mating slot. See Fig. #9.
4. Pivot guard back and forth a few times to make sure that it moves freely.

**NOTE:** Once the guard has been installed, do not remove it for any reason.



FIGURE 9



## MOUNTING THE ROUTER TABLE

THE ROUTER TABLE MUST ALWAYS BE FIRMLY AND SECURELY MOUNTED TO A WORK SURFACE BEFORE USE. FAILURE TO DO SO COULD CAUSE TABLE TO TIP OVER OR SLIDE, RESULTING IN PROPERTY DAMAGE AND/OR SERIOUS PERSONAL INJURY.

Each leg has (4) holes at the bottom for mounting. Firmly secure router table to work surface using appropriate fasteners (not provided) as shown in Fig. #10.

Attach 1" x 6" or 2" x 6" skids to bottom of legs as shown in Fig. #10, then secure table firmly to work surface.

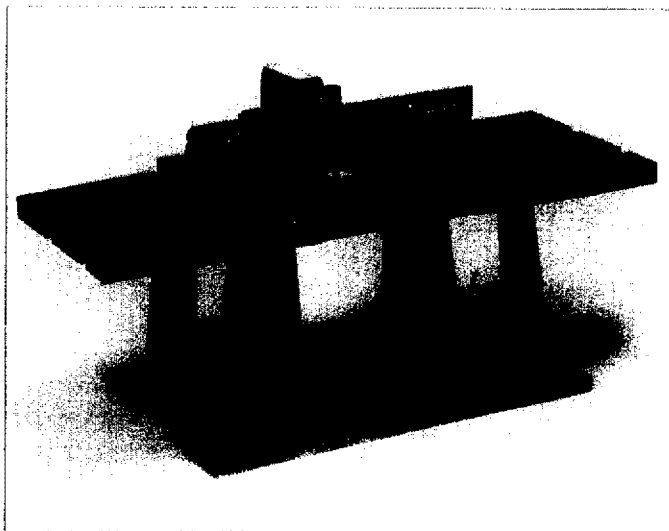


FIGURE 10

## DUST COLLECTING ATTACHMENT

Unitized fence is provided with a hookup for most Craftsman 2 1/2" and 1 1/4" hose diameter wet/dry vacs.

FOR ALL OPERATIONS REQUIRING USE OF FRONT-SIDE OF UNITIZED FENCE, connect wet/dry vac as follows:

1. Raise guard and lean it against the fence.
2. Attach 2 1/2" hose diameter nozzle as shown in Fig. #11.
3. Attach 1 1/4" hose diameter nozzle as shown in Fig. #12.
4. Lower guard and let it rest on the vac hose.

**NOTE:** For maximum suction efficiency, stick a piece of tape or use a piece of scrap wood to cover up the opening in the rear of the fence as shown in Figures 11 and 12. Uncover opening after use.

FOR OPERATIONS REQUIRING USE OF BACKSIDE OF UNITIZED FENCE, DO NOT CONNECT WET/DRY VAC AS IT WILL HINDER OPERATION. THE BACKSIDE OF FENCE IS ONLY FOR CUTTING OPERATIONS ON THE UNDERSIDE OF WORKPIECE. THE WORKPIECE DURING SUCH OPERATIONS COMPLETELY COVERS THE ROUTER BIT AND THE DUST CANNOT BE VACUUMED.

**!** OPERATING ROUTER TABLE WITHOUT USE OF WET/DRY VAC MAY RESULT IN EXCESSIVE COLLECTION OF SAW DUST AND CHIPS UNDER THE FENCE AND THE RETRACTABLE GUARD AREA.

FOR YOUR OWN SAFETY, ALWAYS UNPLUG THE ROUTER AND CHECK FUNCTION OF GUARD BEFORE EACH USE. REMOVE DUST AND CHIPS FROM GUARD AREA AS NEEDED TO MAINTAIN GUARD FUNCTION. KEEP WORK AREA CLEAN. REMOVE UNITIZED FENCE FROM TABLE (MAKE SURE ROUTER IS UNPLUGGED) TO CLEAR DUST AND CHIPS TRAPPED BETWEEN FENCE AND TABLE TOP.



FIGURE 11

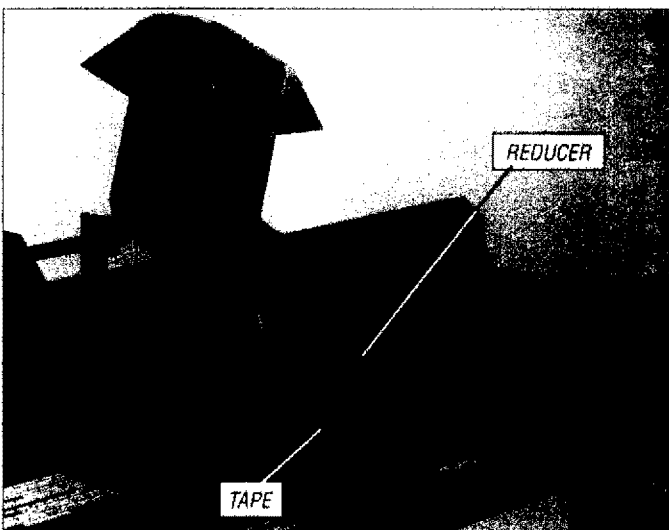


FIGURE 12

## ASSEMBLY OF MITER GAUGE

Assemble protractor head to miter bar as shown in Fig. #13.

## ALIGNMENT OF UNITIZED FENCE TO MITER BAR SLOT

1. Measure distance from each end of unitized fence to edge 'E' of miter bar slot on the table as shown in Fig. #14. If both distances are the same, the fence is parallel to miter bar slot. If not, loosen large knobs and adjust fence accordingly. Tighten both knobs.
2. Position miter gauge on table as shown in Fig. #14.

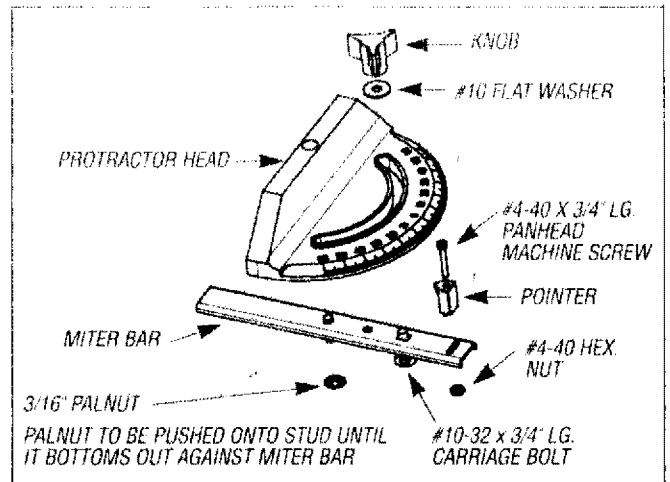


FIGURE 13

## OPERATION – ROUTING USING FRONTSIDE OF UNITIZED FENCE

ALWAYS UNPLUG THE ROUTER BEFORE MAKING ANY SETTING, ADJUSTMENTS OR CHANGING BITS.

WHEN ROUTING, ALWAYS FEED AGAINST THE ROTATION OF THE CUTTER. FEED WORKPIECE IN THE DIRECTION OF ARROW AS SHOWN ON THE LABEL ON THE SIDE OF THE FENCE BEING USED (when facing the table front).

The unitized fence on your table is provided as a guide, against which the workpiece should be held for accuracy in routing. Free hand routing (not holding work against the fence) is hazardous and should be strictly avoided.

Wet/dry vac with either 2½" diameter or 1½" diameter hose nozzle should be connected to the dust collection attachment when using the router table.

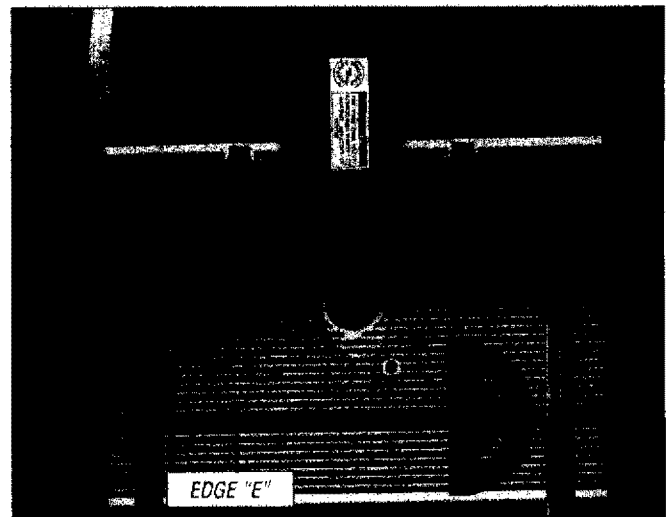


FIGURE 14

## ADJUSTING DEPTH AND HEIGHT OF CUT

In order to retract the guard and have full access to the router bit for making adjustments, select a board that is smooth with edges and ends true to each other and its surfaces. Keep in mind the following as well:

1. Mark lines 'A' and 'B' on the end of this board. Line 'A' for desired depth of cut (amount of material you want to remove) and line 'B' for desired cutting height. See Fig. #15.
2. Position this board against the face of the fence with edge resting on table top and end marked with lines 'A' and 'B' close to the bit. See Fig. #15. (This will retract guard inside fence and provide access to the bit for making adjustments. MAKE SURE ROUTER IS UNPLUGGED WHEN MAKING ADJUSTMENTS.)
3. Loosen both large knobs that allow movement of fence and move fence forward and backward until outermost cutting edge of router bit is aligned with line 'A'. Tighten both knobs.

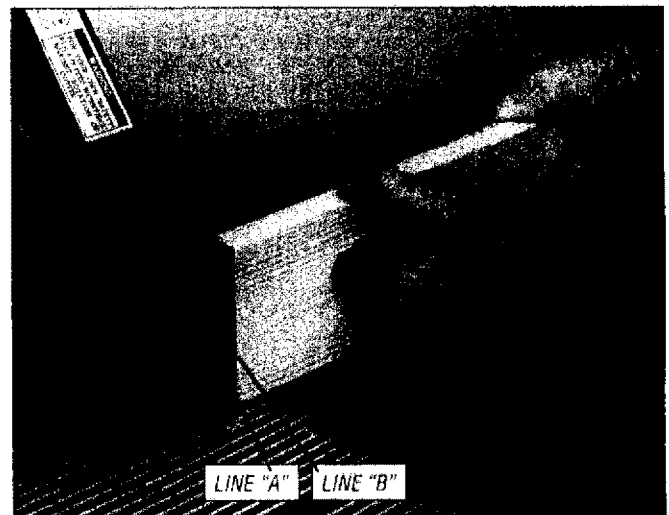


FIGURE 15

4. Raise or lower the router until top cutting edge of bit is aligned with line 'B'. (Refer to your router owner's manual for adjusting your router properly). AFTER MAKING THIS ADJUSTMENT, BE SURE THAT ROUTER IS SECURELY TIGHTENED IN THE ROUTER BASE, BIT IS SECURELY TIGHTENED IN THE ROUTER CHUCK, AND ROUTER BASE IS TIGHTLY SECURED TO TABLE TOP.

5. Remove the board from the fence.

**!** **WHEN ADJUSTING HEIGHT OF ROUTER BIT FOR ANY DESIRED CUT, MAKE ABSOLUTELY CERTAIN THAT TOP OF BIT IS BELOW THE INSIDE SURFACE OF RETRACTABLE GUARD, AS SHOWN IN FIG. #16. CHECK TO SEE THAT GUARD RETRACTS FREELY IN AND OUT OF FENCE TO ITS NORMAL POSITION OVER THE ROUTER TABLE HOLE. DO NOT OPERATE ROUTER IF ANY PART OF THE BIT CONTACTS THE GUARD.**

**NOTE:** The procedure described above is intended to provide a way of retracting and holding the guard to have full access to the router bit for making adjustments. Workpiece to be routed could be substituted for the scrap board for making adjustments.

### USING ROUTER TABLE AS JOINTER (FULL EDGE CUTTING)

For maximum strength and accuracy, boards to be joined together should be smooth and true. The edges should be true to the (90°) workpiece surface. You can true the edges of workpiece on your router table using a straight bit.

1. Check to see if face of jointing fence is flush with the face of unitized fence. If not, loosen small knob on jointing fence and push jointing fence inside the cavity in unitized fence. Tighten knob on jointing fence.

**NOTE:** The jointing fence provides a continuous support for the workpiece, as it is fed beyond the router bit. It compensates for the amount of material removed by the router bit.

2. Adjust depth of cut (material you want to remove) and router bit height as described before for Fig. #15. Tightly secure the fence and the router as described before. (MAKE SURE ROUTER IS UNPLUGGED WHEN MAKING ADJUSTMENTS.)

3. Check your adjustments by turning the router 'ON' and feeding a piece of scrap wood a few inches beyond router bit. Then stop and turn router 'OFF'.

**NOTE:** Feed work in the direction of arrow shown on label on the frontside of unitized fence (when facing table front).

4. Loosen knob on jointing fence and move it out flush against the finished edge of scrap wood. Retighten the knob. See Fig. #17.

5. Repeat the test cut on the scrap wood.

6. The router table is now ready for use.

**NOTE:** For best jointing results, take very shallow cuts – 1/8" or less.

### USING ROUTER TABLE FOR EDGE CUTTING WITH NON-PILOTED BITS

1. Position the jointing fence such that its face is flush with the face of unitized fence. Tighten small knob on jointing fence. See Fig. #18.

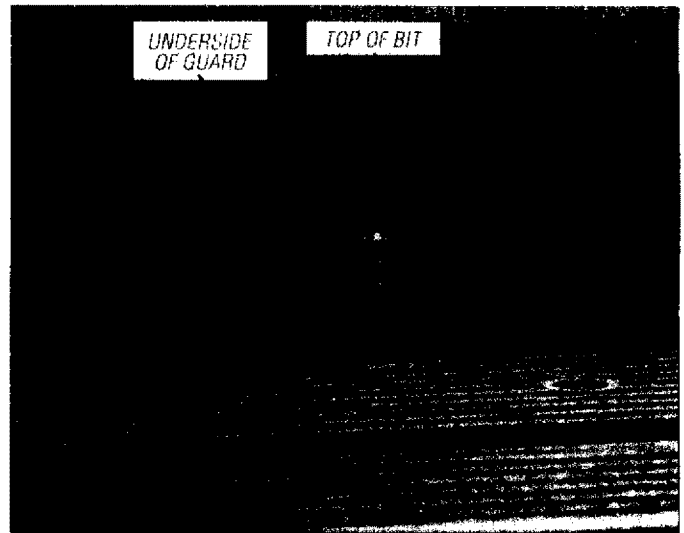


FIGURE 16

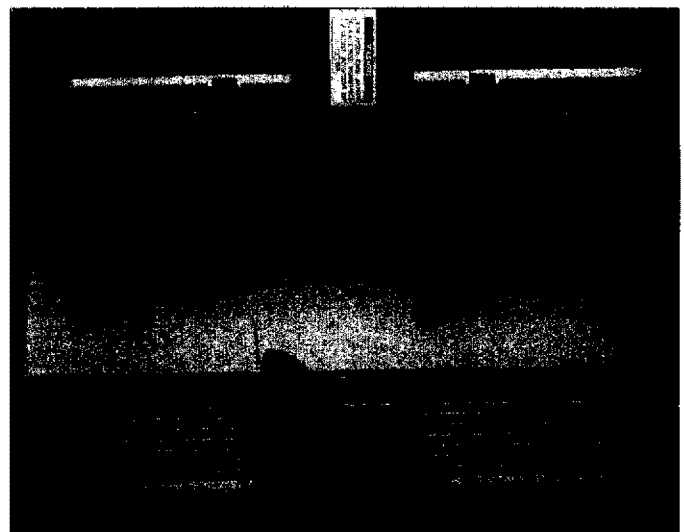


FIGURE 17

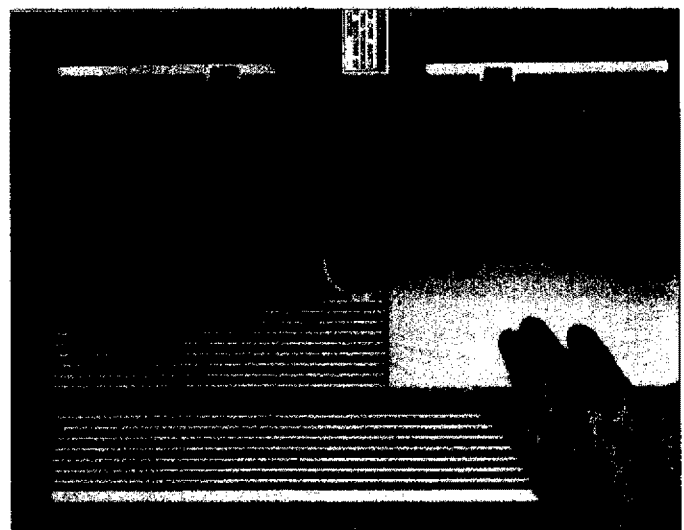


FIGURE 18

2. Adjust depth of cut (material you want to remove) and router bit height as described before. Tighten both large knobs to lock fence on table. Tightly secure the router. (MAKE SURE ROUTER IS UNPLUGGED WHEN MAKING ADJUSTMENTS.)

3. Test cut a piece of scrap wood to make sure your adjustments are satisfactory.

**NOTE:** Feed work in the direction of arrow shown on label on frontside of unitized fence (when facing table front).

4. The router table is now ready for use.

## WITH PILOTED TYPE BITS

Remember the following when bits with pilots are used to control the cutting depth:

1. Position the jointing fence in the same manner as with non-piloted bits.

2. Move the unitized fence back only enough to permit the pilot to control the cutting depth. Positioning the unitized fence as close to the pilot as possible will serve as a back-up and will help in avoiding an accident and possible personal injury. See Fig. #19.

**NOTE:** If you have purchased RAIL AND STILE CUTTERS (Craftsman<sup>®</sup> 21257 or 21259) for making cabinet door frames on your router table, MAKE SURE THAT FRAME THICKNESS is not more than  $\frac{3}{4}$ ". If frame thickness is more than  $\frac{3}{4}$ ", the top of the bit, as shown in Fig. 20, will interfere with retractable guard on your unitized fence. See Fig. #20 and Fig. #16.

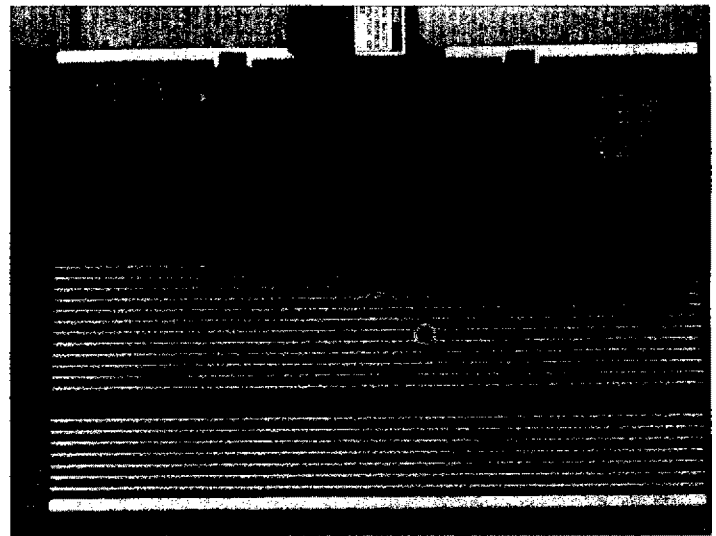


FIGURE 19

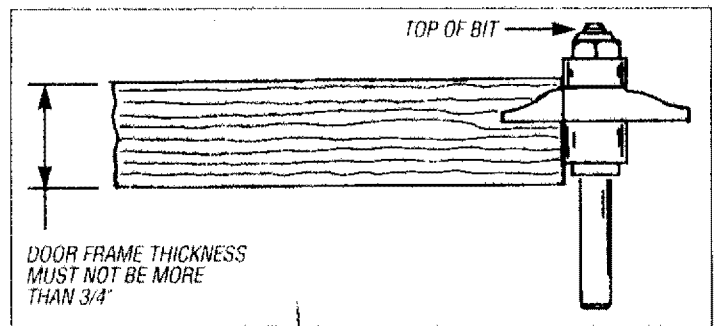


FIGURE 20

## USING ROUTER TABLE FOR END CUTTING

When routing on ends of workpiece for making tenons, sliding dovetails and tongue and groove joints, the workpiece must be made smooth with both edges and ends made true to each other and its surfaces. (90°)

**NOTE:** The push block and clamp plate assembly will not accommodate workpiece wider than 4".

### EXAMPLE: CUTTING TENONS

1. Make certain that jointing fence is locked in position with its face flush with that of unitized fence.

2. Mount push block assembly on unitized fence as shown before in Fig. #8.

3. Install proper table insert into the table top hole.

4. Mark lines 'A' and 'B' on the edge of the workpiece closest to the end to be cut. Line 'A' for FULL DEPTH OF CUT (total amount of material you want to remove) and line 'B' for FULL DESIRED HEIGHT OF TENON. See Fig. #21.

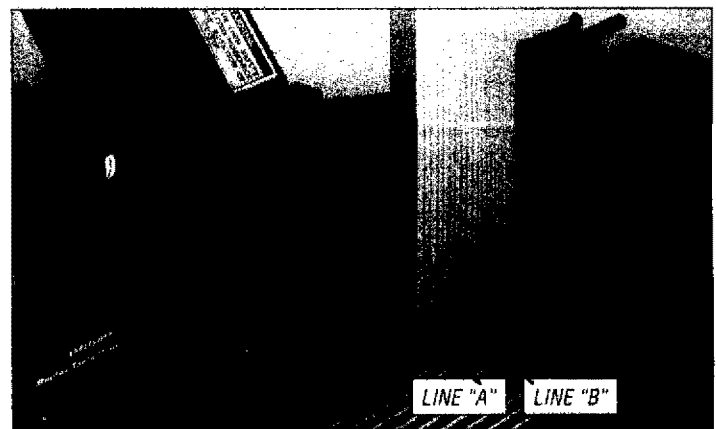


FIGURE 21

**!** DO NOT SET DEPTH OF CUT MORE THAN  $\frac{3}{8}$ " (FIG. #23). IF DEPTH OF CUT IS MORE THAN  $\frac{3}{8}$ ", THE EDGE 'E' OF WORKPIECE WHEN SLIDING ACROSS WILL INTERFERE WITH PORTION 'P' OF GUARD. THE GUARD THEN WILL NOT RETRACT INSIDE FENCE, AND YOU WILL NOT BE ABLE TO SLIDE WORKPIECE ACROSS THE BIT TO MAKE THE CUT. SEE FIG. #24.

5. Position workpiece between clamp plate and push block such that its side is held flush against face of the unitized fence, end to be cut is resting on the edge of the table top hole and edge marked with lines 'A' and 'B' is facing the router bit. Clamp workpiece in this position by snugly tightening the wing nut on clamp rod while making sure that clamp plate stays oriented on workpiece as shown in Fig. #21. (This will retract guard inside the fence and provide access to the bit for making adjustments. MAKE SURE ROUTER IS UNPLUGGED WHEN POSITIONING AND CLAMPING WORKPIECE AND MAKING ADJUSTMENTS.)

**NOTE:** Tighten wing nut just enough to clamp workpiece in position. OVERTIGHTENING wing nut could cause binding in the sliding motion of push block, which in turn may result in variations and/or steps in the finished tenon surface when cut. See Fig. #25.

6. Slide workpiece close to the bit and adjust unitized fence and the router as described before, so that outer-most cutting edge of bit is aligned with line 'A' and top cutting edge of bit is aligned with line 'B'. See Fig. #21. Tightly secure the fence and the router, as described before in ADJUSTING DEPTH AND HEIGHT OF CUT.

7. Slide push block and workpiece back to let guard swing out to its normal position as shown in Fig. #14.

8. Turn router and wet/dry vac 'ON'. While holding push block GUIDE WORKPIECE AGAINST FENCE WITH BOTH HANDS (Fig. #23 & #24) and FINGERS AT SAFE DISTANCE ABOVE GUARD AND SPINNING BIT. Feed workpiece across the bit to make FULL DEPTH OF CUT IN ONE PASS (DO NOT STOP FEED UNTIL WORKPIECE IS FAR ENOUGH BEYOND SPINNING BIT TO ALLOW GUARD TO RETRACT OUT FULLY TO ITS NORMAL POSITION).

**NOTE:** Clamp and test cut a piece of scrap wood to check your adjustments before making your finished cut.

9. Turn router and wet/dry vac 'OFF'. Unclamp workpiece and slide push block back.

10. Position and clamp the opposite side of workpiece in the same manner as described in Step #5 (make sure the wing nut is tight just enough to clamp workpiece in position and end to be cut is resting on the edge of table top hole.) Repeat steps #7, #8, and #9.

11. To cut ends of the tenon, position and clamp workpiece in the same manner as in step #5 above, except edge of workpiece should be held flush against face of fence and end to be cut should be resting on edge of table top hole. See Fig. #24. Repeat steps #7, #8, #9, and #10.

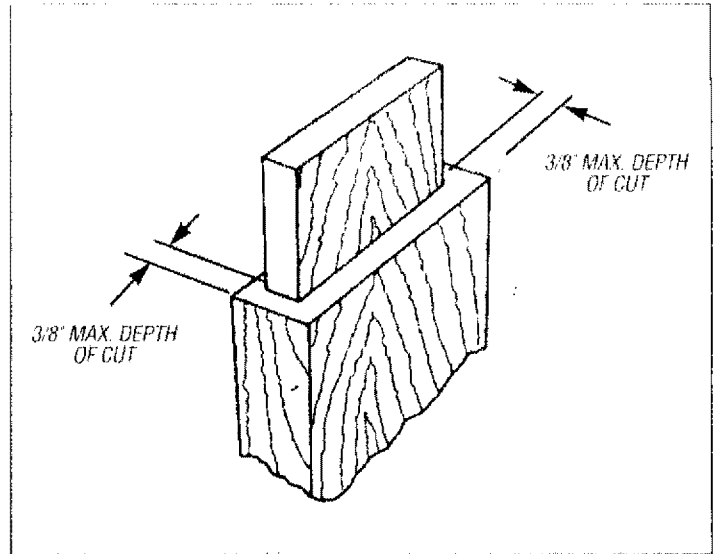


FIGURE 22



FIGURE 23

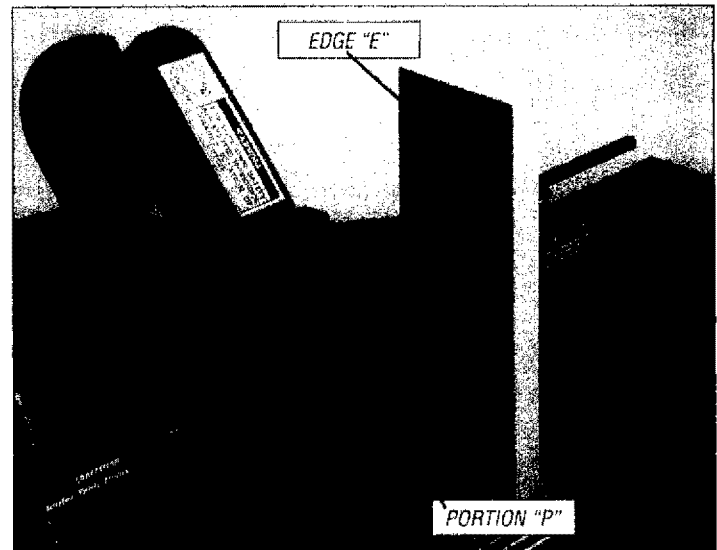


FIGURE 24

**NOTE:** When cutting tenons, always clamp workpiece with end to be cut resting on edge of table top hole. This will minimize steps in finished tenon surface (Fig. #25) due to variations in the table top flatness.

**!** ALWAYS CUT FULL DEPTH ON ALL 4 SIDES OF TENON IN ONE PASS ACROSS THE BIT. ONCE THE SIDES ARE CUT AND IF STEPS OR OTHER IMPERFECTIONS ARE NOTICED ON FINISHED TENON SURFACE, CLEAN THEM WITH WOOD CHISEL, SAND PAPER OR FILE, ETC. DO NOT TRY TO CLEAN THEM BY RE-SETTING WORKPIECE ON ROUTER TABLE AND FENCE. WORKPIECE MAY INTERFERE WITH GUARD (SEE FIG. #21) WHICH IN TURN WILL PREVENT IT FROM SLIDING ACROSS THE BIT.

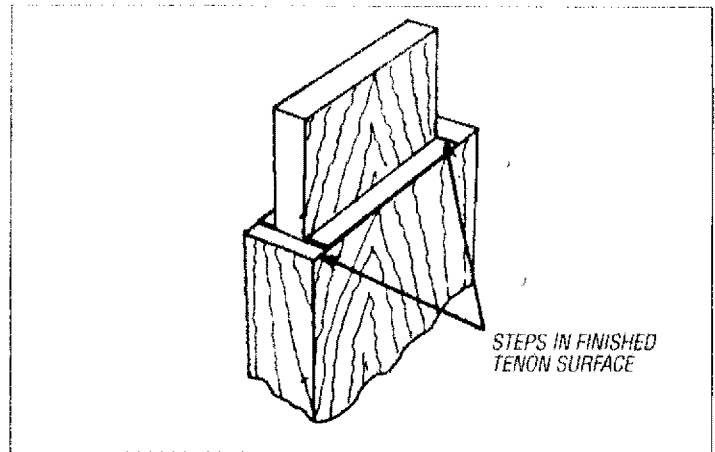


FIGURE 25

## OPERATION – ROUTING USING BACKSIDE OF UNITIZED FENCE

USE BACKSIDE OF FENCE ONLY FOR ROUTING OPERATIONS AWAY FROM EDGE ON THE UNDERSIDE OF WORKPIECE, SUCH AS GROOVING, FLUTING, VEINING, CROWN MOLDING, ETC.

ALWAYS UNPLUG THE ROUTER BEFORE MAKING ANY SETTING, ADJUSTMENTS, OR CHANGING BITS.

WHEN ROUTING, ALWAYS FEED AGAINST THE ROTATION OF THE CUTTER. FEED WORKPIECE IN THE DIRECTION OF ARROW AS SHOWN ON LABEL ON THE SIDE OF FENCE BEING USED (when facing the table front).

DO NOT CONNECT WET/DRY VAC WHEN USING BACKSIDE OF FENCE. THE HOSE WILL HINDER OPERATION.

1. Remove both large knobs and  $\frac{1}{4}$ -20 x  $1\frac{1}{4}$ " lg. hex head bolts, turn the unitized fence around and attach it back to table with backside of fence facing the table front. See Fig. #26. (MAKE SURE ROUTER IS UNPLUGGED WHEN REMOVING AND ATTACHING FENCE TO TABLE).

2. Raise guard and let it lean against the fence.

3. Position the fence behind the router bit for the desired cutting depth (the distance of the cut from the edge of the workpiece, as shown in Fig. #27).

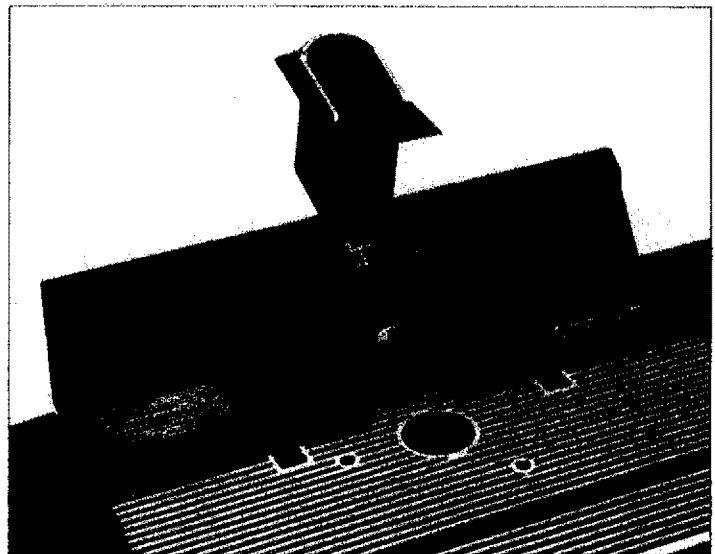


FIGURE 26



FIGURE 27

4. Securely tighten both knobs and LOWER THE GUARD OVER THE BIT

5. Make the cut by sliding straight edge of workpiece against the fence. (For each successive cut, the fence would need to be readjusted.)

**NOTE:** Test cut a piece of scrap wood before making your finished cut. Feed workpiece in the direction of arrow shown on fence label (Fig. #28).

**NOTE:** When routing deep cuts (controlled by router bit) in a workpiece, remove material in increments to prevent your router from overloading. Repeat operation with several passes until the desired depth is achieved.

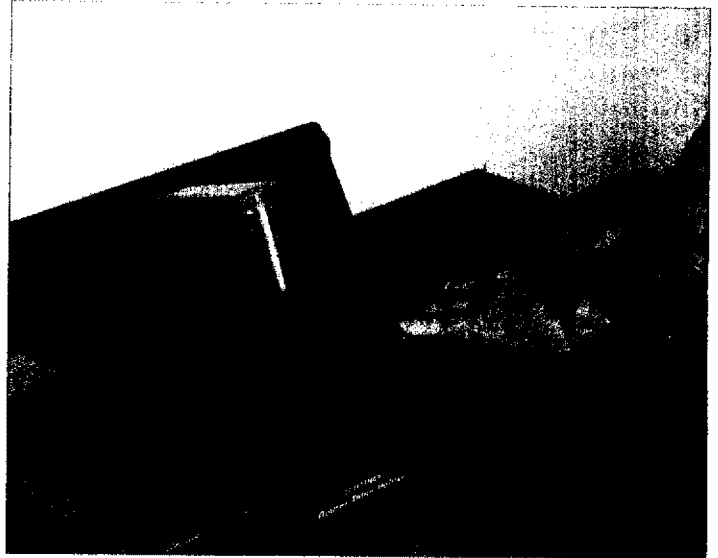


FIGURE 28

## PROTRACTOR

Your protractor will serve as a handy aid when extra support is needed for routing small workpieces or ends of large workpieces. See Fig. #29.

**NOTE:** FOR ALL ROUTING OPERATIONS REQUIRING USE OF MITER GAUGE ALONG WITH THE FENCE, BE SURE TO ALIGN FENCE WITH MITER BAR SLOT BEFORE MAKING ANY CUTS. SEE FIG. #14.



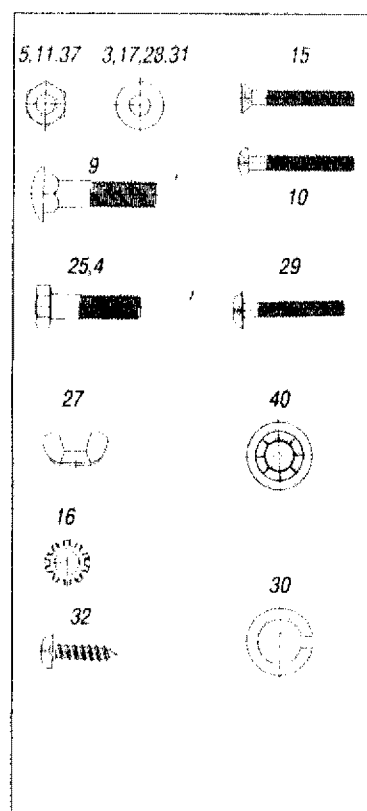
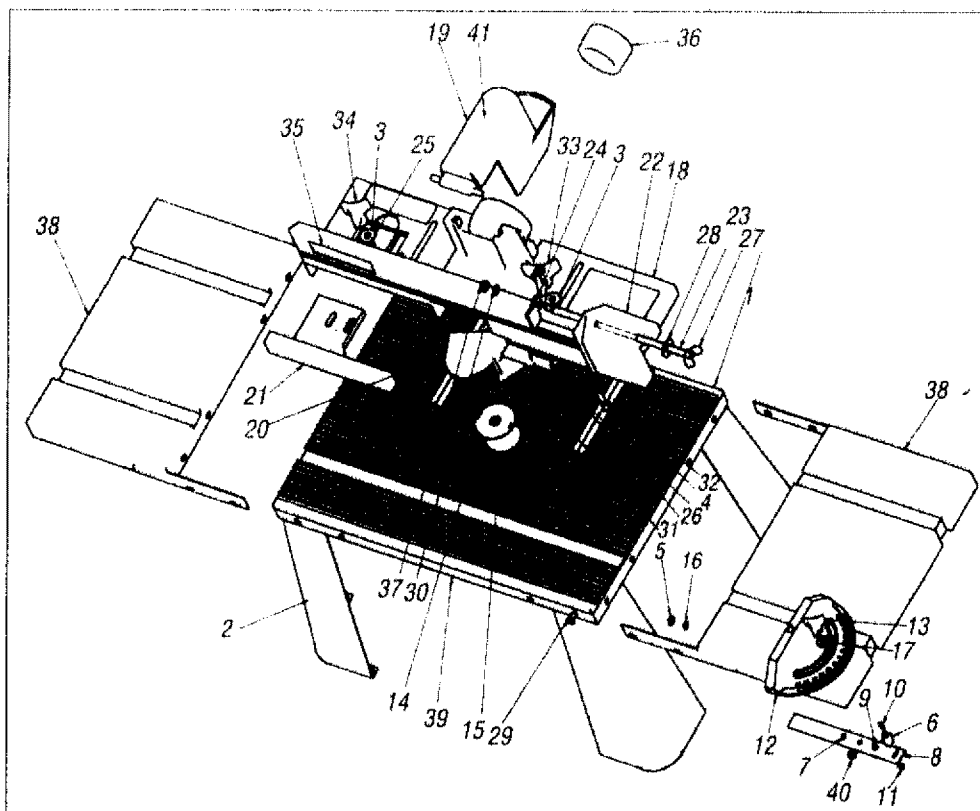
FIGURE 29

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## NOTES

# PARTS LIST FOR CRAFTSMAN ROUTER TABLE

# MODEL NO. 25481



Key No.	Part No.	Description	Quan.	Key No.	Part No.	Description	Quan.
1	31L-431	Cast Router Table Top	1	22	29L-648	Push Block	1
2	29LCN-985	Table Leg	4	23	29L-651	Clamp Rod	1
3	F29A-306-41	$\frac{1}{2}$ " O.D. x $\frac{3}{8}$ " I.D. x $\frac{1}{8}$ " Flat Washer	3	24	29L-652	Clamp Plate	1
4	F29A-489-10	Hex. Hd. Bolt $\frac{1}{4}$ -20" x 1 $\frac{1}{2}$ "	2	25	F29A-246-20	Hex. Hd. Cap Screw $\frac{1}{4}$ - 20 x 1" Lg.	1
5	F29A-242-2	#10-32 Hex. Hd. Machine Screw Nut	16	26	29L-654	Spring	1
6	29LCN-967	Miter Pointer	1	27	F29A-252-16	Wing Nut $\frac{3}{8}$ " - 18	1
7	29L-183	Grooved Pin $\frac{3}{8}$ " dia. x $\frac{3}{8}$ " Lg.	1	28	F29A-306-40	$\frac{3}{8}$ " Flat Washer	1
8	29LCN-966	Miter Bar	1	29	F29A-970-5	#10-32 x 1/2" Lg. Truss Hd. Machine 16 Screw with Phil. Recess	1
9	F29A-310-20	#10-24 X $\frac{3}{4}$ " Lg. Carriage Bolt	1	30	F29A-327-5	$\frac{1}{2}$ "-Lock Washer (Helical)	1
10	F29L-469-21	#4-40 X $\frac{3}{4}$ " Lg. Pan Hd. Machine Screw	1	31	F29A-306-26	#8 Flat Washer $\frac{3}{8}$ " ID. x $\frac{1}{2}$ " O.D.	1
11	F29L-242-15	#4-40 Hex. Hd. Machine Screw Nut	1	32	F29A-653	#8-10 x $\frac{3}{8}$ " Lg. Platform Screw	1
12	29L-293	Protractor Head	1	33	29L-660	Knob (Large)	2
13	31L-560	Knob	1	34	29L-659	Knob	1
14	29L-202	Plastic Insert	5	35	45A-382	Label (Fence)	1
15	29LD-841-4	#10-32 x $\frac{3}{8}$ " Flat C'Sunk Hd. Machine Screw with Phil. Recess	3	36	29L-655	Vacuum Hose Reducer	1
16	29A-509-1	#10 Lock Washer	16	37	F29A-242-16	$\frac{1}{4}$ -28 Hex Nut	1
17	29A-306-37	$\frac{1}{2}$ " O.D. x $\frac{3}{8}$ " I.D. Flat Washer	1	38	29L-610	Table Extensions	2
18	29L-646	Unitized Fence	1	39	45A-383	Label (Table)	1
19	29L-650	Guard (Red)	1	40	29A-491-2	$\frac{3}{8}$ " Palnut	1
20	29L-647	Guard (Small)	1	41	45A-292	Label (Guard)	1
21	29L-649	Adjustable Fence	1	49LCN-59	Instruction Manual	1	

When corresponding, always give the following information as shown in the list.

1. The PART NUMBER
2. The PART DESCRIPTION
3. The MODEL 25481
4. The ITEM NAME--DELUXE ROUTER TABLE

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