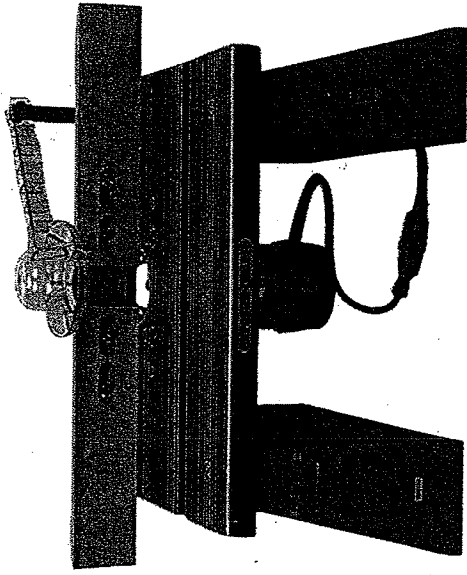


Router/Shaper and Shaper Table



MODEL 695 Router/Shaper Complete
MODEL 696 Shaper Table Only

IMPORTANT

Please make certain that the person who is to use this equipment carefully reads and understands these instructions before starting operations.

The Model and Serial No. plate is located on the main housing of the tool. Record these numbers in the spaces below and retain for future reference.

Model No. _____

Type _____

Serial No. _____

Router
6912 1/2 HP
Serial # 149918

Instruction
manual

PORTER-CABLE
PROFESSIONAL POWER TOOLS

13. **DON'T OVERREACH.** Keep proper footing and balance at all times.
14. **MAINTAIN TOOLS WITH CARE.** Keep tools sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect tool cords periodically and if damaged, have repaired by authorized service facility. Inspect extension cords periodically and replace if damaged. Have all worn, broken or lost parts replaced immediately. Keep handles dry, clean and free from oil and grease.
15. **DISCONNECT TOOLS** when not in use, before servicing, and when changing accessories such as blades, bits, cutters, etc.
16. **REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of checking to see that keys and adjusting wrenches are removed from the tool before turning it on.
17. **AVOID UNINTENTIONAL STARTING.** Do not carry a plugged-in tool with finger on switch. Be sure switch is off when plugging in. Keep hands, body and clothing clear of blades, bits, cutters, etc. when plugging in the tool.
18. **OUTDOOR USE EXTENSION CORDS.** When tool is used outdoors, use only extension cords marked "Suitable for use with outdoor appliances - store indoors when not in use."
19. **STAY ALERT.** Watch what you are doing. Use common sense. Do not operate tool when you are tired or while under the influence of medication, alcohol or drugs.
20. **USE RECOMMENDED ACCESSORIES.** Consult the owner's manual for recommended accessories. The use of improper accessories may cause risk of injury to persons.
21. **NEVER STAND ON TOOL.** Serious injury could occur if the tool is tipped or if the cutting tool is unintentionally contacted.
22. **CHECK DAMAGED PARTS.** Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine 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.
23. **DIRECTION OF FEED.** Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.
24. **NEVER LEAVE TOOL RUNNING UNATTENDED. TURN POWER OFF.** Don't leave tool until it comes to a complete stop.
25. **WEAR EAR PROTECTION** to safeguard against possible hearing loss.

SAVE THESE INSTRUCTIONS

ADDITIONAL SAFETY RULES FOR ROUTER/SHAPER

1. **DO NOT USE** awkward hand positions.
2. **KEEP FINGERS AWAY** from revolving cutter - use fixtures when necessary.
3. **USE OVERHEAD CUTTER GUARD** for all applications.
4. **KEEP OVERHEAD CUTTER GUARD IN PLACE** and in working order.
5. **KEEP BITTERS SHARP.**

6. **NEVER RUN STOCK** between fence and cutter.

7. **WHEN SHAPING** with piloted bit, the pilot must have sufficient bearing surface ($\frac{1}{8}$ " minimum) as shown in Fig. 1. Fig. 2 illustrates the **INCORRECT** method for this operation as the pilot **DOES NOT** have sufficient bearing surface.

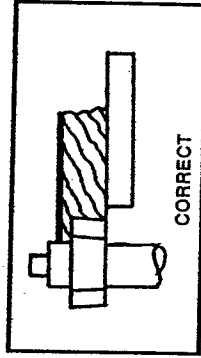


Fig. 1

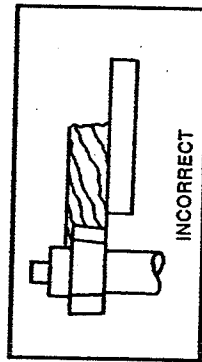


Fig. 2

8. **WHEN SHAPING**, the work must be fairly heavy in proportion to the cut being made as shown in Fig. 3. **UNDER NO CIRCUMSTANCE** should short work of light body be shaped as shown in Fig. 4.

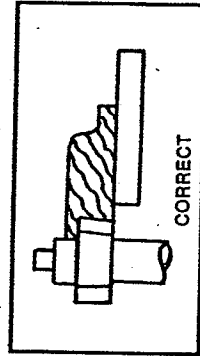


Fig. 3

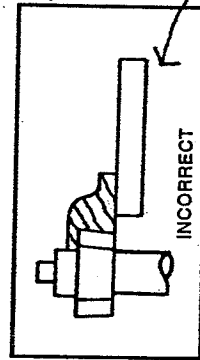


Fig. 4

9. **THE FENCE** should be adjusted endwise so the opening is never more than is required to clear the cutter.

10. **CLAMP OR BOLT** shaper table securely to workbench to prevent "walking".

11. **DO NOT USE** router bits larger in diameter than those recommended for your router (see **SELECTING THE BIT**).

12. **WHEN SHAPING NARROW MATERIAL**, use a push stick and make sure the material is properly supported.

13. **WHEN END SHAPING**, make sure the material is properly supported by using a miter gauge or back-up block.

14. **SOME WOOD CONTAINS PRESERVATIVES WHICH CAN BE TOXIC.** Take extra care to prevent inhalation and skin contact when working with these materials. Request, and follow, any safety information available from your material supplier.

REPLACEMENT PARTS

When servicing use only identical replacement parts.

MOTOR

Many Porter-Cable tools will operate on either D.C., or single phase 25 to 60 cycle A.C. current and voltage within plus or minus 5 percent of that shown on the specification plate on the tool. Several models, however, are designed for A.C. current only. Refer to the specification plate on your tool for proper voltage and current rating.

USING THE ROUTER/SHAPER

WARNING: Figures 21 through 30 show machine with cutter guards removed for clarity. **NEVER OPERATE** Router/Shaper without guards in place.

IMPORTANT: Before using your machine, consider the kind and total amount of material to be removed. Depending on the material, it may be necessary to make more than one cut to avoid overloading the motor. Before beginning the cut on the actual workpiece, it is advisable to make a sample cut on a piece of scrap lumber. This will show exactly how the cut will look as well as enable you to check dimensions.

The cutter rotates in a counterclockwise direction (viewing from above). Always feed work against the cutter rotation as shown in Fig. 21.

WARNING: Serious injury could result if workpiece is not always fed into the cutter against the direction of rotation.

The speed and depth of cut will depend largely on the type of material being worked upon. Keep the cutting pressure constant but do not crowd the machine so the motor speed slows excessively. It may be necessary on exceptionally hard woods or problem materials to make more than one pass at various settings to get the desired depth of cut.

When making cuts on all four edges of the workpiece, it is advisable to have the first cut on the end of the piece across the grain. Thus, if chipping of wood occurs at the end of a cut, it will be removed when making the next cut parallel with the grain.

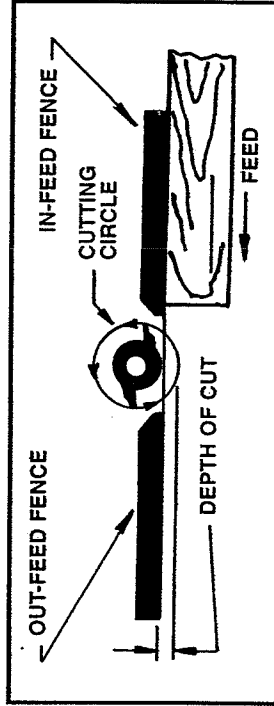


Fig. 21

SHAPING WITH PILOTED BITS

For shaping irregular edges a starting pin (A) Fig. 22, is furnished with your Router/Shaper for use with piloted router bits. To install starting pin, remove fence assembly by removing two thumb screws (A) Fig. 14 and fence assembly. Insert starting pin into either hole (C) or (D) Fig. 22. For majority of shaping operations the starting pin should be installed in hole (C) Fig. 22, as work must be fed against the direction of rotation of the cutter.

When using piloted bits only part of the edge of the workpiece can be cut since it is necessary to have the other part riding against the pilot.

WARNING: Never leave less than $\frac{1}{8}$ " of the workpiece to ride against the pilot. Leaving less than $\frac{1}{8}$ " could cause the edge to splinter possibly resulting in serious injury.

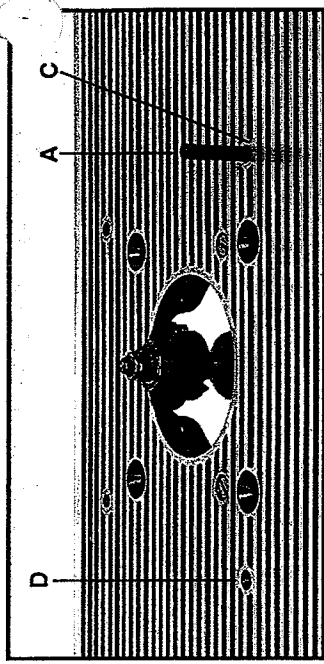


Fig. 22

Adjust overhead cutter guard as outlined under section titled "Overhead Cutter Guard".

Turn machine "ON" and allow it to come to full speed.

Place workpiece in first position (see Fig. 23). Using the starting pin as a support, swing workpiece into cutter (second position Fig. 23). When cut is started, press workpiece against piloted bit and swing workpiece away from starting pin. After the cut is started the piloted bit acts as a guide and not the starting pin. Feed workpiece against the direction of rotation of the cutter until complete edge is shaped. Slide workpiece away from cutter and turn machine "OFF".

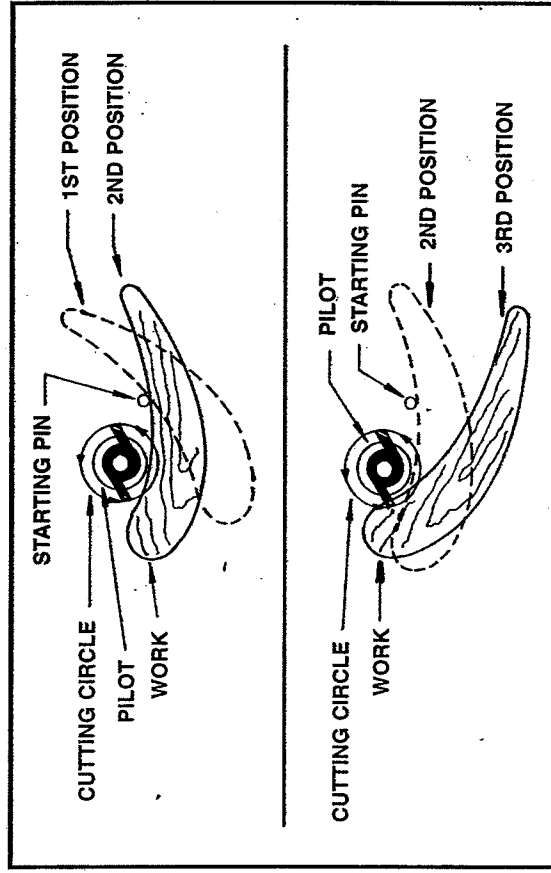


Fig. 23

SHAPING WITH FENCE

When shaping straight edges, the fence can be used as a guide. The entire fence assembly or either the infeed or outfeed section can be adjusted independently as outlined under "Adjusting the Fence".

For normal work where a portion of the original edge of the work is not altered by the cutter, both the front and rear fences are in a straight line, as shown in Fig. 24.

NOTE: Always check fences for correct alignment. The workpiece must slide along both fences smoothly. Always make a trial cut on scrap material to check your set-up.

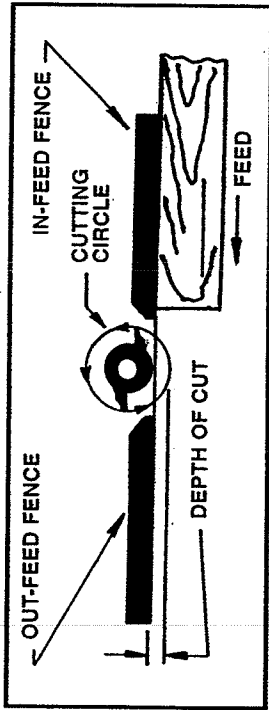


Fig. 24

For shaping operations that remove the entire end of the work, the shaped edge will not be supported by the outfeed fence when both fences are in-line, as shown in Fig. 25. In this case, the work should be advanced to the position shown in Fig. 25, and stopped.

CAUTION: DISCONNECT MACHINE FROM POWER SOURCE BEFORE MAKING ADJUSTMENTS.

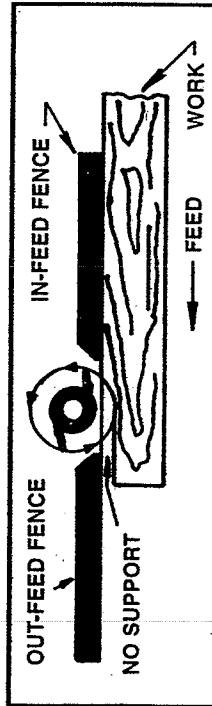


Fig. 25

The out-feed fence should then be advanced to contact the work, as shown in Fig. 26.

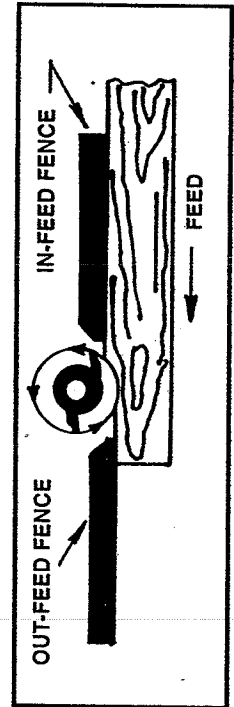


Fig. 26

END SHAPING

Sufficient support of the work piece must be maintained during all shaping operations. This exists when the workpiece is long enough to rest firmly against both the infeed and outfeed fences when you are halfway through the cut. When end shaping a workpiece that is not long enough to be sufficiently supported halfway through the cut, a miter gauge (available as an accessory) or back-up block must be used (see Fig. 27 and 28).

WARNING: Any attempt to end shape a narrow workpiece without sufficient support could result in serious injury.

When using the miter gauge, the infeed fence assembly must be parallel to the miter slot. The outfeed fence must be adjusted so that it will not contact the workpiece after it has passed the cutter. Place workpiece firmly against the miter gauge and infeed fence and feed into cutter by pushing the miter gauge.

WARNING: Failure to hold workpiece firmly against miter gauge during cut could result in slippage of the workpiece causing serious injury and damage to the workpiece.

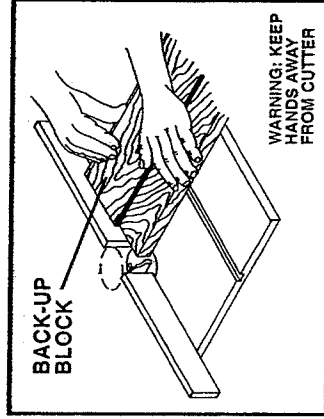


Fig. 27

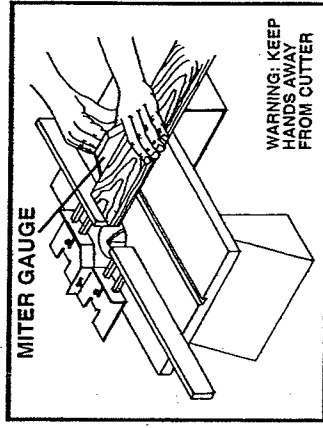


Fig. 28

CROSS-GRAIN SHAPING

When shaping across the grain, some splintering at the end of the cut may result. This can be minimized by feeding the workpiece slowly across the cutter at the end of the cut. When shaping all four sides of a workpiece, do the cross-grain cuts first. Doing with-the-grain cuts last will usually remove the splintered end.

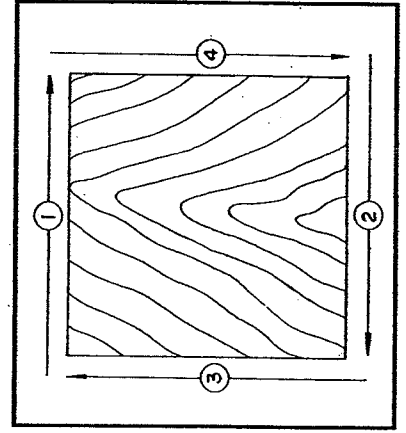


Fig. 29

SHAPING NARROW MATERIAL

When shaping narrow material (less than 3" wide), a support as shown in Fig. 30 must be clamped to your Router/Shaper and the workpiece fed under this support with a push stick. The push stick should be slightly narrower and thinner than the workpiece.

WARNING: Shaping narrow material without proper support and push stick could result in serious injury.

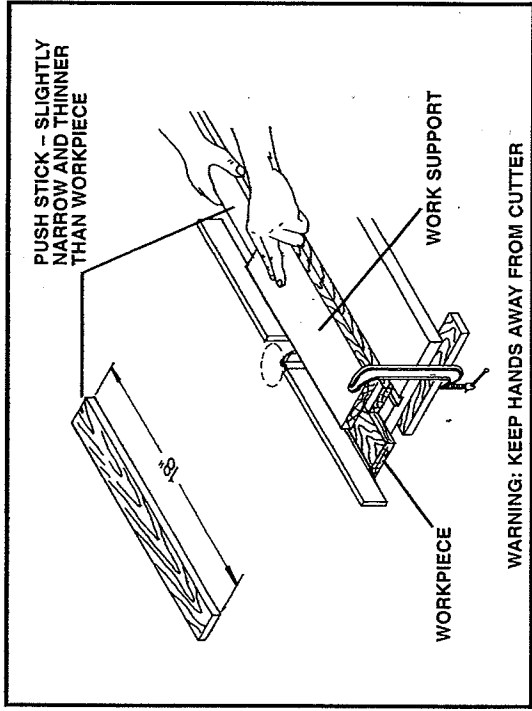


Fig. 30

MAINTENANCE

KEEP TOOL CLEAN

Periodically blow out all air passages with dry compressed air. Remove buildup of grime resulting from working with green or sappy wood. All plastic parts should be cleaned with a soft damp cloth. NEVER use solvents to clean plastic parts. They could possibly dissolve or otherwise damage the material.

CAUTION: Wear safety glasses while using compressed air.

FAILURE TO START

Should your tool fail to start, check to make sure the prongs on the cord plug are making good contact in the outlet. Also, check for blown fuses or open circuit breakers in the line.

LUBRICATION

This tool has been lubricated with a sufficient amount of high grade lubricant for the life of the unit under normal operating conditions. No further lubrication is necessary.

BRUSH INSPECTION

At approximately 100 hours of use, take or send your tool to the nearest Authorized Porter-Cable Service Station to be thoroughly cleaned and inspected; worn parts replaced, when necessary; relubricated with fresh lubricant, if required; reassembled with new brushes; and performance tested.

Any loss of power before the above maintenance check may indicate the need for immediate servicing of your tool. **DO NOT CONTINUE TO OPERATE TOOL UNDER THIS CONDITION.** If proper operating voltage is present, return your tool to the Service Station for immediate service.

SERVICE AND REPAIRS

All quality tools will eventually require servicing or replacement of parts due to wear from normal use. These operations, including brush inspection and replacement, should ONLY be performed by either an AUTHORIZED PORTER-CABLE SERVICE STATION or a PORTER-CABLE SERVICE CENTER. All repairs made by these agencies are fully guaranteed against defective material and workmanship. We cannot guarantee repairs made or attempted by anyone other than these agencies.

Should you have any questions about your tool, feel free to write us at any time. In any communications, please give all information shown on the nameplate of your tool (model number, type, serial number, etc.).

ACCESSORIES

The testing of this tool has been accomplished with the following accessories. For safest operation, it is recommended that only these accessories be used with this product.

WARNING: Since accessories other than those listed have not been tested with this product, use of such accessories could be hazardous.

MITER GAUGE

Delta International Catalog No. 34-578
(available from Porter-Cable Service Centers or Delta Dealers)