



# Router Table Safety Rules

Routers mounted in a table are typically used to create decorative surfaces on a workpiece. Most of us own a router and can have a more versatile machine if we procure a router table. To avoid accidents, the following safety rules must be observed by everyone working on the Router Table. Failure to follow these safety rules may result in serious personal injury or injury to others and can result in a loss of shop privileges.

## Start with a Risk Assessment to ensure a safe work area:

1. Follow all procedures in **CHARLOTTE WOODWORKERS' ASSOCIATION Shop Rules and Guidelines**.
2. A four (4) foot perimeter around these machines should be kept clear of people and debris that impair traction or footing to avoid slipping.
3. The router table should also be clean and clear of off-cuts, sawdust, and other material prior to making adjustments and using the router table. Starting with a clean table and fence will improve your odds of making accurate cuts the first time.
4. Safety glasses with side shields or a face shield must be worn. Everyday eyeglasses are only made of impact resistant glass, they aren't safety glasses. If you're not wearing actual safety glasses, wearing safety goggles over your regular glasses can provide the protection you need.
5. Hearing protection should be worn.
6. Use an appropriate mask or respirator in dusty work conditions.
7. Remove loose fitting clothing and jewelry. Tie back long hair, and do not wear gloves.
8. Before working with the router mounted to a table make sure all guards are in place and working properly.
9. Make all adjustments to the table, fence, and guards before turning on the router.
10. Adjust the fence halves so the cutter opening is a bit more than is required to clear the bit and lock the fence into position. Be aware of the fact that if you raise a bit that is wider toward the bottom of the bit that you may need to readjust the fence to ensure proper clearance.
11. Always choose the correct tool and the proper accessory for your job. If you have questions about what to choose for your operation, don't hesitate to contact the Shop Foreman. They can help you find someone who can advise you.
12. Always ensure that bits are sharp and clean of rust and pitch to avoid excessive friction. If

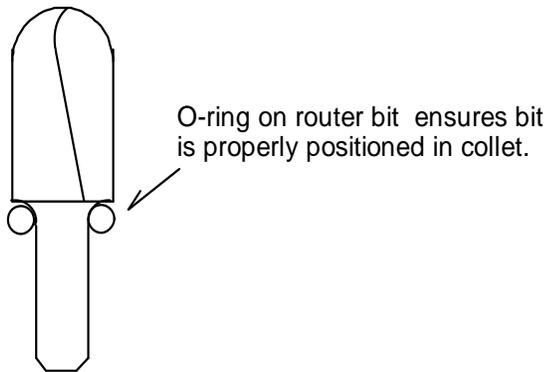
## Operational Safety Rules:

1. Approach your work in the Shop & on the router table with a safe attitude!

the bit is your own, you're responsible for maintaining it. If you are using a bit that belongs to Charlotte Woodworkers Association or our host and encounter issues, contact the Shop Foreman who can have it serviced.

**13. When changing a bit, make sure that the machine is unplugged.**

- 14. If they're available, always use the wrenches provided with the tool to make adjustments. Using properly sized wrenches will help ensure that you don't damage the router or the router table.
- 15. Most router bits have a radius where the shank of the bit transitions into the cutter portion of the bit. It's critical that when the bit is put into the router motor that you NOT have this portion of the bit in the collet. Otherwise the collet may tighten on the curved section of the radius and not on the straight section of the shank. When the router is started, this bit can be thrown from the router and damage or injury will result. See diagram below.



- 16. Set the router's speed appropriately for the size of bit you've installed. Larger diameter bits must be run at slower speeds than bits with smaller diameters. Rockler provides a rough guide to appropriate speeds for different diameter bits: here's a typical maximum router bit speed chart:

Router Bit Diameter	Maximum Speed
Up to 1"	22,000 - 24,000 rpm
1" to 2"	18,000 - 22,000 rpm
2" to 2-1/2"	12,000 - 16,000 rpm
2-1/2" to 3-1/2"	8,000 - 12,000 rpm

- 17. After changing the bit or making any adjustments, make sure the collet nut is securely tightened and that the unused portion of the bit is covered by the guard before tool use.
- 18. Take time to examine your workpiece and to make sure that all necessary precautions have been taken before cutting. Always make sure the work surface is free from nails, knots, and other foreign objects.
- 19. Do not shape chipboard, panel board, or any stock that has paint or varnish on the area that will contact the bit's cutting edge.
- 20. Properly support long lengths of material. Use work supports or stands as needed.
- 21. **Never climb cut when feeding the stock by hand.** A climb cut is when you feed the workpiece in the direction of cutting blade rotation. Otherwise, the cutter blade can grab and pull the workpiece, potentially pulling your fingers or hand into the spinning bit.
- 22. Never trap the stock in between the fence and the bit.
- 23. Never route parts that are too small to be held safely while maintaining adequate clearance between the bit and your hands and fingers. If you use a jig as a workaround when working with small pieces ensure that it holds the stock securely so that it isn't thrown by the router which could present a hazard to anyone who might be struck by the flying stock.
- 24. Always use a miter gauge & clamp for "end shaping" to maintain safe control. This assumes that the router table you're using has a miter gauge, and that you can clamp the stock being shaped to it in a way that will hold the stock securely and still allow it to slide through the cutter's path. If you need assistance with this, consult with the Shop Foreman who will be able to find someone to assist you.
- 25. When making a freehand cut, use a starting pin and a bearing on the bit. If you don't know how to perform this operation safely contact the Shop Foreman who will help you find someone with the experience to assist you in doing this type of operation safely.
- 26. If a dust collection port is available, always connect the dust collector to that port before using the router table.

27. Keep the exhaust port pointed away from you. Don't reach into the exhaust chute to unclog chips. Stop the tool and unplug it from the power source. After making sure the bit has stopped, clear the chute with something other than your bare hand.
28. **Never reach under the table while the tool is running.** Remember, the spinning router bit can be both above and below the router table's surface depending on how it's adjusted.
29. Never leave the machine running unattended. Turn the power off and do not leave the machine until it comes to a complete stop.