

## Powered Hand Tools

### Powered Hand Tools - Routers

#### On this page

[What should you do before start cutting with a router?](#)

[What should you do to work with a router safely?](#)

---

#### What should you do before start cutting with a router?

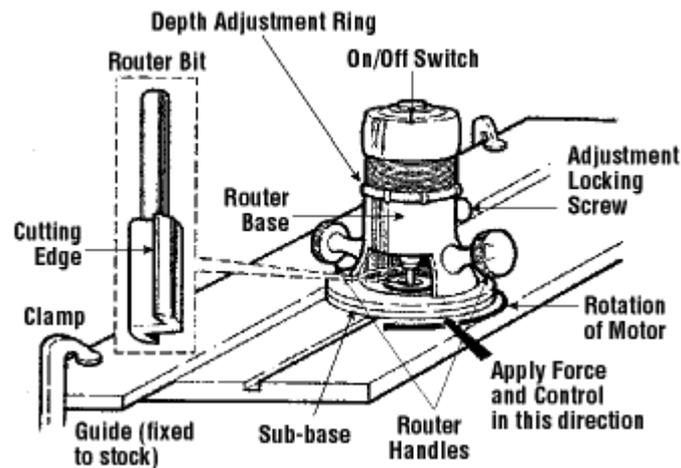
- Wear safety glasses or goggles, or a face shield (with safety glasses or goggles) and appropriate hearing protection.
- Disconnect the power supply before making any adjustments or changing bits. Inspect bits carefully before installing
- Ensure that the bit is securely mounted in the chuck and the base is tight.
- Put the base of the router on the work, template or guide. Make sure that the bit can rotate freely before switching on the motor.
- Secure stock. Never rely on yourself or a second person to support or hold the material. Sudden torque or kickback from the router can cause damage and injury.
- Before using a router, check stock thoroughly for staples, nails, screws or other foreign objects.
- Keep all cords clear of cutting area.

---

#### What should you do to work with a router safely?

- Hold both hands on router handles always, until a motor has stopped. Do not set the router down until exposed router bit has stopped turning.
- Do not overreach. Keep proper footing and balance.
- When inside routing, start the motor with the bit above the stock. When the router reaches full power, lower bit to required depth.
- When routing outside edges, guide the router counter clockwise around the work.

- When routing bevels, moldings and other edge work, make sure the router bit is in contact with the stock to the left of a starting point and is pointed in the correct cutting direction.



- Feed the router bit into the material at a firm, controlled speed.
- With softwood, you can sometimes move the router as fast as it can go.
- With hardwood, knotty and twisted wood, or with larger bits, cutting may be very slow.
- The sound of the motor can indicate safe cutting speeds. When the router is fed into the material too slowly, the motor makes a high-pitched whine. When the router is pushed too hard, the motor makes a low growling noise.
- When the type of wood or size of the bit requires going slow, make two or more passes to prevent the router from burning out or kicking back.
- To decide the depth of cut and how many passes to make, test the router on scrap lumber similar to the work.

If a router is connected to a router table, refer to [Woodworking Machines - Shapers](#) for more guidance.

Refer to [Powered Hand Tools - Basic Safety for Electric Tools](#) for general electrical safety tips.

Fact sheet confirmed current: 2019-08-15

Fact sheet last revised: 2013-12-20

## Disclaimer

Although every effort is made to ensure the accuracy, currency and completeness of the information, CCOHS does not guarantee, warrant, represent or undertake that the information provided is correct, accurate or current. CCOHS is not liable for any loss, claim, or demand arising directly or indirectly from any use or reliance upon the information.