

ROUTER TABLE

VERSION 3.1



AUTODESK
PIER 9

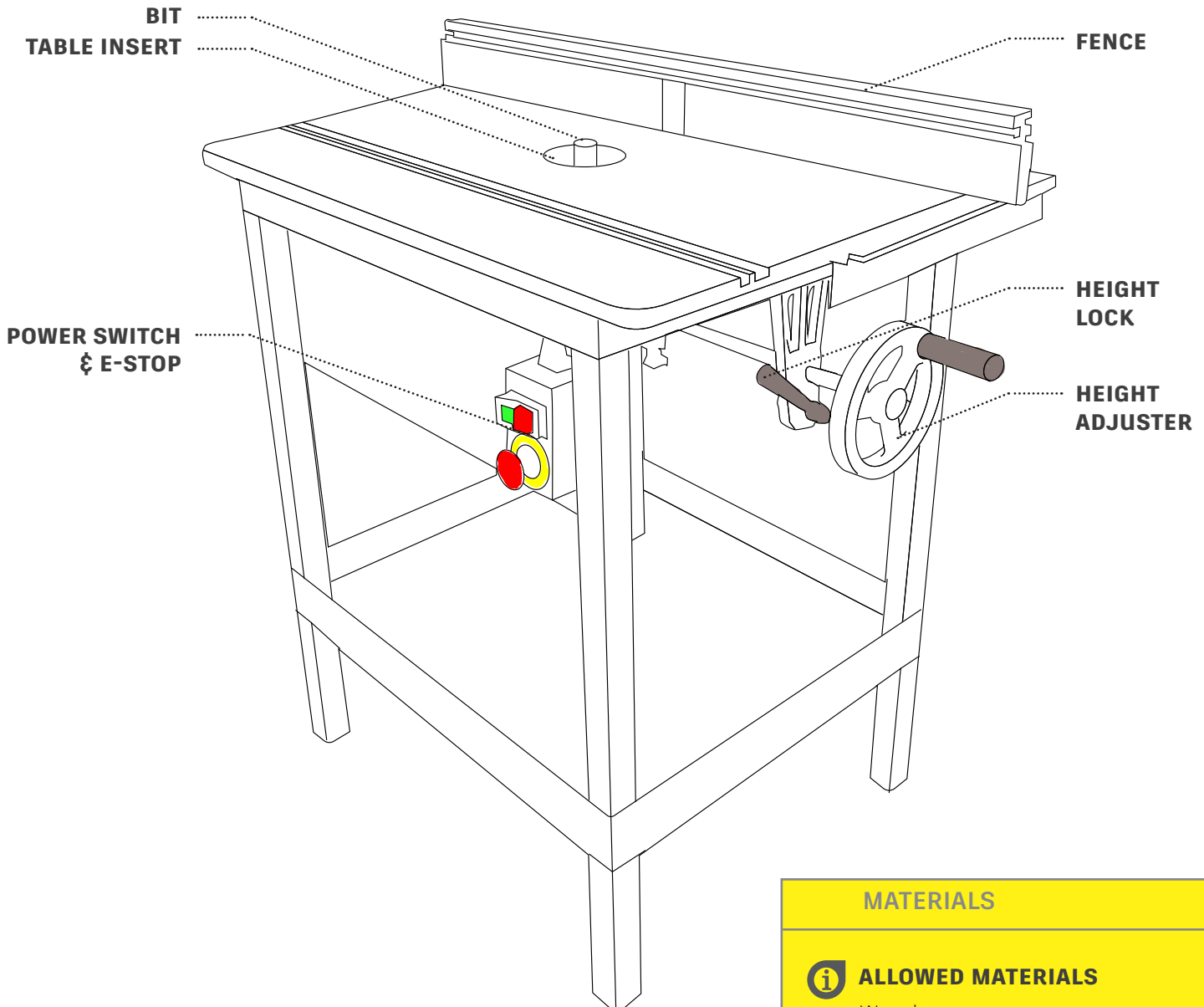
ROUTER TABLE

MACHINE
OPERATION

VERSION 3.1

THE ROUTER CUTS A PROFILE ON THE EDGE OF A BOARD.

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MATERIALS

i ALLOWED MATERIALS

- + Wood
- + Plastic

⊗ BANNED MATERIALS

- + Metal
- + PVC
- + Pressure treated wood
- + Carbon fiber and composites

? SEE SHOP STAFF FIRST

- + All other materials

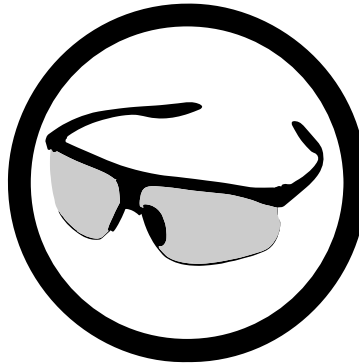
ROUTER TABLE

KEEP IT SAFE

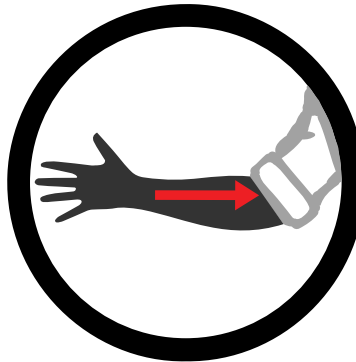
VERSION 3.1

USE PERSONAL PROTECTIVE EQUIPMENT WHEN OPERATING THE ROUTER.

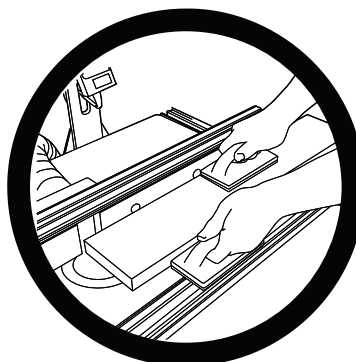
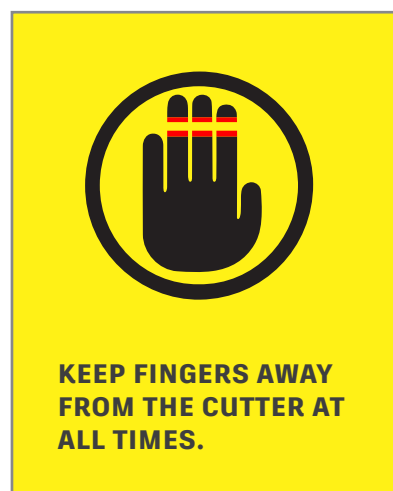
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Always wear safety glasses.



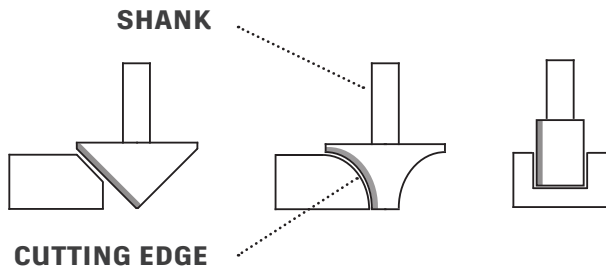
Always wear short sleeves, or rolled sleeves, pull back and tuck in long hair, remove jewelry and lanyards, etc. Do not wear gloves.



Keep hands a minimum of 6" away from the cutting bit. Use push blocks when needed.

CHOOSE FROM A VARIETY OF CUTTING BITS TO FIND THE PROPER SHAPE FOR YOUR JOB.

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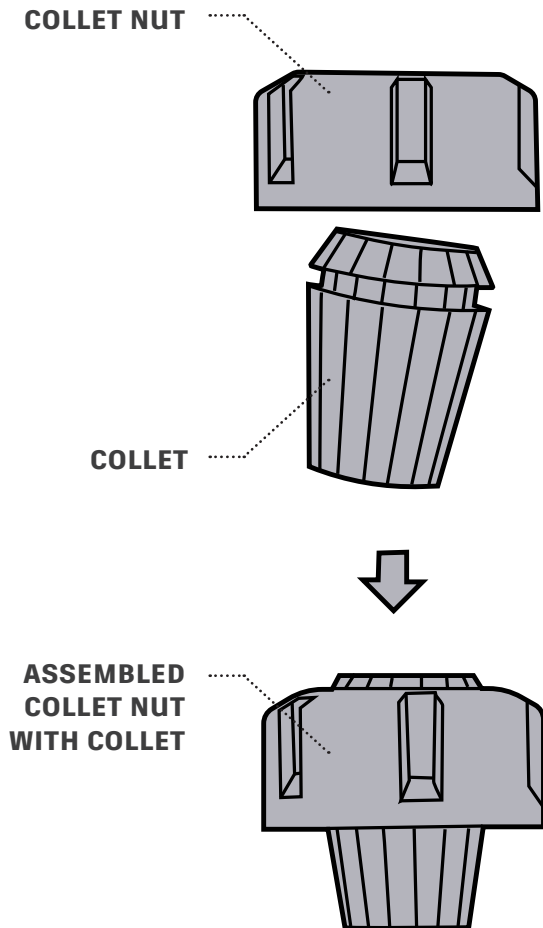


CUTTING BITS

Bits come in a variety of shapes, diameters and lengths.

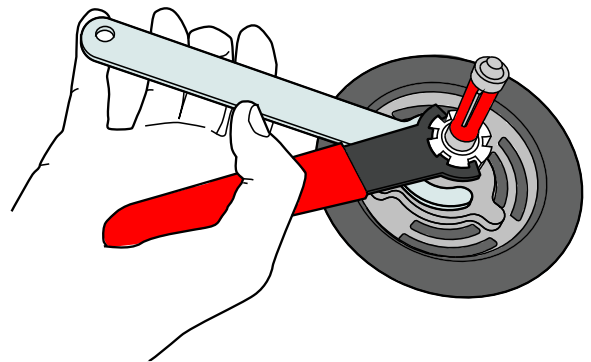
Some bits have a top or bottom bearing, for following a template; see Shop Staff for assistance with bearing bits.

The bit is held in a *collet*, which is attached to the router.



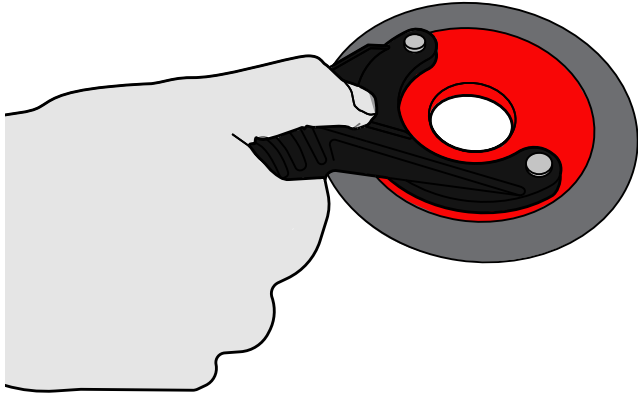
INSTALLING THE COLLET & BIT

1. Snap the collet into the collet nut.
 - ▶ The collet should freely rotate inside the nut.
2. Slide the *shank* of the cutting bit into the collet.
 - ▶ The shank of the bit must fit snugly in the collet.
 - ▶ Do not force bits into the collet.
3. Turn off the router, and press the E-stop.
4. Place the bit into the router and hand tighten the collet nut.
5. The collet should only engage the shank, not the cutting edges.
6. Use the collet wrenches to tighten the collet.
 - ▶ Use one hand to hold both wrenches, and squeeze them together.



LARGE DIAMETER BITS REQUIRE A LOWER OPERATING SPEED AND HAVE SPECIAL SAFETY CONCERNS.

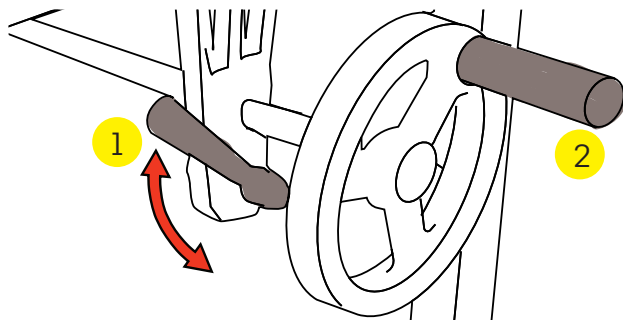
See Shop Staff before using any bit over 1/2" (13mm) in diameter.



INSTALLING A TABLE INSERT

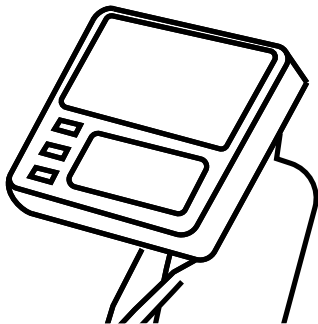
Always use a table insert that leaves the smallest gap possible around the bit. The bit should not touch the insert.

1. Use the plastic spanner to place an insert into the table opening.
2. Rotate the insert 1/4 turn to lock it in place.
3. Remove the insert by turning then lifting.



ADJUSTING THE BIT HEIGHT

1. Unlock the handle.
2. Turn the handwheel.
3. Snug the handle.



USING THE DIGITAL READOUT (DRO)

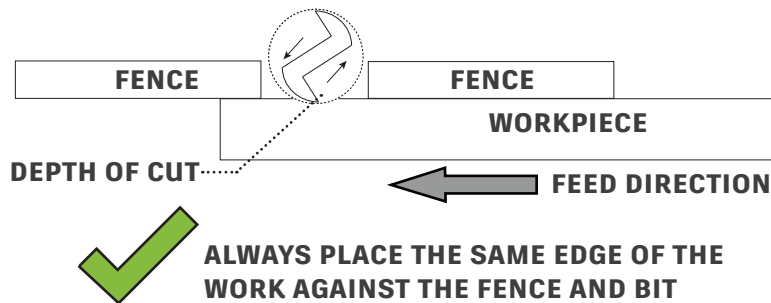
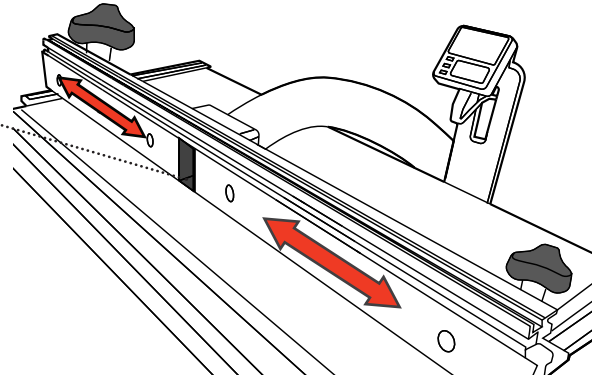
The DRO displays vertical movement of the bit, and allows for precise positioning and depth of cut.

- + Press and hold ON/OFF to reset the display to 0.

USING THE FENCE

The fence has two halves that are adjustable for width. Adjust the gap between the bit and each section of fence to about 1/2".

1. Loosen the black lock knobs.
2. Slide the fence sides into position.
3. Snug the lock knobs.



Adjusting how far the bit sticks out past the fence will determine how deep into the workpiece the bit cuts.

Taking several small cuts ensures safety and accuracy.

- + Never take greater than 1/8" depth of cut.



Never place the workpiece between the bit and fence.

This can cause the bit to grab the work and throw it across the shop.

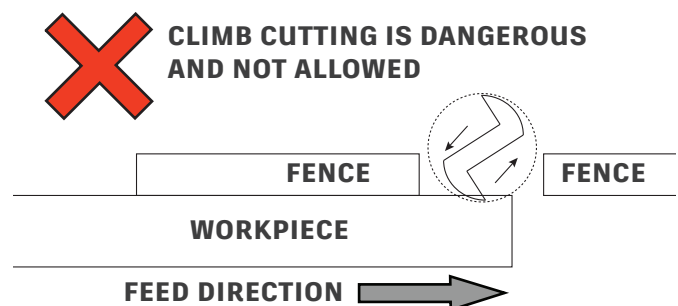
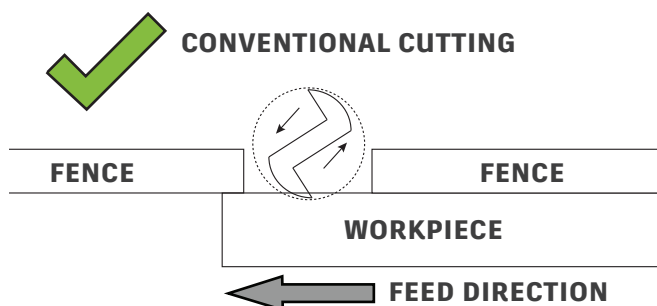
CONVENTIONAL CUTTING VS. CLIMB CUTTING

Conventional cutting is when the workpiece moves against the direction of the cutting bit.

- + All manual router work must be done with conventional cuts, at all times.

Climb cutting is when the workpiece moves in the same direction as the bit.

- + This is dangerous, and not allowed on the router table.
- + Climb cutting is only allowed on CNC routers.



ROUTER TABLE

HANDS ON

VERSION 3.1

CLEAR STEPS FOR SAFE MACHINE OPERATION.

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AREA AND MACHINE PREPARATION

1. Make sure there is sufficient room around the router for your workpiece.
2. Press the E-stop.
3. Insert a bit & table insert.
4. Adjust the fence.
5. Adjust the bit height.
6. Clean and clear the table.
7. Turn on dust collection.
8. Have push blocks nearby.
9. Make sure your material is clear of the bit.

ALWAYS PRESS THE E-STOP BEFORE CHANGING THE BIT.

USING THE ROUTER

1. Reset the E-stop.
2. Turn on the router.
3. Move the material past the bit in a steady motion.
 - ▶ Use push blocks when handling small material or any time your hands are near the bit.
 - ▶ Keep a hand or a push block on the material at all times; never completely let go.
4. If needed, turn off the router and readjust the bit height or fence to get the desired cut.

USE PUSH BLOCKS TO KEEP YOUR FINGERS AWAY FROM THE BIT.

CLEANUP

1. Press the E-stop.
2. Turn off the dust collector.
3. Remove the bit.
4. Brush off the table and clean up the area.
5. Put scraps in the trash and reusable pieces in the storage bin in the wood shop.

ALWAYS PRESS THE E-STOP BEFORE CLEANING UP.