

Mounting your router to an insert plate can be an intimidating process, yet with a few tips and tricks, it can be accomplished quickly and accurately. We will be discussing three different methods for properly and accurately mounting the router to the insert plate. These steps are provided as an instructional guide for the benefit of our customers.

1. Insert Ring Method
2. Centering Pin Method
3. Baseplate Measurement Method

Each method will require you have specific accessories, they will be outlined for you before you begin. Some routers have a finished base, e.g. Triton 2-1/4" and 3-1/4", meaning the screw holes do not go entirely through the base. If this is your condition, use Method #3, the Baseplate Measurement Method. Once you measure and mark your plate, you will proceed to the drilling and countersink/counterbore steps.

Before you begin, please take a moment to mark your insert plate with masking tape to avoid errors and mistakes.

1. On the side that the router will be mounted to, mark it "BOTTOM".
2. On the side that will be the working surface, mark it "TOP".
3. Mark the plate orientation to ensure you have the plate in your table correctly.
Typically, the small hole that is used for the Starter Pin (also known as Safety Pin) is to the right of the insert ring opening. Mark it "RIGHT" on both the top and bottom surfaces.

Insert Ring Method

What you will need:

- Router plate that supports insert rings.
- Insert ring, with either a 1/4" or 1/2" opening.
- 1/4" or 1/2" spiral bit, or straight cutting bit (shank does not matter).
- Router.
- Sharpie pen, or some type of centering punch.

Measuring and Marking

1. Remove the router baseplate (black plastic base, also called skid-plate) from the router, the baseplate will not be needed once you mount it to the plate.
2. Retain the screws that hold the baseplate onto the router, these will be needed to remount the router to the plate. NOTE: these screws may not be long enough and longer replacement screws may be needed.

3. Locate either a 1/4" or 1/2" spiral or straight cutting bit to use as your "centering guide" and insert it into your router collet and secure it tightly.
4. Insert the same size insert ring as the router bit you are using, and properly secure it. For example, if you are using a 1/2" spiral bit, you will use the 1/2" opening insert ring in your plate.
5. Ensure that the router bit is sufficiently exposed through the base to allow for it to enter the insert ring, and allow a secure alignment.
6. Gently push the bit through the insert ring, until the router base is flush with the plate, and ensure that the controls (variable speed if present and power on/off switch) are aligned for easy and efficient use.
7. Using the screw holes for the router base, mark the hole positions on the plate, with a Sharpie Pen (thin), centering punch, or a tool that will allow you to mark the center of the hole. This is important for the proper drilling of the holes.
8. Again, verify the alignment of the router to ensure easy and efficient access to the variable speed controls (if present) and the power on/off switch.
9. Gently remove the router from the plate.
10. Proceed to the Drilling and Countersink/Counterbore steps!

Centering Pin Method

What you will need:

- Router plate or insert that supports the use of a guide bushing.
- A 5/16" guide bushing, MLCS item number 9048.
- A guide bushing centering pin, MLCS item number 9055.
- Router with 1/4" shaft collet.
- Sharpie pen, or some type of centering punch.

Measuring and Marking

1. Remove the router baseplate (black plastic base, also called skid-plate) from the router, the baseplate will not be needed once you mount it to the plate.
2. Retain the screws that hold the baseplate onto the router, these will be needed to remount the router to the plate. NOTE: these screws may not be long enough and longer replacement screws may be needed.
3. Thread the 5/16" guide bushing into your router plate or insert. Please remember, wherever your guide bushing is set, that will be the center of the router.
4. Insert the centering pin through the guide bushing opening, and into the router collet. Sufficiently tighten the centering pin into the collet.
5. Raise the router so that the centering pin head firmly seats in the guide bushing and the router base is flush and snug with the underside of the insert plate.

6. Using the screw holes for the router base, mark the hole positions on the plate, with a Sharpie Pen (thin), centering punch, or a tool that will allow you to mark the center of the hole. This is important for the proper drilling of the holes.
7. Again, verify the alignment of the router to ensure easy and efficient access to the variable speed controls (if present) and the power on/off switch.
8. Gently remove the router from the plate.
9. Proceed to the Drilling and Countersink/Counterbore steps!

Baseplate Measuring Method

What you will need:

- The baseplate from your router
- Sharpie pen, or some type of centering punch

Measuring and Marking

1. Remove the router baseplate (black plastic base, also called skid-plate) from the router, the baseplate will not be needed once you mount it to the plate.
2. More here in a bit!

Drilling and Countersink/Counterbore

What you will need:

- Metal drilling drill bits.
- Metal countersink or counterbore.
- A drill or drill press.

Drilling Steps

1. Verify that the holes are marked clearly.
2. Locate the screws that were removed from the router base, you will need to measure the diameter of the screws.
3. Locate a drill bit of equal size, slightly larger is acceptable if the exact size is not available. The smallest hole possible for the screw is ideal.
4. Ensure you are working from the BOTTOM side of the insert plate.
5. Ideally, using a drill press, carefully drill the holes as marked.
6. Verify that the screws will fit through the holes as drilled. At this point, you will be able to determine if the screws are of sufficient length to safely attach your router to the insert plate.

7. The screw head must be recessed into the insert plate. This is to avoid the screwhead from protruding above the insert plate and catching on your work.
8. Looking at the screws, you will determine which type of countersink (V shape) or counterbore (U shape) is necessary.
 - If the screw head is flat and has tapered sides, an 82° metal countersink will be sufficient.
 - If the screw head is of a button, round or dome shaped, you may opt to counterbore it. A counterbore is more ideal than a countersink (which will work) to allow the screw to sit more firmly in a flat base recessed hole. This can be accomplished using a drill bit of equal size to the diameter of the screw head. The trick is to set the depth properly to ensure the screw head is flush or slightly below the top level of the insert plate.
9. Ensure you are working on the TOP of the insert plate, a common mistake is to countersink/counterbore the BOTTOM of the insert plate.
10. Determine the depth of the countersink/counterbore by measuring the depth of the screw head only. Using that depth as a guide (slightly shorter is recommended to start), slowly drill the countersink/counterbore. Test the fit often and refine your fit until you are satisfied.
11. Once you have all of the holes drilled and recessed accordingly. Align your router to the holes, and hand tighten the screws. This allows you to tweak the position.
12. When you are satisfied with the position. Tighten the screws firmly. A drop of blue Loctite can be helpful, more often than not, it is not needed.
13. Mount your router and plate into your router table and ensure that it is level with the surface using the level adjusters for your plate.
14. Your router is now ready to use, perform a few test cuts and recheck the screws that mount your router to the plate to confirm tightness.