The Compact Router Ellipse/Circle Jig allows you to use your compact plunge router to easily cut precise ellipses and circles for picture frames, mirrors, signs and more. For safe and effective operation, please read these instructions fully before use.
## GENERAL SAFETY WARNINGS

This tool is designed for specific applications as defined in the instructions and should not be modified and/or used for any other applications. Before using the Compact Router Ellipse/Circle Jig read, understand and follow all instructions and safety information provided. **KEEP THESE INSTRUCTIONS.**

> For any tool that is used in conjunction with this product always read, understand and follow the instructions and safety warnings for that tool.

> Before using this product, review and verify that all tools used with it are in proper working order as defined by the tool's owner's manual.

> All safety equipment must be installed and working properly as defined by the tool's owner's manual.

> Do not use this product until you have read the provided instructions and warnings and are confident you understand them.

> Always wear safety glasses in compliance with ANSI safety standards and hearing protection and follow all standard shop safety practices including:
  - Keep your work area well lit and clean.
  - Use dust collection tools and dust face masks to reduce exposure to dust.
  - Use accessory safety equipment such as feather boards, push sticks, and push blocks whenever appropriate.
  - Do not use power tools in explosive environments, e.g. in the presence of flammable liquids, fumes or dust.
  - Keep children and bystanders away while operating your tools.
  - Maintain proper footing at all times and do not overreach.
  - Do not force the tool.
  - Unplug all power tools before making any adjustments or changing accessories.

> Remain alert and use good judgment when using this tool. Do not use this tool if you are in any way impaired by medications, alcohol, drugs or fatigue.

> Dress appropriately and remove all jewelry, secure loose clothing and tie up long hair before using this tool.

> It is the sole responsibility of the purchaser of this tool to ensure that any third party reads and agrees to all the safety precautions outlined in this manual prior to using the tool.

> Maintain these instructions and warnings as long as you own the tool. Keep in a place where they will be readily available for reference.

> The user assumes all risk for the proper use of this tool and for ensuring product suitability for intended application.

> These warnings and instructions do not represent the total of all information available regarding tool safety, use and technique. Always seek out opportunities to learn more and improve your skills and knowledge.

## SPECIFIC SAFETY WARNINGS

> Your router must be unplugged while attaching the Ellipse/Circle Jig and while making any adjustments.

> Properly secure your workpiece before attempting to make a cut.

> Do not attempt to make the full depth of cut in one pass. Make several passes removing small increments of material each time.

> Maintain awareness of the router bit at all times while cutting.
<table>
<thead>
<tr>
<th>PARTS LIST - COMPACT ROUTER ELLIPSE/CIRCLE JIG</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Jig Arm</td>
<td>1</td>
</tr>
<tr>
<td>2 Jig Base</td>
<td>1</td>
</tr>
<tr>
<td>3 Dovetail Key</td>
<td>2</td>
</tr>
<tr>
<td>4 5/16-18 x 1&quot; Knobs</td>
<td>2</td>
</tr>
<tr>
<td>5 5/16&quot; Washers</td>
<td>2</td>
</tr>
<tr>
<td>6 5/16-18 x 1&quot; T-Bolts</td>
<td>2</td>
</tr>
<tr>
<td>7 #6 Wood Screws</td>
<td>4</td>
</tr>
<tr>
<td>8 10mm Machine Pan Head Screws</td>
<td>4</td>
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ROUTER MOUNTING HOLE KEY

- Bosch Colt PR20EVS Kits
- Porter Cable 450PK
- DeWalt DWP611PK
**Jig and Workpiece Setup**

Recommended maximum material thickness (for through routing) is 1/2".

1. Attach your compact plunge router to the Jig Arm (1) with the included 10mm Pan-Head Machine Screws (8) and install the desired bit.  
   **Note:** We recommend using a 1/4" diameter spiral up-cut bit (82652, sold separately).

2. Set up your workpiece on a solid, stable surface.

3. If making through cuts, elevate your workpiece to prevent damage to the surface underneath. Secure the workpiece to a sacrificial board, or use spacers to hold and support the workpiece, including any sections that will be cut free. Make sure that all parts of the workpiece will remain stationary during cuts to avoid potentially dangerous and damaging shifts, and position any spacers out of the path of the cutter.

**Routing an Ellipse**

1. Mark a center point on your workpiece. Lay out the major (long) and minor (short) axes of your ellipse so that they’re perpendicular and intersect at the center point. The major axis can be a maximum of 24" long and a minimum of 11". The minor axis can be a maximum of 19" long and a minimum of 6". (The maximum difference in length between the major and minor axes is 5").  
   **Fig. 1.**

2. Use the scribe lines machined into the Jig Base to center it on the intersection of the major and minor axes. Secure the Jig Base (2) to the workpiece with the included #6 Wood Screws (7).  
   **Fig. 2.**
3. Insert a Dovetailed Key (3) into each channel in the Jig Base (2). Center one (hereafter referred to as “Dovetail Key A”) along the minor axis.

4. Loosen the two Locking Pivots on the Jig Arm (1) and position them so they mount on the pins in the Dovetailed Keys (3). Fig. 3. Note: The Locking Pivot closest to the router must be mounted on “Dovetail Key B” (along the major axis).

5. Rotate the Jig Arm (1) so it’s aligned with the major axis, and adjust it in or out until the bit is positioned as desired to make the cut. Tighten the Locking Pivot on Dovetail Key A. Fig. 4.

6. Rotate the Jig Arm (1) so it’s aligned with the minor axis, and adjust it in or out until the bit is positioned as desired to make the cut. Tighten the Locking Pivot on Dovetail Key B. Fig. 5. Note: The maximum distance between Locking Pivots A and B is 2½".

7. With the router off, rotate the Jig Arm (1) through the full range of cut. You want to ensure that the dovetail keys will move smoothly, as well as verify the ellipse pattern and proper placement of any spacers/supports. Then make the cut. Note: Don’t try to cut to full depth in one pass. Make several passes, increasing the depth of cut with each pass.

**Routing a Circle**

1. Mark a center point on your workpiece and lay out the perpendicular axes.
2. Use the scribe lines machined into the Jig Base (2) to center it on the intersection of the axes. Secure the Jig Base (2) to the workpiece with the included #6 Wood Screws (7).

3. Remove one of the Locking Pivots from the Jig Arm (1) and one of the dovetail keys (3) from the Jig Base (2).

4. Make sure the remaining Dovetail Key (3) is in the channel that has the two holes near the center. Align the holes in the Dovetail Key (3) with the holes in the Jig Base (2) and secure with two of the included #6 Wood Screws (7). Fig. 6.

5. Loosen the Locking Pivot on the Jig Arm (1) and position it so it mounts on the pin in the Dovetailed Key (3).

6. Adjust the Jig Arm (1) in or out until the bit is positioned as desired to make the cut. Tighten the Locking Pivot.

7. With the router off, rotate the Jig Arm (1) through the full range of cut. You want to ensure that the Jig Arm will move smoothly, as well as verify the circle pattern and proper placement of any spacers/supports. Then make the cut.

Note: Don’t try to cut to full depth in one pass. Make several passes, increasing the depth of cut with each.

Check Rockler.com for updates. If you have further questions, please contact our Technical Support Department at 1-800-260-9663 or support@rockler.com

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Fig. 5 - Router removed for clarity

Fig. 6 - Key fastened with screws