

Ellipse/Circle Router Jig Instructions

Effective April 2026

Review full instructions prior to use for important safety information.

Always check Rockler.com to confirm that you are using the most recent version of instructions for your product.



ROCKLER®

CREATE WITH CONFIDENCE

GENERAL SAFETY WARNINGS

This product is designed only for specific applications as defined in the instructions and should not be modified or used for any manner not described in these instructions. Use only recommended accessories. Before using the Ellipse/Circle Router Jig: **READ, UNDERSTAND and FOLLOW ALL INSTRUCTIONS AND SAFETY WARNINGS. KEEP THESE INSTRUCTIONS READILY AVAILABLE FOR FUTURE REFERENCE.**

- > Always confirm that you are using the most recent version of the instructions and safety warnings for your product (see the instructions link on the product page at Rockler.com).
- > Before using another tool with this product, always read, understand and follow the instructions and safety warnings in the owner's manual for that tool. If you do not have the owner's manual, obtain one from the tool's manufacturer before using it with this product.
- > Before using any chemical with this product, always read, understand and follow all safety warnings and guidelines in the manufacturer's Safety Data Sheet (SDS; formerly called "MSDS"), especially regarding:
 - How to safely use the chemical, including potential hazards and recommended first aid measures;
 - Personal safety equipment required to safely use the chemical (e.g. gloves, eye protection, mask/respirator, etc.);
 - Proper and safe handling, storage and disposal of the chemical.
- > Before using this product, review and verify that all tools to be used with it have safety equipment installed and are in proper working order as defined by the tool's owner's manual.
- > Do not use this product until you have read and are confident you understand:
 - Product Specific Safety Warnings (p. 3);
 - Parts List (p. 4);
 - Router Mounting Hole Key (p. 5);
 - Jig and Workpiece Setup (p. 6);
 - Routing an Ellipse (pp. 6 - 7);
 - Routing a Circle (p. 8).
- > The user assumes all risk and responsibility for the proper and safe use of this product and for ensuring product suitability for the intended application.
- > It is the sole responsibility of the purchaser of this product to ensure that anyone you allow to use this product reads and complies with all instructions and safety precautions outlined in this manual prior to use.
- > Follow all standard shop safety practices, including:
 - Keep children and bystanders away from the tool operating area;
 - Do **NOT** use power tools in explosive environments, or in the presence of flammable liquids, fumes or dust;
 - **TURN OFF AND UNPLUG** all power tools **BEFORE** making any adjustments or changing accessories;
 - Remain alert and use good judgment. Do not use this product if you are in any way impaired by medications, alcohol, drugs or fatigue;
 - Keep your work area well lit and clean;
 - Dress appropriately. Secure loose clothing, remove all jewelry and tie up long hair before using this product;
 - **ALWAYS** wear safety glasses, hearing protection and respiratory protection that complies with NIOSH/OSHA/ANSI safety standards;
 - Use dust collection tools and dust face masks to reduce exposure to dust;
 - Use safety equipment such as featherboards, push sticks and push blocks, etc., when appropriate;
 - Maintain proper footing at all times and do not overreach;
 - Do **NOT** force woodworking tools.
- > 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.

⚠ CA WARNING: Drilling, sawing, sanding or machining wood products can expose you to wood dust, a substance known to the State of California to cause cancer. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection. For more information go to www.P65Warnings.ca.gov/wood.

⚠ DANGER Danger indicates a hazardous situation that, if not avoided, will result in death or serious injury.

⚠ WARNING Warning indicates a hazardous situation that, if not avoided, could result in death or serious injury.

⚠ CAUTION Caution indicates a hazardous situation that, if not avoided, may result in minor or moderate injury or property damage.

NOTICE Notice indicates important or helpful information and/or user tips.

PRODUCT SPECIFIC SAFETY WARNINGS



DANGER

- > To avoid serious injury, keep hands and fingers away from spinning router bit. Maintain awareness of the bit at all times.

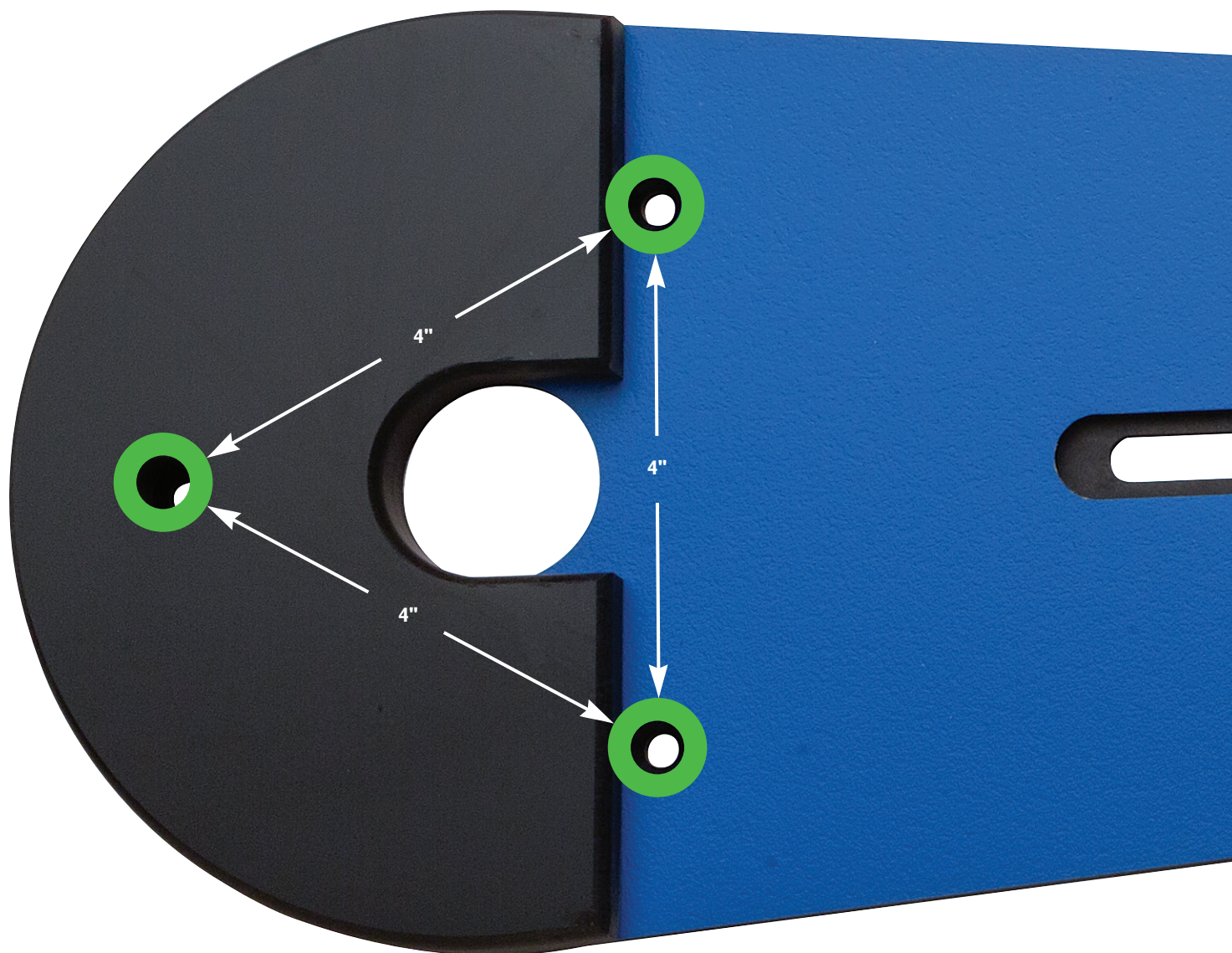
WARNING

- > Your router must be unplugged while attaching the Ellipse/Circle Jig and while making any adjustments.
- > Properly and firmly secure your workpiece to a solid and stable workbench 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.
- > In order to avoid the risk of serious injury be sure your router's power cord does not become entangled while cutting.



PARTS LIST - ELLIPSE/CIRCLE ROUTER JIG

	Quantity
1 Jig Arm	1
2 Jig Base	1
3 Dovetail Key	2
4 5/16-18 x 1" Knobs	2
5 5/16" Washers	2
6 5/16-18 x 1" T-Bolts	2



ROUTER MOUNTING HOLE KEY



Bosch MRC23 series
Bosch 1617
Bosch 1618
DeWalt DW616

DeWalt DW618
Hitachi M12VC (fixed and kit)
Makita 1100
Milwaukee 5615

Milwaukee 5616
Milwaukee 5624
Porter-Cable 690 series
Porter-Cable 890 series

Porter-Cable 7529
Porter-Cable 97529
Porter-Cable 8529
Ridgid 2930 combo kit

* Also, the jig can be drilled to fit most routers with a 6" base.

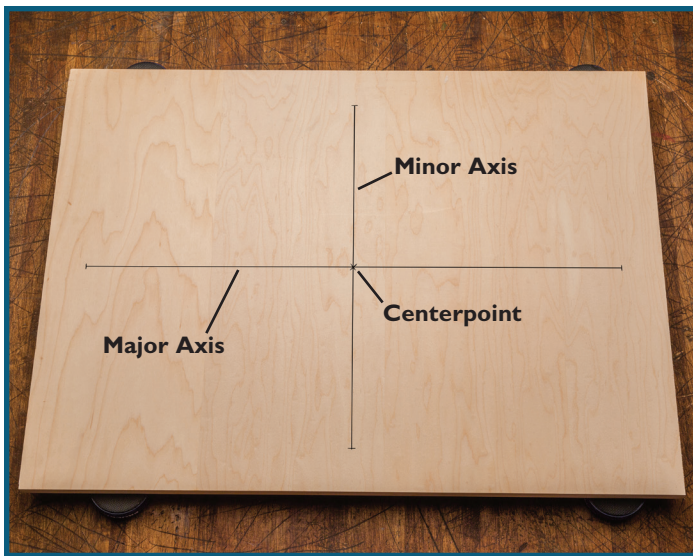


Fig. 1

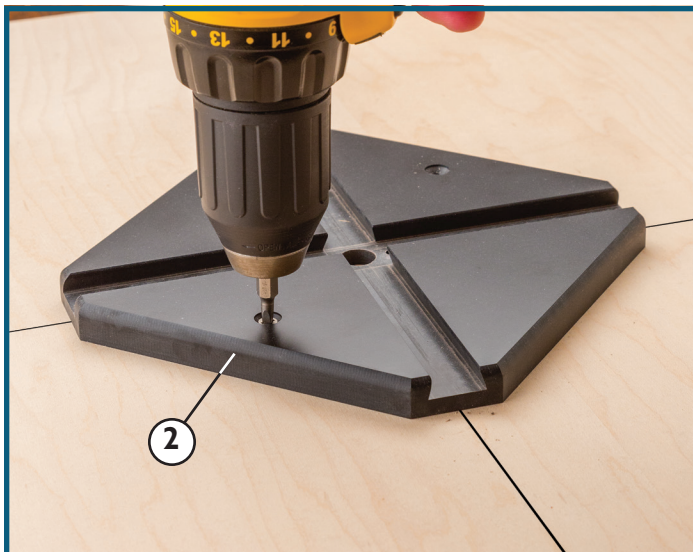


Fig. 2

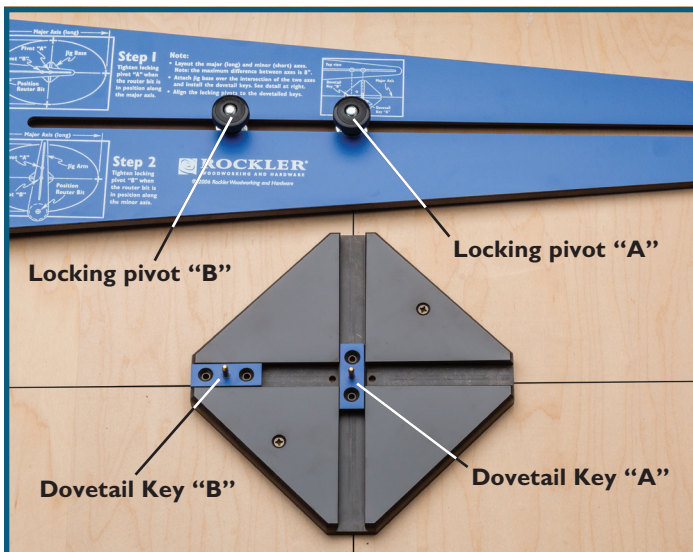


Fig. 3

Jig and Workpiece Setup

⚠ WARNING

- > Properly and firmly secure your workpiece before attempting to make a cut.
- > Your router must be unplugged while attaching the Ellipse/Circle Jig and while making any adjustments.

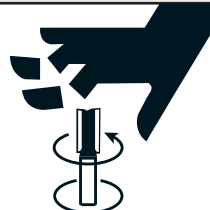
NOTICE

We recommend using a 1/4" diameter spiral up-cut bit (82652, sold separately).

1. Attach your plunge router to the Jig Arm (1) with the screws from your router baseplate and install the desired bit.
2. Set up and firmly secure 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

THESE WARNINGS PERTAIN TO THIS SECTION:



⚠ DANGER

- > To avoid serious injury, keep hands and fingers away from spinning router bit. Maintain awareness of the bit at all times.

⚠ WARNING

- > 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.

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 52" long and a minimum of 17½". The minor axis can be a maximum of 44" long and a minimum of 9½". (The maximum difference in length between the major and minor axes is 8".) **Fig. 1.**
2. Center the Jig Base on the intersection of the major and minor axes. Secure the Jig Base (2) to the workpiece with screws of a length appropriate for your workpiece. **Fig. 2.**

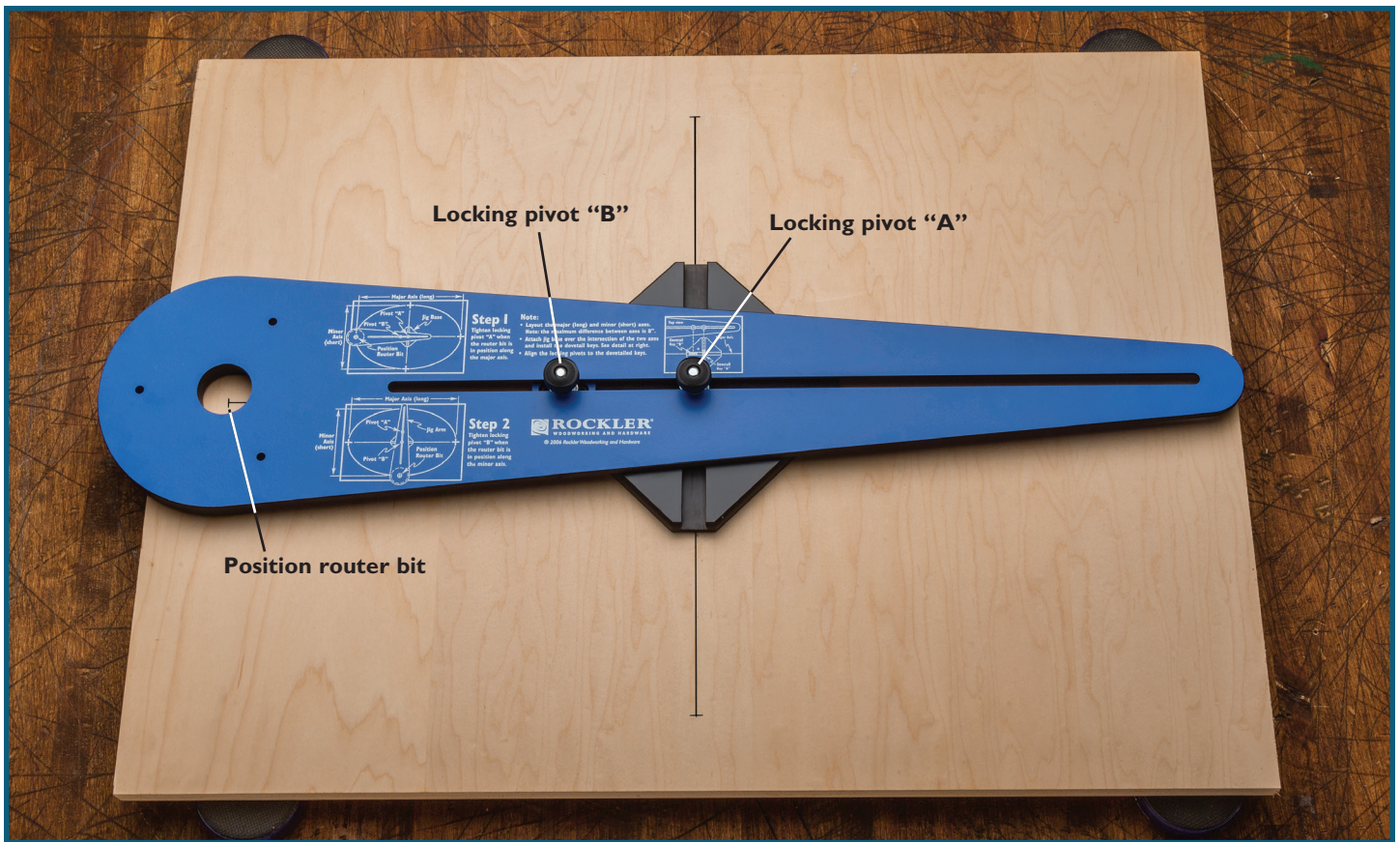


Fig. 4 - Router removed for clarity

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.

NOTICE

The Locking Pivot closest to the router must be mounted on "Dovetail Key B" (along the major 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.**
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.**

NOTICE

The maximum distance between Locking Pivots A and B is 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.**
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.

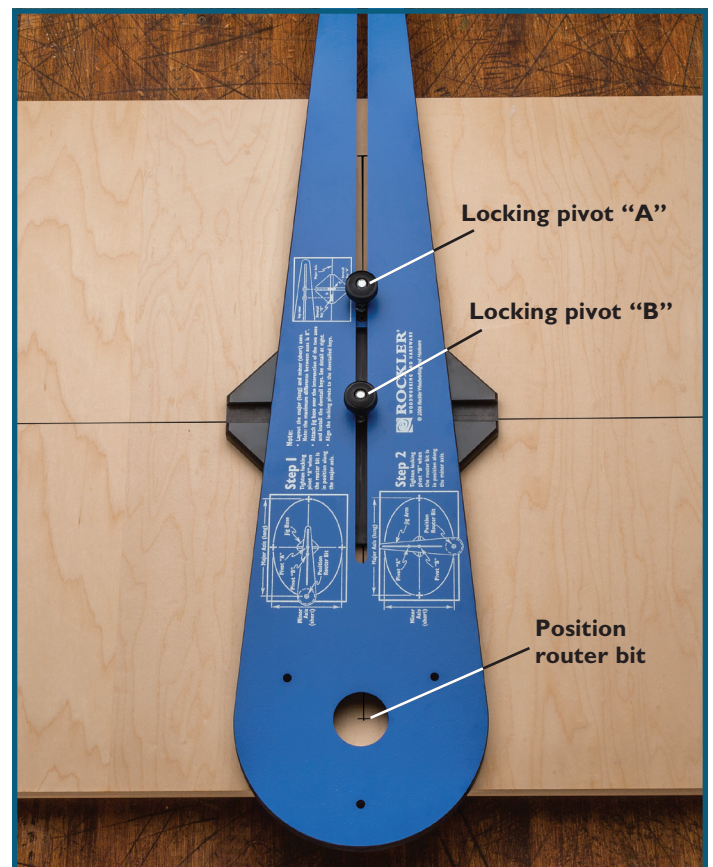


Fig. 5 - Router removed for clarity

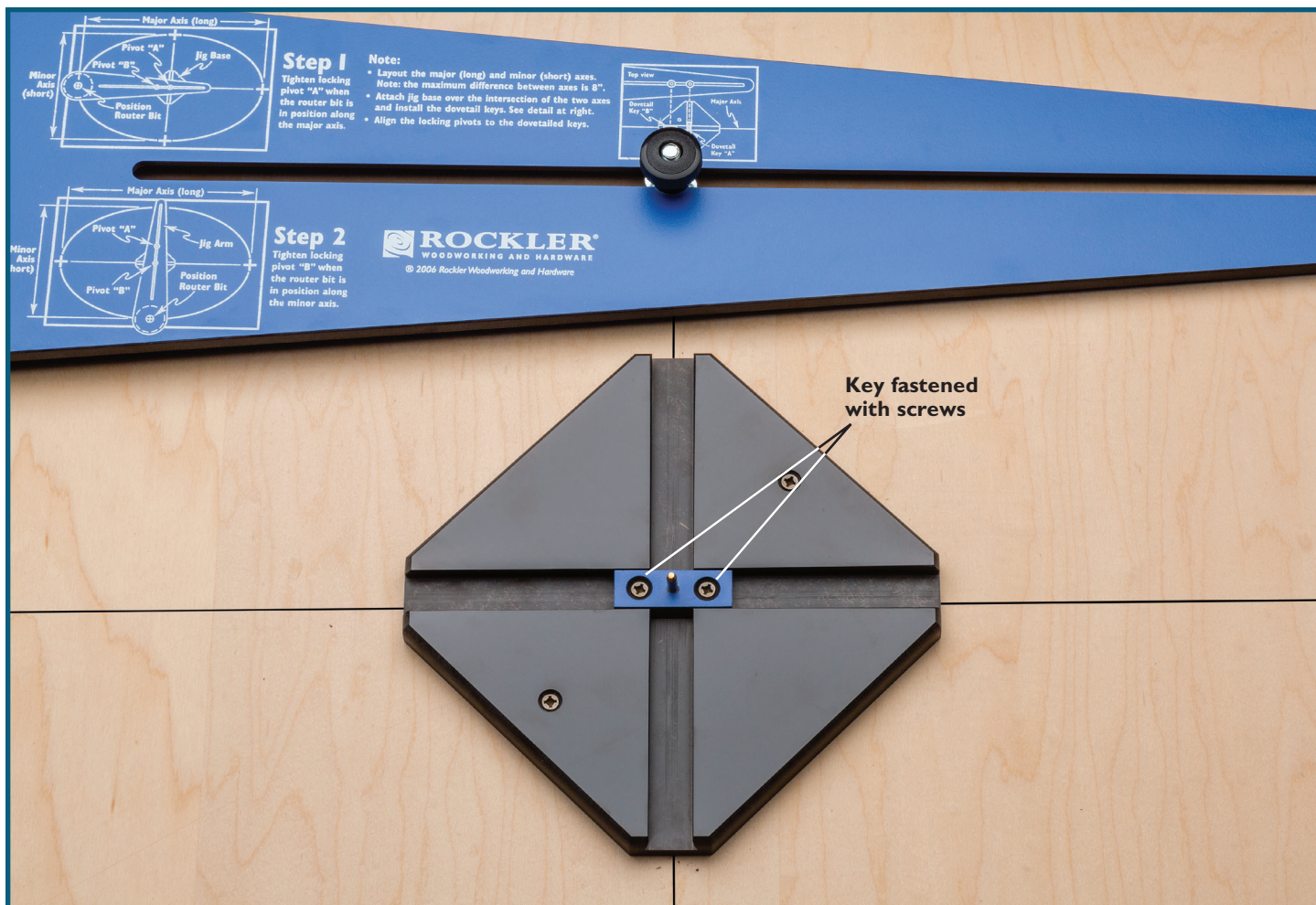
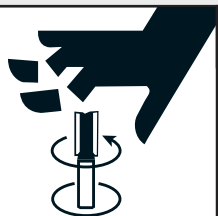


Fig. 6

Routing a Circle

THESE WARNINGS PERTAIN TO THIS SECTION:



⚠ DANGER

> To avoid serious injury, keep hands and fingers away from spinning router bit. Maintain awareness of the bit at all times.

⚠ WARNING

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

1. Mark a center point on your workpiece and lay out the perpendicular axes.

2. Center the Jig Base (2) on the intersection of the axes and secure it to the workpiece with screws.
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 #6 wood screws (not included). **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.

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