

ROCKLER 17/32 inch 7° Dovetail Router Bit

ROCKLER 17/32 inch 7° Dovetail Router Bit User Manual

INTRODUCTION

This manual provides instructions for the ROCKLER 17/32 inch 7° Dovetail Router Bit. This bit is designed for cutting precise dovetail joints and is compatible with Porter-Cable 4210 and 4212 Dovetail Jigs. It features two finely ground carbide cutters for durability and a 1/2 inch shank for increased rigidity during operation.



Image: The ROCKLER 17/32 inch 7° Dovetail Router Bit, featuring its carbide cutting edges and 1/2 inch shank.

SAFETY INFORMATION

Always prioritize safety when operating power tools. Failure to follow safety guidelines can result in serious injury.

- **Eye Protection:** Always wear ANSI-approved safety glasses or a face shield to protect against flying debris.
- **Hearing Protection:** Use hearing protection to prevent noise-induced hearing loss.
- **Respiratory Protection:** Wear a dust mask or respirator, especially when routing wood, to avoid inhaling fine dust particles.
- **Unplug Tool:** Disconnect the router from the power source before changing bits, making adjustments, or performing maintenance.
- **Secure Workpiece:** Ensure the workpiece is firmly clamped or secured to prevent movement during routing.
- **Proper Bit Installation:** Insert the router bit shank fully into the collet and tighten securely. Never overtighten.
- **Inspect Bit:** Before each use, inspect the router bit for any signs of damage, dullness, or cracks. Do not use damaged bits.

- **Feed Rate:** Maintain a consistent and appropriate feed rate. Feeding too fast can cause burning or poor cut quality; feeding too slow can also cause burning.
- **Direction of Cut:** Always feed the router against the rotation of the bit to maintain control.
- **Clear Work Area:** Keep your work area clean and free of clutter.

SETUP

1. **Inspect the Bit:** Before installation, visually inspect the ROCKLER dovetail router bit for any manufacturing defects, damage, or excessive wear. Ensure the carbide cutters are sharp and free of chips.
2. **Prepare Router:** Ensure your router is unplugged from the power source. Clean the router collet and collet nut to remove any dust or debris that could affect bit seating.
3. **Install Bit:** Insert the 1/2 inch shank of the dovetail router bit into the router collet. For optimal grip and to prevent bit slippage, insert the shank as far as it will go, then pull it out approximately 1/16 to 1/8 inch before tightening the collet nut securely with the appropriate wrenches. Do not overtighten.
4. **Jig Setup:** Refer to the instruction manual for your specific Porter-Cable 4210 or 4212 Dovetail Jig for detailed setup procedures, including guide bushing selection, bit projection, and template alignment. This ROCKLER bit is designed to work with these jigs.
5. **Test Piece:** Always perform a test cut on a scrap piece of wood identical to your project material to verify settings and ensure proper fit of the dovetail joint.

OPERATING INSTRUCTIONS

This section outlines general operating procedures for using the ROCKLER dovetail router bit. Always consult your router and dovetail jig manuals for specific operational guidelines.

1. **Workpiece Preparation:** Ensure your workpieces are properly dimensioned, square, and free of defects. Mark your joint locations clearly.
2. **Secure Workpiece:** Firmly clamp the workpiece(s) into your Porter-Cable 4210 or 4212 Dovetail Jig according to its instructions. Ensure there is no movement possible during the routing process.
3. **Router Speed:** Set your router to an appropriate speed for the material being cut. For larger diameter bits like this 17/32 inch dovetail bit, a medium to lower speed setting is generally recommended to prevent overheating and burning.
4. **Routing Technique:**
 - Engage the router bit with the workpiece, ensuring the guide bushing follows the jig's template accurately.
 - Maintain a steady, controlled feed rate. Avoid forcing the router, as this can lead to poor cut quality, bit damage, and kickback.
 - Allow the bit to cut cleanly. Listen to the sound of the router; a strained sound indicates too fast a feed rate or a dull bit.
 - For through dovetails, route the pins and tails according to your jig's specific instructions.
5. **Dust Collection:** Utilize a dust collection system with your router and jig setup to minimize airborne dust and keep the work area clear.
6. **Post-Routing:** After routing, carefully remove the workpiece from the jig. Inspect the joint for fit and quality. Make any necessary adjustments to your jig or router settings for subsequent cuts.

MAINTENANCE

Proper maintenance extends the life and performance of your ROCKLER dovetail router bit.

- **Cleaning:** After each use, clean the bit to remove resin and wood residue. Use a specialized router bit cleaner or a mild solvent. Avoid using wire brushes, which can damage the carbide.
- **Inspection:** Regularly inspect the carbide cutting edges for dullness, chips, or cracks. A dull bit will cause burning, tear-out, and increased strain on your router.
- **Sharpening:** Router bits with carbide tips can be professionally sharpened. Do not attempt to sharpen carbide bits yourself unless you have specialized equipment and training, as improper sharpening can ruin the bit.
- **Storage:** Store the router bit in its original protective case or a dedicated bit storage tray. This protects the delicate carbide edges from damage and prevents rust. Keep bits in a dry environment.
- **Lubrication:** A light coat of dry lubricant or rust preventative can be applied to the bit body (avoiding the carbide edges) for long-term storage.

TROUBLESHOOTING

Problem	Possible Cause	Solution
Poor Cut Quality / Tear-out	Dull bit, incorrect feed rate, improper jig setup, wrong router speed.	Replace or sharpen bit, adjust feed rate, verify jig settings (guide bushing, bit projection), adjust router speed.
Wood Burning	Dull bit, too slow feed rate, excessive router speed, resin buildup on bit.	Clean or sharpen bit, increase feed rate slightly, reduce router speed, ensure proper dust extraction.
Excessive Vibration / Noise	Bit not properly seated/tightened, bent shank, damaged bit, unbalanced bit.	Re-seat and tighten bit, inspect bit for damage (replace if necessary), ensure collet is clean.
Bit Slippage	Improper bit installation, dirty collet, worn collet.	Ensure shank is fully inserted and tightened, clean collet, replace worn collet.

SPECIFICATIONS

Brand: ROCKLER
Model: 17/32 inch 7° Dovetail Router Bit
Compatibility: Porter-Cable 4210 and 4212 Dovetail Jigs
Material: Carbide
Number of Flutes: 2
Cutting Diameter: 0.5 Inches (approximately 1/2 inch)
Cutting Length: 0.53 Inches (approximately 17/32 inch)
Shank Diameter: 1/2 inch
Cut Type: Dovetail Cut

WARRANTY AND SUPPORT

ROCKLER router bits are manufactured to high standards. For specific warranty information regarding this product, please refer to the official ROCKLER website or contact ROCKLER customer service directly. Keep your purchase receipt as proof of purchase.

For technical assistance or further inquiries, please visit the [ROCKLER Brand Store on Amazon](#) or their official website.