

Pro-Cut 50-742

PRO-CUT 50-742 Premium Carbide Cutting Tips Instruction Manual

For Pro-Cut Rotor Matching Systems

1. INTRODUCTION

This manual provides essential instructions for the proper installation, operation, and maintenance of your PRO-CUT 50-742 Premium Carbide Cutting Tips. These tips are specifically designed for use with Pro-Cut Rotor Matching Systems to ensure optimal performance and longevity.

Package Contents:

- 10 x PRO-CUT 50-742 Premium Carbide Cutting Tips (5 complete pairs)
- Installation Screws



Figure 1: PRO-CUT 50-742 Premium Carbide Cutting Tips in original packaging.

2. SAFETY INFORMATION

WARNING: Always prioritize safety when working with cutting tools and machinery.

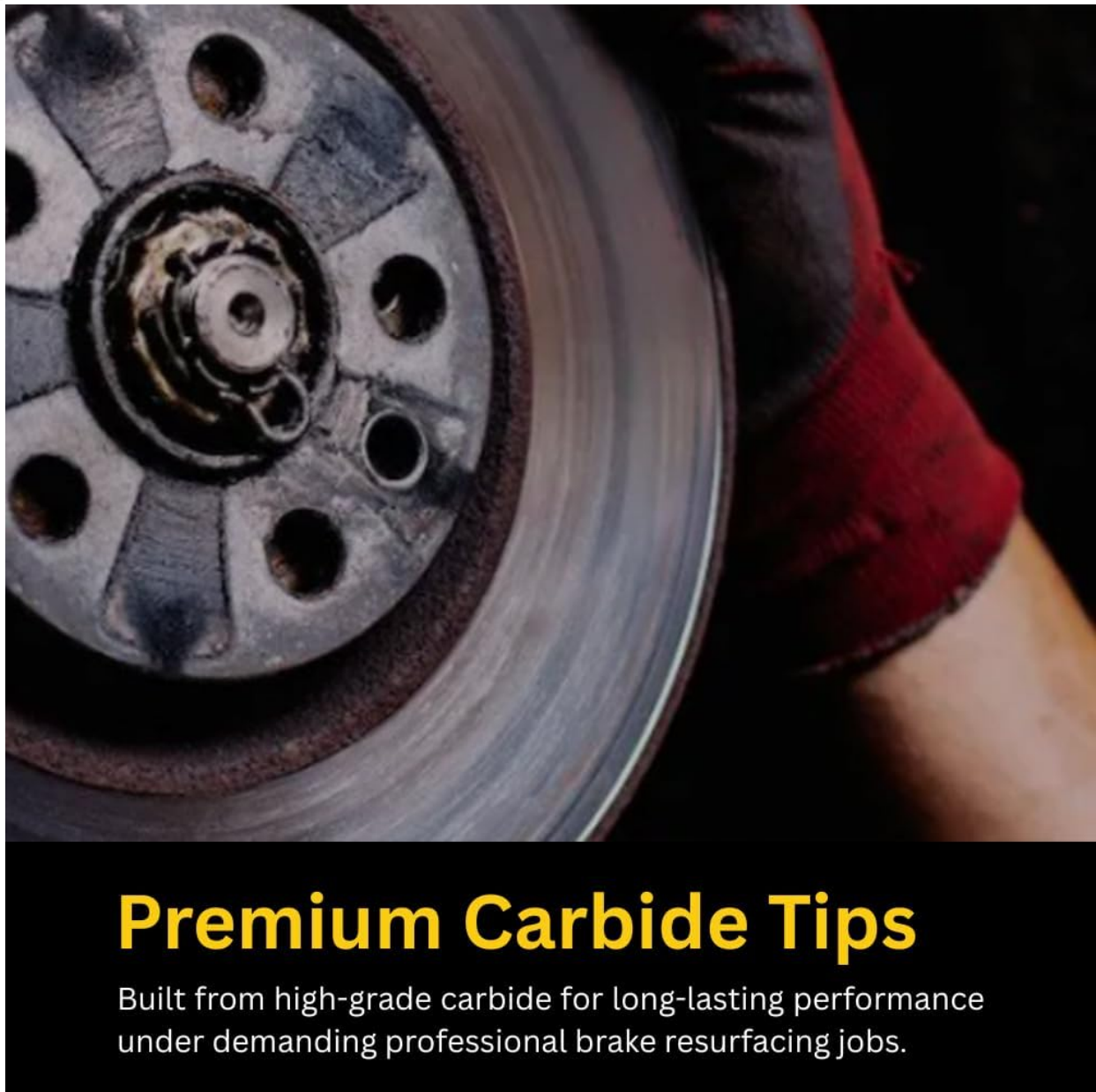
- Always wear appropriate personal protective equipment (PPE), including safety glasses or face shield, and gloves, to prevent injury from flying debris or sharp edges.
- Ensure adequate ventilation in the work area to avoid inhaling dust generated during cutting operations.
- Refer to the safety data sheet (SDS) for information regarding the materials being cut and the carbide tips themselves.
- Cutting tools can break. Exercise caution and maintain a safe distance during operation.
- Always follow the safety guidelines provided in your Pro-Cut Rotor Matching System's operating manual.

3. SETUP AND INSTALLATION

Proper installation of the cutting tips is crucial for achieving precise results and ensuring tool longevity. Refer to your Pro-Cut Rotor Matching System's manual for specific instructions on accessing and preparing the tool holder.

1. **Prepare the Tool Holder:** Ensure the tool holder on your Pro-Cut Rotor Matching System is clean and free from debris.
2. **Select a Tip:** Carefully remove one PRO-CUT 50-742 carbide cutting tip and an installation screw from the package.
3. **Position the Tip:** Place the carbide tip into the designated slot on the tool holder. Ensure it sits flush and is correctly oriented.

4. **Secure the Tip:** Insert the provided installation screw through the tip's central hole and tighten it securely using the appropriate tool (e.g., a Torx wrench, if applicable, as per your lathe's specifications). Do not overtighten, as this can damage the tip or screw.
5. **Verify Installation:** Double-check that the tip is firmly seated and does not wobble.



Premium Carbide Tips

Built from high-grade carbide for long-lasting performance under demanding professional brake resurfacing jobs.

Figure 2: A PRO-CUT 50-742 cutting tip correctly installed in a tool holder.



Figure 3: Individual PRO-CUT 50-742 tips and their corresponding installation screws.

4. OPERATING INSTRUCTIONS

Once the PRO-CUT 50-742 tips are installed, follow your Pro-Cut Rotor Matching System's operating procedures for resurfacing brake rotors. These tips are engineered for optimal performance under specific conditions.

- **Cut Depth:** These carbide tips are designed to accommodate cut depths of up to **0.020 inches (0.508 mm) per side**. Adhering to this maximum depth helps maintain tip integrity and ensures a high-quality finish.
- **Smooth Operation:** The precision geometry and integrated chip breakers of the PRO-CUT tips are designed to provide smooth, clean cuts with minimal vibration.
- **Machine Settings:** Always follow the recommended feed rates and spindle speeds specified in your Pro-Cut Rotor Matching System's operating manual for the best results and to prevent premature tip wear.
- **Rotor Preparation:** Ensure the rotor is properly mounted and cleaned before beginning the resurfacing process.



Figure 4: PRO-CUT 50-742 tip in action, resurfacing a brake rotor.

5. MAINTENANCE

Proper maintenance extends the life of your PRO-CUT 50-742 carbide cutting tips and ensures consistent performance.

- **Inspection:** Regularly inspect tips for signs of wear, chipping, or damage before and after each use. Replace worn or damaged tips immediately.
- **Cleaning:** After use, carefully clean the tips to remove any metal shavings or debris. Use a soft brush or compressed air. Avoid harsh chemicals that could degrade the carbide material.
- **Storage:** Store unused and cleaned tips in their original protective packaging in a dry, cool environment to prevent damage and corrosion.
- **Rotation:** If your system allows for tip rotation, ensure all cutting edges are utilized evenly to maximize tip life.

6. TROUBLESHOOTING

If you encounter issues during rotor resurfacing, consider the following common problems and solutions:

Problem	Possible Cause	Solution
Poor surface finish / Chatter marks	<ul style="list-style-type: none">Worn or damaged cutting tipImproper tip installationIncorrect machine settings (feed rate, speed)Rotor not securely mounted	<ul style="list-style-type: none">Replace tipReinstall tip securelyAdjust machine settings as per lathe manualRe-mount rotor properly
Excessive vibration	<ul style="list-style-type: none">Loose cutting tipWorn tool holder componentsUnbalanced rotor	<ul style="list-style-type: none">Tighten tip screwInspect and replace worn lathe componentsEnsure rotor is balanced and mounted correctly
Premature tip wear	<ul style="list-style-type: none">Excessive cut depthIncorrect machine speed/feedCutting contaminated or excessively hard material	<ul style="list-style-type: none">Reduce cut depth to recommended maximum (0.020" per side)Adjust machine settingsEnsure rotor is clean and free of foreign objects

7. SPECIFICATIONS

Key technical details for the PRO-CUT 50-742 Premium Carbide Cutting Tips:

- **Model Number:** 50-742
- **Material:** Premium Carbide
- **Maximum Cut Depth:** 0.020 inches (0.508 mm) per side
- **Quantity:** 10 tips (5 pairs) per pack
- **Compatibility:** Designed for Pro-Cut Rotor Matching Systems
- **Item Weight:** Approximately 1.06 ounces (30 grams)
- **Package Dimensions:** Approximately 3.9 x 1.57 x 0.43 inches (9.9 x 4.0 x 1.1 cm)
- **Manufacturer:** Pro-Cut International
- **Origin:** Made in USA



Figure 5: A complete set of PRO-CUT 50-742 cutting tips.

8. WARRANTY AND SUPPORT

PRO-CUT International stands behind the quality of its products. For specific warranty information, please refer to the documentation included with your Pro-Cut Rotor Matching System or visit the official Pro-Cut International website.

For technical assistance, replacement parts, or further inquiries, please contact Pro-Cut International customer support:

- **Website:** www.procutinternational.com
- **Contact Information:** Refer to the website for current phone numbers and email addresses.

