3” Rapid Z™-CUT with Template Bearing INSTRUCTIONS

Introduction

Thank you for purchasing the NSI Solutions Rapid Z™-CUT with Template Bearing. The Rapid Z™-CUT is a 3”, stacked blade type, grinding wheel designed to quickly grind stone and quartz. The top mounted bearing ring is designed to ride against a template. Please read these instructions thoroughly before using this tool. Keep these instructions in a place where operators can access it easily.

Use Proper Safety Gear

To prevent damage to eyes from flying debris, wear protective glasses or face shield. Be sure to wear waterproof safety boots, appropriate hearing protection and dust protection as required.

Caution

Before each use, inspect the Rapid Z™-CUT for bent, cracked or otherwise damaged blades. Replace damaged blades before use. Never use a Rapid Z™-CUT with damaged blades or other components.

Caution

The Rapid Z™-CUT is designed for wet use only

Caution

Maximum RPM 12,000

Caution

Always be sure that the grinder is switched off and unplugged from power (either electric or air) before installing/removing the Rapid Z™-CUT or attempting to perform any inspection or maintenance.

Tools Needed For Assembly/Disassembly

- 5/16” Nut driver or socket wrench
- 5/16” Allen (hex) wrench
- Flat bladed screw driver (optional)
- Vise

Instructions

1. The Rapid Z™-CUT is designed for clockwise rotation, looking down on the threaded arbor mounting hole, and should not be used on a grinder or tool with the opposite rotation.
2. The Rapid Z™-CUT mounts to a male 5/8-11 thread (M14 thread on European version). Prior to use, ensure it is mounted tightly.
3. The Rapid Z™-CUT is designed for wet use only. Use either center water feed or a sufficient external water spray. Ensure enough water is used to avoid creating dust.

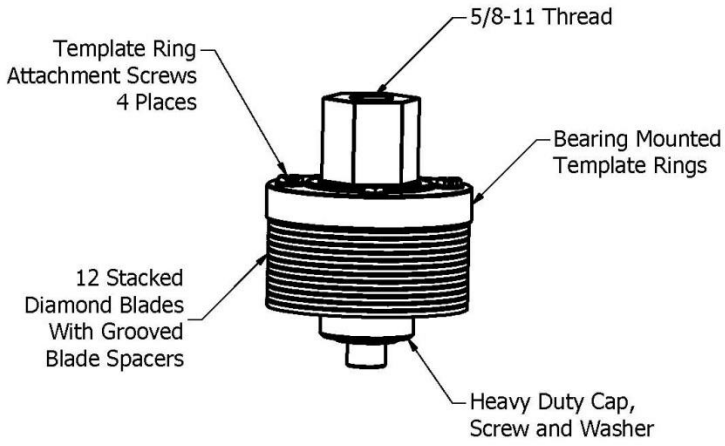
4. Make sure the machine height is adjusted so that the bearing rides against the template and the blade portion is aligned with the stone to be ground
5. With the grinding machine in place on the template and the water running start the motor and work the Rapid Z™-CUT around the template until the bearing is in contact with the template around the entire periphery. The blades will grind away stone leaving it slightly proud of the template.
6. As the blades wear they will create an "apple core" shape. For maximum blade life, the blades should be rearranged often. Relocate the largest blades (normally the outer blades) to a location where they will get more wear (normally toward the center of the stack). This can be accomplished as follows (see Figure 1 & 2):
    a. Clamp the Rapid Z™-CUT upside down in a vise (hex shaft down).
    b. Using a 5/16 Allen wrench or hex wrench remove the socket head cap screw, washer and cap from the arbor.
    c. Remove the blades and rearrange as required.
    d. Make sure that a grooved blade spacer is reinstalled between each blade. The spacers may stick to the blades but can be pried off easily.
    e. NOTE - ensure 2 grooved blade spacers are located against the bearing.
    f. Be sure to maintain the correct blade rotation direction. Repeatedly reversing the blade rotation will result in premature blade wear.
    g. Reinstall the cap, washer and socket head cap screw and tighten.

7. The Rapid Z™-CUT template bearing ring incorporates a two stage design to help compensate for blade wear. After all the blades have worn down approximately 1/8" you can remove the large outer template ring and run the smaller inner ring against the template. This can be accomplished as follows (see Figure 1 & 2):
    a. Using a 5/16" nut driver, socket wrench or a flat bladed screw driver; remove quantity (4) ring attachment screws.
    b. Remove the large outer ring and save for reinstallation when the blades are replaced.
    c. To keep the threads clear, reinstall the (4) screws into the smaller inner ring.
    d. Now use the Rapid Z™-CUT with the smaller ring running against the template.

Visit https://nsisolutions.com/rapid-z-cut/ to view a video of this tool

Cleaning

The ball bearing supporting the template ring will last longer if it is blown dry, with compressed air, after each use.



- Center Water Feed Compatible

- Corrossion Resistant Construction

FIGURE 1 – Rapid Z™-CUT with Template Bearing (Assembled)

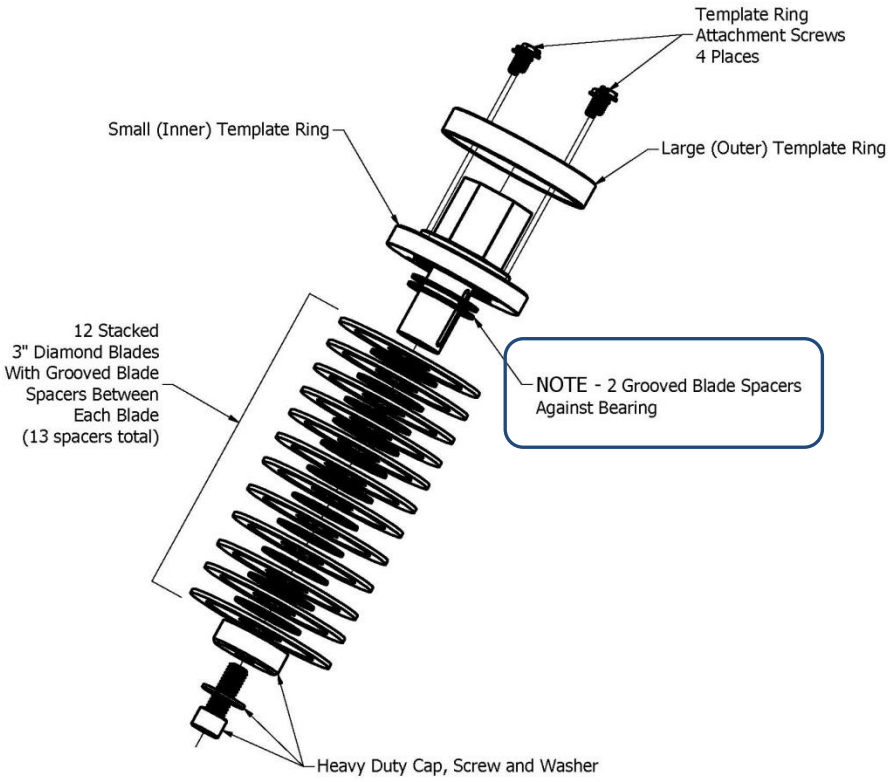


FIGURE 2 – Rapid Z™-CUT with Template Bearing (Exploded)