

INSTRUCTIONS: CARBIDE STUD SHARPENING TOOL – STD SERIES

Congratulations on the purchase of your BITEHARDER Diamond Coated – Standard Series Carbide Stud Sharpening Tool. This product is handmade in the U.S.A. with quality materials. All components are carefully machined from stainless steel to the highest quality standards, on state of the art manufacturing equipment, and diamond coated using a proprietary braze process, to assure you get the most life out of your tool.

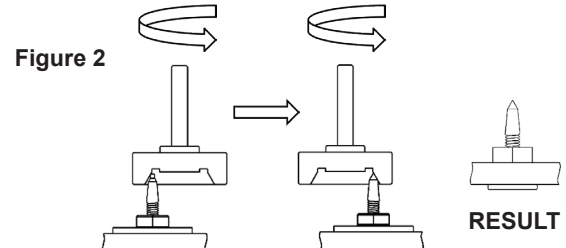
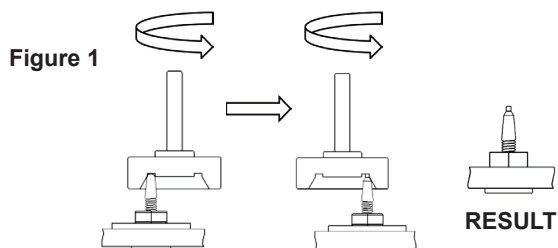
This product has been designed to allow you to sharpen carbide studs, simply by using a cordless drill, all without the need to remove it from your snowmobile's track.

Using your tool to repair **individual** broken or worn studs will yield the best results. Trying to re-sharpen all the studs in your track will prematurely wear the tool. Only our Professional Series Carbide Stud Sharpening tool is designed for this type of sharpening.

Like all cutting tools, the product will wear out over time and will need to be replaced. By following these simple instructions, you will maximize the effectiveness and longevity of your BITEHARDER[®] Standard Series Carbide Stud Sharpening tool.

INSTRUCTIONS:

1. Properly attach your sharpening tool to the chuck of a cordless drill which will accommodate a ¼ inch shank. Set your drill to the fastest (RPM's) setting. Most drills will run at 1500 to 2000 RPM's.
2. With the tool spinning, gradually place the tool over the carbide stud until it contacts the bottom inside surface of the BITEHARDER[®] sharpening tool and rotate the tool around the carbide stud in a continuous, uniform circular motion, **IN THE OPPOSITE DIRECTION FROM WHAT THE TOOL IS SPINNING**. You will become more efficient with each stud you sharpen. This is the first stage of the sharpening process which removes the host material, exposing the carbide stem (**Figure 1**).
3. Once the required material is removed, and the carbide stem is exposed, back the tool slightly away from the stud and again using a continuous uniform circular motion, rotate the tool around the stud **IN THE OPPOSITE DIRECTION FROM WHAT THE TOOL IS SPINNING**, to sharpen the carbide stud tip (**Figure 2**).
4. After the appropriate amount of sharpening time, inspect the stud for the desired result. Repeat this process by indexing the track to repair other broken or worn studs.



FOR BEST RESULTS:

- The **BITEHARDER**[®] sharpening tool should be held parallel to the carbide stud at all times.
- Do not twist or angle the tool during the sharpening process.
- A smooth and consistent motion of the drill attached to the **BITEHARDER**[®] sharpening tool is important to achieve the best results possible. Light pressure is all that is required – **LET THE DIAMONDS DO THE CUTTING!** Too much pressure will only help to wear your tool prematurely.
- If required, keep the **BITEHARDER**[®] sharpening tool cool by adding water or snow to the process.
- Never let the tool grab or kick-off the stud being sharpened. This could damage the tool and the carbide stud.
- Frequently inspect your **BITEHARDER**[®] sharpening tool for wear, as a worn tool is not effective.
- You can also check out our YouTube channel for updated videos detailing the sharpening process.

SAFETY WARNINGS:

- Our Standard Series tools are only designed to run at speeds that are achieved using a cordless drill (1,500 to 2,000 RPM's). Running these tools faster can cause them to break apart and fail prematurely.
- Never place any part of your body in contact with the **BITEHARDER**[®] sharpening tool during use.
- Never wear jewelry, neckties, or loose-fitting clothing when using the **BITEHARDER**[®] sharpening tool.
- Long hair should be tied back before using the **BITEHARDER**[®] Sharpening tool.
- The **BITEHARDER**[®] sharpening tool can produce excessive noise during operation and hearing protection may be required. See "Carbide Dust Warning" below.
- The **BITEHARDER**[®] sharpening tool and carbide stud may become hot during use and can cause burns if touched.
- Improper use of the **BITEHARDER**[®] sharpening tool may cause the tool or the carbide stud to fracture. Always wear proper protective clothing and equipment including face, eye, and tight fitting hand protection.

CARBIDE DUST WARNING:

Grinding or sharpening carbide will produce a dust of potentially hazardous ingredients which can cause nose, throat, skin and eye irritation and possible temporary or permanent respiratory disease in a small percentage of exposed individuals. Permanent respiratory disease can lead to disability or death. Take precautions and avoid breathing dust. Avoid prolonged skin contact with dust. Always use adequate ventilation when grinding or sharpening. Use protective devices such as an appropriate mask/respirator and appropriate eyewear at all times. Immediately wash hands thoroughly after each use.