

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 on state of the art manufacturing equipment, and assembled with pride, to the highest quality standards.

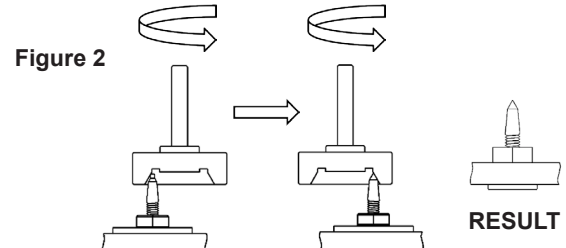
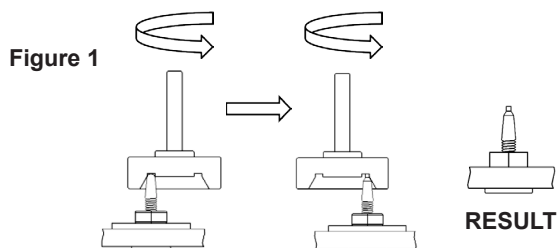
This product has been designed to allow you to sharpen your carbide studs without the need to remove them from your snowmobile's track, using a cordless drill.

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. 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 (RPMs) setting.
2. With the tool spinning, gradually contact the carbide stud with 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 stud tip (**Figure 2**).
4. After the appropriate amount of sharpening, inspect the stud for the desired result. Repeat this process by indexing the track to repair other broken or work 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.

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 RPMs). 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 should be worn.
- 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.