

# INSTRUCTIONS FOR USE

On the Adjustable Angle Sharpener

## Components and Features

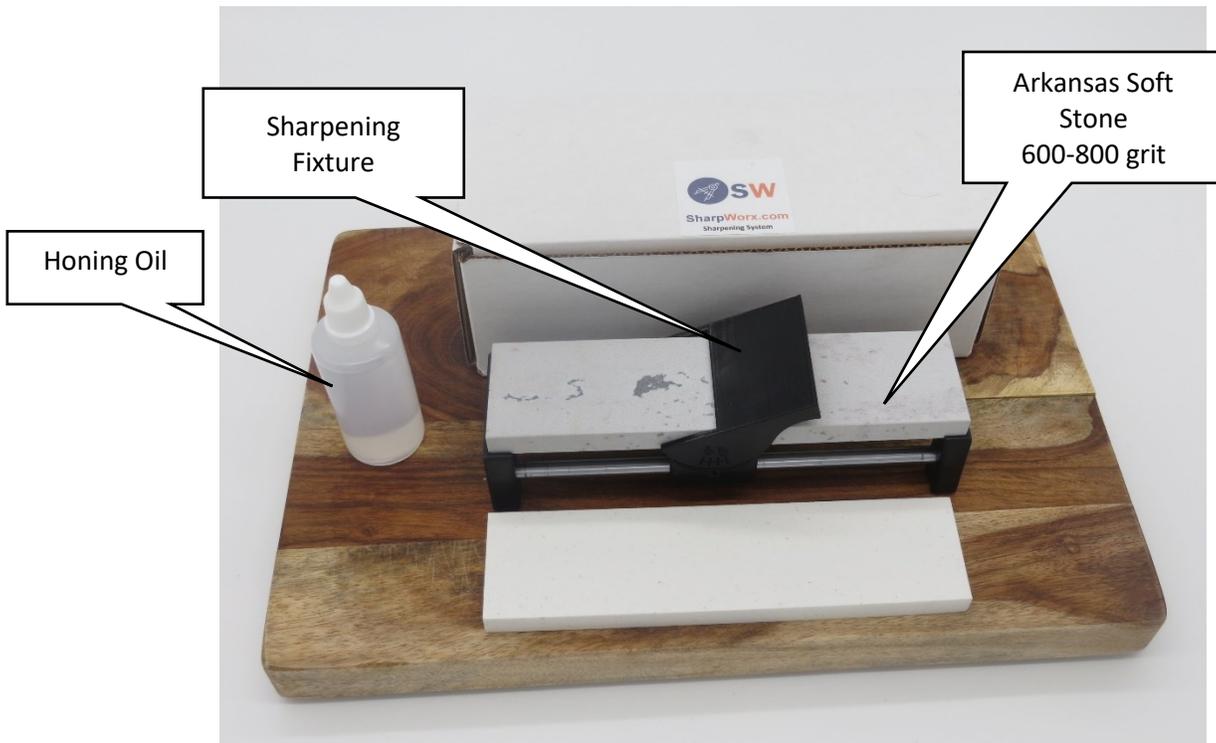


Figure 1: Kit Contents

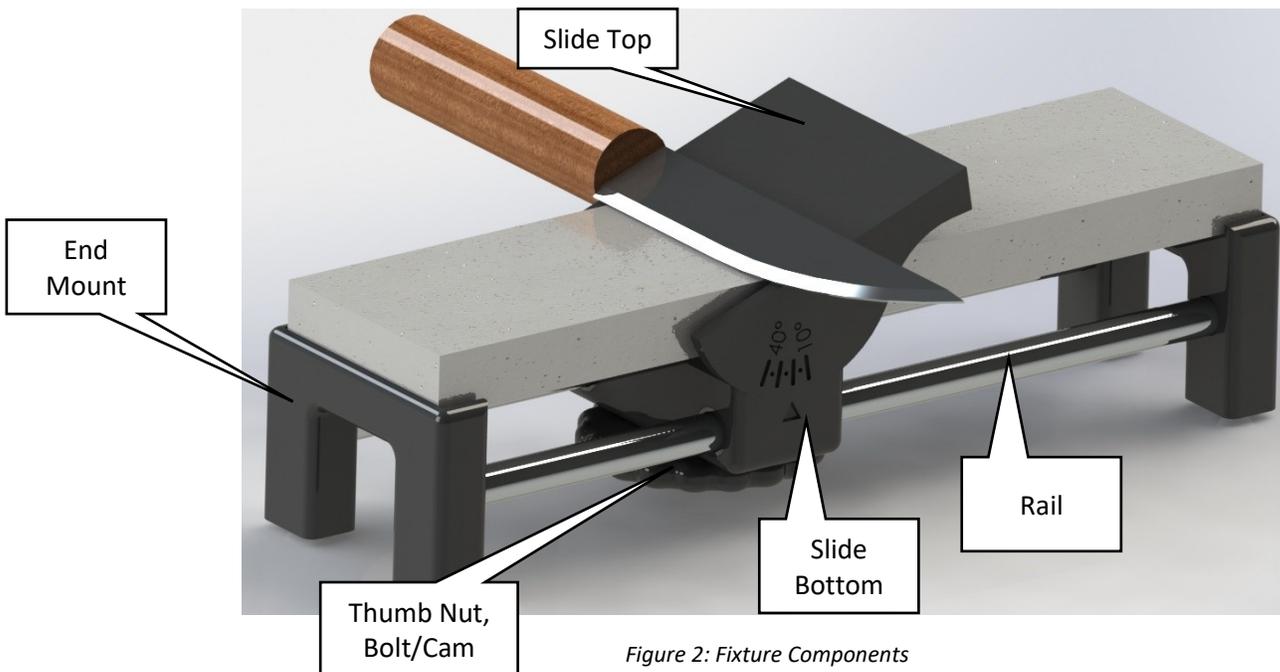


Figure 2: Fixture Components

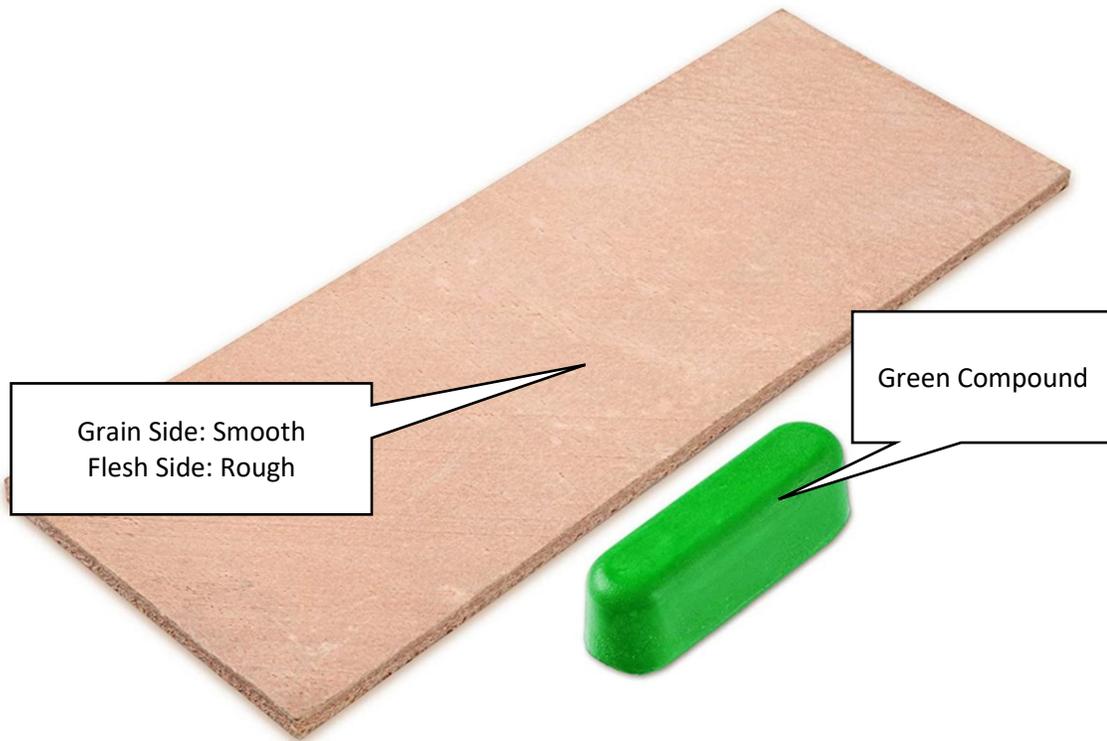


Figure 3: Leather Strop

## Training Videos

## [Instruction Videos](#)

## Sharpness Test

An easy test for checking the sharpness of a knife is slicing paper. Try using a piece of standard copy paper and holding it in one hand and slicing a section with your other hand. Make sure to use the full length of the edge. The knife should easily slice through the paper along the full length of the blade. If there are any places where the knife catches this may be a sign there is a nick in the edge, note this area and give it additional attention as you sharpen.

## Proper Angle

A consistent angle is key to having a sharp knife. Different angles are intended for different applications which gives a tradeoff of durability versus sharpness. The angle is created on the edge of the blade when sharpening and is applied to both sides of the blade.

Angle	Purpose	Material	Sharpness	Durability
15/17°	A razor edge with for fine details	Soft materials	★★★★	★
20°	Kitchen	Meats and produce	★★★	★★
25°	Outdoors and recreation	Wood, brush, rope, cardboard	★★	★★★

30°	A durable edge for long use	Carpet, industrial material	★	★★★★
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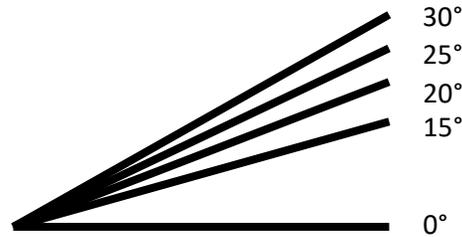


Figure 4: The Proper Angle

## Oil and Water

Oil and water is not recommended for use with the stones. Expert sharpeners have stated that lubricants make the result of sharpening worse.

## Stone Grits

- Green: 220 grit
- Blue: 600 grit
- Yellow: 1000 grit
- Arkansas Soft Stone (Grit rating is not applied to Arkansas Soft Stones, approximate is 800 grit)

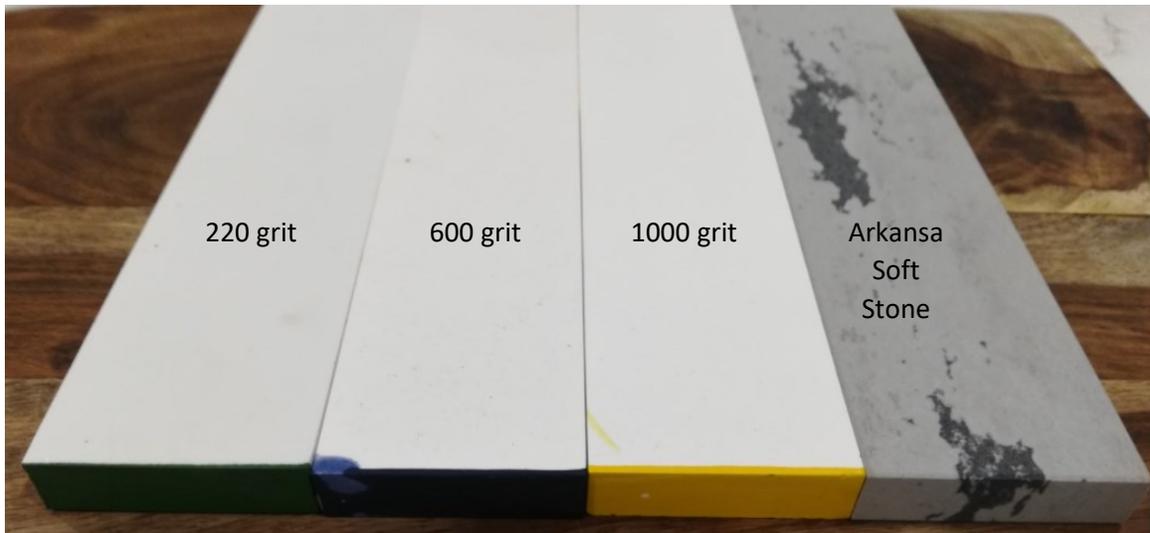


Figure 5: Stone Grits

## Cleaning the Stone

If you have never used oil on the stone, then after using the stones the stones can be wiped down with water and soap and allowed to dry.

If you have used oil on the stone, then after using the stones the stones can be wiped down with oil.

## Sharpie Test

A Sharpie marker can be used to determine the angle of the edge and if sharpening is being completed properly. The marker is applied along the entire length of both sides of the edge. As you sharpen the marker will wear off and you can see the pattern left on the edge of the knife. The pattern of removal of the marker will indicate if you are at the right angle and if sharpening is complete.

**Step 1:** Color along the edge of the knife from the tip to the heel.



Figure 6: Edge with Sharpie marking

**Step 2:** After sharpening the marker should be removed from the edge of the blade.



Figure 7: Correct Edge Pattern

**Step 3:** Diagnosis - If the marker is not removed from the edge of the blade, then the angle is incorrect or additional sharpening is required. If the marker is only removed only at the very edge of the blade the angle may be too high or more passes sharpening is required to reform the angle of the edge. If the marker is removed on the blade, but not the edge then the angle is too low and the angle should be increased.

## Burr Formation

A burr is a thin strip of metal the forms while sharpening; it is most noticeable when using coarse stones. The burr indicates that you have removed enough material to reach the edge of the blade. When sharpening with a coarse stone you should sharpen the same side until you have a burr along the full edge of the blade. The burr is ultimately removed by the finer stones.

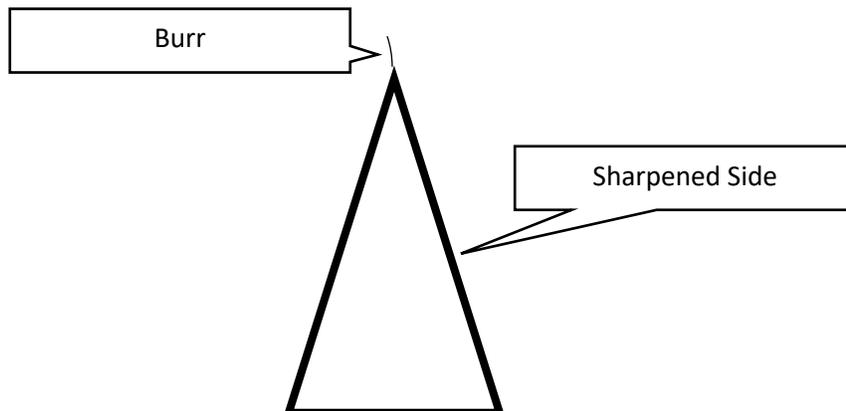
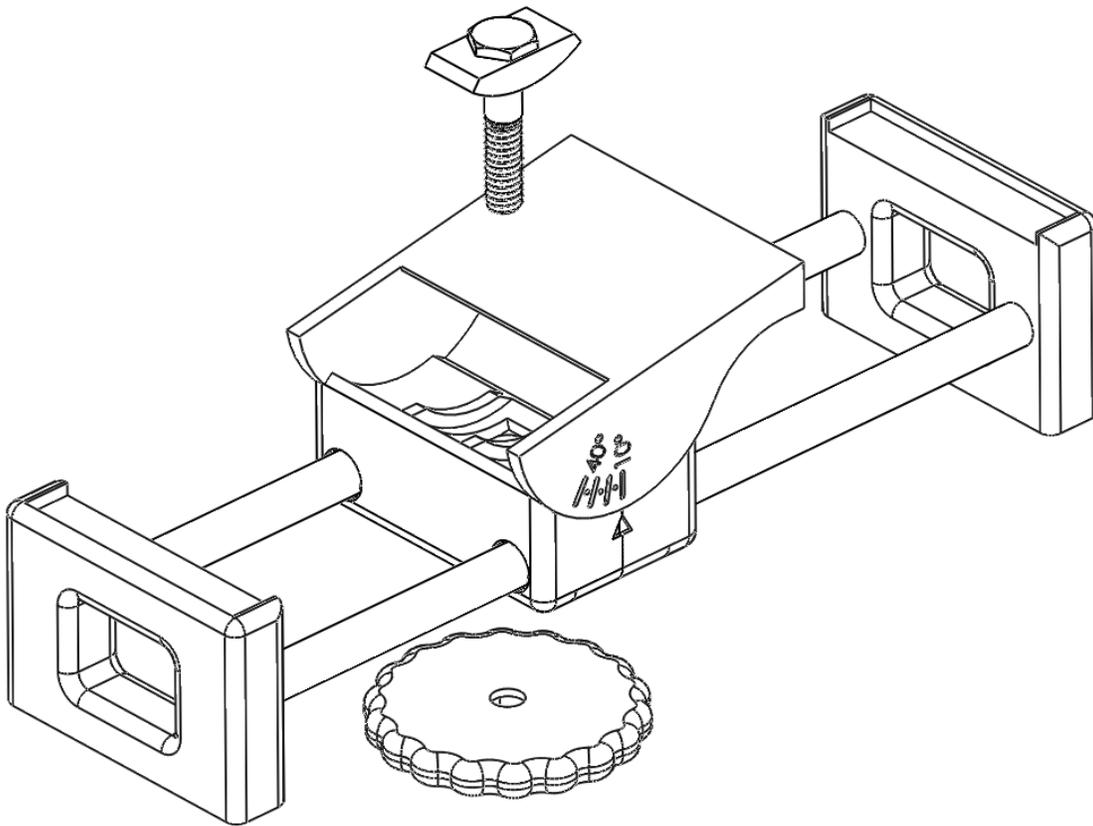


Figure 8: Burr Formation

## Assembly

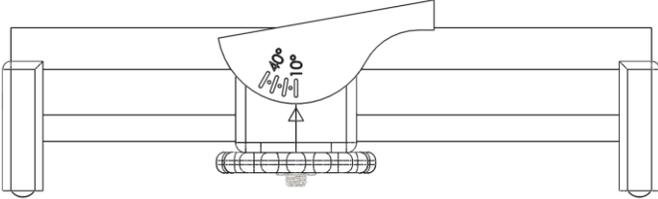
1. Install the bolt and cam through the Slide Top
2. Insert the bolt threaded section through the Slide Bottom
3. Screw Thumb Screw on to Bolt

Note: The stone can be put in the Slide Top after Step #1 or the stone can be installed after Step #3 by moving the slide to one of the sides of the sharpener.



*Figure 9: Assembly Exploded View*

## Instructions

	Step	Description
1		Sharpness test – if you can slice paper go to Step 6
2		Install coarse stone 1. Move the slide to one side of the sharpener. 2. Insert the stone through the Slide Top
3		Set-up fixture 1. Loosen the thumb nut 2. Adjust Angle to proper angle. See section on <b>Proper Angle</b> . 3. Tighten the thumb nut 4. Set gate distance (Optional)  
4		Sharpen Left Side – Sharpen the left side until you feel a burr along the entire right side of the blade.
5		Sharpen Right Side – Sharpen the left side until you feel a burr along the entire left side of the blade.
6		Switch to Smooth Stone
7		Adjust Angle – Add a 2° to 5° to the angle being sharpened.
8		Sharpen Left Side – Do 3 to 5 passes
9		Sharpen Right Side – Do 3 to 5 passes  Repeat the Left and Right side with decreasing number of passes and pressure. You should see a distinct section of the blade that where the smooth stone has sharpened.
10		Strop (Optional) – Using the grain side of the leather apply the compound to the leather. Green is coarser and White is finer. At an angle similar to what was used on the fixture draw the knife along the leather away from the edge, otherwise the knife will cut the leather. Do this 10 times on each side of the blade.
11		Sharpness test – a) If the knife easily slices through the paper along the full length of the edge, then you are complete b) If the knife gets caught on a single area, then you may have a nick and need to go back to the coarse stone and repeat the process. c) If the knife slices through the paper by with resistance, then repeat the sharpening on the Smooth Stone, then the strop.