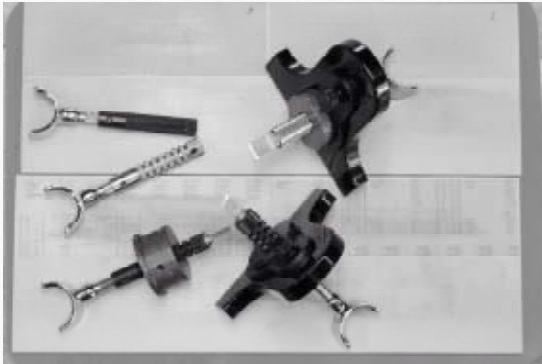


Red Ox Brand In-line Swivel Knife Sharpener

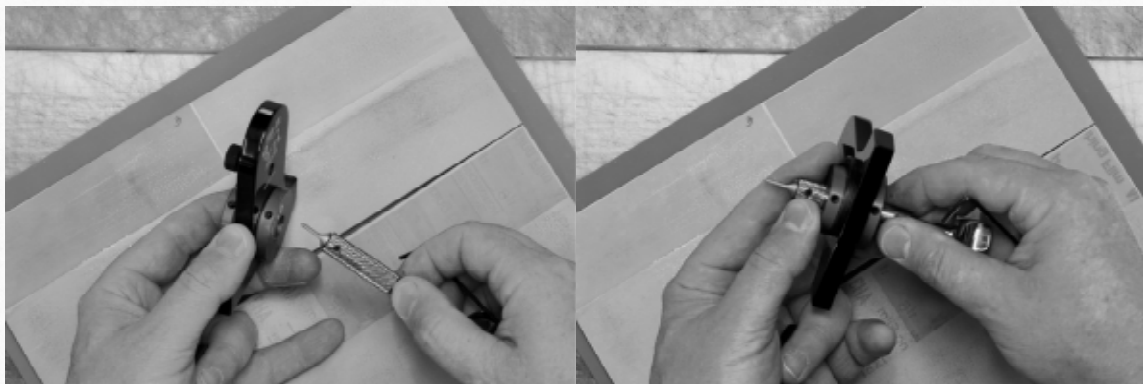
Instruction Guide

The system consists of a hand piece, and a bushing through which the swivel knife passes, being held in place at a set distance. There are two types of bushings, each available in sizes to match standard swivel knife barrel sizes. The first type of bushing holds the knife with two nylon tipped set screws. It is made to accept any make of knife. The second type is made to accept a specialized 'snap in' swivel knife barrel. The knife slides into the bushing and is twisted to lock it into place for conveniently fast sharpening.



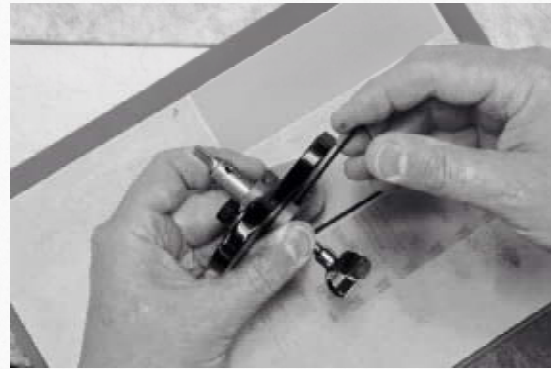
This is the hand piece with a double set screw bushing installed. The bushing and knife are 7/16".

Line up the set screws of the bushing with the edge of the blade and slide the knife into the bushing.



The cutting edge of the blade should extend 1 ½” beyond the bushing. A piece of tubing set to the correct length is used to measure this distance.

Very lightly, tighten the two nylon tipped set screws in the bushing to hold the knife in place. **It takes very little pressure to hold the knife.**

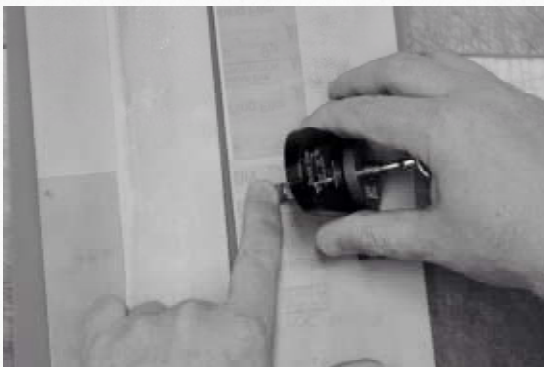


Practice with both of these grips when sharpening your swivel knife.



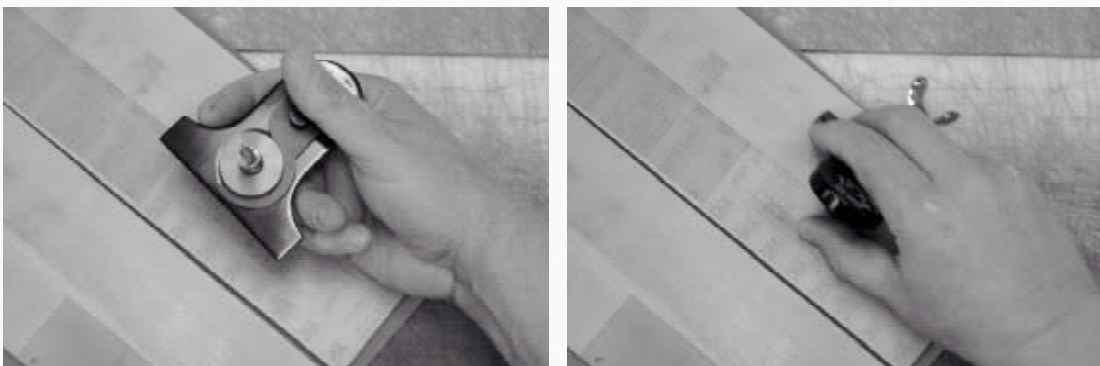
You are now ready to sharpen by tilting the knife blade onto the sharpening medium. Here we are using abrasive film stuck down to a laminate topped Masonite sharpening board which is placed on a urethane mat to hold it in place.

Press on the blade to insure that it is seated flush on the abrasive. Here we are starting with 30 micron abrasive. Sharpen by sliding the sharpener side to side, in line with the cutting edge. Use light pressure, allowing the abrasive to do the work.



This alternate grip allows you to place a thumb on the blade as you sharpen. Use care not to press more on one side of the blade than the other, **unless** you are working to correct previously off balance sharpening. Use light pressure and let the grit do the work.

Great care must be taken when sharpening angle blades. The sharpening process will naturally remove more metal from the heel. Maintain light pressure on the tip edge of the blade while checking your progress often



Work through the progressively finer grits until you have polished the blade. Here we see a 3 micron film being used. The blade is finished with 1 micron film, leaving a mirror polish.



Snap-in Swivel knife and Bushing Combination



The snap-in bushing uses a spring loaded indexing pin to hold the swivel knife in place for sharpening. This allows the knife to be quickly loaded into the sharpener.

For clarity the first pictures here show the knife being loaded into the bushing alone. In actual use the knife can be loaded into the a bushing that is already installed in the hand-piece.

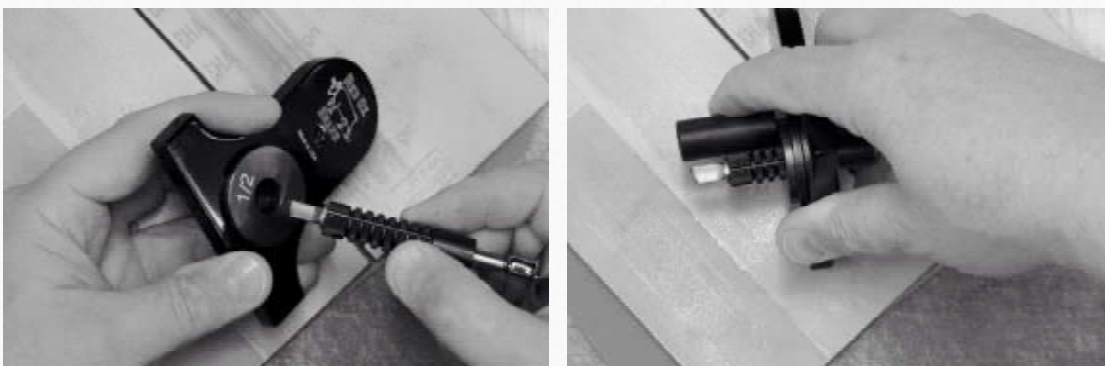
Aline the notch in the swivel knife blade with the indexing pin and slide the knife into the bushing along the long barrel groove.



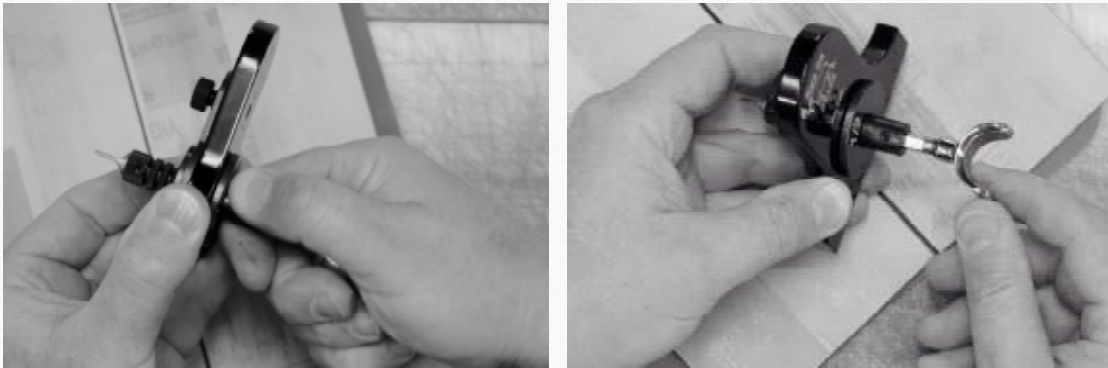
We want the blade to protrude as close to 1 1/2" as possible, which will give a bevel angle within half a degree or so of 30 degrees.
Slide the knife through the bushing and twist it into the indexing ring that will come closest to 1 1/2".



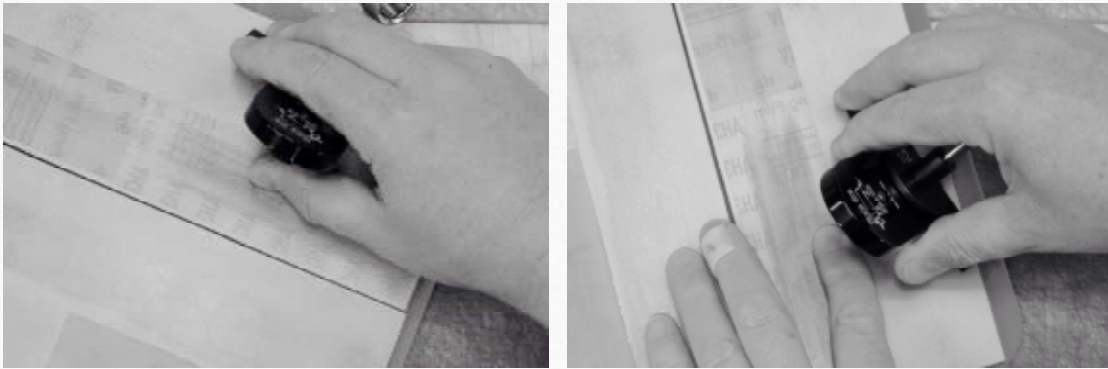
These next pictures repeat the process, but with the bushing installed in the hand-piece.
The indexing pin is located in line with the bushing size numbers on the bushing.
This knife holds an angle blade.
Slide the knife through the bushing and twist it into the indexing ring that will come closest to 1 1/2".



Twist the knife, locking it at the correct distance.



These pictures show the two grips to use. The sharpener is at an angle because an angle blade is being sharpened. This way the blade is kept in-line when sharpened and polished.



Twist the knife back to the long barrel groove and pull it out to remove it. Stop the blade and go to work.

