

## Sharpening Tips

- For a variety of tools

**TIP: Grit Selection** Rough work = coarser grits; fine work = finer grits. If an edge is damaged, you need an aggressive grit to repair and then progress into finer grits based on the edge you need. You progress in the grits as far as the work dictates. Cutting rope or boxes, you want a bite to your edge, so coarse diamond is sufficient. Slicing tomatoes or planing wood or other fine cutting tasks, means finishing with fine or extra-fine diamond grits.

**TIP: Quarter Trick** An easy way to get this angle is to stack two quarters on top of each other and lay the blade on them. This angle is about 20°. (Good for bench stones / knives)

**TIP: Paper Guide** Another method to get a quick angle guide is to fold a small piece of paper in half on the diagonal, then in half again along the same edge. The paper edge goes from 90° to 45° to a self standing 22.5° guide. (Good for bench stones / knives)

**TIP: Marker Trick** Take a marker and color the bevel. Next do your best to match the bevel and take a stroke on the blade. If the mark on the bevel is still visible, adjust the angle until you remove the rest of the marker. (Good for all type sharpening stones / all bevels)

## Sharpening Knives

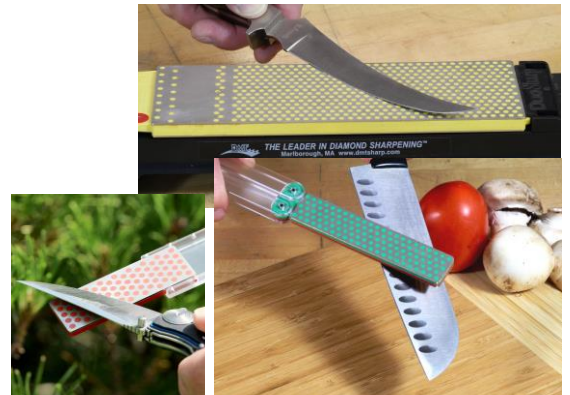
- For hand-held and bench stone sharpeners

When sharpening a pocket knife, it is usually suggested that you use a 20-25° angle, although it is not so much important that you get the exact angle as it is that you keep the angle constant.

A fine stone is usually sufficient for sharpening the blade of a knife; the coarse stone can be used before fine if the blade has dulled. Knives can be sharpened on virtually all DMT® products. Always sharpen into the edge as pictured below; this will prevent a burr from forming on the other side. With the blade at a 20° angle, slide it across the sharpening stone from heel to toe of the blade. This will ensure that you are sharpening a constant edge on the blade. Be sure not to roll the blade because this will change the angle of the bevel. Also make sure you take the same number of strokes per side to ensure the bevels are the same. Do 5 -6 strokes on a side and then alternate to the other side with 5 -6 strokes.

### Quick Review

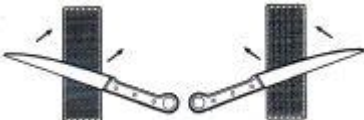
- ◆ Use a diamond hand-held stone or bench stone.
- ◆ Approximate 20° angle keeping it constant.
- ◆ Use one of the tips to assist in matching the bevel.
- ◆ Start with fine unless knife is dull, the start with coarse.
- ◆ Sharpen heel to toe (don't roll knife).
- ◆ Use same amount of strokes per side.



- Establish same angle as knife bevel with whetstone. 20° for most knives. Sharpen into the edge.



- Stroke away from the body, alternating on each side of the knife with equal number of strokes on each side.



- TIP: Lighter strokes will produce a finer edge. Never test edge on body. Use water only for lubrication.

Black=Extra-Coarse (60 micron 220 mesh)  
Red=Fine (25 micron/600 mesh)

Blue=Coarse (45 micron/325 mesh)  
Green=Extra-Fine (9 micron /1200 mesh)

## Sharpening Scissors/Shears

- For hand-held sharpeners

When sharpening a pair of scissors or shears, it is helpful to understand that the bevel angle is much steeper than the average knife. The bevel angle is approximately 75° to 80°, and is easily sharpened with a couple of helpful tips.

### Level the Bevel

Always hold the handle of the scissor blade you are about to sharpen in order to maintain control of the blade. Hold the handle of the scissor in your left hand. Rest the tip of the back edge on the edge of a table at a comfortable height. Working directly underneath a bright light, angle the handle of the scissor clockwise (10° to 15°) until the bevel reflects the overhead light back to you brightly. Rotate back and forth slightly until you have the angle that results in the brightest reflection; at this point the bevel is level (parallel) to the tabletop.

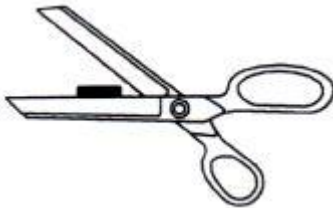
Hold the Diafold parallel to the tabletop and stroke into and across the scissor bevel from the hinge joint to the tip of the scissor blade (using the magic marker trick will ensure you have sharpened the entire bevel surface). Usually 5 – 6 strokes will refresh a dulled edge and you may find it useful to progress from the coarse to fine grits especially for scissors intended for fine work. Rotate the scissors clockwise 180° and grasping the other handle, repeat the process for the other scissor blade.

### Quick Review

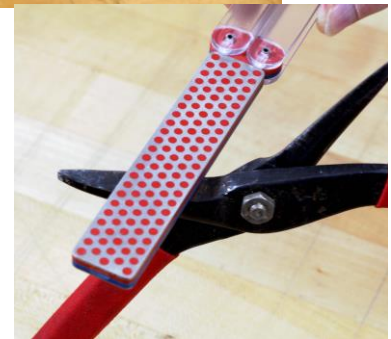
- ◆ Hold the handle of the blade you are sharpening.
- ◆ Level the bevel.
- ◆ Match bevel.
- ◆ Long fluid strokes into the cutting edge.
- ◆ Five to six strokes on each blade.



- Align sharpener flush with the bright bevel.



- Stroke smoothly towards the outside of the scissors. Repeat on the other half.



- TIP: Small burr on each sliding surface can be wiped off with a single, light stroke on the flat back of the scissor.

## Sharpening Chisels / Plane Irons

- For bench stone sharpeners

### Flatten the Back (if this is a new or damaged chisel or plane iron)

When sharpening a new chisel you are going to need to flatten the back— only the last ½” or so— before you sharpen the bevel. This is done by lubricating an extra-coarse Diamond Whetstone™ or DuoSharp® Bench Stone with water and placing the chisel back down on the sharpener. Push downward on the back and move the chisel from one end of the diamond stone to the other the long way with long fluid strokes. Once a uniform scratch pattern has been established using the extra-coarse stone, step down through the grits to extra fine. Use the same procedure as with the extra-coarse stone. (Optional: After all the diamond grits have been used you may step down into the Dia-Paste™, a diamond compound for polishing. Spread this paste on a substrate such as close-grained hard wood, MDF, cast iron, or glass and repeat the same procedure over the paste to achieve a true polished finish. Be certain to carefully clean all traces of paste off the chisel before stepping to finer micron size. This will give the back a mirror, polished finish.) After the back is flattened (polished) the bevel can be sharpened.

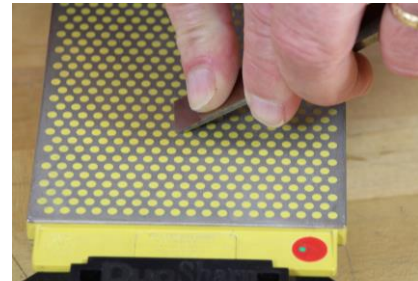
### Sharpen the Bevel

Cradle the chisel or plane iron as shown below. Holding the chisel and iron in this manner simplifies keeping the angle constant. Make long fluid strokes back and forth pushing the face of the blade downward onto the stone. Use a fine diamond stone unless the blade is very dull or chipped, in which case start with a coarse diamond stone.

After sharpening the bevel, you may want to put a micro bevel on the end of the blade. This is done by holding the chisel in the same manner and matching the bevel to an extra-fine diamond stone. Now lift the chisel up a small amount to an angle about 1 or 2 degrees greater than the bevel. Only a few strokes and you have a sharp micro bevel. Finally, lay the back down flat again and give two quick strokes to take the wire burr off the back side.

### Quick Review

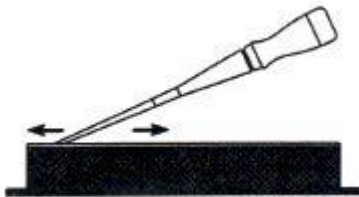
- ◆ Flatten back of new or damaged chisel / plane iron.
- ◆ Use a DuoSharp® Bench Stone or DMT Diamond Whetstone™.
- ◆ Thumb and fingers are easy makeshift jig.
- ◆ Match bevel.
- ◆ Long fluid strokes back and forth.
- ◆ Micro bevel (done with only a few strokes at slightly greater angle).
- ◆ Two final strokes on the back to take off burr.



- On new or damaged chisels, flatten the back first, using extra-coarse to finer grits. This step is not required for routine sharpening.



- Cradle tools in your fingers or use a jig to keep bevel flat on stone. Use water only for lubrication.



- TIP:  
Finish with one light, flat stroke on back of chisel using fine or extra-fine grit to remove wire edge burr.

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