KNIFE SHARPENING BASICS

Sharpening Japanese Knives

The knives in the Korin collection have been chosen for their exceptional quality, outstanding sharpness and long-lasting edges. Both traditional-style and Western-style Japanese knives must be hand-sharpened on water stones to become the knives they were intended to be. As you train your knife against the stone, you begin to personalize the edge to your specific needs and sharpening style. With practice and good technique your knife should become sharper than it was in its original condition.

Japanese chefs consider sharpening a crucial step in preparing fine cuisine. Many sushi chefs sharpen their precious knives at the end of each workday. Ideally, you should sharpen while your knife is still relatively sharp. If you do this, the knife will only need five or ten minutes against the stone to sharpen. If you put off sharpening until the knife is truly dull, then you will need to spend significantly more time to sharpen. You should be prepared to sharpen Western-style knives every two to three days during average professional use. If you are inexperienced with Japanese knives and water stones, try to choose a knife that is easier for you to sharpen.

Basic Knife Sharpening Steps

The basics of sharpening on a water stone are the same for traditional Japanese knives and Western-style knives. See pages 76 and 77 for style-specific instruction and tips. Illustrations and instruction represent right-handed knife sharpening.

Step One – Prepare the stones

A level stone surface is necessary to obtain an edge and to avoid damaging your blade edge. Synthetic stones and stone fixers should be soaked in water for ten minutes before sharpening, or until bubbles stop. Use the stone fixer on the stone's edges first to bevel the corners of the stone. Then start to 'sand off' the top of the stone with a back-and-forth motion, removing enough material to flatten the surface of the stone. Ceramic stones and diamond stones do not get soaked prior to sharpening. Dip ceramic and diamond stones briefly in water before sharpening.

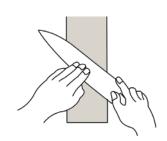
Place the stone on a damp towel or base to stabilize while sharpening.

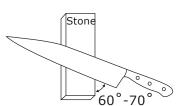
Step Two - Establish position of knife to stone and determine edge sharpening angle

Hold the knife as pictured, with your index finger resting on the spine of the knife, your thumb on the flat part of the blade, and your three remaining fingers grasping the handle. Do not try to sharpen by gripping the handle only in a cutting grip. Use a more stable grip.

Keep a firm grip on the knife, with shoulders square to the stone and upper body relaxed. With your arm and elbow in a comfortable position, place the face of the knife on the stone and note the angle of knife to stone for sharpening. A 60-70° angle of knife to stone is common. A wider or narrower angle is acceptable, but keeping this angle of knife to stone consistent every time you sharpen is critical to sharpening success.

Find the angle of the blade edge at which you will sharpen. The angle at which you hold the edge to the stone will determine the edge shape and is the key to good sharpening technique. The specific area you will sharpen on traditional Japanese knives and Western-style knives is explained on pages 76 and 77. When you have determined the sharpening angle you will be ready to start sharpening!



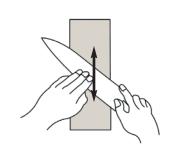


KNIFE SHARPENING BASICS

Step Three - Sharpen

Place two or three fingers of your left hand on the blade close to the cutting edge and press the edge of the blade to the stone. You will be sharpening the area directly under your fingers, and stable pressure is needed to achieve even sharpening.

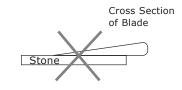
Pressing the edge to the stone with your fingers, push the knife forward and back along the stone. For controlled sharpening, exert pressure as you move forward and release pressure on the down stroke. Move the knife to position the next section of blade under your fingers and repeat this procedure to sharpen a bit of the edge at a time. Remember not to change the angle of the blade edge to the stone and keep a consistent angle of knife to stone with a straight back and forth motion. As you sharpen you will feel a slight, even burr form along the entire edge.



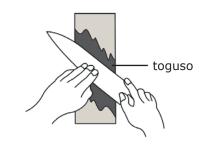
Once you have a burr, reverse the blade. Exert more pressure on the upward stroke to remove the burr (for traditional-style knives) or establish a double-sided edge. See pages 76 and 77 for specifics on this important step.

Basic Sharpening Tips

Never sharpen the blade flat against the stone. This will scratch the surface of the knife and will result in a very weak edge. This is a common cause of chipping and breakage with Japanese knives.



Be sure to keep the stone wet with water during sharpening. To wet the stone during sharpening, sprinkle a few drops of water from your hand onto the stone, but do not wash away the slurry or grainy water (toguso) that forms on the stone while sharpening! This grainy mixture is an important aid in the sharpening process.



As you sharpen, you are making small scratches on the surface of the metal with the medium stones and then smoothing out those scratches with the finer grit finishing stones to create a polished, sharp edge. It is critical to keep a consistent angle of the knife to the stone the entire time you are sharpening. This will ensure that you are always working the knife along the stone following the same lines and in the same direction, and when you switch stone grits, you will be polishing out the scratches you made with the more abrasive sharpening stones in the previous stage.

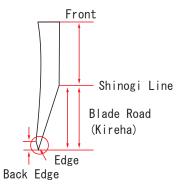
SHARPENING TRADITIONAL JAPANESE KNIVES

Traditional Japanese knives owe their precision effectiveness to an ingenious single-edged design. The diagram below shows the tapered edge on the front of the knife called the Blade Road or kireha, bordered by the shinogi line. The shinogi line is where the cutting area starts to taper down to the edge and it plays an important role in the way the blade of the knife moves through food. Do not erase or alter the shinogi line when sharpening! On the back of yanagi, deba, and usuba knives there is a gentle curve called urasuki. The urasuki feature allows food to cleanly separate after it is cut and also acts as a suspension for the knife, absorbing pressure and protecting against chipping.

Sharpening Traditional Knives

When sharpening a traditional Japanese knife it is important to follow the shinogi line, but note that you are only sharpening the very edge, not the entire blade road. This is very important!

Place your fingers very close to the blade edge and press firmly to ensure even contact with the stone. Although Western-style knives can be sharpened for several strokes in one place at a time on the edge, traditional Japanese knives should be sharpened for one or two strokes and then the next section of edge should be positioned under your fingers for sharpening. In this way, you must move continually down the edge when sharpening traditional Japanese knives, especially the yanagi. The yanagi's thin, delicate edge will become weak if you sharpen for too many strokes in one spot.



Follow good basic sharpening techniques to sharpen the entire edge until there is a slight and even burr on the reverse side.

Uraoshi- Removing the ridge or burr that forms on the edge when sharpening Japanese knives is called uraoshi. Turn the knife over to the back and apply pressure to the edge only on the upstroke. This is not sharpening! Keep the blade angle flat to the stone and keep fingers between the edge and the shinogi. Be careful! The burr on Japanese knives is also sharp!

Sharpen the kissaki – The kissaki is the tip of the blade edge, curving to the point. Sharpen this area carefully to preserve the original curve of the edge. Sharpen the point more than the rest of the blade edge, adjusting the angle to allow the entire tip to touch the stone. Press the tip with your fingers and slightly lift your right elbow to apply more pressure to the tip.

The traditional Japanese knives in the Korin collection can be maintained with a medium grit (#1000) sharpening stone (naka toishi) and a fine grit (#8000) finishing stone (shiage toishi); however, for the best possible sharpening results, a more gradual sharpening with multiple grit stones is highly recommended. Experienced sharpeners are encouraged to try the following sharpening stone series:

- For all traditional Japanese Knives: #400 #1000 #3000 -(#6000*) #8000 (*#6000 is recommended for stain-resistant Japanese knives)
- For deba knives: #220 #400 #1000 #3000 #8000

Advanced Sharpening Tip

Japanese knives should be sharpened at the shinogi for optimum performance. It is vital to preserve the original shinogi line without breaking it! **This is an advanced technique. Sharpening instruction is advised.** Inexperienced sharpeners can send their knives to Korin's knife master for this sharpening service.

Sharpen the shinogi – Flip the blade over to the front and sharpen the shinogi line by moving your fingers away from the edge and pressing just below the middle of the blade. You will be sharpening the area of the shinogi just inside the blade road, creating a small rise in the middle of the blade road. This hill between the shinogi and the edge resembles a clam shell and when shinogi sharpening is successfully performed, this 'hamaguriba' (clam-shaped blade) makes possible the clean cutting of sashimi and other ingredients that traditional Japanese knives require.

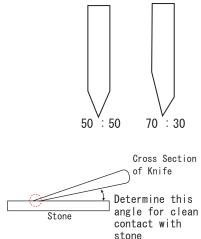
SHARPENING WESTERN-STYLE KNIVES

Japanese Western-style knives are sharp, task-specific precision tools that can be used in all kitchens. Most of the Western-style knives in the Korin collection come to us from the manufacturers in Japan in 'honbazuke' condition, meaning 'with a true edge'. The honbazuke label means that the edges on these knives were individually finished by craftsmen in the final factory production stage. The edge on a honbazuke knife has already been established by an expert and it is recommended to re-sharpen these knives to their original edge shape.

Sharpening Western-Style Knives

When sharpening Western-style knives like the gyutou, first determine the angles of the blade edge of your knife. Look at the blade road on the front and back of your knife. The area you are sharpening is the entire blade road from the shinogi to the edge. Although the 50:50, or even V-shaped blade is common in Western-style knives, many Japanese Western-style knives have a broader, more substantial edge on the face than on the back, often in a 70:30 ratio of angles.

To determine the angles of your blade: Place the face of the knife flat against the stone and your fingers lightly half on the stone and half on the blade edge. Raise the spine of the knife slowly until you feel the spot where the bevel makes clean contact with the stone. Beginners can judge the sharpening angles on most Western-style knives by placing two pennies under the blade when sharpening the front of the knife and three pennies under the blade for the backside.



Follow good basic sharpening technique to sharpen the entire edge until you feel a slight ridge form along the edge. Turn the knife over, establish the angle of the back edge and sharpen the entire edge with proportionately less strokes on the back. This is important! If you sharpened for seven strokes along the front edge of the knife, only sharpen with three strokes on the back.

Except for symmetrical 50:50 blades, remember to sharpen the back edge less than the front edge on your Western-style knife. Some styles, such as the slicer, honesuki and the Wa-type knives have minimal edges on the back, with ratios of up to 90:10.

Sharpen the kissaki – The kissaki is the tip of the blade edge, curving to the point. It is important to follow the curve of the kissaki when sharpening. Adjust the angle of the blade edge to the stone by lifting your right elbow so that only the kissaki makes contact with the stone. Make sure that the rest of the edge between the kissaki and the heel does not touch the stone. Sharpen in a slight upward arc with firm pressure against the stone.

The Western-style knives in the Korin collection can be maintained with a medium grit (#1000) sharpening stone (naka toishi) and a fine grit (#6000) finishing stone (shiage toishi); however, for the best possible sharpening results, a more gradual sharpening with multiple grit stones is highly recommended. Experienced sharpeners are encouraged to try the following sharpening stone series for Western-style knives:

#400* - #1000 - #3000 - #6000 (*#220 can be used in place of #400 for skilled sharpeners)

Sharpening Tips

Using the stone – Beginners are encouraged to use the entire stone when sharpening, making long strokes. Experienced sharpeners can visually divide the stone into quadrants and concentrate sharpening in one quadrant per sharpening session. By turning the stone 180° and switching the quadrant for successive sharpenings, your stone will wear more evenly and require less leveling with the fixer.

It is important not to break the shinogi line when sharpening. A good tip for beginners is to pick up the blade every two or three strokes to check the blade road and see your sharpening progress.

For more details on sharpening traditional Japanese knives and Western-style Japanese knives:

- Order 'The Chef's Edge' knife sharpening instruction DVD. See page 78.
- Arrange a sharpening lesson with Knife Master Chiharu Sugai. See page 79.
- Email your questions to custserv@korin.com. Please allow time for Korin staff to personally respond to your inquiry!