

How to Set the Hoops on Japanese Chisels

Bench and mortise chisels made in the Japanese tradition are hooped at the end of the handle. This is to keep the handle from splitting when it is hit with a mallet, and allows for a more slender wood handle that is very comfortable to hold. Wood moves with the weather, so it is traditional to ship the chisel with the hoops barely fitted to the handle so that the user can properly set the hoop on the handle. Fear not! The actual time it takes to set a hoop on a handle is only a few minutes. One of the best things about setting the hoop on a new chisel is that you get a chance to really feel the fit of the handle in your hand and become acquainted with the tool.

Warning: Hoops and handles are not interchangeable. The hoops and handle sizes may vary depending on the chisel size, so take care not to mix up which hoop goes with which handle. Some chisels arrive with their hoops tightly jammed onto the handle. This is really a temporary measure and the hoop will probably loosen up in use. Whether you decide to set the hoops correctly right away or wait until they loosen is a matter of personal preference, but here is the process.



1. The tools you need to set the hoops are very simple: The chisel and its hoop, a steel hammer (*a hammer or similar tool with a squared-off end, like the Japanese hammer shown here, will work best; although a regular hammer can work*), a rat-tail file, and (optional) a cat's paw. I also used another chisel for trimming the handle and a spring clamp for holding the chisel in a glass of water (not shown).



2. Using a rat-tail file, file any roughness or ridges off the inside of the hoop. This step is very important.



3. Fit the hoop to the handle. It should easily seat about a $1/32'' - 1/16''$ below the top of the handle. Note that the bevel edge on the inside of the hoop should be facing downwards, towards the cutting edge. If it isn't, either file the hoop a little wider or slightly trim the handle all around with a knife. If, when the hoop was originally forced on the handle by the maker, a ridge in the wood was formed limiting how low the hoop will go, you may want to carefully trim down this ridge a little with a knife. Just slightly, to even it out a little.



4. Using a steel hammer, hammer the handle all around the area where the hoop will go. The purpose is to compress the fibers of the handle a small amount so the hoop slides down further. Use discretion – the handle will compress very slightly but not enough for you to see it easily.



5. With the hoop sitting correctly, seat the hoop permanently by gently hammering the hoop down directly with the hammer or a cat's paw.
Warning: do not hold the handle in a vise, since hammering a clamped handle will loosen the blade. Hammer the hoop with the blade resting cross-grain on a scrap of wood.



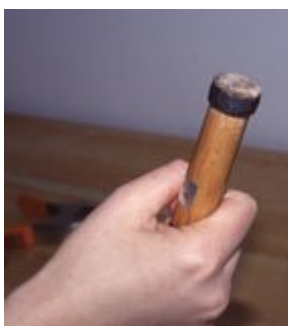
5A: You can also seat the hoop using a cat's paw to hammer down the hoop evenly. It's a little faster than doing it just with a hammer and worth the investment for a large set of chisels.



6. Soak the top quarter inch of the handle in a partially filled glass of water (about 20 minutes seems right for oak [used by the maker of McClain's nomi]; denser woods such as boxwood should soak longer, for around 30-40 minutes). This is to make the compressed wood of the handle swell back to its original size and to soften the wood for step 7. Be careful not to get the rest of the handle wet, since this will damage the finish on the handles. On this chisel I put some masking tape on the hoop and part of the handle to make sure I didn't get the handle wet. I used a spring clamp to keep the chisel supported vertically in the water.

On my set of chisels, I ended up deciding to refinish the handles completely. I sanded off the entire handle finish before setting the hoops and applied a Danish oil finish after I was all done. (Since these chisels are not used outdoors, you can remove the finish and allow the oils from your hand to create a natural finish over time.)

7. Holding the chisel with one hand, "mushroom" the top of the chisel with a steel hammer by hitting the top of the handle all around the edge. You can't see it in the picture, but I'm holding the chisel in one hand and bracing my hand against my chest. In this case the edge of the chisel is unsupported (as opposed to when I was forcing down the hoop). I'm striking glancing blows all around the edge of the handle, and slowly the end grain of the handle mushrooms over. You can see in the next two pictures what the handle looks like when I'm all done.



Total elapsed time: about five minutes including the filing of the hoop (the most annoying part of the process) and 20 minutes or so for soaking.

8. Dry the chisel and oil the blade to prevent rust.

9. Let the handle dry completely.

10. If you plan to refinish the chisel, apply your favorite finish after the handle is completely dry.

Conclusion: While setting the hoops may seem like a lot of work, you only need to do it once per chisel per lifetime. Once you get in practice, you will set the hoops with very little effort. In time and with use and changes of weather the hoops may loosen up again. That's okay. The mushrooming is permanent and will prevent the hoops from coming off.

(Excerpted from The Museum of Woodworking Tools, www.toolsforwood.com. © 2003 The Museum of Woodworking Tools. Material in italics written by McClain's.)



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