Spokeshave Assembly Instructions

View the Video and FAQ at HOCKTOOLS.com

1. Begin by dry-assembling the body, blade, brass wear strip, and thumbscrews using the photo on the box to familiarize yourself with the kit. Lay out your intended shape with a pencil. There are many possibilities, but those who want some guidance may wish to look at traditional wooden spokeshaves for inspiration. If you like, you can disassemble the spokeshave and make your rough cuts now. If you prefer to keep your options open you can wait until the later. Don’t cut into the front center portion of the body yet or you will have difficulty clamping the wear strip during glue-up. It is also important to maintain full thickness where the thumbscrews pass through the body.

2. Prepare the brass wear strip for gluing by lightly sanding one side. After sanding, thoroughly clean the brass and the rabbet at the front of your spokeshave using acetone or mineral spirits. Be sure to wash your hands after handling brass parts as brass often contains a small amount of lead.

3. Use a clamping caul to distribute pressure evenly during glue-up. A piece of 3/8” wide hardwood with a straight edge will do a good job. Wax the caul liberally to prevent it from becoming glued to your spokeshave.

4. Mix a good-quality epoxy according to the manufacturer’s instructions and spread it in the rabbet. Press the sanded side of the brass wear strip into the epoxy and clamp it using the caul you prepared. Use only as much clamping force as necessary. Excessive pressure will weaken an epoxy joint, not strengthen it. Be sure the wear strip is seated properly and that the caul bears only on the brass, not on the wood. Clean up the squeeze-out using denatured alcohol and set your spokeshave aside for the epoxy manufacturer’s recommended cure time.

5. Take some time now to sharpen the blade. It’s a little different than sharpening a plane iron, but the principles are the same. (See www.hocktools.com for more about sharpening.) The good news is that unlike other wooden spokeshaves, this blade doesn’t have any posts attached to the blade, so there’s nothing to get in the way when sharpening. Because the back edge of the blade will rub the work surface during use, it is a good idea to break this edge lightly with sandpaper.

6. Once the epoxy has fully cured, you can lightly sand the bottom of the spokeshave to level things out. Use sticky-backed sandpaper on a flat surface for the best results. Perfectly flat is good, but spokeshaves are used on curved surfaces, so close is almost always close enough. Don’t remove too much, and remember that wood will be sanded away much faster than brass.

7. Now you can finish shaping your spokeshave. Don’t be intimidated by the brass wear strip. Brass cuts easily on a woodworking bandsaw, and it is also easy to work using files and sandpaper. File or sand away the small lip of brass overhanging the front edge. Taking care to file toward the wood to avoid stressing the epoxy joint.

8. When your shaping is done, re-install the blade and thumbscrews. Use the supplied hex key to insert the two set screws from the top of the spokeshave. They will cut their own threads as you drive them into their holes. By raising and lowering the setscrews, you can control the depth of cut. Always loosen the thumbscrews before adjusting the depth of cut, and then lightly snug them up afterward. Once the depth is set, you can remove the blade for sharpening or to clear shavings without having to re-set the depth when you replace it.

Congratulations!

Plane design, production and instructions by
Isaac Fisher
Pachyderm Furniture Works
Fort Bragg, California 95437
Isaac@pachydermfurniture.com

* Brass contains chemicals know to the state of California to cause cancer, birth defects and other bad things. Don’t eat the hardware and wash you hands after handling any brass items.
Spokeshave FAQ

What is a spokeshave used for?

As its name implies, the spokeshave was once used to shave the spokes of wooden wheels. Modern-day woodworkers use spokeshaves for many different types of curved work ranging from chair-making to boat-building and covering everything in between. These versatile tools can be used on both concave and convex curves.

What's so special about wooden spokeshaves?

The orientation of the blade in a wooden spokeshave allows it to cut the wood at a low angle of 27° (much lower than typical metal-bodied spokeshaves and even lower than a low-angle block plane). At the same time, the blade has a 27° bevel, which gives it a more durable edge than other low-angle tools. The combination of low cutting angle and durable edge make the wooden spokeshave an ideal tool for working end grain or difficult grain.

What's the best shape for a wooden spokeshave?

The most important thing when shaping your spokeshave is to make it comfortable to hold in your hands during use (see below). Traditional wooden spokeshaves were shaped in many ways, but most had a body section in the middle and distinctly thinner handle sections at both ends. You may find it helpful to do a trial run on a scrap piece of wood milled to the same dimensions as your spokeshave kit.

What's the best way to hold my spokeshave?

Spokeshaves can be either pushed or pulled, but it is usually easiest and most comfortable to use a fluid pulling motion. For delicate cuts where control is critical, hold the tool near the center with your hands close together and your fingers wrapped around the back. You can get more power for deeper cuts by moving your hands outward on the handles, though this may make the tool more difficult to control.

How do I adjust my spokeshave's depth of cut?

First, loosen the two brass thumbscrews holding the blade. Next, use the supplied 3/32" hex key to adjust the set screws on both sides. Turning the setscrews clockwise gives a deeper cut; counterclockwise gives a lighter cut. Finally, tighten the thumbscrews back up and your spokeshave will be ready to use.

My spokeshave is making a deeper cut in the center than at the sides. What's happening?

Remember, you only need to tighten the thumbscrews until they are snug. Over-tightening will cause the blade to bow, stressing the tool and resulting in a deeper cut in the center. Try loosening one or both thumbscrews slightly.

Why is my spokeshave chattering/skipping/digging/doing nothing when I try to make a cut?

Have you sharpened lately? These are all classic signs of a dull blade. If the blade is sharp, try readjusting for a lighter cut.

I'm getting a nice cutting action, but my spokeshave is leaving scratches on the surface. Why is this happening?

As you move the spokeshave along the cut, the back edge of the blade is rubbing on the surface that the front edge has just cut. If the back edge is ragged or uneven it will scratch the wood. This is especially true when you are working a concave surface. You can remedy this situation by lightly rounding the back edge of the blade with sandpaper or a sharpening stone.

I still can't get it to work. Help!!!

Take heart. Even the most experienced woodworkers often struggle the first time they encounter a wooden spokeshave. Learning how to adjust and use a wooden spokeshave can be frustrating at first, but with patience, practice, and a sharp blade it will soon be second nature to you.

Good luck, and be happy in your work!