

Jeweler's Saw Instructions

Congratulations on your new saw frame! This saw frame, 100% made in the USA by Potter USA, is one of the finest quality saws on the market today. Its rigid, stainless steel frame is well-balanced and is great for detailed sawing and piercing. The frame is a little heavier than a standard, adjustable German-style saw frame, which helps with momentum when sawing.

- Throat depth: 3 in.
- (previous versions had a 2-1/2 in. throat; the instructions are the same for both)
- Handle: Screw-on for easy shipping and storage;
- machined aluminum; powder-coated
- Acceptable blades: Standard jeweler's saw blade (5-1/8 in. long). The frame is not adjustable and cannot hold shorter or broken saw blades.
- Available in numerous colors (handle).



STOP Read all instructions before assembling or using the saw frame

General Safety: DOs and DO NOTs

... wear eye protection when sawing. Blades can go flying when they break, and you don't want them to land anywhere near your eyes.

- ... keep your fingers out of the path of the saw.
- ... sit at a bench that's at upper-chest level to prevent slouching and neck/back/wrist pain.
- ... take frequent breaks and stretch your hands and arms.
- ... use magnification, if needed, to see your work instead of hunching over your work.
- ... only use replacement parts from Potter USA.

DO NOT ...

... let children or other adults near the saw blades unless they have been instructed on how to use it safely.

... saw when you're tired or under the influence of alcohol or drugs.



Parts of the saw frame

- Screw-on handle (a)
- Frame (b)
- Wingnuts, top and bottom (c)
- Brass knurled nut (d)

How to Assemble the Saw

We ship the saw frame disassembled so that we can send it in a flat-rate box, saving you shipping costs. To assemble the frame, simply screw the handle onto the bottom of the frame, and tighten it. And, that's it! If it's tightened enough, the handle will not come free from the frame with regular use. If you need to travel with your frame for a class or workshop, simply unscrew the handle, pack your frame in a small box, and reassemble it when you get to your final location. It takes up less room than standard saw frames.



How to Insert a Saw Blade

1. Choose a jeweler's saw blade. Choose a blade that has three or more teeth in contact with the metal at all times; this will vary depending on the gauge of your metal. You can always use smaller blades to cut thicker material, but if you use a larger blade with thinner metal, the blade will catch and be more difficult to control.

2. Determine the correct orientation of the blade. Because the blade cuts on the down stroke, the teeth of the blade need to be facing down toward the handle of the saw frame, and out, away from the frame. Think of it like petting a cat. When you stroke a cat from head to tail, there's no resistance; when you reverse the stroke from tail to head, you suffer the consequences. This is the same as with a saw blade. When you run your finger down a saw blade (lightly!) from the top of the saw frame to the bottom, there should be no resistance. When you run your finger from bottom to top, the blade will catch/cut. There are a couple ways to check this to make sure you insert your blade into the frame correctly:

- Look at the blade. Use magnifiers or a loupe, if necessary. You will see teeny tiny teeth on the blade; notice the angle of the teeth, and make sure they angle downward.
- Check it against your apron or jeans. Gently drag the saw blade against your apron or jeans. The teeth will grab the fabric when the blade is in the correct orientation for cutting. Make sure to insert the blade into the frame with this side of the blade facing down and out.
- Run your finger along the blade. This is the same as the apron/jeans test, but use your finger instead. You don't need to press hard; in fact, a lighter touch is better.



3. Sit down at your jeweler's bench or work table.

You want your bench pin to be at upper chest level to prevent slouching and neck/back/wrist pain.

4. Insert the blade into the top of the saw frame.

The teeth of the blade should face facing down toward the handle and out, away from the frame. Tighten the top wing nut.

NOTE: Make sure to tighten the wingnuts enough that the blade doesn't slip out. You'll know if you didn't tighten them enough if, when you use the saw, the blade releases from either the top or bottom of the frame. This isn't an issue with the saw frame; simply reinsert the blade, and tighten the wingnuts more than you did before.

5. Insert the blade into the bottom of the saw

frame. Rest the top of the saw frame in the Vcutout in your bench pin with the handle pointing toward you. Press forward against the handle end of the frame. While maintaining pressure, insert the free end of the blade into the bottom of the frame and tighten the wing nut.

There are a couple ways to do this. You can use your chest or shoulder to press against the handle, but those techniques cause unnecessary pain. We suggest you hold the handle of the frame in your non-dominant hand, exert pressure on the frame with your hand (using your body weight as leverage), and secure the blade in the bottom of the frame with your dominant hand. You can use the fingers from the hand holding the handle to help guide the saw blade into position.

6. Check the blade tension. To check the tension of the blade, pluck the blade gently with your thumbnail. When the tension is correct, you'll hear a high-pitched "ping." When it's too loose, you'll hear more of a dull, lower "pong" or "twang." If your blade is too loose, release it from the bottom of the frame and reinsert it, exerting more pressure on the frame.

7. Now you're ready to saw! Make sure to lubricate your blade with a wax-based lubricant. Grip the saw frame loosely; take long, smooth strokes; let the blade do the work.

For piercing metal: Repeat the same steps as above, but thread your blade through a hole in your metal sheet before securing it in the bottom of the frame.







F.A.Q.

Will this saw frame make me better at sawing?

Short answer: no. Only loads of practice will make you better at sawing. Our saw frame is designed to be rigid and well-balanced, so at least you'll know that it's not the saw frame that's making sawing difficult. Some styles of saw frames have some flex to them that can make them more difficult to use. Ours has no flex, and will always hold a saw blade at the correct tension.

Why is there a brass nut on the saw?

Kevin Potter: **25** years ago, I got a job as an apprentice goldsmith. I sat next to the owner's father who was a goldsmith. He was old. Real old. He drank coffee and smoked and yelled at me. His last day at the bench he said, 'F--- it. I can't see what the hell I am doing anymore.' He handed me his saw and said, 'You take it. I am done.' I used that saw for 25 years, and it had a brass nut on the front of it. It seemed to serve no purpose. When I made my saw, I put the same brass knurled nut on it. It serves no purpose. It is just there. *****

Contact Us

Potter USA 1934 E. 18th St. Tucson, AZ 85719 PotterUSA.com sales@potterusa.com 520.777.6032