

The Veritas Miniature Bench Vise is a one-third scale version of the Veritas Quick-Release Front Vise.

Making Wooden Jaws

To install the vise onto a workbench sized for modelmaking, you will need to make wooden vise jaws. The rear jaw is intended to fit under the workbench top and should be at least 1 1/4" high, 4 1/2" to 7" wide and at least 3/4" thick. The front jaw should be the same width and thickness as the rear jaw. Its height should be the height of the rear jaw **plus** the thickness of the workbench top, and about 1/32" more so you can plane it flush with the workbench top after installation. You can bevel the edges of the front jaw, if desired.

Lay out the hole locations on the rear jaw according to the dimensions in **Figure 1** (but do not drill the holes at this time). The hole pattern should be centered on the width of the rear jaw.

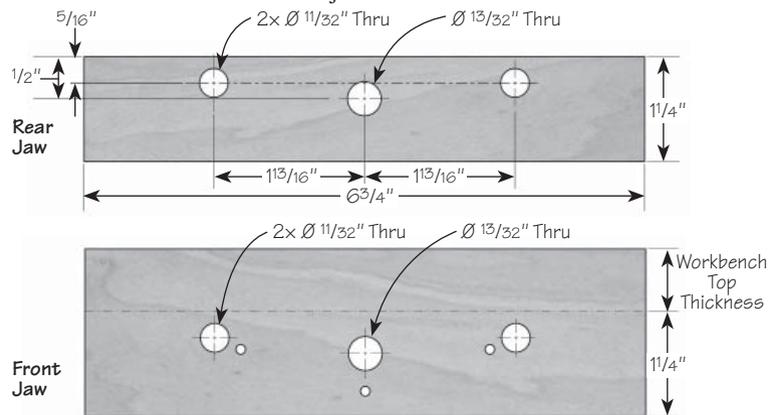


Figure 1: Hole locations for user-made jaws.

Align the bottom edges of the front and rear jaws and clamp them securely together.

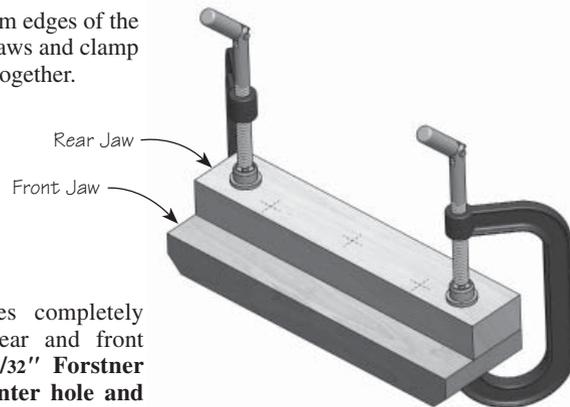


Figure 2: Clamping front and rear jaws together.

Drill the holes completely through the rear and front jaw. Use a 13/32" Forstner bit for the center hole and an 11/32" bit for the two outer holes. Leave the parts clamped together.

Assembling the Vise

Install the front plate on the front of the front jaw, centering the guide rods and threaded main shaft in their respective holes.

Transfer and drill the three front plate mounting holes into the front jaw. For hardwood jaws, the holes should be 7/64" in diameter and 3/8" deep; for softwood jaws, the holes should be 3/32" in diameter and 3/8" deep.

Mount the front plate to the front jaw with three #4 x 5/8" screws.

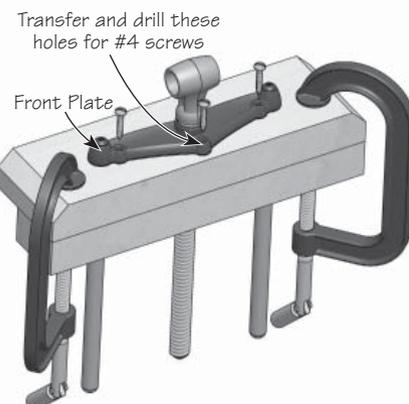


Figure 3: Transferring front plate mounting holes.

Slide the guide rods into the holes in the rear plate, such that the counterbores in the rear plate face away from the rear jaw. Wind the main screw into the rear plate until the rear plate is tight against the rear jaw.

Transfer and drill the four rear plate mounting holes into the rear jaw. Drill these holes to the same diameter and depth as for the front jaw.

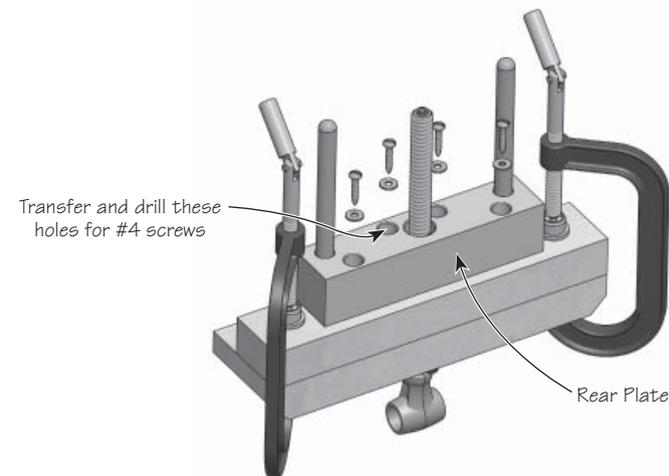


Figure 4: Transferring rear plate mounting holes.

Attach the rear plate to the rear jaw with four #4 x 5/8" wood screws and washers.

Unclamp the jaws and attach the rear jaw to the workbench with your preferred attachment method. Plane the top of the front jaw flush with the workbench top.

Insert the handle into the tee, slide an O-ring onto each end of the handle, then attach the end caps with the #4 x 5/8" wood screws, as shown in **Figure 5**.

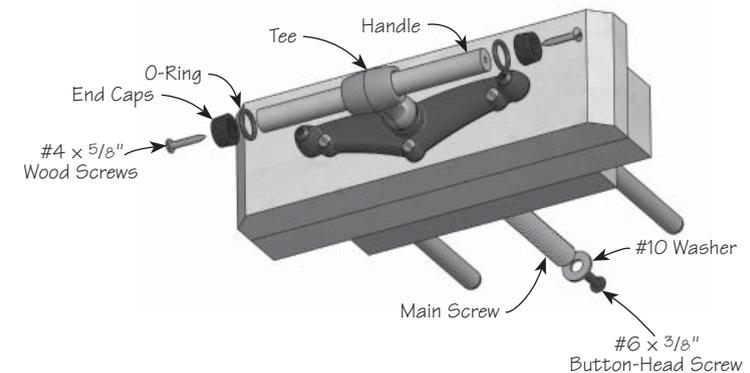


Figure 5: Installing the handle.

Install the #10 washer and #6 x 3/8" button-head screw in the end of the main screw.

Care and Maintenance

Periodically clean the main screw and guide rods to remove dust and debris. After cleaning, apply light oil to the moving parts.