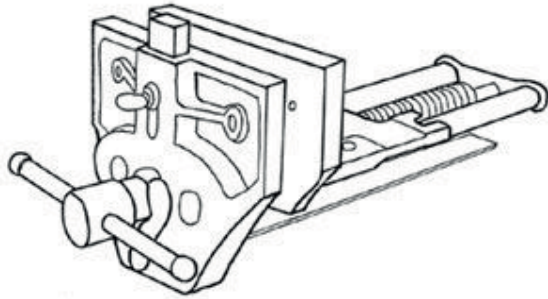




## MOUNTING A QUICK RELEASE VICE



Woodworking vices can be mounted in variety of positions and on many different types of bench. The key to successful installation is careful planning and preparation. Installed properly, your vice will give a lifetime of service.

### VICE POSITION

Assuming you're right handed, typical mounting positions would be either toward the left of the front edge of your bench, or the right end of your bench. Carvers will probably find the end position most useful, as will those who clamp wide, flat work like doors and large panels. For general purpose work the front edge is probably the best option. Check that the vice does not interfere with the bench's legs or aprons. Remember to take into account that the vice will have wooden jaw liners (described later) that stick out past the edge of the vice. Most people prefer to have the ends of the jaw liners flush with corner of the bench top, so take that into consideration when locate your vice.

### MAKING A SPACER BLOCK

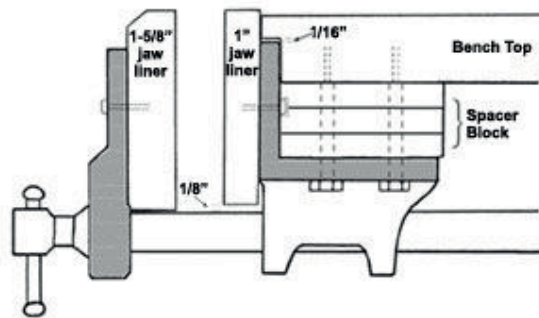
For most bench tops, you'll need to mount a spacer between the vice carriage and the underside of the bench top. You'll want the vice's cast iron jaws set about  $\frac{1}{2}$ " below the top surface of the bench to protect your tools from accidental contact. This  $\frac{1}{2}$ " measurement is not critical. You may have to adjust it in order to make your spacer material fit. Now, measure the distance between the vice carriage and the underside of the bench. This distance is the thickness of your spacer. We recommend building the spacer from MDF or particleboard both of which are crush-resistant.

### MORTISING THE REAR JAW

Once you've determined the thickness of the spacer block, you'll need to mortise the rear jaw into the edge of your bench top. Put the bench top on edge and secure it well. Temporarily clamp the vice with the spacer blocks to the bench top. With a pencil, mark around the rear jaw onto the edge of the bench. Remove the vice. Make the top line about a  $\frac{1}{16}$ " to  $\frac{1}{8}$ " higher so there'll be a gap between the top of the jaw and the mortise. This gap will allow seasonal movement to occur. The depth of the mortise will be the thickness of the rear jaw. On some vice models, you may also have to remove additional material to accommodate any reinforcement webbing cast into the vice's carriage.

## JAW LINERS

Wooden liners expand your vice's holding capacity and prevent your work from being marred by iron jaws. Any hardwood will work as a liner material. The front jaw liner should be at least  $1\frac{5}{8}$ " thick to prevent deflection and so you can drill holes in the top of the liner for bench dogs if you like. The rear jaw liner only needs to be  $\frac{3}{4}$ " - 1" thick because it will be supported by the edge of the bench.



In the end, the jaw liners need to be at least  $\frac{1}{8}$ " above the vice's guide posts to allow for seasonal movement and flush with the top of the bench.

For small vices with up to a 175mm/7" jaw make the liner length 300-350mm/12-14". Medium sized vices with a jaw width of 230mm/9" can handle liners 350-400mm/14-16" in length. Anything longer will cause excessive racking and shorten the life of your vice. The jaw liners need to be at least  $\frac{1}{8}$ " above the vice's guide posts to allow for seasonal movement and flush with the top of the bench. However you choose to attach your jaw liners to your vice, make they can be easily removed if they become damaged or warped. At this point, close the vice and make sure the liners mate up acceptably and shim if necessary. Remember, the jaws of these vices toe in where they meet at the top and should do so after the liners are installed.



## MOUNTING THE VICE

Depending on your bench's worktop thickness, you have two mounting options. If your top is at least 50mm/2" thick, coach (lag) screws work fine. With washers attached, run the lags up from underneath the vice's carriage, through the spacer block and into the underside of the bench top. If your top is less than 50mm/2" thick, install carriage bolts right through the bench top and secure them with nuts and washers under the vice's carriage. Be sure to countersink the heads of the bolts below the surface of the top to prevent tool or work damage. Plug or fill the holes after fitting. that With either mounting technique, you'll want to occasionally check the hardware to be sure it isn't working loose. As for maintenance, lubricate the threads of the main screw with light oil and wax the guide rods occasionally.