

A Buyer's Guide to Hardworking Vises

A quality vise lets you get a grip on wood instead of wrestling materials.

You can spend just a few dollars or several hundred bucks on a vise, but each of those vises is designed to do the same thing: hold a workpiece solidly without marring it. Vises come in many sizes and types,

but the most popular vise for home woodworkers is a bench vise, shown *above*.

This style of vise mounts easily to most workbenches and requires only the addition of hardwood faces to the metal jaws. Figure about an hour's installation work before the vise can go to work for you.

The smooth jaws of a woodworker's vise don't get a firm enough grip on metal workpieces, so if your shop also handles metal-working chores, you'll need another vise. (See "The metal-working vise and a portable vise" on the *facing page*.)

Three "must-have" bench-vise features

1 QUICK-RELEASE JAW To spare you the annoyance of tediously turning (and turning) the vise's handle for large adjustments, a quick-release mechanism allows you to instantly position the jaw anywhere along its range. A *lever release*, shown in **Photo A**, disengages the threads from the screw when you actuate the lever, then reengages them when released.

More convenient is a *gravity release*, which disengages with a mere counter-clockwise half-turn of the screw; turning it clockwise reengages the threads. You'll especially like this style of quick release if you have limited hand strength.

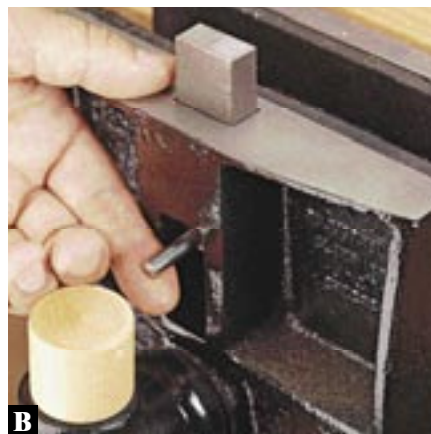
2 POP-UP DOG You'll find this feature on all but the most bare-bones vises. When used with bench dogs this device will help hold a benchtop workpiece in place for sanding or scraping.

A thumbscrew locks most vise dogs in place; precious few, such as the spring-loaded dog on the Jorgensen vise shown in **Photo B**, stay in the up or down position without having to be locked. (Jorgensen vises: adjustableclamp.com or 312/666-0640.) The Wilton vise, shown in **Photo C**, adds an interesting twist to the pop-up dog: The entire jaw rises to provide holding power while minimizing workpiece damage. (Wilton vises: wiltontool.com or 847/851-1000.)

3 TOED-IN JAWS As you can see in **Photo D**, the jaws of a good bench vise come together at the top before they touch at the bottom. This arrangement, called *toe-in*, helps equalize clamping pressure across the jaws. Without toe-in, the jaws apply more pressure at the bottom than at the top.



A Pressing the quick-release lever toward the screw allows the movable jaw to travel freely for speedy positioning while supporting the workpiece with a second hand.



B Jorgensen's pop-up dog rises to the occasion with a simple lift lever. Spring steel in the jaw eliminates the need for a locking thumbscrew.



C Why have a pop-up dog when the entire jaw rises? You could clamp small panels with this Wilton vise because of the wide, workpiece-friendly wooden surface.

Mounting tips

Thinking of buying a bench vise? Here are a few things to consider before you install it:

1 FRONT, BUT NOT CENTER

For front-of-bench mounting, install your vise near one end or the other. This allows you to hold short workpieces for cutting off with a handsaw without fear of cutting into your benchtop. You also can hold a workpiece or assembly that goes around a corner, such as a portion of a frame. Don't forget to allow enough clearance behind the vise for the screw when the jaws are closed.

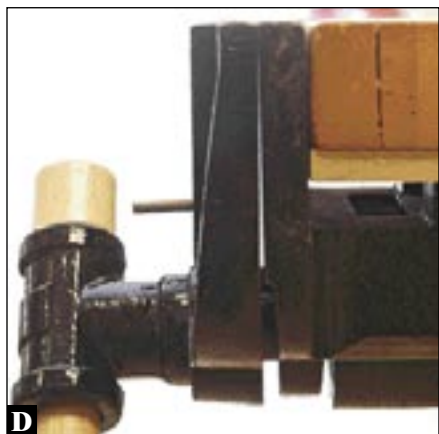
2 RIGHTIES, GO LEFT If you're right-handed, mount the vise near the left end of your bench; left-handed woodworkers should install it on the right. This keeps your "power arm" over the workpiece for hand-tool tasks, such as planing.

3 FLUSH THOSE JAWS The tops of the wooden jaws should be flush with or slightly lower than your benchtop. You may need to shim between the vise and the bottom of the benchtop before installing it.

Yes, you actually can take it with you

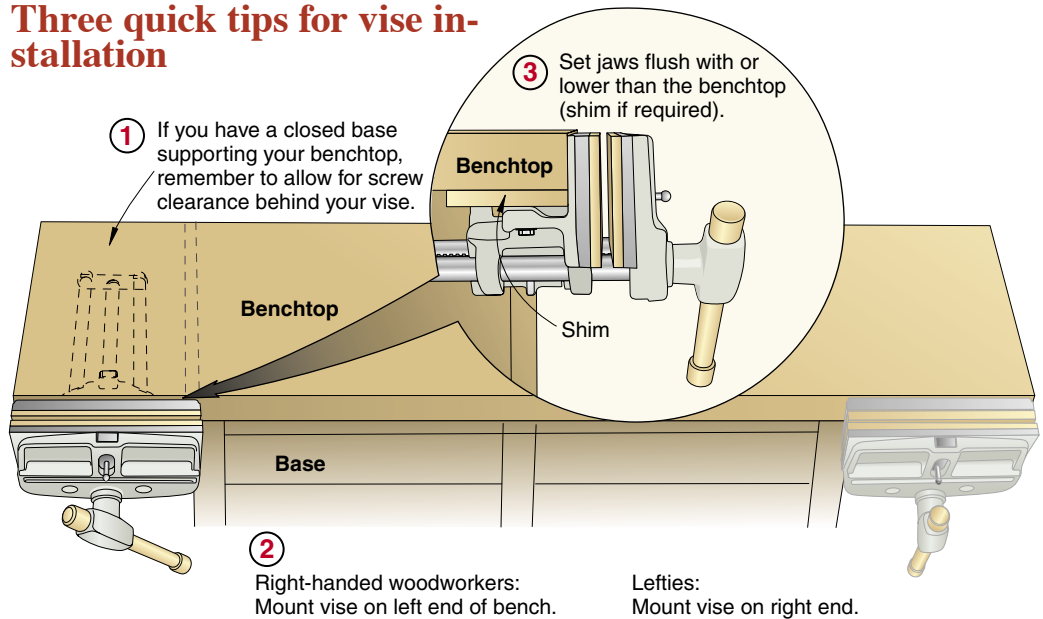
A portable vise (see **Photo E**) is an excellent addition to your bench, and you can pop it into your tool bucket for jobsites inside your home or outdoors.

Holes in the aluminum jaws make it easy to add wood pads. Other choices include cork or leather liners applied with double-faced tape. 🪛



D Toed-in jaws, shown on this Jorgensen vise, meet at the top first, then become parallel as you tighten them. (Wooden jaw faces removed for clarity.)

Three quick tips for vise installation



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A shop with plenty of vises

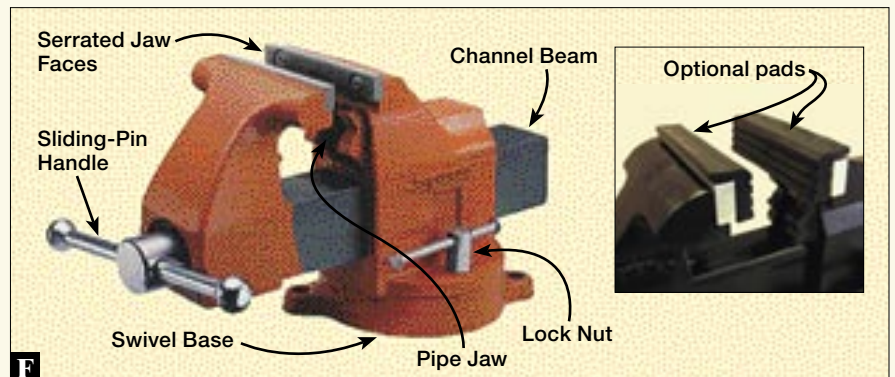
Light-duty vises (**Photo E**) have an exposed screw that opens and closes the jaws. In heavy-duty versions, a rectangular channel beefs up the tool and hides the screw (**Photo F**).

With an affordable price tag, a portable vise (**Photo E**) is quite versatile—you can hold wood vertically or horizontally. Clamp it to one end, and the entire benchtop supports your work—great for long boards. Holes in the jaws let you easily add your own shop-made wood jaw faces.

Metal-working vises (**Photo F**) have serrations on their jaw faces to bite into metal surfaces for a no-slip grip. Pipe jaws are another common feature. Optional smooth jaws (**inset photo below**) install instantly with a magnetic grip to prevent marring finished metal surfaces. Smooth jaws also can adapt the vise to woodworking jobs.



E This light-duty vise from Lee Valley has an exposed screw. Metal filings and sawdust trapped on the screw may inhibit



F These are the main features of a metal-working vise. Optional pads (inset photo) protect finished surfaces.