

Your Veritas® Workbench comes in a knock-down state for shipping purposes. All required hardware is included and holes for assembling it are predrilled. Assembly should take only an hour or so.

The only tools that are needed are:

- Ratchet with 9/16" socket
- #3 Robertson® screwdriver (square drive)
- #2 Phillips screwdriver (cross drive)
- Hammer

Base Assembly

1. Remove the T-nuts from the levelling feet and drive them into the holes in the lower rails with a hammer. Install the levelling feet. (Note that these parts are in the smaller box.)

2. Install one 3/8" flat washer and hex nut flush to one end only of each of the truss rods. Slide the opposite end of the truss rods all the way into each of the four holes in one of the trestles, from the counterbored side. Place the other trestle onto the exposed truss rods (counterbored face out), and install one 3/8" flat washer and hex nut flush with the ends of each of the truss rods.

3. Place one stretcher (both contained in the larger box) onto one pair of truss rods, as shown in **Figure 1**. Using a ratchet fitted with a 9/16" socket, tighten the hex nuts just enough to hold the stretcher in place. Repeat for the other stretcher.

Note: To prevent the truss rods from spinning until tightened, a flat screwdriver can be wedged between the truss rods and the grooves in which they rest. Also, when tightening the nuts, do so alternately from opposite ends to keep the exposed rod ends approximately equal.

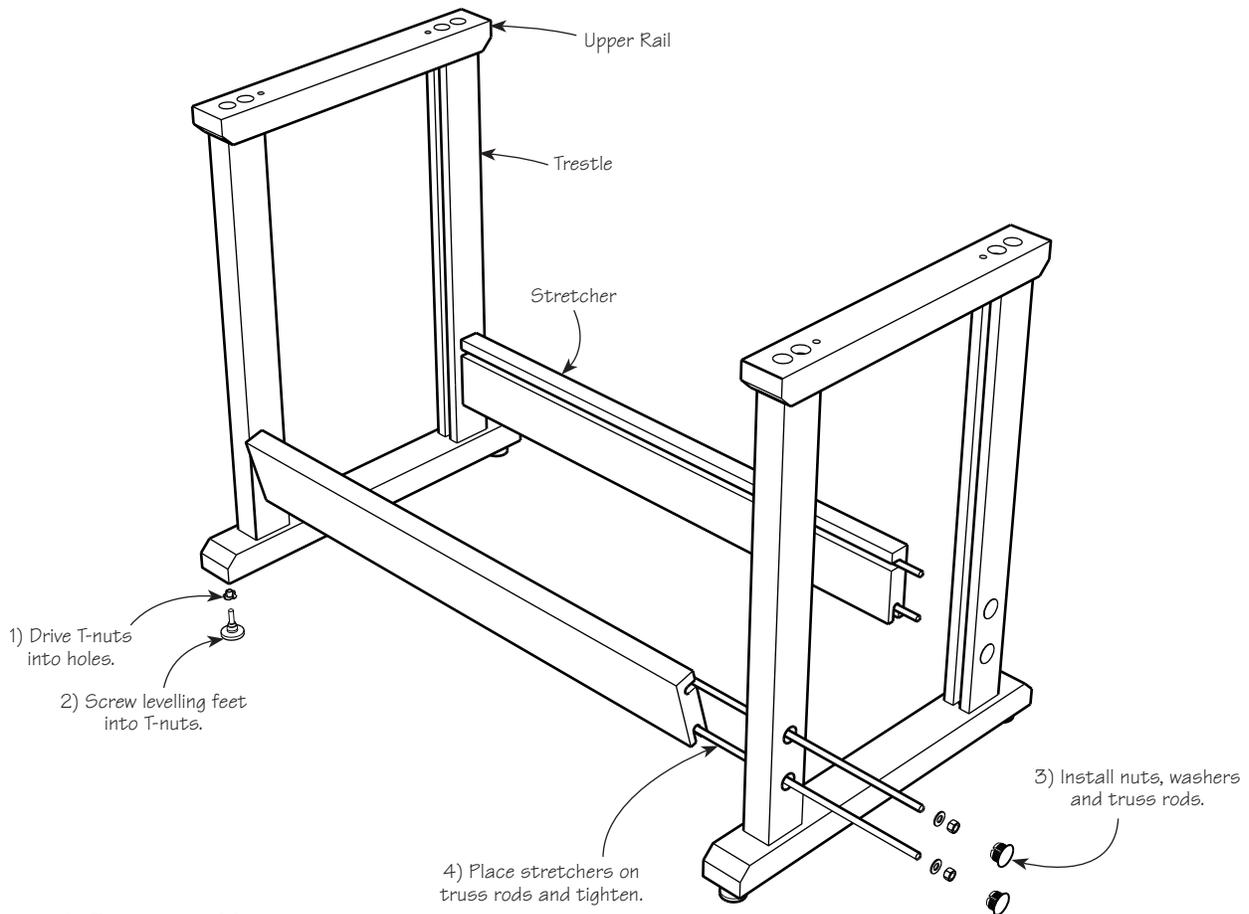


Figure 1: Base assembly.

Top Assembly

4. Near each end of the upper rails on the trestles there is a hole. These are used to fasten the bench top, which has four mating pilot holes, to the base. Place the bench top over the base, aligning the mounting holes. Using a $\frac{9}{16}$ " socket or wrench, secure the top to the base with four $\frac{3}{8}$ " \times 3" lag screws and flat washers. Firmly tighten the eight hex nuts holding the base together, and cover the counterbores with the plastic caps provided. Adjust the levelling feet as required to eliminate any rocking.
5. Slide the front vise into the holes in the front vise jaw and, using a #3 Robertson® screwdriver (square drive), fasten the two together with three #14 \times $1\frac{1}{2}$ " flat-head screws. Wind the front vise jaw assembly into the mating holes located on the left front corner of the bench.
6. Install the Veritas® Twin-Screw Vise following the instructions provided with it.
7. Install the three vise handles onto the vise tees, using a #2 Phillips screwdriver to fasten the end caps.

Note: One of the handles is equipped with a speed knob; this is intended to fit onto either tee of the twin-screw vise for faster opening and closing.

Using your Veritas® Workbench

The Veritas® Workbench, with its Veritas® Twin-Screw Vise, front vise, matrix of mating $\frac{3}{4}$ " bench dog holes and four brass bench dogs, provides an extremely versatile work surface with many clamping possibilities.

The twin-screw vise has some features that may not be obvious. Besides its two clamping screws that eliminate all possibility of racking, a spring-loaded drive/lock pin lets you disengage the connecting chain drive for controlled skewing needed to equalize pressure on slightly out-of-square work. This is activated by simply pulling back on the brass knob located on the right-hand tee. Disengaging the drive/lock pin lets you turn either screw independently of the other to produce the required skew.

Warning: The vise should *never* be skewed more than one full turn in either direction.

To realign the jaws, turn the handle you moved in the opposite direction (back to how it was) and you will hear and see the drive/lock pin "click" back into place. If you try to disengage the pin with the jaws clamped tight, you may find that you have to first slacken the vise screw containing the pin.

The drive/lock pin also acts as a shear pin. If you apply excessive force to either screw, the pin will shear before the vise becomes damaged. A spare pin is enclosed should this ever occur. An exploded view of the twin-screw vise is shown in **Figure 2**.

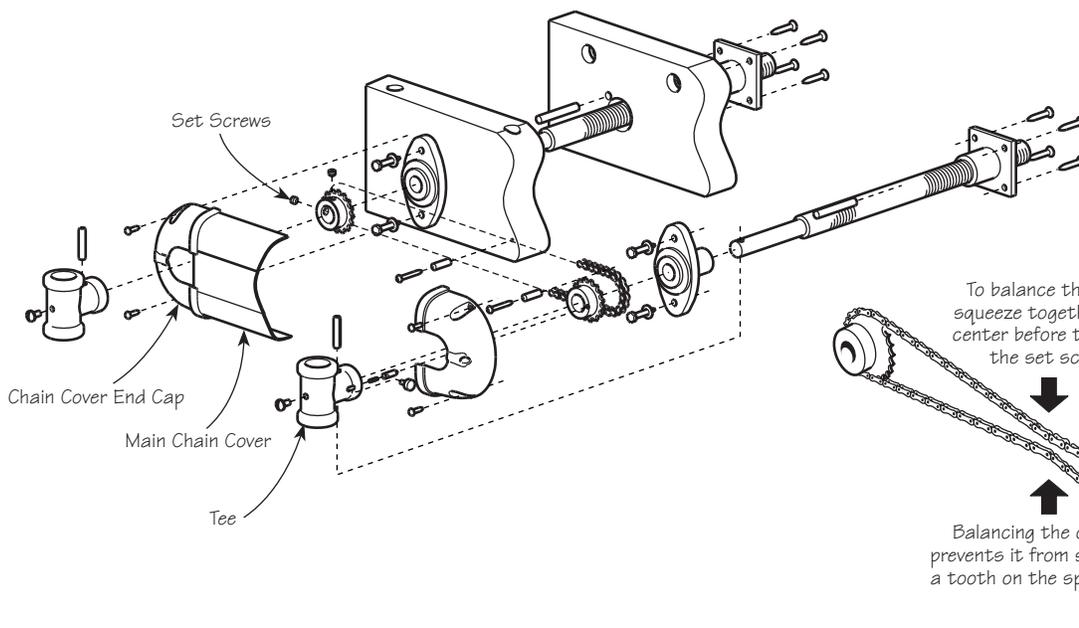


Figure 2: Veritas® Twin-Screw Vise.

Figure 3: Balancing the chain on twin-screw vise.

The front jaw of the twin-screw vise has been adjusted to be parallel with the rear jaw. Over time, regular use or seasonal movement of the wood may cause the front jaw to become misaligned. To reset the front jaw, remove the chain guard and, using the hex key provided, loosen the two set screws on the follower sprocket located behind the left tee. Check that the drive/lock pin is engaged in the driving sprocket. Turn each tee at the same time to snug the vise jaws together. Balance the chain by grasping it in the center, pinching it together with two fingers, and tighten the two set screws.

Note: The inside face of the front jaws on both vises is slightly tapered. This is intentionally done to ensure intimate contact with the top edge of the vise jaws and the workpiece being clamped.

Periodically check that the nuts holding the truss rods in place are tight. Seasonal wood movement can cause them to become slack.

Bench Accessories

Accessories increase the functionality of the bench and turn it into a woodworking station. Veritas offers a host of clamping accessories compatible with the 3/4" dog holes. Because of the flexibility of the grid of dog holes, shop-made accessories are limited only by the builder's imagination.

Shop-Made Accessories

The grid of holes in the Veritas Workbench allows an endless variety of shop-made accessories and jigs to be fabricated to enhance its versatility and customize it for specialized tasks. Here are a few of our suggestions. We would like to hear about yours.

Leg Clamp

If you wish to work on large panels and doors, a leg clamping fixture is a convenient addition, providing enhanced front panel clamping. A pair of leg clamps allows large objects to be supported when used in conjunction with the front vise. The use of a single leg clamp provides support to long objects. Leg clamps are easy and inexpensive bench accessories that help to extend the functional range of the Veritas Workbench.

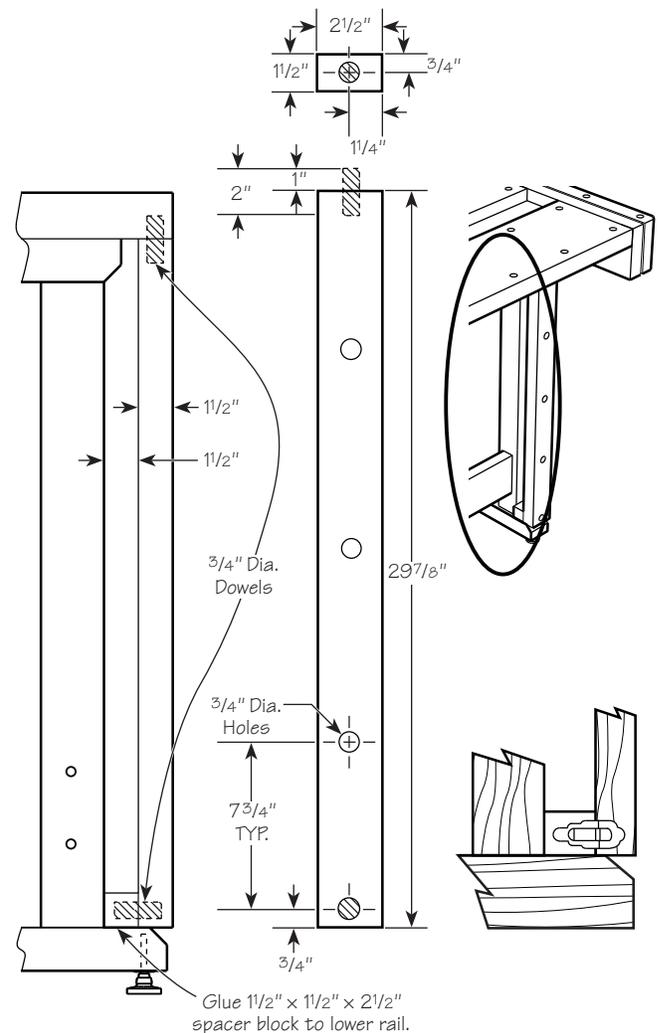


Figure 4: Leg clamp.

Carver's Sub-Table

Carvers may wish to fabricate a sub-table from $\frac{3}{4}$ " plywood to raise their workpiece to an ideal height for detailed work.

A sub-table fixture is particularly useful for engravers and chip carvers.

The sub-table shown in **Figure 5** raises the work 5". The center hole allows a Veritas® Carver's Screw (05G08.01) to be used to secure delicate work. One of the many advantages of the sub-table is that it allows the workpiece to be removed from the bench for storage without having to dismount it.

The builder may wish to make the sub-table larger or alter the height for a particular application. The base can also be left open on the front to allow access to the carver's screw without dismounting it from the bench.

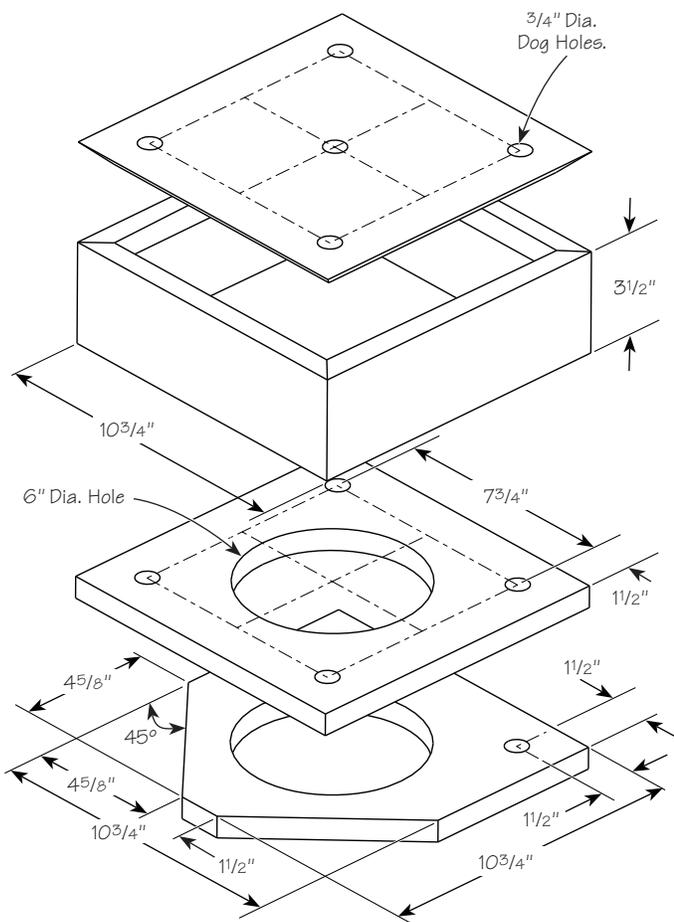


Figure 5: Carver's sub-table.

Constructing a Simple Tail Vise

You can construct a low-cost, high-value, home-made accessory for your Veritas Workbench system using a Veritas® Wonder Dog® clamp (05G10.01). Most useful in pairs, they convert any part of the bench edge into a set of tail vises with a capacity nearly equalling the length of your bench.

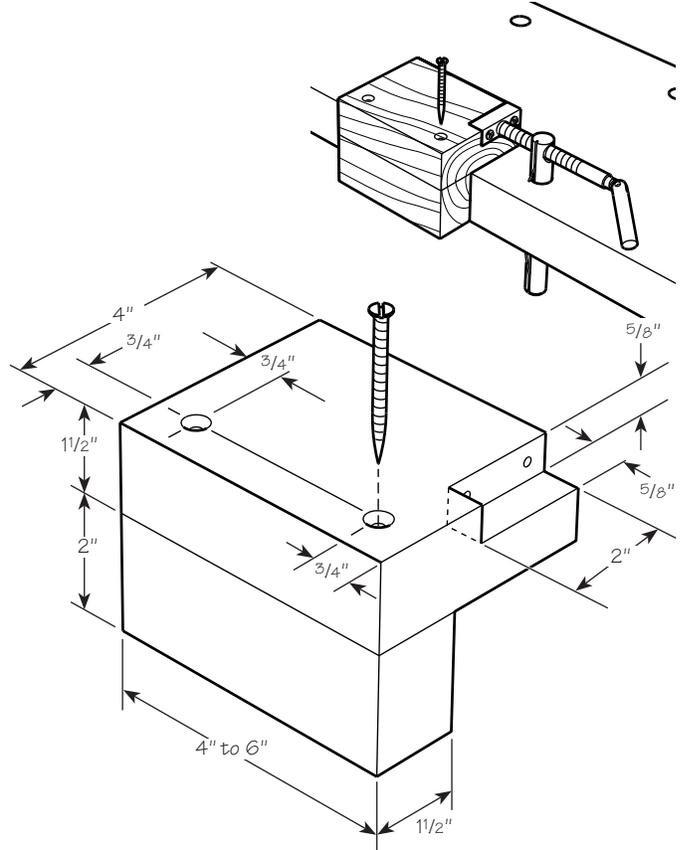


Figure 6: Constructing a simple tail vise.

Under-Bench Storage Systems: Using the Free Real Estate

The Simple Shelf

It is easy to add a shelf to the base of the bench for storage. Cut a $\frac{1}{2}$ " plywood panel $37\frac{1}{2} \times 17$ ". Install the plywood shelf into the inside grooves of the stretchers during base assembly. No fasteners or glue are required because the shelf is held captive by the stretchers. The use of glue is discouraged; if the shelf is fastened into place, it can make any distortion or warping impossible to correct through selective truss-rod tightening.

The Bin System

Bin boxes have an advantage over a shelf in that their contents can be grouped into tasks or projects and they can be lifted onto the bench top during use.

The spacing between the leg stretchers allows the use of standard plastic storage boxes to straddle the gap, providing low-cost off-the-shelf storage.

Several manufacturers make these storage containers. They are available from warehouse or restaurant suppliers.

Bin boxes can also be made from shop scraps.

Figure 7 offers one suggestion for bin box construction.

Boxes should be made 16" front to rear and can be any depth up to $9\frac{1}{4}$ " from the rail sill. Their widths should sum to 36" to fit between the rails. The following bin widths allow $1\frac{1}{2}$ " of total space for easy removal. Because of the thickness of the stretchers, great amounts of weight can be stored in these bins, while serving to enhance overall bench stability — so go ahead and load them up.

The recommended bin widths are:

- 4 Bins at 9"
- 3 Bins at 12"
- 2 Bins at 18"

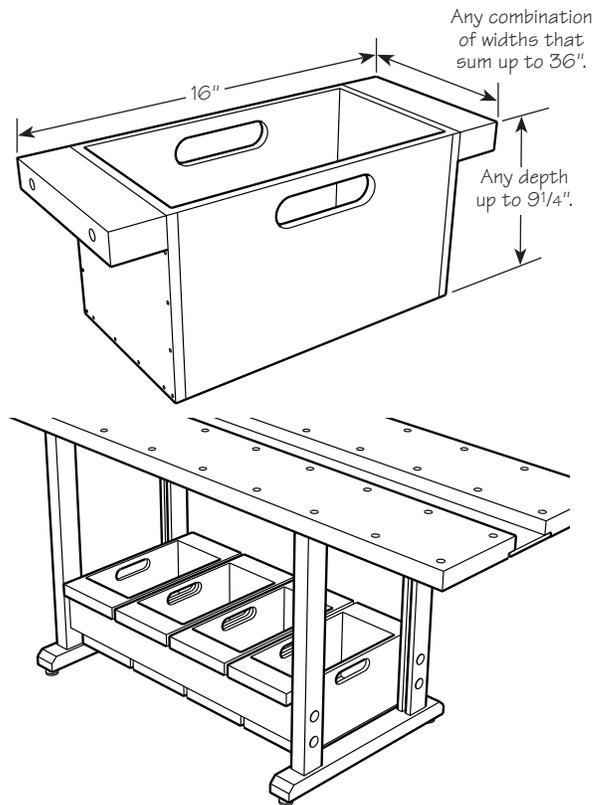


Figure 7: Installing a bin system.

Protective Top

If you will be doing any finishing or other work that may disfigure your bench top, you may wish to add a removable protective top. The protective masonite sheet that comes with the bench can serve to cover nearly the entire bench surface.

To keep the sheet from shifting, it can be line drilled from the bottom side of two dog holes, at opposing corners, with $\frac{3}{4} \times \frac{1}{2}$ " long stub dowels glued into the sheet. To use, simply drop the sheet onto your bench, locating the dowels into the mating dog holes.

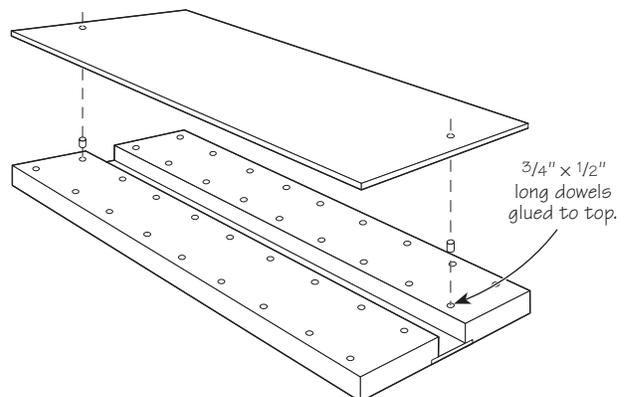


Figure 8: Protective top over complete bench.