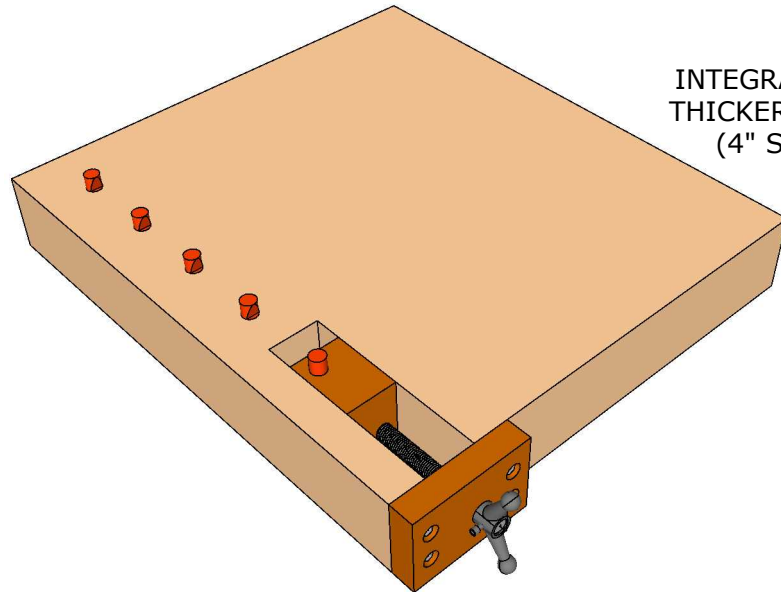
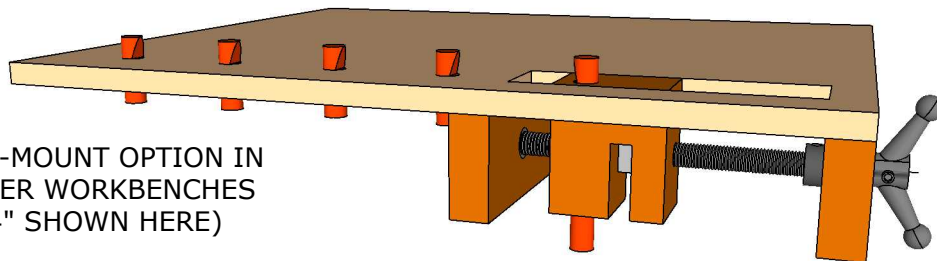




JAY'S
CUSTOM CREATIONS



INTEGRATED OPTION IN
THICKER WORKBENCHES
(4" SHOWN HERE)



UNDER-MOUNT OPTION IN
THINNER WORKBENCHES
(3/4" SHOWN HERE)

Wagon Vise

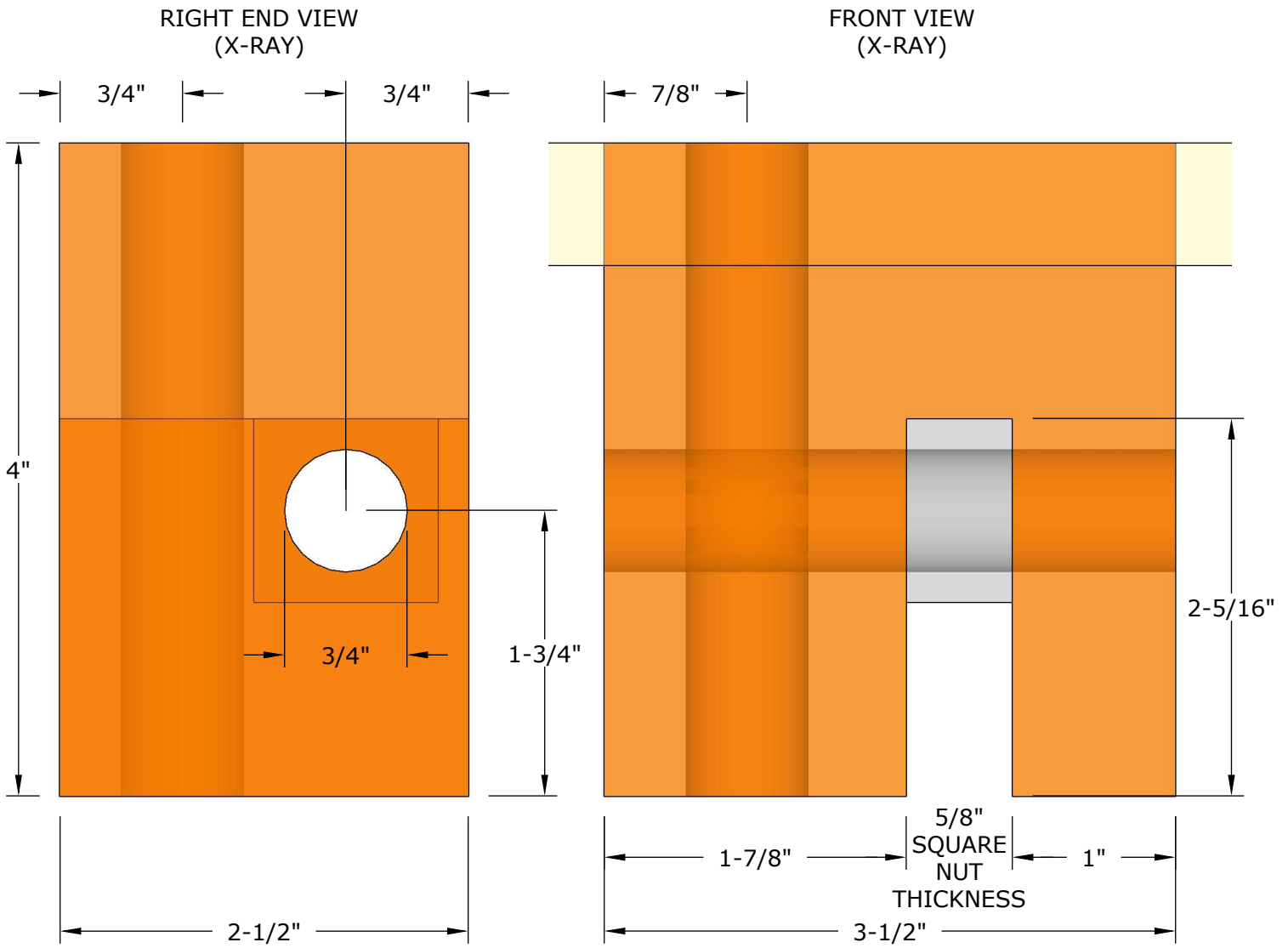
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Implement this wagon vise into your next workbench build or retrofit your existing workbench to fit it. The vise is made from an inexpensive hardware kit (\$24.99 USD at the time of making this document). This does not include the lag screws and washers to hold the end plate. Workbench thicknesses vary and that is what determines how many lag screws are necessary. You might be able to get away with using regular wood screws instead of lag screws.

This design represents dog holes 2-1/2" away from the front edge of the workbench and spaced apart 4" on center. All dog holes are 3/4". Manufactured bench dogs can be used but I prefer a piece of 3/4" hardwood dowel.

Item	Quantity	Description
12" long 3/4-10 steel threaded rod	1	Vise screw.
3/4-10 square nut	1	Transfers the rotation of the threaded rod into lateral movement for the dog block.
2 each 3/4" ID x 1" OD x 1-1/4" long steel bushings	2	Necessary for smooth spinning of the threaded rod and to prevent excessive wear in the wood.
3/4" ID one piece depth stop with Allen screw	1	Necessary to stop the threaded rod from backing out of the wagon vise opening in the bench.
1-1/4" #8 wood 4-1/2" cast double prong cast knob	1	Diameter of knob determines depth of screw below work surface. You don't want a lot of handle sticking up and getting in the way.
Lag screws with washers	4	Or less depending on your workbench thickness. Use long wood screws as an alternative. These are not included in the kit.

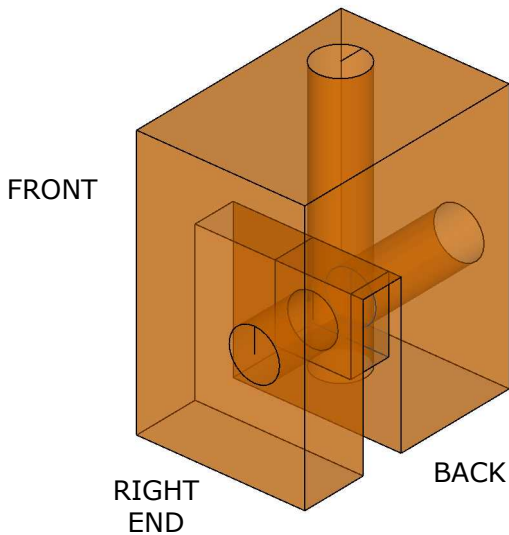
The hardware kit, minus the lag screws for attaching the end plate, for this wagon vise can be found here: <https://lddy.no/vd0i>



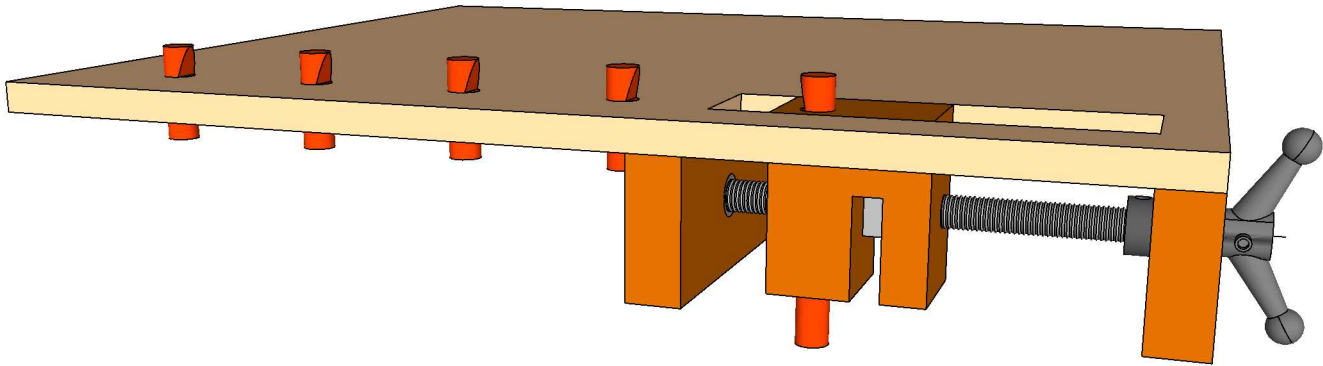
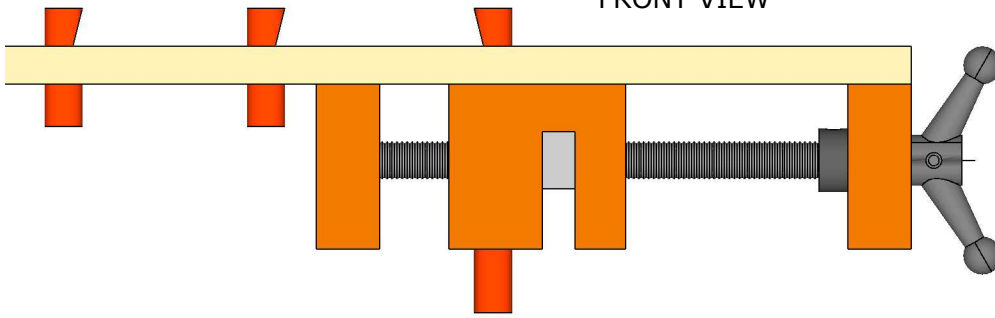
NOTE:

Use measurements in this document as a guide. Size the vise block to your exact opening in the workbench. Dog holes are 3/4" in diameter. Holes for the threaded rod bushings are 1" in diameter. The threaded rod hole in the vise block is 3/4" in diameter. Width of dado for the square nut should be loose with minimal wiggle room. Exact height of dado should be set so the nut cannot rotate on the threaded rod.

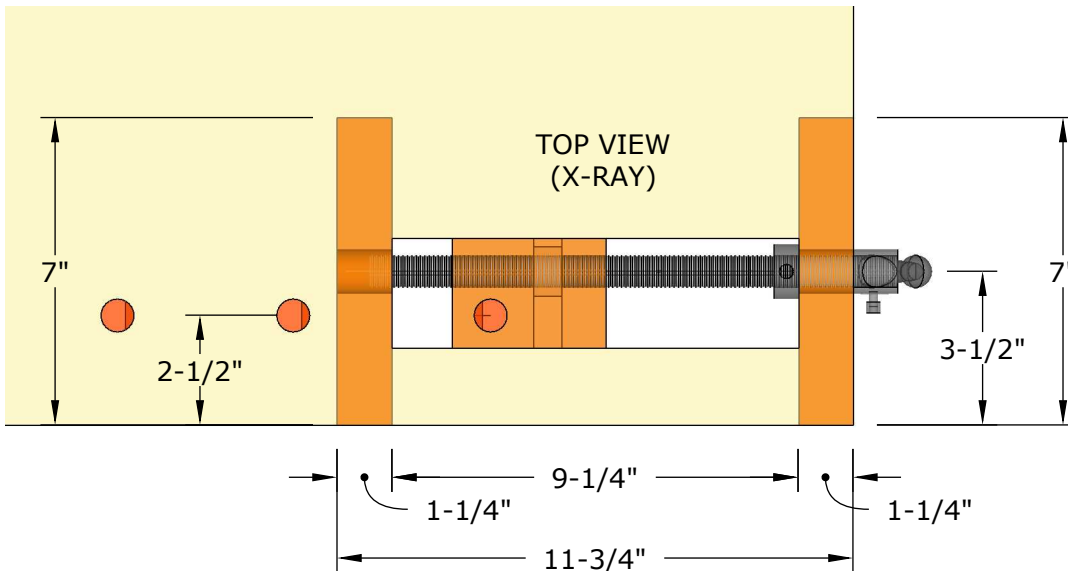
When using 3/4" hardwood dowels for bench dogs, cut a slight inward angled notch on the top to create an inside face of the dowel to better hold material.



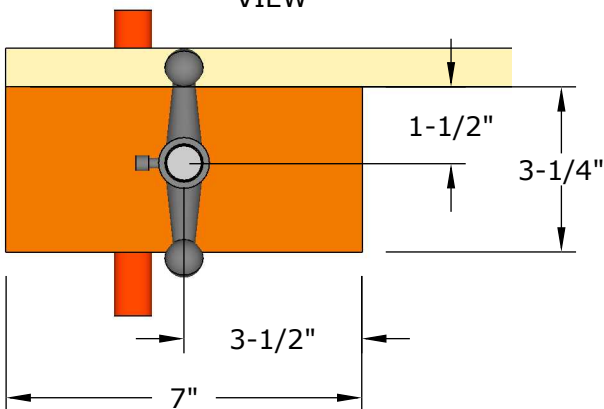
FRONT VIEW



TOP VIEW
(X-RAY)



RIGHT END
VIEW



NOTE:

The vise block is made to the same dimensions with the under-mount version. This version shows a 3/4" thick top material. Two end caps are made to house the bushings. Both end caps are mounted to the bottom of the workbench surface. For added support, additional blocks can be attached to the sides of the end caps, basically turning the structure into a box. This may or may not be necessary, depending on how much flex is in your setup.