



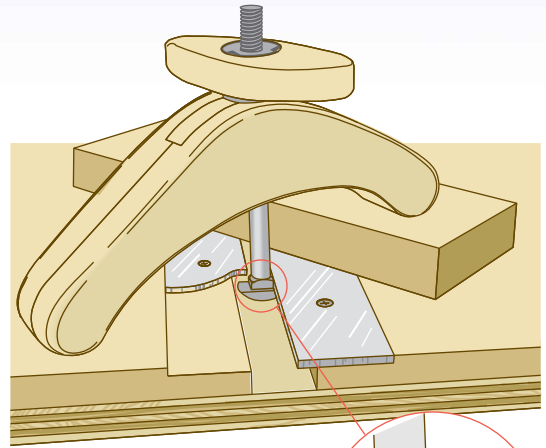
# Shop Notes

## Workbench Top with Hold-Down Tracks

**T**raditional-style workbenches provide several means for securing your work. Unfortunately, they are expensive to purchase and time consuming to make. Some of us are limited by existing space and benches. I decided to modify my existing 30 inch by 14 foot workbench by adding hold down tracks, rather than a side vise and tail vise.

I've used these two hold-down patterns elsewhere in my shop. They are made from laminated hardwood scrap, 3/8 X 16 t-nuts, and carriage bolts with their heads ground flat on two sides so they can be inserted anywhere along the track. Templates and tool bases can also be secured to the workbench using the tracks.

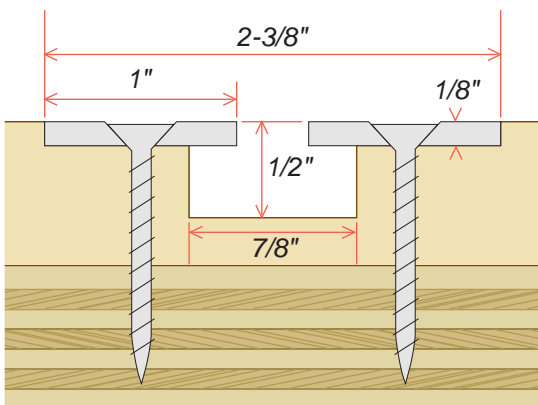
The existing workbench was an inch and a half thick lamination of plywood. On top of this, I glued down a layer of 3/4 inch Medium Density Fiberboard. A router cuts the grooves for the aluminum tracks and the clearance groove for the bolt head. The dimensions shown are for 3/8 X 16 carriage bolts and 1 X 1/8 aluminum bar stock. It's worth the time to cobble together a template to rout the grooves for the tracks. The aluminum bar stock is cut to length, and drilled and countersunk for wood screws. In this case I was sure to use screws long enough to penetrate the first plywood layer. I doubt that the MDF has enough pullout resistance for this use.



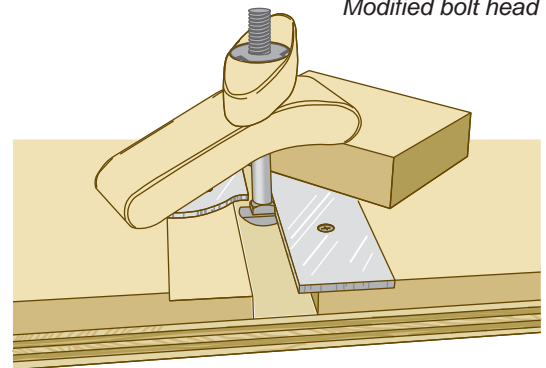
Large hold-down. Track shown partially cut away.



Modified bolt head



Section through track.



Small hold-down.