

Workshop Tips #3 **Drilling Axle Holder**

Drilling holes in small pieces of wood is a difficult task. Making the axle holder on vehicles is one of those annoying, frustrating little jobs. The hole has to be precisely straight down to ensure the vehicle does not wobble. A drill vice will hold the small piece of wood, but not at the right angle.

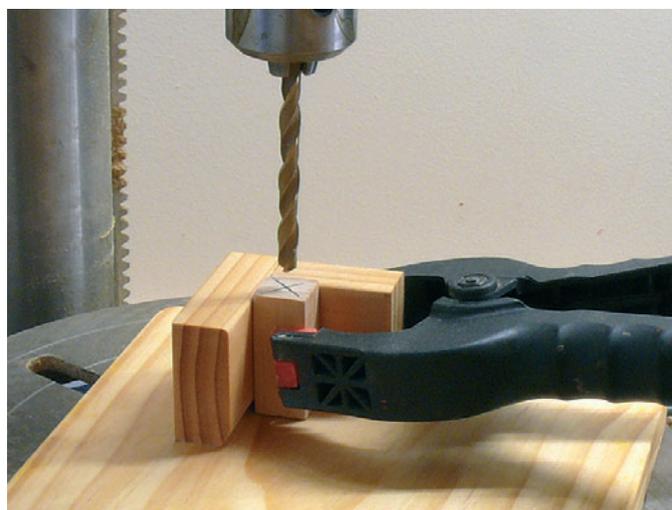
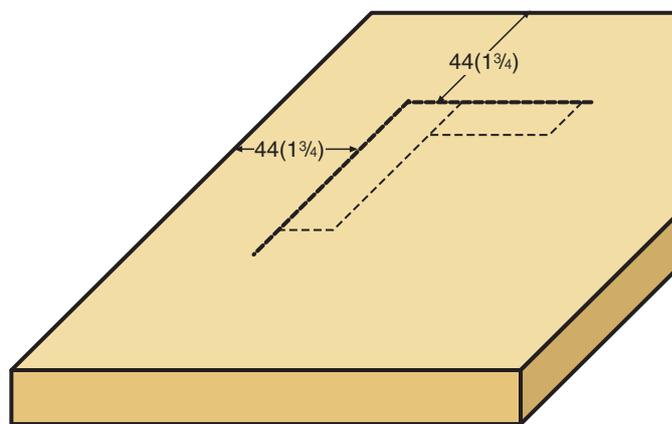
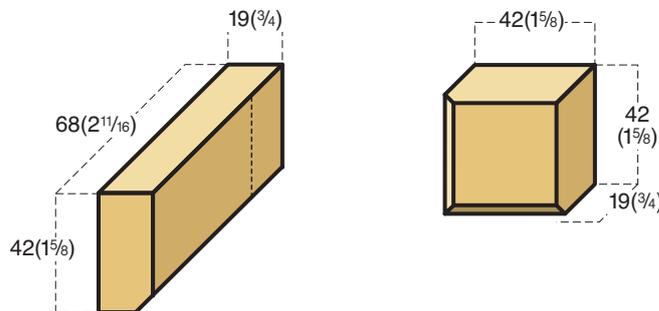
At Aschi's Workshop we use a simple jig for all drilling into small parts like the axle holders.

A piece of scrap wood, about 152 mm (6") x 229 mm (9") or bigger and about 19 mm ($\frac{3}{4}$ ") thick is a good base for the jig. It is important that the wood is straight and not warped, for that reason plywood or particle board is a better choice than natural wood. Natural wood can warp along the grain direction over a period of time. Cut the two parts as per drawing, the sizes are not crucial, although the height should not be much more than the axle holder itself. The edges on the underside and in the corner (see drawing) need to be sanded off before gluing the parts onto the baseboard. The sanded corners prevent sawdust buildup that could prevent the axle holder to fit smoothly into the jig.

A strong clamp holds the wood in position while drilling. It is easy to hold the whole jig steady with your hands on the drill table, keeping your fingers safely away from the drill bit.

The photo shows a normal axle holder in the jig. Longer parts, like whole frames or holders for three axles, can be easily clamped to the outside of the longer upright piece.

Once you have made the jig, you will find plenty of use for it and wonder why you have not made this simple device earlier.



Special thanks to Jutta from **WOODCRAFTERS HAVEN** in Wodonga Vic/Australia for giving us the information about working with patterns.