

Drilling Out Solid Rivets by Vernon Little, RV-9A Builder

Rather than using a full-size drill (#30) to drill out 1/8" rivets, use the following method. First, using a smaller drill (for example, a 3/32" or #40 drill for an 1/8" rivet), drill a pilot hole almost through the rivet. It's easy to keep this pilot hole centered on the rivet head. Then, using a full-size drill (a #30 in this case), drill just deep enough to snap off the head with a 1/8" punch. Finally, Use a 3/32" punch and a hammer to tap out the rivet. In this fashion, there is no danger of enlarging the rivet holes by mis-drilling. Drilling through the shank with a smaller drill relieves the interference in the hole, making the rivet easier to punch out.

It is also a good idea to purchase a 12" #40 drill to help in drilling rivets in tough to reach places.

The benefits of this technique are that it makes the rivets much easier to punch out, preventing distortion or damage. It's possible to insert the 3/32" punch in the pilot hole, and have it stay in place 'hands-free'. This frees one hand for a hammer and the other to hold a support block behind the rivet.

