Anvil Stand

story & illustrations by Paul Boulay, Campbell, California
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At ABANA 2006 in Seattle, I purchased an anvil from Steve Fontanini of Rat Hole Forge – a contemporary design and cast of tool steel. All that, a touch of design embellishment and a cute name – who could ask for more in an anvil? Well, actually I did wish for it to not ring quite so loudly.

After considering my options, I decided that I'd make a steel stand along the lines of the Tom Clark scheme (1, 2, 4 & 5). The legs are $4^n \times \frac{1}{4^n}$ tubing, and the top is 1^n plate. In order to fix the anvil to the stand, I welded a $\frac{1}{4^n}$ flange nut to the bottom as you can see in the photo (3). I took all necessary precautions for the welding. (Preheat to 300° F, weld with enough amperage to ensure penetration, peen, post-heat, cool slowly.)

The base of the anvil sits on a spacer that is made of #6 solid copper wire. In order to have a good bearing surface, I ground the base of the anvil so that, when held down, it sits flat enough. In the plate with spacers (2), you can see the copper rings and some little bits at the corners – these are made of lead wheel weights. I also installed some ½" cap screws at strategic points around the perimeter of the anvil in order to prevent any sort of twisting motion.

Having completed all the preparations and given the stand a bit of maroon paint, I was ready for the final attachment. I used a full tube of silicone sealant on the base, then placed the anvil on that and bolted it down with a giant washer and a 7/8" cap screw (4).

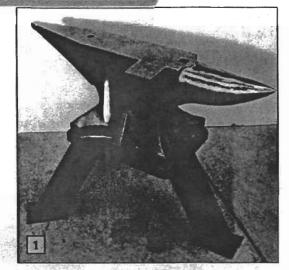
Before mounting, the anvil would ring quite loudly. Afterward, it is solid, but the ring is completely under control. One additional precaution against noise that I haven't mentioned so far is that I packed the tubular legs of the stand full of sand. I also plan to bolt the stand to the concrete floor, at which point nothing will budge it!

I don't know what contributes to deadening the ring, but it worked. Upon reflection, I think that tying down the center of the anvil did a lot by maximizing the effectiveness of the silicone layer.

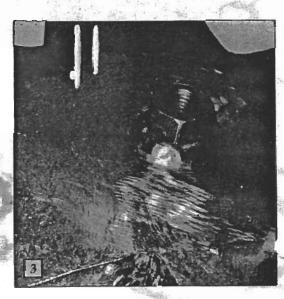
Materials

- 1 Base Plate, 1" steel (A-36?)
- 3 Legs, 4" square x 14" steel (A-363)
- 3 Foot Plates 1/2" steel (A-363)
- 1. Flange Nut 7,8 (McMaster 91030A037)
- 1 Washer 1 ID 31 OD (McMaster 91117A249)
- 1 Socket Head Cap Screw 7," x 11/2", washer, lock washer
- 3 NPT 1½" Half Coupler (McMaster 4513K76) (Weld onto legs to make sand filler ports.)
- 3 NPT 11/ Nylon Cap (McMaster 48335K157)
- 1 10 oz. Tube Silicone Sealant (GE Silicone II for Aluminum and Metal)
- 6 Socket Head Cap Screw 1/2" x 1", washers

As required, sundry hardware store items, coarse sand &

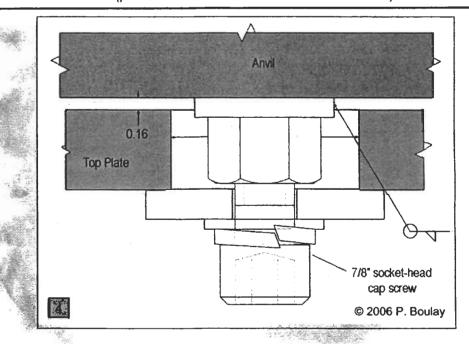


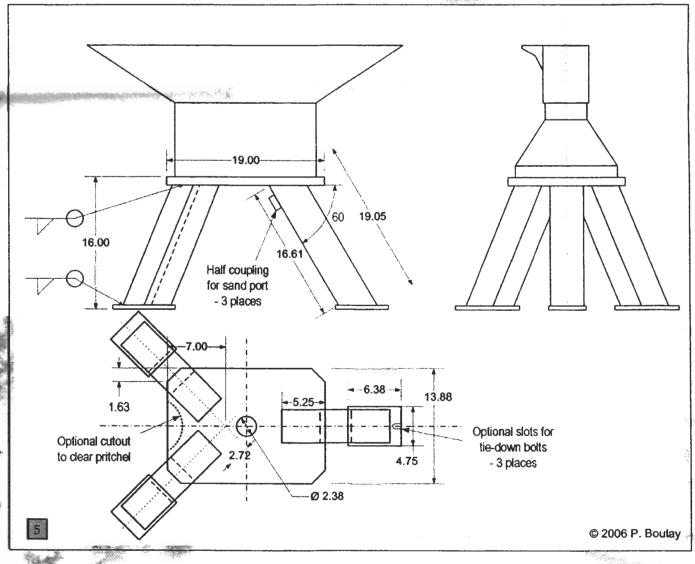




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