

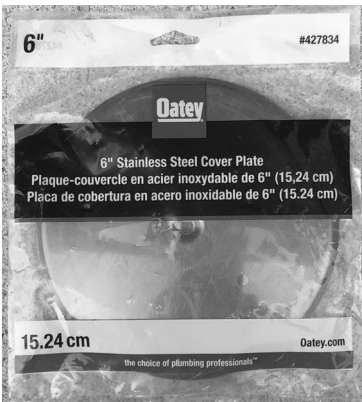
## J-23 DIY Air Cleaner Base *By Bob Olbers*

MY RECENTLY-INSTALLED VANGUARD needed an air cleaner. I considered piecing something together from a leftover Kohler base, but this would have required significant rework to the stamping to fit the different hole pattern and mounting surface of the Vanguard carburetor.

I decided that it would be easier to make a new base using a 6"-diameter stainless-steel plumbing cover plate (Oatey 427834). I used a step drill to enlarge the center hole to 1-1/8" to match the carb throat. Next, I aligned the carb gasket to the center hole and taped it in place so I could mark the mounting screw holes with a "hinge-locating" center punch. Be careful to orient the gasket with the correct side up if your carb has asymmetric hole locations, or you may find yourself welding up and re-doing a couple of the holes (ask me how I know this...) I also drilled a hole to accept the crankcase breather tube, simply eyeballing a suitable location.

Finally, I bent up some 1/8-in x 1/2-in steel bar for a bracket to hold the lid in place. I drilled a 1/4-in hole in the center for the mounting bolt. I flipped the lid upside-down and used a long bolt, washer, and nut to center everything up so that I could weld the bracket to the plate. Be careful not to accidentally tack the plate to your nice chrome air-cleaner lid if you copy this approach (again, ask me how I know this...). A locknut secures the mounting bolt to the bracket.

The 6" plate is actually a little undersized for my air cleaner, but it works well enough for the time being. I might try again with a slightly larger piece, and try not to repeat my mistakes next time... ▣



*Cover plate*



*Step drilling center bore*



*Gasket lightly taped in place*



*Marking mounting holes for drilling*



*Bracket located for welding*



*Mounted to carburetor*



*Finished installation*