CATALINA 350 INTERNATIONAL ASSOCIATION

Catalina C350 Water Lift Muffler – Hidden Drain Screw Repair



C350 Association Technical Editor Bill Templeton

While completing the damper plate replacement on my 2004 C350, (which is now wonderfully quiet with no more noise in gear than in neutral with the PYI high deflection damper plate), I noticed a rust stain below the aft end of the water lift muffler near where it is strapped to the shelf beneath it. Upon further inspection, I discovered that there is a "hidden" drain screw in the bottom aft portion of the muffler which was badly corroded and clearly had been leaking. This drain screw couldn't be in a more useless location as the muffler would have to be removed to use it. This is something others may want to check on their boats to see if they also have the drain screw which can result in a big rusty mess.

After cleaning up the head of the screw, I tried to back it out but it sheared off in the muffler. It appears to be stainless steel which rusted in the middle where it passed through the muffler, probably due to anaerobic conditions from water stagnating inside the muffler. The screw originally sealed against the muffler housing with a rubber washer.

Solution: Given the essentially worthless location of the drain plug, I decided it would be better to eliminate it rather than attempting to drill an oversize hold and replace it with a new drain screw just to have it rust out again. I drilled out the drain plug hole and sanded the surface of the muffler around it followed by cleaning with acetone. I filled the hole with thickened epoxy followed by three layers of small fiberglass squares over the hole using a regular epoxy resin mix.

New Drain Petcock: To complete the job, I added a 1/8-inch NPT brass petcock on the front face of the muffler to allow for draining in an appropriate manner (similar to the drain screw provided as part of the Catalina exhaust anti-siphon kit around 2006, but is more robust). I drilled and tapped the fiberglass muffler material which was at least a quarter inch thick and used Teflon tape around the petcock when I screwed it in. After putting the muffler back in there are no leaks so the repair seems to be holding up well. **–William Van Wagoner**, P.E.C350 No. 229, Destiny, July 26, 2017

