

Two Fuel System Alerts

1. We are always learning new things about Corvairs – this concerns the fuel pump retaining bolt, which you tighten when installing the pump (and then tighten the lock nut). There were apparently two different designs of these bolts used, I have yet to determine why or when the change was made. This is the problem: one design (no marking on the head) has a longer, slimmer taper and a sharper point. This design allows the point to contact the bottom of the hole in the pump before the sides touch the tapered hole, resulting in all the pressure being exerted against the thin bottom of the pump casting hole. Two problems are possible with this design bolt, the pump will loosen up and the steel bolt will wallow out the hole or the original attempt to tighten the bolt or follow up attempts to tighten it will punch through the casting and lock up the fuel pump push rod. The second design bolt has an “L” stamped on the head and appears to work perfectly. Check your bolt head with a mirror; if the “L” is present, you are fine with normal tightening of the bolt. If you have the bolt with no marking, either find the other design bolt or remove your current bolt and cut about 1/8” off of the end. Dress up the edges and reinstall.
2. All Corvairs require a vented gas cap; apparently local parts stores and possibly some Corvair vendors have been selling replacement Corvair gas caps which fit just fine but they have a pressure/vacuum valve installed in the cap which could cause significant problems for your Corvair. The caps sold in the Kansas City area are “Murray Ultra”. If you used one of these replacement caps you could generate a vacuum in the tank on a long drive which will overcome the ability of the fuel pump to create vacuum in the line. The result is you are out of gas. The second big problem with this cap is that if you fill up with cold underground gas and then let the gas warm up in the sun or in your garage; the pressure generated during warm up cannot escape. Try unhooking a fuel line (as in pulling an engine) in this situation and the fuel just keeps coming. It could possibly also build up enough pressure to overpower the needle and seat and fill your engine oil with gas while you sleep. If you get a new cap and it has the valve, simply use needle nose pliers and a screwdriver to remove it and the cap will function normally.