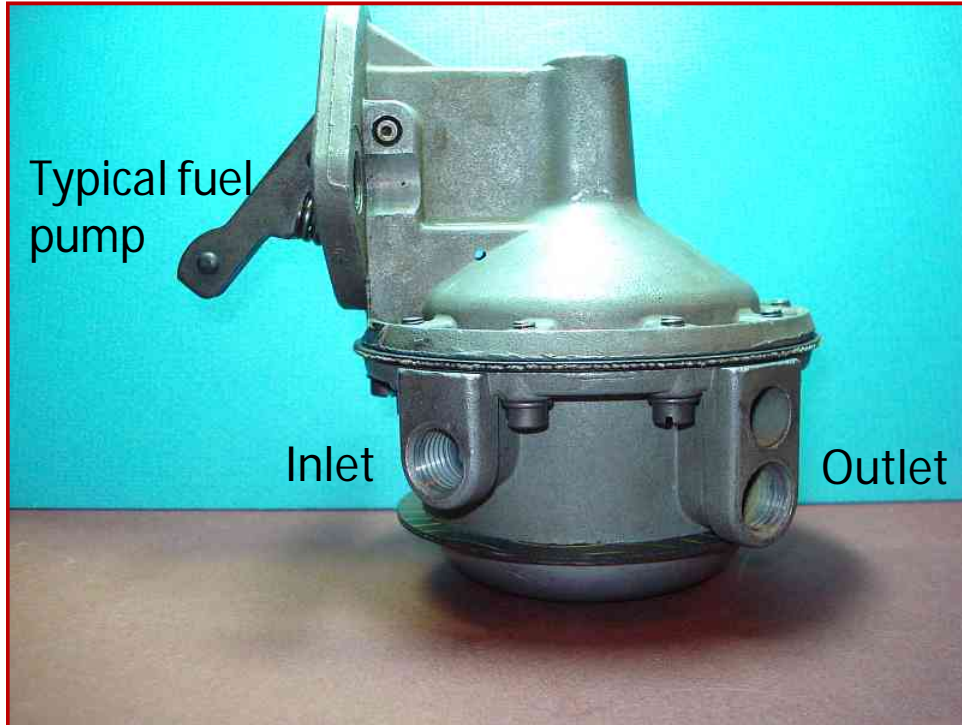


## Replacing the fuel pump on a '58-'62 Corvette

Dave Zuberer, Jeff Cline, Mark Brennan

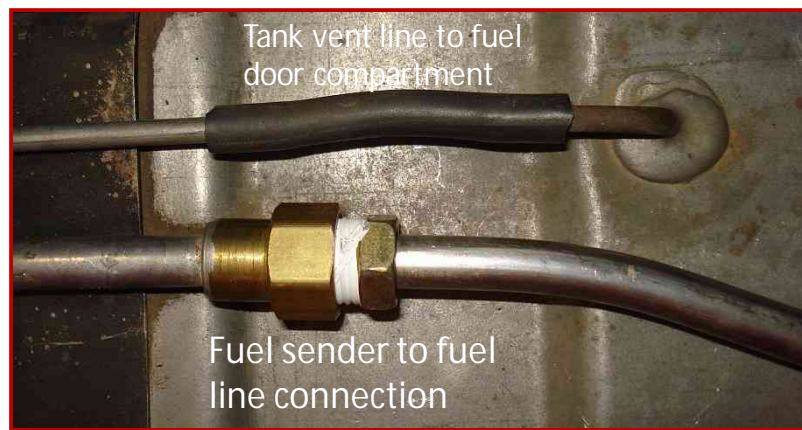
This document covers some points about replacing the fuel pump on 1958-1962 Corvettes (or small block Chevys in general). The information is gathered from previous threads on the Corvette Forum along with photos and information gathered during a recent fuel-pump swap on DZ's 1960.



Note: replace the inlet and outlet fittings before you install the new pump.

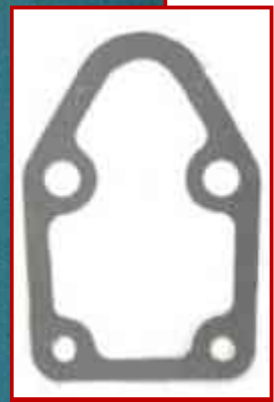
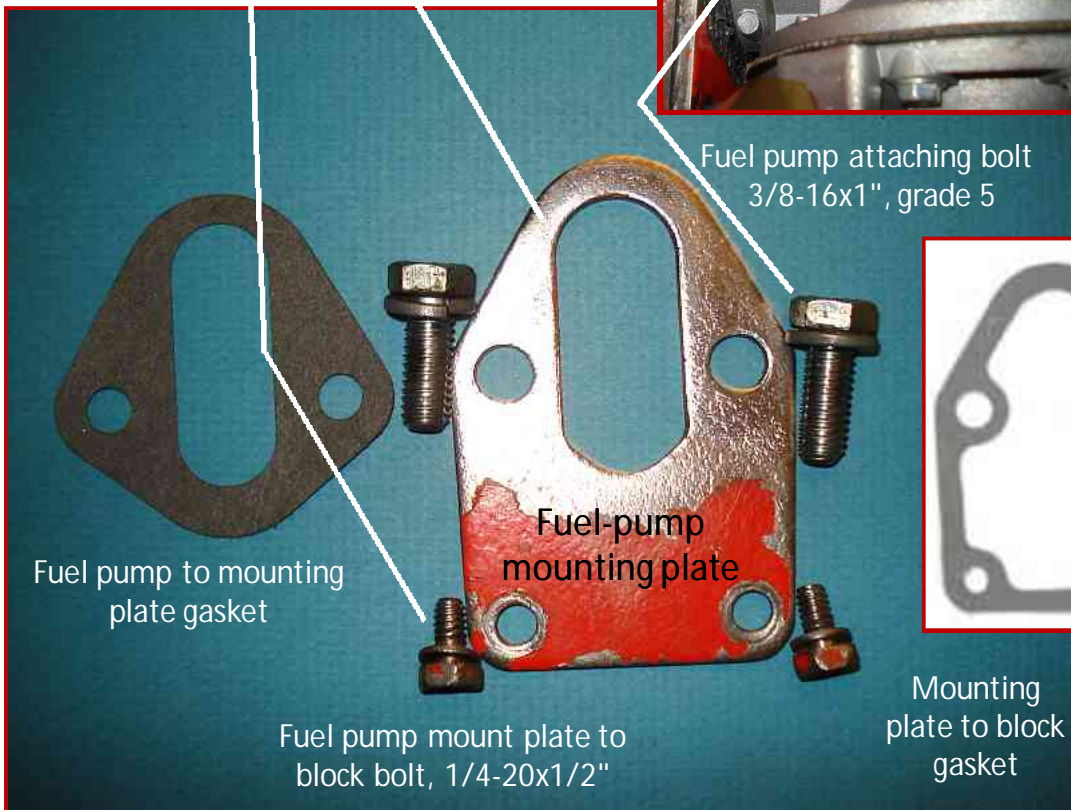
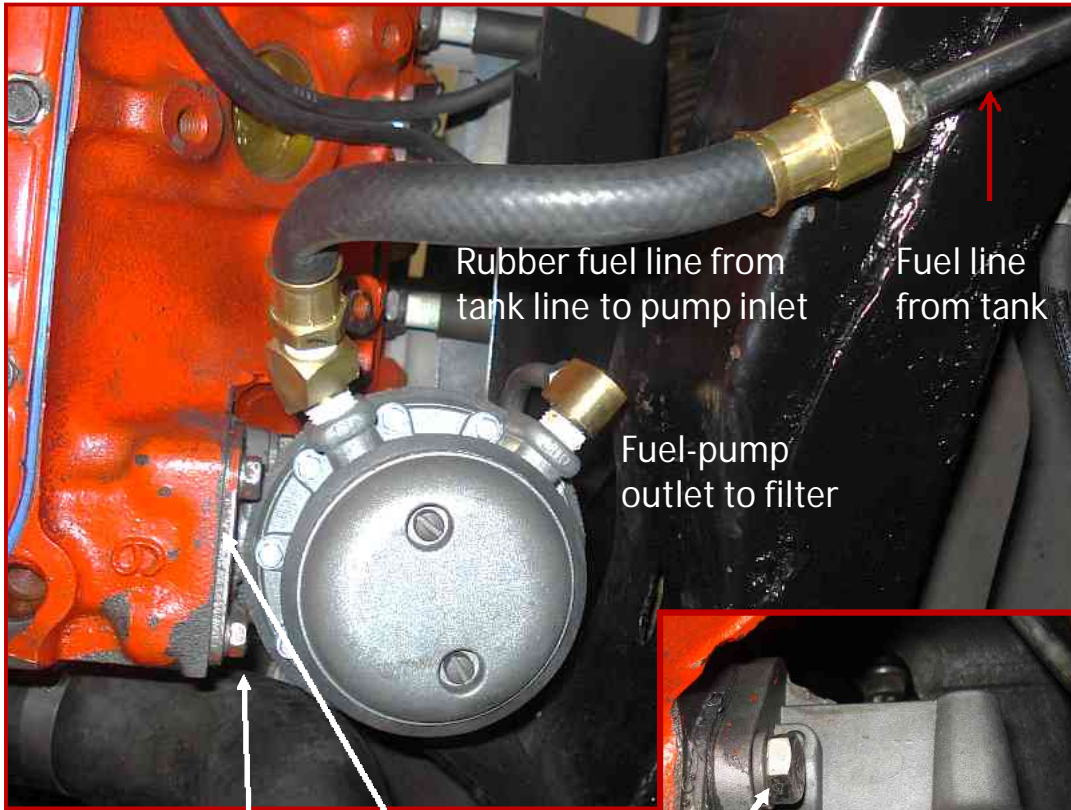
I had my car up on my Kwik-Lift during this change of the fuel pump. Earlier, I changed out the pump with the passenger side of the car just up on a floor jack and a jack stand for backup. I found it easier to access the fuel pump by disconnecting the lower radiator hose from the water pump outlet and moving it to the side for better access to the fuel-pump mounting bolts. Be advised that there will be some coolant in the hose and you might get a bath.

For this change, I also removed the fuel tank cover and disconnected the main fuel line at the fuel-sending unit. That way, I only had to deal with the residual fuel in the main line and no siphoning of fuel from the tank. See Jeff's note later on how he handled the siphoning issue.

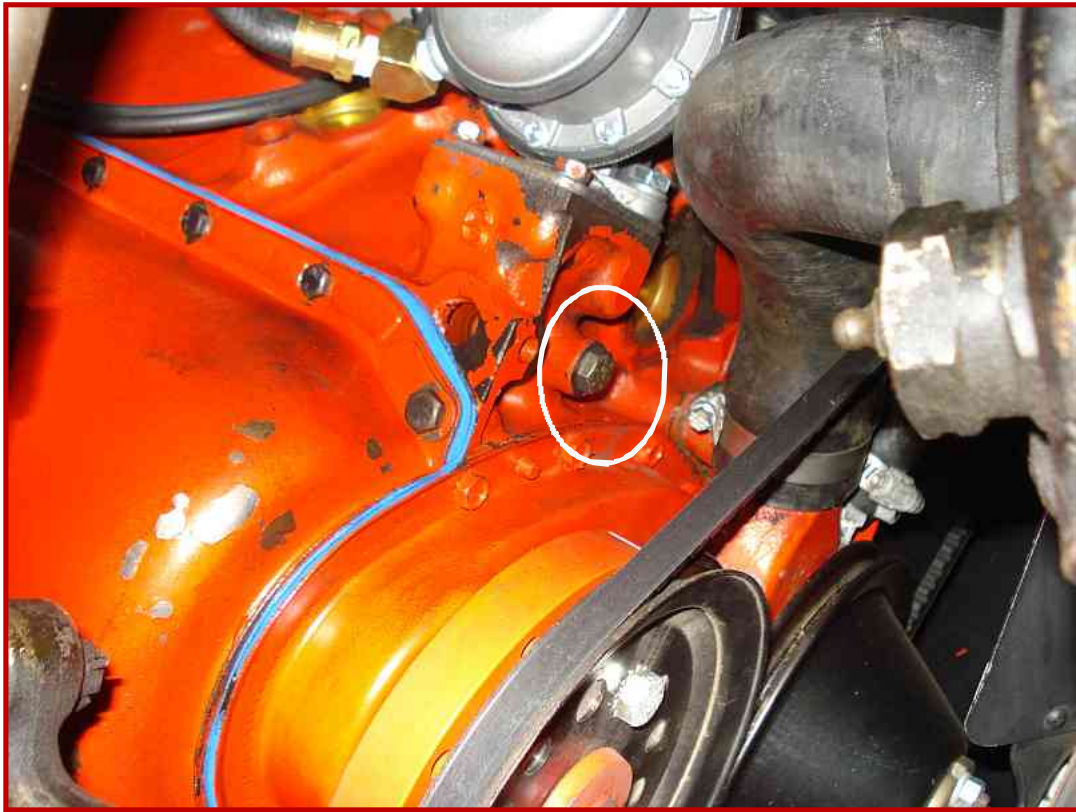


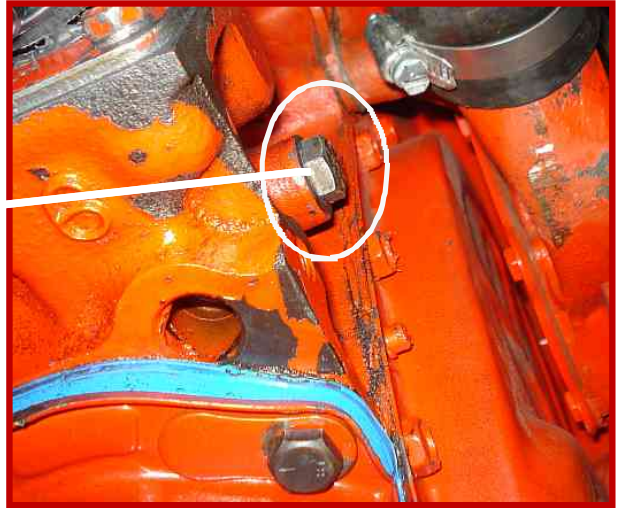
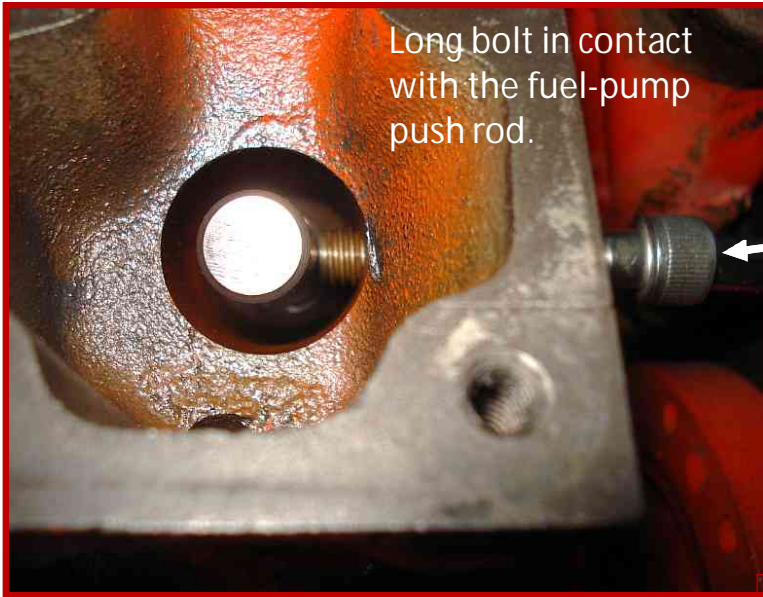
Once the fuel lines (tank-to-pump and pump to filter/carb(s)) are removed from the pump you can dismount the pump by removing the two fuel-pump mounting screws and backing the pump away from the mounting plate. It is not necessary to remove the fuel-pump mounting plate to swap out the pump. If you do take the plate off, be advised that there is a gasket that mounts between the block and the plate. If you have installed the long bolt earlier to retain the push rod it won't fall out (see photos below). If you have not done that, be prepared to catch the push rod as it may fall out of the block.

To ease the installation of the new pump, it is most helpful to have the engine rotated to #1 Top Dead Center (TDC) since at this position the cam for the fuel-pump rod is in its lowest position and the fuel-pump push rod is in its most recessed location in the block (thus, there is the least amount of tension on the fuel-pump rocker arm). This can be done by checking the position of the rotor (with the dist. Cap out of the way) to see that it is on the #1 plug wire location, or, as in my case, I had my wife bump the starter motor (**WITH THE COIL WIRE REMOVED**) while I held my finger on the end of the push rod. When the rod retreats to its upmost position (photos below), it is fairly easy to compress the rocker arm spring on the bump and bolt it up the mounting plate. I used sealant to attach the gasket to the pump before I attached the pump to the block with more RTV sealant applied to the gasket.

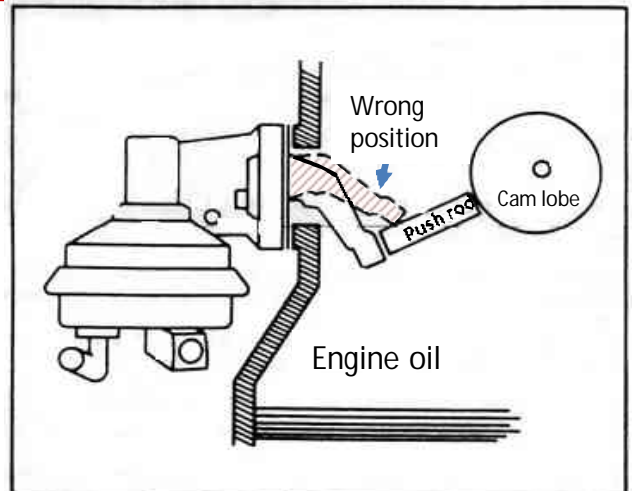


Remove the bolt shown below and replace it with a bolt of the same thread long enough to contact the fuel-pump push rod (see next page).





Remove this short bolt just below the water pump outlet for the lower radiator hose. Replace it with long bolt to gently hold the fuel pump push rod in place. **DO NOT OVERTIGHTEN** or you might damage the push rod. With the pump removed, you can bump the starter (after disconnecting the coil wire!!!) until the push rod is in its upmost position (i.e., low spot on the camshaft; **be sure to loosen the long bolt while you do this**). Clean the surface of the of the block where the plate is mounted. The photos at left were taken with the plate removed. You don't have to remove this plate. I found it easier to get my finger on the end of the push rod. With the push rod in its upmost position it is fairly easy to install the new pump. **BE SURE THAT THE ROCKER ARM IS PROPERLY LOCATED WITH RESPECT TO THE PUSH ROD (SEE DIAGRAM BELOW).**





Fuel line fittings attached to the fuel pump body. The 1960 A.I.M. indicates that the 45° elbow should be rotated 15°-20° from vertical toward the right side.

## Changing fuel pump on 58-62 Corvette

62Jeff (Jeff Cline) Corvette Forum, 1-3-2014

<http://forums.corvetteforum.com/c1-and-c2-corvettes/3398826-1958-fuel-pump-replacement-need-advice.html>

Howdy,

Here's what I do for my 62:

1) Put the engine on #1 TDC (a forum trick recently learned). This puts the fuel pump eccentric on the cam in the best position for the fuel pump push rod (puts push rod farthest "in" to engine, making the amount of spring compression required when installing the fuel pump much less)

2) Jack car up and remove right front wheel.

3) Remove the short bolt on the front of the block and replace it with a longer one that you carefully tighten until you feel it touching the fuel pump push rod. You want to trap the fuel pump push rod in place so it won't slide down later, but not damage it with the long bolt. In this photo the bolt in question is the orange bolt on the front of the block just below the water pump radiator hose connection, and a few inches inboard of the pump (white circle).



- 4) Disconnect the rubber fuel hose from the main line coming from the tank. Fuel will begin to rush out of the main line so to stop this I connect a long 3/8" fuel hose over the end of the main line with the other end of the hose held up near the female hood latch. By putting the other end of the hose higher than the fuel tank, siphoning will stop. You can also just use a short piece of 3/8" fuel hose with a bolt in the other end. The bolt might weep a little fuel.
- 5) Disconnect the fuel line coming out of the fuel pump
- 6) Remove the 2 bolts (1/2" socket if I recall correctly) that hold the pump to the block, and remove pump
- 7) With the pump out, the fuel pump push rod should be visible in the block and should not be moving (remember the long bolt from #3)
- 8) Clean the mounting surface on the block
- 9) Move the flexible rubber fuel hose and fitting from the old pump to the new. No thread sealer is required here. Move the outlet fitting from the old pump to the new.
- 10) Install a new gasket on the fuel pump, I use a little gasket sealer to keep it in place
- 11) Place the new pump on the engine, making sure the lever on the pump is placed on the end (not the top) of the fuel pump push rod. You'll have to compress the pump actuator lever spring somewhat, but if you followed step #1, the effort will be significantly less.
- 12) Put thread sealer on the 2 mounting bolts and install the bolts. I put them in snugly but don't try to get a torque wrench in there
- 13) Connect the fuel line on the outlet side of the pump
- 14) Connect the rubber fuel hose from the pump to the main fuel line
- 15) Remove long bolt from step #3 and reinstall short bolt
- 16) Install wheel
- 17) Lower car to the ground.

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Last edited by 62Jeff; 01-03-2014 at 01:36 PM.

Suggested mounting method by Mark Brennan (Coves4me):

Now to install the fuel pump. Get some carb studs about 1-1/2 inch to 1-3/4 inches long that will thread into the fuel pump bolt holes about 1/4-inch. You can use old bolts with the heads shaved off as long as nuts can be installed. Next install the gasket with sealant and fuel pump plate. Now install the fuel pump and gasket with sealant over the studs and run nuts over the studs while you keep the fuel pump centered on the pump rod. Be patient as you go from one stud to the other pulling the fuel pump down. Once down tight against the block, remove ONE nut only and stud and replace the original fuel pump bolt. Once tight, do the other side. Voila, you're done. Now remove the 1-1/4 inch bolt on the front of the block and install the shorter bolt with sealant on the threads to prevent an oil leak. Put everything back in order and you should be done. Oh, by the way, save the studs, you'll need them someday down the road. Good luck!!