



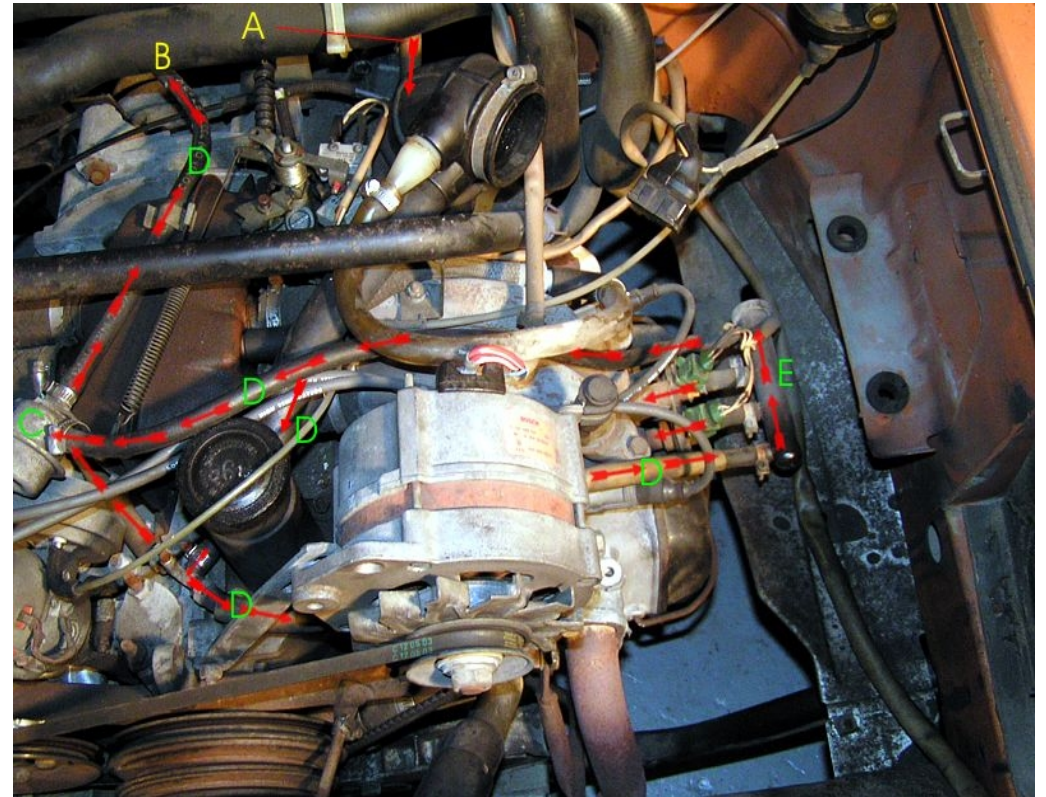
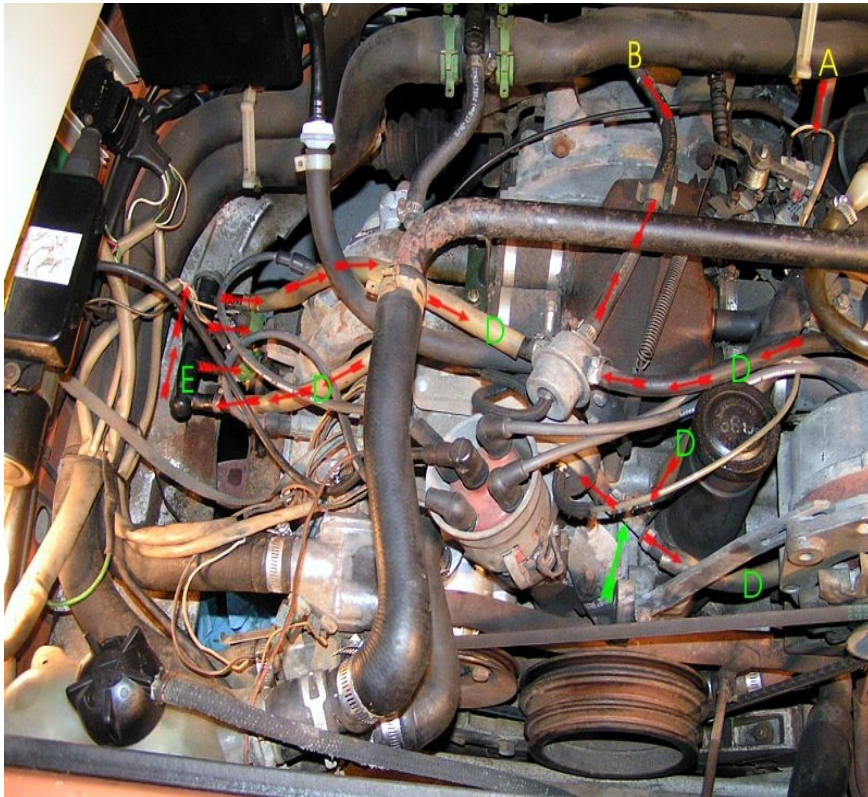
Fuel hose replacement section (including the small fuel injector hoses). On your van are 10, 20 to 30 years old fuel lines, carb or FI, it doesn't matter, CHANGE them!!! Not even a visual check is ok, only a pressure test is appropriate, even then.... if you don't know about the condition of your fuel lines, change them, period....we've heard enough about engines fires. So here is how!!!

You will need about 10 to 12 feet of 5/16 FI hoses to cover the engine bay area, if you decide to do the fuel pump to firewall plastic junction line, you will need an extra 6 feet. About 20 x 5/16 FI clamps are also needed. You should also disconnect the battery. Be careful to put a pan under the engine to collect dripping fuel. A fuel pressure test should also be performed to make sure everything is tight.

Good luck, Ben

DO NOT USE this kind of line!!



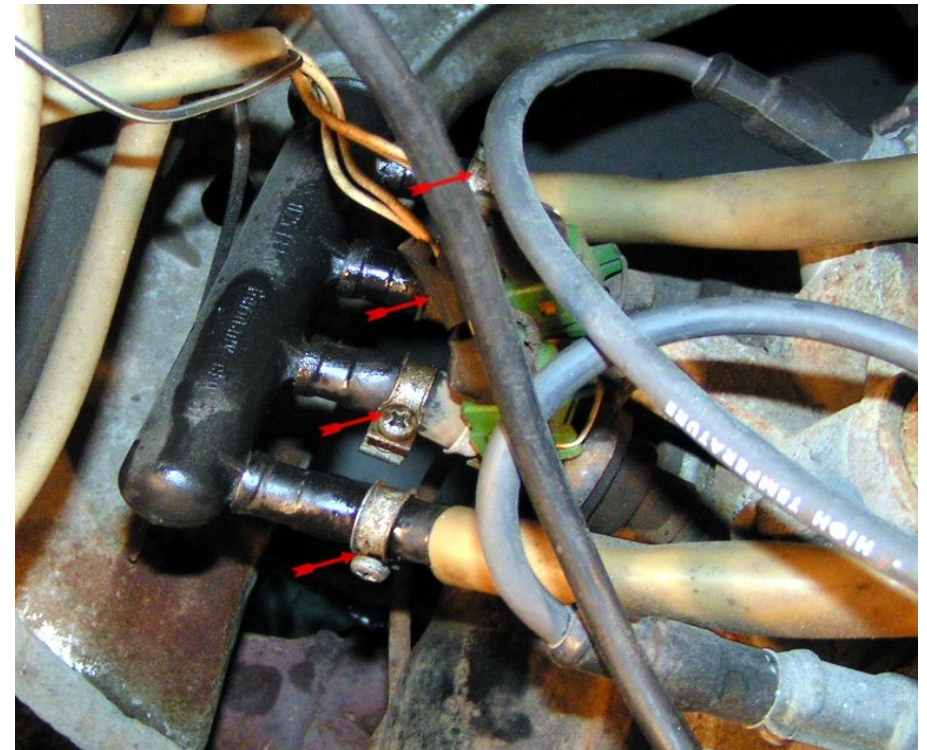


Here is the fuel flow and FI line location. Fuel comes in from the tank/fuel pump/firewall (A), splits at the T junction where the fuel bleeder is (Green arrow) and flows to either side of the engine and into the black fuel rails (E) where the injectors are hooked to the engine. Fuel exits the rail at the other end and passes into the fuel pressure regulator (C) where the unused fuel returns to the fuel tank.



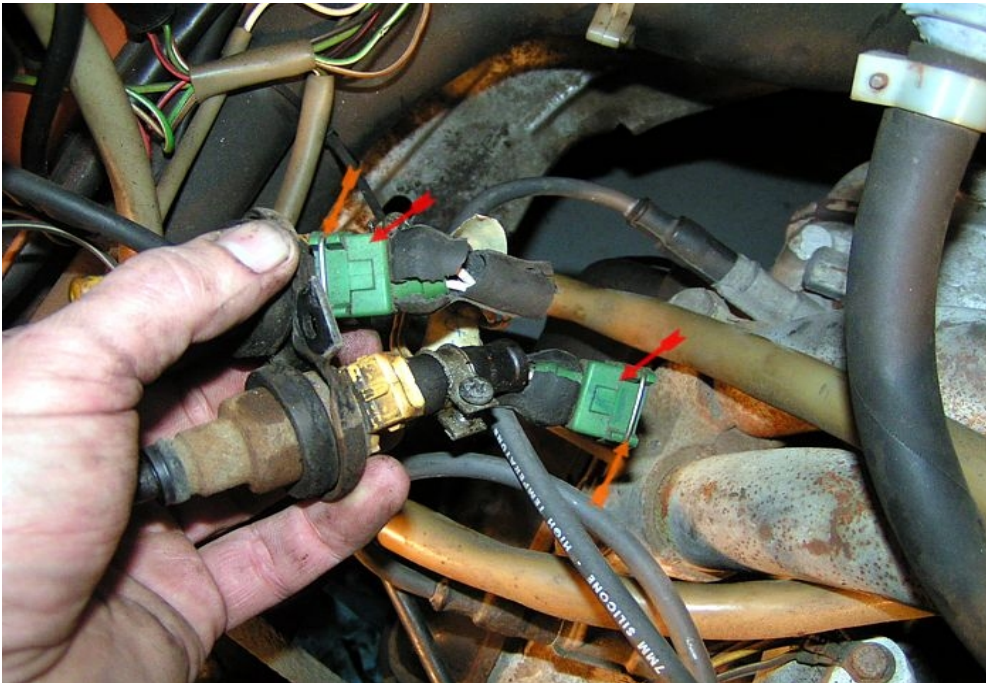
First, release (put a rag under) the fuel pressure with the little bleeder screw (green arrow)

Now unscrew the 4 clamps on the fuel rail. Remove the fuel rail from the injectors and the 2 hoses.

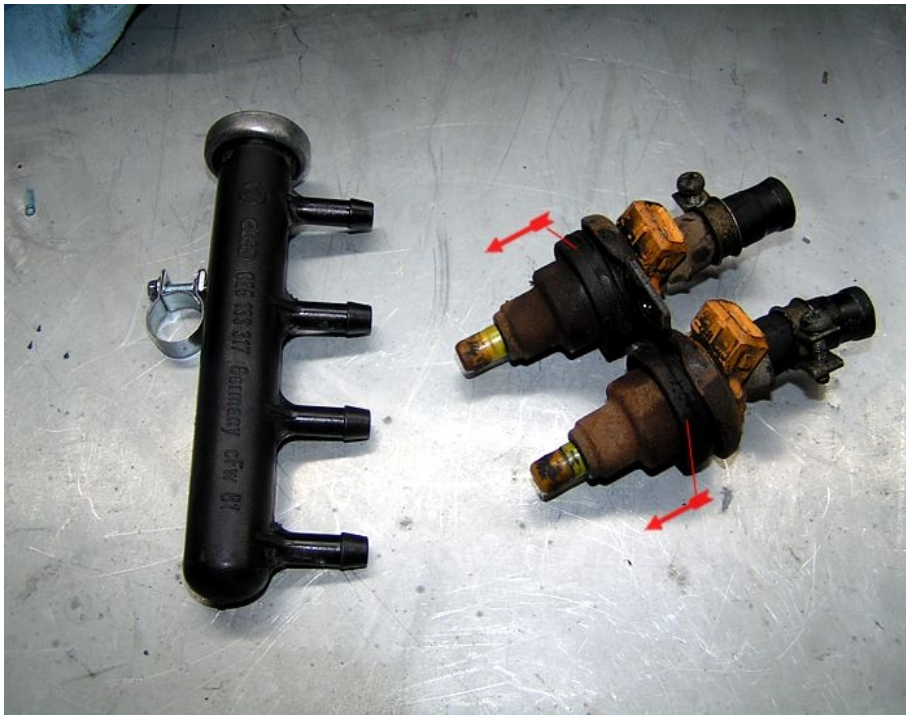




Remove the only screw that holds both injectors on the engine, slowly pull both injectors at the same time, being careful not to lose the 2 small sealing O-rings (engine side) on the small end of the injectors. They may be stuck on the engine, if so, remove them.



Unhook the 2 injector connectors by pulling the metal clip.



Remove the 2 big O-rings, the clamps and the metal holder.

Here we have all injectors parts.





Lets repair those hoses... You will need a cutter and an Xacto knife. The pictures speak for themselves.

Note: on the second picture, wiggle the xacto knife deep inside to make sure you cut the hose all the way.

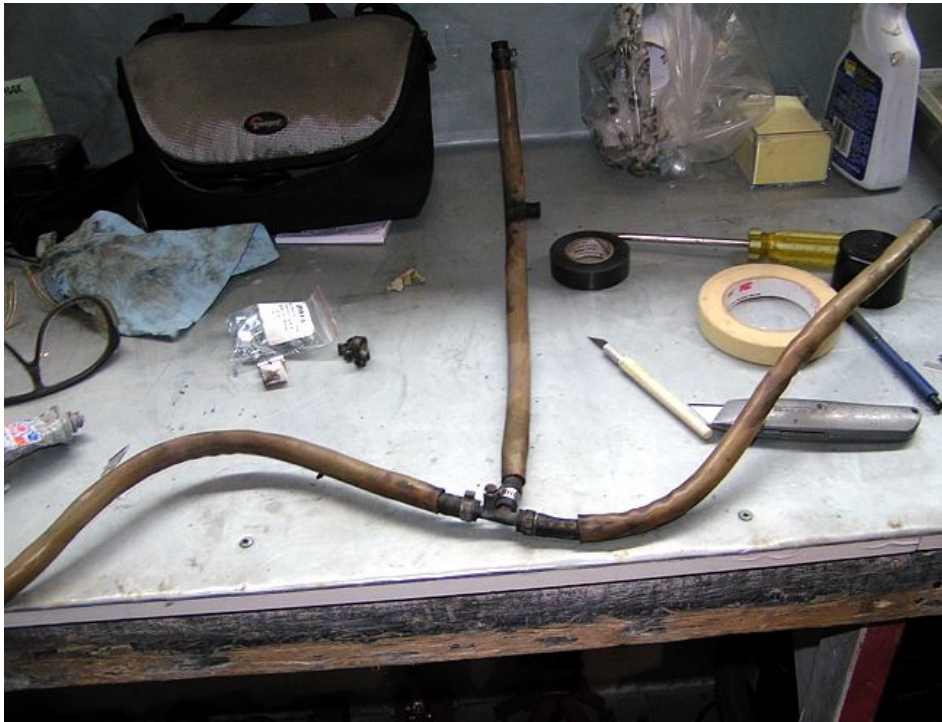


Cut 4 pieces of hose of the same length. Use an old one to measure length. Insert the new hoses into the injectors, affix a 5/16" FI clamp on each injector and secure those carefully.



NOTE: unlike the pictures on your right, there is no need to reuse the old "Injector Cuffs", only the collars are enough.





Now that the injectors are ready, it's time to remove and replace the remaining hoses. Begin with the one that is attached to the right side of the firewall to the plastic part junction (lower photo), unscrew it at the plastic part (coming from the fuel pump), to do so you will have to wiggle your way there. Once it's unscrewed, remove all 3 hoses at the same time, measure the length of each one and replace them one at a time so you won't get confused. Use only FI clamp and not the garden hose cheap clamps. When those 3 hoses are back in the van, do the 3 remaining return lines. Do these one by one as they go through the fuel regulator. The only difficult one is the one that goes from the fuel regulator to the fuel tank called the return line (left side), this one is more difficult to reach because the clamp is behind the firewall. You may also choose to discard the fuel line sleeves.



This should complete all the fuel lines in the engine compartment. Don't forget about the lines near the fuel tank, they are old as well.