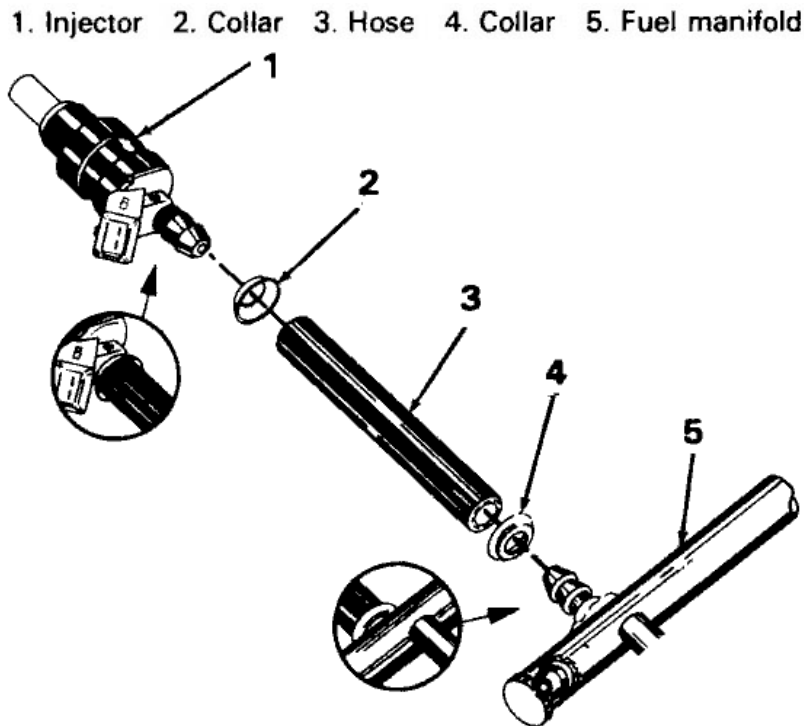


Taking the Mystery out of FI Hose Replacement

Below is the official FIAT Manual page outlining the procedure for changing the FI hoses. I've found that many people read this in disbelief and refuse to believe that this is all there is to it. Believe it or not, this is in fact all there is to it. No, you don't need extra special hose clamps but you do need the correct hose. See Lalo's Tips below.



INSTALLATION

NOTE: When replacing a defective injector, replace both the injector and hose.

To replace injector (1), pull hose (3) off fuel manifold (5). Use a twisting, rocking motion while pulling on hose.

To replace a damaged hose on a good injector, cut hose at both ends and remove it.

When installing new hose on injector, place collar (2 and 4) over shoulder of injector and manifold.

Push hose on injector and manifold until hose end is inside collar and collar is tight against shoulder.

To complete installation, reverse removal procedure. Make sure retaining bolts are tight. Check all fuel and air connections for leaks.

Lalo's Tips:

So how do you know if your hoses need replacement? For starters if your car has the original hoses then there is no doubt that you need to change your hoses. Check them for cracks and for abrasion and for small leaks. If they show any of these signs then I recommend you change them as soon as possible.



The hardest part of the procedure is removing the old hose from the barbs. I've found that the best tool for the job is a nice sharp exacto knife or a fresh razor blade. The trick is to cut the hose as far under the collar as possible. You want to cut it along it's length.

You then pull the hose down on the barb as if trying to snap a pencil in two. This will expose the uncut hose at the end past the collar so you can do the final cut.



Be very careful to minimize scoring the barbs. This is where the sealing occurs and any deep scoring caused by the knife can lead to leaks.

Here is one injector and hose completely removed from the fuel rail. Note that the collars are intact. **DO NOT** damage the collars in any way, this includes bending or cutting them. Any damage to the collars can lead to leakage.



Use the old piece of hose to size the new one. I always add another .060" of length to account for any shrinkage of the original hose. Make sure the cut is as clean and straight as possible. I first install the hose on the rail. When installing the new hose, push it firmly against the collar as hard as you can. Be sure that the outer diameter of the hose has in fact squeezed itself entirely inside the collar. It is this compression of the hose inside the collar that helps the sealing process.

Next, install the injector on the hose the same way. In this case, you can hold the rail in one hand and the injector in the other and push hard until the hose is pushed hard into the collar.

That's it. One down and four to go. The fuel supply hose and the cold start injector hose are replaced in the same manner.



What Hose Size and Type is Required?

The correct hose size is 7.5mm. NOT 8mm or 5/16in. I have in the past used 5/16in hose with success, but I will be the first to concede that it was pure dumb luck. When I went to remove the fuel injector rail to change the hoses three of the injectors FELL OFF the rail !!! How lucky was I to not have major fuel leaks over the several months that I ran with the 5/16in hose?? I've also seen 5/16in hose fail immediately after installation.

Secondly, you must use hose that is rated for FI pressures. In most cases the hose will have a rating of 100psi. Do not use anything rated less than 65psi. You can normally find the hose at your local VW dealer or BOSCH parts supplier. Be aware that the hose is not cheap, but ask yourself what it's worth to avoid an engine fire...

That's really all there is to it. Good luck changing those hoses!



Lalo's X1/9 Tech Page



Lalo's X1/9 Page



Lalo's FIAT Tech pages



Home

©copyright [V. Lalo Ruiz](#)