

2006-11 HHR, 2005-10 Chevrolet Cobalt-2003-07 Saturn Ion-2007-10 Pontiac G5

NFR0017 - (Fuel Vapor Line From Fuel Charcoal Canister to Engine)

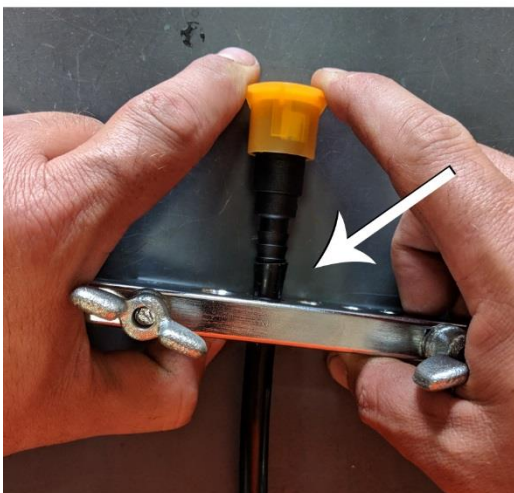
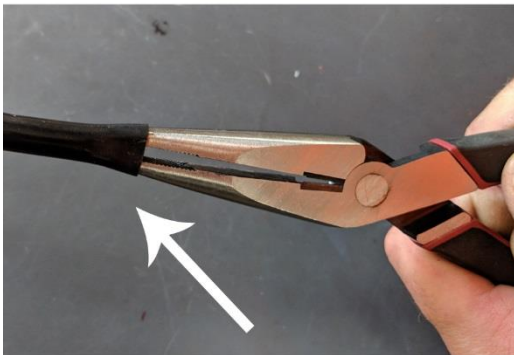
NFR0018 - (Fuel Line From Fuel Tank Line or Filter to Engine)

Take time to read all the literature that came with this kit. All Flexible nylon fuel kits can be installed into the factory clips and clamps or you can use the new plastic ties that are provided in the kit.

1. Remove old vapor line from the charcoal canister and disconnect at the top of engine purge valve. Discard old assembly. Remove the old main fuel line, At the tank disconnect from the filter (ion, G5, Cobalt) or fuel tank line (HHR) coming off the fuel tank. To get the lines apart you will require a disconnect tool to remove the existing line. **(Leave the old fuel filter bracket in place as the bolt can break off)**. To disconnect the fuel lines, you need the disconnect tool (inline tube Part # TLF10). Install the new fuel filter in place of the old filter.
2. **Main Fuel Line:** Install the new filter to the green line push connect (ION, G5 & Cobalt) (HHR Does not use the filter discard) Either end both are the same. Route the new line over the exhaust and let it suspend free. Run this line in the existing clips all the way forward to the engine compartment. Next go engine top side connect the new flex hose to the engine and drop down by the firewall. Connect the metal quick connect end to the engine line to complete the install.
3. **Fuel Vent Line:** Installing the white fuel tank vent line, at the back of the car plug the 90 degree black plastic push connect to the canister and run towards the front of the car. Push the lines up as high as possible, behind the old heat shield and wire tie into place as you work to the front. Next go engine top side connect the new flex hose to the engine purge valve and drop down by the firewall. Connect the metal quick connect end to the engine line to complete the install.
4. Clean up the routing areas of lines – make sure the line is not rubbing on anything.
5. Apply the **“CAUTION FUEL LINE”** sticker so that future mechanics know that this is a fuel line.
6. General Note: If the steel lines are rusted at the quick connects, see next page of directions on how to install new quick connects on the lines. (Instruction sheet Replacing Quick Connect)

SAFETY FIRST:

1. Never smoke in or near repair bays or garages. Vehicles contain flammable and combustible fluids which can easily be set on fire if they come into contact with fuel.
2. Make sure to drain all fuel lines or any component that may have fuel in it that can come in contact with spark, heat or flame. Do not work on vehicle while running or after being run or while hot. Let vehicle cool down for a couple of hours before working on fuel lines.
3. Keep work areas clean and organized. Pick up rags and tools to keep work area clear and free.
4. Wear protective gear at all times, as appropriate for the repair. Goggles, gloves.
5. Make sure fire extinguishers are easily acceptable and appropriate for all potential fire types. In the event of a fire, extinguishers need to be accessed quickly.
6. Always disconnect the battery when working on fuel systems.
7. Never work underneath a vehicle unless it has been properly supported. Raising the vehicle off the ground to access the underside requires verifying it is stable.
8. Always remove the keys from the ignition switch. as the key can draw an electrical charge from the battery, there is a risk of electrical shock, and/or electrical spikes that may spark.
9. Be aware of the vehicle's temperature before beginning any work. The engine, manifold, exhaust system, and radiator could be hot and cause skin burns or fire.



- Cut old outer covering near the end of the fuel fitting barb. Leave 1/8" on to the existing barb and cut around it with a knife. Cut where indicated, this leaves a larger opening in the nylon to start the new quick connect. By leaving 1/8" the end is already expanded for the new fitting
- Remove the remainder of the old quick connect barb from the nylon tubing using long nose pliers. Clamp on and put it out.
- Using long nose pliers, flare out the opening of the nylon hose for ease of sliding in the new fitting or connector.
(You may want to use a tube flaring tool to hold the nylon tube while working on it- leave 1/2" sticking out and stretch with long nose pliers.)
- Place Nylon hose into the tube flaring tool. You may want to lubricate the new connector barb with grease or oil before you push the new fitting into the nylon hose.
- Lines sizes
 - Main Fuel Line Green or 3/8"
 - Fuel Return Line Blue or 5/16"
 - Fuel Vapor Line White 5/16 or 1/4"