

Please read the entire instructions before beginning installation based on your year model. The removal and reinstallation of the fuel pump assembly on each year model are similar. The 90-93 model inlet tube will be modified to allow the new fuel pump mounting. The 94-05 model we will lower the pump about 1/2 in. (12.5 mm) in the assembly to reduce potential fuel starvation in aggressive driving.

Start with Step 1: Fuel Pump Access which relates to all year models and then proceed to Step 2. Step 2 Fuel Pump Wiring relates to those pumps that had screw terminals instead of plug in terminal. Step 3 Fuel Pump Removal relates to all year models for pump assembly removal. Step 4 instructions is for 90-93 models and Step 5 instructions is for 94-05 models.



Safety Preparation

- You are working with gasoline which is flammable so by all means have a Fire Extinguisher close by.
- Disconnect your battery negative post.
- Before starting it is recommended that you have minimal amount of gas in your tank. If not then have some paper towels close by to catch the fuel dripping from the fuel pump assembly.
- Put the top up with the rear window closed if removable and both door windows open. Do not perform the installation near open flame and do not smoke.
- Open the vehicle's doors or windows to prevent gasoline vapor from accumulating.
- Clear an area on a workbench to prepare for exchanging fuel pumps.

STEP 1: General Instructions for Fuel Pump Access

To install the high-pressure fuel pump, you will first need to remove the stock fuel pump. The access panel to the gas tank is located under the carpet on the package shelf behind the driver's seat.

- Disconnect the negative ground wire from the battery as shown in Photo 1-1. Caution: Make sure you know your radio's secret code if you have programmed it (if you haven't programmed a lock code, don't worry, it won't lock up).



Photo 1-1: Disconnect battery ground



Photo 1-2: Remove gas cap to relieve pressure

- Remove the gas cap as shown in Photo 1-2 to relieve pressure in the fuel system.
- Pull the top up, but don't latch it as shown in Photo 1-3 to allow access and add additional ventilation.
- Pull both seats forward for access to the back panel. Works best to lean in from the left side of the car to remove the fuel pump.
- Remove the five plastic tabs securing the carpet as shown in Photo 1-4. Roll the carpet back so that the silver cover plate on the driver's side is exposed as shown in Photo 1-5.
- Remove the six Phillips head screws in the silver cover plate as shown in Photo 1-6 and place aside.



Photo 1-3: Open top and windows down for ventilation



Photo 1-4: Disconnect tabs from carpet deck



Photo 1-5: Carpet rolled back for access to pump

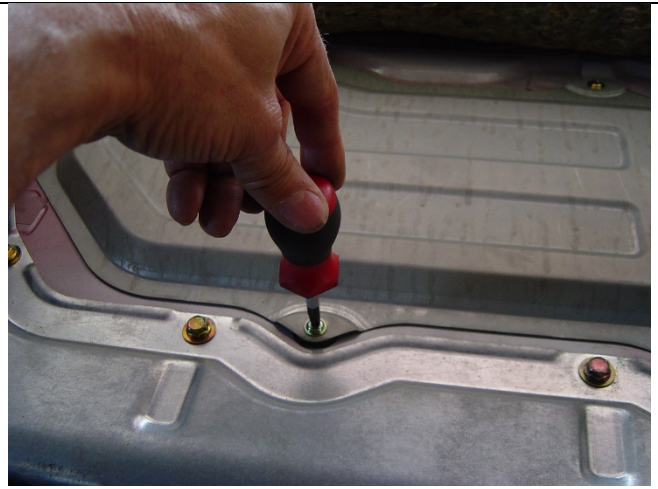


Photo 1-6: Remove cover panel

- You will need paper towels to soak up spilled gas. Notice that the top of the fuel tank has a slight angle that will run the gas towards the front of the car. Place the paper towels between the gas tank and the bottom of the shelf towards the front of the car.

STEP 2: Fuel Pump Wiring

Some models use a screw mounted terminal arrangement on the factory fuel pump. The TDR accessory kit includes a plug style harness that plugs into the new fuel pump.

- Verify which style fuel pump you have. If you have the screw mounted harness type as shown in Photo 2-1 you will cut the wire a couple of inches (50 mm) above the fuel pump.
- If you have the more common plug in fuel pump harness as shown in Photo 2-2 then unplug during the removal instructions and plug into new fuel pump. No wire cutting required.
- If using the new harness, attach by crimping two of the wire connectors as shown in Photo 2-3.
- Attach the Red wire (Hot) to the Blue wire and the two Black (Ground) wires together as shown in Photo 2-4.
- After the fuel pump installation, tie-wrap the harness to the fuel line as shown in Photo 2-4.



Photo 2-1: Screw type fuel pump termination

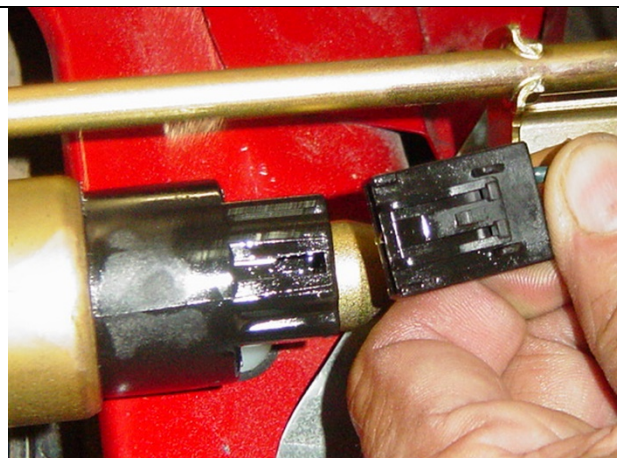


Photo 2-2: Plug in type fuel pump termination

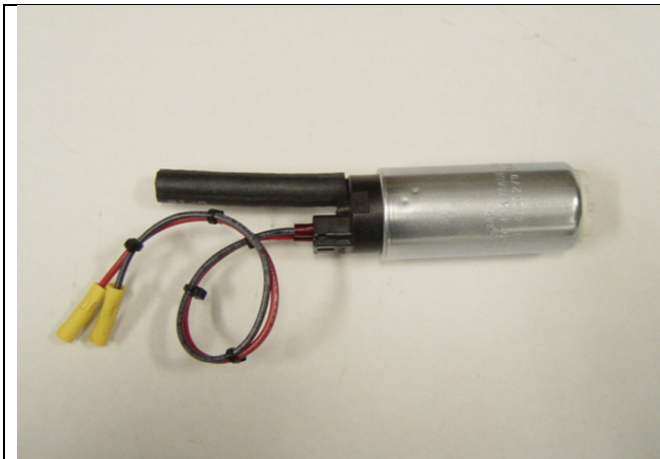


Photo 2-3: New plug in harness with wire connectors

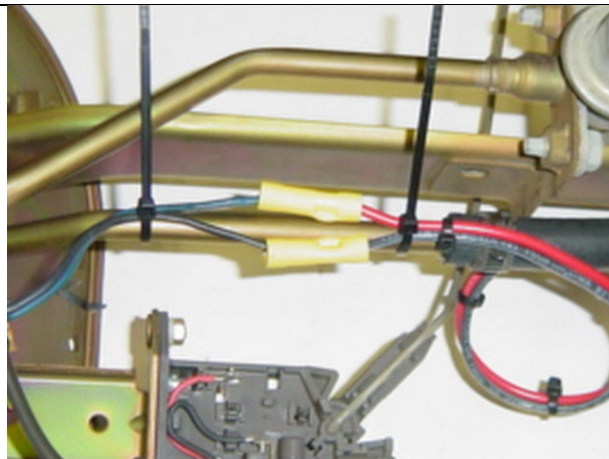


Photo 2-4: New harness connected to existing harness

STEP 3: Fuel Pump Assembly Removal

Section 3-1

The 90-97 fuel pump assembly removal and installation are the same using rubber hose and spring clamps.

- Before removing assembly, mark one of the rubber fuel hoses on both the pipe and the hose as shown in Photo 3-1. You can also use a tie-wrap on each for a marker.
- Remove the nine brass Phillips screw surrounding the assembly cover as shown in Photo 3-2. Be careful not to strip or loose the screws.
- Remove the spring clamps and pull the hose off the metal fitting. Unplug the electrical connection as shown in Photo 3-3.
- Lift the assembly out of the fuel tank as shown in Photo 3-4. The strainer will be holding fuel. Squeeze the strainer to remove as much fuel before moving to a bench to begin modification.



Photo 3-1: Fuel hose marked for reinstallation

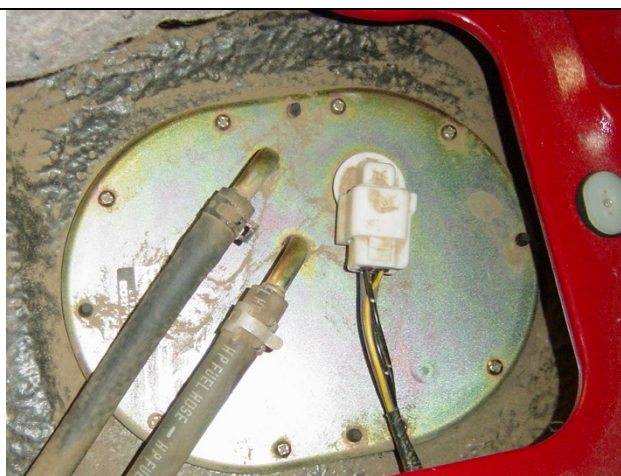


Photo 3-2: Assembly screws removed



Photo 3-3: Remove spring clamps and harness



Photo 3-4: Fuel pump pulled from tank

Section 3-2

The 99-05 fuel pump assembly fuel line connection attaches by using locking clips.

- Squeeze the white clip and then pulling the fuel line off as shown in Photo 3-5.
- Remove the electrical connection by squeezing the connector.
- Remove the Phillips screws and pull the assembly out. The strainer will be holding fuel. Squeeze the strainer to remove as much fuel before moving to a bench to begin modification.



Photo 3-5: Fuel line released



Photo 3-6: Releases electrical connection

STEP 4: 90-93 Fuel Pump Modification

The 90-93 model fuel pump is mounted with the outlet of the pump inserted into the pickup inlet tube. This pickup tube will be modified for the new pump installation.

- Using a Phillips screw driver, unscrew the lower mount as shown in Photo 4-1.
- If you are going to reuse your strainer you need to remove the clip using a small flat-head screwdriver as shown in Photo 4-2 and 4-3. Be careful not to lose this clip. If using the new strainer, the kit comes with a new clip so removal of the old strainer is not necessary.



Photo 4-1: Base removed from pump



Photo 4-2: Strainer clip removed

- Photo 4-4 shows the inlet tube before removing off the widen section.
- Mark the inlet tube and mount as shown in Photo 4-5. You will be cutting the inlet tube wide section off for the new fuel pump hose installation.
- Using a hack saw or band saw, cut the brace first as shown in Photo 4-6.



Photo 4-3: Strainer and clip

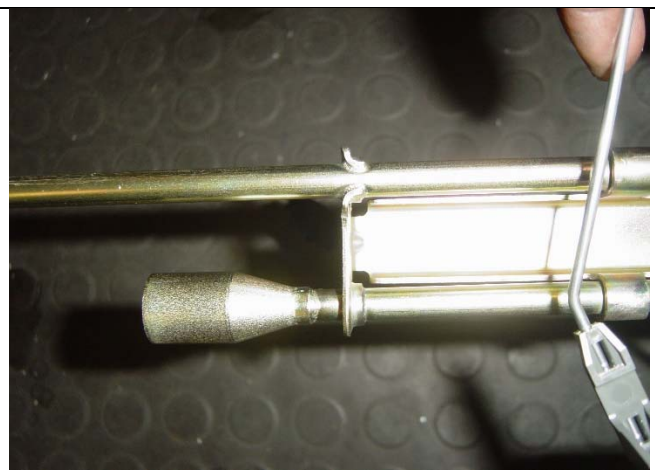


Photo 4-4: Fuel pump inlet tube

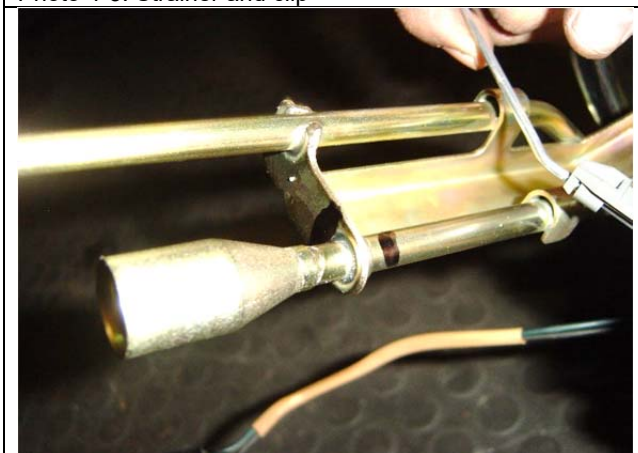


Photo 4-5: Inlet tube marked for cutting

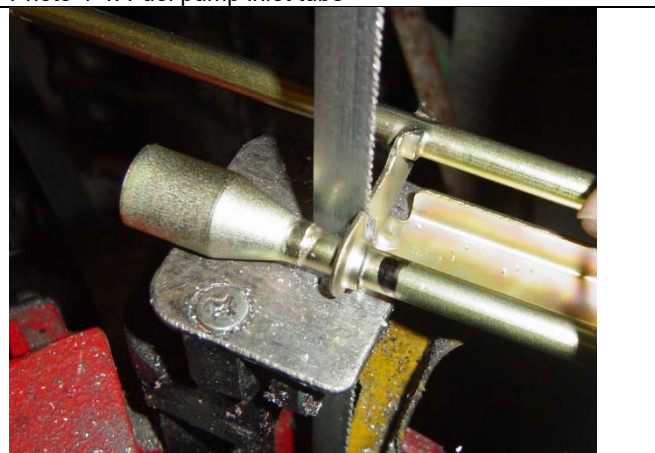


Photo 4-6: Brace cut from inlet tube

- Next cut the tube as shown in Photo 4-7.
- Using a Phillips screwdriver, insert into inlet tube and bend the tube out for the rubber hose clearance as shown in Photo 4-8 and 4-9.
- Blow air or run water through the tube to clear any debris as shown in Photo 4-10. Also make sure there are no burrs on the tube inlet so the rubber hose will slide over easily.



Photo 4-7: Inlet tube cut

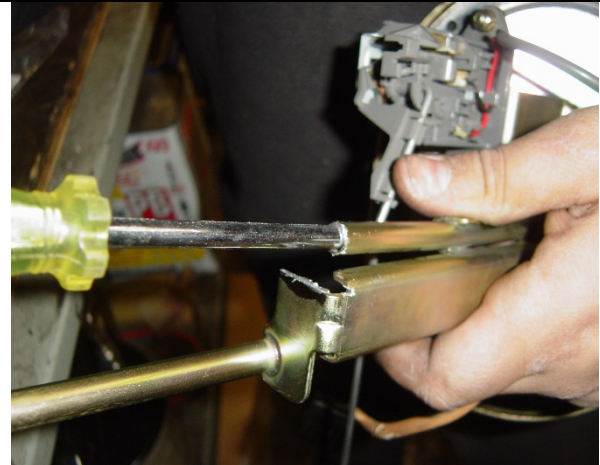


Photo 4-8: Inlet tube bent out from the support

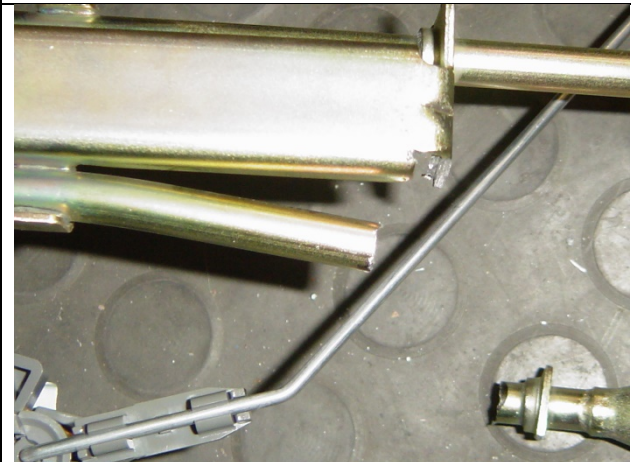


Photo 4-9: Inlet tube bent out from the support



Photo 4-10: Air blown thru inlet tube to clear debris

- Slide the supplied hose and with clamps over the modified inlet tube. Then slide the hose with clamp over the fuel pump outlet as shown in Photo 4-11. Slide the pump to where it is flush with the base
- Install the rubber band back on to the pump assembly. You might add tie-wraps as well to hold the pump assembly when complete.
- Install the strainer with supplied clip. It works best to use a small socket like a 3/16 in. (4 mm) to press the clip down as shown in Photo 4-12.
- Install new rubber mount over pump base. Reinstall base mount using Phillips screw as shown in Photo 4-13.
- The completed assembly should look like the Photo 4-14.
- Install the electrical plug into the fuel pump.

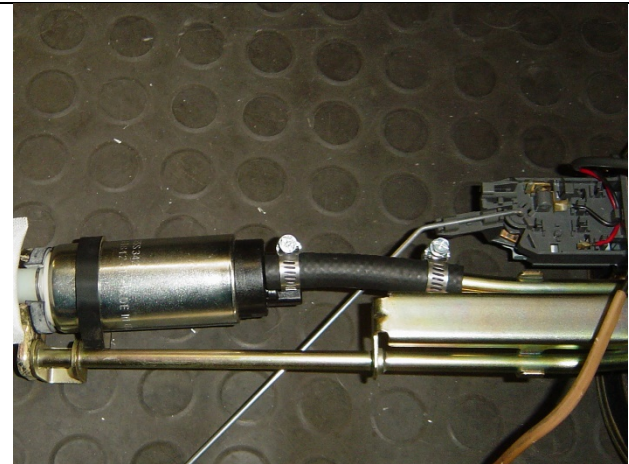


Photo 4-11: Fuel hose attached to pump and inlet tube



Photo 4-12: Strainer clip installed



Photo 4-13: Bottom mounting bracket installed

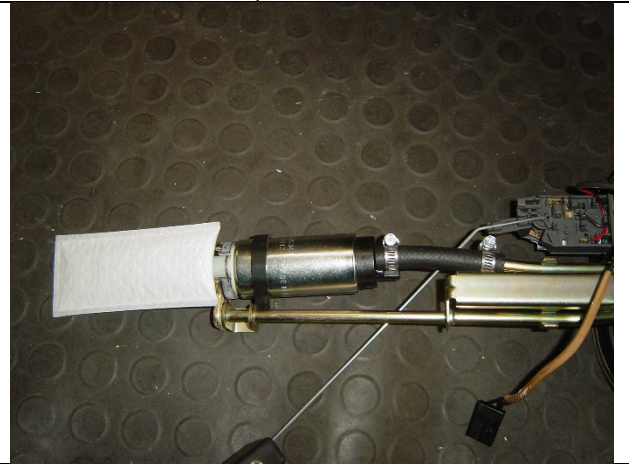


Photo 4-14: Fuel pump assembly complete

- Reinstall assembly into the gas tank.
- Reconnect the fuel pump electrical plug and two fuel lines. Make sure all connections are secure.
- Clean up any gasoline that may be left and any paper towels.
- Reinstall the silver cover plate. Put carpet back in place and reinstall the plastic carpet securing tabs.
- Tighten down fuel cap, and reinstall the negative battery connection.
- Start the engine, there will be a small delay to build up fuel pressure.

STEP 5: 94-05 Fuel Pump Installation

The 94-05 model fuel pump is mounted with rubber hose between inlet pipe and the pump outlet. The base is held on by a Phillips screw on the side. We will be extending the pump lower than stock to help fuel pickup in aggressive driving.

- The fuel pump assembly should be out and on the bench at this time.
- Using pliers, squeeze the lower hose spring clamp on the short rubber fuel hose and slide them off as shown in Photo 5-2.
- Remove the lower bracket by removing the Phillips head screw as shown in Photo 5-3.



Photo 5-1: Fuel pump assembly being removed



Photo 5-2: Spring clamps removed from hose



Photo 5-3: Bottom mount screw removed



Photo 5-4: Strainer clip removed with small screw driver

- Remove the strainer using a small screwdriver to pull the circular clip off a shown in Photo 5-4. Don't discard this clip if you are going to reuse the old strainer. Skip this step if you are using new strainer.
- Install the rubber hose with the clamps onto the new pump as shown in Photo 5-6.
- Install the strainer with supplied clip. It works best to use a small socket like a 3/16 in. (4 mm) to press the clip down as shown in Photo 4-12.



Photo 5-5: Remove strainer clip using a small screwdriver



Photo 5-6: New hose installed on fuel pump



Photo 5-7: Clip installed on strainer



Photo 5-8: Rubber mount on bottom of pump

- Install new rubber mount over pump base as shown in Photo 5-8.
- In order to improve low fuel pick up, we reinstall the pump using Phillips screw mounted into the square hole on the L-bracket as shown in Photo 5-9. The rubber hose on the input tube will slide down to meet this slightly lower mounted position.
- Use tie-wrap to secure pump as shown in Photo 5-10.
- Install the fuel pump electrical harness.



Photo 5-9: L-bracket mounted with screw in square hole



Photo 5-10: Fuel Pump assembly complete

- Reinstall assembly into the gas tank.
- Reconnect the fuel pump two fuel lines and electrical plug. The fuel line connections will snap back in on the 99-05 model when seated. Make sure all connections are secure.
- Reinstall the silver cover plate. Put carpet back in place and reinstall the five, plastic carpet securing tabs.
- Tighten down fuel cap, and reinstall the negative battery connection.
- Start the engine, there will be a small delay to build up fuel pressure.

If at any time you need assistance please feel free to contact us or email us at support@trackdogracing.com. If you have any comments or suggestions, please let us know.