

1. Before proceeding, it is a good idea to:

A. Verify fuel pressure. This procedure is not discussed in these instructions.

B. Have as little fuel in the gas tank as possible.

Open the front trunk. Using a 10mm wrench, unscrew the 4 acorn nuts and remove the fuel pump access cover. Release the fuel pump connector by squeezing the locks and simultaneously pulling upwards, as shown.

To relieve fuel pressure, start the engine and allow it to stall. Remove the key from the ignition switch.



2. Dislodge the two ¼ fasteners and remove the plastic battery panel on the cowl. Using a 10mm wrench, remove the negative battery terminal, as shown.

CAUTION:

1. Disconnecting the battery (G1) may cancel the fault memories of some control units. Consequently, before disconnecting the car's battery, always interrogate the fault memories.

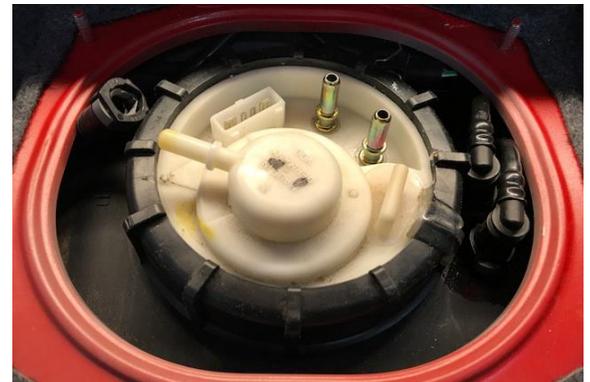
2. Do not close the front trunk when the battery is disconnected. The latch is electronically-controlled (not mechanical).



3. It is a good idea to clean the fuel pump area before opening the fuel system.

Squeeze each of the three SAE fuel fittings' locks and release them from fuel pump hanger top, as shown. Have a rag handy as fuel will instantly leak out of these connections.

To remove the black fuel tank lock ring, it is recommended to purchase a spanner tool. These are relatively inexpensive and can be found from companies like Lisle, OEMTools, Ryco, etc. Radium successfully uses Lisle P/N: 63000. Spin the ring counterclockwise to allow the glue to break free and remove.



4. Use a white paint marker and draw a ½" straight line from the white plastic fuel hanger top through to the fuel tank lid threads. This allows a reference of how the fuel pump hanger is orientated so the level sender (in particular) is clocked properly when reinstalling.

Pull the fuel hanger top up just enough to expose the fuel pump power wiring (shown). Pull the 2-pin electrical connector to disconnect.



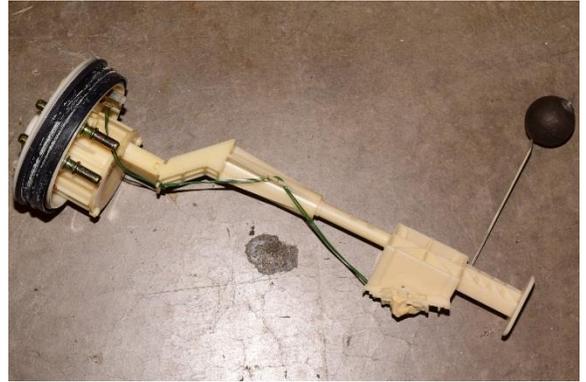
5. To release the factory quick disconnect fuel tubes on the underside of the fuel top, first remove the black plastic tab by pulling away (outwardly).

Next, squeeze the locks on each fuel fitting connector to release the convoluted feed and return fuel tubes.



6. Carefully remove the level sender portion of the fuel hanger from the vehicle.

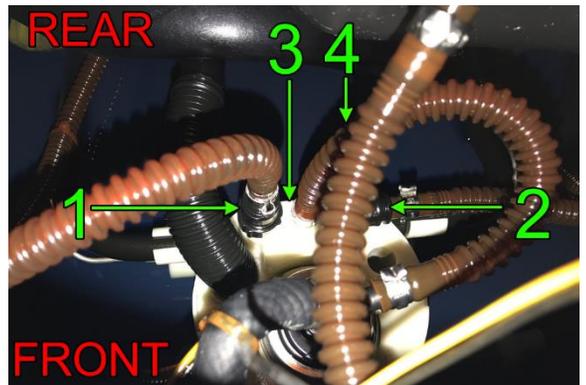
Remove the large diameter black rubber gasket from the hanger top. This gasket **MUST BE** installed onto the gas tank opening before reinstalling the hanger assembly.



7. The next step is to remove both venturi jet pump arms from the fuel basket.

Press the RH SAE fitting lock (1) and remove the RH high pressure convoluted tubing connector that points upwards. Press the LH SAE fitting lock (2) and remove the LH high pressure convoluted tubing connector that comes from the side.

Reach in behind the fuel pump basket. You will feel two push tabs (3) and (4). These are not shown in this picture. Each side holds and secures a black low pressure pickup tube and the metal arm.

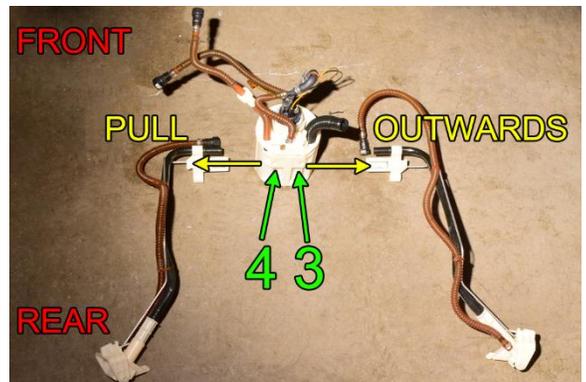


8. Pull the venturi jet pump arms outwards to release.

NOTE: The picture shows the fuel pump assembly outside of the vehicle. The angle is shown from the backside of the assembly for clarity.

Carefully move each venturi jet pump arm out of the way inside the gas tank. As they do not need to be removed.

To disconnect the fuel filler, gently pull the black short (large diameter) convoluted tube. For these instructions we will keep it attached to the fuel pump assembly but it can also detach here and stay in the gas tank.



9. Spin the main fuel pump basket a ¼ turn counterclockwise to unlock it from the bottom of the gas tank (gas tank lock ring shown).

Have a bucket nearby and cautiously pull the fuel pump basket out of the tank. This is a tight fit so make sure everything is clear when the basket is at the opening.

The basket will likely be full of fuel. Dump all contents into the bucket and set onto a clean workspace.



10. Pull the convoluted fuel return hose out of the top of the basket hole and set aside. It will be reinstalled later.

Cut the non-serviceable pinch clamp off the fuel pump barb, as shown.

Spread the clamp apart and pull the 2-piece clamp off the rubber hose.



11. Pull the Y-fitting hose assembly off the fuel pump barb.

Remove the female power and ground spade connections off the fuel pump.



12. Pry the tabs around the upper sides of the basket to release the top portion with the fuel pump.

Clean any debris that may be inside the basket.



13. The fuel pump can now be separated from the assembly.

First, take note of the clocking orientation of the plastic holder in respect to the fuel pump's outlet barb. Pry the 3 plastic tabs outwards to release the fuel pump. NOTE: The holder will come out the bottom of the pump, as shown.

The plastic pump holder will be reused.

NOTE: In the fuel feed line after the Y-fitting, there is an OEM metal inline check valve (shown in silver). This can be removed for extra fuel pump flow, but know that fuel pressure will immediately drop as soon as the engine is turned OFF.



14. First, slide the Radium sleeve over the new pump. Insert the included worm drive clamp into the recess. For Walbro F90000262/263/267/274/285/295 pumps, fully seat the sleeve until it bottoms out. For all other pumps, the top of the sleeve and pump should be flush for proper positioning height. Secure using a 1/4" socket.

Install the pump sock filter (Radium 14-0143 shown). Next, lubricate and insert the pump outlet into the rubber hose and secure using the included EFI clamp.

NOTES:

1. If 20-0276-00 was purchased, no wiring is included and the blue spades will need to be used.
2. If a Walbro F90000262/263 was purchased, reuse the OEM Porsche pump wiring.
3. If Radium 17-0053 or 17-0054 (shown) connector harness was purchased, install to the pump now.



15. To fit the fuel pump back into the OEM plastic fuel pump cradle, first insert the sock filter. Next, slide the fuel pump down until the Radium sleeve's ring engages and fully seats into the OEM plastic fuel pump cradle.

For proper clocking, rotate the fuel pump around so the fuel pump outlet hose is opposite of the OEM black convoluted fuel filler hose, as shown.

Insert the fuel pump assembly into the basket until it snaps in place.

Reinsert the OEM convoluted return tubing back into the top cap, as shown.

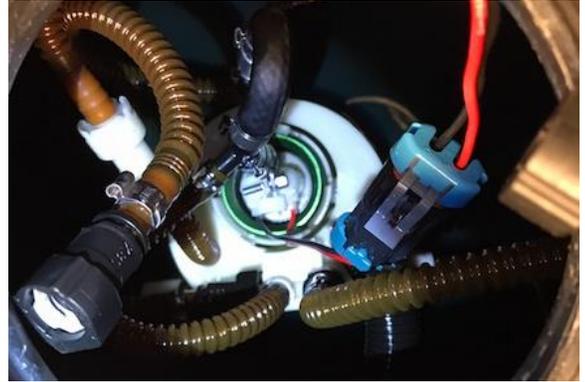


16. Place the assembly back into the tank. Reinstall the venturi jet pump arms into the backside and fully push the two SAE pickup tubes until a click is "felt".

Locate the lock ring at the bottom of the gas tank. Engage and rotate the fuel pump assembly ¼ turn clockwise to lock it into place.

Push the short large diameter black convoluted tube onto the fuel filler tube.

Reinstall the large diameter rubber gasket onto the gas tank opening. Find and pull the fuel pump wires, the fuel pump outlet tubing, and the fuel return tubing just outside of the gas tank.



17. Lower the top final piece down into the gas tank and make sure the level sender float is on the RH side of the tank. Be sure the fuel level arm is in front of the venturi jet pump arms.

Push each SAE convoluted tube fitting into their respective male receivers on the underside of the hanger top until a click is "felt". NOTE: From the top side, the "V" (green fitting) is "Pump Out" and the "R" (gray fitting) is "Fuel Return".

Push the black lock fitting over the SAE fittings, as shown.

Finally, reinstall the electrical connector on the bottom side of the hanger top.



18. Fully seat the hanger top into the gas tank opening gasket.

Rotate the hanger around until the marks lineup that we were made prior to removing the fuel hanger.

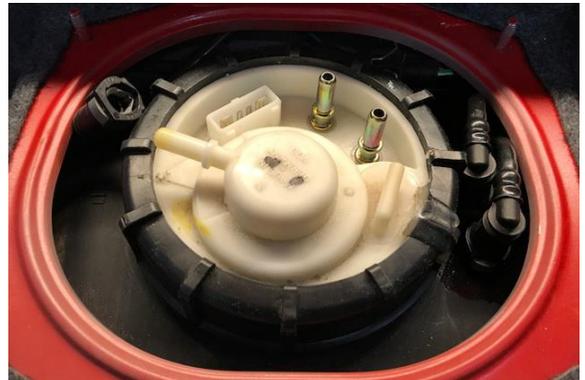
Reinstall the black fuel tank lock ring, as shown.

Install the green SAE female fitting to the metal "V" male SAE fitting.

Install the gray SAE female fitting to the metal "R" male SAE fitting.

Install the final SAE female fitting to the plastic male SAE fitting.

Plug in the electrical fuel hanger connector.



19. Reinstall the negative battery terminal and plastic battery panel. Turn the ignition key to the ON position to confirm the fuel level sender is properly working. Cycle the ignition key a few times to allow the fuel pump to prime.

Start the vehicle. NOTE: The engine may run rough for a few seconds while alleviating any potential air that may have been introduced into the fuel system.

Check fuel pressure and fuel leaks. Reinstall the fuel pump access cover using the 4 acorn nuts.

INSTALLATION COMPLETE

