LOW PRESSURE FUEL PUMP

INSTALLATION INSTRUCTIONS





Notes:

These instructions were written for a North American specification MkVII GTI. Other models, like the Golf R, are similar.

When disassembling the car, be sure to keep all fasteners so they can be reused. It is recommend that you get some kind of compartmented tray to organize the fastners, such as a fishing tackle box or several large ice cube trays. Fasteners that are not reused for reinstallation are noted in the instructions. All directions used in this manual (right, left, front, etc.) are based on if you were sitting in the drivers seat of the car.

These instructions assume that you have basic mechanical skills and several varieties of the tools of basic hand tools in order to install the kit. If you have any questions about the install, feel free to contact your APR representative.

1) Before beginning this installation, the vehicle should have less than 1/4 a tank of fuel. Some fuel may need to be pumped out if over 1/2 a tank. Disconnect the 10mm negative battery terminal and set aside. Open the gas cap of the car to depressurize the gas tank.





2) Remove the four covers over the child seat locking points by pulling the plastic covers away from the seat bottom.

3) Lift up on the front of the bottom of the rear seat. With the front of the seat lifted up, push the back of the seat bottom down and back to release it from the car. Remove the seat bottom from the car.





4) Lift up slightly on the fuel pump access cover. Run your fingers all around the cover to separate it from the surrounding metal.

5) Disconnect the electrical connector from the top of the fuel pump. Slide the access cover and electrical harness aside.





6) Place several rags around the fuel pump area before taking the fuel fitting off. The fuel system may still have pressure in it, so be prepared for spraying fuel. While pressing the tab on the side of the fuel fitting, lift the fitting off the top of the fuel pump. Slide the fitting and hose aside.

7) Put a small screwdriver or chisel on the raised tabs of the fuel pump retaining ring. Gently tap the chisel with a hammer so the retaining ring rotates counterclockwise. Remove the retaining ring.

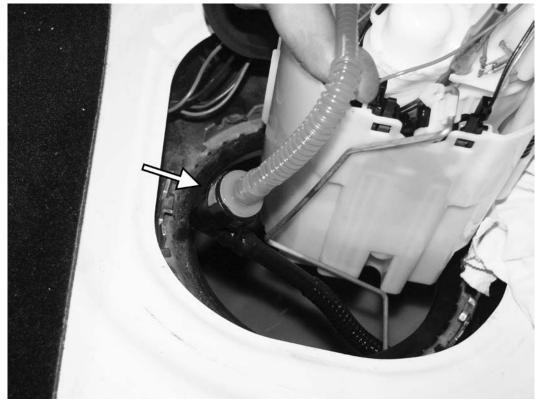




8) Lift up on the fuel pump top, being careful not to damage the rubber seal ring. Remove the seal ring from the car. Be careful not to spill the fuel that is inside the fuel pump basket.

9) Lift the fuel pump basket out of the tank enough to separate the fuel line from the side of the fuel pump basket. Again, be careful not to spill the fuel that is inside the fuel pump basket in the car.



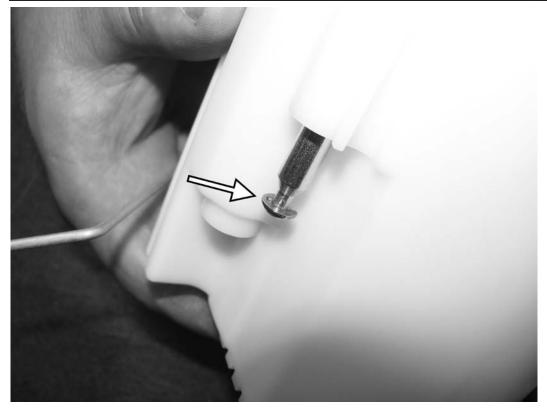


10) Lifting the pump further, locate and disconnect the fuel fitting that is attached to the fuel line that was on the side of the fuel pump basket. Push the tab on the fitting in and pull to disconnect. Also, be careful not to bend the metal arm that goes to the float on the fuel level sensor.

11) Remove the fuel pump assembly from the car, being careful with the fuel level float arm. Any excess fuel in the basket can be drained back into the tank.

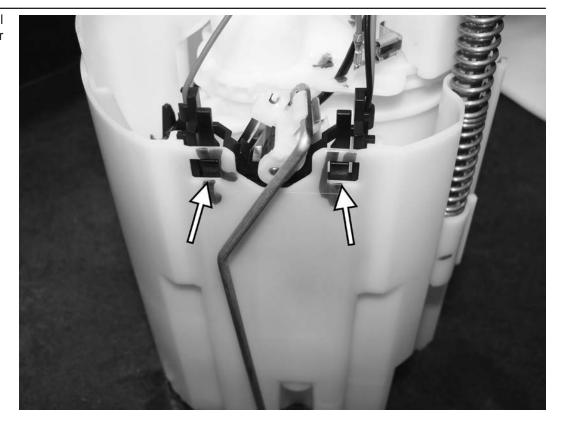
If you are replacing your existing pump assembly with a prebuilt assembly from APR instead of rebuilding your pump, skip to step 48 of this manual.

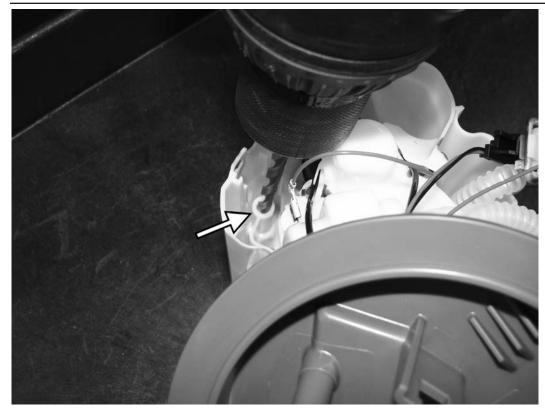




12) On a clean work area, remove the circlip from the bottom of the spring loaded rod on the bottom of the fuel pump. Do not lose this circlip, as it will be reused. Lift the spring loaded top of the fuel pump off the fuel pump basket and set aside.

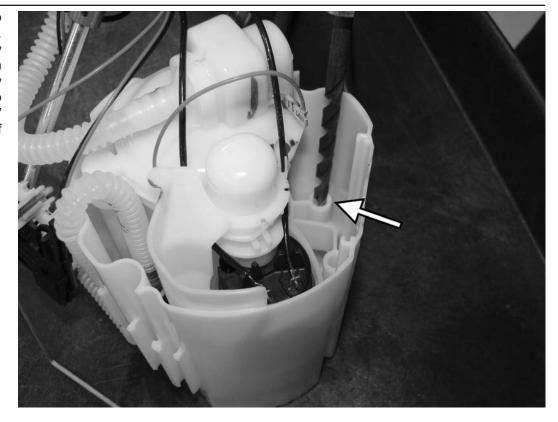
13) Push in the tabs on the fuel level sensor and lift the sensor and sensor arm out of the pump basket.





14) Inside the fuel pump basket under where the fuel level sensor mounted, drill out the hole in the mount shown with one of the 6.5mm drill bits. Drill this hole with a high drill speed, but go very slow to take care not to break the plastic of the pump basket. Drill all the way through this hole to the bottom side of the pump basket.

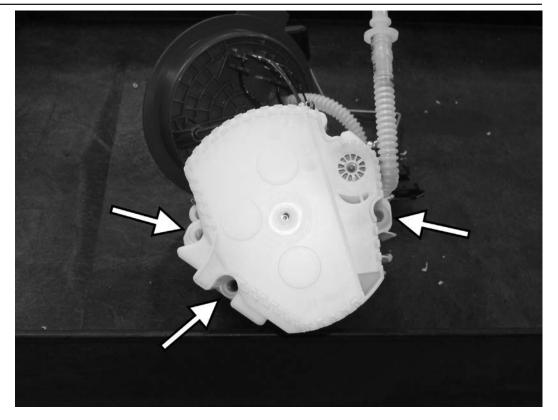
15) Locate the other hole just next to the hole drilled in the previous step. Again with a high drill speed, slowly drill all the way through this hole with the 6.5mm drill bit. This hole is only supported by one support tab, so be careful not to let the drill bit "bite" and break the entire mount out of the pump basket.

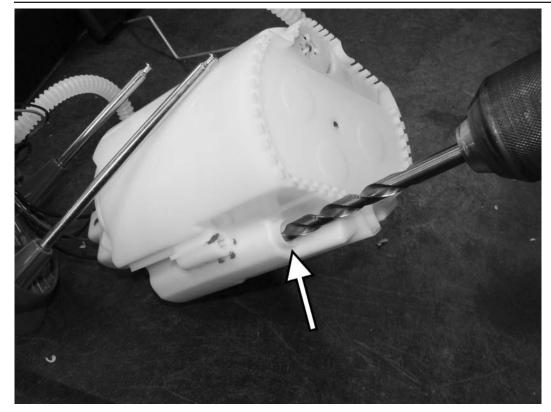




16) Locate the last mounting hole on the opposite side of the two holes just drilled. Drill this hole all the way through carefully with the 6.5mm drill bit.

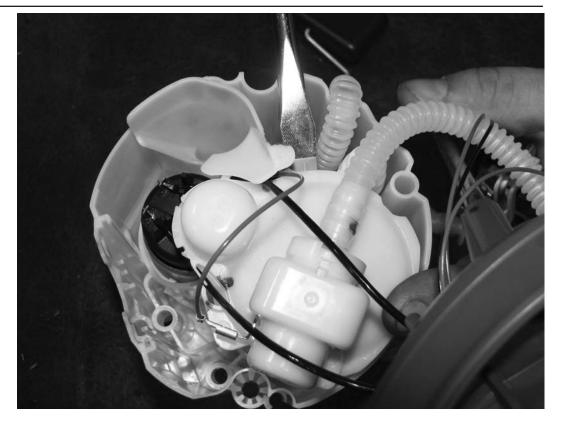
17) Flip the entire pump basket over, and locate the bottom of the three holes that were just drilled from the top. You will be trying to separate where the inner plastic structure of the pump basket is plastic welded to the outer housing of the pump basket.





18) Using the 8mm drill bit, drill these three holes from the bottom side. You should only need to drill to a depth of about 3mm in order to reach and drill through the plastic welding. If you drill too deep, you will drill into the thin part of the mount of the inner plastic structure, and you will break the mounting holes off of the support tabs.

19) Carefully use a screwdriver to help pry the inner plastic structure of the pump basket from the outer pump basket. Most of the plastic welding has been drilled through with the 6.5mm and 8mm drilling operations, but a small section still remains. It may be necessary to slightly enlarge the 8mm holes.





20) Using a small screwdriver, carefully pry both sides of the fuel pump sock awat from the fuel pump assembly.

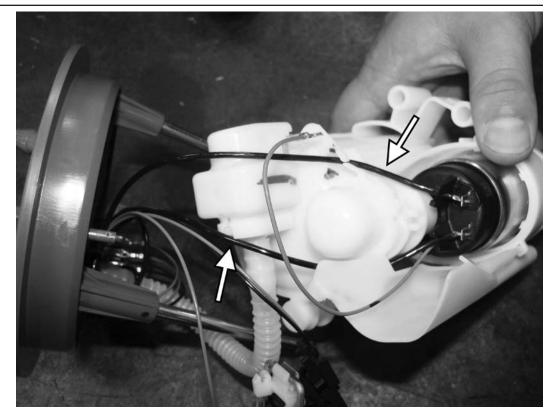
21) Once the two sides of the fuel pump sock are separated, remove the front tab holding the sock to the fuel pump, and remove the pump sock.

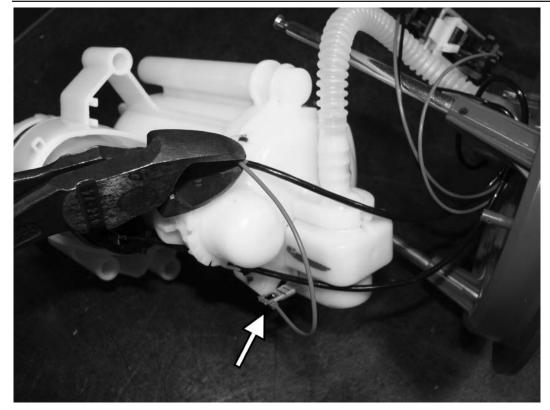




22) Locate and identify the wires inside the pump assembly based off of the markings on the pump top. The AWD pumps have two separate electrical connectors, but the same connections are present.

23) Find the wire coming off the EKP+ terminal and cut this wire close to the actual fuel pump, leaving a long wire off of the pump top. Locate the EKP- wire and cut this about 2-3 inches wire closer to the pump top.

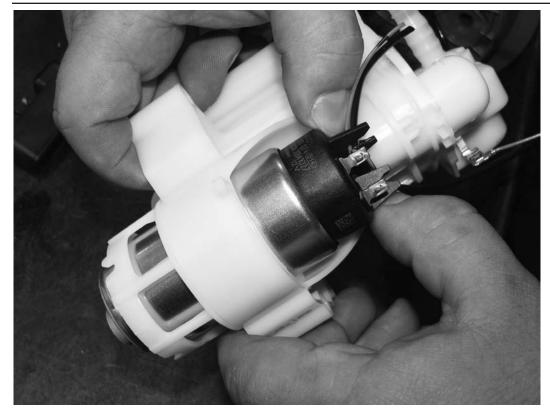




24) Locate the red wire that has a spade connector down near the top of the actual fuel pump. Cut this wire about four inches from the spade terminal.

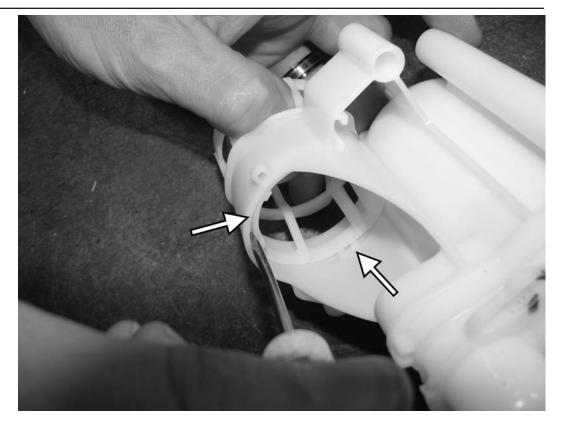
25) Remove the plastic chamber that is sitting next to the fuel pump by lifting on the locking tab near the bottom of the chamber and lifting the chamber away from the base of the fuel pump.





26) Push the actual fuel pump out of the assembly by pushing it down and out of the plastic housing.

27) Using a small screwdriver, pop up the three small tabs holding the stock fuel pump spacer to pump housing. Remove the stock pump spacer and discard.

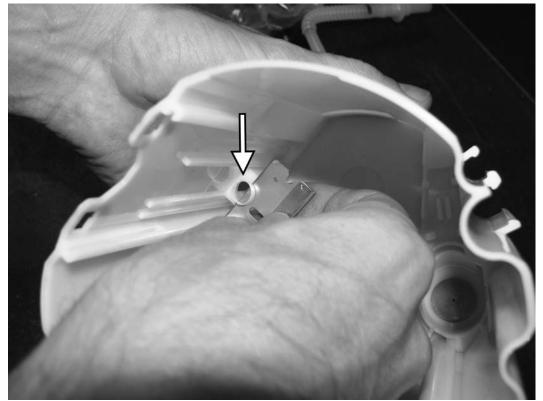




28) Cut 5-6mm off of the side of the pump housing as shown marked.

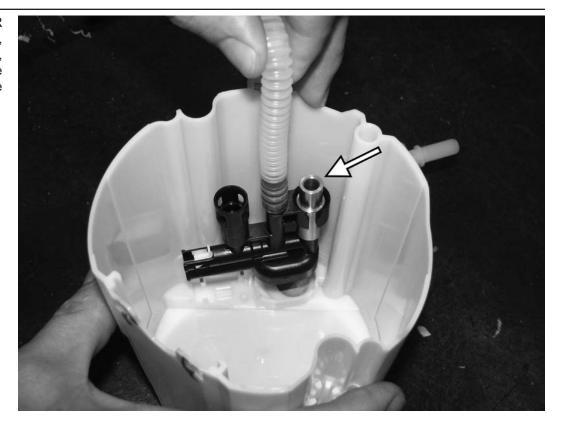
29) Remove the siphon tube assembly from inside the stock pump basket. Angle the siphon tube to the side to separate it from the pump basket.

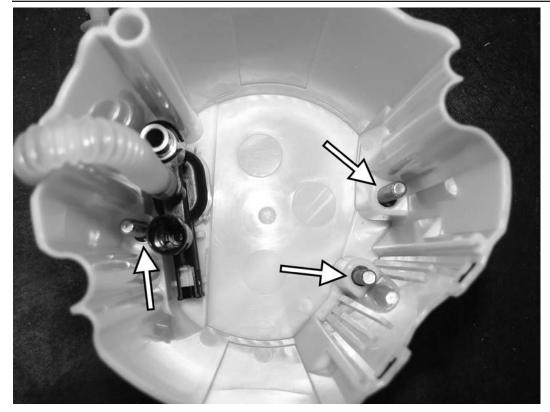




30) Using a sharp razor blade, remove any excess flashing from inside the pump basket around the three previously drilled holes. Cut the excess flashing off so the hole is flat to the flat embossed portion of the pump basket. Clean any excess plastic shavings out of the pump basket.

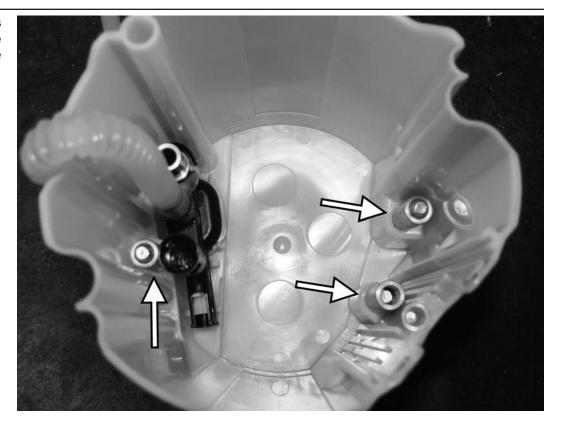
31) Locate and install the APR siphon tube adapter. This is the one, longest spacer supplied by APR, and press fits onto the siphon tube as shown. Reinstall the siphon tube in the pump basket.

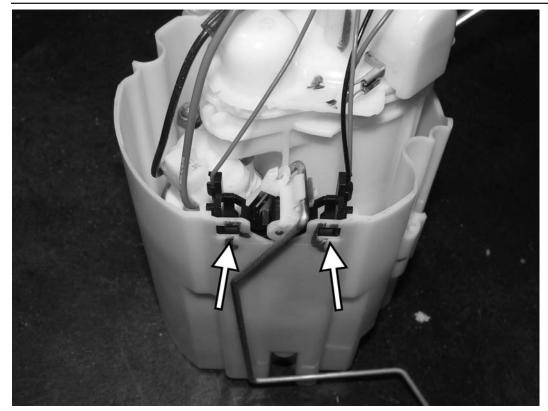




32) Locate the three supplied bolts with fuel pump spacer kit. From underneath the pump basket, place all three bolts into the three previously drilled hole locations. The one short bolt goes under where the fuel level sensor mounts.

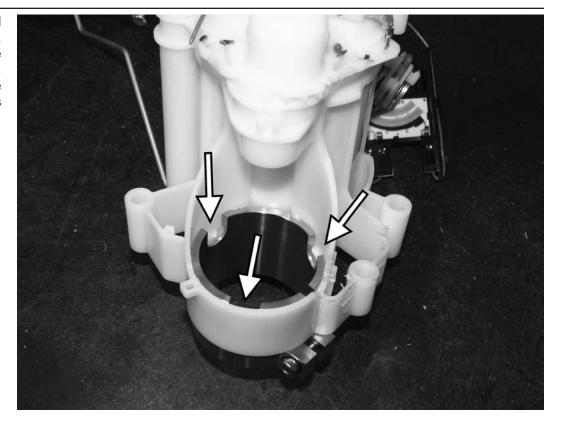
33) Place the three APR spacers that are the same length on the previously installed bolts inside the pump basket.

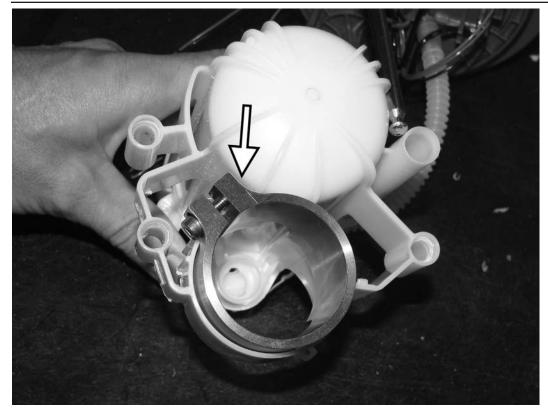




34) Loosely place the inner pump housing back in the outer pump basket. The inner pump housing should now be sitting higher than stock on the previously installed APR pump spacers. Clip the fuel level sensor back into place. If the sensor does not snap back to its original mounting tabs, you will need to trim more of the plastic as seen on step 29. Once the level sensor fits in the correct mounting tabs, remove the level sensor and the inner pump housing.

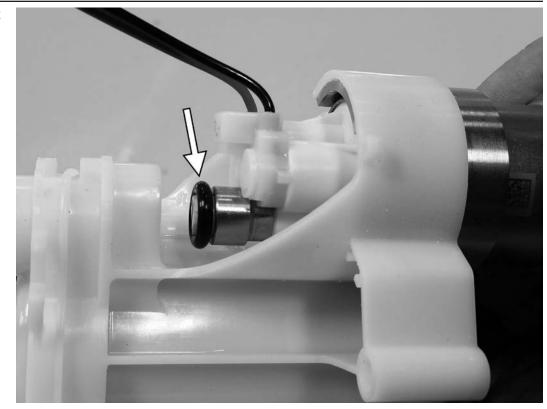
35) Loosely install the supplied screw into the APR pump spacer. Insert the APR pump spacer into the inner pump housing from beneath. Ensure that the three notches in the pump housing align with the notches in the APR pump spacer.





36) Rotate the APR pump spacer in the inner pump housing clockwise, until the screw for the pump spacer is almost touching the fuel filter housing. Make sure not to rotate the spacer too much, otherwise the screw can pierce the side of the fuel filter when the pump is installed and the screw is tightened.

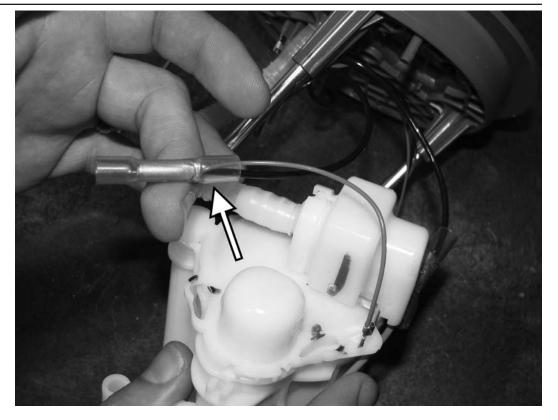
37) Install the supplied pump outlet adapter on the top of the APR fuel pump and push all the way down. Lubricate and install the o-ring onto the end of the pump outlet. Slide the APR pump, electrical connector first, up into the APR pump spacer. Push the pump up so that the o-ring goes inside the hole in the inner pump housing. Tighten the 3mm allen screw on the APR pump spacer to secure the pump in place. Finally, snap the new, supplied fuel pump sock onto the bottom of the APR pump.

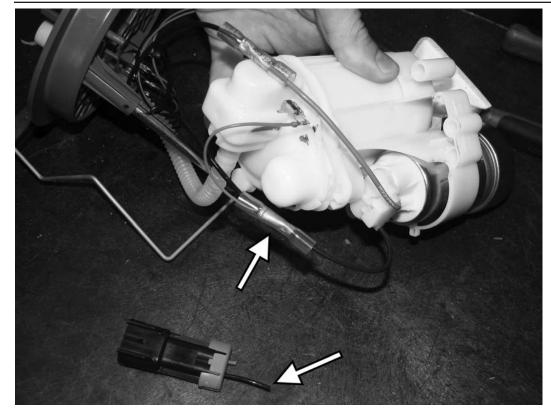




38) Cut the red wire on the APR pump right at the electrical connector attached to the pump. Locate the previously cut, shorter wire that is labeled on the fuel pump top as EKP+. Strip the ends of both wires and connect the red wire from the APR pump with the black wire labeled EKP+ with one of the supplied crimp connectors.

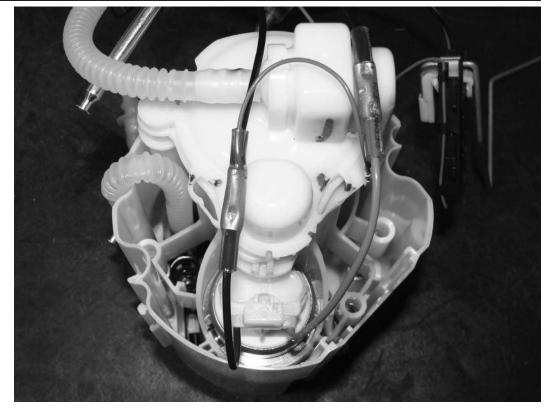
39) Locate the previously cut red wire with a spade connector on the top of the fuel filter housing. Locate the previously cut, longer black wire that is labeled on the fuel pump top as EKP-. Strip the ends of both wires, twist the wires together, and insert into one side of the other supplied crimp connector.

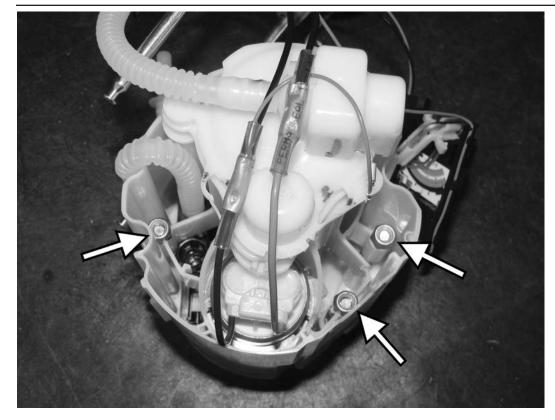




40) Cut the black wire on the APR pump an inch or two away from the electrical connector attached to the pump. Strip this wire and connect to the other side of the crimp connector in the previous step. Use a heat gun to shrink and seal both of the supplied APR crimp connectors. Do NOT use any open flame to seal the connectors, as some residual gasoline can ignite.

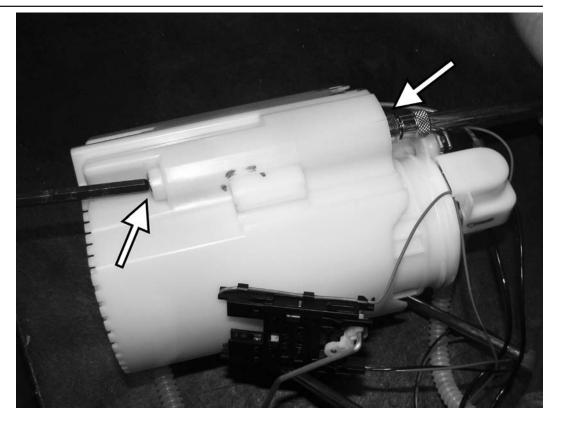
41) Place the new pump assembly into the pump basket, making sure that the APR adapter on the siphon connection inside the pump basket fully seats with the pump assembly. The APR spacers and bolts should still be installed in pump basket, as previously described.

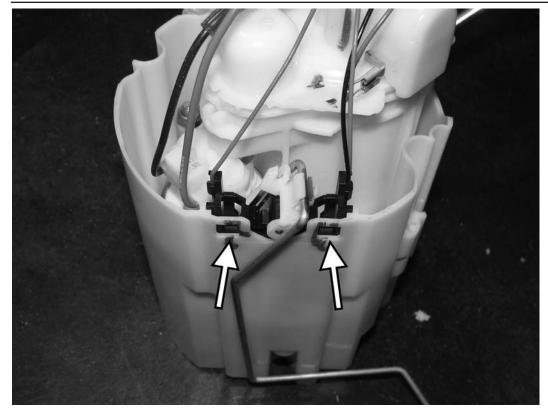




42) Holding each bolt up from underneath, start to thread the supplied nut on each bolt from inside the pump basket.

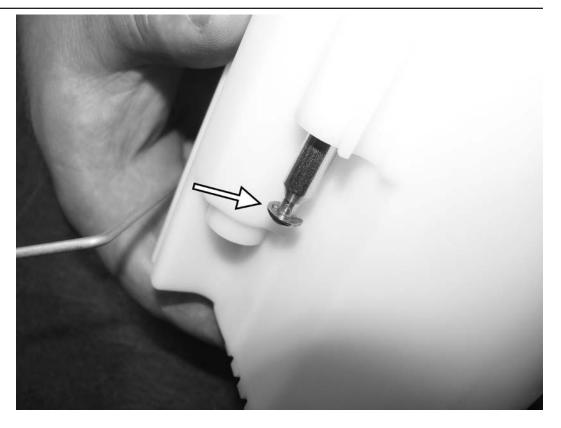
43) Use a 4mm allen socket on the head of the bolts under the pump basket. Using a 10mm socket inside the pump basket, tighten the nuts.

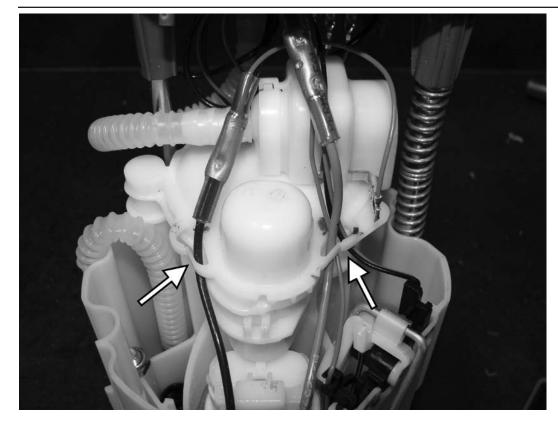




44) Reinstall the fuel level sensor in the pump basket. Again, make sure the level sensor snaps back in the original factory mounting tabs. If it does not, you will need to disassemble the pump and trim more of the inner plastic housing as seen on step 28.

45) Replace the fuel pump top onto the fuel pump basket with the original spring, and reattach the previously removed circlip that holds the top in place.





46) Route all wires into the factory clips on the sides of the inner pump housing.

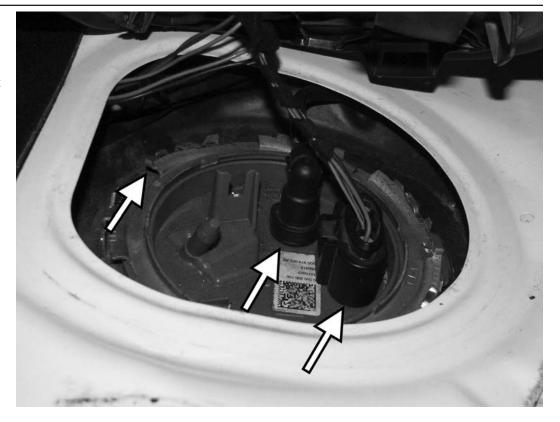
47) Place the fuel pump assembly back in the fuel tank, with the fuel level float going in the tank first. Reconnect the fitting in the tank to the fuel line on the side of the fuel pump basket and then snap the fuel line back into the groove on the side of the fuel pump basket.





48) Place the factory fuel tank seal around the opening in the fuel tank. Lower the fuel pump assembly slowly into the fuel tank. Finally, carefully push the top of the fuel pump back into the seal being careful not to roll the seal back into the tank.

49) Place the metal fuel pump retaining ring back on the fuel tank. Use a chisel and hammer to tap the ring clockwise until it locks in place on the fuel tank. Finally reconnect the quick disconnect fuel fitting and the electrical connector on the fuel pump top.





50) Replace the fuel pump access cover, making sure the lip of the cover seals against the metal of the floorpan.

51) Reinstall the seat bottom by first placing the back of the seat bottom in the appropriate slots, and then lowering the front of the seat bottom down into the holes in the floorpan. Reinstall the four covers over the child seat locking points.



52) Reconnect the negative battery terminal and secure the 10mm nut holding it in place.





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