

Applies To: **1998 Passport** – Thru VIN 4S6C.58W.W4424533**November 6, 2013**

Fuel Gauge Reads Low

(Supersedes 99-004, dated September 14, 1999; see REVISION SUMMARY)

REVISION SUMMARY

This service bulletin has been revised extensively, American Honda recommends you read the entire service bulletin.

SYMPTOM

The vehicle may have any of these conditions:

- With a full tank, the fuel gauge does not read full.
- After filling the tank, the fuel gauge drops below the 3/4 mark within 50 miles.
- After filling the tank, the fuel gauge drops below full, then rises back to full.
- The fuel gauge drops during braking and rises during acceleration.
- The fuel gauge reads empty with 5 or more gallons of fuel in the tank.

POSSIBLE CAUSE

The resistance value at the fuel sending unit does not coincide with the fuel level in the tank.

CORRECTIVE ACTION

Replace the 20-to-120-ohm fuel sending unit with an 80-to-290-ohm unit, and update the PCM software according to Service Bulletin 99-005, *Updating the Passport PCM*.

PARTS INFORMATION

Fuel Sending Unit Kit: P/N 8-25325-201-0

Kit contents: Two 80-to-290-ohm sending units (one with a small pump connector, the other with a large pump connector), O-ring, black locking clip, and red locking clip.

You'll need the following clips only if you break them while removing or installing the fuel lines:

Fuel Line Retaining Clip, 5/16": P/N 2-90442-800-0

Fuel Line Retaining Clip, 3/8": P/N 2-90442-810-0

REQUIRED MATERIALS

Non-Chlorinated Brake Cleaner: P/N 08732-9001
(One can is enough for two vehicles.)

WARRANTY CLAIM INFORMATION

The normal warranty applies.

Operation Number: 310135

Flat Rate Time: 1.5 hours (includes sending unit replacement and PCM update)

Failed Part: P/N 8-25166-689-0

Defect Code: 039

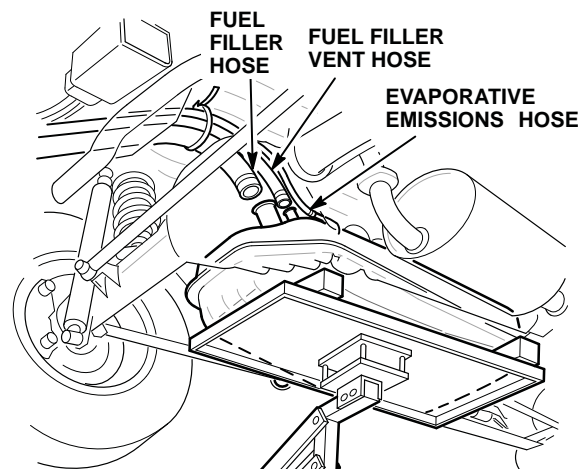
Symptom Code: B02

Skill Level: Repair Technician

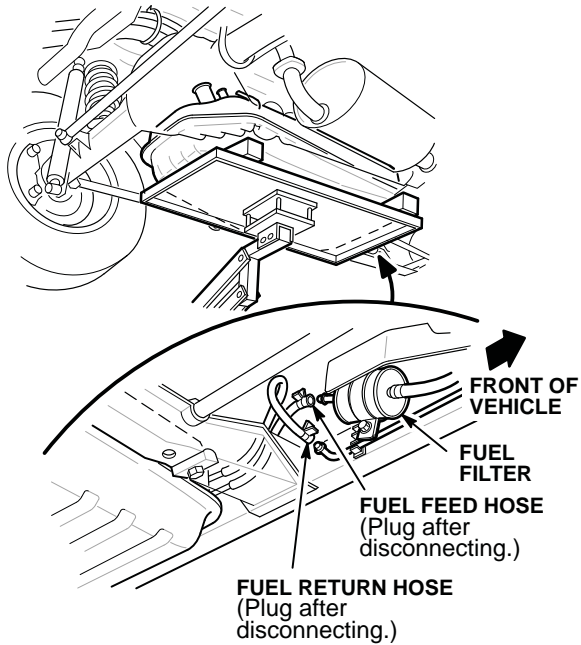
REPAIR PROCEDURE

NOTE: Wear eye protection for the entire procedure.

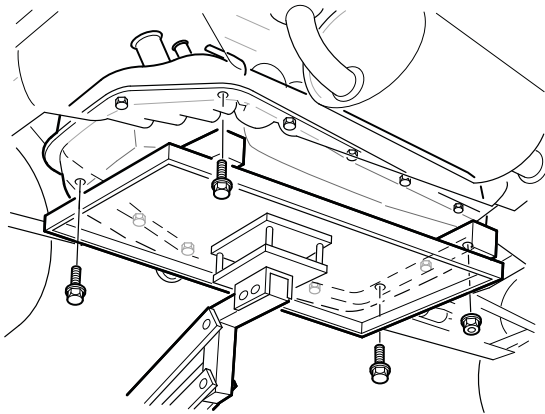
1. Record the radio station presets.
2. Note the reading on the fuel gauge, then disconnect the negative cable from the battery.
3. If the fuel tank is more than 1/4 full, drain or siphon the fuel into a suitable container.
4. Remove the fuel filler cap.
5. Raise the vehicle on a hoist, support the fuel tank with a powertrain lift or a commercially available jack as shown in the illustrations. (The powertrain lift, model No. OTC-1585, is available through the Honda Tool and Equipment Program. Call 888-424-6857.)
6. Disconnect the evaporative emissions hose, the filler vent hose, and the fuel filler hose where they connect to the fillings at the back of the tank.



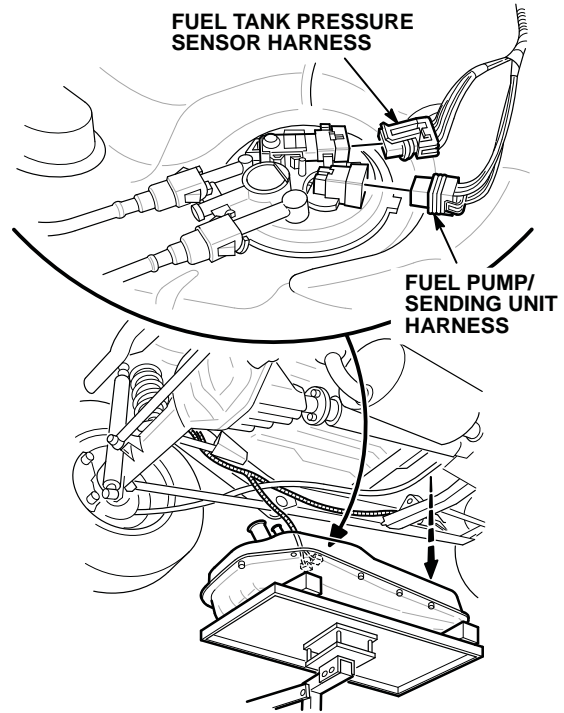
- At the front of the tank, disconnect the fuel feed hose and the fuel return hose where they connect to the fuel filter and the fuel line. Then remove the hoses from the support clip. To prevent fuel leakage, plug the hoses, and cap the lines.



- Remove the nut and bolts from the corners of the tank. Do not remove the bolts from the skid plate.

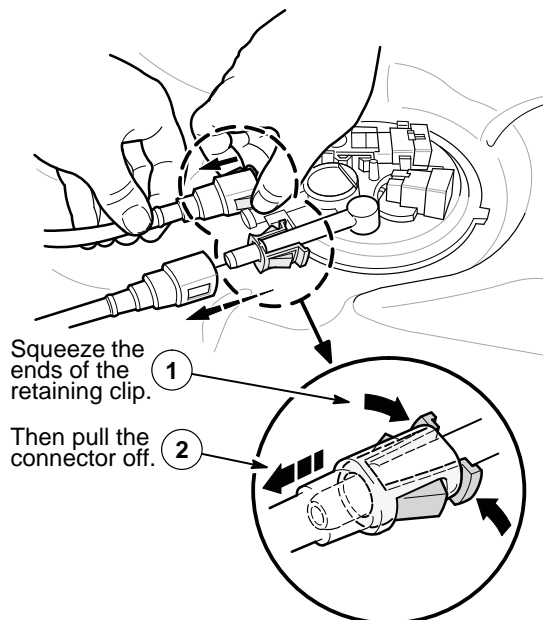


- Partially lower the tank, then disconnect the fuel pump/sending unit harness and the fuel tank pressure sensor harness. Remove the tank.

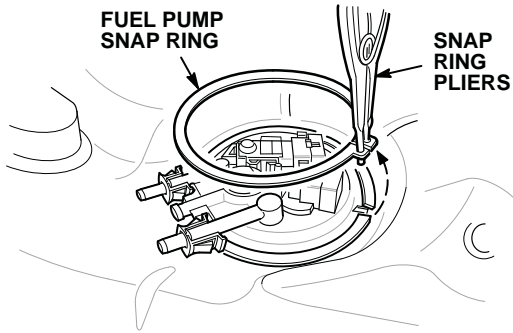


- Thoroughly clean the fuel pump and surrounding area with brake cleaner and compressed air.

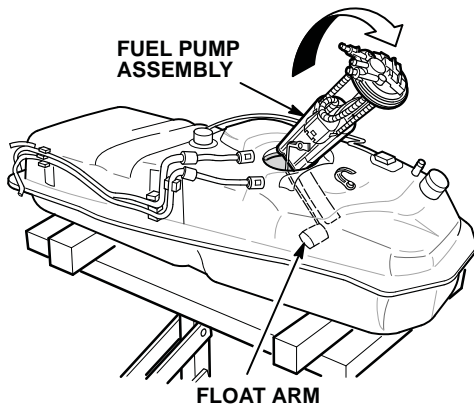
- Carefully remove the fuel feed hose and fuel return hose from the fuel pump. Do not use too much force on the fuel line retaining clips or you will break them. (To replace broken clips, see PARTS INFORMATION.)



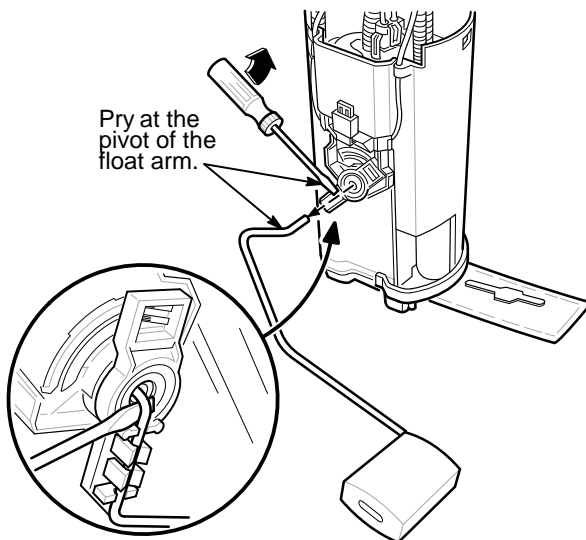
12. Remove the fuel pump snap ring with snap ring pliers, then clean the area around the pump opening with compressed air and brake cleaner.



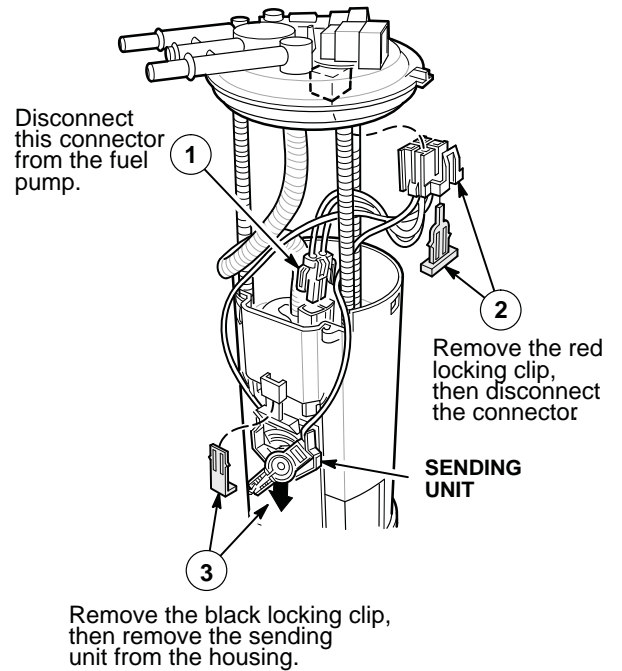
13. Remove the fuel pump assembly. To prevent damage to the float arm, lift the assembly straight up, and then roll it to the right.



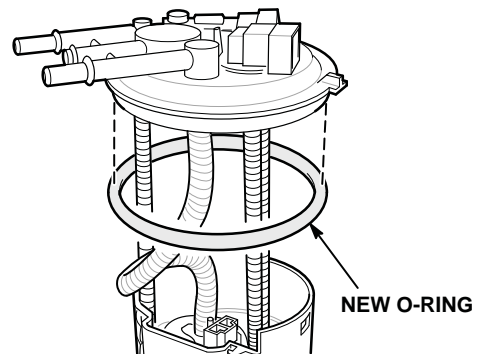
14. Remove the float arm by carefully prying it from the sending unit with a small screwdriver inserted between the pivot point and the brass bushing. Do not bend the arm.



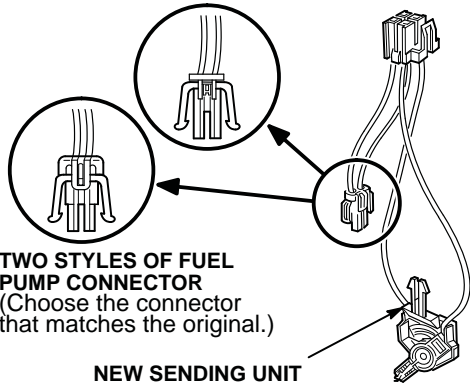
15. Remove the sending unit from the fuel pump assembly.



16. Remove the O-ring from the top of the pump assembly, and clean the O-ring seat. Then lubricate the new O-ring with engine oil, and install it on the pump.

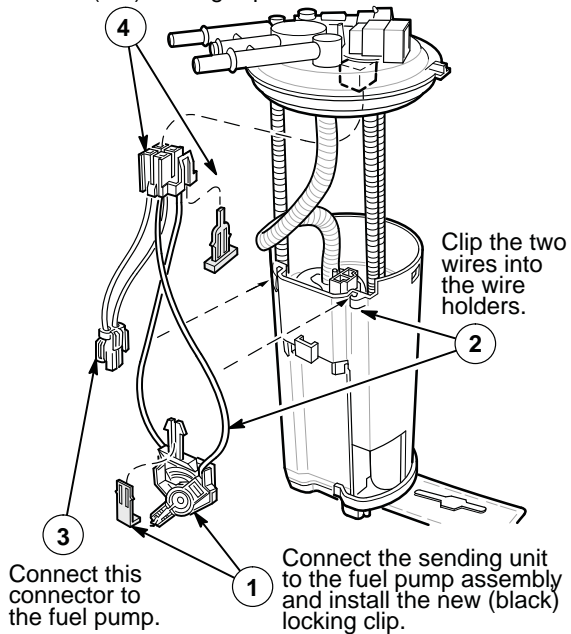


17. Of the two sending units in the kit, choose the one with the connector that matches the connector from the old sending unit.

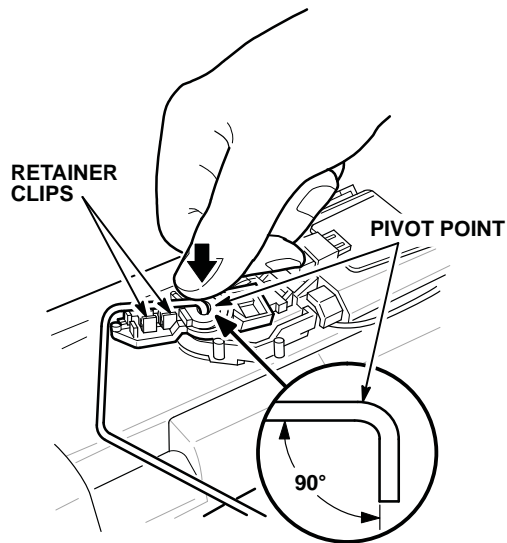


18. Install the new sending unit.

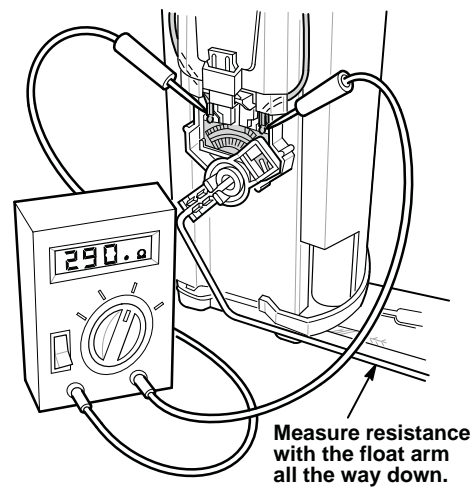
Connect this connector to the top plate, and install the new (red) locking clip.



19. Reinstall the original float arm by pushing on its pivot point to clip it into place. After installation, make sure the arm moves freely under its own weight. If it doesn't, the pivot point is bent, and the sending unit won't show the correct fuel level. To correct a bent pivot point, remove the arm, bend the pivot back to its original 90° position, and reinstall the arm.



20. Move the float arm all the way down, then connect a DVOM to the sending unit and measure the resistance; it should be about 290 ohms. (If the resistance is about 120 ohms, you have reinstalled the old sending unit).



21. Discard the old sending unit and the unused new one from step 17.
22. Make sure the fuel pump opening on the tank is clean, then reinstall the pump assembly and its snap ring.
23. Reconnect the fuel feed hose and the fuel return hose to the fuel pump.

24. Raise the tank close to installation level with the powertrain lift or jack, then reconnect the fuel pump/sending unit harness and the fuel tank pressure sensor harness.
25. Raise the tank to installation level. Reinstall the tank nut and bolts, and torque them to **68 N•m (50 lb-ft)**.
26. Reconnect the fuel feed hose and the fuel return hose to the fuel filter and the fuel line at the front of the tank. Attach the hoses to the support clip.
27. Reconnect the evaporative emissions hose, the filler vent hose, and the fuel filler hose to the fittings on the back of the tank. Make sure the hoses aren't kinked or crushed, then lower the vehicle.
28. Refill the tank with the fuel you removed.
29. Reinstall the fuel filler cap.
30. Reconnect the negative cable to the battery.
31. Enter the radio station presets, and set the clock.
32. Update the PCM software with the PCM Smart Cable. For instructions, refer to S/B 99-005, *Updating the Passport PCM*.
33. Clear any remaining DTCs with the PGM Tester.