

2004 ENGINES

Fuel Supply System - TSX

COMPONENT LOCATION INDEX

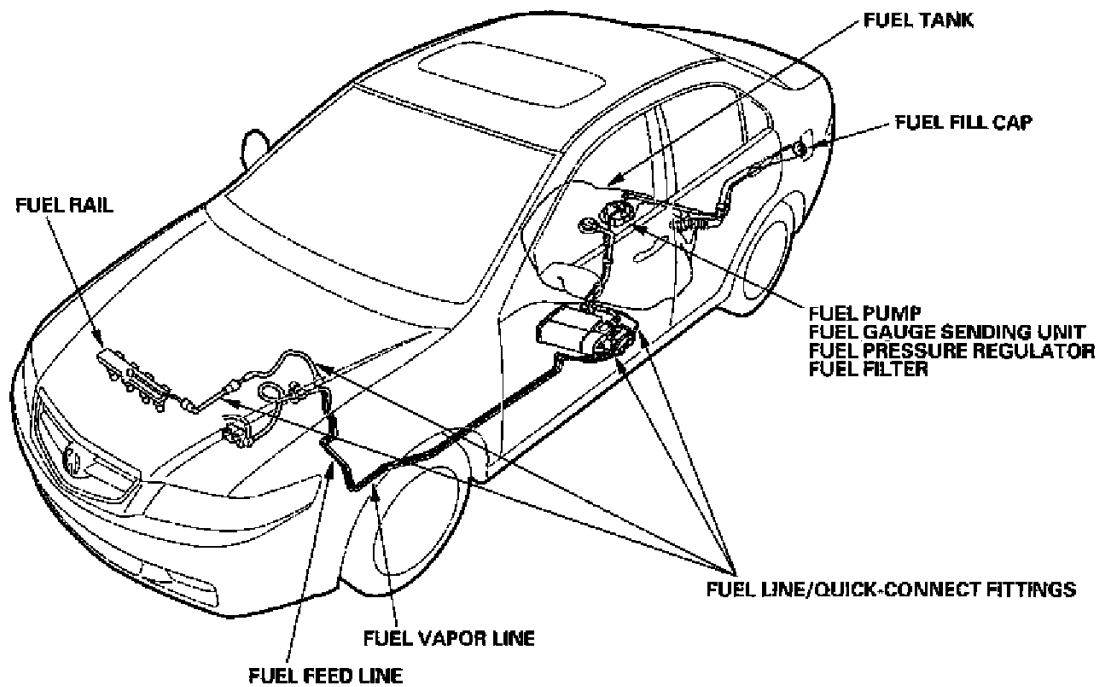
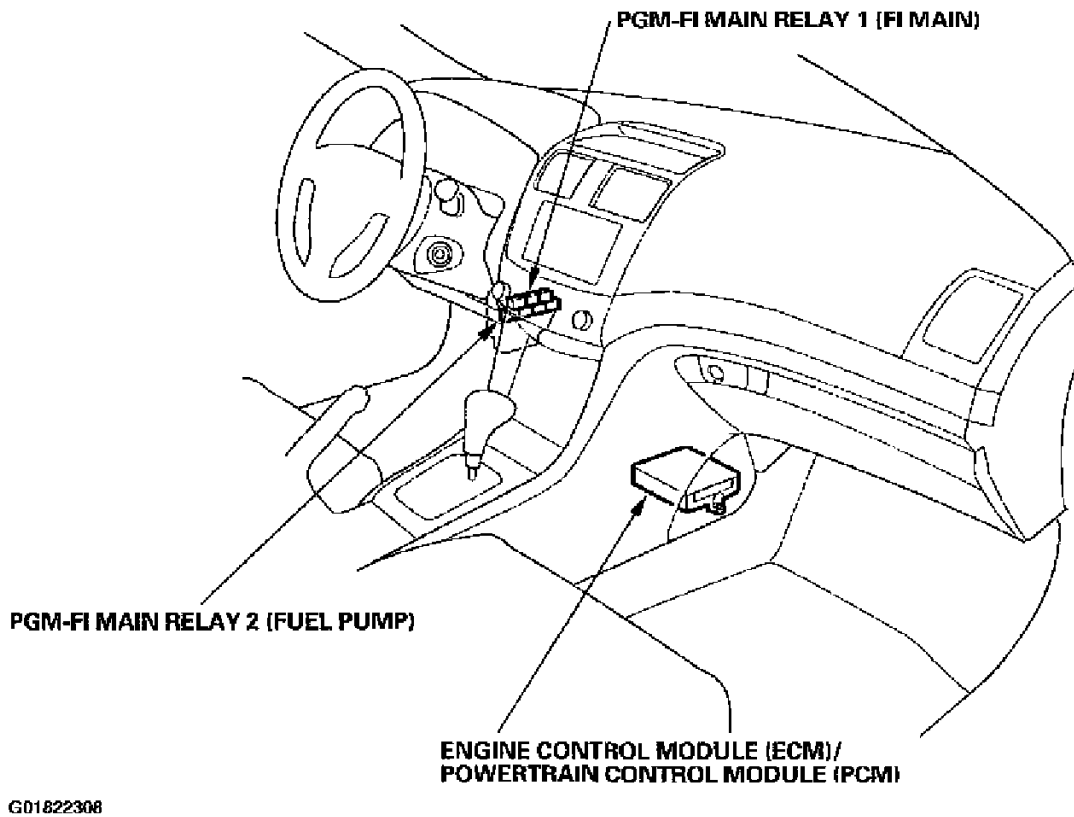


Fig. 1: Locating Fuel Supply System Components (1 Of 2)



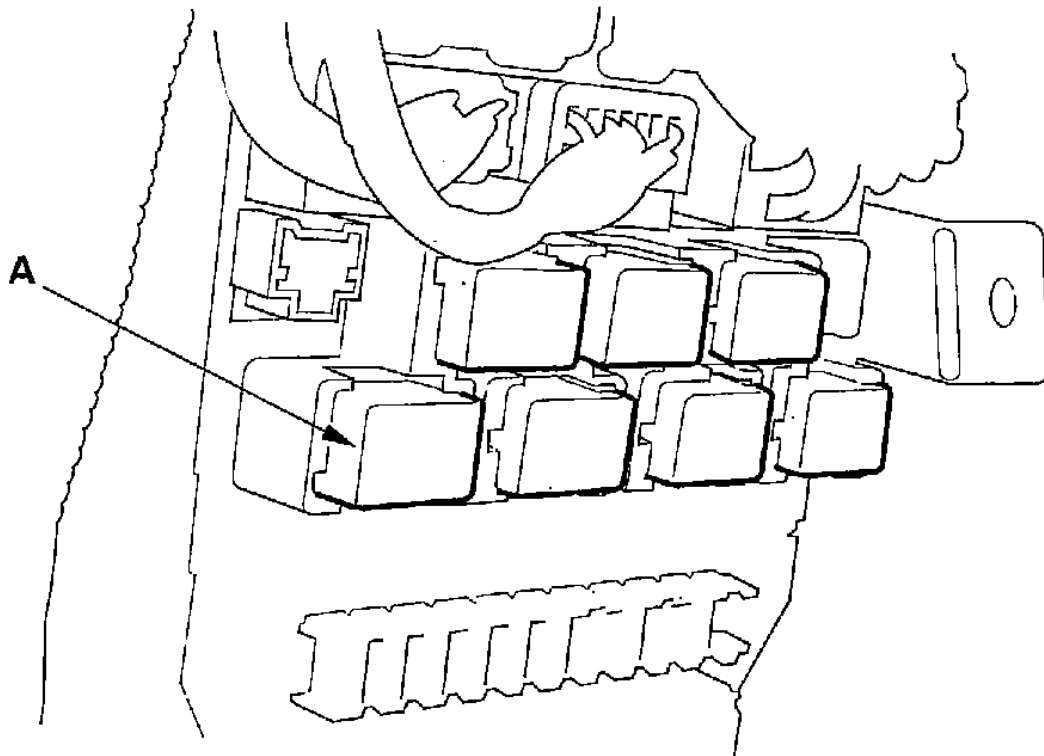
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Fig. 2: Locating Fuel Supply System Components (2 Of 2)

FUEL PUMP CIRCUIT TROUBLESHOOTING

If you suspect a problem with the fuel pump, check that the fuel pump actually runs; when it is on, you will hear some noise if you listen to the fuel fill port with the fuel fill cap removed. The fuel pump should run for 2 seconds when the ignition switch is first turned on. If the fuel pump does not make noise, check as follows:

1. Turn the ignition switch OFF.
2. Remove the left kick panel (see **TRIM REMOVAL/INSTALLATION - DOOR AREA**), then remove PGM-FI main relay 2 (FUEL PUMP) (A) from the under-dash fuse/relay box.



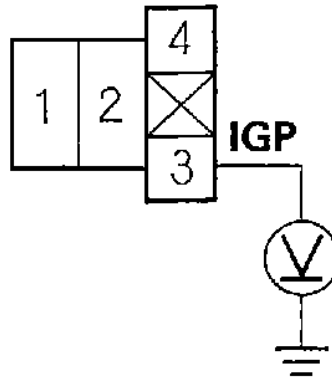
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Fig. 3: Removing PGM-FI Main Relay 2 (FUEL PUMP)

3. Turn the ignition switch ON (II).
4. Measure voltage between PGM-FI main relay 2 (FUEL PUMP) 4P connector terminal No. 3 and body ground.

Is there battery voltage?**YES:** Go to step 5.**NO:**

- Replace PGM-FI main relay 1 (FI MAIN).
- Replace the under-dash fuse/relay box.

PGM-FI MAIN RELAY 2 (FUEL PUMP) 4P CONNECTOR

Terminal side of female terminals

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Fig. 4: Measuring Voltage Between PGM-FI Main Relay 2 (FUEL PUMP) 4P Connector Terminal No. 3 & Body Ground

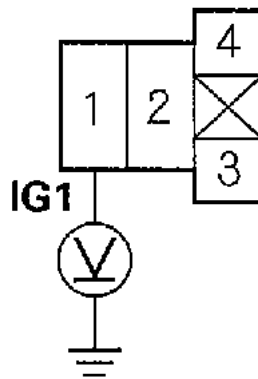
5. Measure voltage between PGM-FI main relay 2 (FUEL PUMP) 4P connector terminal No. 1 and body ground.

Is there battery voltage?

YES: Go to step 6.

NO:

- Replace the No. 19 FUEL PUMP (15A) fuse in the under-hood fuse/relay box.
- Replace the under-dash fuse/relay box.

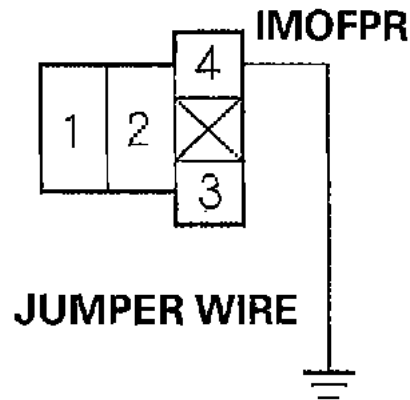
PGM-FI MAIN RELAY 2 (FUEL PUMP) 4P CONNECTOR

Terminal side of female terminals

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Fig. 5: Measuring Voltage Between PGM-FI Main Relay 2 (FUEL PUMP) 4P Connector Terminal No. 1 & Body Ground

6. Turn the ignition switch OFF.
7. Connect PGM-FI main relay 2 (FUEL PUMP) 4P connector terminal No. 4 to body ground with a jumper wire.

PGM-FI MAIN RELAY 2 (FUEL PUMP) 4P CONNECTOR

Terminal side of female terminals

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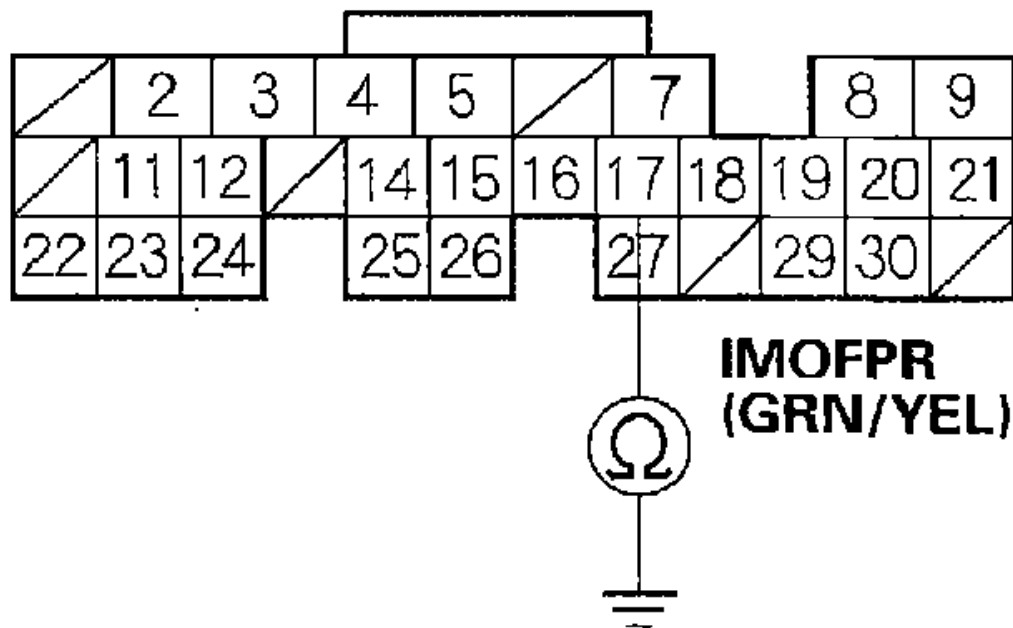
Fig. 6: Connecting PGM-FI Main Relay 2 (FUEL PUMP) 4P Connector Terminal No. 4 To Body Ground With A Jumper Wire

8. Turn the ignition switch OFF.
9. Jump the SCS line with the HDS.
10. Disconnect ECM/PCM connector E (31P).
11. Check for continuity between body ground and ECM/PCM connector terminal E17.

Is there continuity?

YES: Go to step 12.

NO: Repair open in the wire between PGM-FI main relay 2 (FUEL PUMP) and the ECM/PCM (E17).

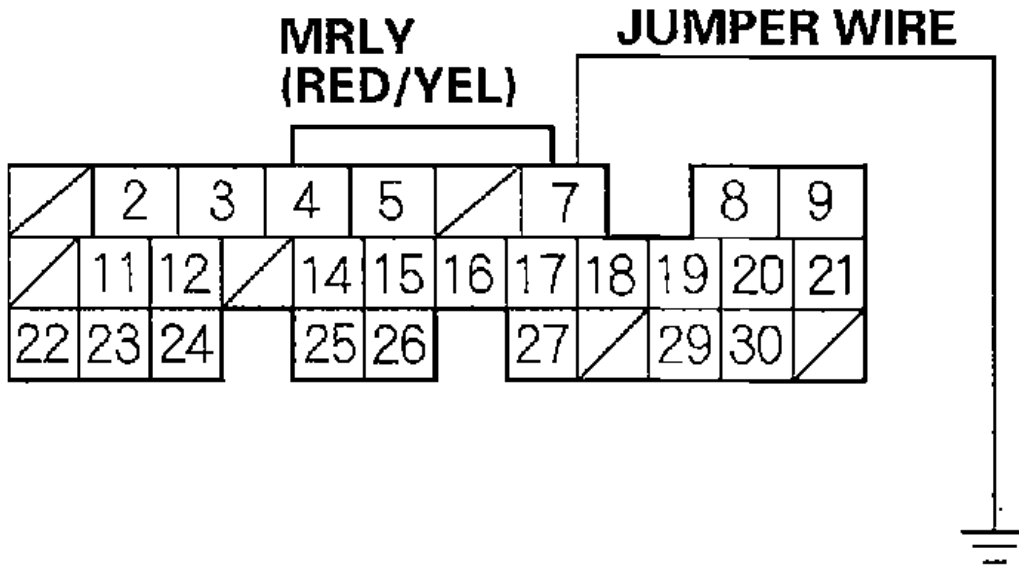
ECM/PCM CONNECTOR E (31P)

Wire side of female terminals

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Fig. 7: Checking For Continuity Between Body Ground & ECM/PCM Connector Terminal E17

12. Reinstall PGM-FI main relay 2 (FUEL PUMP).
13. Connect the ECM/PCM connector terminal E7 to body ground with a jumper wire.

ECM/PCM CONNECTOR E (31P)

Wire side of female terminals

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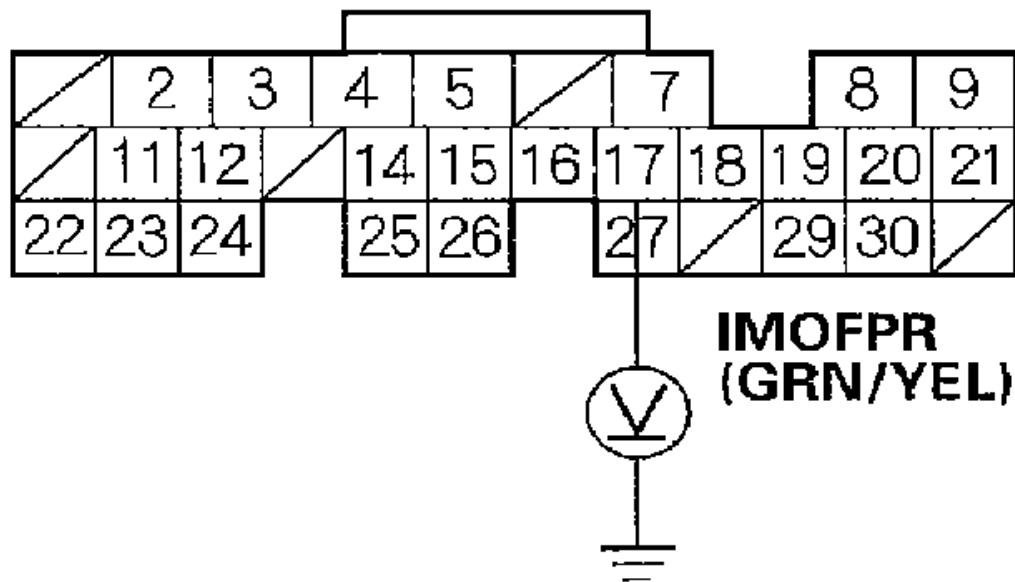
Fig. 8: Connecting The ECM/PCM Connector Terminal E7 To Body Ground With A Jumper Wire

14. Turn the ignition switch ON (II).
15. Measure voltage between ECM/PCM connector terminal E17 and body ground.

Is there battery voltage?

YES: Go to step 16.

NO: Replace PGM-FI main relay 2 (FUEL PUMP).

ECM/PCM CONNECTOR E (31P)

Wire side of female terminals

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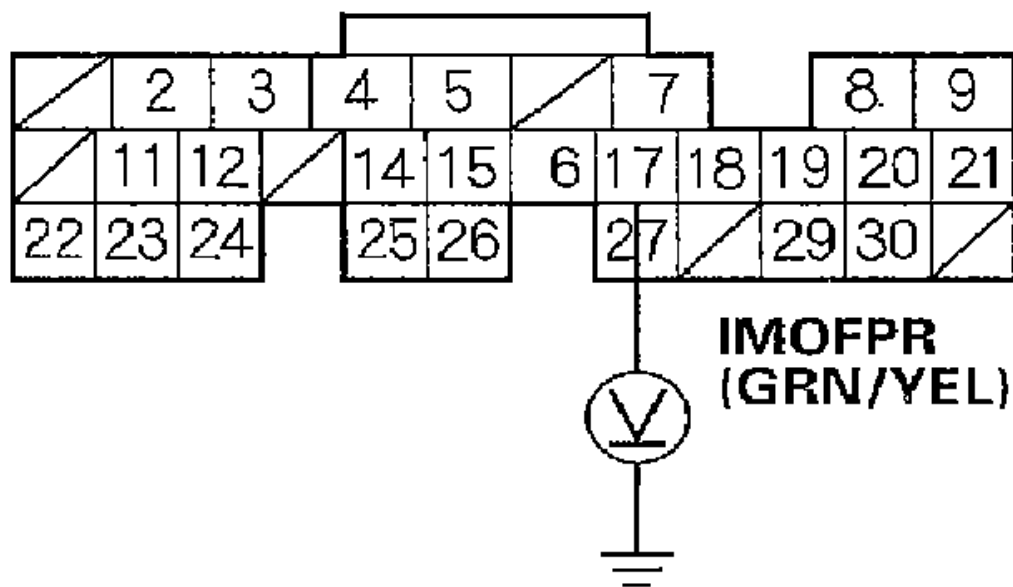
Fig. 9: Measuring Voltage Between ECM/PCM Connector Terminal E17 & Body Ground

16. Turn the ignition switch OFF.
17. Reconnect ECM/PCM connector E (31P).
18. Open the SCS line with the HDS.
19. Turn the ignition switch OFF.
20. Turn the ignition switch ON (II), and measure voltage between ECM/PCM connector terminal E17 and body ground within the first 2 seconds after the ignition switch was turned on.

Is there battery voltage?

YES: Update the ECM/PCM if it does not have the latest software, or substitute a known-good ECM/PCM, then recheck (see **ECM/PCM UPDATING AND SUBSTITUTION FOR TESTING**). If the symptom/indication goes away with a know-good ECM/PCM, replace the original ECM/PCM.

NO: Go to step 21.

ECM/PCM CONNECTOR E (31P)

Wire side of female terminals

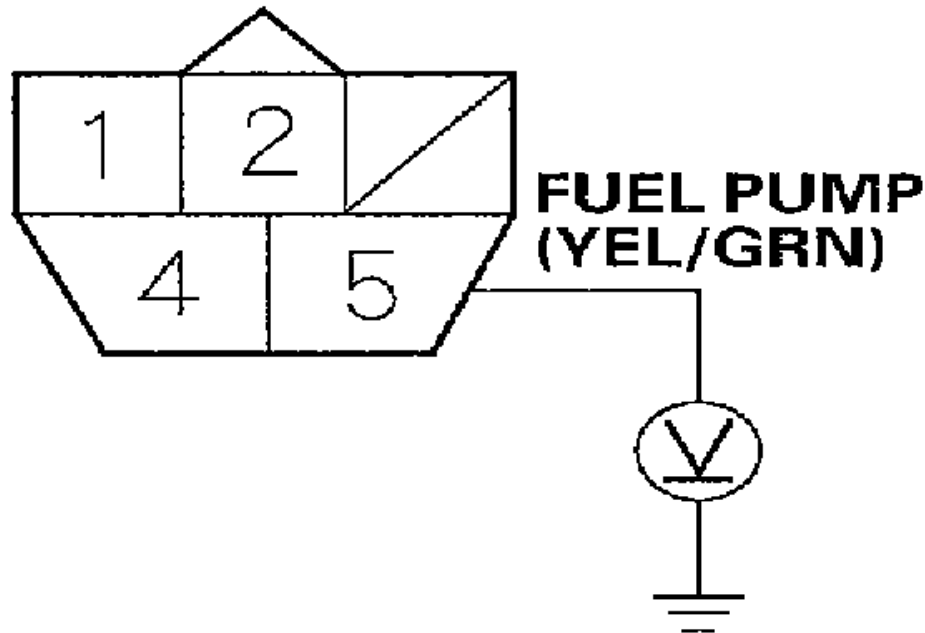
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Fig. 10: Measuring Voltage Between ECM/PCM Connector Terminal E17 & Body Ground

21. Turn the ignition switch OFF.
22. Remove the trunk floor.
23. Remove the access panel from the floor.
24. Measure voltage between fuel pump 5P connector terminal No. 5 and body ground within the first 2 seconds after the ignition switch was turned on.

Is there battery voltage?**YES:** Go to step 30 .**NO:** Go to step 25.

FUEL PUMP 5P CONNECTOR

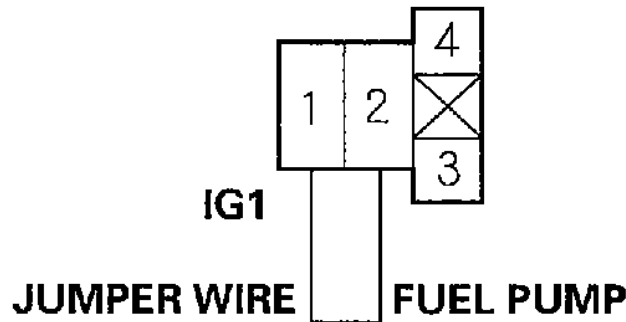


Wire side of female terminals

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Fig. 11: Measuring Voltage Between Fuel Pump 5P Connector Terminal No. 5 & Body Ground

25. Turn the ignition switch OFF.
26. Remove PGM-FI main relay 2 (FUEL PUMP)
27. Connect PGM-FI main relay 2 (FUEL PUMP) 4P connector terminals No. 1 and No. 2 with a jumper wire.

PGM-FI MAIN RELAY 2 (FUEL PUMP) 4P CONNECTOR

Terminal side of female terminals

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Fig. 12: Connecting PGM-FI Main Relay 2 (FUEL PUMP) 4P Connector Terminals No. 1 & No. 2 With A Jumper Wire

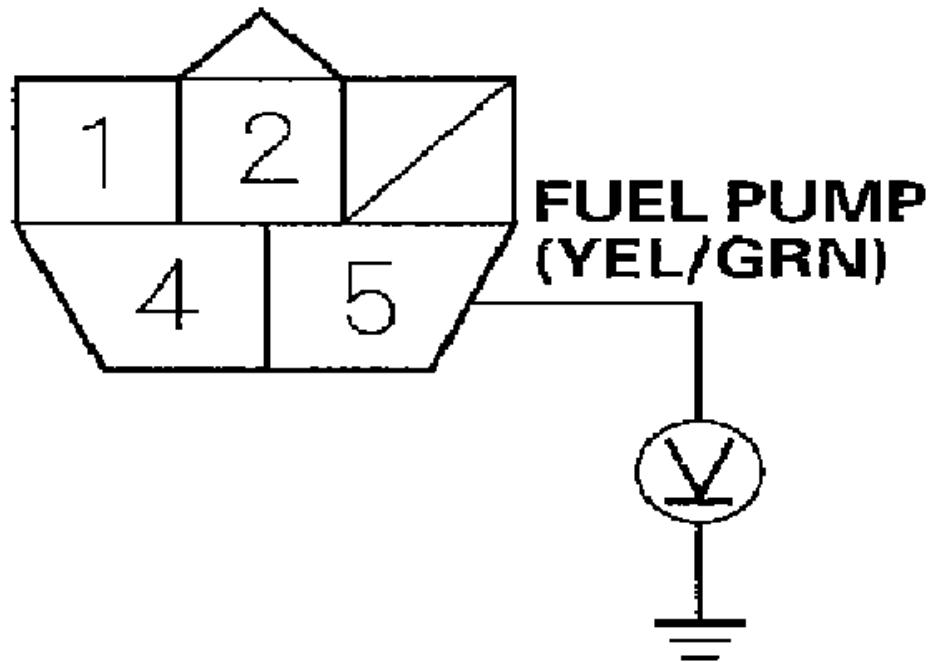
28. Turn the ignition switch ON (II).
29. Measure voltage between fuel pump 5P connector terminal No. 5 and body ground within the first 2 seconds after the ignition switch was turned on.

Is there battery voltage?

YES: Replace PGM-FI main relay 2 (FUEL PUMP).

NO: Repair open in the wire between PGM-FI main relay 2 (FUEL PUMP) and the fuel pump 5P connector.

FUEL PUMP 5P CONNECTOR



Wire side of female terminals

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Fig. 13: Measuring Voltage Between Fuel Pump 5P Connector Terminal No. 5 & Body Ground

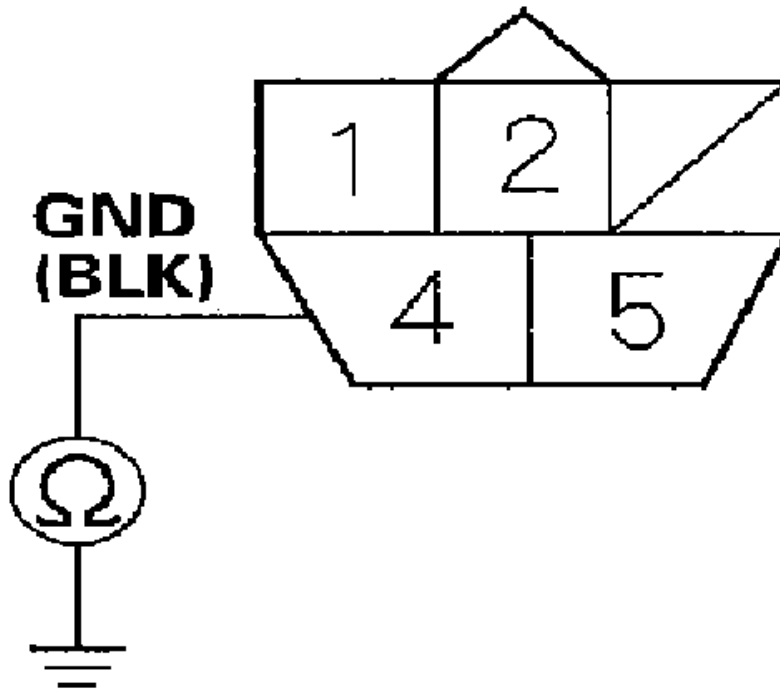
30. Turn the ignition switch OFF.
31. Check for continuity between fuel pump 5P connector terminal No. 4 and body ground.

Is there continuity?

YES: Replace the fuel pump.

NO: Repair open in the wire between the fuel pump 5P connector and G603.

FUEL PUMP 5P CONNECTOR



Wire side of female terminals

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Fig. 14: Checking For Continuity Between Fuel Pump 5P Connector Terminal No. 4 & Body Ground

FUEL PRESSURE RELIEVING

Before disconnecting fuel lines or hoses, relieve pressure from the system by stopping the fuel pump and disconnecting the fuel tube/quick connect fitting in the engine compartment.

WITH THE HDS

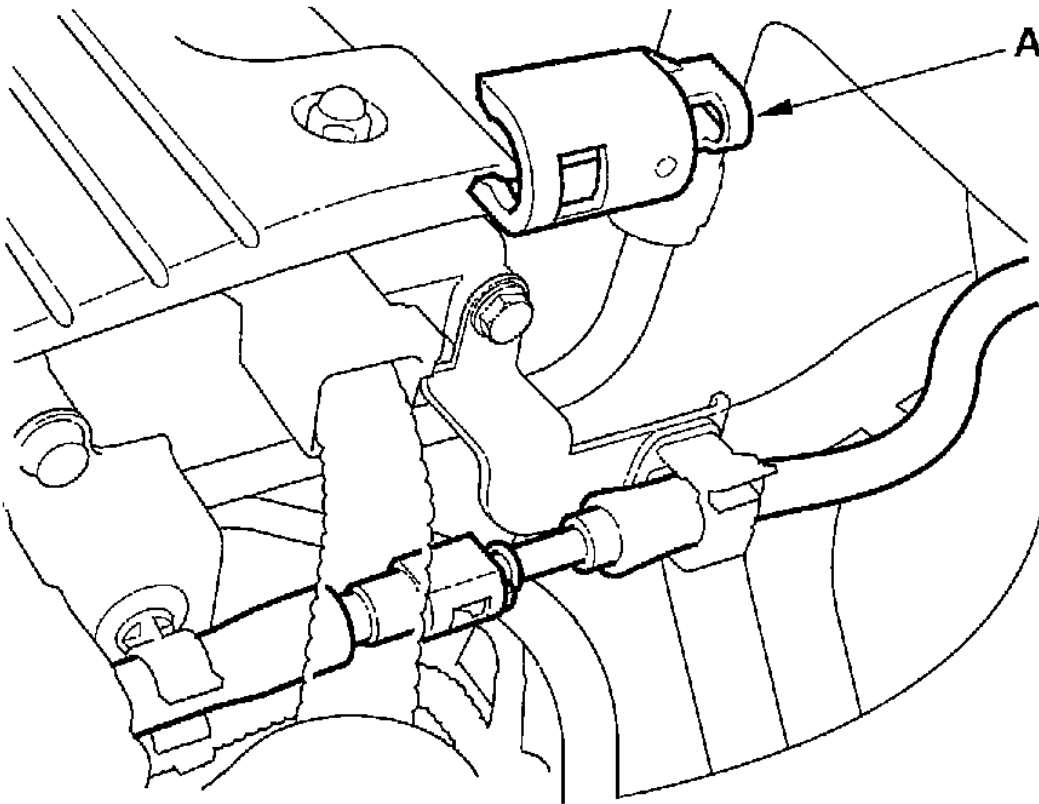
1. Remove the fuel fill cap.
2. Turn the ignition switch ON (II).

3. From the INSPECTION MENU of the HDS, select Fuel Pump OFF, then start the engine, and let it idle until it stalls.
4. Turn the ignition switch OFF.

NOTE:

- Do not allow the engine to idle above 1,000 RPM or the ECM/PCM will continue to operate the fuel pump.
- A DTC or a Temporary DTC may be set during this procedure. Check for DTCs, and clear them as needed (see GENERAL TROUBLESHOOTING INFORMATION).

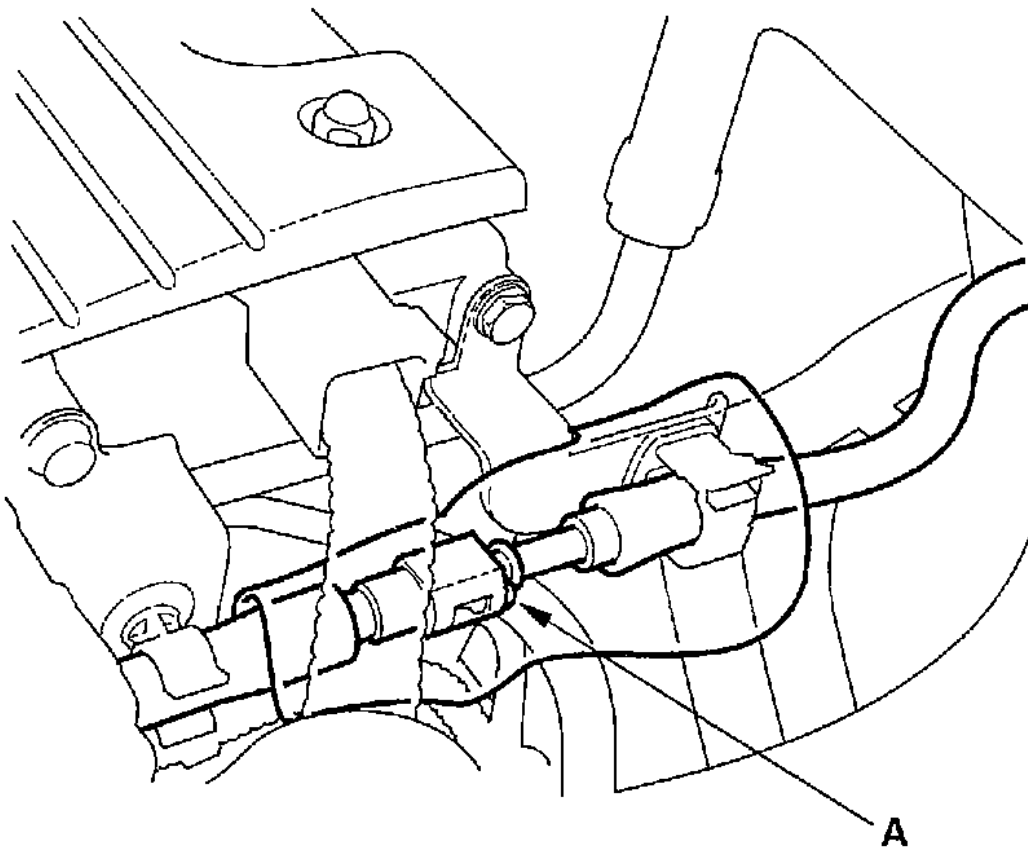
5. Turn the ignition switch OFF.
6. Make sure you have the anti-theft codes for the radio, then write down the frequencies for the radio's preset buttons.
7. Disconnect the negative cable from the battery.
8. Remove the quick-connect fitting cover (A).



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Fig. 15: Removing The Quick-Connect Fitting Cover

9. Check the fuel quick-connect fitting for dirt, and clean it if needed.
10. Place a rag or shop towel over the quick-connect fitting (A).



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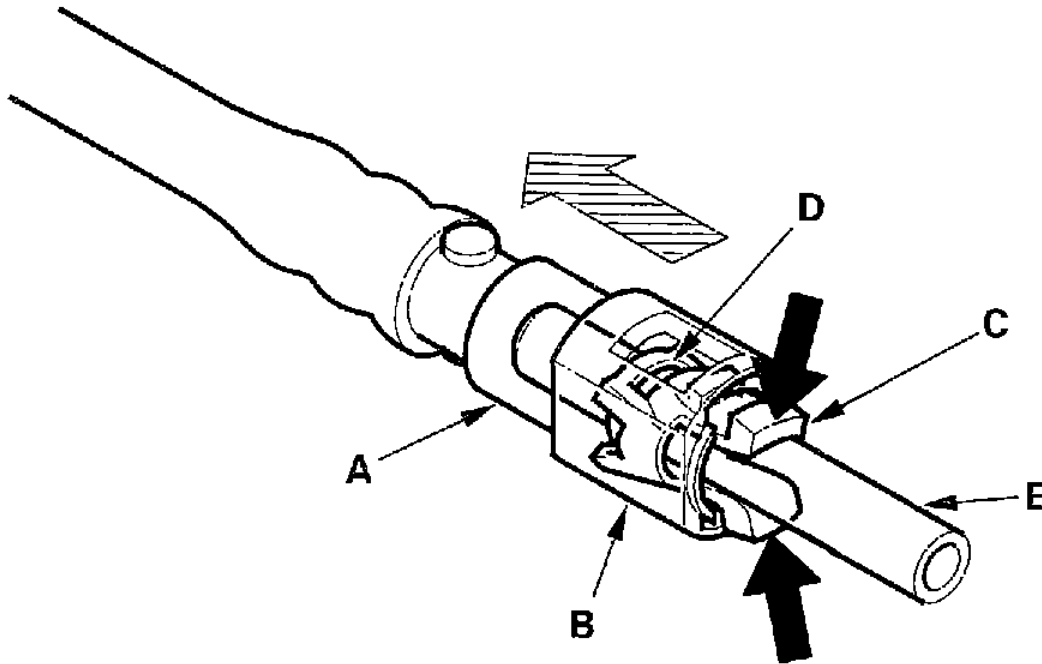
Fig. 16: Placing A Rag Or Shop Towel Over The Quick-Connect Fitting

11. Disconnect the quick-connect fitting (A): Hold the connector (B) with one hand, and squeeze the retainer tabs (C) with the other hand to release them from the locking tabs (D). Pull the connector off.

NOTE:

- To prevent the remaining fuel in the fuel feed line or hose from flowing out, use a rag or shop towel.
- Be careful not to damage the line (E) or other parts.
- Do not use tools.
- If the connector does not move, keep the retainer tabs pressed down,

- and alternately pull and push the connector until it comes off easily.
- Do not remove the retainer from the line; once removed, the retainer must be replaced with a new one.



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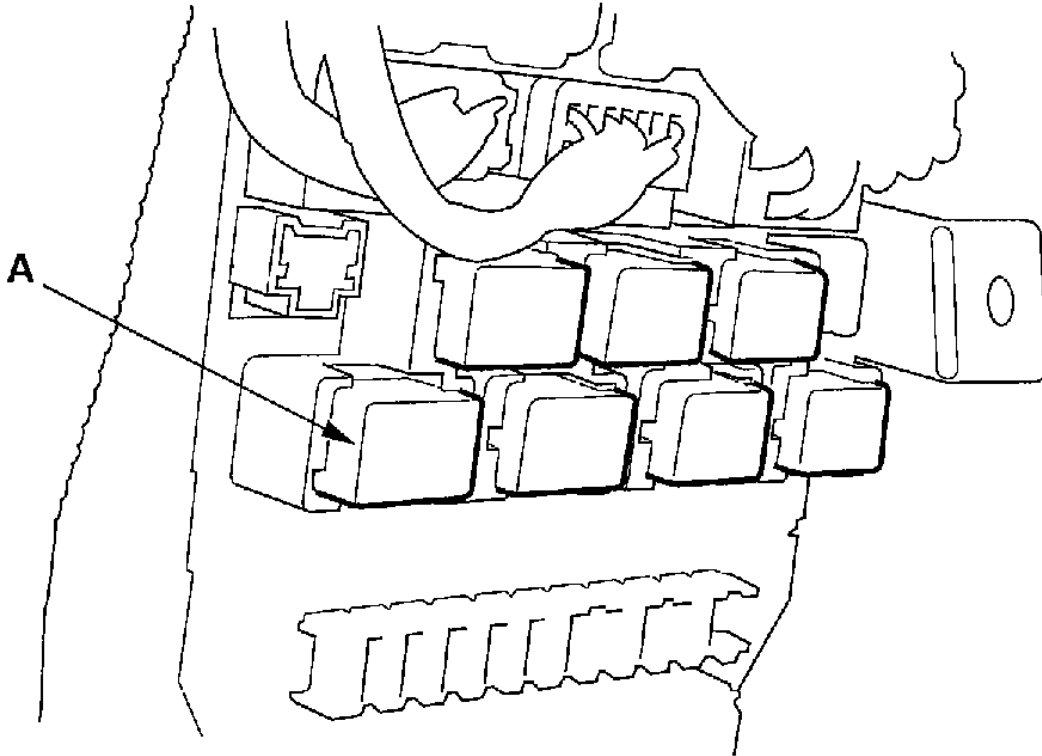
Fig. 17: Disconnecting The Quick-Connect Fitting

12. After disconnecting the quick-connect fitting, check it for dirt or damage (see step 4 of **FUEL LINE/QUICK-CONNECT FITTING REMOVAL**).
13. Reconnect the negative cable to the battery and do the following items:
 - ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
 - Power window control unit reset procedure (see **RESETTING THE POWER WINDOW**).
 - Enter the anti-theft codes for the radio and the navigation system, then enter the customer's radio station presets.
 - Reset the clock.

WITHOUT THE HDS

1. Make sure you have the anti-theft codes for the radio, and Navigation if equipped then write down the frequencies for the radio's preset buttons.
2. Remove the left kick panel (see **TRIM REMOVAL/INSTALLATION - DOOR AREA**), then remove

PGM-FI main relay 2 (FUEL PUMP) (A) from the under-dash fuse/relay box.



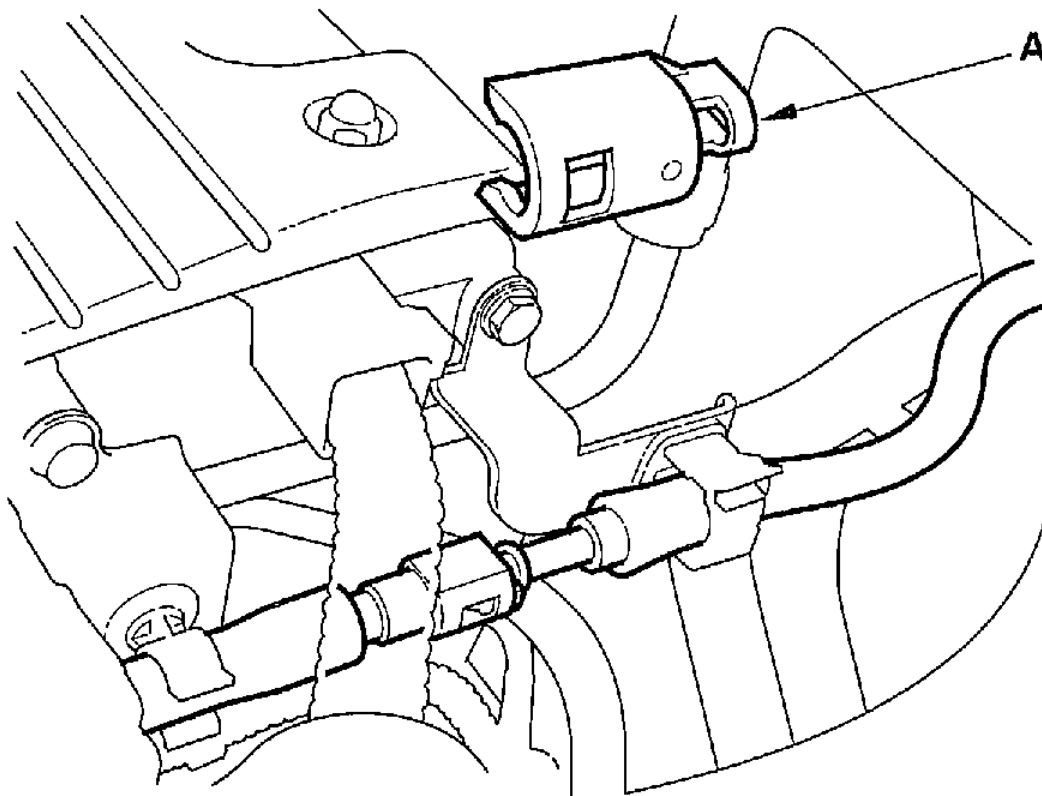
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Fig. 18: Removing PGM-FI Main Relay 2 (FUEL PUMP)

3. Start the engine, and let it idle until it stalls.

NOTE: If any DTCs are stored, clear and ignore them.

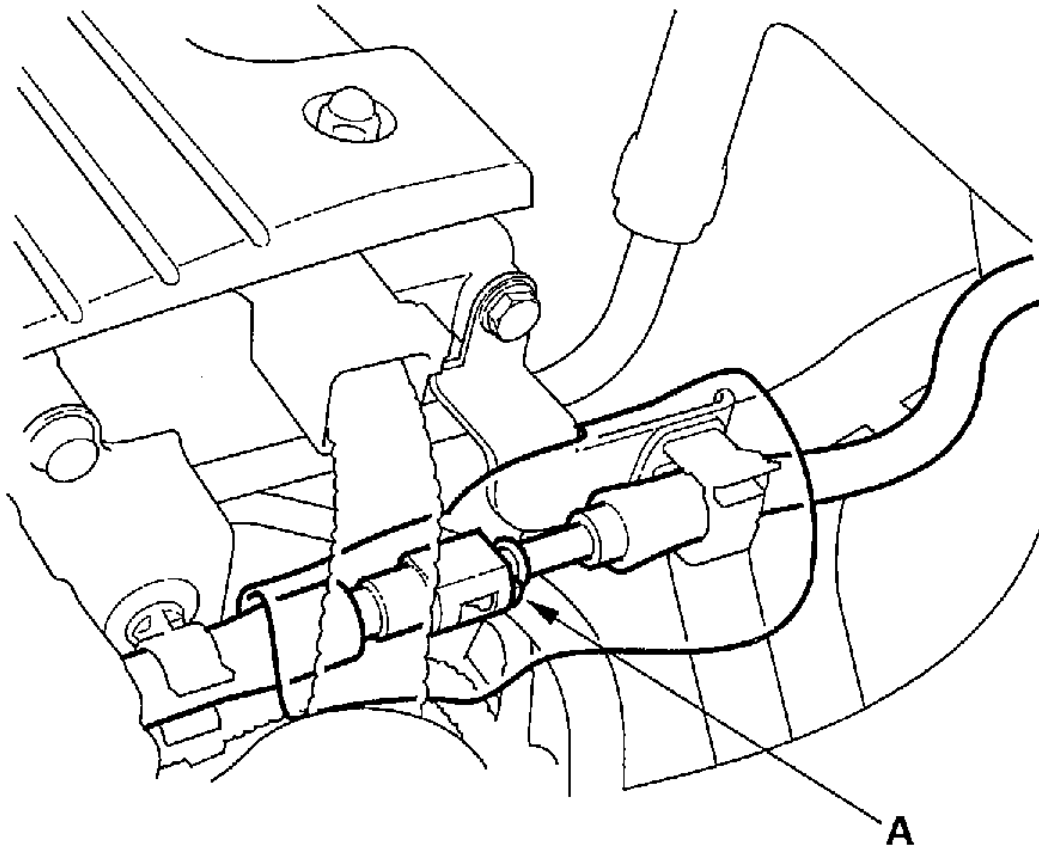
4. Turn the ignition switch OFF.
5. Remove the fuel fill cap, and relieve the pressure in the fuel tank.
6. Disconnect the negative cable from the battery.
7. Remove the quick-connect fitting cover (A).



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Fig. 19: Removing The Quick-Connect Fitting Cover

8. Check the fuel quick-connect fitting for dirt, and clean it if needed.
9. Place a rag or shop towel over the quick-connect fitting (A).



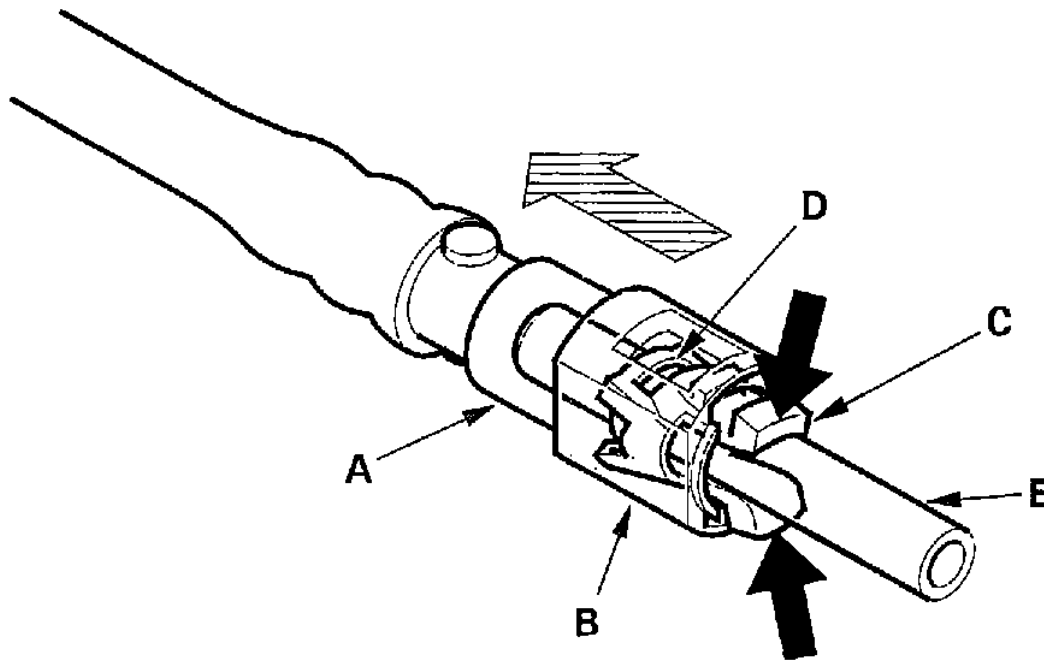
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Fig. 20: Placing A Rag Or Shop Towel Over The Quick-Connect Fitting

10. Disconnect the quick-connect fitting (A): Hold the connector (B) with one hand, and squeeze the retainer tabs (C) with the other hand to release them from the locking tabs (D). Pull the connector off.

NOTE:

- To prevent the remaining fuel in the fuel feed line or hose from flowing out, use a rag or shop towel.
- Be careful not to damage the line (E) or other parts.
- Do not use tools.
- If the connector does not move, keep the retainer tabs pressed down, and alternately pull and push the connector until it comes off easily.
- Do not remove the retainer from the line; once removed, the retainer must be replaced with a new one.



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Fig. 21: Disconnecting The Quick-Connect Fitting

11. After disconnecting the quick-connect fitting, check it for dirt or damage (see step 4 of **FUEL LINE/QUICK-CONNECT FITTING REMOVAL**).
12. Reconnect the negative cable to the battery and do the following items:
 - ECM/PCM idle learn procedure (see **ECM/PCM IDLE LEARN PROCEDURE**).
 - Power window control unit reset procedure (see **RESETTING THE POWER WINDOW**).
 - Enter the anti-theft codes for the radio and the navigation system, then enter the customer's radio station presets.
 - Reset the clock.

FUEL PRESSURE TEST

Special Tools Required:

- Fuel pressure gauge 07406-004000A
- Fuel pressure gauge set 07ZAJ-S5A0100
- Fuel hose attachment 07ZAJ-S7C0100
- Fuel joint attachment 07ZAJ-S7C0200

1. Relieve the fuel pressure (see **FUEL PRESSURE RELIEVING**).
2. Disconnect the quick-connect fitting (A). Attach the fuel pressure gauge set and the fuel pressure gauge.

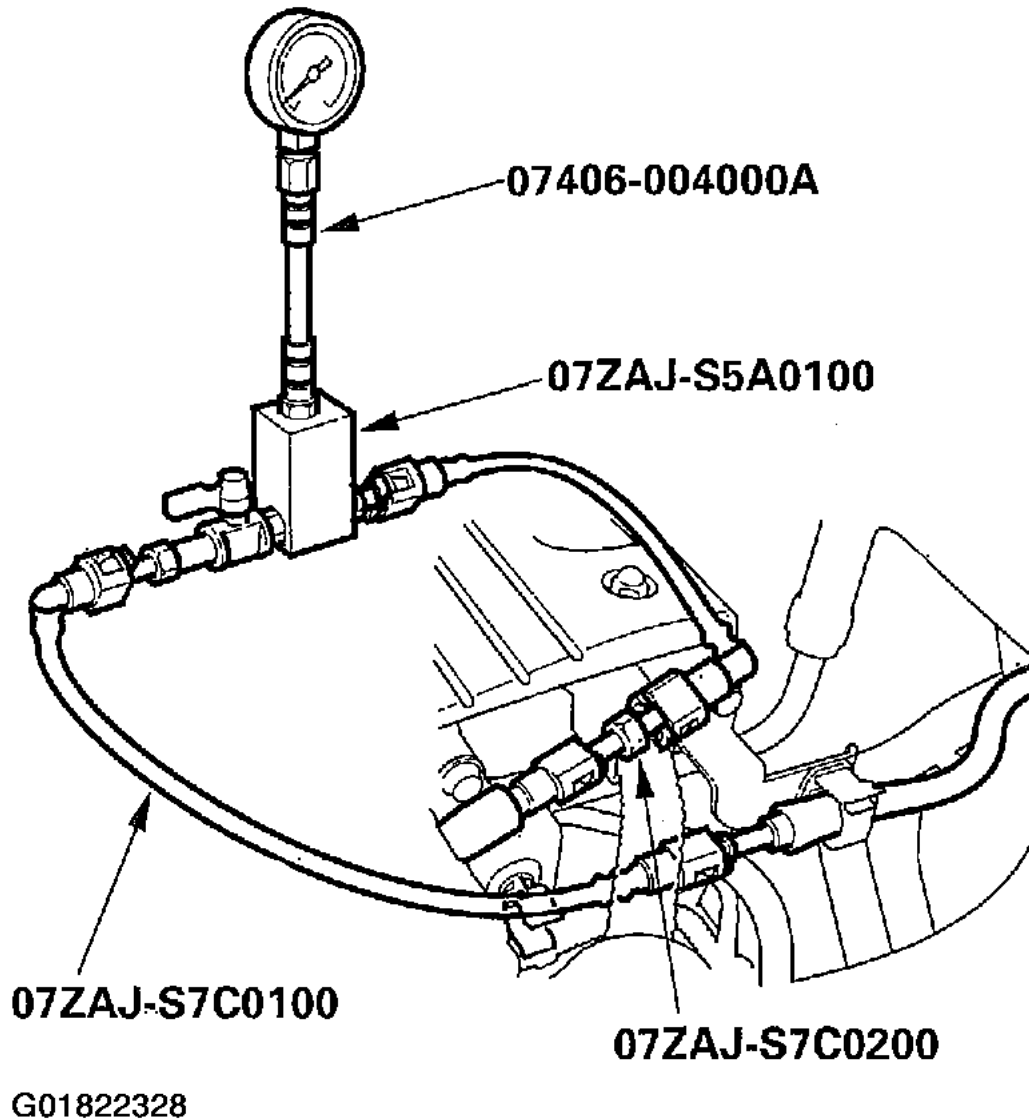


Fig. 22: Attaching The Fuel Pressure Gauge Set & The Fuel Pressure Gauge

3. Start the engine and let it idle.
 - If the engine starts, go to step 5 .
 - If the engine does not start, go to step 4.
4. Check to see if the fuel pump is running: listen to the fuel filler port with the fuel fill cap removed. The fuel pump should run for 2 seconds when the ignition switch is first turned on.

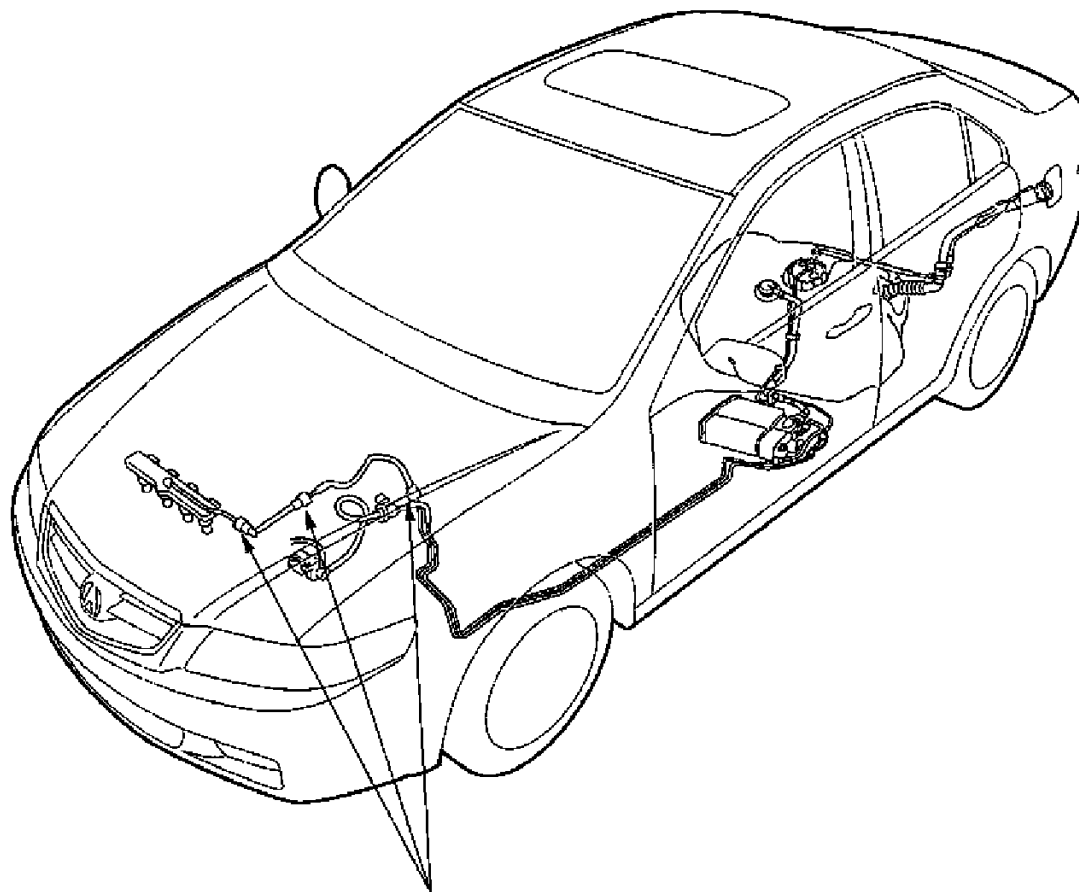
- If the pump runs, go to step 5.
 - If the pump does not run, do the fuel pump circuit troubleshooting (see **FUEL PUMP CIRCUIT TROUBLESHOOTING**).
5. Read the fuel pressure gauge. The pressure should be 330-380 kPa (3.4-3.9 kgf/cm² , 48-55 psi).
- If the pressure is OK, the test is complete.
 - If the pressure is out of specification, replace the fuel pressure regulator (see **FUEL PRESSURE REGULATOR REPLACEMENT**) and the fuel filter (see **FUEL FILTER REPLACEMENT**), then recheck the fuel pressure.

FUEL TANK DRAINING

1. Remove the fuel pump assembly (see **Fuel Pump/Fuel Gauge Sending Unit Replacement**).
2. Using a hand pump, a hose, and a container suitable for gasoline, draw the fuel from the fuel tank.

FUEL LINE INSPECTION

Check the fuel system lines and hoses, for damage, leaks, and deterioration. Replace any damaged parts.



Make sure the connections are secure and the quick-connect fitting covers are firmly locked in place.

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Fig. 23: Checking The Fuel System Lines & Hoses

Check all clamps and retighten if necessary.

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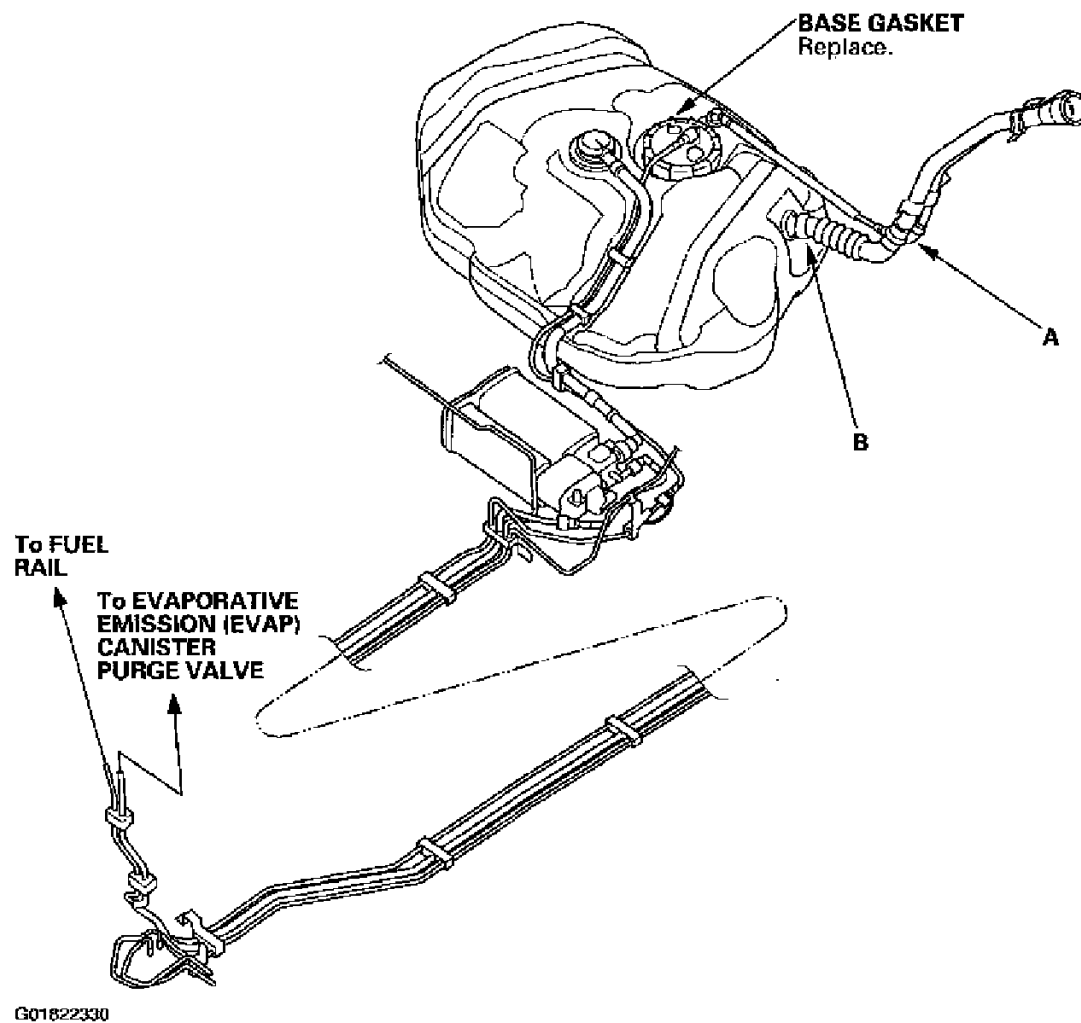


Fig. 24: EVAP System Hoses & Clamps

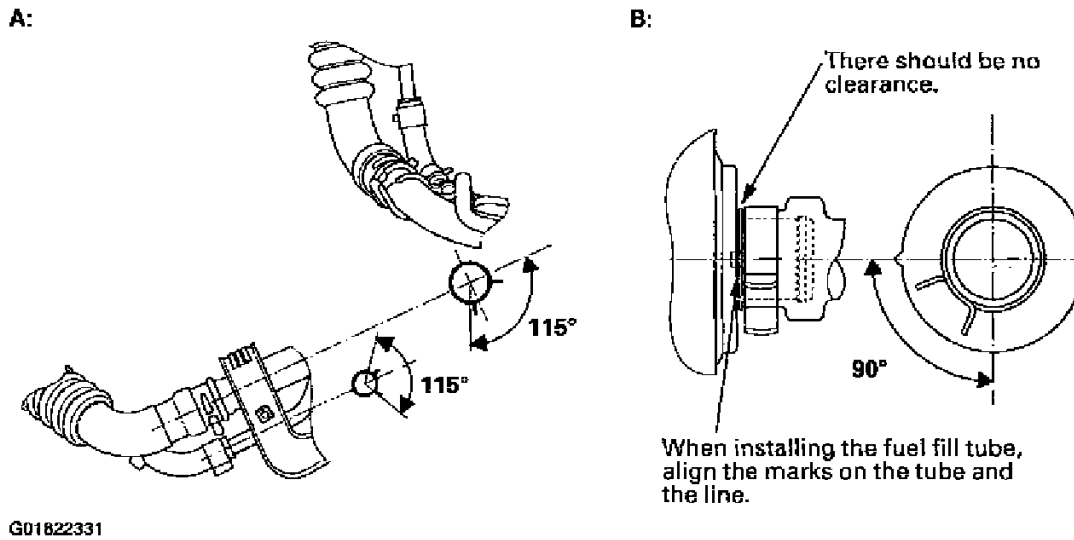


Fig. 25: Filler Neck Hoses & Clamps

FUEL LINE/QUICK-CONNECT FITTING PRECAUTION

The fuel line/quick-connect fittings connect the fuel rail (A) to fuel feed hose (B), fuel feed hose (B) to the fuel feed hose (C), the fuel feed hose (C) to the fuel line (D), the fuel line (E) to the fuel tank unit (F) and the fuel vapor line (G) to the EVAP canister (H). When removing or installing the fuel feed hose, fuel tank unit, or fuel tank, it is necessary to disconnect or connect the quick-connect fittings.

Pay attention to the following:

- The fuel feed hoses, fuel line, and quick-connect fittings are not heat-resistant; be careful not to damage them during welding or other heat-generating procedures.
- The fuel feed hoses, fuel line, and quick-connect fittings are not acid-proof; do not touch them with a shop towel that was used for wiping battery electrolyte. Replace them if they came into contact with electrolyte or something similar.
- When connecting or disconnecting the fuel feed hoses, fuel line, and quick-connect fittings, be careful not to bend or twist them excessively. Replace them if they are damaged.

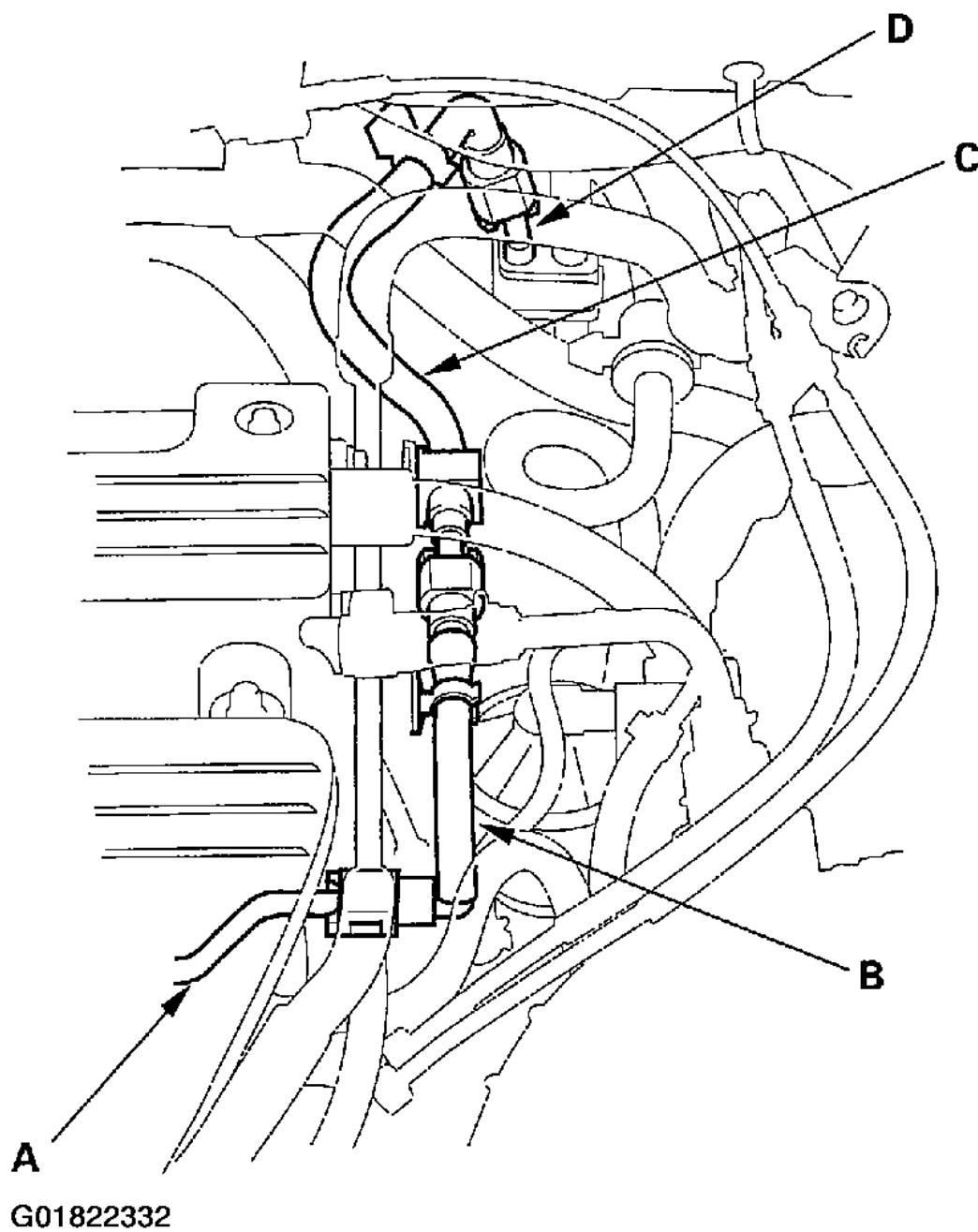
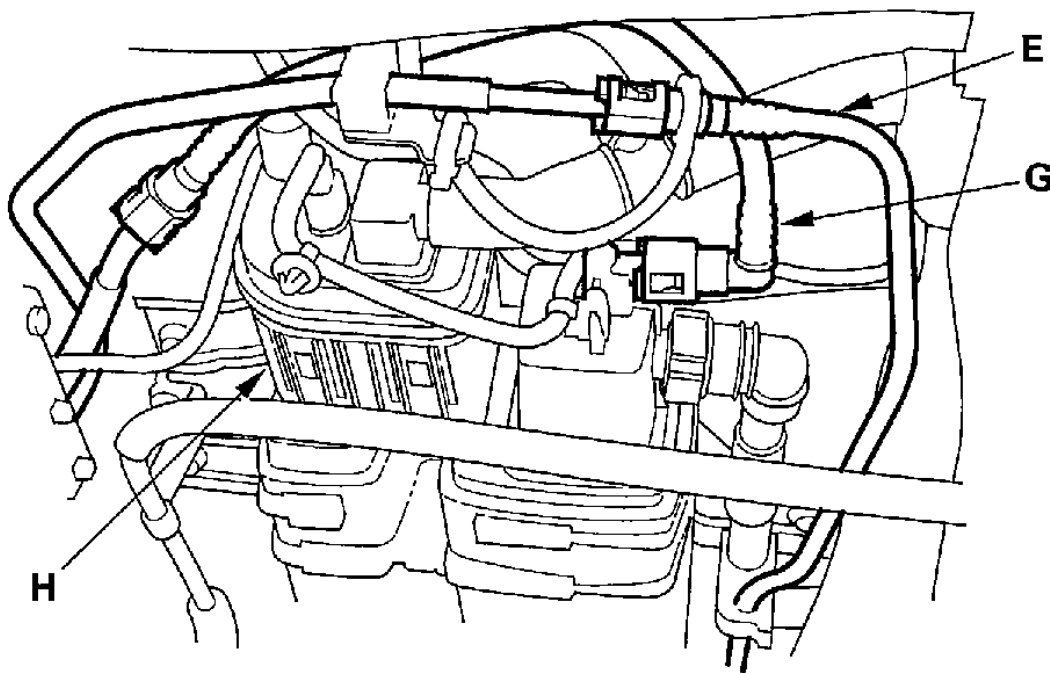
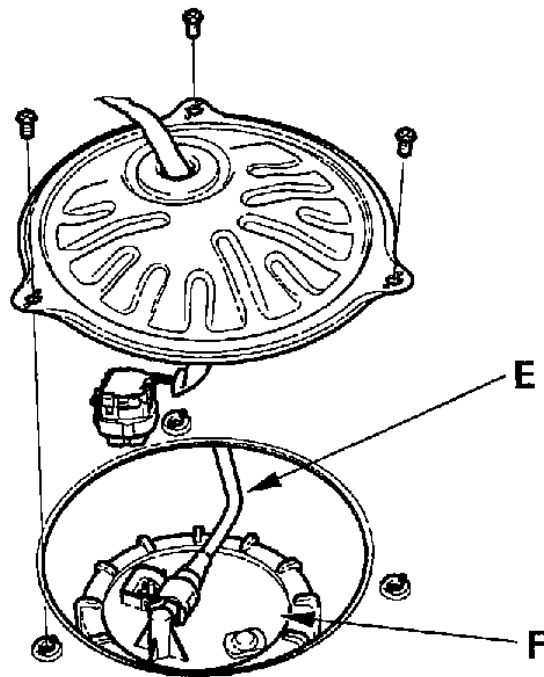


Fig. 26: Identifying Fuel Rail, Fuel Feed Hoses & The Fuel Line



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Fig. 27: Identifying Fuel Line, Fuel Tank Unit, Fuel Vapor Line & EVAP Canister

A disconnected quick-connect fitting can be reconnected, but the retainer on the mating line cannot be reused once it has been removed from the line. Replace the retainer when:

- replacing the fuel rail.
- replacing the fuel line.
- replacing the fuel pump.
- replacing the fuel filter.
- replacing the fuel gauge sending unit.
- it has been removed from the line.
- it is damaged.

Retainer location	Manufacturer	Retainer color
Engine compartment fuel feed hoses	Sanoh	White
Fuel tank unit: Fuel feed line, fuel tank unit side	Tokai	Orange
Fuel tank unit: Fuel feed line, fuel line side	Tokai	Green
EVAP canister: fuel vapor line	Tokai	Orange

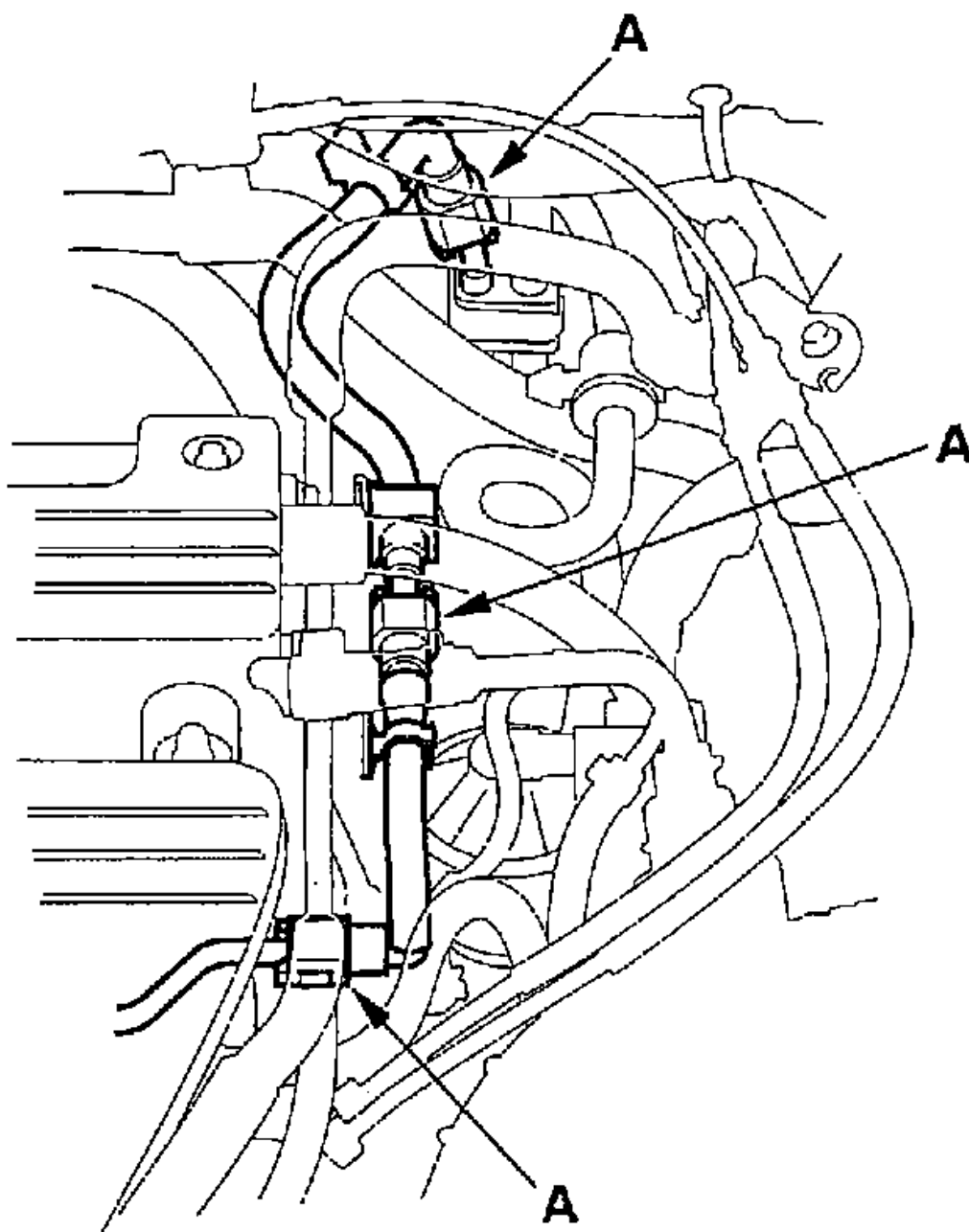
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Fig. 28: Quick-Connect Fitting Retainer Identification/Location Table

NOTE: When replacing a retainer, use the same size and manufacturer.

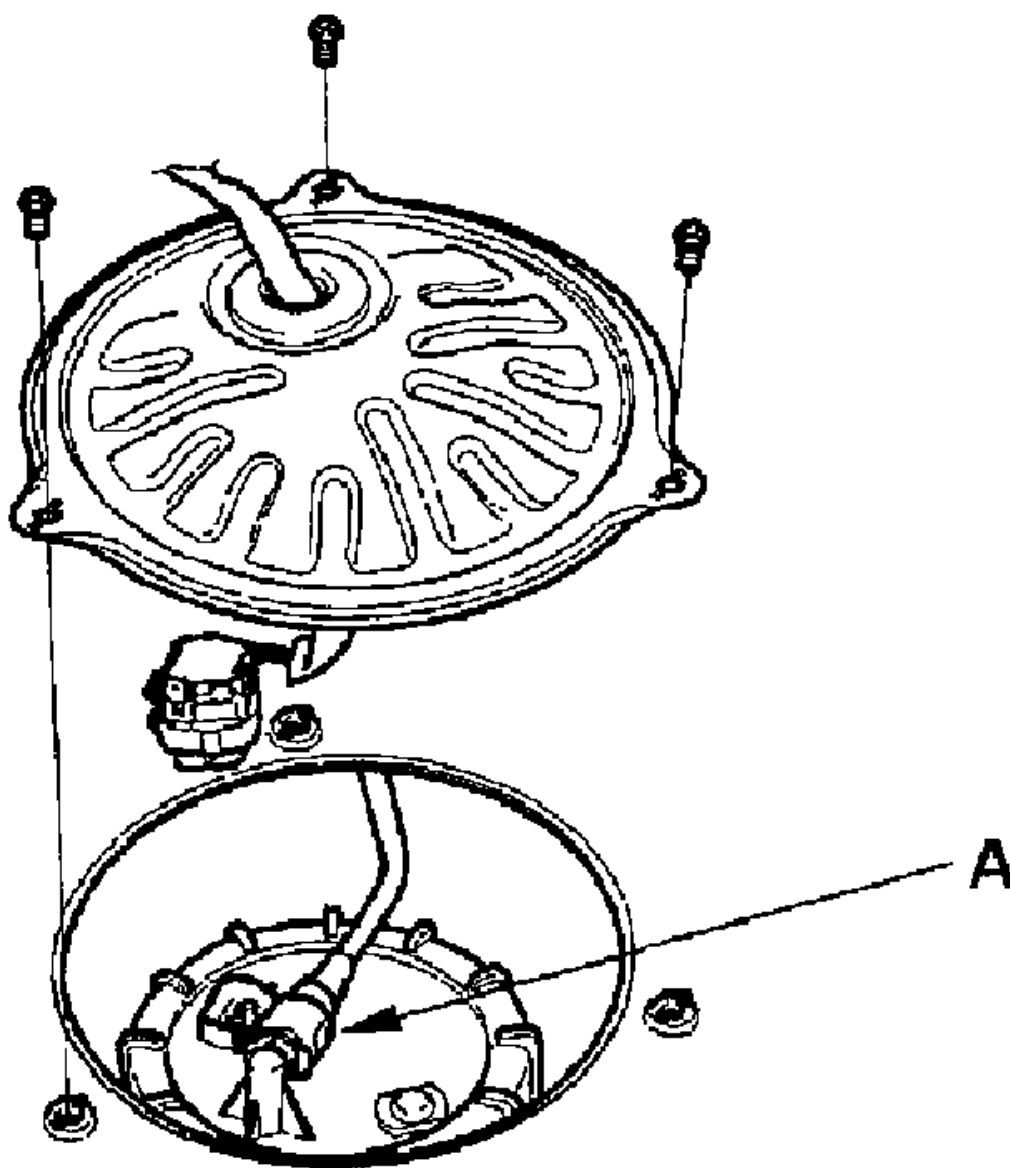
FUEL LINE/QUICK-CONNECT FITTING REMOVAL

1. Relieve the fuel pressure (see **FUEL PRESSURE RELIEVING**).
2. Check the fuel quick-connect fittings (A) for dirt, and clean them if needed (see **FUEL LINE/QUICK-CONNECT FITTING PRECAUTION**).



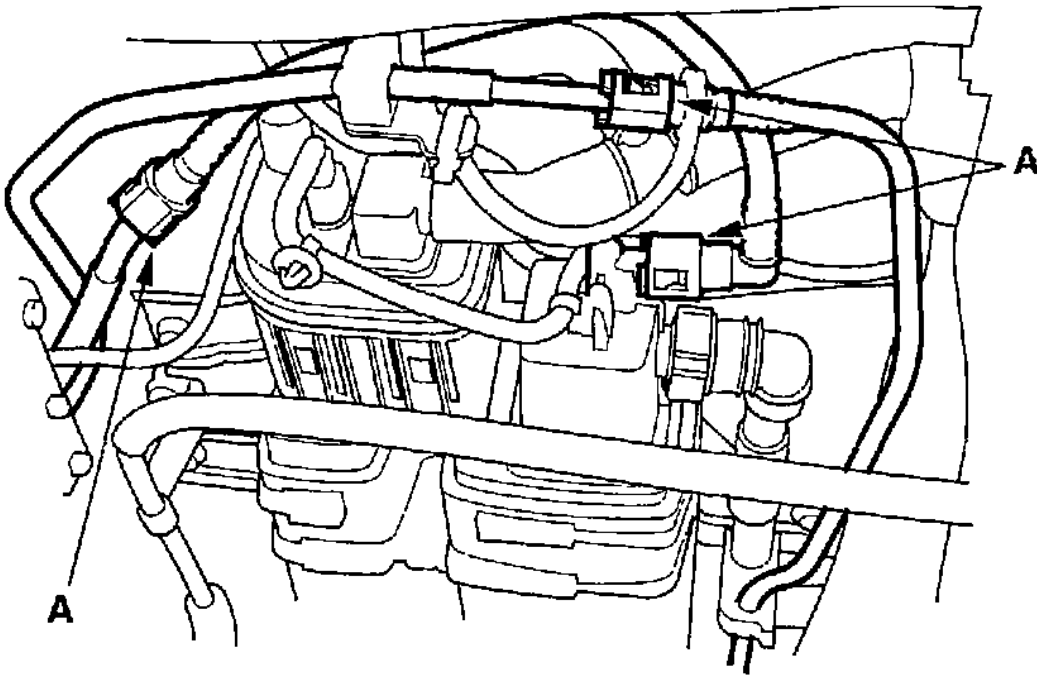
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Fig. 29: Locating Fuel Quick-Connect Fittings (1 Of 3)



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Fig. 30: Locating Fuel Quick-Connect Fittings (2 Of 3)



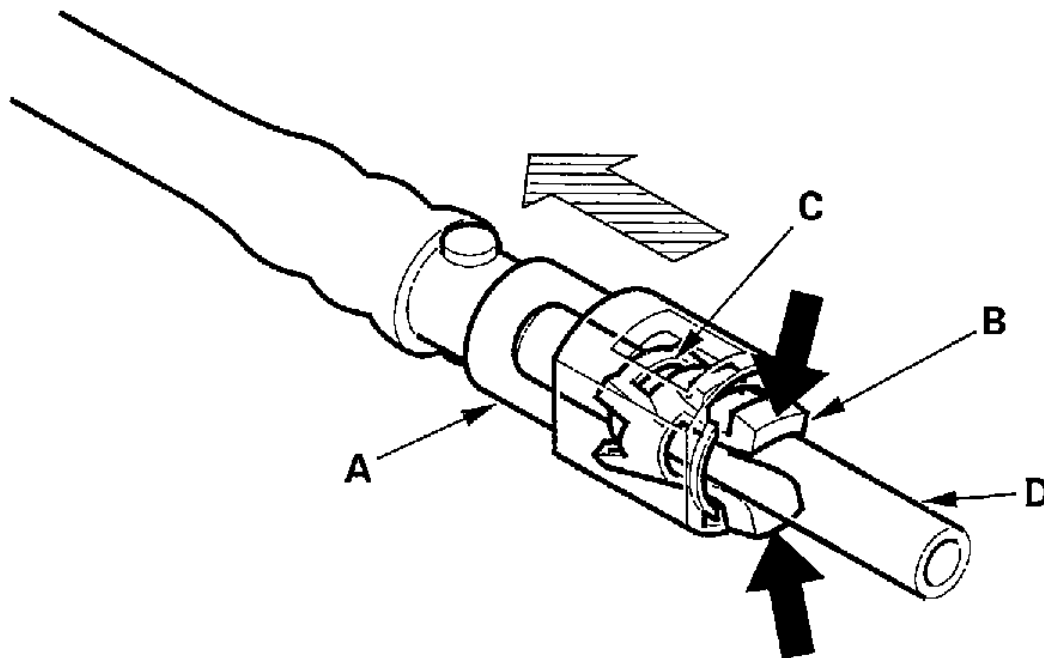
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Fig. 31: Locating Fuel Quick-Connect Fittings (3 Of 3)

3. Place a rag or shop towel over the quick-connect fitting. Hold the connector (A) with one hand, and squeeze the retainer tabs (B) with the other hand to release them from the locking tabs (C). Pull the connector off.

NOTE:

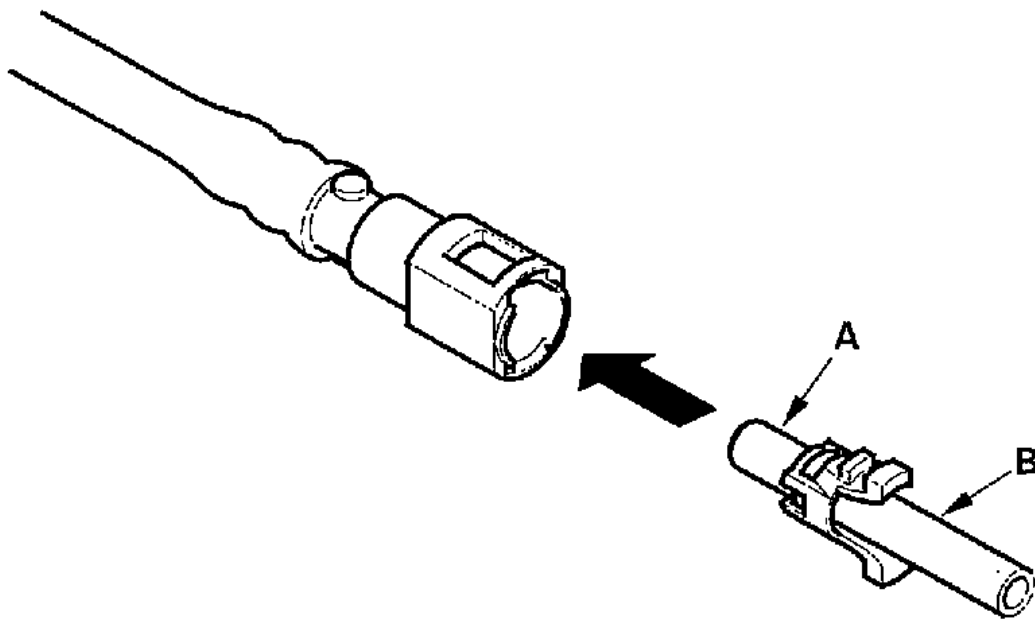
- Be careful not to damage the line (D) or other parts. Do not use tools.
- If the connector does not move, keep the retainer tabs pressed down, and alternately pull and push the connector until it comes off easily.
- Do not remove the retainer from the line; once removed, the retainer must be replaced with a new one.



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Fig. 32: Removing Fuel Quick-Connect Fittings

4. Check the contact area (A) of the line (B) for dirt or damage.
 - If it is dirty, clean it.
 - If it is rusty or damaged, replace the fuel pump, fuel filter, or fuel feed line.



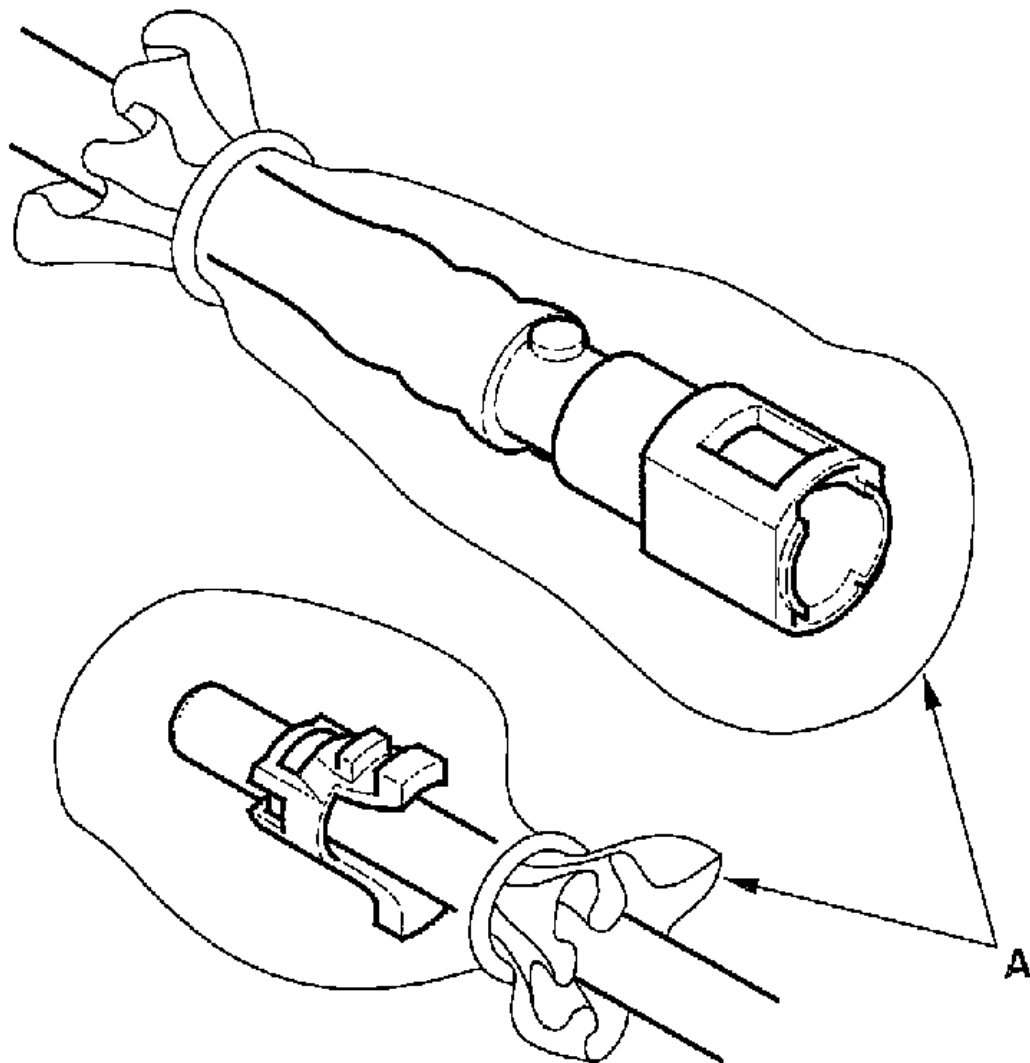
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Fig. 33: Checking Fuel Quick-Connect Fittings

5. To prevent damage and keep foreign matter out, cover the disconnected connector and line ends with plastic bags (A).

NOTE: The retainer cannot be reused once it has been removed from the line. Replace the retainer when:

- replacing the fuel rail.
- replacing the fuel feed line.
- replacing the fuel pump.
- replacing the fuel filter.
- replacing the fuel gauge sending unit.
- it has been removed from the line.
- it is damaged.

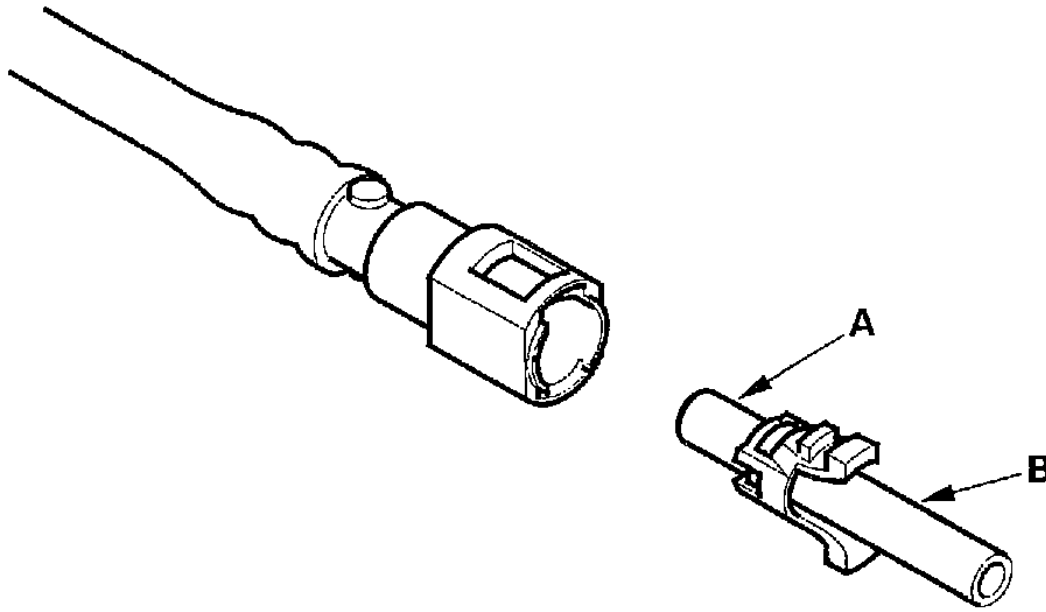


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Fig. 34: Covering Fuel Quick-Connect Fittings With Plastic Bags

FUEL LINE/QUICK-CONNECT FITTING INSTALLATION

1. Check the contact area (A) of the line (B) for dirt or damage, and clean it if needed.

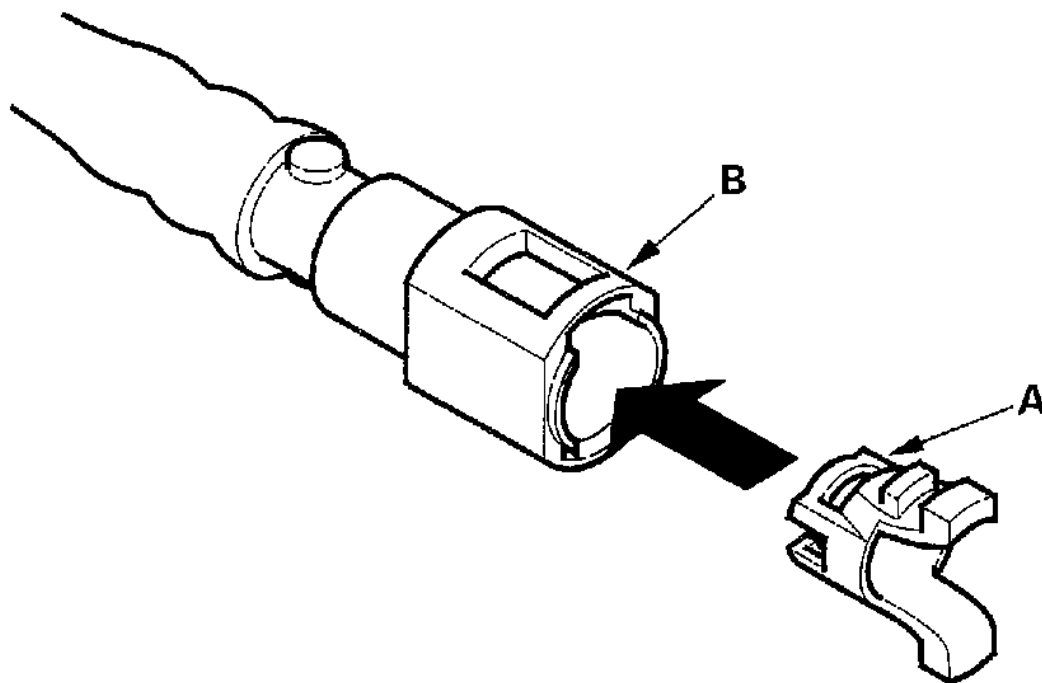


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Fig. 35: Checking Fuel Line/Quick-Connect Fitting

2. Insert a new retainer (A) into the connector (B) if the retainer is damaged, or after:
 - replacing the fuel rail.
 - replacing the fuel feed line.
 - replacing the fuel pump.
 - replacing the fuel filter.
 - replacing the fuel gauge sending unit.
 - removing the retainer from the line.

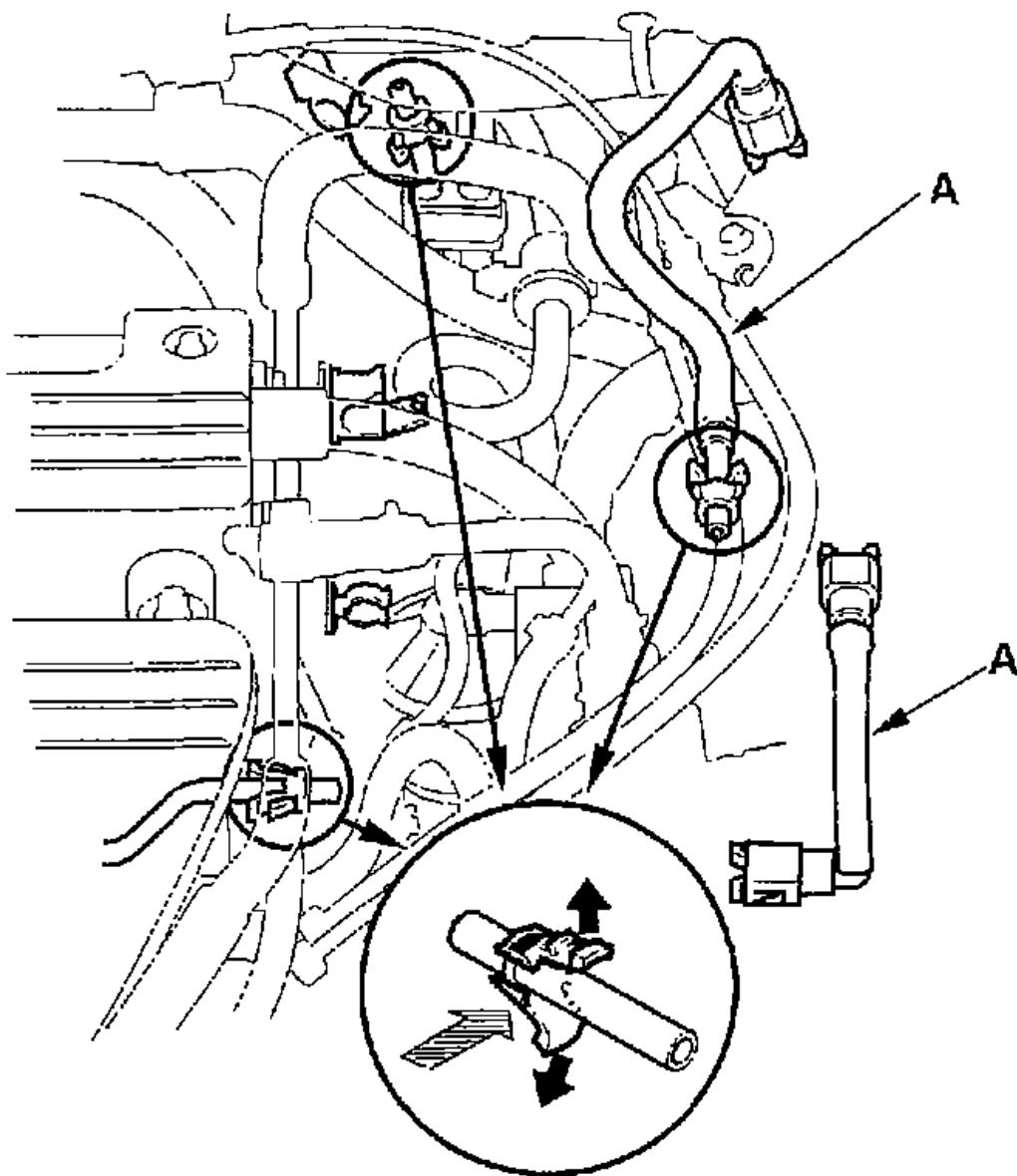
NOTE: When replacing a retainer, use the same size and manufacturer.



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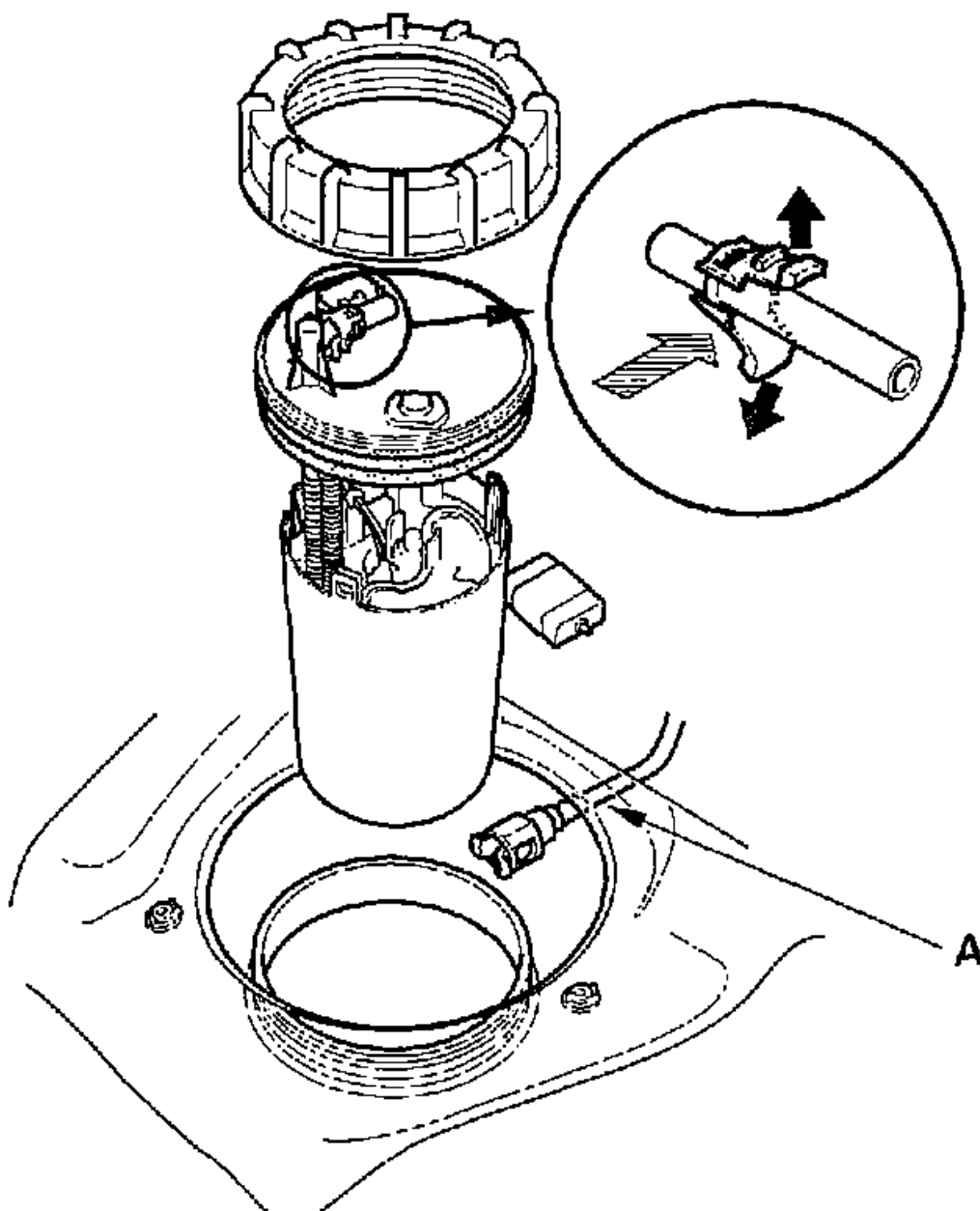
Fig. 36: Inserting A New Retainer Into The Connector

3. Before connecting a new fuel tube/quick-connect fitting assembly (A), remove the old retainer from the mating line.



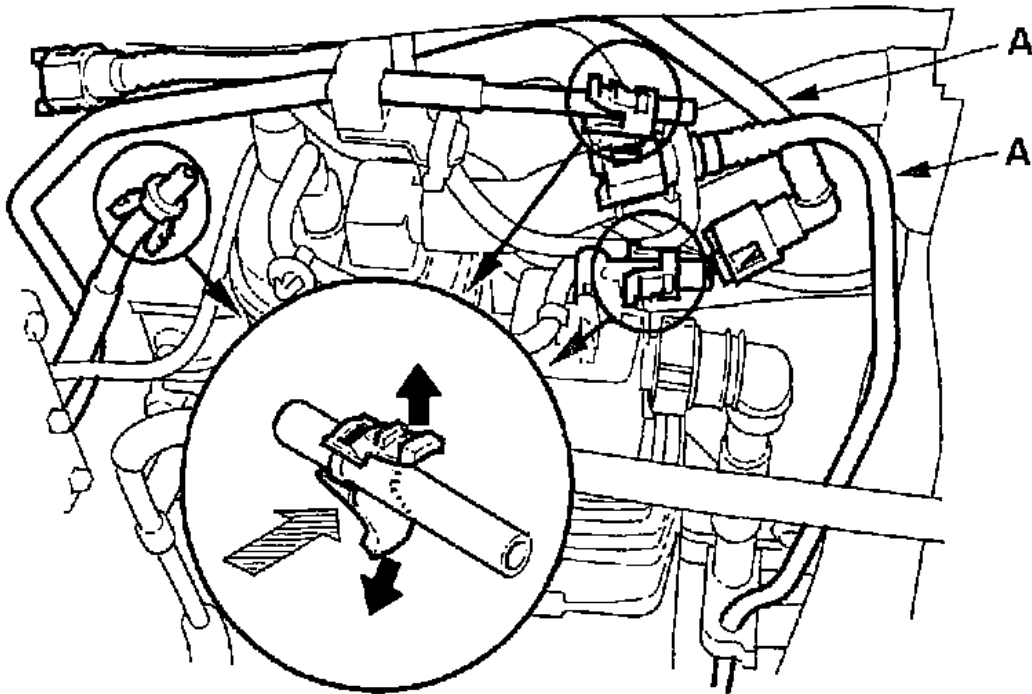
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Fig. 37: Removing The Old Retainer From The Mating Line (1 Of 3)



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Fig. 38: Removing The Old Retainer From The Mating Line (2 Of 3)

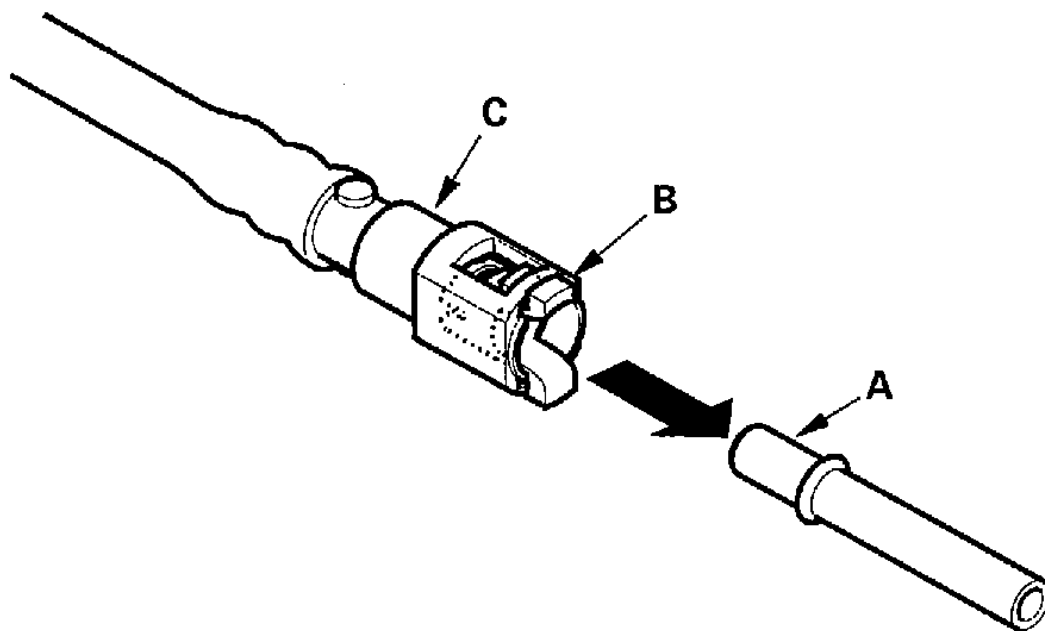


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Fig. 39: Removing The Old Retainer From The Mating Line (3 Of 3)

4. Align the quick-connect fittings with the line (A), and align the retainer locking tabs (B) with the connector grooves (C). Then press the quick-connect fittings onto the line until both retainer pawls lock with a clicking sound.

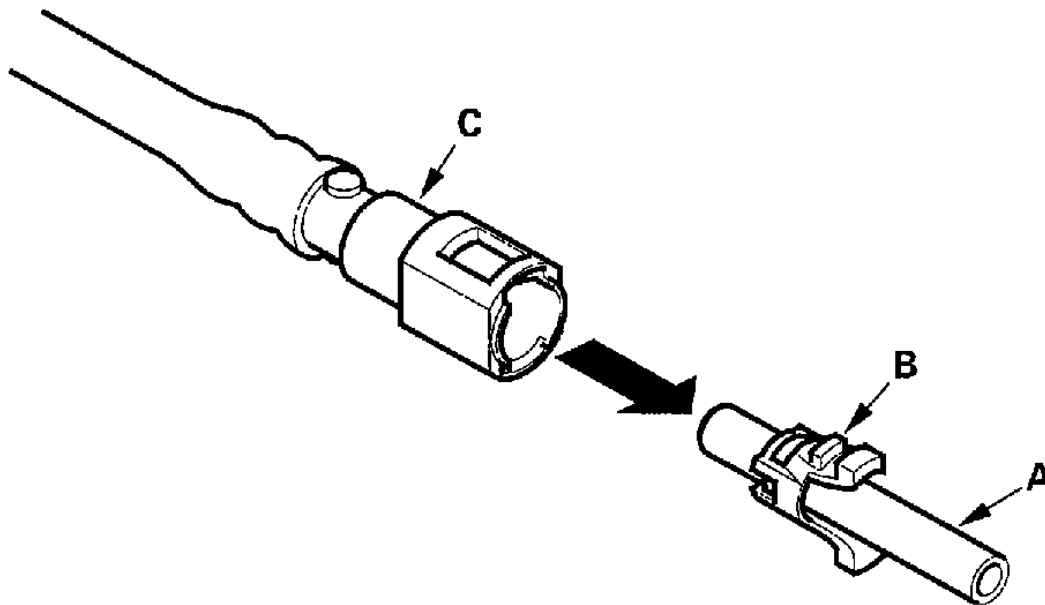
NOTE: If it is hard to connect, put a small amount of new engine oil on the line end.



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Fig. 40: Connecting Fuel Line/Quick-Connect Fitting (New Retainer)

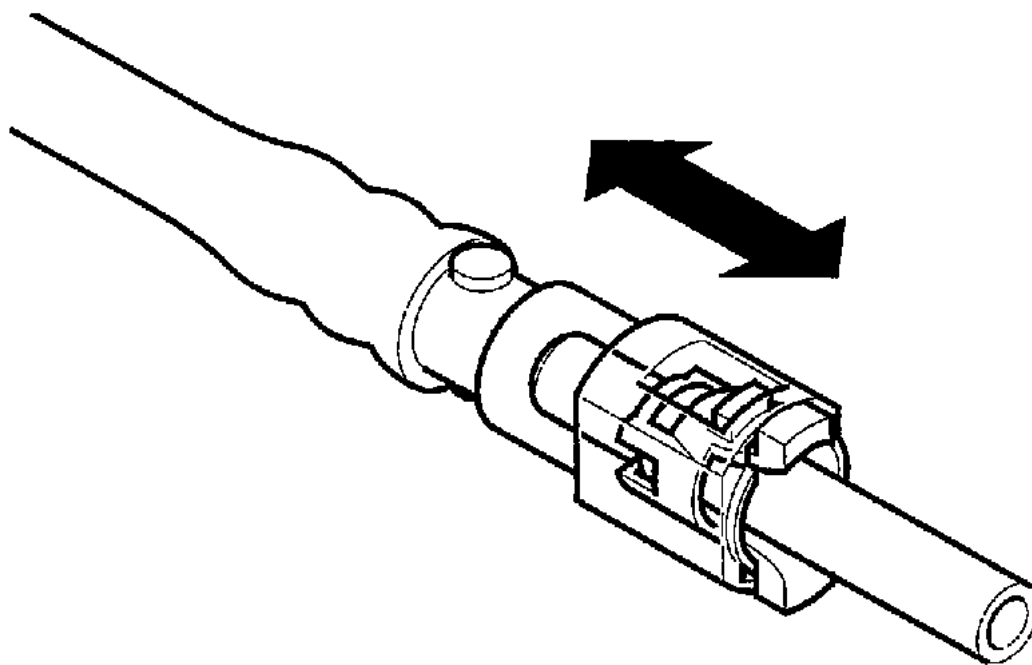
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Fig. 41: Connecting Fuel Line/Quick-Connect Fitting (Existing Retainer)

5. Make sure the connection is secure and that the tabs are firmly locked into place; check visually and by pulling the connector.



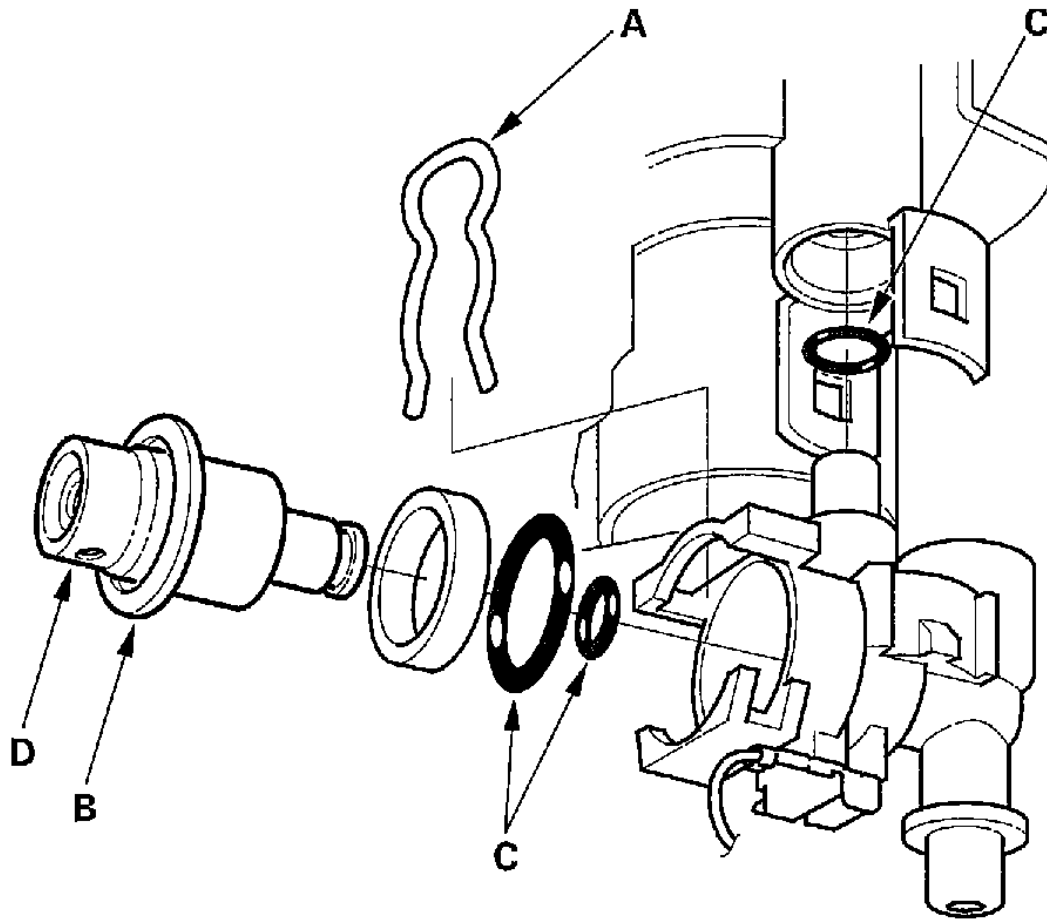
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Fig. 42: Checking Connection

6. Reconnect the negative cable to the battery, and turn the ignition switch ON (II) (but do not operate the starter motor). The fuel pump will run for about 2 seconds, and fuel pressure will rise. Repeat two or three times, and check that there is no leakage in the fuel supply system.

FUEL PRESSURE REGULATOR REPLACEMENT

1. Remove the fuel pump (see **FUEL PUMP/FUEL GAUGE SENDING UNIT REPLACEMENT**).
2. Remove the clip (A).



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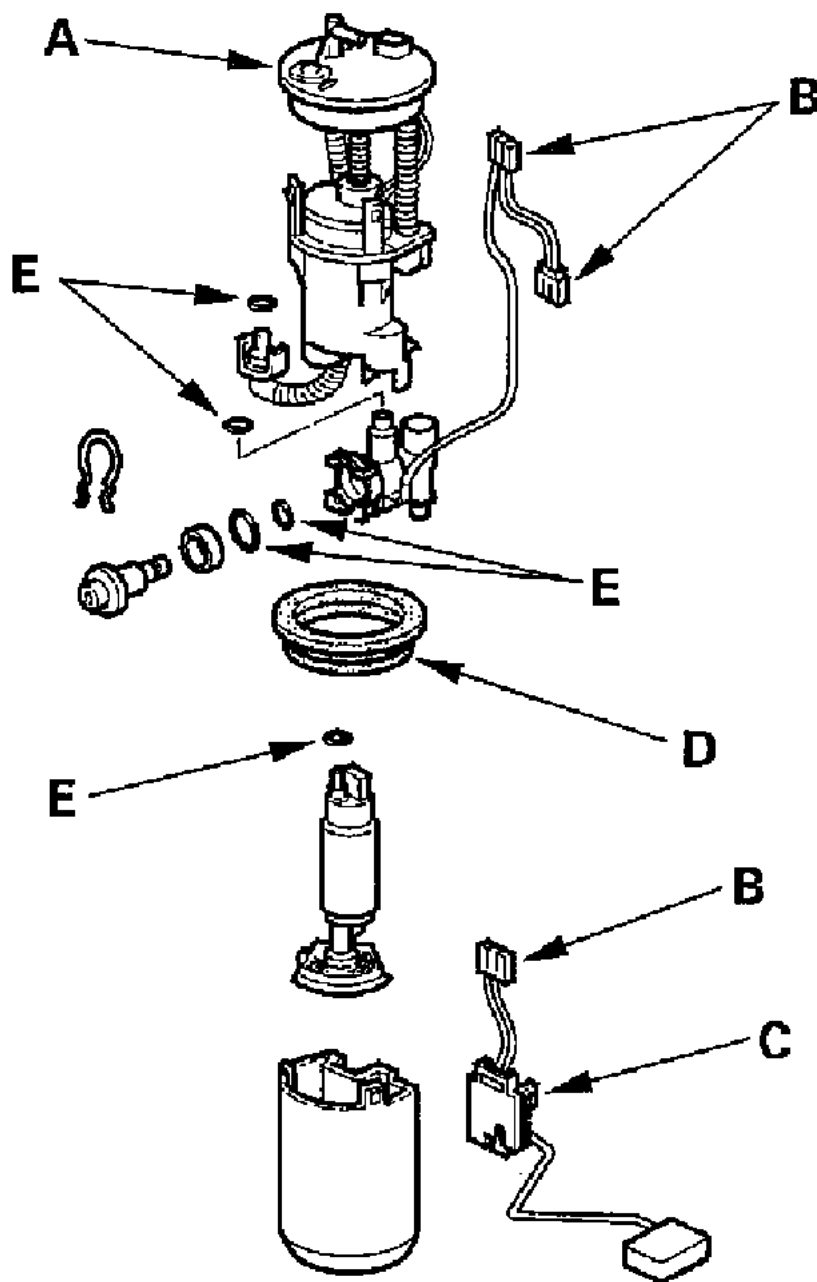
Fig. 43: Removing The Fuel Pressure Regulator

3. Remove the fuel pressure regulator (B).
4. Install the regulator in the reverse order of removal with new O-rings (C). Make sure the regulator is installed with the drain hole (D) facing down.

FUEL FILTER REPLACEMENT

The fuel filter should be replaced whenever the fuel pressure drops below the specified value (see **FUEL PRESSURE TEST**), after making sure that the fuel pump and the fuel pressure regulator are OK.

1. Remove the fuel pump (see **FUEL PUMP/FUEL GAUGE SENDING UNIT REPLACEMENT**).
2. Remove the fuel filter set (A).



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Fig. 44: Removing Fuel Filter

3. Check these items before installing the fuel tank unit:
 - When connecting the wire harness, make sure the connection is secure and the connectors (B) are

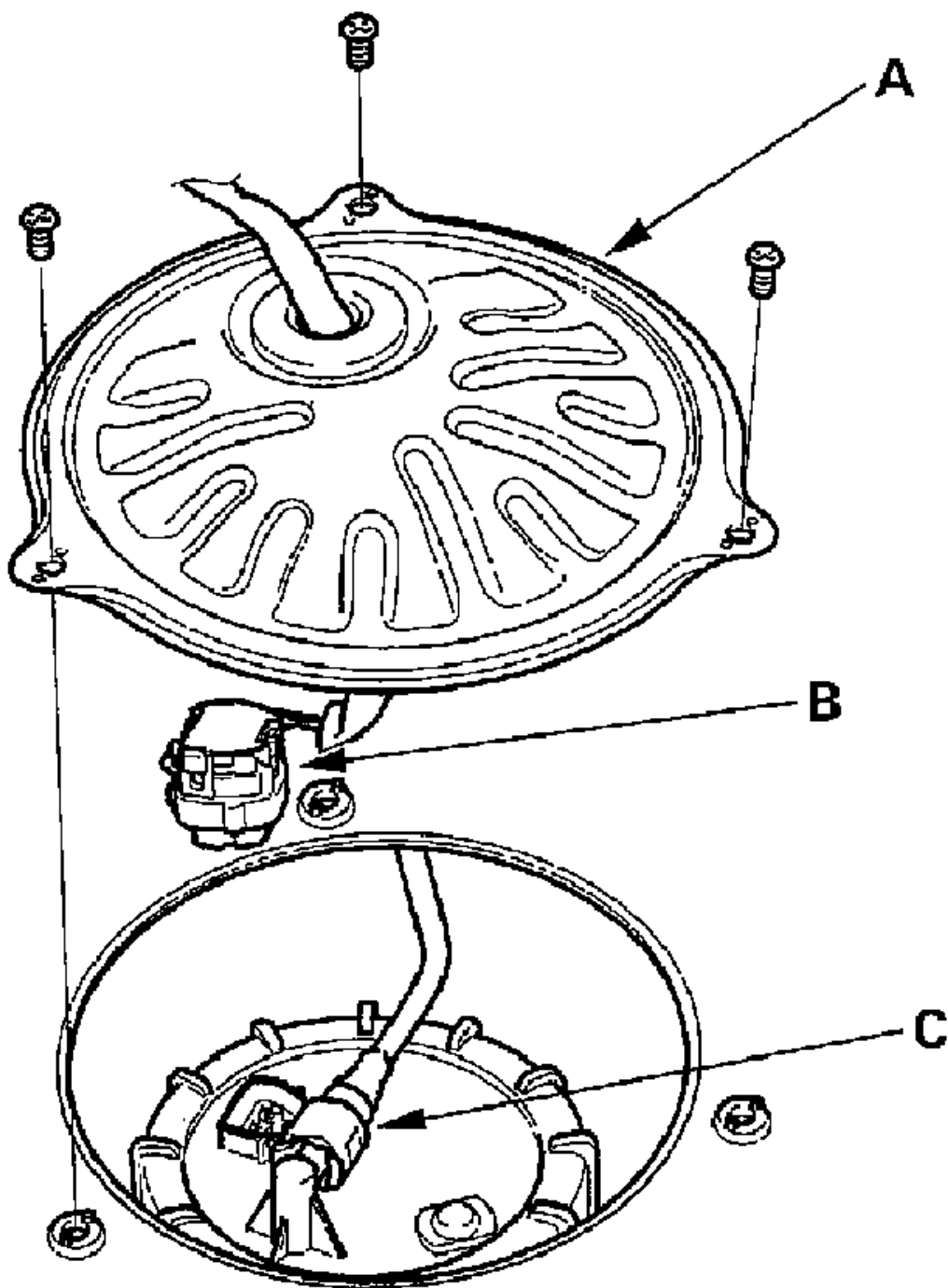
firmly locked into place.

- When installing the fuel gauge sending unit (C), make sure the connection is secure and the connector is firmly locked into place. Be careful not to bend or twist it excessively.
4. Install the parts in the reverse order of removal with a new base gasket (D) and new O-rings (E). When installing the fuel tank unit, align the marks on the unit and the fuel tank (see **FUEL PUMP/FUEL GAUGE SENDING UNIT REPLACEMENT**).

FUEL PUMP/FUEL GAUGE SENDING UNIT REPLACEMENT

Special Tools Required: Fuel sender wrench 07XAA-001010A

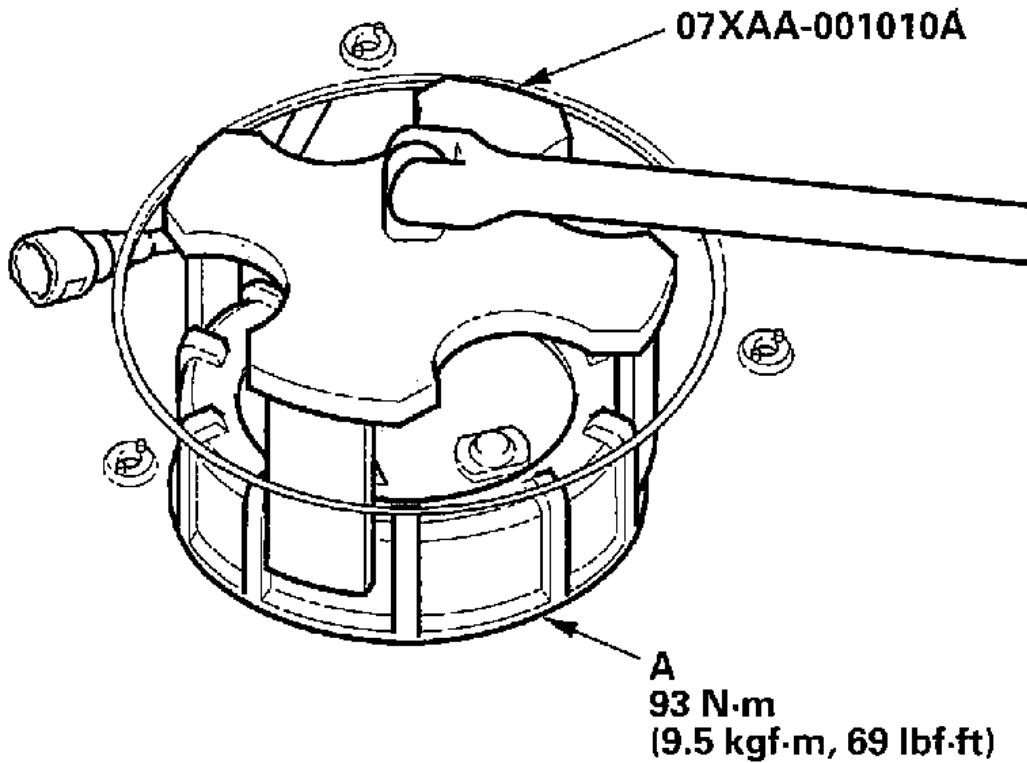
1. Relieve the fuel pressure (see **FUEL PRESSURE RELIEVING**).
2. Remove the fuel fill cap.
3. Remove the trunk floor.
4. Remove the access panel (A) from the floor.



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Fig. 45: Removing Access Panel

5. Disconnect the fuel pump 5P connector (B).
6. Disconnect the quick-connect fitting (C) from the fuel tank unit.
7. Using the special tool, loosen the fuel pump/sender assembly locknut (A).



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Fig. 46: Removing Locknut

8. Remove the locknut (A) and the fuel pump/sender assembly.



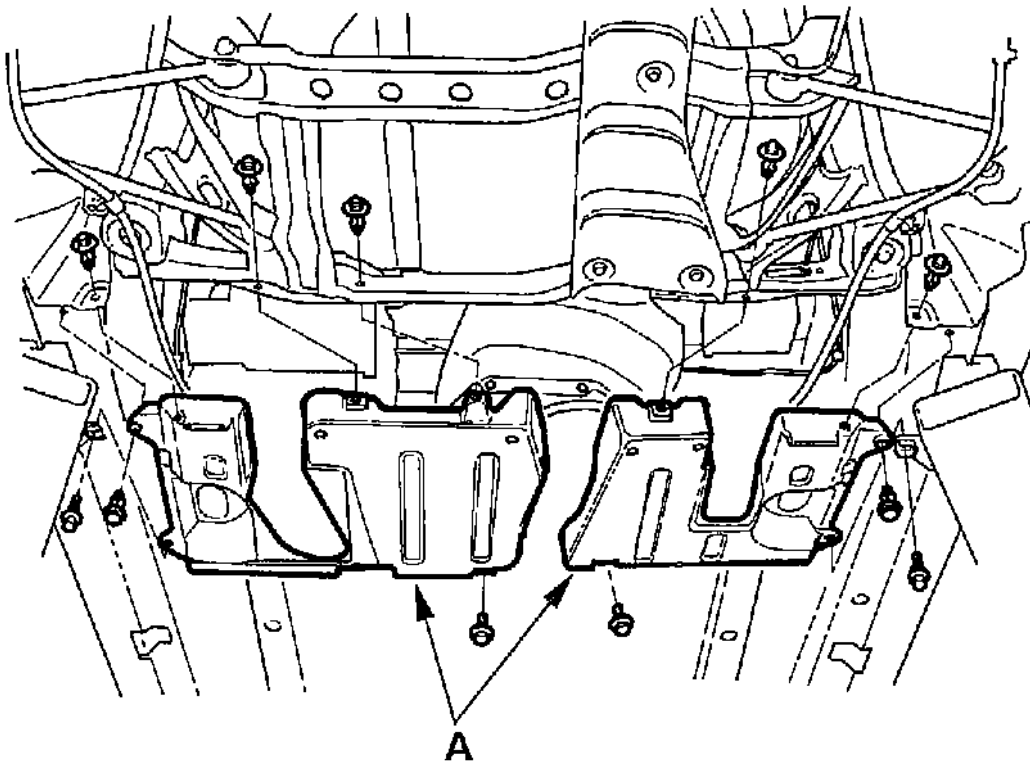
Fig. 47: Exploded View Of Fuel Pump/Fuel Gauge Sending Unit

9. Remove the fuel filter (B), the fuel gauge sending unit (C), the case (D), the wire harness (E), and the fuel pressure regulator (F).
10. When connecting the fuel pump assembly, make sure the connection is secure and the suction filter (G) is firmly connected to the fuel pump (H).
11. Check these items before installing the fuel tank unit:
 - When connecting the wire harness, make sure the connection is secure and the connectors (I) are firmly locked into place.
 - When installing the fuel gauge sending unit, make sure the connection is secure and the connector is firmly locked into place. Be careful not to bend or twist it excessively.
12. Install the parts in the reverse order of removal with a new base gasket (J) and new O-rings (K). When installing the fuel tank unit, align the marks (L) on the unit (M) and the fuel tank (N).

FUEL TANK REPLACEMENT

REMOVAL

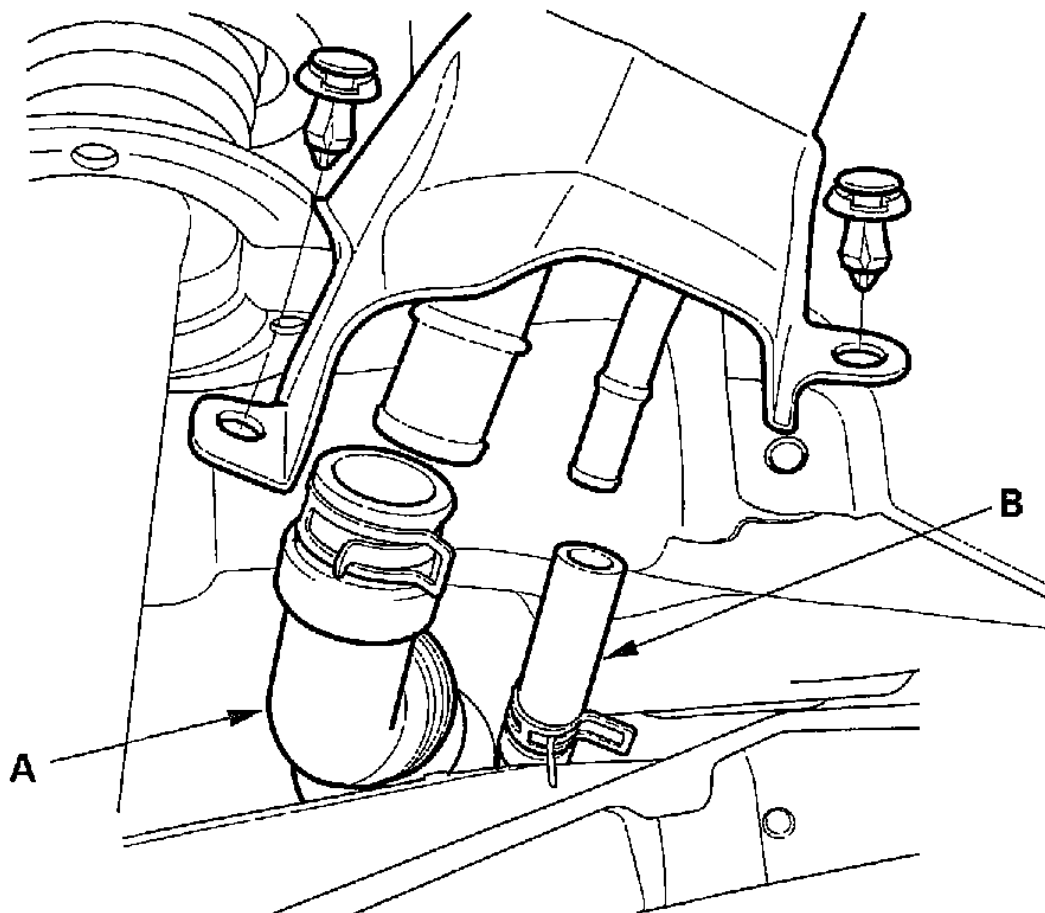
1. Relieve the fuel pressure (see **FUEL PRESSURE RELIEVING**).
2. Drain the fuel tank (see **FUEL TANK DRAINING**).
3. Loosen the rear wheel nuts slightly, then raise the vehicle, and make sure it is securely supported. Remove the rear wheels.
4. Release the parking brake.
5. Remove the fuel tank covers (A).



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Fig. 48: Removing The Fuel Tank Covers

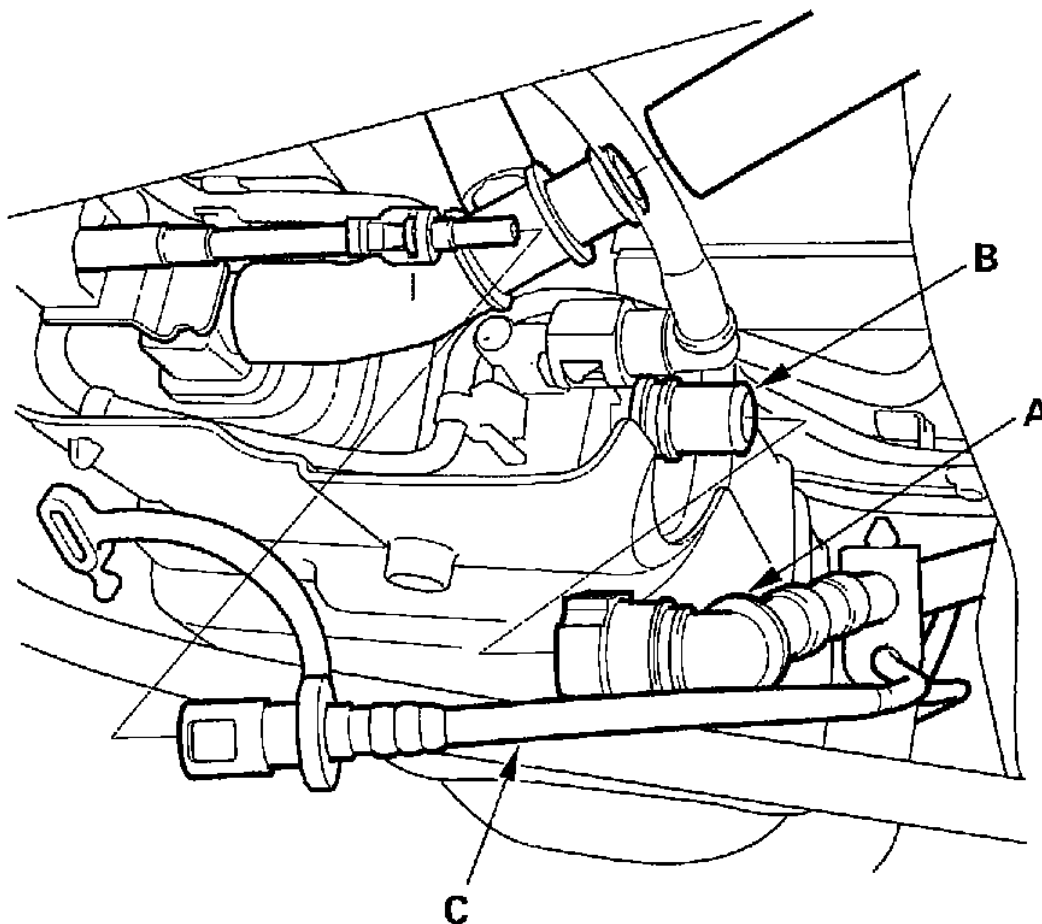
6. Remove the exhaust muffler (see **EXHAUST PIPE & MUFFLER REPLACEMENT**).
7. Disconnect the fuel fill neck tube (A) and breather hose (B).



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Fig. 49: Disconnecting The Fuel Fill Neck Tube & Breather Hose

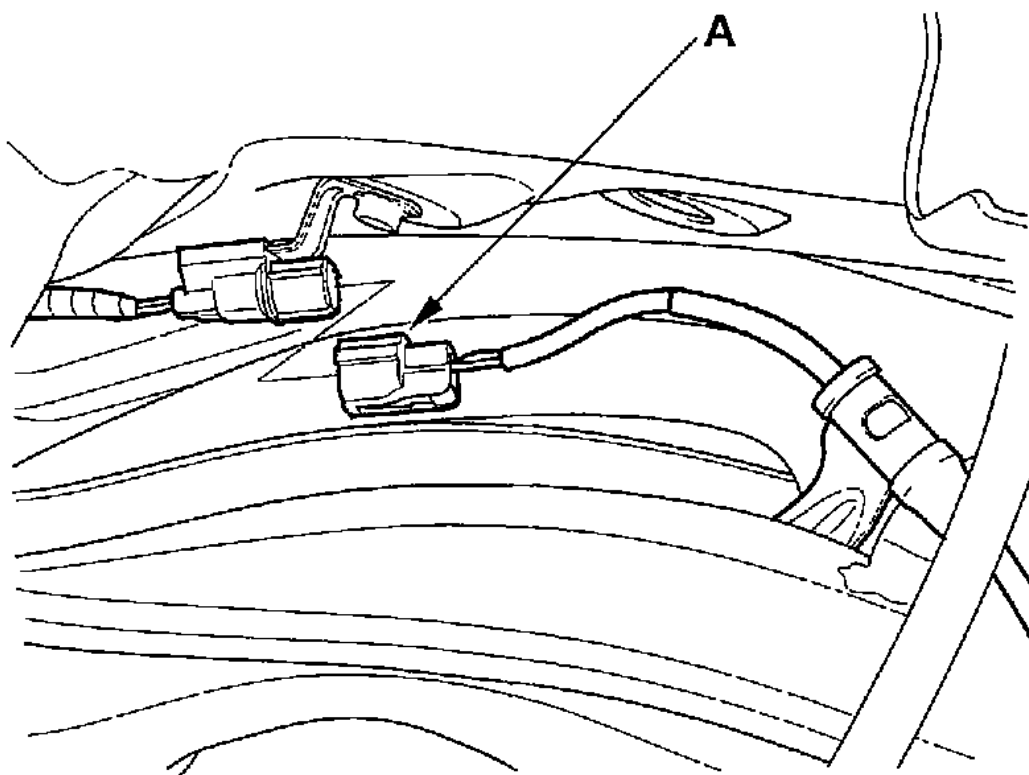
8. Disconnect the vapor line (A) from the EVAP canister (B). Then disconnect the fuel line (C).



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Fig. 50: Disconnecting The Vapor Line From The EVAP Canister & Disconnecting The Fuel Line

9. Disconnect the wheel sensor 2P connector (A).



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Fig. 51: Disconnecting The Wheel Sensor 2P Connector

10. Remove the clip (A), parking brake cable (B), two caliper bolts (C), and caliper body (D).

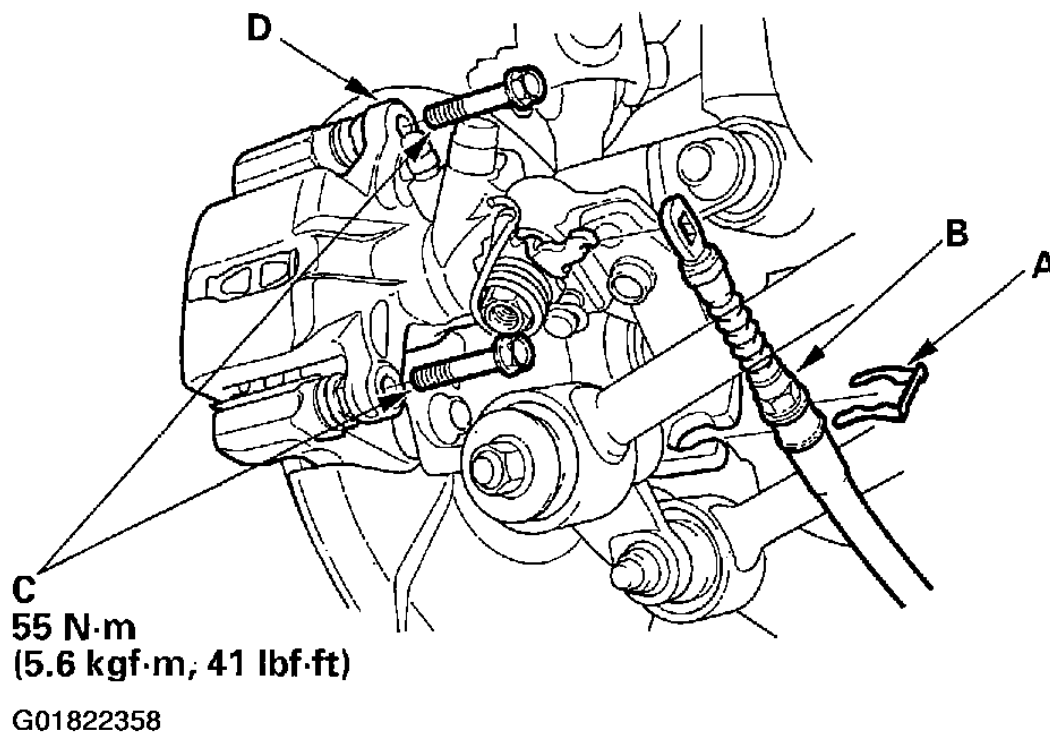


Fig. 52: Removing The Clip, Parking Brake Cable, Two Caliper Bolts & Caliper Body

11. Remove the brake hose bracket (E).

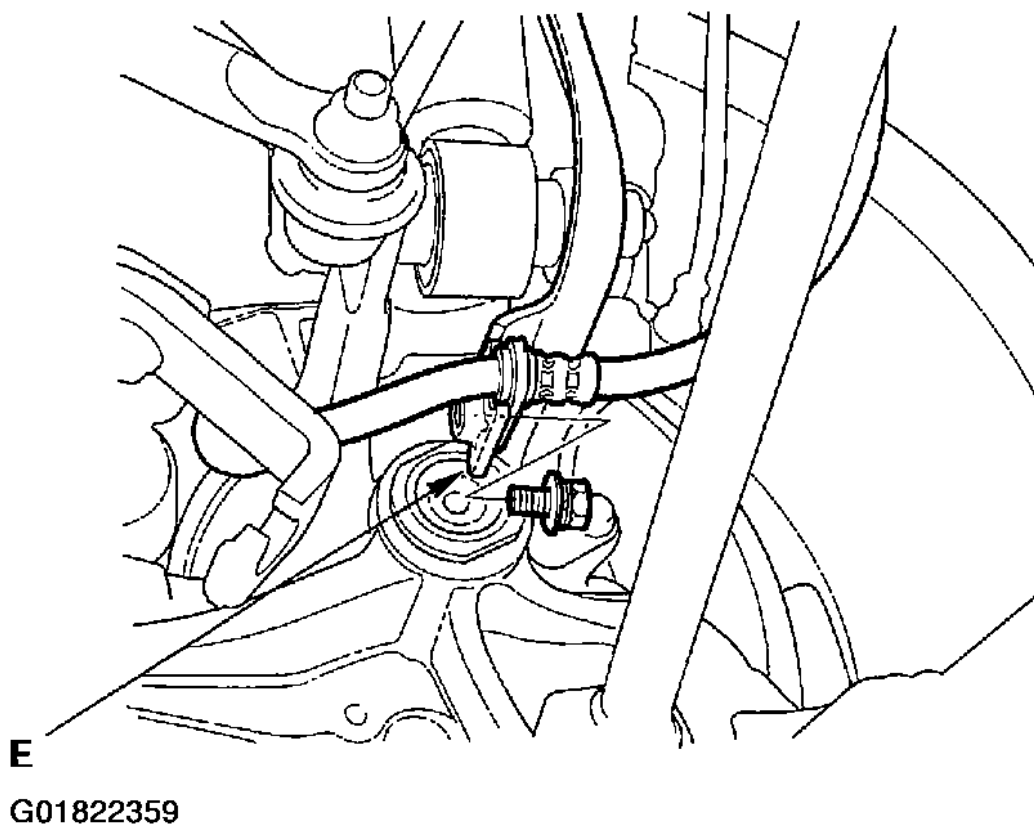
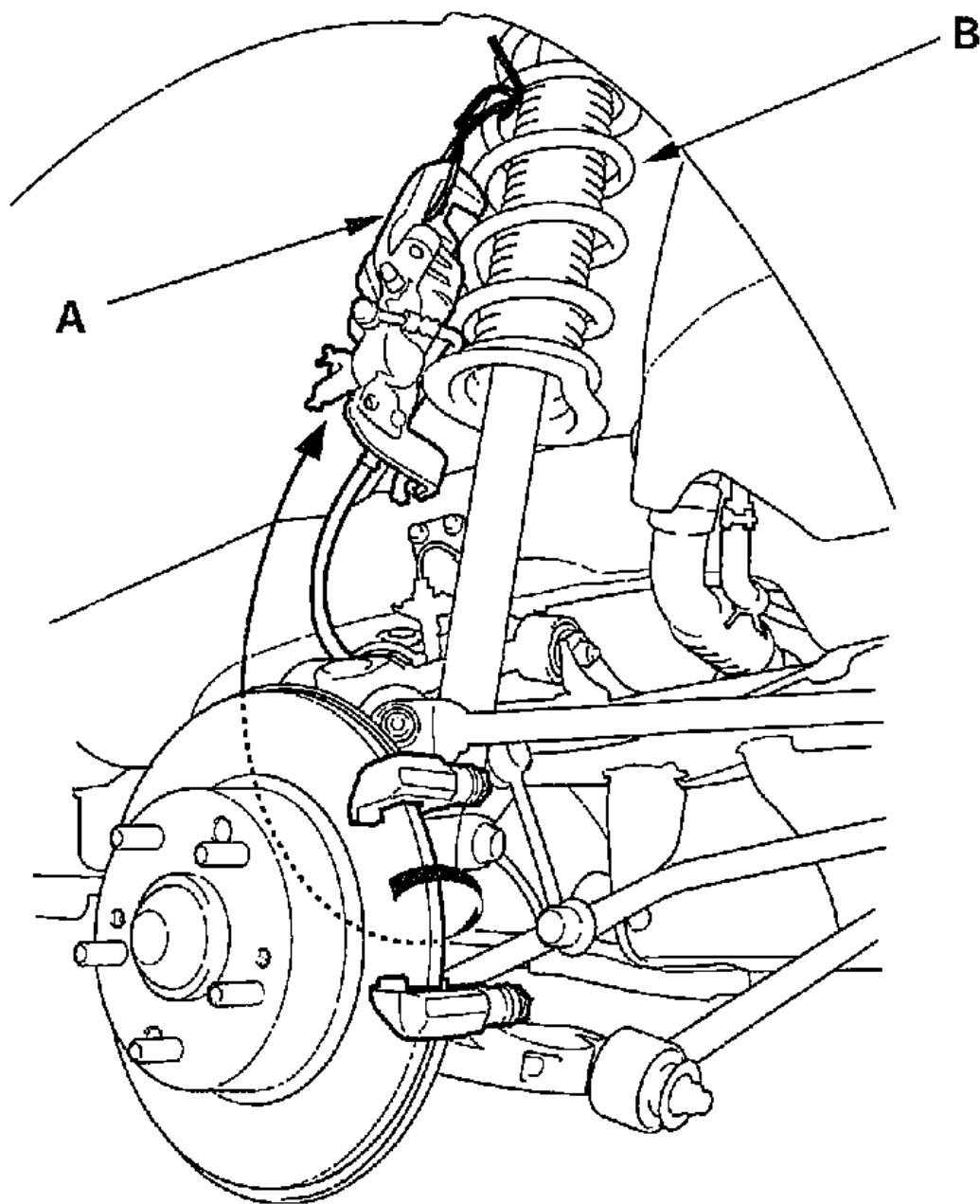


Fig. 53: Removing The Brake Hose Bracket

12. Hook the caliper body (A) on to the damper spring (B).



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Fig. 54: Hooking The Caliper Body On To The Damper Spring

13. Remove the flange bolt (A).

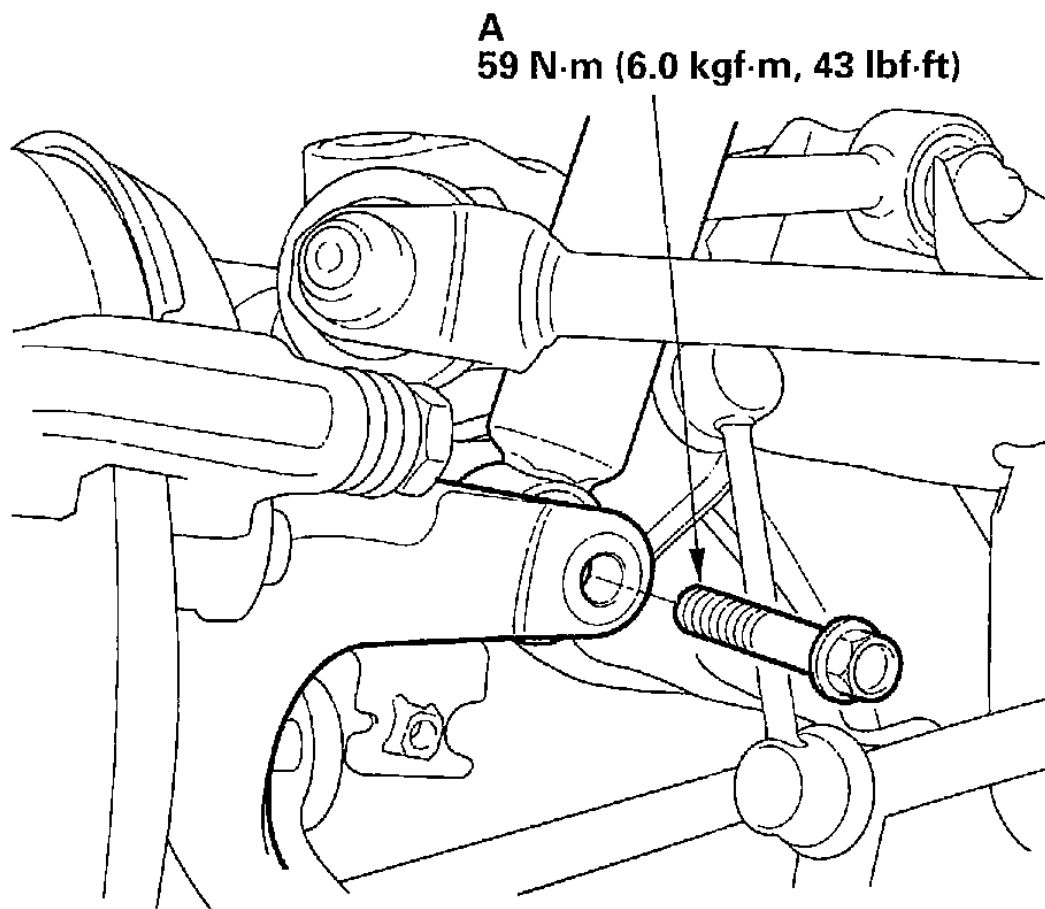
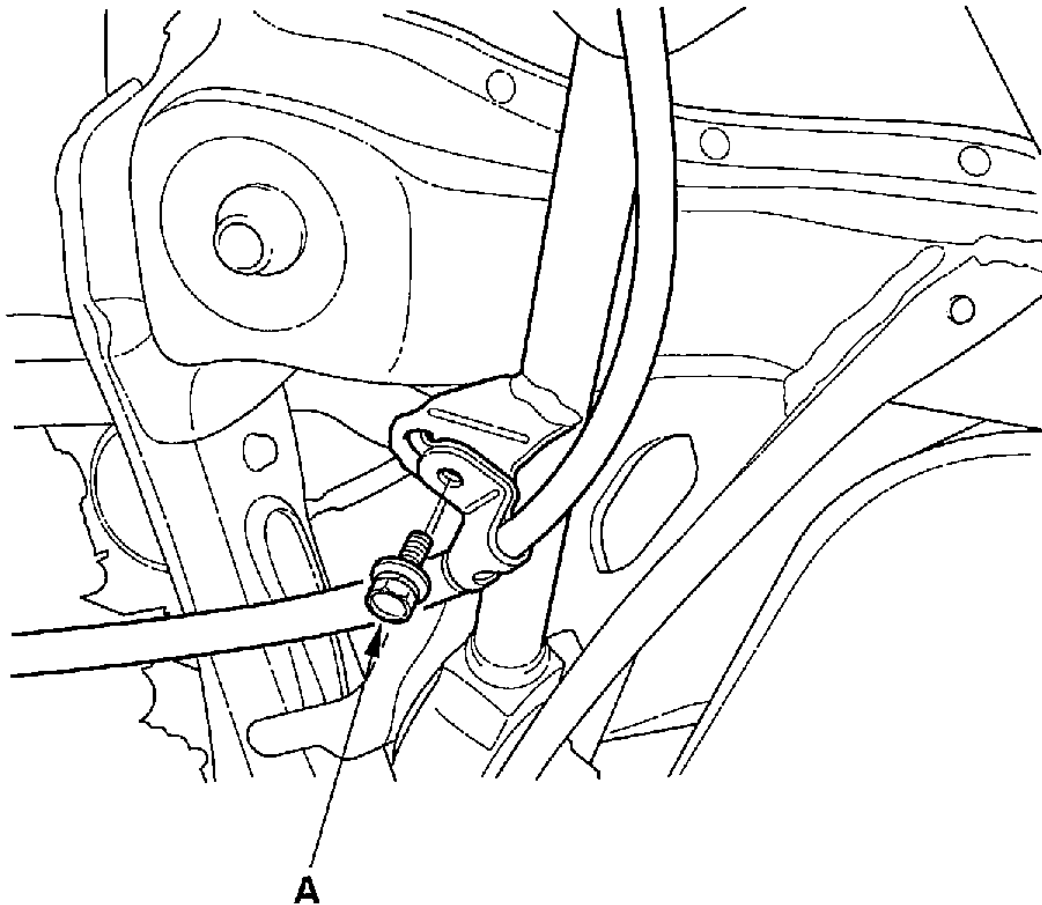


Fig. 55: Removing The Flange Bolt

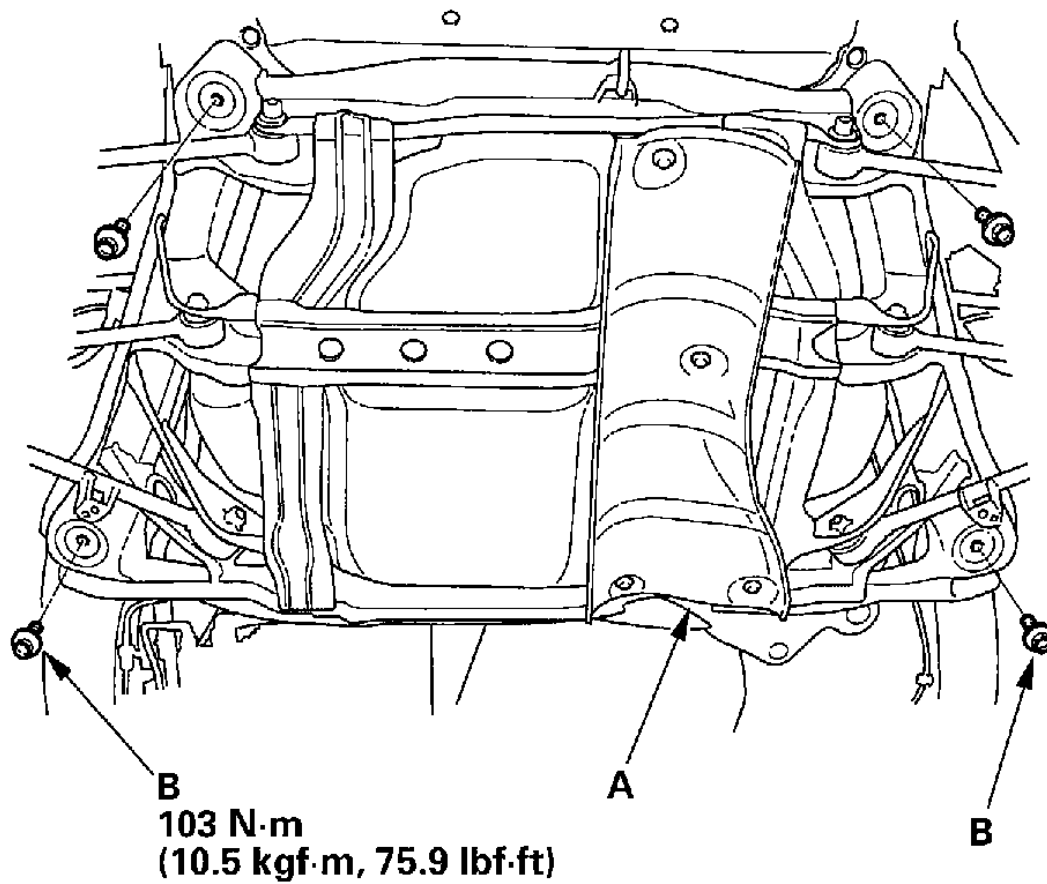
14. Remove the parking brake cable bracket (A).



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Fig. 56: Removing The Parking Brake Cable Bracket

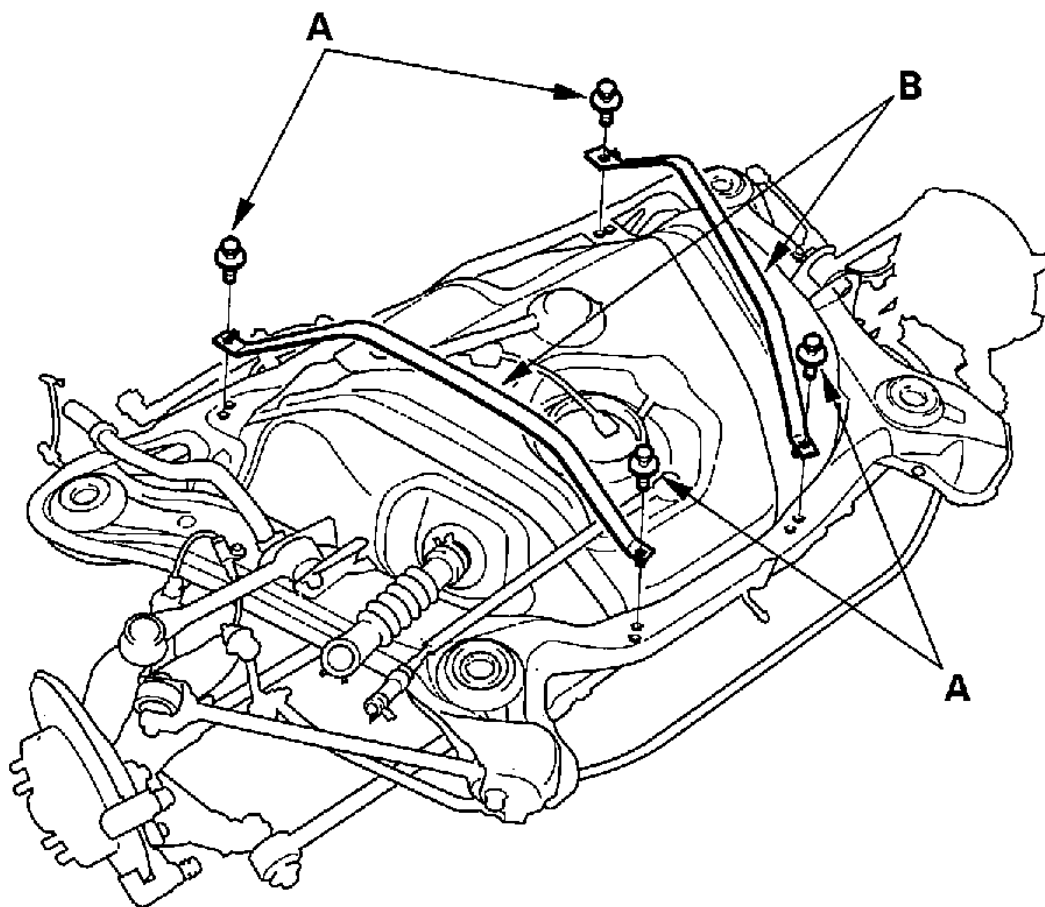
15. Remove the heat shield (A). Place a jack or support under the suspension subframe. Remove the mounting bolts (B). Remove the rear suspension subframe.



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Fig. 57: Removing The Heat Shield

16. Remove the bolts (A) and the fuel tank straps (B).



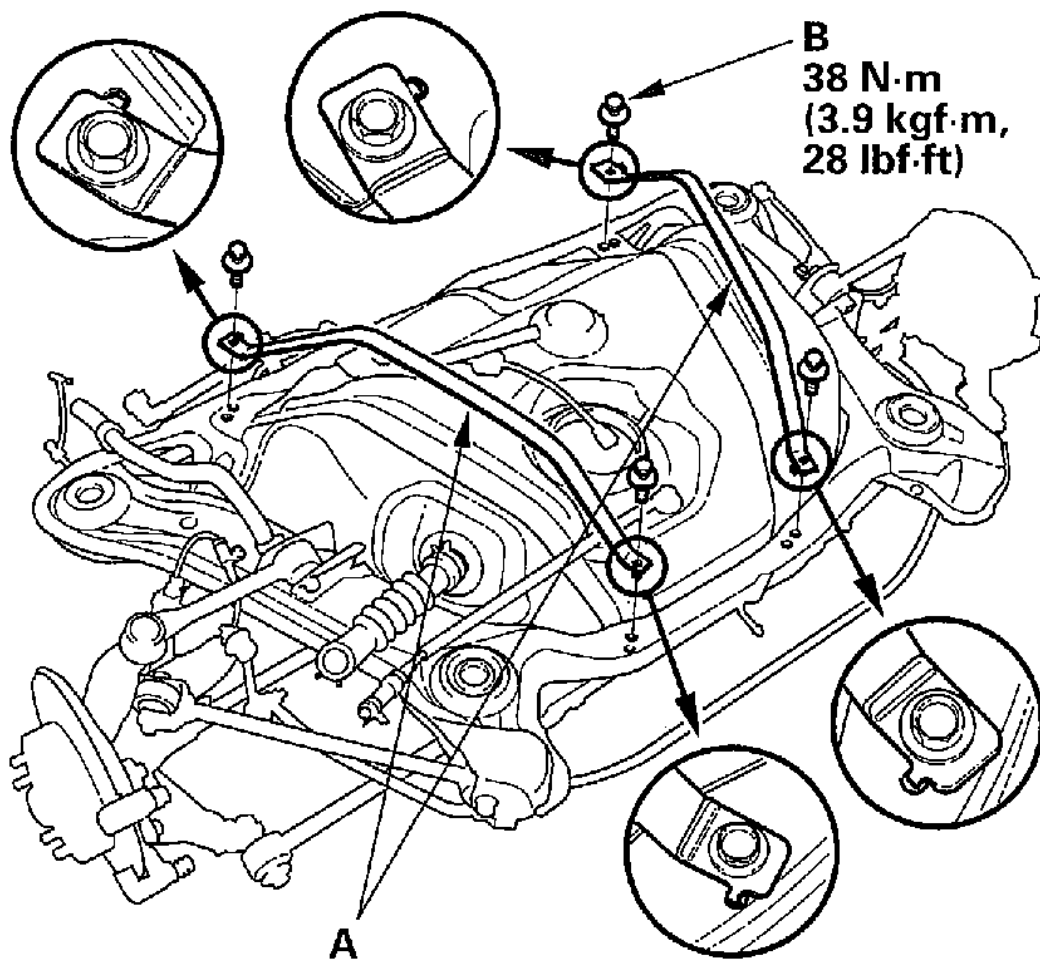
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Fig. 58: Removing The Fuel Tank Straps

17. Lift the fuel tank out of the subframe.

INSTALLATION

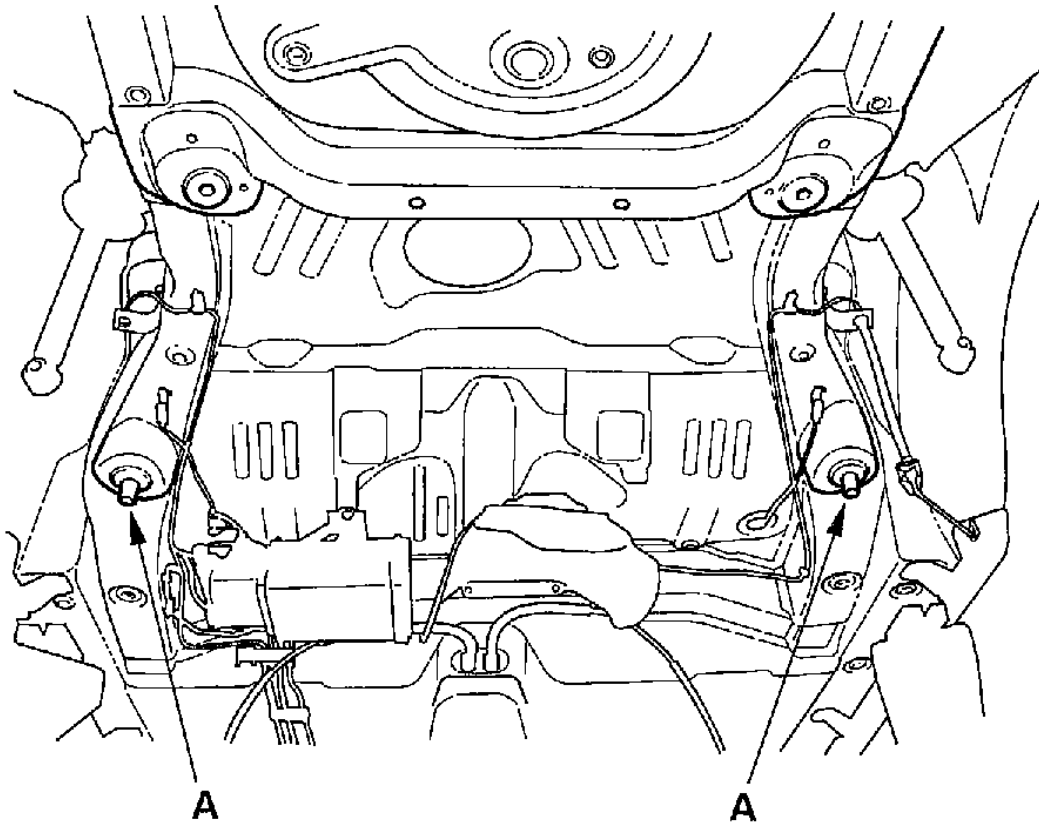
1. Install the tank straps (A), and tighten the bolts (B).



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Fig. 59: Installing The Tank Straps

2. Place a jack or support under the rear suspension subframe. Install the rear suspension subframe, aligning the pins (A) with the holes in the subframe.



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Fig. 60: Aligning The Pins With The Holes In The Subframe

3. Install the remaining parts in the reverse order of removal.
4. After installation, do a wheel alignment (see **WHEEL ALIGNMENT PROCEDURES**).

FUEL GAUGE SENDING UNIT TEST

NOTE: For the fuel gauge system circuit diagram, refer to the Gauges Circuit Diagram (see **CIRCUIT DIAGRAM**).

1. Before starting the fuel gauge sending unit test, perform the multiplex integrated control system troubleshooting test mode A (see **TROUBLESHOOTING**).
 - If no problem is found, go to step 2.
 - If DTC B1175 is indicated, go to the indicated DTC troubleshooting.
2. Check the No. 21 METER (7.5A) fuse in the under-dash fuse/relay box before testing.
3. Do the gauge drive circuit check (see **SELF-DIAGNOSTIC PROCEDURE**).

- If the fuel gauge needle sweeps from the minimum to maximum position and then returns to minimum, the gauge is OK. Go to step 3.
 - If the fuel gauge needle does not sweep correctly, replace the gauge assembly and retest.
4. Turn the ignition switch OFF.
 5. Remove the trunk floor.
 6. Remove the access panel (A) from the floor.

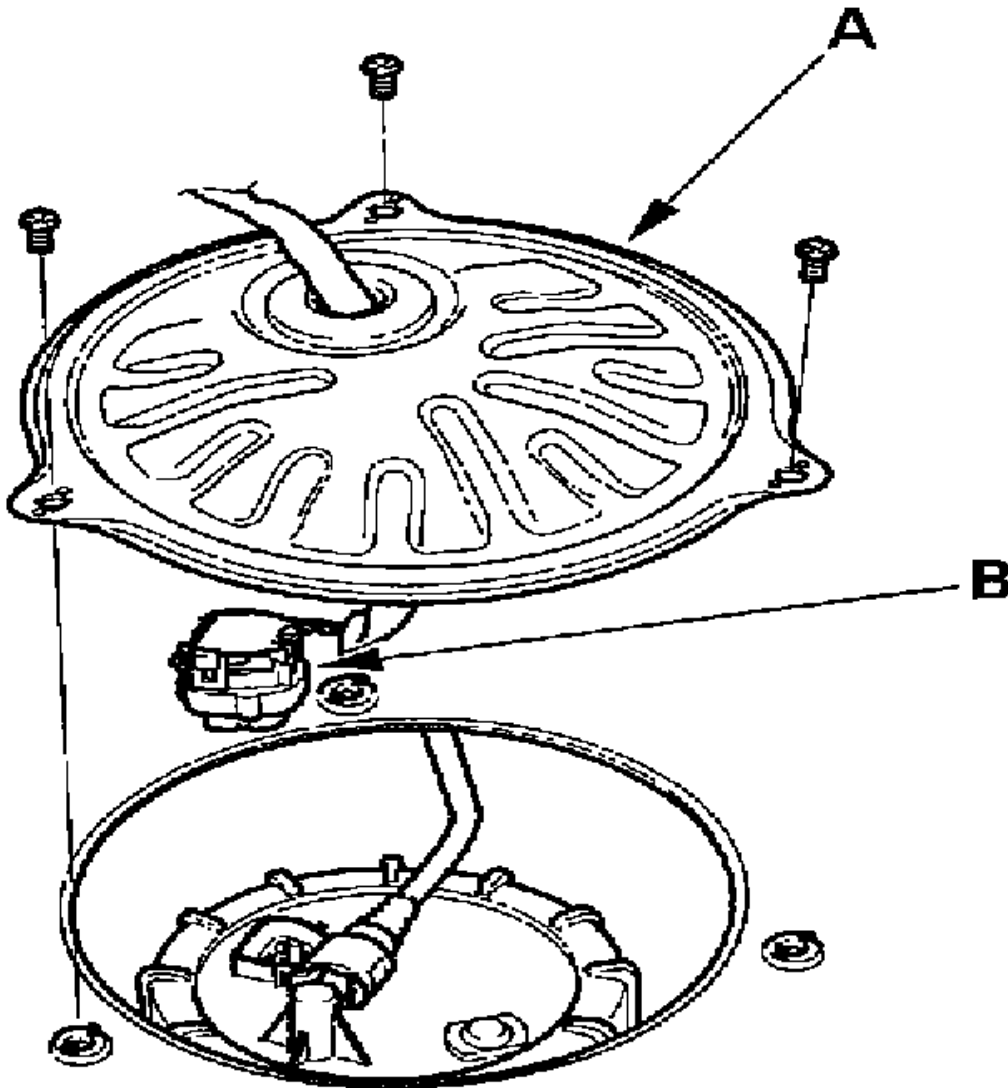
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Fig. 61: Removing The Access Panel

7. Disconnect the fuel pump 5P connector (B).
8. Remove the fuel pump assembly from the fuel tank (see **FUEL PUMP/FUEL GAUGE SENDING UNIT REPLACEMENT**).
9. Measure resistance between the No. 1 and No. 2 terminals with the float at E (EMPTY), 1/2 (HALF FULL), and F (FULL) positions.

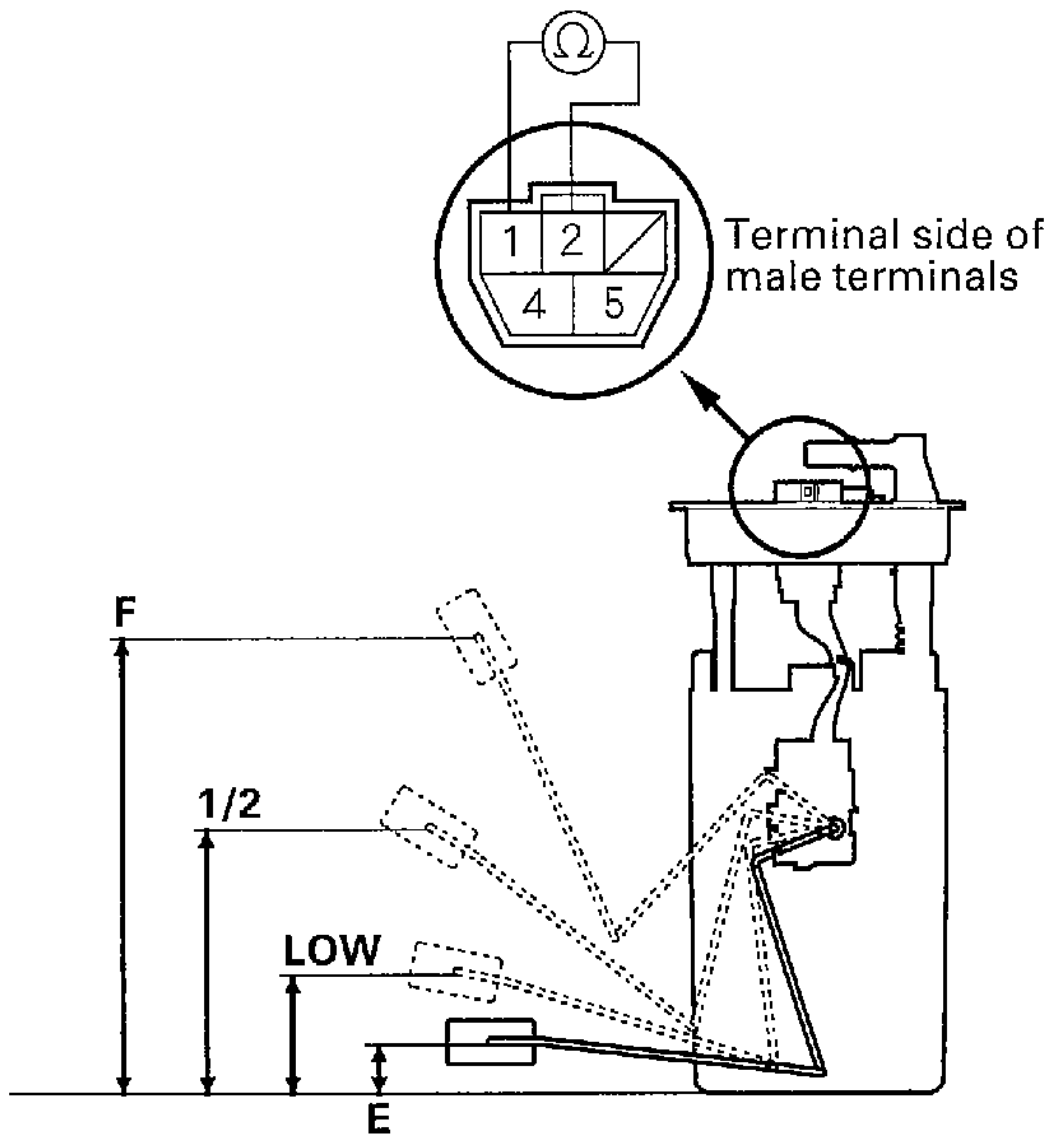
If you do not get the following readings, replace the fuel gauge sending unit (see **FUEL PUMP/FUEL GAUGE SENDING UNIT REPLACEMENT**).

Float Position	F 7.6 in (191.4 mm)	1/2 4.4 in (113.1 mm)	LOW 2.0 in (52.4 mm)	E 0.8 in (25.6 mm)
Resistance (Ω)	19 to 21	205.5 to 215.5	487.9 to 617.1	770 to 790

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Fig. 62: Fuel Gauge Sending Unit Test Resistance Table

NOTE: Remove the No. 15 BACK UP (40A) fuse from the under-hood fuse/relay box for at least 10 seconds after completing troubleshooting, otherwise it may take up to 20 minutes for the fuel gauge to indicate the correct fuel level.



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Fig. 63: Testing Fuel Gauge Sending Unit**LOW FUEL INDICATOR TEST**

1. Do the gauge drive circuit check (see **SELF-DIAGNOSTIC PROCEDURE**).
 - If the low fuel indicator flashes, go to step 2.
 - If the low fuel indicator does not flash, replace the gauge control module assembly.
2. Perform the multiplex integrated control system troubleshooting test mode A (see

TROUBLESHOOTING).

- If any DTCs are indicated, do the indicated DTC troubleshooting.
 - If no DTCs are indicated, go to step 3.
3. Perform fuel gauge sending unit test (see **FUEL GAUGE SENDING UNIT TEST**).