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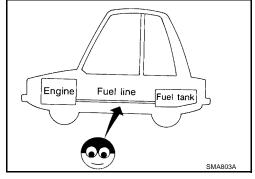
FUEL SYSTEM PFP:17503

## **Checking Fuel Lines**

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Inspect the fuel lines, filler cap, and fuel tank for incorrect attachment, leaks, cracks, damage, loose connections, chafing, and deterioration.

If necessary, repair or replace the faulty parts.



#### **General Precautions**

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#### **WARNING:**

When replacing the fuel line parts, observe the following:

- Place a "CAUTION: FLAMMABLE" sign in the workshop.
- Do not smoke while servicing the fuel system. Keep open flames and sparks away from the work area.
- Have a CO<sub>2</sub> fire extinguisher in the workshop.

#### **CAUTION:**

- Before removing the fuel line parts, use the following procedures:
- Put drained fuel in an explosion-proof container and put the lid on securely.
- Release the fuel pressure from the fuel system. Refer to <u>EC-56, "FUEL PRESSURE RELEASE"</u> [QG18DE (ULEV)], <u>EC-637, "FUEL PRESSURE RELEASE"</u> [QG18DE (SULEV)], <u>EC-1257, "FUEL PRESSURE RELEASE"</u> (QR25DE).
- Disconnect the battery ground cable.
- Always replace the O-ring seals with new ones.
- Do not kink or twist any of the hoses and tubes when installing.
- Do not over tighten the hose clamps to avoid damaging hoses.
- After installation, run the engine and check for fuel leaks at the connections.
- Use only a genuine NISSAN fuel filler cap as a replacement. If an incorrect fuel filler cap is used, the MIL may come on.
- For inspection and installation of EVAP system parts, refer to <a href="EC-33">EC-33</a>, "System Diagram" [QG18DE (ULEV)], <a href="EC-614">EC-614</a>, "System Diagram" [QG18DE (SULEV)], <a href="EC-1236">EC-1236</a>, "System Diagram" (QR25DE).
- For inspection and installation of ORVR system parts, refer to <a href="EC-33">EC-33</a>, "System Diagram" [QG18DE (ULEV)], <a href="EC-614">EC-614</a>, "System Diagram" [QG18DE (SULEV)], <a href="EC-1236">EC-1236</a>, "System Diagram" (QR25DE).

## FUEL LEVEL SENSOR UNIT, FUEL FILTER AND FUEL PUMP ASSEMBLY PFP:17042

# Removal and Installation REMOVAL

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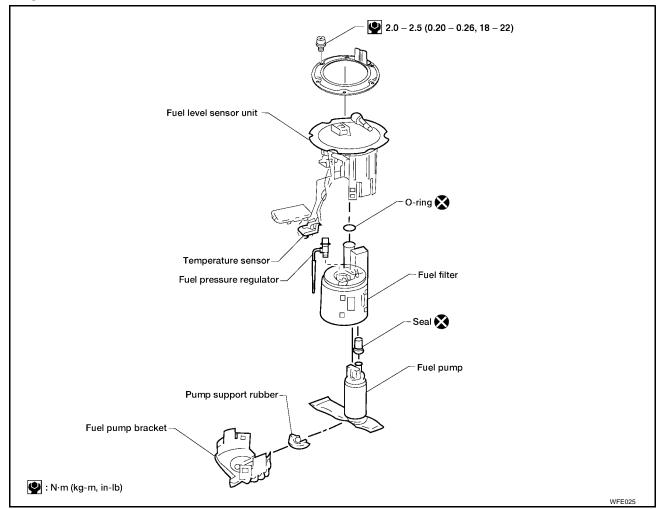
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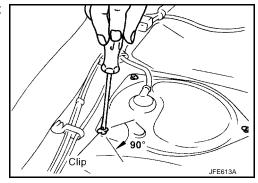
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Release the fuel pressure from the fuel line.

Refer to <u>EC-56</u>, "<u>FUEL PRESSURE RELEASE</u>" [QG18DE (ULEV)] <u>EC-637</u>, "<u>FUEL PRESSURE RELEASE</u>" (QR25DE).

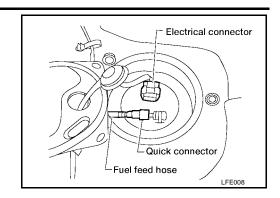
- 2. Disconnect the battery ground cable.
- 3. Open the fuel filler lid and filler cap.
- Remove the rear seat cushion. Refer to <u>SE-5, "Removal and Installation"</u>.
- 5. Remove the inspection hole cover located under the rear seat cushion.



Revision: May 2004 FL-3 2003 Sentra

## FUEL LEVEL SENSOR UNIT, FUEL FILTER AND FUEL PUMP ASSEMBLY

6. Disconnect the fuel pump assembly electrical connector.



Fuel level sensor unit

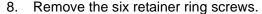
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and fuel pump

- 7. Disconnect the fuel feed hose quick connector as follows:
- a. Align the mating marks on the fuel pump outlet and the quick connector.
- b. Hold the quick connector and push in the tabs, then pull out from the fuel pump outlet that is inserted in the quick connector.

#### CAUTION:

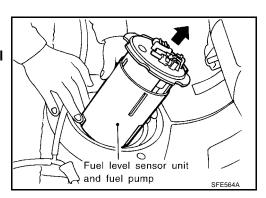
- The quick connector can be removed when the tabs are completely depressed. Do not twist the fuel hose more than necessary.
- Do not use any tools to remove the quick connector.



9. To remove, pull up on the fuel level sensor unit and fuel pump.

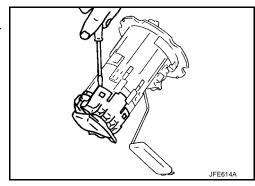
#### CAUTION:

Do not damage the arm of the fuel level sensor and fuel tank temperature sensor when removing.



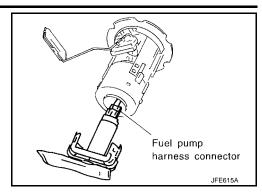
Quick connector

- 10. Remove the fuel pump as shown in the figure.
  - Apply mating marks on the fuel pump and fuel filter for proper alignment for installation.



## FUEL LEVEL SENSOR UNIT, FUEL FILTER AND FUEL PUMP ASSEMBLY

11. Disconnect the fuel pump harness connector.



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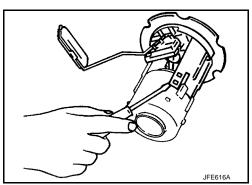
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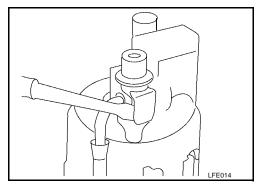
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- 12. Remove the fuel filter from fuel level sensor unit as shown.
  - Apply mating marks on fuel filter and fuel level sensor unit for proper alignment for installation.



13. Remove the fuel pressure regulator from the fuel filter, if necessary.



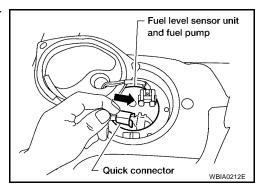
## FUEL LEVEL SENSOR UNIT, FUEL FILTER AND FUEL PUMP ASSEMBLY

#### **INSTALLATION**

Installation is in reverse order of removal.

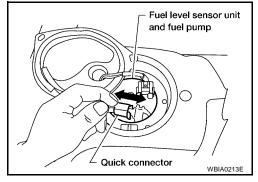
Connect the quick connector as follows:

- Align the mating marks on the fuel pump outlet and quick connector for installation.
- 2. Align the push tabs with the quick connector slots.
- 3. Insert the fuel pump outlet into the center of the quick connector until you hear a click.



After connecting the quick connector, make sure the connection is fully seated as follows:

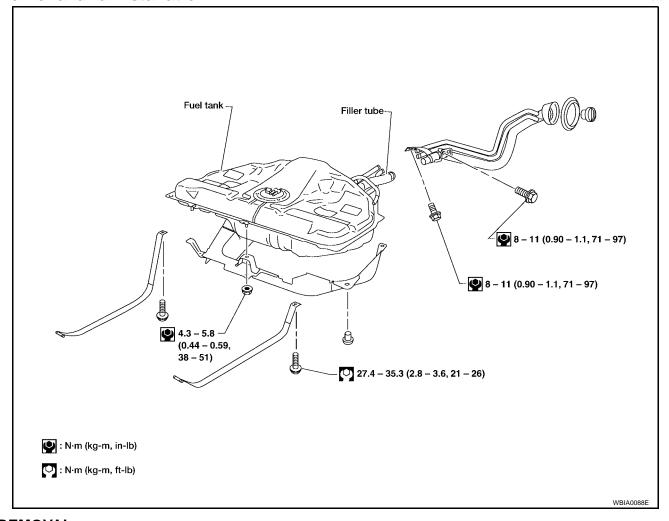
- 1. Pull on the guick connector to make sure it is firmly connected.
- Apply fuel pressure to the fuel lines by turning the ignition switch ON (without starting the engine). Then check for fuel leaks at the connections
- Start the engine and increase the engine speed, verify there are no fuel leaks.



FUEL TANK
PFP:17202

## **Removal and Installation**

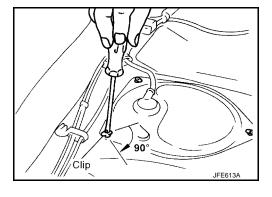
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#### **REMOVAL**

Release the fuel pressure.
 Refer to <u>EC-56</u>, "<u>FUEL PRESSURE RELEASE</u>" [QG18DE (ULEV)], <u>EC-637</u>, "<u>FUEL PRESSURE RELEASE</u>" [QG18DE (SULEV)], <u>EC-1257</u>, "<u>FUEL PRESSURE RELEASE</u>" (QR25DE).

- 2. Disconnect the battery ground cable.
- 3. Open the fuel filler lid and filler cap.
- 4. Drain the fuel from fuel tank.
- 5. Remove the rear seat cushion. Refer to SE-5, "Removal and Installation".
- 6. Remove the inspection hole cover located under rear seat.



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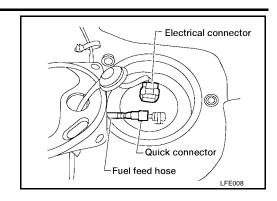
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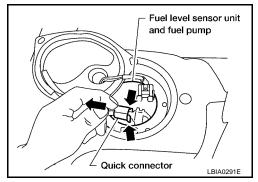
7. Disconnect the fuel pump electrical connector.



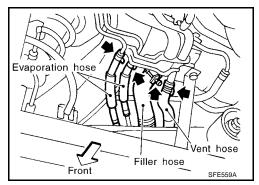
- 8. Disconnect the fuel feed hose quick connector as follows:
- Apply mating marks on the fuel pump outlet and the quick connector for installation.
- b. Hold the quick connector and push in the tabs, then pull out off of the fuel pump outlet that is inserted into the quick connector.

#### CAUTION:

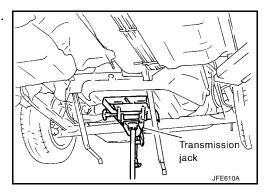
- The quick connector can be removed when the tabs are completely depressed. Do not twist the fuel feed hose more than necessary.
- Do not use any tools to remove the quick connector.



- 9. Remove the center exhaust tube. Refer to <a>EX-3</a>, "Removal and Installation"</a>.
- 10. From rear left area of the fuel tank, remove the filler hose, vent hose, and evaporation hoses as shown.



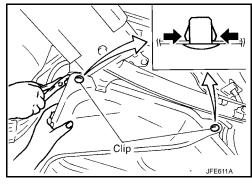
11. Support the fuel tank with a suitable transmission jack as shown.



12. Remove the fuel tank mounting band bolts while supporting the fuel tank.

## **FUEL TANK**

- 13. Lower the fuel tank by 70 80 mm (2.76 3.15 in), then remove the nuts and clips holding the fuel tank protector, and remove the protector.
  - To remove the clips, use pliers to squeeze the extensions as shown by the arrows, and then remove the clip from above.



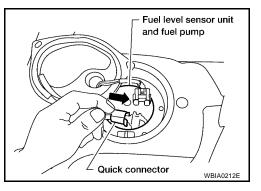
14. Remove the fuel tank.

#### **INSTALLATION**

Installation is in the reverse order of removal.

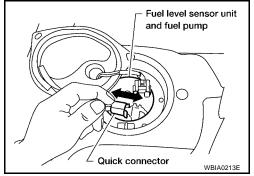
Connect the quick connector as follows:

- 1. Align mating marks on the fuel pump outlet and the quick connector for correct installation.
- 2. Align the push tabs with the quick connector slots.
- 3. Insert the fuel pump outlet into the center of the quick connector until you hear a click.



After connecting the quick connector, check that the quick connector is fully seated as follows:

- 1. Pull on the quick connector to make sure it is firmly connected.
- Apply fuel pressure to the fuel lines by turning the ignition switch ON (without starting the engine). Then check for fuel leaks at the hose connections.
- Start the engine and increase engine speed, verify that there are no fuel leaks.



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## **SERVICE DATA AND SPECIFICATIONS (SDS)**

# SERVICE DATA AND SPECIFICATIONS (SDS) Standard and Limit Fuel tank capacity 50 \( \ell \) (13 1/4 US gal, 11 Imp gal)