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PRECAUTIONS

< PRECAUTION >

PRECAUTION

PRECAUTIONS

General Precautions

INFOID:000000003793245

WARNING:

When replacing fuel line parts, be sure to observe the following.

- Put a "CAUTION: FLAMMABLE" sign in the workshop.
- Be sure to work in a well ventilated area and furnish workshop with a CO2 fire extinguisher.
- Never smoke while servicing fuel system. Keep open flames and sparks away from the work area.

CAUTION:

- Use gasoline required by the regulations for octane number. Refer to [GI-29, "Fuel"](#).
- Before removing fuel line parts, perform out the following procedures:
 - Put drained fuel in an explosion-proof container and put the lid on securely. Keep the container in safe area.
 - Release fuel pressure from the fuel lines. Refer to [EC-411, "Inspection"](#).
 - Disconnect the battery cable from the negative terminal.
- Always replace O-ring and clamps with new ones.
- Never kink or twist tubes when they are being installed.
- Never tighten hose clamps excessively to avoid damaging hoses.
- After installing tubes, check there is no fuel leakage at connections in the following steps.
 - Apply fuel pressure to fuel lines with turning ignition switch "ON" (with engine stopped). Then check for fuel leakage at connections.
 - Start engine and rev it up and check for fuel leakage at connections.
- Use only a genuine NISSAN fuel filler cap as a replacement. If an incorrect fuel filler cap is used, the "MI" may come on.
- For servicing "Evaporative Emission System" parts, refer to [EC-76, "System Diagram"](#).

PREPARATION

< PREPARATION >

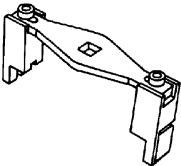
PREPARATION

PREPARATION

Commercial Service Tool

INFOID:000000003793247

FL

Tool name	Description
Lock ring wrench	Removing and installing lock ring
 ZZA0122D	

A
C
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F
G
H
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M
N
O
P

FUEL SYSTEM

< ON-VEHICLE MAINTENANCE >

ON-VEHICLE MAINTENANCE

FUEL SYSTEM

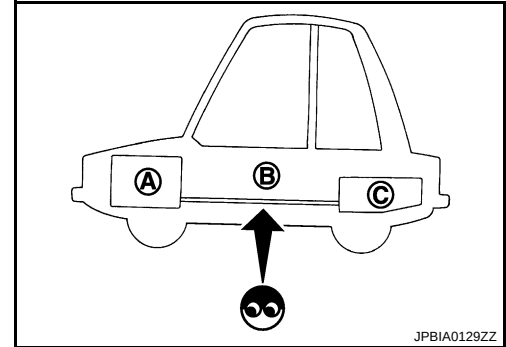
Inspection

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Inspect fuel lines, fuel filler cap and fuel tank for improper attachment, leakage, cracks, damage, loose connections, chafing or deterioration.

- A : Engine
- B : Fuel line
- C : Fuel tank

If necessary, repair or replace damaged parts.



Quick Connector

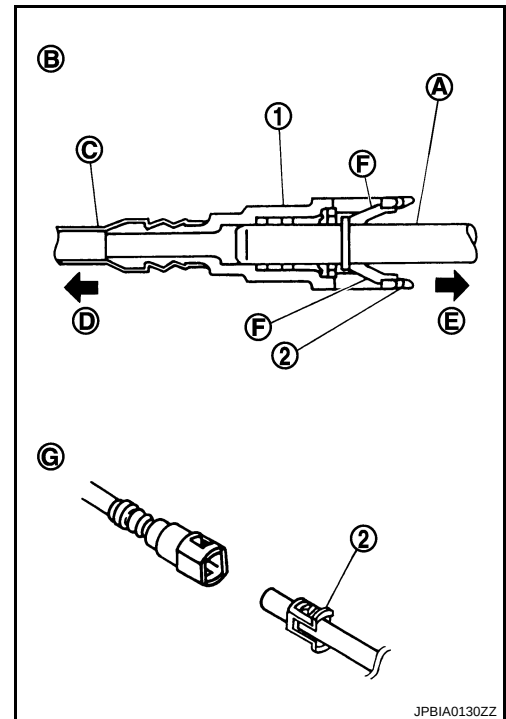
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CAUTION:

- After connecting fuel tube quick connectors, check quick connectors are secure.

- 1 : Quick connector
- 2 : Retainer
- A : Hard tube (or the equivalent)
- B : Connection (cross-section)
- C : Resin tube
- D : To under floor fuel line
- E : To fuel tank
- F : Tab
- G : Disconnection

- Ensure that connector and resin tube never contact any adjacent parts.



FUEL LEVEL SENSOR UNIT, FUEL FILTER AND FUEL PUMP ASSEMBLY

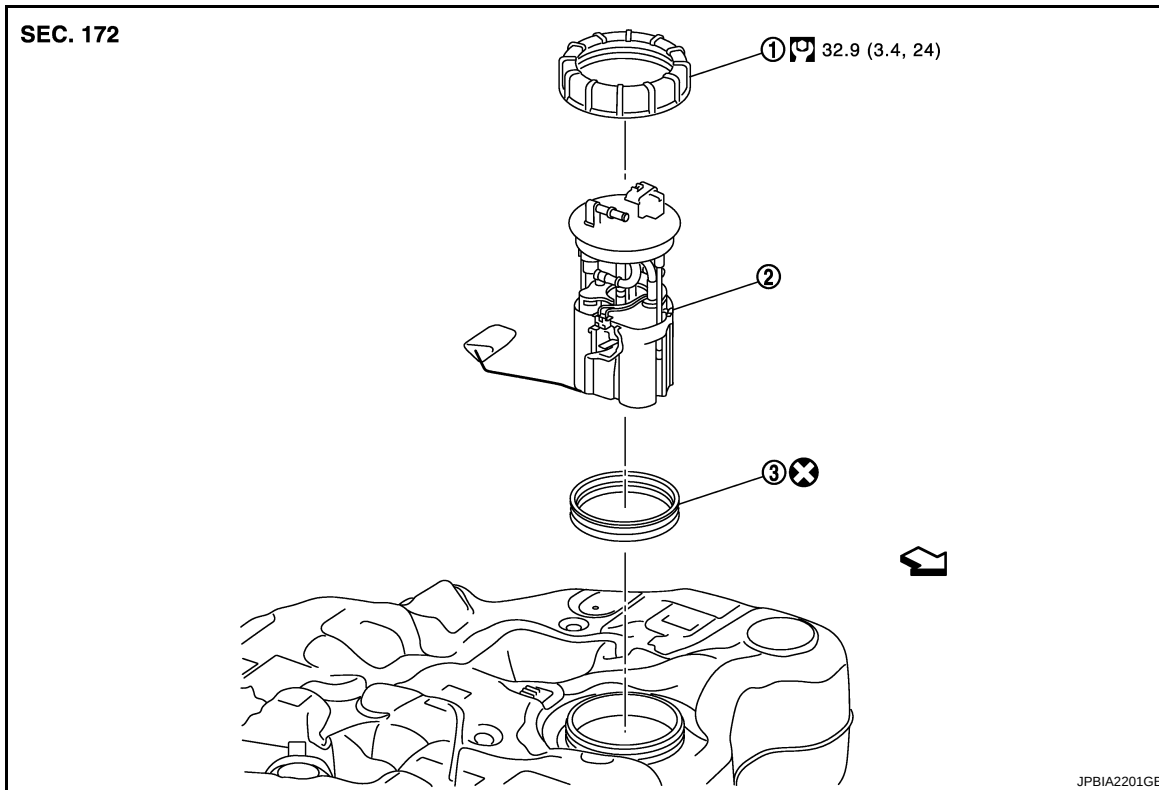
< ON-VEHICLE REPAIR >

ON-VEHICLE REPAIR

FUEL LEVEL SENSOR UNIT, FUEL FILTER AND FUEL PUMP ASSEMBLY

Exploded View

INFOID:000000003793250



1. Lock ring

2. Fuel level sensor unit, fuel filter and fuel pump assembly

3. Seal packing

↩ : Vehicle front

Refer to [GI-4, "Components"](#) for symbols in the figure.

Removal and Installation

INFOID:000000003793251

WARNING:

Read "General Precautions" when working on the fuel system. Refer to [FL-2, "General Precautions"](#).

REMOVAL

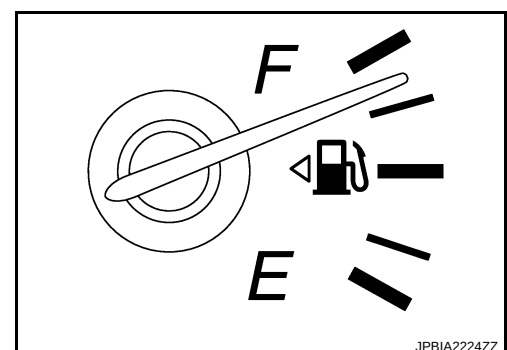
1. Check fuel level on fuel gauge. If fuel gauge indicates more than the level as shown in the figure (full or almost full), drain fuel from fuel tank until fuel gauge indicates level as shown in the figure or below.

NOTE:

Because fuel will be spilled when removing fuel level sensor units for the top of the fuel is above the fuel level sensor units installation surface.

- As a guide, fuel level becomes the position as shown in the figure or below when approximately 10 ℓ (2-1/4 Imp gal) of fuel are drained from fuel tank.
- In a case that fuel pump does not operate, perform the following procedure.

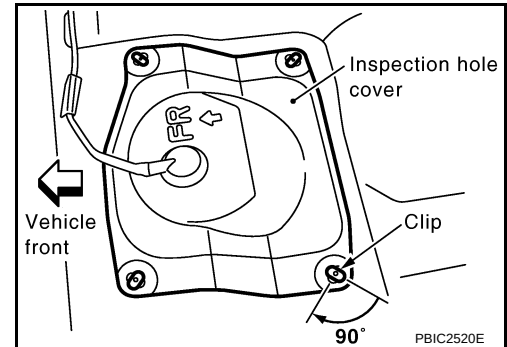
- a. Insert hose of less than 25 mm (0.98 in) in diameter into fuel filler tube through fuel filler opening to draw fuel from fuel filler tube.



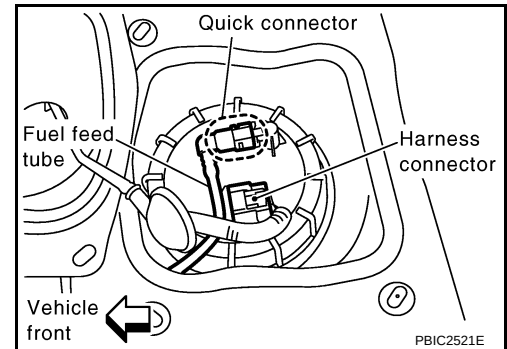
FUEL LEVEL SENSOR UNIT, FUEL FILTER AND FUEL PUMP ASSEMBLY

< ON-VEHICLE REPAIR >

- b. Disconnect fuel filler hose from fuel filler tube. Refer to [FL-9, "Exploded View"](#).
- c. Insert hose into fuel tank through fuel filler hose to draw fuel from fuel tank.
2. Release the fuel pressure from the fuel lines. Refer to [EC-411, "Inspection"](#).
3. Open fuel filler lid.
4. Open filler cap and release the pressure inside fuel tank.
5. Remove rear seat cushion. Refer to [SE-98, "Exploded View"](#) (WITH VENTILATION SEAT) or [SE-140, "Exploded View"](#) (WITHOUT VENTILATION SEAT).
6. Peel off floor carpet, then remove inspection hole cover units by turning clips clockwise by 90 degrees.



7. Disconnect harness connector and quick connector.

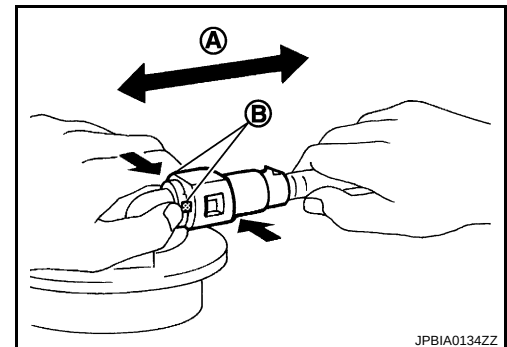


Disconnect quick connector as follows:

- Hold the sides of connector, push in tabs (B) and pull out fuel feed tube.

A : Pull

- If quick connector sticks to tube of fuel level sensor unit, push and pull quick connector several times until they start to move. Then disconnect them by pulling.



CAUTION:

FUEL LEVEL SENSOR UNIT, FUEL FILTER AND FUEL PUMP ASSEMBLY

< ON-VEHICLE REPAIR >

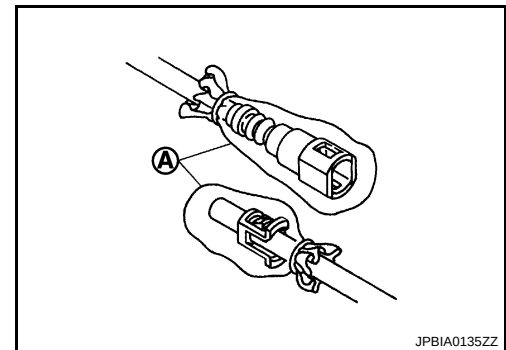
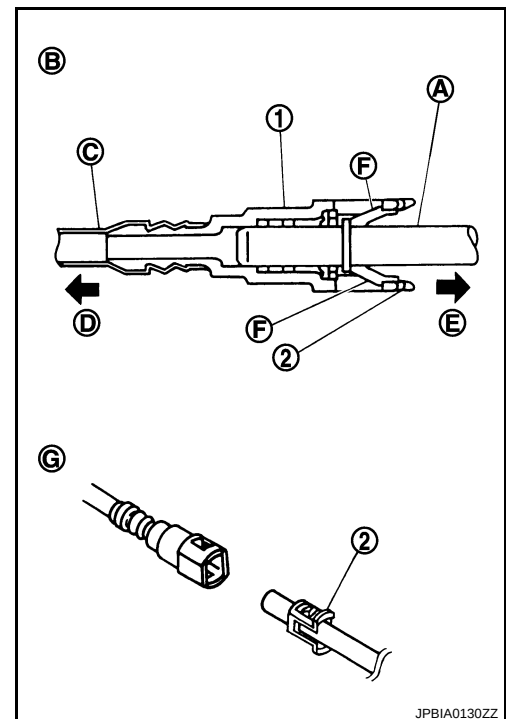
- Quick connector (1) can be disconnected when the tabs (F) are completely depressed. Never twist it more than necessary.

B : Connection (Cross-section)
 D : To under floor fuel line
 E : To fuel tank
 G : Disconnection

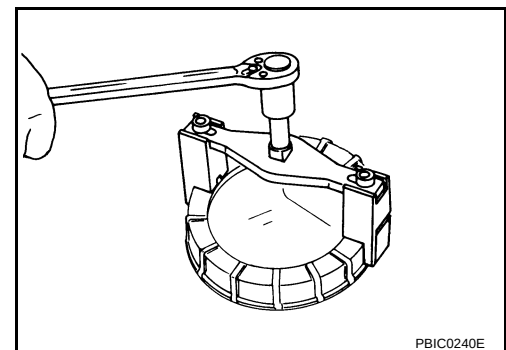
- Never use any tools to disconnected quick connector.
- Keep resin tube (C) away from heat. Be especially careful when welding near the resin tube.
- Prevent acid liquid such as battery electrolyte, etc. from getting on resin tube.
- Never bend or twist resin tube during installation and disconnection.
- Never remove the remaining retainer (2) on hard tube (or the equivalent) (A) except when resin tube or retainer is replaced.
- When resin tube or hard tube (or the equivalent) is replaced, also replace retainer with new one.

Retainer color : White

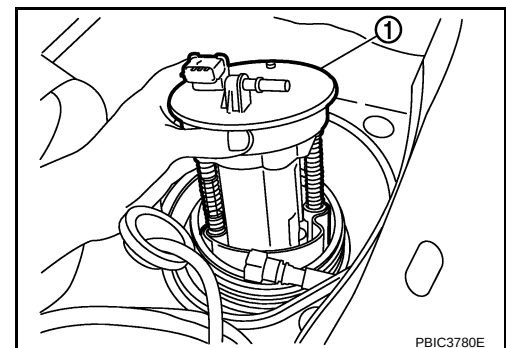
- To keep the connecting portion clean and to avoid damage and foreign materials, cover them completely with plastic bags (A) or something similar.



- Remove lock ring for fuel level sensor unit, fuel filter and fuel pump assembly with fuel tank lock ring wrench (commercial service tool) by turning counterclockwise.



- Remove fuel level sensor unit, fuel filter and fuel pump assembly (1).
 - Never bend float arm during removal.
 - Never pollute the inside by residue fuel. Draw out avoiding inclination by supporting with a cloth.
 - Never cause impacts such as dropping when handling components.



FUEL LEVEL SENSOR UNIT, FUEL FILTER AND FUEL PUMP ASSEMBLY

< ON-VEHICLE REPAIR >

INSTALLATION

Note to the following, and install in the reverse order of removal.

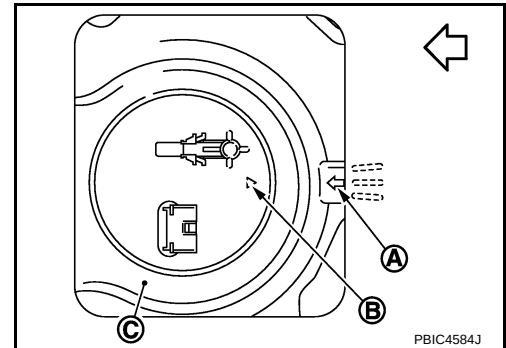
Fuel Level Sensor Unit

1. Install new seal packing to fuel tank without any twist.
2. Align (B) with (A) as shown in the figure. Install fuel level sensor unit, fuel filter and fuel pump assembly to fuel tank (C).

↖ : Vehicle front

CAUTION:

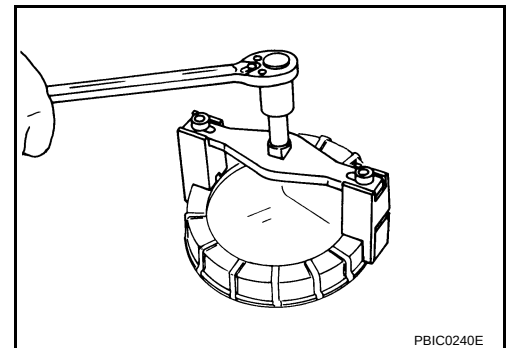
- Never allow seal packing to drop.
- Never bend float arm during installing.



3. Install seal packing for fuel level sensor unit, fuel filter and fuel pump assembly with lock ring wrench (commercial service tool) by turning clockwise.

CAUTION:

Install lock ring horizontally.



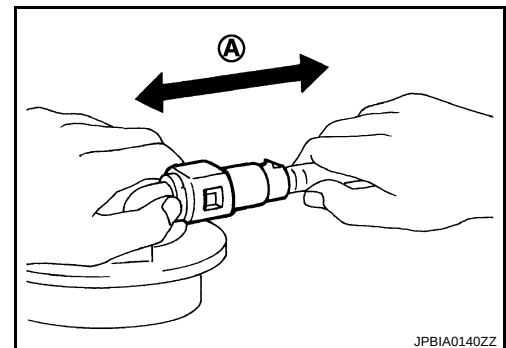
Quick Connector

Connect quick connector as follows:

1. Check the connection for damage or any foreign materials.
2. Align the connector with the tube, then insert the connector straight into the tube until a click sound is heard.
3. After connecting, check that the connection is secure by following method.
 - Pull the tube and the connector to check they are securely connected.

A : Pull

- Visually confirm that the two retainer tabs are connected to the connector.



Inspection

INFOID:000000003793253

INSPECTION AFTER INSTALLATION

Use the following procedure to check for fuel leakage.

1. Turn ignition switch "ON" (with engine stopped), then check connections for leakage by applying fuel pressure to fuel piping.
2. Start engine and let it idle and check there are no fuel leakage at the fuel system connections.

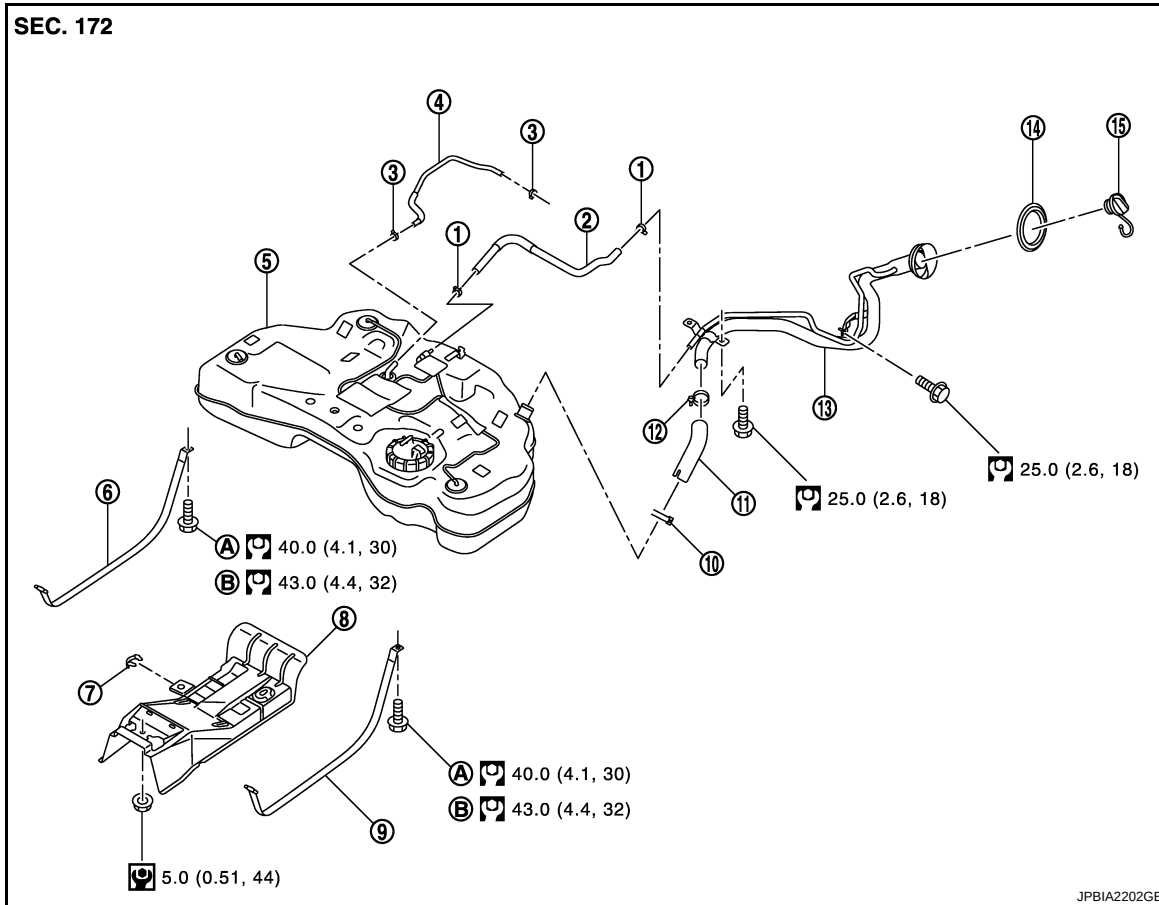
FUEL TANK

< ON-VEHICLE REPAIR >

FUEL TANK

Exploded View

INFOID:000000003793254



- | | | |
|----------------------|------------------------|---------------------------------|
| 1. Clamp | 2. Vent hose | 3. Clamp |
| 4. EVAP hose | 5. Fuel tank | 6. Fuel tank mounting band (RH) |
| 7. Clip | 8. Fuel tank protector | 9. Fuel tank mounting band (LH) |
| 10. Clamp | 11. Fuel filler hose | 12. Clamp |
| 13. Fuel filler tube | 14. Grommet | 15. Fuel filler cap |

A. The measurement of hexagonal width across flats: 16 mm (0.63 in)

B. The measurement of hexagonal width across flats: 14 mm (0.55 in)

Refer to [GI-4, "Components"](#) for symbols in the figure.

- In regard to the notation of torque in the figure, (A) shows an ISO standard, (B) shows a conventional standard.

Removal and Installation

INFOID:000000003793255

WARNING:

Be sure to read "General Precautions" when working on the fuel system. Refer to [FL-2, "General Precautions"](#).

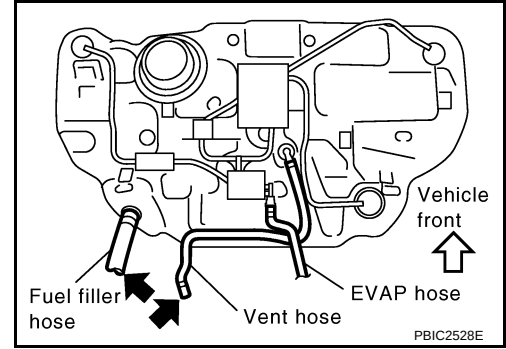
REMOVAL

- Drain fuel from fuel tank if necessary. Refer to [FL-5, "Removal and Installation"](#).
 - Perform work on level place.
1. Perform steps 2 to 7 of "REMOVAL" in "FUEL LEVEL SENSOR UNIT, FUEL FILTER AND FUEL PUMP ASSEMBLY" on fuel level sensor units. Refer to [FL-5, "Removal and Installation"](#).
 2. Remove center muffler. Refer to [EX-5, "Exploded View"](#).
 3. Remove fuel tank protector.

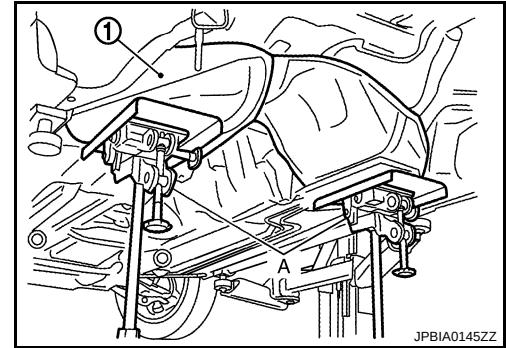
FUEL TANK

< ON-VEHICLE REPAIR >

4. Remove rear parking brake cables. Refer to [PB-5, "Exploded View"](#).
5. Disconnect fuel filler hose, and vent hose at the position shown in the figure.
6. Disconnect EVAP hose at EVAP canister side.



7. Support the lower part of fuel tank (1) with transmission jack (A).
CAUTION:
Support the position that fuel tank mounting bands never engage.



8. Remove fuel tank mounting bands.
9. Supporting with hands, descend transmission jack carefully, and remove fuel tank.
CAUTION:
 - Check that all connection points have been disconnected.
 - Confirm there is no interference with vehicle.
10. Remove fuel filler tube, as necessary.

INSTALLATION

Note the following, and install in the reverse order of removal.

- Surely clamp fuel hoses and insert hose to the length below.

Fuel filler hose : 35 mm (1.38 in)

The other hoses : 25 mm (0.98 in)

- Be sure hose clamp is not placed on swelled area of fuel tube.
- Tighten fuel filler hose clamp so that the remaining length of screw thread becomes to the following.

Fuel filler tube side : 7 - 11 mm (0.28 - 0.43 in)

Fuel tank side : 5 - 9 mm (0.20 - 0.35 in)

- To connect quick connector, refer to [FL-5, "Removal and Installation"](#).

Inspection

INFOID:0000000003793256

INSPECTION AFTER INSTALLATION

Use the following procedure to check for fuel leakage.

1. Turn ignition switch "ON" (with engine stopped), and check connections for leakage by applying fuel pressure to fuel piping.
2. Start engine and rev it up and check there are no fuel leakage at the fuel system tube and hose connections.

SERVICE DATA AND SPECIFICATIONS (SDS)

< SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

Fuel Tank

INFOID:0000000003793257

FL

Standard and Limit

Fuel tank capacity	Approx. 70 ℓ (15-3/8 Imp gal)
Fuel recommendation	Refer to GI-29

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