

SECTION

FL

FUEL SYSTEM

A  
FL  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M

CONTENTS

QR		YD22DDTi	
<b>PREPARATION</b> .....	<b>2</b>	<b>PREPARATION</b> .....	<b>13</b>
Commercial Service Tool .....	2	Commercial Service Tool .....	13
<b>FUEL SYSTEM</b> .....	<b>3</b>	<b>FUEL SYSTEM</b> .....	<b>14</b>
Checking Fuel Lines .....	3	Checking Fuel Lines .....	14
General Precautions .....	3	General Precautions .....	14
<b>FUEL LEVEL SENSOR UNIT, FUEL FILTER AND FUEL PUMP ASSEMBLY</b> .....	<b>4</b>	<b>FUEL FILTER</b> .....	<b>15</b>
Removal and Installation .....	4	Removal and Installation .....	15
REMOVAL .....	4	REMOVAL .....	15
INSPECTION AFTER REMOVAL .....	6	INSTALLATION .....	15
INSTALLATION .....	6	INSPECTION AFTER INSTALLATION .....	15
INSPECTION AFTER INSTALLATION .....	6	Air Bleeding .....	16
Disassembly and Assembly .....	7	Draining Water from Fuel Filter .....	16
DISASSEMBLY .....	7	<b>FUEL LEVEL SENSOR UNIT</b> .....	<b>17</b>
ASSEMBLY .....	8	Removal and Installation .....	17
<b>FUEL TANK</b> .....	<b>9</b>	REMOVAL .....	17
Removal and Installation .....	9	INSPECTION AFTER REMOVAL .....	19
REMOVAL .....	9	INSTALLATION .....	19
INSTALLATION .....	10	INSPECTION AFTER INSTALLATION .....	20
INSPECTION AFTER INSTALLATION .....	11	<b>FUEL TANK</b> .....	<b>21</b>
<b>SERVICE DATA AND SPECIFICATIONS (SDS)</b> .....	<b>12</b>	Removal and Installation .....	21
Standard and Limit .....	12	REMOVAL .....	21
FUEL TANK .....	12	INSTALLATION .....	22
Tightening Torque .....	12	INSPECTION AFTER INSTALLATION .....	22
		<b>SERVICE DATA AND SPECIFICATIONS (SDS)</b> .....	<b>24</b>
		Standard and Limit .....	24
		Tightening Torque .....	24

# PREPARATION

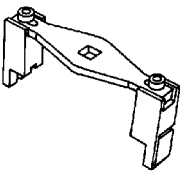
[QR]

## PREPARATION

PFP:00002

### Commercial Service Tool

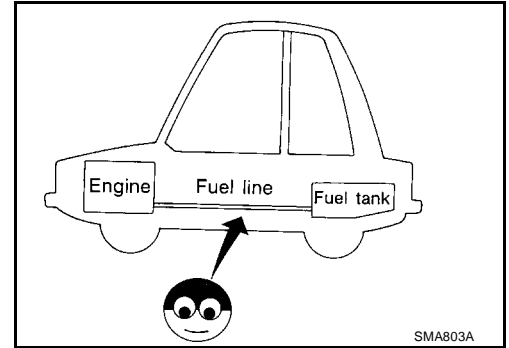
EBS00KOR

Tool name	Description
<p data-bbox="140 308 406 336">Fuel tank lock ring wrench</p>  <p data-bbox="837 510 901 532">ZZA0122D</p>	<p data-bbox="1000 308 1423 336">Removing and installing fuel tank lock ring</p>

## FUEL SYSTEM

### Checking Fuel Lines

Inspect fuel lines, filler cap and tank for improper attachment, leaks, cracks, damage, loose connections, chafing or deterioration. If necessary, repair or replace damaged parts.



### General Precautions

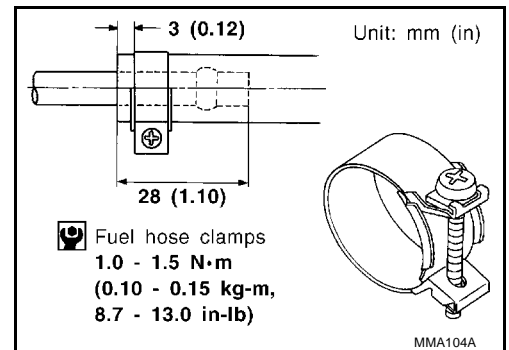
#### WARNING:

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

- Put a “CAUTION: INFLAMMABLE” sign in workshop.
- Be sure to work in a well-ventilated area and furnish workshop with a CO<sub>2</sub> fire extinguisher.
- Do not smoke while servicing fuel system, keep open flames and spark away from work area.

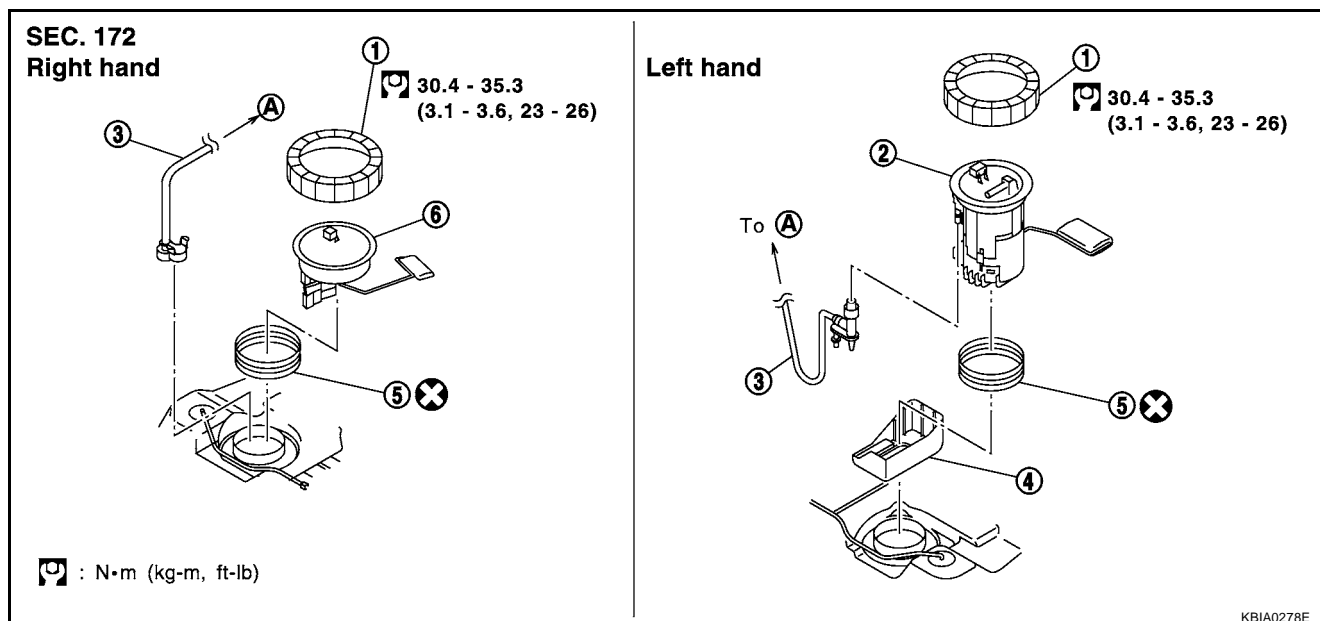
#### CAUTION:

- Before removing fuel line parts, carry out the following procedures.
  - a) Put drained fuel in an explosion-proof container and put the lid on securely, keep the container in safe area.
  - b) Release fuel pressure from fuel line, Refer to [EC-775, "FUEL PRESSURE RELEASE" \[QR20DE \(WITH EURO-OBD\)\]](#), [EC-1139, "FUEL PRESSURE RELEASE" \[QR20DE \(WITHOUT EURO-OBD\)\]](#), [EC-42, "FUEL PRESSURE RELEASE" \[QR25DE \(WITH EURO-OBD\)\]](#) or [EC-452, "FUEL PRESSURE RELEASE" \[QR25DE \(WITHOUT EURO-OBD\)\]](#).
  - c) Disconnect battery ground cable.
- Always replace O-ring and clamps with new ones.
- Do not kink or twist tubes when they are being installed.
- Do not tighten hose clamps excessively to avoid damaging hoses. Tighten high-pressure rubber hose clamp so that clamp end is 3 mm (0.12 in) from hose end. Tightening torque specifications are the same for all rubber hose clamps. Ensure that screw does not contact adjacent parts.
- After installing tubes, make sure there is no fuel leakage at connections in the following steps.
  - a) Apply fuel pressure to fuel lines with turning ignition switch “ON” (with engine stopped). Then check for fuel leaks at connections.
  - b) Start the engine and rev it up and check for fuel leaks at connections.



### Removal and Installation

EBS00K0U

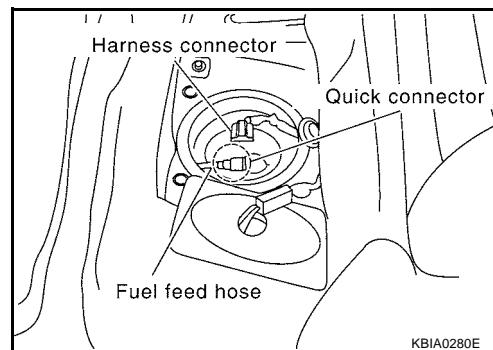


### REMOVAL

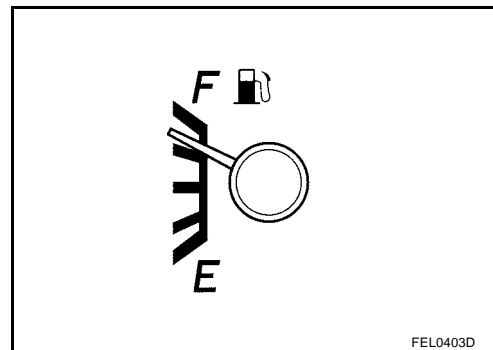
#### WARNING:

Be sure to read "General Precautions" when working on fuel system. Refer to [FL-3, "General Precautions"](#).

1. Release fuel pressure from fuel line. Refer to [EC-775, "FUEL PRESSURE RELEASE"](#) [QR20DE (WITH EURO-OBD)], [EC-1139, "FUEL PRESSURE RELEASE"](#) [QR20DE (WITHOUT EURO-OBD)], [EC-42, "FUEL PRESSURE RELEASE"](#) [QR25DE (WITH EURO-OBD)] or [EC-452, "FUEL PRESSURE RELEASE"](#) [QR25DE (WITHOUT EURO-OBD)].
2. Open fuel filler lid.
3. Open the filler cap and release the pressure inside the fuel tank.



4. Check fuel level on level place. If gauge indicates more than the level shown in figure (full or almost full), drain fuel from fuel tank until gauge indicates level shown in figure or below.  
In case of fuel pump does not operate, take following procedure.
  - a. Insert fuel tube 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.
  - b. Disconnect fuel filler hose from fuel filler tube.
  - c. Insert fuel tube into fuel tank through fuel filler hose to draw fuel from fuel tank.
    - As a guide, fuel level becomes the position shown in figure or below when approximately 15 liter (13-1/4 Imp qt) of fuel are drained from fuel tank.



#### NOTE:

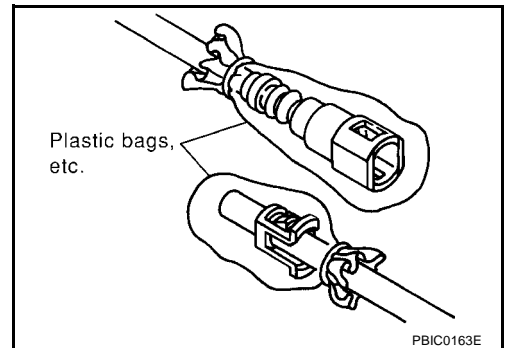
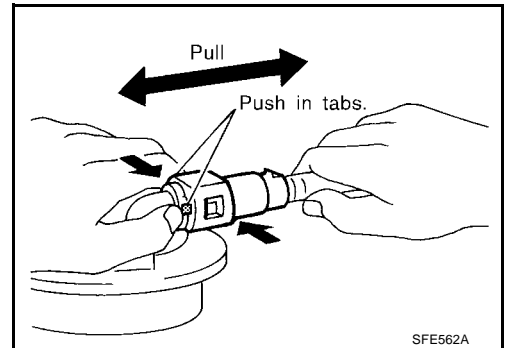
Adjusting fuel level is to prevent fuel from spilling, when fuel level sensor unit, fuel filter and fuel pump assembly is removed.

5. Remove rear seat bottom.
6. Remove inspection hole cover, harness connector and fuel feed hose.

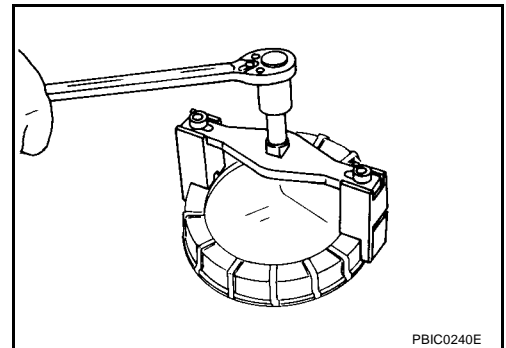
- Disconnect the quick connector as follows.
- Remove the quick connector cap.
- Hold the sides of the connector, push in tabs and pull out the tube. (The figure is shown for reference only.)
- If the connector and the tube are stuck together, push and pull several times until they start to move. Then disconnect them by pulling.

**CAUTION:**

- The quick connector can be removed when the tabs are completely depressed. Do not twist it more than necessary.
- Do not use any tools to remove the quick connector.
- Keep the resin tube away from heat. Be especially careful when welding near the tube.
- Prevent acid liquid such as battery electrolyte etc. from getting on the resin tube.
- Do not bend or twist the tube during installation and disconnection.
- Do not remove the remaining retainer on tube.
- When the tube is replaced, also replace the retainer with a new one.  
Retainer color: Green.
- To keep clean the connecting portion and to avoid damage and foreign materials, cover them completely with plastic bags or something similar.



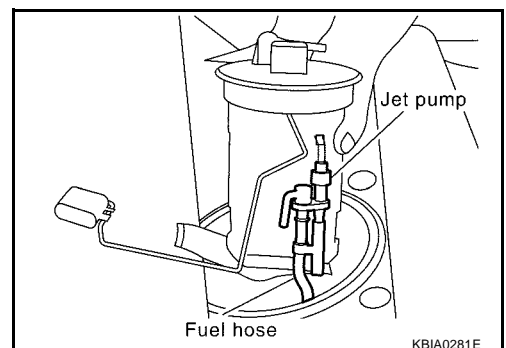
7. Using a fuel tank lock ring wrench, remove the lock ring.



8. Remove main fuel level sensor unit, fuel filter, fuel pump assembly and sub fuel level sensor unit.

**CAUTION:**

- Do not bend the float arm during removal.
- Avoid impacts such as falling when handling components.
- Removal of main fuel level sensor unit, fuel filter, fuel pump assembly.
- Raise the sender unit, and remove the jet pump to remove the sender unit.
- Leave the jet pump on the fuel tank with the fuel hose.



- If necessary, remove the chamber from the bottom of the fuel tank.
- Remove the chamber by sliding toward the rear of the vehicle.

Removal of sub fuel level sensor unit.

- Raise and release the sub fuel level sensor unit to remove.
- If necessary, remove the jet pump inlet from the bottom of the fuel tank.  
To remove it, pinch the tabs (2 places).

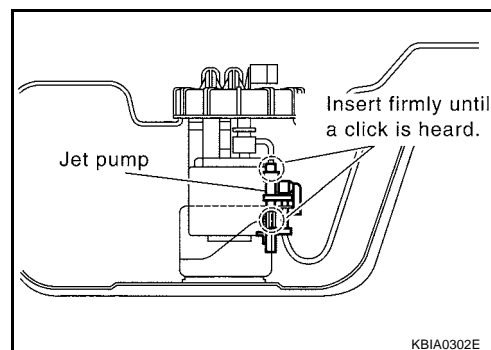
## INSPECTION AFTER REMOVAL

Make sure the fuel pump strainer is free from foreign materials, If any are found, remove them.

## INSTALLATION

Install in the reverse order of removal paying attention to the following.

- When installing the chamber and jet pump, insert them fully until a click sound of full stopper engagement is heard (Ditto for jet pump inlet).

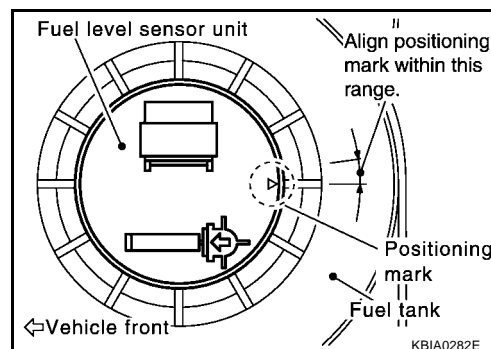


- Connect the quick connector as follows.
  1. Check the connection for damage and foreign materials.
  2. Align the connector with the tube, then insert the connector straight into the tube until a click is heard.
  3. After connecting, make sure that the connection is secure by following the steps below.
    - Visually confirm that the two retainer tabs are connected to the connector.
    - Pull the tube and the connector to make sure they are securely connected.
    - Install fuel level sensor unit with mating mark (triangular protrusion) facing between two carved lines on fuel tank. (Figure shows left side of fuel tank.)

### NOTE:

On right side of fuel tank, there are three carved lines on fuel tank. Set mating mark between two outer carved lines.

- Install the inspection hole cover with the front mark (arrow) facing front of the vehicle (Both for RH and LH).



## INSPECTION AFTER INSTALLATION

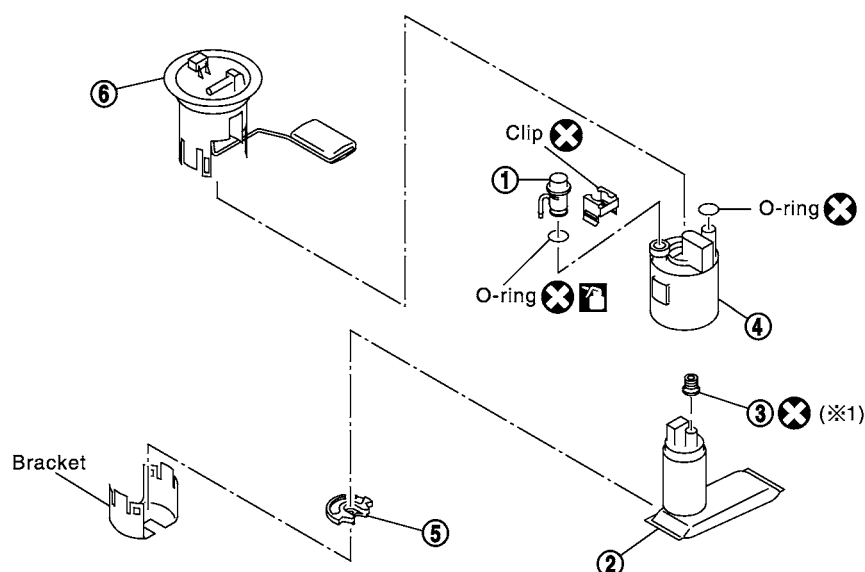
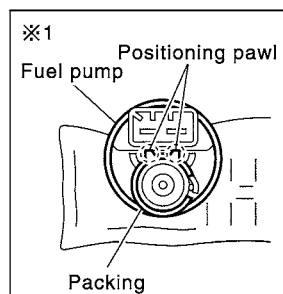
Make sure there is no fuel leakage at connections in the following steps.

1. Apply fuel pressure to fuel lines with turning ignition switch ON (with engine stopped). Then check for fuel leaks at connections.
2. Start the engine and rev it up and check for fuel leaks at connections.

## Disassembly and Assembly

EBS00KOV

### SEC. 172



PBIC0241E

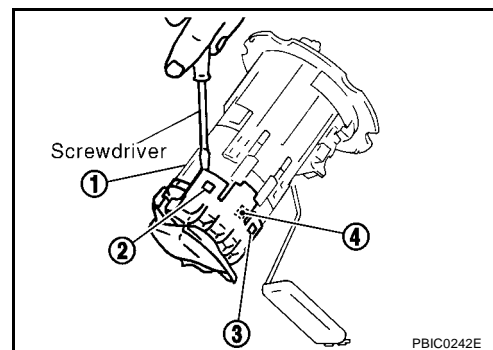
- |                       |              |                           |
|-----------------------|--------------|---------------------------|
| 1. Pressure regulator | 2. Fuel pump | 3. Packing                |
| 4. Fuel filter        | 5. Rubber    | 6. Fuel level sensor unit |
| 7. Bracket            |              |                           |

### NOTE:

Sub fuel level sensor unit cannot be disassembled and should be replaced as a unit.

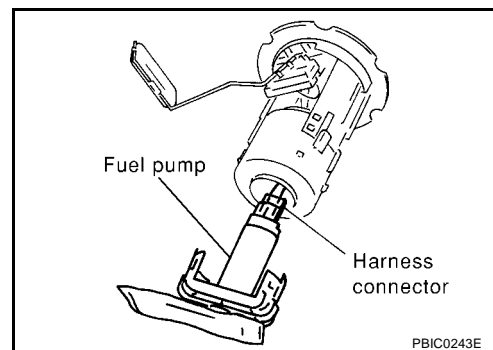
### DISASSEMBLY

- Remove fuel pump removing bracket.
  - Using a screwdriver, remove the snap fit portion of bracket in the order of (1), (2), (3) and (4) as shown in the figure.



PBIC0242E

- Disconnect fuel pump harness connector.

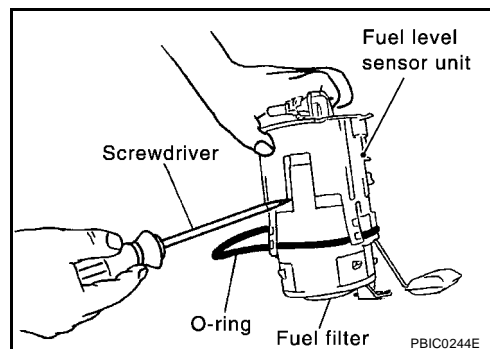


PBIC0243E

3. Separate the fuel filter and fuel level sensor unit.
  - a. Fit a used O-ring into space between fuel level sensor unit and fuel filter. Undo catches and separate fuel level sensor unit and fuel filter.
    - For reference when reassembling, put a mating mark on outer edges of fuel level sensor unit and fuel filter with some means which cannot be erased by fuel.
  - b. Insert blade end screwdriver to the gap between the fuel filter and fuel level sensor unit to separate them.

**CAUTION:**

**Put cloth or similar one on the edge of screwdriver not to damage the inserted portion.**



4. Remove pressure regulator from fuel filter.
  - a. Open and remove the clip.
  - b. Pull the pressure regulator straight out during removal.

**CAUTION:**

- Avoid impacts such as falling during removal.
- Do not disassemble or adjust.

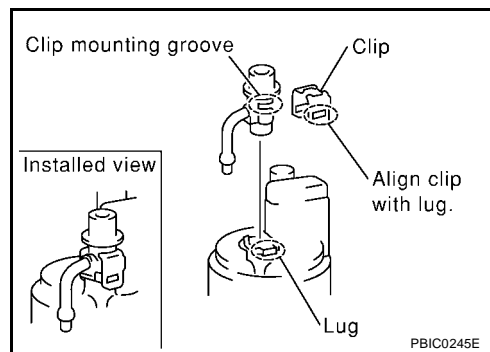
## ASSEMBLY

Install in the reverse order of removal paying attention to the following.

- Install the fuel filter and fuel pump with the tabs aligned, Make sure a click sound of secure engagement is heard.
- Securely connect the harness connector of the fuel pump.
- Install the pressure regulator O-ring as follows.

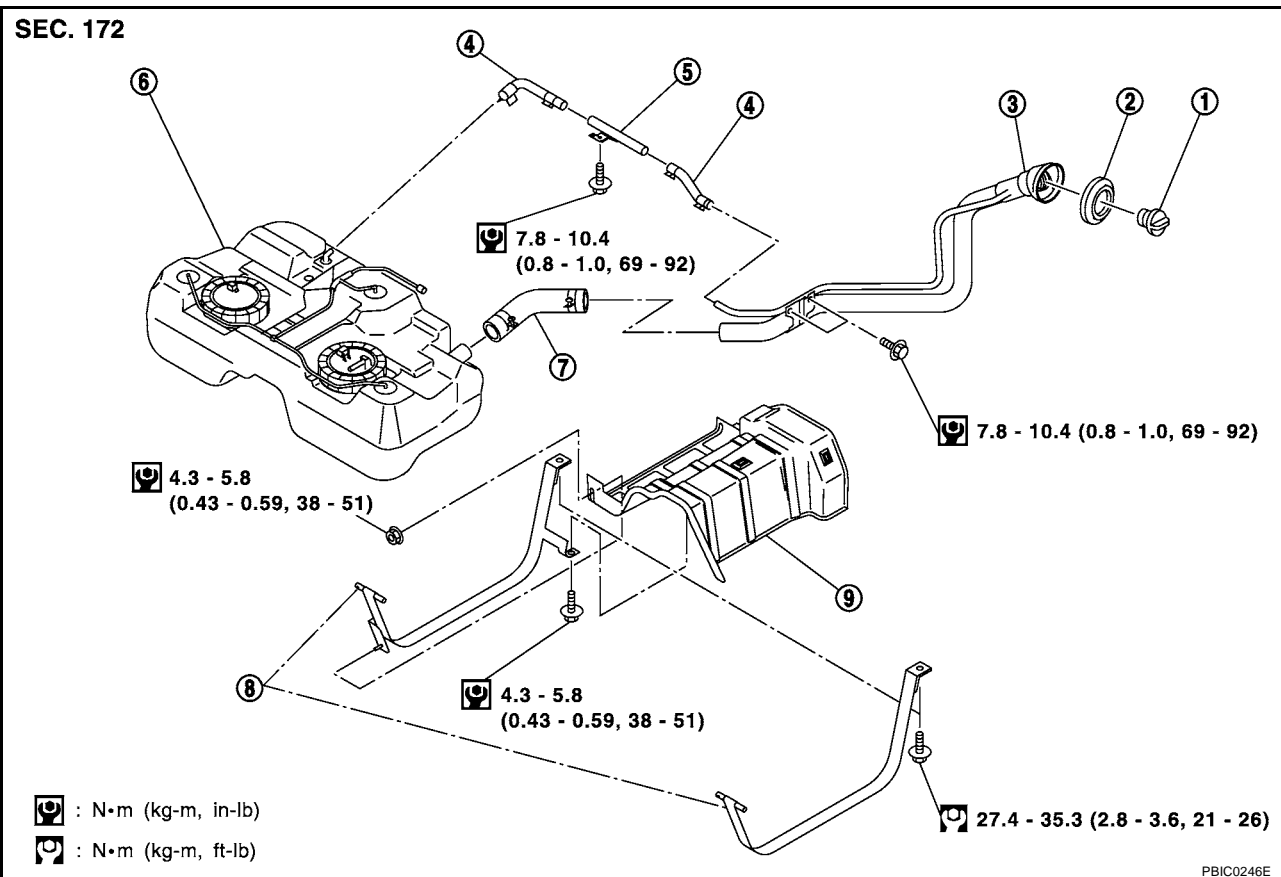
**CAUTION:**

- When replacing, always use a new O-ring.
  - Handle it with bare hands. (Do not use gloves.)
  - Visually check the O-ring, mounting parts and mating parts for foreign materials and flaws.
  - Before installing, apply new engine oil.
  - To avoid damage, do not apply an excessive force (pulling or starching).
- Install the pressure regulator as follows.
    1. Insert the clip to the groove of the pressure regulator.
    2. With the clip installed, insert the pressure regulator straight by matching the fuel filter protrusion and the clip notch.
    3. Make sure that the fuel filter protrusion and clip notch are securely engaged.



## FUEL TANK

### Removal and Installation

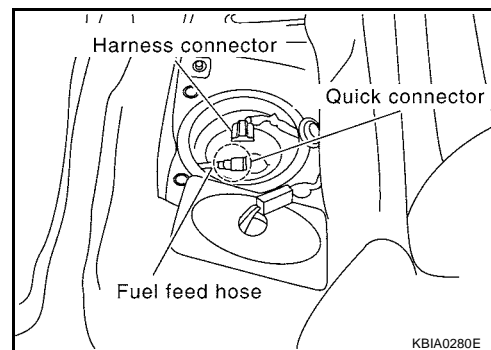


### REMOVAL

#### WARNING:

Be sure to read "General Precautions" when working on fuel system. Refer to [FL-3, "General Precautions"](#).

1. Release fuel pressure from fuel line. Refer to [EC-775, "FUEL PRESSURE RELEASE"](#) [QR20DE (WITH EURO-OBD)], [EC-1139, "FUEL PRESSURE RELEASE"](#) [QR20DE (WITHOUT EURO-OBD)], [EC-42, "FUEL PRESSURE RELEASE"](#) [QR25DE (WITH EURO-OBD)] or [EC-452, "FUEL PRESSURE RELEASE"](#) [QR25DE (WITHOUT EURO-OBD)].
2. Open the fuel filler cap and release the pressure inside the fuel tank.
3. Remove rear seat bottom.
4. Remove inspection hole cover, harness connector and fuel feed hose.
5. Drain fuel from fuel tank if necessary. For the draining procedure, refer to Step 4 in removal of [FL-4, "FUEL LEVEL SENSOR UNIT, FUEL FILTER AND FUEL PUMP ASSEMBLY"](#).

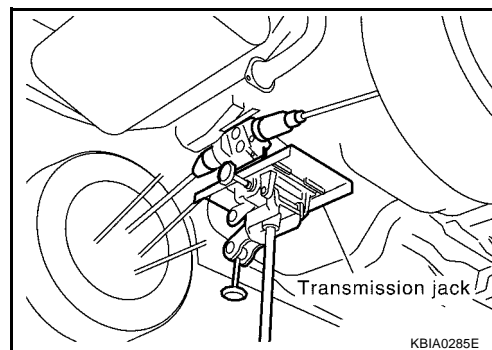


#### CAUTION:

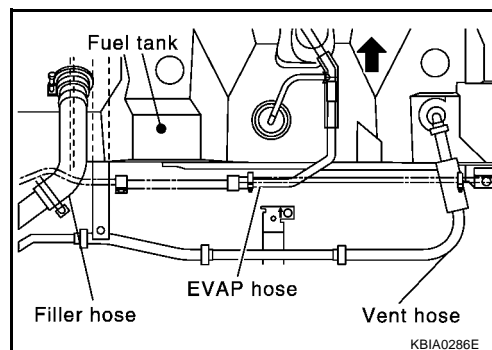
For the safety work and to maintain fuel tank gravity at center, drain fuel to the level where fuel tank weight at left and right becomes equal.

6. Disconnect the quick connector.
  - Put mating marks on hoses for correct installation.

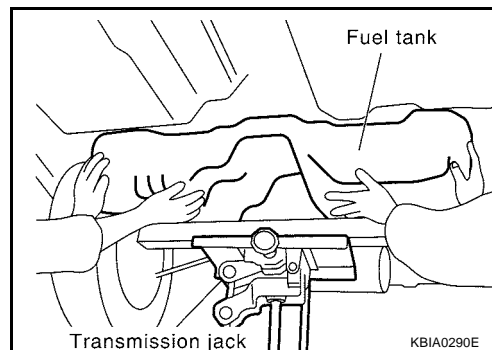
7. Remove exhaust center tube and insulator. Refer to [EX-2, "EXHAUST SYSTEM"](#).
8. Remove propeller shaft. Refer to [PR-2, "REAR PROPELLER SHAFT"](#).
9. Using a transmission jack, support the bottom of the rear final drive.
10. Remove the mounting nuts on the rear suspension member, and lower the transmission jack carefully until just before the rear suspension member is removed from the stud bolts on the vehicle.



11. Disconnect fuel filler hose, EVAP hose and vent hose at fuel tank side.
12. For disconnection procedure of the quick connector on the evaporator hose, Refer to [FL-4, "FUEL LEVEL SENSOR UNIT, FUEL FILTER AND FUEL PUMP ASSEMBLY"](#).
13. Remove fuel tank protector.



14. Remove fuel tank band mounting bolts while supporting fuel tank.
15. Remove fuel tank.



## INSTALLATION

Install in the reverse order of removal paying attention to the following.

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

**Fuel filler hose** : 35mm (1.38 in)

**The other hoses** : 25mm (0.98 in)

- Be sure hose clamp is not placed on swelled area of fuel tube.
- Tighten fuel hose clamp so that the distance between its lugs becomes to the following.

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

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

- Push the mounting band pin to the vehicle side securely.
- Before fixing the fuel tank, temporarily install the filler tube.

### CAUTION:

**Use genuine fuel filler tube mounting bolts or equivalent. Make sure to tighten them to the specified torque.**

- To connect the quick connector, refer to [FL-4, "FUEL LEVEL SENSOR UNIT, FUEL FILTER AND FUEL PUMP ASSEMBLY"](#).

INSPECTION AFTER INSTALLATION

Make sure there is no fuel leakage at connections in the following steps.

- 1. Apply fuel pressure to fuel lines with turning ignition switch ON (with engine stopped). Then check for fuel leaks at connections.
- 2. Start the engine and rev it up and check for fuel leaks at connections.

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# SERVICE DATA AND SPECIFICATIONS (SDS)

[QR]

## SERVICE DATA AND SPECIFICATIONS (SDS)

PFP:00030

### Standard and Limit FUEL TANK

EBS00K0X

Fuel tank capacity	Approx. 60 ℓ (13-1/4 Imp gal)
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### Tightening Torque

EBS00K0Y

Unit: N·m (kg-m, ft-lb)

Unit: N·m (kg-m, in-lb)\*

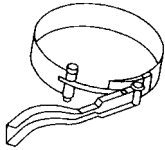
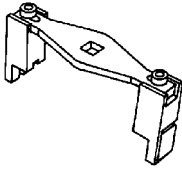
Lock ring	30.4 - 35.3 (3.1- 3.6, 23 - 26)
Fuel tank band	27.4 - 35.3 (2.8 - 3.6, 21 - 26)
Fuel tank band to fuel tank protector	4.3 - 5.8 (0.43 - 0.59, 38 - 51)*
Fuel filler tube	7.8 - 10.4 (0.80 - 1.1, 69 - 92)*
Vent tube	7.8 - 10.4 (0.80 - 1.1, 69 - 92)*

## PREPARATION

PFP:00002

### Commercial Service Tool

EBS00BKG

Tool name	Description
Fuel filter wrench  PBIC0519E	Removing fuel filter
Fuel tank lock ring wrench  ZZA0122D	Removing and installing fuel tank lock ring

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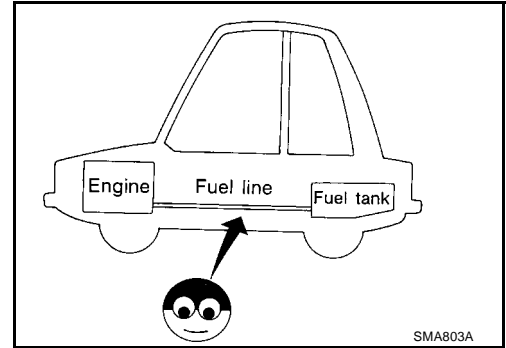
M

## FUEL SYSTEM

### Checking Fuel Lines

EBS00BKH

Inspect fuel lines, filler cap and tank for improper attachment, leaks, cracks, damage, loose connections, chafing or deterioration. If necessary, repair or replace damaged parts.



### General Precautions

EBS00BKJ

**WARNING:**

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

- Put a “CAUTION: INFLAMMABLE” sign in workshop.
- Be sure to work in a well-ventilated area and furnish workshop with a CO<sub>2</sub> fire extinguisher.
- Do not smoke while servicing fuel system. Keep open flames and spark away from work area.

**CAUTION:**

- Before removing fuel line parts, carry out the following procedures:
  - a) Put drained fuel in an explosion-proof container and put the lid on securely. Keep the container in safe area.
  - b) Disconnect battery ground cable.
- Always replace O-ring and clamps with new ones.
- Do not kink or twist tubes when they are being installed.
- Do not tighten hose clamps excessively to avoid damaging hoses.
- After installing tubes, make sure there is no fuel leakage at connections in the following steps.
  - a) Apply fuel pressure to fuel lines with turning ignition switch “ON” (with engine stopped). Then check for fuel leaks at connections.
  - b) Start the engine and rev it up and check for fuel leaks at connections.

## FUEL FILTER

### Removal and Installation REMOVAL

1. Remove air duct and upper air cleaner case.
2. Remove fuel filter protector.
3. Disconnect fuel hoses at fuel filter bracket.

**CAUTION:**

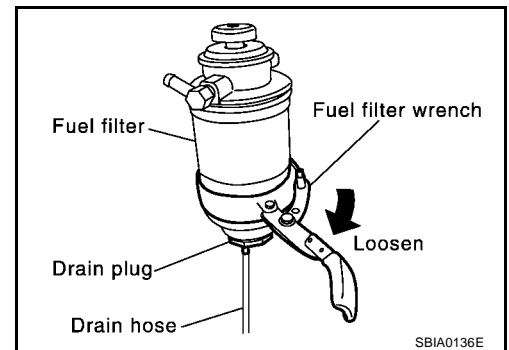
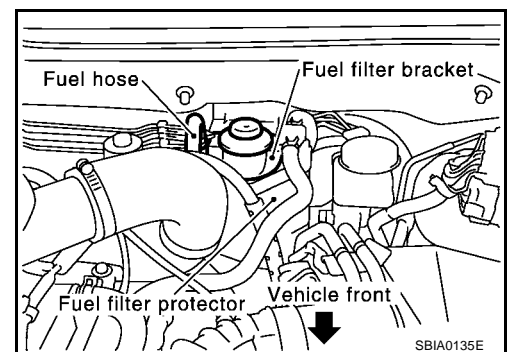
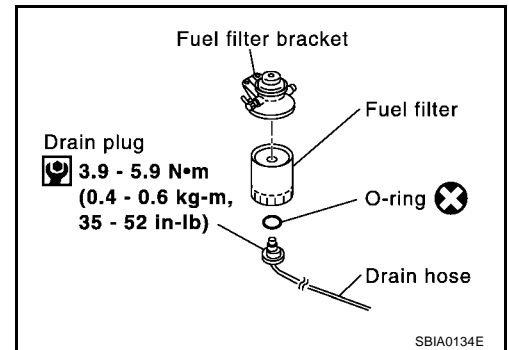
**Plug the pipe to prevent fuel from draining.**

4. Remove fuel filter with bracket.

**CAUTION:**

**Do not splash fuel during removal. If fuel is splashed, immediately wipe it off.**

5. Using band-type filter wrench (commercial service tool), remove fuel filter.
6. Turn fuel filter upside down to drain fuel.
7. Remove drain plug from fuel filter.



## INSTALLATION

Install in reverse order of removal, paying attention to following:

- Replace O-ring on drain plug with new one.

**Drain plug**

**3.9 - 5.9 N·m (0.4 - 0.6 kg-m, 35 - 52 in-lb)**

- Screw the fuel filter by hand until packing contacts sealing surface of bracket. Then tighten it by turning approximately 2/3 turn.
- After installation, bleed air from fuel path. Refer to [FL-16, "Air Bleeding"](#).

## INSPECTION AFTER INSTALLATION

Make sure there is no fuel leakage at connections in the following steps.

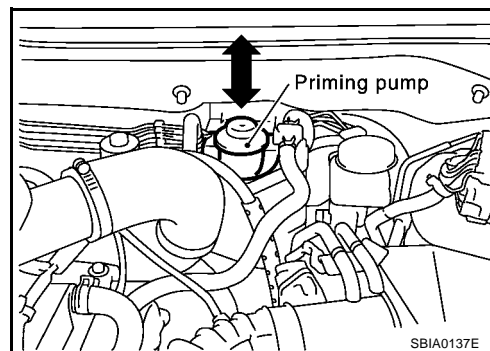
1. Apply fuel pressure to fuel lines with turning ignition switch "ON" (with engine stopped). Then check for fuel leaks at connections.
2. Start the engine and rev it up and check for fuel leaks at connections.

## Air Bleeding

EBS00BLB

After fuel filter is replaced and after fuel system components are removed/installed, bleed air from fuel path as follows:

1. Move priming pump up and down to bleed air from fuel path.
2. When air is bled, pumping of priming pump becomes heavy stop operation at that time.
3. Crank the engine until it starts. Do not crank the engine for more than 30 seconds.
4. If the engine does not start, stop cranking and repeat step 1 above.
5. If the engine does not operate smoothly after it has started, race it two or three times.
6. If air cannot be bled easily (pumping of priming pump does not become heavy), disconnect feed-side of hose between fuel filter and electronically controlled fuel injection pump. After that, operate priming pump and confirm that fuel comes out.



### CAUTION:

Prepare a tray to collect fuel. Prevent fuel from adhering to rubber parts, especially the engine mount insulator.

## Draining Water from Fuel Filter

EBS00MRU

1. Prepare a tray at the drain hose open end.
2. Loosen drain cock, and operate priming pump to drain water from fuel filter.

### CAUTION:

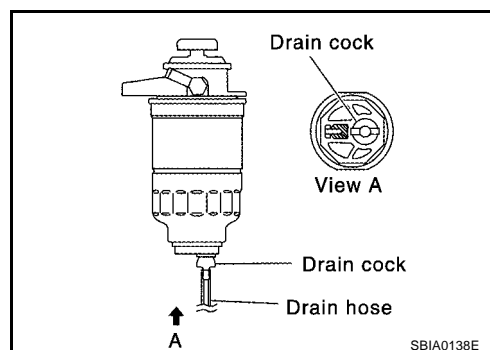
- Water in filter is drained with fuel. Prepare larger capacity pan than fuel filter volume.
- Drained water is mixed with fuel. Prevent fuel from adhering to rubber parts such as engine mount insulator.

3. After draining, close drain cock by hand.

### CAUTION:

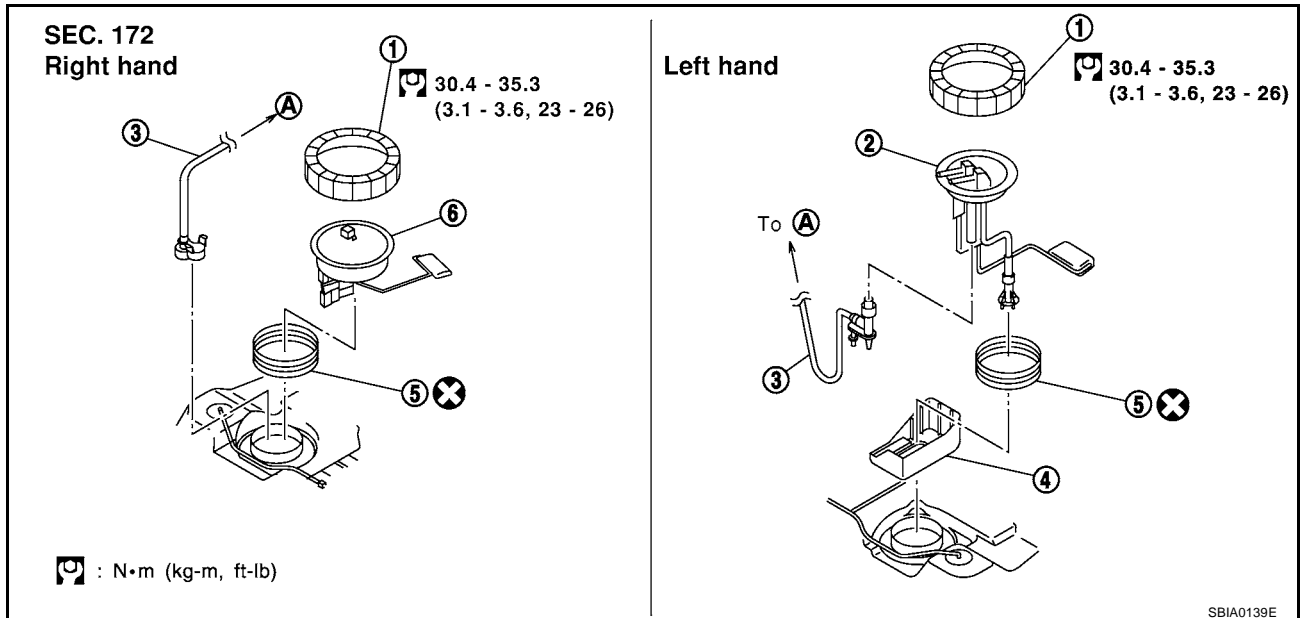
If drain cock is tightened excessively, it may be damaged and fuel will leak. Do not use tools to tighten drain cock.

4. Bleed air in fuel piping. Refer to [FL-16, "Air Bleeding"](#).
5. Start engine and check for fuel leakage.



## FUEL LEVEL SENSOR UNIT

### Removal and Installation



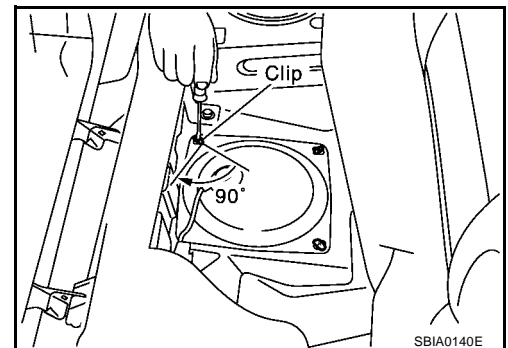
- |              |                                |  |
|--------------|--------------------------------|--|
| 1. Lock ring | 2. Main fuel level sensor unit | 3. Jet pump, fuel hose and jet pump inlet assembly |
| 4. Chamber   | 5. Seal packing                | 6. Sub fuel level sensor unit                      |

### REMOVAL

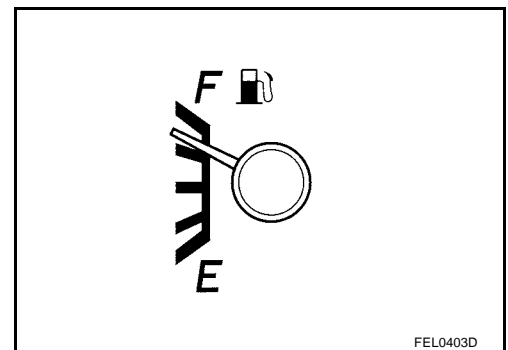
#### WARNING:

Be sure to read "General Precautions" When working on fuel system. Refer to [FL-14, "General Precautions"](#).

1. Disconnect battery ground cable.
2. Open fuel filler lid.
3. Open the filler cap and release the pressure inside the fuel tank.



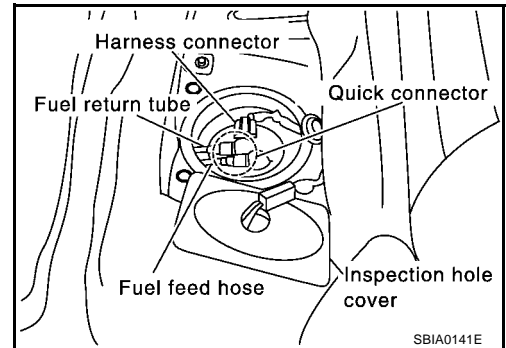
4. Check fuel level on level place. If gauge indicates more than the level shown in figure (full or almost full), drain fuel from fuel tank until gauge indicates level shown in figure or below. In case of fuel pump does not operate, take following procedure.
  - a. Insert fuel tube of less than 25 mm (0.98 in) in diameter into fuel filler tube through fuel filler opening to draw fuel from fuel filler tube.
  - b. Disconnect fuel filler hose from fuel filler tube.
  - c. Insert fuel tube into fuel tank through fuel filler hose to draw fuel from fuel tank.
    - As a guide, fuel level becomes the position shown in figure or below when approximately 15 liter (13-1/4 Imp qt) of fuel are drained from full tank.



#### NOTE:

Adjusting fuel level is to prevent fuel from spilling, when fuel level sensor unit is removed.

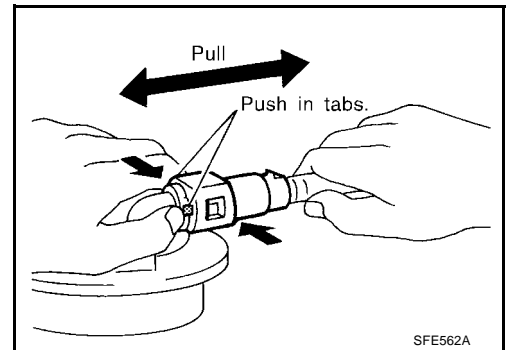
5. Remove rear seat bottom.
6. Peel off floor carpet, then remove inspection hole cover.
7. Disconnect the harness connector, fuel feed tube and fuel return tube.



- Disconnect the quick connector of the fuel tube as follows.

**NOTE:**

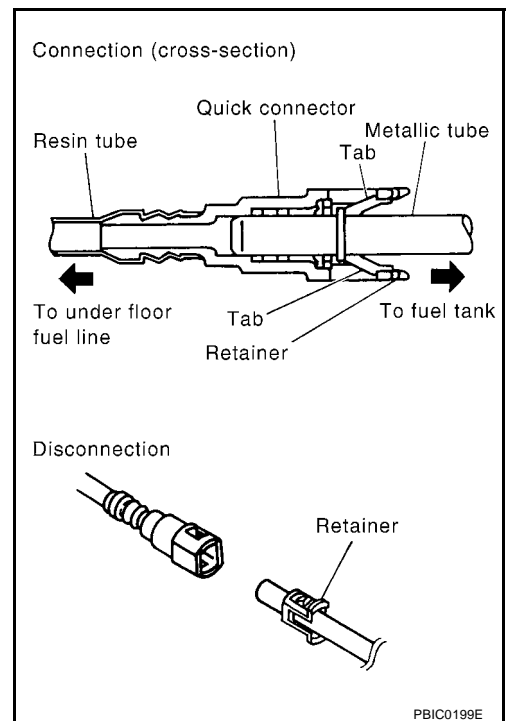
- Hold the sides of the connector, push in tabs and pull out the tube.
- If the connector and the tubes are stuck together, push and pull several times until they start to move. Then disconnect them by pulling.



**CAUTION:**

- The quick connector can be removed when the tabs are completely depressed. Do not twist it more than necessary.
- Do not use any tools to remove the quick connector.
- Keep the resin tube away from heat. Be especially careful when welding near the tube.
- Prevent acid liquid such as battery electrolyte etc. from getting on the resin tube.
- Do not bend or twist the tube during installation and removal.
- Do not remove the remaining retainer on tube or fuel level sensor unit.
- When the tube or fuel level sensor unit is replaced, also replace the retainer with a new one.

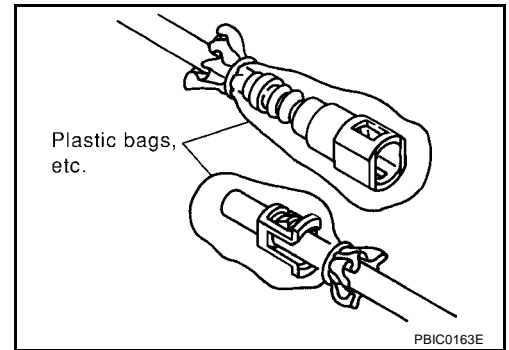
Retainer color : Green (Feed hose side)  
: Gray (Return hose side)



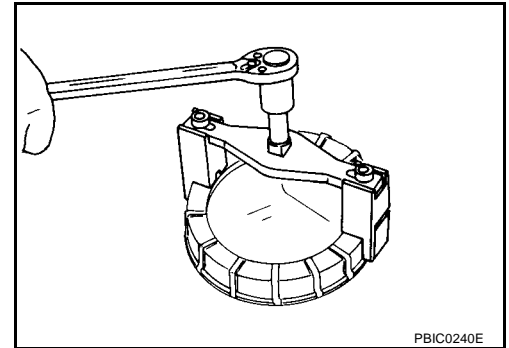
# FUEL LEVEL SENSOR UNIT

[YD22DDTi]

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



8. Using a fuel tank lock ring wrench, remove the lock ring.



9. Remove main fuel level sensor unit and sub fuel level sensor unit.

## CAUTION:

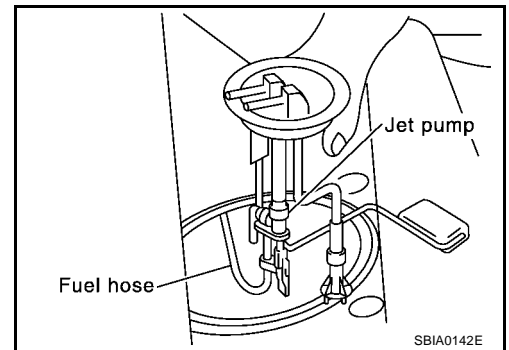
- Do not bend the float arm during removal.
- Avoid impacts such as falling when handling components.

Removal of main fuel level sensor unit:

- Raise the fuel level sensor unit, and remove the jet pump.
- Leave the jet pump on the fuel tank with the fuel hose.
- If necessary, remove the chamber from the bottom of the fuel tank.
- Remove the chamber by sliding toward the rear of the vehicle.

Removal of sub fuel level sensor unit:

- Raise and release the sub fuel level sensor unit to remove.
- If necessary, remove the jet pump inlet from the bottom of the fuel tank.  
To remove it, pinch the tabs (2 places).



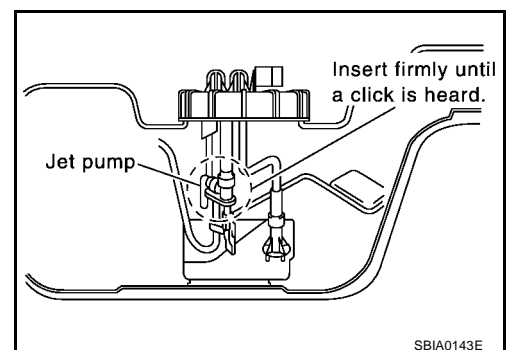
## INSPECTION AFTER REMOVAL

Make sure the fuel pump strainer is free from foreign materials, If any are found, remove them.

## INSTALLATION

Install in the reverse order of removal paying attention to the following.

- When installing the chamber and jet pump, insert them fully until a click sound of full stopper engagement is heard (for jet pump inlet).
- Connect the quick connector as follows.
  1. Check the connection for damage and foreign materials.
  2. Align the connector with the tube, then insert the connector straight into the tube until a click is heard.
  3. After connecting, make sure that the connection is secure by following the steps below.



## FUEL LEVEL SENSOR UNIT

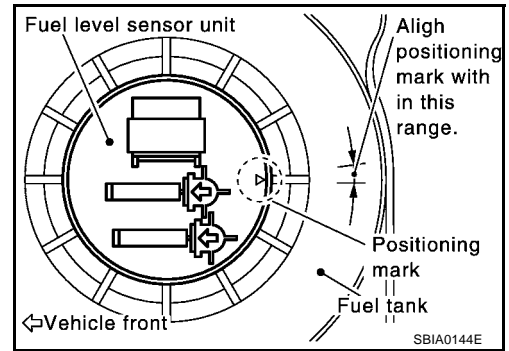
[YD22DDTi]

- Visually confirm that the two retainer tabs are connected to the connector.
- Pull the tube and the connector to make sure they are securely connected.
- Install fuel level sensor unit with mating mark (triangular protrusion) facing between two carved lines on fuel tank. (Figure shows left side of fuel tank.)

**NOTE:**

On right side of fuel tank, there are three carved lines on fuel tank. Set mating mark between two outer carved lines.

- Install the inspection hole cover with the front mark (arrow) facing front of the vehicle (Both for RH and LH).



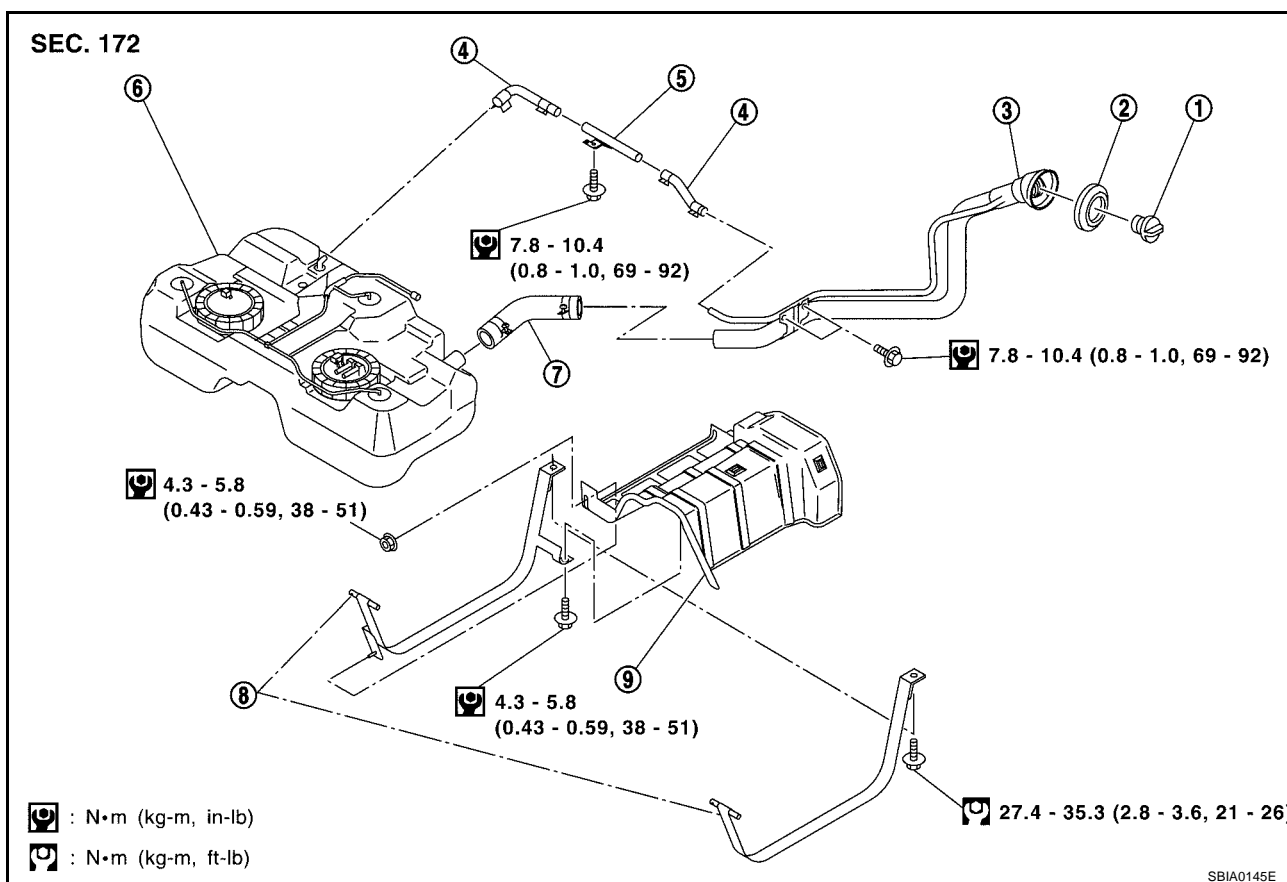
### INSPECTION AFTER INSTALLATION

Make sure there is no fuel leakage at connections in the following steps.

1. Apply fuel pressure to fuel lines with turning ignition switch ON (with engine stopped). Then check for fuel leaks at connections.
2. Start the engine and rev it up and check for fuel leaks at connections.

## FUEL TANK

## Removal and Installation



- |                     |                   |                        |
|---------------------|-------------------|------------------------|
| 1. Fuel filler cap  | 2. Grommet        | 3. Fuel filler tube    |
| 4. Vent hose        | 5. Vent tube      | 6. Fuel tank           |
| 7. Fuel filler hose | 8. Fuel tank band | 9. Fuel tank protector |

## REMOVAL

**WARNING:**

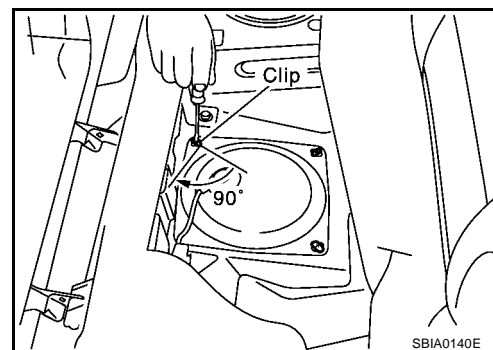
Be sure to read "General Precautions" when working on fuel system. Refer to [FL-14, "General Precautions"](#).

1. Disconnect battery ground cable.
2. Open the fuel filler cap and release the pressure inside the fuel tank.
3. Remove rear seat bottom.
4. Peel off floor carpet, then remove inspection hole cover.
5. Disconnect the harness connector, fuel feed tube and fuel return tube.
6. Drain fuel from fuel tank if necessary. For the draining procedure, refer to step 4 in removal of [FL-17, "FUEL LEVEL SENSOR UNIT"](#).

**CAUTION:**

For the safety work and to maintain fuel tank gravity at center, drain fuel to the level where fuel tank weight at left and right becomes equal.

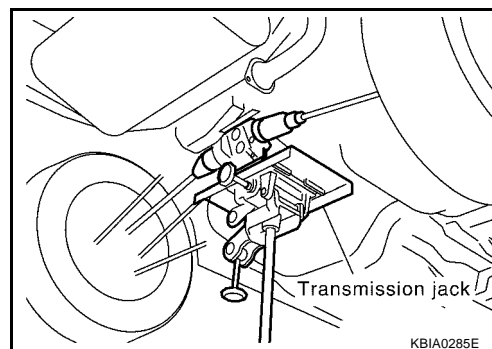
7. Disconnect the quick connector.
  - Put mating marks on hoses for correct installation.
8. Remove exhaust center tube and insulator. Refer to [EX-2, "EXHAUST SYSTEM"](#).
9. Remove propeller shaft, Refer to [PR-2, "REAR PROPELLER SHAFT"](#).



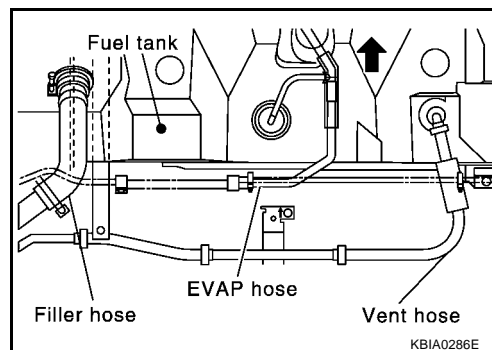
# FUEL TANK

[YD22DDTi]

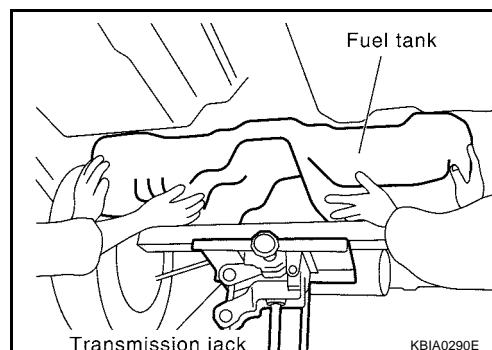
10. Using a transmission jack, support the bottom of the rear final drive.
11. Remove the mounting nuts on the rear suspension member, and lower the transmission jack carefully until just before the rear suspension member is removed from the stud bolts on the vehicle.



12. Disconnect fuel filler hose, EVAP hose and vent hose at fuel tank side.  
For disconnection procedure of the quick connector. Refer to [FL-17, "FUEL LEVEL SENSOR UNIT"](#).
13. Remove fuel tank protector.



14. Remove fuel tank band mounting bolts while supporting fuel tank.
15. Remove fuel tank.



## INSTALLATION

- Install in the reverse order of removal paying attention to the following.
- Surely clamp fuel hoses and insert hose to the length below.

**Fuel filler hose** : 35 mm (1.38 in)

**The other hose** : 25 mm (0.98 in)

- Be sure hose clamp is not positioned on swelled area of fuel tube.
- Tighten fuel hose clamp so that the distance between its lugs becomes to the following.

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

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

- Push the mounting band pin to the vehicle side securely.
- Before fixing the fuel tank, temporarily install the fuel filler tube.

### CAUTION:

Use genuine fuel filler tube mounting bolts or equivalent. Make sure to tighten them to the specified torque.

- To connect the quick connector. Refer to [FL-17, "FUEL LEVEL SENSOR UNIT"](#).

## INSPECTION AFTER INSTALLATION

Make sure there is no fuel leakage at connections in the following steps.

1.

Apply fuel pressure to fuel lines with turning ignition switch “ON” (with engine stopped). Then check for fuel leaks at connections.
2.

Start the engine and rev it up and check for fuel leaks at connections.

A

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# SERVICE DATA AND SPECIFICATIONS (SDS)

[YD22DDTi]

## SERVICE DATA AND SPECIFICATIONS (SDS)

PFP:00030

### Standard and Limit

EBS00BL5

Fuel tank capacity	Approx. 60 ℓ (13-1/4 Imp gal)
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### Tightening Torque

EBS00BL6

Unit: N·m (kg-m, ft-lb)

Unit: N·m (kg-m, in-lb)\*

Drain plug	3.9 - 5.9 (0.4 - 0.6, 35 - 52)*
Fuel tank tightening band	27.4 - 35.3 (2.8 - 3.6, 21 - 26)
Fuel filler tube	7.8 - 10.4 (0.80 - 1.1, 69 - 92)*
Vent tube	7.8 - 10.4 (0.80 - 1.1, 69 - 92)*
Lock ring.	30.4 - 35.3 (3.1- 3.6, 23 - 26)