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### **PREPARATION**

[VQ]

### PREPARATION PFP:00002

## **Special Service Tools**

GBS000EG

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

[VQ]

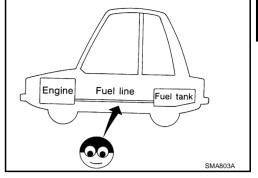
FUEL SYSTEM PFP:17503

### **Checking Fuel Lines**

GBS000EH

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

If necessary, repair or replace damaged parts.



#### **General Precautions**

GRSOODEI

#### **WARNING:**

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

- Put a "CAUTION: INFLAMMABLE" sign in the 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 sparks away from the work area.

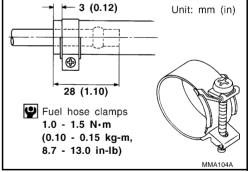
#### **CAUTION:**

- Use gasoline required by the regulations for octane number. Refer to GI-5, "Precautions for Fuel".
- Before removing fuel line parts, perform 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 <u>EC-74, "FUEL PRESSURE RELEASE"</u> (models for Australia) or <u>EC-617, "FUEL PRESSURE RELEASE"</u> (models except for Australia).
- Disconnect the battery cable from the negative terminal.
- Always replace O-rings and clamps with new ones.
- Do not kink or twist hoses 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.



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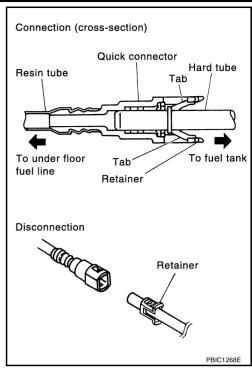
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FL-3

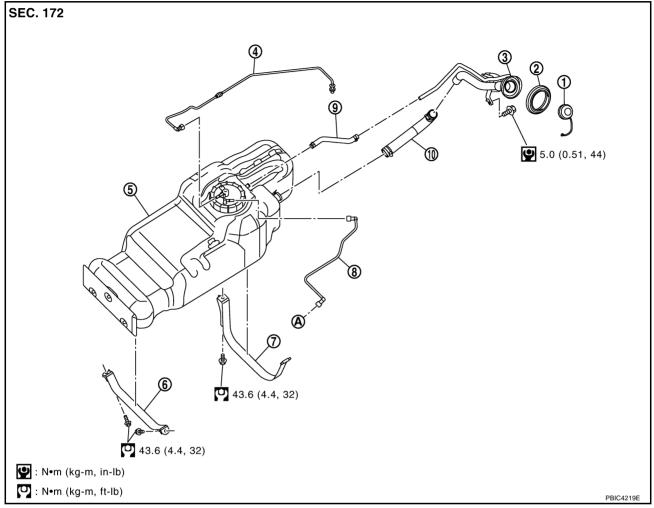
- After connecting the fuel tube quick connectors, make sure the quick connectors are secure.
  - Ensure that the connector and resin tube do not contact any adjacent parts.
- After installing tubes, make sure there is no fuel leakage at connections in the following steps.
- Apply fuel pressure to fuel lines with turning ignition switch ON (with engine stopped). Then check for fuel leaks at connections.
- Start the engine and rev it up and check for fuel leaks at 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 servicing "Evaporative Emission System" parts, refer to <u>EC-37</u>, "EVAPORATIVE EMISSION SYSTEM" (models for Australia) or <u>EC-594</u>, "EVAPORATIVE EMISSION SYSTEM" (models except for Australia).



[VQ]

FUEL TANK PFP:17202

Components



- 1. Fuel filler cap
- 4. EVAP tube
- 7. Fuel tank band
- 10. Fuel filler hose
- A. To engine

- 2. Grommet
- 5. Fuel tank
- 8. Fuel feed tube

- 3. Fuel filler tube
- 6. Fuel tank band
- 9. Vent hose

# Removal and Installation REMOVAL

#### **WARNING:**

Be sure to read "General Precautions" when working on fuel system. Refer to  $\underline{\text{FL-3}}$ , "General Precautions".

- Drain fuel from fuel tank if necessary.
- Perform work on level place.
- 1. Open fuel filler lid.
- 2. Open the fuel filler cap and release the pressure inside fuel tank.

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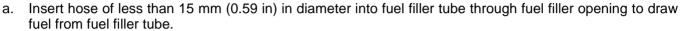
PBIC3631E

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

#### NOTE:

Because fuel will be spilled when removing fuel level sensor unit, fuel filter and fuel pump assembly for the top of the fuel is above the fuel level sensor unit, fuel filter and fuel pump assembly installation surface.

- As a guide, fuel level becomes the position as shown in the figure or below when approximately 20 ℓ (4-3/8 lmp gal) of fuel are drained from fuel tank.
- In a case that fuel pump does not operate, perform the following steps.



- b. Disconnect fuel filler hose from fuel filler tube.
- c. Insert tube into fuel tank to draw fuel from fuel tank.
  - As a guide, fuel level becomes the position shown in figure or below when approximately 20 liter (17-5/8 lmp qt) of fuel are drained from full tank.

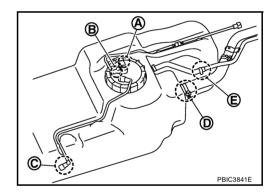
#### NOTE:

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

- 4. Release the fuel pressure from fuel lines. Refer to <u>EC-74, "FUEL PRESSURE RELEASE"</u> (models for Australia) or <u>EC-617, "FUEL PRESSURE RELEASE"</u> (models except for Australia).
- 5. Disconnect the battery cable from the negative terminal.
- 6. Disconnect fuel feed tube (C).

A : Harness connector

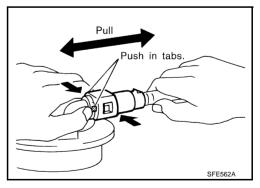
B : EVAP tube
D : Fuel filler hose
E : Vent hose



Disconnect quick connector of fuel feed tube as follows.

#### NOTE

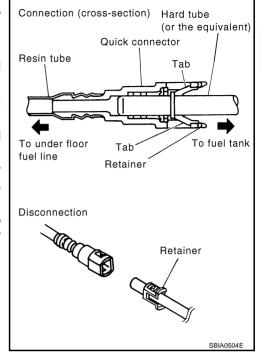
- Hold the sides of the connector, push in tubs and pull out the tube.
- If the connector and the tube are stuck together, push and pull several times until they start to move. Then disconnect them by pulling.



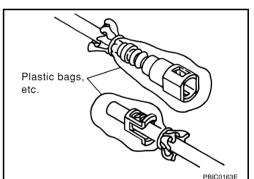
#### **CAUTION:**

- Quick connector can be disconnected when the tabs are completely depressed. Do not twist it more than necessary.
- Do not use any tools to disconnect quick connector.
- Keep resin tube 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.
- Do not bend or twist resin tube during installation and removal.
- Do not remove the remaining retainer on hard tube (or equivalent) except when resin tube or retainer is replaced.
- When resin tube or fuel level sensor unit is replaced, also replace retainer with a new one. Replace same color retainer as before replacing.

Retainer color : Green



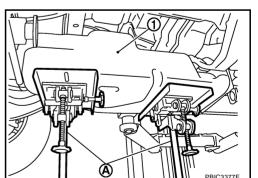
To keep clean the connecting portion and to avoid damage and foreign materials, cover them completely with plastic bags or something similar.



7. Using a transmission jack (A), support the bottom of fuel tank (1).

#### **CAUTION:**

Support the position that fuel tank bands do not engage.



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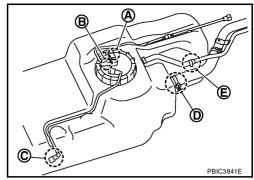
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[VQ]

- 8. Remove fuel tank bands, and lower the transmission jack carefully until harness connector (A), EVAP tube (B), fuel filler hose (D) and vent hose (E) can be disconnected.
- 9. Disconnect harness connector (A), EVAP tube (B), fuel filler hose (D) and vent hose (E).

C : Fuel feed tube



10. Supporting with hands, lower transmission jack carefully, and remove fuel tank.

#### **CAUTION:**

- Pay attention not to fall fuel tank.
- Make sure that all connection points have been disconnected.
- Confirm there is no interference with vehicle.
- 11. Remove fuel filler tubes, fuel filler hoses and vent hoses if necessary.

#### **INSTALLATION**

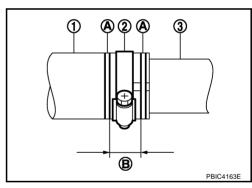
Note the following, and install in the reverse order of removal.

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

Fuel filler hose : 35 mm (1.38 in)
The other hose : 25 mm (0.98 in)

- Be sure hose clamp is not positioned on swelled area of fuel tube.
- Position fuel filler hose clamp (2) between paint marking (B).

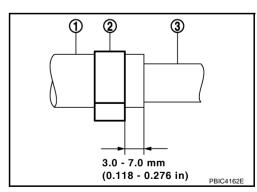
1 : Fuel filler hose3 : Fuel filler tubeA : paint marking



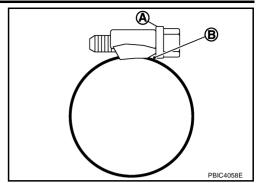
Position vent hose clamp (2) as shown in the figure.

1 : Vent hose

3 : Vent tube (part of fuel filler tube)



 Tighten fuel hose clamp so that the flange (A) of bolt head is on the paint mark (B) on the band.



Fit mounting band pin to the vehicle side securely.

• Before fixing the fuel tank, temporarily install the fuel filler tube.

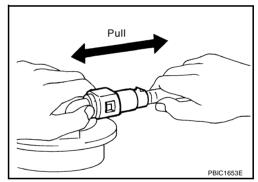
#### **CAUTION:**

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

Connect quick connector as follows.

1. Check connection for damage and foreign materials.

- 2. Align the connector with the tube, then insert connector straight into 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 tabs are connected to connector.
  - Pull the tube and connector to make sure they are securely connected.



#### INSPECTION AFTER INSTALLATION

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

- 1. Turn ignition switch "ON" (with engine stopped), then check connections for leaks by applying fuel pressure to fuel piping.
- 2. Start engine and revit up and make sure there is no fuel leakage at connections.

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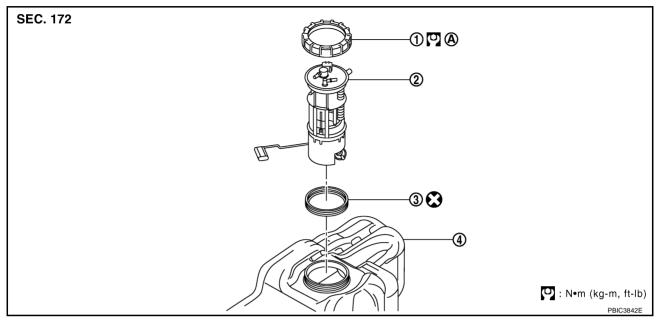
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### [VQ]

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

Components



1. Lock ring

 Fuel level sensor unit, fuel filter and 3. Seal packing fuel pump assembly

- 4. Fuel tank
- A. Refer to FL-8.
- Refer to GI-10, "Components" for symbol marks in the figure.

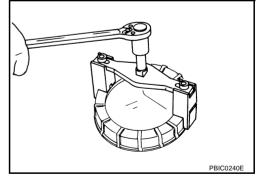
# Removal and Installation REMOVAL

GBS000EM

#### **WARNING:**

Be sure to read "General Precautions" when working on fuel system. Refer to <u>FL-3, "General Precautions"</u>.

- Remove fuel tank from the vehicle. Refer to <u>FL-5</u>, "<u>FUEL TANK</u>".
- 2. Using a fuel tank lock ring wrench (commercial service tool), remove the lock ring.



3. Remove fuel level sensor unit, fuel filter and fuel pump assembly.

#### **CAUTION:**

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

#### **INSPECTION AFTER REMOVAL**

Make sure fuel level sensor unit, fuel filter and fuel pump assembly is free from foreign materials. If any are found, remove them.

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

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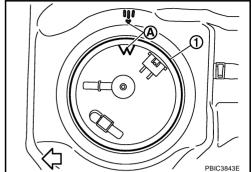
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#### INSTALLATION

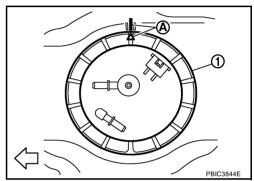
Note the following, and install in the reverse order of removal.

Install fuel level sensor unit, fuel filter and fuel pump assembly

 (1) with aligning mating marks (A) on fuel tank and fuel level sensor unit, fuel filter and fuel pump assembly as shown in the figure.



 Install lock ring (1), and tighten lock ring by hand. Then tighten lock ring with a fuel tank lock ring wrench (commercial service tool), aligning mating marks (A) on fuel tank and lock ring as shown in the figure.



#### INSPECTION AFTER INSTALLATION

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

- Turn ignition switch "ON" (with engine stopped), then check connections for leaks by applying fuel pressure to fuel piping.
- Start engine and rev it up and make sure there is no fuel leakage at the fuel system connections.

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

[VQ]

GBS000EN

# SERVICE DATA AND SPECIFICATIONS (SDS)

### **Standard and Limit**

PFP:00030

Fuel tank capacity	Approx. 80 $\ell$ (17-5/8 Imp gal)
Fuel recommendation	Refer to GI-5.

### **PREPARATION**

[YD]

# PREPARATION Commercial Service Tools

PFP:00002

GBS000DX

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

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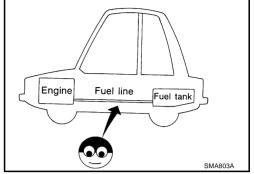
FUEL SYSTEM PFP:17503

### **Checking Fuel Lines**

GBS000DY

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

If necessary, repair or replace damaged parts.



#### **General Precautions**

GBS000DZ

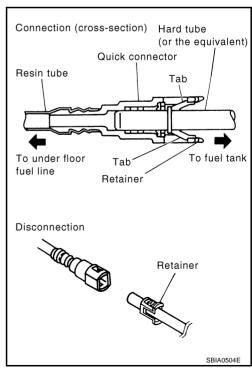
#### **WARNING:**

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 CO2 fire extinguisher.
- Do not smoke while servicing fuel system. Keep open flames and spark away from work area.

#### **CAUTION:**

- Use diesel fuel required by the regulations for cetane number. Refer to GI-6, "DIESEL ENGINE".
- Before removing fuel line parts, perform the following procedures:
- Put drained fuel in an explosion-proof container and put the lid on securely. Keep the container in safe area.
- Disconnect the battery cable from the negative terminal.
- 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 connecting fuel tube quick connectors, make sure quick connectors are secure.
   Ensure that connector and resin tube do not contact any
  - Ensure that connector and resin tube do not contact any adjacent parts.
- After installing tubes, make sure there is no fuel leakage at connections in the following steps.
- Start the engine and rev it up and check for fuel leaks at connections.

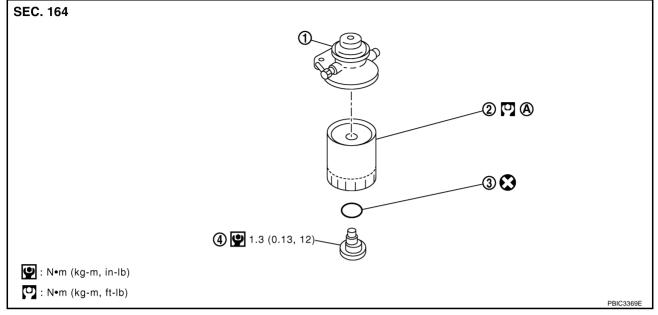


[YD]

FUEL FILTER PFP:16400

### **Components**

GBS000E0



- 1. Fuel filter bracket
- 2. Fuel filter

3. O-ring

- 4. Drain plug
- A. Refer to FL-16.
- Refer to GI-10, "Components" for symbol marks in the figure.

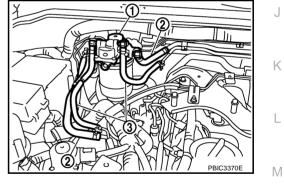
# Removal and Installation REMOVAL

GBS000E1

- 1. Disconnect fuel hoses at fuel filter.
  - 1 : Fuel filter
  - 2 : Fuel hose (feed)
  - 3 : Fuel hose (return)

#### **CAUTION:**

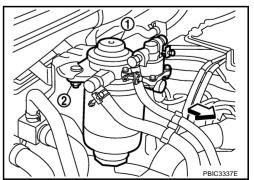
Plug the pipe to prevent fuel from draining.



- 2. Loosen mounting nuts (2) and remove fuel filter (1).
  - ⟨□ : Vehicle front

#### **CAUTION:**

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



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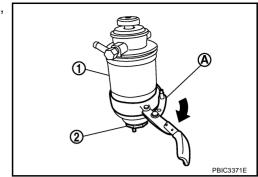
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- 3. Using band-type fuel filter wrench (A) (commercial service tool), remove fuel filter (1).
- 4. Turn fuel filter (1) upside down to drain fuel.
- 5. Remove drain plug (2) from fuel filter.



#### **INSTALLATION**

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

- Replace O-ring on drain plug with new one.
- Screw the fuel filter by hand until packing contacts sealing surface of fuel filter bracket. Then tighten it by turning approximately 2/3 turn.

Fuel filter (reference value)

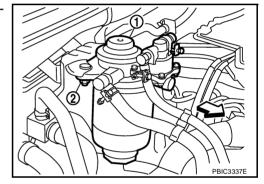
2: 13.5 N·m (1.4 kg-m, 10 ft-lb)

 Install fuel filter (1), and tighten mounting nuts (2) to the specified torque.

: Vehicle front

**Fuel filter mounting nuts** 

**□**: 13.5 N⋅m (1.4 kg-m, 10 ft-lb)



After installation, bleed air from fuel line. Refer to <u>FL-17, "Air Bleeding"</u>.

#### INSPECTION AFTER INSTALLATION

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

Start the engine and rev it up and make sure there is no fuel leakage at connections.

#### **FUEL FILTER**

[YD]

#### **Sedimentor Switch REMOVAL**

GBS000H7

- Remove sedimentor.
- 2. Remove sedimentor switch from sedimentor.

#### INSPECTION AFTER REMOVAL

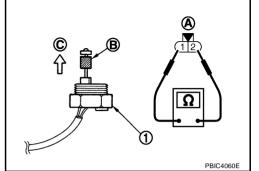
Check continuity between harness connector (A) No. 1 and No. 2 when float (B) is lifted and when not lifted.

C: Lift up

Standard:

Lifted : Continuity should exist. Not lifted : Continuity should not exist.

If out of standard, replace sedimentor switch (1).



#### INSTALLATION

Following instructions below, install in reverse order of removal.

Replace O-ring on sedimentor switch with new one.

**≌**: 4.9 N⋅m (0.5 kg-m, 43 in-lb)

Tighten sedimentor mounting bolts to the specified torque.

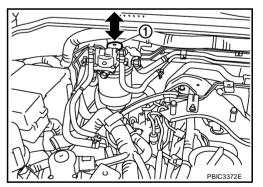
**Sedimentor mounting bolts** 

2: 11.0 N·m (1.1 kg-m, 8 ft-lb)

Air Bleeding GRSOODES

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

Move priming pump (1) up and down to bleed air from fuel path. When air is bled, pumping of priming pump becomes heavy stop operation at that time.



- Crank engine until it starts. Do not crank engine for more than 30 seconds.
- If engine does not start, stop cranking and repeat step 1 above.
- If engine does not operate smoothly after it has started, race it two or three times.
- 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 pump. After that, operate priming pump and confirm that fuel comes out.

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

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GBS000E3

### **Draining Water from Fuel Filter**

- 1. Prepare a tray (A) under the drain plug (1).
- 2. Loosen drain plug (1), and operate priming pump (2) 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 mounting insulator.
- 3. Replace O-ring on drain plug with new one.
- 4. After draining, close drain plug to specified torque.

#### **Drain plug**

**9**: 1.3 N-m (0.13 kg-m, 12 in-lb)



If drain plug is tightened excessively, it may be damaged and fuel will leak.

- 5. Bleed air in fuel piping. Refer to FL-17, "Air Bleeding".
- 6. Start engine and make sure there is no fuel leakage.

### **Draining Water from Sedimentor**

GBS000H8

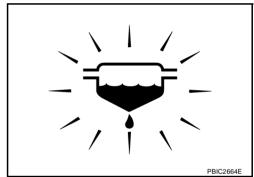
Air bleeder screw

Sedimentor

SMA281C

#### **CAUTION:**

 Drain water from sedimentor when fuel filter warning lamp turns on as follows:



Loosen

Drain

- 1. Prepare a tray under the drain plug.
- 2. Loosen air bleeder screw of the sedimentor.
- 3. Loosen drain cock and drain water.

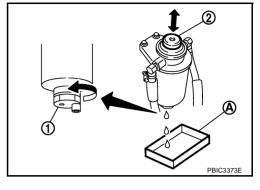
#### **CAUTION:**

- Loosening drain cock four to five turns causes water to start draining. Do not remove drain cock by loosening it excessively.
- 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 mounting insulator.
- 4. 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.

- 5. Bleed air in fuel piping. Refer to FL-17, "Air Bleeding".
- 6. Start engine and make sure there is no fuel leakage.

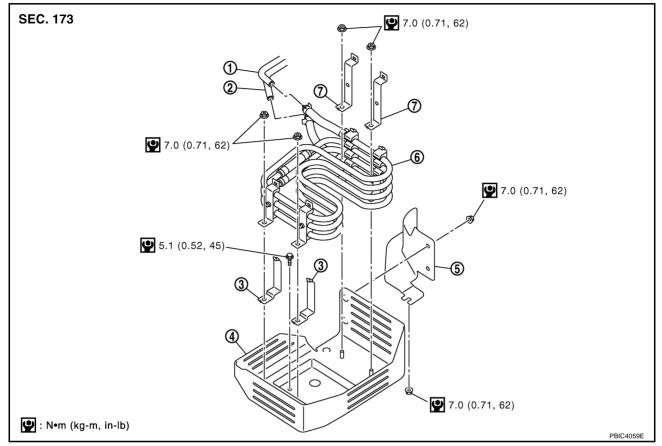


[YD]

FUEL COOLER PFP:17511

### **Components (4WD Models Only)**

GBS000E4



- 1. Fuel tube (return) (to fuel tank)
- 4. Protector (fuel cooler)
- 2. Fuel tube (return) (to engine)
- 5. Protector (fuel tube)
- Bracket
- 6. Fuel cooler assembly

# Removal and Installation (4WD Models Only) REMOVAL

GBS000E5

#### **WARNING:**

Be sure to read "General Precautions" when working on fuel system. Refer to <u>FL-14, "General Precautions"</u>.

- Remove protector (fuel tube).
- 2. Remove protector (fuel cooler) mounting bolts (3 pieces) then disconnect fuel tubes from fuel cooler assembly.

#### **CAUTION:**

- Plug fuel tubes and fuel cooler assembly to prevent fuel from draining.
- Do not splash fuel during removal. If fuel is splashed, immediately wipe it off.
- 3. Remove fuel cooler assembly from protector (fuel cooler)

#### **CAUTION:**

- Do not bend fuel tubes during removal.
- Avoid impacts such as falling when handling components.

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#### **INSTALLATION**

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

• Insert hose to the length below when there is no spool on the fuel tube and surely clamp fuel hoses.

Fuel hose : 25 mm (0.98 in)

• Be sure hose clamp is not positioned on swelled area of fuel tube.

#### **INSPECTION AFTER INSTALLATION**

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

• Start engine and rev it up and make sure there is no fuel leakage at connections.

[YD]

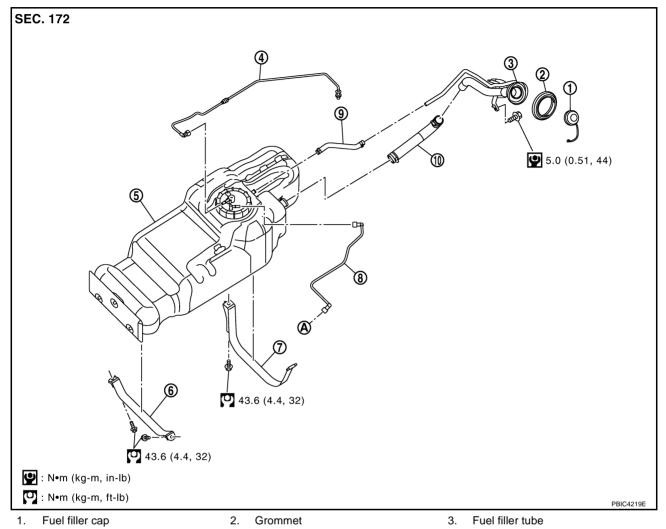
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FUEL TANK PFP:17202

Components



- 4. EVAP tube
- 7. Fuel tank band
- 10. Vent hose
- A. To fuel filter

- 5. Fuel tank
- 8. Fuel feed tube
- 11. Fuel filler hose
  - To fuel cooler (under floor) (4WD
- B. models)
  - To fuel return tube (2WD models)
- 6. Fuel tank band
  - . Fuel return tube

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# Removal and Installation REMOVAL

#### **WARNING:**

Be sure to read "General Precautions" when working on fuel system. Refer to <u>FL-14, "General Precautions"</u>.

- 1. Open fuel filler lid.
- 2. Open the fuel filler cap and release the pressure inside fuel tank.

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

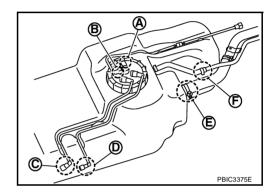
#### NOTE:

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

- As a guide, fuel level becomes the position as shown in the figure or below when approximately 20 ℓ (4-3/8 lmp gal) of fuel are drained from fuel tank.
- Refer to the following for draining fuel.
- a. Insert fuel tube of less than 15 mm (0.59 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.
- 4. Disconnect the battery cable from the negative terminal.
- 5. Disconnect fuel feed tube (C) and fuel return tube (D).

A : Harness connector

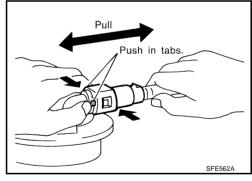
B: EVAP tube
E: Fuel filler hose
E: Vent hose



Disconnect quick connector of fuel feed tube and fuel return tube as follows.

#### NOTE:

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

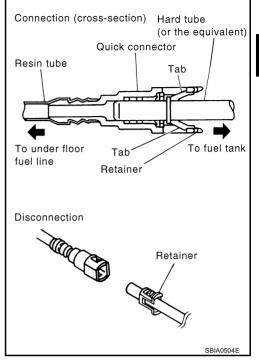


#### **CAUTION:**

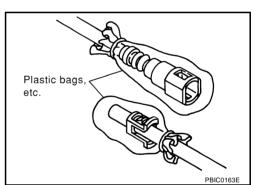
- Quick connector can be disconnected when the tabs are completely depressed. Do not twist it more than necessary.
- Do not use any tools to disconnect quick connector.
- Keep resin tube away from heat. Be especially careful when welding near the resin tube.
- Prevent acid liquid such as battery electrolyte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

Retainer color : Green (Fuel feed tube)

: Gray (Fuel return tube)



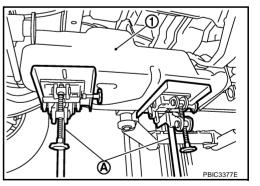
To keep clean the connecting portion and to avoid damage and foreign materials, cover them completely with plastic bags or something similar.



6. Using a transmission jack (A), support the bottom of fuel tank (1).

#### **CAUTION:**

Support the position that fuel tank bands do not engage.



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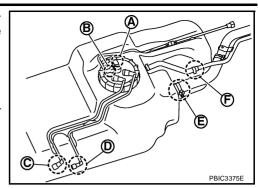
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7. Remove fuel tank bands, and lower the transmission jack carefully until harness connector (A), EVAP tube (B), fuel filler hose (E) and vent hose (F) can be disconnected.

C : Fuel feed tubeD : Fuel return tube

8. Disconnect harness connector (A), EVAP tube (B), fuel filler hose (E) and vent hose (F).



9. Supporting with hands, lower transmission jack carefully, and remove fuel tank.

#### **CAUTION:**

- Pay attention not to fall fuel tank.
- Make sure that all connection points have been disconnected.
- Confirm there is no interference with vehicle.
- 10. Remove fuel filler tubes, fuel filler hoses and vent hoses if necessary.

#### **INSTALLATION**

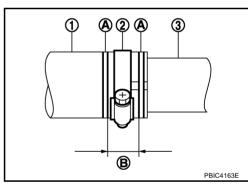
Note the following, and install in the reverse order of removal.

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

Fuel filler hose : 35 mm (1.38 in)
The other hose : 25 mm (0.98 in)

- Be sure hose clamp is not positioned on swelled area of fuel tube.
- Position fuel filler hose clamp (2) between paint marking (B).

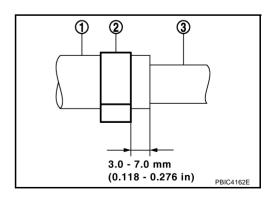
1 : Fuel filler hose3 : Fuel filler tubeA : paint marking



Position vent hose clamp (2) as shown in the figure.

1 : Vent hose

3 : Vent tube (part of fuel filler tube)



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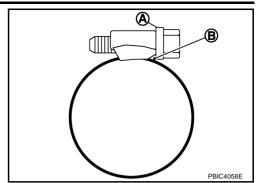
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 Tighten fuel hose clamp so that the flange (A) of bolt head is on the paint mark (B) on the band.



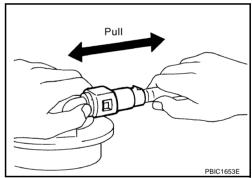
Fit mounting band pin to the vehicle side securely.

• 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.

- Connect quick connector as follows.
- 1. Check connection for damage and foreign materials.
- 2. Align the connector with the tube, then insert connector straight into 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 tabs are connected to connector.
  - Pull the tube and connector to make sure they are securely connected.



#### INSPECTION AFTER INSTALLATION

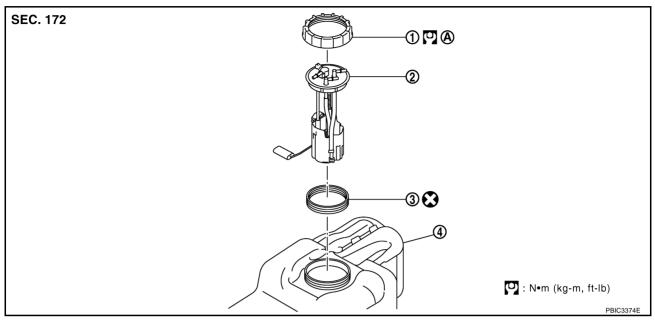
Make sure there is no fuel leakage at connections in the following step.

Start engine and rev it up and make sure there is no fuel leakage at connections.

#### **FUEL LEVEL SENSOR UNIT**

PFP:17042

### Components



1. Lock ring

- 2. Fuel level sensor unit
- 3. Seal packing

- 4. Fuel tank
- A. Refer to FL-27.
- Refer to GI-10, "Components" for symbol marks in the figure.

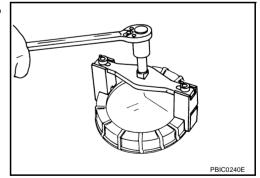
# Removal and Installation

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#### **WARNING:**

Be sure to read "General Precautions" when working on fuel system. Refer to <u>FL-14</u>, "<u>General Precautions</u>".

- 1. Remove fuel tank from the vehicle. Refer to FL-21, "FUEL TANK".
- 2. Using a fuel tank lock ring wrench (commercial service tool), remove the lock ring.



3. Remove fuel level sensor unit.

#### **CAUTION:**

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

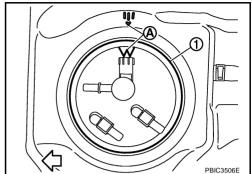
#### **INSPECTION AFTER REMOVAL**

Make sure fuel level sensor unit is free from foreign materials. If any are found, remove them.

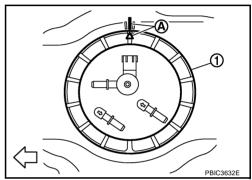
#### **INSTALLATION**

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

• Install fuel level sensor unit (1) with aligning mating marks (A) on fuel tank and fuel level sensor unit as shown in the figure.



• Install lock ring (1), and tighten lock ring by hand. Then tighten lock ring with a fuel tank lock ring wrench (commercial service tool), aligning mating marks (A) on fuel tank and lock ring as shown in the figure.



#### INSPECTION AFTER INSTALLATION

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

Start engine and rev it up and make sure there is no fuel leakage at connections.

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

[YD]

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

# Standard and Limit

PFP:00030

Fuel tank capacity	Approx. 80 ℓ (17-5/8 Imp gal)
Fuel recommendation	Refer to GI-6.