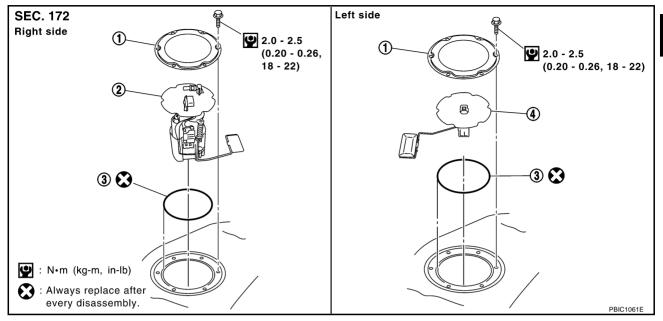
## FUEL LEVEL SENSOR UNIT, FUEL FILTER AND FUEL PUMP ASSEMBLY PFP:17042

## Removal and Installation

ABS002BG



- Retainer
- :4
- 2. Main fuel level sensor unit, fuel filter and fuel pump assembly
  - 3. O ring

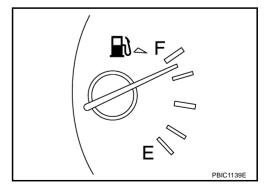
Sub fuel level sensor unit

#### **REMOVAL**

#### **WARNING:**

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

- 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 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.
- 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 20 liter (5-1/4 US gal, 4-3/8 Imp gal) of fuel are drained from fuel tank.



- 2. Release the fuel pressure from the fuel lines. Refer to <a href="EC-53">EC-53</a>, "FUEL PRESSURE RELEASE"</a>.
- Open fuel filler lid.
- 4. Open the filler cap and release the pressure inside the fuel tank.
- 5. Remove woofer rear speaker or tray of rear floor box. Refer to <u>AV-5, "AUDIO"</u> or <u>EI-34, "LUGGAGE</u> FLOOR TRIM".

Revision; 2004 April **FL-5** 2003 350Z

FL

Α

С

F

F

G

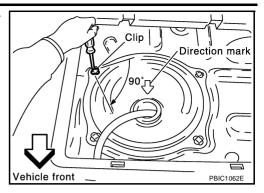
Н

. .

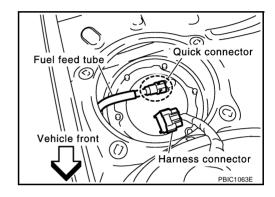
L

M

6. Remove inspection hole cover for main and sub fuel level sensor unit by turning clips clockwise by 90°.

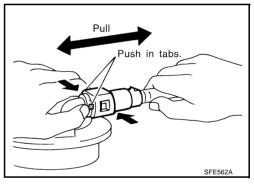


7. Disconnect the harness connector and fuel feed tube.



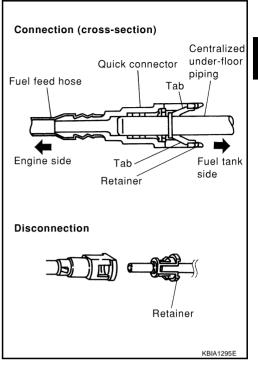
Disconnect the quick connector as follows:

- 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:**

- 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.
- Only when the tube is replaced, remove the remaining retainer on the tube or fuel pump assembly.
- When the tube or fuel level sensor unit is replaced, also replace the retainer with a new one (White colored retainer).



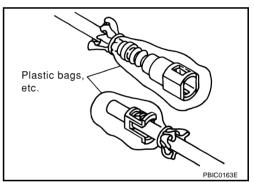
Α

 $\mathsf{FL}$ 

F

Н

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



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:

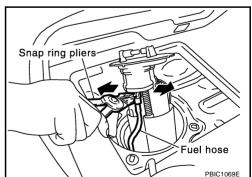
 Raise the sender unit, and using a snap ring pliers, remove the fuel hose connector.

#### CAUTION:

Be careful not to damage fuel hose connector by expanding them excessively.

Removal of sub fuel level sensor unit:

Raise and release the sub fuel level sensor unit to remove.



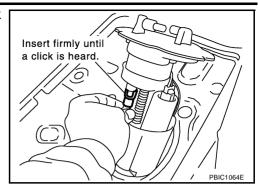
### **INSPECTION AFTER REMOVAL**

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

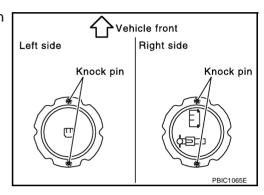
### INSTALLATION

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

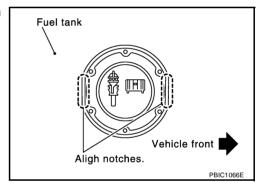
 When installing fuel hose connector insert them fully until a click sound of full stopper engagement is heard.



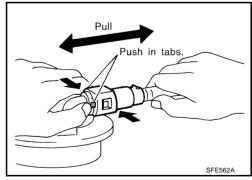
 Face fuel gauge as shown in figure, and install it with knock pin on back aligned with pinhole on fuel tank.



 Install retainer so that its notch becomes parallel with notch on fuel tank.



- Tighten retainer mounting bolts evenly.
- Connect the 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 is heard.
- 3. After connecting, make sure that the connection is secure by following method.
- 4. Pull the tube and the connector to make sure they are securely connected.
- Visually confirm that the two retainer tabs are connected to the connector.

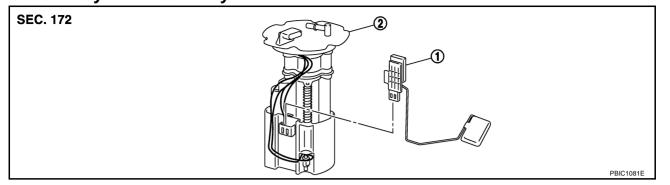


### **INSPECTION AFTER INSTALLATION**

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

# **Disassembly and Assembly**

Bennabu



- 1. Fuel level sensor unit
- 2. Main fuel filter and fuel pump assembly

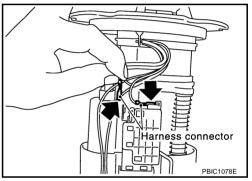
### NOTE:

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

### **DISASSEMBLY**

Remove fuel level sensor unit with the following procedure.

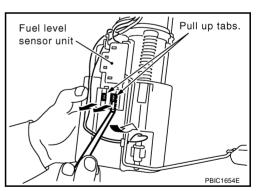
- 1. Disconnect harness connector.
  - Hold connector by fingers and pull it out, because there is no stopper release tab.



2. Using a suitable tool, pull up tabs points shown in the figure (2 points) to release the tabs, and disconnect them.

### **CAUTION:**

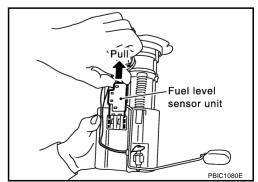
• Be careful not to damage it.



3. After fixing tabs are disengaged, slide fuel level sensor unit out in direction shown by the arrow.

#### **CAUTION:**

• Do not disassemble fuel filter and fuel pump assembly.



FL

D

F

G

Н

ı

ı

M

### **ASSEMBLY**

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

- 1. Check for damage at the fuel filter and fuel pump assembly side fuel gauge installation position.
- 2. Slide fuel level sensor unit until it aligns to installation groove, then insert it until stop.
  - After inserting, apply force in reverse direction (removal direction) to ensure it cannot be pulled out.
- 3. Connect harness connector.
  - Securely insert harness connector until it stops.