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## PRECAUTION

### PRECAUTIONS

#### General Precautions

INFOID:000000001160843

**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 CO<sub>2</sub> 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-32, "FUEL : Unleaded Premium Gasoline"](#).
- 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 [ECM-349, "Inspection"](#) (MR20DE) or [ECQ-356, "Inspection"](#) (QR25DE).
  - Disconnect the battery cable from the negative terminal.
- Always replace O-ring and clamps with new ones.
- Never bend or twist tubes when they are being installed.
- Never tighten hose clamps excessively to avoid damaging hoses.
- After installing tubes, check that 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 [ECM-351, "Inspection"](#) (MR20DE) or [ECQ-357, "Inspection"](#) (QR25DE).

PREPARATION

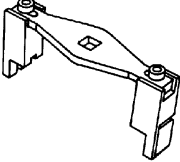
PREPARATION

Commercial Service Tools

INFOID:000000001160844

A

FL

Tool name	Description
<p data-bbox="175 415 347 443">Lock ring wrench</p>  <p data-bbox="833 632 899 646">ZZA0122D</p>	<p data-bbox="987 415 1317 443">Removing and Installing lock ring</p>

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## ON-VEHICLE MAINTENANCE

### FUEL SYSTEM

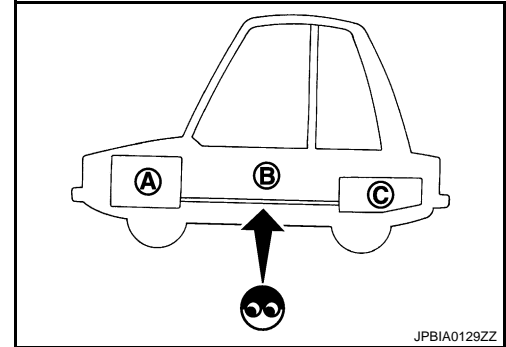
#### Inspection

INFOID:000000001160845

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

If necessary, repair or replace damaged parts.

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



JPBIA0129ZZ

#### Quick Connector

INFOID:000000001160846

#### **CAUTION:**

- After connecting fuel tube quick connectors, check that quick connectors are secure.
- Ensure that connector and resin tube do not contact any adjacent parts.

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

< ON-VEHICLE REPAIR >

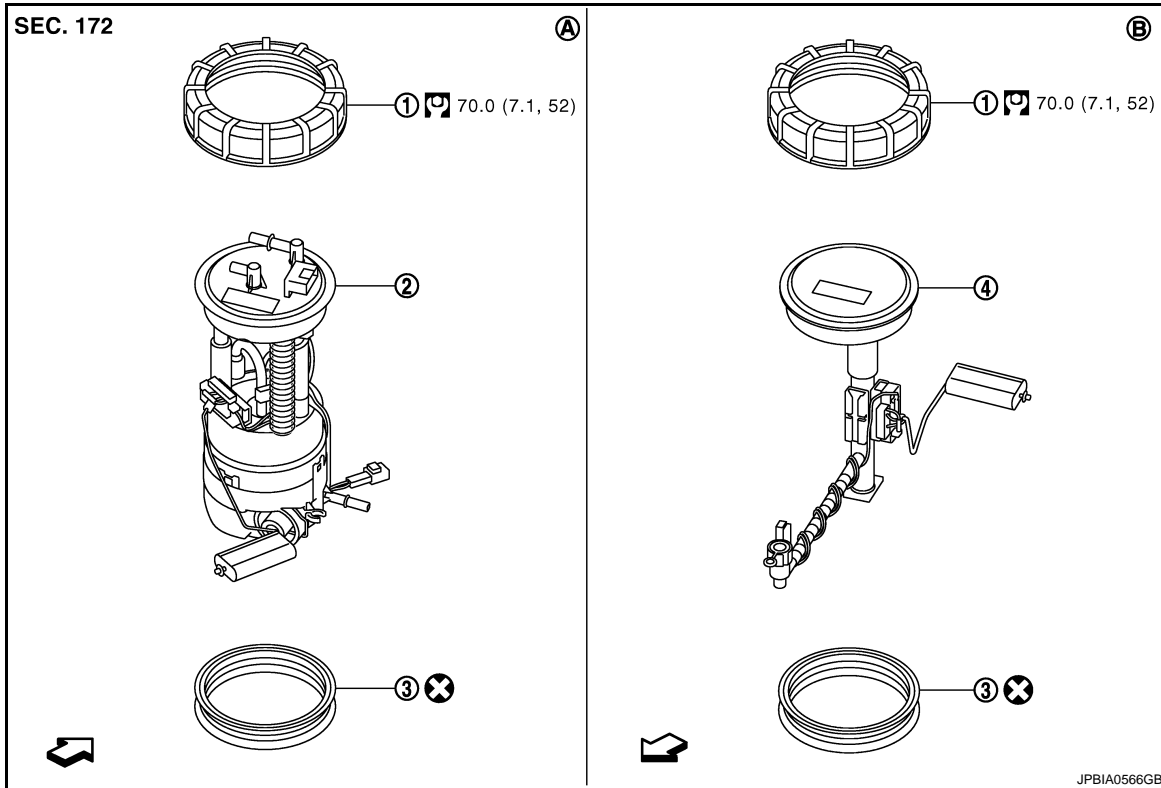
[MR20DE, QR25DE]

## ON-VEHICLE REPAIR

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

Exploded View

INFOID:000000001160851



- 1. Lock ring
  - 2. Fuel level sensor unit, fuel filter and fuel pump assembly
  - 3. O-ring
  - 4. Sub fuel level sensor assembly
- A. Right side      B. Left side

← : Vehicle front

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

#### CAUTION:

Never remove or disassemble parts unless instructed as shown in the figure.

#### Removal and Installation

INFOID:000000001160852

#### REMOVAL

#### WARNING:

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

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

< ON-VEHICLE REPAIR >

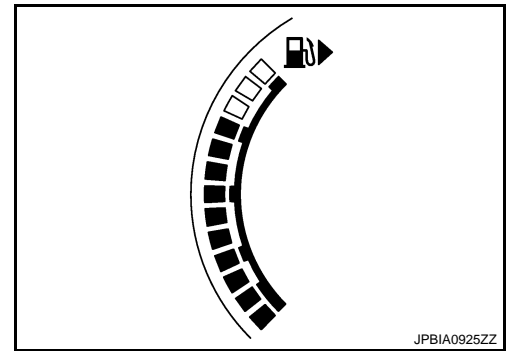
[MR20DE, QR25DE]

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:**

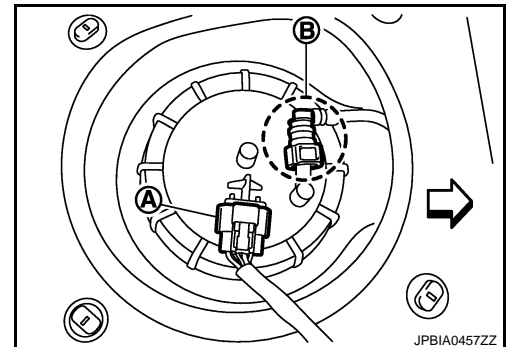
Because fuel spills when removing fuel level sensor unit, fuel filter and fuel pump assembly for the top of the fuel is above the installation surface of fuel level sensor unit.

- As a guide, fuel level becomes the position as shown in the figure or below when approximately 15 ℓ (3-1/4 Imp gal) of fuel are drained from fuel tank.
- In case fuel pump does not operate, perform the following procedure.



- a. Insert hose of less than 20 mm (0.79 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. 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 [ECM-349, "Inspection"](#) (MR20DE) or [ECQ-356, "Inspection"](#) (QR 25DE).
  3. Open fuel filler lid.
  4. Open fuel filler cap and release the pressure inside the fuel tank.
  5. Remove rear seat cushion. Refer to [SE-45, "Exploded View"](#).
  6. Remove inspection hole cover.
    - Using a screwdriver, remove it by turning clips clockwise by 90 degrees.
  7. Disconnect harness connector (A) and quick connector (B).

← : Vehicle front



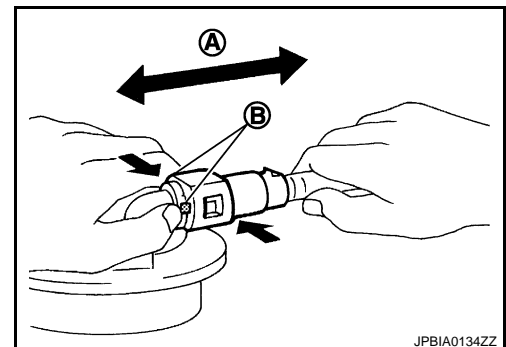
Disconnect quick connector as follows:

- Hold the sides of connector, press tabs and pull out fuel feed tube.

- A : Pull
- B : Push in tabs

- If quick connector sticks to tube of main fuel level sensor unit, push and pull quick connectors 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 >

[MR20DE, QR25DE]

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

B : Connection (Cross-section)

D : To under floor fuel line

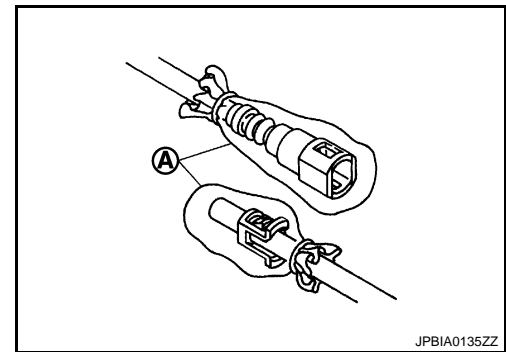
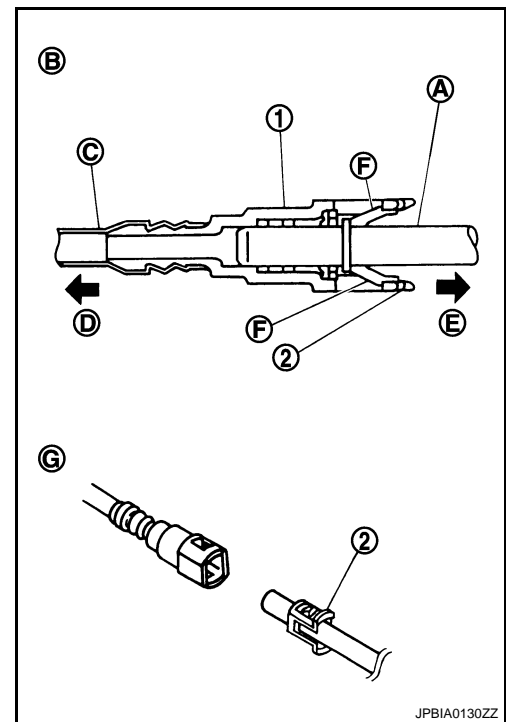
E : To fuel tank

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 : Brown

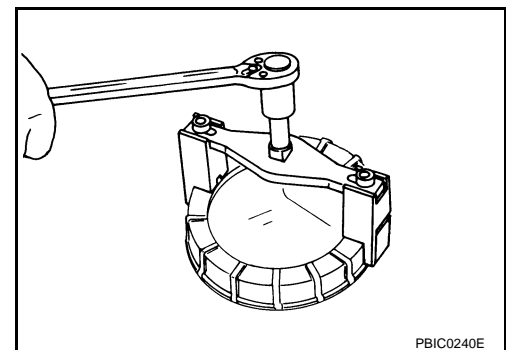
- To keep the connecting portion clean and to avoid damage and foreign materials, cover them completely with plastic bags (A) or something similar.



- Using lock ring wrench (commercial service tool), remove lock ring.

**NOTE:**

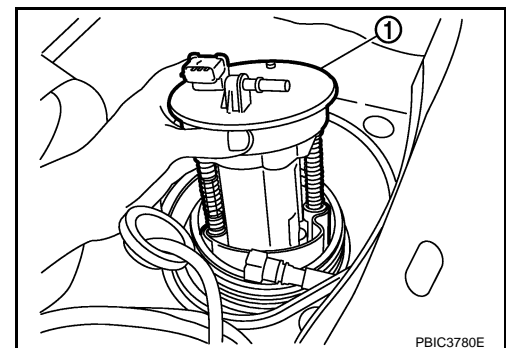
For reference when installing, put a matching mark on lock ring, fuel pump assembly and fuel tank.



- Raise fuel level sensor unit, fuel filter and fuel pump assembly (1), and disconnect fuel tube and harness connector.

**CAUTION:**

- 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 by dropping when handling components.



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

< ON-VEHICLE REPAIR >

[MR20DE, QR25DE]

10. Raise sub fuel level sensor assembly.

## CAUTION:

- Never disassemble a fuel tube from sub fuel sensor assembly.
- 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 by dropping when handling components.

## INSTALLATION

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

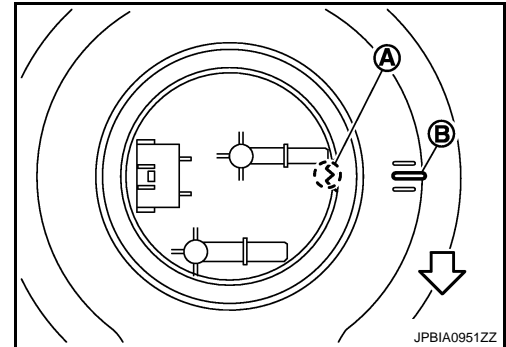
Fuel Level Sensor Unit, Fuel Filter and Fuel Pump Assembly and Sub Fuel Level Sensor Assembly

1. Install O-ring to fuel tank without any twist.
2. Install fuel level sensor unit with its matching mark (A) aligned with fuel tank matching mark (B) as shown in the figure.

⇐ : Vehicle front

## NOTE:

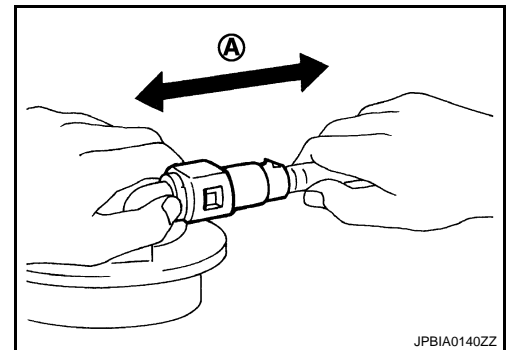
- Figure shows fuel level sensor unit, fuel filter and fuel pump assembly side of fuel tank.
- For sub fuel level sensor assembly matching mark is located on the fuel tank of the vehicle front side.



## Quick Connector

Connect quick connector of fuel feed tube in the following procedures.

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 secured with following procedures.
  - Visually confirm that the two tabs are connected to the connector.
  - Pull (A) the tube and the connector to check that they are securely connected.



## Inspection Hole Cover

- Before installing inspection hole cover, check that the connecting part has no fuel leakage. Refer to [FL-8, "Inspection"](#).

1. Install inspection hole covers with the front mark (arrow) facing front of vehicle.
2. Lock clips by turning counterclockwise.

## Inspection

INFOID:000000001160854

## 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. Then let it idle and check that there is no fuel leakage at the fuel system connections.



# FUEL TANK

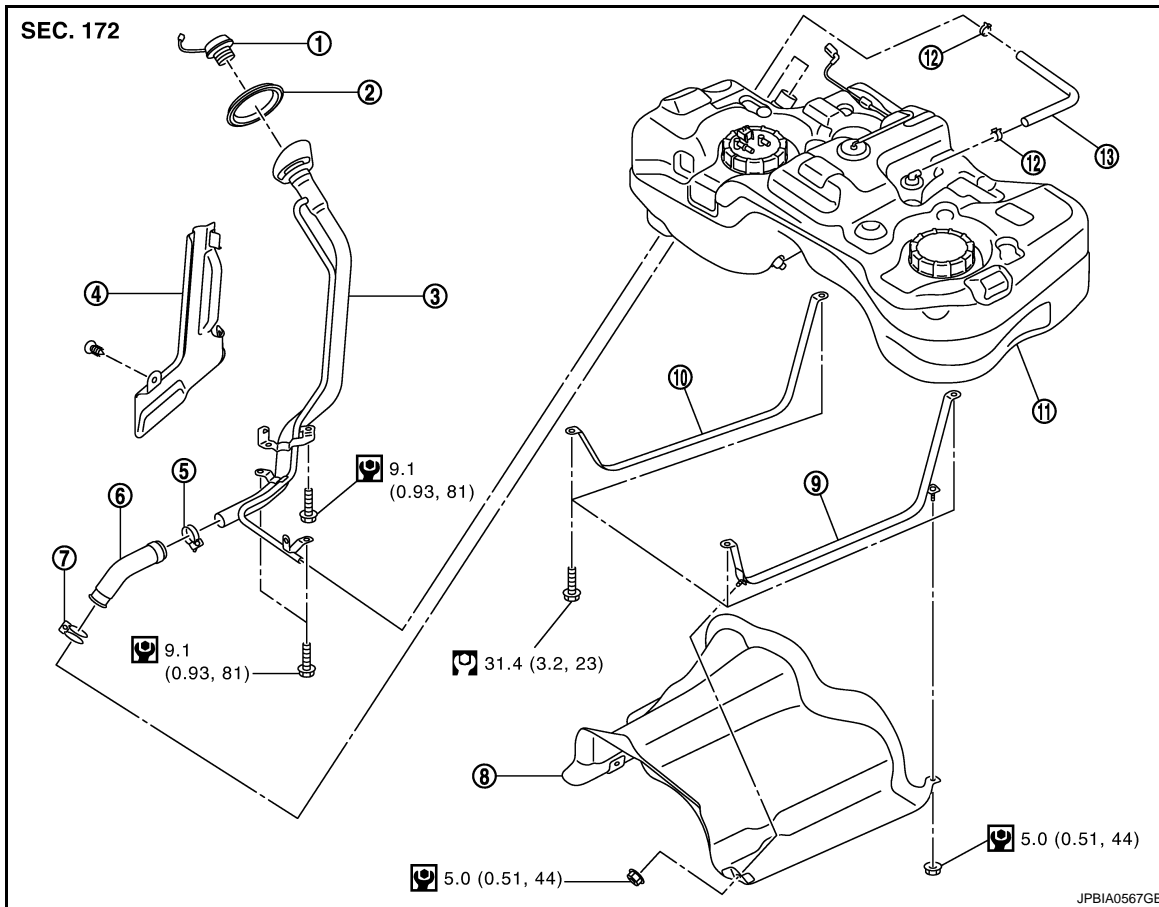
< ON-VEHICLE REPAIR >

[MR20DE, QR25DE]

## FUEL TANK

### Exploded View

INFOID:000000001160858



- |                         |               |                        |
|-------------------------|---------------|------------------------|
| 1. Fuel filler cap      | 2. Grommet    | 3. Fuel filler tube    |
| 4. Cover                | 5. Clamp      | 6. Fuel filler hose    |
| 7. Clamp                | 8. Protector  | 9. Fuel tank band (LH) |
| 10. Fuel tank band (RH) | 11. Fuel tank | 12. Clamp              |
| 13. Vent hose           |               |                        |

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

## Removal and Installation

INFOID:000000001160859

### REMOVAL

#### **WARNING:**

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

1. Perform the steps 2 to 7 of "REMOVAL" in "FUEL LEVEL SENSOR UNIT, FUEL FILTER AND FUEL PUMP ASSEMBLY". Refer to [FL-5, "Removal and Installation"](#).
2. Drain fuel from fuel tank if necessary. Refer to [FL-5, "Removal and Installation"](#).

#### **CAUTION:**

- Because fuel tank forwardly inclines and becomes unstable when installing/removing, fuel should be drained if found the remaining quantity.
  - Situate vehicle on a flat and solid surface.
3. Remove main muffler. Refer to [EX-5, "Exploded View"](#) (MR20DE) or [EX-10, "Exploded View"](#) (QR25DE).
  4. Remove propeller shaft. Refer to [DLN-121, "Exploded View"](#). (4WD models)
  5. Remove protector from fuel tank.

# FUEL TANK

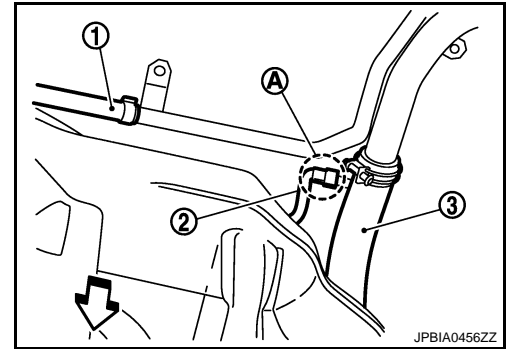
< ON-VEHICLE REPAIR >

[MR20DE, QR25DE]

6. Remove vent hose (1) at rear side of fuel tank.

⇐: Vehicle front

7. Disconnect EVAP tube (2) at rear side of fuel tank.  
• Instruction for quick connector (A) of EVAP tube. Refer to [FL-5, "Removal and Installation"](#).
8. Remove fuel filler hose (3) at fuel filler tube side.



9. Remove suspension bar. Refer to [RSU-19, "Exploded View"](#). (4WD models)
10. Remove parking brake cable mounting bolts and separate parking brake cable from suspension arm. Refer to [PB-5, "Exploded View"](#). (4WD models)
11. Disconnect 4WD solenoid harness connector and harness clip. (4WD models)
12. Loosen final drive mounting nut (A) at rear suspension member (1). [RSU-19, "Exploded View"](#). (4WD models)

**CAUTION:**

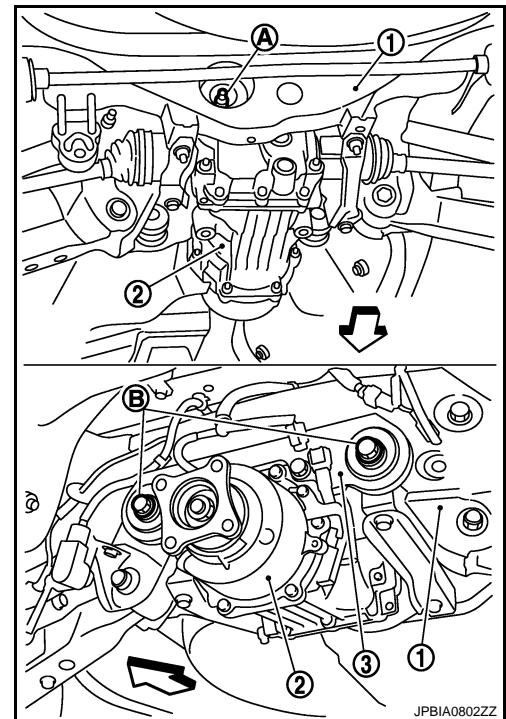
**Never remove final drive mounting nut.**

⇐ : Vehicle front

13. Remove final drive mounting bolts (B) from final drive mounting bracket (3) to tilt final drive assembly (2). Refer to DLN-XX, "Exploded View". (4WD models)

**NOTE:**

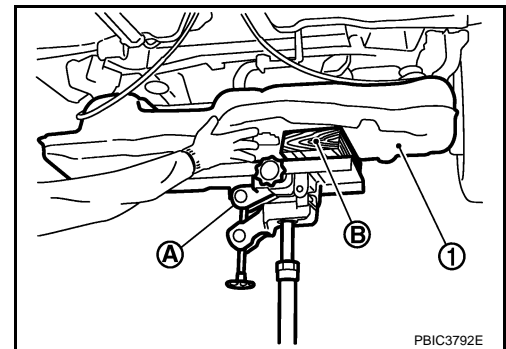
Final drive assembly does not have to be removed from the vehicle.



14. Support center of fuel tank (1) with transmission jack (A).

**CAUTION:**

**Securely support the fuel tank with a piece of wood (B).**



15. Remove fuel tank band (RH and LH).
16. Lower transmission jack carefully to remove fuel tank while holding it by hand.

**CAUTION:**

**Fuel tank may be in an unstable condition because of the shape of fuel tank bottom. Never rely on jack too much. Be sure to hold tank securely.**

# FUEL TANK

< ON-VEHICLE REPAIR >

[MR20DE, QR25DE]

## INSTALLATION

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

Fuel Filler Hose

- Insert fuel filler hose to the length below.

**: 35 mm (1.38 in)**

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

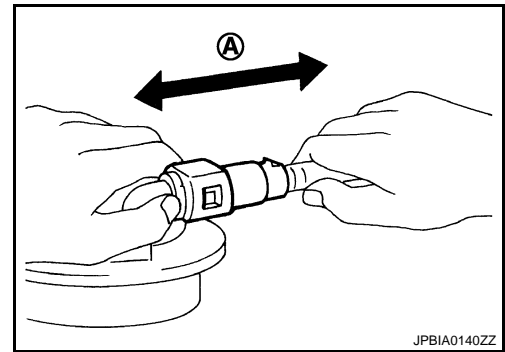
**Fuel filler tube side : 7 - 11 mm (0.28 - 0.43 in)**

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

EVAP Hose

1. Check connections for damage or foreign material.
2. Align the matching side connection part with the center of shaft, and insert connector straight until it clicks.
3. After connecting, pull out quick connector and centralized under-floor piping by hand. Make sure connections are secure.

A : Pull



INFOID:000000001160860

## Inspection

### 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 that there is no fuel leakage at the fuel system tube and hose connections.

## SERVICE DATA AND SPECIFICATIONS (SDS)

< SERVICE DATA AND SPECIFICATIONS (SDS)

[MR20DE, QR25DE]

# SERVICE DATA AND SPECIFICATIONS (SDS)

## SERVICE DATA AND SPECIFICATIONS (SDS)

### Fuel Tank

INFOID:000000001160861

#### Standard and Limit

Fuel tank capacity	Approx. 65 ℓ (14-1/4 Imp gal)
Fuel recommendation	Refer to <a href="#">GI-32</a>

PRECAUTION

PRECAUTIONS

General Precautions

INFOID:000000001315189

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**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 CO<sub>2</sub> fire extinguisher.
- Never smoke while servicing fuel system. Keep open flames and sparks away from the work area.

**CAUTION:**

- Use diesel fuel required by the regulations for cetane number. Refer to [GI-32, "FUEL : Diesel Engine 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.
  - 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 that there is no fuel leakage at connections in the following steps.
    - 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.
  - Drain water from fuel filter, when the fuel filter warning lamp turns ON (with fuel filter warning). Refer to [FL-17, "Water Draining"](#).

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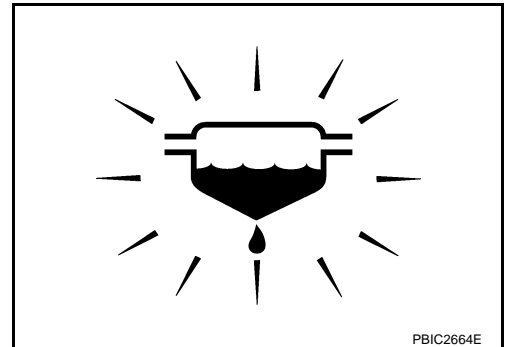
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# PREPARATION

< PREPARATION >

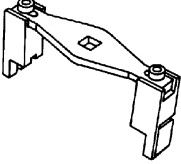
[M9R]

## PREPARATION

### PREPARATION

#### Commercial Service Tools

INFOID:000000001160862

Tool name	Description
<p data-bbox="159 411 334 443">Lock ring wrench</p>  <p data-bbox="850 632 919 646">ZZA0122D</p>	<p data-bbox="1040 411 1377 443">Removing and Installing lock ring</p>

## ON-VEHICLE MAINTENANCE

### FUEL SYSTEM

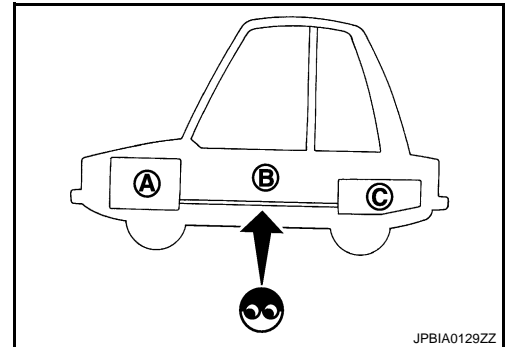
#### Inspection

INFOID:000000001315190

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

If necessary, repair or replace damaged parts.

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



#### Quick Connector

INFOID:000000001315191

#### **CAUTION:**

- After connecting fuel tube quick connectors, check that quick connectors are secure.
- Ensure that connector and resin tube never contact any adjacent parts.

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# FUEL FILTER

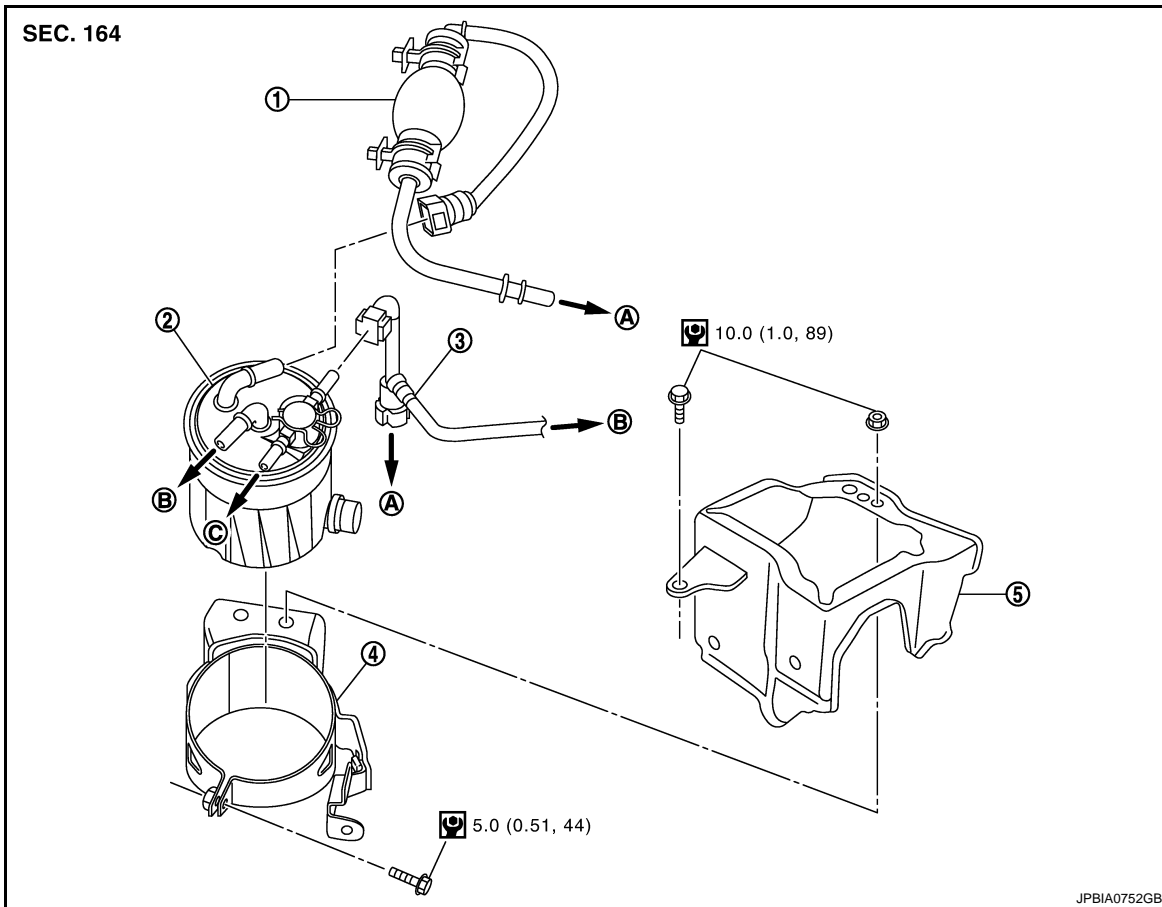
< ON-VEHICLE MAINTENANCE >

[M9R]

## FUEL FILTER

### Exploded View

INFOID:000000001160864



- |                                      |                          |                  |
|--------------------------------------|--------------------------|------------------|
| 1. Priming bulb                      | 2. Fuel filter           | 3. Fuel hose     |
| 4. Fuel filter bracket               | 5. Fuel filter protector |                  |
| A. To centralized under-floor piping | B. To fuel pump          | C. To spill tube |

## Removal and Installation

INFOID:000000001160865

### REMOVAL

1. Disconnect quick connectors, and remove fuel hoses.  
**CAUTION:**  
**Never splash fuel during removal. If fuel is splashed, immediately wipe it off.**
2. Remove fuel protector.
3. Remove fuel filter.

### INSTALLATION

1. Note the following, and install in the reverse order of removal.
  - After installation, bleed air from fuel line. Refer to [FL-17, "Air Bleeding"](#).  
**CAUTION:**  
**Never bend or twist the fuel tube during installation and removal.**



# FUEL FILTER

< ON-VEHICLE MAINTENANCE >

[M9R]

## Water Draining

INFOID:000000001160866

1. Connect drain hose (suitable hose) to the end of drain plug (A).
2. Prepare a tray at the drain plug open end.
3. Loosen drain plug, and operate priming bulb to drain water from fuel filter.

**CAUTION:**

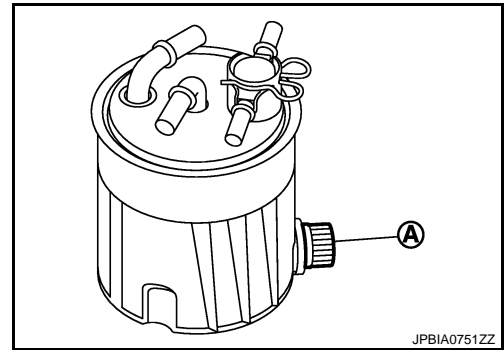
- Water in filter is drained with fuel. Prepare larger capacity pan than fuel filter volume.
- Drained water is mixed with fuel. Prevent fuel from adhering to rubber parts such as engine mounting insulator.

4. After draining, close drain plug by hand.

**CAUTION:**

If drain plug is tightened excessively, it may be damaged and fuel will leak. Never use tools to tighten drain plug.

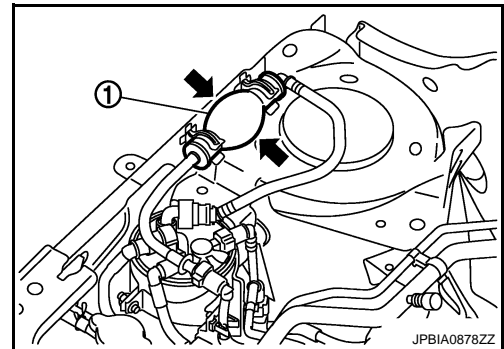
5. Bleed air in fuel piping. Refer to [FL-17. "Air Bleeding"](#).
6. Start engine and check there is no fuel leakage.



## Air Bleeding

INFOID:000000001160867

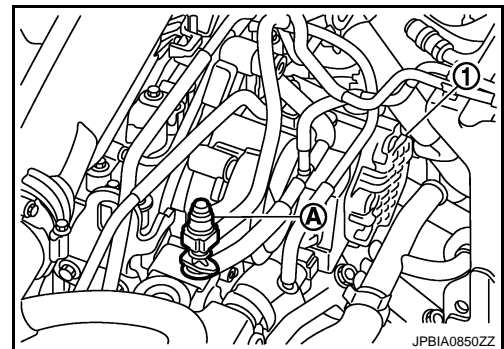
1. Prime the circuit using the priming bulb (1).
2. Perform engine cranking with repeating several times until engine starting.



3. If the engine does not start, disconnect the quick connector (A) on the fuel hose (return).

1 : Fuel pump

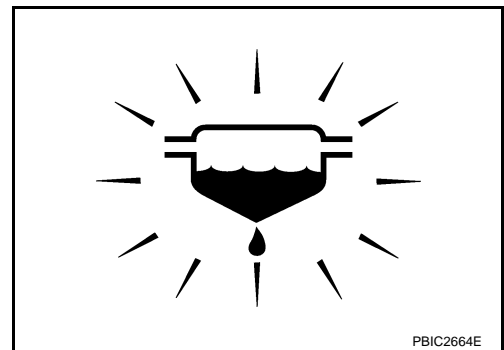
4. When the bleeding is completed, connect the quick connector, and check absence of leakage.



## Fuel Filter Sensor (With Fuel Filter Warning)

INFOID:000000001454787

- Drain water from fuel filter, when the fuel filter warning lamp turns ON. Refer to [FL-17. "Water Draining"](#).



# FUEL FILTER

< ON-VEHICLE MAINTENANCE >

[M9R]

## Inspection

INFOID:000000001160868

### INSPECTION AFTER INSTALLATION

Check that there is no fuel leakage at connections in the following steps.

- Start engine and rev it up and check that there is no fuel leakage at connections.

# FUEL LEVEL SENSOR UNIT

< ON-VEHICLE REPAIR >

[M9R]

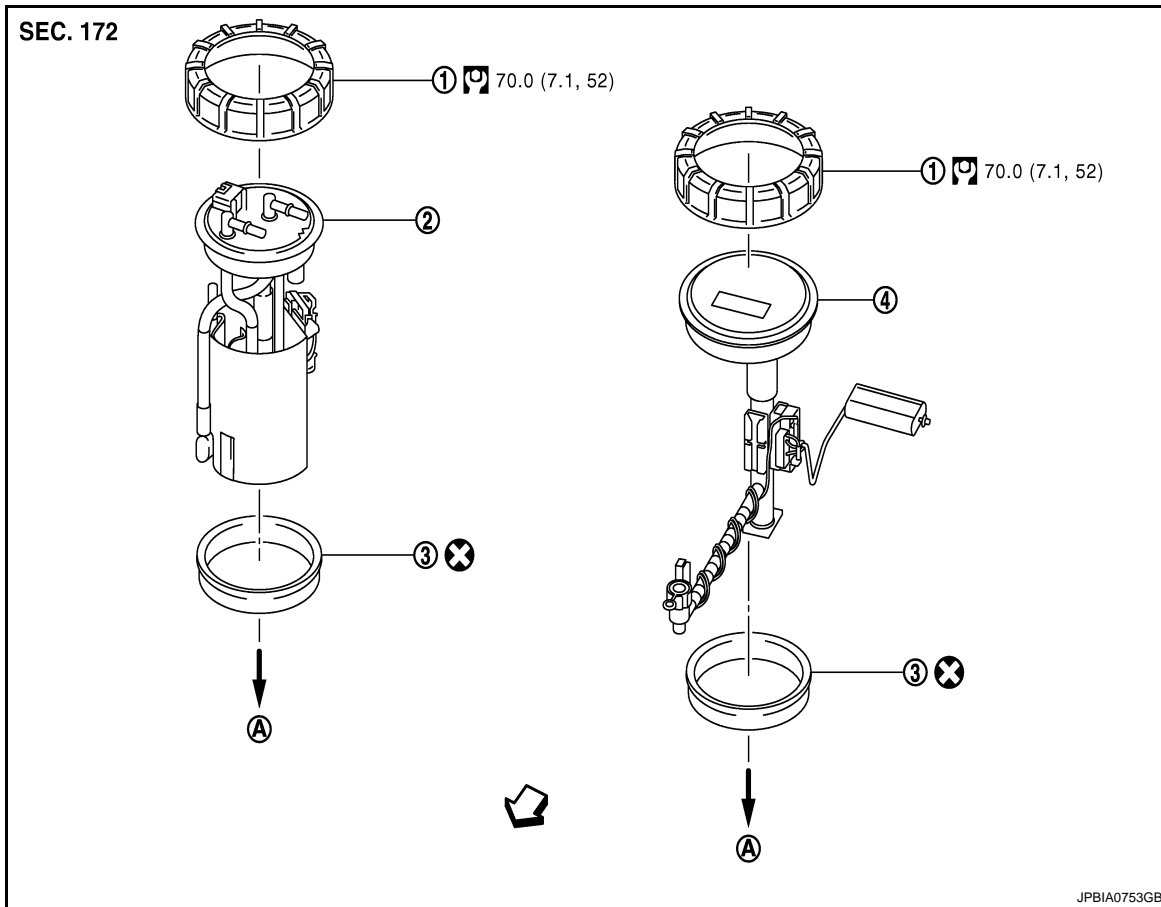
## ON-VEHICLE REPAIR

### FUEL LEVEL SENSOR UNIT

Exploded View

INFOID:000000001315192

A  
FL



C  
D  
E  
F  
G  
H  
I  
J  
K

- 1. Lock ring
- 2. Fuel level sensor unit
- 3. O-ring

- 4. Sub fuel level sensor unit

A. To fuel tank

↔ : Vehicle front

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

### CAUTION:

Never remove or disassemble parts unless instructed as shown in the figure.

## Removal and Installation

INFOID:000000001315193

### REMOVAL

#### WARNING:

Be sure to read "General Precautions" before working on the fuel system. Refer to [FL-13, "General Precautions"](#).

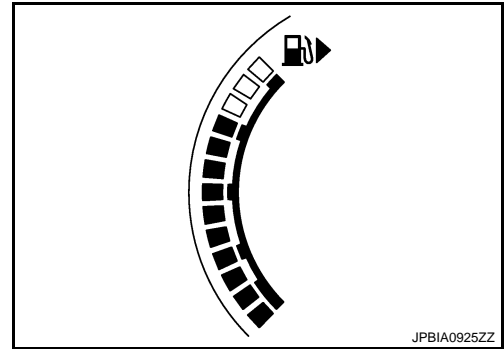
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# FUEL LEVEL SENSOR UNIT

[M9R]

## < ON-VEHICLE REPAIR >

1. 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.
  - Refer to the following for draining fuel.
- a. Insert hose of less than 20 mm (0.79 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. Refer to [FL-24, "Removal and Installation"](#).
- c. Insert hose 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 ℓ (3-1/4 Imp qt) of fuel are drained from full tank.

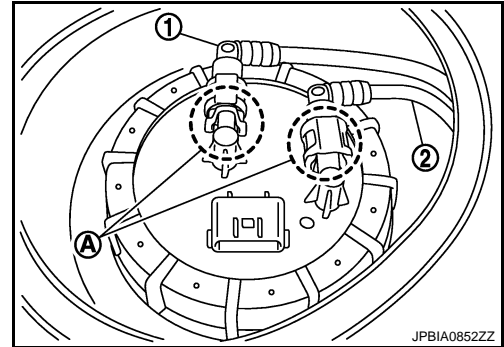


### NOTE:

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

2. Open fuel filler lid.
3. Open fuel filler cap and release the pressure inside the fuel tank.
4. Remove rear seat cushion. Refer to [SE-45, "Exploded View"](#).
5. Remove inspection hole cover.
  - Using a screwdriver, remove it by turning clips clockwise by 90 degrees.
6. Disconnect harness connector and quick connectors (A).

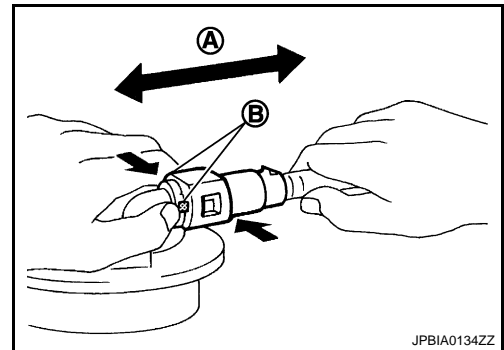
- 1 : Fuel tube (return side)
- 2 : Fuel tube (feed side)



- Disconnect quick connector as follows:
  - Hold the sides of connector, press tabs and pull out fuel feed tube.

- A : Pull
- B : Push in tabs

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



### CAUTION:

# FUEL LEVEL SENSOR UNIT

[M9R]

## < ON-VEHICLE REPAIR >

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

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

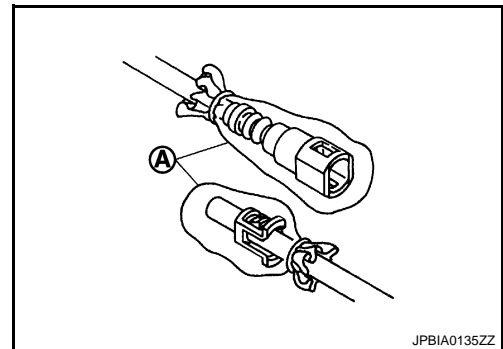
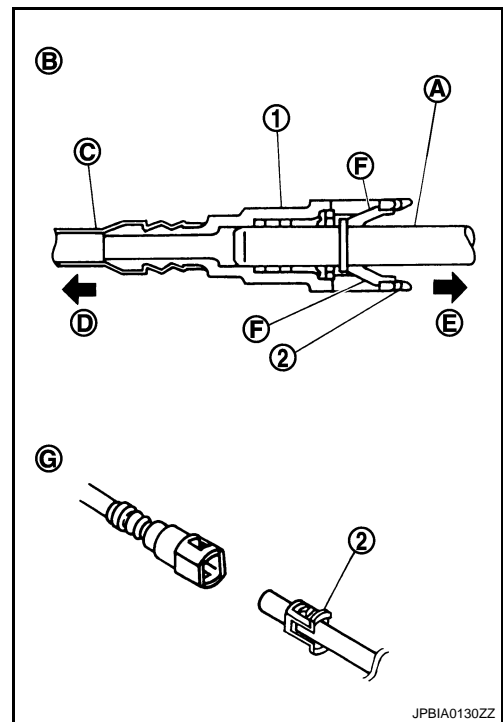
- Never use any tools to disconnect quick connector.
- Keep resin tube (C) away from heat. Be especially careful when welding near the resin tube.
- Prevent acid liquid such as battery electrolyte, etc. from getting on resin tube.
- Never bend or twist resin tube during installation and disconnection.
- 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

Feed tube : Brown

Return tube : Gray

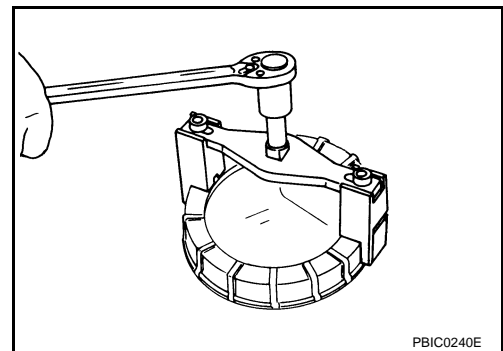
- To keep the connecting portion clean and to avoid damage and foreign materials, cover them completely with plastic bags (A) or something similar.



- Using lock ring wrench (commercial service tool), remove lock ring.

### NOTE:

For reference when installing, put a matching mark on lock ring, fuel level sensor unit and fuel tank.



# FUEL LEVEL SENSOR UNIT

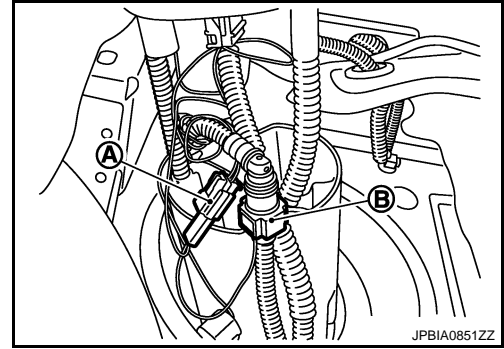
[M9R]

## < ON-VEHICLE REPAIR >

8. Raise fuel level sensor unit, and disconnect fuel tube (B) and harness connector (A).

**CAUTION:**

- 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 by dropping when handling components.



9. Remove sub fuel level sensor unit.

**CAUTION:**

- Never disassemble a fuel tube from sub fuel sensor unit.
- 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 by dropping when handling components.

## INSTALLATION

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

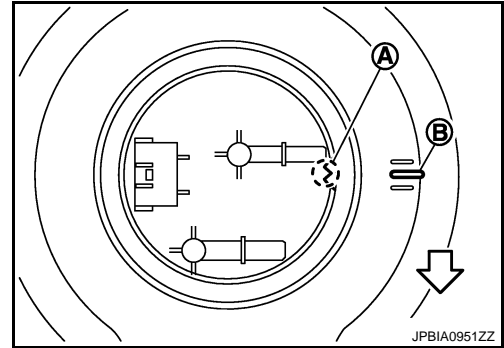
Fuel Level Sensor Unit and Sub Fuel Level Sensor Unit

1. Install O-ring to fuel tank without any twist.
2. Install fuel level sensor unit with its matching mark (A) aligned with fuel tank matching mark (B) as shown in the figure.

↔ : Vehicle front

**NOTE:**

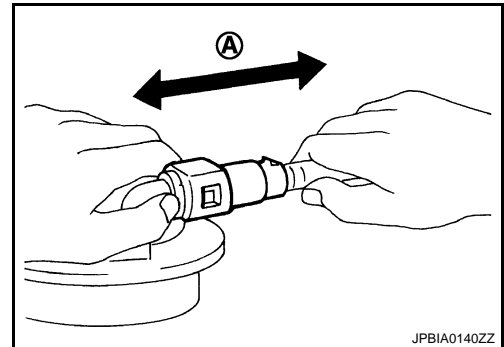
- Figure shows fuel level sensor unit side of fuel tank.
- For sub fuel level sensor assembly matching mark is located on the fuel tank of the vehicle front side.



## Quick Connector

Connect quick connector of fuel tube in the following procedure:

1. Check the connection for damage or any foreign materials.
2. Align the connector with the fuel tube, then insert the connector straight into the fuel tube until a "click" sound is heard.
3. After connecting, check that the connection is secured with following procedures.
  - Visually confirm that the two tabs are connected to the connector.
  - Pull (A) the fuel tube and the connector to check that they are securely connected.



## Inspection Hole Cover

- Before installing inspection hole cover, check that the connecting part has no fuel leakage. Refer to [FL-23](#), "[Inspection](#)".

# FUEL LEVEL SENSOR UNIT

[M9R]

< ON-VEHICLE REPAIR >

1. Install inspection hole covers with the front mark (arrow) facing front of vehicle.
2. Lock clips by turning counterclockwise.

A

## Inspection

INFOID:000000001315194

FL

## INSPECTION AFTER INSTALLATION

Check that there is no fuel leakage at connections in the following steps.

- Start engine and rev it up and check that there is no fuel leakage at connections.

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# FUEL TANK

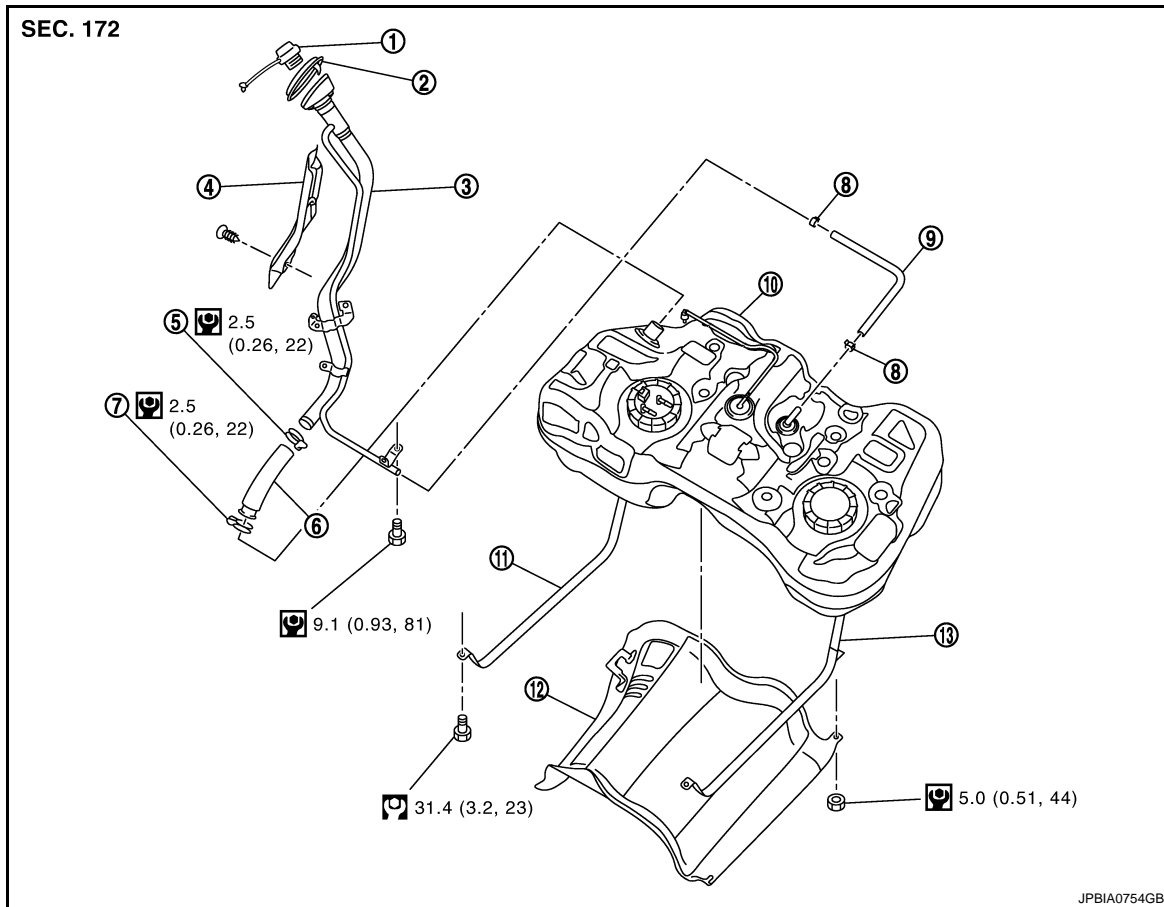
< ON-VEHICLE REPAIR >

[M9R]

## FUEL TANK

### Exploded View

INFOID:000000001315195



- |                         |                         |                     |
|-------------------------|-------------------------|---------------------|
| 1. Fuel filler cap      | 2. Grommet              | 3. Fuel filler tube |
| 4. Cover                | 5. Clamp                | 6. Fuel filler hose |
| 7. Clamp                | 8. Clamp                | 9. Vent hose        |
| 10. Fuel tank           | 11. Fuel tank band (RH) | 12. Protector       |
| 13. Fuel tank band (LH) |                         |                     |

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

## Removal and Installation

INFOID:000000001315196

### REMOVAL

#### **WARNING:**

Be sure to read "General Precautions" when working on the fuel system. Refer to [FL-13, "General Precautions"](#).

1. Perform the steps 2 to 6 of "REMOVAL" in "FUEL LEVEL SENSOR UNIT". Refer to [FL-19, "Removal and Installation"](#).
2. Drain fuel from fuel tank if necessary. Refer to [FL-19, "Removal and Installation"](#).

#### **CAUTION:**

- Because fuel tank forwardly inclines and becomes unstable when installing/removing, fuel should be drained if found the remaining quantity.
- Situate vehicle on a flat and solid surface.

3. Remove main muffler. Refer to [EX-14, "Exploded View"](#).
4. Remove propeller shaft. Refer to [DLN-121, "Exploded View"](#). (4WD models)
5. Remove protector from fuel tank.



# FUEL TANK

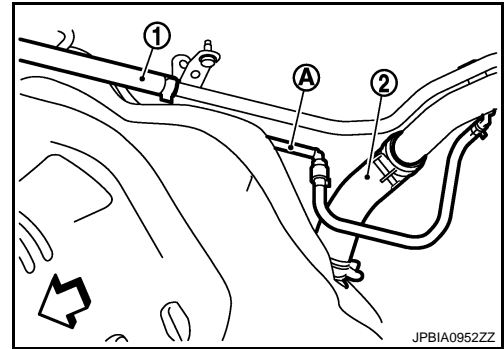
[M9R]

## < ON-VEHICLE REPAIR >

6. Disconnect EVAP tube (A).

↔ : Vehicle front

7. Disconnect vent hose (1).
8. Remove fuel filler hose (2) at fuel filler tube side.



9. Remove suspension bar. Refer to [RSU-19. "Exploded View"](#). (4WD models)
10. Remove parking brake cable mounting bolts and separate parking brake cable from suspension arm. Refer to [PB-5. "Exploded View"](#). (4WD models)
11. Disconnect 4WD solenoid harness connector and harness clip. (4WD models)
12. Loosen final drive mounting nut (A) at rear suspension member (1). Refer to [DLN-140. "Exploded View"](#). (4WD models)

**CAUTION:**

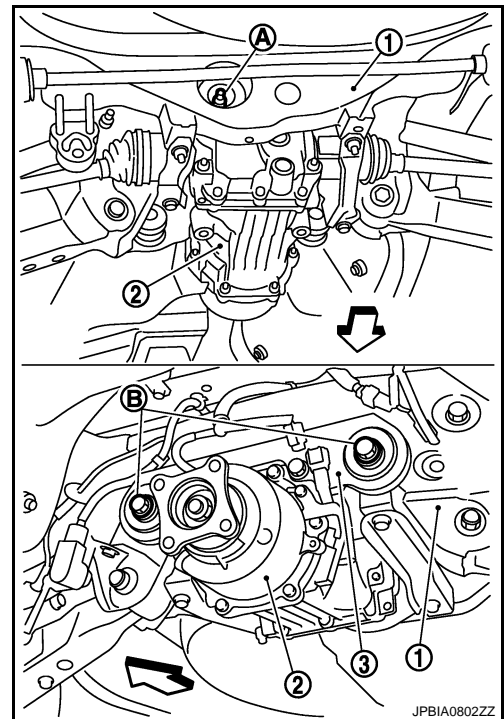
**Never remove final drive mounting nut.**

↔ : Vehicle front

13. Remove final drive mounting bolts (B) from final drive mounting bracket (3) to tilt final drive assembly (2). Refer to [DLN-140. "Exploded View"](#). (4WD models)

**NOTE:**

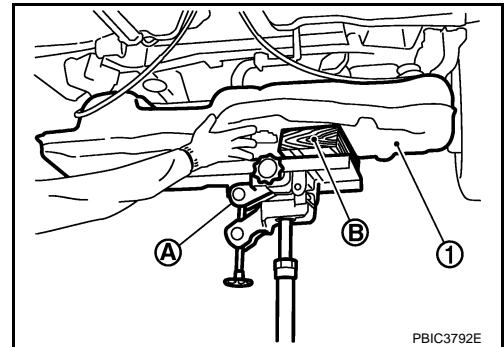
Final drive assembly does not have to be removed from the vehicle.



14. Support center of fuel tank (1) with transmission jack (A).

**CAUTION:**

**Securely support the fuel tank with a piece of wood (B).**



15. Remove fuel tank band (RH and LH).
16. Lower transmission jack carefully to remove fuel tank while holding it by hand.

**CAUTION:**

**Fuel tank may be in an unstable condition because of the shape of fuel tank bottom. Never rely on jack too much. Be sure to hold tank securely.**

# FUEL TANK

< ON-VEHICLE REPAIR >

[M9R]

## INSTALLATION

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

Fuel Filler Hose

- Insert fuel filler hose to the length below.

**: 35 mm (1.38 in)**

- Be sure hose clamp is not placed on swelled area of fuel filler 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)**

## Inspection

INFOID:000000001315197

## INSPECTION AFTER INSTALLATION

Check that there is no fuel leakage at connections in the following steps.

- Start engine and rev it up and check that there is no fuel leakage at connections.

# SERVICE DATA AND SPECIFICATIONS (SDS)

< SERVICE DATA AND SPECIFICATIONS (SDS)

[M9R]

## SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

Fuel Tank

INFOID:000000001315198

FL

Standard and Limit

Fuel tank capacity	Approx. 65 ℓ (14-1/4 Imp gal)
Fuel recommendation	Refer to <a href="#">GI-32</a>

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