

# ACCELERATOR CONTROL, FUEL & EXHAUST SYSTEMS

## SECTION FE

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# PREPARATION

*Special Service Tool*

## Special Service Tool

NMFE0006

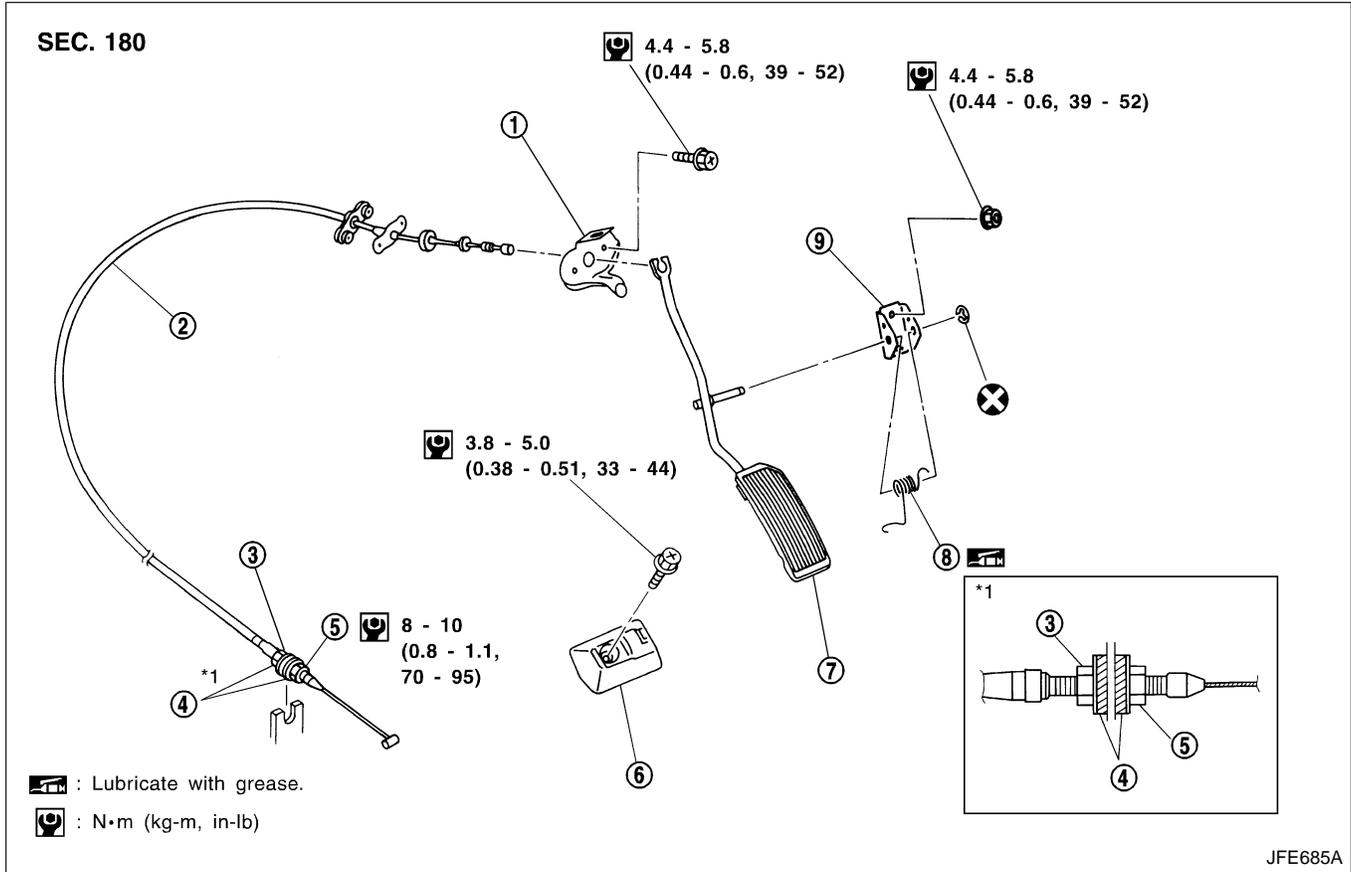
| Tool number<br>Tool name                    | Description   |
|---|---|
| KV999G0010<br>Fuel tank lock ring<br>socket |  <p data-bbox="1036 279 1463 304">Removing and installing fuel tank lock ring</p> <p data-bbox="418 384 479 405">NT057</p> |

## Removal and Installation

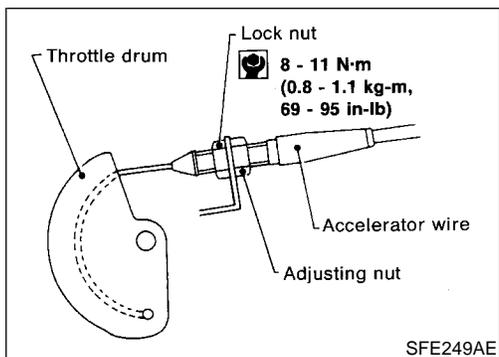
NMFE0002

**CAUTION:**

- When removing accelerator wire, make a mark to indicate lock nut's initial position.
- Check that throttle valve opens fully when accelerator pedal is fully depressed. Also check that it returns to idle position when pedal is released.
- Check accelerator control parts for improper contact with any adjacent parts.
- When connecting accelerator wire, be careful not to twist or scratch its inner wire.



- |                      |              |                      |
|----------------------|--------------|----------------------|
| 1. Wire bracket      | 4. Insulator | 7. Accelerator pedal |
| 2. Accelerator cable | 5. Lock nut  | 8. Return spring     |
| 3. Adjusting nut     | 6. Stopper   | 9. Pedal bracket     |



### Adjusting Accelerator Wire

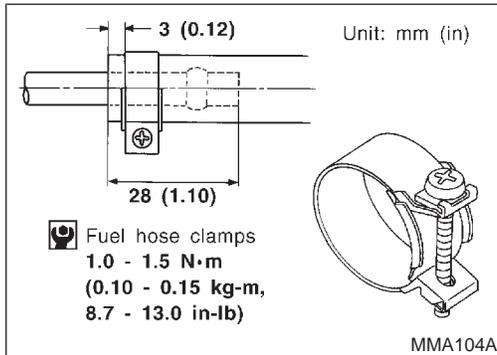
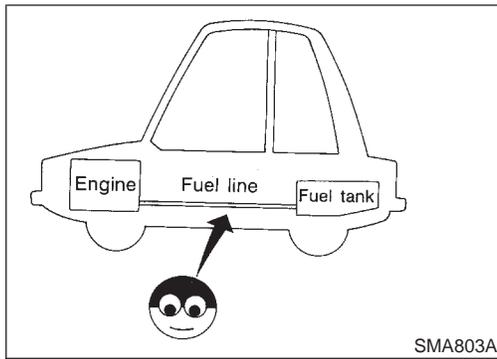
NMFE0003

1. Loosen lock nut.
2. Tighten accelerator adjusting nut until throttle drum starts to move.
3. From that position, turn back adjusting nut 1.5 to 2 turns, and secure lock nut.

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# FUEL SYSTEM

## Checking Fuel Lines



## Checking Fuel Lines

NMFE0008

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

### CAUTION:

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.

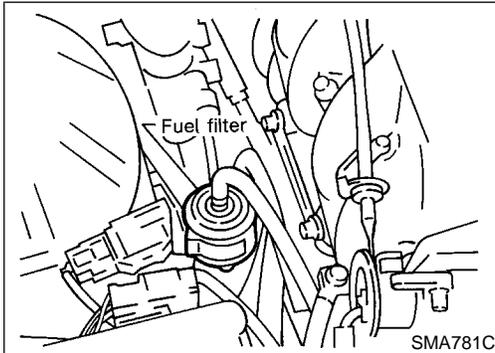
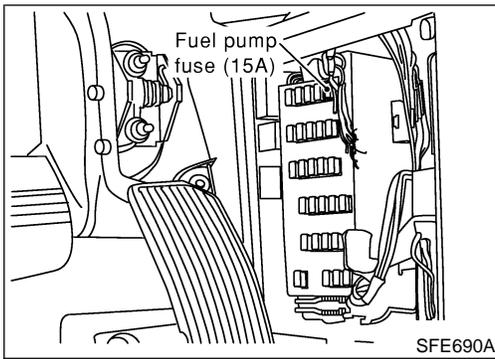
Ensure that screw does not contact adjacent parts.

## Changing Fuel Filter

NMFE0009

### WARNING:

- Be careful not to spill fuel over engine compartment. Place a shop towel to absorb fuel.
  - Use a high-pressure type fuel filter. Do not use a synthetic resinous fuel filter.
  - When tightening fuel hose clamps, refer to “Checking Fuel Lines”.
1. Release fuel pressure from fuel line.
    - a.  **WITH CONSULT**  
Refer to EC-27, “Fuel Pressure Release”.



- b. **⊗ WITHOUT CONSULT**
  - i. Remove fuse for fuel pump.
  - ii. Start engine.
  - iii. After engine stalls, crank engine two or three times to make sure that fuel pressure is released.
  - iv. Turn ignition switch off and install fuse for fuel pump.

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2. Loosen fuel hose clamps.
3. Replace fuel filter.

EC

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## Removal and Installation

NMFE0004

### **WARNING:**

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

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

AT

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### **CAUTION:**

- Before removing fuel line parts, carry out the following procedures:
  - a) Put drained fuel in an explosion-proof container and put lid on securely.
  - b) Release fuel pressure from fuel line. Refer to FE-4, “Changing Fuel Filter”.
  - c) Disconnect battery ground cable.
    - Always replace O-ring with new ones.
    - Do not kink or twist hose and tube when they are installed.
    - Do not tighten hose clamps excessively to avoid damaging hoses.
    - After installation, run engine and check for fuel leaks at connections.

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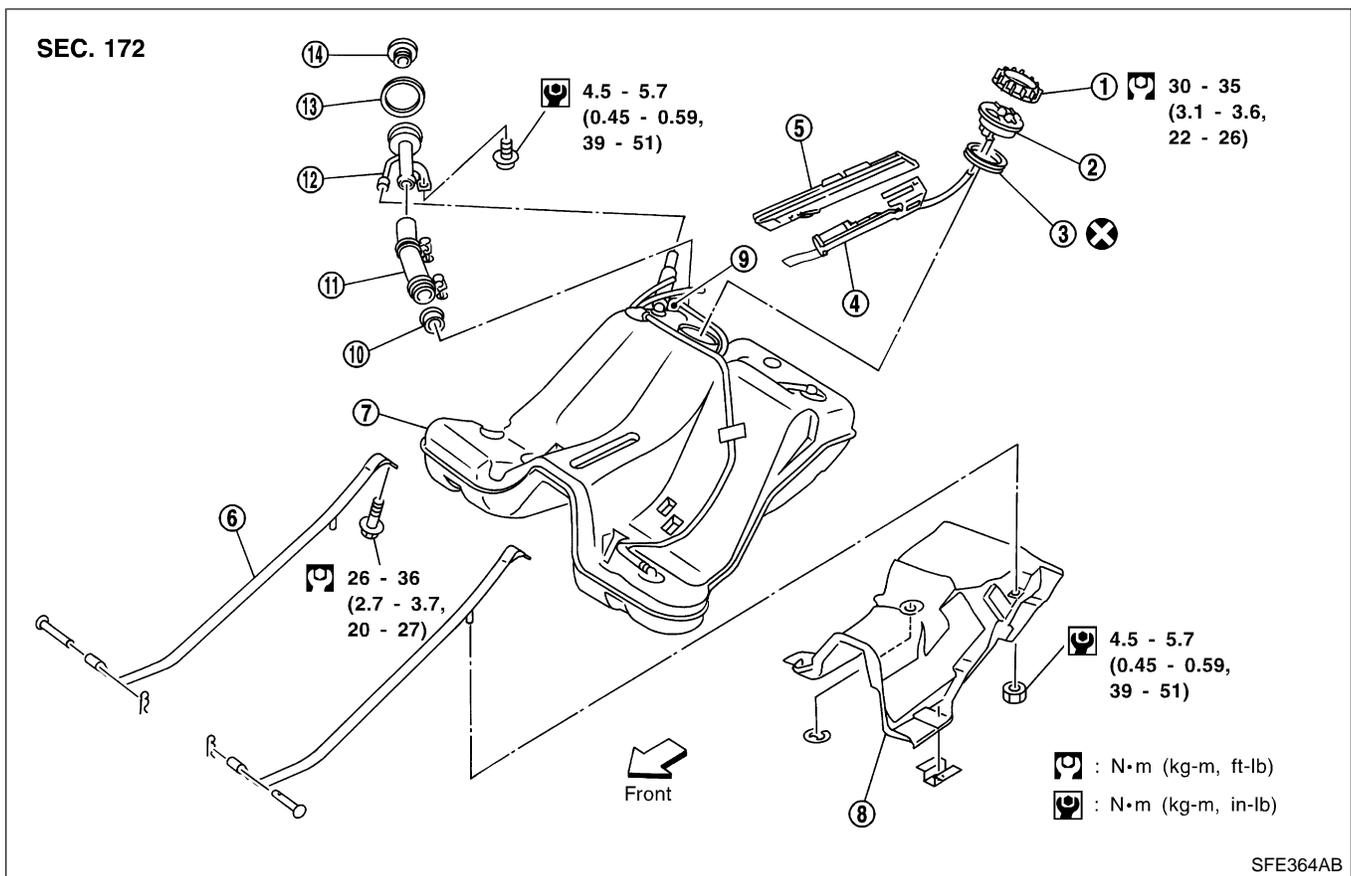
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# FUEL SYSTEM

Removal and Installation (Cont'd)



- |                           |                        |                 |
|---------------------------|------------------------|-----------------|
| 1. Lock ring              | 6. Mounting band       | 11. Filler hose |
| 2. Upper plate            | 7. Fuel tank           | 12. Filler tube |
| 3. Seal packing           | 8. Fuel tank protector | 13. Grommet     |
| 4. Fuel pump              | 9. Fuel check valve    | 14. Filler cap  |
| 5. Fuel level sensor unit | 10. Filler collar      |                 |

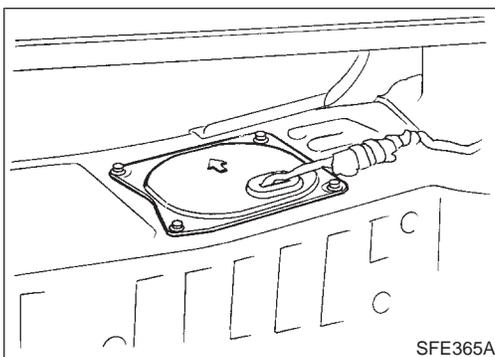
## Fuel Tank REMOVAL

NMFE0010

NMFE0010S01

### CAUTION:

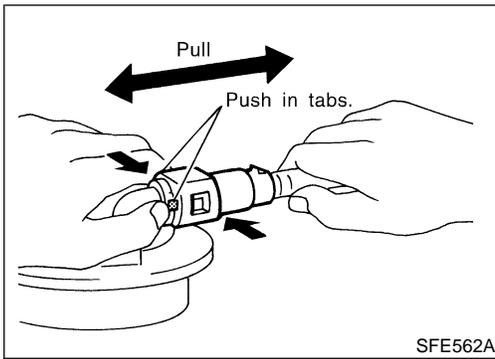
- Do not disconnect any fuel line unless absolutely necessary.
- Plug hose and pipe openings to prevent entry of dust or oil.



1. Release fuel pressure from fuel line. Refer to FE-4, "Changing Fuel Filter".
2. Disconnect battery ground cable.
3. Open fuel filler lid and filler cap.
4. Pump fuel out from fuel tank using a suitable pump.
5. Remove inspection hole cover located behind the rear seat.
6. Disconnect harness connectors under inspection hole cover.
7. Disconnect the quick connector as follows.
  - a. Put mating marks on tubes and connectors for correct installation.

# FUEL SYSTEM

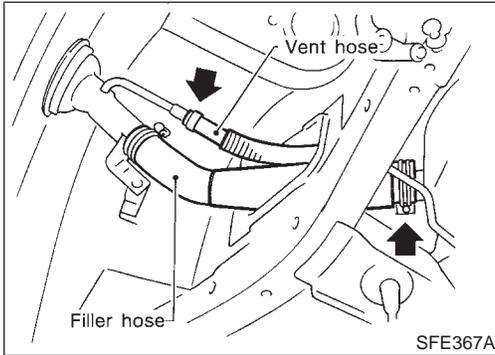
Fuel Tank (Cont'd)



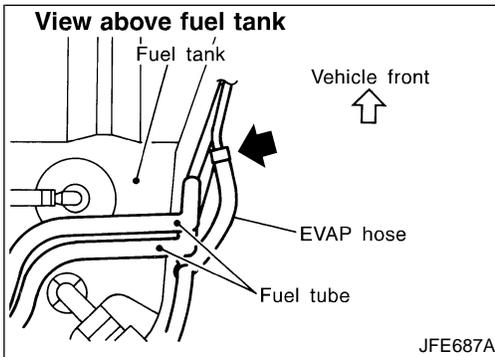
- b. Hold the sides of the connector, push in tabs, and pull out the tube inserted in the retainer.

**CAUTION:**

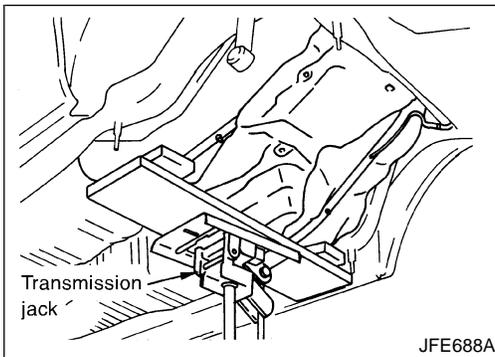
- The tube can be removed when the push in tabs are completely depressed. Do not twist it more than necessary.
- Do not use any tools to remove the quick connector.



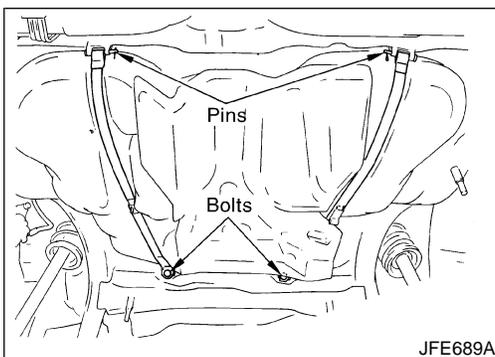
8. Remove exhaust center tube, propeller shaft, differential carrier, rear suspension member and drive shafts (Refer to RA section).
9. Disconnect filler hose at fuel tank side and vent hose at filler tube side.



10. Disconnect EVAP hose at the lower right-hand side of fuel tank.



11. Set a suitable transmission jack under fuel tank.

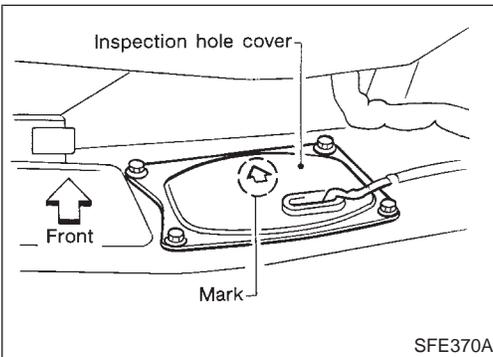
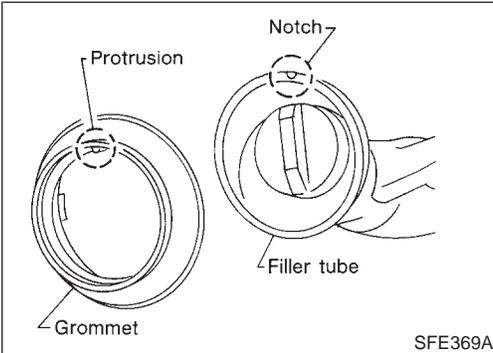
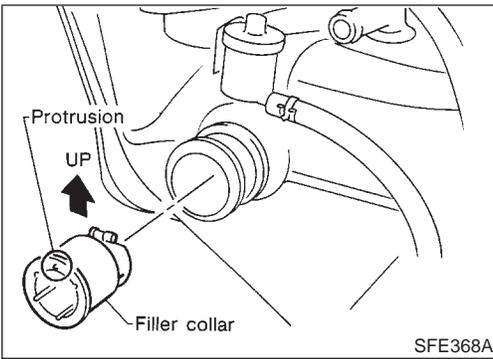


12. Remove fuel tank band mounting bolts while supporting fuel tank.
13. Remove fuel tank.

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# FUEL SYSTEM

## Fuel Tank (Cont'd)



## INSTALLATION

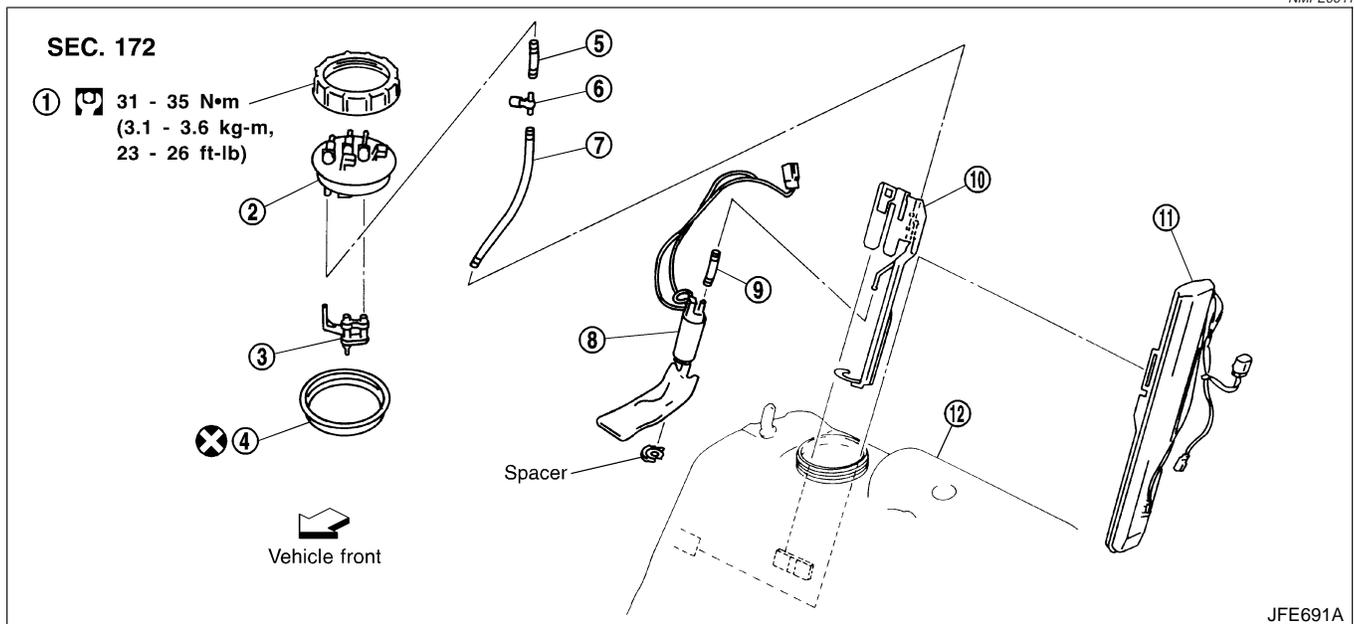
Installation procedure is the reverse order of removal.

NMFE0010S02

- When installing filler collar, place the protrusion of the collar flange upward.
- When installing the grommet of the filler tube, align the protrusion on the grommet with the notch on the filler tube.
- When installing the inspection hole, put the arrow mark forward.

## Fuel Pump and Fuel Level Sensor Unit

NMFE0011



1. Lock ring

2. Upper plate

3. Jet pump

# FUEL SYSTEM

## Fuel Pump and Fuel Level Sensor Unit (Cont'd)

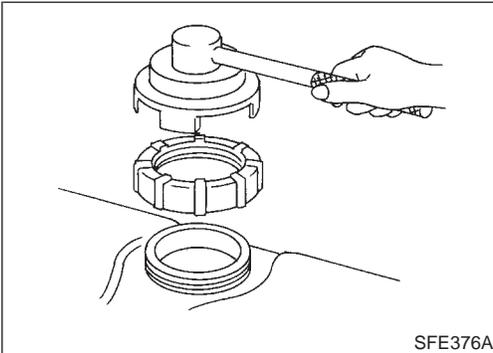
- |                 |              |                            |
|-----------------|--------------|----------------------------|
| 4. Seal packing | 7. Fuel tube | 10. Fuel pump bracket      |
| 5. Fuel tube    | 8. Fuel pump | 11. Fuel level sensor unit |
| 6. Relief valve | 9. Fuel tube | 12. Fuel tank              |

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### REMOVAL

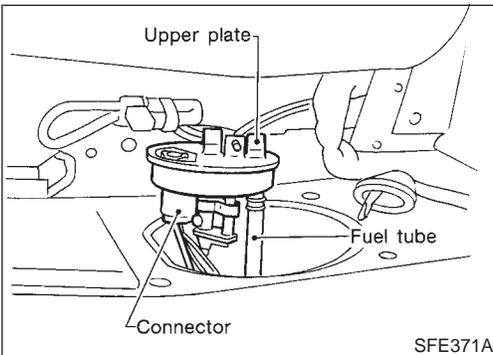
NMFE0011S01

1. Release fuel pressure.  
Refer to FE-4, "Changing Fuel Filter".
2. Remove inspection hole cover located behind the rear seat.
3. Disconnect harness connectors and fuel tubes on upper plate.
  - Put mating marks on tubes for correct installation.
4. Remove lock ring (Use SST).

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5. While lifting upper plate, disconnect fuel tube and harness connectors.

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6. Remove fuel pump pulling the top end of the fuel pump bracket upward.

BR

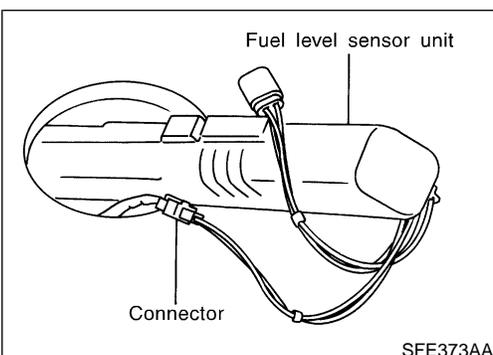
7. Remove fuel level sensor unit.

- a. Pull fuel level sensor unit horizontally to the left.

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- b. Remove harness connector.

- Carefully place the removed connector in the fuel tank so that it can be pulled out for the installation.

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# FUEL SYSTEM

Fuel Pump and Fuel Level Sensor Unit (Cont'd)

## INSTALLATION

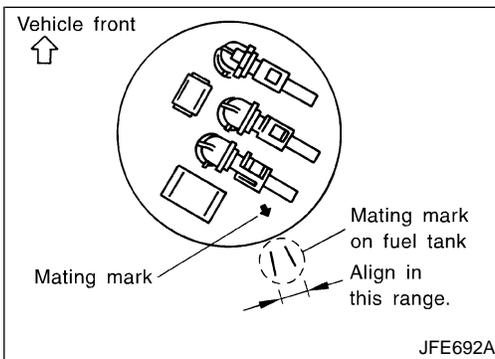
To install, reverse the removal procedure.

NMFE0011S02

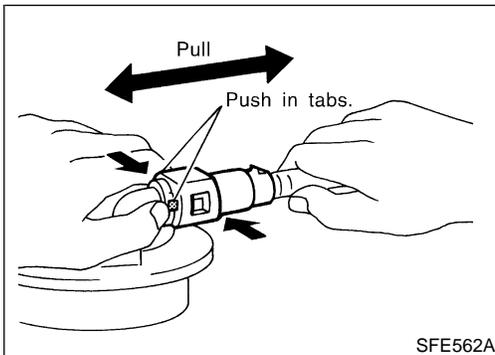
### CAUTION:

- Always replace O-ring with a new one.
- After installation, run engine and check for leaks at connections.

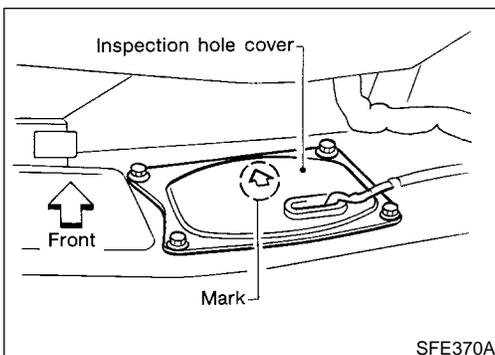
- Take extreme care for the fuel pump and fuel level sensor unit not to drop or give similar impact.
- Check for no foreign objects on the fuel pump filter.
- Fuel hose and connector should be connected securely.



- Install upper plate by aligning mating marks.
- Using lock ring socket (SST), tighten the lock ring.



- Connect quick connector by the following procedures.
  - a) Check for no foreign objects, damage to the connection part.
  - b) Align connector and axial center and insert the tube until "click" sound is heard.
  - c) After connection, visually check the secure connection by the following procedures.
- Visually check that two retainer's pawls are connected to the connectors.
- By pulling tube and connector, check for secure connection.



- Install inspection hole cover by facing the arrow mark to the front of the vehicle.



## NOTES