

A
C
D
E
F
G
H
I
J
K
L
M
N
O
P

CONTENTS

HR16DE, MR20DE		4WD : Inspection17	F
PRECAUTION	3	SERVICE DATA AND SPECIFICATIONS (SDS)	18
PRECAUTIONS	3	SERVICE DATA AND SPECIFICATIONS (SDS)	18
General Precautions	3	Fuel Tank	18
PREPARATION	4	K9K	
PREPARATION	4	PREPARATION	19
Commercial Service Tools	4	PREPARATION	19
ON-VEHICLE MAINTENANCE	5	Special Service Tools	19
FUEL SYSTEM	5	ON-VEHICLE MAINTENANCE	20
Inspection	5	FUEL SYSTEM	20
Quick Connector	5	Inspection	20
ON-VEHICLE REPAIR	6	FUEL FILTER	21
FUEL LEVEL SENSOR UNIT, FUEL FILTER AND FUEL PUMP ASSEMBLY	6	Exploded View	21
2WD	6	Replacement	21
2WD : Exploded View	6	Water Draining	21
2WD : Removal and Installation	6	Air Bleeding	22
2WD : Inspection	9	Inspection	22
4WD	9	ON-VEHICLE REPAIR	23
4WD : Exploded View	9	FUEL LEVEL SENSOR UNIT	23
4WD : Removal and Installation	10	Exploded View	23
4WD : Inspection	12	Removal and Installation	23
FUEL TANK	13	FUEL TANK	25
2WD	13	Exploded View	25
2WD : Exploded View	13	Removal and Installation	25
2WD : Removal and Installation	13	Inspection	27
2WD : Inspection	15	SERVICE DATA AND SPECIFICATIONS (SDS)	28
4WD	15		
4WD : Exploded View	15		
4WD : Removal and Installation	15		

SERVICE DATA AND SPECIFICATIONS (SDS)	28	FUEL LEVEL SENSOR UNIT	35
Fuel Tank	28	2WD	35
		2WD : Exploded View	35
		2WD : Removal and Installation	35
		2WD : Inspection	37
		4WD	37
		4WD : Exploded View	38
		4WD : Removal and Installation	38
		4WD : Inspection	41
PRECAUTION	29	FUEL TANK	42
PRECAUTIONS	29	2WD	42
General Precautions	29	2WD : Exploded View	42
PREPARATION	30	2WD : Removal and Installation	42
PREPARATION	30	2WD : Inspection	43
Commercial Service Tools	30	4WD	43
ON-VEHICLE MAINTENANCE	31	4WD : Exploded View	44
FUEL SYSTEM	31	4WD : Removal and Installation	44
Inspection	31	4WD : Inspection	46
Quick Connector	31	SERVICE DATA AND SPECIFICATIONS (SDS)	47
FUEL FILTER	32	SERVICE DATA AND SPECIFICATIONS (SDS)	47
Exploded View	32	Fuel Tank	47
Removal and Installation	32		
Water Draining	33		
Air Bleeding	33		
Fuel Filter Sensor (With Fuel Filter Warning)	33		
Inspection	34		
ON-VEHICLE REPAIR	35		

PRECAUTION

PRECAUTIONS

General Precautions

INFOID:000000001179275

A

FL

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 CO₂ 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 [ECH-345, "Inspection"](#) (HR16DE) or [ECM-349, "Inspection"](#) (MR20DE).
 - 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, 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 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 “MI” may come on.
 - For servicing “Evaporative Emission System” parts. Refer to [ECH-63, "System Diagram"](#) (HR16DE) or [ECM-64, "System Diagram"](#) (MR20DE).
 - For servicing “On Board Refueling Vapor Recovery (ORVR)” parts. Refer to [ECH-76, "Diagnosis Description"](#) (HR16DE) or [ECM-78, "Diagnosis Description"](#) (MR20DE).

C

D

E

F

G

H

I

J

K

L

M

N

O

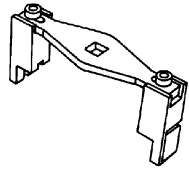
P

PREPARATION

PREPARATION

Commercial Service Tools

INFOID:000000001179276

Tool name	Description
Lock ring wrench  ZZA0122D	Removing and Installing lock ring

ON-VEHICLE MAINTENANCE

FUEL SYSTEM

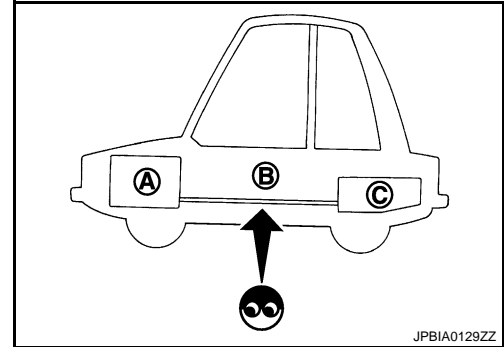
Inspection

INFOID:000000001179277

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.

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



Quick Connector

INFOID:000000001179278

CAUTION:

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

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

FUEL LEVEL SENSOR UNIT, FUEL FILTER AND FUEL PUMP ASSEMBLY

< ON-VEHICLE REPAIR >

[HR16DE, MR20DE]

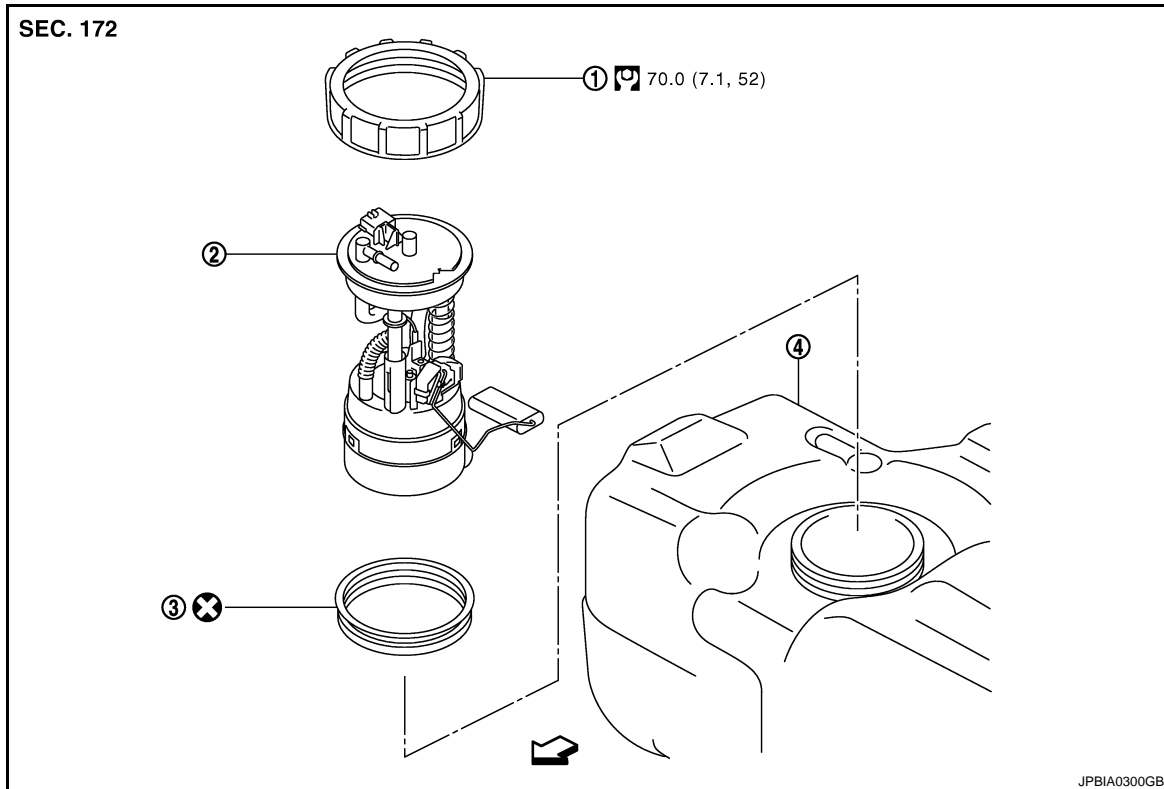
ON-VEHICLE REPAIR

FUEL LEVEL SENSOR UNIT, FUEL FILTER AND FUEL PUMP ASSEMBLY 2WD

2WD : Exploded View

INFOID:000000001179279

Removal and Installation



1. Lock ring
2. Fuel level sensor unit, fuel filter and fuel pump assembly
3. O-ring

4. Fuel tank

↔ : Vehicle front

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

2WD : Removal and Installation

INFOID:000000001179280

REMOVAL

WARNING:

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

FUEL LEVEL SENSOR UNIT, FUEL FILTER AND FUEL PUMP ASSEMBLY

< ON-VEHICLE REPAIR >

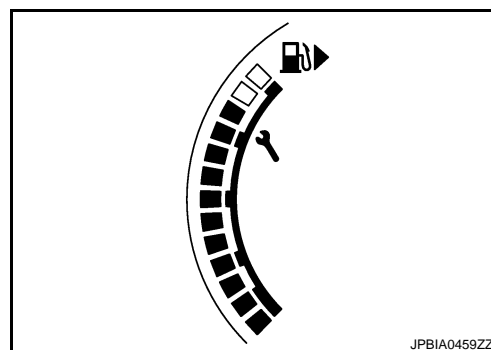
[HR16DE, MR20DE]

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:

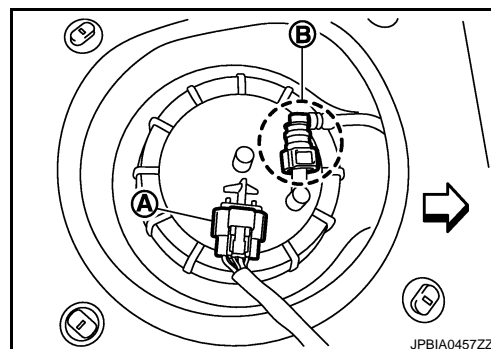
Because fuel will be spilled when removing fuel level sensor unit, fuel filter and fuel pump assembly for the top of the fuel is above the fuel level sensor units installation surface.

- 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-13, "2WD : 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 [ECH-345, "Inspection"](#) (HR16DE) or [ECM-349, "Inspection"](#) (MR20DE).
 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-20, "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).

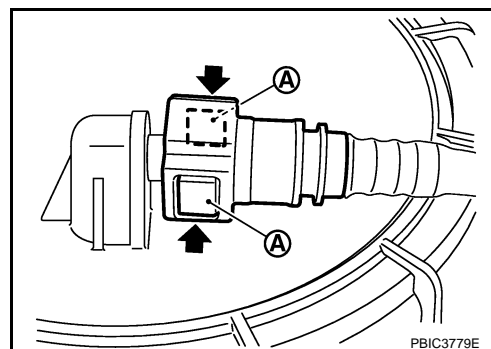
← : Vehicle front



- Remove quick connector in the following procedures.
 - Pinch quick connector square-part (A) with your fingers, and pull out the quick connector by hand.
 - If quick connector and tube on sender unit are stuck, push and pull several times until they move, and pull out.

CAUTION:

- Quick connector can be removed when the tabs are completely depressed. Never twist it more than necessary.
- Never 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.
- Never bend or twist resin tube during installation and disconnection.

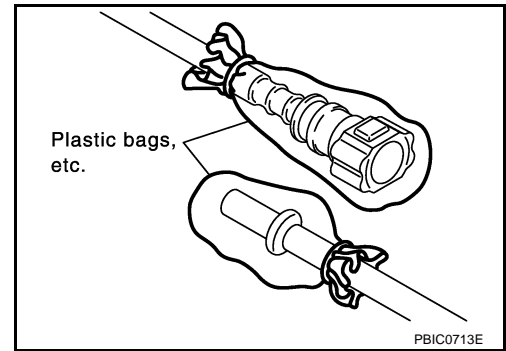


FUEL LEVEL SENSOR UNIT, FUEL FILTER AND FUEL PUMP ASSEMBLY

< ON-VEHICLE REPAIR >

[HR16DE, MR20DE]

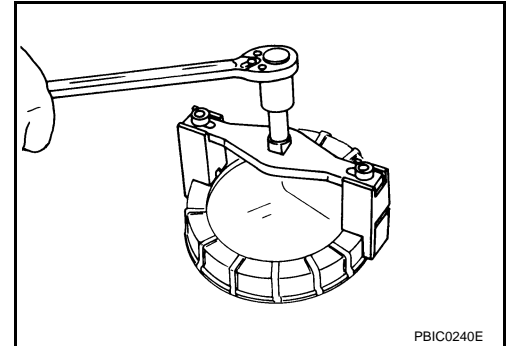
- To keep the connecting portion clean and to avoid damage and foreign materials, cover them completely with plastic bags or something similar.
- Never insert plug, preventing damage on o-ring in quick connector.



8. 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.



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

CAUTION:

- Never bend float arm during removal.
- Avoid polluting the inside by residue fuel. Draw out with avoiding inclination by supporting with a cloth.
- Avoid impacts such as falling when handling components.

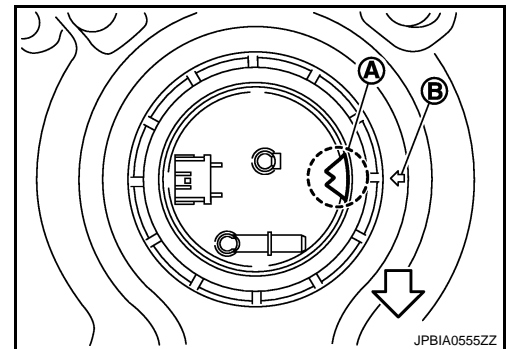
INSTALLATION

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

Fuel Level Sensor Unit, Fuel Filter and Fuel Pump Assembly

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

⇐ : Vehicle front



Quick Connector

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

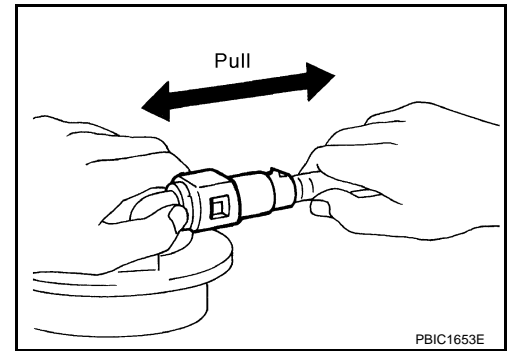
1. Check the connection for damage or any foreign materials.
2. Align the connector with the tube, then insert the connector straight into the tube until a “click” sound is heard.
3. After connecting, make sure that the connection is secure by following procedures.
 - Visually confirm that the two tabs are connected to the connector.

FUEL LEVEL SENSOR UNIT, FUEL FILTER AND FUEL PUMP ASSEMBLY

< ON-VEHICLE REPAIR >

[HR16DE, MR20DE]

- Pull the tube and the connector to make sure they are securely connected.



4. Connect harness connector.

Inspection Hole Cover

- Before installing inspection hole cover, check that the connecting part has no fuel leaks. Refer to [FL-9, "2WD : Inspection"](#).

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

2WD : Inspection

INFOID:000000001179282

INSPECTION AFTER INSTALLATION

Use the following procedure to check for fuel leaks.

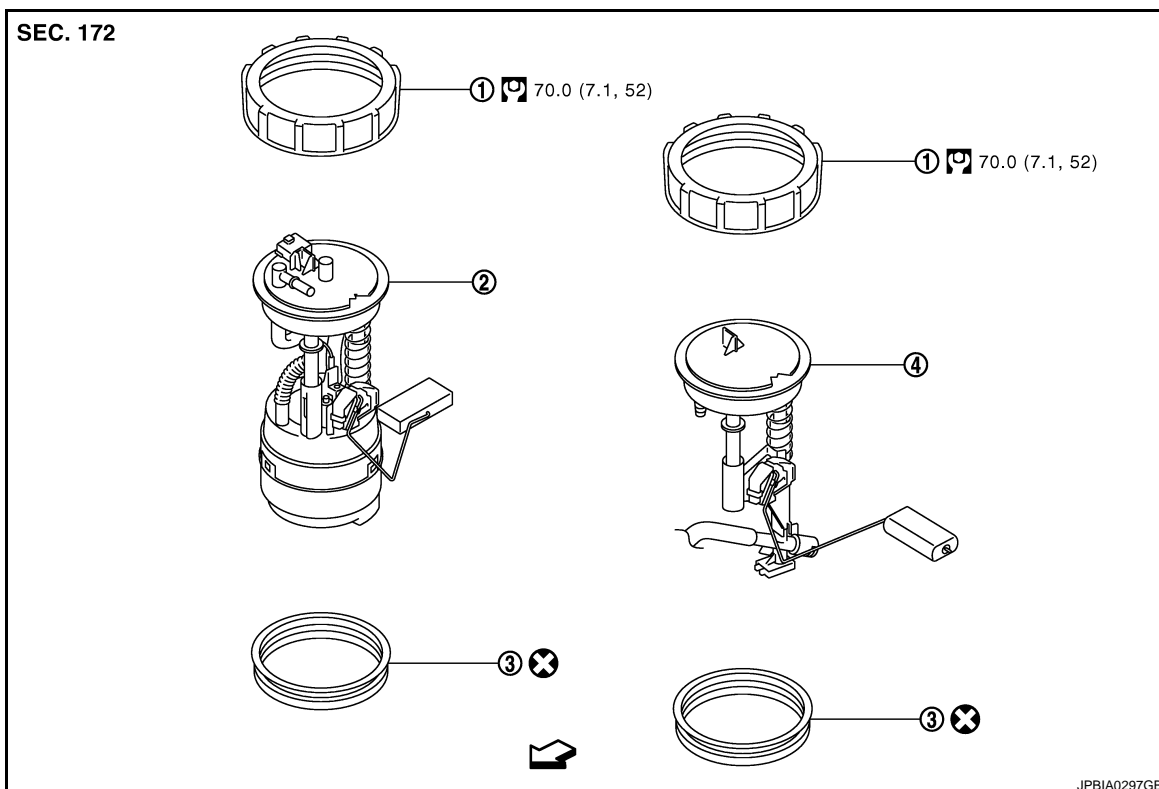
1. Turn ignition switch "ON" (with engine stopped), then check connections for leaks by applying fuel pressure to fuel piping.
2. Start engine and let it idle and make sure there are no fuel leaks at the fuel system connections.

4WD

4WD : Exploded View

INFOID:000000001179283

Removal and Installation



FUEL LEVEL SENSOR UNIT, FUEL FILTER AND FUEL PUMP ASSEMBLY

< ON-VEHICLE REPAIR >

[HR16DE, MR20DE]

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

↶ : Vehicle front

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

4WD : Removal and Installation

INFOID:000000001179284

REMOVAL

WARNING:

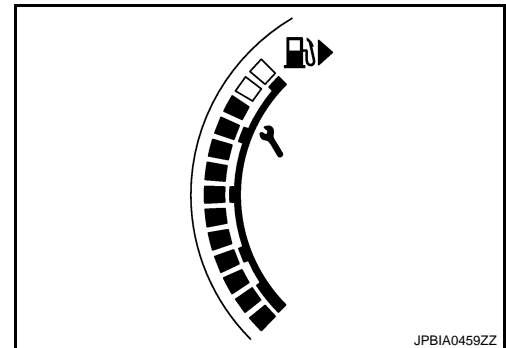
Be sure to read "General Precautions" before working on the fuel system. Refer to [FL-3, "General Precautions"](#).

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:

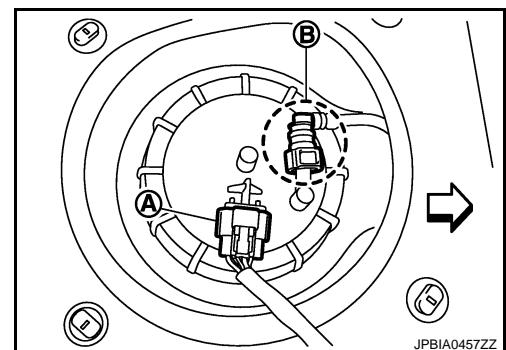
Because fuel will be spilled when removing fuel level sensor unit, fuel filter and fuel pump assembly for the top of the fuel is above the fuel level sensor units installation surface.

- 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-15, "4WD : 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"](#).
 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-20, "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



- Remove quick connector in the following procedures.

FUEL LEVEL SENSOR UNIT, FUEL FILTER AND FUEL PUMP ASSEMBLY

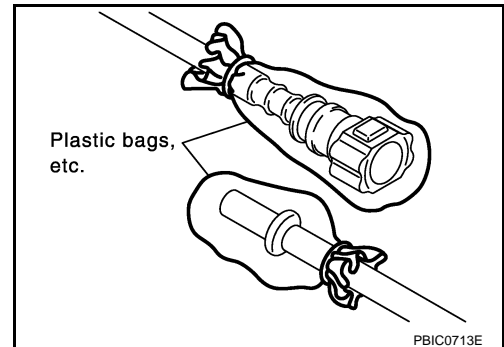
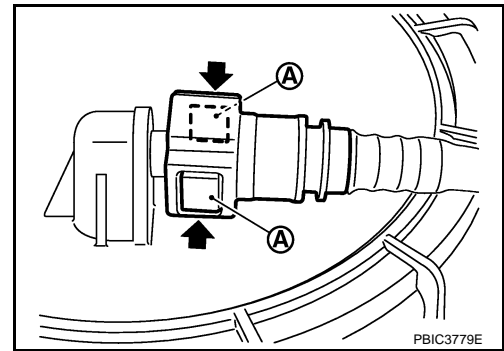
< ON-VEHICLE REPAIR >

[HR16DE, MR20DE]

- Pinch quick connector square-part (A) with your fingers, and pull out the quick connector by hand.
- If quick connector and tube on sender unit are stuck, push and pull several times until they move, and pull out.

CAUTION:

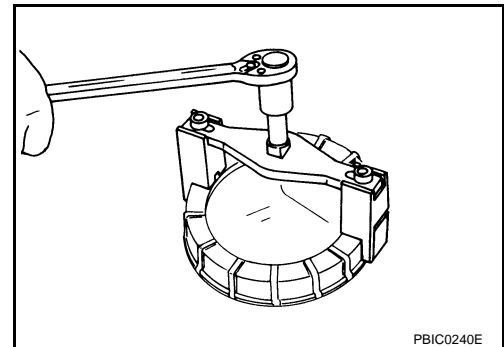
- Quick connector can be removed when the tabs are completely depressed. Never twist it more than necessary.
- Never use any tools to disconnect quick connector.
- Keep resin tube away from heat. Be especially careful when welding near the resin tube.
- Prevent acid liquid such as battery electrolyte, etc. from getting on resin tube.
- Never bend or twist resin tube during installation and disconnection.
- To keep the connecting portion clean and to avoid damage and foreign materials, cover them completely with plastic bags or something similar.
- Never insert plug, preventing damage on o-ring in quick connector.



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

NOTE:

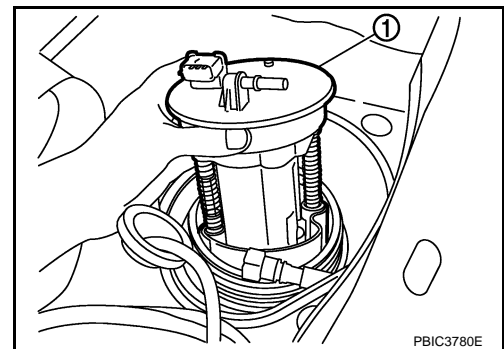
For reference when installing, put a matching mark on lock ring, fuel pump assembly and fuel tank.



9. 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.
- Avoid polluting the inside by residue fuel. Draw out with avoiding inclination by supporting with a cloth.
- Avoid impacts such as falling when handling components.



10. Raise sub fuel level sensor assembly.

CAUTION:

- Never disassembly a fuel tube from sub fuel sensor assembly.
- Never bend float arm during removal.
- Avoid polluting the inside by residue fuel. Draw out with avoiding inclination by supporting with a cloth.
- Avoid impacts such as falling when handling components.

INSTALLATION

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

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

FUEL LEVEL SENSOR UNIT, FUEL FILTER AND FUEL PUMP ASSEMBLY

< ON-VEHICLE REPAIR >

[HR16DE, MR20DE]

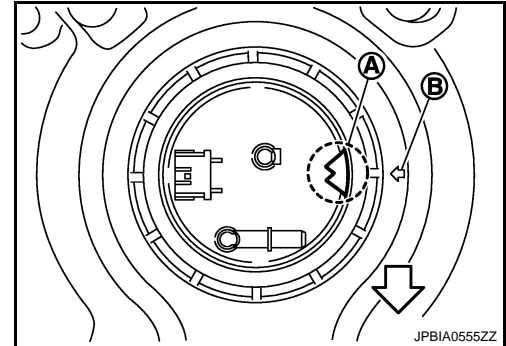
Fuel Level Sensor Unit, Fuel Filter and Fuel Pump Assembly and Sub Fuel Level Sensor Assembly

1. Install O-ring to fuel tank without any twist.
2. Install fuel level sensor unit with aligning mating marks (A) on fuel level sensor unit and (B) on fuel tank as shown in the figure.

⇐ : Vehicle front

NOTE:

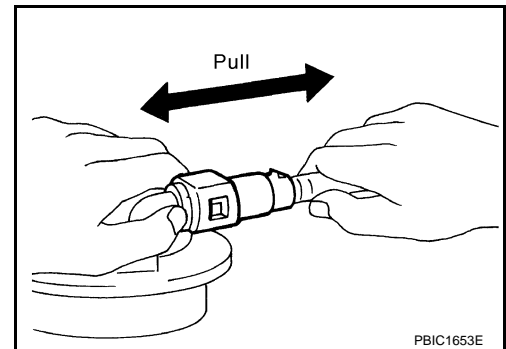
Figure shows fuel level sensor unit, fuel filter and fuel pump assembly side of fuel tank.



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, make sure that the connection is secure by following procedures.
 - Visually confirm that the two tabs are connected to the connector.
 - Pull the tube and the connector to make sure they are securely connected.



4. Connect harness connector.

Inspection Hole Cover

- Before installing inspection hole cover, check that the connecting part has no fuel leaks. Refer to [FL-12, "4WD : Inspection"](#).

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

4WD : Inspection

INFOID:000000001179286

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 engine and let it idle and make sure there are no fuel leaks at the fuel system connections.

FUEL TANK

< ON-VEHICLE REPAIR >

[HR16DE, MR20DE]

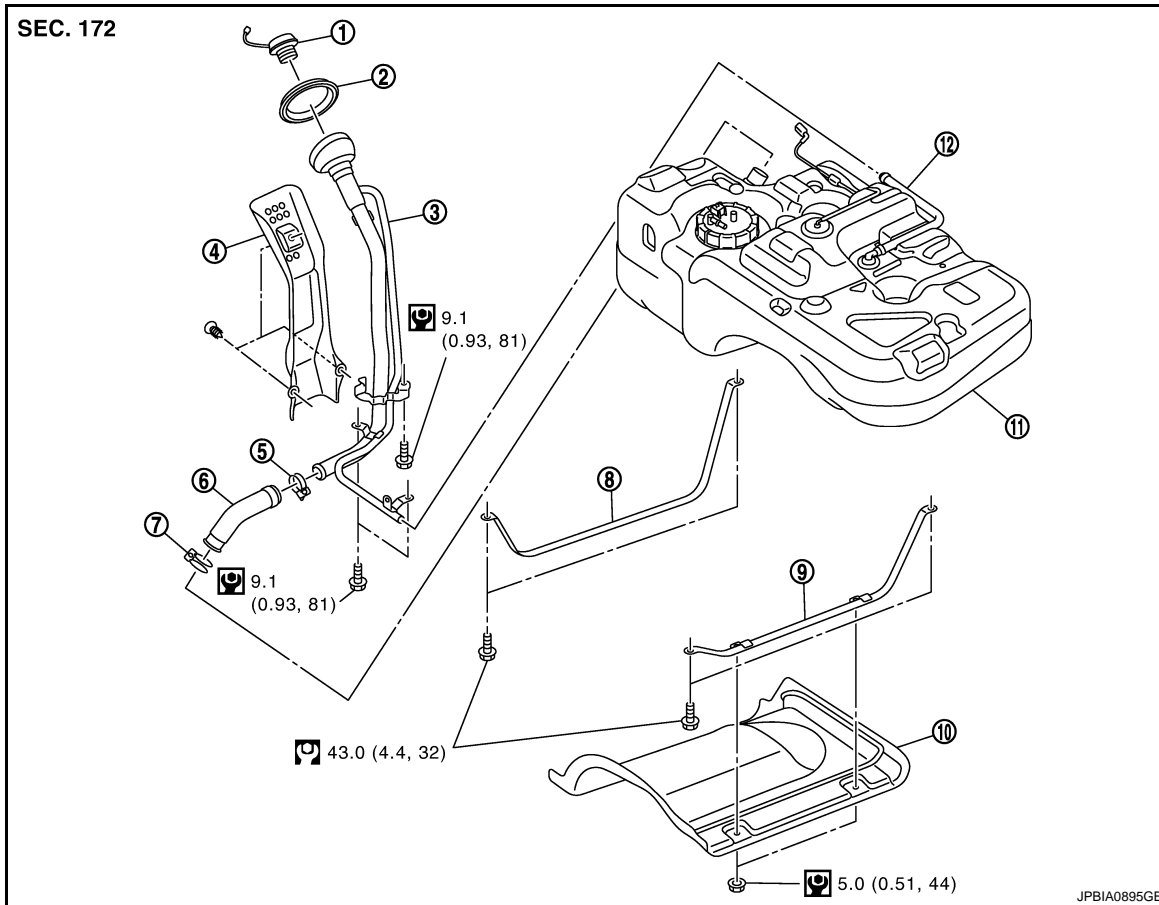
FUEL TANK

2WD

2WD : Exploded View

INFOID:000000001179287

2WD



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

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

2WD : Removal and Installation

INFOID:000000001179288

REMOVAL

WARNING:

Be sure to read "General Precautions" when working on the fuel system. Refer to [FL-3, "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-6, "2WD : Removal and Installation"](#).
2. Drain fuel from fuel tank if necessary. Refer to [FL-6, "2WD : 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"](#) (HR16DE) or [EX-10, "Exploded View"](#) (MR20DE).

FUEL TANK

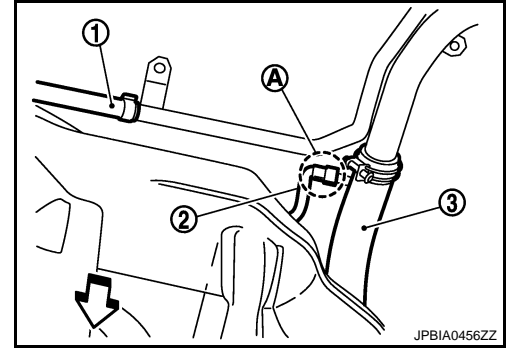
< ON-VEHICLE REPAIR >

[HR16DE, MR20DE]

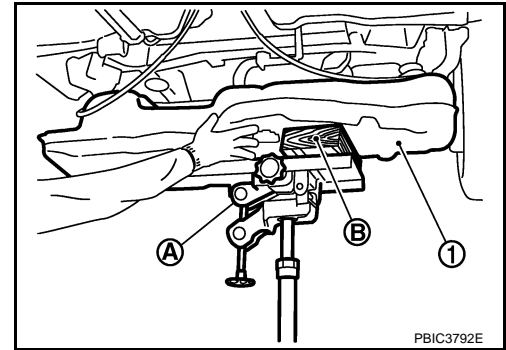
4. Remove protector from fuel tank.
5. Remove vent hose (1) at rear side of fuel tank.

↔: Vehicle front

6. Disconnect EVAP tube (2) at rear side of fuel tank.
 - Instruction for quick connector (A) of EVAP tube. Refer to [FL-6, "2WD : Removal and Installation"](#)
7. Remove fuel filler hose (3) at fuel filler tube side.



8. Support center of fuel tank (1) with transmission jack (A).
CAUTION:
Securely support the fuel tank with a piece of wood (B).



9. Remove fuel tank band (RH and LH).
10. 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.

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)

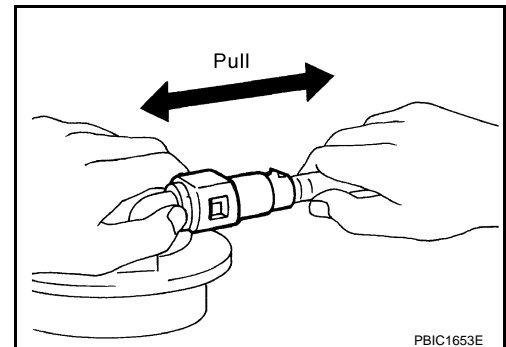
- Be sure hose clamp is not placed on swelled area of fuel filler tube.
- Tighten fuel filler hose clamp so that the remaining length of screw thread becomes to the following.

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.



FUEL TANK

< ON-VEHICLE REPAIR >

[HR16DE, MR20DE]

2WD : Inspection

INFOID:000000001179289

INSPECTION AFTER INSTALLATION

Use the following procedure to check for fuel leaks.

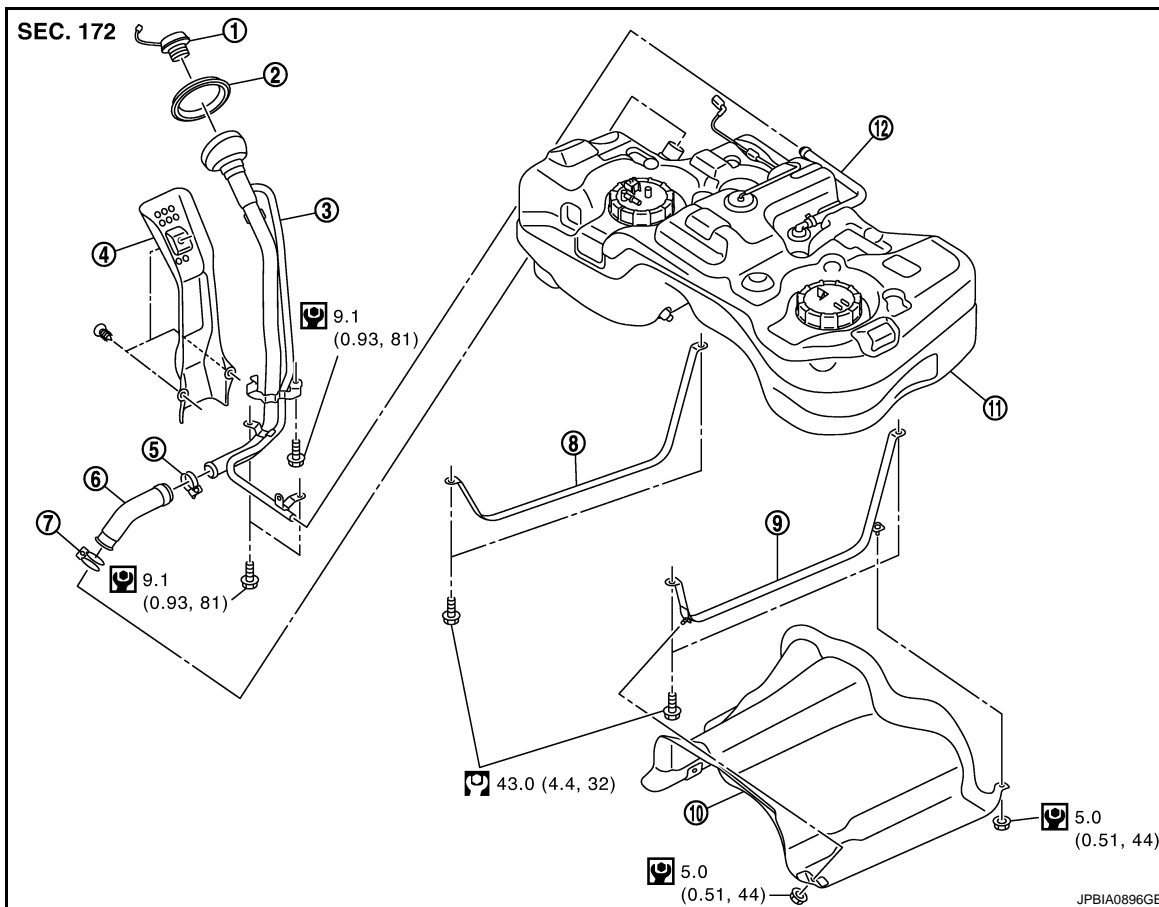
1. Turn ignition switch "ON" (with engine stopped), and check connections for leakage by applying fuel pressure to fuel piping.
2. Start engine and rev it up and make sure there are no fuel leaks at the fuel system tube and hose connections.

4WD

4WD : Exploded View

INFOID:000000001179290

4WD



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

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

4WD : Removal and Installation

INFOID:000000001179291

REMOVAL

WARNING:

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

FUEL TANK

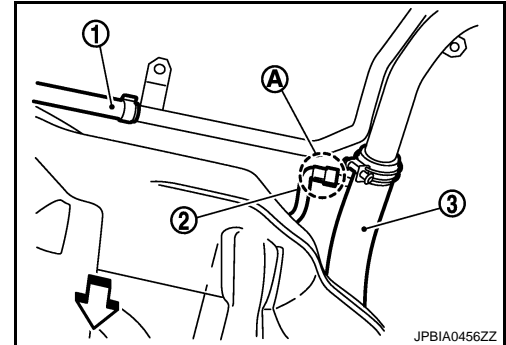
< ON-VEHICLE REPAIR >

[HR16DE, MR20DE]

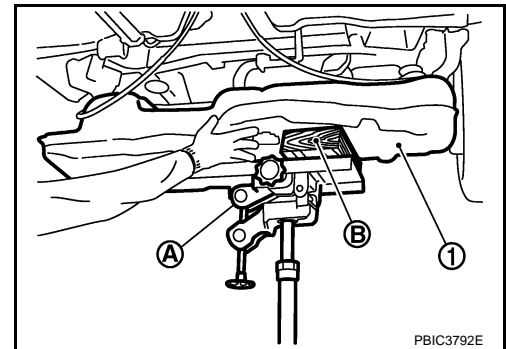
1. Perform the steps 2 to 7 of "REMOVAL" in " FUEL LEVEL SENSOR UNIT, FUEL FILTER AND FUEL PUMP ASSEMBLY". Refer to [FL-10, "4WD : Removal and Installation"](#).
2. Drain fuel from fuel tank if necessary. Refer to [FL-10, "4WD : Removal and Installation"](#).
CAUTION:
 - Because fuel tank forwardly inclines 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 propeller shaft. Refer to [DLN-112, "Exploded View"](#).
4. Remove main muffler. Refer to [EX-10, "Exploded View"](#).
5. Remove protector from fuel tank.
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-10, "4WD : Removal and Installation"](#)
8. Remove fuel filler hose (3) at fuel filler tube side.



9. Support center of fuel tank (1) with transmission jack (A).
CAUTION:
Securely support the fuel tank with a piece of wood (B).



10. Remove fuel tank band (RH and LH).
11. 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.

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)

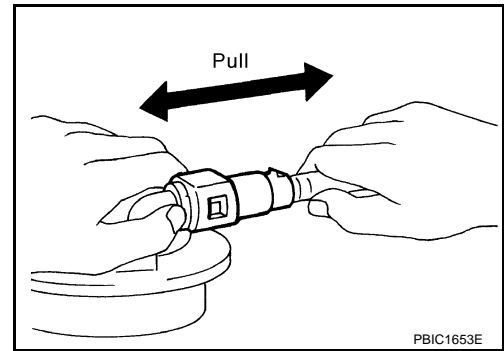
EVAP Hose

FUEL TANK

< ON-VEHICLE REPAIR >

[HR16DE, MR20DE]

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.



4WD : Inspection

INSPECTION AFTER INSTALLATION

Use the following procedure to check for fuel leaks.

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 make sure there are no fuel leaks at the fuel system tube and hose connections.

INFOID:000000001179292

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

SERVICE DATA AND SPECIFICATIONS (SDS)

< SERVICE DATA AND SPECIFICATIONS (SDS)

[HR16DE, MR20DE]

SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

Fuel Tank

INFOID:000000001179293

Standard and Limit

Fuel tank capacity	Approximate 65 ℓ (14-1/2 Imp gal)
Fuel recommendation	Refer to GI-32

PREPARATION

< PREPARATION >

[K9K]

PREPARATION

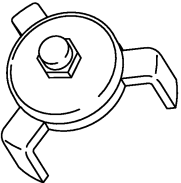
PREPARATION

Special Service Tools

INFOID:000000001179294

A

FL

Tool number (RENAULT tool number) Tool name	Description	C
KV993G0010 (Mot. 1397) Lock ring wrench  PBIC1627E	Removing and Installing lock ring	D E F G H I J K L M N O P

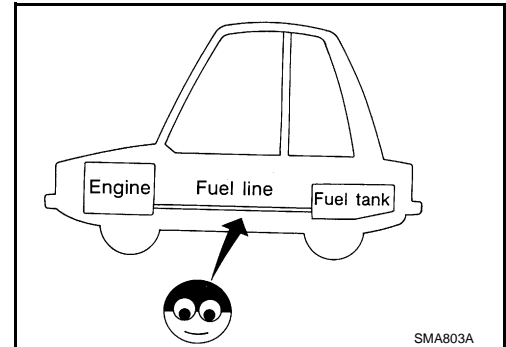
ON-VEHICLE MAINTENANCE

FUEL SYSTEM

Inspection

INFOID:000000001179295

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



FUEL FILTER

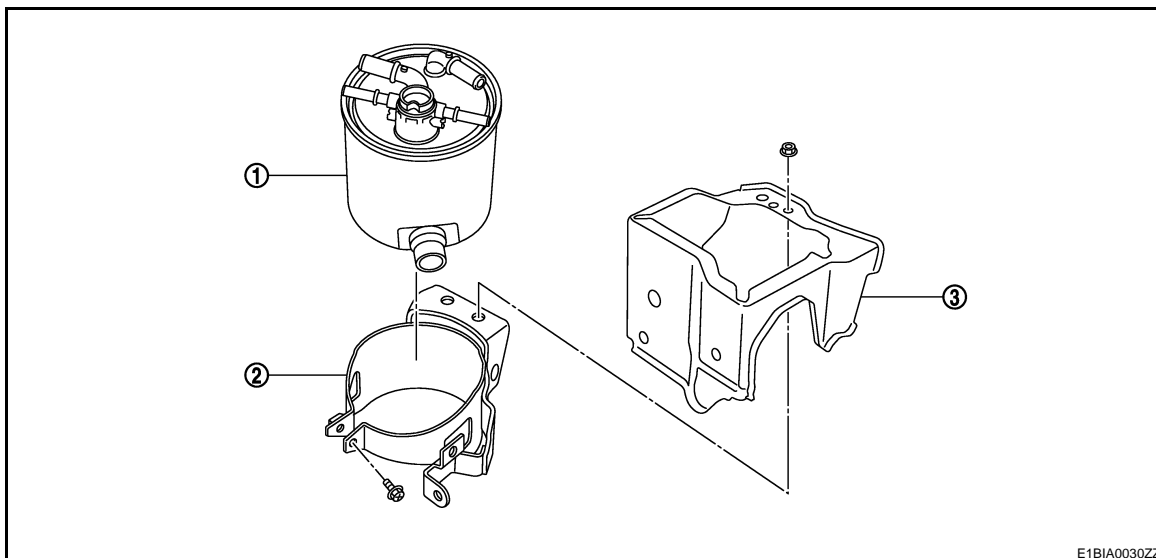
< ON-VEHICLE MAINTENANCE >

[K9K]

FUEL FILTER

Exploded View

INFOID:000000001179296



1. Fuel filter

2. Fuel filter bracket

3. Fuel filter protector

Replacement

INFOID:000000001179297

1. Remove priming bulb from priming bulb bracket.
2. Remove fuel filter from fuel filter bracket.
3. Remove quick connectors as above.

CAUTION:

Put a shop cloth under the drain valve, to avoid the water and fuel spill on ABS actuator. Be especially careful to prevent any damage.

4. Install in the reverse order of removal.
 - After installation, operate the priming bulb vertically, if it is possible, to perform air bleeding. Refer to [FL-22, "Air Bleeding"](#).

CAUTION:

Do not bend or twist the tube during installation and removal.

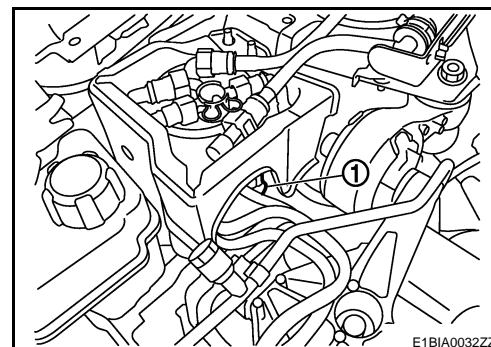
Water Draining

INFOID:000000001179298

Open drain valve (1) at the bottom of fuel filter.

CAUTION:

Put a shop cloth under the drain valve, to avoid the water and fuel spill on ABS actuator.



FUEL FILTER

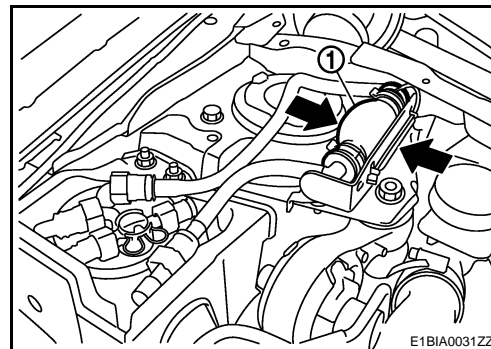
< ON-VEHICLE MAINTENANCE >

[K9K]

Air Bleeding

INFOID:000000001179299

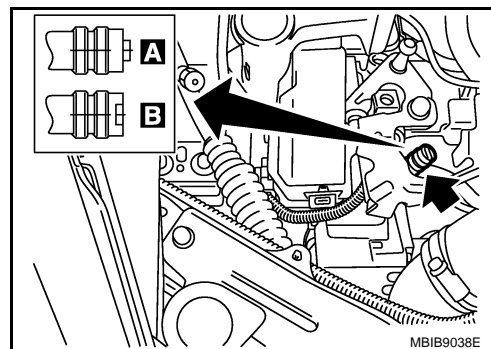
1. Prime the circuit using the priming bulb (1).
2. Perform engine cranking with repeating several times until engine starting.



3. If the engine does not start, use a flat bladed screwdriver to lift up the button on the fuel return pipe and perform engine cranking.
4. When the bleeding is completed, push the button, and check absence of leakage.

A : Bleeding position

B : Normal position



Inspection

INFOID:000000001179300

INSPECTION AFTER REPLACEMENT

Check fuel filter for fuel leakage, damage and other abnormal signs.

FUEL LEVEL SENSOR UNIT

< ON-VEHICLE REPAIR >

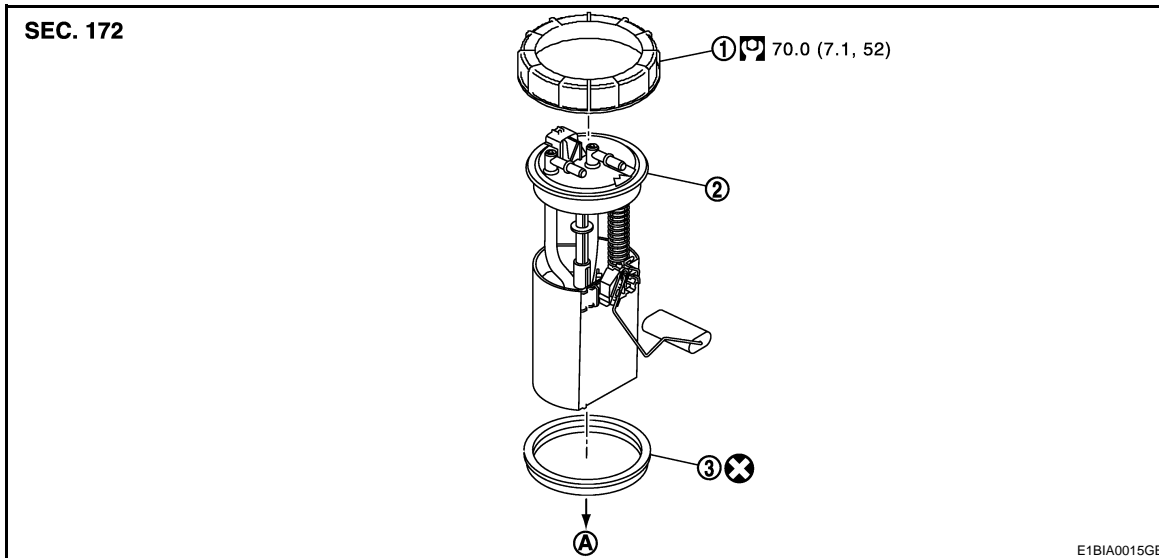
[K9K]

ON-VEHICLE REPAIR

FUEL LEVEL SENSOR UNIT

Exploded View

INFOID:000000001179301



1. Rock ring
 2. Fuel level sensor unit
 3. Seal packing
- A. To fuel tank

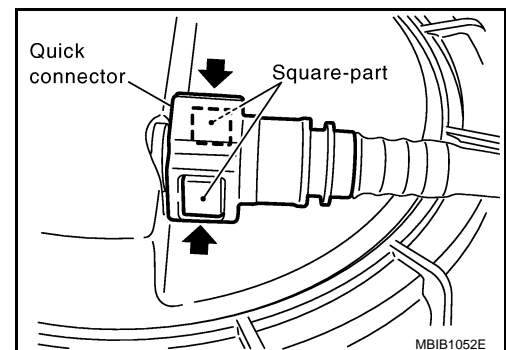
Refer to [GI-4, "Components"](#) for symbols not described on the above.

Removal and Installation

INFOID:000000001179302

REMOVAL

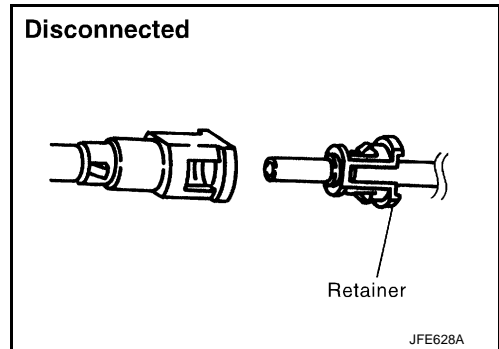
1. Disconnect battery ground cable.
2. Open fuel filler lid and filler cap to release the pressure inside the fuel tank.
3. Remove rear seat cushion. Refer to [SE-21, "Removal and Installation"](#).
4. Remove inspection hole cover under the rear seat.
5. Disconnect electrical connector.
6. Disconnect the quick connectors.
 - Hold the connector while pushing in tabs, and pull out the tube.



FUEL LEVEL SENSOR UNIT

< ON-VEHICLE REPAIR >

[K9K]



CAUTION:

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

7. Using lock ring wrench [SST: KV993G0010], remove lock ring (2).

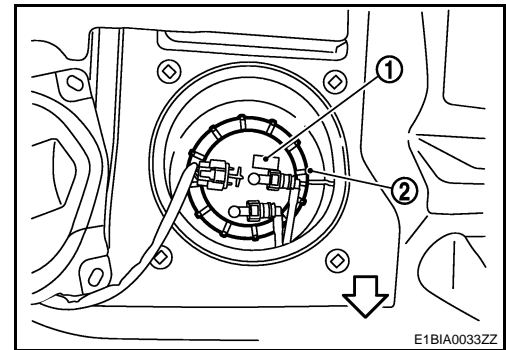
CAUTION:

Rotate SST while pressing fuel level sensor unit as spring reaction force is applied from fuel tank inside to up ward.

8. Remove fuel level sensor unit(1).

CAUTION:

- Be careful not to bend the float arm when removing.
- Handle them carefully without subjecting them to impacts such as dropping.



INSTALLATION

Install in the reverse order of removal.

FUEL TANK

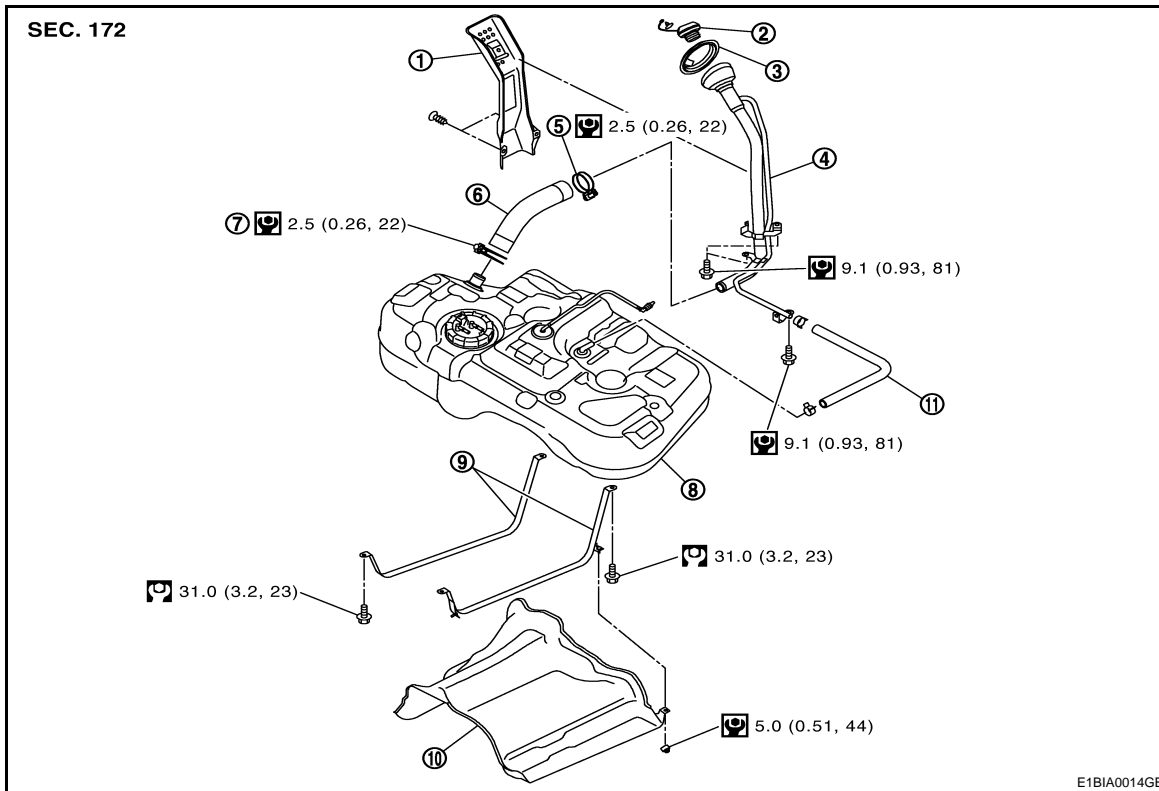
< ON-VEHICLE REPAIR >

[K9K]

FUEL TANK

Exploded View

INFOID:000000001179303



- | | | |
|-------------------------------|--------------------|------------------------------|
| 1. Fuel filler tube protector | 2. Fuel filler cap | 3. Fuel filler cap protector |
| 4. Fuel filler tube | 5. Clamp | 6. Fuel filler hose |
| 7. Clamp | 8. Fuel tank | 9. Fuel tank mounting band |
| 10. Fuel tank protector | 11. Vent hose | |

Refer to [GI-4, "Components"](#) for symbols not described on the above.

Removal and Installation

INFOID:000000001179304

REMOVAL

1. Remove RH rear wheel.
2. Remove fuel level sensor unit. Refer to [FL-23, "Removal and Installation"](#).
CAUTION:
If fuel tank bottom face is not level, and remaining fuel level is high, tank position becomes unstable, causing a danger. Drain fuel further than that in step 1 of the referenced procedure until tank can be held by hand even if the balance is lost.
3. Remove muffler. Refer to [EX-15, "Removal and Installation"](#).
4. Remove vehicle side insulator on upper center muffler and main muffler.
5. Move parking brake cable from the lower face of fuel tank. Then remove clips for parking brake cable.

FUEL TANK

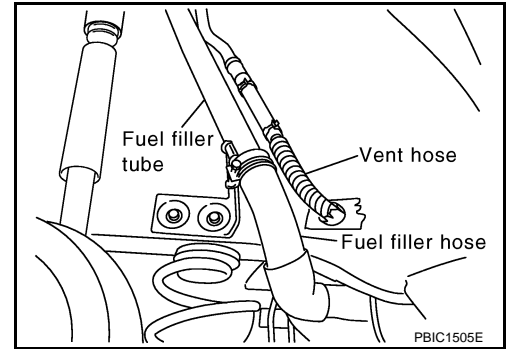
[K9K]

< ON-VEHICLE REPAIR >

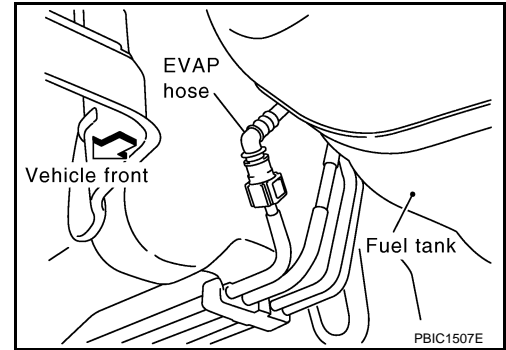
6. Disconnect fuel filler hose on fuel tank side.

CAUTION:

Do not remove fuel filler hose at fuel filler tube side, preventing to interfere with suspension due to dislocation when installing. When removing at fuel filler tube side necessarily, put mating marks, and remove.



7. Remove vent hose at RH rear wheelwell side.
8. Remove EVAP hose at front side of fuel tank.



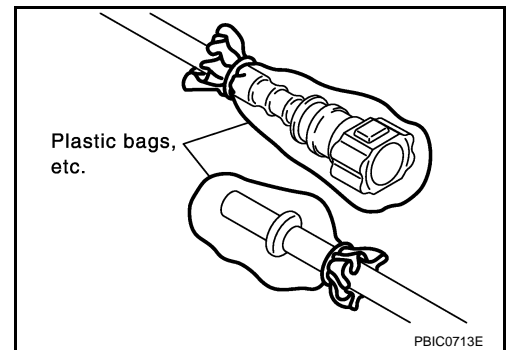
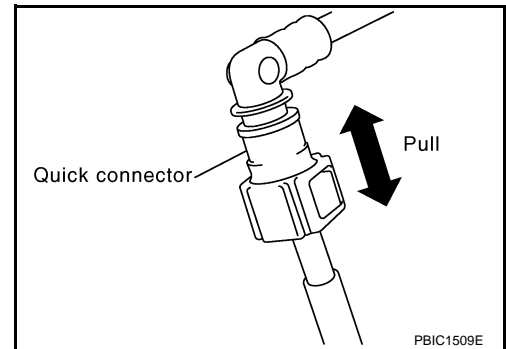
- Remove quick connector in the following procedures.
- Pinch quick connector square-parts with your fingers, and pull out the quick connector by hand.
- If quick connector and tube on vehicle are stuck, push and pull several times until they move, and pull out.

CAUTION:

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

CAUTION:

Do not insert plug, preventing damage on O-ring in quick connector.



FUEL TANK

[K9K]

< ON-VEHICLE REPAIR >

9. Support center of fuel tank with suitable transmission jack.

CAUTION:

Securely support the fuel tank with a piece of wood.

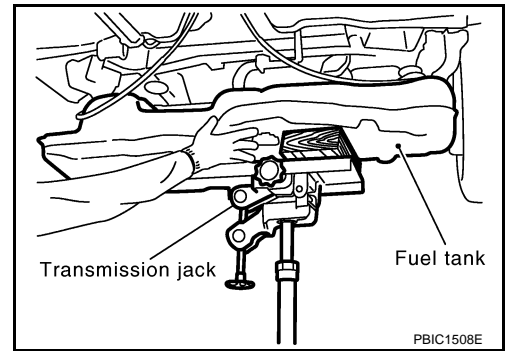
10. Remove RH/LH mounting band.

11. Lower suitable transmission jack carefully to remove fuel tank while holding it by hand. Perform the following works at the same time.

- Pull out vent hose from through hole of vehicle.
- Avoid interference with tank by pulling parking brake cable by hand.

CAUTION:

Tank may be in an unstable condition because of the shape of fuel tank bottom. Do not rely on jack too much. Be sure to hold tank securely.



INSTALLATION

Install in the reverse order of removal which being careful of the following.

Installation of Fuel Tank Mounting Band

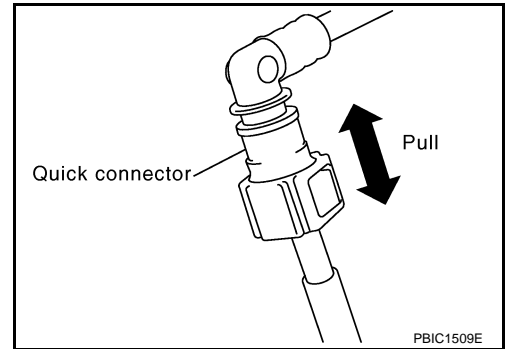
- Install it by referring to the identification stamp mark "R" and "L" on the end.

Installation of fuel Filler Hose

- Insert filler hose into mating side part by 35 mm (1.38 in), and secure it with clamp.
- When installing clamp, do not allow clamp to contact the bulge (bump) part of the tube.
- Tighten the clamp of filler hose to a torque of 2.5 N·m (0.26 kg·m, 22 in-lb).

Installation of EVAP Hose

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



Installation of Vent Hose

- Push vent hose into through hole of vehicle.
- Insert vent hose into vent rubber hose, and secure it with clamp.

Inspection

INFOID:000000001179305

INSPECTION AFTER INSTALLATION

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

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

SERVICE DATA AND SPECIFICATIONS (SDS)

< SERVICE DATA AND SPECIFICATIONS (SDS)

[K9K]

SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

Fuel Tank

INFOID:000000001179306

Fuel tank capacity	Approx. 65 ℓ (14-1/4 Imp gal)
--------------------	-------------------------------

PRECAUTION

PRECAUTIONS

General Precautions

INFOID:000000001366198

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

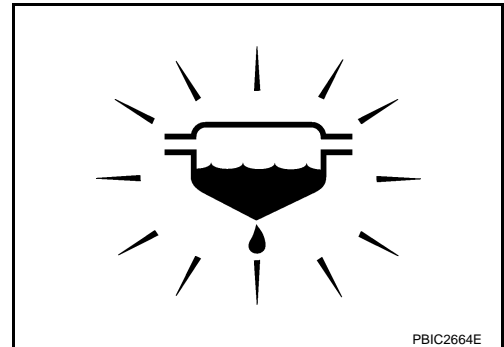
WARNING:

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 CO2 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-33, "Water Draining"](#).



PREPARATION

< PREPARATION >

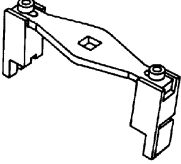
[M9R]

PREPARATION

PREPARATION

Commercial Service Tools

INFOID:000000001366199

Tool name	Description
Lock ring wrench  ZZA0122D	Removing and Installing lock ring

ON-VEHICLE MAINTENANCE

FUEL SYSTEM

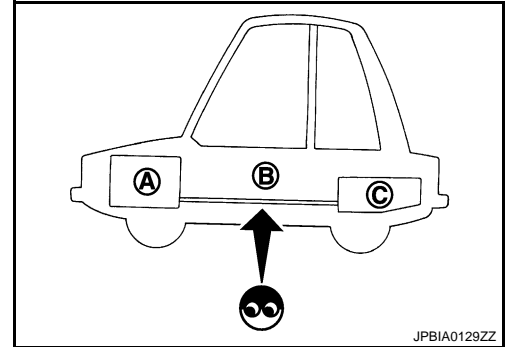
Inspection

INFOID:000000001366200

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:000000001366201

CAUTION:

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

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

FUEL FILTER

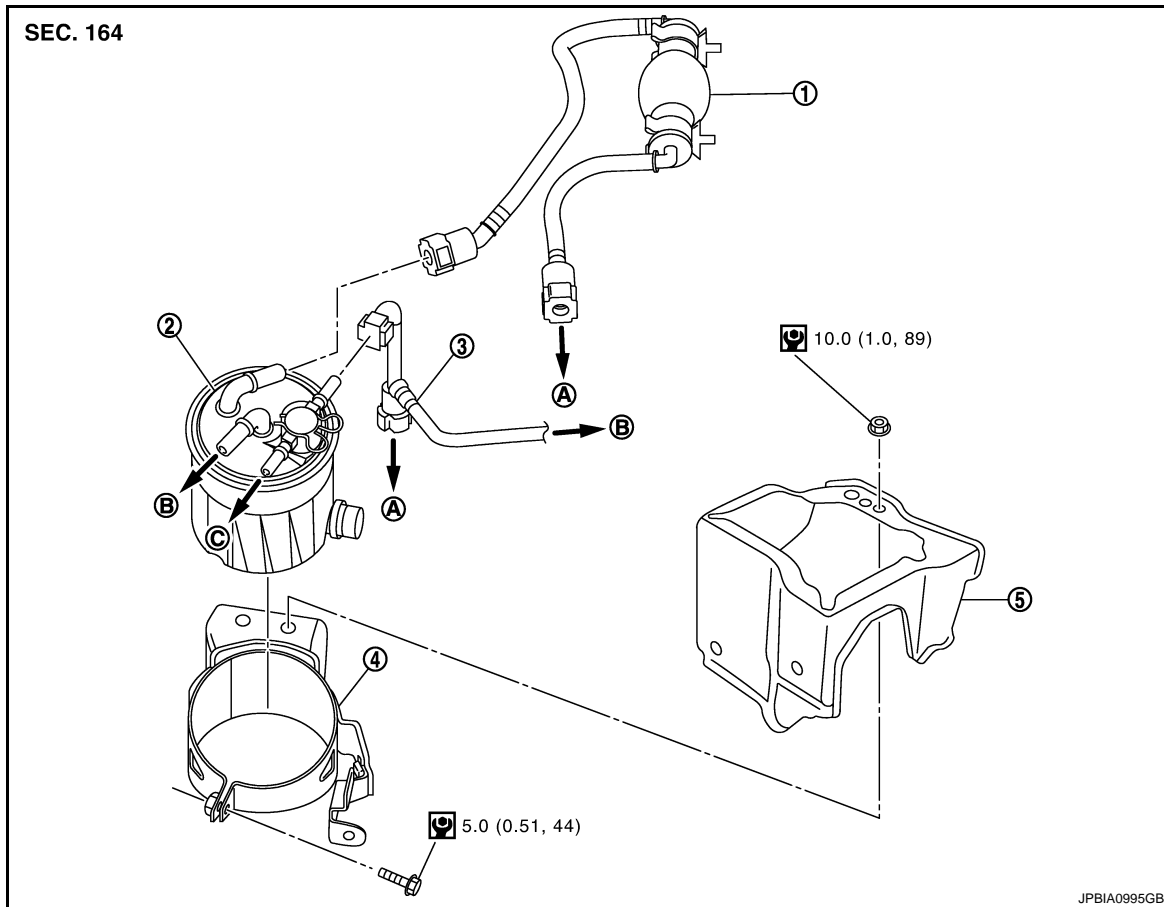
< ON-VEHICLE MAINTENANCE >

[M9R]

FUEL FILTER

Exploded View

INFOID:000000001366202



- | | | |
|--------------------------------------|--------------------------|------------------|
| 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:000000001366203

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-33, "Air Bleeding"](#).
CAUTION:
Never bend or twist the fuel tube during installation and removal.

FUEL FILTER

< ON-VEHICLE MAINTENANCE >

[M9R]

Water Draining

INFOID:000000001366204

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:

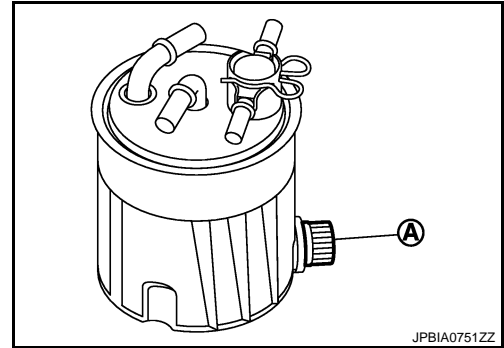
- Water in filter is drained with fuel. Prepare larger capacity pan than fuel filter volume.
- Drained water is mixed with fuel. Prevent fuel from adhering to rubber parts such as engine mounting insulator.

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.

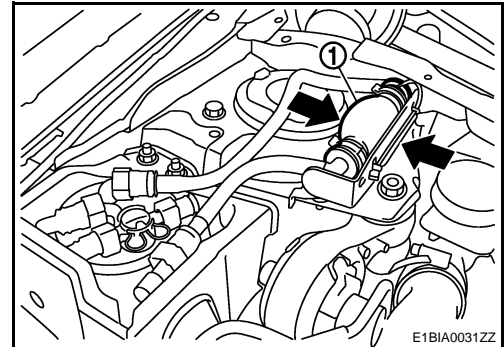
5. Bleed air in fuel piping. Refer to [FL-33. "Air Bleeding"](#).
6. Start engine and check there is no fuel leakage.



Air Bleeding

INFOID:000000001366205

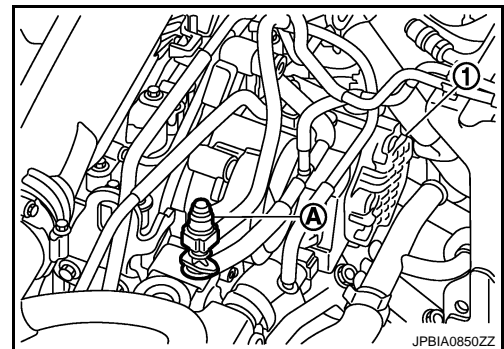
1. Prime the circuit using the priming bulb (1).
2. Perform engine cranking with repeating several times until engine starting.



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

1 : Fuel pump

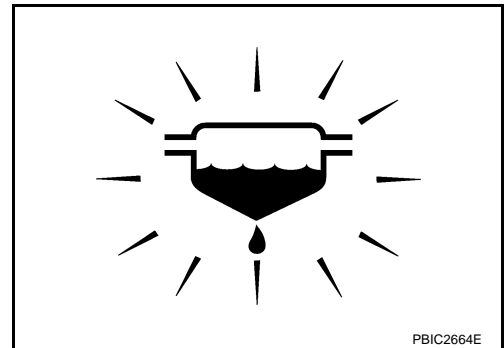
4. When the bleeding is completed, connect the quick connector, and check absence of leakage.



Fuel Filter Sensor (With Fuel Filter Warning)

INFOID:000000001495793

- Drain water from fuel filter, when the fuel filter warning lamp turns ON. Refer to [FL-33. "Water Draining"](#).



FUEL FILTER

< ON-VEHICLE MAINTENANCE >

[M9R]

Inspection

INFOID:000000001366206

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]

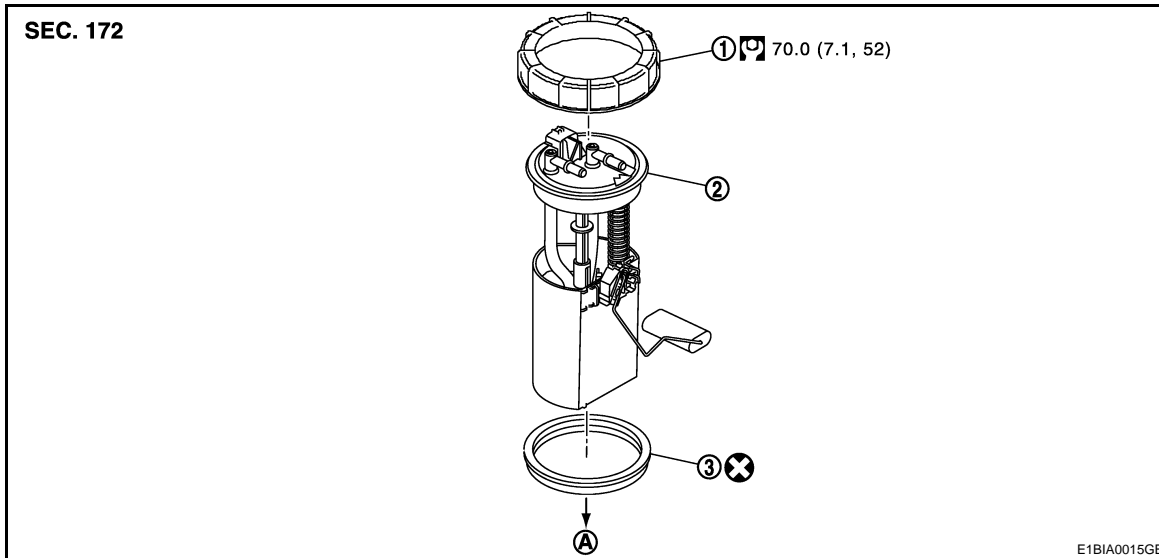
ON-VEHICLE REPAIR

FUEL LEVEL SENSOR UNIT

2WD

2WD : Exploded View

INFOID:000000001366207



1. Lock ring

2. Fuel level sensor unit

3. O-ring

A. To fuel tank

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

CAUTION:

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

2WD : Removal and Installation

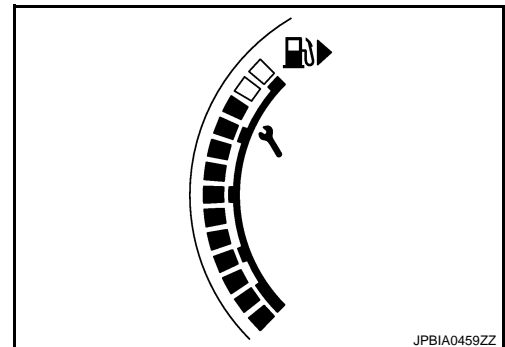
INFOID:000000001366208

REMOVAL

WARNING:

Be sure to read "General Precautions" before working on the fuel system. Refer to [FL-29, "General Precautions"](#).

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-42, "2WD : 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-20, "Exploded View"](#).

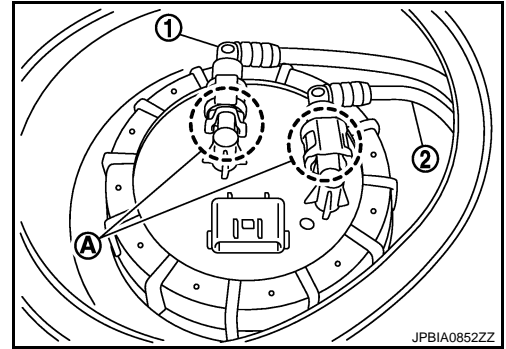
FUEL LEVEL SENSOR UNIT

[M9R]

< ON-VEHICLE REPAIR >

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).

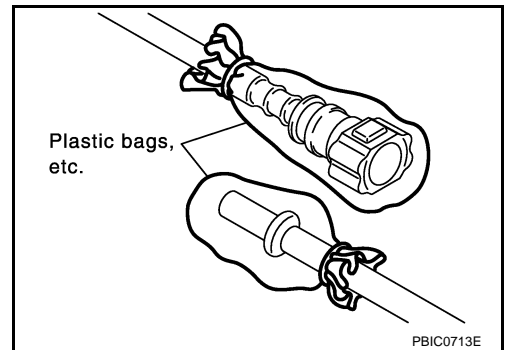
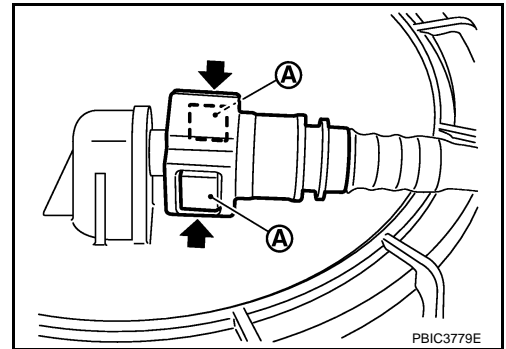
- 1 : Fuel tube (return side)
- 2 : Fuel tube (feed side)



- Disconnect quick connector as follows:
 - Pinch quick connector square-part (A) with your fingers, and pull out the quick connector by hand.
 - 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:

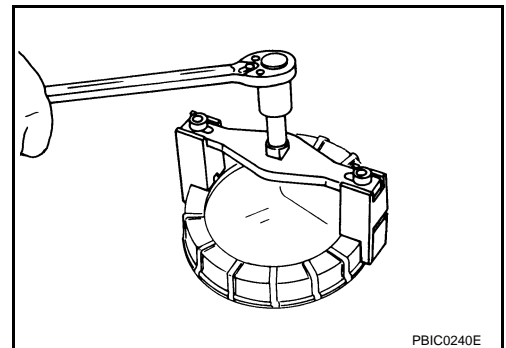
- Quick connector can be removed when the tabs are completely depressed. Never twist it more than necessary.
- Never use any tools to disconnect quick connector.
- Keep resin tube away from heat. Be especially careful when welding near the resin tube.
- Prevent acid liquid such as battery electrolyte, etc. from getting on resin tube.
- Never bend or twist resin tube during installation and disconnection.
- To keep the connecting portion clean and to avoid damage and foreign materials, cover them completely with plastic bags or something similar.
- When resin tube or hard tube (or the equivalent) is replaced, also replace retainer with new one.
- To keep the connecting portion clean and to avoid damage and foreign materials, cover them completely with plastic bags or something similar.
- Never insert plug, preventing damage on o-ring in quick connector.



7. 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.



8. Remove fuel level sensor unit.

CAUTION:

- Never bend float arm during removal.

FUEL LEVEL SENSOR UNIT

[M9R]

< ON-VEHICLE REPAIR >

- 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.

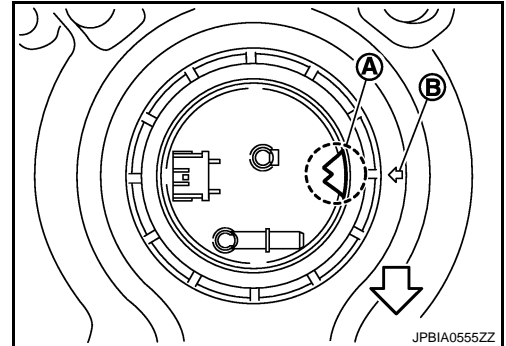
INSTALLATION

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

Fuel Level Sensor Unit

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.

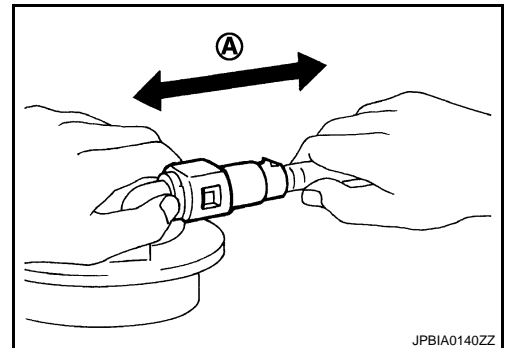
⇐ : Vehicle front



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-31](#), "[Inspection](#)".
1. Install inspection hole covers with the front mark (arrow) facing front of vehicle.
 2. Lock clips by turning counterclockwise.

2WD : Inspection

INFOID:000000001366209

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.

4WD

FUEL LEVEL SENSOR UNIT

[M9R]

< ON-VEHICLE REPAIR >

- 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.

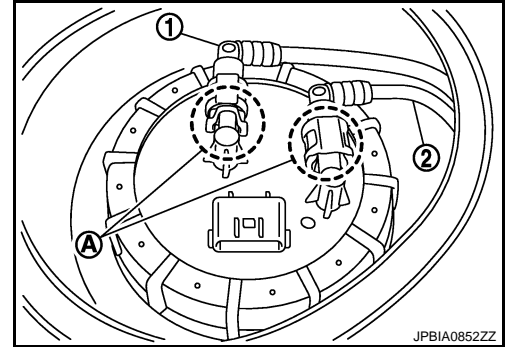
NOTE:

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

- Open fuel filler lid.
- Open fuel filler cap and release the pressure inside the fuel tank.
- Remove rear seat cushion. Refer to [SE-20, "Exploded View"](#).
- Remove inspection hole cover.
 - Using a screwdriver, remove it by turning clips clockwise by 90 degrees.
- Disconnect harness connector and quick connectors (A).

1 : Fuel tube (return side)

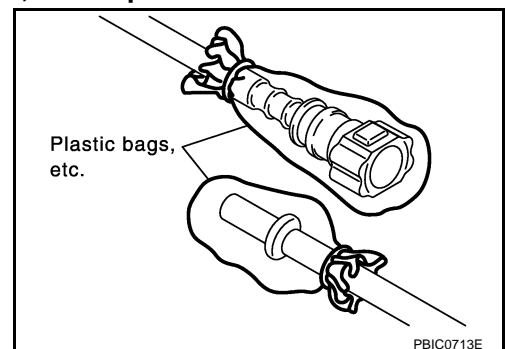
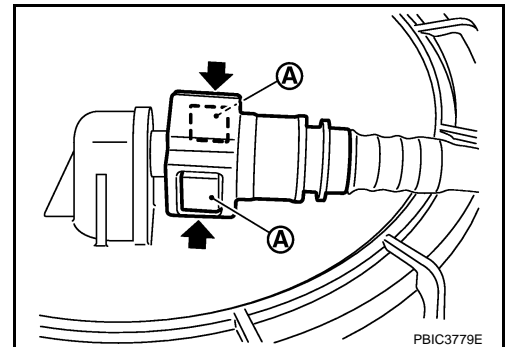
2 : Fuel tube (feed side)



- Disconnect quick connector as follows:
 - Pinch quick connector square-part (A) with your fingers, and pull out the quick connector by hand.
 - 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:

- Quick connector can be removed when the tabs are completely depressed. Never twist it more than necessary.
- Never 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.
- Never bend or twist resin tube during installation and disconnection.
- To keep the connecting portion clean and to avoid damage and foreign materials, cover them completely with plastic bags or something similar.
- When resin tube or hard tube (or the equivalent) is replaced, also replace retainer with new one.
- To keep the connecting portion clean and to avoid damage and foreign materials, cover them completely with plastic bags or something similar.
- Never insert plug, preventing damage on o-ring in quick connector.



FUEL LEVEL SENSOR UNIT

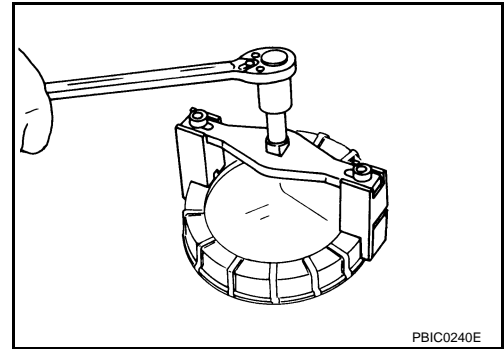
[M9R]

< ON-VEHICLE REPAIR >

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

NOTE:

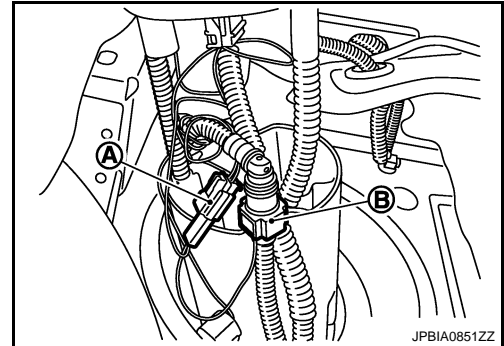
For reference when installing, put a matching mark on lock ring, fuel level sensor unit and fuel tank.



- 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.



- 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.

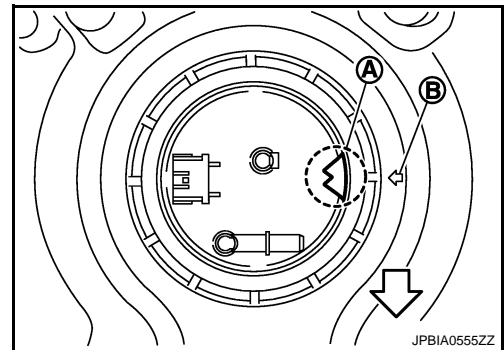
Fuel Level Sensor Unit and Sub Fuel Level Sensor Unit

- Install O-ring to fuel tank without any twist.
- 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 (A) is located on the fuel tank of the vehicle front side.



Quick Connector

Connect quick connector of fuel tube in the following procedure:

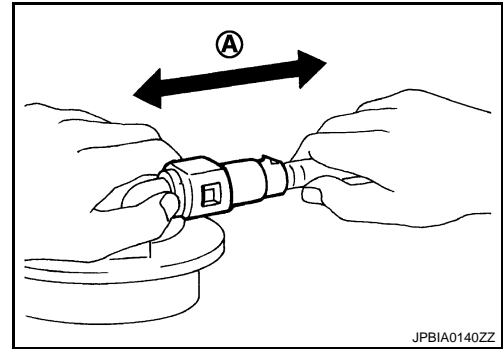
- Check the connection for damage or any foreign materials.
- Align the connector with the fuel tube, then insert the connector straight into the fuel tube until a “click” sound is heard.
- After connecting, check that the connection is secured with following procedures.
 - Visually confirm that the two tabs are connected to the connector.

FUEL LEVEL SENSOR UNIT

[M9R]

< ON-VEHICLE REPAIR >

- 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-46](#), "[4WD : Inspection](#)".
1. Install inspection hole covers with the front mark (arrow) facing front of vehicle.
 2. Lock clips by turning counterclockwise.

4WD : Inspection

INFOID:000000001537563

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 TANK

< ON-VEHICLE REPAIR >

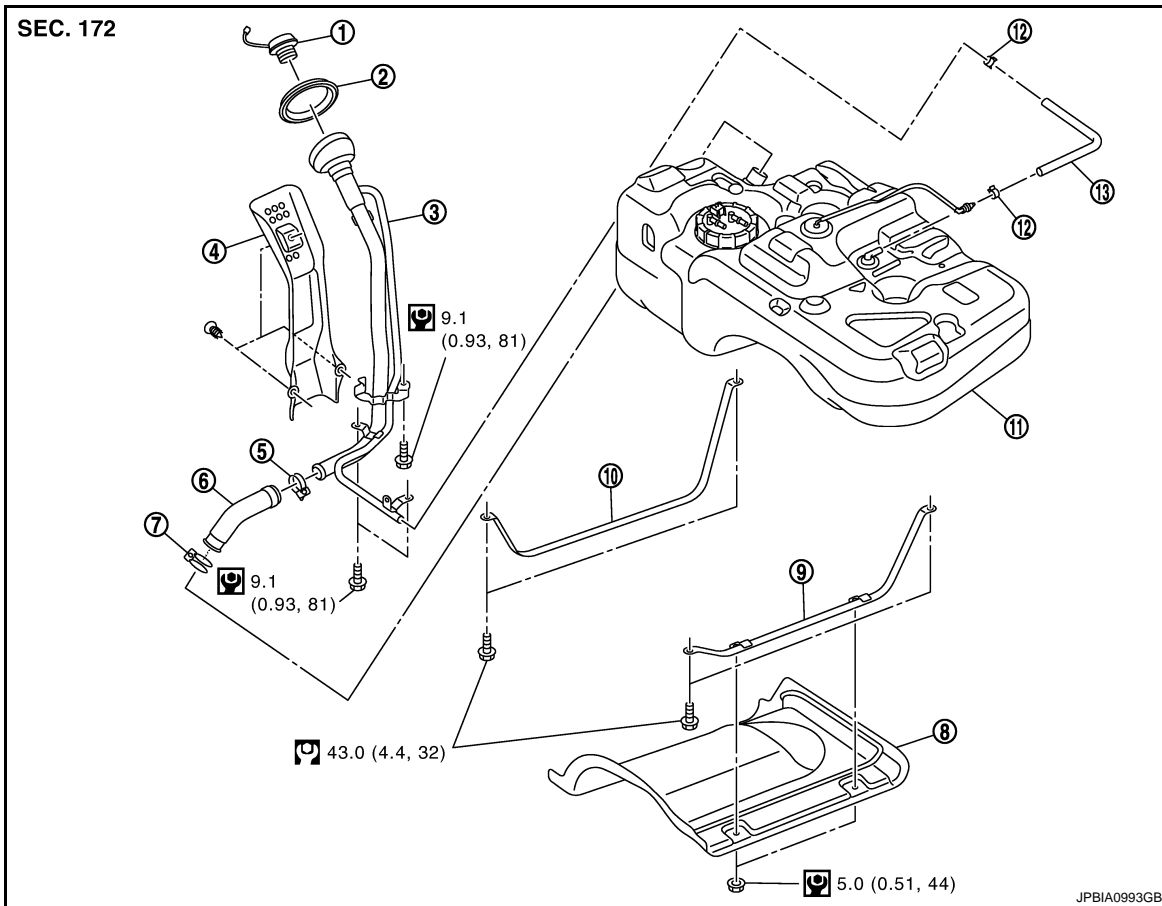
[M9R]

FUEL TANK

2WD

2WD : Exploded View

INFOID:000000001532216



- | | | |
|-------------------------|---------------|------------------------|
| 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.

2WD : Removal and Installation

INFOID:000000001366211

REMOVAL

WARNING:

Be sure to read "General Precautions" when working on the fuel system. Refer to [FL-29, "General Precautions"](#).

1. Perform the steps 2 to 6 of "REMOVAL" in "FUEL LEVEL SENSOR UNIT". Refer to [FL-35, "2WD : Removal and Installation"](#).
2. Drain fuel from fuel tank if necessary. Refer to [FL-35, "2WD : 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-19, "Exploded View"](#).

FUEL TANK

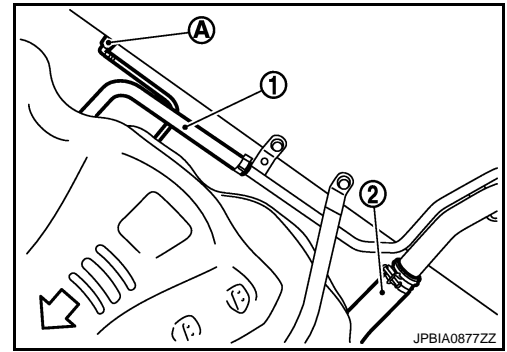
[M9R]

< ON-VEHICLE REPAIR >

4. Remove protector from fuel tank.
5. Disconnect EVAP tube (A).

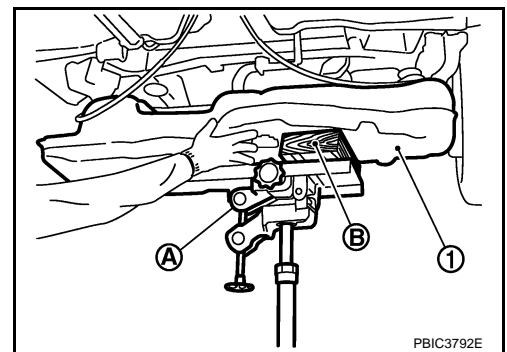
↔: Vehicle front

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



8. Remove parking brake cable mounting bolts and separate parking brake cable from suspension arm. Refer to [PB-5, "Exploded View"](#).

9. Support center of fuel tank (1) with transmission jack (A).
CAUTION:
Securely support the fuel tank with a piece of wood (B).



10. Remove fuel tank band (RH and LH).
11. 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.

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)

2WD : Inspection

INFOID:000000001366212

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.

4WD

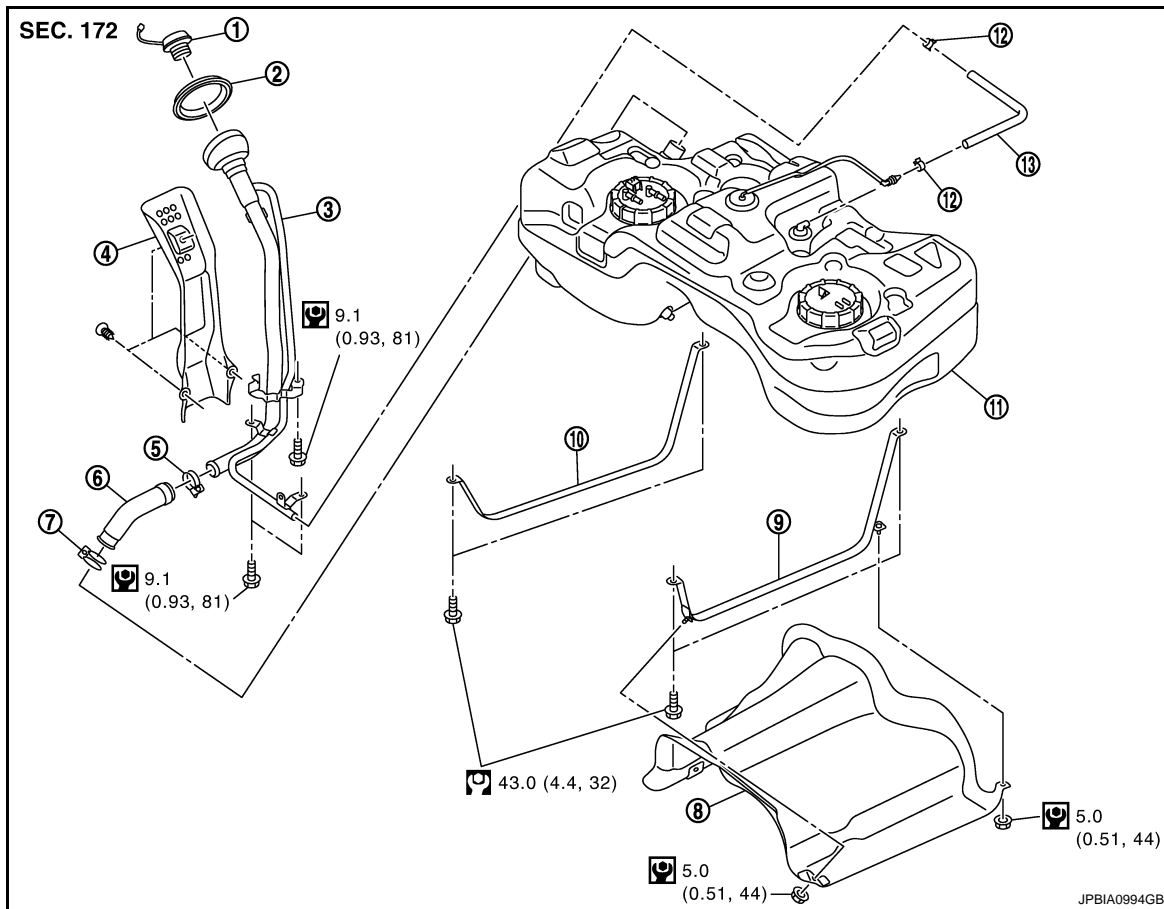
FUEL TANK

< ON-VEHICLE REPAIR >

[M9R]

4WD : Exploded View

INFOID:000000001532217



- | | | |
|-------------------------|---------------|------------------------|
| 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.

4WD : Removal and Installation

INFOID:000000001532219

REMOVAL

WARNING:

Be sure to read "General Precautions" when working on the fuel system. Refer to [FL-29, "General Precautions"](#).

1. Perform the steps 2 to 6 of "REMOVAL" in "FUEL LEVEL SENSOR UNIT". Refer to [FL-35, "2WD : Removal and Installation"](#).
2. Drain fuel from fuel tank if necessary. Refer to [FL-35, "2WD : 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-19, "Exploded View"](#).
 4. Remove propeller shaft. Refer to [RAX-13, "Exploded View"](#).
 5. Remove protector from fuel tank.

FUEL TANK

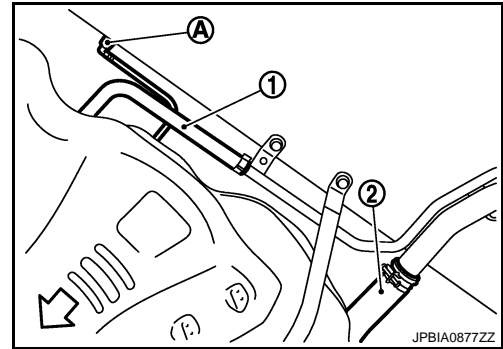
[M9R]

< 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-21, "Exploded View"](#).
10. Remove parking brake cable mounting bolts and separate parking brake cable from suspension arm. Refer to [PB-5, "Exploded View"](#).
11. Disconnect 4WD solenoid harness connector and harness clip.
12. Loosen final drive mounting nut (A) at rear suspension member (1). Refer to [RSU-21, "Exploded View"](#).

CAUTION:

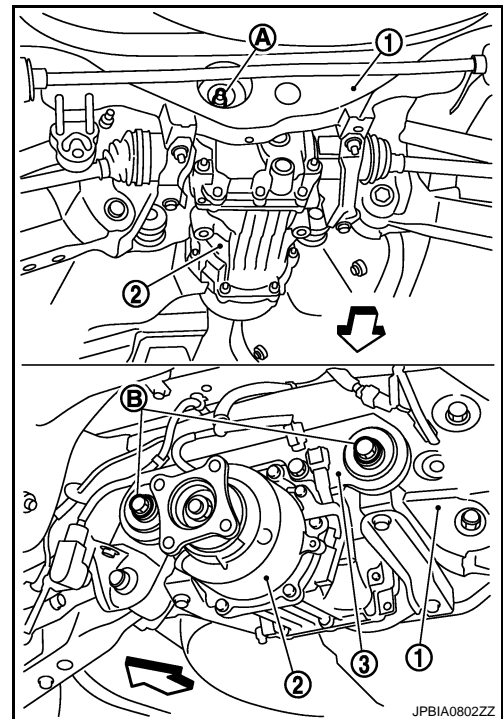
Never remove final drive mounting nut.

↔ : Vehicle front

13. Remove final drive mounting bolts (B) from final drive mounting bracket (3) to tilt final drive assembly (2). Refer to [DLN-131, "Exploded View"](#).

NOTE:

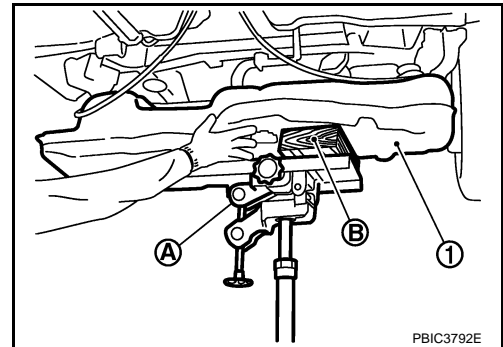
Final drive assembly does not have to be removed from the vehicle.



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

[M9R]

< ON-VEHICLE REPAIR >

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)

4WD : Inspection

INFOID:000000001532218

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:000000001366213

A

FL

Standard and Limit

Fuel tank capacity	Approx. 65 ℓ (14-1/4 Imp gal)
Fuel recommendation	Refer to GI-32

C

D

E

F

G

H

I

J

K

L

M

N

O

P