NO. 1 FUEL SUCTION SUPPORT

FUEL SUB-TANK

FUEL PRESSURE REGULATOR ASSEMBLY

FUEL PUMP SPACER

FUEL PUMP

FUEL PUMP HARNESS

HARNESS PROTECTOR

FUEL SENDER GAUGE ASSEMBLY

O-RING

Non-reusable part
REMOVAL

1. REMOVE FUEL SUCTION TUBE ASSEMBLY WITH PUMP AND GAUGE

(a) Remove the fuel suction tube assembly with pump and gauge.

2. REMOVE FUEL SENDER GAUGE ASSEMBLY

3. REMOVE FUEL PUMP

(a) Disconnect the connector of the fuel pump harness.

(b) Disconnect the fuel pump filter hose.

(c) Using a screwdriver with its tip wrapped in protective tape, disengage the 2 claws, and remove the fuel filter and fuel pump from the fuel sub-tank.

Text in Illustration

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<table>
<thead>
<tr>
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<tbody>
<tr>
<td>*1</td>
<td>Fuel Tube</td>
</tr>
<tr>
<td>*2</td>
<td>Fuel Sub-tank</td>
</tr>
</tbody>
</table>

NOTICE:

Do not do anything which may separate the fuel tube from either the fuel suction plate or fuel filter assembly, such as applying excessive force to the tube.

(d) Using a screwdriver with its tip wrapped in protective tape, disengage the 2 claws and remove the No. 1 fuel suction support.
(e) Using a screwdriver with its tip wrapped in protective tape, disengage the 5 claws, and remove the fuel pump filter and fuel pump from the fuel filter.

- Do not damage the fuel pump filter.
- Do not remove the suction filter.
- Do not use either the fuel pump or the suction filter if the suction filter is removed from the fuel pump.

(f) Disconnect the fuel pump harness connector.

(g) Remove the O-ring and spacer from the fuel pump.

**Text in Illustration**

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<tbody>
<tr>
<td>*1</td>
<td>O-ring</td>
</tr>
<tr>
<td>*2</td>
<td>Spacer</td>
</tr>
</tbody>
</table>

**NOTICE:**

Be careful not to damage the sealing surface.
HINT:

If the O-ring still remains in the fuel filter, remove it using a wire tip (1 mm diameter) that is formed as shown in the illustration.

4. REMOVE FUEL PRESSURE REGULATOR ASSEMBLY

(a) Using a screwdriver with its tip wrapped in protective tape, remove the fuel pressure regulator assembly.

NOTICE:

Slowly pull out the fuel pressure regulator assembly because the O-ring is firmly installed between the regulator and the fuel filter.

(b) Remove the 2 O-rings from the pressure regulator assembly.

**Text in Illustration**

| *1     | O-ring |
INSTALLATION

1. INSTALL FUEL PRESSURE REGULATOR ASSEMBLY

(a) Apply gasoline to 2 new O-rings and then install them to the fuel pressure regulator assembly.

**Text in Illustration**

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<tbody>
<tr>
<td>*1</td>
<td>O-ring</td>
</tr>
</tbody>
</table>

(b) Install the fuel pressure regulator assembly.

2. INSTALL FUEL PUMP

3. INSTALL FUEL SENDER GAUGE ASSEMBLY

4. INSTALL FUEL SUCTION TUBE ASSEMBLY WITH PUMP AND GAUGE

(a) Install the fuel suction tube assembly with pump and gauge.
COMPONENTS

ILLUSTRATION

for Integrated Type:

for Separate Type:

ILLUSTRATION
REAR SEAT CUSHION ASSEMBLY

ILLUSTRATION
REAR FLOOR SERVICE HOLE COVER

FUEL TANK MAIN TUBE SUB-ASSEMBLY

FUEL PUMP GAUGE RETAINER

FUEL SUCTION TUBE ASSEMBLY WITH PUMP AND GAUGE

GASKET

Non-reusable part

c

ILLUSTRATION
REMOVAL

1. REMOVE REAR SEAT CUSHION ASSEMBLY

2. REMOVE REAR FLOOR SERVICE HOLE COVER

(a) Remove the rear floor service hole cover.

3. DISCHARGE FUEL SYSTEM PRESSURE

HINT:

4. REMOVE REAR NO. 2 FLOOR BOARD (for Separate Type)

5. REMOVE REAR DECK FLOOR BOX

6. REMOVE REAR NO. 3 FLOOR BOARD

7. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected.

8. REMOVE FUEL TANK MAIN TUBE SUB-ASSEMBLY

(a) Remove the tube joint clip and disengage the fuel tank main tube clamp, then pull the fuel tube joint out of the plug of the fuel suction tube assembly.
Text in Illustration

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<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>*1</td>
<td>Tube Joint Clip</td>
</tr>
<tr>
<td>*2</td>
<td>Fuel Tank Main Tube Clamp</td>
</tr>
<tr>
<td>*3</td>
<td>Fuel Tube Joint</td>
</tr>
<tr>
<td>*4</td>
<td>O-ring</td>
</tr>
</tbody>
</table>

- Check that there is no dirt or other foreign objects around the fuel tube joint before disconnecting it. Clean the joint if necessary.
- It is necessary to prevent mud or dirt from entering the joint. If mud or dirt gets in the joint, the O-rings may not seal properly.
- Only disconnect the joint by hand.
- Do not bend, kink or twist the nylon tubes.
- Protect the contact surfaces by covering it with a plastic bag.

9. REMOVE FUEL PUMP GAUGE RETAINER

(a) Using a 6 mm socket hexagon wrench, set SST to the fuel pump gauge retainer.

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09808-01430

- Engage the SST claws securely with the fuel pump gauge retainer holes to secure SST.
- Install SST while pressing the SST claws toward the fuel pump gauge retainer (towards the center of SST).

(b) Using SST, loosen the fuel pump gauge retainer.

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09808-01430

- Do not use any tools other than specified in this operation. Damage to the fuel pump gauge retainer or the fuel tank may result.
• Loosen the retainer by turning it counterclockwise while holding SST down. Do not allow the claw of the tank suction tube support to slip out of its groove on the fuel tank.

HINT:

The holes on the fuel pump gauge retainer can be fitted into the tips of SST.

(c) Remove the fuel pump gauge retainer while holding the fuel suction tube assembly by hand.

10. REMOVE FUEL SUCTION TUBE ASSEMBLY WITH PUMP AND GAUGE

(a) Remove the fuel suction tube assembly with pump and gauge from the fuel tank.

NOTICE:

Make sure that the fuel sender gauge arm does not bend.

(b) Remove the gasket from the fuel tank.
DISASSEMBLY

1. REMOVE FUEL SENDER GAUGE ASSEMBLY

2. REMOVE FUEL PUMP

(a) Disconnect the connector of the fuel pump harness.

(b) Disconnect the fuel pump filter hose.

(c) Using a screwdriver with its tip wrapped in protective tape, disengage the 2 claws, and remove the fuel filter and fuel pump from the fuel sub-tank.

Text in Illustration

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<thead>
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<tbody>
<tr>
<td>1</td>
<td>Fuel Tube</td>
</tr>
<tr>
<td>2</td>
<td>Fuel Sub-tank</td>
</tr>
</tbody>
</table>

NOTICE:

Do not do anything which may separate the fuel tube from either the fuel suction plate or fuel filter assembly, such as applying excessive force to the tube.

(d) Using a screwdriver with its tip wrapped in protective tape, disengage the 2 claws and remove the No. 1 fuel suction support.
(e) Using a screwdriver with its tip wrapped in protective tape, disengage the 5 claws, and remove the fuel pump filter and fuel pump from the fuel filter.

- Do not damage the fuel pump filter.
- Do not remove the suction filter.
- Do not use either the fuel pump or the suction filter if the suction filter is removed from the fuel pump.

(f) Disconnect the fuel pump harness connector.

(g) Remove the O-ring and spacer from the fuel pump.

**Text in Illustration**

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<tbody>
<tr>
<td>*1</td>
<td>O-ring</td>
</tr>
<tr>
<td>*2</td>
<td>Spacer</td>
</tr>
</tbody>
</table>

**NOTICE:**

Be careful not to damage the sealing surface.

**HINT:**

If the O-ring still remains in the fuel filter, remove it using a wire tip (1 mm diameter) that is formed as shown in the illustration.
INSPECTION

1. INSPECT FUEL PUMP

(a) Check the resistance.

(1) Using an ohmmeter, measure the resistance according to the value(s) in the table below.

Standard Resistance:

<table>
<thead>
<tr>
<th>Tester Connection</th>
<th>Condition</th>
<th>Specified Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - 2</td>
<td>20°C (68°F)</td>
<td>0.2 to 3.0 Ω</td>
</tr>
</tbody>
</table>

If the result is not as specified, replace the fuel pump.

(b) Check fuel pump operation.

(1) Apply battery voltage between terminals 1 and 2. Check that the pump operates.

NOTICE:

- These tests must be done quickly (within 10 seconds) to prevent the coil from burning out.
- Keep the fuel pump as far away from the battery as possible.
- Always switch the voltage on and off on the battery side, not the fuel pump side. If the pump does not operate, replace the fuel pump.

If the pump does not operate, replace the fuel pump.
1. INSTALL FUEL PUMP

(a) Apply gasoline to a new O-ring. Then install the O-ring and spacer to the fuel pump.

Text in Illustration

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</thead>
<tbody>
<tr>
<td>*1</td>
<td>O-ring</td>
</tr>
<tr>
<td>*2</td>
<td>Spacer</td>
</tr>
</tbody>
</table>

(b) Connect the fuel pump harness connector.

(c) Engage the 5 claws of the fuel pump.

- Make sure that the O-ring is not cut or pinched during the installation.
- Engage the claws securely.
- Do not remove the fuel filter.

(d) Engage the 2 claws of the No. 1 fuel suction support.
(e) Engage the 2 claws of the fuel suction support and install the fuel filter and the fuel pump onto the fuel sub-tank.

(f) Align the groove of the fuel pump filter hose with the cutout of the fuel sub-tank and install the hose.

NOTICE:
Do not apply excessive force to the fuel tube or the suction support.

(g) Connect the connector of the fuel pump harness.

2. INSTALL FUEL SENDER GAUGE ASSEMBLY
INSTALLATION

1. INSTALL FUEL SUCTION TUBE ASSEMBLY WITH PUMP AND GAUGE

(a) Install a new gasket onto the fuel tank.

(b) Install the fuel suction tube assembly with pump and gauge to the fuel tank.

Text in Illustration

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<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>*1</td>
<td>Protrusion</td>
</tr>
<tr>
<td>*2</td>
<td>Notch</td>
</tr>
</tbody>
</table>

NOTICE:

Make sure that the fuel sender gauge arm does not bend.

(c) Align the protrusions of the fuel suction tube assembly with pump and gauge with the notches of the fuel tank.

NOTICE:

Ensure that the fuel suction tube gasket is in the correct position.

2. INSTALL FUEL PUMP GAUGE RETAINER

(a) While holding the fuel suction tube assembly with pump and gauge by hand, position the fuel pump gauge retainer and tighten it lightly by hand.

Text in Illustration

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<tbody>
<tr>
<td>*1</td>
<td>Lock Point</td>
</tr>
</tbody>
</table>
NOTICE:

Check that the contact surface of the fuel tank retainer is not scratched or damaged, and prevent the entry of foreign objects.

(b) Using a 6 mm socket hexagon wrench, set SST to the fuel pump gauge retainer.

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09808-01430

- Hold the fuel suction tube assembly upright by hand to ensure that the fuel suction tube gasket is not moved out of position.
- Engage the SST claws securely with the fuel pump gauge retainer holes to secure SST.
- Install SST while pressing the SST claws toward the fuel pump gauge retainer (toward the center of SST).

(c) Using SST, align the marks on the fuel tank and fuel pump gauge retainer.

**Text in Illustration**

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<tr>
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<tbody>
<tr>
<td>*1</td>
<td>Lock Point</td>
<td></td>
</tr>
<tr>
<td>*2</td>
<td>Starting Point</td>
<td></td>
</tr>
<tr>
<td>*3</td>
<td>Front of Vehicle</td>
<td></td>
</tr>
</tbody>
</table>

SST: 09808-14020
09808-01410
09808-01420
09808-01430

- Do not use any tools other than specified in this operation. Damage to the fuel pump gauge retainer or the fuel tank may result.
- Tighten the retainer by turning it clockwise while holding SST
3. CONNECT FUEL TANK MAIN TUBE SUB-ASSEMBLY

(a) Push the fuel tube joint in the plug of the fuel suction plate, then install the tube joint clip.

Text in Illustration

<table>
<thead>
<tr>
<th>*1</th>
<th>Tube Joint Clip</th>
</tr>
</thead>
<tbody>
<tr>
<td>*2</td>
<td>Fuel Tank Main Tube clamp</td>
</tr>
<tr>
<td>*3</td>
<td>Fuel Tube Joint</td>
</tr>
<tr>
<td>*4</td>
<td>O-ring</td>
</tr>
<tr>
<td>*5</td>
<td>Collars</td>
</tr>
</tbody>
</table>

- Check that there are no scratches or foreign objects around the connected part of the fuel tube joint and plug before performing this work.
- Check that the fuel tube joint is securely inserted to the end.
- Check that the tube joint clip is on the collar of the fuel tube joint.
- After installing the tube joint clip, check that the fuel tank main tube cannot be pushed out.

(b) Connect the fuel pump connector.

4. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected.

5. INSPECT FOR FUEL LEAK

6. INSTALL REAR FLOOR SERVICE HOLE COVER

(a) Install the rear floor service hole cover with new butyl tape.
7. INSTALL REAR SEAT CUSHION ASSEMBLY

8. INSTALL REAR NO. 3 FLOOR BOARD

9. INSTALL REAR DECK FLOOR BOX

10. INSTALL REAR NO. 2 FLOOR BOARD (for Separate Type)
COMPONENTS

ILLUSTRATION

- REAR FLOOR SERVICE HOLE COVER
- FUEL TANK MAIN TUBE SUB-ASSEMBLY
- FUEL PUMP GAUGE RETAINER
- FUEL SUCTION TUBE ASSEMBLY WITH PUMP AND GAUGE
- GASKET

● Non-reusable part

ILLUSTRATION
• O-RING
• O-RING
• O-RING

FUEL PUMP SPACER
FUEL PUMP
FUEL PRESSURE REGULATOR ASSEMBLY
FUEL SUB-TANK

FUEL PUMP HARNESS
HARNESS PROTECTOR
FUEL SENDER GAUGE ASSEMBLY

• Non-reusable part
REMOVAL

1. REMOVE FUEL SUCTION TUBE ASSEMBLY WITH PUMP AND GAUGE

(a) Remove the fuel suction tube assembly with pump and gauge.

2. REMOVE FUEL SENDER GAUGE ASSEMBLY

(a) Disconnect the 3 harness clamps.

NOTICE:
Do not damage the wire harness.

(b) Remove the 2 harness protectors from the wire harness.

NOTICE:
Do not damage the wire harness.

(c) Disconnect the connector of the fuel sender gauge assembly.

(d) Release the lock as shown in the illustration and slide the fuel sender gauge assembly to remove it.
1. INSPECT FUEL SENDER GAUGE ASSEMBLY

(a) Remove the fuel sender gauge assembly.

(b) Check that the float moves smoothly between F and E.

(c) Measure the resistance between terminals 1 and 2 of the connector according to the value(s) in the table below.

**Standard Resistance:**

<table>
<thead>
<tr>
<th>Float Level</th>
<th>Resistance (Ω)</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>12.0 to 18.0</td>
</tr>
<tr>
<td>Between E and F</td>
<td>12.0 to 415.0 (Gradually changes)</td>
</tr>
<tr>
<td>E</td>
<td>405.0 to 415.0</td>
</tr>
</tbody>
</table>

If the value is not as specified, replace the fuel sender gauge assembly.

**Text in Illustration**

- *1* Front view of wire harness connector: *(to Fuel Sender Gauge Assembly)*
- *2* Fuel Sender Gauge Assembly
1. INSTALL FUEL SENDER GAUGE ASSEMBLY

(a) Install the fuel sender gauge assembly by sliding it downward.

(b) Connect the connector of the fuel sender gauge assembly.

(c) Install the 2 harness protectors.

NOTICE:
Do not damage the wire harness.

(d) Connect the 3 harness clamps.
2. INSTALL FUEL SUCTION TUBE ASSEMBLY WITH PUMP AND GAUGE

(a) Install the fuel suction tube assembly with pump and gauge.
**PRECAUTION**

1. PRECAUTIONS

(a) Before inspecting and repairing the fuel system, disconnect the cable from the negative (-) battery terminal.

(b) Do not smoke or work near fire when handling the fuel system.

(c) Keep gasoline away from rubber or leather parts.

2. DISCHARGE FUEL SYSTEM PRESSURE

**CAUTION:**

- Perform the following procedure to prevent fuel from spilling out before removing any fuel system parts.
- Pressure will still remain in the fuel lines even after performing the following procedure. When disconnecting a fuel line, cover it with a piece of cloth to prevent fuel from spraying or coming out.

(a) Remove the rear seat cushion assembly.

(b) Remove the rear floor service hole cover.

(c) Disconnect the fuel pump connector.

(d) Put the vehicle in the "inspection mode".

(e) Start the engine.

(f) After the engine has stopped on its own, turn the power switch off.

**HINT:**

DTCs P0171/25 may be detected.
(g) Crank the engine again and make sure that the engine does not start.

(h) Disconnect the cable from the negative (-) battery terminal.

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected.

(i) Connect the fuel pump connector.

(j) Loosen the fuel tank cap, then discharge the pressure in the fuel tank completely.

3. FUEL LINE

(a) When disconnecting a high-pressure fuel line, a large amount of gasoline will spray out. Perform the following procedure:

1. Discharge fuel system pressure.

2. Disconnect the fuel tube.

3. Drain the fuel remaining inside the fuel pump tube into a container.

4. Cover the disconnected pipe and connector with a plastic bag to prevent damage and contamination.

(b) Perform the following procedure when disconnecting a fuel delivery pipe (metallic type):

Text in Illustration

<table>
<thead>
<tr>
<th></th>
<th>Plastic Bag</th>
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<tbody>
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<td>*1</td>
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Text in Illustration

<table>
<thead>
<tr>
<th></th>
<th>Retainer</th>
</tr>
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<tbody>
<tr>
<td>*1</td>
<td></td>
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</tbody>
</table>
HINT:
The structure of a fuel tube connector is as shown in the illustration.

(1) Check if there is any damage or foreign objects on the pipe connections.

(2) Remove the No. 2 fuel pipe clamp.

Text in Illustration

| *1 | No. 2 Fuel Pipe Clamp |

NOTICE:
Do not reuse the fuel pipe clamp.

(3) Find the metallic connector of the fuel tube assembly.

(4) Assemble SST to the connector as shown in the illustration.

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(5) Turn SST, align the retainers inside the connector with the SST chamfers and insert SST into the connector.
(6) Slide SST and the connector together towards the fuel tube assembly.

(c) Perform the following procedure when connecting a fuel tube connector (metallic type):

(1) Check if there is any damage or foreign objects on the pipe connections.

(2) Match the axis of the connector with the axis of the pipe, and push the pipe into the connector until the connector makes a "click" sound. If the pipe is difficult to push into the connector, apply a small amount of clean engine oil to the tip of the pipe.

(3) After connecting, check if the pipe and the connector are securely connected by pulling on them.

(4) Install a new No. 2 fuel pipe clamp.

**Text in Illustration**

*1 No. 2 Fuel Pipe Clamp
(5) Check for fuel leaks.

(d) Perform the following procedure when disconnecting a fuel tube connector (quick type A):

1. Release the claw and remove the No. 1 fuel pipe clamp.

2. Check that there is no dirt or other foreign objects on the pipe and contact surface before disconnecting them. Clean them if necessary.

3. Disconnect the connector from the pipe by hand.

NOTICE:

Be sure to disconnect the connector by hand.

4. If the connector and the pipe are stuck, push in and pull on the connector to release them. Pull the connector out of the pipe carefully.
(5) Check that there is no dirt or other foreign objects on the contact surface of the disconnected pipe. Clean them away if necessary.

(6) Cover the disconnected pipe and connector with a plastic bag to prevent damage and contamination.

Text in Illustration

| *1 | Plastic Bag |

(e) Perform the following procedure when connecting a fuel tube connector (quick type A):

(1) Check if there is any damage or foreign objects on the pipe connections.
(2) Line up the two parts of the pipes to be connected, and push them together until the connector makes a "click" sound. If the pipe is difficult to push into the connector, apply a small amount of clean engine oil to the tip of the pipe and reinsert it.

(3) After connecting the pipes, check that the pipe and connector are securely connected by pulling on them.

(4) Inspect for fuel leaks.

(5) Engage the lock claw and install the No. 1 fuel pipe clamp.

(f) Perform the following procedure when disconnecting a fuel tube connector (quick type B):
(1) Check that there is no damage or foreign matter on the part of the pipe that contacts the connector.

(2) Detach the 2 claws of the connector retainer. Push down on the connector and disconnect it from the pipe.

HINT:

Be sure to disconnect it by hand.

(3) If the connector and pipe are stuck, pinch the fuel pipe by hand and push or pull the connector to disconnect it.

(4) Check for foreign matter on the seal surface of the disconnected pipe. Clean it if necessary.

(5) Cover the disconnected pipe and connector with a plastic bag to prevent damage and contamination.

(g) Perform the following procedure when connecting a fuel tube connector (quick type B):

(1) Line up the two parts of the pipes to be connected, and fully push the fuel tube connector and pipe together until they are fully seated. Next, push the retainer into the connector until its claws lock. If the pipe is difficult to push into the connector, apply a small amount of clean engine oil to the tip of the pipe and reinsert it.

(2) After connecting the pipes, check that the pipe and connector are securely connected by pulling on them.

(3) Inspect for fuel leaks
(h) Observe the following precautions when handling a nylon tube:

**CAUTION:**

- Do not twist the connector part of the nylon tube or the quick connector when connecting them.
- Do not bend or twist the nylon tube.
- Do not remove the EPDM protector on the outside of the nylon tube.
- Do not pinch or kink the nylon tubes to prevent fuel leakage.

### 4. INJECTOR

(a) Observe the following precautions when removing and installing a fuel injector:

1. Do not reuse an O-ring and insulator.
2. When placing a new O-ring onto the injector, do not damage the O-ring.
3. Coat the new O-ring with grease or gasoline before installing it. Do not use engine oil, gear oil or brake fluid.

(b) Install the injector into the delivery pipe and cylinder head as shown in the illustration. Apply grease or gasoline to the contact surfaces of the injector before installing the injector.

**Text in Illustration**

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<thead>
<tr>
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<tbody>
<tr>
<td>*1</td>
<td>Delivery Pipe</td>
</tr>
<tr>
<td>*2</td>
<td>O-ring</td>
</tr>
<tr>
<td>3</td>
<td>Insulator</td>
</tr>
</tbody>
</table>

### 5. FUEL SUCTION TUBE ASSEMBLY WITH PUMP AND GAUGE

(a) Do not disconnect the tube shown in the illustration when disassembling the fuel suction tube assembly with pump and gauge. Doing so will cause reassembly of the fuel suction tube assembly with pump and gauge to be impossible as the tube is welded to the plate.

**Text in Illustration**

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<td>*1</td>
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### 6. INSPECT FOR FUEL LEAK

2010 Toyota Prius Repair Manual
(a) Check that there is no fuel leakage after performing maintenance anywhere on the fuel system.
PARTS LOCATION

ILLUSTRATION

- FUEL INJECTOR
- ECM
- FUEL SUCTION PUMP AND GAUGE ASSEMBLY
  - FUEL PUMP
  - FUEL SENDER GAUGE ASSEMBLY

ENGINE ROOM RELAY BLOCK
ON-VEHICLE INSPECTION

1. CHECK FUEL PUMP OPERATION AND INSPECT FOR FUEL LEAK

(a) Check fuel pump operation.

(1) Connect the Techstream to the DLC3.

(2) Turn the power switch on (IG).

NOTICE:

Do not start the engine.

(3) Turn the Techstream on.

(4) Enter the following menus: Powertrain / Engine and ECT / Active Test / Control the Fuel Pump /Speed.

(5) Check for pressure in the fuel inlet tube from the fuel line. Check that sounds of fuel flowing from the fuel tank can be heard. If no sounds can be heard, check the integration relay, fuel pump, ECM and wiring connectors.

(b) Inspect for fuel leaks.

(1) Check that there is no fuel leakage after performing maintenance anywhere on the fuel system. If there is a fuel leak, repair or replace parts as necessary.

(c) Turn the power switch off.

(d) Disconnect the Techstream from the DLC3.

2. CHECK FUEL PRESSURE

(a) Discharge fuel system pressure.

(b) Using a voltmeter, measure the battery voltage according to the value(s) in the table below.

Standard Voltage:

<table>
<thead>
<tr>
<th>Tester Connection</th>
<th>Condition</th>
<th>Specified Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive terminal - Negative terminal</td>
<td>Power switch off</td>
<td>11 to 14 V</td>
</tr>
</tbody>
</table>

(c) Disconnect the cable from the negative (-) battery terminal.

(d) Disconnect the fuel hose from the fuel main tube.

(e) Install SST (pressure gauge) using other SST as shown in the illustration.
(f) Clean up any spilled gasoline.

(g) Connect the cable to the negative (-) battery terminal.

(h) Connect the Techstream to the DLC3.

(i) Enter the following menus: Powertrain / Engine and ECT / Active Test / Control the Fuel Pump /Speed.

(j) Measure the fuel pressure.

Standard fuel pressure:

304 to 343 kPa (3.1 to 3.5 kgf/cm², 44 to 50 psi)

- If the fuel pressure is greater than the standard value, replace the fuel pressure regulator.
- If the fuel pressure is less than the standard value, check the fuel hoses and connections, fuel pump, fuel filter and fuel pressure regulator.

(k) Disconnect the Techstream from the DLC3.

(l) Put the vehicle in the "inspection mode".

(m) Start the engine.
(n) Measure the fuel pressure at idle.

Standard fuel pressure:

304 to 343 kPa (3.1 to 3.5 kgf/cm², 44 to 50 psi)

(o) Stop the engine.

(p) Check that the fuel pressure remains as specified for 5 minutes after the engine stops.

Standard fuel pressure:

147 kPa (1.5 kgf/cm², 21 psi) or more

If the fuel pressure is not as specified, check the fuel pump or fuel injector.

(q) After checking the fuel pressure, disconnect the cable from the negative (-) battery terminal and carefully remove SST to prevent gasoline from spraying.

(r) Reconnect the fuel tube to the main fuel tube (fuel tube connector).

(s) Install the No. 1 fuel pipe clamp to the fuel tube connector.

(t) Inspect for fuel leaks (Step 1).
COMPONENTS

ILLUSTRATION

- REAR FLOOR SERVICE HOLE COVER
- FUEL TANK MAIN TUBE SUB-ASSEMBLY
- FUEL PUMP GAUGE RETAINER
- FUEL SUCTION TUBE ASSEMBLY WITH PUMP AND GAUGE
- GASKET

● Non-reusable part
REMOVAL

1. REMOVE FUEL SUCTION TUBE ASSEMBLY WITH PUMP AND GAUGE

(a) Remove the fuel suction tube assembly with pump and gauge.

2. DRAIN FUEL

3. REMOVE REAR FLOOR SIDE MEMBER COVER LH (w/ Floor Under Cover)

4. REMOVE REAR FLOOR SIDE MEMBER COVER RH (w/ Floor Under Cover)

5. REMOVE REAR SUSPENSION BRACE SUB-ASSEMBLY

6. REMOVE REAR FLOOR STEP UNDER COVER SUB-ASSEMBLY (w/ Floor Under Cover)

7. REMOVE NO. 1 FUEL TANK PROTECTOR

(a) Remove the 3 bolts and the No. 1 fuel tank protector.

8. DISCONNECT FUEL CUT-OFF TUBE

(a) Disconnect the fuel cut-off tube from the charcoal canister assembly.

**Text in Illustration**

| *1 | Retainer |

**HINT:**

Do not remove the retainer.

- Remove any dirt or foreign matter on the fuel cut-off tube connector before performing this work.
- Do not allow any scratches or foreign matter on the parts when disconnecting them as the fuel cut-off tube connector has an O-ring that seals the pipe.
- Perform this work by hand. Do not use any tools.
- Do not forcibly bend, twist or turn the fuel cut-off tube.
9. DISCONNECT FUEL TANK BREATHER TUBE

(a) Pinch the tabs of the retainer to remove the lock claws and pull it down as shown in the illustration.

Text in Illustration

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<tbody>
<tr>
<td>*1</td>
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<tr>
<td>*2</td>
<td>Quick Connector</td>
</tr>
<tr>
<td>*3</td>
<td>Pipe</td>
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<tr>
<td>*4</td>
<td>O-ring</td>
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</table>

(b) Pull out the fuel tank breather tube.

NOTICE:

- Check that there is no dirt or other foreign objects around the connector before this operation and clean the connector as necessary.
- It is necessary to prevent mud or dirt from entering the connector. If mud or dirt gets in the connector, the O-rings may not seal properly.
- Do not use any tools in this operation.
- Do not bend, kink or twist the nylon tube. Protect the connector by covering it with a plastic bag.
- When the pipe and connector are stuck, push and pull the connector to release and pull the connector out carefully.

10. DISCONNECT FUEL TANK TO FILLER PIPE HOSE

(a) Pull the tabs of the retainer to disengage the lock claws and pull it down as shown in the illustration

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<td>*1</td>
<td>Retainer</td>
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</table>
(b) Pull out the fuel tank to filler pipe hose.

**NOTICE:**

- Check that there is no dirt or other foreign objects around the connector before this operation and clean the connector as necessary.
- It is necessary to prevent mud or dirt from entering the connector. If mud or dirt gets in the connector, the O-rings may not seal properly.
- Do not use any tools in this operation.
- Do not bend, kink or twist the nylon tube. Protect the connector by covering it with a plastic bag.
- When the pipe and connector are stuck, push and pull the connector to release and pull the connector out carefully.

11. REMOVE FUEL TANK MAIN TUBE SUB-ASSEMBLY

**Text in Illustration**

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</table>

(a) Pinch the tabs of the retainer to remove the lock claws and pull it down as shown in the illustration.

(b) Pull out and remove the fuel tank main tube sub-assembly.

- Check that there is no dirt or other foreign objects around the connector before this operation and clean the connector as necessary.
- It is necessary to prevent mud or dirt from entering the connector. If mud or dirt gets in the connector, the O-rings may not seal properly.
- Do not use any tools in this operation.
- Do not bend, kink or twist the nylon tube. Protect the connector by covering it with a plastic bag.
- When the pipe and connector are stuck, push and pull the connector to release and pull the connector out carefully.

12. REMOVE FUEL TANK ASSEMBLY

(a) Remove the 2 bolts and disconnect the parking brake cable assembly.

(b) Support the fuel tank using an engine lifter.

(c) Remove the 4 set bolts of the 2 fuel tank bands.

(d) Lower the engine lifter to remove the fuel tank.

NOTICE:

- Slowly operate the engine lifter to lower the fuel tank.
- Do not drop the fuel tank.
- When removing the fuel tank, tilt it slightly to prevent it from interfering with the suspension arm or other surrounding parts.

13. REMOVE FUEL TANK CUSHION
(a) Remove the 3 No. 1 fuel tank cushions and 2 No. 2 fuel tank cushions.

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<tr>
<td>*1</td>
<td>No. 1 Fuel Tank Cushion</td>
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<tr>
<td>*2</td>
<td>No. 2 Fuel Tank Cushion</td>
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</table>
INSTALLATION

1. INSTALL FUEL TANK CUSHION

(a) Install 3 new No. 1 fuel tank cushions and 2 new No. 2 fuel tank cushions as shown in the illustration.

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<tr>
<td>*2</td>
<td>No. 2 Fuel Tank Cushion</td>
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</tbody>
</table>

2. INSTALL FUEL TANK ASSEMBLY

(a) Support the fuel tank using an engine lifter.

(b) Raise the engine lifter, then install the fuel tank to the vehicle.

- Do not drop the fuel tank.
- When installing the fuel tank, tilt it slightly to prevent it from interfering with the suspension arm or other surrounding parts.

(c) Tighten the 4 set bolts of the 2 fuel tank bands.

Torque: **39 N·m (400 kgf·cm, 29ft·lbf)**

NOTICE:

First temporarily install the bolts of the tank bracket. Then temporarily install the bolts of the tank bands. Finally, tighten all of the bolts.

(d) Connect the parking brake cable assembly with the 2 bolts.

Torque: **6.0 N·m (61 kgf·cm, 53in·lbf)**

3. CONNECT FUEL TANK MAIN TUBE SUB-ASSEMBLY
(a) Push in the fuel tank main tube connector to the pipe and push up the retainer so that the claws engage.

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- Check that there are no scratches or foreign objects around the connected part of the fuel tube connector and pipe before starting this step.
- After connecting the fuel tank main tube sub-assembly, check that the fuel tank main tube sub-assembly is securely connected by pulling on the fuel tube connector.

### 4. CONNECT FUEL TANK TO FILLER PIPE HOSE

(a) Push in the hose connector to the filler pipe and install the retainer.

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<td>Retainer</td>
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- Before connecting the tube, make sure that it is not damaged. Make sure that there is no dirt present on the connecting surfaces.
- After connecting, check if the fuel tube connector and the pipe are securely connected by pulling on them.

### 5. CONNECT FUEL TANK BREATHER TUBE

(a) Push in the fuel tank breather tube connector to the pipe and push up the retainer so that the claws engage.

**Text in Illustration**

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6. CONNECT FUEL CUT-OFF TUBE

(a) Push in the fuel cut-off tube connector to the charcoal canister and push up the retainer so that the claws engage.

Text in Illustration

| *1 | Retainer |

- Check that there are no scratches or foreign matter around the connected part of the fuel cut-off tube connector and pipe before performing this work.
- After connecting the fuel cut-off tube, check that the fuel cut-off tube is securely connected by pulling the fuel cut-off tube connector and the charcoal canister.

7. INSTALL NO. 1 FUEL TANK PROTECTOR

(a) Install the No. 1 fuel tank protector with the 3 bolts.

Torque: 5.5 N·m (56 kgf·cm, 49in·lbf)

8. INSTALL REAR FLOOR STEP UNDER COVER SUB-ASSEMBLY (w/ Floor Under Cover)
9. INSTALL REAR SUSPENSION BRACE SUB-ASSEMBLY

10. INSTALL REAR FLOOR SIDE MEMBER COVER LH (w/ Floor Under Cover)

11. INSTALL REAR FLOOR SIDE MEMBER COVER RH (w/ Floor Under Cover)

12. ADD FUEL

13. INSTALL FUEL SUCTION TUBE ASSEMBLY WITH PUMP AND GAUGE

(a) Install the fuel suction tube assembly with pump and gauge.