

GROUP 13B

FUEL SUPPLY

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GENERAL INFORMATION

- The fuel tank is located under the floor of the rear seats to provide increased protection and more luggage space.
- A fuel tank safety valve is used to prevent fuel from leaking out in case of a collision.
- A fuel pump module, including fuel pump, fuel filter assembly and fuel gauge unit (main), is utilized to reduce weight and improve serviceability.

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ON-VEHICLE SERVICE

FUEL PUMP OPERATION CHECK

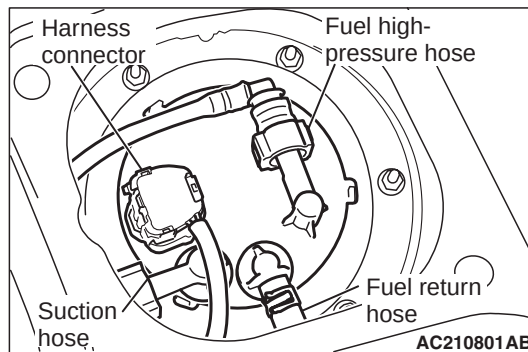
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Refer to GROUP 13A, On-vehicle Service
[P.13A-399](#).

FUEL PUMP MODULE REPLACEMENT

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1. Remove the rear seat cushion assembly. (Refer to GROUP 52A, Rear Seat Assembly [P.52A-20](#)).
2. Remove the service hole cover.

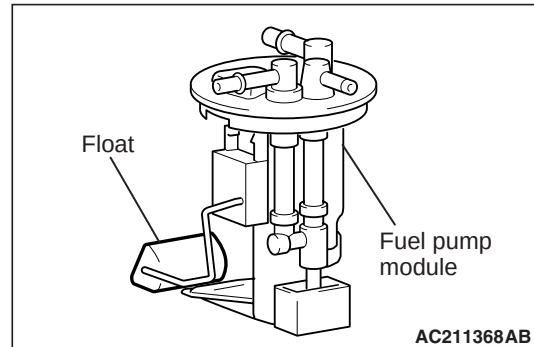


3. Disconnect the harness connector.

NOTE: Check the fuel pump (Refer to GROUP 13A, On-vehicle Service [P.13A-399](#)). If defective, replace the fuel pump, which is incorporated in the fuel pump module.

4. Disconnect fuel high-pressure hose, suction hose and fuel return hose.

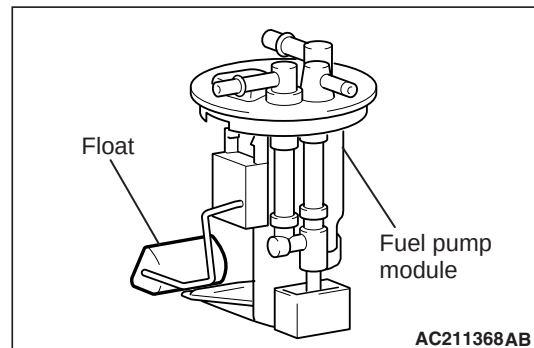
CAUTION



When withdrawing the fuel pump module from the fuel tank, be careful not damage the module unit and the float.

5. Unscrew the mounting nuts to remove the fuel pump module.
6. Replace the fuel pump (Refer to [P.13B-9](#)).

CAUTION

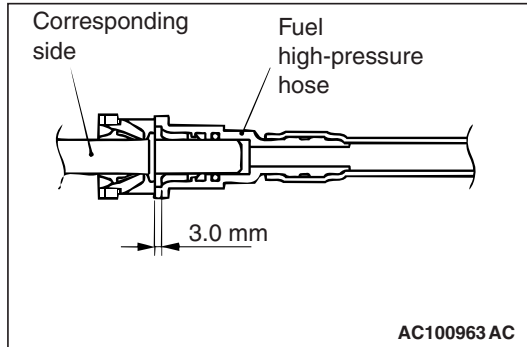


When installing the fuel pump module into the fuel tank, be careful not damage the module unit and the float.

7. Install the fuel pump module. Tighten the mounting nuts to the specified torque.

Tightening torque: 2.5 ± 0.5 N·m

CAUTION



Snap the fuel high-pressure hose one-touch joint into place, then pull back slightly on the hose to assure it is secure. However, the connection should have a play of approximately 3.0 mm.

8. Connect the harness connector, fuel high-pressure hose, suction hose and fuel return hose.
9. Replace the service hole cover.
10. Install the rear seat cushion assembly (Refer to GROUP 52A, Rear Seat Assembly [P.52A-20](#)).

FUEL GAUGE UNIT CHECK

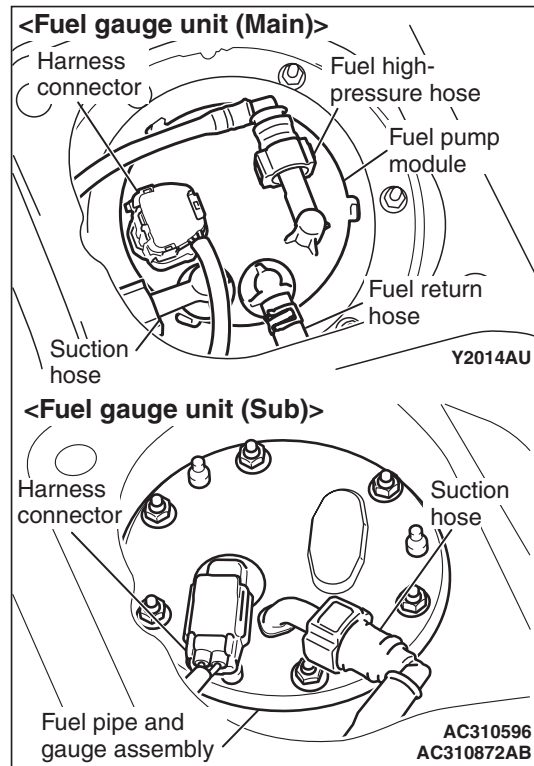
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Refer to GROUP 54A, Combination Meter Assembly and Vehicle Speed Sensor – On-vehicle Service [P.54A-54](#).

FUEL GAUGE UNIT REPLACEMENT

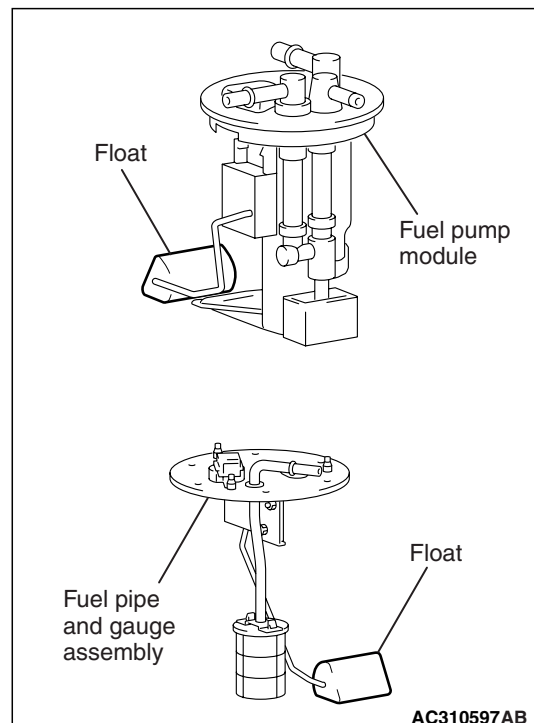
M1135001400428

1. Remove the rear seat cushion assembly. (Refer to GROUP 52A, Rear Seat Assembly [P.52A-20](#)).
2. Remove the service hole cover.



3. Disconnect the harness connector, fuel high-pressure hose, suction hose and fuel return hose.

CAUTION

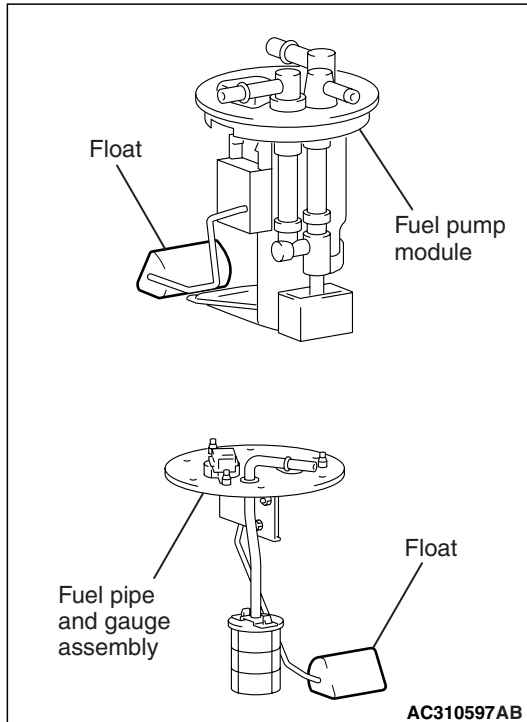


When withdrawing the fuel pump module or fuel pipe and gauge assembly from the fuel tank, be careful not damage the sensor unit and the float.

4. Unscrew the mounting nuts to remove the fuel pump module or fuel pipe and gauge assembly.

NOTE: Check the fuel gauge unit (Refer to GROUP 54A, Combination Meter Assembly and Vehicle Speed Sensor – On-vehicle Service P.54A-54). If defective, replace it. (Refer to P.13B-9).

CAUTION

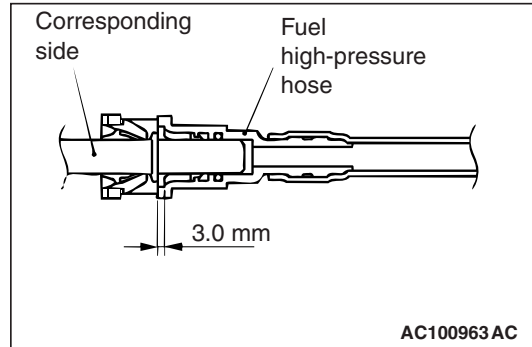


When inserting the fuel pump module or fuel pipe and gauge assembly into the fuel tank, be careful not damage the sensor unit and the float.

5. Install the fuel pump module or fuel pipe and gauge assembly. Tighten the mounting nuts to the specified torque.

Tightening torque: 2.5 ± 0.5 N·m

CAUTION



Snap the fuel high-pressure hose one-touch joint into place, then pull back slightly on the hose to assure it is secure. However, the connection should have a play of approximately 3.0 mm.

6. Connect the harness connector, fuel high-pressure hose, suction hose and fuel return hose.
7. Replace the service hole cover.
8. Install the rear seat cushion assembly. (Refer to GROUP 52A, Rear Seat Assembly P.52A-20).

FUEL TANK

REMOVAL AND INSTALLATION

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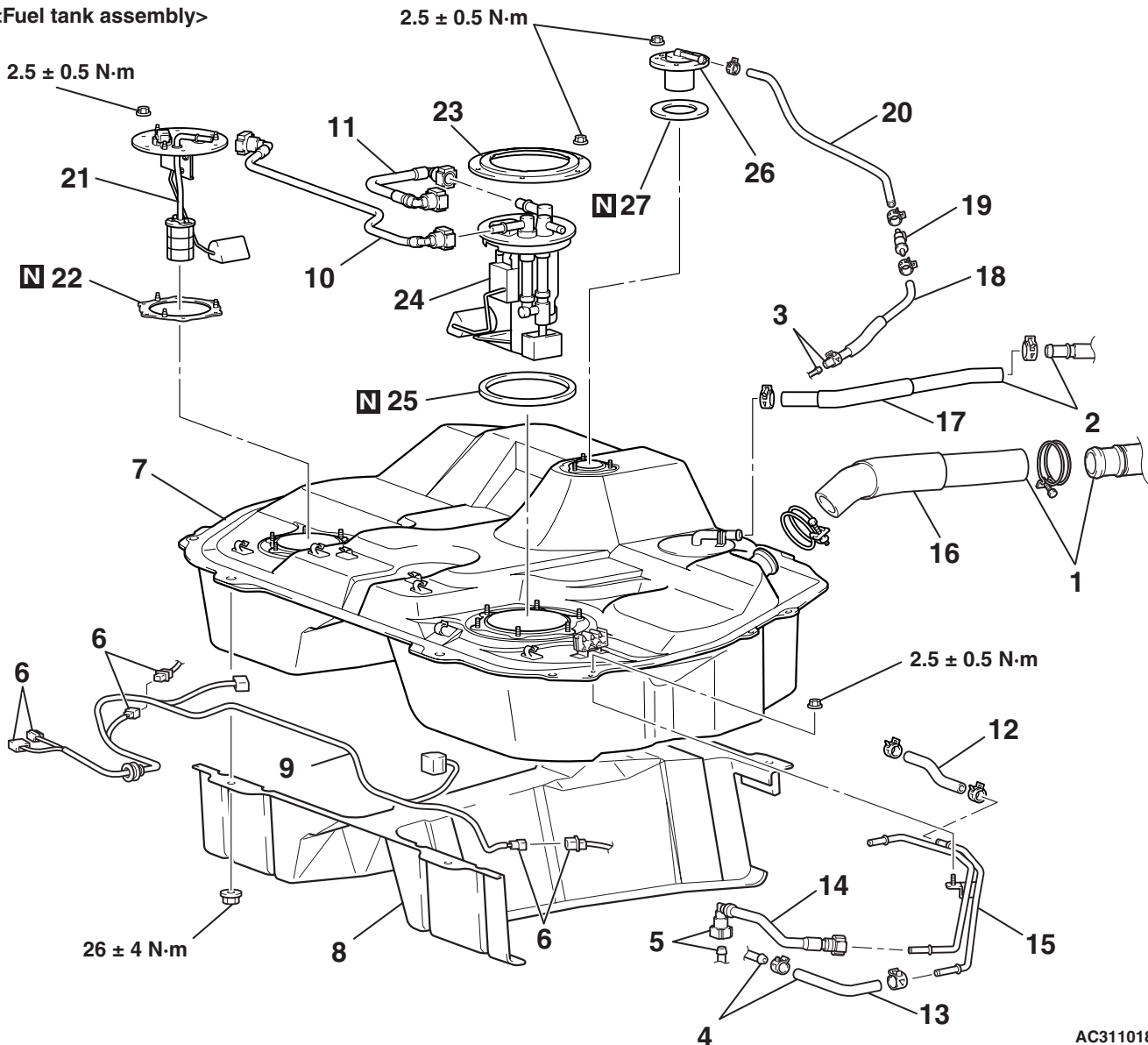
Pre-removal Operation

- Draining Fuel
- Fuel Pump Connector Disconnection (How to Reduce Fuel Pressure). (Refer to GROUP 13A, On-vehicle Service P.13A-398).
- Centre Exhaust Pipe Removal (Refer to GROUP 15, Exhaust Pipe and Main Muffler P.15-13).
- Propeller Shaft Removal (Refer to GROUP 25, Propeller Shaft P.25-3).

Pre-installation Operation

- Propeller Shaft Installation (Refer to GROUP 25, Propeller Shaft P.25-3).
- Centre Exhaust Pipe Installation (Refer to GROUP 15, Exhaust Pipe and Main Muffler P.15-13).
- Refilling Fuel
- Checking for Fuel Leaks

<Fuel tank assembly>



AC311018 AC

Fuel tank assembly removal steps

1. Fuel filler neck hose connection
2. Fuel filler neck breather hose connection
3. Fuel vapour hose connection
4. Fuel return hose connection

Fuel tank assembly removal steps (Continued)

- >>B<<
5. Fuel high-pressure hose connection
 6. Fuel wiring harness connector
 - Parking brake cable clamp connection (Refer to GROUP 36, Parking Brake Cable P.36-5).

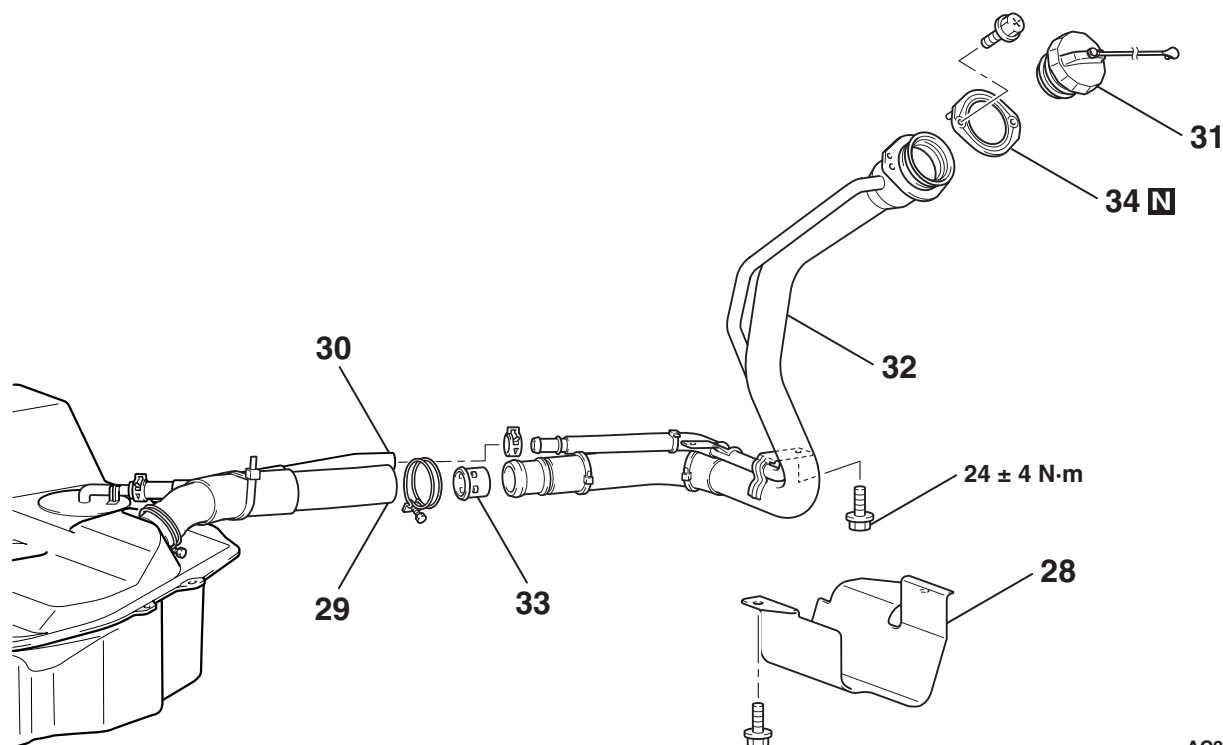
Fuel tank assembly removal steps (Continued)

- Rear ABS sensor connector and harness clamp connection (Refer to GROUP 35B, ABS Sensor P.35B-146).
- <<A>>
7. Fuel tank assembly
 8. Fuel tank lower protector
 9. Fuel wiring harness
- >>B<<
10. Suction hose
 - >>B<< 11. Fuel high-pressure hose
 12. Fuel return hose
 13. Fuel return hose
 - >>B<< 14. Fuel high-pressure hose

Fuel tank assembly removal steps (Continued)

15. Fuel pipe assembly
16. Fuel filler neck hose
17. Fuel filler neck breather hose
18. Fuel vapour hose
19. Fuel tank check valve
20. Fuel vapour hose
- <> >>A<< 21. Fuel pipe and gauge assembly
22. Packing
23. Plate
- <> >>A<< 24. Fuel pump module
25. Packing
26. Fuel tank safety valve
27. Packing

<Fuel filler neck assembly>



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Fuel filler neck assembly removal steps

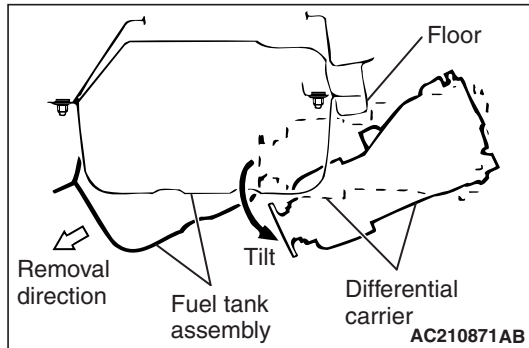
28. Fuel tank protector
29. Fuel filler neck hose connection
30. Fuel filler neck breather hose connection
31. Fuel tank filler cap

Fuel filler neck assembly removal steps (Continued)

32. Fuel filler neck assembly
33. Fuel filler neck valve
34. Packing

REMOVAL SERVICE POINTS

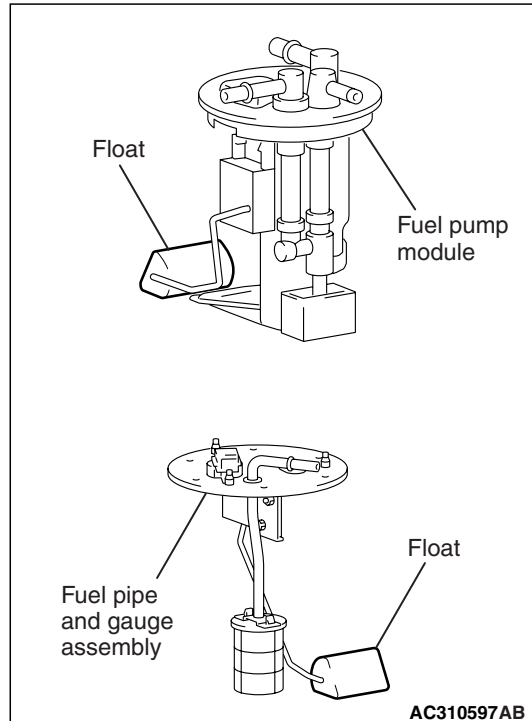
<<A>> FUEL TANK ASSEMBLY REMOVAL



1. Remove the differential support member and tilt the differential carrier. (Refer to GROUP 27, Differential Carrier [P.27-43](#)).
2. Hold the fuel tank assembly with a transmission jack and remove the nuts connected to the fuel tank assembly.
3. Remove the fuel tank assembly in the tilting direction to avoid contact with the differential carrier.

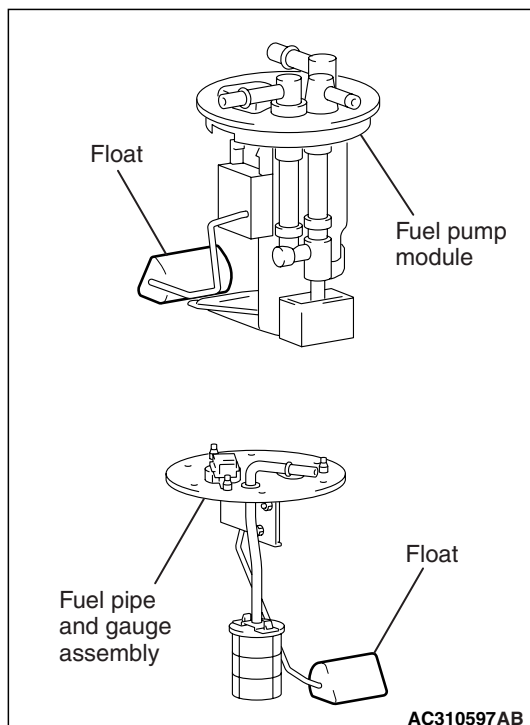
<> FUEL PIPE AND GAUGE ASSEMBLY/FUEL PUMP MODULE REMOVAL

CAUTION

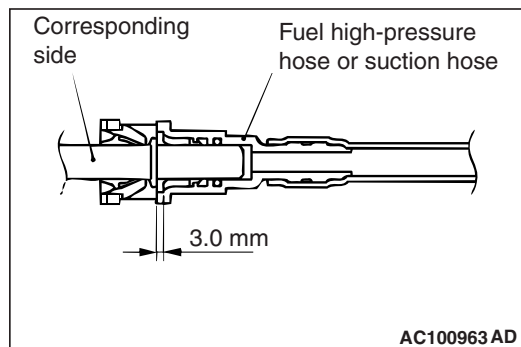


When withdrawing the fuel pipe and gauge assembly and fuel pump module from the fuel tank, be careful not damage the sensor unit and the float.

INSTALLATION SERVICE POINTS

>>A<< FUEL PUMP MODULE/FUEL PIPE
AND GAUGE ASSEMBLY INSTALLATION**⚠ CAUTION**

When inserting the fuel pump module and fuel pipe and gauge assembly into the fuel tank, be careful not to damage the sensor unit and the float.

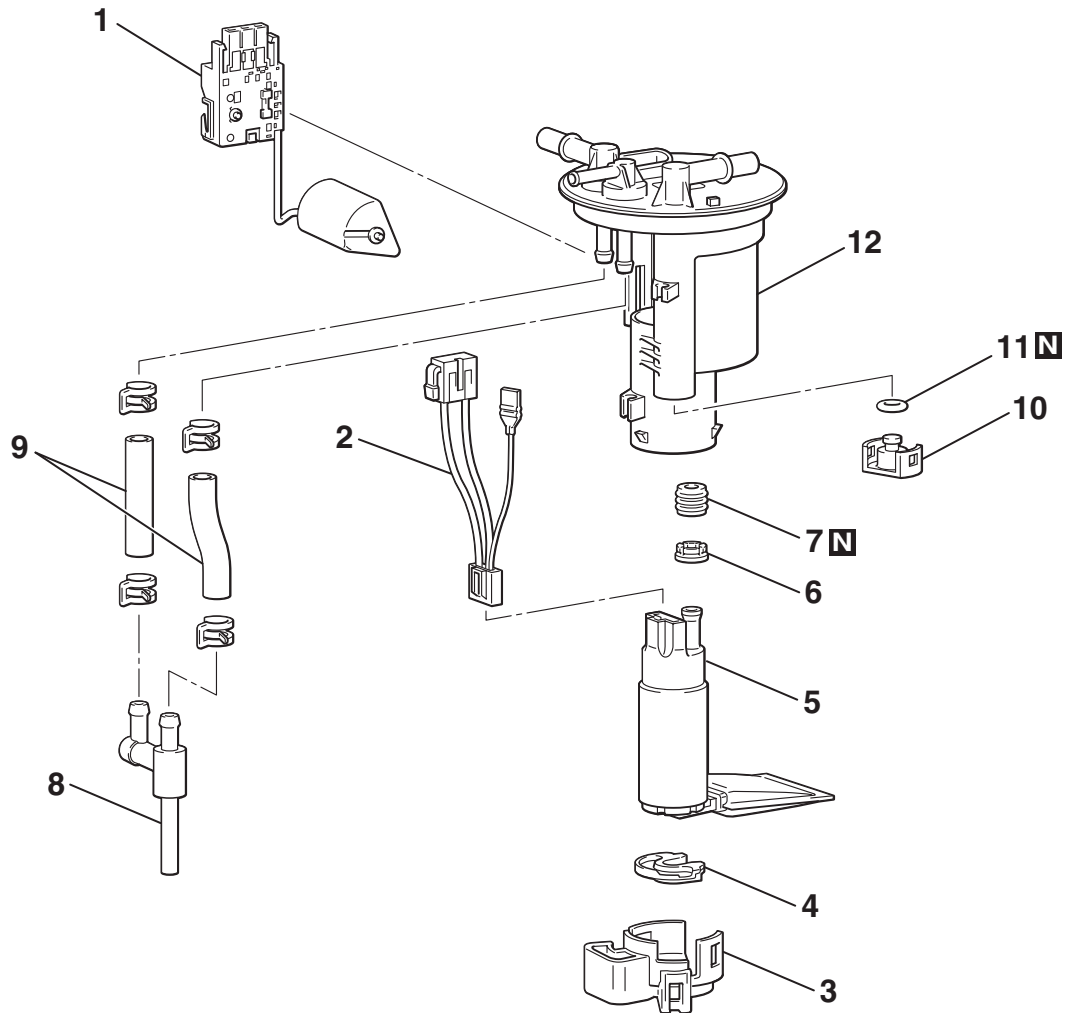
>>B<< FUEL HIGH-PRESSURE
HOSE/SUCTION HOSE INSTALLATION**⚠ CAUTION**

After connecting the quickrelease joint of the fuel high-pressure hose or suction hose, pull the joint lightly away from the quickrelease joint to confirm that it is secure. In addition, confirm that there is a play of approximately 3.0 mm at the joint.

FUEL PUMP MODULE DISASSEMBLY AND REASSEMBLY

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<FUEL PUMP MODULE>



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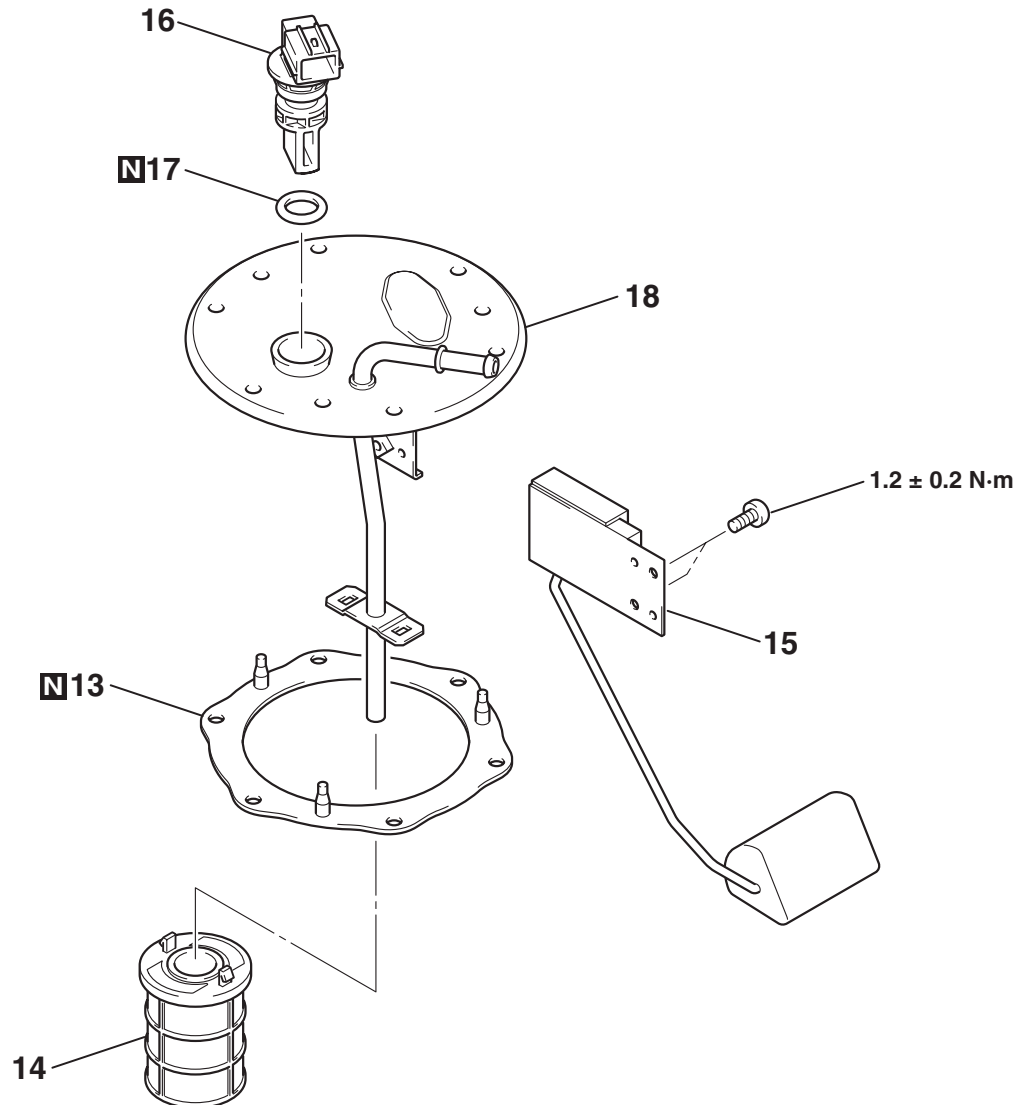
Disassembly steps

1. Fuel gauge unit (Main)
2. Fuel pump harness
3. Fuel pump bracket
4. Fuel pump cushion
5. Fuel pump
6. Spacer

Disassembly steps (Continued)

- >>A<< 7. Grommet
8. Fuel feed assist pump
9. Fuel hose
10. Cap
- >>A<< 11. O-ring
12. Fuel filter assembly

<FUEL PIPE AND GAUGE ASSEMBLY>



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Disassembly steps

- 13. Packing
- 14. Fuel filter
- 15. Fuel gauge unit (Sub)

Disassembly steps (Continued)

- 16. Connector
- 17. O-ring
- 18. Fuel pipe assembly

REASSEMBLY SERVICE POINT

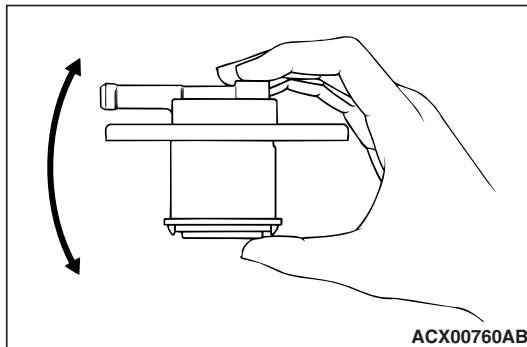
>>A<< O-RING/GROMMET INSTALLATION

Apply gasoline on the O-ring and the grommet before mounting them to prevent damage or twisting.

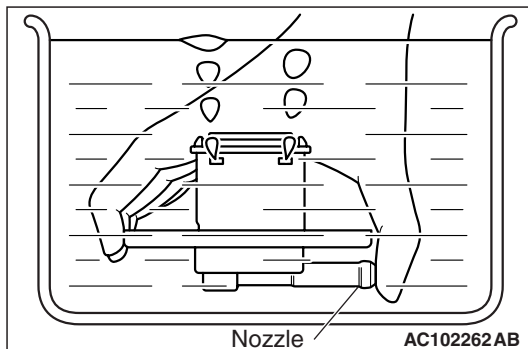
INSPECTION

FUEL TANK SAFETY VALVE CHECK

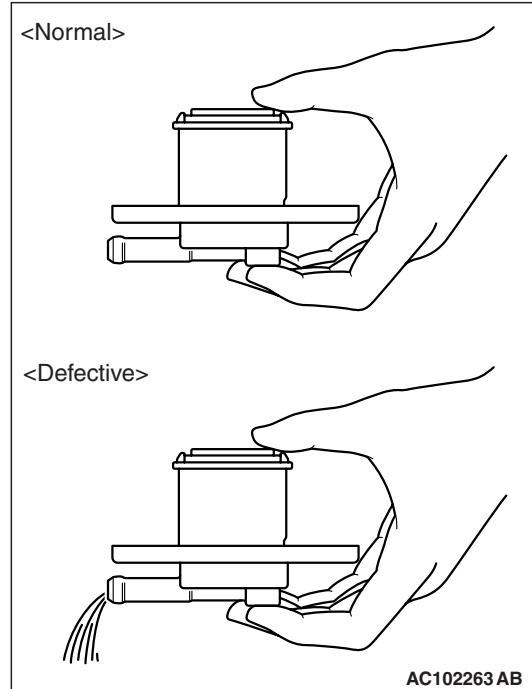
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1. Shake the fuel tank safety valve up and down to check the float inside the fuel tank safety valve is not seized.



2. Obtain a container, which is full of water.
3. Invert the fuel tank safety valve, and submerge it slowly in the water while placing your fingers over the nozzle.
4. Check that no more air bubbles appears from the fuel tank safety valve, and withdraw it slowly.



5. Open the fuel tank safety valve nozzle. If no water flows out from the nozzle aperture, the valve is normal. If water flows out, the float or spring inside the fuel tank safety valve is defective. Replace the fuel tank safety valve.

NOTES