
GROUP 13D

FUEL SUPPLY

CONTENTS

GENERAL INFORMATION	13D-2	FUEL TANK GAUGE UNIT REPLACEMENT	13D-4
ON-VEHICLE SERVICE.....	13D-2	FUEL TANK	13D-5
FUEL PUMP OPERATION CHECK	13D-2	REMOVAL AND INSTALLATION	13D-5
FUEL TANK GAUGE UNIT CHECK	13D-2	DISASSEMBLY AND REASSEMBLY	13D-9
FUEL TANK PUMP AND GAUGE ASSEMBLY REPLACEMENT.....	13D-2		

GENERAL INFORMATION

M1135000100509

- The fuel tank is located under the floor of the rear seats to provide increased protection and a more luggage space.
- A fuel tank safety valve, which prevents fuel leakage when the vehicle banks or rolls over, is located inside the fuel tank to reduce openings and piping junctions on the top surface of the fuel tank.
- A built-in fuel tank filter and a fuel tank suction hose have been adopted to meet the fuel tank of a saddleback shape.

ON-VEHICLE SERVICE

FUEL PUMP OPERATION CHECK

M1135001000345

<Except vehicles for Hong Kong, Singapore, Australia and New Zealand>: Refer to GROUP 13A – On-vehicle Service, Fuel Pump Operation Check [P.13A-311](#).

<Vehicles for Hong Kong and Singapore>: Refer to GROUP 13B – On-vehicle Service, Fuel Pump Operation Check [P.13B-284](#).

<Vehicles for Australia and New Zealand>: Refer to GROUP 13C – On-vehicle Service, Fuel Pump Operation Check [P.13C-337](#).

FUEL TANK GAUGE UNIT CHECK

M1135003100434

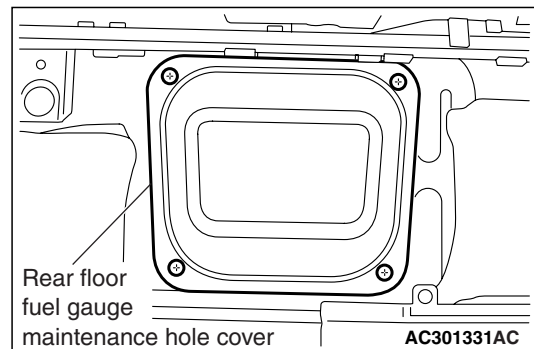
Refer to GROUP 54A – Combination Meter, On-vehicle Service, Fuel Tank Gauge Unit Check [P.54A-99](#).

FUEL TANK PUMP AND GAUGE ASSEMBLY REPLACEMENT

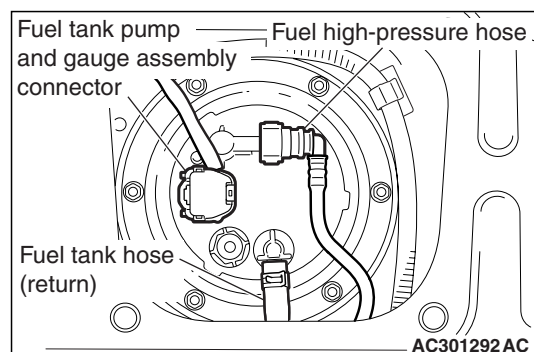
M1135004900615

1. Reduce fuel line pressure. [Refer to GROUP 13A, On-vehicle Service – Fuel Pump Relay Disconnection (How to Reduce Pressurized Fuel Lines) <Except vehicles for Hong Kong, Singapore, Australia and New Zealand>[P.13A-310](#)]. [Refer to GROUP 13B, On-vehicle Service – Fuel Pump Relay Disconnection (How to Reduce Pressurized Fuel Lines) <Vehicles for Hong Kong and Singapore>[P.13B-284](#)]. [Refer to GROUP 13C, On-vehicle Service – Fuel Pump Relay Disconnection (How to Reduce Pressurized Fuel Lines) <Vehicles for Australia and New Zealand>[P.13C-337](#)].

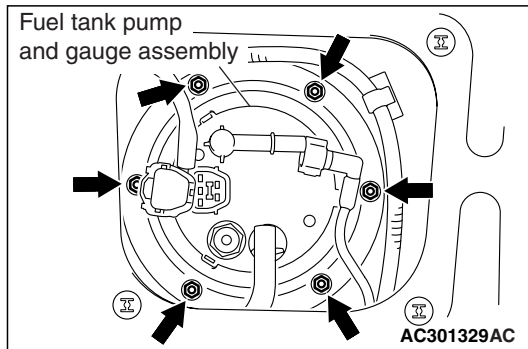
2. Remove the second seat assembly, the rail cover outer and the rail cover inner. (Refer to GROUP 52A, Second Seat Assembly Removal and Installation [P.52A-27](#)).
3. Remove the rear scuff plate (Refer to GROUP 52A, Trim Removal and Installation [P.52A-10](#)), and turn up the floor mat.



4. Remove the rear floor fuel gauge maintenance hole cover (LH).

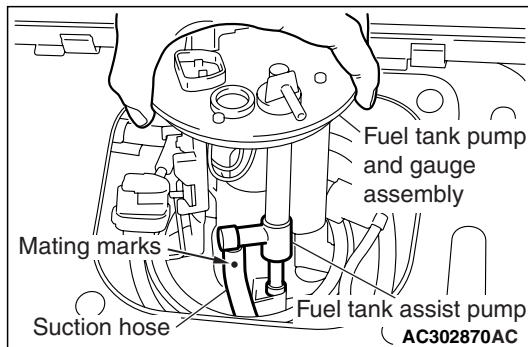


5. Disconnect the fuel tank pump and gauge assembly connector, fuel high-pressure hose and fuel tank hose.

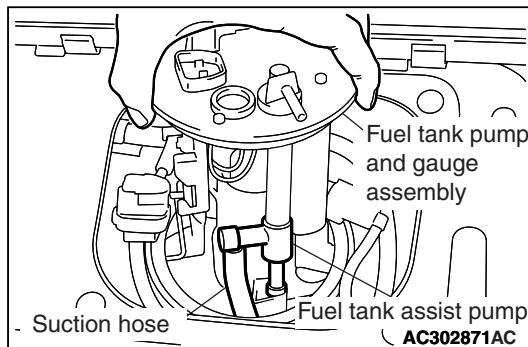


6. Remove the fuel tank pump and gauge assembly mounting nuts.

CAUTION



- The section hose connecting fuel tank assist pump has factory preset mating marks. However, if the marks have been dropped out because of gasoline adherence, make the mating marks and remove the suction hose.
- When withdrawing the fuel tank pump and gauge assembly via the service hole, be careful not to damage the gauge and the float.

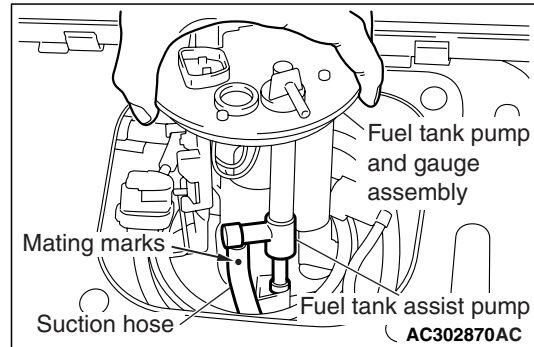


7. While removing the fuel tank pump and gauge assembly from service hole, disconnect the suction hose from fuel tank assist pump, and remove the fuel tank pump and gauge assembly from service hole completely.

NOTE: When disassembling and reassembling the fuel tank pump and gauge assembly, refer to the items of fuel pump module disassembly and reassembly. (Refer to P.13D-9)

8. Replace the fuel tank pump gasket with a new one.

CAUTION

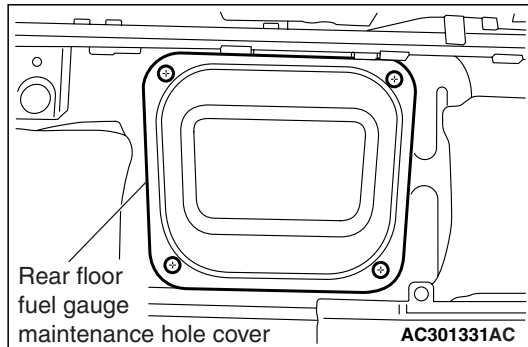


- When installing the fuel tank pump and gauge assembly from service hole to fuel tank, install it with suction hose mating mark facing as shown in the illustration not to twist the suction hose.
 - When installing the fuel tank pump and gauge assembly from the service hole to the fuel tank, be careful not to damage the gauge of fuel tank pump and gauge assembly and the float. In addition, be careful that the float of fuel gauge does not catch the suction hose in the fuel tank.
 - When installing the fuel tank pump and gauge assembly from service hole to fuel tank, make sure that the gauge moving area can move smoothly.
9. While inserting the fuel tank pump and gauge assembly from the service hole to fuel tank, connect the suction hose to the fuel tank assist pump and install the fuel tank pump and gauge assembly to the fuel tank.
 10. Connect the fuel tank pump and gauge assembly connector, fuel high-pressure hose and fuel tank hose.
 11. Install the rear floor fuel gauge maintenance hole cover (LH).
 12. Return the floor carpet back to the original state and install the rear scuff plate. (Refer to GROUP 52A, Trim Removal and Installation P.52A-10).
 13. Install the rail cover inner, the rail cover outer and second seat assembly. (Refer to GROUP 52A, Second Seat Assembly Removal and Installation P.52A-27).

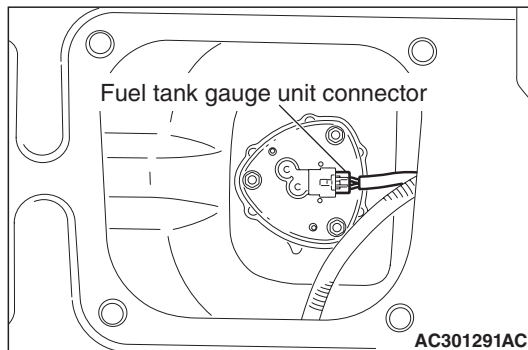
FUEL TANK GAUGE UNIT REPLACEMENT

M1135001400462

1. Remove the second seat assembly, the rail cover outer and the rail cover inner. (Refer to GROUP 52A, Second Seat Assembly Removal and Installation [P.52A-27](#)).
2. Remove the rear scuff plate (Refer to GROUP 52A, Trim Removal and Installation [P.52A-10](#)), and turn up the floor mat.



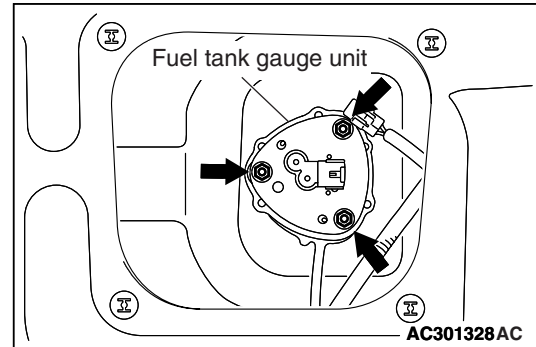
3. Remove the rear floor fuel gauge maintenance hole cover (RH).



4. Disconnect the fuel tank gauge unit connector.

⚠ CAUTION

When withdrawing the fuel tank gauge unit from the service hole, be careful not to damage the gauge and the float.



5. Remove the fuel tank gauge unit mounting nuts and remove the fuel tank gauge unit from service hole.
6. Replace the fuel tank gauge unit gasket with a new one.

⚠ CAUTION

When installing the fuel tank gauge unit into the fuel tank from the service hole, be careful not to damage the gauge and the float.

7. Install the fuel tank gauge unit into the fuel tank via the service hole, and tighten the mounting nuts.
8. Connect the fuel tank gauge unit connector.
9. Install the rear floor fuel gauge maintenance hole cover (RH).
10. Return the floor carpet and install the rear scuff plate. (Refer to GROUP 52A, Trim Removal and Installation [P.52A-10](#)).
11. Install the rail cover inner, the rail cover outer and the second seat assembly. (Refer to GROUP 52A, Second Seat Assembly Removal and Installation [P.52A-27](#)).

FUEL TANK

REMOVAL AND INSTALLATION

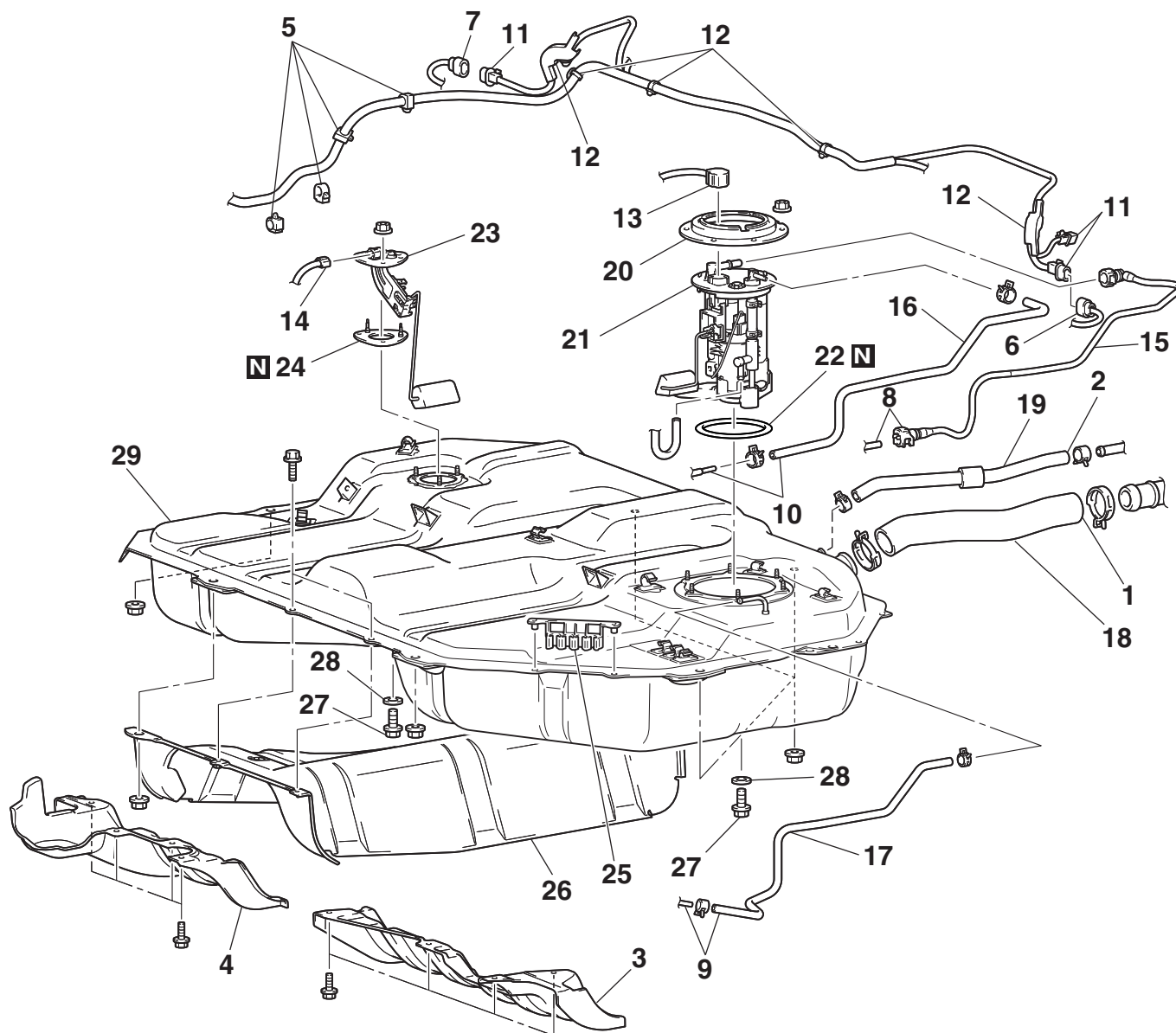
M1135001900973

Pre-removal Operation

- Fuel Line Pressure Reduction [Refer to GROUP 13A, On-vehicle Service –Fuel Pump Relay Disconnection (How to Reduce Pressurized Fuel Lines) <Except Vehicles for Hong Kong, Singapore, Australia and New Zealand>[P.13A-310](#)].
- Fuel Line Pressure Reduction [Refer to GROUP 13B, On-vehicle Service –Fuel Pump Connector Disconnection (How to Reduce Pressurized Fuel Lines) <Vehicles for Hong Kong and Singapore>[P.13B-284](#)].
- Fuel Line Pressure Reduction [Refer to GROUP 13C, On-vehicle Service –Fuel Pump Connector Disconnection (How to Reduce Pressurized Fuel Lines) <Vehicles for Australia and New Zealand>[P.13C-337](#)].
- Draining Fuel
- Centre Exhaust Pipe Removal (Refer to GROUP 15, Exhaust Pipe and Main Muffler [P.15-9](#)).

Post-installation Operation

- Centre Exhaust Pipe Installation (Refer to GROUP 15, Exhaust Pipe and Main Muffler [P.15-9](#)).
- Refilling Fuel
- Checking for Fuel Leaks



AC310760AB

Fuel tank assembly removal steps

- | | | |
|-------------|--|-------------|
| | 1. Fuel filler hose connection <Fuel filler neck side> | <> |
| | 2. Fuel filler neck breather hose connection <Fuel filler neck side> | <> |
| | 3. Rear under cover (LH) | |
| | 4. Rear under cover (RH) | |
| | 5. Wiring harness clamp connection | |
| | 6. Rear ABS sensor (LH) connector | |
| | 7. Rear ABS sensor (RH) connector | |
| <<A>> >>C<< | 8. Fuel high-pressure hose connection | <<C>> >>B<< |
| | 9. Fuel tank hose (vapour) connection | |
| | 10. Fuel tank hose (return) connection | <<C>> >>A<< |
| <> | 11. Connector clamp connection | |
| <> | 12. Wiring harness clamp connection | |
| | 13. Fuel tank pump and gauge assembly connector connection | |

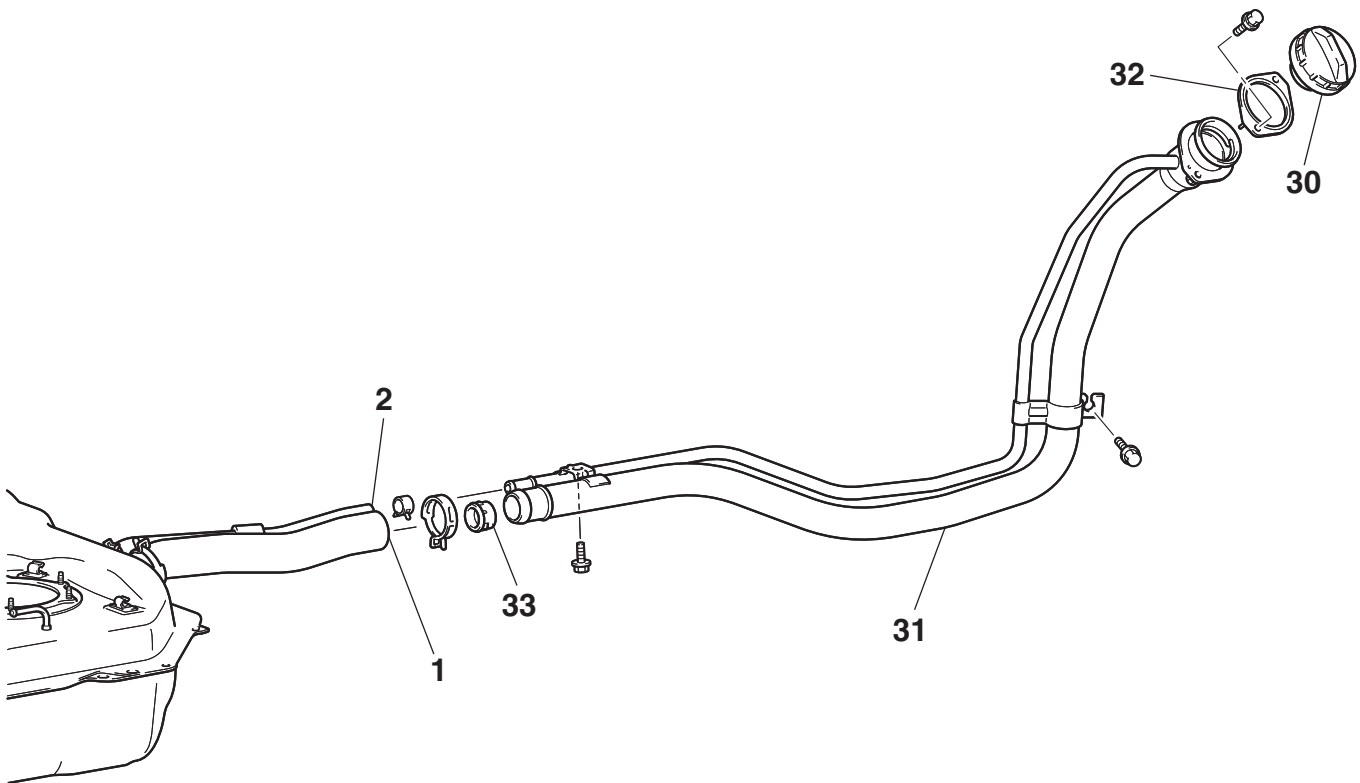
Fuel tank assembly removal steps (Continued)

- | |
|---|
| 14. Fuel tank gauge unit connector connection |
| • Fuel tank assembly |
| 15. Fuel high-pressure hose |
| 16. Fuel tank hose (return) |
| 17. Fuel tank hose (vapour) |
| 18. Fuel filler neck hose |
| 19. Fuel filler neck breather hose |
| 20. Fuel pump bracket plat |
| 21. Fuel tank pump and gauge assembly |
| 22. Fuel tank pump gasket |
| 23. Fuel tank gauge unit |
| 24. Fuel tank gauge unit gasket |
| 25. Fuel tank clamp |
| 26. Fuel tank lower protector |

Fuel tank assembly removal steps (Continued)

27. Fuel tank drain plug <Except vehicles for Hong kong, Singapore, Australia and New Zealand>
28. Gasket <Except vehicles for Hong kong, Singapore, Australia and New Zealand>
29. Fuel tank

<FUEL FILLER NECK>



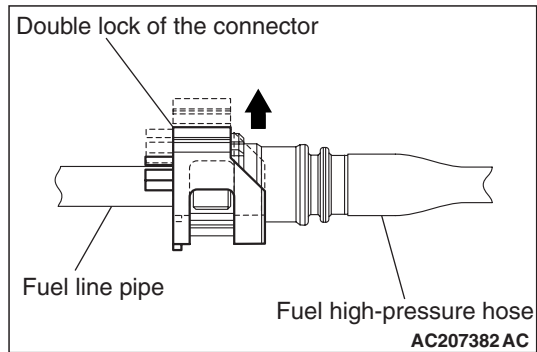
AC302247AC

Fuel filler neck removal steps

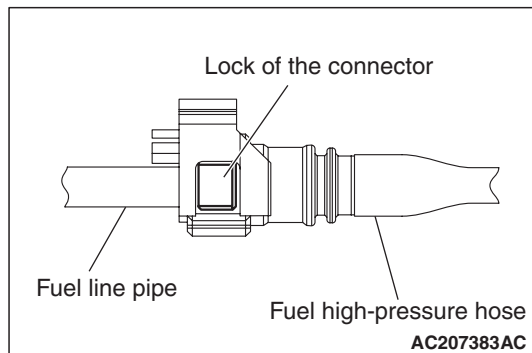
1. Fuel filler hose connection <Fuel filler neck side>
2. Fuel filler neck breather hose connection <Fuel filler neck side>
30. Fuel tank cap

Fuel filler neck removal steps

- Rear suspension crossmember stay (LH) (Refer to GROUP 34 - Rear Suspension Crossmember [P.34-12](#)).
31. Fuel filler neck assembly
 32. Fuel filler neck gasket
 33. Fuel filler neck valve

REMOVAL SERVICE POINTS**<<A>> FUEL HIGH-PRESSURE HOSE
DISCONNECTION**

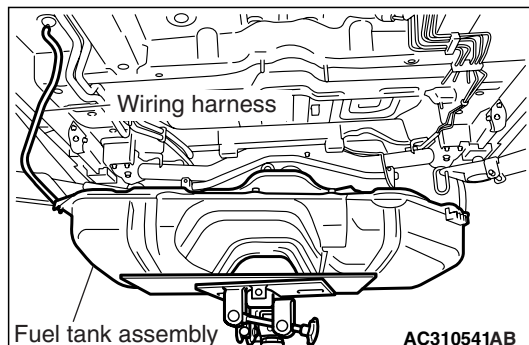
1. Push up the double lock of the fuel high-pressure hose connector.



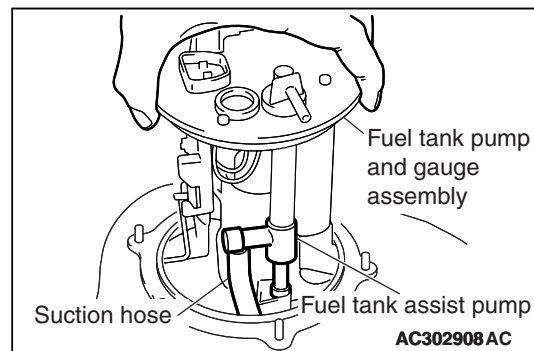
2. Disconnect the fuel high-pressure hose while pushing the double lock of the fuel high-pressure hose connector.

**<> WIRING HARNESS CLAMP
CONNECTION/FUEL TANK PUMP AND
GAUGE ASSEMBLY CONNECTOR
CONNECTION/FUEL TANK GAUGE UNIT
CONNECTOR CONNECTION/FUEL TANK
ASSEMBLY REMOVAL****⚠ CAUTION**

Be careful not to open circuit in the wiring harness when removing the fuel tank assembly.



1. Raise and support the fuel tank assembly with a transmission jack, and remove the mounting nuts.
2. Use a transmission jack while taking care of the wiring harness, and lower the fuel tank assembly until the wiring harness installation position of fuel tank assembly's top can be made sure.
3. Remove the each wiring harness clamp connection, fuel tank pump and gauge assembly connector connection and fuel tank gauge unit connector connection, and then remove the fuel tank assembly.

**<<C>> FUEL TANK PUMP AND GAUGE
ASSEMBLY/FUEL TANK GAUGE UNIT
REMOVAL****⚠ CAUTION**

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

While removing the fuel tank pump and gauge assembly from the fuel tank, disconnect the suction hose from the fuel tank assist pump, and remove the fuel tank pump and gauge assembly from the fuel tank completely.

INSTALLATION SERVICE POINS

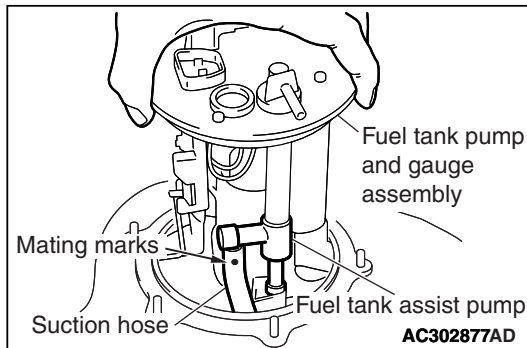
>>A<< FUEL TANK GAUGE UNIT INSTALLATION

⚠ CAUTION

When installing the fuel tank gauge unit into the fuel tank, be careful not to damage the gauge and the float.

>>B<< FUEL TANK PUMP AND GAUGE ASSEMBLY INSTALLATION

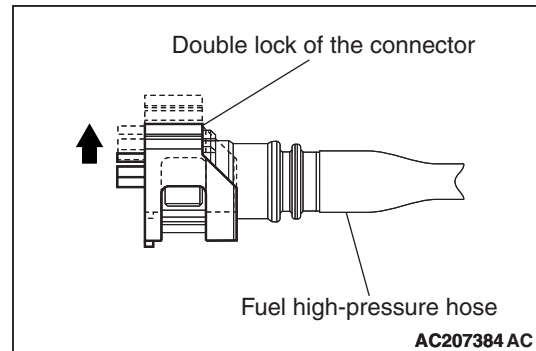
⚠ CAUTION



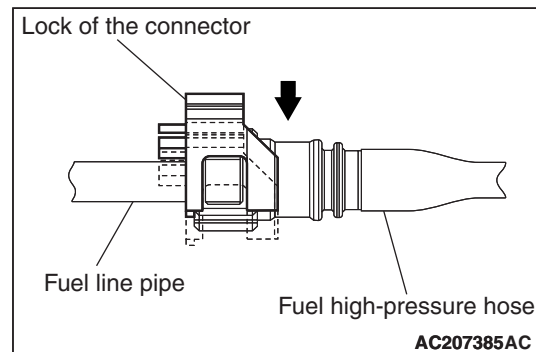
- When installing the fuel tank pump and gauge assembly from service hole to fuel tank, install it with suction hose mating mark facing as shown in the illustration not to twist the suction hose.
- When installing the fuel tank pump and gauge assembly into the fuel tank, be careful not to damage the gauge and the float. In addition, be careful that the float of fuel gauge does not catch the suction hose in the fuel tank.
- When installing the fuel tank pump and gauge assembly from service hole to fuel tank, make sure that the gauge moving area can move smoothly.

While inserting the fuel tank pump and gauge assembly into the fuel tank, connect the suction hose to the fuel tank assist pump and install the fuel tank pump and gauge assembly to the fuel tank.

>>C<< FUEL HIGH-PRESSURE HOSE INSTALLATION



1. Before installing fuel high-pressure hose, push up the double lock of the fuel high-pressure hose connector.



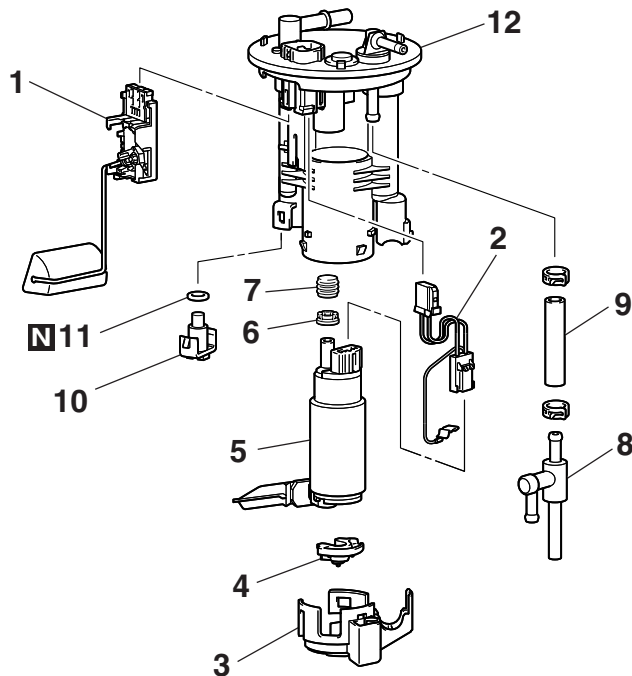
2. Install the fuel high-pressure hose connector to the fuel line pipe, and push down the lock of the connector to lock it thoroughly.
3. After connecting the fuel high-pressure hose, slightly pull it to ensure that is installed securely. Also confirm that there is a play approximately 3 mm.

DISASSEMBLY AND REASSEMBLY

M1135004600443

FUEL TANK PUMP ASSEMBLY

NOTE: For the removal and installation procedures, refer to the fuel tank pump assembly replacement procedure in On-vehicle Service (Refer to [P.13D-2](#)).



AC301951AC

Disassembly steps

1. Fuel gauge unit
2. Fuel gauge harness
3. Fuel pump bracket
4. Fuel pump cushion
5. Fuel tank pump assembly
6. Spacer
7. Grommet
8. Fuel tank assist pump
9. Fuel pump hose
10. Cap

>>A<<

Disassembly steps (Continued)

- >>A<< 11. O-ring
12. Fuel tank filter assembly

REASSEMBLY SERVICE POINT**>>A<< FUEL TANK GROMMET/O-RING
INSTALLATION**

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