GROUP 13C

FUEL SUPPLY

CONTENTS

GENERAL INFORMATION

M1135000101438

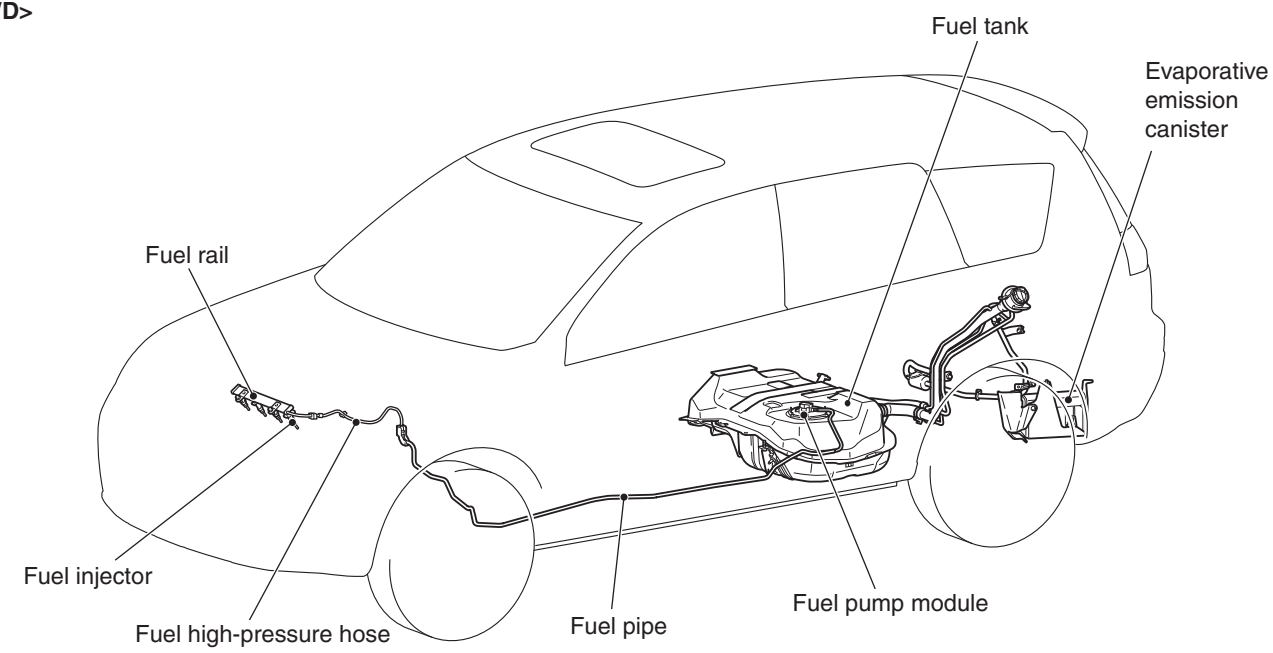
This fuel system is designed with consideration for global environment protection to ensure safety at a collision, reduce weight, and improve reliability and quality. This system has the following features:

- A quick-joint connector is used for the fuel high-pressure hose in the engine compartment to reduce the permeation of fuel evaporative emission.
- The surface of underfloor fuel pipes is coated with 1 mm (0.04 inch) thick resin to improve resistance to corrosion and chipping.
- A returnless fuel system eliminates returned fuel from the engine. The heat that fuel receives from the engine is reduced, minimizing fuel temperature in the fuel tank and controlling the amount of evaporated gas.

CONSTRUCTION DIAGRAM

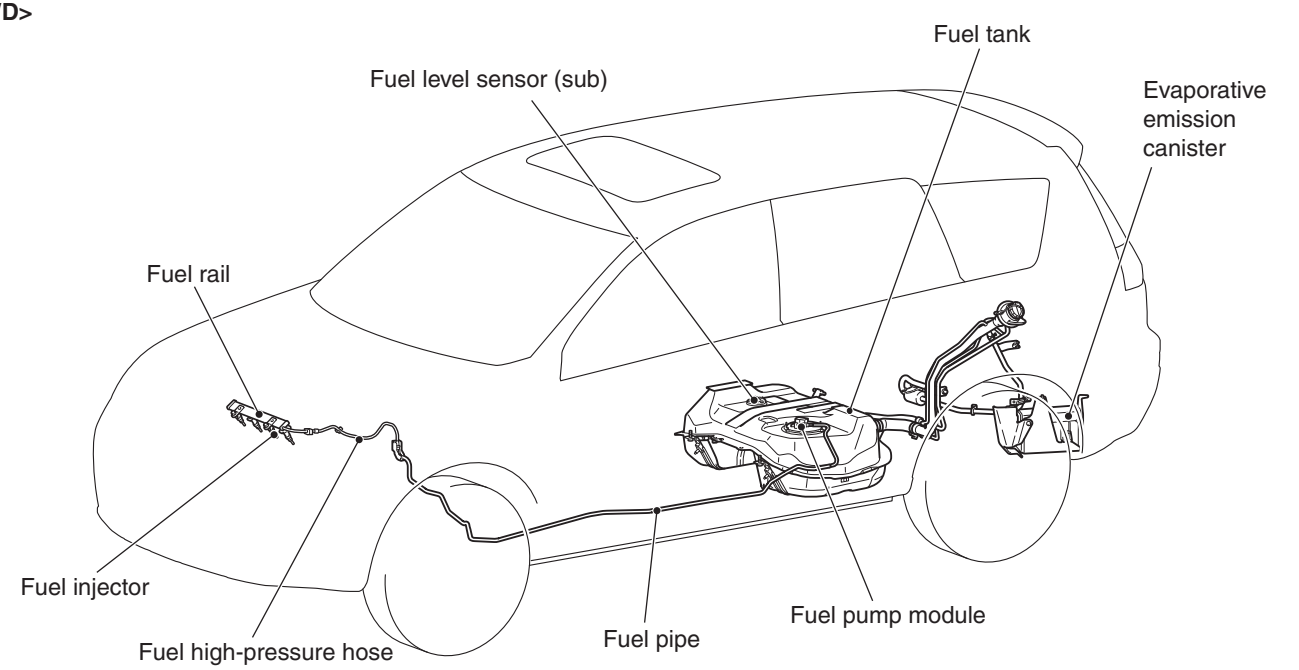
<2.4L ENGINE>

<FWD>



AC901400 AB

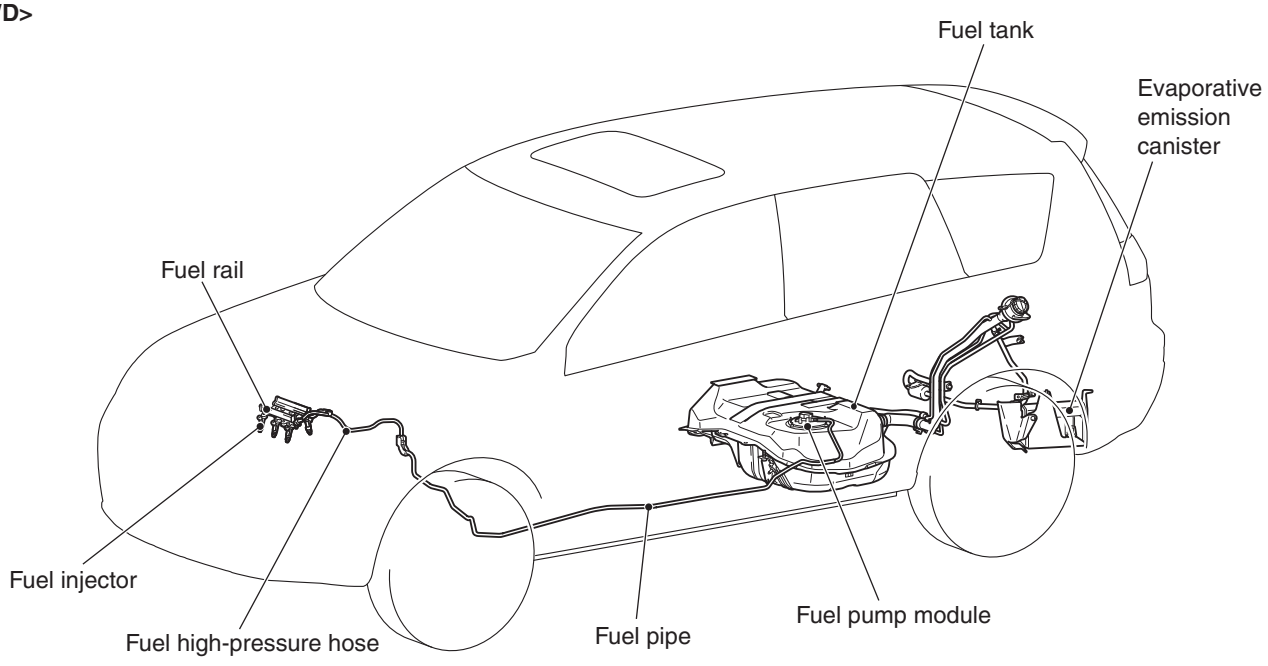
<AWD>



AC901401AB

<3.0L ENGINE>

<FWD>



AC901402AC

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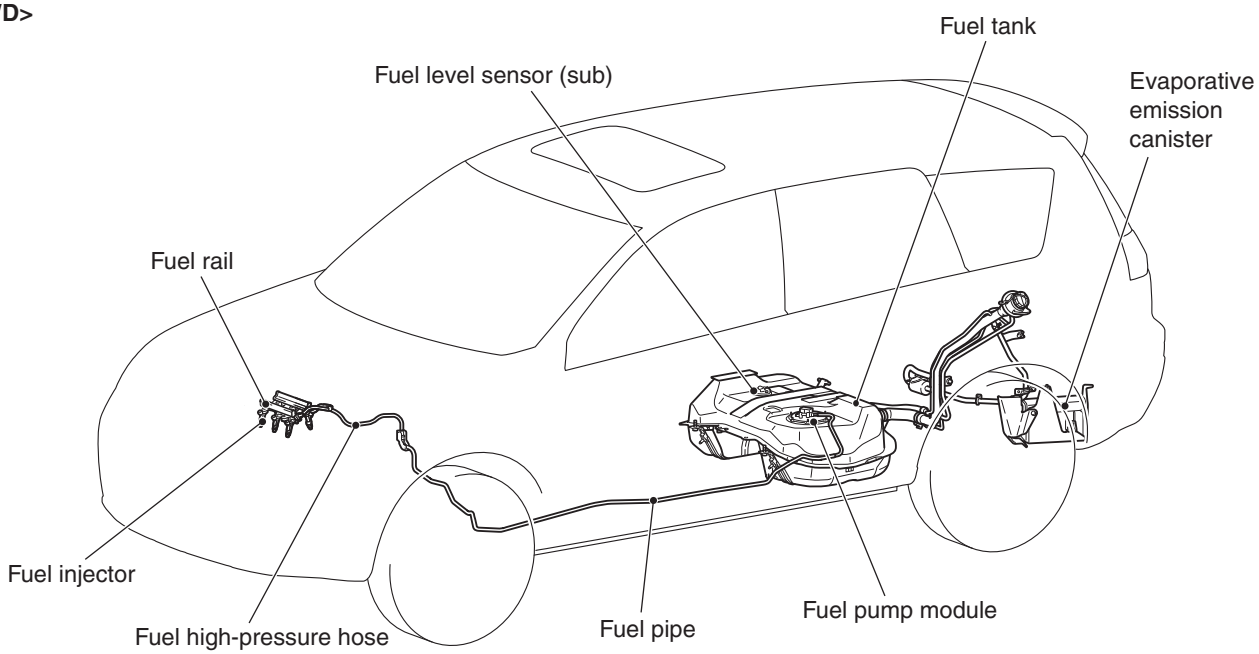


AC901403 AC

SERVICE SPECIFICATION

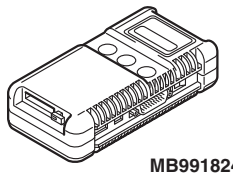
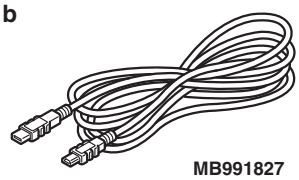
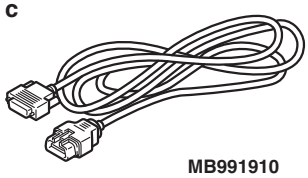
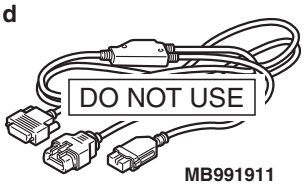
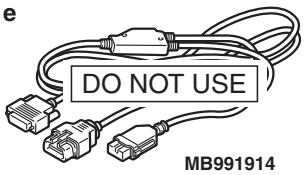
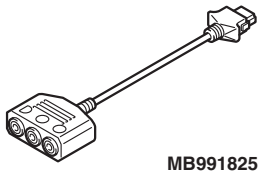
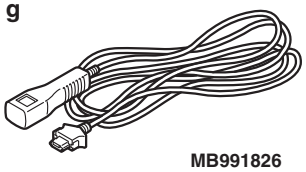
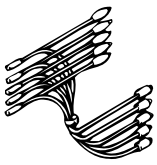
M1135000300332

Item	Standard value
Fuel tank differential pressure sensor output voltage V	2.0 – 3.0

TSB Revision

SPECIAL TOOLS

M1135000600924

Tool	Tool number and name	Supersession	Application
a  MB991824 b  MB991827 c  MB991910 d  MB991911 e  MB991914 f  MB991825 g  MB991826 MB991958	MB991958 Scan tool (M.U.T.-III sub assembly) a: MB991824 Vehicle communication interface (V.C.I.) b: MB991827 M.U.T.-III USB cable c: MB991910 M.U.T.-III main harness A (Vehicles with CAN communication system) d: MB991911 M.U.T.-III main harness B (Vehicles without CAN communication system) e: MB991914 M.U.T.-III main harness C (for Chrysler models only) f: MB991825 M.U.T.-III adapter harness g: MB991826 M.U.T.-III trigger harness	MB991824-KIT *NOTE: MB991826 M.U.T.-III Trigger Harness is not necessary when pushing V.C.I. ENTER key.*	**⚠ CAUTION** **For vehicles with CAN communication, use M.U.T.-III main harness A to send simulated vehicle speed. If you connect M.U.T.-III main harness B instead, the CAN communication does not function correctly.** Checking diagnostic trouble codes
 MB991658	MB991658 Test harness set	Tool not available	Fuel tank differential pressure sensor check

FUEL SUPPLY DIAGNOSIS

INTRODUCTION

M1135004000452

The fuel system is used to supply an appropriate fuel mixture to the engine. The system consists of the fuel tank, fuel filter, fuel pump and fuel pipes. An evaporative emission system is provided to prevent evaporated fuel from escaping into the atmosphere.

Engine malfunctions caused by insufficient fuel supply and evaporative emission system operation malfunctions can be caused by faults in the vapor line, fuel pipe, hose, or fuel tank pressure control valve, etc.

TROUBLESHOOTING STRATEGY

M1135004100385

Use these steps to plan your diagnostic strategy. If you follow them carefully, you will be sure to find most of the fuel supply faults.

1. Gather information from the customer.
2. Verify that the condition described by the customer exists.
3. Find the malfunction by following the Symptom Procedure.
4. Verify malfunction is eliminated.

SYMPTOM PROCEDURES

M1135004800458

Inspection Procedure 1 : Engine Malfunctions Due to Insufficient Fuel Supply

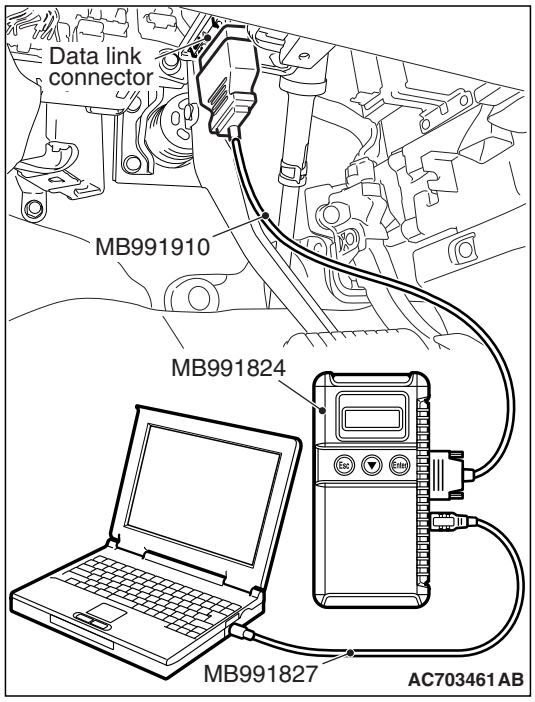
TROUBLESHOOTING HINTS (The most likely causes for this case:)

- Fuel injector failed.
- Open or shorted fuel injector circuit, or loose connector.
- Bent, twisted or clogged fuel main pipe or fuel high-pressure tube.
- Malfunction of the fuel pump module.

DIAGNOSIS

Required Special Tools:

- MB991958: Scan Tool (M.U.T.-III Sub Assembly)
  - MB991824: V.C.I.
  - MB991827: M.U.T.-III USB Cable
  - MB991910: M.U.T.-III Main Harness A



STEP 1. Using scan tool MB991958, read the MFI system diagnostic trouble code.

⚠ CAUTION
To prevent damage to scan tool MB991958, always turn the ignition switch to the "LOCK" (OFF) position before connecting or disconnecting scan tool MB991958.

(1) Ensure that the ignition switch is at the "LOCK" (OFF) position.
(2) Start up the personal computer.
(3) Connect special tool MB991827 to special tool MB991824 and the personal computer.
(4) Connect special tool MB991910 to special tool MB991824.
(5) Connect special tool MB991910 to the data link connector.
(6) Turn the power switch of special tool MB991824 to the "ON" position.

NOTE: When special tool MB991824 is energized, special tool MB991824 indicator light will be illuminated in a green color.

(7) Start the M.U.T.-III system on the personal computer.
(8) Turn the ignition switch to the "ON" position.
(9) Check for MFI system diagnostic trouble code (Refer to GROUP 13A, Diagnostic Function – How to Read and Erase Diagnostic Trouble Codes P.13A-11) <2.4L engine>, (Refer to GROUP 13B, Diagnostic Function – How to Read and Erase Diagnostic Trouble Codes P.13B-11) <3.0L engine>.
(10) Turn the ignition switch to the "LOCK" (OFF) position, and then remove scan tool MB991958 in the reverse order of installation.

Q: Is the DTC set?

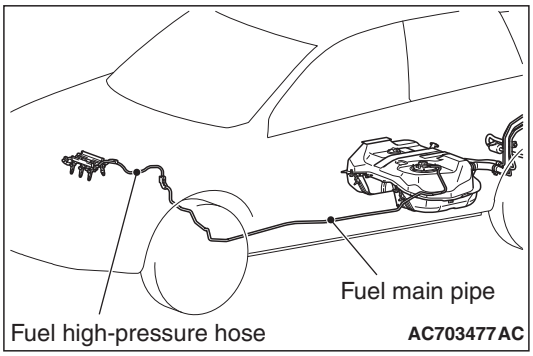
YES : Repair MFI system (Refer to GROUP 13A, Diagnostic Trouble Code Chart P.13A-49) <2.4L engine>, (GROUP 13B, Diagnostic Trouble Code Chart P.13B-50) <3.0L engine>. Then go to Step 6.
NO : Go to Step 2.

STEP 2. Check the fuel pressure.

Release residual pressure from the fuel line to prevent fuel spray (Refer to GROUP 13A, On-vehicle Service – Fuel Pressure Test P.13A-868).

Q: Is the fuel pressure in good condition?

YES : Go to Step 5.
NO : Go to Step 3.



STEP 3. Check for bending, twisting or clogging of the fuel main pipe and fuel high-pressure hose.

Q: Are the fuel main pipe and fuel high-pressure hose in good condition?

YES : Go to Step 4.

NO : Repair or replace the fuel main pipe or fuel high-pressure hose. Then go to Step 6.

STEP 4. Check the fuel pump module operation.

Refer to GROUP 13A, On-vehicle Service – Fuel Pump Operation Check P.13A-867.

Q: Is the fuel pump module operation in good condition?

YES : Go to Step 5.

NO : Replace the fuel pump module (Refer to P.13C-9) <FWD>, (Refer to P.13C-11) <AWD>. Then go to Step 6.

STEP 5. Check the inside of the fuel tank for contamination and rust.

(1) Drain fuel.

(2) Remove the fuel tank (Refer to P.13C-15) <FWD>, (Refer to P.13C-20) <AWD>.

Q: Is the fuel tank in good condition?

YES : Go to Step 6.

NO : Replace the fuel filter, and clean the fuel tank and fuel line. Then go to Step 6.

STEP 6. Retest the system.

Q: Is the engine malfunction eliminated?

YES : The procedure is complete.

NO : Return to Step 1.

ON-VEHICLE SERVICE

FUEL PUMP OPERATION CHECK

M1135001000602

Refer to GROUP 13A, On-vehicle Service – Fuel Pump Operation Check P.13A-867.

FUEL LEVEL SENSOR CHECK

M1135005300111

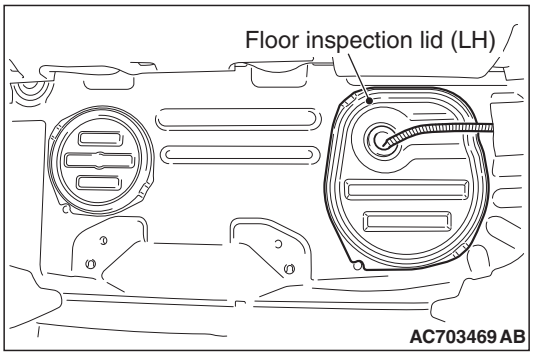
Refer to GROUP 54A, Combination Meter – On-vehicle Service – Fuel Level Sensor Check P.54A-107.

TSB Revision

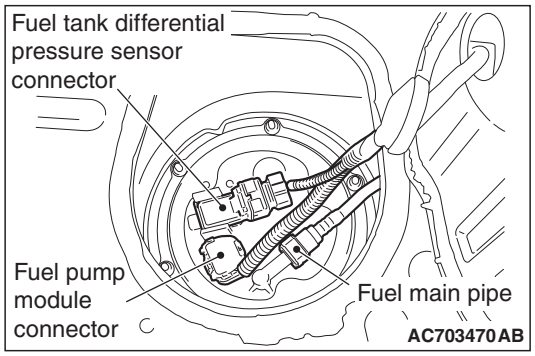
FUEL PUMP MODULE REPLACEMENT <FWD>

M1135004901102

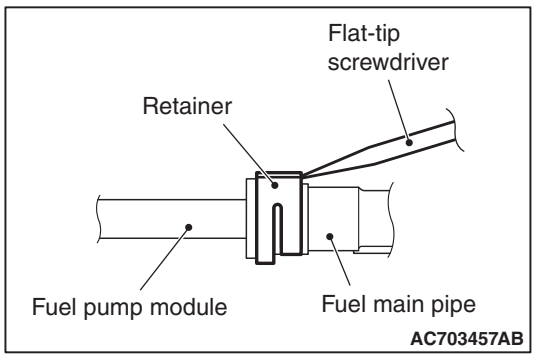
1. Remove the second seat assembly (Refer to GROUP 52A, Second Seat Assembly P.52A-25) and turn up the floor carpet.
2. Remove the floor inspection lid (LH).



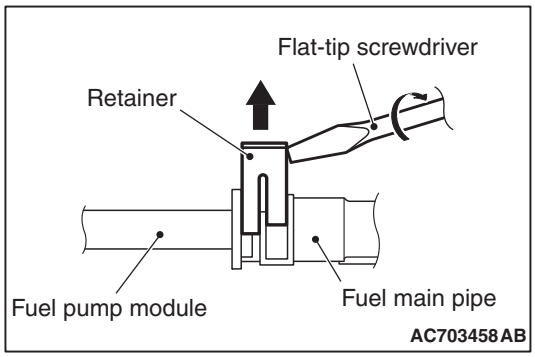
3. Disconnect the fuel pump module connector and fuel tank differential pressure sensor connector.
4. Release the fuel pressure in the fuel line. [Refer to GROUP 13A, On-vehicle Service - Fuel Pump Connector Disconnection (How to Reduce Pressurized Fuel Lines) P.13A-866.]

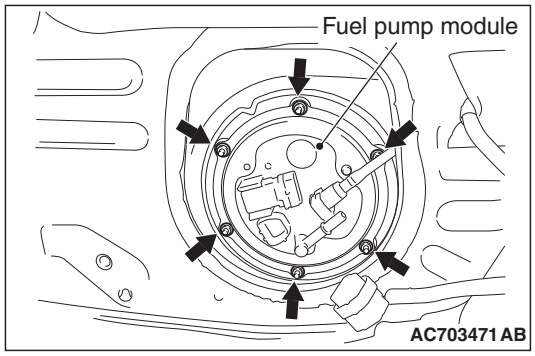


5. Insert a flat-tip screwdriver [6mm (0.24 inch) wide and 1mm (0.04 inch) thick] into the retainer of the fuel main pipe.



6. Turn the flat-tip screwdriver about 90 degrees to push up the retainer, and disconnect the fuel main pipe from the fuel pump module.





7. Remove the mounting nuts of fuel pump module.

⚠ CAUTION

Pay attention not to damage the fuel level sensor and float of the fuel pump module when removing the fuel pump module from the fuel tank.

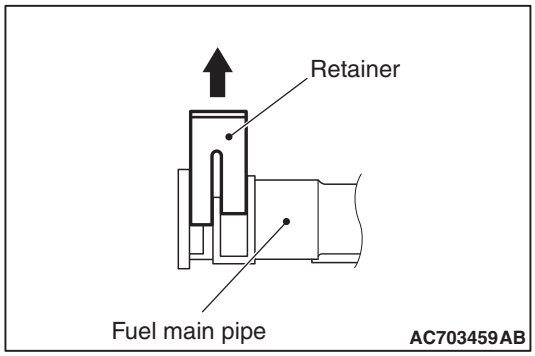
8. Remove the fuel pump module from service hole.
9. Replace the fuel pump module gasket with a new one.

⚠ CAUTION

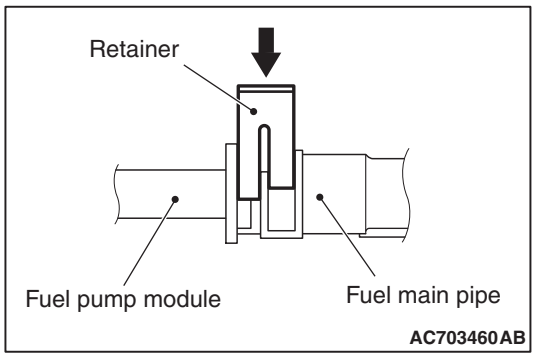
- **Pay attention not to damage the fuel level sensor and the float of the fuel pump module when installing it to the fuel tank.**
- **When installing the fuel pump module to the fuel tank, check that the fuel level sensor moving area moves smoothly.**

10. Install the fuel pump module to the fuel tank through the service hole, and tighten the mounting nuts to the specified torque.

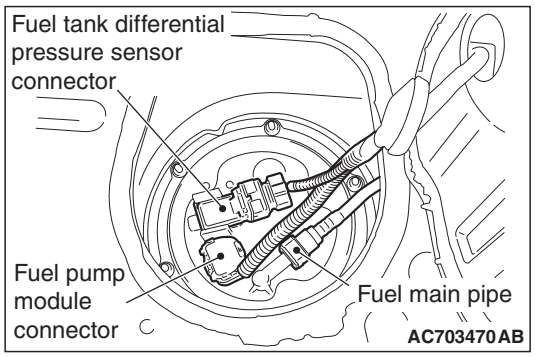
Tightening torque: 2.5 ± 0.4 N·m (22 ± 4 in-lb)



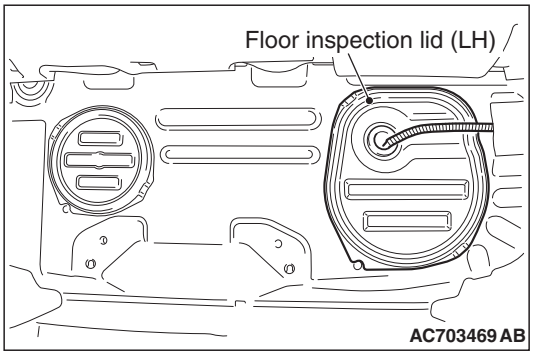
11. Before the installation, push up the retainer of the fuel main pipe.



12. Connect the connector of fuel main pipe to the fuel pump module securely and push down the retainer of the connector to lock it firmly.
13. After the installation, slightly pull the fuel main pipe to check that it is connected securely. At this time, also check that there is approximately 1 mm (0.04 inch) play.



14. Connect the fuel pump module connector and fuel tank differential pressure sensor connector.

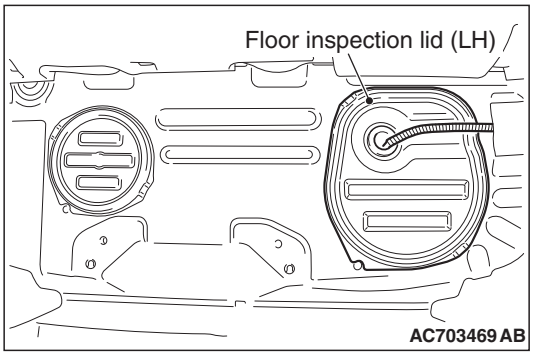


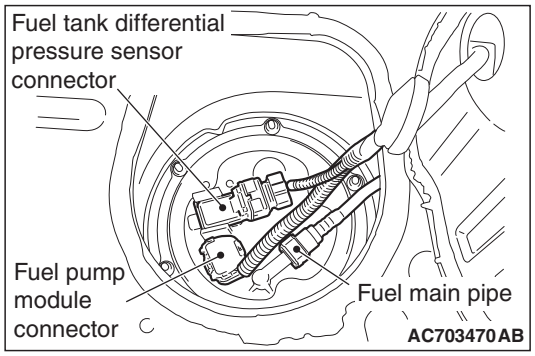
15. Install the floor inspection lid (LH).
16. Return the floor carpet to the original condition and install the second seat assembly (Refer to GROUP 52A, Second Seat Assembly P.52A-25).

FUEL PUMP MODULE REPLACEMENT <AWD>

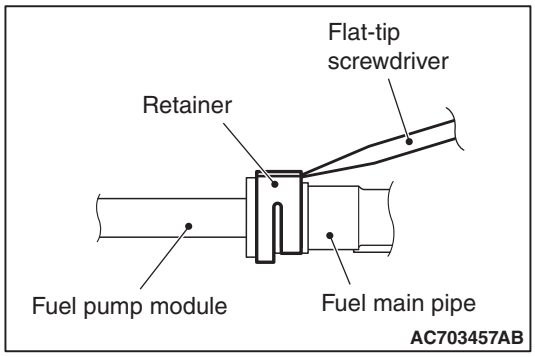
M1135004901481

1. Remove the second seat assembly (Refer to GROUP 52A, Second Seat Assembly P.52A-25) and turn up the floor carpet.
2. Remove the floor inspection lid (LH).

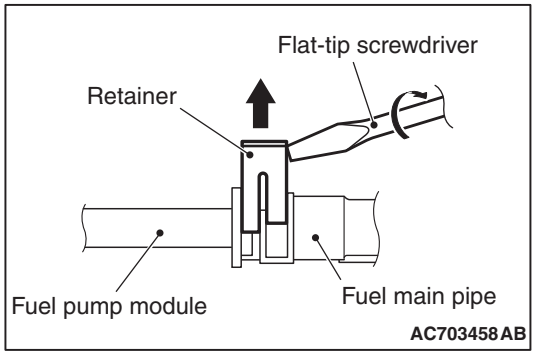




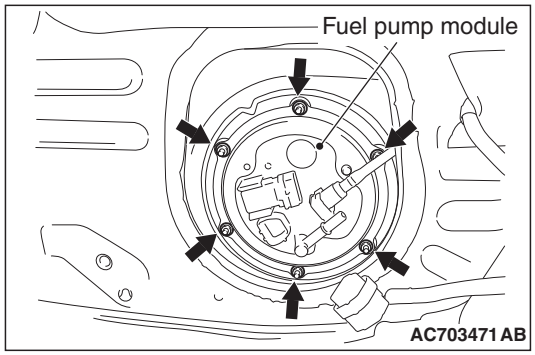
3. Disconnect the fuel pump module connector and fuel tank differential pressure sensor connector.
4. Release the fuel pressure in the fuel line. [Refer to GROUP 13A, On-vehicle Service - Fuel Pump Connector Disconnection (How to Reduce Pressurized Fuel Lines) P.13A-866.]



5. Insert a flat-tip screwdriver [6mm (0.24 inch) wide and 1mm (0.04 inch) thick] into the retainer of the fuel main pipe.



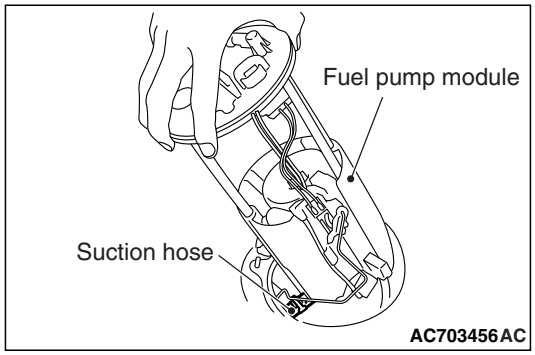
6. Turn the flat-tip screwdriver about 90 degrees to push up the retainer, and disconnect the fuel main pipe from the fuel pump module.



7. Remove the mounting nuts of fuel pump module.

⚠ CAUTION

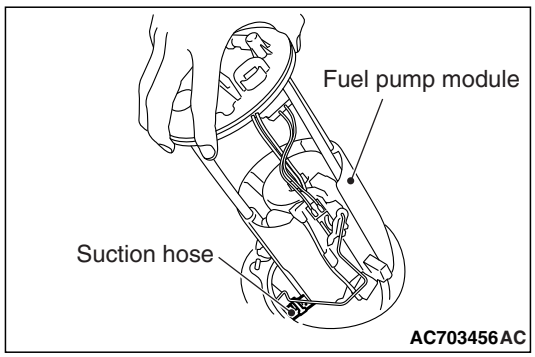
Pay attention not to damage the fuel level sensor and float of the fuel pump module when removing the fuel pump module from the service hole.



8. While removing the fuel pump module from the fuel tank, disconnect the suction hose from the fuel pump module to remove the fuel pump module from the service hole.
9. Replace the fuel pump module gasket with a new one.

⚠ CAUTION

- **Pay attention not to damage the fuel level sensor and the float of the fuel pump module when installing it to the fuel tank. Pay attention to prevent the float of fuel level sensor from being trapped by the suction hose inside the fuel tank.**
- **When installing the fuel pump module to the fuel tank, check that the fuel level sensor moving area moves smoothly.**



10. While inserting the fuel pump module into the fuel tank, connect the suction hose to the fuel pump module to install the fuel pump module to the fuel tank.
    While inserting the fuel tank pump module into the fuel tank from the service hole, connect the suction hose to the fuel tank pump module to install the fuel tank pump module to the fuel tank.
11. Tighten the fuel pump module mounting nuts to the specified torque.

    Tightening torque: 2.5 ± 0.4 N·m (22 ± 4 in-lb)

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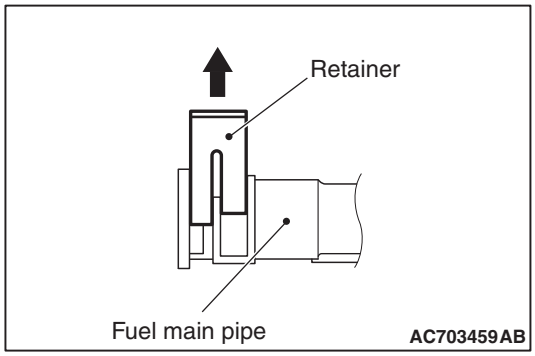
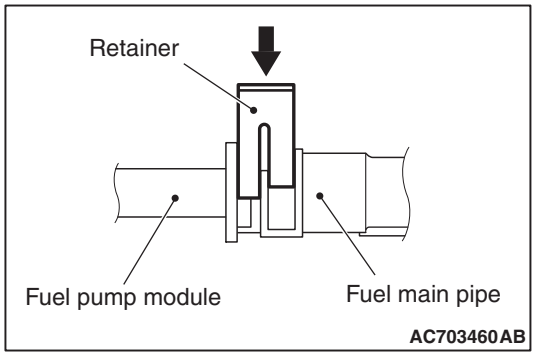
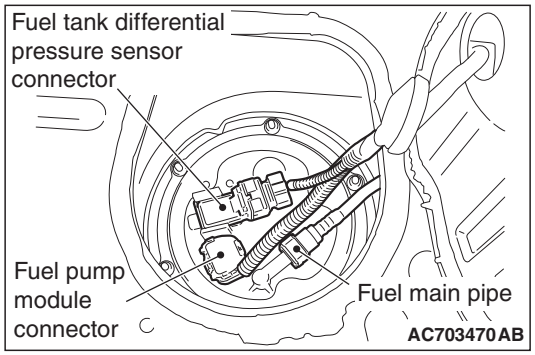


12.Before the installation, push up the retainer of the fuel main pipe.

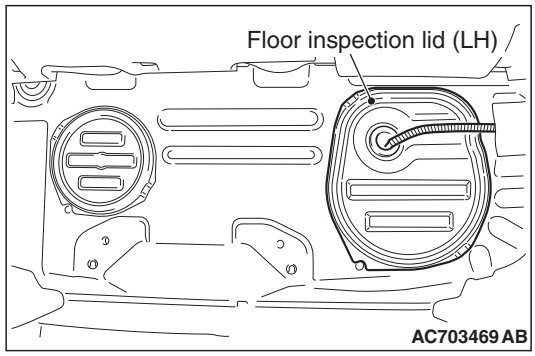


13.Connect the connector of fuel main pipe to the fuel pump module securely and push down the retainer of the connector to lock it firmly.

14.After the installation, slightly pull the fuel main pipe to check that it is connected securely. At this time, also check that there is approximately 1 mm (0.04 inch) play.



15.Connect the fuel pump module connector and fuel tank differential pressure sensor connector.



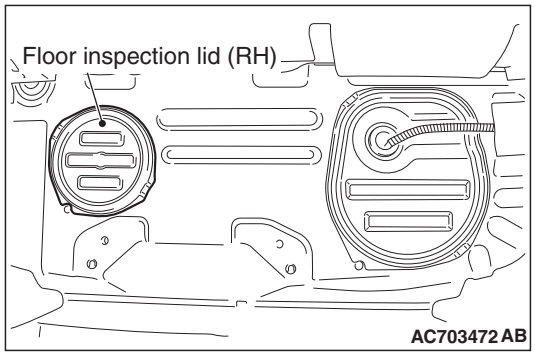
16.Install the floor inspection lid (LH).

17.Return the floor carpet to the original condition and install the second seat assembly (Refer to GROUP 52A, Second Seat Assembly P.52A-25).

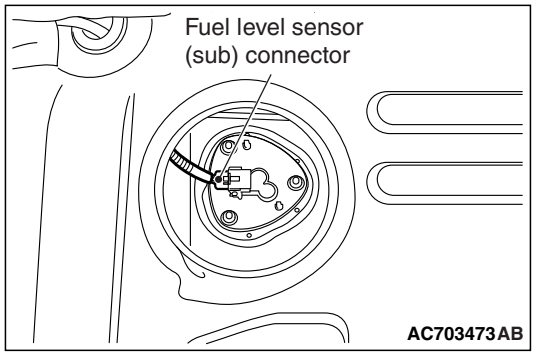
FUEL LEVEL SENSOR (SUB) REPLACEMENT <AWD>

M1135005600071

1. Remove the second seat assembly (Refer to GROUP 52A, Second Seat Assembly P.52A-25) and turn up the floor carpet.



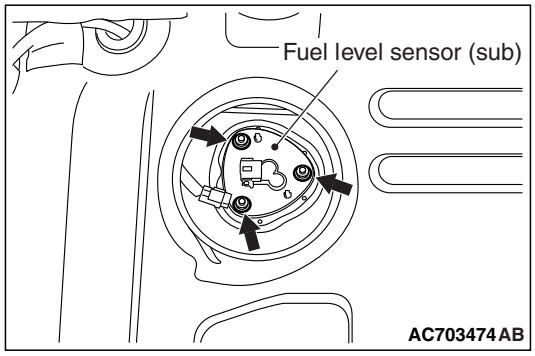
2. Remove the floor inspection lid (RH).



3. Disconnect the fuel level sensor (sub) connector.

⚠ CAUTION

Pay attention not to damage the fuel level sensor (sub) and the float of the fuel level sensor (sub) when withdrawing it from the service hole.



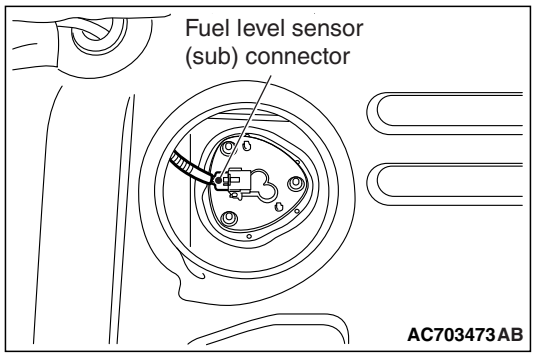
4. Remove the fuel level sensor (sub) mounting nuts, and remove the fuel level sensor (sub) from service hole.
5. Replace the fuel level sensor (sub) gasket with a new one.

⚠ CAUTION

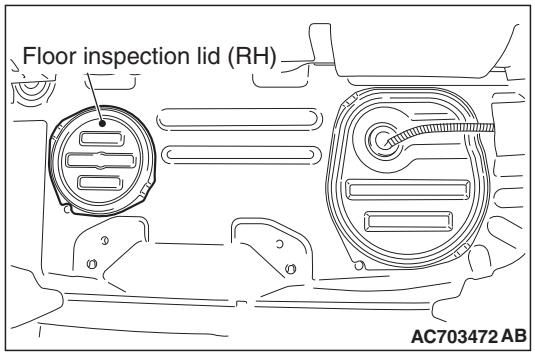
Pay attention not to damage the fuel level sensor (sub) and the float of the fuel level sensor (sub) when installing it to the fuel tank through the service hole.

6. Install the fuel level sensor (sub) to the fuel tank through the service hole, and tighten the mounting nuts to the specified torque.

Tightening torque: 2.5 ± 0.4 N·m (22 ± 4 in-lb)



7. Connect the fuel level sensor (sub) connector.



8. Install the floor inspection lid (RH).
9. Return the floor carpet to the original condition and install the second seat assembly (Refer to GROUP 52A, Second Seat Assembly P.52A-25).

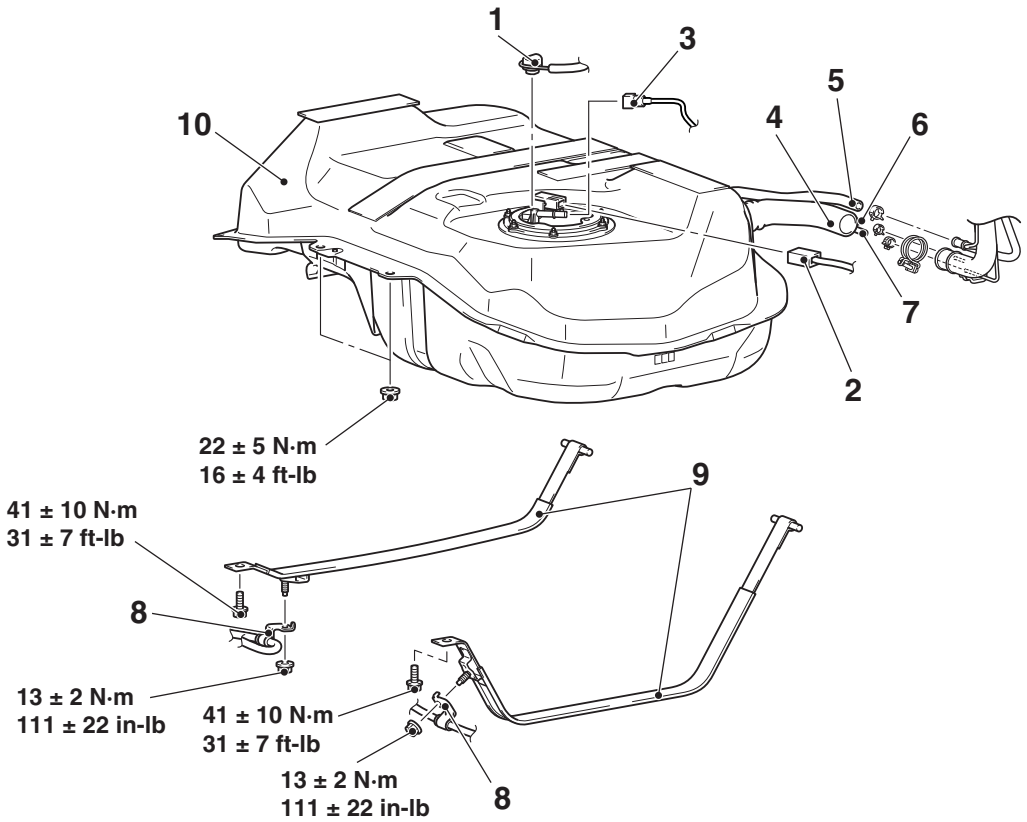
FUEL TANK

REMOVAL AND INSTALLATION <FWD>

M1135001903444

Pre-removal operation	Post-installation operation
• Draining Fuel • Center Exhaust Pipe Removal (Refer to GROUP 15, Exhaust Pipe Main Muffler P.15-22 <2.4L Engine>, P.15-25 <3.0 L Engine>). • Engine Room Under Cover Rear Removal (Refer to GROUP 51, Under Cover P.51-22).	• Engine Room Under Cover Rear Installation (Refer to GROUP 51, Under Cover P.51-22). • Center Exhaust Pipe Installation (Refer to GROUP 15, Exhaust Pipe Main Muffler P.15-22 <2.4L Engine>, P.15-25 <3.0 L Engine>). • Refilling Fuel • Check for Fuel Leaks

<FUEL TANK>



Fuel tank removal steps

- Second seat assembly (Refer to GROUP 52A, Second Seat Assembly P.52A-25)

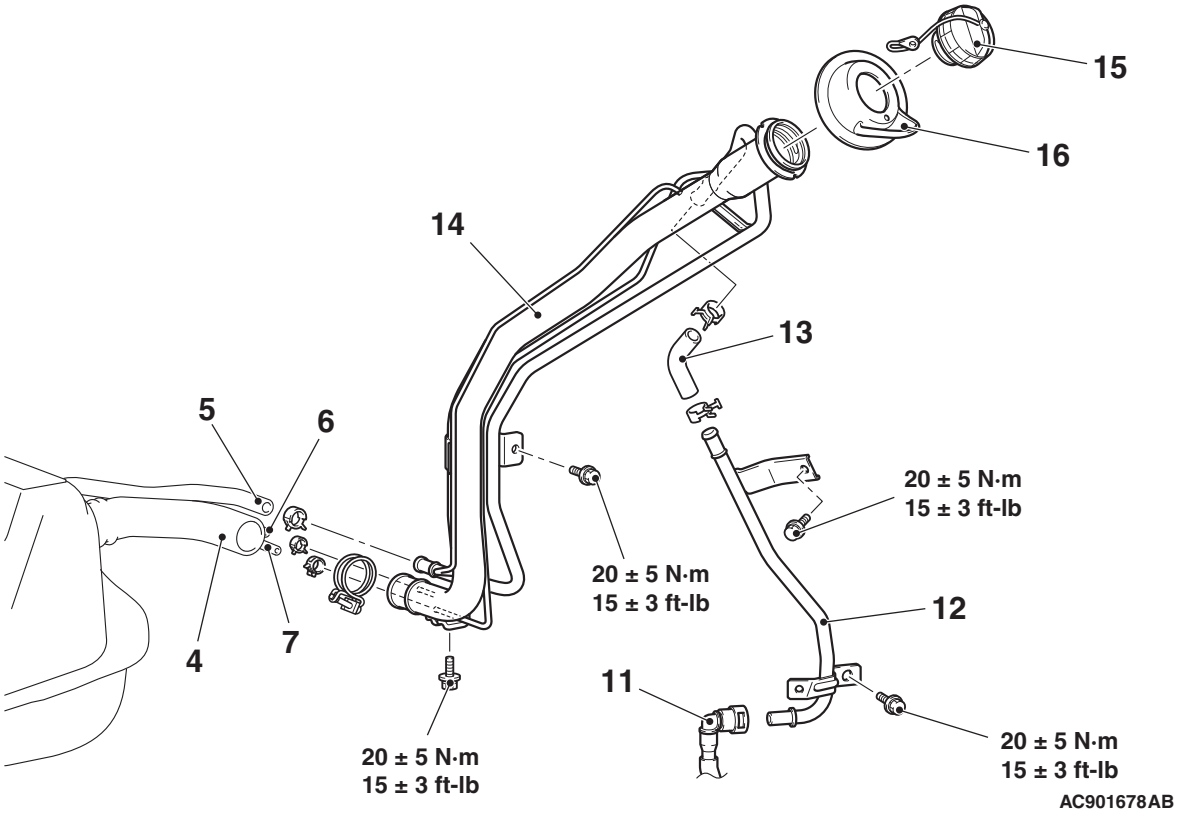
<<A>> 1. Fuel pump module connector connection
<<A>> 2. Fuel tank differential pressure sensor connector connection
<<A>> >>A<< 3. Fuel main pipe connection
4. Fuel filler hose connection
5. Fuel leveling hose connection

Fuel tank removal steps

6. Fuel tank vapor hose A connection
7. Fuel tank vapor hose B connection
8. Parking brake rear cable clamp connection

<<B>> 9. Fuel tank band
<<B>> 10. Fuel tank assembly

<FUEL TANK FILLER TUBE>



Fuel tank filler tube removal steps

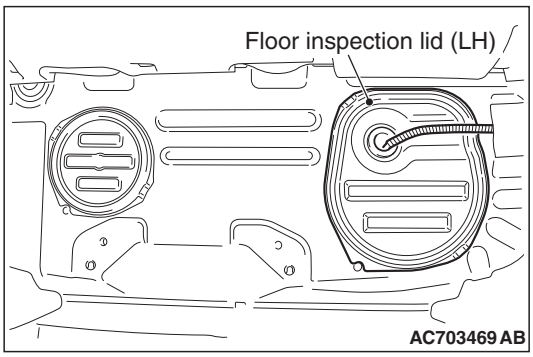
4. Fuel filler hose connection
5. Fuel leveling hose connection
6. Fuel tank vapor hose A connection
7. Fuel tank vapor hose B connection
11. Fuel vapor tube connection

Fuel tank filler tube removal steps (Continued)

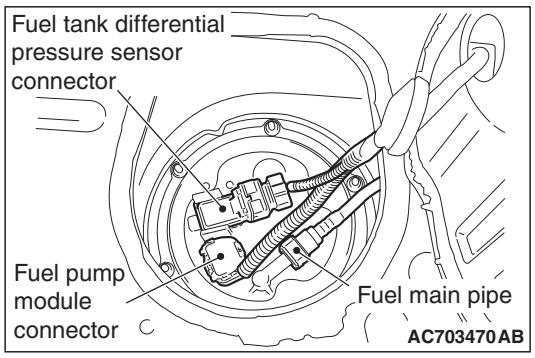
12. Fuel leveling pipe
13. Fuel leveling hose
14. Fuel tank filler tube assembly
15. Fuel cap
16. Fuel tank filler tube boots

REMOVAL SERVICE POINTS

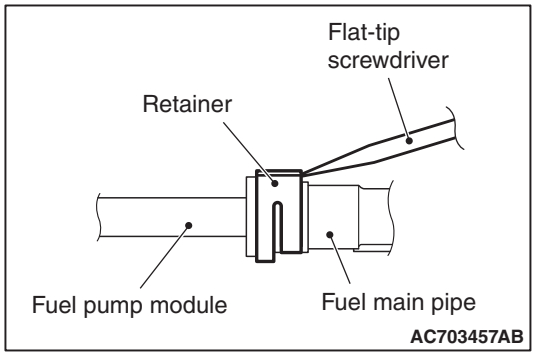
<<A>> FUEL PUMP MODULE CONNECTOR/FUEL TANK DIFFERENTIAL PRESSURE SENSOR CONNECTOR/FUEL MAIN PIPE DISCONNECTION



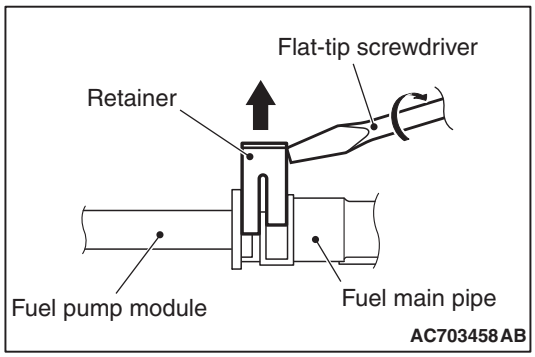
1. Remove the floor inspection lid (LH).



2. Disconnect the fuel pump module connector and fuel tank differential pressure sensor connector.
3. Release the fuel pressure in the fuel line. [Refer to GROUP 13A, On-vehicle Service - Fuel Pump Connector Disconnection (How to Reduce Pressurized Fuel Lines) P.13A-866.]

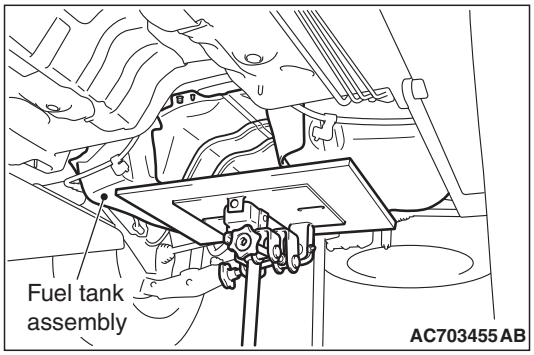


4. Insert a flat-tip screwdriver [6mm (0.24 inch) wide and 1mm (0.04 inch) thick] into the retainer of the fuel main pipe.



5. Turn the flat-tip screwdriver about 90 degrees to push up the retainer, and disconnect the fuel main pipe from the fuel pump module.

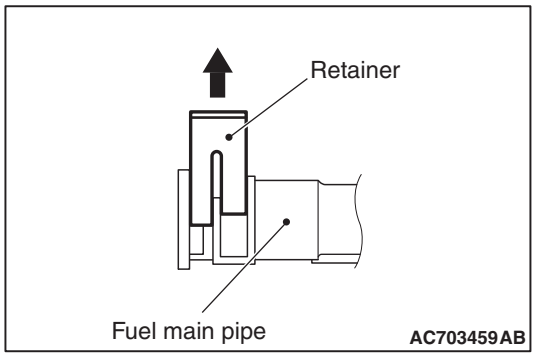
<<B>> FUEL TANK BAND/FUEL TANK ASSEMBLY REMOVAL



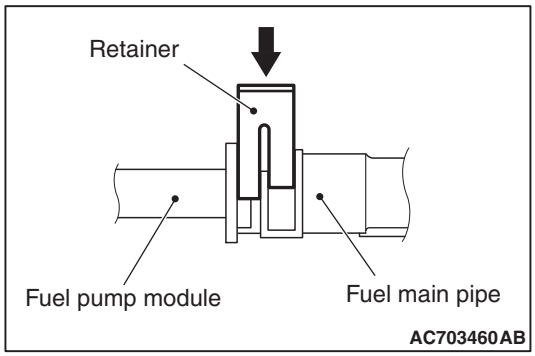
1. Hold the fuel tank assembly with a transaxle jack, and remove the connecting bolts of fuel tank band and the connecting nuts of fuel tank assembly.
2. Remove the fuel tank assembly.

INSTALLATION SERVICE POINT

>>A<< FUEL MAIN PIPE CONNECTION



1. Before the installation, push up the retainer of the fuel main pipe.



2. Connect the connector of fuel main pipe to the fuel pump module securely and push down the retainer of the connector to lock it firmly.
3. After the installation, slightly pull the fuel main pipe to check that it is connected securely. At this time, also check that there is approximately 1 mm (0.04 inch) play.

DISASSEMBLY AND ASSEMBLY

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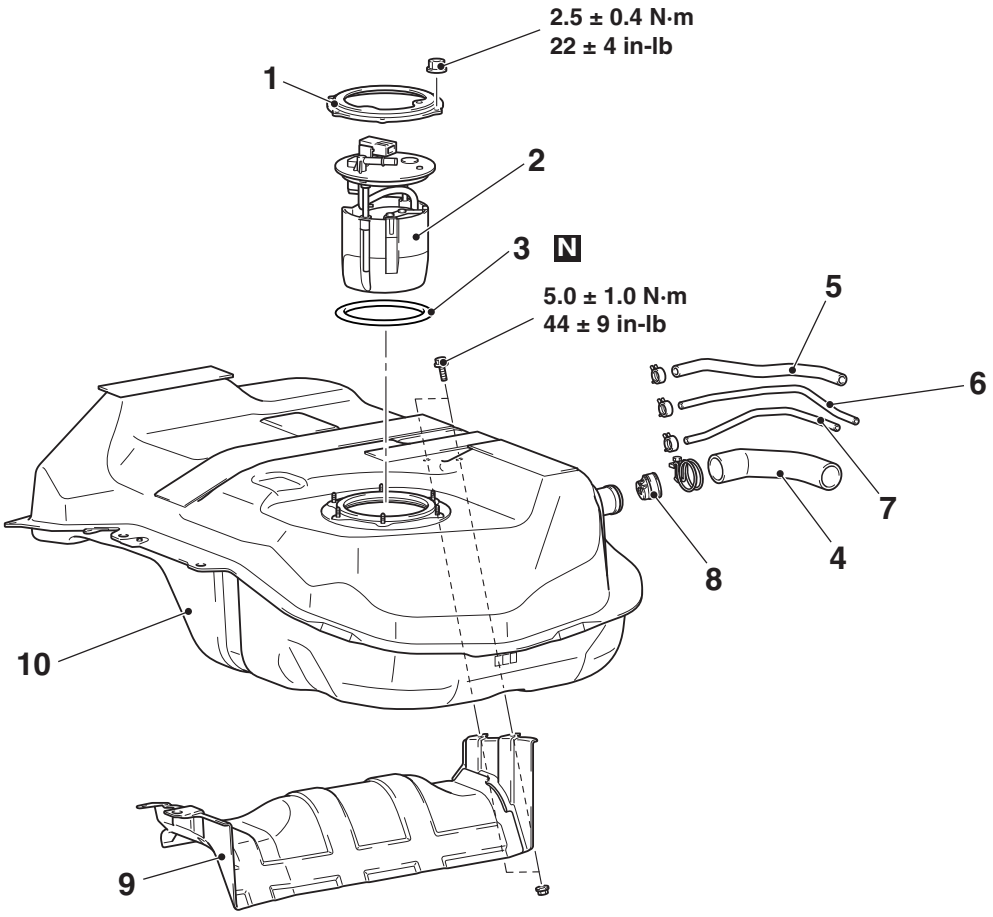
<FUEL TANK ASSEMBLY>



AC703467AC

Fuel tank removal steps

<<A>> >>A<<
1. Plate
2. Fuel pump module
3. Fuel pump module gasket
4. Fuel filler hose
5. Fuel leveling hose

Fuel tank removal steps

6. Fuel tank vapor hose A
7. Fuel tank vapor hose B
8. Fuel shut-off valve
9. Fuel tank lower protector
10. Fuel tank

REMOVAL SERVICE POINT

<<A>> FUEL PUMP MODULE REMOVAL

⚠ CAUTION

Pay attention not to damage the fuel level sensor and float of the fuel pump module when removing the fuel pump module from the fuel tank.

TSB Revision

INSTALLATION SERVICE POINT

>>A<< FUEL PUMP MODULE INSTALLATION

⚠ CAUTION

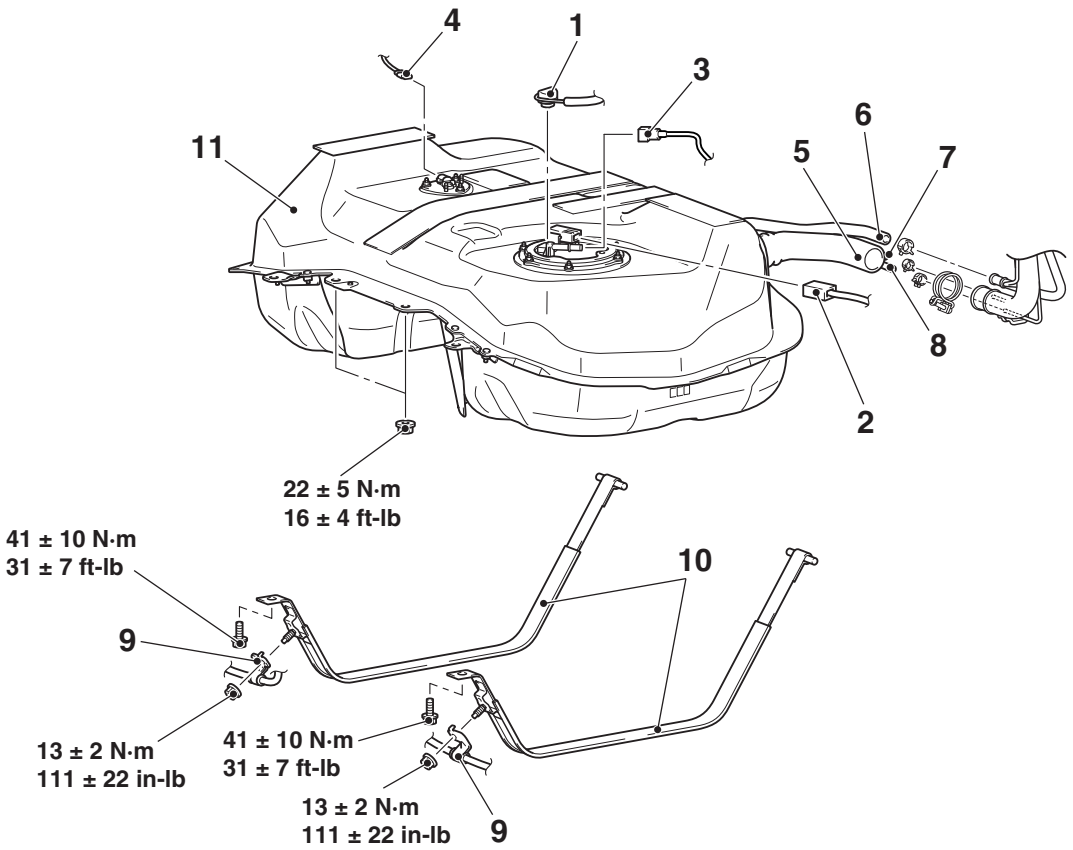
- **Pay attention not to damage the fuel level sensor and the float of the fuel pump module when installing it to the fuel tank.**
- **When installing the fuel pump module to the fuel tank, check that the fuel level sensor moving area moves smoothly.**

REMOVAL AND INSTALLATION <AWD>

M1135001903455

Pre-removal operation	Post-installation operation
• Draining Fuel • Propeller Shaft Removal (Refer to GROUP 25, Propeller Shaft P.25-7). • Center Exhaust Pipe Removal (Refer to GROUP 15, Exhaust Pipe Main Muffler P.15-22 <2.4L Engine>, P.15-25 <3.0 L Engine>). • Engine Room Under Cover Rear Removal (Refer to GROUP 51, Under Cover P.51-22).	• Engine Room Under Cover Rear Installation (Refer to GROUP 51, Under Cover P.51-22). • Center Exhaust Pipe Installation (Refer to GROUP 15, Exhaust Pipe Main Muffler P.15-22 <2.4L Engine>, P.15-25 <3.0 L Engine>). • Propeller Shaft Installation (Refer to GROUP 25, Propeller Shaft P.25-7). • Refilling Fuel • Check for Fuel Leaks

<FUEL TANK>



AC703464AB

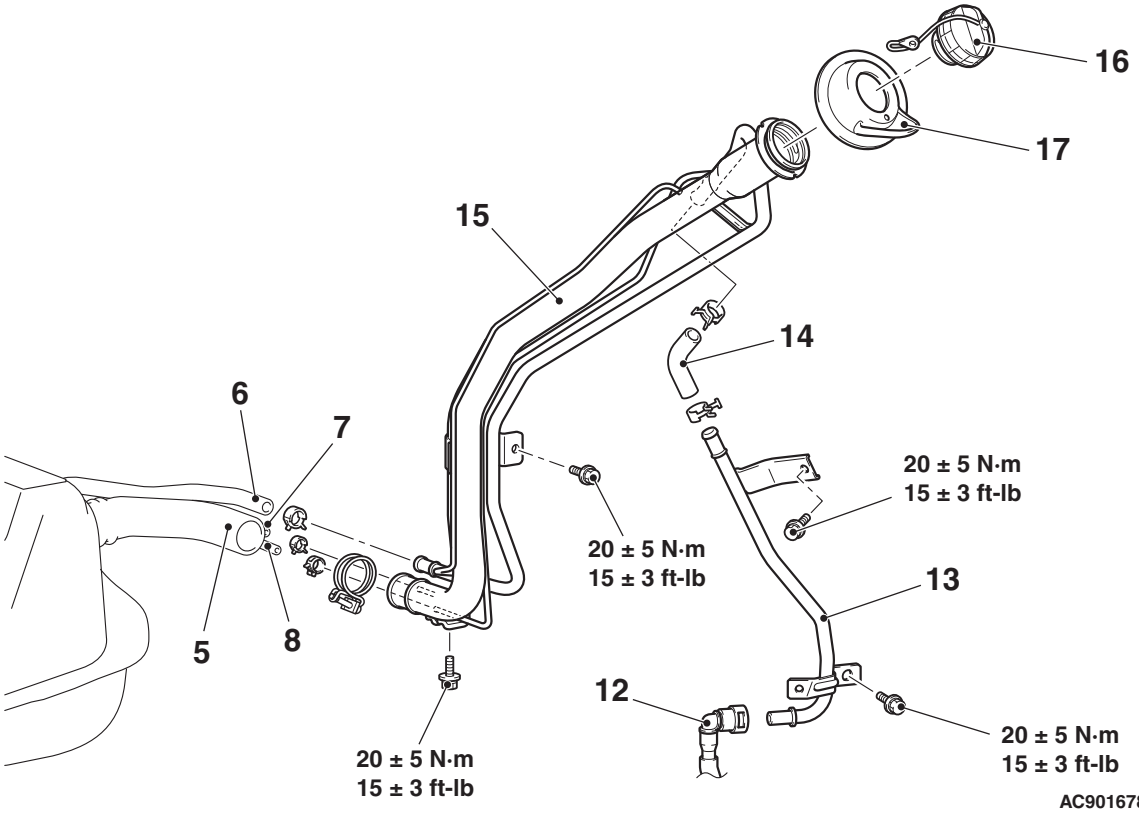
Fuel tank removal steps

- Second seat assembly (Refer to GROUP 52A, Second Seat Assembly P.52A-25)

<<A>> 1. Fuel pump module connector connection
<<A>> 2. Fuel tank differential pressure sensor connector connection
<<A>> >>A<< 3. Fuel main pipe connection
<<B>> 4. Fuel level sensor (sub) connector
5. Fuel filler hose connection
6. Fuel leveling hose connection
<<C>> 7. Fuel tank vapor hose A connection
8. Fuel tank vapor hose B connection
9. Parking brake rear cable clamp connection
- Rear deferential support member mounting bolt

<<C>> 10. Fuel tank band
<<C>> 11. Fuel tank assembly

<FUEL TANK FILLER TUBE>



Fuel tank filler tube removal steps

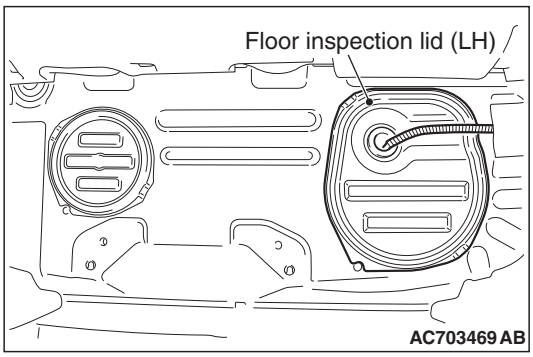
5. Fuel filler hose connection
6. Fuel leveling hose connection
7. Fuel tank vapor hose A connection
8. Fuel tank vapor hose B connection
12. Fuel vapor tube connection

Fuel tank filler tube removal steps (Continued)

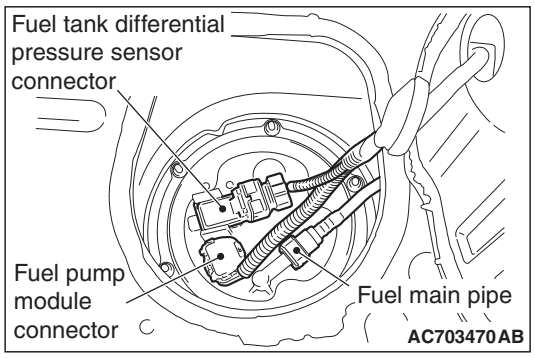
13. Fuel leveling pipe
14. Fuel leveling hose
15. Fuel tank filler tube assembly
16. Fuel cap
17. Fuel tank filler tube boots

REMOVAL SERVICE POINTS

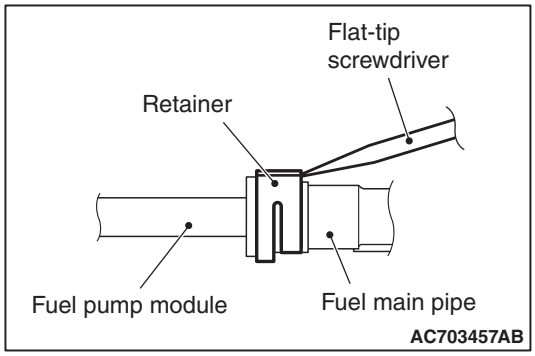
<<A>> FUEL PUMP MODULE CONNECTOR/FUEL TANK DIFFERENTIAL PRESSURE SENSOR CONNECTOR/FUEL MAIN PIPE DISCONNECTION



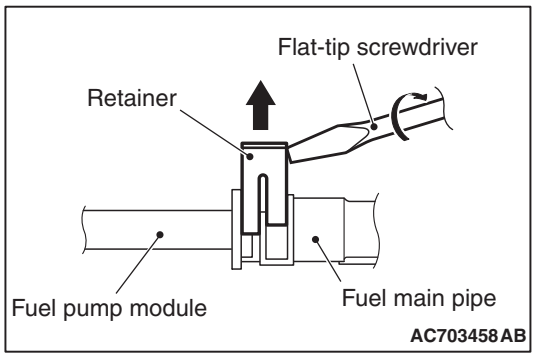
1. Remove the floor inspection lid (LH).



2. Disconnect the fuel pump module connector and fuel tank differential pressure sensor connector.
3. Release the fuel pressure in the fuel line. [Refer to GROUP 13A, On-vehicle Service - Fuel Pump Connector Disconnection (How to Reduce Pressurized Fuel Lines) P.13A-866.]

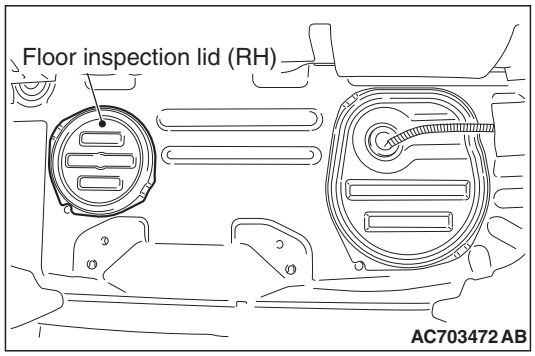


4. Insert a flat-tip screwdriver [6mm (0.24 inch) wide and 1mm (0.04 inch) thick] into the retainer of the fuel main pipe.

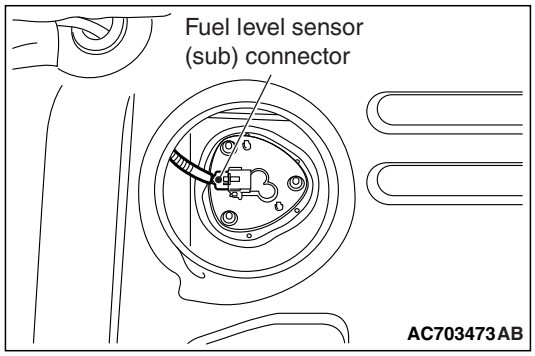


5. Turn the flat-tip screwdriver about 90 degrees to push up the retainer, and disconnect the fuel main pipe from the fuel pump module.

<<B>> FUEL LEVEL SENSOR (SUB) CONNECTOR DISCONNECTION

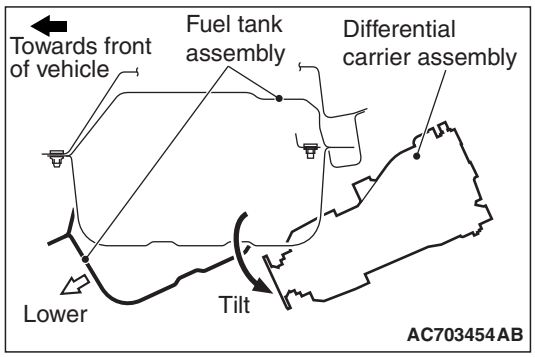


1. Remove the floor inspection lid (RH).

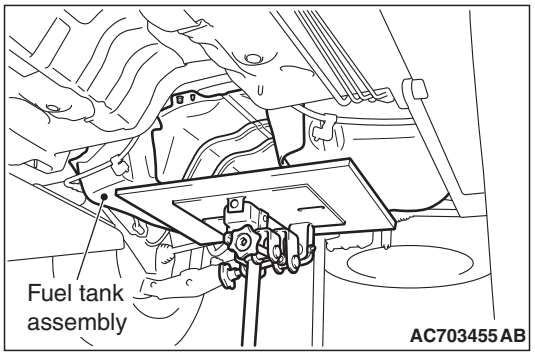


2. Disconnect the fuel level sensor (sub) connector.

<<C>> REAR DIFFERENTIAL SUPPORT MEMBER MOUNTING BOLT/FUEL TANK BAND/FUEL TANK ASSEMBLY REMOVAL

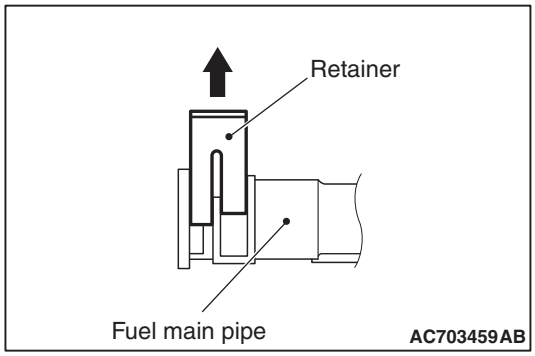


1. Remove the mounting bolts of rear differential support member and tilt the differential carrier assembly. (Refer to GROUP 27B, Differential Carrier Assembly P.27B-31).
2. Hold the fuel tank assembly with the transaxle jack, and remove the connecting bolts of fuel tank band and the connecting nuts of fuel tank assembly.
3. Remove the fuel tank assembly in the tilt direction, paying attention not to bump it against the rear differential carrier.

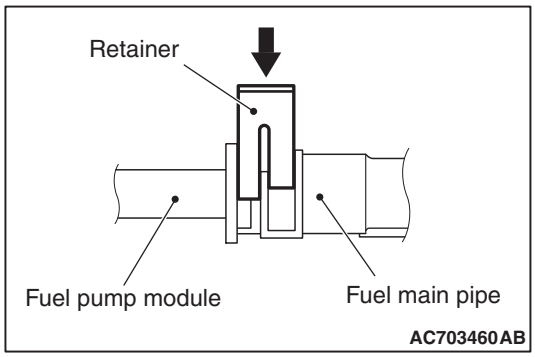


INSTALLATION SERVICE POINT

>>A<< FUEL MAIN PIPE CONNECTION



1. Before the installation, push up the retainer of the fuel main pipe.

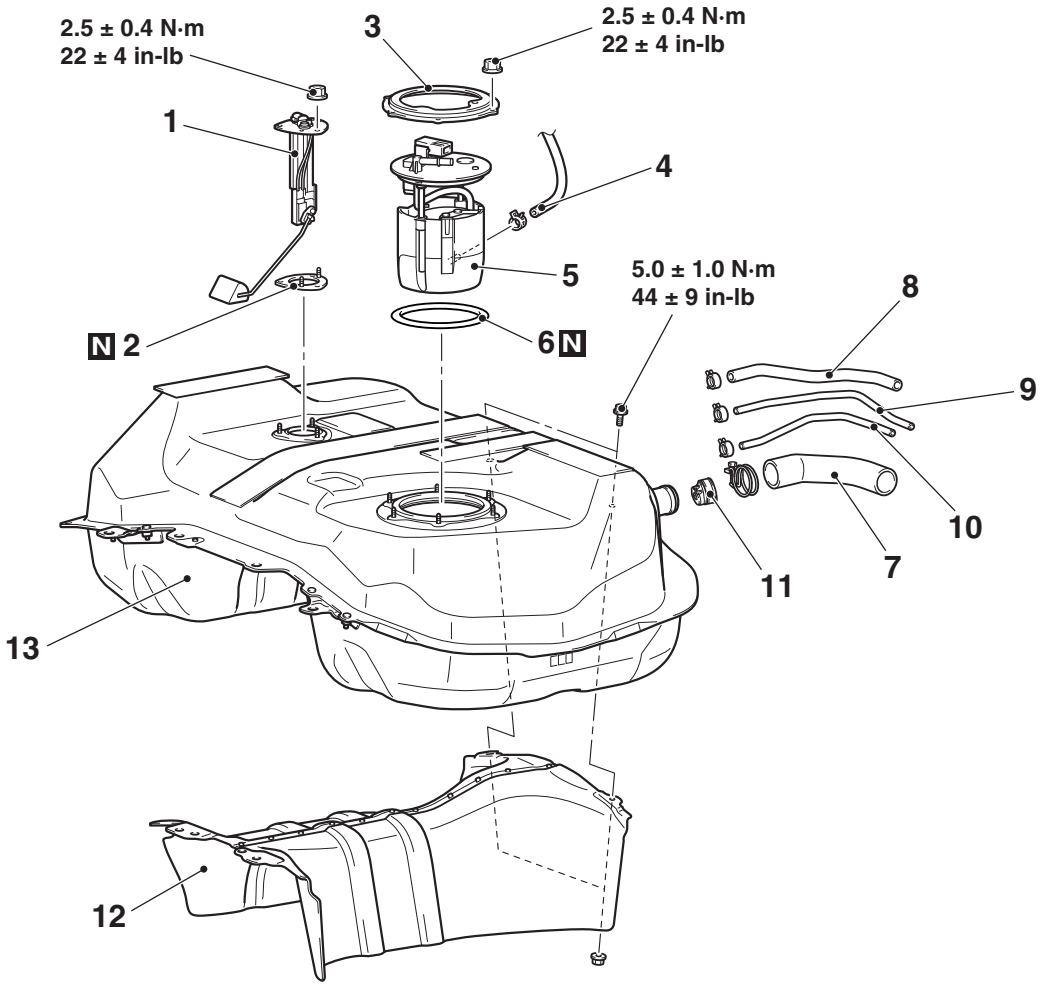


2. Connect the connector of fuel main pipe to the fuel pump module securely and push down the retainer of the connector to lock it firmly.
3. After the installation, slightly pull the fuel main pipe to check that it is connected securely. At this time, also check that there is approximately 1 mm (0.04 inch) play.

DISASSEMBLY AND ASSEMBLY

M1135006800294

<FUEL TANK ASSEMBLY>



AC703466AC

Fuel tank removal steps

<<A>>	>>B<<	1.	Fuel level sensor (sub)
		2.	Fuel level sensor (sub) gasket
		3.	Plate
<<A>>	>>A<<	4.	Suction hose connection
<<A>>	>>A<<	5.	Fuel pump module
		6.	Fuel pump module gasket
		7.	Fuel filler hose

Fuel tank removal steps

8. Fuel leveling hose
9. Fuel tank vapor hose A
10. Fuel tank vapor hose B
11. Fuel shut-off valve
12. Fuel tank lower protector
13. Fuel tank

TSB Revision

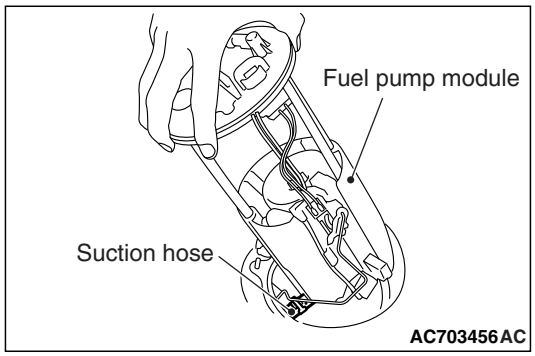
REMOVAL SERVICE POINT

<<A>> FUEL LEVEL SENSOR (SUB)/SUCTION HOSE/FUEL PUMP MODULE REMOVAL

⚠ CAUTION

Pay attention not to damage the fuel level sensor, the float of the fuel level sensor (sub) and float of the fuel pump module when removing the fuel level sensor (sub) and fuel pump module from the fuel tank.

While removing the fuel pump module from the fuel tank, disconnect the suction hose from the fuel pump module to remove the fuel pump module from the fuel tank.



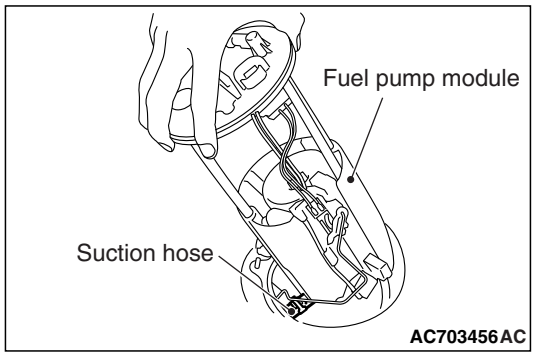
INSTALLATION SERVICE POINTS

>>A<< FUEL PUMP MODULE/SUCTION HOSE INSTALLATION

⚠ CAUTION

- **Pay attention not to damage the fuel level sensor and the float of the fuel pump module when installing it to the fuel tank. Pay attention to prevent the float of fuel level sensor from being trapped by the suction hose inside the fuel tank.**
- **When installing the fuel pump module to the fuel tank, check that the fuel level sensor moving area moves smoothly.**

While inserting the fuel pump module into the fuel tank, connect the suction hose to the fuel pump module to install the fuel pump module to the fuel tank.



>>B<< FUEL LEVEL SENSOR (SUB) INSTALLATION

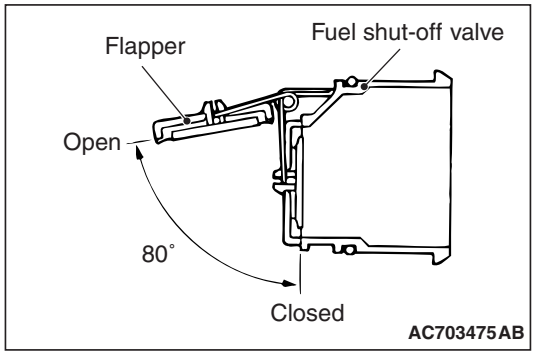
⚠ CAUTION

Pay attention not to damage the fuel level sensor (sub) and the float of the fuel level sensor (sub) when installing it to the fuel tank.

INSPECTION

M1135002000371

FUEL SHUT-OFF VALVE CHECK

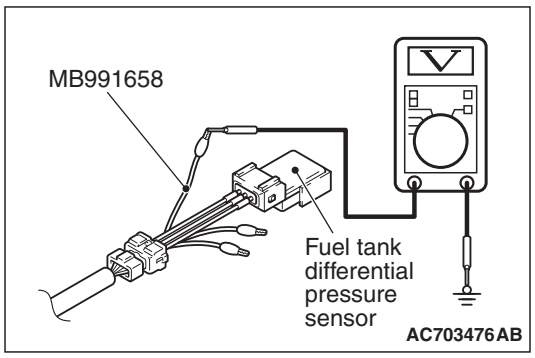


Check that the flapper of the fuel shut-off valve opens and closes as shown in the illustration.

FUEL TANK DIFFERENTIAL PRESSURE SENSOR CHECK

Required Special Tool:

- MB991658: Test Harness Set



1. Disconnect the fuel tank differential pressure sensor connector and connect special tool MB991658 between the terminals of the disconnected connector.
2. Turn the ignition switch to “ON” position and measure the voltage between terminal 1 and ground.

   Standard value: 2.0 – 3.0 V

NOTES