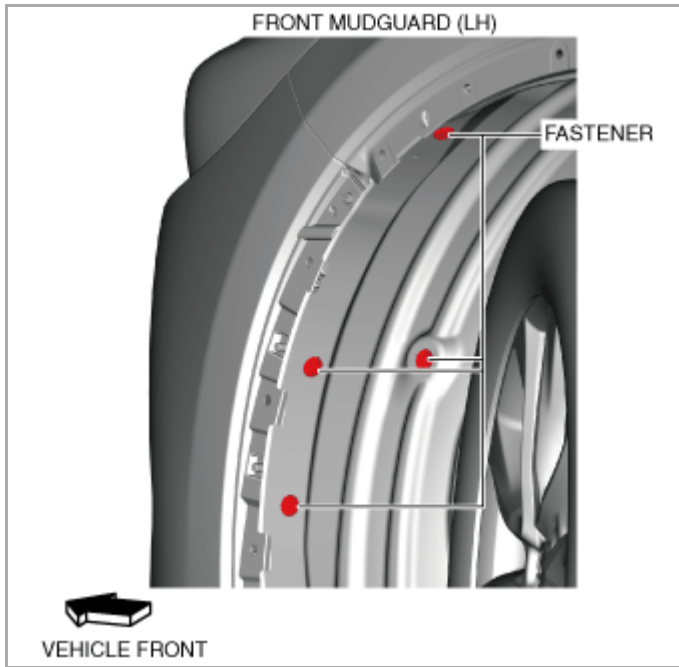


# Your Ultimate Source for OEM Repair Manuals

FactoryManuals.net is a great resource for anyone who wants to save money on repairs by doing their own work. The manuals provide detailed instructions and diagrams that make it easy to understand how to fix a vehicle.

## 2007 MAZDA MX-5 / Miata OEM Service and Repair Workshop Manual

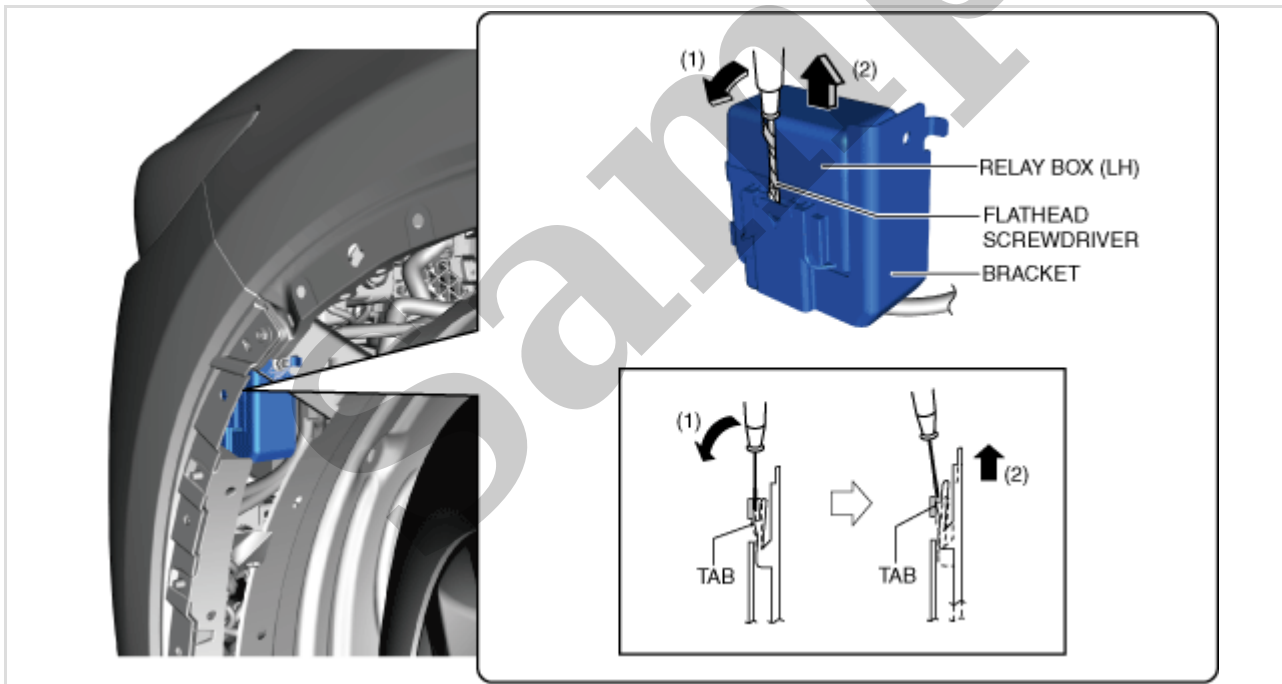
[Go to manual page](#)



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7. Partially peel back the front mud guard (LH) to a position allowing removal of the relay box (LH).

8. Insert a tape-wrapped flathead screwdriver into the position shown in the figure.



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9. Move the tape-wrapped flathead screwdriver in the direction of arrow (1) shown in the figure and lift the relay box (LH) in the direction of arrow (2) to detach the tab of the relay box (LH) from the bracket.

10. Remove the fuel pump relay.

# FUEL FILTER (HIGH-PRESSURE) REMOVAL/INSTALLATION [SKYACTIV-G 2.5 (WITH CYLINDER DEACTIVATION)]

SM2897467

id0114q780300

## Warning

- Highly pressurized fuel may spray out if the fuel line is cut. Due to the following dangers occurring with a fuel spray, always complete the "Fuel Line Safety Procedure" to prevent the fuel from spraying.
  - Fuel may cause irritation if it comes in contact with skin and eyes.
  - If fuel ignites and causes a fire, it may lead to serious injury or death, and damage to property and facilities.
- A person charged with static electricity could cause a fire or explosion, resulting in death or serious injury. Before performing work on the fuel system, discharge static electricity by touching the vehicle body.

1. Complete the "BEFORE SERVICE PRECAUTION". (See [BEFORE SERVICE PRECAUTION \[SKYACTIV-G 2.5 \(WITH CYLINDER DEACTIVATION\)\]](#).)

2. Disconnect the negative battery terminal. (See [NEGATIVE BATTERY TERMINAL DISCONNECTION/CONNECTION](#).)

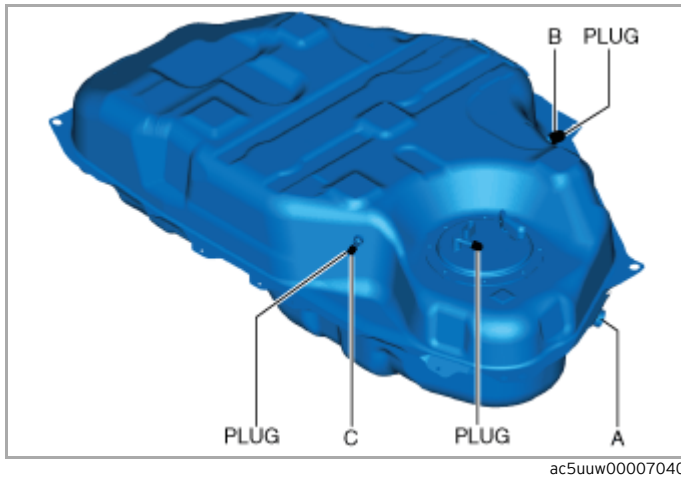
3. Remove the rear seat cushion. (See [REAR SEAT CUSHION REMOVAL/INSTALLATION](#).)

4. Remove the fuel pump unit. (See [FUEL PUMP UNIT REMOVAL/INSTALLATION \[SKYACTIV-G 2.5 \(WITH CYLINDER DEACTIVATION\)\]](#).)

5. Remove the fuel filter (high-pressure). (See [FUEL PUMP UNIT DISASSEMBLY/ASSEMBLY \[SKYACTIV-G 2.5 \(WITH CYLINDER DEACTIVATION\)\]](#).)

6. Install in the reverse order of removal.

7. Complete the "AFTER SERVICE PRECAUTION". (See [AFTER SERVICE PRECAUTION \[SKYACTIV-G 2.5 \(WITH CYLINDER DEACTIVATION\)\]](#).)

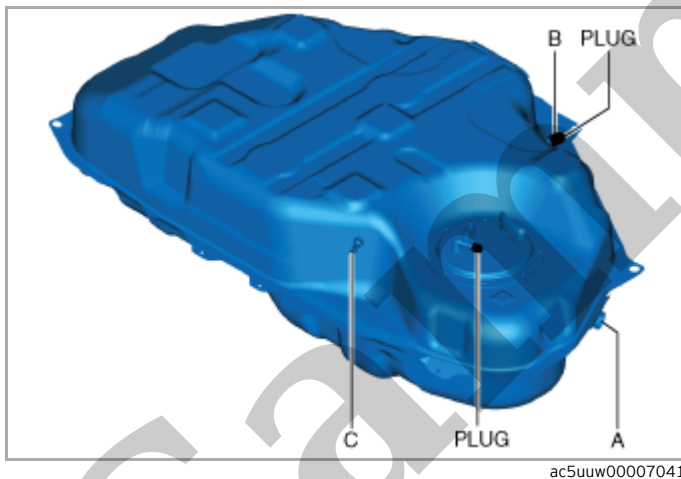


(2) Apply pressure of 5.9 kPa {44 mmHg, 1.7 inHg} to port A and wait for a while.

(3) Verify that there is no change in the pressure and no air leakage from the fuel tank.

- If there is air leakage, replace the fuel tank. (See **FUEL TANK REMOVAL/INSTALLATION [SKYACTIV-G 2.5 (WITH CYLINDER DEACTIVATION)]**.)

13. Remove the port C plug.



14. Place the fuel tank in a level position.

15. Close port A and apply 5.9 kPa {44 mmHg, 1.7 inHg} of pressure to port C, and leave it in this condition momentarily.

16. Open port A and verify that the pressure decreases from 5.9 kPa {44 mmHg, 1.7 inHg}.

- If it cannot be verified, replace the fuel tank. (See **FUEL TANK REMOVAL/INSTALLATION [SKYACTIV-G 2.5 (WITH CYLINDER DEACTIVATION)]**.)

17. Close port A and apply -2.0 kPa {-15 mmHg, -0.59 inHg} vacuum to port C, and leave it in this condition momentarily.

18. Open port A and verify that the -2.0 kPa {-15 mmHg, -0.59 inHg} negative pressure condition restores to near positive pressure.

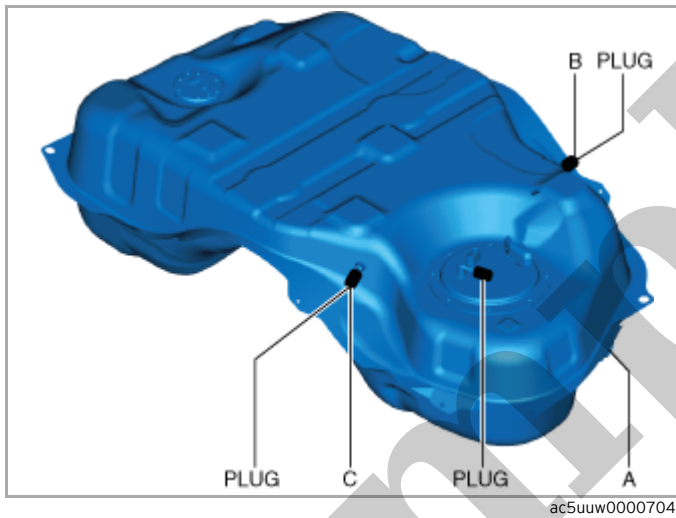
9.Remove the TWC and HO2S as a single unit. (See [EXHAUST SYSTEM REMOVAL/INSTALLATION \[SKYACTIV-G 2.5 \(WITH CYLINDER DEACTIVATION\)\]](#))

10.Remove the propeller shaft. (See [PROPELLER SHAFT REMOVAL/INSTALLATION.](#))

11.Remove the fuel tank, fuel pump unit and fuel gauge sender unit (sub) as a single unit. (See [FUEL TANK REMOVAL/INSTALLATION \[SKYACTIV-G 2.5 \(WITH CYLINDER DEACTIVATION\)\]](#))

12.Perform the following procedure to verify the fuel tank airtightness.

(1)Plug the fuel pump unit pipe, and ports B and C.

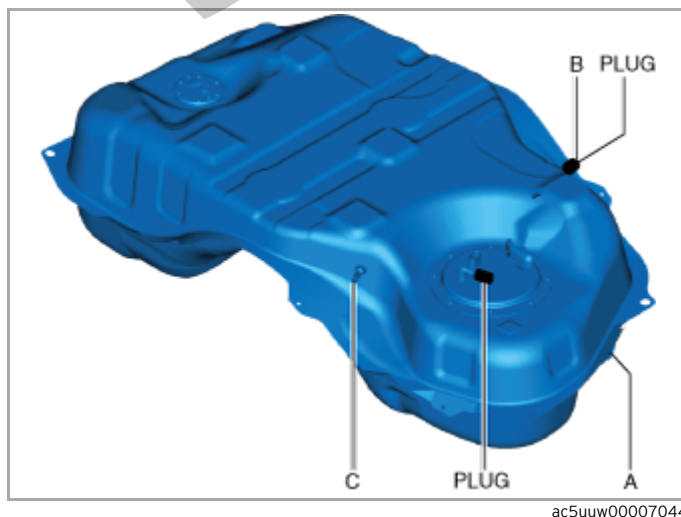


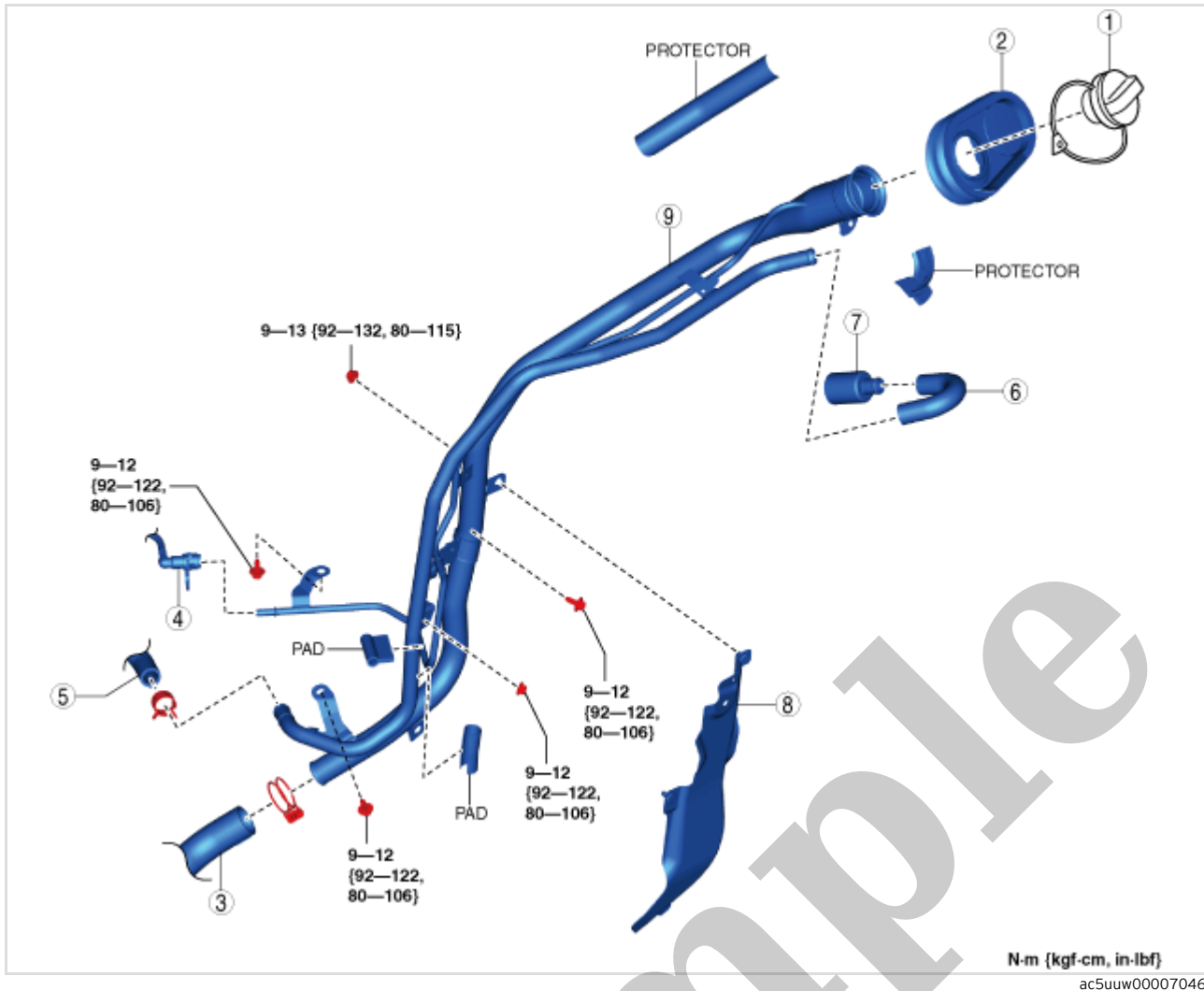
(2)Apply pressure of 5.9 kPa {44 mmHg, 1.7 inHg} to port A and wait for a while.

(3)Verify that there is no change in the pressure and no air leakage from the fuel tank.

- If there is air leakage, replace the fuel tank. (See [FUEL TANK REMOVAL/INSTALLATION \[SKYACTIV-G 2.5 \(WITH CYLINDER DEACTIVATION\)\]](#).)

13.Remove the port C plug.

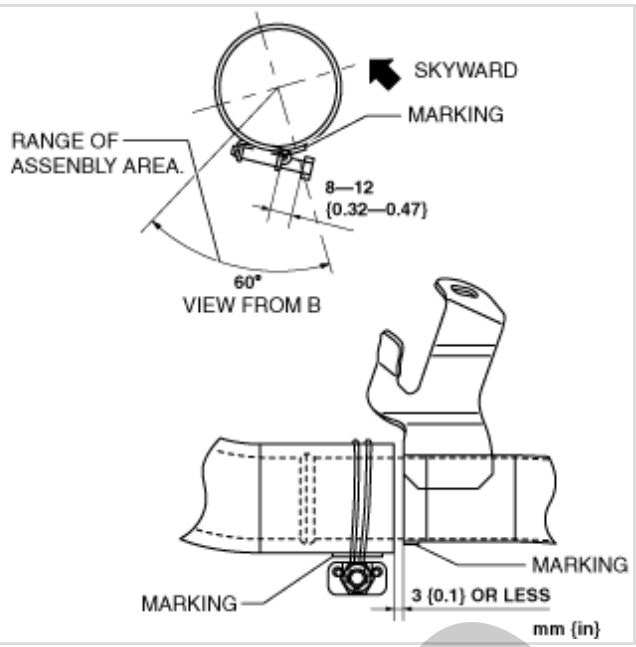
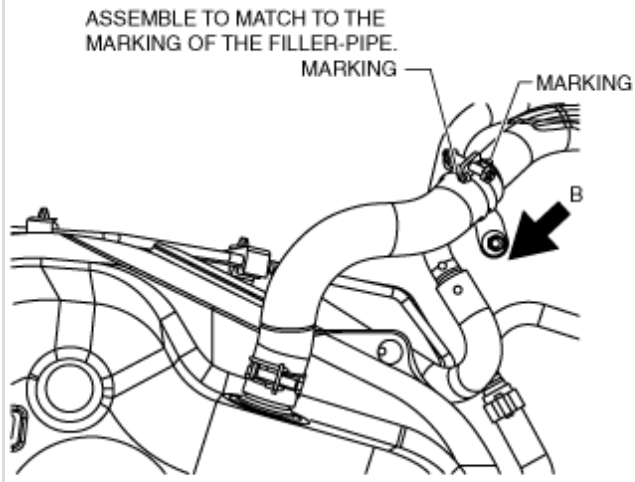




1	Fuel-filler cap
2	Dust cover (See <a href="#">Dust Cover Removal Note.</a> )
3	Joint hose (See <a href="#">Joint Hose Installation Note.</a> )
4	Quick release connector (See <a href="#">QUICK RELEASE CONNECTOR (FUEL SYSTEM) REMOVAL/INSTALLATION [SKYACTIV-G 2.5 (WITH CYLINDER DEACTIVATION)].</a> )
5	Evaporative hose No.1 (See <a href="#">Evaporative Hose No.1 Installation Note.</a> )
6	Evaporative hose No.2
7	Plug
8	Fuel-filler pipe protector
9	Fuel-filler pipe (See <a href="#">Fuel-filler Pipe Removal Note.</a> ) (See <a href="#">Fuel-filler Pipe Installation Note.</a> )

## Dust Cover Removal Note

1. Remove the rear mudguard (LH). (See [MUDGUARD REMOVAL/INSTALLATION.](#))
2. Release the dust cover tab using a flathead screwdriver as shown in the figure.



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Sample

4. Cover the disconnected quick release connector and fuel pipe with vinyl sheeting or a similar material to prevent it from getting scratched or dirty.

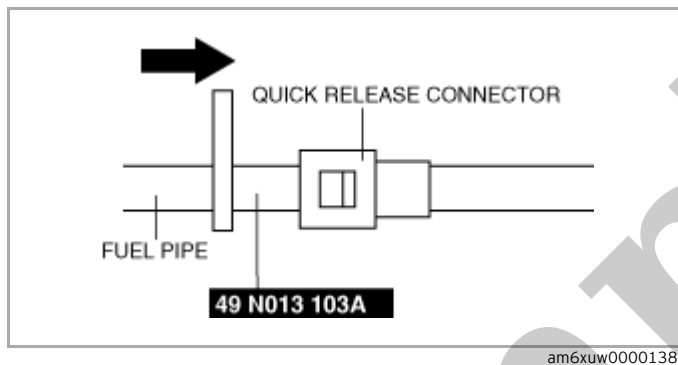
## Type B Removal

### Caution

- Be careful not to damage the pipe when unlocking the retainer.

1. Complete the "BEFORE SERVICE PRECAUTION". (See **BEFORE SERVICE PRECAUTION [SKYACTIV-G 2.5 (WITH CYLINDER DEACTIVATION)]**.)

2. Insert the SST into the quick release connector.



3. Pull the fuel hose straight out from the fuel pipe and disconnect it.

4. Cover the disconnected quick release connector and fuel pipe with vinyl sheeting or a similar material to prevent it from getting scratched or dirty.

## Type A Installation

### Note

- If the quick release connector O-ring is damaged or has slipped, replace the fuel hose.
- A checker tab is integrated with the quick release connector for new fuel hoses. Remove the checker tab from the quick release connector after the connector is completely engaged with the fuel pipe.

1. Inspect the fuel hose and fuel pipe sealing surface for damage and deformation.

- If there is any malfunction, replace it with a new one.

2. Apply a small amount of clean engine oil to the sealing surface of the fuel pipe.

3. Install the quick release connector.



### Warning

- Highly pressurized fuel may spray out if the fuel line is cut. Due to the following dangers occurring with a fuel spray, always complete the "Fuel Line Safety Procedure" to prevent the fuel from spraying.
  - Fuel may cause irritation if it comes in contact with skin and eyes.
  - If fuel ignites and causes a fire, it may lead to serious injury or death, and damage to property and facilities.
- A person charged with static electricity could cause a fire or explosion, resulting in death or serious injury. Before performing work on the fuel system, discharge static electricity by touching the vehicle body.

1. Complete the "BEFORE SERVICE PRECAUTION". (See [BEFORE SERVICE PRECAUTION \[SKYACTIV-G 2.5 \(WITH CYLINDER DEACTIVATION\)\]](#).)
2. Disconnect the negative battery terminal. (See [NEGATIVE BATTERY TERMINAL DISCONNECTION/CONNECTION](#).)
3. Remove the rear seat cushion. (See [REAR SEAT CUSHION REMOVAL/INSTALLATION](#).)
4. Remove the fuel pump unit. (See [FUEL PUMP UNIT REMOVAL/INSTALLATION \[SKYACTIV-G 2.5 \(WITH CYLINDER DEACTIVATION\)\]](#).)
5. Drain the fuel from the fuel tank to the position where the non-return valve is visible. (See [FUEL DRAINING PROCEDURE \[SKYACTIV-G 2.5 \(WITH CYLINDER DEACTIVATION\)\]](#).)

### Note

- Non-return valve is integrated in the fuel tank.
  - The non-return valve is normally closed by the spring force.
6. Verify that the non-return valve is closed.
    - If the non-return valve is stuck open and does not open even when pulled up by a finger, replace the fuel tank. (See [FUEL TANK REMOVAL/INSTALLATION \[SKYACTIV-G 2.5 \(WITH CYLINDER DEACTIVATION\)\]](#).)

## Warning

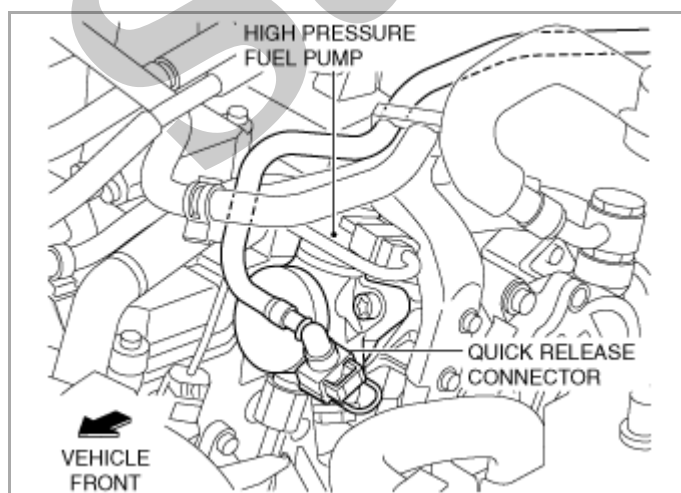
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## Fuel Siphoning Procedure Using Fuel Pump

### Caution

- Disconnecting/connecting the quick release connector without cleaning it may possibly cause damage to the fuel pipe and quick release connector. Always clean the quick release connector joint area before disconnecting/connecting using cloth or soft brush, and make sure that it is free of foreign material.

1. Complete the "BEFORE SERVICE PRECAUTION". (See [BEFORE SERVICE PRECAUTION \[SKYACTIV-G 2.5 \(WITH CYLINDER DEACTIVATION\)\]](#).)
2. Disconnect the negative battery terminal. (See [NEGATIVE BATTERY TERMINAL DISCONNECTION/CONNECTION](#).)
3. Disconnect the quick release connector as shown in the figure. (See [QUICK RELEASE CONNECTOR \(FUEL SYSTEM\) REMOVAL/INSTALLATION \[SKYACTIV-G 2.5 \(WITH CYLINDER DEACTIVATION\)\]](#).)



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4. Connect a long hose to the disconnected quick release connector and drain the fuel into a container used for collecting gasoline.
5. Drain the fuel from the fuel tank using the following procedure: