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2010 MAZDA 6/Atenza Sedan OEM Service and Repair Workshop Manual

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UREA LEVEL SENSOR INSPECTION [SKYACTIV-D 2.2]

SM2897892

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Note

- If measurements are taken with the vehicle on an uneven surface, a correct urea level cannot be detected because the urea tank could be tilted. When inspecting, take measurements with the vehicle on level ground.
- If the ambient temperature is low, the DEF may have frozen and the DEF level may not have been detected correctly. If the ambient temperature level is below freezing, take the measurement after the DEF has defrosted.

PID/DATA Monitor Inspection

1. Park the vehicle on level ground.

2. Verify the ambient temperature.

Ambient temperature is below freezing

- After warming up the engine for approx. 1 hour, go to the next step.

Ambient temperature is above freezing

- Go to the next step.

3. Connect the M-MDS to the DLC-2.

4. Switch the ignition ON (engine off).

5. Using the M-MDS, verify that the value of the ratio of remaining DEF (PID: RRDC_AG_RMN) is 90% or less. (See **ON-BOARD DIAGNOSTIC TEST [DOSING CONTROL UNIT (SKYACTIV-D 2.2)]**.)

90% or more

1. Switch the ignition off.
2. Drain the DEF until it reaches 90% or less. (See **DIESEL EXHAUST FLUID (DEF) REPLACEMENT [SKYACTIV-D 2.2]**.)
3. Using the M-MDS, verify that the PCM PID [RRDC_AG_RMN] is 90% or less, then go to the next step.
 - If the PID does not change even though DEF is drained, replace the urea tank. (See **UREA TANK REMOVAL/INSTALLATION [SKYACTIV-D 2.2]**.)

90% or less

- Switch the ignition OFF, and then go to the next step.

6. Add DEF until the urea tank is completely full. (See **DIESEL EXHAUST FLUID (DEF) REPLACEMENT [SKYACTIV-D 2.2]**.)

7. Switch the ignition ON (engine off).

PM SENSOR REMOVAL/INSTALLATION [SKYACTIV-D 2.2]

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Special Service Tool (SST)

49 H018 001	
Wrench	

Replacement Part

Band	Band
Quantity: 7	Quantity: 5
Location of use: PM sensor (2WD)	Location of use: PM sensor (AWD)

2WD

Warning

- A hot engine and exhaust system can cause severe burns. Turn off the engine and wait until they are cool before removing the exhaust system.

Caution

- Do not disconnect the connector between the PM sensor control module and PM sensor. Otherwise, it could adversely affect the PM sensor control module.

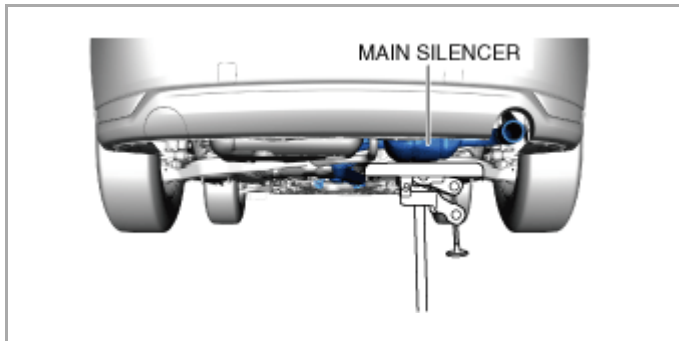
Removal

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

2.Remove the following parts:

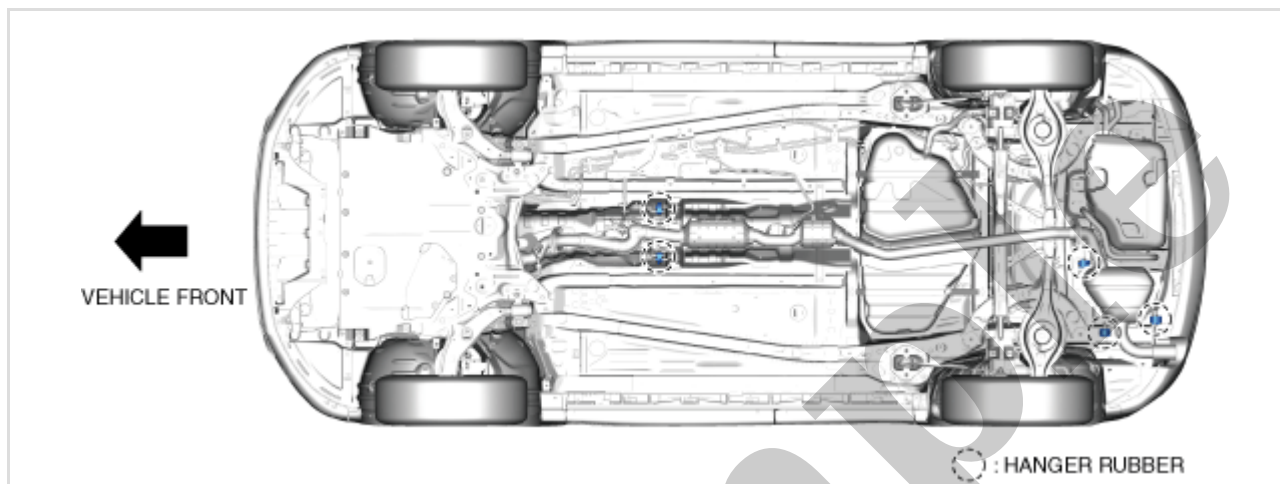
- (1)Floor under cover (See [FLOOR UNDER COVER REMOVAL/INSTALLATION.](#))
- (2)Insulator (See [EXHAUST SYSTEM REMOVAL/INSTALLATION \[SKYACTIV-D 2.2\].](#))
- (3)Brace bar (See [EXHAUST SYSTEM REMOVAL/INSTALLATION \[SKYACTIV-D 2.2\].](#))
- (4)Tunnel member (See [EXHAUST SYSTEM REMOVAL/INSTALLATION \[SKYACTIV-D 2.2\].](#))

3.Remove the clip.



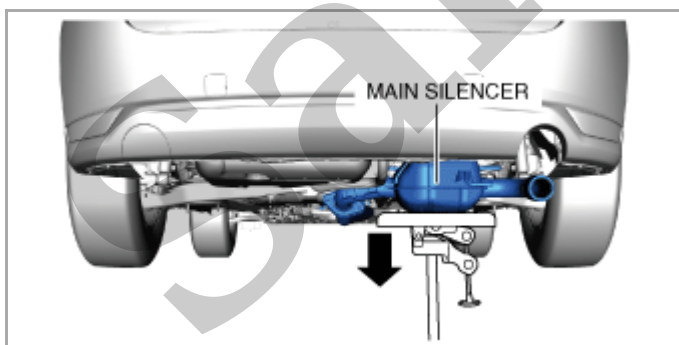
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15. Remove the hanger rubber.



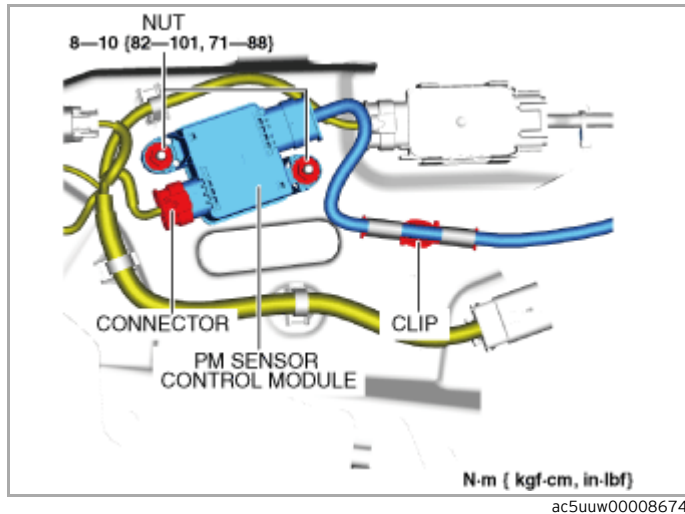
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16. Lower the transmission jack slowly to a position allowing removal of the PM sensor.



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17. Remove the PM sensor using the SST.

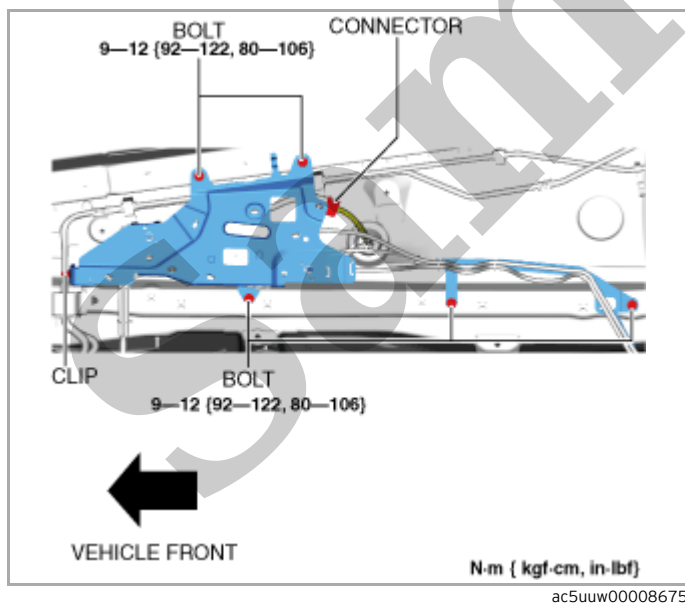


7. Connect the connector.

8. Install the PM sensor control module.

9. Install the nuts.

10. Connect the connector.



11. Install the bolts.

12. Install the clip.

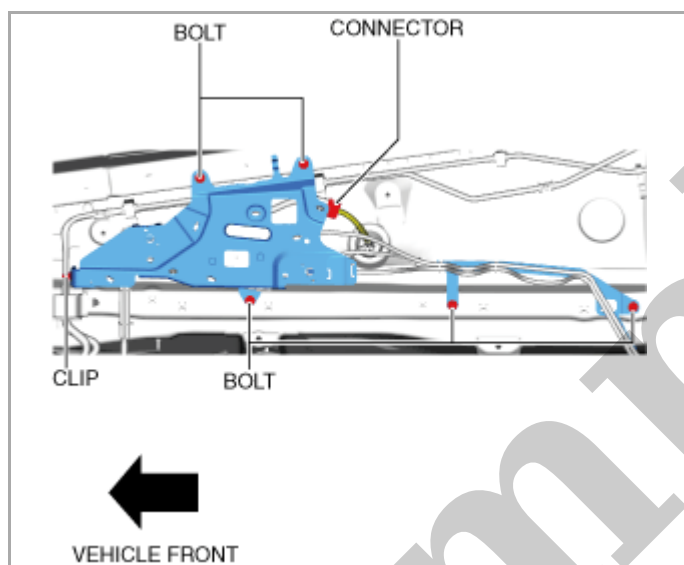
13. Install the following parts:

(1) Tunnel member (See [EXHAUST SYSTEM REMOVAL/INSTALLATION \[SKYACTIV-D 2.2\].](#))

- Do not disconnect the connector between the PM sensor control module and PM sensor. Otherwise, it could adversely affect the PM sensor control module.

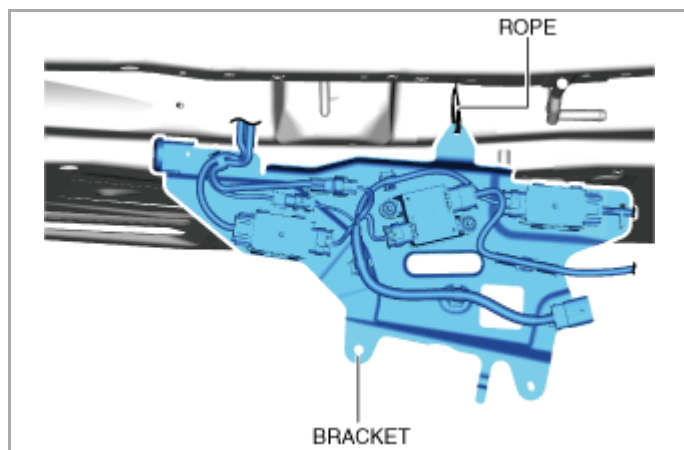
Removal

1. Disconnect the negative battery terminal. (See [NEGATIVE BATTERY TERMINAL DISCONNECTION/CONNECTION.](#))
2. Remove the floor under cover (LH). (See [FLOOR UNDER COVER REMOVAL/INSTALLATION.](#))
3. Remove the clip.



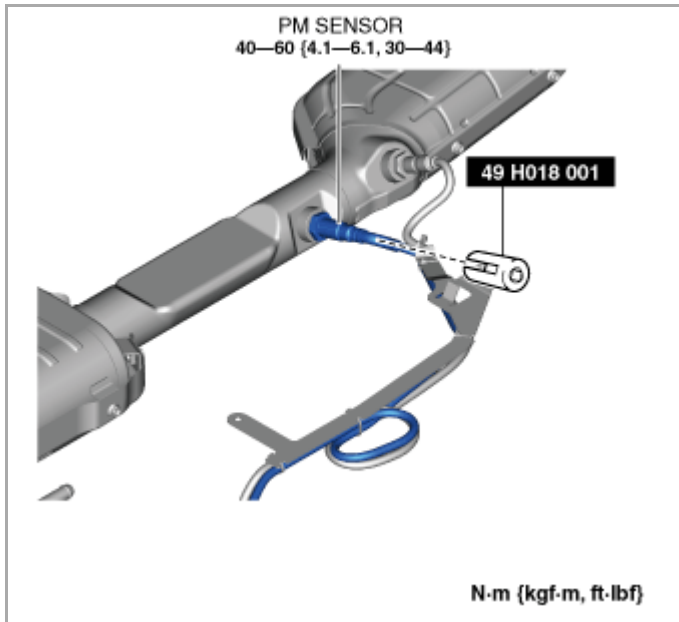
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4. Remove the bolts.
5. Disconnect the connector.
6. Suspend module bracket using a rope as shown in the figure.



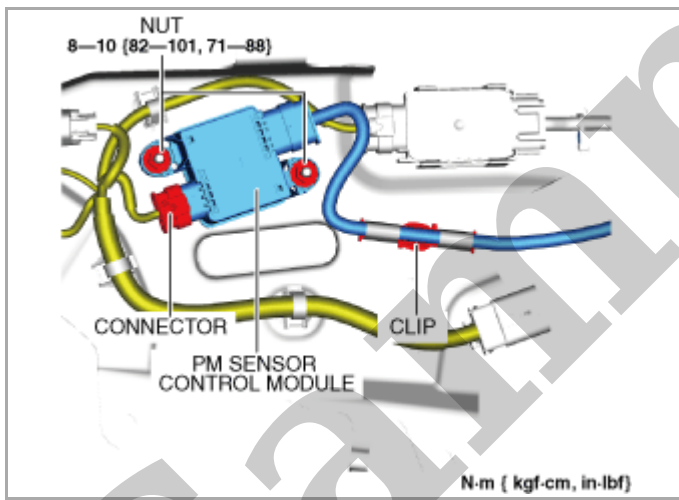
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7. Remove the nuts.



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3.Install the clip.



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4.Connect the connector.

5.Install the PM sensor control module.

6.Install the nuts.

7.Connect the connector.

UREA TEMPERATURE SENSOR REMOVAL/INSTALLATION [SKYACTIV-D 2.2]

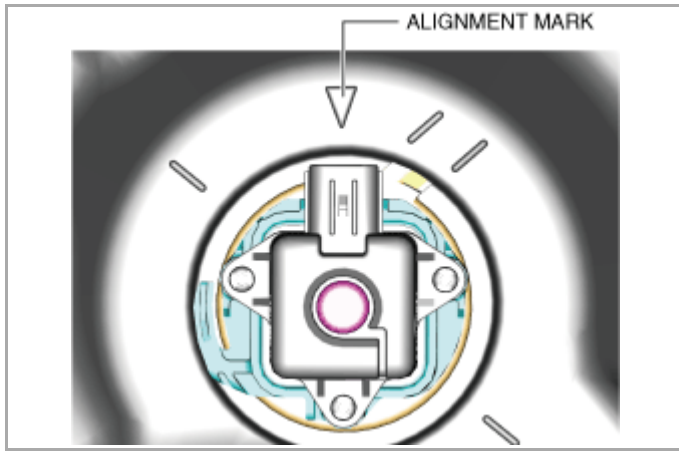
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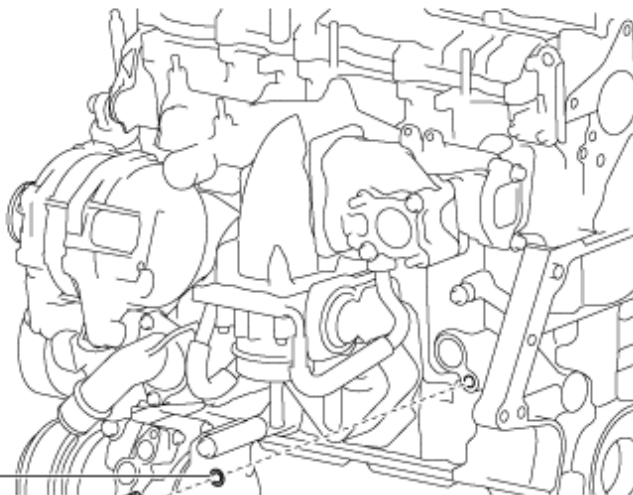
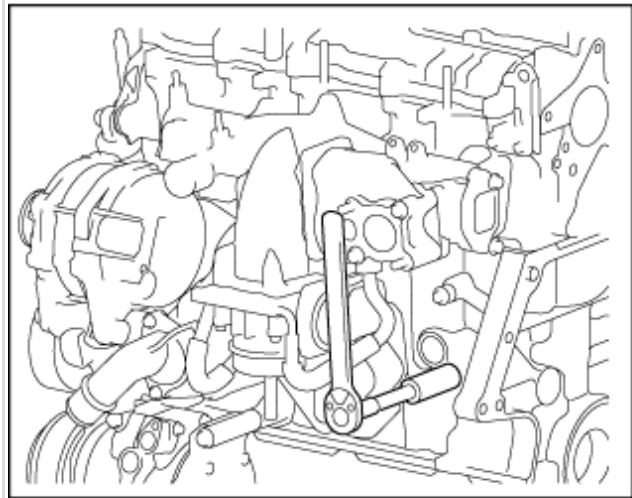
Note

- The urea temperature sensor is integrated with the urea tank.
- For the urea temperature sensor removal/installation, refer to "UREA TANK REMOVAL/INSTALLATION". (See **UREA TANK REMOVAL/INSTALLATION [SKYACTIV-D 2.2]**.)

Sample



Sample



R

ENGINE OIL TEMPERATURE SENSOR/
ENGINE OIL PRESSURE SENSOR
14—18
{1.5—1.8, 11—13}

VEHICLE FRONT

N·m {kgf-m, ft-lbf}

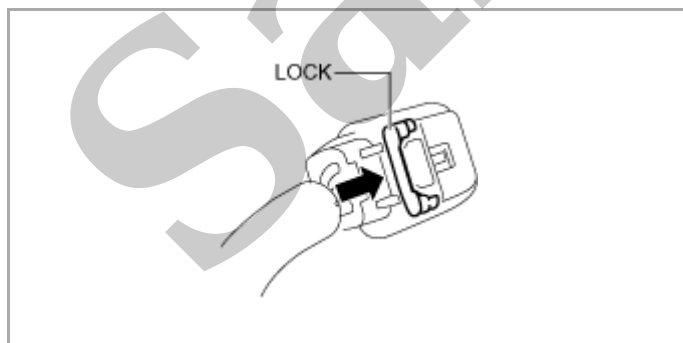
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6. Install in the reverse order of removal.

7. Perform the engine oil data reset. (See [ENGINE OIL DATA RESET \[SKYACTIV-D 2.2\]](#).)

Engine Oil Temperature Sensor/Engine Oil Pressure Sensor Connector Connection Note

1. Connect the connector for the engine oil temperature sensor/engine oil pressure sensor and press it in the lock direction of the arrow.



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