

# 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.

## 2006 MAZDA 5 / Premacy OEM Service and Repair Workshop Manual

[Go to manual page](#)

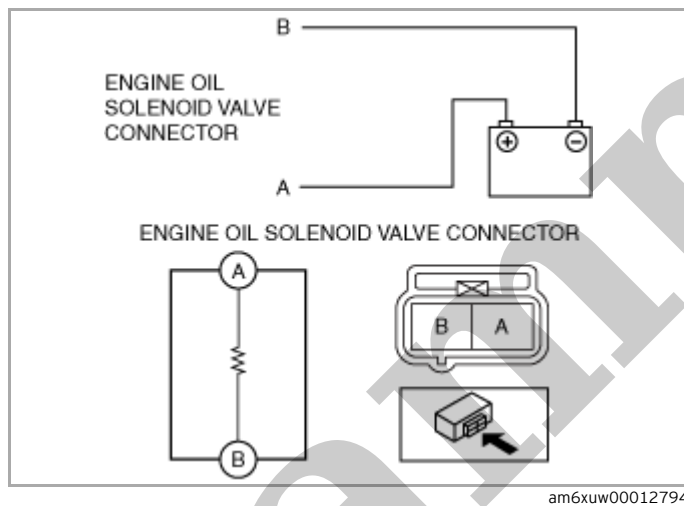
# ENGINE OIL SOLENOID VALVE INSPECTION [SKYACTIV-G 2.5T]

SM2897269

id0111q800290

## Engine Oil Solenoid Valve Operation Inspection

- 1.Remove the engine oil solenoid valve. (See [ENGINE OIL SOLENOID VALVE REMOVAL/INSTALLATION \[SKYACTIV-G 2.5T\].](#))
- 2.Verify that the battery is fully charged.
- 3.Connect the battery to the engine oil solenoid valve connector (2 terminals) as shown in the figure.



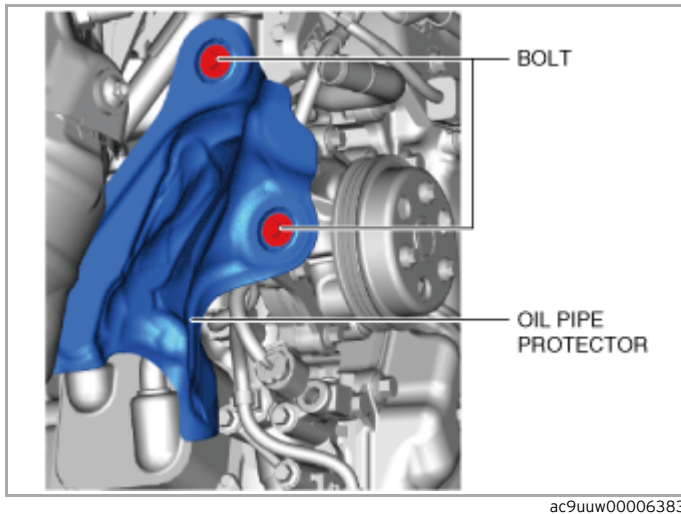
- 4.Verify that there is an operation sound from the engine oil solenoid valve when applying battery voltage between engine oil solenoid valve connector terminals A and B.

- If the operation sound cannot be heard, replace the engine oil solenoid valve.

### Note

- A click sound is heard when the engine oil solenoid valve operates normally.

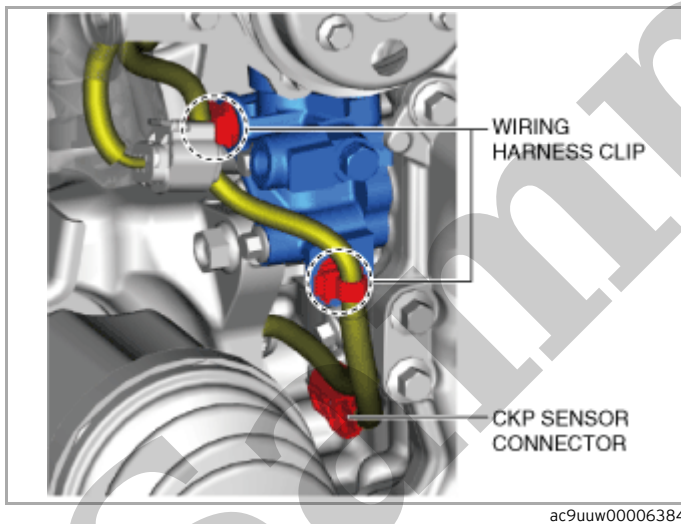
- 5.Install the engine oil solenoid valve. (See [ENGINE OIL SOLENOID VALVE REMOVAL/INSTALLATION \[SKYACTIV-G 2.5T\].](#))



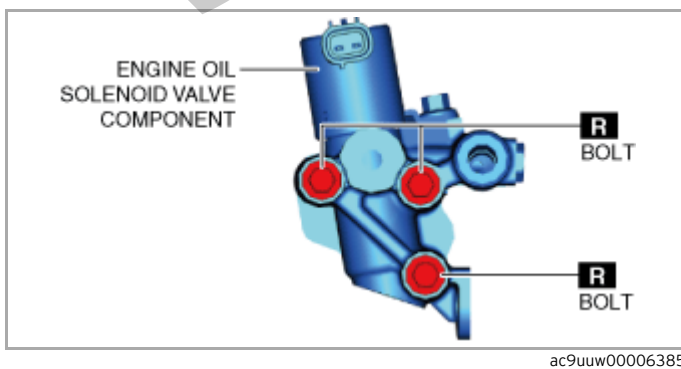
#### Caution

- When removing the engine oil solenoid valve component, be careful not to apply excessive force to the oil pipe protector because it may deform the oil pipe protector.

3.Remove the wiring harness clips and connector shown in the figure.



4.Remove the bolts shown in the figure.



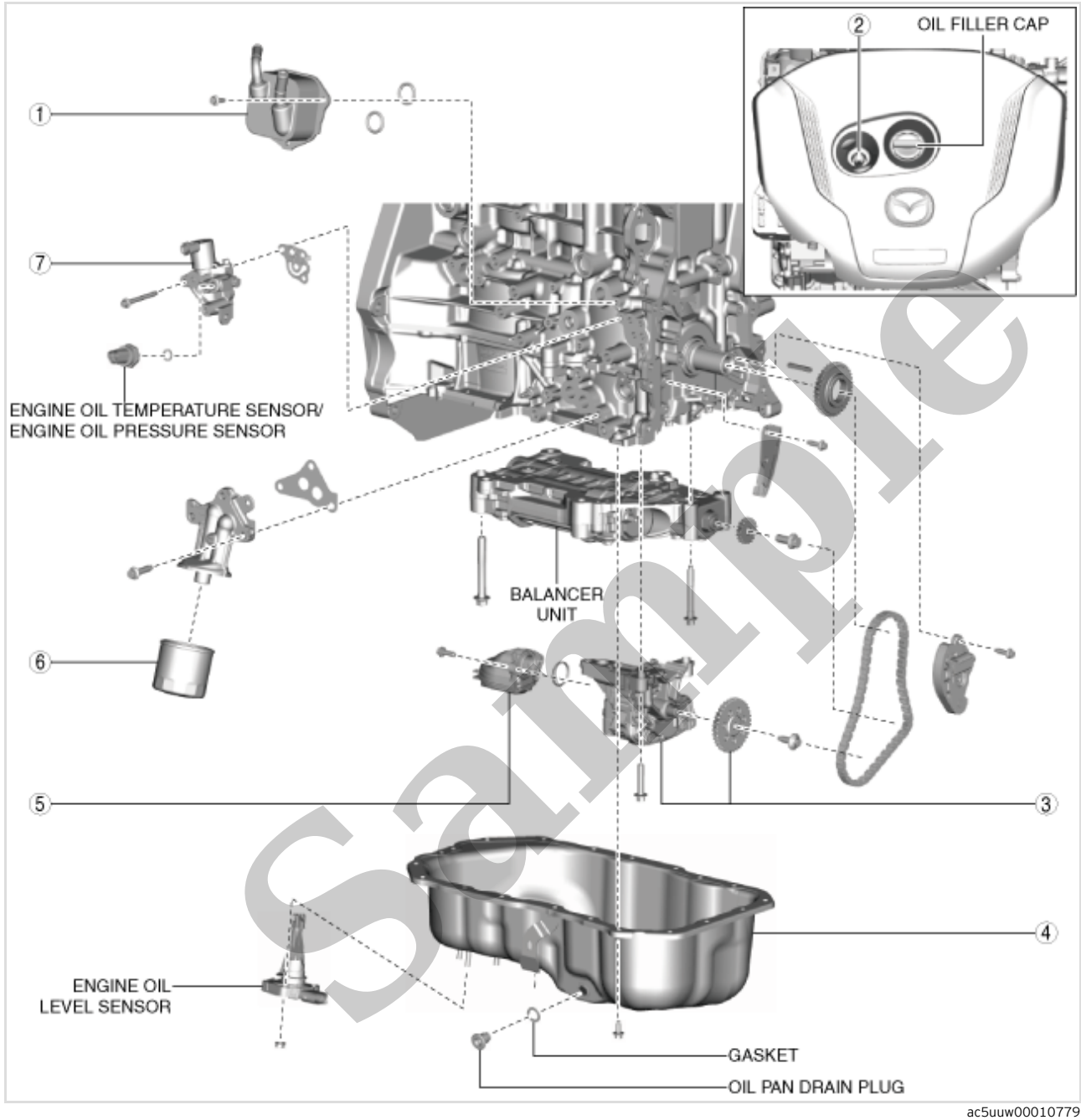
#### Engine Oil Solenoid Valve Connector Disconnecting Note

1.Pull out the engine oil solenoid valve component with the connector connected as shown in the figure.

LUBRICATION SYSTEM LOCATION INDEX [SKYACTIV-G 2.5T]

SM2897271

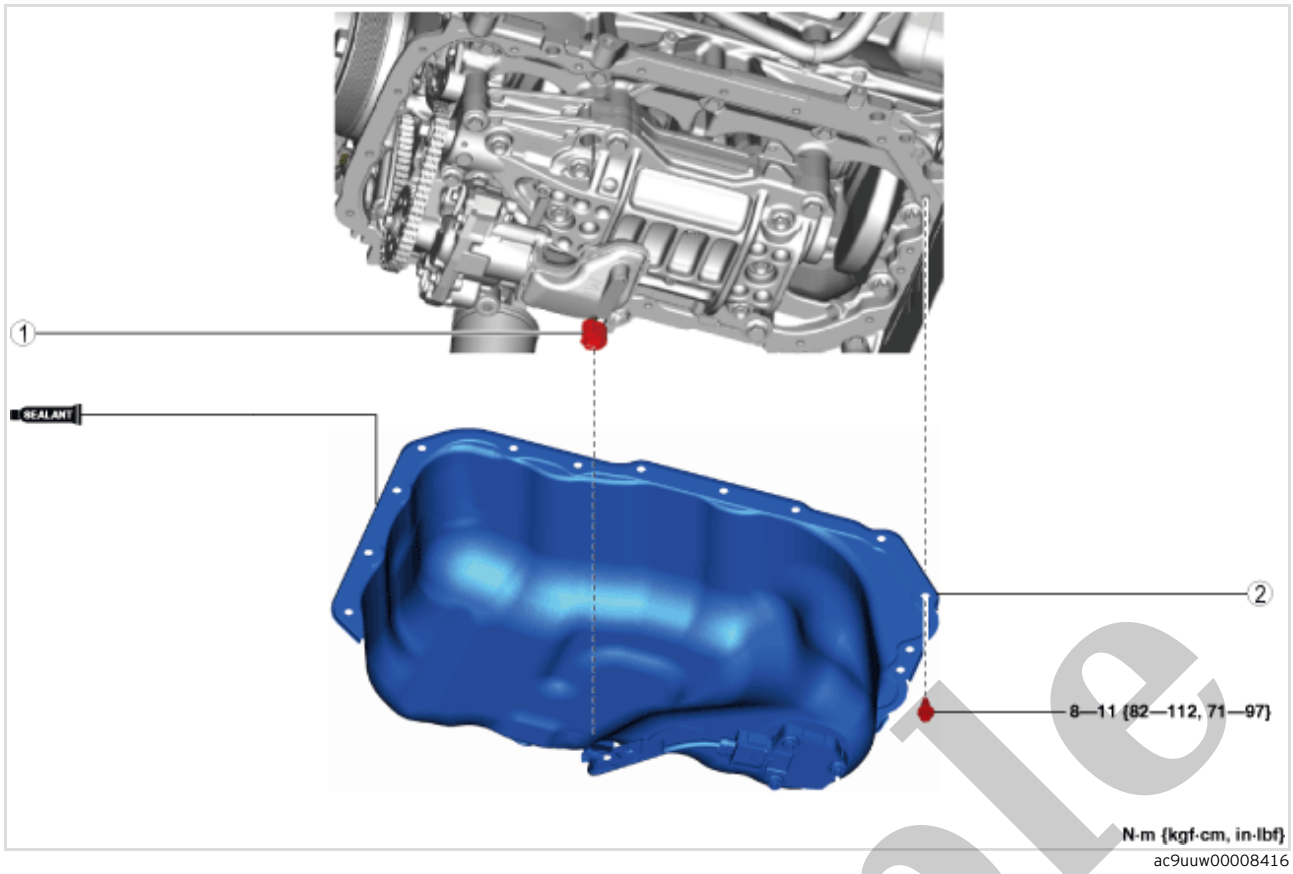
id0111q880010



ac5uuw00010779

1	Oil cooler (See <a href="#">OIL COOLER REMOVAL/INSTALLATION [SKYACTIV-G 2.5T].</a> )
2	Dipstick (See <a href="#">ENGINE OIL LEVEL INSPECTION [SKYACTIV-G 2.5T].</a> ) (See <a href="#">ENGINE OIL REPLACEMENT [SKYACTIV-G 2.5T].</a> )
3	Oil pump component (See <a href="#">OIL PUMP REMOVAL/INSTALLATION [SKYACTIV-G 2.5T].</a> )
4	Oil pan (See <a href="#">OIL PAN REMOVAL/INSTALLATION [SKYACTIV-G 2.5T].</a> )
5	Oil strainer (See <a href="#">OIL PUMP REMOVAL/INSTALLATION [SKYACTIV-G 2.5T].</a> )





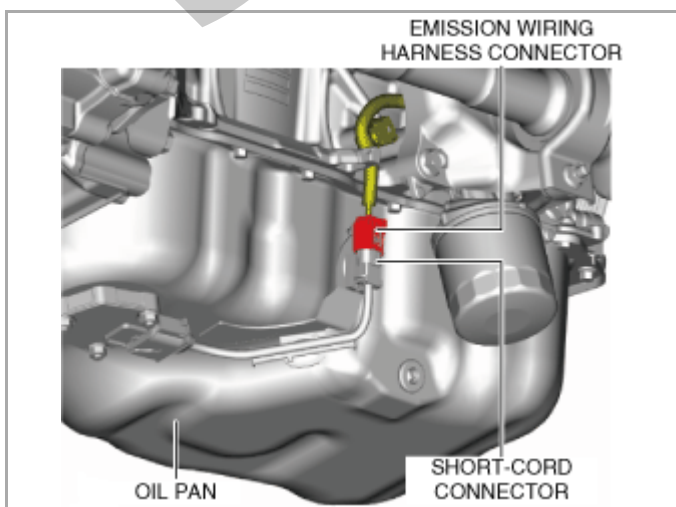
1	Emission wiring harness connector (See <a href="#">Emission Wiring Harness Connector Removal Note.</a> )
2	Oil pan, engine oil level sensor and short-cord component (See <a href="#">Oil Pan Removal Note.</a> ) (See <a href="#">Oil Pan Installation Note.</a> )

## Emission Wiring Harness Connector Removal Note

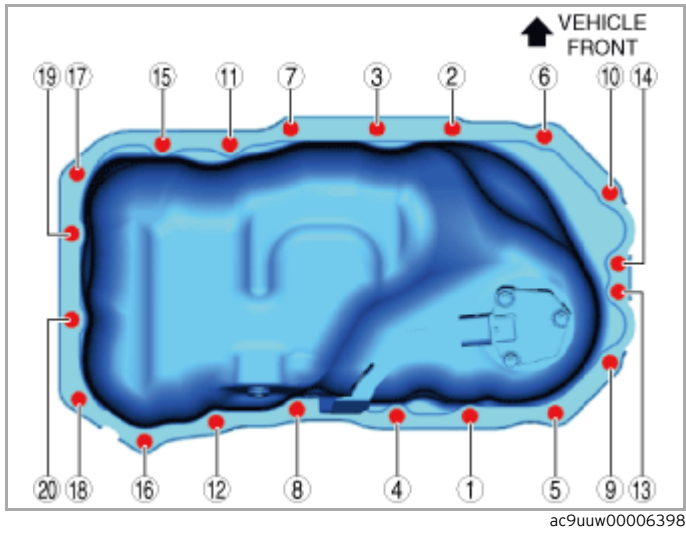
### Caution

- Cover the emission wiring harness connector and short-cord connector using tape to prevent engine oil from adhering to the connector terminal.

1. Disconnect the emission wiring harness connector.



ac9uuw00008417



#### Tightening torque

8–11 N·m {82–112 kgf·cm, 71–97 in·lbf}

# ENGINE OIL SOLENOID VALVE REMOVAL/INSTALLATION [SKYACTIV-D 2.2]

SM2897280

id0111s600300

## Replacement Part

Bolt	Gasket	O-ring
Quantity: 2	Quantity: 1	Quantity: 2
Location of use: Engine oil solenoid valve	Location of use: Engine oil solenoid valve	Location of use: Spacer

## Oil and Chemical Type

Engine oil
Type: Recommended oil

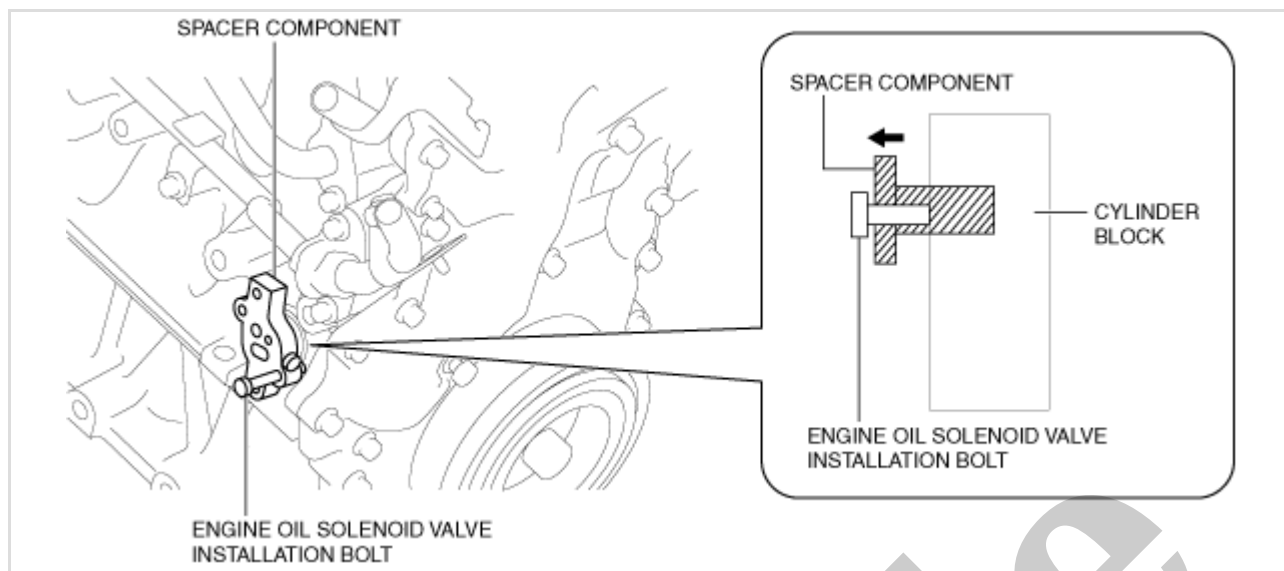
### Warning

- Hot engines and engine oil can cause severe burns. Turn off the engine and wait until it and the engine oil have cooled.
- A vehicle that is lifted but not securely supported on safety stands is dangerous. It can slip or fall, causing death or serious injury. Never work around or under a lifted vehicle if it is not securely supported on safety stands.
- Continuous exposure to USED engine oil has caused skin cancer in laboratory mice. Protect your skin by washing with soap and water immediately after working with engine oil.

- 1.Disconnect the negative battery terminal. (See [NEGATIVE BATTERY TERMINAL DISCONNECTION/CONNECTION.](#))
- 2.Remove the front under cover No.2. (See [FRONT UNDER COVER No.2 REMOVAL/INSTALLATION.](#))
- 3.Remove the front splash shield (RH). (See [SPLASH SHIELD REMOVAL/INSTALLATION.](#))
- 4.Disconnect the exhaust gas temperature sensor No.4 connector. (See [EXHAUST GAS TEMPERATURE SENSOR REMOVAL/INSTALLATION \[SKYACTIV-D 2.2\].](#))
- 5.Remove the catalytic converter lower bracket. (See [EXHAUST SYSTEM REMOVAL/INSTALLATION \[SKYACTIV-D 2.2\].](#))
- 6.Remove in the order indicated in the table.
- 7.Install in the reverse order of removal.
- 8.Start the engine and confirm that there is no oil leakage.

- Do not use the new bolts which are used during assembly.

(4) Tighten to the point that the engine oil solenoid valve installation bolt contacts the cylinder block and the spacer component comes up.



ac5wzw00005184

(5) When the spacer component comes up, pull it out by hand.

# OIL PAN REMOVAL/INSTALLATION [SKYACTIV-D 2.2]

SM2897282

id0111s680020

## Replacement Part

Bolt
Quantity: 19 (Type A, B)
Location of use: Oil pan

## Oil and Chemical Type

Silicone sealant
Type:TB1217D or equivalent

### Warning

- Hot engines and engine oil can cause severe burns. Turn off the engine and wait until it and the engine oil have cooled.
- A vehicle that is lifted but not securely supported on safety stands is dangerous. It can slip or fall, causing death or serious injury. Never work around or under a lifted vehicle if it is not securely supported on safety stands.
- Continuous exposure to USED engine oil has caused skin cancer in laboratory mice. Protect your skin by washing with soap and water immediately after working with engine oil.

### Caution

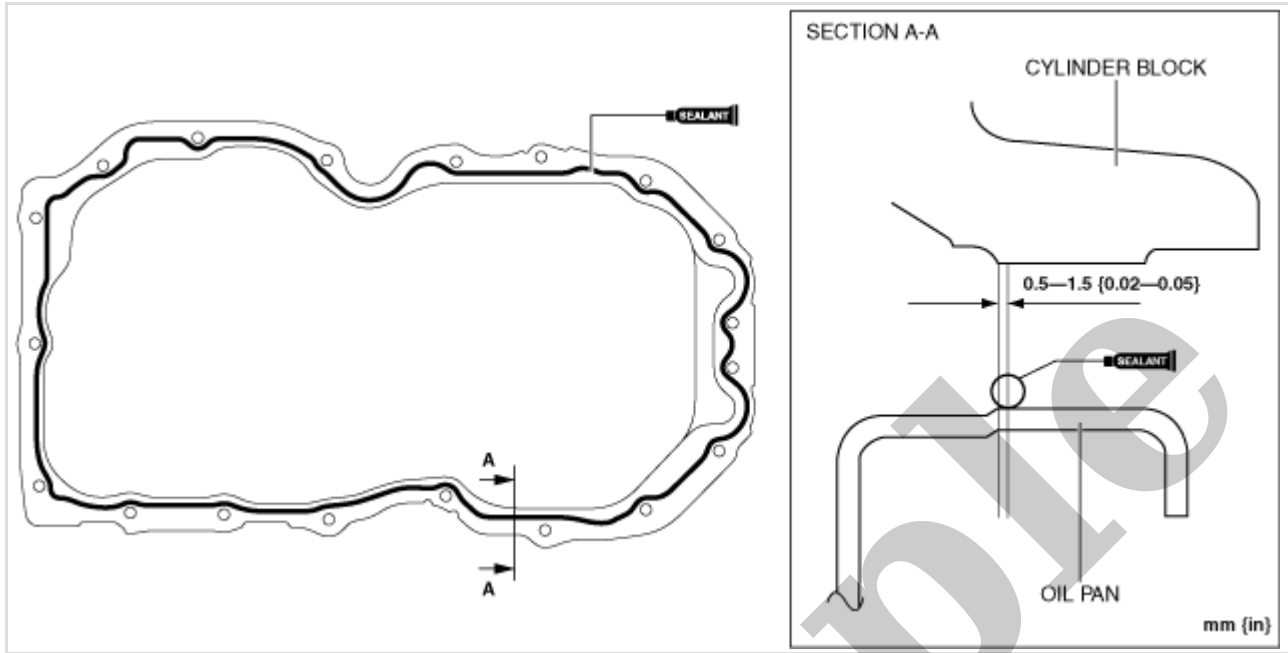
- When installing the oil pan, refer to the Oil Pan Installation Note and apply the silicone sealant correctly. If the silicone sealant application position is incorrect or there is any break in the application track, engine oil leakage will occur due to a poor seal.

- 1.Turn the steering wheel completely to the right.
- 2.Disconnect the negative battery terminal. (See [NEGATIVE BATTERY TERMINAL DISCONNECTION/CONNECTION.](#))
- 3.Remove the front under cover No.2. (See [FRONT UNDER COVER No.2 REMOVAL/INSTALLATION.](#))
- 4.Remove the front splash shield (RH). (See [SPLASH SHIELD REMOVAL/INSTALLATION.](#))
- 5.Drain the engine oil. (See [ENGINE OIL REPLACEMENT \[SKYACTIV-D 2.2\].](#))
- 6.Remove in the order indicated in the table.
- 7.Install in the reverse order of removal.

- Apply silicone sealant in a single, unbroken line to prevent oil leakage.
- To prevent silicone sealant from hardening, adhere the oil pan to the cylinder block within 10 min after silicone sealant is applied. Tighten the installation bolts completely soon after adhering.

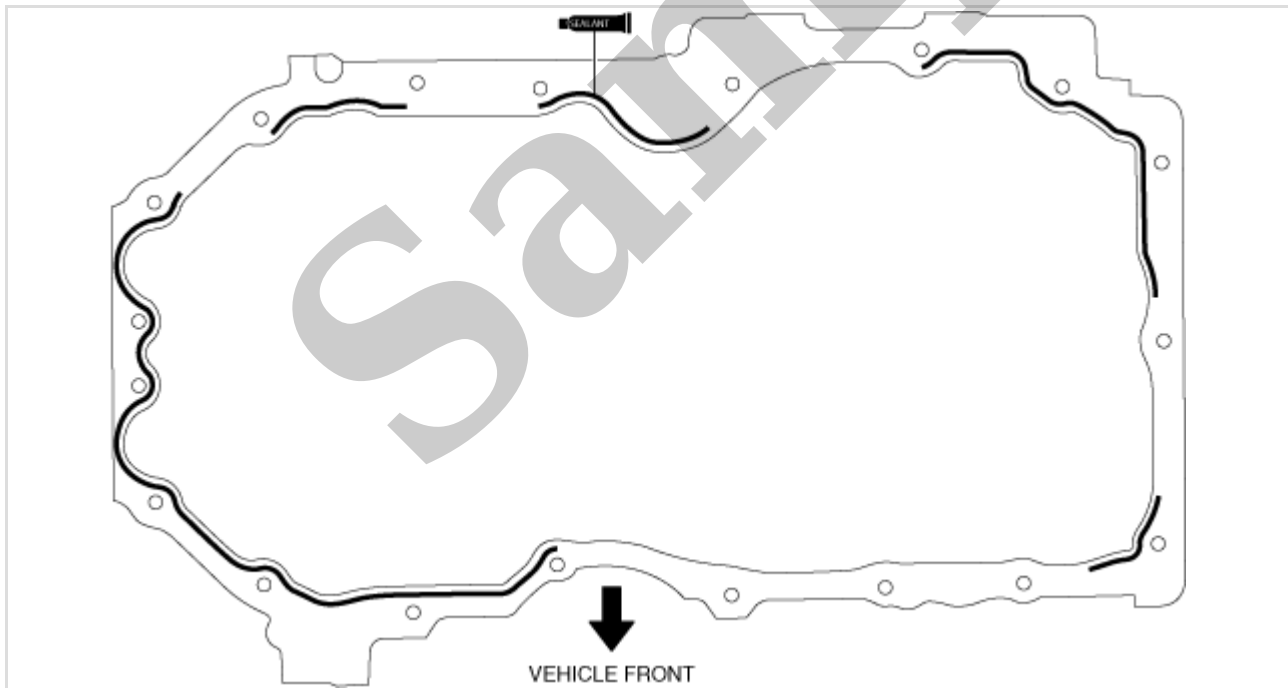
3. Apply silicone sealant (TB1217D or equivalent) to the oil pan and the cylinder block.

#### Oil pan



ac5uuw00009307

#### Cylinder block



ac5wzw00007108

#### Thickness

3.0–7.0 mm {0.12–0.27 in}

4. Install the oil pan to the cylinder block.

#### Caution