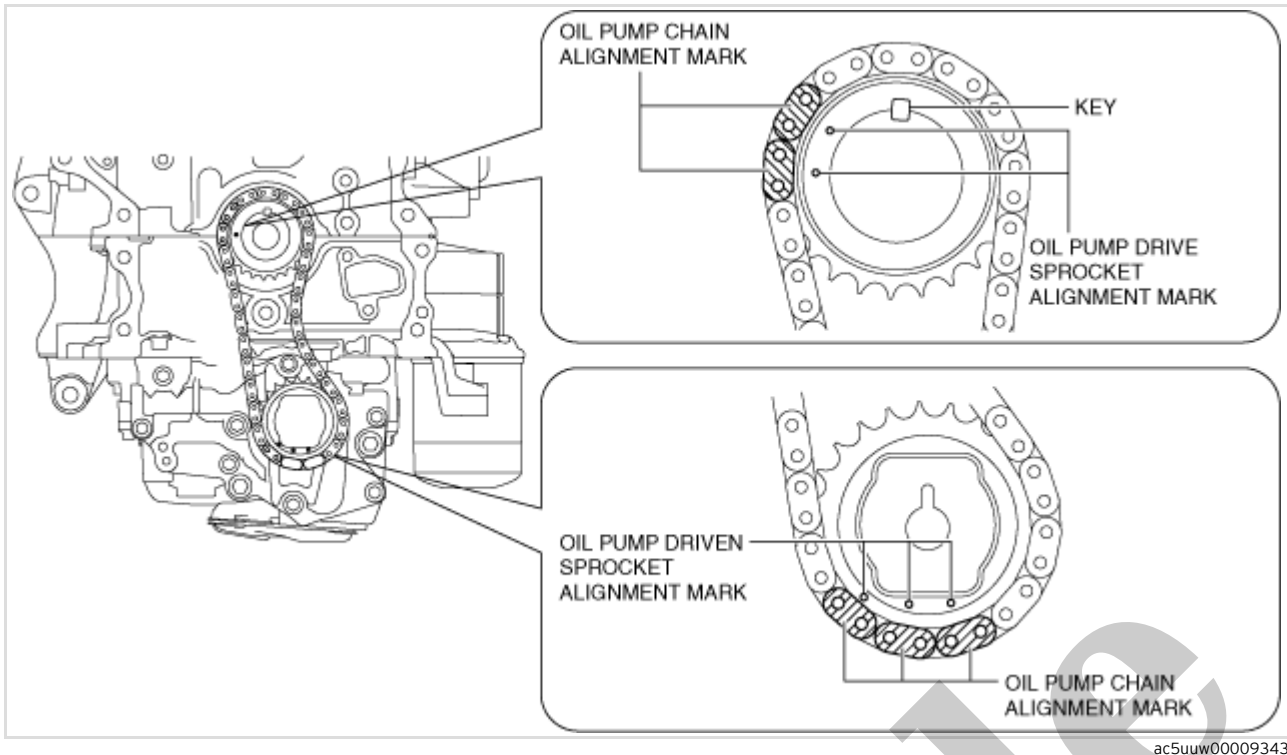


# Your Ultimate Source for OEM Repair Manuals

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.

## 2005 MAZDA 5 / Premacy OEM Service and Repair Workshop Manual

[Go to manual page](#)



4. Temporarily tighten the oil pump driven sprocket installation bolt.

5. Install the oil pump chain tensioner No.1.

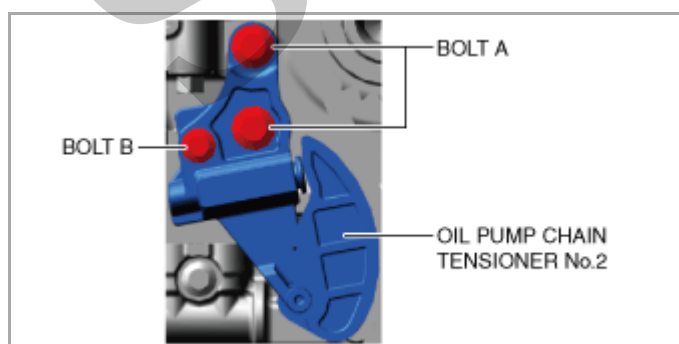
#### Tightening torque

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

#### Caution

- At this stage, do not remove the wire or paper clip installed to the oil pump chain tensioner.

6. Install the oil pump chain tensioner No.2.



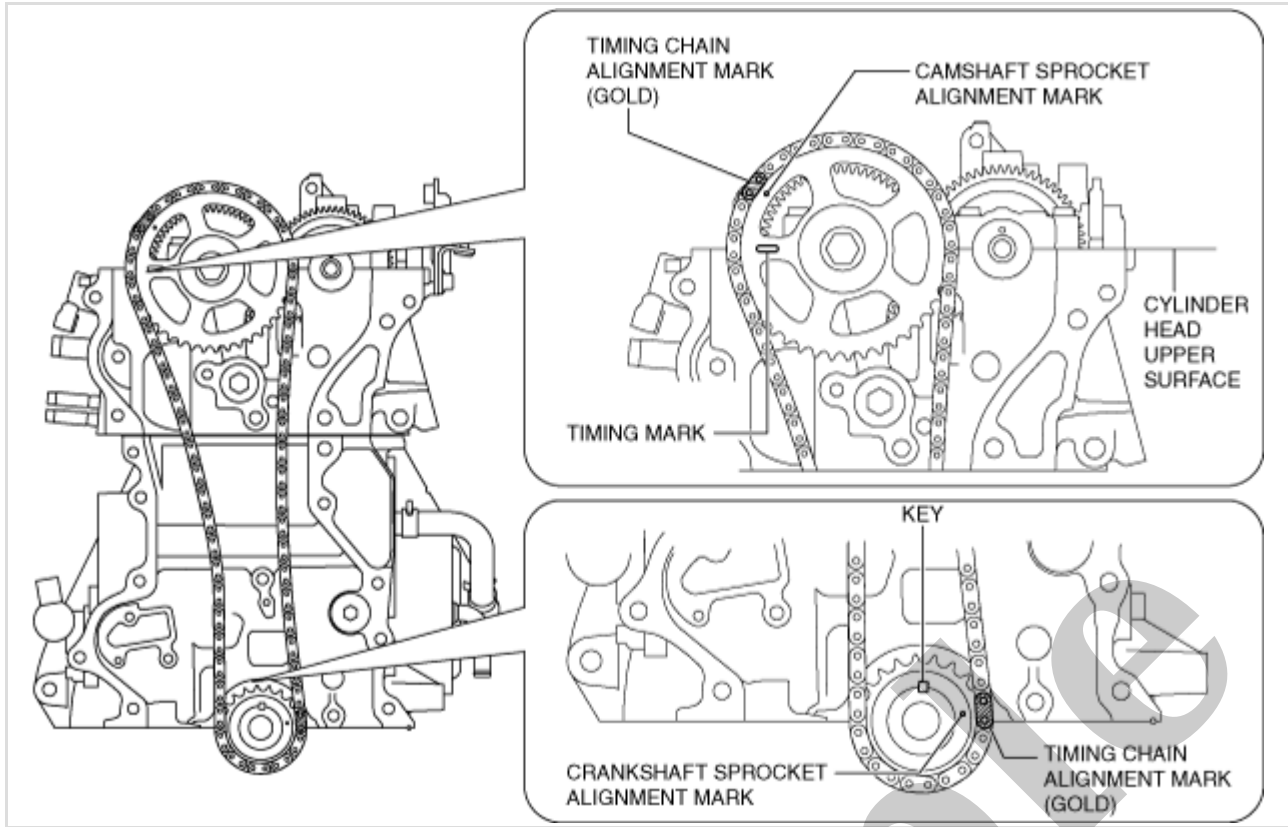
#### Tightening torque

Bolt A: 20–26 N·m {2.1–2.6 kgf·m, 15–19 ft·lbf}

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

#### Caution

- At this stage, do not remove the wire or paper clip installed to the oil pump chain tensioner.



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4. Install the timing chain guide.

#### Tightening torque

20–26 N·m {2.1–2.6 kgf·m, 15–19 ft·lbf}

5. Install the timing chain tensioner arm.

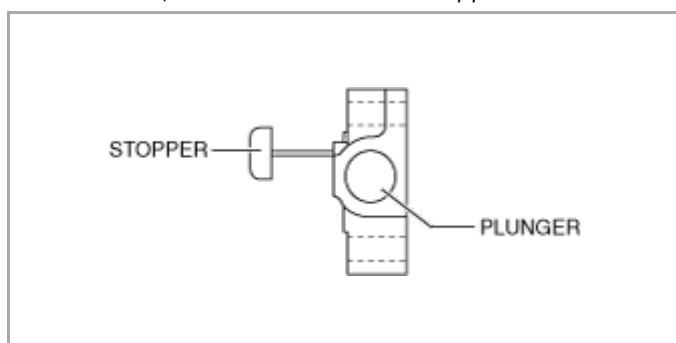
6. Install the timing chain tensioner.

#### Tightening torque

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

7. After installing the timing chain tensioner, remove the installed wire or paper clip, and then apply tension to the timing chain.

- If a new chain tensioner is used, remove the installed stopper.

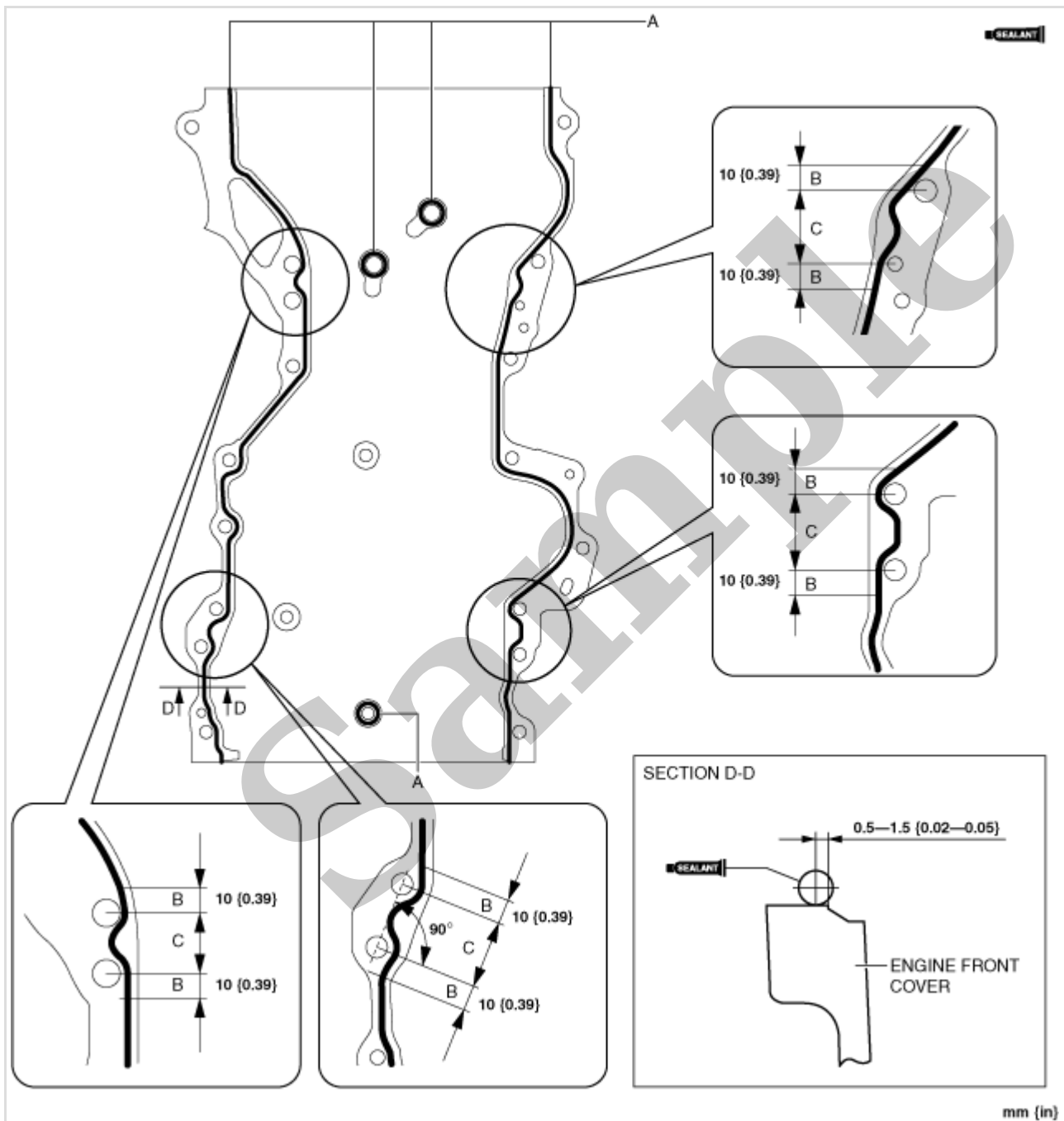


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## Caution

- Apply the silicon sealant in a single, unbroken line.
- To prevent silicone sealant from hardening, adhere the engine front cover and the cylinder block firmly within 10 min. after applying silicone sealant. After adhering them, tighten the installation bolts immediately.
- Do not apply silicone sealant to the step bead.

5. Apply silicone sealant (TB1217D) to the engine front cover according to the directions shown in the figure.

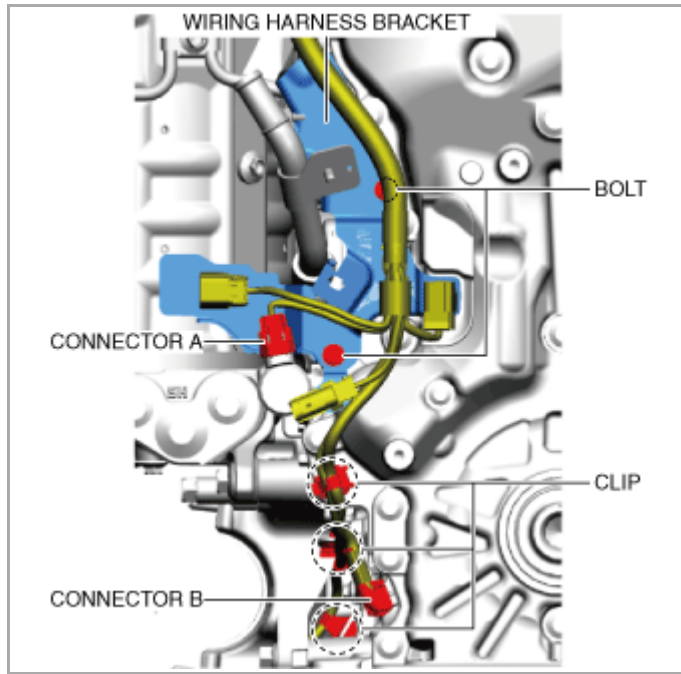


## Bead thickness

- A: 2–6 mm {0.1–0.2 in}
- B: 4–6 mm {0.16–0.23 in}
- C: 4–8 mm {0.2–0.3 in}

## Caution





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### Tightening torque

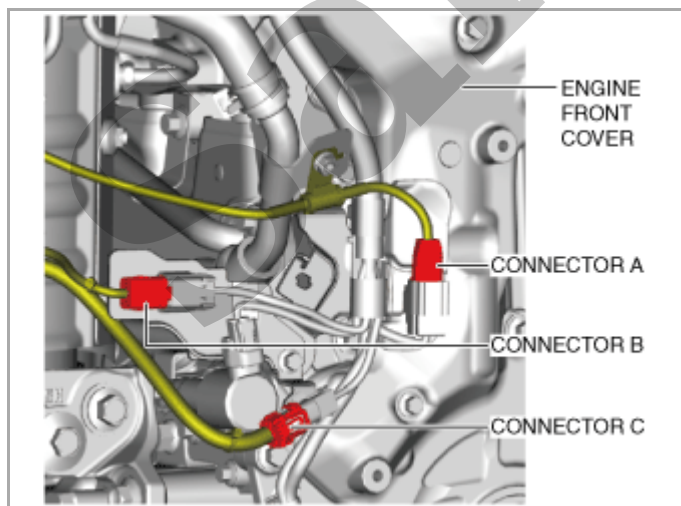
Bolt: 8–11 N·m {82–112 kgf·cm, 71–97 in·lbf}

- Connector A: Engine oil solenoid valve connector
- Connector B: CKP sensor connector

### Note

- The seal rubber (No.3) can be fixed by installing the wiring harness bracket.

3.Connect the connectors shown in the figure.



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- Connector A: Exhaust gas temperature sensor No.2 connector
- Connector B: Exhaust gas temperature sensor No.3 connector
- Connector C: Exhaust gas temperature sensor No.4 connector

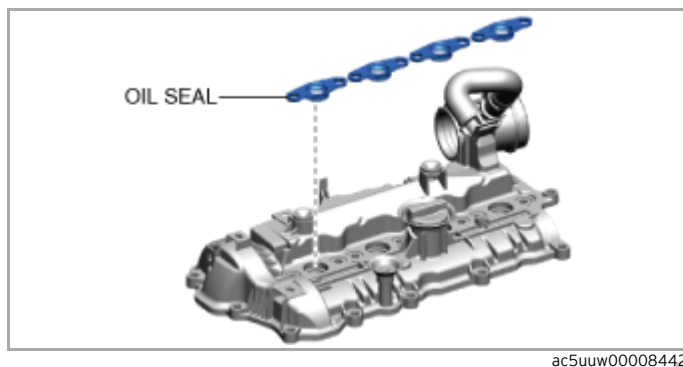
4.Tighten the water pipe installation bolt.

- To assure the sealing performance of the cylinder head cover, be careful of the following:

- Verify that the cylinder head cover gasket is inserted into the cylinder head cover groove and install the cylinder head cover.
- Completely clean and remove any oil, dirt, silicone sealant or other foreign matter from the seal surface.

1. Install the oil seal on the cylinder head cover.

- Verify if the oil seal shown in the figure has been damaged and if so replace it.



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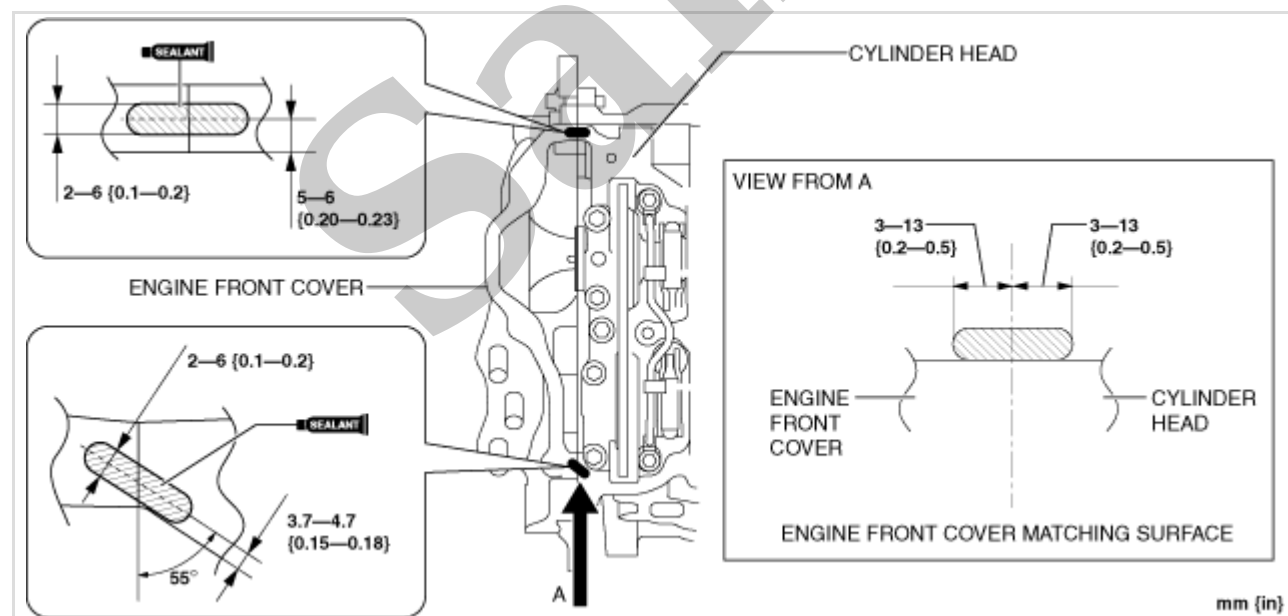
2. Insert a new cylinder head cover gasket into the cylinder head cover groove.

### Caution

- To prevent silicone sealant from hardening, adhere the cylinder head cover and the cylinder head firmly within 10 min. after applying silicone sealant. After adhering them, tighten the installation bolts immediately.

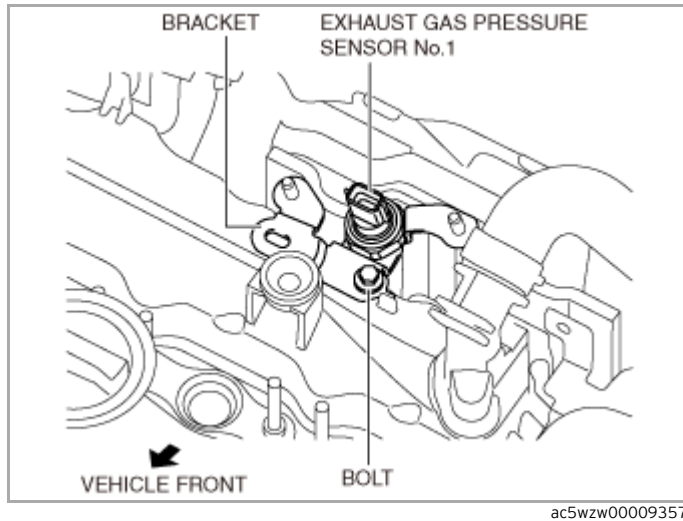
3. Apply silicone sealant (TB1217D or equivalent) to the areas shown in the figure.

### Engine front side



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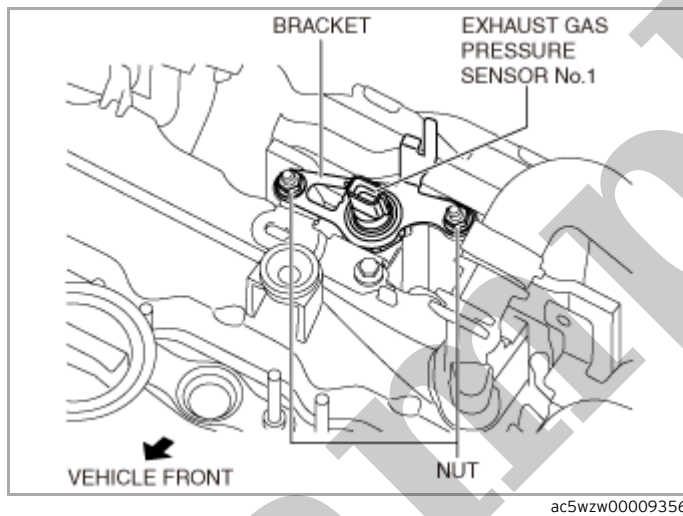
### Engine rear side



#### Tightening torque

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

(2) Install the bracket shown in the figure.

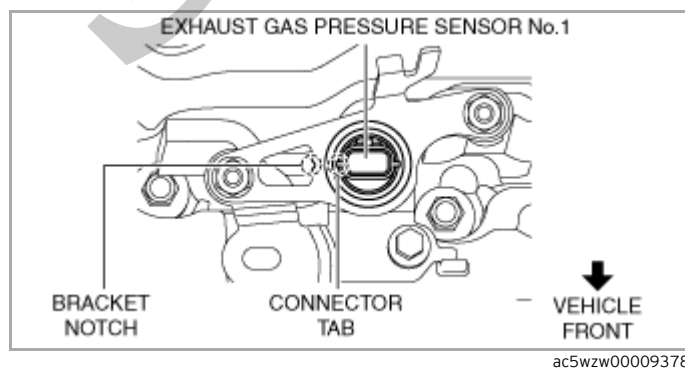


#### Tightening torque

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

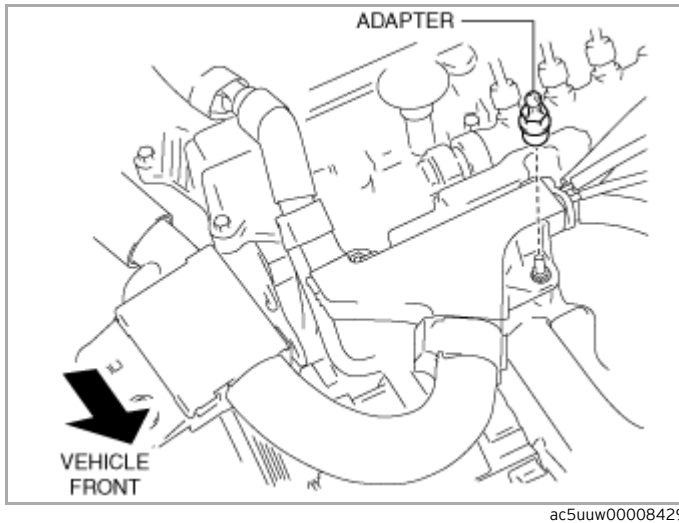
#### Note

- Align the tab of exhaust gas pressure sensor No.1 connector with the notch of the bracket.



8. Install the lower case and fuel hose bracket using the following procedure:

- (1) Return the lower case and the fuel hose bracket to their original positions.
- (2) Tighten the bolts and nut shown in the figure.



### Tightening torque

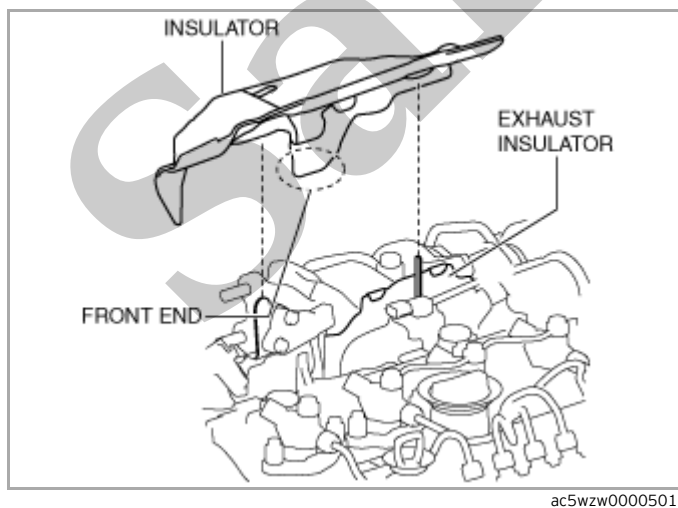
4.0–5.6 N·m {41–57 kgf·cm, 36–49 in·lbf}

10. Install the injection pipe (supply pump side). (See [INJECTION PIPE REMOVAL/INSTALLATION \[SKYACTIV-D 2.2\].](#))

11. Install the fuel feed pipe. (See [SUPPLY PUMP REMOVAL/INSTALLATION \[SKYACTIV-D 2.2\].](#))

### Insulator installation note

1. Install the insulator using the following procedure.



(1) Align the position so that the front end of the insulator is positioned at the front side of the vehicle from the exhaust insulator.

(2) Insert the insulator until it contacts completely.

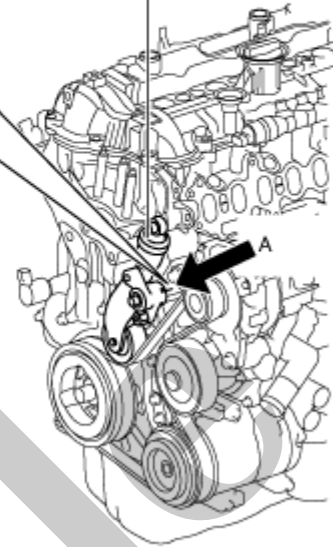
VIEW FROM A

INDICATOR MARK  
(ENGINE SIDE)

NORMAL

LIMIT

DRIVE BELT AUTO  
TENSIONER



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# DRIVE BELT AUTO TENSIONER INSPECTION [SKYACTIV-D 2.2]

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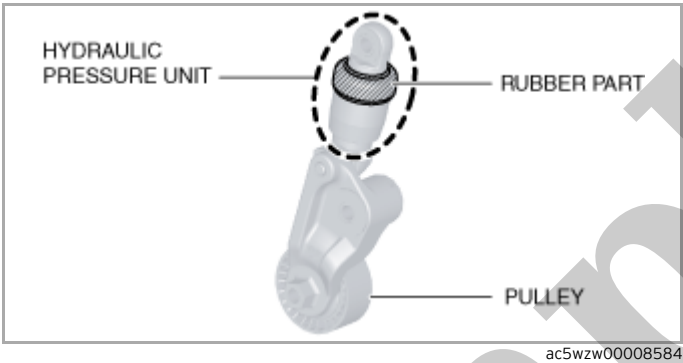
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### Warning

- A hot engine can cause severe burns. Turn off the engine and wait until it is cool before servicing.

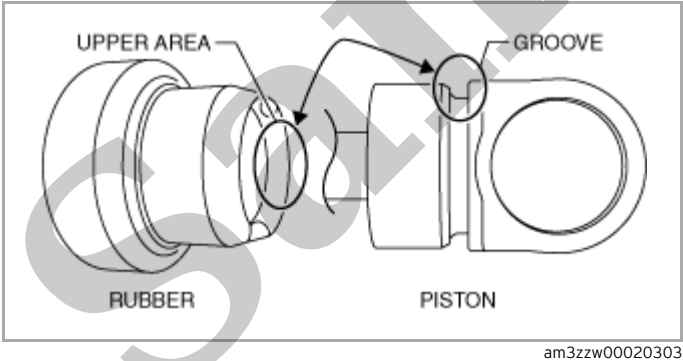
### Caution

- If the rubber part of the drive belt auto tensioner is damaged by a screwdriver or other tool, oil in the hydraulic pressure unit could leak and the tensioner may not operate normally. Be careful not to damage the rubber part of the drive belt auto tensioner.

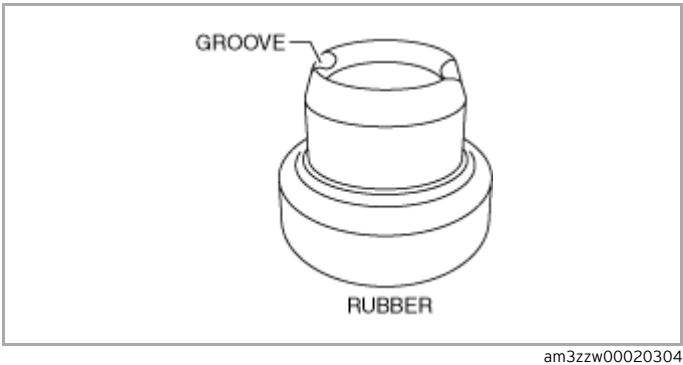


### Note

- Oil is sealed in the upper area of the rubber part and the piston groove shown in the figure.



- If the internal pressure of the hydraulic pressure unit is the specified value or more, the internal pressure will escape from the groove. At this time, oil adhering to the inner wall may seep out, however, this does not indicate a malfunction.



## Hydraulic Pressure Unit Inspection