

Technical Service Bulletin

Mazda North American Operations
Irvine, CA 92618-2922



Subject: OIL SEEPAGE AT ENGINE FRONT COVER	Bulletin No.: 01-018/18
	Last Issued: 09/21/2018

BULLETIN NOTES

This bulletin supersedes the previously issued bulletin(s) listed below. The changes are noted below in Red.

Previously Issued TSBs:	Date(s) Issued
01-005/17	06/02/17 and 03/03/17

APPLICABLE MODEL(S)/VINS

2014-2017 Mazda3 (Japan built) with VINS lower than JM1BN*****100114 (produced before July 4, 2016)

2014-2016 Mazda3 (Mexico built) with VINS lower than 3MZBM*****312993 (produced before June 16, 2016)

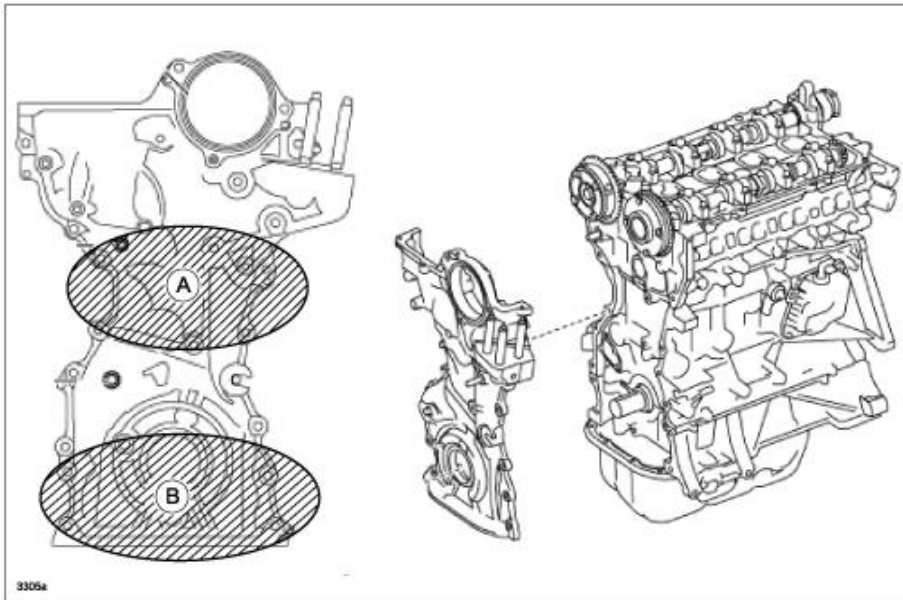
2013-2016 CX-5 with VINS lower than JM3KE*****838638 (produced before July 4, 2016)

2014-2017 Mazda6 with VINS lower than JM1GL*****100801 (produced before July 4, 2016)

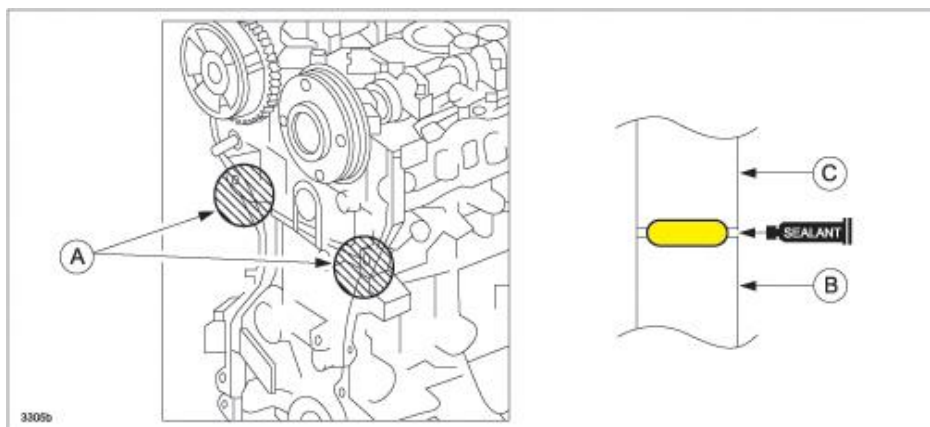
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DESCRIPTION

Some vehicles may exhibit oil residue on the engine front cover from seepage around the joint portion (A) between the cylinder block and head. It becomes very noticeable with dust adhesion. In some cases, the area of oil residue extends down to around the joint portion (B) between the engine front cover and the oil pan.



This may be caused by oil escaping from a fine clearance created at the sealant applied to joint (A) between the cylinder block (B) and head (C) when the engine was pressurized during leak testing on the engine assembly line.



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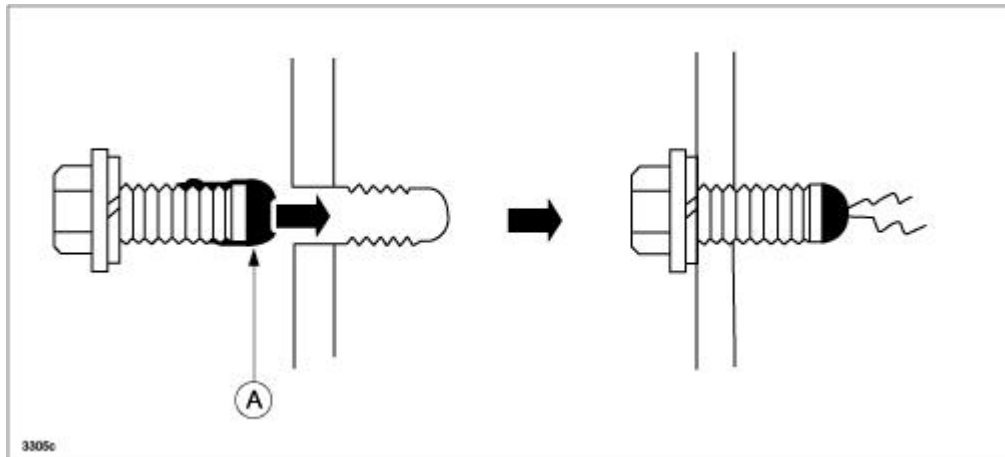
REPAIR PROCEDURE

1. Verify the customer concern.
2. Remove the engine front cover according to MGSS online instructions "TIMING CHAIN REMOVAL/INSTALLATION".
3. Completely clean and remove oil, dirt, sealant or any other foreign matter that may be adhering to the engine front cover, cylinder head, and cylinder block.

CAUTION: If any oil, dirt or sealant remains on the sealant application area, the silicone sealant will not seal and oil leakage will occur.

4. When reusing the engine front cover installation bolts, remove any sealant adhering to the bolts.

CAUTION: If a bolt with sealant adhering to it is used, it could cause cracks in the cylinder head and cylinder block.

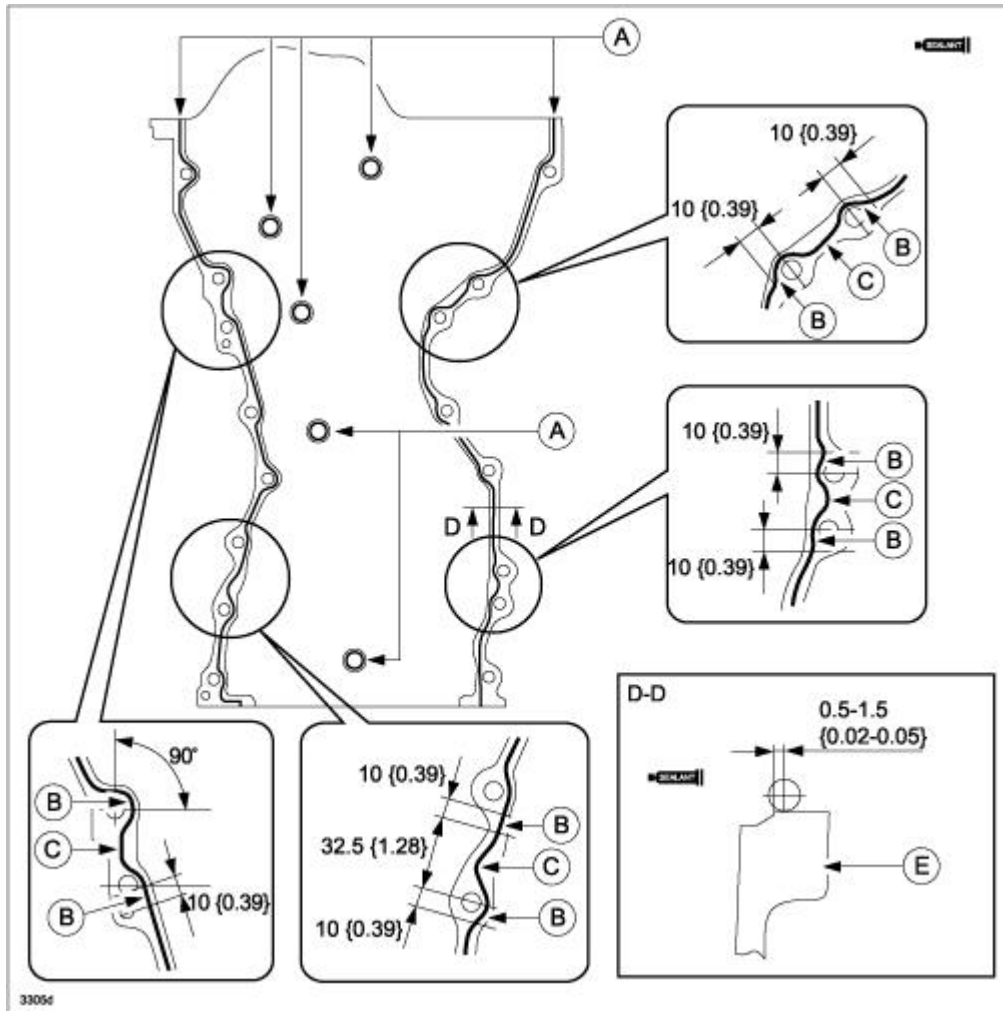


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5. Apply silicone sealant (TB1217D or equivalent) to the engine front cover as shown.

CAUTION:

- Apply the silicon sealant in a single, unbroken line.
- To prevent silicone sealant from hardening, adhere the engine front cover to the cylinder block firmly within 10 minutes after applying silicone sealant. After adhering the engine front cover, tighten the installation bolts immediately.



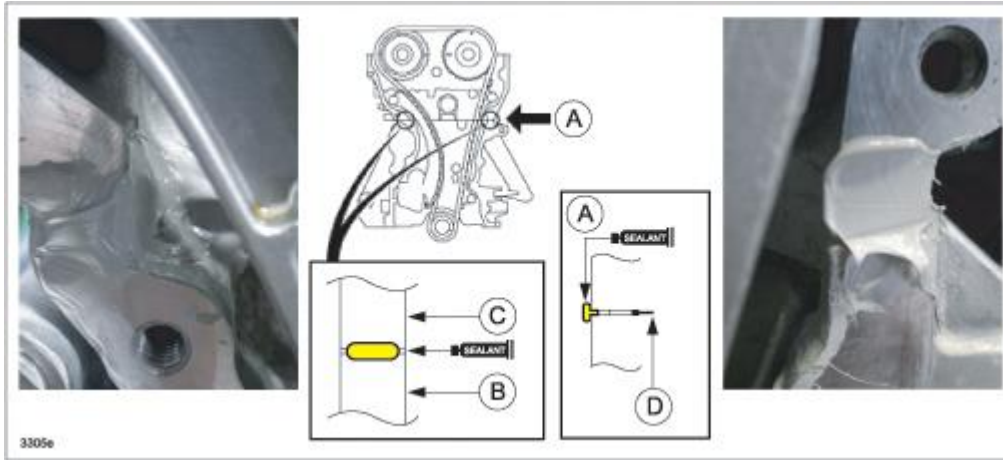
Bead Thickness

- 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}

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6. Apply silicone sealant (TB1217D or equivalent) to the areas shown.

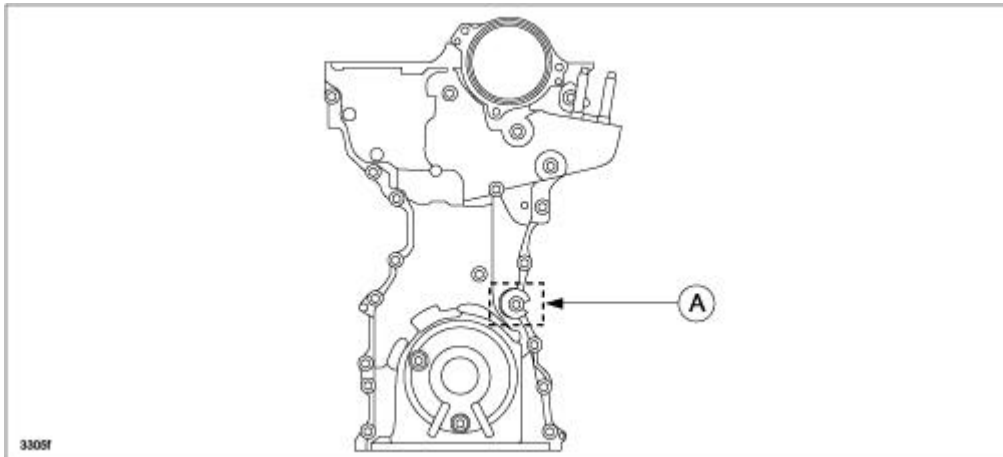
CAUTION: Apply the silicone sealant to the area (A) between the cylinder block (B) and head (C) so that it goes into the cylinder head gasket (D).



7. Install the engine front cover to the engine.

NOTE: Temporarily install an appropriate bolt to the drive belt auto tensioner installation bolt hole (A) to prevent:

- A silicone sealant adhesion malfunction in the drive belt auto tensioner installation bolt hole.
- A bolt mis-installation due to silicone sealant hardening.

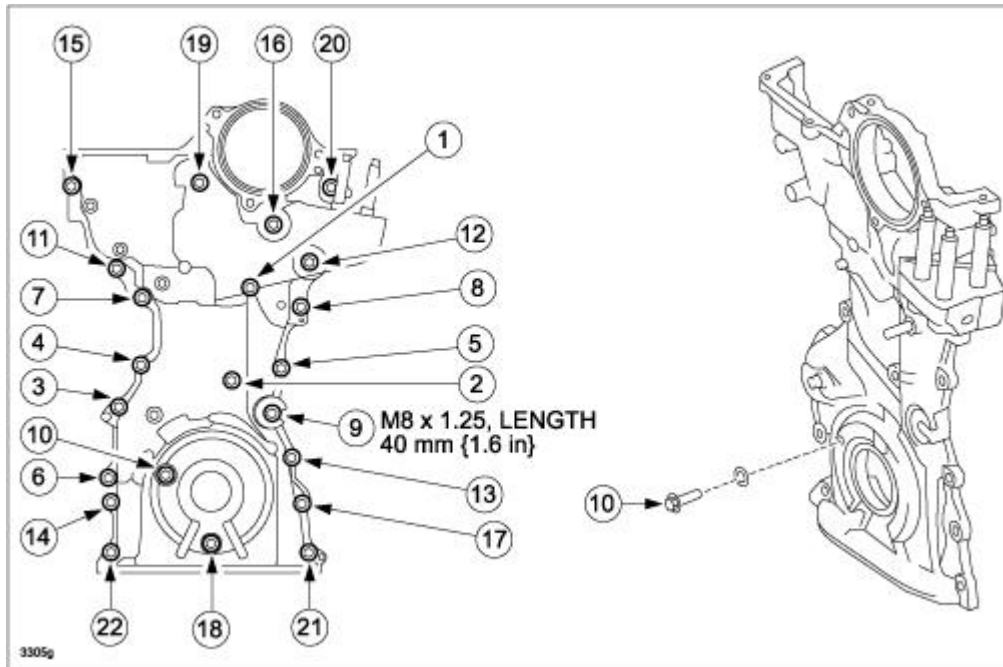


8. Prepare an appropriate M8 × 1.25 bolt (length 40 mm {1.6 in}).

CAUTION: For the number 10 bolt of the tightening order, install the bolt with new washer.

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9. Tighten the engine front cover installation bolts in the order shown.



Tightening torque: 20–26 N•m {2.1–2.6 kgf•m, 15–19 ft•lbf}

10. Remove the bolt installed to the drive belt auto tensioner installation bolt hole when installing the drive belt auto tensioner.

11. Install other removed parts according to MGSS online instructions “TIMING CHAIN REMOVAL/INSTALLATION”.

12. Verify repair.

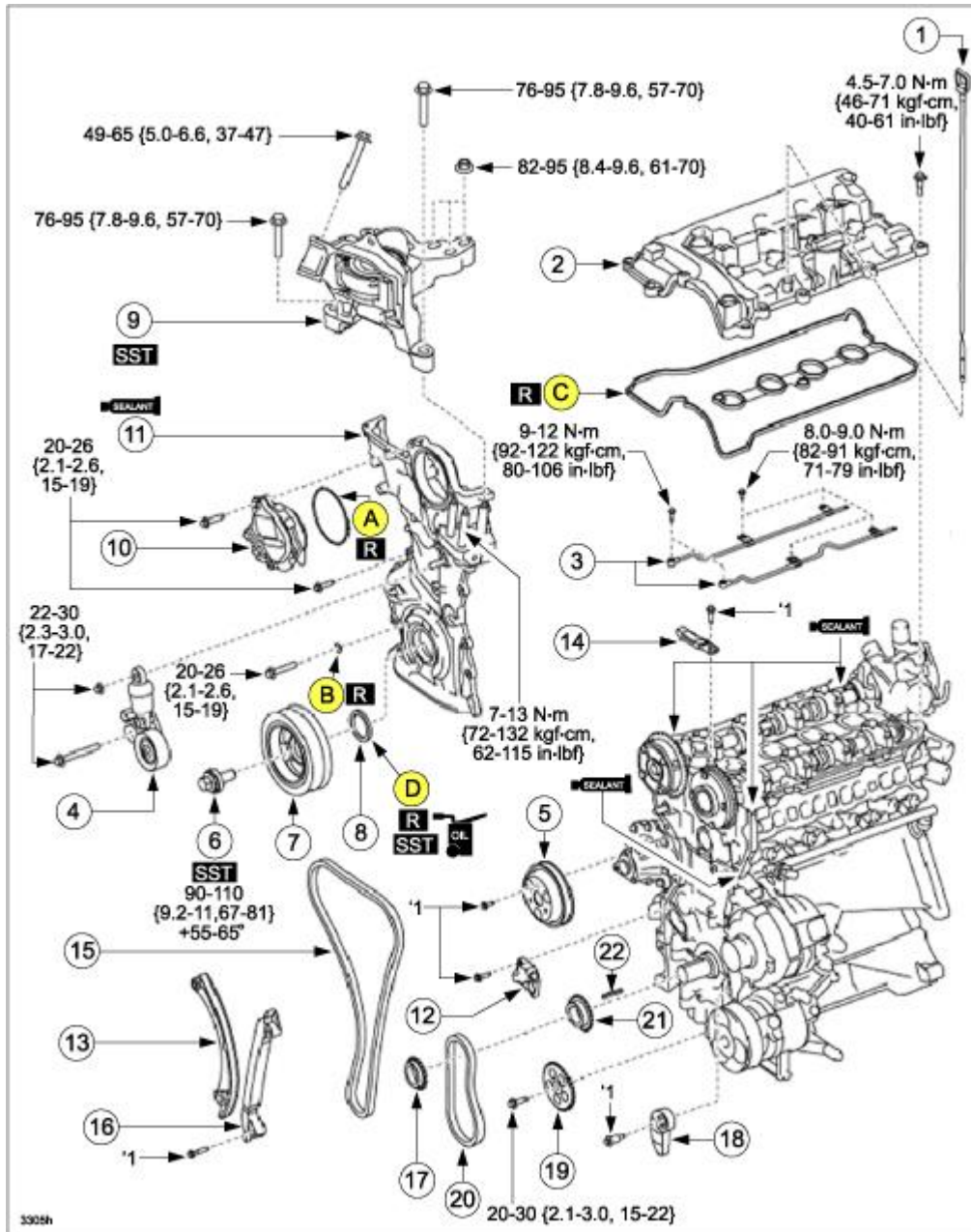
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PARTS INFORMATION

Parts Number	Description	Qty.	Notes
PE01-12-257	O-Ring, VVT Motor (A)	1	
ZJ01-10-243	Sealing Washer (B)	1	
PE01-10-235	Gasket, Head Cover (C)	1	2.0L
PE7W-10-235	Gasket, Head Cover (C)	1	2.0L (for some Mexico built models)
PY01-10-235	Gasket, Head Cover (C)	1	2.5L
PE01-10-602	Front Oil Seal (D)	1	
0000-77-1217-ES	Silicone	1	
0000-G5-0W20-MQ	Engine Oil (0W-20)	2	2 quarts max (for topping off)

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PARTS LOCATION



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Removal Order

1. Dipstick	7. Crankshaft pulley
2. Cylinder head cover	8. Front oil seal
3. Oil shower pipe	9. No. 3 engine mount
4. Drive belt auto tensioner	10. Electric variable valve timing motor/driver
5. Water pump pulley	11. Engine front cover
6. Crankshaft pulley lock bolt	

WARRANTY INFORMATION**NOTE:**

- This warranty information applies only to verified customer complaints on vehicles eligible for warranty repair.
- This repair will be covered under Mazda's Powertrain Limited Warranty term.
- Additional diagnostic time cannot be claimed for this repair.

Warranty Type	A
Symptom Code	76
Damage Code	9A
Part Number Main Cause	PE01-10-500A, Engine Front Cover (2.0L) PY01-10-500A, Engine Front Cover (2.5L)
Quantity	0
Operation Number / Labor Hours:	XXN1CARX / 3.3 Hrs. (SKYACTIV-G 2.0L) XXN1CARX / 3.4 Hrs. (SKYACTIV-G 2.5L)

NOTE: Enter the replaced non-usable parts in Related Parts.

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