

Subject: CAMSHAFT TICKING NOISE	Bulletin No: 01-031/07
	Last Issued: 07/13/2007

BULLETIN NOTE

This bulletin supersedes the previous bulletin 01-032/06, issued on 10/12/2006. The APPLICABLE MODEL(S)/VINS, DESCRIPTION, REPAIR PROCEDURE, and WARRANTY INFORMATION have been revised.

APPLICABLE MODEL(S)/VINS

2001 - 2006 & 2008 Tribute 3.0L

2003 - 2008 Mazda6 3.0L

2002 - 2006 MPV 3.0L

DESCRIPTION

Some vehicles equipped with a 3.0L engine may exhibit a ticking noise from the left bank cylinder head while the engine is running at normal operating temperature.

Customers having this concern should have their vehicle repaired using the following repair procedure. Use the table below to select the correct repair for the applicable model.

Year/Model	Proceed To:
2002 - 2006 MPV 3.0L	A. REPAIR PROCEDURE
2003 - 2008 Mazda6 3.0L	B. REPAIR PROCEDURE
2001 - 2006 Tribute 3.0L - (built BEFORE Jan. 17, 2006)	A. REPAIR PROCEDURE
2006 Tribute 3.0L - (built AFTER Jan. 17, 2006)	B. REPAIR PROCEDURE
2008 Tribute 3.0L - (engine build date BEFORE May 16, 2007)*	B. REPAIR PROCEDURE
2008 Tribute 3.0L - (engine build date AFTER May 16, 2007)*	Service Bulletin procedure does not apply, refer to Workshop Manual - Section 01-01

* - Engine build date can be located on LH cam cover engine label.

A. REPAIR PROCEDURE

2002 - 2006 MPV 3.0L:

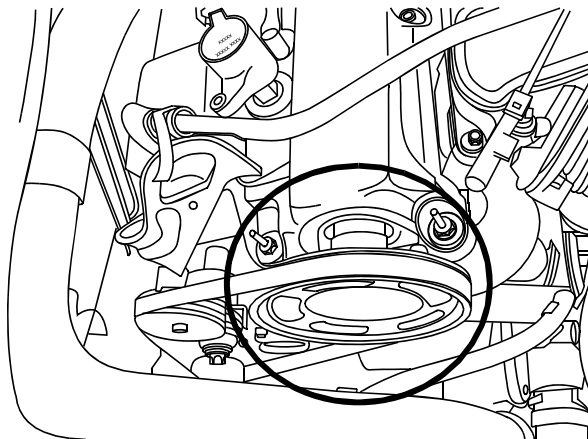
2001 - 2006 TRIBUTE 3.0L - (built BEFORE Jan. 17, 2006):

CAUTION: Before attempting a 2001-2006 Tribute repair, confirm if water pump pulley is driven by INTAKE or EXHAUST camshaft. Be sure to use correct repair procedure.

The water pump on 2001-2006 Tribute vehicles built BEFORE Jan. 17, 2006 are driven by the "INTAKE" camshaft pulley.

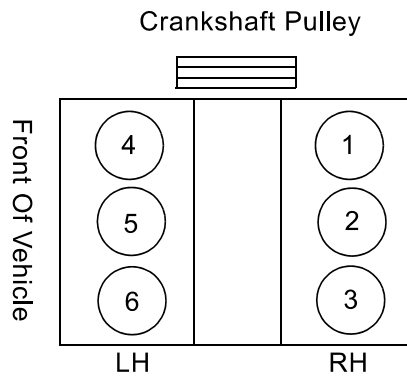
1. Verify the water pump is driven by the INTAKE camshaft pulley.

WATER PUMP DRIVEN BY INTAKE CAMSHAFT PULLEY



1572g

2. Turn engine ON.
3. Verify customer concern by using a stethoscope and conventional diagnostics to isolate the sound. If noise comes from LH valve cover area near cylinder #6, proceed to Step 4.
4. Turn engine OFF.
5. Remove LH valve cover according to applicable Workshop Manual.
6. Rotate engine clockwise until cylinder #6 **INTAKE** cam lobes are pointing up (valves are fully **CLOSED**).

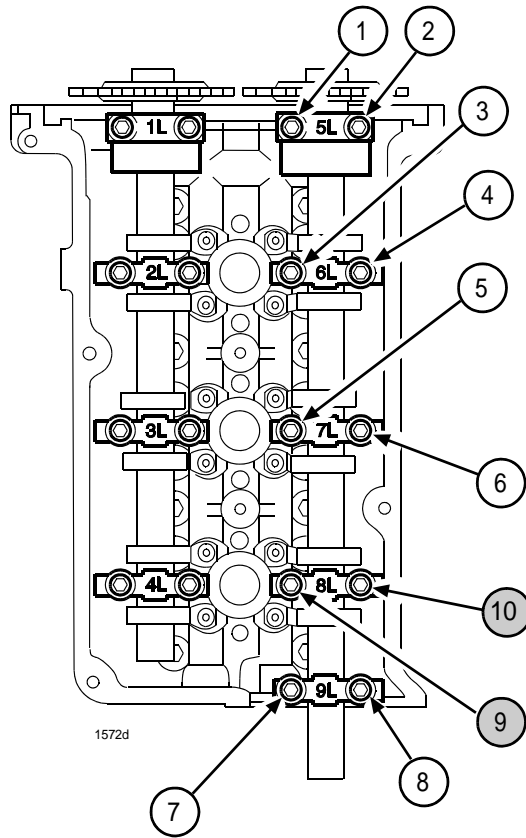


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7. Remove all **INTAKE** camshaft caps (do not remove **EXHAUST** camshaft caps).

NOTE: The camshaft caps must be completely lifted off, then set back into position. Loosening and re-torquing cap bolts is not sufficient.

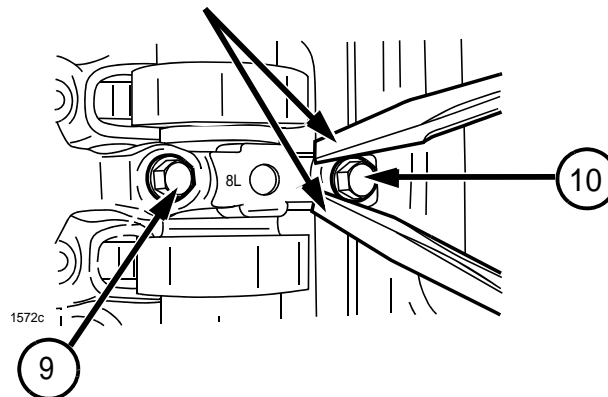
8. Reinstall all camshaft caps and torque bolts (except cam cap number 8L) in the sequence shown below to 8 Nm (72 lb-in).



INSTALL CAM CAP 8L,
BUT DO NOT TORQUE
BOLTS #9 AND #10 AT
THIS TIME.

9. Using a screwdriver positioned on each side of the top of cam cap number 8L, apply hand pressure and shift the cam cap toward the **EXHAUST** side of the cylinder head.

APPLY PRESSURE TO CAM CAP
8L WITH SCREW DRIVERS



10. While holding cam cap number 8L in the shifted position, torque fasteners number 9 (inboard) first, to 8 Nm (72 lb-in), then torque fastener number 10.
11. Reinstall LH valve cover.
12. Verify repair.

B. REPAIR PROCEDURE

2003 - 2008 MAZDA6 3.0L:

2006 TRIBUTE 3.0L - (built AFTER Jan. 17, 2006):

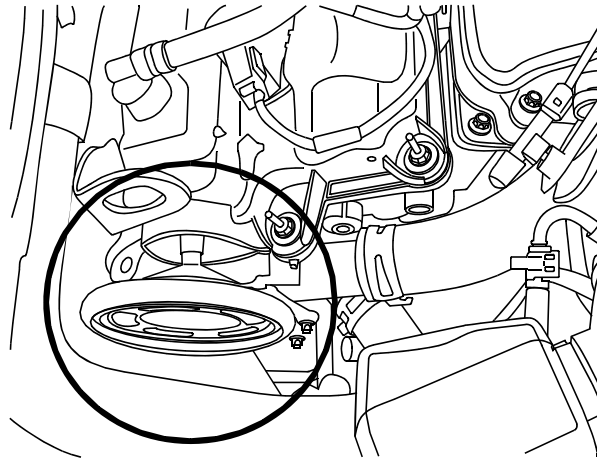
2008 TRIBUTE 3.0L - (with engine build date BEFORE May 16, 2007):

CAUTION: Before attempting a 2006 Tribute repair, confirm if water pump pulley is driven by INTAKE or EXHAUST camshaft. Be sure to use correct repair procedure.

The water pump on 2006 Tribute vehicles built AFTER Jan. 17, 2006 are driven by the "EXHAUST" camshaft pulley.

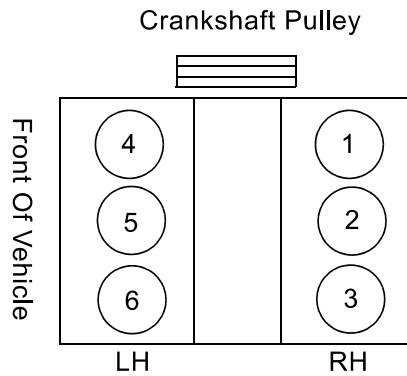
1. Verify the water pump is driven by the EXHAUST camshaft pulley.

WATER PUMP DRIVEN BY EXHAUST CAMSHAFT PULLEY



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2. Turn engine ON.
3. Verify the concern by use a stethoscope and conventional diagnostics to isolate the sound. If the noise comes from the LH valve cover area near cylinder #6, proceed to Step 4.
4. Turn engine OFF.
5. Remove the LH valve cover according to applicable Workshop Manual.
6. Rotate the engine clockwise until cylinder #6 **EXHAUST** cam lobes are pointing up (valves are fully **CLOSED**).



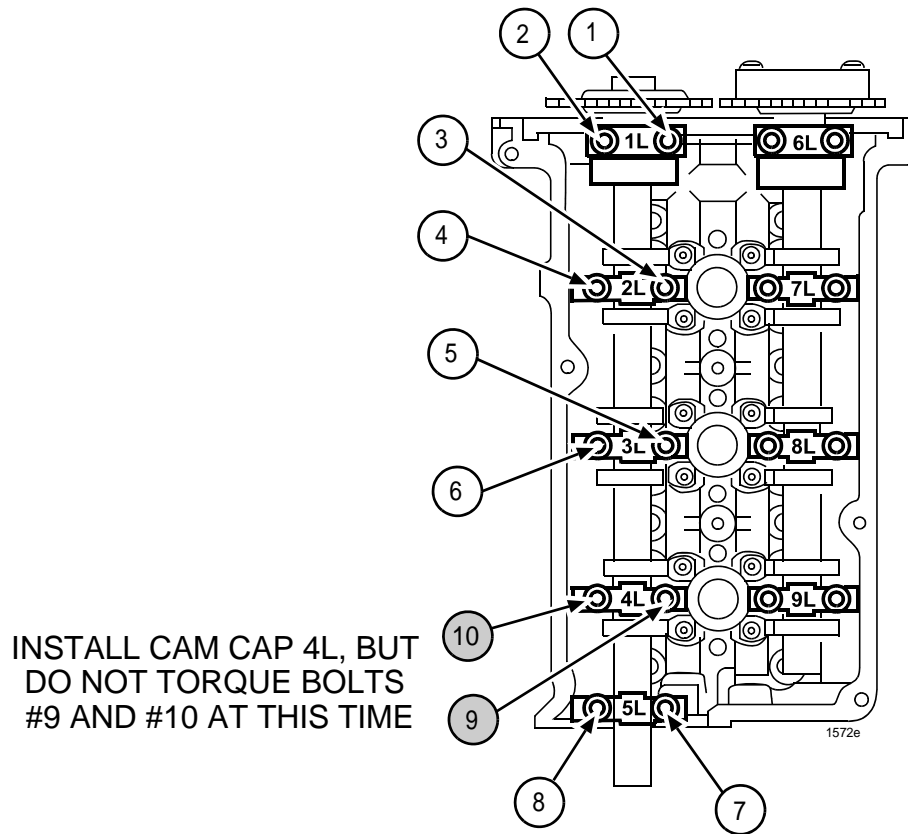
Firing Order: 1-4-2-5-3-6

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7. Remove all **EXHAUST** camshaft caps (do not remove **INTAKE** camshaft caps).

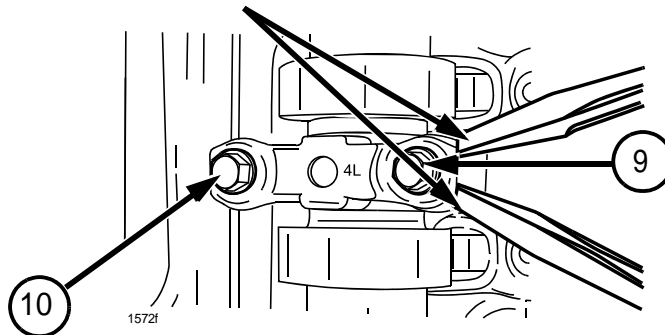
NOTE: The camshaft caps must be completely lifted off, then set back into position. Loosening and re-torquing cap bolts is not sufficient.

8. Reinstall all camshaft caps and torque bolts (except cam cap number 4L) in the sequence shown below to 8 Nm (72 lb-in).



9. Using a screwdriver positioned on each side of the top of cam cap number 4L, apply hand pressure and shift the cam cap toward the **EXHAUST** side of the cylinder head.

APPLY PRESSURE TO CAM CAP 4L WITH SCREW DRIVERS



10. While holding cam cap number 4L in the shifted position, torque fasteners number 9 (inboard) first, to 8 Nm (72 lb-in), then torque fastener number 10.

11. Reinstall LH valve cover.
12. Verify repair.

WARRANTY INFORMATION

NOTE:

- This warranty information applies only to verified customer complaints on vehicles eligible for warranty repair. Refer to the Warranty Wizard for warranty term information.
- Additional diagnostic time cannot be claimed for this repair.

Warranty Type	A
Symptom Code	82
Damage Code	9H
Part Number Main Cause	AJ03-10-131
Quantity	0
Operation Number / Labor Hours:	YY368XRX / 1.2 (Mazda6 & MPV) YY368XRX / 1.4 (Tribute) Remove and reinstall camshaft caps (includes time to remove and install valve cover)