

Service Bulletin

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MAZDA

Category B	Applicable Model/s 1995-97 Millenia 1995-97 626/MX-6	Subject TAPPING NOISE WHEN ENGINE IS COLD	Bulletin No. 001/97 Issued 03/10/97 Revised 04/25/97
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NOTE: The Warranty section of this bulletin is revised. Replace the original bulletin with this revised copy.

APPLICABLE MODELS

- 1995 - 97 Millenia with a KLD engine.
- 1995 - 97 626 / MX-6 with a KLD engine.

DESCRIPTION

A slight tapping noise may be heard at idle after cold start.

- The noise diminishes as the engine warms up.
- The noise also diminishes as engine speed is increased from idle to 1500 - 2500 RPM.
- The noise tone changes intermittently from high to low and as a load is applied to the engine (i.e. engaging transmission).
- The noise is similar to HLA and fuel injector noise.
- The noise is unlike carbon knock which is most evident at 1500 - 2500 RPM.

Carbon accumulation on the top of the piston ring area is the cause of this tapping noise. Customers complaining of this noise should have the carbon removed according to the instructions in this bulletin.

REPAIR PROCEDURE

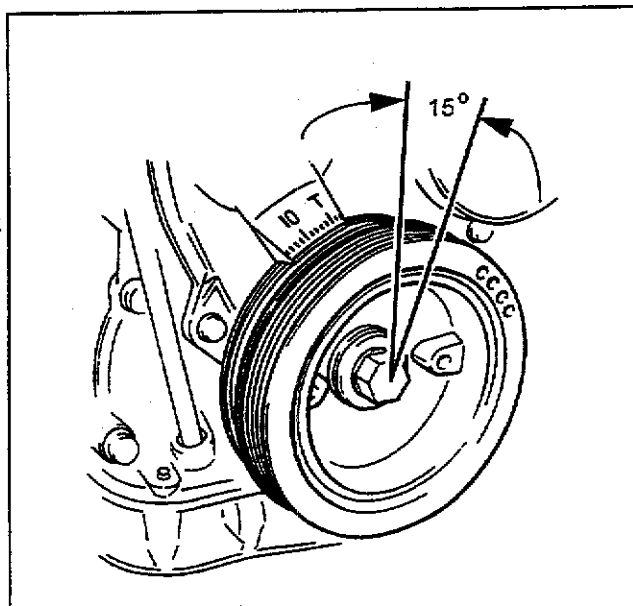
WARNING: DISCONNECT THE NEGATIVE BATTERY TERMINAL WHILE PERFORMING THIS REPAIR.

1. Verify the complaint.
2. Remove spark plugs.

CAUTION: Remove any dirt or grit from spark plug bore prior to removing spark plug.

3. Set piston No. 1 at TDC of the compression stroke. Refer to the position of the distributor rotor to confirm position.
4. Rotate crank pulley clockwise one (1) revolution.
 - Stop rotation when the timing mark (located on the crankshaft pulley) reaches the range shown.

NOTE: This step is critical for the procedure to be effective on No. 1 and No. 4 pistons.



CONSUMER NOTICE: The information and instructions in this bulletin are intended for use by skilled technicians. Mazda technicians utilize the proper tools / equipment and take training to correctly and safely maintain Mazda vehicles. These instructions should not be performed by "do-it-yourselfers." Customers should not assume this bulletin applies to their vehicle or that their vehicle will develop the described concern. To determine if the information applies, customers should contact their nearest authorized Mazda dealership.

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5. Pour the following amount of top engine cleaner into the cylinders through the spark plug holes.

- No. 1 and No. 4 - 2.75 fl.oz (81.25 ml.)
- No. 2, 3, 5 and 6 - 5.5 fl.oz (162.5 ml.)

6. Protect cylinders from contamination of foreign material with shop towels inserted into the spark plug holes.

7. Allow top engine cleaner to soak for 5 - 6 hours.

NOTE: Soak time is very important. If the soak time is too short the repair will not be effective, if the time is too long, the piston coating may peel and engine damage could result.

8. Remove fluid from cylinders.

- Leave shop towels inserted in the spark plug holes.
- Crank engine slowly by hand.

9. Change engine oil.

10. Install spark plugs.

11. Connect battery cables.

12. Start engine and increase engine speed to approximately 2000 RPM for a 2 - 3 minutes to remove fluid residue.

WARRANTY INFORMATION

(Applies To Verified Customer Complaints On Vehicles Covered Under Normal Warranty. Refer To The SRT Microfiche For Warranty Term Information.)

Warranty Type:	A
Symptom Code:	82
Damage Code:	93
Part Number Main Cause:	7777-13-004
Quantity:	0
Related Part Number:	5555-EG-009 (oil) 0000-77-2025 (top engine cleaner)
Quantity:	Record amount used.
Operation Number:	XX892XRX
Labor Hours:	1.6 Hrs.

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