



NUMBER: 09-007-04

GROUP: Engine

DATE: March 2, 2004

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SUBJECT:

Irregular Engine Snapping Sound

OVERVIEW:

This bulletin involves chamfering the bore radius on cam bearing caps L2 through L5 and R2 through R5.

MODELS:

2001 - 2004	(JR)	Sebring Convertible/Sebring Sedan/Stratus Sedan
2002 - 2004	(KJ)	Liberty
2002 - 2004	(KJ)	Cherokee (International Markets)
2003 - 2004	(PL)	Neon
2001 - 2004	(PT)	PT Cruiser
2001 - 2004	(RG)	Chrysler Voyager (International Markets)
2001 - 2004	(RS)	Town & Country/ Caravan/Voyager
2003 - 2004	(TJ)	Wrangler

NOTE: This bulletin applies to vehicles equipped with a 2.0L, 2.4L DOHC or 2.4L Turbo engine (sales code ECC, EDZ, ED1, EDV, ED2 or EDT).

SYMPTOM/CONDITION:

The sound may be noticed when the engine is idling in park between idle rpm and 1400 rpm at normal operating temperature. The sound is on the upper end of the engine (cylinder head) towards the front of the engine or passenger side (right side). The sound is irregular, not periodic or harmonious. The frequency of the sound will increase with RPM. The sound is more of a higher pitch snapping noise not a low metallic knock.

DIAGNOSIS:

If the vehicle operator describes the Symptom/Condition and the technician determines that the sound is from the upper end of the engine (cylinder head) towards the front of the engine or passenger side (right side), perform the Repair Procedure.

REPAIR PROCEDURE:

1. Remove the cylinder head cover (Refer to information available in TechCONNECT 9 - ENGINE/CYLINDER HEAD COVER - Removal)
2. Remove L2 cam bearing cap (Fig. 1).

NOTE: Do not remove the #L1/R1 or L6 cam bearing caps, or loosen the fasteners.

NOTE: Only remove one cam bearing cap at a time.

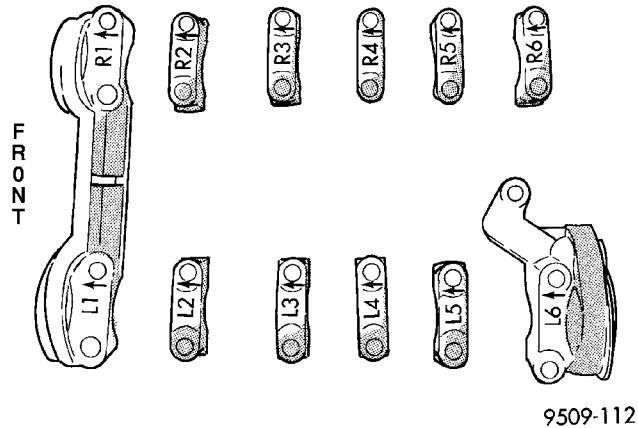


Fig. 1 CAMSHAFT BEARING CAP IDENTIFICATION

3. Lightly chamfer the two bore radius edges with a small hand file, creating a 45° chamfer 1.0 to 1.5 mm in width along the edge of each bore radius (Fig. 2).

CAUTION: Be careful not to scratch bore surface of cam bearing cap. Chamfer both bore radius.

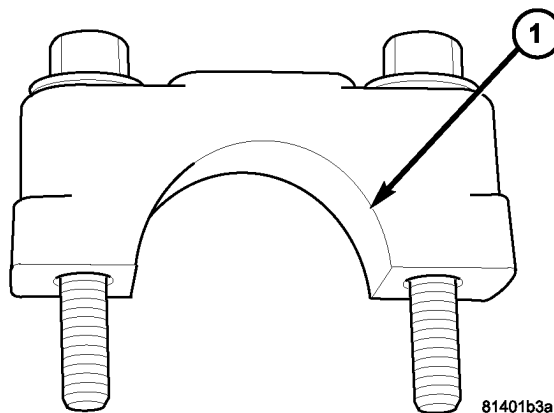


Fig. 2 CAMSHAFT BEARING CAP

1 - CAM BEARING CAP RADIUS

4. Clean part to remove any aluminum filings prior to reinstalling.

5. Reinstall L2 cam bearing cap by loosely assembling fasteners. Prior to and during the torquing of each fastener, twist the cam bearing cap by hand in a clockwise direction, as viewed from the top of the engine. Torque M6 fasteners to 12 N·m (105 in. lbs.) while maintaining a clockwise twisting force on the cam bearing cap.
6. Repeat steps 2 through 4 for cam bearing caps L3, L4, L5, R2, R3, R4, R5 and R6.

POLICY:

Reimbursable within the provisions of the warranty.

TIME ALLOWANCE:

Labor Operation No:	Description	Amount
09-05-01-94	Irregular Engine Snapping Sound	1.3 Hrs JR
		1.8 Hrs PT
		1.9 Hrs RS/RG
		1.4 Hrs PL
09-05-01-95	Irregular Engine Snapping Sound	1.8 Hrs KJ
		2.0 Hrs TJ

FAILURE CODE:

52	Improperly Machined
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