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TECHNICAL BULLETIN		Mfg: GM
	October 2010	Model: CATERA
	TB 2544	Liter: 3.0L
		V I N: R
		Year: 97-08

Engine Noise on
2005 GM 3.0L VIN R Engines

The AERA Technical Committee offers the following information regarding an upper engine noise on 2005 GM 3.0L VIN R engines. It has been reported some customers may comment on a squeak, chirp, or cricket type noise from the engine. This noise is most noticeable around the timing belt cover at engine speeds of 600-3500 RPM.

The cause of this condition may be caused by either of the bank 2 (front bank) timing belt camshaft sprockets being cracked near the base of the tooth area of the camshaft sprocket. Refer to the Figure 1 which shows a typical location of fatigue crack. Engines affected with this condition were built between and including VIN breakpoints 5Y501038 to 5Y505543.

Figure 1. Damaged Gear Area.

To correct this condition, it is suggested to replace both bank 2 (front bank) timing belt camshaft sprockets and bolts. The gears are available with Part #90573286 and the bolt is available with Part #90573287. When replacing the timing gears it may be necessary to renumber the gears in accordance to the gears shown in Figure 2 to assist in future timing of the gears.

Figure2. Cam Gear Pin Locations

Important: Always use a new camshaft gear bolt. The required tightening method will stretch the bolts to its yield point; therefore, the bolt is not reusable. Follow the steps below to install the camshaft bolts.

1. Install the camshaft gear bolt.
2. Use the J 42069 and the J 42069-2 to hold the camshaft gear and camshaft in place while tightening the camshaft gear bolt.
3. Use the SA9140E to tighten the camshaft gear bolt. Tighten the camshaft gear

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bolt to 37 ft/lbs (50 Nm) plus 60 degrees plus 15 degrees.

The AERA Technical Committee

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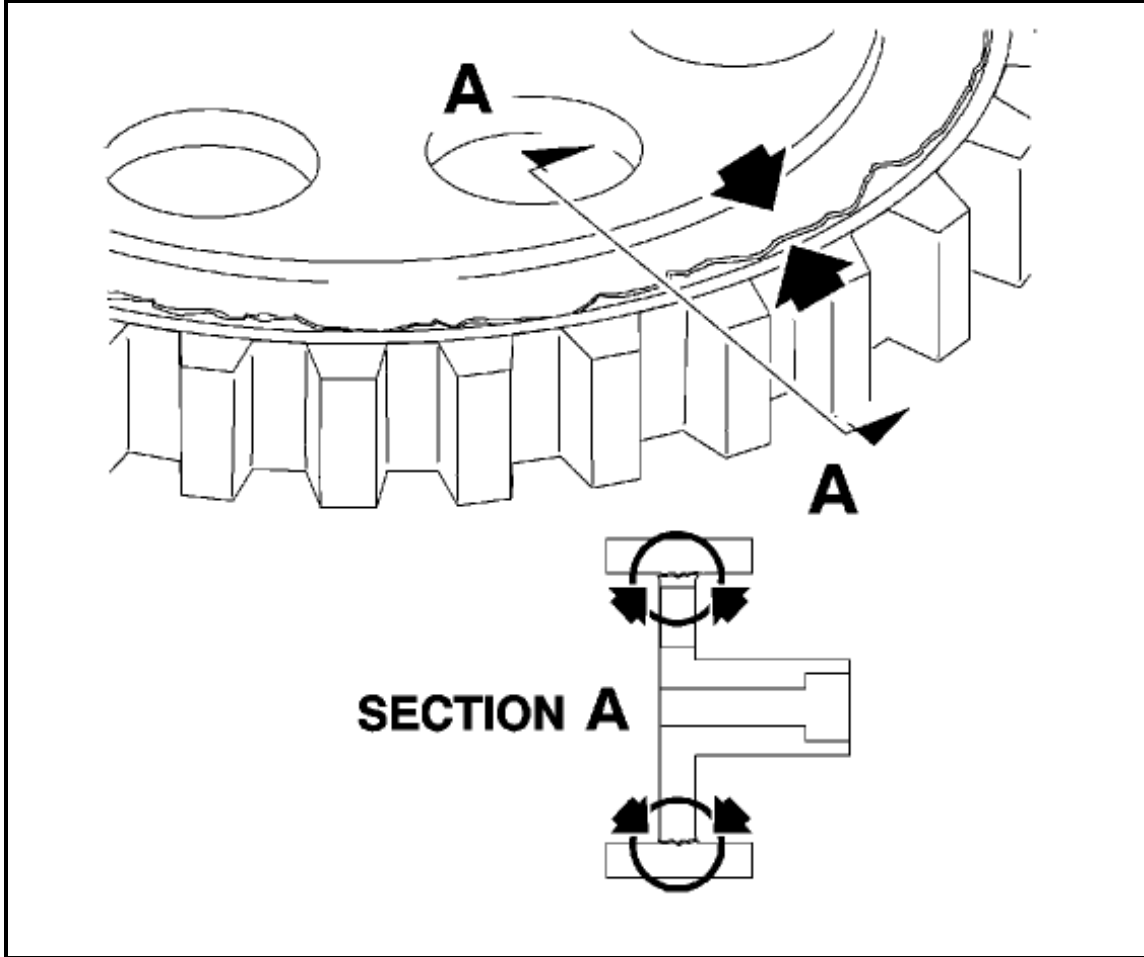
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Bulletin Diagram: FIGURE 1. DAMAGED GEAR AREA - VALVE TRAIN



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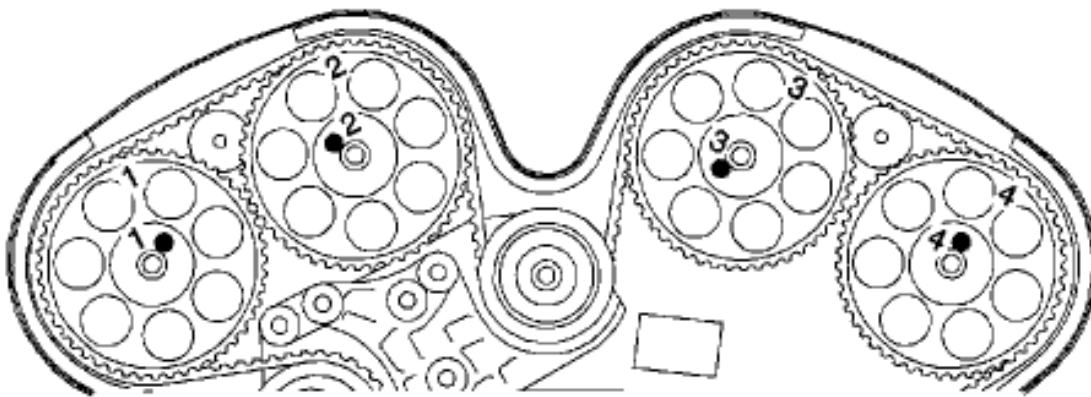
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Bulletin Diagram: FIGURE 2. CAM GEAR PIN LOCATIONS - VALVE TRAIN



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