



Timing Chain Noise On 1992-1997 GM 2.2L VIN 4 Engines

The AERA Technical Committee offers the following information on a timing chain noise on 1992-97 GM 2.2L VIN 4 engines. Vehicles equipped with this particular engine may experience a noise in the front cover area of the engine at idle speed. The cause of this noise may be insufficient oil flow to the timing chain area.

In the front of the block there is a small lubrication hole located in the front oil passage plug as shown in Figure 2 below. If regular engine oil maintenance is not performed on this engine, that oil passage hole may become plugged with debris or varnish, restricting oil flow.

Inspect the front oil passage plug located behind the timing chain for restriction or debris. The plug has an oil orifice that is approximately .039" (.990 mm) in diameter. If the plug shows no signs of having oil in it or the orifice hole is blocked, remove the plug with a slide hammer. After the hole has been cleaned out of any debris in the oil passage, install a new plug, Part #14033197. If a plug with a larger orifice is used, a reduction in overall engine oil pressure may occur.

Inspection of the timing chain system for wear can be done by measuring the distance between the hole in the tensioner bracket to the unworn surface of the tensioner shoe, as shown in Figure 1. If the distance exceeds .314" (7.970 mm), replacement of the timing chain tensioner, Part #12363192, is required.

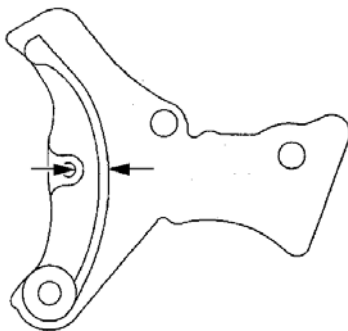


Figure 1: Tensioner Shoe Bracket

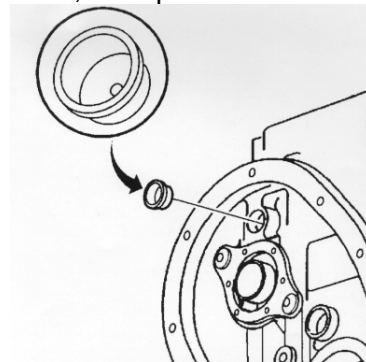


Figure 2: Small Lubrication Hole

<u>Description</u>	<u>GM Part #</u>
Timing Chain Tensioner	12363192
Front Oil Passage Plug	14033197
Crankshaft Sprocket	10083171
Cam Sprocket 1992-1993	10083170
Cam Sprocket 1994 and Later	10198810
Timing Chain	24576828

The AERA Technical Committee

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