



## Whine or Rattle Noise On 2004 GM 3.5L VIN 6 Engines

AERA members have reported a whine or rattle noise on 2004 GM 3.5L VIN 6 Engines. This noise seems to be present on light acceleration, coming from the engine, and may be more pronounced at start-up or after an overnight soak.

The source of the noise may be the balance shaft chain and tensioner interaction. There are two balance shafts in this engine that are driven by the crankshaft to keep the engine running smoothly. This noise does vary from vehicle to vehicle and does not cause any durability concerns.

To cure this problem, GM has designed a new tensioner to eliminate the noise. The tensioner kit, Part #89017543, consists of an oil-fed tensioner, longer tensioner bolts, balance shaft drive chain and right-side balance shaft assembly. Please note that it is necessary to install the updated balance shaft assembly, because it contains an oil feed passage for the oil fed tensioner.

This new tensioner was introduced into production in the mid-December time frame. If the customer's vehicle was built prior to VIN breakpoints 48123220 (Chevrolet) and 48123225 (GMC), installation of the new tensioner kit is recommended.