Ford 3.5L Ecoboost Caution for Cam to Crank Correlation Code

The AERA Technical Committee offers the following information regarding 2011-2014 Ford 3.5L Ecoboost engines throwing a camshaft to crankshaft correlation code, this code is P0016. Beyond the code the engine may run rough, hesitate, have difficulty starting or exhibit poor fuel economy.

AERA is aware a common cause for this is a stretched primary timing chain. The stretched chain allows the timing to be altered and results in some of the symptoms listed above and sets off the P0016 code. When checking the primary chain compare it to a new chain to visually see if the existing chain is stretched. This chain is very long and as each link starts to stretch, the combined growth of each link adds up to the point where it can alter timing. See Figure 1. Replacement of the primary timing chain is required to restore correct camshaft to crankshaft correlation.

Note: If the primary chain is not stretched, inspect the camshaft and crankshaft reluctor wheels for damage, cam or crank position sensors for damage, wiring or the cam phasers.

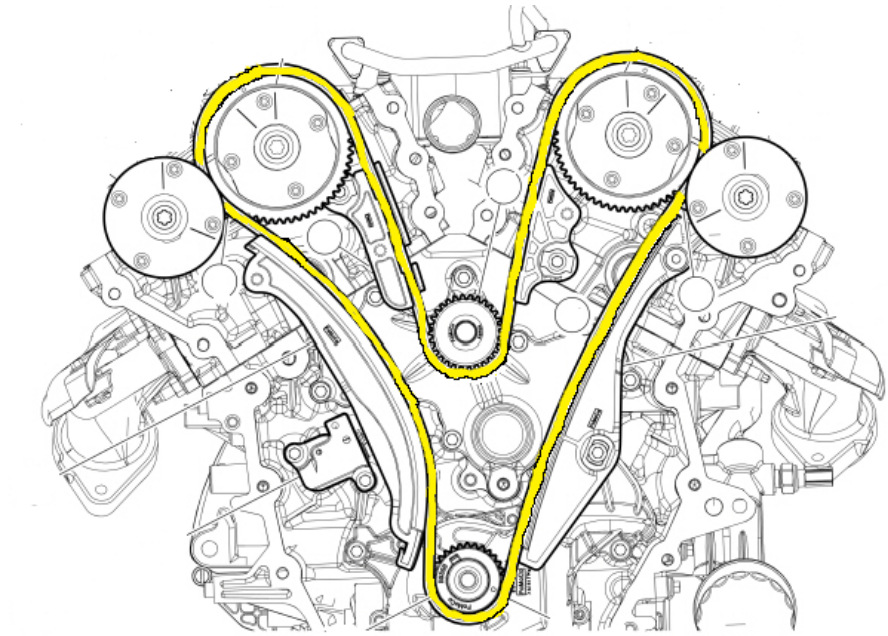


FIGURE 1: Primary Chain in Yellow

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