

2016 - 2019 Cadillac CTS-V: GM TechLink: Setting the Timing on Gen 5 V6 and V8 Engines

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GM TechLink:
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When installing a chain and gear set on the Gen 5 4.3L V6 (RPO LV1, LV3), 5.3L V8 (RPO L83) or 6.2L V8 engine (RPO L86, LT1, LT4) in some 2014 - 2019 Silverado, Sierra; 2015 - 2019 Escalade, Tahoe, Suburban, Yukon; and 2016 - 2019 Cadillac CTS-V, Camaro, and Corvette models, it may be difficult to get a proper view of the timing marks for alignment. As a result, the engine base timing may not be set correctly.

While inspecting the gears, it can be seen that the gears have the correct number of teeth to allow marking of the opposite side of the gears for alignment. By using the chain as the timing device, it is easier to install and align the gears properly.

To set the timing, mark the tooth that is 180 degrees opposite of the timing marks on both gears. Next, count the links and fold the timing chain to mark the links at each end. Hang the chain on the two gears at the marks and verify that the gears are properly aligned.

In the illustration of the gear set (Fig. 12), the vertical red line travels through the links at the top and bottom. In this case, the chain was installed with the face links at the teeth that were 180 degrees from the proper timing marks. The mark on the camshaft position actuator sprocket (Fig. 12, #1) should be in the 6 o'clock position and the mark on the crankshaft sprocket (Fig. 12, #2) should be located in the 12 o'clock position. Since the oil feed hole (Fig. 12, #3) is not centered in the block, it may throw off your perception during alignment.

Fig. 12

– *Thanks to Richard Renshaw*

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