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Katech Website: [www.katechengines.com](http://www.katechengines.com)

# ***KAT-A6914 LT VVT Delete Wet Sump Front Cover Kit Instructions***





## ***I. Included in the Kit:***

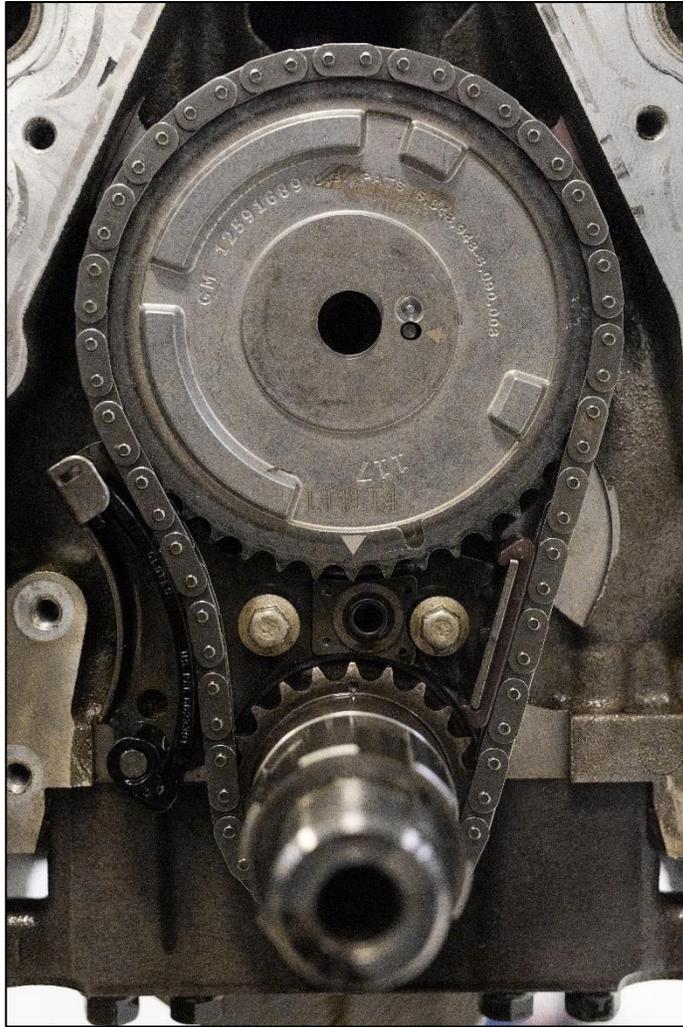
- a. KAT-6914 Katech LT Wet Sump Front Cover
- b. Katech Cam Sprocket Bolt
- c. Katech VVT Delete Cam Sprocket
- d. Front Cover Locating Dowels (2)
- e. Katech Camshaft Position Sensor Harness Bracket Stanchion
- f. Katech Camshaft Position Sensor Harness Bracket Bolt
- g. Front Crank Seal

## ***II. Required for Installation:***

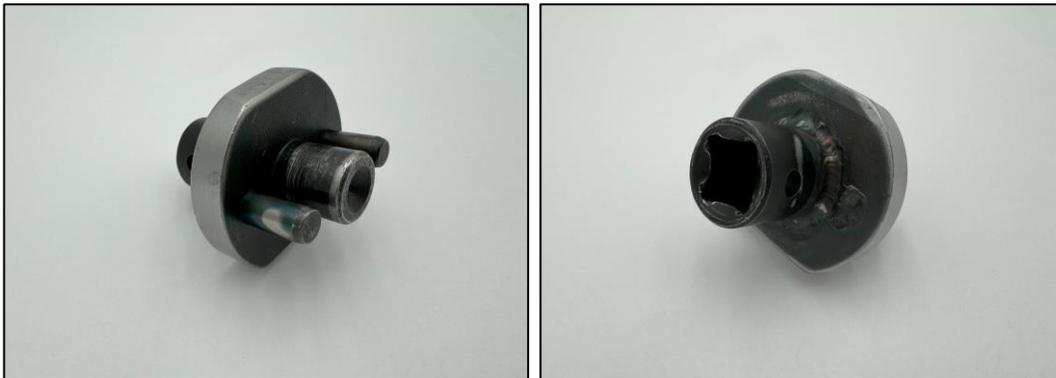
- a. Metric Socket Set
- b. Torque Wrench
- c. Front Seal Install Tool
- d. LT Cam Torque Tool
- e. Loctite Retaining Compound
- f. RTV Sealant

## ***III. Procedure:***

- a. This procedure is intended to be followed at the point of the engine assembly process where the camshaft, cam thrust plate, and timing chain tensioner have been installed per manufacturer's specifications, with no oil pan on the engine
- b. Install the Katech cam sprocket and timing chain of choice
  - i. Link to the recommended Katech C5-R Timing Chain:  
<https://katechengines.com/i-30497638-katech-c5-r-timing-chain.html>
- c. Ensure to properly align the cam and crank sprockets so that the **LASER ENGRAVED ARROW** on the cam sprocket points down towards the crank while the dot on the crank sprocket points up towards the cam
  - i. See photo below for reference
  - ii. Whenever a camshaft is installed into an engine, cam timing should be verified with a degree wheel and dial indicator
  - iii. Failure to properly align the timing set **WILL RESULT IN ENGINE DAMAGE**



- d. Install the Katech cam sprocket bolt and torque to **105 ft-lbs**
  - i. Katech recommends torquing the cam bolt by holding the rear of the cam using an LT cam torque tool, seen below



- e. Remove the timing chain tensioner pin
- f. Install the oil pump of choice per manufacturer's specifications, ensuring correct alignment



- g. Prior to installing the cover, apply RTV sealant to the perimeter of the crank seal and install the crank seal into the cover using the proper seal install tool. Wipe off excess RTV following install
- h. Install the supplied cover dowels in the holes seen below using a small dab of Loctite retaining compound (green)



- i. Install the oil pump flow control valve harness to the cover
- j. Apply RTV sealant to the back of the cover
- k. Install the cover on to the engine and torque the 10 M8 bolts to **18 ft-lbs**, making sure the two longer bolts go in the bottom two bolt holes
- l. Install the camshaft position sensor and sensor harness, using the supplied M6 bolt and stanchion where required for the harness bracket. Torque both M6 bolts to **88 in-lbs**
  - i. If engine is equipped with non-caged camshaft position sensor harness bracket, bracket may need modified for camshaft position sensor clearance
- m. Proceed with engine assembly

