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

# ***KAT-A7854***

## ***LT Race Dry Sump Front Cover Kit Instructions***





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

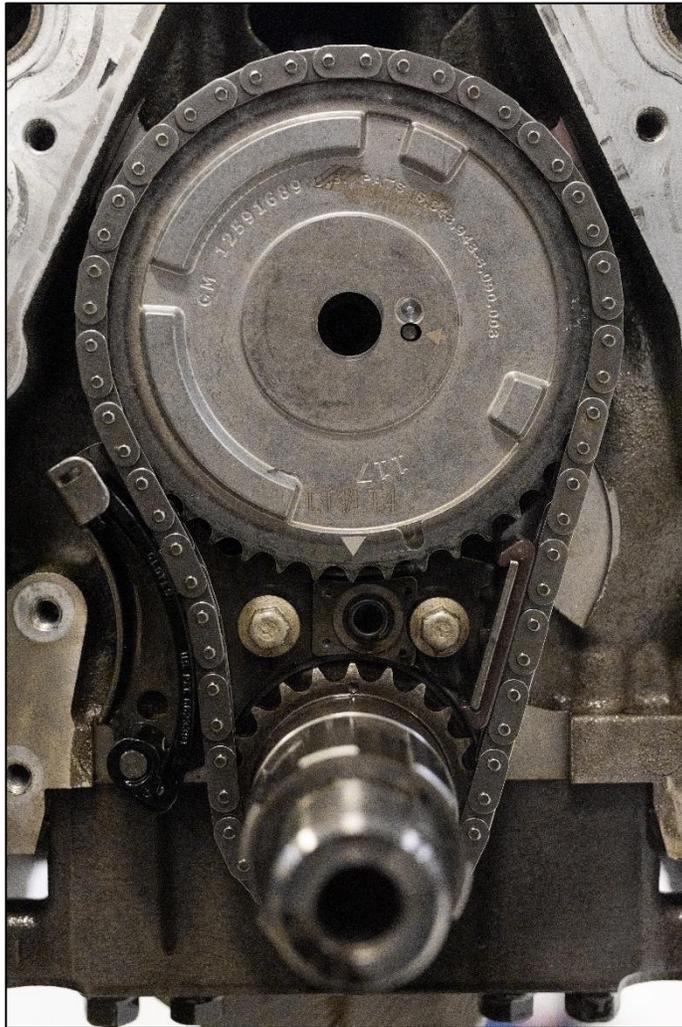
- a. KAT-7669 Katech LT Race Dry Sump Front Cover
- b. KAT-7670 Katech Front Seal Carrier
- c. Seal Carrier to Front Cover O Ring
- d. Front Seal
- e. Katech VVT Delete Cam Sprocket
- f. Katech Cam Sprocket Bolt
- g. Front Cover Bolts (10)
- h. Seal Carrier Bolts (6)
- i. Front Cover Locating Dowels (2)

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

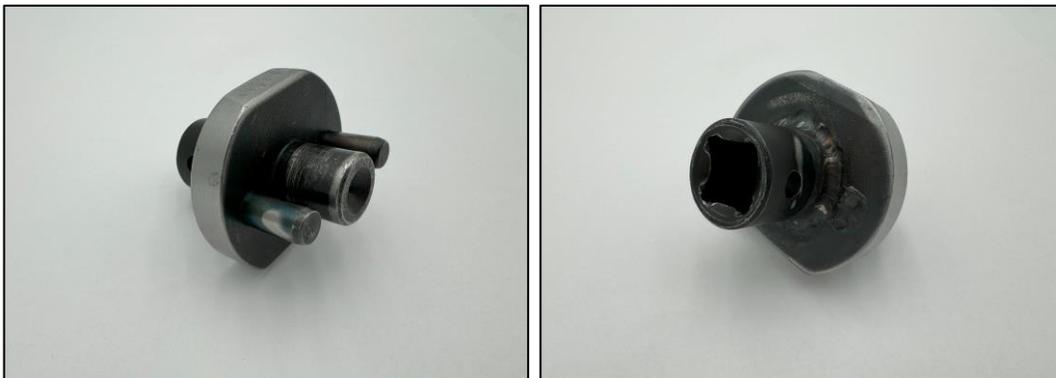
- a. Metric Socket Set
- b. Torque Wrench
- c. Front Seal Install Tool
- d. LT Cam Torque Tool
- e. Loctite Retaining Compound
- f. RTV Sealant

## ***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. The oil pressure port on the front of the block that is normally fed by the oil pump, ***MUST BE PLUGGED*** for use with this cover
- c. 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>
- d. Ensure to properly align the cam and crank sprockets so that the ***LASER ENGRAVED ARROW*** on the cam sprocket points down toward 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***



- e. 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



- f. Remove the timing chain tensioner pin



- g. Prior to installing the cover, install the crank seal into the cover using the proper seal install tool
- h. Install the supplied cover dowels in the holes seen below using a small dab of Loctite retaining compound (green)
  
- i. Apply RTV sealant to the back of the cover
- j. Install the cover on to the engine and torque the 10 M8 bolts to **18 ft-lbs**,
- k. Install the camshaft position sensor and torque the M6 bolt to **88 in-lbs**
- l. Proceed with engine assembly

