



2816 Centennial Road

Salina, KS 67401

785-825-6166

www.innovatorswest.com

E-Mail – sales@innovatorswest.com

HellCat Install Instructions



Installation Notes:

Gates Belt # K100594 (or equivalent) is required for Overdrive Dampers when used with the factory supercharger pulley. This belt is available at most local auto parts stores or industrial supply house. For applications using aftermarket diameter idler pulleys or aftermarket supercharger pulleys, the belt length may need to be increased or decreased to fit your application.

The factory bolt is torque to yield and should only be used one time. The included crank bolt is a non-torque to yield bolt and may be reused is needed. Make sure to apply some red Loctite to the supplied crank bolt prior to tightening to **130 ft-lbs.**

Use the supplied Extreme Pressure lube on the inside of the damper hub, outside of the crank snout and under the head of the bolt. This lube will help the damper install and remove easier. Additional lube can be purchased from Innovators West if needed.

DO NOT remove the hub from the damper case. Install as a complete assembly!

Overdrive dampers will require grinding on the factory air conditioner mounting boss (lower drivers side of the timing cover) and a bolt head for clearance (located at approximately 10 o'clock in relation to the crankshaft snout). Measure over 4.5" from the center of the crankshaft and make a mark on the front cover a/c mounting boss and the bolt head located on the passenger side of the cover. This mark will indicate how much of the bracket and bolt head must be removed for proper clearance.

Innovators West Damper Install Video:

https://www.youtube.com/watch?v=S0swLZ3Q_sA&t=160s

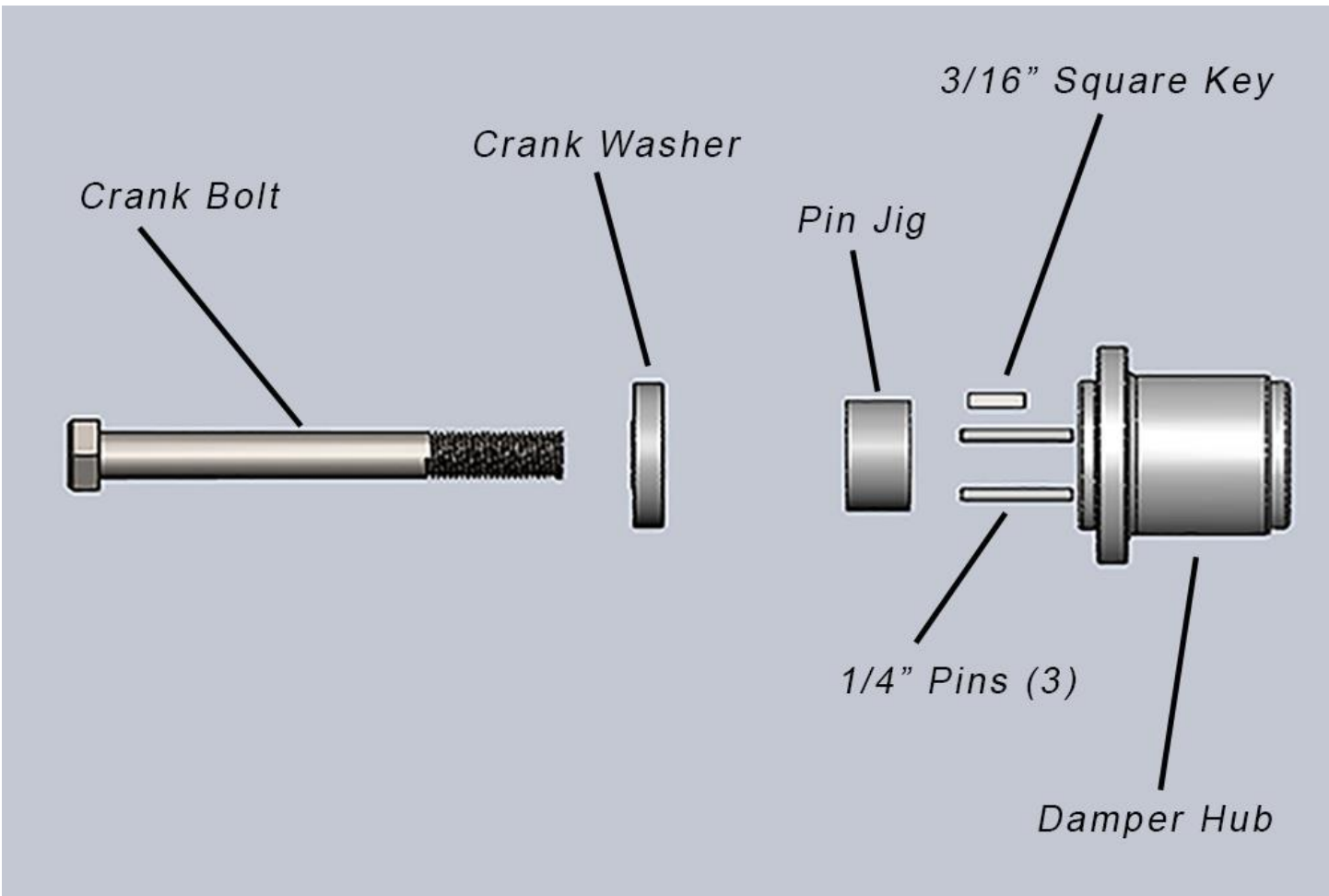
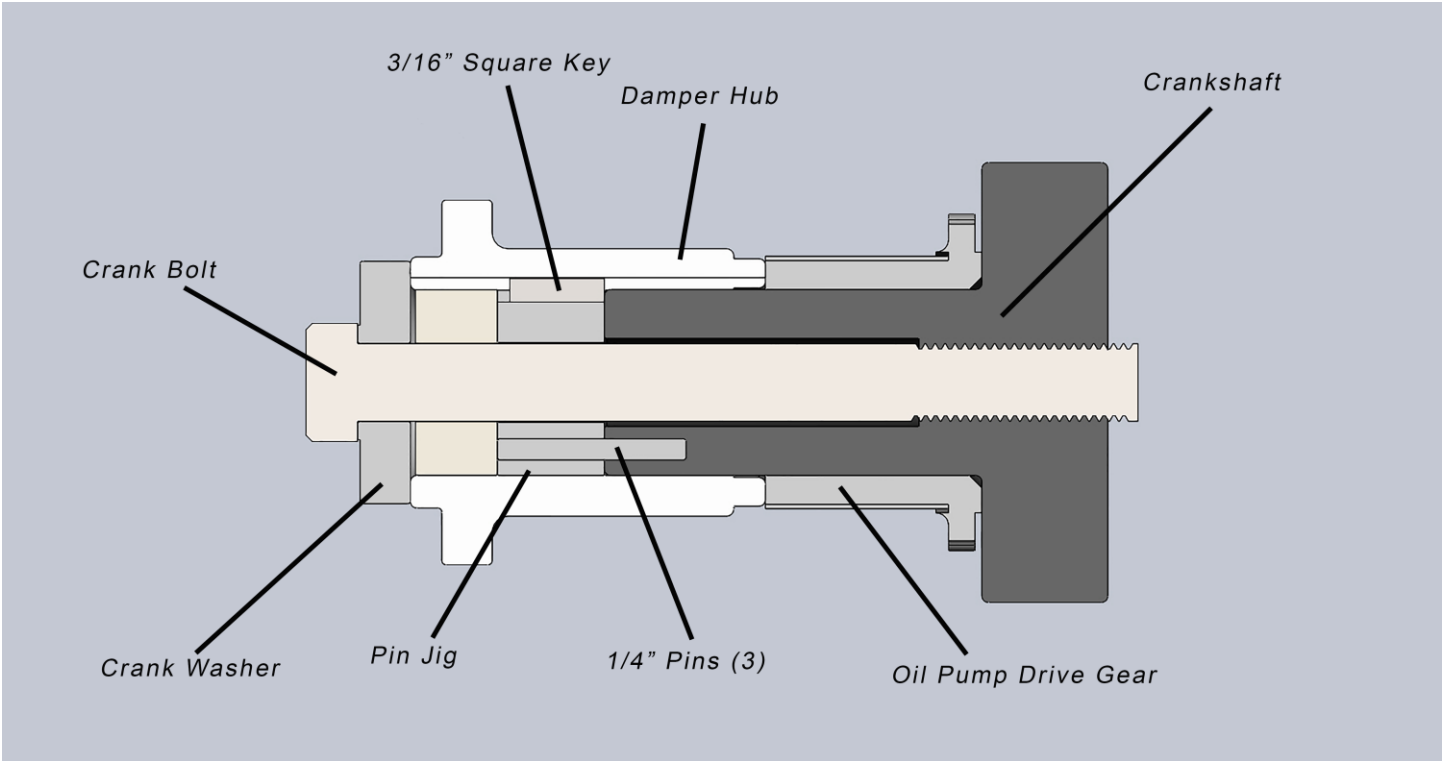
Once the damper is installed the included pinning kit will be used to secure the damper to the stock crankshaft snout. Please see the included, separate pin kit install instruction sheet for details and pictures.

Pin Kit Instructions:

- 1 – Install harmonic damper onto crankshaft as per damper install instructions.
- 2 – Remove pin kit from the package.
- 3 – Install keyway into the machined keyway in the pin drill jig.
- 4 – Insert pin drill jig into the hub of the harmonic damper.
- 5 – Using the 3 provided holes in the jig, drill into the end of the crankshaft .750" deep (piece of tape on the drill bit can be used as a depth guide)
- 6 – Using compressed air, blow out the drill jig and crankshaft threads. Aerosol cleaner can be used to ensure that the threads and holes are completely clean and debris free.
- 7 – Take the 3 pins provided in the kit and tap them into the 3 holes in the pin jig. Make sure that the pins are fully seated into the crank and are not sticking out of the face of the drill jig.
- 8 – Install the provided crank bolt and washer and torque to 130 ft. lbs

Innovators West Pin Kit Install Video:

<https://www.youtube.com/watch?v=7hrFYigTU6c>



Removal Notes:

Removal of 3 of the 6 - 5/16" socket cap screws holding the case to the hub will allow for a pulley to be secured to the damper for removal (see picture below). These socket cap screws are 5/16" – 18 thread pitch and will allow your removal tool to be bolted into the steel hub at the rear of the damper for removal of the damper as a complete unit.



Bolt Torque Specs:

During installation or when reinstalling after removal, it may be necessary to torque fasteners on the damper. The following chart can be used for bolt torques with the Innovators West dampers.

- 5/16-18 Bolts – 20 ft-lbs
- 3/8-16 Hub Bolts (Steel threads) – 30 ft-lbs.
- 3/8-16 Pulley bolts (Aluminum threads) – 25 ft-lbs.

For any other fastener torque specs, please call Innovators West at 785-825-6166.