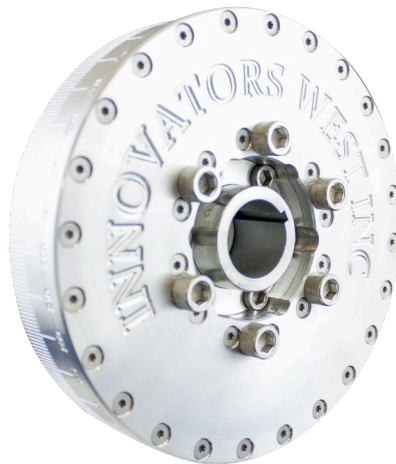




2816 Centennial Road
Salina, KS 67401
785-825-6166
www.innovatorswest.com
E-Mail – sales@innovatorswest.com

Harmonic Damper Install Instructions



Installation:

Use a proper damper installer to install the damper. Do not use a factory or aftermarket bolt to draw the damper onto the crank. Failure to use the proper installer may result in damage to the damper, crankshaft bolt or crankshaft threads. **DO NOT** remove the hub from the damper case. Install as a complete assembly! The damper should install with a press fit. **DO NOT** hone the hub for a slip fit.

1. Inspect the crankshaft snout for any burrs, nicks and imperfections.
2. Inspect your crankshaft key and replace if necessary.
3. 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.

4. Press the damper onto the crankshaft using the proper install tool.
5. **DO NOT** apply direct heat to the damper (ie an open flame/torch). The concentration of heat may damage the components inside the damper.
6. Apply some red Loctite to the crank bolt and torque to the bolt manufacturer's specifications.

Removal:

Use a proper damper puller (such as shown below) to remove the damper from the crankshaft. Make sure to attach the damper to two or more of the cap screw bolts that are threaded into the hub of the damper. Use of the bolts that attach the pulley to the damper may result in damage to the case of the damper or pulled threads.

1. Remove the crankshaft bolt.
2. Remove 3 of the 6 inner 5/16" – 18 socket cap screws that secure the damper case to the hub.
3. Using a proper damper puller, remove the damper from the crankshaft. (Make sure that the center bolt of the damper puller is not exerting its force directly to the end of the crankshaft as damage to the crankshaft or bolt threads may be possible)
4. Reinstall the removed hub bolts back into the damper. Torque the bolt to between 18-20 ft-lbs.



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.