

# **BHJ Products, Inc.**

Parts List & Instructions

Product Name: Harmonic Damper Installer BHJ Part#: HD-1

### **Kit Contents:**

1x Installer Body

**3x** Thread Adapters (1/2", 5/8", 34")\*

**1x** 3/8-24 x 5" Grade-8 Bolt **1x** 7/16-20 x 5" Grade-8 Bolt

### \* Other Thread Adapters available separately

#### Description

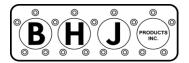
The HD-1 Harmonic Damper Installer is a high quality, precision-machined tool that enables the proper press-fit of all harmonic dampers and is designed for a lifetime of use.

Manufactured from alloy steel and fully heat-treated, the HD-1 incorporates a Torrington thrust bearing and washers for smooth, effortless damper installation.

## Operation

- 1. Select Thread Adapter size required for the crank snout thread.
- 2. Select one of the two 5" bolts needed for use with the Thread Adapter and install bolt through HD-1 installer body, with hex-head end of the bolt away from bearing end of body.
- 3. Apply anti-seize, or other lubricant of choice, to threads of 5" bolt and install Thread Adapter onto threaded end of 5" bolt.
- 4. Turn the 3/4" threaded center stud clockwise, into hex drive & bearing portion of installer body as far as necessary, to allow the Thread Adapter to fully thread into crank snout, with damper in the "ready" position on crank. The flats on the end of the center stud must protrude forward of the body, to enable securing with a wrench during damper installation.
- 5. Liberally apply anti-seize, or other lubricant of choice, to the outside threads of the Thread Adapter, in preparation for installation into crank snout.
- 6. Have one 9/16" and one 1-1/4" wrench available for installation process.
- 7. Install Thread Adapter through damper and into crank snout thread, until fully-seated and tool is supported in place.

Page 1 of 2



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Page 2 of 2

- 8. Place 1-1/4" wrench on hex drive and 9/16" wrench on center stud flats. Begin turning hex drive clockwise, while preventing center stud from turning, using the 9/16" wrench. The installer body will snug-up against the face of the damper and begin pressing it onto the crankshaft snout. Continue installation until damper is fully-seated against timing gear.
- 9. Once damper is fully installed, turn hex head of 5" bolt counterclockwise, to loosen connection with crankshaft and remove tool from crank/damper assembly.
- 10. It is advised to spray the parts with a rust inhibitor, if they are to be stored for an extended period, to protect threads and other surfaces.

# **Installation Tech Tips**

#### **Press Fit:**

If the damper has excessive interference fit (press fit), it will be very difficult to install and damage may occur to the damper bore, damper keyway and/or crank snout. See recommended interference fit for various damper materials, below. Measurements should be made with a micrometer (crank O.D.) and dial-bore gauge (damper I.D.), for maximum accuracy. Dampers may be honed to remove excess interference fit.

Steel Hub Damper: .0015/.0010" Cast Iron Hub Damper: .0020/.0015" Aluminum Hub Damper: .0020/.0015"