



# BHJ Dynamics

## Installation Instructions

Product Name: **Billet Pro Harmonic Damper: Steel Hub, Press Fit**

### **DO NOT ATTEMPT TO INSTALL DAMPER UNTIL YOU HAVE READ THESE INSTRUCTIONS**

**Any Modifications To This Damper, Other Than Honing The Bore To Fit The Crankshaft & Drilling Of Balancing Holes As Specified Below, Will Void All Warranties.**

This is an aftermarket high performance part, not a direct factory replacement, and as such may differ somewhat in size than your original harmonic damper. As with any aftermarket bolt-on part, some minor modification of surrounding parts may be necessary prior to installation of this part. Unless specifically ordered otherwise, BHJ Harmonic Dampers are manufactured to match critical OEM mounting dimensions. As such, all OEM accessory drives should line up without difficulty.

**ALL HARMONIC DAMPERS, OF ANY TYPE OR MANUFACTURE, ARE SENSITIVE TO TEMPERATURE EXTREMES. IF DYNAMOMETER TESTING IS TO BE PERFORMED IT IS ADVISABLE TO ASSURE THAT THERE IS ADEQUATE COOL AIR CIRCULATING TO PREVENT THE DAMPER FROM OVERHEATING DUE TO INTERNAL HEAT GENERATION.**

#### **1. Crankshaft Fit**

##### **a) Steel Hub Dampers – Press Fit**

Internal diameter has been honed to minimum OEM tolerance. In many instances, this will create an excessively tight press fit. Carefully measure your crankshaft snout diameter and hone the bore of the damper to give a **.0010/.0015” press fit**. This operation must be performed with the utmost care as too loose a fit will cause the damper to move and damage the keyway and too tight a fit may cause the damper to gall and weld itself to your crank. We highly recommend the use of an anti-seize compound or press-fit lubricant, as a steel hub is not as forgiving as a stock cast iron hub.

#### **2. Installation**

**DO NOT INSTALL THIS DAMPER WITH A HAMMER!**

All dampers should be installed with a proper press-on installation tool. They are available from a number of manufacturers, including BHJ. (Order BHJ Part No. HD-1)

#### **3. Balance (Internally Balanced Engines)**

All neutral-balance dampers have been factory balanced. However, we highly recommend that you have your balance shop check the BHJ Damper against your existing damper; since some balance shops have been known to utilize an out of balance damper as part of a balanced assembly. If any additional balance holes are required, they should be drilled as follows:

Maximum Drill Diameter ---- 3/8”  
Maximum Hole Depth ---- 1/4”

#### **4. Balance (Externally Balanced Engines)**

We have attempted to duplicate the OEM imbalance as closely as possible, but due to the fact that the stock damper is a casting, it is virtually impossible to duplicate the size of the weight...

**THEREFORE THIS DAMPER MUST BE MATCH-BALANCED TO THE ENGINE ASSEMBLY.**

All balance holes should be drilled in the hub only, the balance weight can be lightened or Mallory metal can be added to increase the weight.

#### **5. Cleaning**

Do not dip or soak this damper in any type of solvent. Doing so will damage the elastomer, leading to premature damper failure and will void the warranty. Cleaning should be done only with a cloth moistened with cleaning solvent.

**NOTE: ALL DAMPERS MUST BE CLEAR-COATED, PAINTED OR MAINTAINED WITH RUST INHIBITOR TO PREVENT OXIDATION.**

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