

**Professional  
Products®**

## INSTALLATION INSTRUCTIONS FOR 80030 AND 90030 HARMONIC DAMPER

Fits 1992-'96 LT-1 Corvette, and 1993-'97 LT-1 Chevy Camaro, Pontiac Firebird, Chevy Caprice, Impala, and Buick Roadmaster. Will not fit 1996-'97 LT-4 Corvette and Camaro.

This damper is designed to fit the late version LT-1 small block Chevy V8. (Note that Chevrolet also had a high performance engine built back in the '70's that was also called the LT-1. This damper is not for that engine.)

**Kit Contents:** Damper • Hub • Crank Spacer (Steel) • Hub Spacer (Aluminum) • (3) 7/16"-14 x 1" long bolts • (3) 7/16" x 14 x 1-1/2" long bolts • crank to damper key • (3) 7/16" lock washers.

**General Information:** This damper arrangement is essentially the same as the factory setup. The factory uses three different hubs. We cover that with one hub and two spacers. The hub is a press fit onto the crank. The damper then bolts to the hub. Note that the hub and damper are designed to only go together one way. Although the stock damper hub does not have a keyway in it, the crank does have a provision for a key. Our hub has a keyway and we recommend that you use a key. While the stock damper does not have any timing marks on it, due to the design of the stock ignition, our damper does include timing marks for those setups where timing marks are desired. When you install the damper on our hub, you will find that due to one hole being offset, plus our alignment pin, you can only assemble it one way.

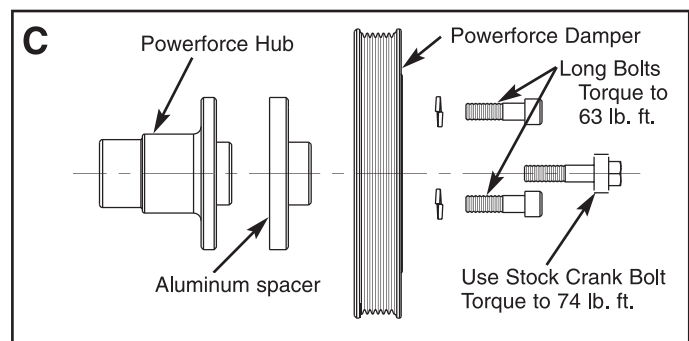
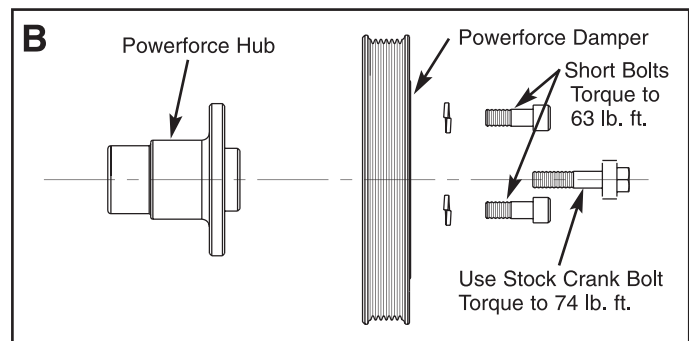
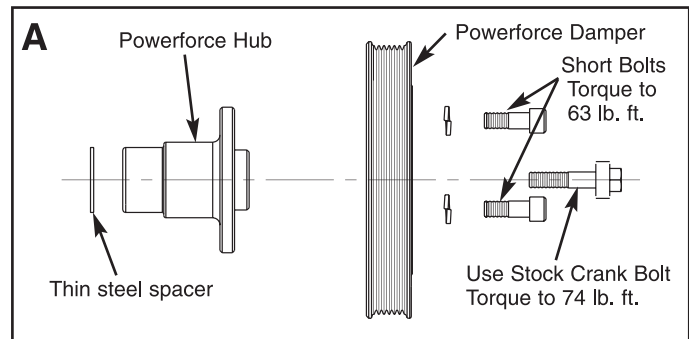
**IMPORTANT NOTE:** The damper is assembled from the factory in configuration B, see drawing at right. However, note that the bolts are not tight. For any of the three configurations you will need to unbolt the damper from the hub first as the hub should be installed onto the crank by itself without the damper. See "Installation of New Damper" below.

**Removal of old damper:** Unbolt damper from hub. Use steering wheel puller to pull hub off of crank. To fit 7/16" bolts thorough puller may require grinding of slots. (Note: Stock hub may be used (with 80030 only, not 90030) if you do not plan to use a key. However, our hub is made of steel and the stock hub is cast iron so we recommend using our hub in any high performance application and it must be used where SFI-specs apply. If you do use the stock hub, **do not** use any of the spacers in our kit. Use short set of bolts.)

**Installation of new damper:** Note that installation varies depending upon year and model of the vehicle. These instructions provide the necessary information. In every instance, we recommend installing the hub with a damper installation tool. Make sure the crank snout is free of any scratches or burrs. It may be polished with a fine emery paper or steel wool. We suggest that a new oil seal be installed in the timing cover. Smear the crank and the hub bore with clean engine oil. Install key (if you are using the key) and carefully align keyway in hub with key in crank. Note that if you attempt to press the hub onto the crank without the key being properly aligned, you could severely damage the hub and possibly the crank. Install damper to hub, correctly aligning damper to hub. It has one mounting hole that is offset and can only go on one way. Install three bolts holding damper to hub. Torque bolts to 63 ft. lbs. of torque. Use original stock crank bolt and washer to install damper, remove bolt, then use new GM bolt (12557840) with original washer and torque to 74 lb. ft. of torque.

Note that there are three different versions of the late model LT-1 damper. Please pay careful attention to the way the various components in this damper kit are assembled in order to fit your particular application.

- A LT-1 1992-'95 Corvette and 1993-'95 Camaro & Firebird:** Install thin steel spacer onto crank. Install supplied hub onto crank. Install damper onto hub. Do not use aluminum spacer. Use short set of bolts to secure damper onto hub. See Illustration A.
- B LT-1 1996 Corvette and 1996-'97 Camaro & Firebird:** Install supplied hub onto crank. Do not use steel spacer. Install damper onto hub. Do not use aluminum spacer. Use short set of bolts to secure damper onto hub. See Illustration B.
- C LT-1 1993-'97 Caprice, Impala, & Roadmaster:** Install supplied hub onto crank. Install aluminum spacer onto hub and damper onto aluminum spacer. Use long set of bolts to secure damper to spacer and hub. Torque bolts to figures given. See Illustration C.



**Important: Follow torque recommendations on bolts!**