

# INSTALLATION INSTRUCTIONS

### INSTALLATION INSTRUCTIONS FOR THE FOLLOWING:

# 74267..... Chevrolet 396-427 V8 – **Supercharged** applications.

This damper has been specially designed for supercharged applications with 6 tapped holes which align with most blower pulleys as well as a second larger 1/4" keyway for very high-performance applications.

For a limited number of supercharger pulleys you may have to enlarge the six bolt holes in the supercharger pulley to align properly with the tapped holes in the damper. Not all supercharger pulleys use exactly the same bolt circle diameter but they are close enough that slight enlargement of the pulley holes will ensure correct alignment.

Some supercharger kits supply an aluminum V-belt pulley which bolts to the stock three hole damper bolt pattern and then the blower pulley bolts to the aluminum V-belt pulley. We recommend drilling out the six tapped holes in the aluminum V-belt pulley and then fitting longer bolts which bolt both the supercharger pulley and the V-belt pulley directly to the six holes in the PRO/RACE Supercharger damper. If you elect to discard the V-belt pulley for any reason you will need to fashion some type of centering spud to align the supercharger pulley with the damper.

The second keyway in the damper accepts a standard 1/4" key. It is common practice with many supercharger engines to machine a second keyway in the crank to avoid shearing the stock single key. This is usually only necessary on setups exceeding 12 pounds of boost or for competition applications.

<u>NOTE:</u> The PRO/RACE "ALL STEEL" Crankshaft Vibration Damper has a specially machined inner bore, sized for an interference fit to the crankshaft which requires special attention prior to installing.

- 1. Engine must be completely cold.
- 2. Remove original Damper, using a Damper puller or removal tool.
- 3. Check the end of the crankshaft to ensure that the snout has been drilled and threaded 7/16" UNF (some early model cranks require this modification).
- 4. Inspect crankshaft snout to ensure there are no burrs or rust, if required polish with very fine emery paper or steel wool, wash clean.
- 5. Examine key(s), should the key(s) be damaged or loose in the key-way groove of the crankshaft, install a new key.
- 6. Replace the front timing cover oil seal.
- 7. The PRO/RACE Crankshaft Vibration Damper can be installed just like any other Damper using a Damper installation tool. However, you can make installation much easier by immersing the Damper in boiling water for 15 minutes or placing in a pre-heated oven at the lowest temperature (max. 250°F or 120°C) for 15 minutes. This process will expand the hub of the Damper.
- 8. If you are <u>NOT</u> using a professional installation tool, it is **ESSENTIAL** that the Damper be preheated as outlined in step 7. above, to expand the hub. All subsequent steps will need to be followed carefully.



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- 9. Smear crank snout and the timing case oil seal with clean oil.
- 10. If you are not using a Damper installation tool, remove Damper from boiling water (or oven), using insulated, heat proof gloves. Smear bore of Damper with oil.
- 11. Immediately locate Damper on to the crankshaft and rotate until the hub locates in the key-way.

## IMPORTANT - DO NOT ALLOW DAMPER TO COOL.

- 12. If using a professional Damper installation tool, install the Damper following the instructions supplied with your installation tool and ignore step 13.
- 13. If you are not using an installation tool, quickly, utilizing a block of aluminum to protect the machined face, drive the Damper on the crankshaft.
- 14. Promptly reinstall the Damper retaining bolt and washer and tension to 65 lb/ft torque.

## NOTE: Use LOCTITE to secure the crankshaft and pulley bolts.

- 15. Check that the pulley alignment is correct.
- 16. Recheck for adequate clearance of all components before re-starting engine.
- 17. Should you have any difficulty installing your PRO/RACE Damper, please contact your local PRO/RACE Distributor.

<u>NOTE:</u> Chevrolet has used two different TDC locations. The PRO/RACE Damper is designed to be used in-conjunction with the aftermarket "bolt-on" style timing tab indicator.

Should you have any difficulty fitting your PRO/RACE "All Steel" Crankshaft Vibration Damper, please contact:

PRO/RACE Performance Products

Email: <a href="mailto:tech@pro-race.com">tech@pro-race.com</a>
Website: <a href="mailto:www.pro-race.com">www.pro-race.com</a>

OR alternatively please contact your place of purchase or closest Distributor.