



## INSTALLATION INSTRUCTIONS

#64272... Ford 429-460 cu. inch V8

Will suit FE series Race Engines with modification?

**IMPORTANT: Before attempting installation please read these instructions fully.**

**NOTE:** The PRO/RACER "All Steel" Crankshaft Vibration Damper has a precision machined inner bore which requires special attention prior to fitting. It is also important to note that your PRO/RACER Damper is supplied "IN BALANCE" condition, therefore, if any balancing operations are to be carried out on the engine, weight must be added or removed from the crankshaft only.

**IMPORTANT: DO NOT drill any holes in your PRO/RACER Damper as this may void SFI -18.1 Certification**

1. Engine must be completely cold.
2. Remove water pump.
3. Rotate Engine by hand until timing pointer indicates 0° TDC. Remove original Damper carefully, using Damper puller tool.
4. The 429-460 Engine family has used several different timing pointer locations. Most applications will have the timing pointer at the "10 O'CLOCK" position. The PRO/RACER Damper has two keyways, a 1/4" and a 3/16". The 1/4" keyway will correctly position the Damper on a production crankshaft (or custom crank with crank post machined to production spec.) so that a "10 O'CLOCK" pointer lines up with 0° TDC on the Damper. The 3/16" keyway is used for locating the Damper on the Ford SVO M-6303-A600 crankshaft (a component of the M-6011-A600 short block kit). The "10 O'CLOCK" timing pointer should align with 0° TDC on the Damper. If the timing pointer is not aligned with TDC on the Damper, please contact your PRO/RACE Tech-line.
5. Inspect crankshaft snout and ensure there are no burrs or rust. If required polish with very fine emery paper or steel wool, wash clean.
6. Examine key, should the key be damaged or loose in the keyway groove of the crankshaft, install a new key.
7. Replace the front timing cover oil seal.
8. Install the crankshaft spacer. NOTE: The PRO/RACER Damper will require a different length spacer when used on Ford SVO M-6303-B600 crankshafts. Use Ford SVO spacer part M-6359-C460 for internally balanced Engines (no counterweight). For externally balanced Engines, the production spacer (counterweighted) can be machined to the correct length.
9. The PRO/RACER Damper can be installed 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.
10. If you are NOT using a damper installation tool, it is **ESSENTIAL** that the Damper be pre-heated as outlined in step 9. above, to expand the hub. All subsequent steps will need to be followed carefully.
11. Smear crank snout and the timing case oil seal with clean oil.
12. Remove Damper from boiling water (or oven), using insulated, heat proof gloves. Smear bore of Damper with oil.
13. Immediately locate Damper on to the crankshaft and rotate until the hub locates in the key-way.

**IMPORTANT - DO NOT ALLOW DAMPER TO COOL**

.... turn over

14. If using a Damper installation tool, install the Damper following the instructions supplied with your installation tool and ignore step 15.
15. 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.
16. Promptly reinstall the Damper retaining washer and bolt then tension to 90 lb/ft torque. Recheck torque after Damper has cooled completely. Use LOCTITE to secure the crankshaft and pulley bolts and spigot sleeve in Damper.
17. The PRO/RACER Damper has been machined with the standard Ford 4 bolt crank pulley pattern, and the Big Block Chev. 3 bolt patterns. This allows the use of most popular crank trigger setups, including MSD and Moroso units for competition applications or standard Ford accessory drive capability for front dress applications. Pulley sheave alignment must be checked. The crankshaft spacer length should be adjusted to correct any misalignment.
18. Before reinstalling water pump, ensure there is a minimum of  $\frac{1}{8}$ " clearance between Damper Inertia Ring and the water pump housing, check that the pulley alignment is correct.  
**WARNING:** Some cast iron water pumps have a casting lug which must be ground off to clear Damper Inertia Ring.
19. Re-check for adequate clearance of all components before re-starting engine.

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

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