



## INSTALLATION INSTRUCTIONS

#34272.....Ford 429-460 V8

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

**NOTE:** The PRO/SPORT SFI Bonded Steel Crankshaft Damper has a precision machined inner bore which requires special attention prior to fitting. It is also important to note that your PRO/SPORT 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. The PRO/SPORT Damper will suit both internally and externally balanced applications - externally balanced crankshafts use a Ford production spacer which is counterweighted accordingly. No counterweight is required in the Damper for internally balanced applications.

**IMPORTANT:** DO NOT drill any holes in your PRO/SPORT 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/SPORT 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 Performance Parts 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/SPORT distributor.
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. Check the height of the installed key – "it must be less than the keyway depth in the Damper by at least .025" to allow Damper installation.
7. Replace the front timing cover oil seal.
8. Install the crankshaft spacer. NOTE: The PRO/SPORT Damper will require a different length spacer when used on Ford Performance Parts M-6303-B600 crankshafts. Use Ford Performance Parts spacer part M-6359-C460 for internally balanced Engines (no counterweight). For externally balanced Engines, the production spacer (counterweighted – which is also available from Ford Performance Parts as M-6359-D460) can be machined to the correct length.
9. The PRO/SPORT Damper can be installed using a Damper Installation Tool. However, you can make installation much easier placing Damper 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.

..... turn over

12. If you are not using a Damper Installation Tool, remove Damper from 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**

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 a Damper 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 bolt and washer and tension to 90 lb/ft torque. Ensure the crank snout is recessed in the Damper and does not contact the retaining bolt washer or proper bolt torque will not be achieved. Recheck torque after Damper has cooled completely. Use LOCTITE to secure the crankshaft and pulley bolts and spigot sleeve in Damper.
17. The PRO/SPORT 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 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 ring.
19. Re-check for adequate clearance of all components before re-starting engine.

Should you have any difficulty fitting your PRO/SPORT Damper, please contact your PRO/SPORT Tech-line.

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