



INSTALLATION INSTRUCTIONS

#74269 & #74270 Ford Small Block V8 Supercharger Damper.
Suits factory externally balanced engines.

IMPORTANT: BEFORE ATTEMPTING INSTALLATION PLEASE READ THESE INSTRUCTIONS FULLY.

NOTE: 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 factory "IN BALANCE" condition, therefore, if any balancing operations are 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

NOTE: PRO/RACER #74269 and #74270 crankshaft Dampers are machined with a second ¼-inch keyway. This is for supercharged engines that run high boost as they require dual keys to prevent the single OE 3/16 key from shearing.

1. Engine must be completely cold.
2. Remove water pump.
3. Remove original Damper carefully, using Damper Puller or Removal Tool.
4. Ford has used three different TDC (Top Dead Center) locations in the SB V8 engine family and to accommodate all timing pointer locations. The PRO/RACER Damper has been engraved with 3 sets of timing marks at various locations, only one will be used in timing operations. To determine which set of timing marks to use on your PRO/RACER Damper you can either compare to the original Damper by aligning keyways and marking the appropriate set of timing marks on the PRO/RACER Damper which corresponds to the timing marks on the original Damper. Alternatively, on your engine, rotate the crankshaft until the key in the crank snout is pointing straight up in the 12 o'clock position. Temporarily align the PRO/RACER Damper keyway with the key in the crank snout and observe which set of timing marks on the Damper lines up with your timing pointer.

When you have determined which set of timing marks suits your engine, you may want to highlight the degree mark for your initial timing setting (or full advance setting if you power time your engine) with paint, or pen. White or yellow will show up best.

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.

NOTE: This Damper utilises an oversized oil seal diameter, the standard oil seal will not fit. A suitable oil seal has been provided with the Damper (for future replacements use Chicago Rawhide #20520).

8. 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.

...turn over

9. If you are NOT using a Damper installation tool, it is **ESSENTIAL** that the Damper be pre-heated as outlined in step 8. to expand the hub. All subsequent steps will need to be followed carefully.
10. Smear crank snout and the timing case oil seal with clean oil....
11. Remove Damper from boiling water (or oven), using insulated, heat proof gloves. Smear bore of Damper with oil.
12. Immediately locate Damper on to the crankshaft and rotate until the hub engages into the key-way.

IMPORTANT - DO NOT ALLOW DAMPER TO COOL

13. If using a Damper Installation Tool, install the Damper following the instructions supplied with your installation tool and ignore step 14.
14. If you are not using an installation tool, quickly, utilizing a block of aluminum to protect the machined face, drive the Damper onto the crankshaft.
15. Promptly reinstall the Damper retaining washer and bolt then tension to 90 lb-ft torque.
16. Ford has used many different styles of Dampers with various pulley spacings, bolt hole and spigot combinations. For all supercharged engines a correct length solid pulley spacer should be used, these can be sourced from your local Ford Performance parts dealer.

NOTE: -The PRO/RACER Damper is drilled to accept both 3 & 4 Ford pulley bolt hole patterns.

-Use LOCTITE® to secure the crankshaft and pulley bolts and spigot sleeve in Damper.

17. 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 the Damper Inertia Ring.

18. Re-check for adequate clearance of all components before re-starting engine.

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

USA:	PRO/RACE	Tel: 734 740 0922	
Australia:	PRO/RACE Tech-line	Tel: +61 3 9584 3522	Fax: +61 3 9584 5194
Email:	tech@pro-race.com	Website: www.pro-race.com	