



INSTALLATION INSTRUCTIONS

INSTALLATION INSTRUCTIONS FOR THE FOLLOWING:

#74269...Ford Small Block V8 Supercharger Damper.

Suits Externally Balanced Engines through 1980.

Suits Internally Balanced Engines upon removal of the bolt-in counterweight, see note below.

Important: For special purpose race engines with an **internally balanced crankshaft**, simply unscrew the two $\frac{3}{8}$ " socket head cap screws and remove the counterweight.

Before attempting installation, please read these instructions.

NOTE: PRO/RACE "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/RACE Damper is supplied "IN BALANCE" condition, therefore, if any balancing operations are carried out on the engine, weight must be added or removed from the crankshaft only.

The PRO/RACE 74269 crankshaft damper is machined with a second $\frac{1}{4}$ -inch keyway. This is for supercharged engines that run high boost as they require dual keys to prevent the single OE key from shearing.

Important: DO NOT drill any holes in your PRO/RACE Damper.

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/RACE Damper has been engraved with 3 sets of timing marks, only one will be used in timing operations. To determine which set of timing marks to use on your PRO/RACE Damper you can either compare to the original Damper by aligning keyways and marking the appropriate set of timing marks on the PRO/RACE 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/RACE 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.

Once 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 white-out. 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 with SKF #20520 supplied with the damper.



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NOTE: This damper features 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 SKF #20520).

8. The PRO/RACE 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.
9. If you are NOT using a professional installation tool, it is **ESSENTIAL** that the Damper be pre-heated as outlined in step 8. above, 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. 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.
12. Immediately locate Damper on to the crankshaft and rotate until the hub locates in the key-way.
IMPORTANT - DO NOT ALLOW DAMPER TO COOL
13. If using a professional 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 on the crankshaft.
15. Promptly reinstall the Damper retaining bolt and washer and 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 solid pulley spacer should be used, these can be sourced from your local Ford Performance parts dealer.

NOTE: The PRO/RACE 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 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 ring.

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

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

PRO/RACE Performance Products
Email: tech@pro-race.com
Website: www.pro-race.com

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