



INSTALLATION INSTRUCTIONS

#TFS-19004.....GM LS1 Camaro & Firebird, LS2 GTO
#TFS-19005.....GM LS1, LS2 & LS6 Corvette

Important: Before attempting installation, please read these instructions.

NOTE: The TRICK FLOW 'Bracket Racer' SFI Bonded Steel Crankshaft Harmonic 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 poly-V belt(s).
3. Remove original Damper, using a Damper puller or removal tool.
4. Inspect crank snout to ensure there are no burrs or rust, if required polish with very fine emery paper or steel wool, wash clean.
5. OEM crankshafts are not machined with a key-way groove, however the TRICK FLOW damper has been machined to accept 3/16" keys for circumstances when an aftermarket crankshaft with key-way groove is used, or if the OEM crankshaft has been custom machined. If appropriate install a new key in the crankshaft key-way groove and ensure the height of the key does not hinder damper installation.
6. Replace the front timing cover oil seal.
7. The TRICK FLOW 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 **NOT** using a professional installation tool, it is **ESSENTIAL** that the Damper be pre-heated as outlined in step 7 above, to expand the hub. All subsequent steps will need to be followed carefully.
9. Smear crank snout and the timing cover 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. If a custom keyway and key is fitted, rotate damper 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 which fits into the recess of the damper to protect the machined hub face, drive the Damper hub onto the crankshaft. **DO NOT** drive the damper onto the crankshaft by the outer ring!
14. Install and tighten the old crankshaft Damper bolt to 240 lb/ft, make sure the damper is fully seated. Remove and discard the old crankshaft Damper bolt.
15. Install a new OEM crankshaft Damper bolt GM #12557840 and tighten to 37 lb/ft, and make a final pass on the damper bolt to 140 degrees.

NOTE: Use **LOCTITE** to secure the crankshaft bolt.

16. Recheck for adequate clearance of all components before re-starting engine.

Should you have any difficulty fitting your TRICK FLOW Damper, please call:

TRICK FLOW Technical Department

Tel: (330) 630 1555, email: techinfo@trickflow.com

www.trickflow.com

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