

# **Installation Instructions**

#24277: Chrysler 273 – 360 "A" series V8 Internally Balanced #24278: Chrysler 360 "A" series V8 Externally Balanced #24279: Chrysler 383 – 440 "B" series V8 incl. Hemi models\*

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

<u>NOTE:</u> \* Suits Chrysler 440 Forged crank, 361 - 383 "B" engine forged cranks (1962 - 70), 413 - 426. Also suits Street 426 Hemi with slight TDC adjustment by adding 2 degrees to the reading shown on the Damper (e.g. if the Damper shows 10 degrees, the engine timing is at 12 degrees).

<u>WARNING</u>: The PRO/STREET Nodular Iron Damper has been spin tested for one hour at 8,000 rpm and for five minutes at 12,500 rpm by the official SFI Test Lab. However, these are static continuous tests unlike the dynamic workout that a Damper receives when fitted to an engine. In actual use a Damper is subject to much more heat and harmonic stresses. As a result, we do not recommend that PRO/STREET Dampers be utilized in applications over 6,000 rpm. You must observe this warning! If Damper disintegrates at high speed, it can do serious damage to your vehicle or serious injury to anyone who might be in the vicinity.

WARNING: DO NOT USE PRO/STREET NODULAR IRON DAMPERS IN ANY RACING APPLICATION.

# NOTE: FOR RACING, UTILISE OUR 'ALL STEEL' PRO/RACER or PRO/SPORT SFI – SPEC 18.1 DAMPERS.

PRO/STREET Nodular Iron Crankshaft Dampers are designed to be a direct replacement of the original equipment crankshaft Damper used on your engine However, they vary in several very important areas. One, they are made of nodular iron instead of regular grey iron. Two, the elastomer (rubber) is bonded to the hub and the ring which virtually eliminates any rotation of the outer ring, a common problem with stock Dampers. PRO/STREET Dampers feature bolt-in counterweights. This provides a great degree of flexibility if you are balancing your engine or decide to switch the Damper from an external balanced engine to an internally balanced one, or vice versa.

# IMPORTANT: DO NOT drill any hole in your PRO/STREET Damper when Dynamically balancing your engine.

- 1. Engine should be completely cold.
- 2. Remove original Damper. This is best done with a Damper removal tool.
- 3. Check the end of the crank to ensure the snout has been drilled and threaded.
- 4. Inspect crank snout to ensure there are no burrs or rust. If needed, polish with a very fine emery paper or steel wool. Wash clean.
- 5. Examine key. Should key be damaged or loose in the keyway, install new key.
- 6. Replace the front timing cover oil seal.
- 7. The PRO/STREET Damper can be installed using an Installation Tool. However, you can make the installation much easier by placing Damper in a pre-heated oven at the lowest temperature (usually 250°F or 120°C) for 15 minutes. This process will expand the hub of the Damper and not damage the Damper.
- 8. If you are not using a Damper Installation Tool, it is essential that you heat the Damper to expand the Damper Bore as outlined in 7.

Turn over...

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- 9. Smear the crank snout and the timing cover oil seal with clean oil.
- 10. Using insulated heat proof gloves, remove the Damper from oven. Smear Damper bore with clean oil.
- 11. Immediately position the Damper on the crank snout. Rotate to align the keyway in the Damper with the key in the crank.

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

- 12. If using an Installation Tool, install the Damper per instructions provided with the tool. Ignore step 13.
- 13. If not using an Installation Tool, quickly, utilizing a block of Aluminum on the front face of the Damper, drive the Damper onto the crank using a large hammer or mallet. Drive the Damper on until seated against shoulder on crank.
- 14. Promptly reinstall the Damper retaining bolt and washer and torque 90 ft-lb.
- 15. Check that the pulley alignment is correct. **Note:** Some early model pulleys had an "offset" bolthole. This must be elongated with a suitable tool e.g. "rat tail" file to allow proper attachment to the Damper face.
- 16. Recheck for proper clearance of all components before restarting engine.

<u>NOTE:</u> **EXTERNALLY BALANCED DAMPERS** have bolt-in counterweights. The counterweight can be removed allowing the Damper to be used on an internally balanced engine. Counterweights are also sold separately and may be added to use an internal style Damper on an externally balanced engine.

Should you have any issues fitting your PRO/STREET Damper, please contact PRO/RACE Tech-line.

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17Sept2018