

## INSTALLATION INSTRUCTIONS

## **INSTALLATION INSTRUCTIONS FOR THE FOLLOWING:**

#64296..... Jaguar 6 cyl 3.4, 3.8 & 4.2 litre engines
Damper does not include V-pulley groove for XJ-6, 1968 & later (see item 3).

**Important**: Before attempting installation, please read these instructions.

<u>Note:</u> The PRO/RACE "All Steel" Crankshaft Vibration Damper has a specially machined inner bore, sized for an interference fit to the crankshaft which requires special attention prior to fitting. It is also important to note that our PRO/RACE 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.

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

- 1. Engine must be completely cold.
- 2. Remove original Damper and the tapered split collar, using Damper Puller or removal tool.
- 3. The PRO/RACE #64296 Harmonic Damper attaches directly onto the crankshaft of all 6-cylinder Jaguar engines without modification.

Please note that the PRO/RACE damper does not include the V-pulley groove for XJ-6, 1968 and later engines. In such applications, modifications to the alternator bracket will be required to allow use of a bolt-on style pulley to drive the alternator, and modifications may be required to correct belt alignment of other accessories.

- 4. The 3.4 and 3.8 litre models fitted with the larger diameter megulastik disc type damper may require having the attachment face of the pulley machined to correct the alignment of the "V" pulley groove.
- 5. Models prior to the XJ (1968) which had the timing pointer attached to the sump, will require the fitting of a later model timing pointer by attachment to the timing case, under the existing timing cover retaining bolts.
- 6. Inspect crankshaft snout and ensure there are no burrs or rust. If required, polish with very fine emery paper or steel wool, wash clean.
- 7. Examine key, should the key be damaged or loose in the keyway groove of the crankshaft, install a new key.
- 8. Replace the front timing cover oil seal.
- 9. 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.
- 10. If you are <u>NOT</u> using a professional installation tool, it is **ESSENTIAL** that the Damper be preheated 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.



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- 12. 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.
- 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 professional Damper installation tool, install the Damper following the instructions supplied with your installation tool and ignore step 15.
- 15. If you are not using an installation tool, quickly, utilising a block of aluminium to protect the machined face, drive the Damper on the crankshaft.
- 16. Promptly reinstall the damper retaining nut and washer, and tension to 125-150 lb/ft torque.

## **NOTE:** Use LOCTITE to secure the crankshaft and pulley bolts

- 17. Check that the pulley alignment is correct.
- 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:

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Email: <a href="mailto:tech@pro-race.com">tech@pro-race.com</a>
Website: <a href="www.pro-race.com">www.pro-race.com</a>

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