



# INSTALLATION INSTRUCTIONS

## INSTALLATION INSTRUCTIONS FOR THE FOLLOWING:

#64295 Austin Healey 100-4/100-6/3000

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

**Note:** The PRO/RACE "All Steel" Crankshaft Vibration Damper has a precision machined inner bore which requires special attention prior to installing. It is also important to note that your 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.

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

1. Engine must be completely cold.
2. Remove original Damper carefully, using Damper Puller or removal tool.
3. The PRO/RACE #64295 Damper will attach directly onto the crankshaft of all 6-cylinder Austin Healey engines fitted with 3/8" belt without modification. Some later 6-cylinder engines fitted with 1/2" belts will require fitment of the earlier 3/8" generator and water pump pulleys. The PRO/RACE #64295 Damper will also fit directly to the 4-cylinder Austin Healey engine, however this requires fitment of the narrower 3/8" "V-groove" 6 cylinder generator pulley on the 4 cylinder generator and also requires the narrower 6-cylinder 3/8" "V-groove" water pump pulley which will fit with some minor machining to the original 4 cylinder water pump to correct alignment.

**NOTE:** In high performance and racing applications, we recommend using a degree wheel and a piston stop to accurately determine TDC on your engine, to ensure best results. This is achieved by firstly mounting the degree wheel to the crankshaft. Next, mount a pointer to a convenient hole on the engine block. When mounting the wheel, engine should be rotated to place Number 1 Piston as close as possible to TDC and align the pointer with TDC on the degree wheel, and then securing the degree wheel. Using a piston stop (usually screws into spark plug hole), rotate the engine until Piston is firmly against stop, and note reading on degree wheel (at pointer). Next, rotate engine in the opposite direction until Piston is against stop and note reading.

If there are the same number of degrees on each side of TDC, the degree wheel is located perfectly. To avoid confusion, we recommend removing the timing marks on the timing cover that do not correspond to the new TDC location.

Should the number of degrees differ, the wheel will have to be relocated until there are the same number of degrees on each side of TDC. Next, remove the degree wheel and complete steps 4-11, being careful not to move the crankshaft position. The engraved TDC mark should align with the pointer indicator attached to the timing case.

4. Inspect crankshaft snout and ensure there are no burrs or rust. If required, polish with very fine emery paper or steel wool and wash clean.
5. Examine key, should the key be damaged or loose in the keyway groove of the crankshaft, install a new key.
6. Replace the front timing cover oil seal.



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7. 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.
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 case 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 and rotate 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 aluminium to protect the machined face, drive the Damper on the crankshaft.
14. Promptly re-fit the Damper retaining bolt and washer, and tension to 95 lb/ft torque. We recommend using Loctite to secure the crankshaft and pulley bolts.
15. Ensure there is a minimum of 1/8" clearance surrounding the Damper inertia ring.
16. Check that the pulley alignment is correct and 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](mailto:tech@pro-race.com)  
Website: [www.pro-race.com](http://www.pro-race.com)

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