

Fitting Instructions – R274 12/4 Gear Shaft for Half Speed Gears – Issue 1

Introduction

It is important that these shafts are correctly fitted as should they become loose in service the outcome will be significant damage to the timing gears, an expensive replacement.

Fitting a new gear shaft

1. Original shafts may need considerable force to both loosen the nut and to remove. Care should be taken during this exercise to avoid damage to the block casting.
2. The new shaft should be a light push fit in the block. If this is not the case with your engine, remedial work will be required on the block. This work will need considerable care because if the shaft is not correctly positioned timing gear meshing will be adversely affected.
3. It is essential that the following tightening instructions are followed to avoid the risk of damage to the gear shaft. This is because although the thread is $\frac{1}{2}$ " BSF, the shaft has a plugged internal drilling to provide gear lubrication and this requires a lower advised torque than members may otherwise expect on a $\frac{1}{2}$ " BSF nut.
4. With a lubricated nut and thread, tighten the nut to not more than 20 – 25lbf-ft. Some adjustment of the nut may be required to enable the split pin to be inserted, but the torque figures should NOT be exceeded as the threaded portion will begin to yield at around 28lbf – ft.