

ENGINEERING BULLETIN

Ref Document No.	EB15008	Issue No.	1
Subject	Water Pump Idler Pulley Improvement		
Release Date	19 th September 2015		

Purpose – Advise COALTRAM® owner's of a new, greasable water pump idler pulley assembly that can be installed as a product improvement.

Applicability – All in service COALTRAM® models – CT08, CT10, CT10LP, CT13

Background

The Coaltram C7 engine water pump is belt driven. The belt requires tensioning through an idler pulley that currently uses sealed bearings which require replacement at each 500 hour service. There has been multiple reported circumstances where the bearings have collapsed before their scheduled replacement.

Investigations/Findings

PPK has designed and trialled a new water pump tensioner pulley that uses bearings that have the ability to be greased. The new design replaces the sealed for life bearings with open bearings, includes grease porting in the supporting shaft and utilises v-ring seals to contain the grease and allow purging of old grease. The new design adds an extra grease point to the existing manifold mounted to the radiator cowl on the drivers side.

Trials have been completed at two separate mine sites with the new units completing over 1,000 hours without requiring the bearings to be changed.

The old and new design are shown below:

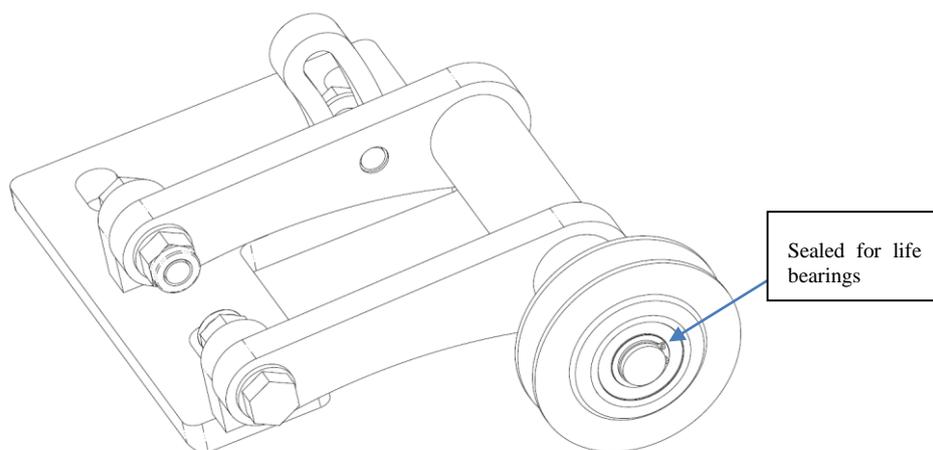


Figure 1: Original idler pulley

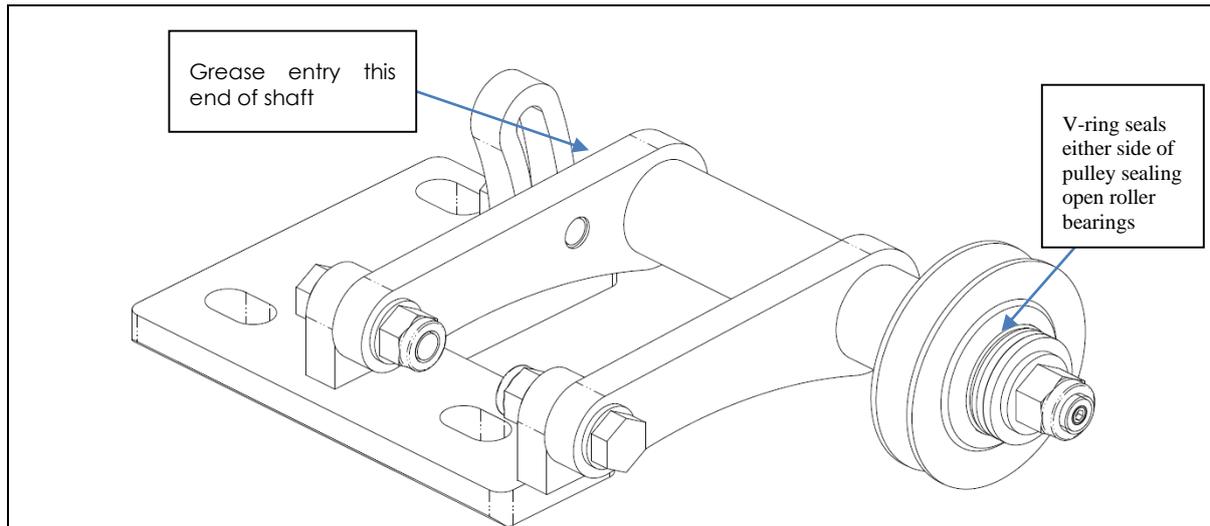


Figure 2: New greasable idler pulley

The original water pump idler assemblies will soon be superseded. There will be a short transition period as existing PPK stock is consumed and the new parts are introduced. PPK will continue to stock the replacement bearings for the original pulley though the pulley themselves are not interchangeable. Relevant updated parts book pages for the new assembly are attached to this bulletin.

Recommendations

1. PPK recommends installing the new water pump idler pulley for improved reliability and extended bearing life.
2. If the new idler pulley is installed remove the bearing change from the 500 hour service. Replace bearings (2 off - part number 5520009829) at the 1,000 hour service.
3. The retrofit components are currently available as a kit part number 5520009773. Contact your PPK service centre for organising installation or parts.

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