

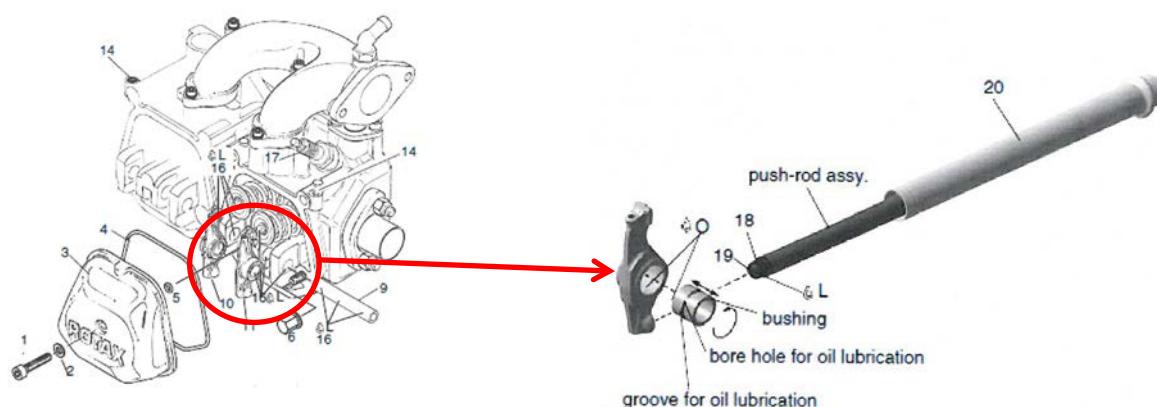
LAA/AWA/18/02
10th March 2018

Rotax 912 (Series) and 914 Engines

Valve Pushrod Assembly – Inspection/Replacement

In October 2017, Rotax Engines issued a Mandatory Service Bulletin (SB) alerting owners of 912 and 914 engines within a specific serial number range that their engines may have been fitted with incorrectly manufactured valve pushrods. LAA Engineering were made aware of this issue by the UK Rotax agent at the time and were assured that, as far as possible, all UK affected engines had been identified and pushrod replacement for these engines was underway; therefore further publicity wasn't deemed necessary.

The issue stems from a batch of pushrods manufactured with an incorrect surface finish on the rocker-arm ball socket which, in service, could result in rapid wear. Wear in this area could lead to rocker arm damage and/or malfunction of the valve train, the possible effects of this include reduced power and a rough running engine.



Since the initial publication of the Rotax Service Bulletin, LAA Engineering has become aware that there is a possibility that some engines may have entered the UK system without the knowledge of the UK Rotax agent; for example, an engine may have been purchased with a kit via an overseas agent. Also, there is a possibility that engines that have been repaired since June 2017 using replacement pushrods may have the affected parts fitted.

Rotax engines are used widely throughout the world and are fitted to both Type-Approved and non-Type Approved aircraft; for this reason, EASA have issued an Airworthiness Directive (AD) mandating the Rotax SB on aircraft operating under their umbrella. Widening this to UK aircraft operating under a Permit to Fly, the UK CAA have recently issued a Mandatory Permit Directive (MPD) requiring owners to check their engines to ensure that they do not contain the sub-standard parts; this check is only necessary if the engine has been repaired since June 2017 or falls within the serial number range defined in the Rotax SB.



The Rotax SB (912 i-008 R1/912-070 R1/914-052 R1) can be downloaded [HERE](#). The EASA AD (2017-0208, 22.12.17) can be downloaded [HERE](#). The UK CAA MPD (2018-001) can be downloaded [HERE](#).

Affected pushrods can easily be identified once the rocker covers have been removed. Pushrods with a silver finish conform to design standard, those with a black finish don't and must therefore be replaced.