

(Updated from LAA/AWA/16/05 of 20.11.15 to include recently issued MPD)

Rotax 912 & 914 (Series) Engines

Engine Temperature Measurement

A design change in the cylinder heads of Rotax 912 engines was introduced in March 2013 which meant that the measurement of engine cylinder temperature changed from the measurement of the temperature of aluminium head itself (CHT) to the measurement of the temperature of the water (Coolant Temp.) in the water jacket. Though, in most respects, the temperature gauges and the sensors themselves are very similar, there is a difference in the permissible maximum indicated temperature.

It is essential that a pilot is presented with appropriate and accurate information about the engine's performance and, most importantly, its operating temperature relative to the maximum allowable operating temperature.



Fig. 1. Picture showing a cylinder manufactured before 2013 which measures Cylinder Head Temperature (CHT); note that the sender unit faces down.

BRP Rotax have issued a Service Bulletin listing the serial numbers of engines that have been affected by this change (SB-912-066 and SB-914-047), though it's possible, for example, if a cylinder has been changed for any reason, that an affected engine could fall outside the serial number range published.

A copy of SB-912-066/SB-914-047 can be downloaded [HERE](#).

In July 2016 the LAA published an Airworthiness Information Leaflet (AIL), (LAA/ENG/ROTAX/001 issue 1) requiring owners to check the engine temperature measurement system on their aircraft at each annual inspection.

A copy of this AIL can be downloaded [HERE](#).

The UK CAA has mandated the actions laid out in Rotax SB 912-066/914-047 and LAA AIL LAA/ENG/Rotax/001 issue 1 by issuing a Mandatory Permit Directive (MPD).

The MPD (2017-01 08.02.17) can be downloaded [HERE](#).



Fig. 2. Picture showing a post 2013 cylinder assembly designed to measure coolant temperature (CT); note that the sensor faces up.