

Lycoming Service Instruction 1009 – Time Between Overhaul Extensions

8 August 2018

Issued by the Civil Aviation Authority of New Zealand in the interests of aviation safety. A Continuing Airworthiness Notice (CAN) is intended to alert, educate, and make recommendations to the aviation community. A CAN contains non-regulatory information and guidance that does not meet the criteria for an Airworthiness Directive (AD). The inspections and practices described in this CAN must still be carried out in accordance with the applicable NZCAR Parts 21, 43 and 91. CAN numbering is by ATA Chapter followed by a sequential number for the next CAN in that ATA Chapter.

Applicability:

Lycoming engines listed in Lycoming Service Instruction (SI) 1009BC dated 9 May 2018, or later approved revision.

Purpose:

The purpose of this continuing airworthiness notice is to provide guidance regarding the assessment whether an engine qualifies for a time between overhaul extensions per the requirements in Lycoming SI 1009BC.

Background:

Lycoming Service Instruction (SI) 1009BC, dated 9 May 2018, or later approved revision identifies the manufacturer's recommended Calendar Year and Operating Hour-based Time Between Overhaul (TBO) for certified Lycoming engine models operated and maintained in compliance with all applicable Lycoming Technical Publications and FAA Airworthiness Directives.

FAA issued Type Acceptance data sheets for Lycoming engines have a statement to the effect:
Engines of models described herein conforming with this data sheet (which is a part of Type Certificate No. XXX) and other approved data on file with the Federal Aviation Administration meet the minimum standards for use in certificated aircraft in accordance with pertinent aircraft data sheets and applicable portions of the Civil Air Regulations/Federal Aviation Regulations provided they are installed, operated and maintained as prescribed by the approved manufacturer's manuals and other approved instructions.

The requirements in Lycoming SI 1009BC are considered to be "other approved instructions", and the engineering aspects of Lycoming Service Instruction 1009BC are FAA approved.

The TBO extensions in Lycoming SI 1009BC do not apply to an engine that:

- a. Does not conform to the original engine model type certificate configuration;
- b. Has been assembled, repaired, or overhauled with FAA-PMA parts, where the FAA-PMA parts have not been approved for use by Lycoming (contact Lycoming for information regarding FAA-PMA parts approved for use by Lycoming);
- c. Has been maintained or overhauled using methods other than Lycoming approved procedures; or
- d. Has been operated outside Lycoming's published specifications.

Requirements:

Aircraft operators and maintenance providers should:

- a. Review all the information in Lycoming SI 1009BC and make sure you have a complete understanding of all the specified requirements.
- b. Review all the records for the affected engine and determine whether the engine complies with all the requirements specified Lycoming SI 1009BC.

The TBO extensions in Lycoming SI 1009, only applies to an engine that:

- a. Meets all the requirements specified Lycoming SI 1009BC;
- b. Conforms to the original engine model type certificate configuration;
- c. Has been assembled, repaired, or overhauled with FAA-PMA parts, where the FAA-PMA parts have been approved for use by Lycoming (contact Lycoming for information regarding FAA-PMA parts approved for use by Lycoming);
- d. Has been maintained or overhauled using methods approved by Lycoming; and
- e. Has been operated within Lycoming's published specifications.

Note:

For an engine fitted with PMA parts that have not been approved for use by Lycoming, an aircraft operator may apply for TBO escalation procedures that are detailed in a maintenance programme per rule 91.603(d).

A TBO escalation for a PMA part can only be considered if information/data from the PMA part manufacturer is provided in support of the application.

For the approval of TBO escalation procedures detailed in a maintenance programme complete CAA form 24091/02 and submit to airworthiness@caa.govt.nz CAA form 24091/02 can be obtained from the CAA website at <https://www.caa.govt.nz/assets/legacy/Forms/24091-02.pdf>

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