
AIRWORTHINESS DIRECTIVE

On the commencement date specified below, and for the reasons set out in the background section, the CASA delegate whose signature appears below repeals Airworthiness Directive (AD) AD/LYC/78 Amdt 5 and issues the following AD under subregulation 39.001 (1) of CASR and subsection 33 (3) of the *Acts Interpretation Act 1901*. The AD requires that the action set out in the requirement section (being action that the delegate considers necessary to correct an unsafe condition) be taken in relation to the aircraft or aeronautical product mentioned in the applicability section: (a) in the circumstances mentioned in the requirement section; and (b) in accordance with the instructions set out in the requirement section; and (c) at the time mentioned in the compliance section.

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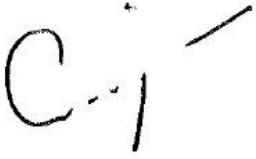
AD/LYC/78 **Thermostatic Oil Cooler Bypass Valve** **9/2021**
Amdt 6

- Applicability: All Lycoming engines with thermostatic oil cooler bypass valves:
- (a) Part number (P/N) 53E19600 (with thermostatic oil cooler bypass valve serial numbers less than 53788),
 - (b) P/N 75944, P/N LW-13230, and P/N 53E19980 (with thermostatic oil cooler bypass valve serial numbers less than 159).
- Requirement: Carry out a physical inspection of the thermostatic bypass valve in accordance with the procedure detailed in Lycoming Mandatory Service Bulletin (MSB) No. 518, as in force from time to time.
- Note 1: The words “as in force from time to time” require compliance with the most recent version of the referenced document.*
- Compliance: Unless previously accomplished in accordance with a previous issue of this Directive:
- a. For dual magneto engines - within 25 hours’ time in service after the commencement date of this AD and thereafter at intervals not to exceed 325 hours’ time in service.
 - b. For non-dual magneto engines - within 25 hours’ time in service after 25 May 1995 and thereafter at intervals not to exceed 625 hours’ time in service.
- Note 2: Replacement of the thermostatic oil cooler bypass valve with a serviceable superseding thermostatic oil cooler bypass valve part number identified in Lycoming Service Instruction No. 1565A, or subsequent, constitutes terminating action for the repeat inspection requirements of this AD.*
- This AD commences on 7 May 2021.
- Background: This Directive requires an inspection of the oil cooler thermostatic bypass valve for security of the crimp nut on the valve shaft as detailed in the requirement document. The original issue of MSB No. 518 included a dimension check of the valve crimp nut in addition to a requirement to inspect the crimp nut for security on the shaft. Following in-service experience, the service bulletin was amended to increase the crimp nut dimension limits.
- Amendment 5 of this AD was issued to require compliance with Lycoming MSB 518B which removed the crimp nut dimensional check entirely.
- Amendment 6 updates the applicability and requirement statements to reflect the most recent version of the requirement document whilst retaining compliance thresholds on

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a time-in-service basis.

A handwritten signature in black ink, appearing to read 'C. Silva' with a flourish extending from the top right of the 'C'.

Alan Silva
Delegate of the Civil Aviation Safety Authority

22 April 2021