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Service Letter No. L287 August 12, 2021

TO: Owners and Operators of Lycoming TEO-540-C1A

SUBJECT: Increased Fuel Economy and Improved Manifold Pressure Stability

NOTICE: Incomplete review of all the information in this document can cause errors. Read the entire Service Letter to make sure you have a complete understanding of the requirements.

This Service Letter announces an engine configuration that will provide for a reduction in fuel consumption and improved manifold pressure control. This is accomplished by upgrading the Engine Control Unit (ECU) and replacing the Turbocharger Wastegate Solenoid Valve.

Engines using Fuel Injector P/N 61X26294-CT and Solenoid Valve P/N 02L29677 must upgrade (reflash) the ECU in accordance with the latest revision of Service Instruction No. 1573 to provide a reduction in fuel consumption at cruise power selections. The Solenoid Valve P/N 02L29677 will increase the manifold pressure stability thereby reducing any surging or fluctuations in manifold pressure during operation.

Installation of the updated Turbocharger Wastegate Solenoid Valve P/N 02L29677 is in accordance with instructions in the latest revision of the TEO-540-C1A Engine Maintenance Manual. The approved oil pressure operating range of the engine is 55 to 95 psi; however, it has been found that optimal performance of the updated Wastegate Solenoid Valve is achieved when the engine oil pressure is adjusted during initial setup to provide 80 to 85 psi at a minimum 185°F oil temperature when performing a full power ground check. Reference Section 72-50 in the most current revision of the TEO-540-C1A Maintenance Manual for oil pressure adjustment. Reference Section 72-20, Figure 5 in the most current revision of the TEO-540-C1A Illustrated Parts Catalog and the most current revision of SSP-1776 – Table of Limits, Part 1, Section V to identify and select the appropriate Oil Pressure Relief Valve Spring.

WARNING

SOLENOID VALVE P/N 02L29677 CANNOT BE USED WITHOUT THE ECU UPGRADE (REFLASHING). ENGINE CONFIGURATION MUST MATCH THE LATEST REVISION OF SERVICE INSTRUCTION NO. 1573 FOR FUEL INJECTOR P/N, ECU P/N AND CALIBRATION DATA TO BE USED WITH THE HARDWARE CONFIGURATION THAT INCLUDES SOLENOID VALVE P/N 02L29677.

For additional assistance and options for completing the ECU upgrade (reflashing), please contact Lycoming Engines Technical Support by phone at 570-327-7222 or 877-836-7878 or by email at Technicalsupport@lycoming.com. Please have the Engine Serial Number, ECU Serial Number and Engine Total Time available when contacting Technical Support.



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