

#### **AIRWORTHINESS DIRECTIVE 2010-11-04**

Teledyne Continental Motors (Formerly Continental and Rolls-Royce Motors, Ltd.): Amendment 39-16309. Docket No. FAA-2009-1156; Directorate Identifier 2009-NE-38-AD. Effective Date

(a) This airworthiness directive (AD) becomes effective June 16, 2010.

Affected ADs

(b) This AD supersedes AD 2009-24-52.

Applicability

(c) This AD applies to all Teledyne Continental Motors (TCM) 240, 346, 360, 470, 520, and 550 series and Rolls-Royce Motors, Ltd. (R-RM) IO-240-A reciprocating engines with hydraulic lifters, part numbers (P/Ns) 657913, 657915, or 657916, installed. These engines are installed on, but not limited to, general aviation airplanes. Unsafe Condition

(d) This AD results from TCM reporting another occurrence of rapid wear on the face of hydraulic lifters, P/Ns 657913, 657915, and 657916, and from the need to expand the applicability of this AD to include the TCM 346 series engines and the R-RM IO-240-A reciprocating engines. We are issuing this AD to prevent excessive hydraulic lifter wear, which can result in loss of engine power and loss of control of the airplane. Compliance

(e) You are responsible for having the actions required by this AD performed before further flight after the effective date of this AD, unless the actions have already been done.

Excluded Engines

(f) If your engine was manufactured or rebuilt before June 19, 2009, and you have not had any hydraulic lifters replaced after June 19, 2009, no action is required. Determining P/N of Lifters

(g) If your engine was manufactured or rebuilt on or after June 19, 2009, or if any of your hydraulic lifters were replaced on or after June 19, 2009, and you can't determine the P/N of your hydraulic lifters from the engine records:

(1) Use the list of engine serial numbers in Section A of TCM Mandatory Service Bulletin (MSB) No. MSB09-8A, dated December 4, 2009.

(2) Inspect the hydraulic lifters in each cylinder for P/Ns 657913, 657915, and 657916. Use TCM MSB No. MSB09-8A, dated December 4, 2009, Section I. Action Required, paragraphs 1. through 3. to determine the P/N of the lifters. Replacing the Lifters

(h) If your engine has any affected hydraulic lifters, replace the hydraulic lifters using TCM MSB No. MSB09-8A, dated December 4, 2009, Step 2, paragraphs 2.a.1) through 2.b.4).

Installation Prohibition

(i) After the effective date of this AD, do not install any hydraulic lifters, P/Ns 657913, 657915, or 657916, into any TCM 240, 346, 360, 470, 520, or 550 series or R-RM IO-240-A reciprocating engine. Alternative Methods of Compliance

(j) The Manager, Atlanta Certification Office, has the authority to approve alternative methods of compliance for this AD if requested using the procedures found in 14 CFR 39.19.

Special Flight Permits

(k) We will not approve any special flight permits. Related Information

(l) Contact Anthony Holton, Aerospace Engineer, Atlanta Certification Office, FAA, Small Airplane Directorate, 1701 Columbia Avenue, College Park, GA 30337; e-mail: anthony.holton@faa.gov; telephone (404) 474-5567; fax (404) 474-5606, for more information about this AD. Material Incorporated by Reference

(m) You must use Teledyne Continental Motors Mandatory Service Bulletin No. MSB09-8A, dated December 4, 2009, to perform the actions required by this AD. The Director of the Federal Register approved the incorporation by reference of this service bulletin in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. You can get a copy from Teledyne Continental Motors, Inc., P.O. Box 90, Mobile, AL 36601; telephone (251)438-3411, or go to: <http://tcmlink.com/servicebulletins.cfm>. You may review copies at the FAA, New England Region, 12 New England Executive Park, Burlington, MA; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call

202-741-6030, or go to:  
<http://www.archives.gov/federal-register/cfr/ibr-locations.html>.  
Issued in Burlington, Massachusetts, on May 12, 2010.

Peter A. White,  
Assistant Manager, Engine  
and Propeller Directorate,  
Aircraft Certification Service

*No Required per Manufacture date of Engine, no lifters replaced after 19 June 2009*