AIRWORTHINESS DIRECTIVE

On the effective date specified below, and for the reasons set out in the background section, the CASA delegate whose signature appears below revokes Airworthiness Directive (AD) AD/CON/87 Amdt 1 and issues the following AD under subregulation 39.001(1) of CASR 1998. The AD requires that the action set out in the requirement section (being action that the delegate considers necessary to correct the 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.

Teledyne Continental Motors Piston Engines

AD/CON/87 Superior Air Parts - Cylinder Assemblies 6/2007
Amdt 2

Applicability: Teledyne Continental Motors (TCM) 470, 520, and 550 series reciprocating engines fitted with PMA cylinder assemblies manufactured by Superior Air Parts (SAP) between April 2005 and November 2005, with the following part numbers (P/Ns):


These P/N cylinder assemblies may be installed in the following TCM engine models:

- IO-520 -A, B, BA, C, CB, D, E, F, J, K, L, M, BB, MB
- IO-550 -A, B, C, D, E, F, L

Note 1: A complete list of aircraft models, applicable TCM engines might be installed on, but not limited to, may be found in FAA Airworthiness Directive 2007-04-19R1 Amendment 39-15005.

Requirement: 1. Determine the P/N of the cylinder assemblies installed. If your engine is fitted with affected cylinder assemblies P/N identified in the applicability list of the AD, check the serial numbers (S/N) of the cylinder assemblies in accordance with Superior Air Parts, Inc Mandatory Service Bulletin (MSB) B06-01 Revision E dated 24 January 2007.

Remove from service any cylinder assemblies that are affected by both the applicability of this AD and the S/N as detailed in the procedure given in SAP MSB B06-01 Rev E.
Teledyne Continental Motors Piston Engines

AD/CON/87 Amdt 2 (continued)

2. Do not install any cylinder assembly with part numbers and serial numbers identified in Requirement 1 of this AD, into any engine.


Compliance:

1. Before cylinder assemblies reach 150 hours total time in service (TTIS).

Note 3: For aircraft with engine cylinder assemblies that have greater than 150 hours TTIS, special flight permits may be issued to ferry the aircraft to a maintenance base.

2. After the effective date of this AD.

This Amendment becomes effective on 7 June 2007.

Background: This AD results from discovery of nine separated SAP cylinder assemblies installed in TCM 470, 520, and 550 series reciprocating engines and one separated SAP cylinder assembly installed in Lycoming Engines 320, 360, and 540 series engines. CASA is issuing this AD to prevent cylinder separation that can lead to engine failure, a possible engine compartment fire, and damage to the aeroplane.

The current amendment corrects manufacturing date range based on Revision 1 of the FAA AD 2007-04-19 dated 23 March 2007 and makes a few editorial changes.

Amendment 1 of this AD made reference to the cylinders assemblies detailed in the manufacturer’s service bulletin and became effective on 5 March 2007.

The original issue of this AD became effective on 2 March 2007.

David Punshon
Delegate of the Civil Aviation Safety Authority

26 April 2007