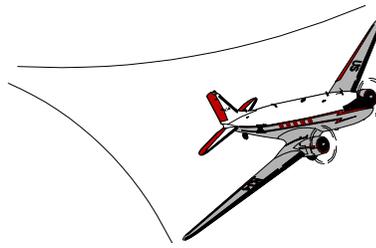


# **SPECIAL AIRWORTHINESS INFORMATION BULLETIN**

REGULATORY SUPPORT DIVISION  
P.O. BOX 26460  
OKLAHOMA CITY, OKLAHOMA 73125-0460



U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

No. CE-00-07  
November 12, 1999

*SAIB's are posted on the internet at <http://av-info.faa.gov>*

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This is issued for informational purposes only and any recommendation for corrective action is not mandatory.

## **Introduction:**

The purpose of this Special Airworthiness Information Bulletin (SAIB) is to alert owners/operators of Teledyne Continental Motors (TCM) models O-470, IO-470, TSIO-470, IO-520, LIO-520, TSIO-520, LTSIO-520, GTSIO-520, IO-550, TSIO-550 and TSIOL-550 series reciprocating engines of the recommendation to replace connecting rod bolts at the time of overhaul. This information is advisory in nature and not mandated by regulation.

## **Background:**

Eight Accident/Incident Reports from 1974 to the present indicate failure of the connecting rod bolts on the TCM IO/TSIO-520-series engines. There were an additional three connecting rod bolt failures; one each on a C-85, an O-300 and a TSIO-360. In addition there are 40 Service Difficulty reports from the same period which indicate problems with the connecting rods/bolts. In most cases it is not possible to determine if the rods, the bolts, or some other component/event caused the problem. Although there are no reports, the TCM 470 and 550 series engines are included in this document because they use the same part number connecting rod bolts.

TCM Service Bulletin, SB97-6, issued on April 7, 1997, lists components including the connecting rod bolts that should be replaced during maintenance and overhaul. TCM SB96-7B issued on January 1, 1999, lists current torque values for all fasteners on TCM engines as well as information on proper lubrication during the installation process.

## **Recommendation:**

Based on currently available information, the FAA is only recommending the following actions; however, the FAA will continue this investigation and additional actions. Issuance of an Airworthiness Directive may be found to be warranted based on analysis of new information.

The FAA recommends that the connecting rod bolts as well as the other components listed in SB97-6 be replaced during maintenance and at the time of overhaul. The FAA further recommends the use of SB96-7B to obtain torque values and lubrication procedures for the installation of these components.

Copies of TCM SB96-7B and SB97-6 may be obtained by calling the TCM Customer Service Department at (888) 221-6942 and leaving your name and address; the bulletin will be mailed as soon as possible. Alternatively, you may contact the Service Department by mail at:

Teledyne Continental Motors  
P.O. Box 90  
Mobile, AL 36601

In addition, the complete text of SB96-7B and SB97-6 are available on the TCM website at: [www.TCMLINK.com](http://www.TCMLINK.com).

## **For Further Information Contact**

Jerry Robinette, Aerospace Engineer, Atlanta Aircraft Certification Office, FAA, Small Airplane Directorate, 1895 Phoenix Boulevard, One Crown Center, Suite 450, Atlanta, GA 30349; telephone: (770) 703-6096; fax: (770) 703-6097; email: [jerry.robinette@faa.gov](mailto:jerry.robinette@faa.gov)

### CHANGE OF ADDRESS NOTICE

Airworthiness Directives (AD) for a particular make and model of aircraft are mailed to the aircraft owners using the permanent mailing address on file with the FAA Registry. If you need to change your address, please complete this form and mail to FAA Aircraft Registration. A revised Certificate of Aircraft Registration will be mailed to you without charge.

**Signature requirements:**

- Individual owner must sign.
- Partnership, a general partner must sign.
- Co-owner, each co-owner must sign, continuing as necessary on an attached sheet.
- Government, any authorized person may sign.

**MAIL TO:**

FAA Aircraft Registry, AFS-750  
 Mike Monroney Aeronautical Center  
 P.O. Box 25504  
 Oklahoma City, OK 73125-0504

AIRCRAFT REGISTRATION NO.	SERIAL NO.	<p style="text-align: center;"><b>CANCELLATION OF REGISTRATION REQUESTED:</b>                      (check applicable block, sign, and date)</p> <input type="checkbox"/> 1. Aircraft sold to: (Purchaser's name and address) _____ _____ _____	
MAKE	MODEL		
<b>ADDRESS CHANGE REQUESTED</b>		<input type="checkbox"/> 2. Aircraft destroyed/scrapped <input type="checkbox"/> 3. Aircraft exported to _____ <input type="checkbox"/> 4. Other, specify _____ I (we) request cancellation of registration for the above reason.	
<b>NAME AND ADDRESS OF CERTIFICATE HOLDER</b>			
STREET _____			
CITY _____			
STATE	ZIP	COUNTRY	SIGNATURE (In Ink)
SIGNATURE (In Ink)	TITLE	DATE	TITLE
DATE	TITLE	DATE	DATE

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