

# MANDATORY

# SERVICE BULLETIN

April 2, 2003

Supplement No. 4

To

Service Bulletin No. 554

Supplement No. 4 to Service Bulletin No. 554 provides an FAA Approved Alternate Method of Compliance (AMOC).

The AMOC (see attached) accepts the following Lycoming kits for compliance with AD #2002-23-06:

05K23325 – TIO/LTIO-540-J2B  
05K23326 – TIO-540-A2B, -A2C  
05K23327 – TIO-540-AJ1A  
05K23335 – TIO-540-AE2A  
05K23336 – TIO-540-AH1A

Check the engine logbook. If the logbook states that Service Bulletin No. 554 was complied with at Lycoming, then an improved cadmium-plated crankshaft gear bolt has been installed and is not affected by AD #2002-23-06.



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

10 Fifth Street  
Third Floor  
Valley Stream, NY 11581-1200

**FEB 25 2003**

Mr. Richard Moffett  
Vice President, Engineering  
Lycoming Engines  
652 Oliver Street  
Williamsport, PA 17701

Dear Mr. Moffett:

This is in response to your February 12, 2003 email to the New York Aircraft Certification Office (NYACO) requesting an Alternate Method Of Compliance (AMOC) to the current Airworthiness Directive (AD) concerning the crankshaft bolts. This AD, 2002-23-06, paragraphs (a), (b), (c), (d), (e), (f) and (g) requires the replacement of Lycoming bolt part number (PN) STD-2209 with another PN STD-2209 bolt known to be cadmium plated or a superseding bolt PN (also known to be cadmium plated) that are contained in Lycoming Kit PN 05K19987. Your request is to approve six additional Lycoming Kits as an AMOC to AD 2002-23-06.

As a part of the crankshaft replacement program, Lycoming prepared six kits to provide engine maintenance facilities with the parts required to complete the rebuild of various engine models. These additional kits contain a Lycoming bolt PN STD-2209 known to be cadmium plated or a superseding bolt PN also known to be cadmium plated that are from the same lots that were used in the PN 05K19987 kits.

The FAA has reviewed this request and found it to be acceptable. The following Lycoming Kits, for the engine models specified, are an Alternate Method Of Compliance to AD 2002-23-06, paragraphs (a), (b), (c), (d), (e), (f) and (g):

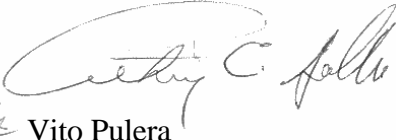
05K23324 - TIO/LTIO-540-J2BD, F2BD  
05K23325 - TIO/LTIO-540-J2B  
05K23326 - TIO-540-A2B, A2C  
05K23327 - TIO-540-AJ1A  
05K23335 - TIO-540-AE2A  
05K23336 - TIO-540-AH1A

The following is not part of your request for an AMOC but should be included in the vehicle used by Lycoming to transmit this AMOC to the field. Engines with STD-2209 bolts installed at Lycoming after November 10, 1998 are not listed in Service Bulletin

(SB) 554 because these bolts are cadmium plated and therefore not affected by AD 2002-23-06. The Lycoming practice of listing "Additional service bulletins....", "554 (2002-23-06)" in the Engine Maintenance Log Book after Lycoming has performed engine maintenance, has raised questions by the field because it implies that SB 554 was used to terminate AD 2002-23-06. The COMPLIANCE section of SB 554 specifies the use of a new STD-2209 bolt, not Lycoming Kit 05K19987, as required by AD 2002-23-06 (the WARRANTY section only requires Kit 05K19987 for warranty). Therefore, SB 554 cannot be used to terminate AD 2002-23-06 in the field. However, whether an engine is affected by AD 2002-23-06 or not, any STD-2209 bolt installed by Lycoming after November 10, 1998 is cadmium plated and not affected by AD 2002-23-06. This includes STD-2209 bolts installed in accordance with SB 554, in production, or for any other reason.

If you have any questions, please call Norm Perenson at (516) 256-7537.

Sincerely,

A handwritten signature in cursive script, appearing to read "Vito Pulera".

*For* Vito Pulera

Manager, New York Aircraft Certification  
Office