97-15-11 Avco Lycoming and Textron Lycoming: Amendment 39-10085. Docket 97-ANE-26-AD. Supersedes AD 97-01-03, Amendment 39-9874.

Applicability: Avco Lycoming and Textron Lycoming O-320, IO-320, LIO-320, AIO-320, AEIO-320, O-360, LO-360, IO-360, LIO-360, VO-360, IVO-360, HO-360, HIO-360, LHIO-360, AIO-360, AEIO-360, TIO-360, TO-360, LTO-360, LTIO-360, O-480, GO-480, IGO-480, IGSO-480, O-540 (except O-540-J1A5D, -J1C5D, -J2A5D, -J3A5D, -J3C5D, -L3C5D), IO-540 (except IO-540-W1A5D, -W3A5D, -AB1A5), AEIO-540, TIO-540, LTIO-540, VO-540, IVO-540, TVO-540, TIVO-540, HIO-540, IGSO-540, TIO-541, TIGO-541, and IO-720 series reciprocating engines, that meet any one of the following conditions:

- 1. Engines with serial numbers (S/Ns) listed in Textron Lycoming Mandatory Service Bulletin (SB) No. 527C, dated April 18, 1997; or
- 2. Engines that had Textron Lycoming cylinder kits installed after December 15, 1995; or
- 3. Engines that have been overhauled, or had cylinder head maintenance performed, by a repair facility other than Textron Lycoming after December 15, 1995.

These engines are installed on but not limited to reciprocating engine powered aircraft manufactured by

Aerospatiale, Bellanca, Cessna, The New Piper Company, Beech, Schweizer, Maule, and Mooney.

Note 1: A maintenance records check may allow an owner or operator to determine if this AD applies.

Note 2: This airworthiness directive (AD) applies to each engine identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For engines that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (e) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent piston pin failure, which could result in engine failure, accomplish the following:

- (a) No action is required for engines that have been inspected in accordance with AD 97-01-03.
- (b) For engines that have not been inspected in accordance with AD 97-01-03, and with S/Ns listed in Textron Lycoming Mandatory SB No. 527C, dated April 18, 1997, accomplish the following:

- (1) Check the piston pin code in accordance with Textron Lycoming SB No. 527C, dated April 18, 1997, in accordance with the following schedule:
- (i) For engines with 45 hours or more time in service (TIS) since the engine was shipped from Textron Lycoming, since overhaul, since installation of a cylinder kit, or since installation of a replacement piston pin, as applicable, accomplish within 5 hours TIS after the effective date of this AD.
- (ii) For engines with less than 45 hours TIS since the engine was shipped from Textron Lycoming, since overhaul, since installation of a cylinder kit, or since installation of a replacement piston pin, as applicable, accomplish prior to accumulating 50 hours TIS since the applicable date.
- (2) Remove from service piston pins, Part Number (P/N) LW-14077, code 17328, and replace with serviceable piston pins.
- (c) For all other affected engines that have not been inspected in accordance with AD 97-01-03, determine if a suspect piston pin, P/N LW-14077, code 17328 could have been installed, in accordance with Textron Lycoming Mandatory SB No. 527C, dated April 18, 1997, and accomplish the following:
- (1) If it is determined that suspect piston pins, P/N LW-14077, code 17328 could have been installed, accomplish paragraphs (b)(1) and (b)(2) of this AD.
- (2) If it is determined that suspect piston pins, P/N LW-14077, code 17328 could not have been installed, no further action is required.
- (3) If it can not be determined if the suspect piston pins, P/N LW-14077, code 17328 were installed, accomplish paragraphs (b)(1) and (b)(2) of this AD.
- (d) For the purpose of this AD, a serviceable piston pin is a piston pin, P/N LW-14077, with a piston pin code of "BN" or "71238." Installation of a piston pin, P/N LW-14077, with a piston pin code of "17328" is prohibited after the effective date of this AD.
- (e) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, New York Aircraft Certification Office. Operators shall submit their requests through an appropriate FAA Maintenance Inspector, who may add comments and then send it to the Manager, New York Aircraft Certification Office.
- Note 3: Information concerning the existence of approved alternative methods of compliance with this airworthiness directive, if any, may be obtained from the New York

Aircraft Certification Office.

- (f) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the aircraft to a location where the requirements of this AD can be accomplished.
- (g) The actions required by this AD shall be done in accordance with the following Textron Lycoming Mandatory SB:

Document No.	Pages	Date
527C	1-4	April 18, 1997
Attachment I	1-6	April 18, 1997
Attachment II	1	April 18, 1997
Total pages: 11.		

This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Textron Lycoming, 652 Oliver St., Williamsport, PA 17701; telephone (717) 327-7278, fax (717) 327-7022. Copies may be inspected at the FAA, New England Region, Office of the Assistant Chief Counsel, 12 New England Executive Park, Burlington, MA; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(h) This amendment becomes effective on August 12, 1997.