Applicability: Textron Lycoming O-320 series, IO-320 series, LIO-320 series, AIO-320 series, AEIO-320 series, O-340 series, O-360 series, LO-360 series, HO-360 series, VO-360 series, IVO-360 series, IO-360 series, AIO-360 series, HIO-360 series, LHIO-360 series, LIO-360 series, AEIO-360 series, TO-360 series, LTO-360 series, TIO-360 series, O-480 series, GSO-480 series, IGSO-480 series, IGO-480 series, GO-480 series, O-540 series (excluding models O-540-J and O-540-L), VO-540 series, IO-540 series (excluding model IO-540-W), HIO-540 series, AEIO-540 series, IGSO-540 series, IGO-540 series, TVO-540 series, TIO-540 series, TIO-540 series, TIO-540 series, TIO-540 series, TIO-541 series, and IO-720 series opposed piston engines; and in addition those engine models and serial numbers listed in Textron Lycoming Service Bulletin (SB) No. 501, Revision B, dated November 15, 1991; installed on but not limited to Cessna 172 and Piper PA-28 aircraft.

Compliance: Required as indicated, unless accomplished previously.

To prevent piston pin failure, or piston release, and engine failure, accomplish the following:

- (a) For engines with serial numbers listed in Textron Lycoming SB No. 501, Revision B, dated November 15, 1991, with more than 75 hours time in service (TIS) since new, since remanufacture, or since factory overhaul on the effective date of this AD, remove all piston pins, Part Number (P/N) LW-14077, within 25 hours TIS after the effective date of this AD, and replace with serviceable parts.
- (b) For engines with serial numbers listed in Textron Lycoming SB No. 501, Revision B, dated November 15, 1991, with 75 hours or less TIS since new, since remanufacture, or since factory overhaul on the effective date of this AD, remove all piston pins, P/N LW-14077, within 100 hours TIS since new, since remanufacture, or since factory overhaul and replace with serviceable parts.
- (c) For engines not listed in Textron Lycoming SB No. 501, Revision B, dated November 15, 1991, accomplish the following:
- (1) Within 15 days after the effective date of this AD, conduct a search and review of maintenance and purchase records to determine if piston pin, P/N LW-14077, had been purchased from Textron Lycoming or a Textron Lycoming distributor from June 18, 1991, through August 5, 1991.
- (2) For installed piston pins, P/N LW-14077, purchased from Textron Lycoming or a Textron Lycoming distributor from June 18, 1991, through August 5, 1991, accomplish the following:
- (i) For engines with more than 75 hours TIS since piston pin installation on the effective date of this AD, remove all piston pins, P/N LW-14077, purchased from Textron

Lycoming or a Textron Lycoming distributor from June 18, 1991, through August 5, 1991, within 25 hours TIS after the effective date of this AD, and replace with serviceable parts.

- (ii) For engines with 75 hours or less TIS since piston pin installation on the effective date of this AD, remove all piston pins, P/N LW-14077, purchased from Textron Lycoming or a Textron Lycoming distributor from June 18, 1991, through August 5, 1991, within 100 hours TIS since piston pin installation and replace with serviceable parts.
- (d) Piston pins, P/N LW-14077, purchased from Textron Lycoming or a Textron Lycoming distributor from June 18, 1991, through August 5, 1991, that are not installed in engines are considered unairworthy and shall not be placed in service.
- (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, Engine and Propeller Directorate. The request should be forwarded through an FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, New York Aircraft Certification Office.

NOTE: 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 FAR 21.197 and 21.199 to operate the airplane to a location where the requirements of this AD can be accomplished.
- (g) The identification of certain engines to which this AD is applicable shall be done in accordance with the following Textron Lycoming service document:

DOCUMENT NO.	PAGES	REVISION	DATE
SB No. 501	1-3	Rev. B	Nov. 15, 1991
Total pages: 3			

This incorporation 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 Street, Williamsport, PA 17701. Copies may be inspected at the FAA, New England Region, Office of the Assistant Chief Counsel, Room 311, 12 New England Executive Park, Burlington, Massachusetts; or at the Office of the Federal Register, 1100 L Street, NW., Room 8401, Washington, D.C.

(h) This amendment becomes effective on July 10, 1992.