
Sektion 2. Utlandstillverkad flygmateriel

TITEL: KALIBRERING OCH RENGÖRING AV "TURBINE INLET" GIVARE
OCH INDIKATOR OCH ÄNDRING AV FLYGHANDBOK OCH
"OPERATING" HANDBOK

GÄLLER: Modellerna PA-46-310P och PA-46-350P alla S/N

ÅTGÄRD: Utför åtgärder angivna i bifogad kopia av FAA AD 99-15-04R1

TID FÖR ÅTGÄRD: Inom tider och intervaller angivna i FAA AD 99-15-04R1

UNDERLAG: FAA AD 99-15-04R1 och däri angivet underlag

REFERENS: FAA AD-99-15-04R1

BESLUTSDATUM: 20 juni 2000

LFS 2000:84

Åtgärder enligt LVD utgör nödvändig förutsättning för ifrågavarande flygmateriels luftvärdighet. Referens BCL M 1.11.
Anteckning om åtgärd, som vidtagits i enlighet med LVD, skall införas i teknisk journal för berörd flygmateriel med hänvisning till ifrågavarande LVD-nummer. Angivet underlag refererar till senast gällande revision/utgåva. LVD utges i luftfartsverkets författningssamlingar LFS.

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The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

REVISION ISSUED MAY 2000

99-15-04 R1 THE NEW PIPER AIRCRAFT, INC.: Amendment 39-11747; Docket No. 98-CE-112-AD; Revises AD 99-15-04, Amendment 39-11223.

(a) **What airplanes are affected by this AD?** This AD applies to Models PA-46-310P and PA-46-350P airplanes, all serial numbers, that are:

- (1) certificated in any category; and
- (2) equipped with a Lewis or Transicoil Turbine Inlet Temperature Gauge and associated probe installed. Relief from the AD is available only if the gauge and probe are replaced through STC and not if a second turbine inlet temperature gauge was installed while retaining the Lewis or Transicoil gauge and probe.

(b) **Who must comply with this AD?** Anyone who wishes to operate any of the above airplanes on the U.S. Register must comply with this AD.

(c) **What problem does this AD address?** The actions required in this AD are intended to detect and correct improperly calibrated turbine inlet temperature indicators or defective turbine inlet temperature probes. This condition, if not detected and corrected, could result in improper engine operation and engine damage/failure with consequent loss of control of the airplane.

(d) **What must I do to address this problem?** To address this problem, you must accomplish the following actions:

- (1) For the Model PA-46-310P airplanes:

Compliance Time	Action	In Accordance With
(i) Within the next 100 hours time-in-service (TIS) after August 31, 1999 (the effective date of the AD 99-15-04).	(A) Perform the Turbine Inlet Temperature Gauge and Probe Cleaning and Inspection.	The PA-46-310P/350P Maintenance Manual, Chapter 77-20-00 (section A.(1)(d), pages 1 and 2).
	(B) Accomplish the Turbine Inlet Temperature System Calibration.	The PA-46-310P/350P Maintenance Manual, Chapter 77-20-00 (pages 3 and 4);
(ii) Prior to further flight after the above cleaning, inspection, and calibration.	Repair or replace any failed parts (the turbine inlet temperature system indicator cannot be calibrated or the turbine inlet temperature probe fails the inspection) with serviceable parts that are listed in paragraph (e) of this AD.	Equipment manufacturer instructions and the applicable maintenance manual.

Compliance Time	Action	In Accordance With
(i) Within the next 100 hours TIS after August 31, 1999 (the effective date of AD 99-15-04).	(A) Perform the Turbine Inlet Temperature Gauge and Probe Cleaning and Inspection.	<p>For serial numbers 4622001 through 4622200 and 4636001 through 4636020, utilize the PA-46-350P Maintenance Manual, Chapter 77-20-00 (section 1.C, page 1).</p> <p>For all serial numbers beginning with 4636021, utilize the PA-46-350P Maintenance Manual, Chapter 77-20-00 (section 1.C, page 1).</p>
	(B) Accomplish the Turbine Inlet Temperature System Calibration.	<p>For serial numbers 4622001 through 4622200 and 4636001 through 4636020, utilize the PA-46-350P Maintenance Manual, Chapter 77-20-00 (section 1.I, pages 4 through 7).</p> <p>For all serial numbers beginning with 4636021, calibration is not required.</p>

Compliance Time	Action	In Accordance With
(ii) Prior to further flight after the above cleaning, inspection, and calibration.	Repair or replace any failed parts (the turbine inlet temperature system indicator cannot be calibrated or the turbine inlet temperature probe fails the inspection) with serviceable parts that are listed in paragraph (e) of this AD.	Equipment manufacturer instructions and the applicable maintenance manual.
(iii) Upon accumulating 250 hours TIS on the currently installed turbine inlet temperature probe or within the next 100 hours TIS after August 31, 1999 (the effective date of AD 99-15-04), whichever occurs later, and thereafter at intervals not to exceed 250 hours TIS.	Replace the turbine inlet temperature probe with a new part number 481-389 or 481-392 probe.	Equipment manufacturer instructions and the applicable maintenance manual.
(iv) Within the next 100 hours TIS after August 31, 1999 (the effective date of the AD 99-15-04), unless the applicable Pilot's Operating Handbook (POH) revision is incorporated as presented in paragraph (f) of this AD	Incorporate the emergency procedures presented in paragraph (g) of this AD into the POH. This may be accomplished by inserting a copy of this AD into the POH.	Not applicable.
(v) As of July 28, 2000 (the effective date of this AD).	Do not install one of the affected Lewis or Transicoil turbine inlet temperature gauges or probes without assuring that it is airworthy and properly calibrated.	Use the procedures located in the previously referenced maintenance manual sections and pages.

(3) Operators of the Model PA-46-350P airplanes with over 150 hours TIS on the currently installed turbine inlet temperature probe will have to replace the probe as required in paragraph (d)(2)(iii) of this AD. In this case, the operator may want to accomplish the replacement prior to the Turbine Inlet Temperature Gauge and Probe Cleaning and Inspection, and Turbine Inlet Temperature System Calibration.

(e) What are the part numbers of the replacement parts referenced in paragraph (d)(2)(ii) of this AD?

Equipment Name and Manufacturer	Part Number
(1) Lewis Turbine Inlet Temperature Analog Indicator	471-008. This is the only indicator that has a zero adjustment screw.
(2) Lewis Turbine Inlet Temperature Digital Indicator	548-811. Since this indicator does not have a zero adjustment screw, you must return it to the factory for adjustment or replacement.
(3) Lewis Turbine Inlet Temperature Probe	471-009 for the Model PA-46-310P airplanes and 481-389 or 481-392 for the Model PA-46-350P airplanes.

(f) **What are the POH revisions that can be incorporated instead of the emergency procedures that this AD requires?**

(1) For operators of the Model PA-46-310P airplanes:

POH	Revision/Date	Affected serial numbers
VB-1200	16/March 19, 1999	46-8408001 through 46-8608067 and 4608001 through 4608007
VB-1300	13/February 25, 1999	4608008 through 4608140

(2) For operators of the Model PA-46-350P airplanes:

POH	Revision/Date	Affected serial numbers
VB-1332	16/November 14, 1997	4622001 through 4622200
VB-1609	1/November 21, 1997	463001 through 4636020
VB-1602	1/November 28, 1997	4636021 through 4636131
VB-1446	New/December 3, 1997	4636132 through 4636195
VB-1710	New/February 23, 1999	all serial numbers beginning with 4636196

(g) **What are the emergency procedures referenced in paragraphs (d)(1)(iii) and (d)(2)(iv) of this AD?**

(1) For Model PA-46-310P airplanes:

(i) If the turbine inlet temperature indication fails during takeoff, climb, descent, or landing, maintain FULL RICH mixture to assure adequate fuel flow for engine cooling.

(ii) If the turbine inlet temperature indication fails after cruise power has been set, maintain cruise power setting and lean to 6 gallons per hour (GPH) fuel flow above that specified in the Power Setting Table in Section 5 of the AFM/POH. Continually monitor engine cylinder head and oil temperatures to avoid exceeding temperature limits.

(2) For Model PA-46-350P airplanes:

(i) If the turbine inlet temperature indication fails during takeoff, climb, descent or landing, set power per the POH Section 5 Power Setting Table and then lean to the approximate POH Power Setting Table fuel flow plus 4 GPH.

(ii) If the turbine inlet temperature indication fails after cruise power has been set, maintain the power setting and increase indicated fuel flow by 1 GPH. Continually monitor engine cylinder head and oil temperatures to avoid exceeding temperature limits.

(h) **Did The New Piper Aircraft, Inc. develop service information related to this subject?** Piper Service Bulletin 995A, dated April 26, 1996, contains information that related to the subject matter of this AD. However, if you comply with this service bulletin, you have not accomplished all of the actions required by the AD. Therefore, we are not mandating compliance with the service bulletin.

(i) **Can the pilot accomplish the action?** Anyone who holds at least a private pilot certificate, as authorized by section 43.7 of the Federal Aviation Regulations (14 CFR 43.7), may insert a copy of this AD into the POH, as required by this AD. You must make an entry into the aircraft records that shows compliance with this AD, in accordance with section 43.9 of the Federal Aviation Regulations (14 CFR 43.9).

(j) **Can I comply with this AD in any other way?** You may use an alternative method of compliance or adjust the compliance time if:

(1) Your alternative method of compliance provides an equivalent level of safety; and

(2) The Manager, Atlanta Aircraft Certification Office (ACO), approves your alternative. Submit your request through an FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Atlanta ACO.

(3) Alternative methods of compliance approved in accordance with AD 99-15-04 are approved as alternative methods of compliance for this AD.

Note: This AD applies to each airplane identified in paragraph (a) of this AD, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes 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 (j) 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 you have not eliminated the unsafe condition, specific actions you propose to address it.

(k) **Where can I get information about any already-approved alternative methods of compliance?** Contact Donald Young, Aerospace Engineer, Atlanta Aircraft Certification Office, One Crown Center, 1895 Phoenix Boulevard, Suite 450, Atlanta, Georgia 30349; telephone: (770) 703-6079; facsimile: (770) 703-6097; e-mail address: "Donald.Young@faa.gov".

(l) **What if I need to fly the aircraft to another location to comply with this AD?** The FAA can issue a special flight permit under sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate your aircraft to a location where you can accomplish the requirements of this AD.

(m) **Does this AD action affect any existing AD actions?** This amendment revises AD 99-15-04, Amendment 39-11223.

(n) **When does this amendment become effective?** This amendment becomes effective on July 28, 2000.

FOR FURTHER INFORMATION CONTACT:

Mr. Donald J. Young, Aerospace Engineer, FAA, Atlanta Aircraft Certification Office, One Crown Center, 1895 Phoenix Boulevard, Suite 450, Atlanta, Georgia 30349; telephone: (770) 703-6079; facsimile: (770) 703-6097; e-mail address: "Donald.Young@faa.gov".

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Michael Gallagher, Manager, Small Airplane Directorate, Aircraft Certification Service.

U.S. Department
of Transportation

**Federal Aviation
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