

## **LUFTVÄRDIGHETSDIREKTIV** (LVD)

A. Flygplan Piper **LVD Nr 2938** Upphäver LVD nr 2486R2

Sektion 2. Utlandstillverkad flygmateriel

TITEL:

Kontroll/byte av vingstöttor och gaffeländstycken

GÄLLER:

I enlighet med bifogad kopia av FAA AD 99-01-05

ÅTGÄRD:

1. Utför åtgärder angivna i FAA AD 99-01-05, Piper Service Bulletin Nr 528D och Nr 910A

2. Luftfartsinspektionen har för närvarande godkänt speciella företag att utföra röntgenradiografering som ett alternativ till utbyte av vingstöttor i FAA AD 99-01-05

I samband med detta skall korrosionsskyddet förnyas, vingstöttor som ej godkänts skall bytas ut före flygning.

3. I FAA AD 99-01-05 godkännes ultraljudkontroll (UT) som en alternativ metod

TID FÖR ÅTGÄRD:

- 1. Åtgärd enligt 1) inom angivet datum i FAA AD 99-01-05
- 2. Åtgärd enligt 2) vid nästkommande 100 h-tillsyn och därefter återkommande med max 3 års intervall räknat från föregående inspektion om ej tidigare utförts.

Driftserfarenheter av flygplan på svenskt register opererade i nordiskt klimat, samt det faktum att röntgenreadiografi är en känsligare detektionsmetod, ger att tiden till återkommande kontroll utökas till max 3 år.

3. Se punkt 2 ovan (tid för åtgärd)

**UNDERLAG:** 

FAA AD 99-01-05

Piper Service Bulletin nr 528D och nr 910A eller senare utgåvor. Av LFV godkänd instruktion för röntgenradiografering - information om

godkända företag kan erhållas genom LFV distriktskontor

**REFERENS:** 

FAA AD 99-01-05

**BESLUTSDATUM:** 

1999-02-12

LFS 1999:24

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.

**Postadress** 

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## **AIRWORTHINESS DIRECTIVE**

Bilaga till LVD 2938

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

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

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Federal Aviation Regulations, 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 FAR Subpart 39.3).

99-01-05 THE NEW PIPER AIRCRAFT, INC.: Amendment 39-10972; Docket No. 96-CE-72-AD; Supersedes AD 93-10-06, Amendment 39-8536.

| Applicability: The following model and serial num  Models | ber airplanes, certificated in any catego<br>Serial Numbers |
|---|---|
|   | All serial numbers  |
| TG-8 (Army TG-8, Navy XLNP-1)                             |   |
| E-2 and F-2   | All serial numbers  |
| J3C-40, J3C-50, J3C-50S, (Army L-4, L-4B,                 | All serial numbers  |
| L-4H, and L-4J), J3C-65 (Navy NE-1 and                    |   |
| NE-2), J3C-65S J3F-50, J3F-50S, J3F-60,                   | •   |
| J3F-60S, J3F-65 (Army L-4D), J3F-65S,                     |   |
| J3L, J3L-S, J3L-65 (Army L-4C), and J3L-65S               |   |
| J4, J4A, J4A-S, and J4E (Army L-4E)                       | 4-401 through 4-1649  |
| J5A (Army L-4F), J5A-80, J5B, (Army L-4G),                | All serial numbers  |
| J5C, L-14, AE-1, and HE-1                                 |   |
| PA-11 and PA-11S  | 11-1 through 11-1678  |
| TA-II ald IA-IIS  | 11-1 unough 11-10/0   |
| PA-12 and PA-12S  | 12-1 through 12-4036  |
| PA-14   | 14-1 through 14-523   |
| PA-15   | 15-1 through 15-388   |
| D. 16 ID. 160   | 1614 146706   |
| PA-16 and PA-16S  | 16-1 through 16-736   |
| PA-17   | 17-1 through 17-215   |
| PA-18, PA-18S, PA-18 "105" (Special),                     | 18-1 through 18-8309025, 189001                             |
| PA-18S "105" (Special) PA-18A, PA-18 "125",               | through 1809032, and 1809034                                |
| (Army L-21A), PA-18S "125", PA-18AS "125",                | through 1809040   |
| PA-18 "135" (Army L-21B), PA-18A "135",                   | _   |
| PA-18S "135", PA-18AS "135", PA-18 "150",                 |   |
| PA-18A "150", PA-18S "150", PA-18AS "150",                |   |
| PA-18A (Restricted),PA-18A "135" (Restricted),            |   |
| and PA-18A "150" (Restricted)                             |   |
|   |   |

PA-19 (Army L-18C), and PA-19S

19-1, 19-2, and 19-3

PA-20, PA-20S, PA-20 "115", PA-20S "115",

20-1 through 20-1121

PA-20 "135", and PA-20S "135"

22-1 through 22-9848

PA-22, PA-22-108, PA-22-135, PA-22S-135, PA-22-150, PA-22S-150, PA-22-160, and PA-22S-160

PA-25, PA-25-235, and PA-25-260

25-1 through 25-8156024

NOTE 1: This AD applies to each airplane 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 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 (f) 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 in the body of this AD, unless already accomplished.

To prevent in-flight separation of the wing from the airplane caused by corroded wing lift struts or cracked wing lift strut forks, which could result in loss of control of the airplane, accomplish the following:

NOTE 2: The paragraph structure of this AD is as follows:

Level 1: (a), (b), (c), etc. Level 2: (1), (2), (3), etc. Level 3: (i), (ii), (iii), etc. Level 4: (A), (B), (C), etc.

Level 2, Level 3, and Level 4 structures are designations of the Level 1 paragraph they immediately follow.

- (a) For all affected airplane models, within 1 calendar month after the effective date of this AD or within 24 calendar months after the last inspection accomplished in accordance with AD 93-10-06 (superseded by this action), whichever occurs later, remove the wing lift struts in accordance with Piper Service Bulletin (SB) No. 528D, dated October 19, 1990, or Piper SB No. 910A, dated October 10, 1989, as applicable, and accomplish one of the following (the actions in either paragraph (a)(1), (a)(2), (a)(3), (a)(4), or (a)(5); including subparagraphs, of this AD):
- (1) Inspect the wing lift struts for corrosion in accordance with the "Instructions" section in Part I of either Piper SB No. 528D, dated October 19, 1990, or Piper SB No. 910A, dated October 10, 1989, as applicable.
- (i) If no perceptible dents (as defined in the above SB's) are found in the wing lift strut and no corrosion is externally visible, prior to further flight, apply corrosion inhibitor to each strut in accordance with whichever of the above SB's that is applicable. Reinspect the lift struts at intervals not to exceed 24 calendar months and accomplish any of the requirements of paragraph (a) of this AD, including all subparagraphs.
- (ii) If a perceptible dent (as defined in the above SB's) is found in the wing lift strut or external corrosion is found, prior to further flight, accomplish one of the installations (and subsequent actions presented in each paragraph) specified in paragraphs (a)(3), (a)(4), or (a)(5) of this AD.
- (2) Inspect the wing lift struts for corrosion in accordance with the Appendix to this AD. The inspection procedures in this Appendix must be accomplished by a Level 2 inspector certified using the guidelines established by the American Society for Non-destructive Testing, or MIL-STD-410.
- (i) If no corrosion is found that is externally visible and all requirements in the Appendix to this AD are met, prior to further flight, apply corrosion inhibitor to each strut in accordance with whichever of the above SB's that is applicable. Reinspect the lift struts at intervals not to exceed 24 calendar months and accomplish any of the requirements of paragraph (a) of this AD, including all subparagraphs.
- (ii) If external corrosion is found or if any of the requirements in the Appendix of this AD are not met, prior to further flight, accomplish one of the installations (and subsequent actions presented in each paragraph) specified in paragraphs (a)(3), (a)(4), or (a)(5) of this AD.
- (3) Install original equipment manufacturer (OEM) part number wing struts (or FAA-approved equivalent part numbers) that have been inspected in accordance with the specifications presented in either paragraph (a)(1) or (a)(2) of this AD, and are found to be airworthy according to the inspection requirements included in these paragraphs. Thereafter, inspect these wing lift struts at intervals not to exceed 24 calendar months in accordance with the specifications presented in either paragraph (a)(1) or (a)(2) of this AD.
- (4) Install new sealed wing lift strut assemblies, part numbers as specified in Piper SB No. 528D and Piper SB No. 910A (or FAA-approved equivalent part numbers) on each wing as specified in the Instructions section in Part II of the above-referenced SB's. These sealed wing lift strut assemblies also include the wing lift strut forks. Installation of these assemblies constitute terminating action for the inspection requirements of both paragraphs (a) and (b) of this AD.
- (5) Install F. Atlee Dodge wing lift strut assemblies in accordance with F. Atlee Dodge Installation Instructions No. 3233-I for Modified Piper Wing Lift Struts (Supplemental Type Certificate (STC) SA4635NM), dated February 1, 1991. Thereafter, inspect these wing lift struts at intervals not to exceed 60 calendar months in accordance with the specifications presented in paragraph (a)(1) or (a)(2) of this AD.
- (b) For all affected airplane models, except for Models PA-25, PA-25-235, and PA-25-260, within the next 100 hours time-in-service (TIS) after the effective date of this AD or within 500 hours TIS after the last inspection accomplished in accordance with AD 93-10-06 (superseded by this action), whichever occurs later, remove the wing lift strut forks, and accomplish one of the following (the actions in either paragraph (b)(1), (b)(2), (b)(3), (b)(4), or (b)(5); including subparagraphs, of this AD):

- (1) Inspect the wing lift strut forks using FAA-approved magnetic particle procedures.
- (i) If no cracks are found, reinspect at intervals not to exceed 500 hours TIS provided that the replacement requirements of paragraphs (b)(1)(ii)(B) and (b)(1)(ii)(C) of this AD have been met.
  - (ii) Replace the wing lift strut forks at whichever of the following is applicable:
    - (A) If cracks are found on any wing lift strut fork: Prior to further flight;
- (B) If the airplane is equipped with floats or has been equipped with floats within the last 2,000 hours TIS and no cracks are found during the above inspections: Upon accumulating 1,000 hours TIS on the wing lift strut forks or within the next 100 hours TIS, whichever occurs later; or
- (C) If the airplane has not been equipped with floats within the last 2,000 hours TIS and no cracks are found during the above inspections: Upon accumulating 2,000 hours TIS on the wing lift strut forks or within the next 100 hours TIS, whichever occurs later.
- (iii) Replacement parts shall be of the same part numbers of the existing part (or FAA-approved equivalent part numbers) and shall be manufactured with rolled threads. Lift strut forks manufactured with machined (cut) threads shall not be utilized.
- (iv) The 500-hour TIS interval repetitive inspections are still required when the above replacements are accomplished.
- (2) Install new OEM part number wing lift strut forks (or FAA-approved equivalent part numbers). Reinspect and replace these wing lift strut forks at the intervals specified in paragraphs (b)(1)(i), (b)(1)(ii), (b)(1)(iii), and (b)(1)(iv), including all subparagraphs, of this AD.
- (3) Install new sealed wing lift strut assemblies, part numbers as specified in Piper SB No. 528D and Piper SB No. 910A (or FAA-approved equivalent part numbers) on each wing, as specified in the Instructions section in Part II of the above-referenced SB's.
- (i) This installation may have "already been accomplished" through the actions specified in paragraph (a)(4) of this AD.
  - (ii) No repetitive inspections are required after installing these sealed wing lift strut assemblies.
- (4) Install Jensen Aircraft wing lift strut fork assemblies as specified in the STC's presented in the paragraphs that follow, as applicable, in accordance with Jensen Aircraft Installation Instructions for Modified Lift Strut Fittings, which incorporates the following pages:

PagesRevision LevelDate1 and 5Original IssueJuly 15, 19832, 4, and 6Revision No. 1March 30, 1984a and 3Revision No. 2April 20, 1984

No repetitive inspections are required after installing these Jensen Aircraft wing lift strut fork assemblies; however, repetitive inspections of the lift strut are required as specified in paragraph (a)(1), (a)(2), or (a)(3) of this AD:

- (i) For Models PA-12 and PA-12S airplanes: STC SA1583NM;
- (ii) For Model PA-14 airplanes: STC SA1584NM;
- (iii) For the Models PA-16 and PA-16S airplanes: STC SA1590NM;
- (iv) For the Models PA-18, PA-18S, 189001 PA-18 "105" (Special), PA-18S "105" (Special), PA-18A, PA-18 "125" (Army L-21A), PA-18S "125", PA-18AS "125", PA-18 "135" (Army L-21B), PA-18A "135", PA-18S "135", PA-18AS "135", PA-18AS "150", PA-18A "150", PA-18S "150", PA-18AS "150
- (v) For the Models PA-20, PA-20S, PA-20 "115", PA-20S "115", PA-20 "135", and PA-20S "135" airplanes: STC SA1586NM; and
  - (vi) For the Model PA-22 airplanes: STC SA1587NM.
- (5) Install F. Atlee Dodge wing lift strut assemblies in accordance with F. Atlee Dodge Installation Instructions No. 3233-I for Modified Piper Wing Lift Struts (STC SA4635NM), dated February 1, 1991.
- (i) No repetitive inspections of the wing lift strut forks are required when these assemblies are installed.
- (ii) This installation may have "already been accomplished" through the actions specified in paragraph (a)(5) of this AD.
- (c) If holes are drilled, in either one of the scenarios presented in paragraphs (c)(1) and (c)(2) of this AD, to attach cuffs, door clips, or other hardware, inspect the wing lift struts at intervals not to exceed 24 calendar months using the procedures specified in paragraphs (a)(1) and (a)(2), including all subparagraphs, of this AD:
  - (1) Wing lift strut assemblies installed in accordance with (a)(4) or (b)(3) of this AD; or
- (2) F. Atlee Dodge wing lift strut assemblies installed in accordance with paragraph (a)(5) or (b)(5) of this AD.
- (d) For all affected airplane models, within 1 calendar month after the effective date of this AD or within 24 calendar months after the last inspection accomplished in accordance with AD 93-10-06 (superseded by this action),

whichever occurs later, and thereafter prior to further flight after the installation of any lift strut assembly, accomplish one of the following:

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- (1) Install "NO STEP" decal, Piper part number (P/N) 80944-02, on each wing lift strut approximately 6 inches from the bottom of the struts in a way that the letters can be read when entering and exiting the aircraft; or
- (2) Paint the statement "NO STEP" approximately 6 inches from the bottom of the struts in a way that the letters can be read when entering and exiting the aircraft. Use a minimum of 1-inch letters using a color that contrasts with the color of the airplane.
- (e) 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 airplane to a location where the requirements of this AD can be accomplished.
- (f) An alternative method of compliance or adjustment of the initial or repetitive compliance times that provides an equivalent level of safety may be approved by the Manager, Atlanta Aircraft Certification Office (ACO), One Crown Center, 1895 Phoenix Boulevard, suite 450, Atlanta, Georgia 30349.
- (1) The request shall be forwarded through an appropriate FAA Maintenance Inspector, who may add comments and then send it to the Manager, Atlanta ACO.
- (2) Alternative methods of compliance approved in accordance with AD 93-10-06, Amendment 39-8536, are considered approved as alternative methods of compliance for this AD.
- NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Atlanta Aircraft Certification Office.
- (g) The inspections required by this AD shall be done in accordance with Piper Service Bulletin No. 528D, dated October 19, 1990, and Piper Service Bulletin No. 910A, dated October 10, 1989. The installation required by this AD shall be done in accordance with F. Atlee Dodge Installation Instructions No. 3233-I for Modified Piper Wing Lift Struts (Supplemental Type Certificate (STC) SA4635NM), dated February 1, 1991, and Jensen Aircraft Installation Instructions for Modified Lift Strut Fittings, which incorporates the following pages:

| Pages       | <b>Revision Level</b> | Pate           |
|-------------|-----------------------|----------------|
| 1 and 5     | Original Issue        | July 15, 1983  |
| 2, 4, and 6 | Revision No. 1        | March 30, 1984 |
| a and 3     | Revision No. 2        | April 20, 1984 |

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. The service bulletins referenced in this AD may be obtained from The New Piper Aircraft, Inc., Customer Services, 2926 Piper Drive, Vero Beach, Florida 32960. Copies of the instructions to the Jensen Aircraft STC's may be obtained from Jensen Aircraft, 9225 County Road 140, Salida, Colorado 81201. Copies of the instructions to the F. Atlee Dodge STC may be obtained from F. Atlee Dodge, Aircraft Services, Inc., P.O. Box 190409, Anchorage, Alaska 99519-0409. Copies may be inspected at the FAA, Central Region, Office of the Regional Counsel, Room 1558, 601 E. 12th Street, Kansas City, Missouri, or at the Office of the Federal Register, 800 North Capitol Street, NW, suite 700, Washington, DC.

- (h) This amendment supersedes AD 93-10-06, Amendment 39-8536.
- (i) This amendment becomes effective on February 8, 1999.

## FOR FURTHER INFORMATION CONTACT:

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