

Luscombe Model 8 Series Aeroplanes

**AD/LUSCOMBE/2
Amdt 1**

Wing Spar Corrosion

3/98 DM

Applicability: Models 8, 8A, 8B, 8C, 8D, 8E, 8F, and T-8F (all serial numbers).

- Requirement:
1. For all aircraft, inspect for intergranular corrosion in the areas of the front and rear spar extrusions of the wing installations and if corrosion is found, prior to further flight, replace the corroded part in accordance with the Compliance Procedures section, paragraph "1A. Fabric Covered Wings." or paragraph "2. Inspect" of The Don Luscombe Aviation History Foundation Recommendation #2, dated 15 December 1993, REVISED 21, November 1995, whichever paragraph is applicable to the wing construction of the aircraft.
 2. For aircraft with metal covered wings:
 - a. Install two additional wing inspection holes (left wing and right wing) using the Don Luscombe Aviation History Foundation (DLAHF) Kit #8007, Wing Access and Inspection Kit, in accordance with the Compliance Procedures section, paragraphs "1B Metal Covered Wings.", (a), (a1.) to (a9.), and (b.) of The Don Luscombe Aviation History Foundation Recommendation #2, dated 15 December 1993, Revised 21 November 1995; and
 - b. Modify the wing tip fairing using the DLAHF Kit #8007, Wing Access and Inspection Kit, in accordance with the Compliance Procedures section, paragraphs "1B Metal Covered Wings.", (c), and (c1.) to (c5.) of The Don Luscombe Aviation History Foundation Recommendation #2, dated 15 December 1993, Revised 21 November 1995; or
 - c. an alternative method of compliance for the modifications required by (a) and (b) above may be accomplished in accordance with the procedures contained in the Appendix to this Directive.

Note: FAA AD 96-24-17R1 refers.

Compliance: Unless already accomplished in accordance with the initial issue of this directive, before 31 March 1998.

The compliance of the initial issue of this directive remains unchanged.

This amendment becomes effective on 21 January 1998.

Background: This directive was issued to detect intergranular corrosion in the wing spars, which if not found and repaired could cause structural failure of the wings.

Amendment 1 is issued in response to a revision of the related FAA AD, which clarifies certain inspections and procedures of the AD Appendix.

The original issue of this airworthiness directive became effective on 27 March 1997.

Appendix to AD/LUSCOMBE/2 Amdt 1

INSPECTION PROCEDURES FOR LUSCOMBE MODEL 8, 8A, 8B, 8C, 8D, 8E, 8F, T-8F AIRCRAFT THAT HAVE NOT ACCOMPLISHED THE INSPECTION IN ACCORDANCE WITH THE PROCEDURES IN THE DON LUSCOMBE AVIATION HISTORY FOUNDATION RECOMMENDATION #2, DATED DECEMBER 15, 1993; REVISED NOVEMBER 21, 1995.

1. Remove all existing wing root fairings, wing inspection hole covers, and wing strut cover plates on both the right and left wing.
2. Loosen the **rear** wing spar root attach bolts on both the right and left wings (**one each wing**) to permit a small wing deflection.
3. Perform a visual inspection of the extruded rear spar aft face of the left and right wing.
4. Inspect the **face of the aft rear** spar from the root to the spliced sheet metal tip spar at the wing root fairing location.
5. To permit removal of the wing strut, unbolt the wing strut and remove the strut **carefully**.

*Note: In the location under **the forward** spars, support the wing half at normal height by any stable means, such as a ladder and padded lashed block. **This will support the wing as the wing strut is removed.** Avoid excess vertical deflection of the wing as this may stress the wing root attach point.*

6. Using suitable light and the access gained by the wing strut hole, visually inspect the front of the rear spar and the rear of the front spar for abnormal bulges or erupted spar surfaces.
7. Remove the wing tip fairing by drilling out the rivets (using a #30 drill or smaller), and inspect the spars for abnormal bulges or erupted spar surfaces in the "U channel attach area" of each spar, and the outer lengths to the splices of the sheet metal spar extrusions.

Note: Inspection of the front of the front spar may be performed by using the existing inspection holes and a "light trolley" on the upper aileron cable (the illumination from the light trolley must be sufficient to provide for adequate inspection). Attach the light trolley to the upper aileron cable with a tie wrap, connect a wire or rope of suitable length to the tie wrap and use this as a means to move the light along the face of the spar.

8. **Replace rivets through the skin and front / rear spars with AN426 flush rivets to secure former, spar and skin. Install at least 6 rivnuts (3 on top / 3 on bottom) through the skin and former. Reattach wing tip fairings with #8/32 rivnuts or #8/32 x 1/2 machine screws, through the fairing, skin, and formers.**

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9. Reassemble wing strut on inspected wing, protecting the root joint by avoiding excess vertical deflection. Check the lock nuts for wear and replace as necessary. Torque the strut ends and wing root bolts using the appropriate torque.
10. If evidence of intergranular corrosion is detected, remove and replace the corroded part with an airworthy part.
11. Upon completion of the inspection, replace the wing root fairings, wing inspection hole covers and wing strut covers.

Note: Text in the above Appendix that is highlighted in “bold”, is the text that has been changed from or added to the Appendix of the initial issue of this Directive.