


AIRCRAFT DEVELOPMENT

TITLE: Installation Procedure-Aileron seal, Cessna

NO. 115-3

DATE OF ISSUE 12/19/78

REVISION D

PREPARED BY

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APPROVED BY

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REV. STATUS	D	D							
OF PAGES	1	2							

F.A.A.
 APPROVED
 Wichita Aircraft Certification
 Office, ACE-115W
 Central Region
 Date *12/19/78*

AIRCRAFT DEVELOPMENT
1220 RED OAK CT.
TROY, MO 63379

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1.0 PURPOSE

To explain the aileron seal, installation procedure for this kit in the safest, most cost and time effective manner.

2.0 SCOPE

This procedure is applicable to all model aileron seal, Cessna kits sold by Aircraft Development.

3.0 GENERAL

All work must be accomplished per Aircraft Development Installation Procedure 115-3, Drawing 115-4 and AC 43.13-1. All materials required for the flap seal are provided with this kit, except for rivets. A hardware kit is available from Aircraft Development for the flap seal installation. Order hardware kit 115H.

4.0 INSTALLATION PROCEDURE

4.1 AILERON SEAL

- 4.1.1 Drill out the 3/32" diameter rivets on the top of the trailing edge of the wing skin, from the inboard end to the outboard end of the aileron. Remove the trailing edge fillers and any shavings from under the wing skin.
- 4.1.2 Slip the aileron seals in place between the wing top skin and the rear spar upper flange as shown in drawing 115-4, being careful to come as close to the .032" clearance between the aileron seals and the aileron, without going under .032". It may be necessary to trim the aileron seals to length. Drill several holes through the aileron seals at the trailing edge of the upper skin with #40 drill using existing hole locations. Cleco the aileron seals to prevent movement. Drill the remaining holes through the aileron seals using a #40 drill, through existing hole locations. Remove aileron seals and shavings from under the wing skin and de-burr holes.
- 4.1.3 Slip the aileron seals back in place and cleco in several places to prevent movement. Rivet the aileron seals in place using MS20470AD3-4 rivets.

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- 4.1.4 Drill out the 3/32" diameter rivets on the bottom of the trailing edge of the wing skin, from the inboard end to the outboard end of the aileron. Remove any shavings from under the wing skin.
- 4.1.5 Slip the aileron seals in place between the wing lower skin and the rear spar lower flange as shown on drawing 115-4. Being careful to come as close to the .200" clearance between the aileron seals and the aileron, without going under .200". Note: be sure that the bent flange on the lower aileron seal is pointing down as shown on drawing 115-4. It may be necessary to trim the aileron seal to length. Drill several holes through the aileron seals at the trailing edge of the lower skin with #40 drill using existing hole locations. Cleco the aileron seals to prevent movement. Drill the remaining holes through the aileron seals using a #40 drill through existing hole locations. Remove aileron seals and shavings from under the wing skin and de-burr holes.
- 4.1.6 Slip the aileron seals back in place and cleco in several places to prevent movement. Rivet the aileron seals in place using MS20470AD3-4 rivets.
- 4.1.7 Check operation of ailerons. ~~Ailerons shall operate smoothly and have the proper clearances as specified on drawing 115-4.~~
- 4.1.8 Paint the aileron seals to match the airplane. It is best to mask only the ailerons and the wing to the sides of the aileron seals. Leaving the front edge of the aileron seals unmasked, as this does not produce an unsightly hard paint line.
- 4.2 If only the aileron seal is being installed, make entry in log book and in block 8 of form 337 as follows: Installed Aircraft Development aileron seal kit in accordance with Aircraft Development drawing 115-4, approved by STC (attached). New weight and balance calculated and entered in aircraft records.

Aileron seals

1.1 lbs.

69.0" arm

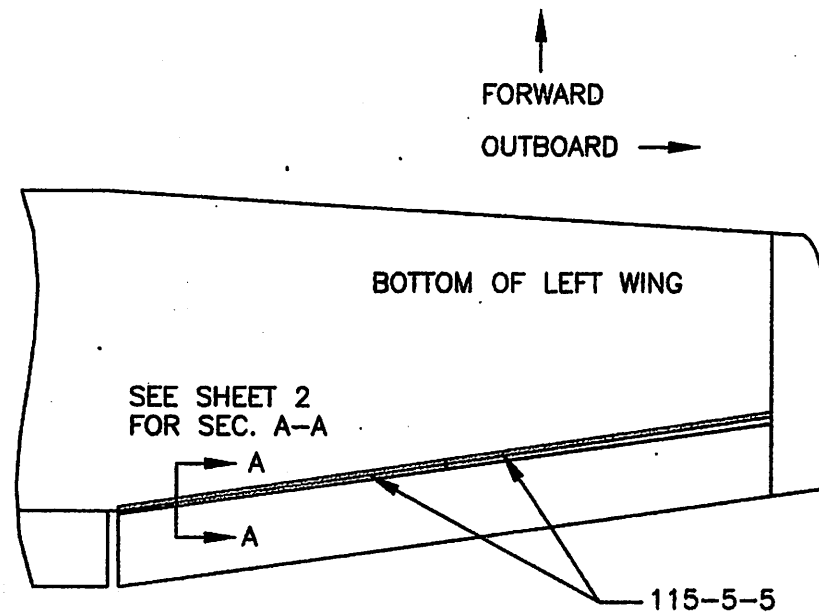
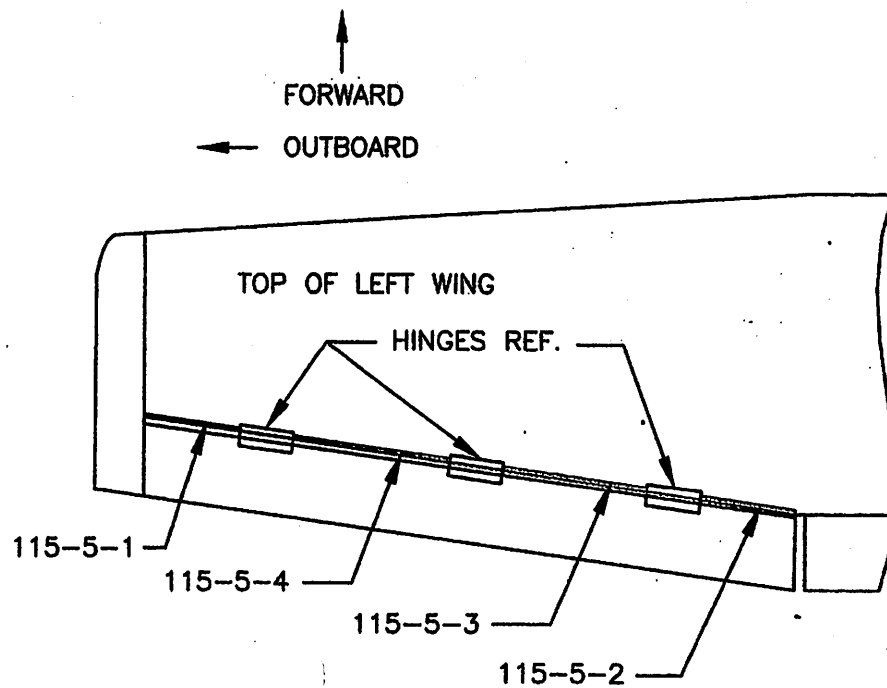
75.9 in lbs.


Make entry in block 8 of form 337 as follows: To insure continued airworthiness of the aileron seal a visual inspection of the aileron seal shall be part of the preflight inspection. If the flap seals are also being installed proceed to flap seal installation 114-3, and after the flap seals are installed, combine the flap and aileron seal statements on back page of form 337.

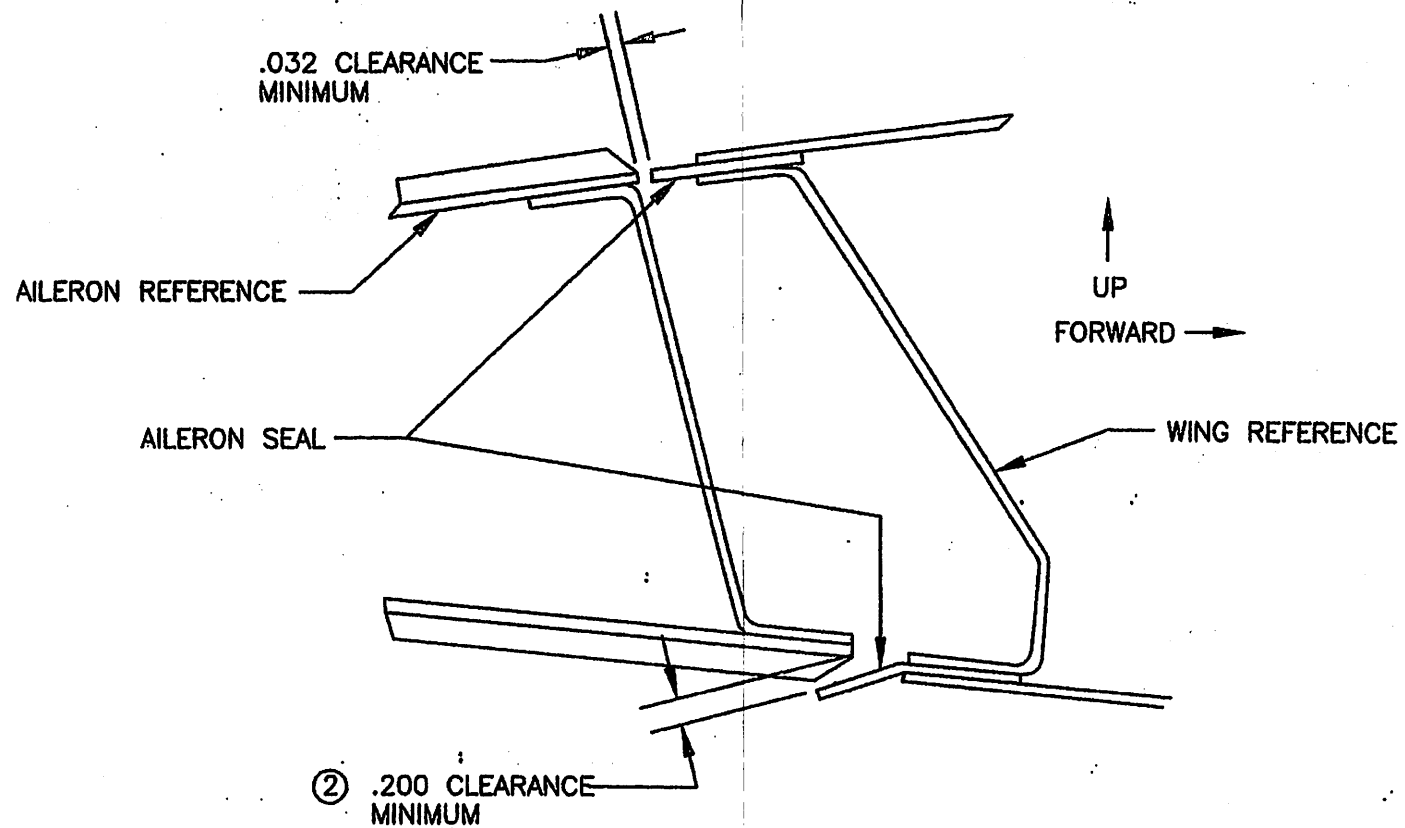
1 LEFT WING SHOWN, RIGHT WING OPPOSITE

② THIS DIMENSION TO BE MET WHEN AILERONS ARE IN THE NEUTRAL POSITION.

REVISION RECORD				
REV.	DATE	BY	CHANGE	APP.
A	3/20/79	RJ	DELETED STALL FENCE AND ALL ASSOCIATED DATA. ADDED NOTE ②	RJ
A	12/15/04	RJ	CONVERTED TO COMPUTER DRAWING WITH NO CHANGES	RJ




 AIRCRAFT DEVELOPMENT	
SCALE NONE	DRAWN BY RICHARD JIMENEZ
AILERON SEAL INSTALLATION	
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VIEW A-A TYPICAL AILERON SEAL INSTALLATION.

VIEW A-A ROTATED 90° CLOCKWISE.

 AIRCRAFT DEVELOPMENT	
SCALE NONE	DRAWN BY RICHARD JIMENEZ
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