EFFECTIVE DATE: This SERVICE INSTRUCTION is effective ***May 31st, 2012.***

SUBJECT: Gap Seal Installation

MODELS AFFECTED: CC11-100 OR CC11-160 All

COMPLIANCE TIME: Compliance is not mandatory

CONTINUED INSPECTION: Per section 2 below

PURPOSE: To install gap seals between horizontal stabilizer and the elevator and between the vertical fin and rudder of the aircraft.

PARTS LIST:

PART	DESCRIPTION	QTY
RM0601-001	EXPANDED CLOSED CELL SILICONE	140”

1 INSTRUCTIONS FOR INSTALLATION AND REMOVAL

1.1 PREPARATION

1. Carefully clean the gap between the horizontal stabilizer and elevators and the fin and rudder with soap and water to remove any grease or grit. If a solvent is used, ensure it is approved for the type of finish on the aircraft.

2. Cut two strips of seal 35 inches long. These will be used for the inboard portion of the elevators. Cut two strips 11 ½ inches long. These will be used of the outboard portion of the elevators.

3. Cut one strip of seal 33 inches long if no navigation light wire is present or cut one strip of seal 27 ⅝ inches long if the navigation light wire is present. A 6 ½ inch long piece may be installed below the navigation light wire to prevent the upper piece from slipping down over time. Cut a 5 ½ inch piece for above the upper rudder hinge.

NOTE
Cut lengths are longer than necessary to account for shrinkage of gap seal material

1.2 INSTALLATION

1. Carefully press the long elevator seals into the gap between the hinges (See Figure 1). Either flat edge may be on top. Make sure that the seals are evenly spaced between the hinges.

2. Ensure each gap seal butts against each hinge. Inspect both the top and the bottom to ensure the gap seal is flat and the lip is not folded in at any point.

3. Carefully press the short elevator seals between the hinge and the elevator horn (See Figure 2). Either flat edge may be on top.

4. Be especially careful to ensure that the seals do not impede the travel of the elevator throughout its range of travel.

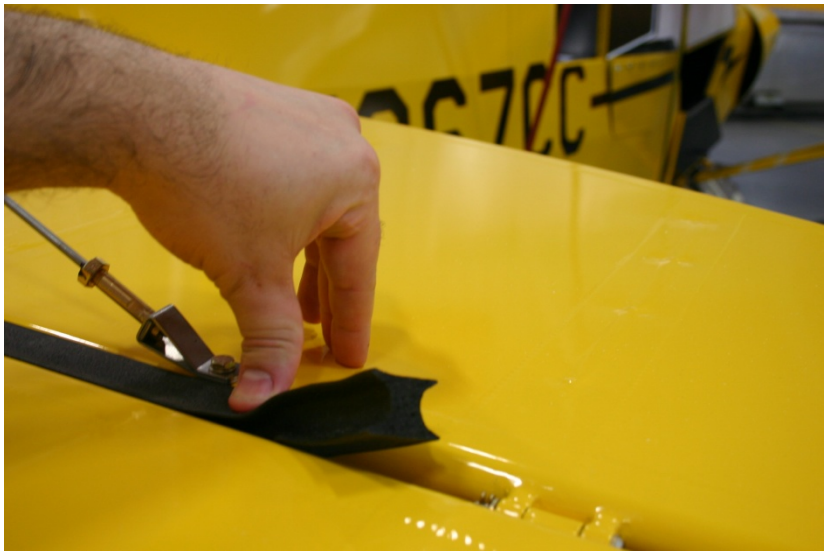

FIGURE 1 - Installing Elevator Gap Seal Between the Hinges

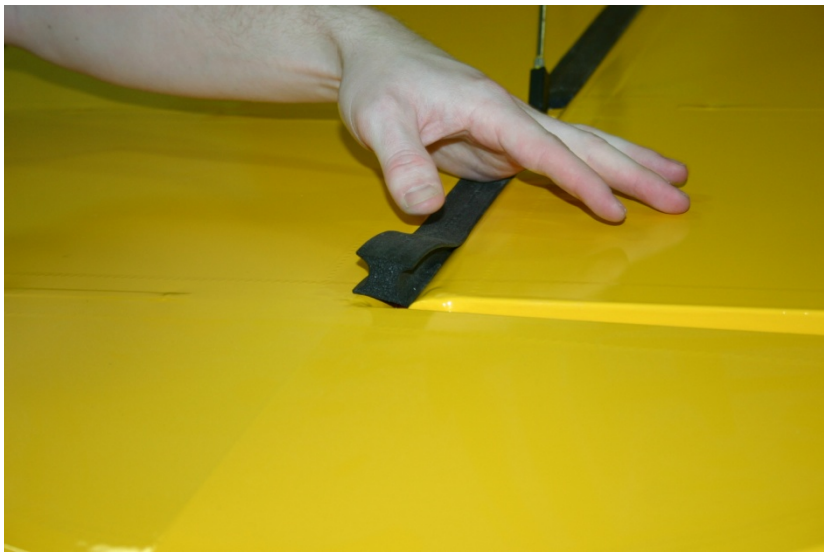

FIGURE 2 - Installing Elevator Gap Seal Between the Outboard Hinge and the Horn

5. Repeat the process with the rudder seal (See Figure 3). Ensure it is evenly spaced between the hinges. In some installations, the wire for the aft navigation light may be in the way. A 6 inch piece of gap seal may be installed below the wire.

6. Ensure the gap seal (Figure 4):

   - Butts against the top and bottom hinge or,
   - If the wire for the navigation light is present, it butts against the top hinge and is clear of the wire mentioned above (Figure 5). Inspect both sides to make sure the gap seal is flat and the lip is not folded in at any point.
   - If navigation light wire is present, gap seal material is not necessary between the wire and lower hinge as illustrated in (Figure 5) but a 6 inch piece may be installed below the navigation light wire.

FIGURE 3 - Installing Rudder Gap Seal

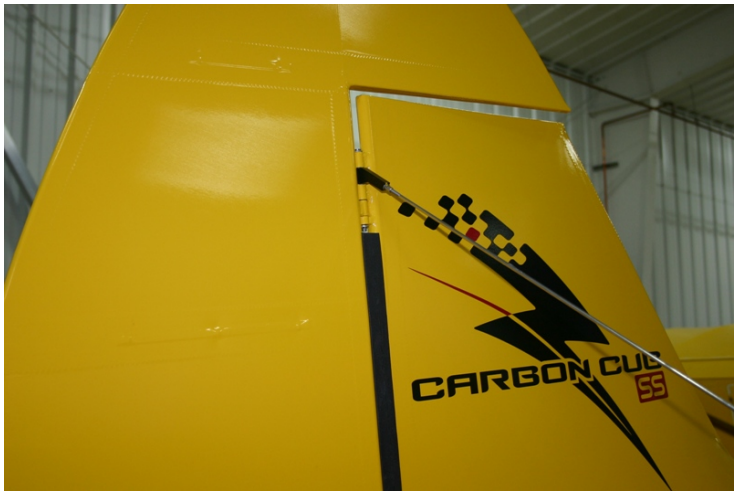

FIGURE 4 – Upper Rudder Gap Seal Position

FIGURE 5 – Lower Rudder Gap Seal Position with Navigation Light Wire

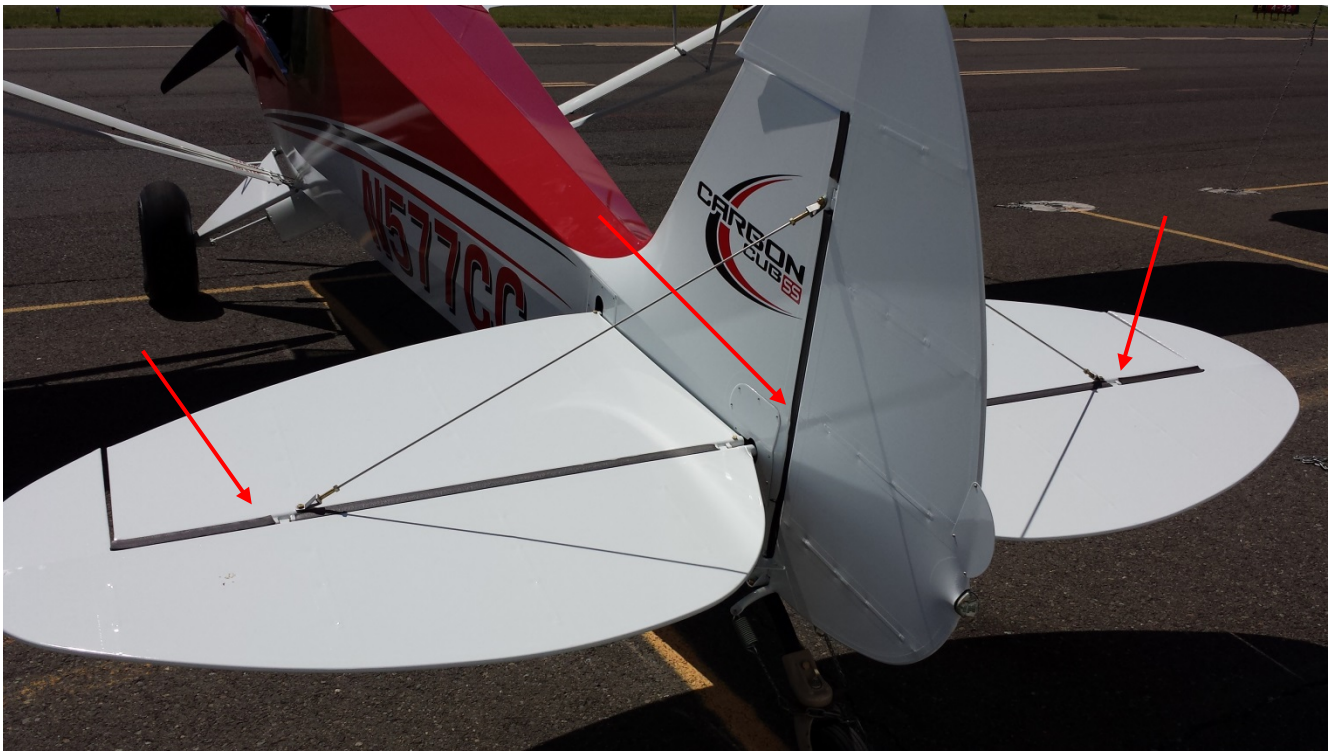

FIGURE 6 – Gap Seals Installed

1.3 REMOVAL

1. To remove any of the seals, gently lift it out of the gap.
2. Note that if one elevator gap seal is removed, **it must be reinstalled before next flight. Otherwise, all other elevator gap seals must be removed before next flight.**

WARNING
DO NOT OPERATE WITH ONE ELEVATOR GAP SEAL MISSING.

NOTE
It is permissible to operate with the rudder gap seal removed and all elevator gap seals installed.

NOTE
It is permissible to operate with all elevator gap seals removed and the rudder gap seal installed.

2 CONTINUED AIRWORTHINESS

2.1 PREFLIGHT

1. Ensure the rudder gap seal and both elevator gap seals are installed snugly.
2. Inspect gap seals for deterioration, cracks or missing sections. If any defects are evident, the affected seal must be removed in accordance with Section 1.3 of this manual. **Take note of the warning in Section 1.3 that states operations with only one elevator gap seal are not permitted.**

WARNING
OPERATIONS ARE NOT PERMITTED WITH PARTIAL SECTIONS OF SEAL.

2.2 ANNUAL INSPECTION

1. Remove both elevator and the rudder gap seals.
2. Inspect for embrittlement, cracks and missing portions. If any defects are observed, replace the seal.
3. Clean the gap between the stabilizer and the elevator, and the fin and the rudder. Ensure there is no grease or grit on the surfaces.
4. Inspect the stabilizer, elevator, fin and rudder in the area of the gaps to ensure there is no deterioration of the fabric and no apparent corrosion in the tubes.
5. Re-install the gap seals according to installation steps in 1.2 of this document.

3 WEIGHT AND BALANCE

This modification has negligible effect on weight and balance.

4 FORMS AND DOCUMENTATION

Make entry in the aircraft log book indicating that this service instruction has been performed.

5 MAJOR REPAIR AND ALTERATION (MRA)

Installation of this service instruction is a major alteration per ASTM F2483 Section 9. A Major Repair or Alteration (MRA) form is not required for installation in an SLSA aircraft per Section 6.5.2 of SC10000AMM, SSC10000AMM or SSC10020AMM.

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