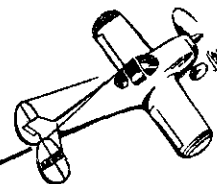


Ercoupe BULLETIN

**SUBJECT: Center Section Belly Skin
Reinforcement of**



1. Failures, occurring as cracks in the center section belly skin at the rearmost rivet attachment in the center section belly skin outer stiffeners, (415-13056 L/R), have been reported. At Ercoupe Serial No. 2038, the outer stiffeners were modified to include an attachment to the center section rear beam, therefore, the affected Ercoupes are Serial Nos. 113 to 2037, inclusive. It is recommended that this bulletin be complied with no later than the next 25 hour check.

2. This bulletin is prepared to give detailed instructions, in Section I, on the installation of the stiffener clips only, for affected Ercoupes with no failure existing. Section II describes a field repair to be accomplished in the event that a failure is present.

3. The stiffener clips and rivets necessary are available, but it is recommended that the center section belly skin patch plates, if needed, be fabricated from local material.

SECTION I

Installation of Stiffener Clips (415-13068)

1. Preliminary Operations:
 - a. Remove baggage compartment end trim (415-53114 L/R)
 - b. Remove screws along front section of Baggage Compartment (415-53121) at seat back attachment.
 - c. Fold baggage compartment to lay on cabin rear deck.
 - d. Remove Battery (415-54044-20)
 - e. Remove Battery Box Assembly (415-54035).
2. Installation of Stiffener Clips (415-13068) (Ref. Page 2, Fig. 1)
 - a. Install stiffener clips on aft end of each outer stiffener (415-13056 L/R) as follows:
 - (1) Clamp, with "C" clamp, clip on outboard side of upper stiffener flange

with clip flange facing toward outside of ship. The first rivet hole should be no less than 9/32" from the aft end of the stiffener.

- (2) Drill two No. 40 holes through stiffener, using clip as template. A 90° or 45° angle drill is recommended for drilling these holes.
- (3) Rivet clip to stiffener with two GLM25-2AD3-4 rivets.
- (4) Drill one No. 40 hole through rear beam, using clip flange hole as template.
- (5) Rivet clip to rear spar with one GLM25-2AD3-5 rivet. To buck this rivet, the lightening hole in fuselage side skin can be used to get behind rear spar.

3. Re-installation of Parts:

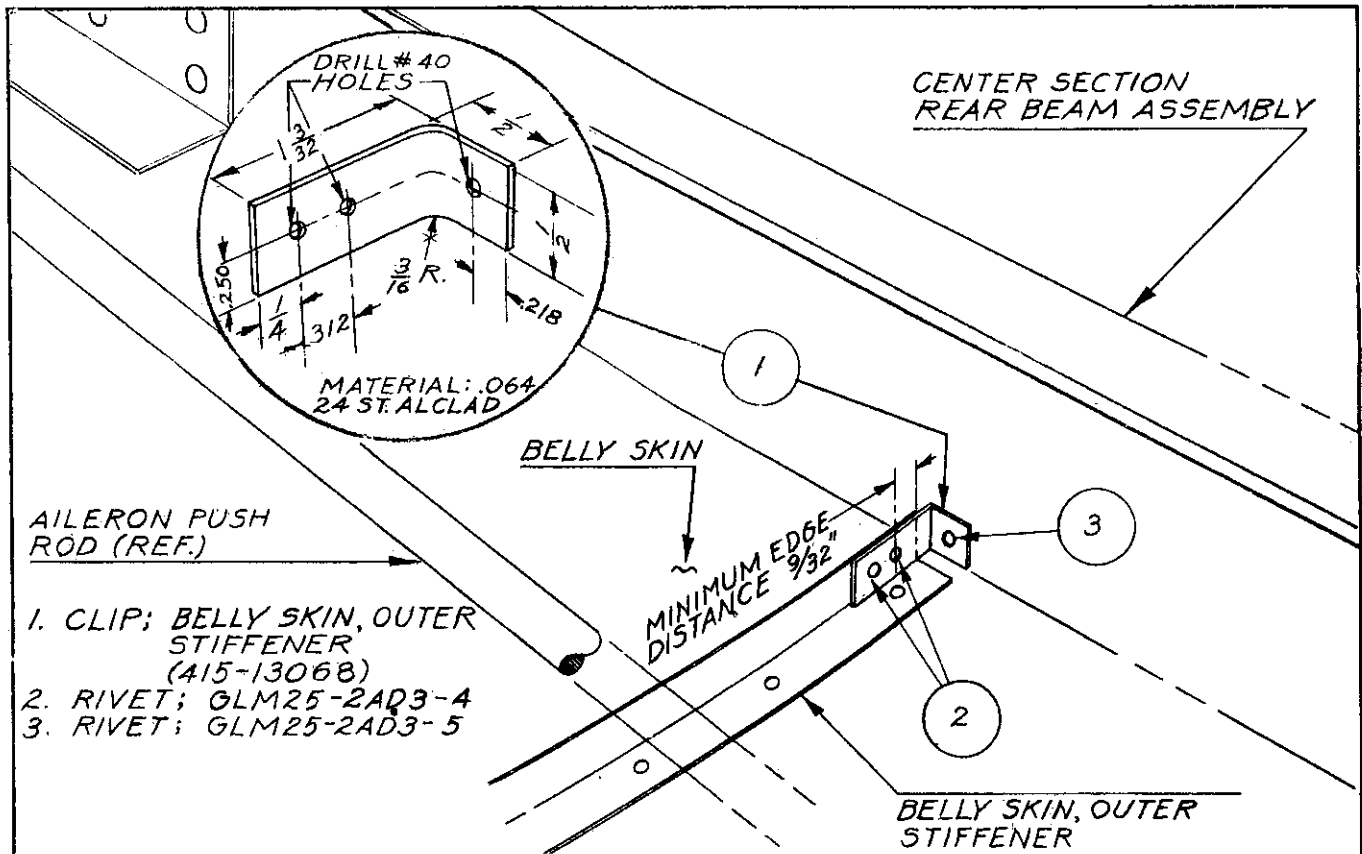
- a. Re-install the following parts:
 - (1) Battery Box Assembly (415-54035)
 - (2) Battery (415-54044-20). The ground cable No. 3 connects to the negative post on the battery.
 - (3) Baggage Compartment (415-53121).
 - (4) End Trims (415-53114 L/R).

SECTION II

4. Installation of Stiffener Clips and Center Section Skin Patch Plates.

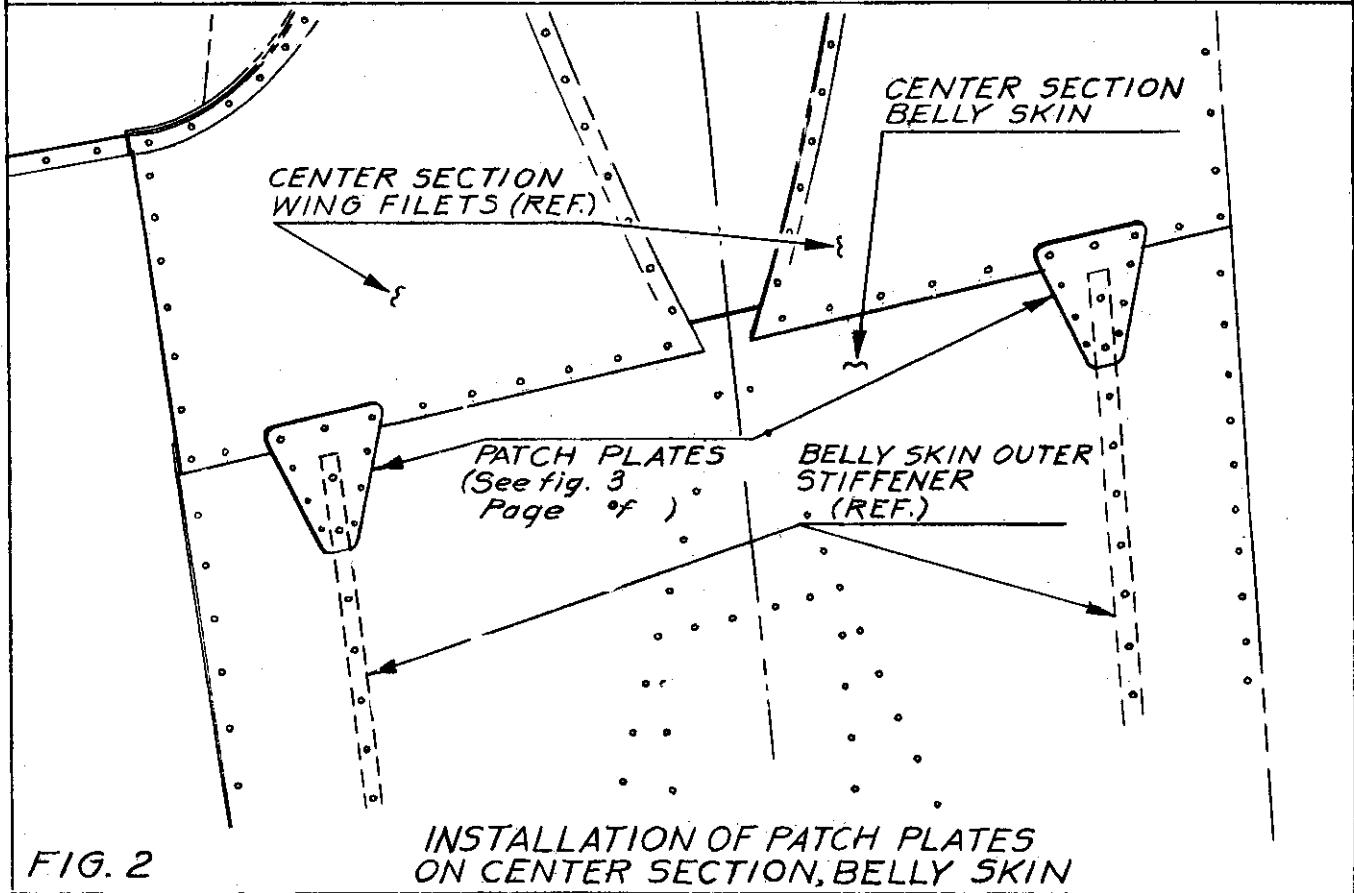
1. Preliminary Operations: (Refer to Section I, Para. 1.)
2. Installation of Clips: (Refer to Section I, Para. 2.)
3. Installation of Center Section Skin Patches:
 - a. Make two skin patch plates from a .032"-24ST Alclad, as illustrated in Figure 3, Page 4. This sketch is full scale and can be used as template.

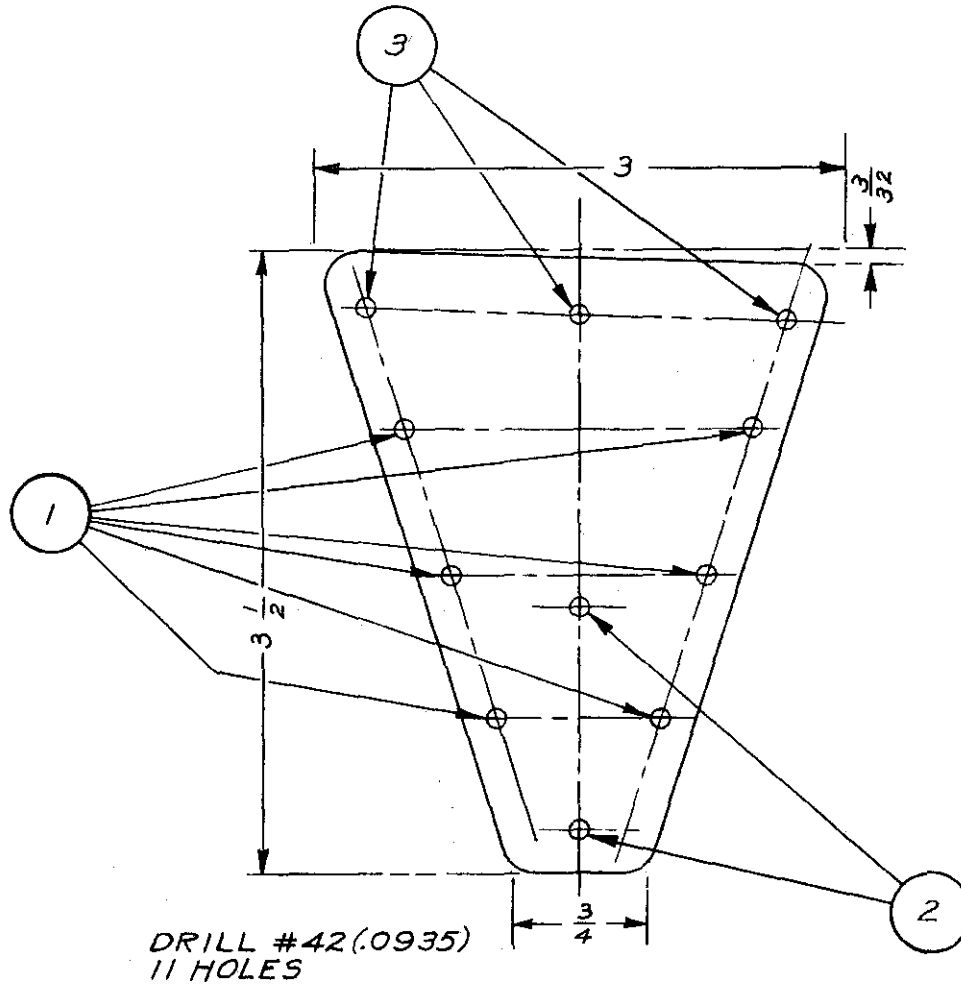
- b. Clean up affected areas and drill relief holes at ends of cracks.
 - c. With proper size drill, drill out the last two rivets in aft end of outer stiffeners (415-13056 L/R) and belly skin and the three rivets in belly skin and rear beam aft of outer stiffeners.
 - d. Fasten skin patch with Clecos or other fasteners to stiffener and rear spar as shown in Figure 2, Page 3.
 - e. Drill six holes in belly skin, marked as No. 1 in Figure 3, Page 5, with No. 42 (.0935) drill.
 - f. Remove patch and burr holes.
 - g. Replace patch and rivet, using GLM25-2AD3-4 rivets in holes marked No. 2 and No. 3, and GLM25-2AD3-3 rivets in holes marked No. 1 in Figure 3, Page 5.
4. Reinstallation of Parts:
- a. Follow instructions in Section I, Para. 3.



1. CLIP; BELLY SKIN, OUTER STIFFENER (415-13068)
2. RIVET; GLM25-2AD3-4
3. RIVET; GLM25-2AD3-5

FIG. 1 INSTALLATION OF C.S. BELLY SKIN, OUTER STIFFENER, CLIP (CLIPS ARE TO BE INSTALLED ON BOTH R. & L. OUTER STIFFENER, LEFT HAND SHOWN)





MATERIAL: .032 24 ST ALCLAD

- ① GLM25-2AD3-3 RIVET
- ② GLM25-2AD3-4 RIVET
- ③ GLM25-2AD3-4 RIVET

FIG 3. PATCH PLATE
CENTER SECTION BELLY SKIN