



SERVICE BULLETIN

SB00016

Rev A

Page 1 of 6

Cub Crafters, Inc. Considers Compliance Mandatory

This Service Bulletin is issued per the requirements of ASTM F2295-06.
It is a Safety Directive for the purpose of compliance with 14 CFR §91.327(b)(4).

EFFECTIVE DATE: This Service Bulletin is effective October 19, 2010.

SUBJECT: JURY STRUT BRACKET AND EYE BOLT

MODELS AFFECTED: CC11-100 AND CC11-160 S/N 0001 THROUGH 00150

COMPLIANCE TIME: PART A: PRIOR TO NEXT FLIGHT
PART B & C: AT NEXT MAINTENANCE ACTION

PURPOSE: Aluminum Jury Strut Brackets have cracked and sheared off in flight. This Service Bulletin addresses the inspection procedure and the replacement of the aluminum brackets with stainless steel brackets. Pilots are reminded to inspect jury strut brackets during pre-flight.

PARTS LIST:	<u>PART</u>	<u>DESCRIPTION</u>	<u>QTY</u>
	AN3-6A	BOLT	4
	AN960-10L	WASHER, FLAT, THIN	16
	HDW-CR3213-4-6	RIVET, CHERRYMAX UNIVERSAL HEAD	12
	MS21042L3	NUT, SELF-LOCKING, STEEL	4
	RM0568-001	LOCTITE 330, ADHESIVE	AR
	RM0568-004	LOCTITE 271, RED (10 Mil)	AR
	SC31604-001	AFT SPAR BRACKET, LH	1
	SC31604-002	AFT SPAR BRACKET, RH	1
	SC31506-001	FRONT SPAR BRACKET, LH	1
	SC31506-002	FRONT SPAR BRACKET, RH	1
	SC37204-001	EYE BOLT, JURY ATTACH	4
	SC37303-001	LIFT STRUT BUSHING, AFT	2
	SC37303-003	LIFT STRUT BUSHING, FWD	2
	TC3017-001	GROMMET	6
	TC9101-001	5" INSPECTION COVER ASSEMBLY	3
	VP5150-002	IGLIDE CLIP BEARING (0.072/0.135")	4

Cub Crafters, Inc. Considers Compliance Mandatory

PART A INSTRUCTIONS:

1. Inspect all jury strut attachment fittings forward and aft, upper and lower, for any cracks or breaks (see in Figure 1).
 - a. The upper brackets protrude down through the fabric from inside the wing and may require a slight push up on the fabric to see more of the bracket.
 - b. The lower eyebolts penetrate the lift struts and should also be checked for any cracks or breaks.



FIGURE 1 – Cracked and Sheared off Upper Bracket

2. Check the security of the jury strut tubes for any abnormal movement.
3. If no cracks or breaks are noted, make a log book entry: “Inspected per SB00016 Rev A”. Check these brackets during normal pre-flight inspection.
4. If a crack or break is found, continue to Part B & C Instructions.

Cub Crafters, Inc. Considers Compliance Mandatory

PART B INSTRUCTIONS – Upper Bracket Replacement:

1. Read all instructions before beginning any work.
2. Jack the tail of the airplane to near level flight attitude accordance with the AMM. This is to prevent rivets from getting into an inaccessible part of the wing.
3. Measure 59" inches inboard from the center of the lift strut upper attach bolt and back 6.5" and 31" from lower trailing edge of the leading edge skin to center the fabric grommet (see Figure 2). Mark the center points.

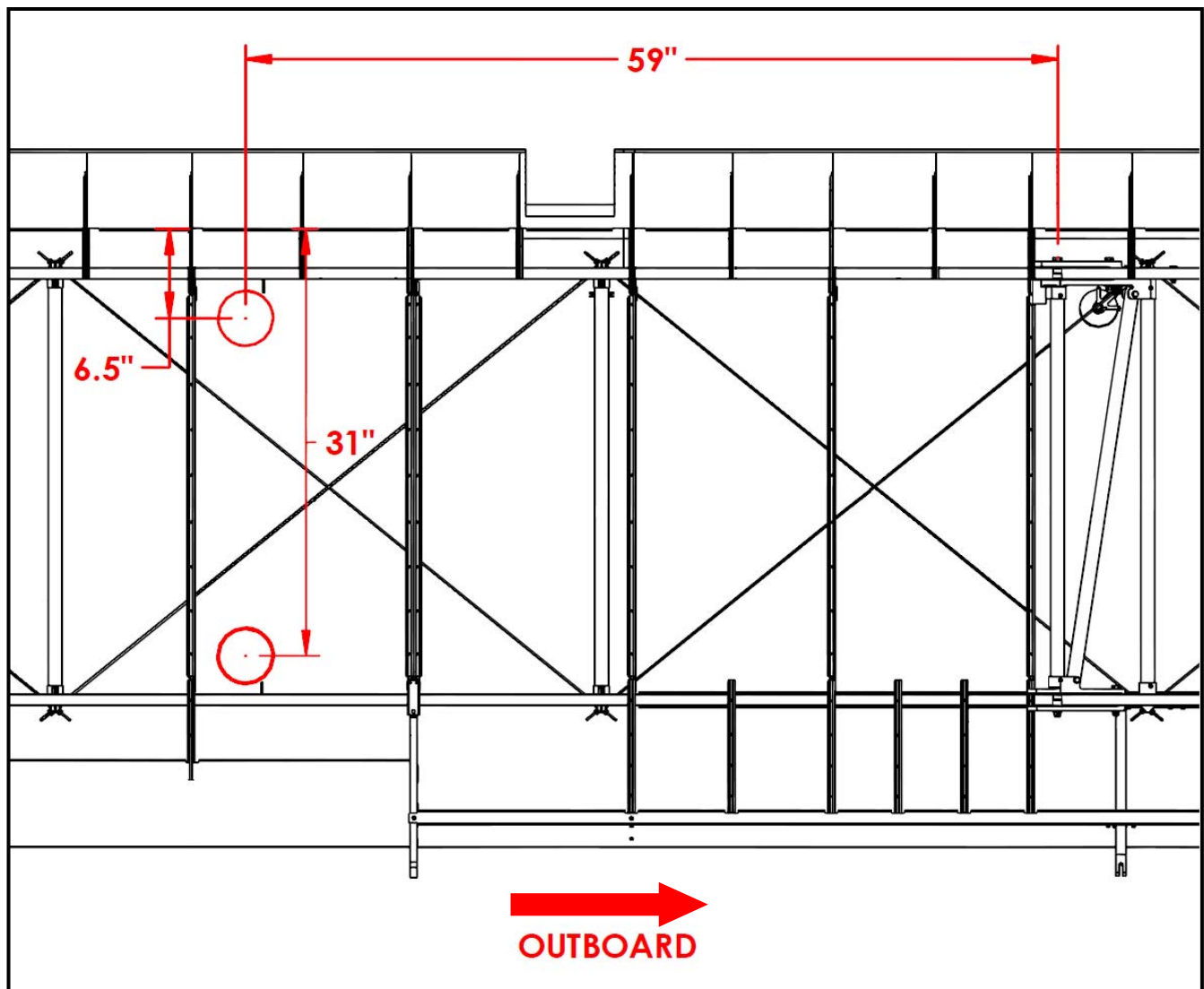


FIGURE 2 – Inspection Hole Location as Viewed from Below the Wing (FOR REFERENCE ONLY)

Cub Crafters, Inc. Considers Compliance Mandatory

4. Lightly sand the flat side of the grommet for best adhesion using 80-grit sandpaper. Wipe clean with alcohol.
5. Apply Loctite 330 adhesive to the sanded side of the grommet and center over the mark on the skin of the wing. Hold firm pressure for 30 seconds; allow one hour for adhesive to cure (see Figure 3).
6. Cut fabric from center of inspection ring using a sharp knife.
7. Follow steps 3 & 4 above to install a second grommet on the inside of the hole, sandwiching the fabric.
8. Inspect for any wear, corrosion, or damage that would cause an unsafe condition for operation.
9. Remove hardware attaching the upper bracket to the jury strut.
10. Drill the aft side of the three rivets from the existing bracket, and remove the bracket (see Figure 4).
11. Completely drill and remove all three rivets and deburr the drilled holes. Remove any residual metal shavings from the wing.
12. Install the new stainless steel bracket using cherry max rivets.
13. Assemble hardware and secure the bracket and jury strut. Keep finger tight for eyebolt replacement (see Figure 5 below).



FIGURE 3 –Grommet installed on Wing Exterior

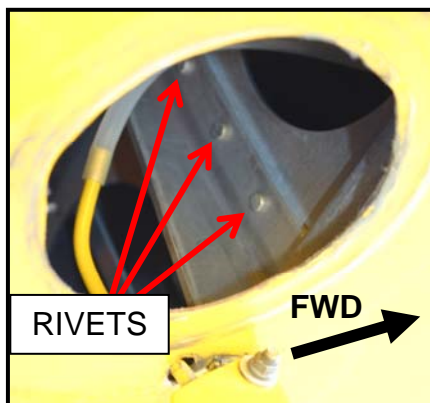


FIGURE 4 – FWD RIVET REMOVAL

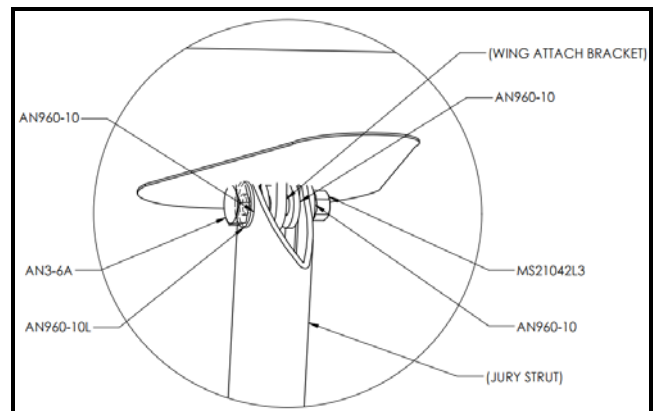


FIGURE 5 – Hardware Assembly

14. Install inspection cover assembly, ensuring that the tabs are perpendicular to the direction of flight.
15. Repeat steps 7-13 for aft bracket and opposite side of the aircraft.

Cub Crafters, Inc. Considers Compliance Mandatory

PART C INSTRUCTIONS – Lower Eyebolt Replacement:

16. Determine if the lower eyebolts need to be replaced. Measure the lower lift strut bushing head flats (see Figure 6). If distance measured is 0.375", continue to step 16. If distance measured is 0.438" then skip to step 29.
17. Loosen hardware attaching jury strut to upper fittings and disconnect jury struts from lower fittings (see Figure 7).
18. Rotate jury struts away from lower jury strut attach fittings.
19. Remove jury strut spreader bar, jury strut eye bolts, and bushings from lift struts.
20. Inspect for any wear, corrosion, or damage that would cause an unsafe condition for operation.
21. Measure fitting holes in lift struts. Enlarge to 0.373" (+/- 0.001") if required. Deburr the holes and remove any shavings from the strut.

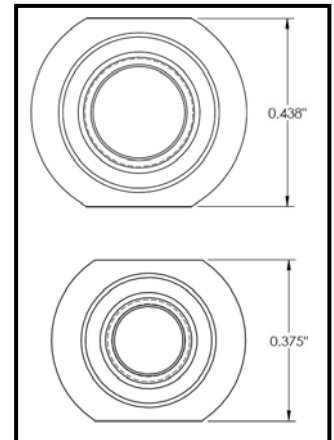


FIGURE 6 – Lower Bushing

WARNING

THE FORWARD AND AFT LIFT STRUTS ARE FITTED WITH DIFFERENT LENGTH BUSHINGS FOR THE JURY STRUT ATTACH EYEBOLTS. P/N SC37303-003 MUST BE INSTALLED IN THE FWD STRUT AND P/N SC37303-001 IN THE AFT STRUT.

22. Insert jury bushing up through the bottom hole in lift strut. Perform visual check to ensure that the tip of the bushing sits approximately 0.03" below the upper surface of the lift strut. If necessary, remove material from top end of bushing to provide a proper fit.
23. Check the fit of the bushing again and remove. Apply Loctite 271 to threads of eyebolt.
24. Insert proper bushing (see warning above) through bottom hole in lift strut while inserting jury strut attach eye bolt through top hole in lift strut. Thread bushing and eye bolt together finger tight.
25. Rotate jury struts into position to eye bolts and rotate eye bolts as necessary to center in jury struts and spreader bar.
26. Once the eye bolts are rotated into proper position, tighten jury strut attach bolts at top until excessive play is removed.
27. Assemble bolt, washers, I-glide clip bearing, jury strut, spreader bar, and nut to jury strut lower attach fitting (see Figure 7).
28. Hold the jury strut attach eye bolt with a wrench and torque the bushing 20-25 in-lbs. Verify the upper bracket hardware is secure.
29. Repeat steps 15-28 for aft lift strut and opposite side.

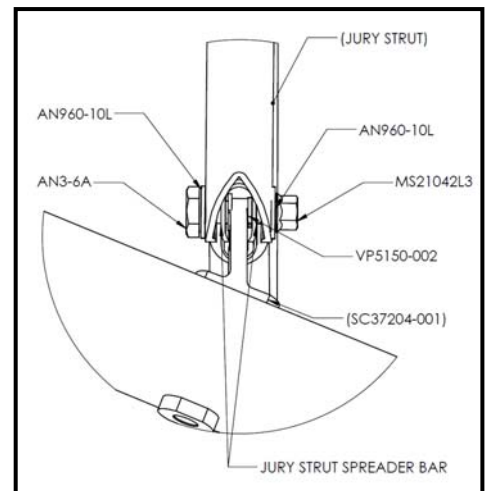


FIGURE 7 – Hardware Installation



Cub Crafters, Inc. Considers Compliance Mandatory

30. Make logbook entry:

- a.** SB00016 Rev A Part B compliance: aluminum bracket was changed to a stainless steel bracket.
- b.** SB00016 Rev A Part C compliance: eyebolt and lower lift strut bushings were replaced.

If you are no longer in possession of this aircraft, please forward this information to the present owner/operator and notify Cub Crafters, Inc. Contact the customer service department at:

Cub Crafters, Inc.
1918 S. 16th Avenue
Yakima, WA 98903.
1-877-484-7865 or 1-509-248-9491
support@cubcrafters.com

Please include the aircraft registration number, serial number, current name, and address of the owner and/or operator.