

Revision #	Date	Detail of changes
1	4-9-2007	Original
2	1-31-2009	Revised for ASTM standards
3	8-31-2012	LSA gear/seat belt installation added.

7. Seat Belt Installation



Section objective: Installation of the seatbelt cables, shoulder harnesses, and inboard lap belts.

Required parts: 2 seat belt sets, 2 shoulder harness cables ALB-0010.

Required hardware: 4 AN4-6A, 1 AN5-10A, 4 AN4-365-428 elastic stop nuts, 1 AN365-524 elastic stop nut, 4 AN970-4 wide washers, 4 AN960-4 standard washers, 2 AN970-5 wide washers.

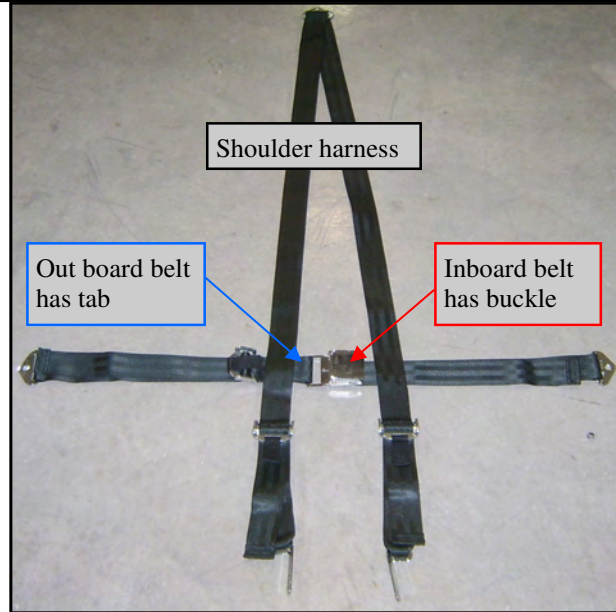
Required tools: Lightning Tool kit.

Required conditions: N/A

Required skills or training: Ability to comprehend detailed instructions and complete the task, simple knowledge of hand tools and use.

Date Completed:

1. The seat belt set has shoulder harness and lap belts.
2. The out board lap belt with the tab will not be used at this time, it does not get installed until the wings are installed for the final time.



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3. There are 2 cables included in the kit ALB-0010 that have eye ends on both ends of the cable.

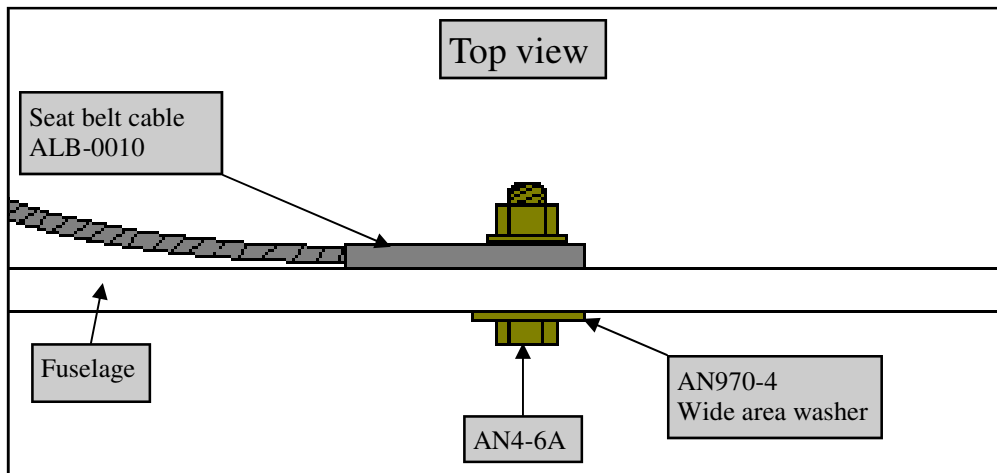
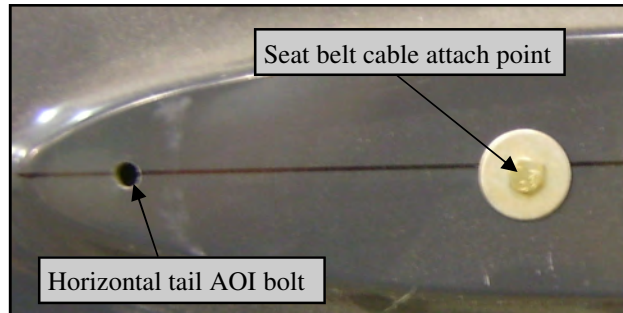
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4. These are bolted to the horizontal tail root.

5. Drill a 1/4" hole in the second hole back, the first hole is the AOI hole do not use.

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6. The cable is bolted to the fuse as follows; AN4-6A, AN970-4 wide washer, fiberglass fuse, seat belt cable, AN365-428A elastic stop nut.

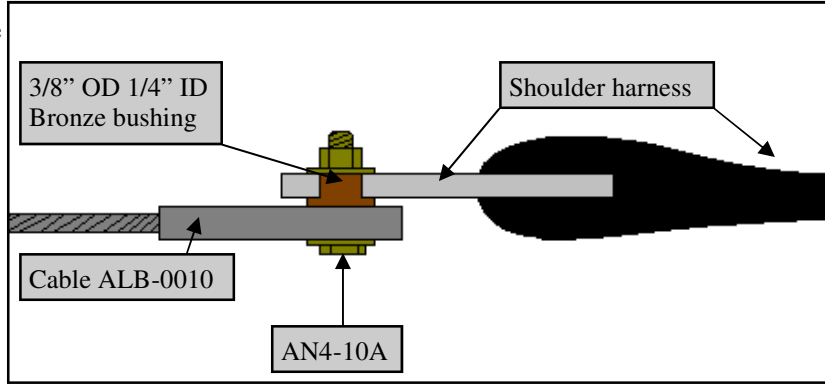
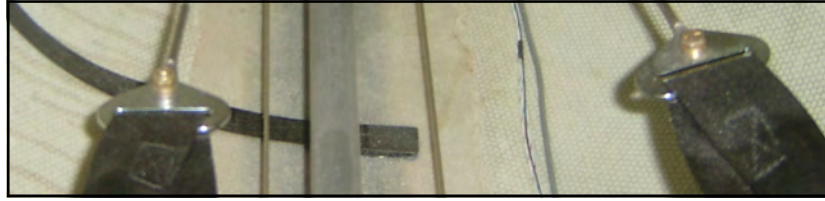


Date
Completed:

7. Seat Belt Installation

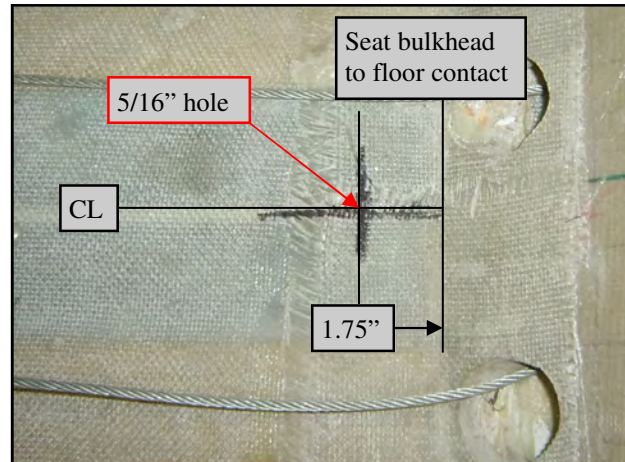
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- 7. The shoulder harness will be bolted to the other end of the cables.
- 8. The shoulder harness requires the use of a bushing. Locate the 3/8" OD 1/4" ID bronze bushings from the kit.
- 9. Insert the bushing into the side of the belt tab which will be against the cable.
- 10. File down flush the end which sticks out.
- 11. Install the AN4-10A bolt and elastic stop nut.
- 12. Torque this joint to the proper specs do not leave loose it must not swivel or have free play.

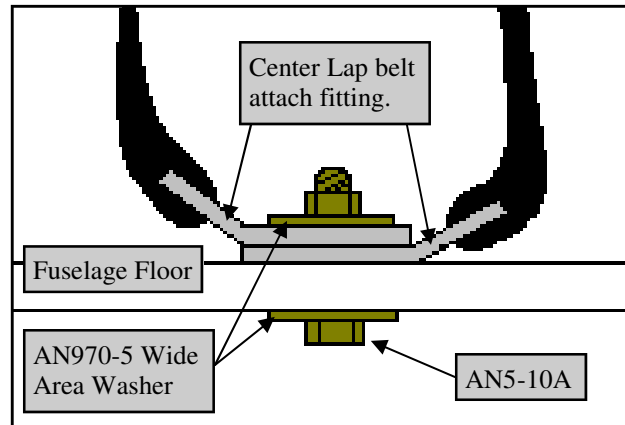


Note: The next steps 13-18, are for the EXP gear center lap belt installation. Aircraft equipped with the LSA wide track gear should use the next page of this section for center lap belt installation.

- 13. Use the photo to properly position the center belt attach hole.
- 14. The belt which attach to the floor on the aircraft center have the buckle attached not the tab.
- 15. Drill a 5/16" hole here.



- 16. Insert from the bottom of the aircraft a AN5-10A thru a AN970-5 wide area washer. A wide area washer must be used.
- 17. Next install the attach brackets for the lap belts.
- 18. Finish with another AN970-5 wide washer and an AN365-524 elastic stop nut.



- 19. As covered before the outboard lap belts will be installed when the wings go on for the final time. The belt attach brackets are captured by the AOI bolt in the trailing spar of the wing.

7. Seat Belt Installation

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Note: The following steps are for the center lap belt installation on LSA wide track gear aircraft.

1. The center lap belt installation on aircraft equipped with the LSA wide track gear is slightly different.
2. No special hole need to be drilled.
3. The belts will be bolted to the rear holes of the spar box torsional supports using AN4 hardware.
4. Note that the belts face forward and the fittings sit laterally in the aircraft fuselage.
5. The pilot side belt can be bolted directly to the support foot.
6. The Co-pilot side will need to have one AN970-4 wide area washer between the fitting and the foot to clear the pilot side belt.
7. Due to the differences in floor thickness the bolt size will vary however AN4-7A or AN4-10A bolts should be correct.
8. The bolt should be installed from the bottom up.
9. The bolt must have a AN970-4 washer installed against the fuselage skin to spread the bolts loads.

