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Operational Alert: 173

Date: May 24, 2013

Subject: Trim Wire Breakage

Compliance: Mandatory

Models Affected: All Models using Push-Pull Wire Trim System

A pilot of an S-12XL experienced an in-flight trim tab flutter due to the push-pull wire breaking. Inspection of the wire suggests possible fatigue due to over bending.

These are our recommendations to prevent this happening to you:

- 1. Inspect during pre-flight. Look closely at the wire where it terminates at the wire swivel. This should be secure and properly assembled with appropriate hardware. The intent of the design is to capture the wire with the wire swivel, while allowing the wire swivel to pivot freely in the trim tab horn. *IMPORTANT:* The wire swivel must pivot freely when the trim wire is final installed with the wire swivel retaining screw fully tightened. Refer to **FIGURE 1**.
- 2. Replace any suspect push-pull wire with proper spec wire. Contact RANS Parts Department to order.
- 3. If the push-pull wire has been bent, it needs to be replaced. See **FIGURE 2**.
- 4. Consider installing an electric trim servo. Several builders have created systems to install the Ray Allen brand of servos. We may be offering a factory made kit for this option.



FIGURE 1 - Proper installation of Wire Swivel allows free rotation.

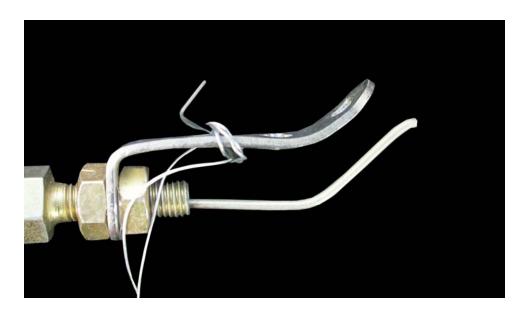


FIGURE 2 - Not replacing bent push-pull wire may lead to failure!

Thank you for your attention to this matter. Hopefully, we have not inconvenienced you to any great degree.

Fly safe.