Checking Engine Cover Mounting Bolts

SD-1003

Evolution Trikes Nov 26, 2010 Status: Mandatory

Background:

Recently it has been brought to our attention that one of the bolts on a Revo equipped with an engine cover has come loose and went through the pusher prop. This bolt belonged to the engine cover bracket system. As a result this mandatory safety directive is being released so all Revo owners can check and properly torque and loctite this bolt with a split lock washer.

Scope:

The following serial numbers of the Revo weight-shift-control aircraft are affected by this safety directive:

007, 1001, 000550U, 000551 through 000557

Authorized Persons:

An owner/operator is allowed to execute this safety directive in accordance with the instructions in this directive.

Tools and Articles Required:

- 1) Loctite 242 medium strength
- 2) 8 mm lock washers (steel zinc plated)
- 3) Metric 12 mm and 13 mm socket and driver
- 4) Torque Wrench (inch-pounds)
- 5) Torque seal mark or white/yellow nail polish

Compliance:

Compliance is mandatory and has to be achieved within next 5 flight hours

This is how to comply with this directive

• With a socket untorque and release the bolts (one at a time) pointed out in the figure below



- Put two drops of 242 loctite on the threads of the bolt
- Place the steel locking split washer on the bolt
- Place the bolt back into the engine where it came out of so that the locking washer is right under the bolt head
- Screw in and tighten the bolt with the socket and torque wrench to 185 inchpounds
- Repeat steps for the second bolt. Let stand overnight before running engine.
- Mark each bolt head all the way to the bracket with torque seal or a bright colored nail polish so if the bolt head moves it can be easily seen in a pre-flight. Let dry.

Testing:

- Run the engine on the ground for 5 minutes
- Check the torque of the bolts and torque seal marks to see if the bolts have moved

Logbook Entry:

Aircraft logbook should be marked with the following entry and dated and signed with mechanic's or pilot owner/operator's license number (if applicable):

"Safety directive 1003 from the manufacturer satisfied as per instructions. Compliance with ASTM standards is maintained"