# Changing Allen Bolts With Bushings Holding Front Rotor on Revo

# SD-1006

**Evolution Trikes April 07, 2011** Status: Mandatory

#### Background:

Recently it has been brought to our attention that on at least two Revos there have been instances of front floating rotor falling off during certain ground operations. This has happened because the floating rotor is riding on 3 hardened allen head bolts and the bolt head is simply not long enough to take care of all the tolerances and in some instances due to this the rotor can fall off the allen heads of the 3 retaining fasteners during turns.

#### Scope:

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

000550U, 000551 through 000558

#### Authorized Persons:

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

## Tools and Articles Required:

#### An allen SAE socket set

Loctite 242 or equivalent non-permanent medium strength anti-vibration compound 3 x longer allen head hardened bolts with 3 hardened steel plated bushings from Evolution Trikes

### Compliance:

Compliance is mandatory and has to be achieved within next 20 flight hours

This is how to comply with this directive

- Order the 3 longer allen head bolts and bushings from Evolution Trikes by sending an e-mail with Name, address and phone to <u>revotrikes@yahoo.com</u>. You will be required to cover shipping and handling but won't have to pay for any parts.
- Use SAE allen socket to take out one of the floating rotor retaining fasteners (put aside) from the front wheel of the Revo.
- Use loctite 242 (or equivalent) on one of the supplied slightly longer bolts sparingly
- Slide one of the hardened bushings on to this allen head bolt and snug it tightly (100 inch-pounds) in so the rotor floats on this bolt head. By using the small bushing the bolt head is extended and the rotor has much longer area to ride on
- There are 3 such bolts to be replaced on the front wheel. Two are visible at one time. To get to the third you'd have to move the aircraft slightly forward or backward
- Make sure all three bolts are replaced with new slightly longer ones with bushings against them
- Let the loctite set for a few hours per directions



#### Testing:

• Test the brakes for normal operation by taxiing the aircraft in a large long safe area and applying brakes. If brakes do not work, shut the aircraft down and check to see what went wrong

## 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 1006 from the manufacturer satisfied as per instructions. Compliance with ASTM standards is maintained"