Correcting Slider Adjustment Interference with Full Throttle Operation

SD-1001

Evolution Trikes August 10, 2010 Status: Mandatory

Background:

In some limited cases of adjustments to the extremes (shortest pilot legs or closest pedal position), it was noted that certain serial numbers of the Revo weight-shift-control aircraft have been fitted with a pedal slider adjuster that is too long to allow full throttle operation successfully.

Scope:

The following serial numbers of the Revo weight-shift-control aircraft are affected by this safety directive: 000551 through 000556

Authorized Persons:

An LSA-R-M or an A&P or higher is allowed to execute this safety directive in accordance with the instructions in this directive.

Tools and Articles Required:

- 1) 7/16" spanner wrench, socket and torque wrench with a 3 inch extention
- 2) A means of cutting stainless steel square stock and de-burring or filing it finished
- 3) An electric drill or drill press with a 3/16" bit and de-burring tool
- 4) 2 x NAS1351-4-10P or MS16998-42 socket head cap screws and 2 x AN-364-428A available from aircraft supply houses. Alternatively, an industrial steel zinc plated socket head cap screw and matching nylock nuts can be used
- 5) Allen heads and open spanner to use with items in #4

Compliance:

Compliance is mandatory and has to be achieved at next 100 hour or annual inspection. Pilots and operators are instructed to not use the closest pedal slider positions which cause interference to reach full throttle till compliance has been achieved

This is how to comply with this directive.



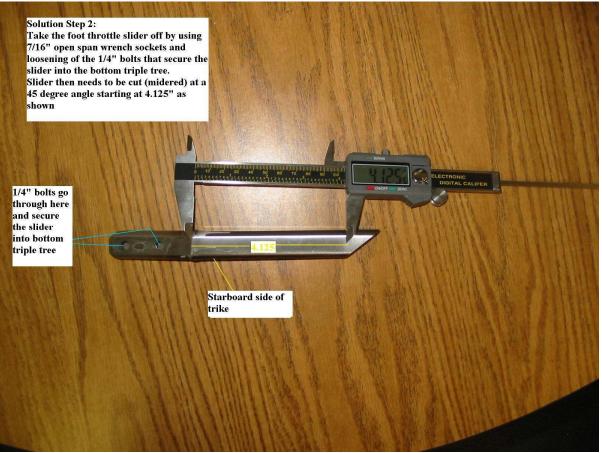
Step-1, Fig-1, Problem description



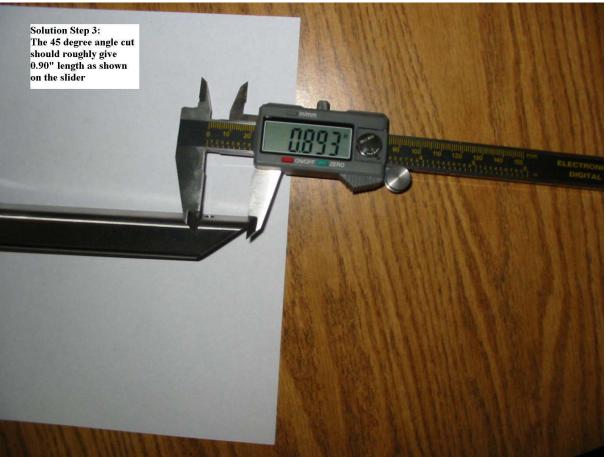
Step-2, Fig-2, Problem description



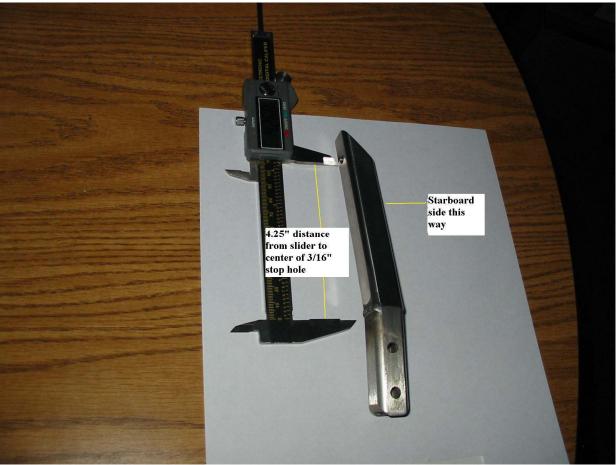
Solution Step-1, Sol-Fig-1



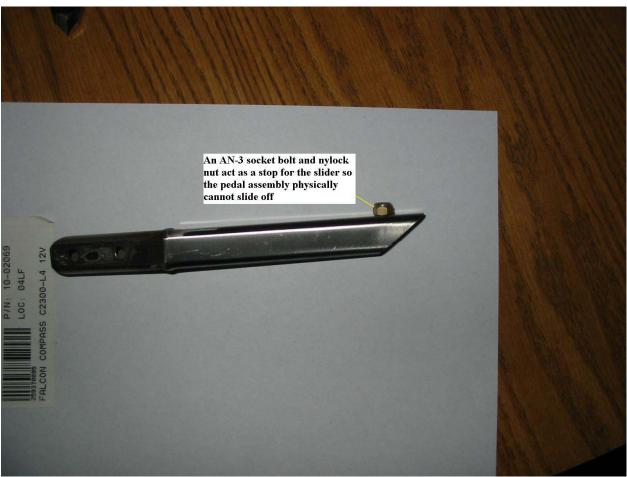
Solution Step-2, Sol-Fig-2



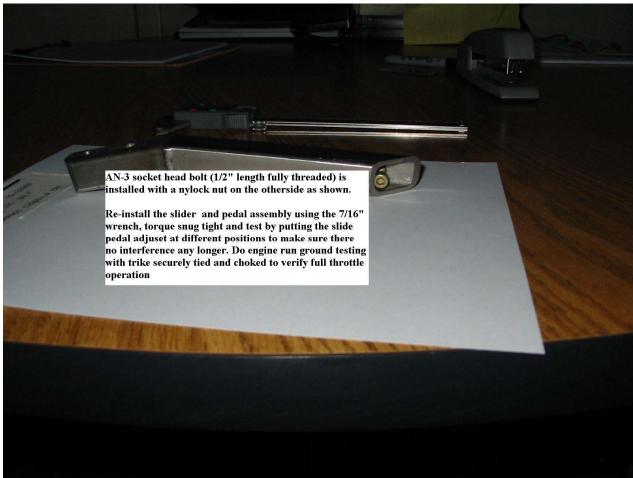
Solution Step-3a, Sol-Fig-3a



Solution Step-3b, Sol-Fig-3b



Solution Step-4a, Sol-Fig-4a



Solution Step-4b, Sol-Fig-4b

Notes: Use Loctite 242 on the two bolts retaining slider square SS stock into the bottom triple tree.

Testing:

- Adjust the pedal to the closest location on the slider (closest to the pilot)
- Adjust the pedal angle adjuster in the farthest hole
- Apply full throttle throw without actually running the engine and confirm that full throw on the carb is achieved

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 1001 from the manufacturer satisfied as per instructions. Compliance with ASTM standards is maintained"