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SERVICE LETTER / NOTIFICATION – OCT 03, 2022

Issue Date

October 03, 2022, Rev. 0

Subject/Purpose

Hardware Inspection

Affected Models

All aircraft – CH designs

Compliance Time

Next oil change

Inspection Frequency

Ongoing

Background

Wrong nut installed on a bolt, elevator control stopped working.

Subject/Purpose

A standard non aviation nut was installed onto the bolt holding the pilots elevator bellcrank system. On take-off, the bolt slipped out and the pilot was left with no elevator controls.

Inspection - Action

Inspect all the bolts and nuts on the aircraft.

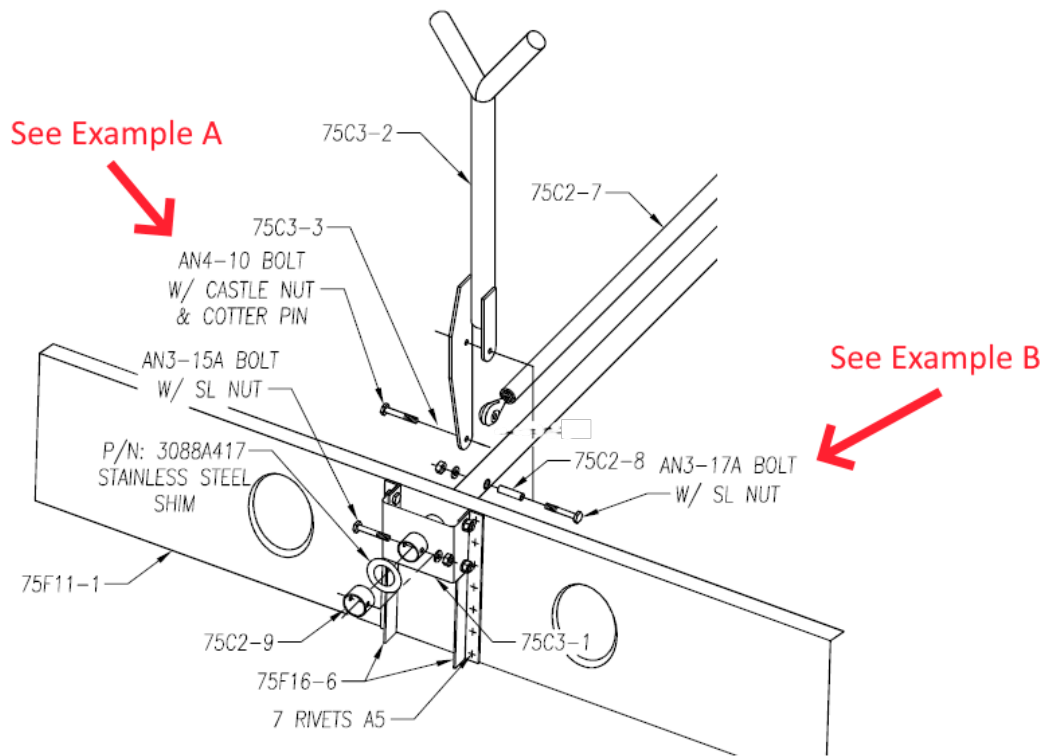
Second and subsequent owners (and/or individuals that are not the actual builders of the aircraft) need to take extra precautions that the aircraft, as manufactured by the builder, are built to the standards shown in the latest edition of the Drawings and Manuals.



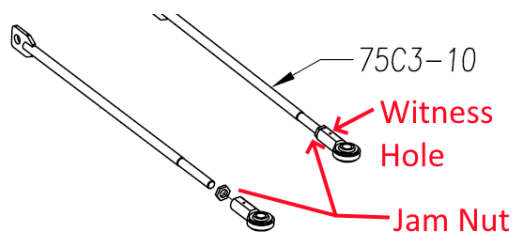
WRONG NUT USED



BOLT FELL OF THE Y STICK



Drawing showing the proper fasteners



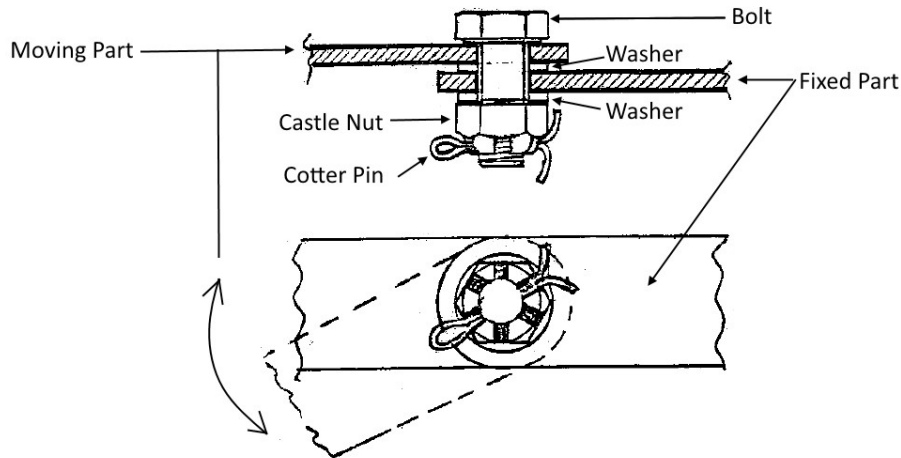
Jam nuts are typically used to prevent threaded rod ends from rotating. No parts are rotating.

There are 2 types of rotating bolt/bushing installations in a typical CH design. For the control Y stick installation, both are used.

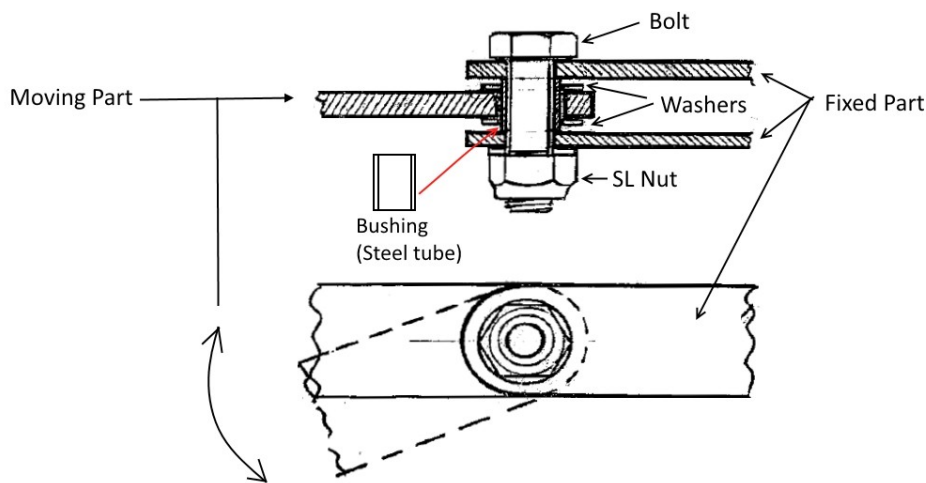
When a part is moving around the bolt, a castle nut is used on the bolt as the bolt can rotate (**Example A**).

When the part is rotating around a bushing, the bolt is tightened to the bushing so the bolt does not rotate. An SL (Self Locking) nut is used (**Example B**).

Note that in both cases, the part must be able to rotate freely and smooth with minimum play so that the controls are smooth throughout.



Example A



Example B

When inspecting, use the aircraft Design Standards manual, aircraft blue prints, and FAR 43.13-1B & 2B if required.

Remember to check www.newplane.com for all the latest service documentation.
For additional information contact Zenair Ltd.