

EuroFox Aircraft

Inspection of Undercarriage Guide Bracket Bolt

During a routine daily inspection, the pilot of a EuroFox aircraft noticed that the hex drive head from one of the two bolts holding the undercarriage leg clamping bracket was missing; the bolt was therefore no longer securing this side of the clamping bracket.

This is the second report of a failure involving this bolt occurring on an LAA administered aircraft and, after discussion with the UK agent for the type, it appears that this type of failure has only occurred on LAA kit-built machines (most having been factory assembled).

A subsequent examination of the bolt's fracture face suggested that it had failed as an indirect result of being over-tightened. After discussions with the inspector who initially signed-off the aircraft's build, it was established that the attachment bolts had been unnecessarily torqued down when the aircraft was first assembled.

On checking the aircraft's build manual, it was revealed that, although these attaching bolts need only to be 'nipped' up such that the undercarriage leg itself just settles into the rubber pad within the support, the manual didn't provide instructions for assembly.

The EuroFox manual has been subsequently updated to include the correct assembly instructions and EuroFox UK have issued a Service Bulletin (SB/02/2015) recommending that all pilots operating a EuroFox aircraft check the bolts on their aircraft to ensure that they haven't been over-tightened by mistake; the Bulletin also recommends that all EuroFox pilots include, in their daily inspection of the aircraft, a visual inspection of these bolts.

A copy of EuroFox SB/02/2015 can be downloaded [HERE](#).



Fig. 1 This picture shows the general arrangement of the EuroFox undercarriage attachment

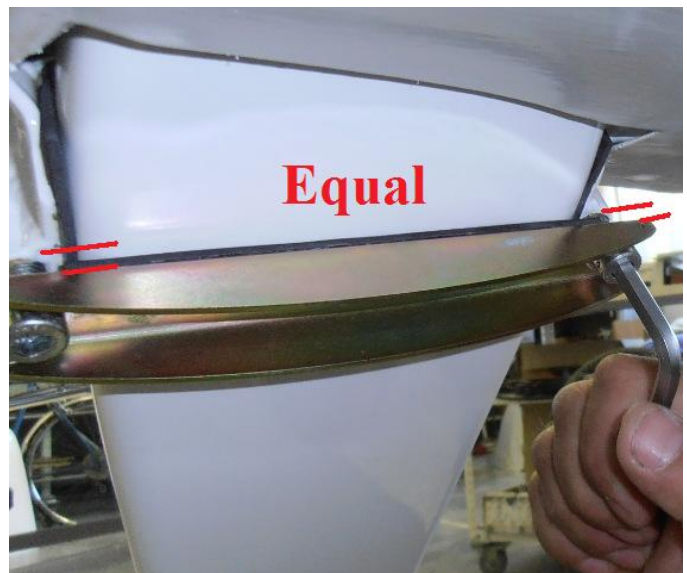


Fig. 2 This picture, taken from the EuroFox UK Bulletin, shows the method of assembly; it is important to maintain an equal clamping force across the undercarriage leg and this is achieved by ensuring an even gap between the clamp and the leg during tightening.