

LAA/AWA/20/02
26th February 2020

Van's RV-12 Inspection for Cracks in the Nosewheel Fork (Van's SB 16-05-23)

Van's Aircraft have recently amended an existing Service Bulletin (SB) to include a mandatory nosewheel fork replacement at the next 100 hour inspection. As an interim measure, in line with a previous SB on this subject, the revised SB requires owners to inspect this component before further flight, and then at 25 flying-hour intervals.

The reason for the issuance of this and the previous SB is that cracks have been found during inspections and that, 'in a handful of instances', a fork has failed.

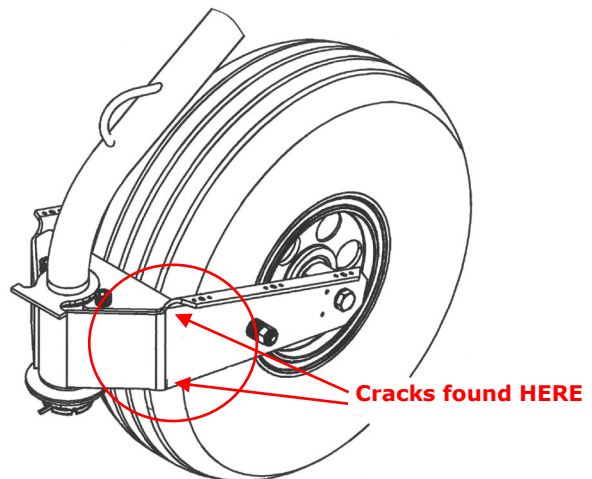


Fig. 1 The Van's RV-12 nosewheel/nosewheel fork assembly showing where cracking has been found.

In the UK's continuing airworthiness system, a Service Bulletin wouldn't, under normal circumstances, be considered a mandatory device. Nonetheless, any advice from an aircraft manufacturer or aircraft component manufacturer should be taken seriously and followed where appropriate.

LAA Engineering has reviewed this Service Bulletin and notes that the manufacture themselves feel that, in the failure cases reported thus far, a crack has not been spotted during an inspection and, in some cases, inspections appear not to have been carried-out. Therefore, whilst the manufacturer's requirement to carry-out a thorough visual inspection of this component each 25 hours is fully supported, we have decided not to 'mandate' this SB with an Airworthiness Information Leaflet; in short, it isn't felt that the nosewheel fork must be replaced at the next 100 hour service point.

Of course, should an owner or Inspector find any cracking in the fork during either the initial or any subsequent inspection, the aircraft must be considered unairworthy and must not be flown until a replacement nosewheel fork is fitted.

Experience has shown that the number of fleet problems associated with this type of nose undercarriage system, common amongst Light Sport types, can be significantly reduced by reducing the number of three-wheel, or worse, 'nosewheel first', landings. It has been generally agreed that keeping the nosewheel off the ground for as long as sensibly possible after landing is a good habit for pilots to get into. Naturally, following any heavy landing, or a landing where the pilot feels the nose undercarriage will have been subjected to an unusual loading, the nosewheel fork should be inspected before further flight.

A copy of Service Bulletin (SB 16-05-23) can be downloaded [HERE](#).