

LAA/AWA/20/15 (Interim)
8th June 2020

Jabiru Engines (All Models)

Flywheel Attachment Bolts In-Service Life and Changes to Bolt Locking Method.



The June 2020 edition of Safety Spot discussed the ongoing issues surrounding the attachment of the flywheel on the Jabiru engine. After much consultation it has been agreed that it is appropriate to define an in-service life for the attachment bolts and to mandate a change from the use of Loctite as the locking medium, to the fitment of Nord-Lock washers.

LAA Engineering hoped that the relevant supporting documentation would have been completed by the publication date of the June edition of *Light Aviation*. However, due to some last-minute changes to the method of fitting the Nord-Lock washers, suggested by Jabiru engine specialists, and an unprecedented work-load due to the return-to-flight enjoyed by many members after the Corona-Virus grounding, the publication of this supporting documentation has been delayed.

Though the publication of the paperwork has been delayed, the following has now been agreed:

1. Maximum Cap-Bolt Life Permitted – 100 hrs.
2. Visual Inspection of Flywheel Assembly to ensure Cap-Bolts remain in place each 25 hrs.
3. Torque-check of Cap-Bolts at 50 hrs.
4. Fitment of Nord-Lock washers as replacement to Loctite.

After the problems associated with maintaining correct cap-bolt tension when using Loctite 620 as the primary locking method were seen, Jabiru Aircraft PTY Ltd. issued a Service Bulletin ([JSBO 12-5](#)) requiring the fitment of Nord-Lock washers. Many LAA owners have complied with this manufacturer's requirement. Recent reports suggest that the Nord-Lock method, whilst removing some of the problems associated with a liquid thread-locking compound in this application, hasn't solved the problem of tension reduction (due to material creep) when used with the aluminium flywheels; for this reason, the fitment of a steel crush-plate will be required at the next cap-bolt change point on aluminium flywheels.

If you own a Jabiru engine, LAA Engineering will let you know directly when the supporting documentation for these requirements has been fully approved and published.