JABIRU AIRCRAFT PTY LTD

1

P.O. Box 5186 Bundaberg West Queensland, Australia.

SERVICE BULLETIN:

Issue:

Date:

Subject:

31st March 2005

JSB 008-1

Main Undercarriage Bolts -

Jabiru Aircraft

1. Applicability:

All Jabiru J400 family aircraft (all models with 3-door fuselages.) Optional on other Jabiru Aircraft.

2. Background:

Recently some owners of Jabiru aircraft in the J400-family (models with 3-door fuselages) have suffered failures of the main undercarriage leg attachment bolts. These failures appear to have been contributed to by the following factors:

- i) Relatively rough grass taxiways or runways
- ii) Relatively high hours on the airframe.
- iii) Aircraft operated regularly at or close to the maximum take-off weight.

While periodic inspection and replacement of the bolts would most likely prevent in-service failures, Jabiru Aircraft have decided to upgrade the undercarriage bolts on all new aircraft to 3/8".

3. Recommendations:

- Jabiru models in the J400 family (models with 3-door fuselages) must have their existing 5/16" undercarriage bolts replaced during the aircraft's next 100-hourly inspection, or within 10 hours of operation if the aircraft is regularly exposed to the risk factors listed above.
- Note that while 3/8" bolts are also being introduced on all other Jabiru models, this is being done solely to retain commonality between the models and is **not** considered a mandatory modification on any aircraft but those in the J400 family.

4. Compliance:

This modification is mandatory for all Jabiru models in the J400 family (models with 3-door fuselages). This work should be carried out during the aircraft's next 100-hourly inspection, or within 10 hours of operation if the aircraft is regularly exposed to the risk factors listed above.

Service Bulletin – Main Undercarriage Bolts – J400 Family	
JSB 008-1	31 st March 2005

The use of 3/8" bolts is standard on all kits in the ranges given below:

LSA / UL / SP & local Variants: J400 Family (all 3-door fuselages): J160 Family: Serial No. 642 and on. Serial No. 234-237, then 240 and on. Serial No. 25 and on.

5. Procedure:

- a) Note: all work must be carried out by approved personnel, such as the kit builder or a Level 2 Maintenance Authority holder.
- b) Remove fairings etc as necessary for access to the main undercarriage bolts.
- c) For aircraft with wing tanks, ensure that the fuel tanks are low, taps are turned off, or that the breathers are blocked to prevent fuel leakage while the aircraft is sitting on the jack at an angle. Note that if the breathers are blocked the covers should be highly visible to ensure they are noticed and removed before flight.
- d) Jack one main undercarriage leg clear of the ground. Jabiru Aircraft use a stand under the wing to lift the wheel clear of the floor. Padded saw-horses placed under the fuselage are also acceptable.
- e) Remove the outer undercarriage leg clamp bolts & clamp. Check the clamp plate visually and against a straight edge. If the plate is bent, contact Jabiru Aircraft for replacement parts. Remove the inner leg attachment bolt.
- f) Using a drill press, enlarge the existing 5/16" holes in the clamp plate to 3/8". Ensure the new holes are parallel with the old. de-burr all accessible edges of the enlarged holes in aluminium parts.
- g) Carefully drill the bolt holes in the fuselage out to 3/8". De-burr the accessible edges of the aluminium reinforcement plates bonded to the inside of the fuselage.
- h) Re-fit the leg in accordance with the details in the Technical and construction manuals, substituting 3/8" bolts in place of the original 5/16" parts.
- i) Let the aircraft back down onto it's wheel, then repeat the process for the other main undercarriage leg.
- j) Replace leg fairings.
- k) Remove any breather covers (if used) and return all fuel taps to their normal positions.
- I) Annotate the aircraft's maintenance log to show that Jabiru Service Bulletin JSB 008 has been carried out.