SERVICE BULLETIN

Propulsion

Title:	Crankshaft Heat Treatment
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Jabiru Aircraft Pty Ltd
ACN 010 910 077

PO Box 5792
Bundaberg Airport
Kensington 4670
Queensland
Australia

T: +61 7 4155 1778
E: info@jabiru.net.au
W: jabiru.aero

Requirements and Deadline

This Service Bulletin provides actions which are mandatory and must be completed prior to 15th December 2026, or 150 hours total time in service (TTIS), whichever occurs later.

Purpose

This Service Bulletin has been released to address issues relating to inadequate heat treatment of some 3300 series crankshafts. Degraded material properties may result in fatigue failure at the crankpin to web fillet radius.

Applicability

Table 1 Production Engines

Make	Jabiru	Jabiru
Model	2200	3300
Serial Number(s)	N/A	33#2774 to 33#2776, 33#2778 to 33#2787, 33#2790, 33#2793, 33#2851 to 33#2861, 33#2863 to 33#2873, 33#2875 to 33#2922, 33#2924 to 33#2957, 33#2958 to 33#2960, 33#2962 to 33#2977, 33#2979 to 33#2991, 33#2993 to 33#3031, 33#3034 to 33#3079, 33#3081 to 33#3093, 33#3095 to 33#3111, 33#3114 to 33#3132, 33#3134 to 33#3161, 33#3163 to 33#3174, 33#3176, 33#3177, 33#3179 to 33#3183

Where "#" is listed in the serial number, applicability extends to any letter.

Table 2 Crankshaft Batch/ Serial Numbers

Crankshaft Batch Number(s)	4A592A0D-36463-33A-004 to -022, 4629072-36424F-33A-xxx, 4A592A0D-39223F-33A-xxx, 4A592A0D-41042F-33A-xxx, 4A592A0D-41549F-33A-xxx

Superseded Notices

This notice does not supersede any other document.

1. BACKGROUND

1.1. Investigation into failure of the crankshaft in some 3300 engines has identified variability in the heat treatment of raw material used for the manufacture of affected batches of 6-cylinder crankshafts.

1.2. Variability in the material micro-structure of the quenched and tempered 4140 steel may result in reduced fatigue strength margins in affected product. The variability in material properties may result in failure of affected 3300 crankshafts at a low time in service.

1.3. For planning purposes Jabiru request operators to submit current engine total time in service and engine serial number to info@jabiru.net.au within 3 months of the release date of this Service Bulletin.

2. INSTRUCTIONS

Detect

2.1. Check the engine serial numbers listed in Table 1 against the serial number of your engine.

2.2. For engines that have had the crankshaft changed under overhaul since 2017, check the serial number and batch of the crankshaft supplied by Jabiru against Table 2. Physical check of the crankshaft may not be practical, and audit of paperwork supplied by Jabiru with the replacement parts is an acceptable alternate.

2.3. The following actions are considered necessary to prevent an unsafe condition from developing in the in-service fleet for any engine identified per Paragraph 2.1 or Paragraph 2.2.

Rectify

2.4. Disassemble the engine to gain access to the crankshaft subassembly per JEM0001 or JEM0004 as applicable.

2.5. Remove, destroy and discard the crankshaft (Refer Table 2 for S/N applicability) per JEM0001 or JEM0004 as applicable.

2.6. Install a new crankshaft P/N 4A592A0D supplied by Jabiru per Section 7 of JEM0001 or Section 4 of JEM0004 as applicable. For engines that removed

crankshaft P/N 4629072 in Step 2.5, the Flywheel and Alternator Rotor will need to be upgraded per Section 5.9.1.4 of JEM0001.

2.7. Put the engine back to serviceable condition, including re-assembly of any parts removed in Step 2.4. The general overhaul procedures of Section 3 of JEM0001 or Section 3 of JEM0004 as applicable must be followed.

2.8. Perform post-assembly inspections and tests per Section 8 or JEM0001 or Section 5 of JEM0004 as applicable.

Document

2.9. Record incorporation of JSB046-1 in the relevant aircraft and/or engine logbook following completion of the rectification steps in this Service Notice.

3. CONTINUING AIRWORTHINESS

3.1. There is no change to the Weight and Balance of the aircraft following incorporation of this Service Notice.

3.2. Completion of the instructions required by Section 2 are considered terminating actions to this Service Bulletin.

Notification

This document has been provided to all owners of applicable engines who are registered with Jabiru. If you are no longer in possession of this aircraft, please forward this information to the new owner and immediately notify Jabiru at info@jabiru.net.au or via the members section of the website at jabiru.aero.

Implementation

This document has been prepared in accordance with ASTM standard F3198 – Light Sport Aircraft Manufacturer's Continued Operational Safety (COS) Program.

Jabiru strongly recommends the implementation of this notice, in the interests of safety, regardless of the relevant products certification basis or the aviation authority under which the product is operated.

For operations in Australia, Civil Aviation Safety Regulations 1998, Part 91.900 requires pilots of Light Sport Aircraft to comply with any safety direction or requirement issued by the aircraft's manufacturer. Similar requirements exist for all National Aviation Authorities (NAA) that recognise the Light Sport Aircraft category.

For Type Certificated products, this notice must be complied with if it has been issued as an Airworthiness Directive by the relevant authority.

For products operating under an Experimental Certificate (or similar) the owner of the product is responsible for the design and continued airworthiness of the product.