

Jabiru Service Bulletin: Jabiru Elevator Cable			JABIRU AIRCRAFT PTY LTD P.O. Box 5792 Bundaberg West Queensland, Australia. Phone: +61 7 4155 1778 Fax: +61 7 4155 2669 Web: www.jabiru.net.au Email: info@jabiru.net.au		
JSB 041-1	Release Date: 13th July 2017	Effective Date: 20th July 2017	Affected Models: See Applicability	S/No. Range: See Applicability	Page 1 of 5

SERVICE BULLETIN: JSB 041-1

Issue: 1
Release Date: 13th July 2017
Effective Date: 20th July 2017
Subject: Jabiru Elevator Cable

Affected Models: All aircraft

1	APPLICABILITY	1
2	BACKGROUND	1
3	COMPLIANCE – IMPLEMENTATION SCHEDULE	2
4	INSPECTION PROCEDURE	3
5	CORRECTIVE ACTION	4
6	AIRWORTHINESS NOTE.....	4

1 Applicability

All models of Jabiru aircraft **over 1000 hours TTIS.**

Note: For aircraft in Light Sport Aircraft categories this Bulletin is equivalent to a Manufacturer’s Safety Direction.

2 Background

- Jabiru elevator cables are a Teleflex “push-pull” design with a guide tube attached to prevent buckling of the cable under compression. The support tube end is flared and fits into the grooved conduit cap which has a bowed-in mouth to form a ball-and-socket type attachment with small amounts of free play. Refer to Figure 1 for correct terminology.

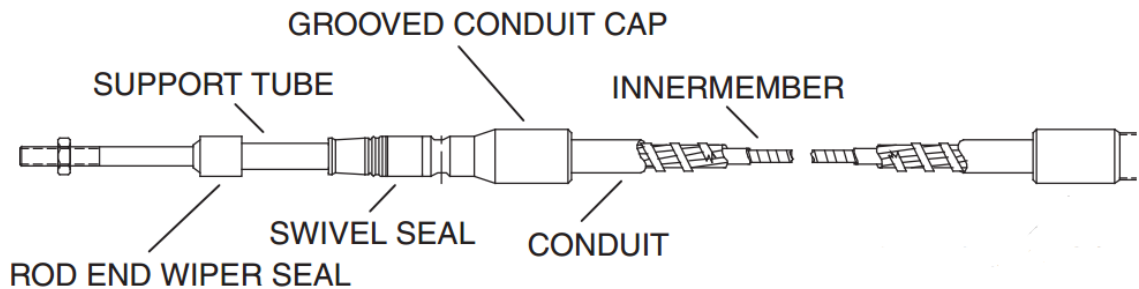


Figure 1 – Elevator cable layout

- An attachment defect at 1600 hours TTIS was brought to the attention of Jabiru Aircraft whereby the conduit cap and support tube had become distorted (non-circular) at their ends. In a certain control stick position, this caused the support tube to detach from the

Jabiru Service Bulletin: Jabiru Elevator Cable			JABIRU AIRCRAFT PTY LTD P.O. Box 5792 Bundaberg West Queensland, Australia.			Phone:+61 7 4155 1778 Fax:+61 7 4155 2669 Web: www.jabiru.net.au Email: info@jabiru.net.au
			JSB 041-1	Release Date: 13th July 2017	Effective Date: 20th July 2017	Affected Models: See Applicability

conduit cap, exposing the cable (inner member) itself. With no support tube, the cable was unable to slide back smoothly through the conduit, subsequently inhibiting back pressure (pitch up manoeuvres) to be applied from the control stick. Figure 2 shows the exposed cable with distorted tube mouths which allowed for the detachment to occur.

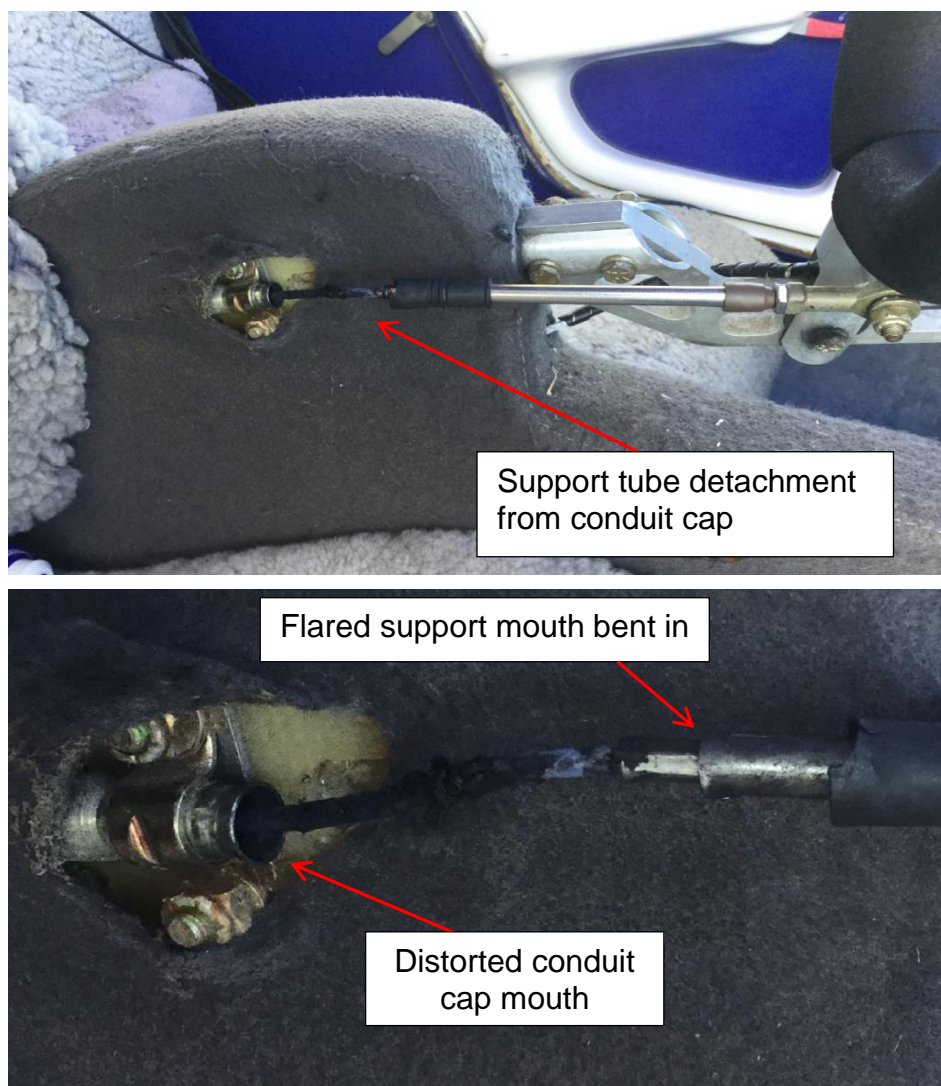


Figure 2 – Cable failure

- This service bulletin acts as a precautionary service message to inform maintainers and operators of this potential condition and prescribes an inspection to check that the connection between the support tube and conduit cap is in suitable condition.
- Note that Jabiru aircraft have fully functioning trim control independent of elevator control and thus allow adequate pitch control of the aircraft in the event of an elevator cable malfunction.

3 Compliance – Implementation Schedule

- The inspection detailed in section 4 of this service bulletin must be conducted before the next flight and at regular service intervals (50 hourly, 100 hourly or Annual Inspection) until otherwise instructed by revision to this service bulletin (JSB041).

Jabiru Service Bulletin: Jabiru Elevator Cable			JABIRU AIRCRAFT PTY LTD P.O. Box 5792 Bundaberg West Queensland, Australia. Phone: +61 7 4155 1778 Fax: +61 7 4155 2669 Web: www.jabiru.net.au Email: info@jabiru.net.au		
JSB 041-1	Release Date: 13th July 2017	Effective Date: 20th July 2017	Affected Models: See Applicability	S/No. Range: See Applicability	Page 3 of 5

- The Time-In-Service for which service intervals are determined is the accumulated time the engine has been run, not Airswitch time. Jabiru Service letter JSL010 provides details on service time interval requirements.

4 Inspection procedure

The inspection detailed in this section is to be carried out **before the next flight for applicable aircraft** and at the service intervals prescribed in section 3.



Figure 3 – Location of cables to inspect

- 1) Pull the swivel seal up the support tube to reveal the attachment point with the conduit cap. For aircraft models where this cable is inside the console proceed to step 3 below.

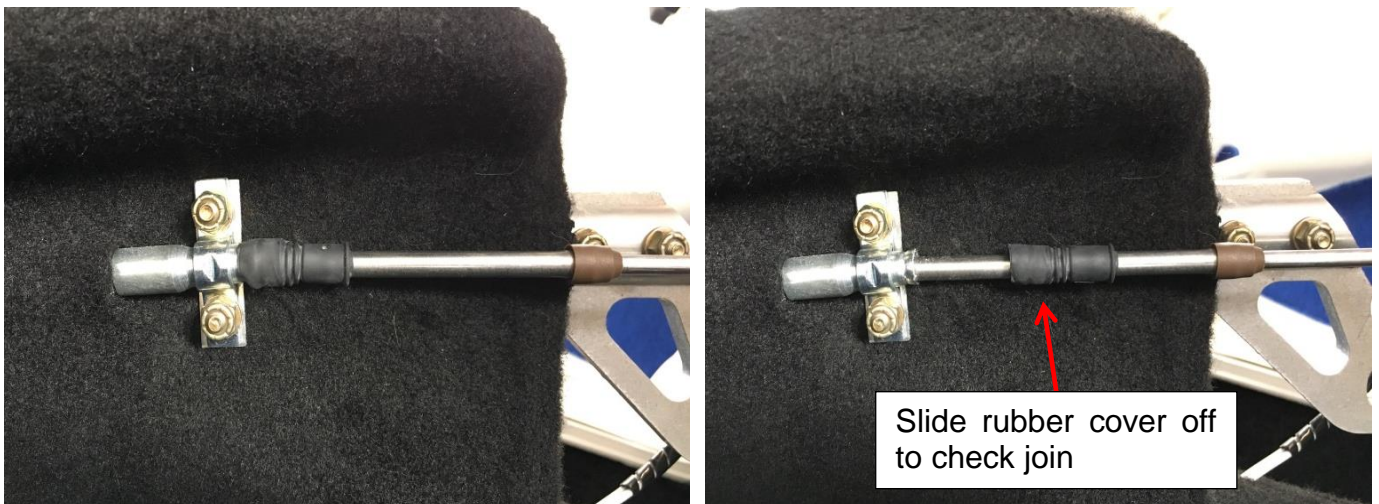


Figure 4 – Pull back rubber cover to inspect tube mouth

Jabiru Service Bulletin: Jabiru Elevator Cable			JABIRU AIRCRAFT PTY LTD P.O. Box 5792 Bundaberg West Queensland, Australia. Phone: +61 7 4155 1778 Fax: +61 7 4155 2669 Web: www.jabiru.net.au Email: info@jabiru.net.au		
JSB 041-1	Release Date: 13th July 2017	Effective Date: 20th July 2017	Affected Models: See Applicability	S/No. Range: See Applicability	Page 4 of 5

- 2) Inspect the mouth of the tube for distortions such as flattening and non-circular shapes.

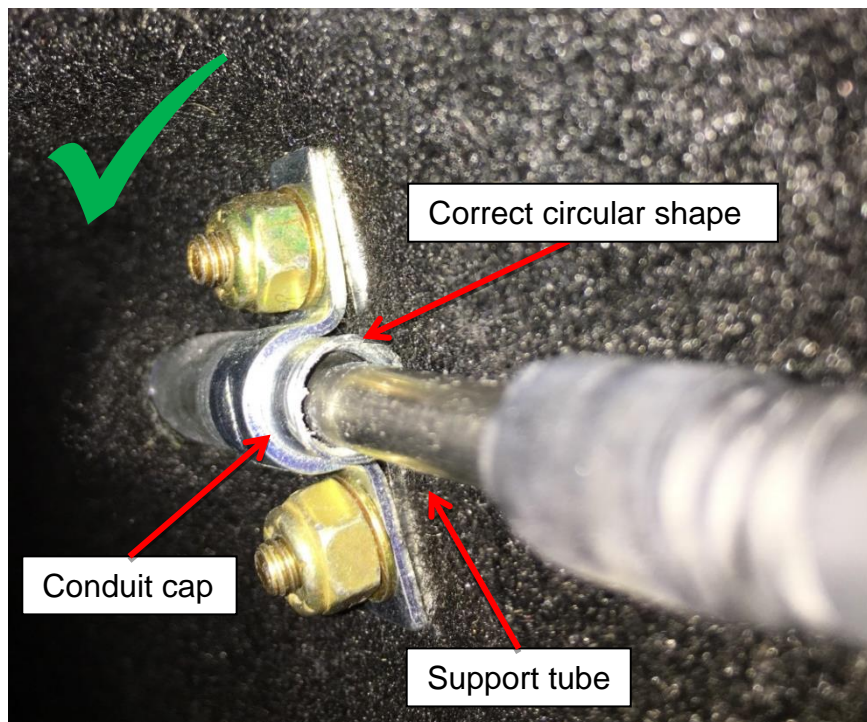


Figure 5 – Inspection of tube mouth

- 3) Lightly apply a pulling force on the support tube away from the conduit cap mouth by hand. At the same time while pulling, rotate the control stick around the four corners of a box pattern.
- 4) Release any pressure on the control stick. Rotate support tube 90° and repeat step 3, making sure to maintain a constant pulling force on the support tube. This will establish if there is any position at which the support tube may detach from the conduit cap.
- 5) Repeat steps 3 and 4 until support tube has rotated through 360°.
- 6) After inspection and verification, pull swivel seal back over conduit cap mouth.

5 Corrective action

If it is found that the mouth of the conduit cap is significantly distorted and non-circular or that the support tube detaches from the conduit cap joint, the condition must be corrected **before further flight**. Contact Jabiru Aircraft if this situation is encountered and complete a Continued Operating Safety Reporting Form that can be found at the following web address:

http://jabiru.net.au/images/Owner_Operator_Responsibilities.pdf

6 Airworthiness Note

- All work called for by this Service Bulletin must be carried out by authorised personnel. For the aircraft detailed herein this may mean the owner, an RA-Aus Level 2 holder, a Licensed Aircraft Maintenance Engineer (LAME) or equivalent – as appropriate to the aircraft's registration.
- On completion of the work prescribed, the authorised person must note the completion of the actions required by this bulletin in the aircraft's maintenance logbook. This note

Jabiru Service Bulletin: Jabiru Elevator Cable			JABIRU AIRCRAFT PTY LTD		
			P.O. Box 5792 Bundaberg West Queensland, Australia.		Phone:+61 7 4155 1778 Fax:+61 7 4155 2669 Web: www.jabiru.net.au Email: info@jabiru.net.au
JSB 041-1	Release Date: 13th July 2017	Effective Date: 20th July 2017	Affected Models: See Applicability	S/No. Range: See Applicability	Page 5 of 5

should include the date of the work, the service bulletin number (i.e. JSB041-1) and the identity (including license number where appropriate) of the person carrying out the work.

LSA Service Bulletin: LSA JSB 041-1

Issue: 1

Release Date: 11th July 2017

Effective Date: 18th July 2017

Subject: Jabiru Elevator Cable

Affected Models: All aircraft

Applicability:

- The content of this directive is applicable to all Jabiru aircraft.

Requirement:

- Operators of aircraft within Light Sport Aircraft categories must comply with the requirements of Jabiru Service Bulletin JSB 041-1

Compliance:

- The compliance details given in JSB 041-1 must be met.

Background:

- This Safety Directive has been prepared to make mandatory the requirements of JSB 041-1 for aircraft operating within Light Sport Aircraft Categories.