

THE GLIDING FEDERATION OF AUSTRALIA

GFA AD 510
(ISSUE 1)

GFA AIRWORTHINESS DIRECTIVE

- TYPE AFFECTED:** LS 4 and LS 4-a, S/N 4000 to 4852.
- SUBJECT:** Air brake locking in fuselage.
- BACKGROUND:** Due to possibly improper preflight checks, asymmetric adjustment of pushrods during exchange of L'Hotellier ball snap joints or uneven locking adjustments, the airbrake locking bracket may be under long time asymmetric load, resulting in fatigue fracture at the lateral fixtures.
- DOCUMENTATION:** Rolladen-Schneider Technical Bulletin No. 4042 which herewith becomes part of this AD.
- ACTION REQUIRED:**
1. With sailplane rigged, check air brake locking bracket on rear landing gear box for lateral movement during air brake locking.
 2. Check both fixing angles at this air brake locking bracket for lateral deformation (indication by cracks in paint or paint chipping off) and/or cracks in the welding area next to the tube. See sketch of air brake locking bracket.
 3. When cracks or deformation are detected disassemble the bracket. Repair and modification is required according to Technical Bulletin No. 4042.
- WEIGHT AND BALANCE:** Not affected.
- COMPLIANCE:** Actions 1. and 2. may be carried out by a Daily Inspector before the next flight. Accomplishment must be entered into the Maintenance Release by the DI. If action 3. is required the works must be carried out by an inspector rated for replacement of components or higher. An independent check of a Form 2 inspector before return to service is mandatory. Accomplishment must be entered into the logbook and the TB-AD-Accomplishment List in the Maintenance Manual and signed by a Form 2 inspector during the next annual inspection. The requirements of this GFA Airworthiness Directive are mandatory. This Directive is issued pursuant to the Rules and Regulations of the Gliding Federation of Australia.

SIGNED:

CHIEF TECHNICAL OFFICER AIRWORTHINESS

For and on behalf of:

©THE GLIDING FEDERATION
OF AUSTRALIA

GFA AD 510

ISSUE: 1

27. July 1999

Page 1 of 3

Subject: Air brake locking in fuselage

Effectivity: Sailplane LS4, versions LS4 and LS4-a,
serial numbers between 4000 and 4852

Accomplishment: Inspection for cracks before next flight by operator.

Reason: Due to possibly improper preflight checks, asymmetric adjustment of pushrods during exchange of L'Hotellier ball snap joints or uneven locking adjustments, the air brake locking bracket may be under long time asymmetric load, resulting in fatigue fracture at the lateral fixtures.

- Material and Instructions:
1. With sailplane rigged, check air brake locking bracket on rear landing gear box for lateral movement during air brake locking.
 2. Check both fixing angles at this air brake locking bracket for lateral deformation (indication by cracks in paint or paint chipping off) and/or cracks in the welding region to the tube. (See sketch on page 2)
 3. Only with cracks or deformation existent, disassemble the bracket. Repair and modification required according to drawing 3R6-27b.

After assembly of bracket, the following must be checked:

- simultaneous touching of air brake elastic covers to wing cut-out during retracting
- adjustment of short fuselage locking pushrods possible at inner rod end bearings in 0.625 mm [0.0246 in] steps per half turn, dismount pushrods from overcenter unit for adjustment.
- finer adjustment steps are also possible due to different thread pitch: Turning L'Hotellier ball snap joint 1 turn outward (1mm [0.03937 in] pitch) and turning rod end bearing 1 half turn inward results in 0.375 mm [0.01476 in] longer pushrod.
- check locking of nuts after adjustments
- check minimum thread length in both pushrod ends after adjustments using thread control openings: feeler wire must still touch thread
- maximum locking force at cockpit lever 20 kg [44 lbs], longer locking pushrods increase force required.

Weight and Balance: Not affected.

Remarks: Inspection and possible exchange/adjustments by operator or national authority approved repair station.

Accomplishment must be entered into logbook (Repair performed or not required) and TB-AD-Accomplishment List in Maintenance Manual and signed by inspector during next annual inspection.

LBA-approved:



19. 07. 99

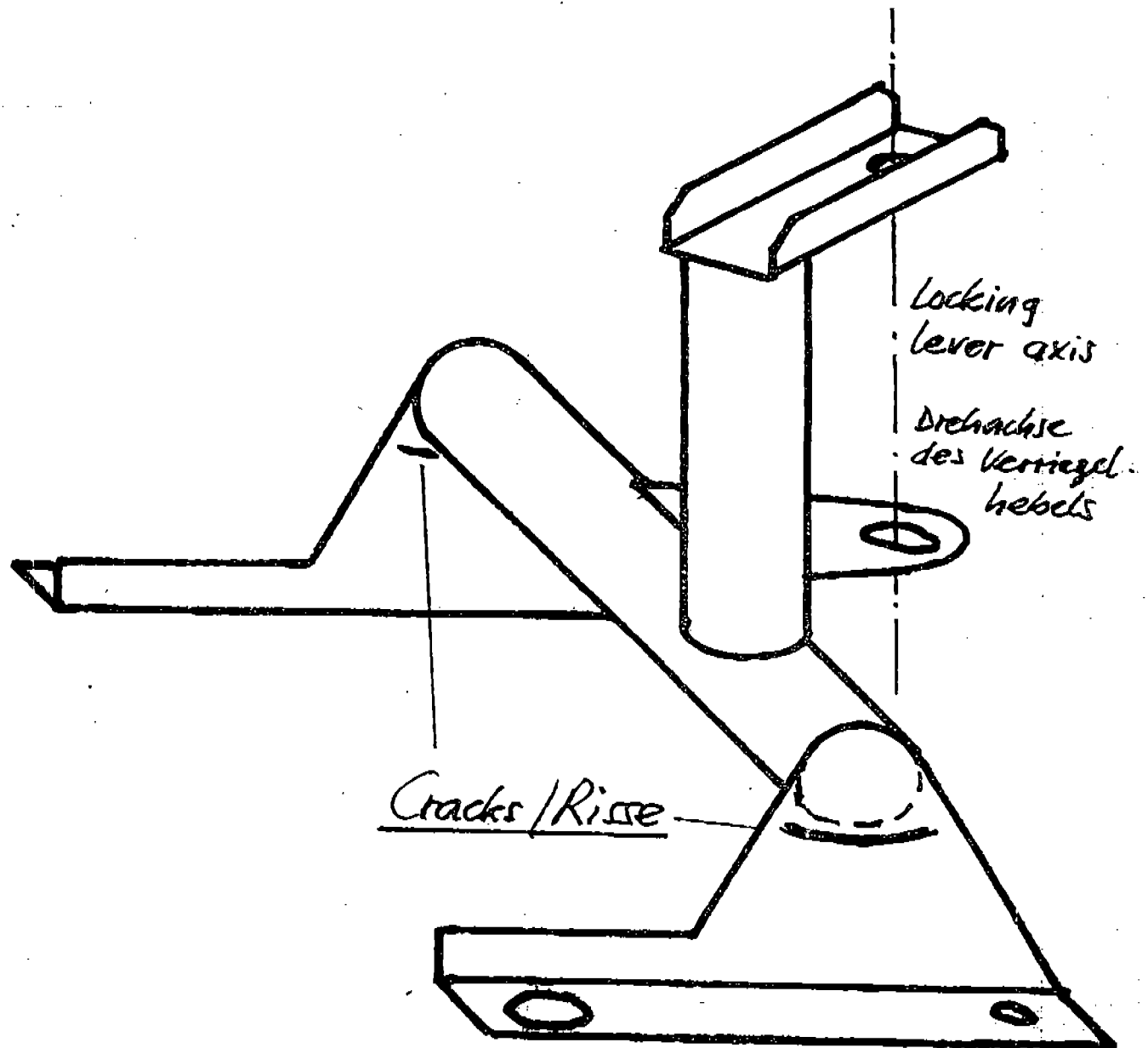
(TM4042)

Erstellt: 02. Juli 1999

Geprüft:

Lagerbock der Bremsklappenverriegelung rumpfseitig auf dem Fahrwerkskasten (Bereich auftretender Risse markiert)

Air brake locking bracket on landing gear box (Crack region marked)



(TM4042)

Erstellt: 02. Juli 1999

Heuck

Geprüft:

Wapfen