

MANDATORY BULLETIN

MB No: L23/060a Revision 2

Concerns: All L 23 SUPER-BLANÍK.

Subject: Inspection check of controls cable attachment screws and rudder hinge bolt

Reason: Unsafe Condition - Appearance of crack on controls cable attachment screw

To be carried out at the latest by: Before next flight

To be carried out by: Operator and Organization approved for penetrate test according to part ASTM E1417-16 (see part A.4)

Costs to be covered by: Operator

Necessary material to be delivered by: No material required

Bulletin becomes effective: On the date of its issue

Total number of pages: 6

Released: Oldřich Cimbálek
Chief of Office of Airworthiness **23. 03. 2020**

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INTRODUCTION

Due to finding of a crack on the rudder controls cable stud bolts detected on a sailplane during standard maintenance procedure and reported to TC holder, it was decided to issue this mandatory bulletin, in order to ensure an affected area inspection on the L-23 fleet.

The further reporting by operators/maintenance organisations confirmed that the described issue is not an isolated case. In-flight collapsing of the rudder screws/stud bolts could lead to rudder controls failure causing a loss of directional control of sailplane, and subsequently leading to fatal accident. Based on updated evidences, TC holder classify this as unsafe condition.

The following working procedure is divided to two separate blocks with respect to differences in type design applicable either to 79th series (including) or from 80th series according to L-23 sailplane production series. The number of production series can be identified based on the sailplane serial number S/N where the second pair of digits means the number of series (for example the sailplane S/N XXYYZZ – XX means year of production; YY means series; ZZ means order number). Based on the YY indicator select one of following Working Procedures.

Design valid up to 79th series
Rudder control cable "screw"

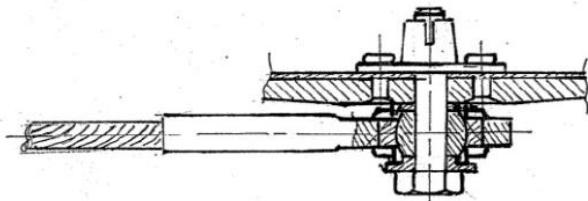


Fig. A

Design valid since 80th series
Rudder control cable "stud bolt"

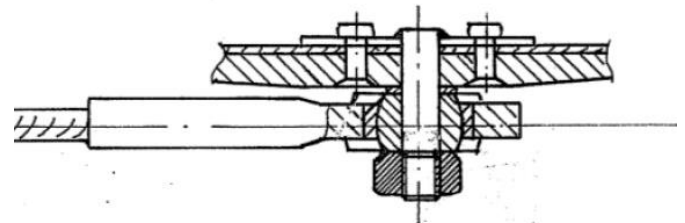


Fig. B

A. WORKING PROCEDURE

A.1 DISMOUNT (up to 79th series including – Fig.A)

1. Dismount the rudder according to the maintenance manual. (page 402-404, 27-20-00)
2. Place the rudder on the supports to allow good access to the cable attachment screws P/N A730515N and P/N A740259N, and rudder hinge bolt P/N A730514N - pos.21 (2x) pos. 22 on figure 1, page 3, 27-20-00 of the maintenance manual).
3. Clean and degrease the screws and hinge bolt.
4. Perform the penetrant testing on the entire accessible shoulder, thread undercut and thread of the screws and hinge bolt according to specification ASTM E1417-16, TYPE II, METHOD C, FORM e. The penetrant test must be performed by an approved organization.
5. Acceptance criteria: No cracks in checked area.

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6. In case of passing the test – provide a record in the Airframe Logbook according to the part G of this bulletin. The operation of sailplane is permitted.
7. If cracks have been detected on the checked area, the operation of sailplane is prohibited. Send to the sailplane TC holder:
 - Registration mark
 - Serial Number
 - Total flight hours
 - Number of starts by winch and aerotowSailplane TC holder will send you the service bulletin No. L23/061b in order to perform the replacement of damaged screws.
8. Install the rudder according to the maintenance manual (page 402-404, 27-20-00)

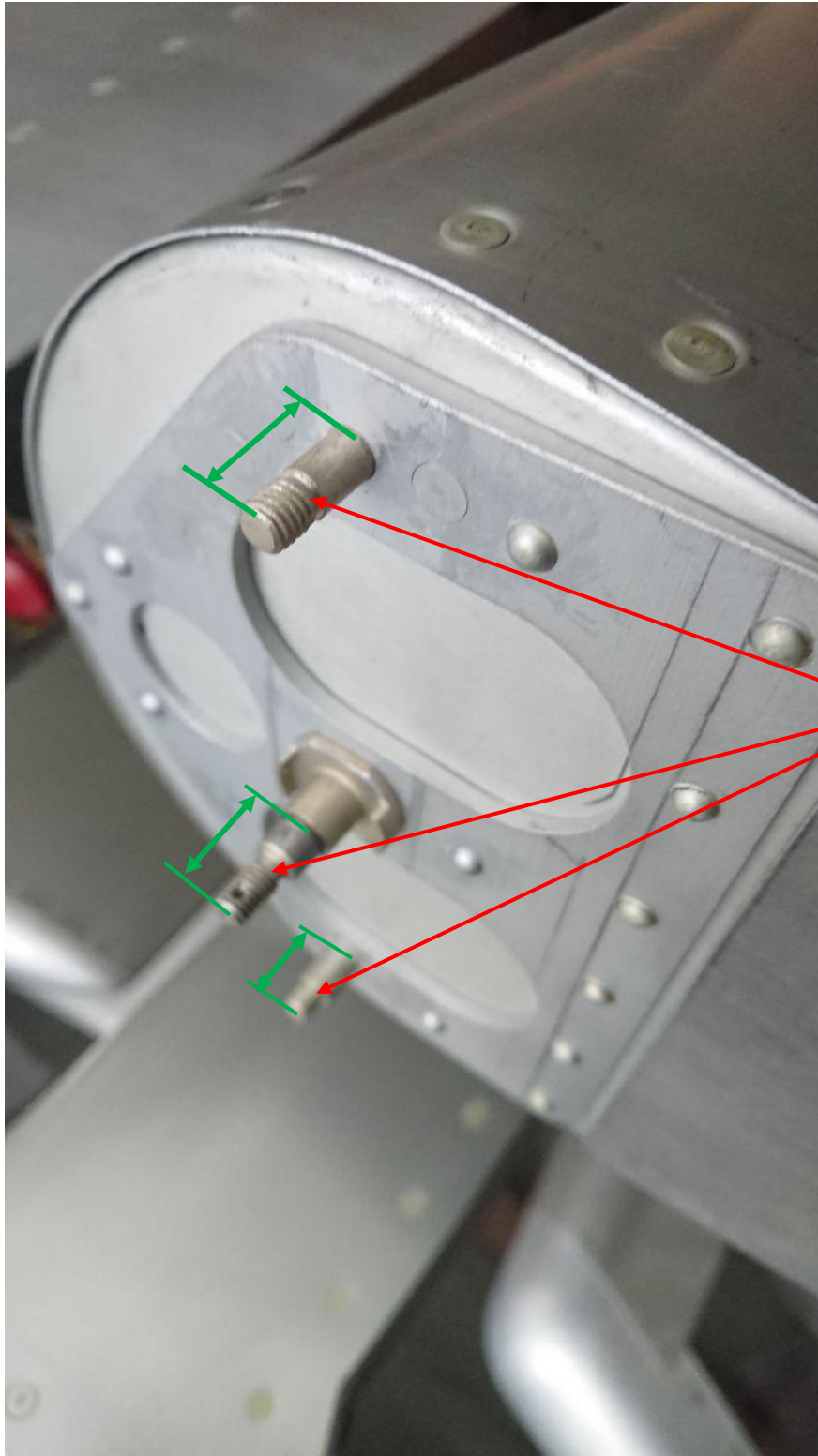
A.2 DISMOUNT (from 80th series – Fig. B)

1. Dismount the rudder according to the maintenance manual. (page 402-404, 27-20-00)
2. Place the rudder on the supports to allow good access to the cable attachment stud bolts P/N A730545N and P/N A730540N, and rudder hinge bolt P/N A730514N - pos.21 (2x) pos. 22 on figure 1, page 3, 27-20-00 of the maintenance manual).
3. Clean and degrease the stud bolts and hinge bolt. (Do not drill-out the stud bolts out of the rudder).
4. Perform the penetrant testing on the entire accessible shoulder, thread undercut and thread of the stud bolts and hinge bolt according to specification ASTM E1417-16, TYPE II, METHOD C, FORM e. The penetrant test must be performed by an approved organization.
5. Acceptance criteria: No cracks in checked area.
6. In case of passing the test – provide a record in the Airframe Logbook according to the part G of this bulletin. The operation of sailplane is permitted.
7. If cracks have been detected on the checked area, the operation of sailplane is prohibited. Send to the sailplane TC holder:
 - Registration mark
 - Serial Number
 - Total flight hours
 - Number of starts by winch and aerotowSailplane TC holder will send you the service bulletin No. L23/061b in order to perform the replacement of damaged Stud bolts
8. Install the rudder according to the maintenance manual (page 402-404, 27-20-00)

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B. MATERIAL REQUIRED

Not required

C. ILLUSTRATIONS**Screws and bolt for inspection**

This seem to be the stud bolts and the hinge bolt from series 80 on.

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D. DOCUMENTATION REQUIRED

L 23 SUPER-BLANÍK Maintenance Manual Doc. No.: Do-L23-1031.3., rev. 26 or later approved revision

E. SPARE PARTS IN OPERATION

Not affected

F. SAILPLANE MASS AND CG

Not affected

G. RECORD IN AIRFRAME LOGBOOK AFTER BULLETIN IMPLEMENTATION

Inspection of controls cable attachment screw and rudder hinge bolt has been performed according to the Mandatory Bulletin No. L23/060a REVISION 2.

- The screws and bolt without defects. The sailplane is released into operation.
- Cracks found in the (screw/bolt). The sailplane is grounded. In order to renew airworthiness, follow the service bulletin No. L23/061b.

Date:

Carried out by:
(legible signature of verification person)

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