

GLIDING FEDERATION OF AUSTRALIA

AD 382  
(ISSUE 1)

AIRWORTHINESS DIRECTIVE

SUBJECT: Possible incorrect assembly of the aileron drive mechanism.

TYPE AFFECTED: Jantar 2A and Jantar 2B

BACKGROUND: When the glider is de-rigged it is possible for the aileron to become dislodged from its hinges. When re-installing the ailerons it is possible to install the aileron drive incorrectly by inserting the lever end above the guide instead of into it. Incorrect assembly can only be detected by the change in aileron deflection and operating noise of the aileron. Stick travel is not restricted by incorrect assembly of the aileron.

DOCUMENTATION: PZL-Bielsko Bulletin BE-039/90.

ACTION REQUIRED: 1. At each DI the ailerons should be visually checked for correct assembly as shown in figures 1 and 2 of the PZL-Bielsko Bulletin BE-039/90 which forms part of this AD.

2. At each rigging the aileron deflections must be checked to ensure correct assembly of the ailerons. The check should be done with the flaps in the 0° setting, at the inboard end of the aileron. The correct deflections are:

Up 52 mm ± 2.5 mm  
Down 36 mm ± 2.5 mm

3. The Flight Manual is to be amended by replacing page 38 with page 38 dated 16 February, 1992 GFA AD 382 Issue 1. This page is available from the GFA secretariate on request.

4. Note the revision to the flight manual on page 4 (Amendment record) with "Revised to GFA AD 382 Issue 1." date and sign.

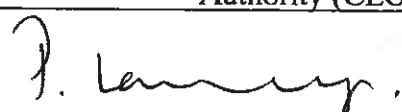
IMPLEMENTATION: This inspection must be performed by persons rated Daily inspection or higher.

Flight manual amendments may be performed by the owner.

WEIGHT AND BALANCE: Not affected.

COMPLIANCE: The requirements of this Airworthiness Directive are mandatory. This Directive is issued pursuant to the Australian Civil aviation Regulations under the delegated authority of the Civil Aviation Authority (CEO42/90).

SIGNED:



For and on behalf of:

THE GLIDING FEDERATION  
OF AUSTRALIA

CHIEF TECHNICAL OFFICER AIRWORTHINESS

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Ref: Inspection of the correct installation of aileron control system levers in the wing guides.

Way of introducing: In case the internal aileron part is disassembled or when this part falls out of the hinges - the inspection shall be introduced immediately,

Elaborated in PDPS-TKE.

Director PDPS "PZL-BIELSKO"

Juliusz Bończa, M.Sc.

#### 1. GROUNDS FOR INTRODUCING THIS BULLETIN

In the operation the case of incorrect assembling of aileron control system occurred. It depended on the fact that the lever end has been inserted above the guide housing instead of to be inserted into the "pocket" formed by the glide housing.

In the respect to above this Bulletin introduces the directive of inspection for the aileron deflection after each disassembling or when the aileron inner part falls out of the hinges - e.g. during the ground transportation.

#### 2. LIST OF THE GLIDER FACT.NOS. COVERED WITH THIS BULLETIN

This Bulletin concerns the following gliders:

2.1. SZD-42-1 "JANTAR-2A" of Fact.Nos: X-128, B-857, B-875 and from B-775 to B-792.

2.2. SZD-42-2 "JANTAR-2B" of Fact.Nos: X-131 and from B-853 to B-1131.

#### 3. DESCRIPTION OF THE INTRODUCED CHANGES

This Bulletin does not introduce the design changes on the glider. It is aimed to draw the attention that when disassembling the aileron or falling it out of the hinges the correct assembling should be checked as well as the deflection values on the assembled glider.

The incorrect aileron assembling is monitored by the noisy operation and changed deflection range.

The restriction in the stick movement does not appear, so the fault can be not recognized by the pilot.

Therefore the inspection of correct aileron assembling is to be taken as the important one.

The gliders having some troubles in deflection adjusting should be inspected for the correct assembling of control levers in the guides.

The sketches Fig. 1 and Fig. 2 show the correctly and incorrectly assembled aileron control levers.

Translated by:  
*K. Stępiej*  
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## 4. LIST OF ENCLOSURES

No enclosures.

## 5. FINAL STATEMENTS

- 5.1. When assembling the inner aileron pay a special attention to insert correctly the ends of control levers into the "pockets" of the guide housing.  
After assembling check the aileron deflections to be correct.

5.2. The eventual problems in aileron adjustment may be caused by the incorrect assembling of the control levers in wing.

5.3. The excessive noise of aileron control system operation can be caused by the incorrect assembling of the control levers.

T H E   E N D -

*właściwy montaż*  
*correct assembling*  
*richtige Zusammenstellung*  
*corectualny montaż*

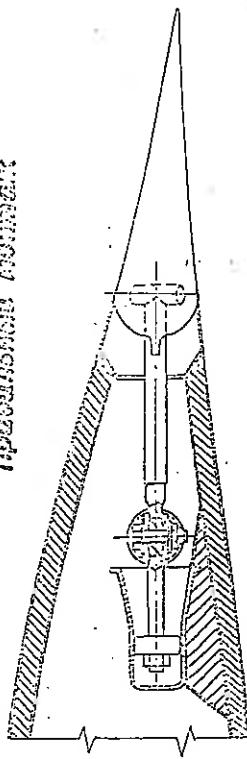


Fig. 1

*własny montaż*  
*incorrect assembling*  
*falsche Zusammenstellung*  
*incorrectualny montaż*

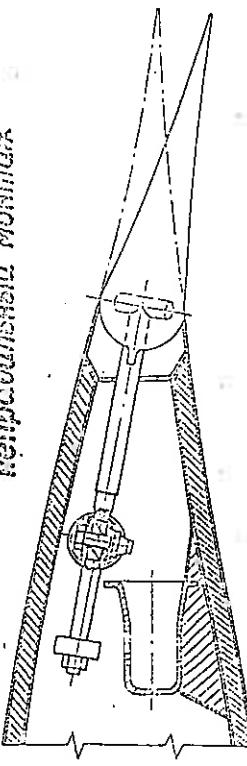


Fig. 2

4. Lock the tailplane by rotating the locking pin/5/ 90° and inserting it into the hole in the tube spar. Correct locking is obtained when the red painted portion of the pin is invisible.

**3.9.4 Rigging and derigging of the wing outer panels. Fig 6.**

1. Remove the inspection panel on the upper surface of the wing outer panel.
2. Slide the bolt /12/ back out of its bush on the guide.
3. Put the wing outer panel on the spar end. Ensure that the pins /16/ on the wing ribs and the spar end are in their bearings.
4. Insert the bolt /12/ into the bush and lock it. Ensure that the locking pin is engaged in the hole in the lower wall of the housing.
5. Measure the deflection of the aileron. The flaps should be set to 0° and the deflection measured at the inboard end of the aileron. Correct deflections are: Up 52 mm ± 2.5 mm and Down 36 mm ± 2.5 mm.
6. Install the inspection panel and secure it with the screw.

**3.9.5 Derigging of the sailplane.**

When derigging the sailplane follow this sequence.

- Disassemble the wing outer panels.
- Disassemble the horizontal tailplane.
- Disassemble the wing central panels.