

COMMONWEALTH OF AUSTRALIA
DEPARTMENT OF TRANSPORT
AIR TRANSPORT GROUP

Airworthiness Directive Gliders

GFA/FFA 3/74

Glider Types Affected

F.F.A. Diamant 16.5 & 18.

Background

Two service bulletins Nos. 04 and 05 have been received from the makers of Diamant 16.5 and 18 gliders, Flug und Fahrzeugwerke A.G. No. 4 relates to excessive wear in the control column bearing. It would be expected that the requirements of this bulletin would be catered for in normal maintenance however, if this is not the case then the requirements of Service Bulletin No. 04 apply to gliders of the type in Australia.

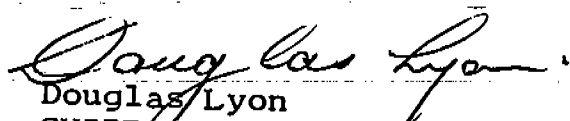
Parts may be obtained from the manufacturers or manufactured to details of Drawing GFA/FFA 3/04. Service Bulletin No. 05 relates to reinforcement of the lower safety harness attachments.

Compliance

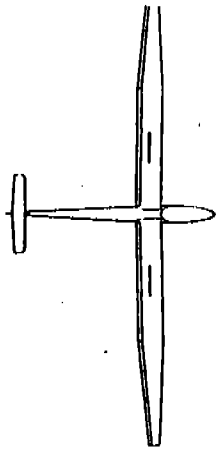
The requirements of Service Bulletins Nos 04 and 05 are mandatory for Diamant 16.5 or 18 gliders in Australia and these bulletins form part of this directive, compliance is mandatory.

This directive is issued pursuant to Air Navigation Regulations under the delegated authority of the Director General of Civil Aviation.

These modifications are to be carried out by an authorised C. of A. Inspector (qualified F.R.P. for No. 05).


Douglas Lyon
CHIEF TECHNICAL OFFICER-AIRWORTH
GLIDING FEDERATION OF AUSTRALIA

Date of issue: 2nd July 1974.



SERVICE BULLETIN

DATE : 11-12-1973
 SUBJECT : Stick control
 MODELS AFFECTED : DIAMANT 16.5 } all serial numbers
 DIAMANT 18 }
 COMPLIANCE : See required action below

Reason : The stick control of one DIAMANT sailplane had too much play. The result of an exact investigation was showing wear of the stick bearing in the torsion tube.

Required action :

1. Inspect stick control for excessive play immediately after receipt of this Service Bulletin.
2. If the stick bearing shows normal play the inspection must be repeated every 50 flight hours.
3. If the stick bearing shows play accomplish the modification in accordance with para 4 before the next flight.
4. Modification:
 The present two holes in the torsion tube D1.203-0103 must be drilled and reamed to the diameter of 12-H7 ($12 + 8,018$ mm).
 According to the attached drawing, two bushings SK 2521 have to be bonded into the torsion tube. Due to the new dimension of the bearing depth, the pivot bolt D1.203-0106 must be replaced by a new bolt SK 2520.
5. The inspections according to para 2 are no longer necessary if modification has been carried out.

Material : The bushings SK 2521 and the pivot bolt SK 2520 will be supplied by the manufacturer.

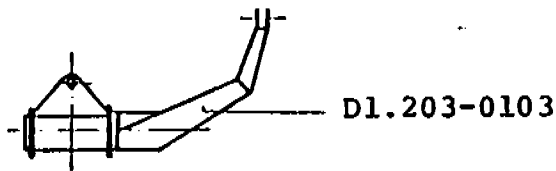
Accomplishment : This modification can be carried out by the DIAMANT owners.

Issued by: B. Gugger

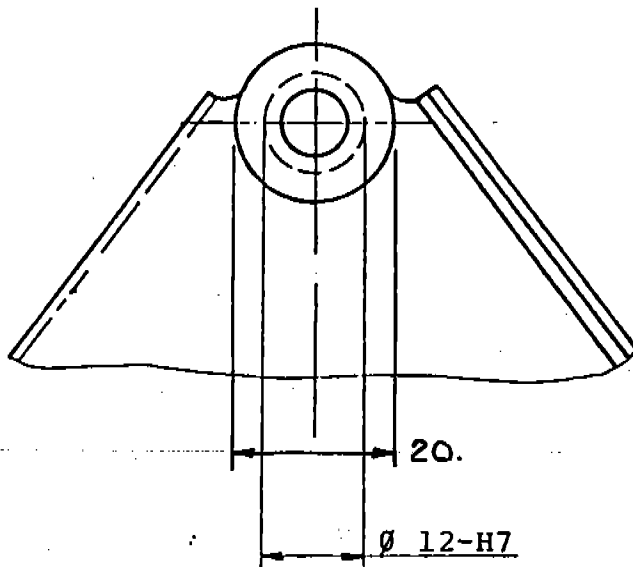
This Service Bulletin, approved by the Swiss Federal Air Office, has to be added to the Technical Documents and compliance must be recorded in the Maintenance Reports of the sailplane concerned.

M: 1 : 10

AD. GFA./FFA 3/74



M: 1 : 1

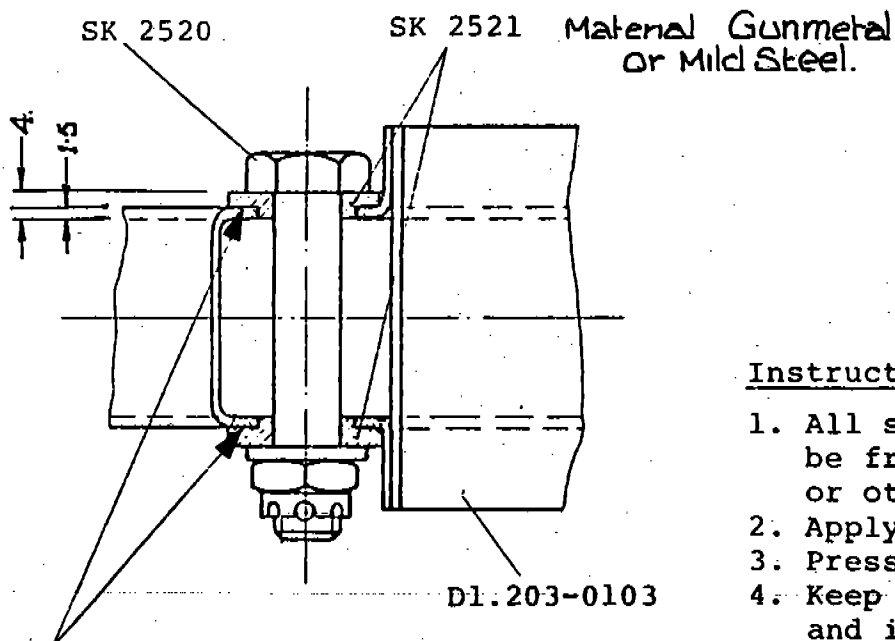
Adhesive:

Loctite No. 40

or

Araldit Resin AW 106

Hardener HV 953U



Bonding area

Instruction for bonding:

1. All surfaces to be bonded must be free of paint, oil, grease or other foreign substances.
2. Apply the adhesive.
3. Press in the bushings.
4. Keep the bore of the bushings and inner surface free of adhesive.

SERVICE BULLETIN

DATE : February 4, 1974
SUBJECT : Lower harness attachments D1.201-07
MODELS AFFECTED : DIAMANT HBV }
DIAMANT 16.5 } - all serial numbers
DIAMANT 18 }
COMPLIANCE : Immediately after receipt of this Bulletin.

REASON : The lower harness attachments of a DIAMANT sailplane can be loose due to an incident. The investigation showed that the bonding of the attachments was insufficient.

A reinforcement of every lower harness attachment is required since checking the bonding of all active DIAMANT sailplanes is not possible.

REQUIRED ACTION

- : Two each fiberglass clothes 140 diagonal have to be laminated across the harness attachments in accordance with the attached drawing SK-HBV 189:
1. Remove LH and RH sidewall panels.
 2. Remove seat upholstery as far as necessary (glued).
 3. Remove lower harness.
 4. Remove attachment support D1.206-0510 of long trim springs.
 5. Disconnect trim lever D1.206-0501 at pivot point.
 6. Remove aileron and flap bellcranks at the lefthand side of the landing gear. Tying the push rods up gives sufficient space for the bonding procedure.
 7. Sand fuselage and harness retaining area to the size of the reinforcement laminate.
 8. Cut to size glass clothes in accordance with the attached drawing SK-HBV 189.
 9. Laminate tailored fiberglass clothes with Araldit resin LY 554 (5 parts) and Araldit hardener HY 554 (1 part). Minimum temperature for bonding procedure is $20^{\circ}\text{C} = 68^{\circ}\text{F}$.
 10. Cut out opening for harness attachment after curing.

11. Reinstall trim lever and attachment support for long trim springs.
12. Reinstall aileron and flap bellcranks.
13. Check trim and all control systems for freedom and correct travel.
14. Reglue seat upholstery.
15. Install harness and sidewall panels.

MATERIAL : 4 glass clothes 140 diagonal
size 200 mm x 220 mm
1 tin (350 gr) Araldit resin LY 554 (5 parts)
1 tin (70 gr) Araldit hardener HY 554 (1 part)

ACCOMPLISHMENT: This modification can be carried out by the DIAMANT owners.

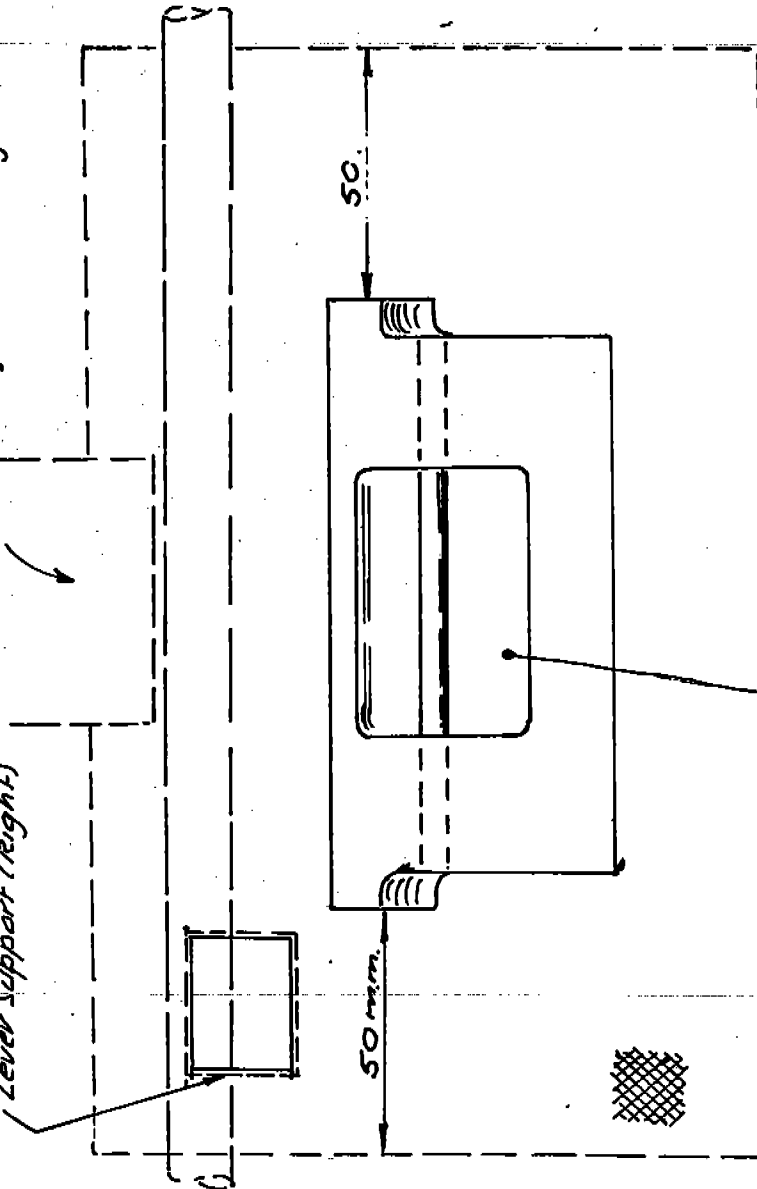
Issued by:

B. Guggiani
(B. Guggiari)

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ATTACHMENT FIXING D.I. 206-OSIO
(Right) For Long trim spring

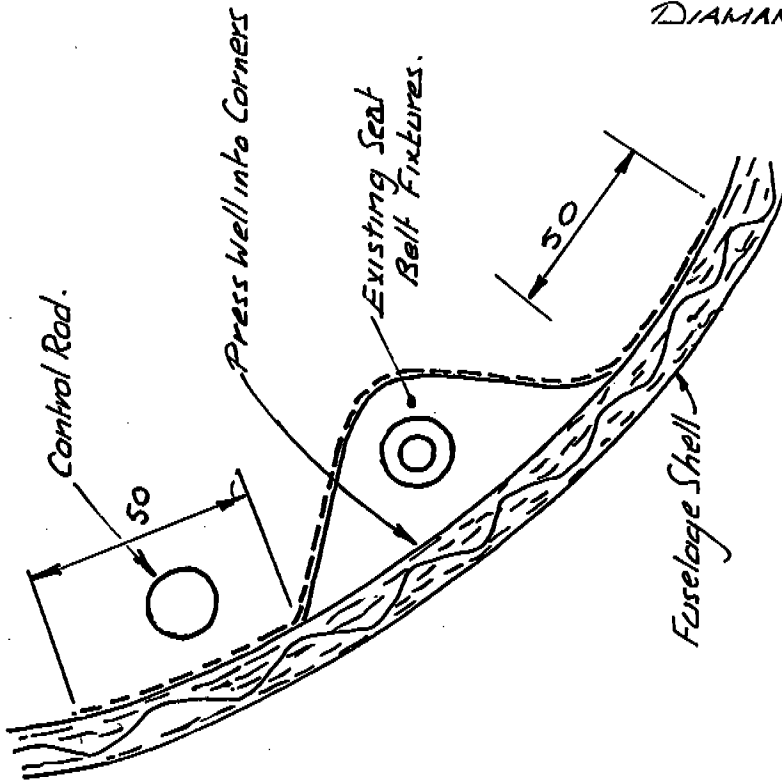
Cut out of trim Control
(Lever Support (right))



2 Fabrics X
Laminated.

To be cut out after
Laminating

Materials 2 Glasscloth Fabrics N° 140 - 200x220 mm.
Resin LY 544 5 Parts
Hardener HY 544 1 Part.



DIAMANT. SEAT BELT FIXTURES.