

AIRWORTHINESS DIRECTIVE

- TYPE AFFECTED:** Grob Twin Astir and Twin Astir Trainer. Serial numbers 3000 to 3291 (Trainer with supplement T).
- Grob G 103 Twin II and Grob G 103 A Twin II Acro. Serial numbers 3501 to 3878 (Acro with supplement K).
- Grob Single seat Astir's. All types, all serial numbers.
- SUBJECT:** Inspection, relocation and maintenance procedures of tow release handles.
- BACKGROUND:** This AD was originally issued in 1989 and requested the movement of all single/front seat tow release knobs as well as the rear seat knob movement as required by Grob Technical Bulletin 315-22. The movement of the single/front seat knobs has resulted in several operational problems. These are:
- A) Single seat Astir's. The cable from the yellow knob may catch on the rear edge of the cable pulley keeper. This may jam the cable.
- The wheel brake lever on the front of the control column may hook in behind the yellow knob when the control column is pushed full forward, full left. This could result in unintentional release of the tow line.
- B) All affected types (front seat). The raised knob may be shielded by the control column when the control column is in the full forward, full left position. The shielding is sufficient to restrict access to the yellow knob until the control column is moved back towards centre.
- DOCUMENTATION:** Grob Service Bulletin 315-32 and Repair Instruction 315-32.
- ACTION REQUIRED:**
1. Before next flight and at each subsequent Form 2 inspection all release knobs in all affected gliders must be inspected for worn or broken cable guides and correct freeplay in the release circuit as shown in figure 1 below.
 2. Before or at the next form 2 all single/front seat release knobs which were raised in accordance with Issue 1 of this AD must have the knob moved back to the manufacturers original position.

SIGNED:

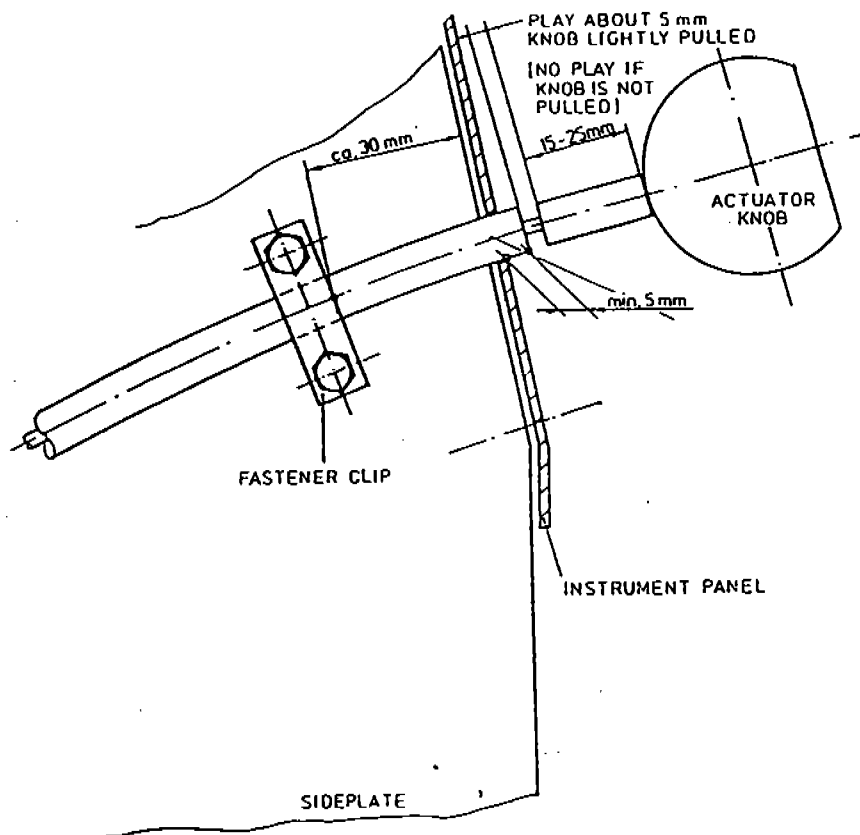


CHIEF TECHNICAL OFFICER AIRWORTHINESS

For and on behalf of:

**THE GLIDING FEDERATION
OF AUSTRALIA**

Figure 1. Release knob freeplay.

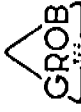


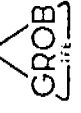
3. Before or at the next Form 2 inspection the rear release knob of the Twin Astir's, Twin Astir Trainers, The G 103 Twin II and G 103 A Twin II Acro must be inspected and if necessary relocated in accordance with Instructions 1 and 2 of Grob Service Bulletin TM 315-32 which forms part of this AD.

WEIGHT AND BALANCE: Not Affected

IMPLEMENTATION: The requirements of this AD must be performed by persons rated "Inspection for Issue of Certificates of Airworthiness" any type".

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).

	Service Bulletin TN 315-32	GCS ASTIR TWIN G 103 A "TWIN II" ACRO"
Weight and balance: NO effect. Remarks: Instructions 1 and 2 can be carried out by qualified mechanics. Satisfactory execution shall be certified by a Class III inspector, immediately following completion, in the log book. Mattsies, June 12, 1987 LBA-approved on July 1, 1987 signed: Dipl.-Ing. R. Rischer P.S.: In case you have sold your glider meanwhile, we ask you kindly to give this information immediately to the new owner and to let us know his address and serial number. The translation has been done by best knowledge and judgement. In any case or doubt, the German original is authoritative. The German original of this Service Bulletin has been approved by the LBA under the date of July 1, 1987 and is signed by K. Volosciuk.		
Datum June 12, 87	ersetzt Ausgabe vom	Bearbeitung Seite 2

	Service Bulletin TN 315-32	ASTIR TWIN G 103 A "TWIN II" ACRO"
Subject: Checking and relocating aft actuator knob of the tow hooks Effectivity: Gliders TWIN ASTIR and TWIN ASTIR TRAINER factory serial no. 3000 - 3291 (inclusive) (TRAINER with Supplement "T") Gliders G 103 "TWIN II" and G 103 A "TWIN II ACRO" factory serial no. 3501 - 3878 (inclusive) (ACRO with Supplement "K") Accomplishment: - Instruction 1 before next take-off - Instruction 2 together with instruction 1 Reason: When the guide sleeve of the aft tow hook actuator knob is worn out and/or snapped off, there is a danger of the release knob dropping into the stick boot during flight and obstructing stick movement. If the guide sleeve cutout is located in the bottom LH corner of the instrument panel, it is good practice to relocate the cutout. Instructions: 1. <u>Instruction:</u> Localizing guide sleeve cutout 1.1 If the guide sleeve cutout is located in the bottom LH corner of the instrument panel, Instruction 2 shall be carried out before next take-off. 1.2 If the guide sleeve cutout is already located higher, as standard, check the guide sleeve for signs of wear and check play of the release knob. Remove any material showing signs of wear and tear. Set play according to Repair Instructions No. 315-32 which are a component of this Service Bulletin. 2. <u>Instruction:</u> Relocating guide sleeve cutout 2.1 Relocating the guide sleeve cutout shall be done in accordance with Repair Instructions No. 315-32. Material: Material as required by Repair Instructions of Service Bulletin TN 315-32 shall be procured from the manufacturer.		
Datum June 12, 87	ersetzt Ausgabe vom	Bearbeitung Seite 1

	Repair Instructions No. 315-32 for Service Bulletin TM 315-32	GCS TWIN ASTIR C 113 "TWIN II" G 113 A "TWIN II ADP"
1. Remove both seats. 2. Remove rear instrument panel filler. 3. Remove rear instrument panel by removing the bottom two fastener screws (connection to the frame) and the two screws midway in the height of the instrument panel (connection to the sideplates). 4. Tilt instrument panel to the right. The pitot static tubes need only be removed in some cases. 5. Remove fastener clip holding the polyamide guide tube (two clips provided as an exception) by removing the screws or drilling the rivets (drill dia. 4.2 mm) open. 6. Mark and produce the new cutout in the instrument panel as shown in Fig. 1. 7. Secure the instrument panel by the bottom two screws. 8. Check the polyamide guide tube for signs of wear and tear. Pare off any signs of wear and tear. 9. Drill holes (drill dia. 4.2 mm) to mount the clip as shown in Fig. 2. 10. Fit clip using M 4 bolts, roses, washers and stop nuts. <u>Note:</u> Only use new stop nuts! The polyamide guide tube must protrude at least 5 mm from the instrument panel (see Fig. 2). This may require on the TWIN ASTIR removal of the clip on the rudder parallel guide between the rear sideplates. 11. Thread approx. 15 - 25 mm long piece of polyamide tubing over the release pullicord. If the complete release pullicord does not need replacing, a piece of the tubing can be slitted open and applied to the pullicord, before taping it together. <u>Note:</u> The release knob must now be held in place so that the play is 5 - 10 mm when the knob is lightly pulled (see Fig. 2) without the nose hook opening. The belly hook must not open until the nose hook is fully open. No play must be evident when the release knob is not pulled.		
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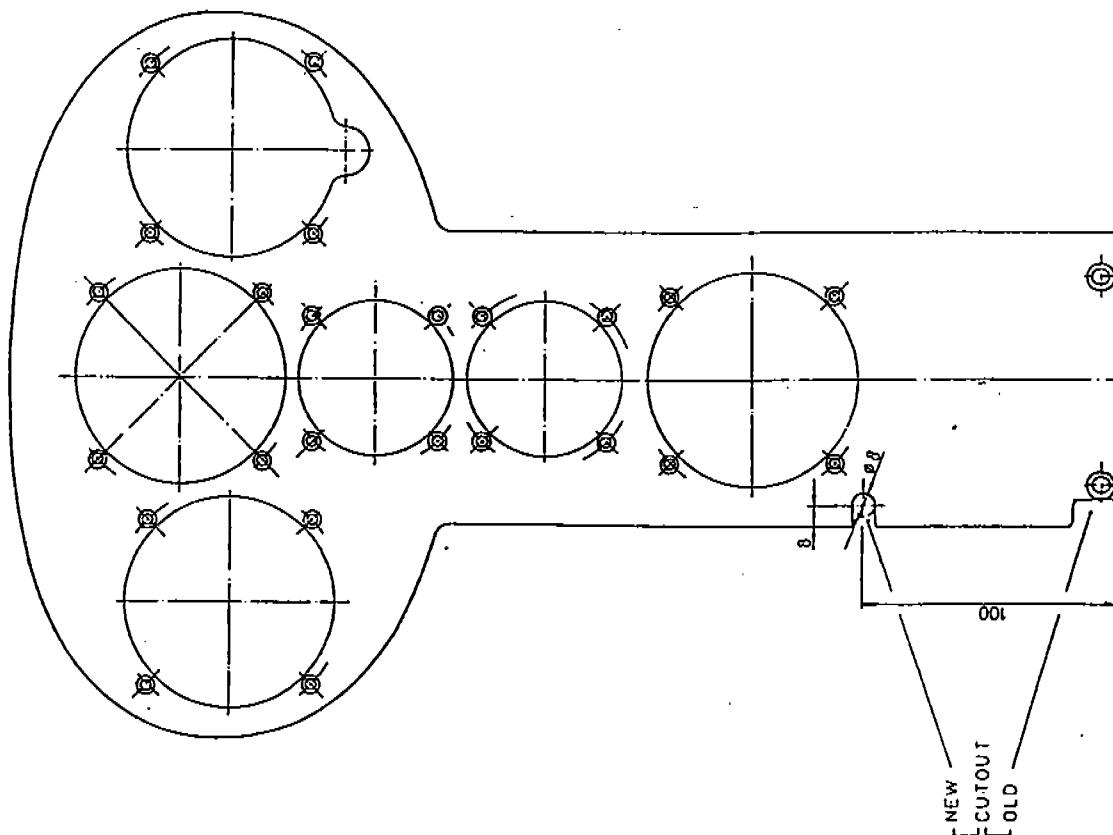
	Repair Instructions No. 315-32 for Service Bulletin TM 315-32	GCS TWIN ASTIR C 113 "TWIN II" G 113 A "TWIN II ADP"
Repair Instructions No. 315-32 pertain to Service Bulletin 315-32 and relate to checking and relocating the aft tow hook actuator knob. Material: (Material listed in the following is not necessary on all gliders) 2 countersunk screws M 4 x 16, DIN 963 2 roses dia. 4 2 washers 4.3 LN 9025 2 hexagon nuts LN 9348 - M 4 polyamide tubing 8 dia. x 1 <u>As an exception:</u> 1 cord LN 9374 - 3.2 1 Nicopress sleeve 28-3-M 1 stop sleeve 871-18J 1 ball knob yellow 40 dia. 1 placard TOW HOOK Tools: 1 power drill 1 set screwdrivers (assorted slot widths) 1 fork wrench size 7 2 drills (8 dia., 4.2 dia.) 1 hacksaw files <u>As an exception:</u> 1 Nicopress pliers Note: It is good practice, before dismantling anything, to make a mental note or small sketch of how the things fit together, so that later reassembly is easier. Make a precise note also of such minor items such as screws, for instance. Relocation of the actuation knob can be done in both, the rigged and the derigged condition.		
Datum June 12, 87	ersetzt Ausgabe vom	Bearbeitung Seite 1



Arbeitsanleitung nr. 315-32
(Repair instruction no. 315-32)

GROB
TWIN ASTIR
TWIN ASTIR TRAINER
G103 "TWIN II"
G103A "TWIN II ACRO"

Abb. 1
(fig. 1)



12. Reassembly is in reverse sequence.

13. After reassembly recheck tow hook functioning.

Note:

Should difficulties arise in the work, please get in touch with the manufacturer.

Mattsies, June 12, 1987

signed: Dipl.-Ing. R. Rischer

GROB
TWIN ASTIR
TWIN ASTIR TRAINER
G103 "TWIN II"
G103A "TWIN II ACRO"

Repair Instructions No. 315-32
for Service Bulletin TM 315-32



Datum
June 12, 87

ersetzt Ausgabe
vom

Bearbeitung

Seite
3

GROB WERKE GMDH & CO. KG
Unternehmensbereich
Burkhart Grob Flugzeugbau
Am Flugplatz

D-8939 Mattsies
Federal Republic of Germany

P U R C H A S E O R D E R

Gentlemen:

We herewith order for early delivery the following material according to Repair Instructions No. 315-32 to Service Bulletin TM 315-32 dated June 12, 1987 :

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Serial Number:

Registration:

Flight hours:

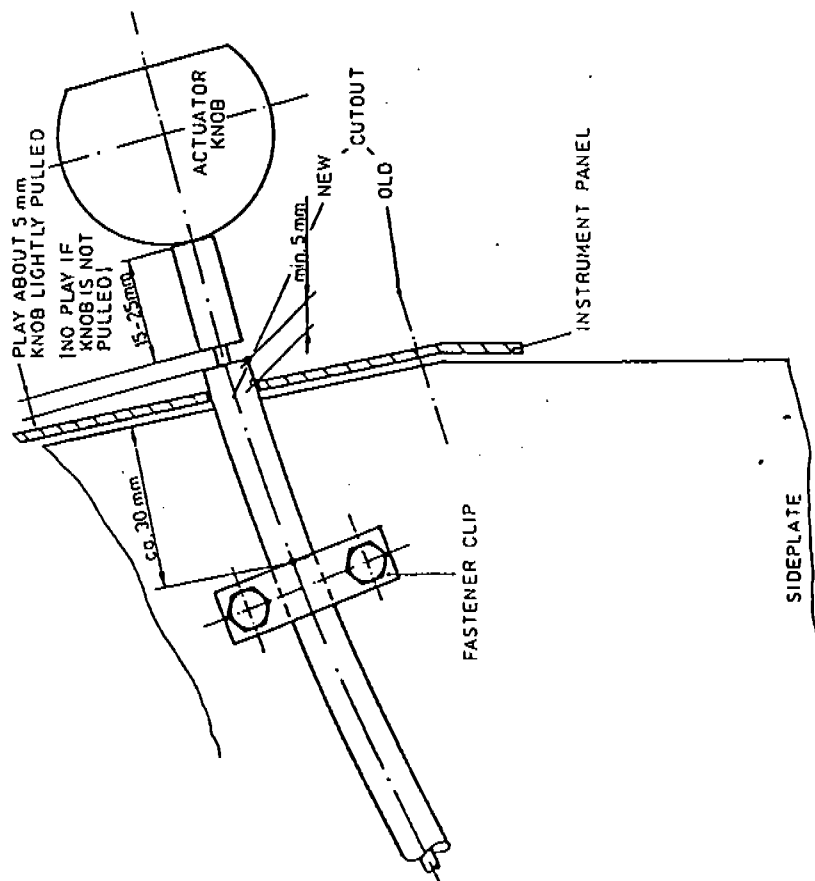
Take-off number:

Sender (owner):

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.....
.....
.....

..... (Date) (Signature)

Abb. 2
(fig.2)



GROB
TWIN ASTIR
TWIN ASTIR TRAINER
G103 "TWIN II"
G103A "TWIN II ACO"

Arbeitsanleitung Nr. 315-32
(Repair instruction no. 315-32)

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