



Bundesamt für Zivilluftfahrt (BAZL)
Office fédéral de l'aviation civile (OFAC)
Ufficio federale dell'aviazione civile (UFAC)
Federal Office for Civil Aviation (FOCA)

3003 Bern/Berne/Berna

**Lufttüchtigkeitsanweisung
Consigne de navigabilité
Prescrizione di aeronavigabilità
Airworthiness directive**

HB 91-146

Inkraftsetzung
Date en vigueur
Entrata in vigore
Effective Date

14.5.1991

Betroffene Muster – Types concernés – Applicabilità – Models affected

FFA Flugzeugwerke Altenrhein AG, AS202/15, AS202/15-1, AS202/18, AS202/18-1, serial number (S/N) 001-135, excluding S/N 105 and 106 and airplanes on which the black elevator drive shaft assy has already been replaced since 1988 by the grey painted one

Anlass/Massnahmen – Objet/Mesures – Oggetto/Provvedimenti – Subject/Action

Elevator drive shaft assembly - Corrosion in the tube including the welding inside edge - Removal of the elevator drive shaft assembly and installation of a shaft assy with improved surface treatment

Fristen – Délais – Scadenza – Compliance

Within 10 hours time in service, but not later than June 15, 1991

Herkunft – Provenance – Provenienza – Origin

FFA Flugzeugwerke

Bezugnahme – Référence – Riferimento – Reference

FFA Service Bulletin AS 202 Bravo No. 41A (attached)

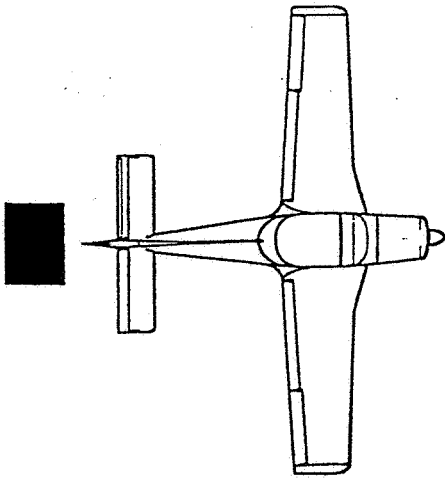
Bemerkungen – Observations – Osservazioni – Remarks

Supersedes HB 91-001

Rechtsmittelbelehrung siehe TM Nr.
Voies de droit voir CT no. F 80.015-10
Rimedi giuridici vedi CT no.
Right to appeal see TC no.

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Mandatory

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Supersedes SB No 41

ELEVATOR DRIVE SHAFT ASSY

1. Planning Information

1.1 Effectivity

- Models: AS 202/15, AS 202/15-1
AS 202/18, AS 202/18-1
- Ser. Nos. S/N 001 to 135
(Excluding S/N 105 and 106 and Airplanes on which the black elevator drive shaft assy has already been replaced since 1988 by the grey painted one)

1.2 Reason: Corrosion in the tube including the welding inside edge

1.3 Description: Removal of elevator drive shaft assembly and installation of shaft assy with improved surface treatment

1.4 Compliance: Within 10 hours time in service but not later than June 15, 1991

1.5 Approval: Approved by the Swiss Federal Air Office as Airworthiness Directive

1.6 Manpower: Approx. 5 man-hours

1.7 Material: Available from FFA

1.8 Tooling: No special tools are required

1.9 Weight and Balance: not affected

1.10 Electrical load data: not affected

1.11 Reference to other publications: AMM / IPC, chapter 27-31-04, 27-31-05
55-20-01, 50-50-01
55-20-02

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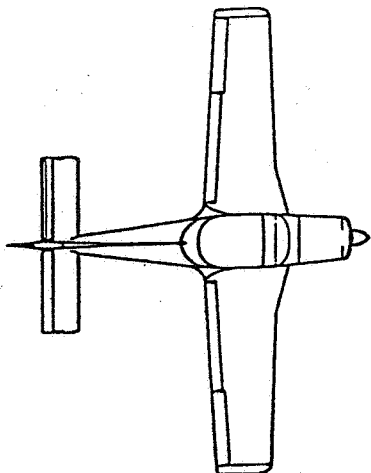


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2. Accomplishment Instructions2.1 Remove

- Remove left cover 202-17.505.11 and right cover 202-17.505.12 on the rear of the fuselage
- Disconnect the elevator steering rod from lever on the drive shaft assy
- Remove covering 202-17.479 of the bearings on the left elevator
- Disconnect the attachment of left elevator on the drive shaft assy
- Remove hinge bolts on the left elevator and carefully remove the left elevator
- Disconnect the middle hinge bolt on the drive shaft assy
- Disconnect the attachment of right elevator on the drive shaft assy and remove the drive shaft assy

2.2 Installation

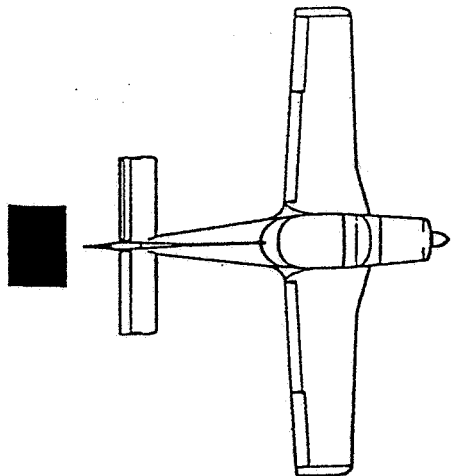
- Install the replacement drive shaft assy on the right elevator, see IPC 55-20-01 Page 0, lock the bolts with locking plate and locking wire
- Install the middle hinge bolt on the drive shaft assy, see IPC 55-50-01 Page 0, lock the castellated nut with cotter pin MS 24665-151
- Install the left elevator in position, connect the hinge bolts, see IPC 55-50-01 Page 0, lock the castellated nuts with cotter pin MS 24665-151

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- Attach the left elevator on the drive shaft assy, see IPC 55-20-01 Page 0, lock the bolts with locking plate and locking wire
- Attach the elevator steering rod on the lever of drive shaft assy, see IPC 27-31-04 Page 0 or 27-31-05 Page 0. Lock the castellated nut with cotter pin MS 24665-153
- Install the cover 202-17.479 at the bearings on the left elevator, see IPC 55-20-02 Page 0
- Install the left cover 202-17.505.11 and right cover 202-17.505.12 rear on the fuselage

2.3 Test

- Check the elevator deflection:

For 150 HP airplanes:

up $30^{\circ} \pm 1^{\circ}$
down $20^{\circ} \pm 1^{\circ}$

For 180 HP airplanes:

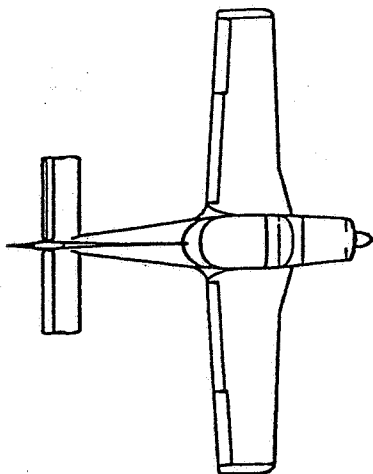
up $30^{\circ} \pm 1^{\circ}$
down $30^{\circ} \pm 1^{\circ}$

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**3. Material**

For completion of this Service Bulletin the following material is necessary:

- 1 piece Elevator drive shaft assy 202-17.450
- 1 piece Cotter pin MS 24665-153
- 2 pieces Cotter pin MS 24665-151
- 2 pieces Locking wire MS 20995-NC32
(length approx. 12" $\hat{=}$ 300 mm)
- 2 pieces Locking plate 202-17.475

The accomplishment of this Service Bulletin should be recorded in the technical document of the airplane.

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