**The technical content of this document is approved under the authority of DOA Ref. EASA.21J.250.**

**PLEASE NOTE:** For details and working instruction refer to Document P067-021-[2015]

<table>
<thead>
<tr>
<th>EASA</th>
<th>☒ Mandatory (Verbindlich) AD-N°: 2015-0034-E</th>
</tr>
</thead>
<tbody>
<tr>
<td>STEMME</td>
<td>☒ Mandatory (Verbindlich)</td>
</tr>
<tr>
<td>☐ Recommended (Empfohlen)</td>
<td></td>
</tr>
<tr>
<td>☐ Optional</td>
<td></td>
</tr>
</tbody>
</table>

---

**Gegenstand:**
Alle Gabelköpfe 6 Stück (3LH, 3RH) am Übergang von Innen- zu Außena-Flügel sind zu tauschen:
ALT: Material Aluminium- teilweise mit Nut
NEU: Material Stahl - ohne Nut PN 054.003

**Betroffene Flugzeuge:**

<table>
<thead>
<tr>
<th>Muster / Type:</th>
<th>TSA-M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baureihe(n) / Variant(s):</td>
<td>S6 / S6 RT</td>
</tr>
<tr>
<td>Kennblatt / TCDS:</td>
<td>EASA.A.143 / FAA G23CE</td>
</tr>
<tr>
<td>Werknummer(n) / S/N:</td>
<td>ALL</td>
</tr>
</tbody>
</table>

**Subject:**
All clevises 6 each (3 LH, 3RH) at intersection of inner and outer wing, shall be replaced:
OLD: Material Aluminium- partly with notch
NEW: Material Steel - without notch PN 054.003

**Affected Airplanes:**

**Dringlichkeit:**
Vor dem nächsten Flug

**Time of Compliance:**
Before next flight

---

**printed**

STEMME AG, Flugplatzstrasse F2, Nr. 6 - 7, D-15344 Strausberg, Germany
Tel.: ++49-(0) 3341-3612-0, Fax.: ++49 (0) 3341-3612-30,
Technische Mitteilung
Service Bulletin

Maßnahmen:

Für alle betroffenen Werknummern:
Tausch aller Gabelköpfe am Außenflügelanschluss

Die Umsetzung ist beschrieben im Dokument P067-021-[2015]

Masse und Schwerpunkt:

Nicht betroffen.

☐ Die aufgeführten Maßnahmen können ausschließlich vom Instandhaltungsbetrieb IHB DE.MF.06C9 der Stemme AG, Flugplatzstraße F2 Nr. 7, D-15344 Strausberg durchgeführt und bescheinigt werden.

☒ Die aufgeführten Maßnahmen müssen von entsprechend genehmigten Instandhaltungsbetrieben durchgeführt und bescheinigt werden.

Actions:

For all serial numbers:
Exchange of all clevises at the intersection of inner and outer wing

For working instruction refer to DOC P067-021-[2015]

Mass and Balance:

Not affected.

☐ The actions for the modification may be carried out and certified only by the maintenance organization DE.MF.0609 of Stemme AG, Flugplatzstraße F2 Nr. 7, D-15344 Strausberg.

☒ The actions for the modification shall be carried out and certified by appropriately approved maintenance organizations.
Annex to P062-021-[2015]

The technical content of this document is approved under the authority of DOA Ref. EASA.21J.250.

**General:**
Please read this instruction before starting with parts replacement.

**Related Documents:**

<table>
<thead>
<tr>
<th>No.</th>
<th>Doc. no.</th>
<th>Description</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>P062-021-[2015]</td>
<td>Corresponding Service Bulletin</td>
<td></td>
</tr>
</tbody>
</table>

**Tools and auxiliary material:**
Standard set of (metric) workshop tools
Self-locking pliers with soft cover on grips
Locking varnish, aircraft grade
crow-foot spanner width AF 13
Torque tool fitting to crow-foot spanner
(spring scale)

**Parts Kit:**

<table>
<thead>
<tr>
<th>Required parts for the replacement kit (No. S-SB_2015_062):</th>
</tr>
</thead>
<tbody>
<tr>
<td>6x 054.003_01.a Steel clevis M8 without slot</td>
</tr>
<tr>
<td>6x M622 Nord Lock Washer</td>
</tr>
<tr>
<td>6x D439-08 Hexagon Nut</td>
</tr>
</tbody>
</table>

**Workflow:**

**Preparation:**
1. Prepare fully rigged aircraft standing on even ground on landing gear. Park in wind protected area, better in hangar. No wing supports or mooring applied to the wing.
2. Set flaps control in cockpit to "neutral" and use the integrated lock there.

**Identify actual deflections of controls**
Aim is to measure values (flaps and ailerons neutral positions, airbrakes locking force and airbrakes deflection) and to use the values for the adjustment after changing the clevises.
3. Check alignment of flaps with wing fairing on inner wing. It must be symmetric and aligned to the inner wing fairing. See Figure 1.

Figure 1 Alignment of flaps and ailerons (flap control lever in cockpit: „neutral“)

4. Proceed to the outer wing. At the gap between flap and inner aileron the surfaces must also be aligned and symmetric (See Figure 1). Although the control stick is held in center position by a spring, friction can cause it to be slightly asymmetric. In that case reposition ailerons until they are symmetric and aligned at the wing, then check again for alignment.

5. Proceed to the outer aileron. It must be as well aligned to the corresponding inner aileron (See Figure 1).

Note that there is no such alignment to the winglet. There is a distinct gap to the winglet by design (See Figure 2).

Figure 2 Gap at aileron and winglet with flap control lever „neutral“ by design
6. Move airbrake control lever in cockpit to locked “center position”. Check airbrakes deflection (from wing surface to airbrakes upper surface; at inner end of the airbrake; Figure 3). It shall be 70mm±2mm. Note actual values for left hand and right hand wing for dimensional check after parts change.

![Figure 3 Measure airbrake deflection from wing surface to airbrakes upper surface](image)

7. Check airbrakes locking force. If available use spring scale and note unlock-force.
8. De-rig outer wing sections (LH and RH) according to manual.

Identification of actual mounting distances of clevises

Aim is to measure actual values and to use them for the adjustment after changing the clevises.

9. Measure mounting distance of each clevis.
   (It is useful to place a notepad with adhesive tape on the wing to note the values)
   If there are already Nord-Lock washers installed, measure distance from lock washers end face to clevis’ bolt hole maximum dimension (Figure 4).
Figure 4 Measure from face of Lock washer to bolt hole maximum dimension – Note value!

If no Nord-Lock washers are mounted measure from control-rods end face (Figure 5). (You have to subtract the thickness difference of Nord-Lock (new) and old washers later (t=2,5 Nord-Lock) and old lock washer (t=0,5mm))

Figure 5 No Nord-Lock: Measure from face of control rod to bolt hole maximum dimension – Note value!

Remove old aluminum clevises with nut and lock washer:

10. First place self-locking pliers with soft cover on grips on the control-rod end (Figure 6 and Figure 7). DO NOT use excessive locking force, especially on carbon fiber-reinforced control-rods (cfp-control-rods).

**NOTE: CFRP-CONTROL-RODS ARE SENSITIVE TO TORSIONAL LOADS, IMPACTS AND PINCHING.**

Place self-locking pliers as near as possible to the control-rods end, as it is reinforced only there. Open counter-nut and prevent control-rod from turning. Remove the clevis.
11. Transfer old securing clips (anodized red) to the new clevises.

![Figure 6 self-locking pliers with soft cover on grips](image)

Install the new clevises:

![Figure 7 Assembly of new clevis, nut, Nord-lock-washer and control rod](image)

12. Use new Nord-Lock-washers and new nuts. Screw in the new clevis (Figure 7).
13. Make old clevises unusable.
14. Tighten counter nut only finger tight for possible re-adjustment.
   Use the self-locking pliers with soft grips to prevent control-rod from turning. (You may use the
corresponding bell-crank in the outer wing to align the clevis. Therefore push in the outer wing into the inner wing with approx. 70mm gap.

(Avoid scratching or contact with the corresponding bell-crank)

15. Check and compare mounting distance of each clevis as described in step 9 (Figure 4). Here 0,4mm tolerance is given, as the smallest step possible are half turns of the clevis. Differences in dimensions could originate from thickness differences of NEW and OLD washer.

16. Mount outer wing according to manual. Check ailerons neutral position with flap control in cockpit locked to “neutral” like steps 2 to 5. If necessary adjust clevis in steps of half turns (middle control-rod moves outer aileron). Note all old and new values and keep them for documentation.

17. Check airbrake deflection as per step 6. Note old and new values and keep them for documentation. If necessary adjust clevis in steps of half turns to get as close as possible to old values.

18. Check both airbrakes if they are locking properly as per step 7.

19. Perform pre-flight-check with special attention to ailerons, flaps and airbrakes.

20. De-rig outer wing (LH and RH) sections according to manual.

21. Tighten all counter-nuts that have been opened with 14Nm. Use the self-locking pliers with soft grips to prevent control-rod turning. You may use the counterpart (corresponding bell-crank) in half mounted outer wing to position the clevis. Avoid scratches in corresponding bell-crank! Apply locking varnish to all nuts.

22. Rig aircraft

23. Perform pre-flight-check with special attention to ailerons, flaps and airbrakes.