



Subject: Replacement of Hotellier-Quicklinks of the elevator system

Effectivity: Sailplane ASTIR CS:
all Serial-N^o. from 1001.
Sailplane ASTIR CS 77:
all Serial-N^o. from 1601.
Sailplane ASTIR CS JEANS:
all Serial-N^o. from 2001.

Accomplishments: Step 1 prior to next flight, after completion every 50 hours until completion of step 2. Step 2 and 3 not later than July 31, 1981. Step 4 is recommended.

Reason: At other types of aircraft several fractures of the 90^o-quick-connections with open housing due to strong wear and tear after a high total aircraft-time were observed at the swivels of the aileron links which requires the exchange of the above mentioned joints against those with closed housing and new swivels.

Cam-type links have to be rejected and replaced.

Pages of the manual have to be exchanged that describe the maintenance of links.

Instructions: Step 1 prior to the next flight and afterwards every 50 hours swivel N^o. 961 M (detail N^o. 4) attached to the elevator pushrod must be inspected for wear and tear. Step 1 is not applicable when link type R9.41 (detail N^o. 1) is installed.

Diameter of the swivel has to be controlled by a micrometer at different positions. Differences in diameter may not exceed 0.1 mm (0,004 in.) that means the swivel must be spheric.

Tolerances in excess of 0.1 mm (0,004 in.) require step 2 prior to the next flight.

Not later than July 31, 1981 the Hotellier-Quick Links (swivel and joint) of the elevator control ass'y at the elevator connection have to be replaced.

Step 2 ist not applicable if link type R9.41. (detail N^o. 1) is installed.

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Step 2. If not yet installed, cam-type links R9.45. (detail N^o. 2) or Z-housing links (open housing) RZ 9.41. (detail N^o. 3) must be replaced by links R9.41. (detail N^o. 1) with closed housing and wedge-type slide. Swivel N^o. 961 M has to be also replaced by a new one.

When replacing, the used swivel and the used lock-nut will be removed and new swivel installed and locked by a new lock-nut (M6 LN 9348)

Measure exact adjustment distance and note installation position of the joint. The used link has to be turned out of the pushrod and the new link installed in the prior-noted position and locked.

Freedom of movement must be check with the aircraft rigged. If needed the gap has to be enlarged by filing. Friction can be reduced by small adjustments of the installation position.

Deflections of the elevator have to be measured according to maintenance manual and, if needed, adjusted properly.

Note: The installation of stronger links (R 12.41) and swivels (N^o. 262 M) with a ball-diameter of 12 mm is permitted by the aircraft manufacturer.

Step 3. Not later than July 31, 1981 pages 3 and 28 of the flight- and maintenance manual have to be replaced that describe maintenance and regular inspections of the connections.

Step 4. Instruction N^o. 4 ist an urgent recommendation by the manufacturer and concerns the additional securing of all quick-connections of aileron-, elevator- and airbrake ass'ys.

The wedge-type slides of all 5 links at the aircraft have got a control-hole to install a safety-pin when the connection is locked properly.

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We urgently recommend that during flying operations all connections are secured additionally by a safety-pin N^o. 500 30 771 (detail N^o. 5). Holes in the slide too small can be drilled to a diameter of 1.5 mm (0.06 in.)

We further advise to tie the safety-pin to the bottom of the link by a short string to avoid the loss of the safety-pin.

Freedom of movement of the connections after installation of the safety-pin has to be checked and if needed, the openings of the root-rib have to be enlarged by filing.

These securities are designed to give additional confidence in the proper condition of the links and to avoid unintentional disconnecting.

- 1 Swivel N^o. 961 M
- 1 Adjustable joint R 9.41.
- 1 Lock-nut M6, LN 9348
- 1 Manual pg. 3
- 1 Manual pg. 28
- 5 Safety-pins N^o. 500 30 771
(A. Würth, D-7118 Künzelsau, W.Germany)

All parts can be ordered from the manufacturer C.O.D. and please, state the total time of your glider when ordering.

Weight and balance: No change.

Remarks: The duly execution of these instructions by an experienced and qualified person must be certified by a competent authority in the aircraft's logbook.

Mattsies, May 4, 1981

gez. *Wilser*

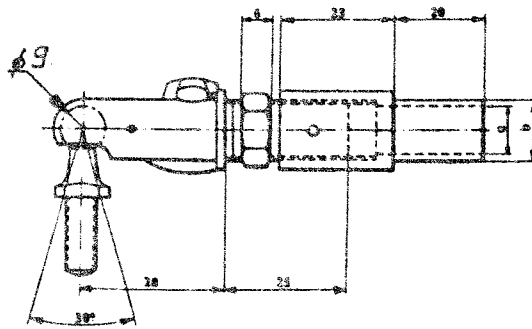
i. A. Dipl.Ing. H. Wilser

LEA approved on: 9. Juni 1981
Lehmann

PS: If you sold your airplane meanwhile, please send this service bulletin to the new owner immediately, and inform us about the new address.

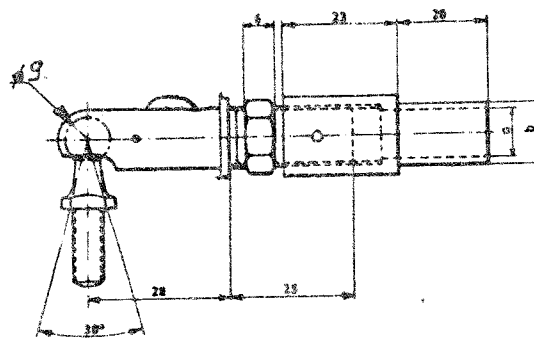


Detail N^o. 1



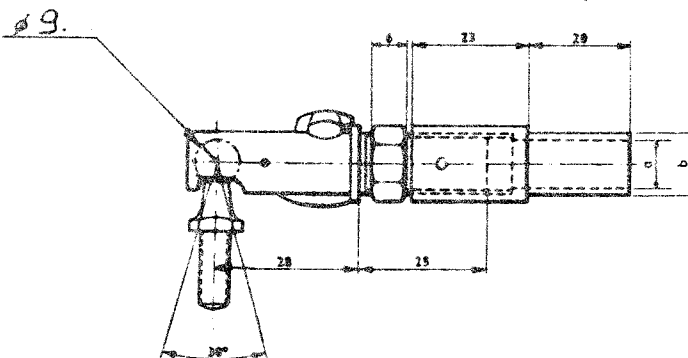
Correct joint with normal swivel-housing and wedge-type slide R 9.41.

Detail N^o. 2



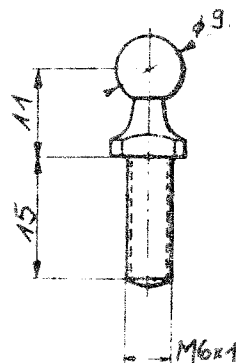
not permitted joint with cam-type lock R 9.45.

Detail N^o. 3



not permitted joint with open swivel-housing (Z-housing) RZ 9.41.

Detail N^o. 4



Swivel N^o. 961 M

Detail N^o. 5



Scale 1:1

Safety-pin N^o. 500 30 771