

Subject:	Self-loosening of a bolted assembly inside the shock absorbing struts of the main landing gear.
Applicability:	ASH 31 Mi, TCDS EASA.A.538, all serial numbers including 31 151, except for serial numbers 31001, 31002, 31024, 31027, 31029, 31030, 31045, 31053, 31090, 31095, 31104, 31108, 31111, 31121, 31128 and 31138 to 31151. For these serial numbers the measure under A) has already been performed at the factory. Also not affected are early serial numbers, which are equipped with shock absorbing struts of version I (2 black damping elements).
Classification:	Major Change (simple) ¹
Urgency:	No later than 31.12. 2017 or after about 300 take-offs. Check on next airworthiness review, if this occurs earlier.
Reason:	In an ASH 31 Mi a strong deceleration was observed during landing. This was caused by a loosened bolted connection in a shock absorbing strut. The bolted connection is usually secured by means of a thread locking fluid against loosening. This was so far the only incident in production, caused by mixing of the cavity conservation with the thread locking fluid, which probably led to an insufficient locking effect.
Action:	<p>Check of the shock absorbing struts of version II (violet damping elements) at the next airworthiness review. The landing gear shall be unloaded and the length according to point 17 of the instruction "Corrective maintenance shock absorbing strut II" has to be measured. If the length of 122 mm is exceeded by more than 2 mm, the repair of the absorbing struts has to be carried out according to the instruction. If the length is not exceeded, then the dismantling, cleaning and securing the bolt connection with Loctite in accordance with the instruction "Corrective maintenance shock absorbing strut II" may be postponed until 31.12.2017 at the latest.</p> <p>From the serial number 31152 on structurally altered shock absorbing struts will be installed in accordance with the drawing number 310.21.1004, this ones need not be checked. They are also interchangeable with the older version II. Shock absorbing struts of version I (2 black damping elements) are only pairwise interchangeable by version II and III.</p> <p>Only the following options are possible in order to repair the affected shock absorbing struts:</p> <ol style="list-style-type: none">1) Removing the shock absorbing struts and sending them to the manufacturer or to a repair station, which has a suitable clamping device according to the above mentioned instruction.2) Transferring the motor glider to the manufacturer or to a repair station, which has a suitable clamping device according to the above mentioned instruction.
Material and Drawings:	See Action
Mass and Balance:	The change in mass and C. of G. position is negligible
Notes:	The structural measures must only be accomplished by the manufacturer Alexander Schleicher or by a maintenance organisation according to European Union Commission Regulation (EC) 2042/2003 Part M / Section A / Subpart F.

¹ Level 2 Major in respect of the Technical Implementation Procedures for Airworthiness and Environmental Certification between FAA and EASA, Appendix C, paragraphs 9.6 and 9.7

All actions, also the reinstallation of the shock absorbing struts, are to be inspected by certifying staff according to European Union Commission Regulation (EC) 2042/2003 Part M / Part 66 in the scope of a modification and have to be certified in the sailplane inspection documents and in the sailplane logbook.

In countries outside the scope of EC 2042/2003 the corresponding national rules shall apply.

Poppenhausen, 26.September 2016

Alexander Schleicher

GmbH & Co.

i.A. 

(M. Heide)

This Technical Note bases on a change, which was approved by the EASA at the date of 07.September 2016 with the Major Change Approval 10059305.