Subject: Inspection and exchange of the exhaust damper of the power-plant. Amendment and corrections to the manuals.

Affected: ASH 25 M, Data Sheet No. 858, all serial numbers.

Compliance: Prior to the next engine flight all powered sailplanes must be inspected to make which version of the exhaust damper has been installed. The upgraded exhaust dampers were marked with the letter ‘X’. This marking is located on the front side as shown in Fig. 1:

Fig. 1:

a) Where an exhaust damper without this marking is still installed and if the operating time of this exhaust damper is less than 40 hours, then prior to the next take-off the CFRP fairing of the exhaust must be inspected for overheat traces while it is still installed.

Where the operating time of the exhaust damper is above 40 hours, the front side of the exhaust damper behind the cover plate (see Fig.1) must be additionally inspected for tempering coloration using an endoscope. If this inspection does not reveal any discoloration from the golden-yellow basic coloring changed to a gray or bluish coloration so, a further engine operation in another two hours intervals is allowed. This inspection must be repeated in 2 hours intervals up to a maximum operating time of the exhaust damper of 60 hours.

If damages or discoloration are found during any of the above inspections, the exhaust damper must be exchanged prior to the next engine flight.

b) In case of powered sailplanes which use already the exhaust damper version marked with an ‘X’, the exhaust damper must be returned for inspection to Schleicher GmbH upon reaching 100 hours engine operating time or at the latest on expiry of 12 months as of the date of this Technical Note.

On all affected powered sailplanes the manual pages stated hereafter must be exchanged at the latest after the installation of the new exhaust damper.

Reason: The high grade steel plate from which the first exhaust dampers were made from, unfortunately turned out to be insufficiently resistant for the inner areas. In one case an exhaust damper system showed cracks in this inner area after about 45 hours operation.

As of 1996 the factory serial production used a superior material for the inner parts of exhaust damper. These upgraded exhaust dampers were marked with an ‘X’ at the front plate. At the time yet there was no reason for exchanging the earlier version.

As an additional offer (for the factory production as well as for replacements) the so far used CFRP fairing may now be exchanged for an improved version (according to drawing 800.65.0011/0012). The CFRP fairing is now subject to a specified maximum service life. The exchange against both improved versions is prescribed at a total engine operation time of 150 hours as stated in Sections 4 and 7, Maintenance Manual.
**Action:**

a) If the inspection shows that an exchange of the exhaust damper becomes necessary, the customer must obtain a new exhaust damper from Schleicher GmbH. The part must be installed in accordance with the instructions supplied with it.

b) If the exhaust damper is marked by an 'X', it must be removed and returned (together with the CFRP fairing) to Schleicher GmbH for inspection - at the latest on expiry of the deadline stated in para "Compliance under b").

The following manual pages must be exchanged for new pages with the same page no., but with the revision entry & date "TN 15 / 03.09.99". The exchange of the pages in the Manuals must be documented on the respective page "Record of Revisions".

- **FM p.:** 2.10, 4.5, 4.11, 4.12, 4.20, 4.35, 7.21
- **MM p.:** 2.25, 2.27, 4.3, 4.4, 4.5, 6.10, 7.7, 7.9, 7.11, 7.12, 9.5, 9.9, 12.9


**Material and Drawings:**

Exhaust damper according to drawing 800.65.0001 by Schleicher GmbH.

Exhaust damper fairing according to drawing 800.65.0011/0012 by Schleicher GmbH.

**Mass & C.G.:**

After the exhaust damper has been removed it must be weighed together with its fairing. The difference in mass compared to the new exhaust damper (including its fairing), must be used for correcting the calculation of the empty mass c.g. which was noted in the previous valid Weight & Balance Form, and where necessary the minimum cockpit load must be corrected. For this correcting calculation a value of 1603 mm as of datum can be assumed as the lever arm of the exhaust damper.

**Notes:**

a) Exhaust damper without 'X' and less than 40 hours:

   The inspection of the CFRP fairing must be made by a competent person within the scope of a pre-flight inspection and must be certified each time in the logbook in the block Maintenance Works.

   Exhaust damper without 'X' and more than 40 hours:

   The inspection of the front side of the exhaust damper for tempering coloration can only be done by means of an endoscope. This inspection can be done by an appropriately licensed inspector or by a technical aviation service station holding an appropriate license, it must be certified in the sailplane's log.

b) Exhaust damper version with an 'X':

   The inspection of this version can only be done by Schleicher GmbH.

   After the exchange or re-installation of the inspected exhaust damper the corresponding entry in the inspection documents must be made.

   The exchange of the exhaust damper system must only be accomplished by the manufacturer Alexander Schleicher or by a technical aviation service station holding an appropriate license.

   The exchange of the pages in the Manuals can be done by the operator of the aircraft himself. The accomplishment of the exchange of the pages in the Manuals must be documented on the respective page "Record of Revisions" (Section 0, under 0.1). In the "Index of Effective Pages" (Section 0, under 0.2) the date of the exchanged pages must be changed to "03.09.99" by hand.

Poppenhausen, September 3, 1999

Alexander Schleicher
GmbH & Co.

i.A.

(Martin Heide)

The German original of this Technical Note has been approved by the LBA under the date of (signature: ). The translation into English has been done by best knowledge and judgement; in any case of doubt the German original is controlling.