

**Subject:** Retrofitting a new type of fuel pump according to SOLO Technical Note TM4603-15, instead of the hitherto BING fuel pump

**Applicability:** **ASW 28-18E**, TCDS EASA.A.034, all serial-numbers  
**ASW 27-18E**, TCDS EASA.A.220, all serial-numbers

**Urgency:** None. Optional on customer's request

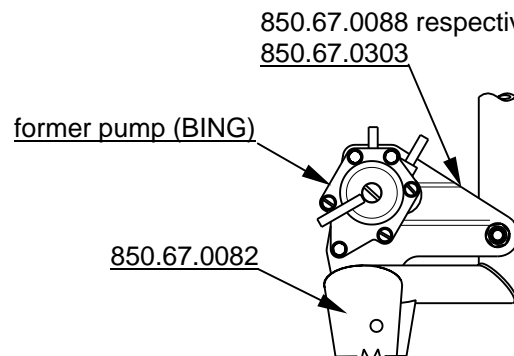
**Reason:** The engine manufacturer SOLO replaces the hitherto pneumatic fuel pump (BING fuel pump, SOLO part number 2300363) through a different type (SOLO part number 2300364), refer to SOLO Technical Note 4603-15. This type requires a different attachment.

This Technical Note describes the measures necessary to retrofit a fuel pump according to SOLO Technical Note TM 4603-15.

**Action:** The BING fuel pump is replaced by the fuel pump, which is described in the SOLO Technical Note 4603-15.

There are different ways to mount the new fuel pump from SOLO-TM4603-15, depending on the engine bearer used. Drawing 850.67.9001 overviews the different variants of the engine bearer (850.67.0082, 850.67.0113, 850.67.0110 und 850.67.0115) and the adequate parts / drawings for mounting the new pump.

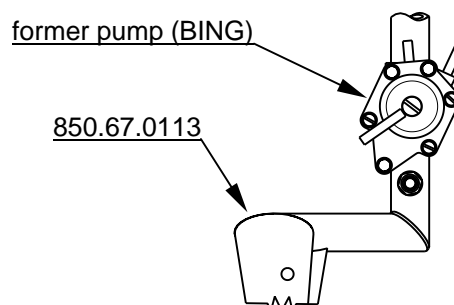
- 1.) Original configuration (two-part engine bearer for „small“ cylinder heads, including left engine bearer 850.67.0082):



The attachment for the fuel pump (850.67.0088 bzw. 850.67.0303) becomes obsolete.

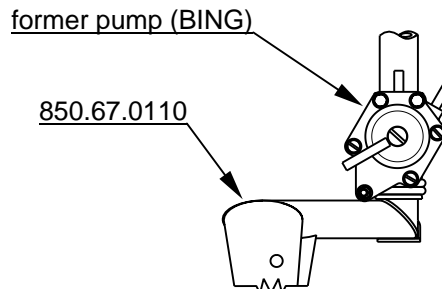
The new pump is mounted according to drawing 850.67.0112, with the connection components given there.

- 2.) Configuration according to ASW 28-18E TN 16 respectively ASW 27-18E TN 10 (two-part engine bearer for „small“ cylinder heads, but with left engine bearer 850.67.0113):



The new pump is mounted according to drawing 850.67.0114, with the connection components given there.

- 3.) Configuration according to ASW 28-18E TN 10 respectively ASW 27-18E TN 5, each with action A (one-part engine bearer for „large“ cylinder heads):



The new pump is mounted according to drawing 850.67.0114, with the connection components given there.

**Material and Drawings:**

see Action

A new fuel hose with fire protection hose is necessary between the stainless steel tube in the FRP sword and the inlet of the fuel pump. Usually the hose becomes too short for the new position of the pump.

4 clamps (according to ASW 28-18E TN10 / ASW 27-18E TN5 Action C)

The connection components necessary to attach the pump are listed in drawings 850.67.0112 / .0113 / .0114 and .0115.

For action 1) three washers  $\text{Ø}8 \times \text{Ø}16 \times 2$  and three new self locking nuts M8 (2x "Stahl-stop" below and 1x "Poly-stop" top) are necessary, where the part "attachment of the fuel pump" is removed.

**Weight (mass) and Balance:**

The changes of mass and c.g. are so small that a new weighing is not necessary.

**Notes:**

Instead of Action 3) it is also possible to perform ASW 28-18E TN 17 respectively ASW 27-18E TN 11. But this is more costly, as the whole engine bearer has to be replaced.


The structural measures may only be accomplished by the manufacturer Alexander-Schleicher GmbH & Co or by a maintenance organisation according to commission regulation of the European Union (EC) 2042/2003 Part M / Section A / Subpart F.

All actions are to be released to service by certifying staff according EC 2042/2003 Part M / Part 66<sup>2</sup> in the scope of a modification, and have to be certified in the sailplane inspection documents and in the sailplane logbook. The change to the manual is considered being eligible for release by the Pilot-owner pursuant to M.A.801(b)3 and must be entered on the page „Record of Revisions“ and in the „List of effective pages“.

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

Poppenhausen, 01.07.14

**Alexander Schleicher**  
GmbH & Co.

i.A.   
(M. Greiner)

The Change described was approved by EASA under approval number Minor Change Approval 10050544 Rev. 1, dated 19.09.14.

<sup>2</sup> As long as no provisions for certifying staff for sailplanes and powered sailplanes were laid down, relevant legislation of the member states is applicable (§66.A.100).