



Airworthiness Directive

AD No.: 2015-0052R1

Issued: 19 November 2015

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) 216/2008 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 66 of that Regulation.

This AD is issued in accordance with Regulation (EU) 748/2012, Part 21.A.3B. In accordance with Regulation (EU) 1321/2014 Annex I, Part M.A.301, the continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate an aircraft to which an AD applies, except in accordance with the requirements of that AD, unless otherwise specified by the Agency [Regulation (EU) 1321/2014 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [Regulation (EC) 216/2008, Article 14(4) exemption].

Design Approval Holder's Name:

SOLO Kleinmotoren GmbH

Type/Model designation(s):

Solo 2350 C engines

Effective Date: Revision 1: 19 November 2015
Original issue: 31 March 2015

TCDS Number(s): EASA.E.219

Foreign AD: Not applicable

Revision: This AD revises EASA Emergency AD 2015-0052-E dated 27 March 2015.

ATA 72 – Engine – Operating Restriction

Manufacturer(s):

Solo Kleinmotoren GmbH

Applicability:

Solo Model 2350 C engines, all manufacturer serial numbers, equipped with a non-foldable propeller, except engines modified in accordance with Solo Kleinmotoren GmbH drawing nb. 2031211-V2 and, for engines installed on DG-Flugzeugbau Model DG-1000T powered sailplanes, concurrently modified in accordance with DG-Flugzeugbau drawing nb. 10 M 067.

These engines are known to be installed on, but not limited to, DG-Flugzeugbau Model DG-1000T powered sailplanes.

Reason:

An occurrence of engine shaft failure and consequent propeller detachment was reported on a Solo 2350 C engine.

This condition, if not corrected, could lead to additional cases of release of the propeller from the engine, possibly resulting in damage to the sailplane, or injury to persons on the ground.



To address this unsafe condition, EASA issued Emergency AD 2013-0217-E to prohibit operation of the engine. That AD was later revised to introduce an optional modification, through Solo Kleinmotoren Service Bulletin (SB) 4603-14, to install a modified excenter axle-pulley assembly, allowing to resume operation of the engine.

Since EASA AD 2013-0217R1 was issued, another occurrence of engine shaft failure and propeller detachment was reported on a Solo 2350 C engine which had been modified in accordance with Solo Kleinmotoren SB 4603-14.

Consequently, EASA issued Emergency AD 2015-0052-E, which superseded AD 2013-0217R1, to prohibit operation of all Solo 2350 C engines, including those engines which had been modified in accordance with Solo Kleinmotoren SB 4603-14. That AD also required a one-time inspection of the propeller shaft to detect cracks and the reporting of findings.

Since that AD was issued, Solo Kleinmotoren GmbH developed modification drawing nb. 2031211-V2 available for in service application through Solo SB 4603-17 and DG Flugzeugbau GmbH developed modifications drawing nb. 10 M 067, available for in service application through DG Flugzeugbau Technical Note (TN) 1000/26 which include replacement of excenter axle-pulley assembly and installation of an elastomeric damper element between the propeller and upper pulley.

This AD is revised to introduce optional modifications to allow resuming operation of an engine.

Required Action(s) and Compliance Time(s):

Required as indicated, unless accomplished previously:

- (1) From 31 March 2015 [the effective date of this AD at original issue], do not operate the engine, unless the engine is modified in accordance with EASA approved instructions (see paragraph (4) or (5) of this AD, as applicable) which remove the operational restriction imposed by this AD.
- (2) DELETED.
- (3) Within 30 days after 31 March 2015 [the effective date of this AD at original issue], accomplish a one-time inspection (magnetic particle or dye penetrant, refer to Solo Inspection Instruction 4603-1 as an acceptable procedure) of the propeller shafts and report the results, also if there are no findings, to Solo Kleinmotoren GmbH (see address below). No findings during the inspection do not remove the operational restriction imposed by paragraph (1) of this AD.
- (4) Modification of an engine accomplished by Solo Kleinmotoren GmbH in accordance with Solo SB 4603-17 removes the operational restriction imposed by paragraph (1) of this AD for that engine.
- (5) For Solo 2350 C engines installed on DG-Flugzeugbau Model DG-1000T powered sailplanes: Concurrent modification of an engine accomplished by Solo Kleinmotoren GmbH in accordance with Solo SB 4603-17 and DG Flugzeugbau TN 1000/26 removes the operational restriction imposed by paragraph (1) of this AD for that engine.



Ref. Publications:

Solo Kleinmotoren GmbH Inspection Instruction SB 4603-1, dated 26 March 2015.

Solo Kleinmotoren GmbH SB 4603-17, dated 15 July 2015.

DG Flugzeugbau TN 1000/26, dated 23 September 2015.

The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.

Remarks:

1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.
2. The results of the safety assessment have indicated the need for immediate publication and notification, without the full consultation process.
3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.

4. For any question concerning the technical content of the requirements in this AD, please contact:

Regarding Solo SB 4603-17:

Solo Kleinmotoren GmbH,
Postfach 600152, 71050 Sindelfingen, Germany,
Telephone: +497031301-0, Fax: +497031301-136,
E-mail: aircraft@solo-germany.com.

Regarding TN 1000/26:

DG Flugzeugbau GmbH,
Otto Lilienthal Weg 2 / Am Flugplatz,
76646 Bruchsal
Telephone: +4972513020-0, Fax: +4972513020-200
E-Mail: wassenaar@dg-flugzeugbau.de.

