



Airworthiness Directive

AD No.: 2019-0029

Issued: 08 February 2019

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EU) 2018/1139 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 129 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 (EU) 2018/1139, Article 71 exemption].

Design Approval Holder's Name:

SOLO KLEINMOTOREN GmbH

Type/Model designation(s):

Solo 2350 engines

Effective Date: 22 February 2019

TCDS Number(s): EASA.E.219

Foreign AD: Not applicable

Supersedure: None

ATA 72 – Engine – Propeller Reduction Gear Excentric Axle Bearings – Replacement

Manufacturer(s):

SOLO Kleinmotoren GmbH (Solo)

Applicability:

Solo 2350 B, 2350 BS, 2350 C and 2350 D engines, all serial numbers.

These engines are known to be installed on, but not limited to, powered sailplanes manufactured by DG Flugzeugbau, Alexander Schleicher Segelflugzeugbau, Schempp-Hirth Flugzeugbau and Technoflug Leichtflugzeugbau.

Definitions:

For the purpose of this AD, the following definitions apply:

The SB: Solo Kleinmotoren Technische Mitteilung/Service Bulletin (TM/SB) 4603-18.

Affected ball bearing: Ball bearing 25 x 52 x 15 – 6205-2-RS, Part Number (P/N) 0050110.

Serviceable ball bearing: Any affected ball bearing having accumulated less than 15 years since first installation on engine.

Affected part: Hex-nut P/N 0028143.



Serviceable part: Flange-nut P/N 0028143-V2.

Groups: Group 1 engines are those that have an affected part installed. Group 2 engines are those that have a serviceable part installed.

Reason:

An occurrence was reported of failure of the bearing of the upper pulley of the belt driven reduction gear, resulting in separation of the propeller from the engine.

This condition, if not corrected, could lead to similar occurrences, with possible reduced control of, and damage to, the aircraft.

To address this potential unsafe condition, Solo redesigned the nut securing the pulley bearing on the axle and introduced a life time limit of 15 years for the reduction gear bearings.

For the reason stated above, this AD requires replacement of affected parts with serviceable parts, and introduces a life limit for the affected ball bearings.

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

Required as indicated, unless accomplished previously:

Modification:

- (1) For Group 1 engines: Within 12 months after the effective date of this AD, modify the engine by replacing the affected part with a serviceable part in accordance with the instructions of the SB.

Ball Bearing Replacement / Life Limit:

- (2) For Group 1 and Group 2 engines: Before an affected ball bearing accumulates 15 years since first installation on an engine, or within 12 months after the effective date of this AD, whichever occurs later, replace that affected ball bearing with a serviceable ball bearing in accordance with the instructions of the SB.

Parts Installation:

- (3) From the effective date of this AD, do not install an affected part on any engine as required by paragraph (3.1) or (3.2) of this AD, as applicable.
 - (3.1) Group 1 engines: After modification of the engine as required by paragraph (1) of this AD.
 - (3.2) Group 2 engines: From the effective date of this AD.
- (4) From the effective date of this AD, it is allowed to install a ball bearing on any engine, provided it is a serviceable ball bearing and that, following installation, it is replaced as required by paragraph (2) of this AD.

Ref. Publications:

Solo Kleinmotoren TM/SB 4603-18 original issue dated 12 December 2018.



The use of later approved revisions of the above-mentioned document 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. This AD was posted on 09 January 2019 as PAD 19-004 for consultation until 06 February 2019. The Comment Response Document can be found in the [EASA Safety Publications Tool](#), in the compressed (zipped) file attached to the record for this AD.
3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
4. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this AD, and which may occur, or have occurred on a product, part or appliance not affected by this AD, can be reported to the [EU aviation safety reporting system](#).
5. For any question concerning the technical content of the requirements in this AD, please contact: Solo Kleinmotoren GmbH, Postfach 600152, 71050 Sindelfingen, Germany, Telephone: +49 7031301-0, Fax: +49 7031301-136, E-mail: aircraft@solo-germany.com.

