



Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 19-004

Issued: 09 January 2019

Note: This Proposed Airworthiness Directive (PAD) 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.

In accordance with the EASA Continuing Airworthiness Procedures, the Executive Director is proposing the issuance of an EASA Airworthiness Directive (AD), applicable to the aeronautical product(s) identified below.

All interested persons may send their comments, referencing the PAD Number above, to the e-mail address specified in the 'Remarks' section, prior to the consultation date indicated.

Design Approval Holder's Name:

SOLO KLEINMOTOREN GmbH

Type/Model designation(s):

Solo 2350 engines

Effective Date: [TBD - standard: 14 days after AD issue date]

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 part: Hex-nut Part Number (P/N) 0028143.

Serviceable part: Flange-nut P/N 002843-V2.



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

Affected Ball Bearing: Ball bearing 25 x 52 x 15 – 6205-2-RS, P/N 0050110.

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

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 aeroplane.

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. This Proposed AD will be closed for consultation on 06 February 2019.
2. Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
3. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this PAD, and which may occur, or have occurred on a product, part or appliance not affected by this PAD, can be reported to the [EU aviation safety reporting system](#).
4. For any question concerning the technical content of the requirements in this PAD, please contact: Solo Kleinmotoren GmbH, Postfach 600152, 71050 Sindelfingen, Germany, Telephone: +49 7031301-0, Fax: +49 7031301-136, E-mail: aircraft@solo-germany.com.

