



Airworthiness Directive

AD No.: 2021-0278R1

Issued: 11 August 2022

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, or Annex Vb Part ML.A.301, as applicable, 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 Annex Vb Part ML.A.303, as applicable] or agreed with the Authority of the State of Registry [Regulation (EU) 2018/1139, Article 71 exemption].

Design Approval Holder's Name:

STEMME AG

Type/Model designation(s):

Stemme S10 powered sailplanes

Effective Date: Revision 1: 11 August 2022
Original Issue: 17 December 2021

TCDS Number(s): EASA.A.054

Foreign AD: Not applicable

Revision: This AD revises Emergency EASA AD 2021-0278-E dated 15 December 2021.

ATA 71 – Powerplant – 12AK Clutch – Prohibition of Flights

Manufacturer(s):

Stemme AG

Applicability:

Stemme S10-VT and Stemme S12 powered sailplanes, all serial numbers (s/n).

Definitions:

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

Affected part: Freewheel clutch, having Part Number (P/N) 12AK and having a s/n starting with '12-', except those which have been modified in accordance with the instructions of Stemme Service Bulletin (SB) P062-980058 Revision 02, and have been re-identified with '/M' at the end of the serial number.

Serviceable part: Any clutch, eligible for installation, which is not an affected part.

The SB: Stemme AG SB P062-980058.

Groups: Group 1 powered sailplanes are those that have an affected part installed.

Group 2 powered sailplanes are those that do not have an affected part installed.



Reason:

Occurrences have been reported of unintended slipping of the freewheel clutch (P/N 12AK) during operation and, subsequently, overheating (burnishing) of the friction pads inside of the clutch.

This condition, if not corrected, could lead to total loss of thrust, possibly resulting in loss of control of the powered sailplane.

Even after a successful implementation of the recommendations for safe operation of the clutch, published in Stemme AG Service Information P064-8900057/01, it has been determined that loss of thrust could occur without signs in advance.

To address this potential unsafe condition, Stemme AG issued SB P062-980058 (Revision 1), to provide applicable instructions. Consequently, EASA issued Emergency AD 2021-0278-E, to prohibit operation of certain powered sailplanes and installation of affected parts. That AD was considered an interim action, pending the development of a dedicated modification.

After that AD was issued, Stemme developed a modification, introducing new friction pads for the clutch, and issued Revision 02 of the SB, providing instructions for modification and re-identification of modified affected parts.

For the reason above, this AD is revised to amend the definition of 'Affected part'.

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

Required as indicated, unless accomplished previously:

Flight Prohibition:

(1) For Group 1 powered sailplanes: From 17 December 2021 [the effective date of the original issue of this AD], do not operate any powered sailplane.

Part(s) Installation:

(2) For Group 2 powered sailplanes: From 17 December 2021 [the effective date of the original issue of this AD], do not install on any powered sailplane an affected part.

Modification:

(3) For Group 1 powered sailplanes: Following replacement of an affected part on a powered sailplane with a serviceable part, that powered sailplane is effectively considered to be a Group 2 powered sailplane (see Note 1 of this AD).

Note 1: Freewheel clutch P/N 11AK is not approved for installation on a Stemme S12 powered sailplane.

Ref. Publications:

Stemme AG SB P062-980058 Revision 01 (original issue) dated 14 December 2021, or Revision 02 dated 18 April 2022.

The use of later approved revisions of the above-mentioned 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. Based on the required actions and the compliance time, EASA have decided to issue a Final AD with Request for Comments, postponing the public consultation process until after publication.
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](#). This may include reporting on the same or similar components, other than those covered by the design to which this AD applies, if the same unsafe condition can exist or may develop on an aircraft with those components installed. Such components may be installed under an FAA Parts Manufacturer Approval (PMA), Supplemental Type Certificate (STC) or other modification.
5. For any question concerning the technical content of the requirements in this AD, please contact: STEMME AG, Flugplatzstrasse F2 Nr. 6-7, 15344 Strausberg, GERMANY
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