



Airworthiness Directive

AD No.: 2024-0123

Issued: 28 June 2024

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:

FOKKER SERVICES B.V.

Type/Model designation(s):

F28 aeroplanes

Effective Date: 12 July 2024

TCDS Number(s): EASA.A.037

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2018-0077 dated 06 April 2018.

ATA 32 – Landing Gear – Hydraulic Line Restrictor Check Valve – Replacement

Manufacturer(s):

Fokker Aircraft B.V.

Applicability:

F28 Mark 0070 and Mark 0100 aeroplanes, all serial numbers.

Definitions:

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

The SB: Fokker Services Service Bulletin (SB) SBF100-32-176 Revision 1, dated 28 February 2024, cancelling SB SBF100-32-163 (which previously cancelled SB SBF100-32-041).

Affected part: Hydraulic line restrictor check valves having Part Number (P/N) CKLX0517200B or P/N CKLX0520100B (with filter screen).

Serviceable part: Hydraulic line restrictor check valves having P/N D71295-401 or P/N D71296-401 (without filter screen).

Groups:

Group 1 aeroplanes are those that have an affected part, as defined in this AD, installed.

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



Reason:

Service experience with Fokker 70 and Fokker 100 aeroplanes showed that debris from the parking brake shut-off valve (PBSOV) could eventually block the restrictor check valve in the hydraulic return line of the PBSOV. Prompted by these findings, Fokker Services issued SB SBF100-32-159 to introduce a modified PBSOV and a one-time inspection for debris in the associated hydraulic lines of the hydraulic return system, and consequently EASA issued AD 2009-0220 to require those actions. In addition, Fokker Services issued SB SBF100-32-163, later revised, introducing the option to install a restrictor check valve with a filter screen in the return line of the PBSOV, which was later mandated by EASA AD 2018-0077.

In-service experience accumulated since publication of these two EASA ADs confirms the effectiveness of the introduction of a new (modified) PBSOV, as required by EASA AD 2009-0220. However, an increasing number of slow Main Landing Gear (MLG) extension events is reported.

Investigation revealed, that these slow MLG extensions could be traced back to damaged or clogged filter screens of the restrictor check valves installed in the return line of the PBSOV as per Fokker Services SB SBF100-32-163.

This condition, if not corrected, represents a degradation of the reliability of the MLG hydraulic system which, if not addressed, could lead to new cases of inability to completely extend the MLG, possibly resulting in damage to the aeroplane during landing and consequent injury to occupants.

To address this potential unsafe condition, Fokker Services issued the SB, as defined in this AD, which cancels SB SBF100-32-163 and provides instructions to replace the affected restrictor check valves with filter screen with check valves without a filter screen.

For the reason described above, this AD supersedes EASA AD 2018-0077 and requires replacement of each affected part with a serviceable part, as defined in this AD.

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

Required as indicated by this AD, unless the action(s) required by this AD have been already accomplished:

Replacement:

- (1) For Group 1 aeroplanes: Within 48 months after the effective date of this AD, modify the aeroplane by replacing each affected part with a serviceable part, as applicable, in accordance with the instructions of the SB.

Part(s) Installation:

- (2) Do not install an affected part on any aeroplane, as required by paragraph (2.1) or (2.2) of this AD, as applicable.

(2.1) For Group 1 aeroplanes: After modification of an aeroplane as required by paragraph (1) of this AD.

(2.2) For Group 2 aeroplanes: From the effective date of this AD.



Ref. Publications:

Fokker Services SB SBF100-32-176 Revision 1 dated 28 February 2024.

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 30 April 2024 as PAD 24-047 for consultation until 28 May 2024. No comments were received during the consultation period.
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: Fokker Services B.V., Technical Services Dept., P.O. Box 1357, 2130 EL, Hoofddorp, The Netherlands: Telephone +31 88 6280 350, Fax +31 88 6280 111, or E-mail: technicalservices@fokker.com.
The referenced publication can be downloaded from www.myfokkerfleet.com.

