

Airworthiness Directive

AD No.: 2023-0055

Issued: 16 March 2023

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:

AIRCRAFT INDUSTRIES, A.S.

Type/Model designation(s):

L-410 aeroplanes

Effective Date: 30 March 2023

TCDS Number(s): EASA.A.026

Foreign AD: Not applicable

Supersedure: None

ATA 32 – Landing Gear – Wheels and Brakes / Brake unit – Replacement

Manufacturer(s):

Aircraft Industries (A.I.), a.s., formerly LET n.p., LET a.s. and LETECKÉ ZÁVODY a.s.

Applicability:

L-410 M Turbolet, L-410 UVP - Turbolet, L-410 UVP-E, L 410 UVP-E9, L 410 UVP-LW, L 410 UVP-E-LW, L 410 UVP-E20, L 410 UVP-E20 CARGO and L-420 aeroplanes, all variants, all manufacturer serial numbers.

Definitions:

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

Affected part: Main Landing Gear (MLG) wheel brake units, having Part Number (P/N) K38-1200-7, with serial number (s/n) XXX-35, XXX-36, XXX-37 or XXX-38, as defined in the SB, where X represents any numerical value; (these units originally contain pressure plates as stated in A.I. Service Letter No. L-410/009).

Serviceable part: Any MLG wheel brake unit eligible for installation which is not an affected part, or an affected part that, before installation, has been modified in accordance with the instructions of the SB.

The SB: A.I. Service Bulletin (SB) L-410/039a Revision 1.



Groups: Group 1 aeroplanes are those having an affected part installed. Group 2 aeroplanes are those which do not have an affected part installed.

Reason:

Four occurrences of MLG wheel brake malfunctioning (blocking) were reported by L-410 operators. Investigations revealed that all malfunctions were caused by fractured brake pressure plates, and further analysis by A.I. and brake unit manufacturer determined that the root-cause of the failure was an improper (re-)design of certain pressure plates, installed on certain s/n of MLG wheel brake units, having P/N K38-1200-7.

This condition, if not detected and corrected, could lead to reduced brake function, possibly resulting in loss of control of the aeroplane, especially during taxiing, (aborted) take-off or landing.

To address this potential unsafe condition, A.I. redesigned in coordination with the brake unit manufacturer the discrepant pressure plates, targeting to decrease the tension around the holes in the plates, and published the SB, as defined in this AD.

For the reason described above, this AD requires replacement of all affected parts (as defined in this AD) and allows only the installation of MLG wheel brake units, defined as serviceable part in this AD.

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

Required as indicated, unless accomplished previously:

Replacement:

- (1) For Group 1 aeroplanes: Before having accumulated 1 500 flight cycles since new (first installation on any aeroplane), replace each installed affected part with a serviceable part, as defined in this AD, in accordance with the instructions of the SB.

Parts Installation:

- (2) For Group 1 and Group 2 aeroplanes: From the effective date of this AD, it is allowed to install on any aeroplane an MLG wheel brake unit, provided it is a serviceable part, as defined in this AD.

Ref. Publications:

A.I. SB L-410/039a Revision 1 dated 25 October 2022.

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 10 February 2023 as PAD 23-019 for consultation until 10 March 2023. 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: Aircraft Industries, a.s., Na Záhonech 1177, 686 04 Kunovice, Czech Republic; Phone: +420 572 817 664, or E-mail: pps@let.cz.

