EASA PAD No.: 25-052



Notification of a Proposal to issue an Airworthiness Directive

PAD No.: 25-052

Issued: 20 March 2025

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: Type/Model designation(s):

PIAGGIO AVIATION S.p.A. P.180 aeroplanes

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

TCDS Number(s): EASA.A.059

Foreign AD: Not applicable

Supersedure: None

ATA 29 – Hydraulic Power – Landing Gear Flexible Hoses – Modification

Manufacturer(s):

Piaggio Aero Industries S.p.A. (PAI)

Applicability:

P.180 Avanti and Avanti II aeroplanes, manufacturer serial numbers (MSN) 1002, 1004 to 1234 inclusive, and 3001 to 3018 inclusive.

Definitions:

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

The SB: PAI Service Bulletin (SB) 80-0497.

Affected parts: Flexible hoses Part Number (P/N) AS117-04-0205 and P/N 98E0520FAMA000W (Landing Gear (LG) Up and LG Down lines); and flexible hoses P/N MS8006G207AL and P/N 99G0530FDFD000W (return line).

Serviceable parts: Flexible hoses P/N AS117-04F0205L (LG Up and LG Down lines); and flexible hoses P/N MS8006G207AG (return line).



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Groups: Group 1 aeroplanes are those that have any affected part(s), as defined in this AD, installed. Group 2 aeroplanes are those that do not have an affected part installed.

Reason:

Leakage from an affected part was reported on an aeroplane.

The results of the subsequent investigation indicate that, due to the failure of the hydraulic pump package (HPP) electrical motor, an anomalous current returned through the HPP body causing one flexible steel braided hose to be punctured by an electrical arching as it was in contact with the HPP body. Contributing factor, in addition to those previously described, was the improper installation of the HPP, being the routing of the hydraulic flexible lines not in accordance with the Aeroplane Maintenance Manual instructions.

This condition, if not corrected, could lead to leaking affected parts, possibly leading to loss of the hydraulic system and/or fire in the HPP area.

To address this potential unsafe condition, PAI designed improved flexible hoses and issued the SB, as defined in this AD, providing instructions for replacement of affected parts on in-service aeroplanes.

For the reason described above, this AD requires modification of aeroplanes, by replacing affected parts with serviceable parts, and prohibits reinstallation of affected parts.

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:

Modification:

(1) Within 660 flight hours (FH) after the effective date of this AD, modify the aeroplane by replacing each affected part with a corresponding serviceable part, in accordance with the instructions of the SB.

Parts Installation:

- (2) Do not install (see Note 1 of this AD) 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 the aeroplane, as required by paragraph (1) of this AD.
 - (2.2) For Group 2 aeroplanes: From the effective date of this AD.

Note 1: Removing an affected part from an aeroplane and, during the same maintenance visit, reinstalling that part on the same location of the same aeroplane, is not considered "install" as specified in paragraph (2) of this AD.



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Ref. Publications:

PAI SB 80-0497 original issue dated 05 March 2025.

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 17 April 2025.
- Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: <u>ADs@easa.europa.eu.</u>
- 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 <u>EU aviation safety reporting system</u>. This may include reporting on the same or similar components, other than those covered by the design to which this PAD 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.
- 4. For any question concerning the technical content of the requirements in this PAD, please contact: Piaggio Aero Industries, P180 Customer Support, Via Pionieri e Aviatori d'Italia 2, 16154 Genoa, Italy; E-mail: technicalsupport@piaggioaerospace.it, or Telephone: + 39 331 679 7493.