EASA AD No.: 2025-0102



# **Airworthiness Directive**

AD No.: 2025-0102

Issued: 05 May 2025

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 M.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 M.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: Type/Model designation(s):

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

Effective Date: 19 May 2025

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).

**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.



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#### 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 resulting in 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 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.

#### **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.



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### **Remarks:**

1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.

- 2. This AD was posted on 20 March 2025 as PAD 25-052 for consultation until 17 April 2025. The Comment Response Document can be found in the <u>EASA Safety Publications Tool</u>, in the compressed ('zipped') file, attached to the record for this AD.
- 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 <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 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: Piaggio Aero Industries, P180 Customer Support, Via Pionieri e Aviatori d'Italia 2, 16154 Genoa, Italy; E-mail: <a href="mailto:technicalsupport@piaggioaerospace.it">technicalsupport@piaggioaerospace.it</a>, or Telephone: + 39 331 679 7493.

