

Airworthiness Directive

AD No.: 2023-0122

Issued: 13 June 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:

PIAGGIO AVIATION S.p.A.

Type/Model designation(s):

P.180 aeroplanes

Effective Date: 27 June 2023

TCDS Number(s): EASA.A.059

Foreign AD: Not applicable

Supersedure: None

ATA 55 – Stabilizers – Vertical Stabilizer Assembly – Inspection
Manufacturer(s):

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

Applicability:

P.180 Avanti aeroplanes, manufacturer serial numbers (MSN) 1004 to 1033 inclusive, if modified in accordance with the instructions of PAI Service Bulletin (SB) 80-0142; and

P.180 Avanti aeroplanes, MSN 1034 to 1104 inclusive; and

P.180 Avanti II aeroplanes, MSN 1002, 1053, 1105 to 1234 inclusive, 3001 to 3014 inclusive, 3016 and 3018.

Definitions:

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

Affected part: The fitting assembly of the horizontal tail trim actuator (HTTA), having Part Number 80-363283-401.

The SB: PAI P.180 (Mandatory) SB 80-0492.

Aeroplane date of manufacture: The date of issuance of the EASA Form 52 (or equivalent), which is referenced in PAI documentation.

Groups: Group 1 aeroplanes are those which, on the effective day of this AD, have accumulated less than 3 000 flight hours (FH) and less than 10 years since the aeroplane date of manufacture. Group 2 aeroplanes are those that are not Group 1.

Reason:

An occurrence was reported where, during scheduled maintenance of an aeroplane, stress corrosion induced cracking was found on the fitting assembly of the HTTA.

This type of corrosion can be found on older aircraft, based and operated for extended time near the seaside, exposed to a salty environment, or parked outside in an environment of high humidity or frequent heavy precipitation.

This condition, if not detected and corrected, could lead to structural failure of the HTTA fitting, with possible loss of control of the aeroplane.

To address this potential unsafe condition, PAI issued the SB, as defined in this AD, providing instructions for High Frequency Eddy Current (HFEC) inspections and replacement of the affected part, as applicable.

For the reason described above, this AD requires repetitive HFEC inspections of the affected part, and, depending on findings, accomplishment of corrective action(s).

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

Required as indicated, unless accomplished previously:

Inspections:

- (1) Within the compliance time as defined in Table 1 of this AD, as applicable, and, thereafter, at intervals not to exceed 660 FH or 26 months, whichever occurs first, accomplish an HFEC inspection of the affected part in accordance with the instructions of section 2.B. Part A of the SB.

Table 1 – HFEC Inspection

	Compliance Time (FH or calendar time, whichever occurs first after the effective date of this AD)
Group 1 aeroplanes	Within 140 FH or 8 months
Group 2 aeroplanes	Within 30 FH or 60 days

Corrective Action(s):

- (2) If, during any inspection as required by paragraph (1) of this AD, any discrepancy, as defined in section 2.B. Part B of the SB (Case 1, 2 or 3), is found, within the compliance time as defined in Table 2 of this AD, accomplish the applicable corrective action in accordance with the instructions of section 2.B. Part B of the SB.



Table 2 – Corrective Action and Compliance Time

Corrosion and/or Damage	Compliance Time	Corrective Action
Case 1	Before next flight	Repair found light corrosion without any other damage
Case 2	Within 150 FH or 7 months, whichever occurs first after the latest inspection	Replace the affected part with a new (not previously installed on any aeroplane) part
Case 3	Before next flight	

Credit:

- (3) Inspections and corrective action(s) on an aeroplane, accomplished before the effective date of this AD in accordance with the instructions of PAI P.180 SB 80-0492 at original issue, Revision 1, or Revision 2 are an acceptable method to comply with the initial requirements of paragraphs (1) and (2) of this AD, as applicable.

Terminating Action:

- (4) Replacement on an aeroplane of the affected part with a new part in accordance with an approved PAI Repair Design Approval Sheet (RDAS), or in accordance with the instructions of PAI Structural Repair Manual 180-MAN-0250-01106 Revision D0 (or later approved revisions), constitutes terminating action for the repetitive inspections as required by paragraph (1) of this AD for that aeroplane (see Note 1 of this AD).

Note 1: The Aircraft Maintenance Manual provides instructions for periodical inspection/maintenance after replacement of the affected part.

Ref. Publications:

PAI P.180 SB 80-0492 original Issue dated 30 November 2022, Revision 1 dated 20 December 2022, Revision 2 dated 15 May 2023, or Revision 3 dated 12 June 2023.

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. 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: Piaggio Aero Industries, P180 Customer Support, Via Pionieri e Aviatori d'Italia 2, snc 16154 Genoa, Italy; E-mail: technicalsupport@piaggioaerospace.it, or Telephone: + 39 331 679 7493.

