

Airworthiness Directive AD No.: 2009-0211R1 Issued: 09 December 2020

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, 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 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): P180 aeroplanes

Effective Date:	Revision 1: 09 December 2020 Original issue: 20 October 2009
TCDS Number(s):	EASA.A.059
Foreign AD:	Not applicable
Revision:	This AD revises EASA AD 2009-0211 dated 06 October 2009.

ATA 53 – Fuselage – Pressure Bulkhead – Inspection / Reinforcement

Manufacturer(s):

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

Applicability:

Model P.180 Avanti II aeroplanes, serial numbers 1106 to 1189 inclusive.

Definitions:

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

The SB: Piaggio Service Bulletin (SB) SB-80-0267 Revision 1.

Reason:

Cracks were detected on the upper flange (cap) of several "0" pressure bulkheads on the production line. None of the cracks had spread across the thickness of material. Investigation results revealed that all "0" pressure bulkheads installed on a specific batch of aeroplanes could have the same cracks. Although calculations confirmed a low stress level in that area, a reinforcement of the "0" pressure bulkhead is necessary.

This condition, if not detected and corrected, could lead to crack growth, possibly resulting in in-flight failure of the "0" pressure bulkhead and decompression of the aeroplane, with consequent risk of injury to occupants.



Prompted by these findings, Piaggio issued the SB to provide instructions to inspect and reinforce the '0' pressure bulkhead.

For the reasons stated above, EASA issued AD 2009-0211 to require a one-time non-destructive inspection of the "0" pressure bulkhead to detect cracks and, depending on findings, accomplishment of applicable corrective action(s). That AD also required reinforcement (by installation of doublers) of the "0" pressure bulkhead and reporting of the inspection results.

Since that AD was issued, it was determined that the compliance time for the reinforcement could be extended and Piaggio intends to revise the SB accordingly.

This AD is revised to amend paragraph (1) by allowing a 200 flight hours (FH) deferral. This revised AD also introduces editorial changes, not affecting the requirements, to update the AD to current writing standards.

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

Required as indicated, unless accomplished previously:

Inspection:

(1) Before exceeding 3 800 FH since first flight of the aeroplane, accomplish a dye-penetrant inspection of the "0" pressure bulkhead in accordance with the instructions of Section 2 Part A of the SB.

Corrective Action(s):

If, during the inspection as required by paragraph (1) of this AD, any cracks are detected, before next flight, contact Piaggio Aero Industries for approved repair instructions and accomplish those instructions accordingly.

Reinforcement:

(2) Concurrently with the inspection and corrective action(s) as required by paragraph (1) of this AD, install doublers on the "0" pressure bulkhead in accordance with the instructions of Section 2 Parts B and C of the SB.

Reporting:

(3) Within 30 days after accomplishment of the inspection as required by paragraph (1) of this AD, report all inspection results (including no findings) to Piaggio Aero Industries. For that purpose, use the contact details as provided in the 'Remarks' section of this AD.

Credit:

(4) Inspection, corrective action(s) and reinforcement on an aeroplane, accomplished before 20 October 2009 [the effective date of the original issue of this AD] in accordance with the instructions of Piaggio SB 80-0267 at original issue, is an acceptable method to comply with the requirements of paragraphs (1) and (2) of this AD for that aeroplane.

Ref. Publications:

Piaggio Aero Industries SB SB-80-0267 original issue dated 19 May 2009, or Revision 1 dated 16 June 2009, or Revision 2 dated 21 May 2014, or Revision 3 dated 23 November 2020.



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. The original issue of this AD was posted on 04 September 2009 as PAD 09-102 for consultation until 02 October 2009. No comments were received during the consultation period.
- 3. Enquiries regarding this AD should be referred to the EASA Programming and Continued Airworthiness Information Section, Certification Directorate. E-mail: <u>ADs@easa.europa.eu</u>.
- 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</u> 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.
- For any question concerning the technical content of the requirements in this AD, please contact: Piaggio Aero Industries S.p.A. - Airworthiness Office, Telephone: +39 010 6481353, Fax: +39 010 6481881, Email: <u>airworthiness@piaggioaerospace.it</u>.

