



Airworthiness Directive

AD No.: 2016-0159

Issued: 05 August 2016

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) 216/2008 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 66 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 (EC) 216/2008, Article 14(4) exemption].

Design Approval Holder's Name:

AIRBUS

Type/Model designation(s):

A318, A319, A320 and A321 aeroplanes

Effective Date: 19 August 2016

TCDS Number(s): EASA.A.064

Foreign AD: Not applicable

Supersedure: This AD supersedes EASA AD 2006-0153R2 dated 12 June 2007.

ATA 49 – Airborne Auxiliary Power – Auxiliary Power Unit Starter Motor and Air Intake System – Inspection / Cleaning

Manufacturer(s):

Airbus (formerly Airbus Industrie)

Applicability:

Airbus A318-111, A318-112, A318-121, A318-122, A319-111, A319-112, A319-113, A319-114, A319-115, A319-131, A319-132, A319-133, A320-211, A320-212, A320-214, A320-215, A320-216, A320-231, A320-232, A320-233, A321-111, A321-112, A321-131, A321-211, A321-212, A321-213, A321-231 and A321-232 aeroplanes, all manufacturer serial numbers.

Reason:

An operator reported black smoke at the rear of the fuselage during taxi after landing. The smoke was caused by a fire in the auxiliary power unit (APU) air intake.

The subsequent analysis demonstrated that, following numerous unsuccessful APU start attempts in flight, there is a risk of reverse flow leading to flame propagation to the APU air inlet and air intake duct.

This condition, if not detected and corrected, could result in an in-flight fire in the APU area.

Prompted by these findings, Airbus issued Service Bulletin (SB) A320-49-1068 to provide inspection and cleaning instructions. The applicable Flight Crew Operating Manual (FCOM) already contained a limitation for the number of APU start attempts, as follows:



APU STARTER

After 3 starter motor duty cycles, wait 60 minutes before attempting 3 more cycles

Consequently, EASA issued AD 2006-0153 to require repetitive inspections of the APU starter motor, APU inlet plenum and APU air intake, as well as repetitive cleaning of the APU air intake. EASA AD 2006-0153 was later revised twice, to reduce the Applicability and introduce optional terminating actions.

Since that AD was issued, it was determined that, since the APU electronic control box (ECB) can be replaced (or moved from one aeroplane to another) in service, the AD applicability has to be modified.

For the reason described above, this AD retains the requirements of EASA AD 2006-0153R2, which is superseded, expands the Applicability and includes references to additional optional terminating actions.

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

Required as indicated, unless accomplished previously:

Restatement of the requirements of EASA AD 2006-0153R2:

- (1) Within 600 flight hours (FH) after 09 June 2006 [the effective date of the original issue of EASA AD 2006-0153], and, thereafter, at intervals not to exceed 600 FH, inspect the APU starter motor, APU air inlet plenum and APU air intake in accordance with the instructions of Airbus SB A320-49-1068 Revision 01.
- (2) If, during any inspection as required by paragraph (1) of this AD, discrepancies are detected, before next flight, accomplish the applicable corrective action(s) in accordance with the instructions of Airbus SB A320-49-1068 Revision 01.
- (3) Unless already accomplished as per Airbus SB A320-49-1068 at original issue, before exceeding 2 400 FH since aeroplane first flight, or within 600 FH after 09 June 2006 [the effective date of the original issue of EASA AD 2006-0153], whichever occurs later, and, thereafter, at intervals not to exceed 2 400 FH, clean the APU air intake in accordance with the instructions of Airbus SB A320-49-1068 Revision 01.

New Requirements of this AD:

- (4) An aeroplane equipped with any of the APU ECB Part Number (P/N) as listed in Appendix 1 of this AD is not affected by the inspection and cleaning requirements of paragraph (1) and (3) of this AD.
- (5) An aeroplane on which Airbus modification (mod) 23698, or mod 24498, or mod 35803, or mod 35936, or mod 152289, or mod 152645, or mod 155015, or mod 157848 has been embodied in production is not affected by the inspection and cleaning requirements of paragraphs (1) and (3) of this AD, provided it is determined that no APU ECB with a P/N listed in Appendix 2 of this AD is installed on that aeroplane.



- (6) Installation on an aeroplane of an APU ECB, having any of the P/N listed in Appendix 1 of this AD, in accordance with Airbus approved modification instructions (see Note), constitutes terminating action for the repetitive inspections and cleaning as required by paragraphs (1) and (3) of this AD for that aeroplane.

Note: Airbus SB A320-49-1070, or SB A320-49-1075, or SB A320-49-1077, or SB A320-49-1098, or SB A320-49-1102 or SB A320-49-1107, as applicable to aeroplane configuration, provide instructions to replace an APU ECB, having P/N listed in Appendix 2 of this AD, with an APU ECB having P/N listed in Appendix 1 of this AD. Airbus SB, issued after the issue date of this AD, and providing instructions to replace an APU ECB with an APU ECB having P/N listed in Appendix 1 of this AD, are acceptable to comply with the requirement of paragraph (6) of this AD.

- (7) An aeroplane equipped with an APU ECB, having a P/N approved after the effective date of this AD, is not affected by the inspection and cleaning requirements of paragraph (1) and (3) of this AD, provided the conditions as specified in paragraphs (7.1) and (7.2) of this AD are met.
- (7.1) The P/N must be approved by EASA, or approved under Airbus Design Organisation Approval (DOA); and
- (7.2) The installation must be accomplished in accordance with aeroplane modification instructions approved by EASA, or approved under Airbus DOA.
- (8) Do not install on any aeroplane an APU ECB, having a P/N identified in Appendix 2 of this AD, as required by paragraph (8.1) or (8.2) of this AD, as applicable.
- (8.1) For an aeroplane that, on the effective date of this AD, is equipped with an APU ECB, having a P/N identified in Appendix 2 of this AD: After modification of that aeroplane as defined by paragraph (6) or (7) of this AD.
- (8.2) For an aeroplane that, on the effective date of this AD, is not equipped with an APU ECB, having a P/N identified in Appendix 2 of this AD: From the effective date of this AD.

Ref. Publications:

Airbus SB A320-49-1068 original issue dated 02 June 2005, or Revision 01 dated 02 February 2006.

Airbus SB A320-49-1070 original issue dated 28 July 2006.

Airbus SB A320-49-1075 original issue dated 22 September 2006.

Airbus SB A320-49-1077 original issue dated 21 March 2007.

Airbus SB A320-49-1098 original issue dated 21 June 2011.

Airbus SB A320-49-1102 original issue dated 03 January 2012.

Airbus SB A320-49-1107 original issue dated 05 November 2013, or Revision 01 dated 28 July 2015.



The use of later approved revisions of these documents 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 22 June 2016 as PAD 16-092 for consultation until 20 July 2016. The Comment Response Document can be found at <http://ad.easa.europa.eu>.
3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
4. For any question concerning the technical content of the requirements in this AD, please contact: AIRBUS – Airworthiness Office – EIAS; Fax +33 5 61 93 44 51; E-mail: account.airworth-eas@airbus.com.

SUPERSEDED



Appendix 1 – APU ECB not affected

APU	ECB P/N
APIC APS 3200	4500003K 4500003L 4500003M
Honeywell 131-9A	3888394-121204 3888394-121205 3888394-221204 3888394-221205 3888394-321206
Honeywell GTCP36-300	304640-5 304817-3

Appendix 2 – APU ECB affected

APU	ECB P/N
APIC APS 3200	4500003D 4500003E 4500003F 4500003G 4500003H 4500003J
Honeywell 131-9A	3888394-120201 3888394-121202 3888394-121203 3888394-221202 3888394-221203
Honeywell GTCP36-300	307950-1 307950-2 307950-3 307950-4 304640-1 304640-2 304640-3 304640-4 304817-1 304817-2

