

EASA	AIRWORTHINESS DIRECTIVE
	AD No.: 2011-0088 Date: 13 May 2011 Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) No 216/2008 on behalf of the European Community, 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 EC 1702/2003, Part 21A.3B. In accordance with EC 2042/2003 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 [EC 2042/2003 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [EC 216/2008, Article 14(4) exemption].	
Type Approval Holder's Name : AIRBUS	Type/Model designation(s) : A340-500, A300, A300-600 aeroplanes
TCDS Number : EASA.A.015	
Foreign AD : Not applicable	
Supersedure : None	
ATA 52	Doors – Nose Landing Gear (NLG) Aft Doors – Hinge Attachment Fittings and Swan Neck – Inspection/Replacement
Manufacturer(s):	Airbus (former Airbus Industrie)
Applicability:	Airbus A300 models -541, -542, -642 and -643 aeroplanes, all manufacturer serial numbers.
Reason:	An operator has reported cracks on the aft hinge forward (FWD) fittings (hinge #5) of the NLG aft doors (Right Hand (RH) side or Left Hand (LH) side). The cracks extended by approximately 15 millimetres from the upper hole to the edge of the fittings. Investigation has revealed that these cracks have initiated due to fatigue loads and propagated under bending load. Cracks on the NLG aft door fittings, if not corrected, could lead to the in-flight detachment of the door, possibly resulting in injury to persons on the ground or damage to the aeroplane. In order to maintain the structural integrity of the NLG aft door aft hinge attachment fittings, EASA issued EASA AD 2010-0028, which requires repetitive inspections at hinge #5. Additional investigations have shown that inspections are also necessary for the hinge #4. For the reasons described above, this AD requires repetitive inspections of the FWD and AFT attachment fittings and of the swan neck at the forward hinge #4 and their replacement, as necessary.

Effective Date:	27 May 2011
Required action(s) and Compliance Time(s):	Required as indicated, unless accomplished previously : (1) <u>FWD and AFT attachment fittings of the NLG aft door forward hinge (#4)</u> (1.1) Before the accumulation of 4 500 total Flight Cycles (FC) after the aeroplane first flight, or within 50 FC after the effective date of this AD, whichever occurs later, do a detailed visual inspection of the FWD attachment fittings of the NLG aft door forward hinge (#4), LH and RH side doors to find any crack, in accordance with the instructions of Airbus Service Bulletin (SB) A340-52-5017. (1.2) If no crack is found, repeat the inspection required in paragraph (1) of this AD at intervals not to exceed 500 FC from the last inspection. (1.3) If any crack is found during the initial or repetitive inspections required by paragraphs (1.1) and (1.2) of this AD, before further flight, perform High Frequency Eddy Current (HFEC) inspection of FWD and AFT attachment fittings of the forward hinge (#4) on the affected NLG aft door in accordance with the instructions of Airbus SB A340-52-5017. (1.3.1) If any additional crack is found, before further flight, replace both FWD and AFT fittings by serviceable ones on the forward hinge (#4) of the affected NLG aft door in accordance with the instructions of Airbus Service Bulletin (SB) A340-52-5017. (1.3.2) If no additional cracks are found: - repeat the HFEC inspection required by paragraph (1.3) of this AD at intervals not to exceed 10 FC from the last inspection; or - perform a Penetrant Inspection at intervals not to exceed 3 FC from the last inspection, in accordance with the instructions of Airbus SB A340-52-5017 up to the limit of 20 FC after the initial crack identification, where the FWD and AFT fitting replacement is anyhow required on the forward hinge (#4) of the affected NLG aft door. (1.3.3) If any additional crack is found during any inspection required by paragraph (1.3.2) of this AD, before further flight, replace both FWD and AFT fittings by serviceable ones on the forward hinge (#4) of the affected NLG aft door, in accordance with the instructions of Airbus SB A340-52-5017. (1.4) After each replacement of the FWD and AFT attachment fittings of the NLG aft door forward hinge (#4) as required by paragraphs (1.3.1) and (1.3.2) of this AD: Before the accumulation of 4 500 FC by the FWD fitting on the aeroplane, perform the inspection required by paragraph (1.1) of this AD and do the applicable actions required by paragraph (1.2) or (1.3) of this AD. (2) <u>Swan Neck of the NLG aft door forward hinge (#4)</u> (2.1) Before the accumulation of 4 500 Total FC after the aeroplane first flight, or within 50 FC after the effective date of this AD, whichever occurs later, perform HFEC inspection of the swan neck of the

	NLG Aft door forward hinge (#4), LH and RH side doors to find any crack, in accordance with the instructions of Airbus SB A340-52-5017. (2.2) If no crack is found, repeat the inspection required in paragraph (2.1) of this AD at intervals not to exceed 500 FC from the last inspection. (2.3) If any crack is found during the initial or repetitive inspections required by paragraphs (2.1) and (2.2) of this AD, before further flight, replace the swan neck by a serviceable one on the forward hinge (#4) of the affected NLG aft door. (2.4) After each replacement of the swan neck of the NLG aft door forward hinge (#4) as required by paragraph (2.3) of this AD: Before the accumulation of 4 500 FC by the swan neck on an aeroplane, perform the inspection required by paragraph (2.1) of this AD and do the applicable actions required by paragraph (2.2) or (2.3) of this AD.
Ref. Publications:	Airbus Service Bulletin (SB) A340-52-5017 at original issue. The use of later approved revisions of this 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. This AD was posted on 03 March 2011 as PAD 11-027 for consultation until 31 March 2011. No comments were received during the consultation period. 3. Enquiries regarding this AD should be referred to the Airworthiness Directives, Safety Management & Research Section, Certification Directorate, EASA. 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 – EAL; E-mail: airworthiness.A330-A340@airbus.com