## EASA

# **AIRWORTHINESS DIRECTIVE**



### AD No.: 2014-0014

## Date: 14 January 2014

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 EU 748/2012, Part 21.A.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].

<b>Design Approv</b> a AIRBUS	al Holder's Name:	<b>Type/Model designation(s):</b> A318, A319, A320 and A321 aeroplanes
TCDS Number:	EASA.A.064	
Foreign AD:	Not applicable	
Supersedure:	This AD supersedes DGAC France AD 2001-062 dated 21 February 2001, and EASA AD 2010-0091R1 dated 12 October 2010.	

ATA 55	Stabilizers – Elevators – Inspection
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 number.
Reason:	Trapped liquid was reported in the honeycomb core of pre-mod 23558 elevators installed on A320 family aeroplanes.
	This condition, if not detected and corrected, could lead to disbonding between the affected elevator panel skin and honeycomb core, affecting the structural integrity of the elevator structure.
	To address this potential unsafe condition, Airbus issued Service Bulletin (SB) A320-55-1024, providing instructions to accomplish a one-time inspection and, depending on findings, repair, modification and re-protection of the affected elevators. Consequently, DGAC France issued AD 2001-062 to require the actions specified in that SB.
	Since that AD was issued, a special detailed repetitive inspection applicable to all pre-mod 35515 elevators was introduced with ALI task 552007 in ALS Part 2 under ALI Document reference AI/SE-M4/95A.0252/96 at issue 7, approved by EASA on 07 February 2006 and mandated by EASA AD 2006-0165.
	EASA AD 2006-0165 was superseded by EASA AD 2010-0071R1, which required implementation of the actions contained in issue 10 of the ALI

	document.		
	As a consequence of the increasing number of elevators being inspected, it was reported that some elevators may have been moved from the aeroplane on which they were originally fitted to another aeroplane, and spare parts may have been installed without having been inspected within the applicable required time frame as per ALI task 552007 requirements.		
	Consequently, EASA issued AD 2010-0091 (later revised) to require identification and inspection of elevators installed on aeroplanes that had not been inspected within the applicable time frame as per ALI task 552007.		
	Since those ADs were issued, Airbus decided to replace the ALI Task 552007 with an inspection SB, in which threshold, interval, inspection method, and applicable corrective actions remain unchanged.		
	2001-062 and EASA AD 2010-009 detect liquid ingress potentially tra	For the reason described above, this AD supersedes DGAC France AD 2001-062 and EASA AD 2010-0091R1 and requires repetitive inspections to detect liquid ingress potentially trapped into the elevator structure and, depending on findings, accomplishment of applicable corrective actions.	
Effective Date:	28 January 2014		
Required Action(s)	Required as indicated, unless acco	mplished previously:	
and Compliance Time(s):	<ol> <li>Within 3 months after the effective date of this AD, identify the Part Number (P/N) and serial number (s/n) of the left-hand (LH) and right-hand (RH) elevator on the aeroplane to determine whether the P/N is listed in Appendix 1 of this AD.</li> </ol>		
	<ul> <li>A review of the aeroplane delivery or maintenance records is acceptable for the P/N determination requirements of paragraph (1) of this AD, provided that the aeroplane configuration and installed components can be conclusively determined from that review.</li> <li>(2) Based on the determination as required by paragraph (1) of this AD, for aeroplanes with an elevator installed, as identified in Appendix 1 of this AD, within the threshold defined in Table 1 of this AD, and, thereafter, at intervals not to exceed 6 years since first flight after last inspection and/or repair, accomplish a thermographic inspection of the affected elevator top and bottom skin panels in accordance with the instructions of Airbus SB A320-55-1046.</li> </ul>		
	Aeroplane configuration	Compliance time (whichever occurs later)	
	Having an elevator installed with a P/N and s/n as specified in Appendix 1 of this AD, Table 1 or Table 2	Within 6 years since first flight of the elevator, or since first flight of the elevator after Airbus SB A320-55-1024 embodiment, or since first flight after last ALI 552007 inspection, as applicable	
	Having an elevator installed with a P/N and s/n as specified in Appendix 1 of this AD, Table 3 or Table 4	Within 12 years since the elevator first flight, or within 6 years since first flight of the elevator after last ALI 552007 inspection, as applicable	
	<ul> <li>(3) If, during any inspection as required by paragraph (2) of this AD, water ingress is confirmed, before next flight, accomplish the applicable corrective actions in accordance with the instructions of Airbus SB A320-55-1046.</li> </ul>		

	Note 1: Accomplishment of the instructions of Airbus SB A320-55-1046 is a substitute for the actions specified in ALI task 552007.	
	(4) Installation on an aeroplane of elevators having a P/N not listed in Appendix 1 of this AD (post-mod 35515) constitutes terminating action f the repetitive inspections required by this AD for that aeroplane.	
	(5) Aeroplanes on which Airbus Modification (Mod.) 35515 has been embodied in production are not affected by the inspection requirements of this AD, provided that, since aeroplane first flight, no elevator has been installed having a P/N and s/n as listed in Appendix 1 of this AD.	
	(6) From the effective date of this AD, it is allowed to install an elevator having a P/N and s/n as listed in Appendix 1 of this AD, on an aeroplane, provided that, following installation, that elevator is inspected and, depending on findings, corrected as required by this AD.	
	Note 2: It is the responsibility of the operator to ensure that the applicable compliance limit is transferred with the elevator to the aeroplane on which the elevator is (to be) installed.	
	(7) From the effective date of this AD, do not operate an aeroplane with an elevator installed having a P/N and s/n as listed in Appendix 1 of this AD, Table 1 or Table 2, unless that elevator has already been inspected and re-protected (as previously required by DGAC France AD 2001-062) in accordance with the instructions of Airbus SB A320-55-1024.	
Ref. Publications:	Airbus SB A320-55-1024 original issue dated 13 January 1999, or Revision 01 dated 04 November 2003.	
	Airbus SB A320-55-1046 original Issue dated 28 February 2013, or Revision 01 dated 09 October 2013.	
	The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.	
Remarks:	<ol> <li>If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.</li> </ol>	
	<ol> <li>This AD was posted on 13 November 2013 as PAD 13-167 for consultation until 11 December 2013. The Comment Response Document can be found at <u>http://ad.easa.europa.eu</u>.</li> </ol>	
	<ol> <li>Enquiries regarding this AD should be referred to the Safety Information Section, Executive Directorate, EASA. E-mail: <u>ADs@easa.europa.eu</u>.</li> </ol>	
	<ol> <li>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: <u>account.airworth-eas@airbus.com</u>.</li> </ol>	

## Appendix 1 – Affected Elevators, LH and RH

Note: Airbus SB A320-55-1042 (mod 150390) includes the installation of an additional marking plate on the elevator front spar and re-identification of the elevator surface depending on its weight and production P/N. As a pre-requisite to SB A320-55-1042 accomplishment, the affected elevator should have been weighed in accordance with Component Maintenance Manual (CMM) 55-21-15, or SB A320-55-1034 instructions.

#### Table 1 – Pre-mod 23558 elevators, <u>not</u> having embodied Airbus SB A320-55-1042 (Airbus mod 150390)

Part name	P/N (first 12 digits only)	s/n
LH Elevator	D55280001000	1002 to 1472 inclusive, 1491 and FIC1
RH Elevator	D55280001001	

#### Table 2 – Pre-mod 23558 elevators, having embodied Airbus SB A320-55-1042 (Airbus mod 150390)

Part name	P/N (first 12 digits only)	s/n
	D55280003000	
LH Elevator	D55280003002	
	D55280003004	1002 to 1472 inclusive 1401 and EIC1
	D55280003001	1002 to 1472 inclusive, 1491 and FIC1
<b>RH</b> Elevator	D55280003003	
	D55280003005	

#### Table 3 – Post-mod 23558 and pre-mod 35515 elevators, **not** having embodied Airbus SB A320-55-1042 (Airbus mod 150390)

Part name	P/N (first 12 digits only)	s/n
LH Elevator	D55280001000	All, except 1002 to 1472 inclusive, 1491 and FIC1
	D55280001002	
	D55280001004	
	D55280001008	All
	D55280001010	
	D55280001012	
RH Elevator	D55280001001	All, except 1002 to 1472 inclusive, 1491 and FIC1
	D55280001003	
	D55280001005	
	D55280001009	All
	D55280001011	
	D55280001013	

Part name	P/N (first 12 digits only)	s/n
	D55280003000	
	D55280003002	All, except 1002 to 1472 inclusive, 1491 and FIC1
	D55280003004	
	D55280003006	
	D55280003008	
	D55280003010	
	D55280003012	
	D55280003014	
LH Elevator	D55280003016	
	D55280003018	
	D55280003020	All
	D55280003022	
	D55280003024	
	D55280003026	
	D55280003028	
	D55280003030	
	D55280003032	
	D55280003034	
	D55280003001	
	D55280003003	All, except 1002 to 1472 inclusive, 1491 and FIC1
	D55280003005	
	D55280003007	
	D55280003009	
	D55280003011	
	D55280003013	
	D55280003015	
RH Elevator	D55280003017	
	D55280003019	
	D55280003021	All
	D55280003023	
	D55280003025	
	D55280003027	
	D55280003029	
	D55280003031	
	D55280003033	
	D55280003035	

Table 4 – Post-mod 23558 and pre-mod 35515 elevators, having embodied Airbus SB A320-55-1042 (Airbus mod 150390)