

EASA	AIRWORTHINESS DIRECTIVE
	AD No.: 2012-0094 Date: 31 May 2012 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].	
Design Approval Holder's Name : AIRBUS	Type/Model designation(s) : A330 aeroplanes
TCDS Number :	EASA.A.004
Foreign AD :	Not applicable
Supersedure :	None
ATA 71	Engine – Forward Engine Mounts Bolts – Torque Check/ Replacement
Manufacturer(s):	Airbus (formerly Airbus Industrie)
Applicability:	Airbus A330-223, A330-223F, A330-321, A330-322 and A330-323 aeroplanes, all manufacturer serial numbers.
Reason:	The forward mount engine pylon bolts, Part Number (P/N) 51U615, fitted on Airbus A330 aeroplanes with Pratt & Whitney (PW) PW4000 engines, are made from MP159 material. The U.S. Federal Aviation Administration (FAA), as Engine Certification Authority, issued AD 2006-16-05 to require (paragraph (g) of that AD) repetitive torque checks of MP159 material forward mount pylon bolts fitted on certain PW4000 series engines. However, the engine mount system is considered to be part of aeroplane certification rather than the engine certification. Following further fatigue load analysis by Airbus of the A330 engine mount system, completed in February 2011 for both the freighter and passenger models of A330 aeroplanes, it was determined that MP159 material forward mount pylon bolts inspection interval must be reduced. This condition, if not detected and corrected, could ultimately lead to engine detachment from the aeroplane, possibly resulting in damage to the aeroplane and/or injury to person on the ground. For the reasons described above, this AD requires accomplishment of repetitive torque checks of the forward mount pylon bolts installed on A330

	aeroplanes powered by PW4000 engines and, depending on findings, the replacement of all four bolts and associated nuts.
Effective Date:	14 June 2012
Required Action(s) and Compliance Time(s):	Required as indicated, unless accomplished previously: (1) Within the compliance time defined in Appendix 1 of this AD (Table 1, Table 2 or Table 3, as applicable to aeroplane model and utilisation), and thereafter at intervals not to exceed the value defined in Appendix 1 of this AD (Table 1, Table 2 or Table 3, as applicable to aeroplane model and utilisation), accomplish a torque check of FWD engine mount bolts (4 positions/engine) on both engines, in accordance with the instructions of Airbus Service Bulletin (SB) A330-71-3028 Revision 01. (2) If, during any torque check as required by paragraph (1) of this AD, any discrepancy is detected, before next flight, replace all four bolts and associated nuts in accordance with the instructions of Airbus SB A330-71-3028 Revision 01. (3) Torque checks and corrective actions, accomplished before the effective date of this AD, in accordance with the instructions of Airbus SB A330-71-3028 at original issue, are acceptable to comply with the initial requirements of paragraph (1) of this AD. After the effective date of this AD, repetitive torque checks and applicable corrective actions must be accomplished in accordance with the instructions of Airbus SB A330-71-3028 Revision 01. (4) Replacement of bolts and nuts as required by paragraph (2) of this AD does not constitute terminating action for the repetitive torque checks as required by paragraph (1) of this AD.
Ref. Publications :	AIRBUS SB A330-71-3028 Original issue dated 24 December 2011 or Revision 01 dated 20 February 2012. The use of later approved revisions of this document is acceptable for compliance with the requirements of this AD. PW Alert Service Bulletin (ASB) PW4G-100-A71-32 initial issue dated 15 April 2005 or Revision 1 dated 08 November 2011.
Remarks :	1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD. 2. This AD was posted on 27 April 2012 as PAD 12-038 for consultation until 25 May 2012. No comments were received during the consultation period. 3. Enquiries regarding this AD should be referred to the Safety Information Section, Executive 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 – EIAL; E-mail: airworthiness.A330-A340@airbus.com.

Appendix 1

Note: For the purpose of Tables 1 and 2 below, the Average Flight Time (AFT) is defined as a computation of the number of flight hours (FH) divided by the number of flight cycles (FC) accumulated since last torque check or since aeroplane first flight, as applicable.

Table 1: For A330-223 and for A330-321, A330-322 and A330-323 with AFT more than 132 minutes

FC accumulated on the effective date of this AD since last torque check performed in accordance with PW ASB PW4G-100-A71-32, or since aeroplane first flight, as applicable	Compliance Time	Torque check Interval
0 – 1 850	Within 2 350 FC since the last torque check performed in accordance with the instructions of PW ASB PW4G-100-A71-32 or since aeroplane first flight, as applicable	2 350 FC or 24 320 FH, whichever occurs first
1 851 – 2 700	Within 500 FC from the effective date of this AD without exceeding 2 700 FC since last torque check performed in accordance the instructions of PW ASB PW4G-100-A71-32 or since aeroplane first flight, as applicable	

Table 2: For A330-321, A330-322 and A330-323 with AFT equal or less than 132 minutes, or in case of AFT is not calculated on a regular basis

FC accumulated on the effective date of this AD since last torque check performed in accordance with PW ASB PW4G-100-A71-32, or since aeroplane first flight, as applicable	Compliance Time	Torque Check Interval
0 – 1 450	Within 1 950 FC since the last torque check performed in accordance with the instructions of PW ASB PW4G-100-A71-32 or since aeroplane first flight, as applicable	1 950 FC or 20 210 FH, whichever occurs first
1451 – 2 700	Within 500 FC after the effective date of this AD, without exceeding 2 700 FC since last torque check performed in accordance with the instructions of PW ASB PW4G-100-A71-32, or since aeroplane first flight, as applicable	

Table 3 : For A330-223F

Compliance Time	Torque Check Interval
Within 2140 FC or 6600 FH, whichever occurs first since the last torque check performed in accordance with the instructions of PW ASB PW4G-100-A71-32, or since aeroplane first flight, as applicable	2 140 FC or 6 600 FH, whichever occurs first