

EASA	AIRWORTHINESS DIRECTIVE
	AD No.: 2013-0089 Date: 12 April 2013 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].	
Design Approval Holder's Name: AIRBUS	Type/Model designation(s): A380 aeroplanes
TCDS Number:	EASA.A.110
Foreign AD:	Not applicable
Supersedure:	None
ATA 29	Hydraulic Power – Hydraulic Power Accumulator – Replacement
Manufacturer(s):	Airbus
Applicability:	Airbus A380-841, A380-842 and A380-861 aeroplanes, all manufacturer serial numbers.
Reason:	During a fatigue cycling test on the hydraulic power (HP) accumulator, a failure occurred in an unusual, sudden rupture mode. The HP accumulator developed a fatigue crack on the full circumference (360°) starting at the electron beam (EB) weld root. The result of the subsequent investigation revealed that a change occurred in the HP accumulator manufacturing process in May 2009, which led to narrower accumulator weld width. The accumulator manufacturer (Eaton) introduced a new inspection procedure to prevent delivery of HP accumulators with narrowed weld width. However, for some parts with part number (P/N) 299000-1, manufactured since 2009, the original cyclic life can no longer be supported. This condition, if not corrected, could lead to accumulator burst and consequent fuselage structure damage, possibly resulting in decompression of the aeroplane and injury to occupants. To address this unsafe condition, Airbus issued a Service Bulletin (SB) A380-29-8018 to provide instruction for replacement of affected HP accumulator. For the reasons described above, this AD requires the replacement of the affected HP accumulator before the compliance time as identified by this AD.

Effective Date:	26 April 2013								
Required Action(s) and Compliance Time(s):	Required as indicated, unless accomplished previously: (1) Within the compliance time as defined in Table 1 of this AD, depending on part configuration, or within 20 days after the effective date of this AD, whichever occurs later, identify the installed HP accumulator and replace the HP accumulator having P/N 299000-1 and serial number (S/N) listed in Appendix 1 of this AD with a serviceable part in accordance with the instructions of Airbus SB A380-29-8018. A review of aeroplane maintenance records is acceptable to make the determination of the installed HP accumulator, provided those records can be relied upon for that purpose. Table 1: HP accumulator P/N 299000-1 replacement compliance time <table> <tr> <th>Affected HP accumulator configuration</th><th>Compliance time (whichever occurs first)</th></tr> <tr> <td>A: without a yellow or pink dot of paint on the identification label - S/N listed in Table 2 of appendix 1 of this AD.</td><td>Within 750 flight cycles (FC) or 6 200 flight hours (FH) accumulated by the part</td></tr> <tr> <td>B: with a pink dot of paint on the identification label, which confirms that the part has been tested in accordance with EATON SB 299000-29A01 - S/N listed in Table 3 of appendix 1 of this AD</td><td>Within 3 525 FC or 29 350 FH accumulated by the part since it has been tested in accordance with EATON SB 299000-29A01</td></tr> <tr> <td>C: with a yellow dot of paint on the identification label - S/N listed in Table 4 of appendix 1 of this AD</td><td>Within 4 275 FC or 35 600 FH accumulated by the part</td></tr> </table> (2) Aeroplanes on which Airbus modification (mod) 71175 has been embodied in production, and aeroplanes which have been modified in service in accordance with the instructions of Airbus SB A380-29-8016, are not affected by the requirement of paragraph (1) of this AD, provided that no HP Accumulator having P/N 299000-1 and S/N listed in Appendix 1 of this AD has been installed since the aeroplane first flight or since modification in accordance with Airbus SB A380-29-8016. (3) From the effective date of this AD, do not install on an aeroplane a HP accumulator P/N 299000-1 with a S/N as listed in Appendix 1 of this AD, unless in compliance with the requirements of this AD.	Affected HP accumulator configuration	Compliance time (whichever occurs first)	A: without a yellow or pink dot of paint on the identification label - S/N listed in Table 2 of appendix 1 of this AD.	Within 750 flight cycles (FC) or 6 200 flight hours (FH) accumulated by the part	B: with a pink dot of paint on the identification label, which confirms that the part has been tested in accordance with EATON SB 299000-29A01 - S/N listed in Table 3 of appendix 1 of this AD	Within 3 525 FC or 29 350 FH accumulated by the part since it has been tested in accordance with EATON SB 299000-29A01	C: with a yellow dot of paint on the identification label - S/N listed in Table 4 of appendix 1 of this AD	Within 4 275 FC or 35 600 FH accumulated by the part
Affected HP accumulator configuration	Compliance time (whichever occurs first)								
A: without a yellow or pink dot of paint on the identification label - S/N listed in Table 2 of appendix 1 of this AD.	Within 750 flight cycles (FC) or 6 200 flight hours (FH) accumulated by the part								
B: with a pink dot of paint on the identification label, which confirms that the part has been tested in accordance with EATON SB 299000-29A01 - S/N listed in Table 3 of appendix 1 of this AD	Within 3 525 FC or 29 350 FH accumulated by the part since it has been tested in accordance with EATON SB 299000-29A01								
C: with a yellow dot of paint on the identification label - S/N listed in Table 4 of appendix 1 of this AD	Within 4 275 FC or 35 600 FH accumulated by the part								
Ref. Publications:	Airbus SB A380-29-8018 original issue dated 23 December 2011, Airbus SB A380-29-8016 original issue dated 05 February 2013, EATON SB 299000-29A01 original issue dated 07 June 2011 or revision 01 dated 19 February 2013. 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 19 November 2012 as PAD 12-145 and on 08 March 2013 as PAD 12-145R1 for consultation until 22 March 2013. The Comment Response Document can be found at http://ad.easa.europa.eu. 3. Enquiries regarding this AD should be referred to the Safety Information Section, Executive Directorate, EASA. E-mail: ADs@easa.europa.eu.								

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| | <p>4. For any question concerning the technical content of the requirements in this AD, please contact: AIRBUS SAS - EIANA (Airworthiness Office),
E-mail: account.airworth-A380@airbus.com.</p> |
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Appendix 1

Table 2 – List of HP accumulators P/N 299000-1, in configuration A, identified by S/N

01512990	01682990
01532990	01692990
01562990	01742990
01642990	01762990
01672990	01832990

Table 3 – List of HP accumulators P/N 299000-1 in configuration B, identified by S/N

01522990	01662990
01542990	01702990
01592990	01712990
01602990	01722990
01612990	01782990
01622990	
01652990	

Table 4 – List of HP accumulators P/N 299000-1 in configuration C, identified by S/N

01732990	02142990	02392990	02652990	02902990
01752990	02152990	02402990	02662990	02912990
01772990	02162990	02412990	02672990	02922990
01812990	02172990	02422990	02682990	02932990
01822990	02182990	02432990	02692990	02942990
01842990	02192990	02442990	02702990	02952990
01852990	02202990	02452990	02712990	02962990
01862990	02212990	02462990	02722990	02972990
01872990	02222990	02472990	02732990	02982990
01882990	02232990	02482990	02742990	02992990
01892990	02242990	02492990	02752990	03002990
01912990	02252990	02502990	02762990	03012990
01962990	02262990	02512990	02772990	03022990
01972990	02272990	02522990	02782990	03032990
01982990	02282990	02532990	02792990	03042990
01992990	02292990	02542990	02802990	03052990
02052990	02302990	02552990	02812990	03062990
02062990	02312990	02562990	02822990	03072990
02072990	02322990	02572990	02832990	03082990
02082990	02332990	02582990	02842990	03092990
02092990	02342990	02602990	02852990	03102990
02102990	02352990	02612990	02862990	03112990
02112990	02362990	02622990	02872990	03122990
02122990	02372990	02632990	02882990	03132990
02132990	02382990	02642990	02892990	03142990