


<b>EASA</b>	<b>AIRWORTHINESS DIRECTIVE</b>
	<p><b>AD No.: 2012-0070</b>  <b>[Correction: 26 April 2012]</b></p> <p><b>Date: 25 April 2012</b></p> <p>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.</p>
<p>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].</p>	
<p><b>Type Approval Holder's Name :</b></p> <p>AIRBUS</p>	<p><b>Type/Model designation(s) :</b></p> <p>A330 and A340-200/-300 aeroplanes</p>
TCDS Number :	EASA.A.004, EASA.A.015
Foreign AD :	Not applicable
Supersedure :	This AD supersedes EASA AD 2011-0139 dated 25 July 2011.
<b>ATA 29</b>	<b>Hydraulic Power – High Pressure Manifold Check Valves – Inspection / Modification</b>
Manufacturer(s):	Airbus (formerly Airbus Industrie)
Applicability:	<p>Airbus A330-201, A330-202, A330-203, A330-223, A330-223F, A330-243, A330-243F, A330-301, A330-302, A330-303, A330-321, A330-322, A330-323, A330-341, A330-342 and A330-343 aeroplanes, all manufacturer serial numbers (MSN), and</p> <p>Airbus A340-211, A340-212, A340-213, A340-311, A340-312 and A340-313 aeroplanes, all MSN.</p>
Reason:	<p>An A330 operator experienced a yellow hydraulic circuit low level due to a loose check valve, Part Number (P/N) CAR401. During the inspection on the other two hydraulic systems, the other three check valves P/N CAR401 were also found to be loose with their lock wire broken in two instances. Airbus A340 aeroplanes are also equipped with P/N CAR401 high pressure manifold check valves.</p> <p>Additional cases of P/N CAR401 check valve loosening have been reported on aeroplanes having accumulated more than 1 000 flight cycles (FC). The check valve fitted on the Yellow hydraulic system is more affected, due to additional system cycles induced by cargo door operation.</p> <p>This condition, if not detected and corrected, could result in hydraulic leaks, possibly leading to the loss of all three hydraulic systems and consequent loss of control of the aeroplane.</p> <p>To address this unsafe condition, EASA issued Emergency AD 2009-0223-E to require an inspection programme to detect any check valve loosening and if necessary, to apply the associated corrective actions.</p> <p>EASA AD 2010-0145, which superseded EASA EAD 2009-0223-E</p>

	<p>retaining its requirements, was issued to expand the applicability to the newly certified models A330-223F and A330-243F.</p> <p>Prompted by further reported in-service events of check valve P/N CAR401 loosening before reaching the threshold of 700 FC, new AD 2011-0139, which superseded AD 2010-0145, retaining its requirements, was issued to:</p> <ul style="list-style-type: none"> <li>- extend the requirement to identify the P/N CAR401 check valves to all aeroplanes, and to</li> <li>- reduce the inspection threshold for aeroplanes fitted with check valve P/N CAR401, either installed in production through Airbus modification 54491, or installed in service through Airbus Service Bulletin (SB) A330-29-3101 or Airbus SB A340-29-4078.</li> </ul> <p>This new AD, which supersedes EASA AD 2011-0139 retaining its requirements, is issued to require an increased torque value of the check valves tightening and High Pressure (HP) manifolds re-identification.</p> <p>This AD has been republished to correct a typographical error in paragraphs (1.1) and (3) where a paragraph (1.1.3) was erroneously mentioned.</p>
Effective Date:	09 May 2012
Required Action(s) and Compliance Time(s):	<p>Required as indicated, unless accomplished previously:</p> <p>(1) Within 900 FH after 08 August 2011 [the effective date of EASA AD 2011-0139], accomplish a visual inspection of the check valves on Blue, Green and Yellow hydraulic systems to identify their P/N, in accordance with the accomplishment instructions of Airbus SB A330-29-3111 Revision 02, or Airbus SB A340-29-4086 Revision 02, as applicable to aeroplane type.</p> <ul style="list-style-type: none"> <li>(1.1) If check valves P/N CAR401 are installed on all three hydraulic systems, accomplish the actions as specified in paragraphs (1.1.1) and (1.1.2) of this AD. <ul style="list-style-type: none"> <li>(1.1.1) Before further flight after the identification as required by paragraph (1) of this AD, perform the inspection programme on <b>yellow and blue</b> system check valves and, depending on findings, apply the associated corrective actions in accordance with the accomplishment instructions of Airbus SB A330-29-3111 Revision 02, or Airbus SB A340-29-4086 Revision 02, as applicable to aeroplane type.</li> <li>(1.1.2) Within 900 FH after compliance with the requirements paragraph (1.1.1) of this AD, and thereafter at intervals not to exceed 900 FH, perform the inspection programme on <b>green, yellow and blue system</b> check valves and, depending on findings, apply the associated corrective actions in accordance with the accomplishment instructions of SB A330-29-3111 Revision 02, or SB A340-29-4086 Revision 02, as applicable to aeroplane type.</li> </ul> </li> <li>(1.2) If check valves P/N CAR401 are not installed on all three hydraulic systems, no immediate further action is required by paragraph (1) of this AD. However, before next flight after any check valve P/N CAR400 is replaced with a check valve P/N CAR401, the aeroplane configuration must be inspected to determine if all three hydraulic systems are equipped with check valve P/N CAR401, in which case the requirements of paragraph (1.1) of this AD must be accomplished.</li> </ul> <p>(2) Within 90 days after each accomplishment of an inspection</p>

	<p>programme as required by paragraph (1) of this AD, report all inspection results to Airbus.</p> <p>(3) Aeroplanes which have been inspected and corrected, before 08 August 2011 [the effective date of EASA AD 2011-0139], in accordance with the instructions of Airbus All Operators Telex (AOT) A330-29A3111 at Original issue or Revision 01, or AOT A340-29A4086 at Original issue or Revision 01, as applicable to aeroplane type, are compliant with the initial inspection programme as required by paragraph (1.1.1) of this AD. After 08 August 2011 [the effective date of EASA AD 2011-0139], all inspection programmes, as required by paragraph (1.1.2) of this AD, must be accomplished in accordance with the accomplishment instructions of Airbus SB A330-29-3111 Revision 02, or SB A340-29-4086 Revision 02, as applicable to aeroplane type.</p> <p>(4) Within 6 years after the effective date of this AD, torque the check valves and re-identify the associated HP manifolds in accordance with the instructions of Airbus SB A330-29-3119 Revision 01, or SB A340-29-4091 Revision 01, as applicable to aeroplane type.</p> <p>Aeroplanes already modified in accordance with the instructions of Airbus SB A330-29-3119 at original issue, or SB A340-29-4091 at original issue, as applicable to aeroplane type, are compliant with this paragraph requirements.</p> <p>(5) Accomplishment of the torque of the check valves and re-identification of the associated HP manifolds as required by paragraph (4) of this AD constitutes a terminating action for the repetitive inspections required by this AD.</p> <p>(6) Aeroplanes that have had Airbus modification (mod.) 201384 embodied during production are compliant with the requirements of paragraphs from (1) to (4) inclusive of this AD.</p> <p>(7) For aeroplanes post mod. 201384 or post SB A330-29-3119 at original issue or Revision 01 or SB A340-29-4091 at original issue or Revision 01, as applicable to aeroplane type: at each replacement of a check valve P/N CAR401, the replacement check valve P/N CAR401 must be torqued to 400 Nm during installation.</p>
Ref. Publications :	<p>Airbus AOT A330-29A3111 original issue dated 02 September 2009, or Revision 01 dated 08 October 2009.</p> <p>Airbus SB A330-29-3111 Revision 02 dated 23 June 2011.</p> <p>Airbus SB A330-29-3119 original issue dated 19 April 2011 or Revision 01 dated 09 December 2011.</p> <p>Airbus AOT A340-29A4086 original issue dated 02 September 2009, or Revision 01 dated 08 October 2009.</p> <p>Airbus SB A340-29-4086 Revision 02 dated 23 June 2011.</p> <p>Airbus SB A340-29-4091 original issue dated 19 April 2011 or Revision 01 dated 09 December 2011.</p> <p>The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.</p>
Remarks :	<ol style="list-style-type: none"> <li>1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.</li> <li>2. This AD was posted on 05 March 2012 as PAD 12-019 for consultation until 02 April 2012. The Comment Response Document can be found at <a href="http://ad.easa.europa.eu">http://ad.easa.europa.eu</a>.</li> <li>3. Enquiries regarding this AD should be referred to the Safety Information Section, Executive Directorate, EASA. E-mail <a href="mailto:ADs@easa.europa.eu">ADs@easa.europa.eu</a>.</li> <li>4. For any questions concerning the technical content of the</li> </ol>

	<p>requirements in this AD, please contact: AIRBUS – Airworthiness Office – EIAL; E-mail: <a href="mailto:airworthiness.A330-A340@airbus.com">airworthiness.A330-A340@airbus.com</a>.</p>
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