EASA AIRWORTHINESS DIRECTIVE AD No.: 2011-0071 Date: 18 April 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/Model designation(s) : Type Approval Holder's Name : AIRBUS A310 aeroplanes France N° 145 **TCDS Number :** Foreign AD : Not applicable Supersedure : None Hydraulic Power – Electrical Motor Pump Feeder Cables and **ATA 29** Pressure Hoses - Inspection / Repair / Placard Installation Airbus (formerly Airbus Industrie) Manufacturer(s): Applicability: A310 aeroplanes, all certified models, all serial numbers. Reason: An operator reported an electrical arc and a large hydraulic haze in the left hand Main Landing Gear (LH MLG) wheel bay that occurred during ground operation. The analysis revealed that this occurrence is likely the result of chafing between hydraulic high pressure hose and electrical wiring of the Green Electrical Motor Pump (EMP). This condition, if not detected and corrected, and in combination with a system failure leading to the use of the Green EMPs in flight, could lead to an uncontrolled and undetected fire in the MLG bay. For the reasons explained above, this AD temporarily prohibits the in-flight use of green EMPs, by mandating an update of the Aeroplane Flight Manual (AFM) limitations section and installation of a placard in the cockpit overhead panel. This AD requires also a one-time visual inspection of hydraulic pressure hoses and electrical wiring of Green EMPs and corrective action(s), depending on findings. Effective Date: 02 May 2011

Required Action(s) and Compliance	Required as indicated, unless accomplished previously:
Time(s):	(1) From the effective date of this AD, the in-flight use of green EMPs is prohibited. For that purpose, before next flight, do the following actions:
	(1.1) Install in the cockpit on the HYDRAULIC POWER overhead panel 427VU, a locally manufactured self-adhesive placard prohibiting the in-flight use of the Green EMPs in accordance with instructions of the Airbus All Operator Telex (AOT) A310-29A2101 Revision 01, as applicable for aeroplanes equipped with EATON (formerly VICKERS) hydraulic EMPs, or Airbus AOT A310-29A2102, as applicable for aeroplanes equipped with PARKER (formerly ABEX) hydraulic EMPs.
	(1.2) Update the Limitations section of the applicable AFM to prohibit the in-flight use of green EMPs.
	Insertion of a copy of this AD into the AFM Limitations section is acceptable to comply with the requirement of paragraph (1.2) of this AD.
	(2) Within 500 flight hours or 4 months after the effective date of this AD, whichever occurs first, perform a one-time visual inspection of the hydraulic pressure hoses, of the electrical conduits, feeder cables and of the associated clamping devices at frame 54 as well as the electrical conduits, feeder cables underneath the clamps (this inspection requires removal of the concerned clamps) in accordance with the instructions of Airbus AOT A310-29A2101 Revision 01, or Airbus AOT A310-29A2102, as applicable to the installed EMP.
	(3) If any damage is found during the visual inspection as required by paragraph (2) of this AD, before further flight, replace or repair the affected parts (hydraulic pressure hoses, electrical conduits, feeder cables, clamps and spacer, if installed), in accordance with the instructions of Airbus AOT A310-29A2101 Revision 01, or Airbus AOT A310-29A2102, as applicable to the installed EMP.
	(4) After compliance with the requirements of paragraph (2) and (3), as applicable, the placard as required by paragraph (1.1) and the update of the Limitations section as required by paragraph (1.2) of this AD must be removed from the aeroplane and from the AFM, respectively.
Ref. Publications:	All Operator Telex A310-29A2101 Revision 01, dated 12 April 2011.
	All Operator Telex A310-29A2102 Original issue, dated 12 April 2011.
	The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.
Remarks :	 If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.
	 The required actions and the risk allowance have granted the issuance of a Final AD with Request for Comments, postponing the public consultation process after publication.
	 Enquiries regarding this AD should be referred to the Airworthiness Directives, Safety Management & Research Section, Certification Directorate, EASA. E-mail: <u>ADs@easa.europa.eu</u>.
	 4. For any question concerning the technical content of the requirements in this AD, please contact: AIRBUS SAS – EAW (Airworthiness Office, Telephone: + 33 5 61 18 41 39, Fax: + 33 5 61 93 44 51).