EASA	AIRWORTHINESS DIRECTIVE
	AD No.: 2012-0014 **Date: 23 January 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].

Type Approval Holder's Name :	**Type/Model designation(s) :**
Learjet, Inc.	Model 45 aeroplanes

TCDS Number :	EASA.IM.A.020
Foreign AD:	FAA AD 2011-25-03 dated 19 December 2011.
Supersedure:	None. This AD deviates from, and thereby replaces, State of Design FAA AD 2011-25-03 for the affected aeroplanes registered in an EU Member State or associated country.

ATA 05	**Time Limits / Maintenance Checks – Main Landing Gear Actuator End Cap – Reduced Life Limit**
Manufacturer(s):	Learjet, Inc.
Applicability:	Model 45 aeroplanes, all serial numbers.
Reason:	A report was received by the FAA, describing the potential for fatigue cracking of the end cap of the Learjet 45 main landing gear (MLG) actuator, Part Number (P/N) 200-0303, prior to the published life limitation (17 000 flight cycles), which had been established during certification to prevent fatigue cracking of the end cap of the MLG. This condition, if not corrected, could result in failure of the MLG actuator upon landing, or failure of the MLG to extend or retract during flight. To address this potential unsafe condition, the FAA issued AD 2011-25-03, to require revising the approved maintenance program to incorporate the reduced life limit (2 387 flight cycles) for the MLG actuator end cap. During the validation of the Learjet 45 in Europe, finalised by the JAA in 1998, another methodology (different scatter factor) was used, which resulted in a life limit (13 700 flight cycles) for the affected component, lower than that required by the FAA. More recently, the same principle has been applied for the reduced life limit that was approved to address the potential unsafe condition, as described above. For the reasons described above, this EASA AD requires the same actions as required by FAA AD 2011-25-03, but deviates from that AD by requiring the implementation of a lower life limit, 1 988 flight cycles.
Effective Date:	23 January 2012

Required Action(s) and Compliance Time(s):	Required as indicated, unless accomplished previously: (1) Before a MLG actuator end cap, P/N 200-0303, accumulates 1 988 flight cycles (FC) after its first installation on an aeroplane, or within 25 FC after the effective date of this AD, whichever occurs later, replace the MLG actuator end cap with a serviceable part. (2) After the initial replacement as required by paragraph (1) of this AD, before each P/N 200-0303 MLG actuator end cap accumulates 1 988 FC since its first installation on an aeroplane, replace the part with a serviceable part. (3) From the effective date, do not install a P/N 200-0303 MLG actuator end cap on an aeroplane, unless it has been determined that the part has not accumulated or exceeded 1 988 FC since its first installation on an aeroplane. (4) Compliance with the requirements as required by paragraphs (1), (2) and (3) of this AD can be demonstrated by: (4.1) Revising as follows, the approved aircraft maintenance programme (AMP) on the basis of which the operator or the owner ensures the continuing airworthiness of each operated aeroplane: Incorporate inspection reference number (IRN) T3220067 (Main Landing Gear Actuator End Cap P/N 200-0303), as specified in Learjet 40 Temporary Revision (TR) L40AMM4-23, to Learjet 40 Maintenance Manual EASA Supplement MM-105-EASA; or in Learjet 45 TR L45AMM4-34, to Learjet 45 JAA Supplement MM-104-JAA, as applicable to aeroplane configuration. (4.2) Complying with the approved AMP described in paragraph (4.1) of this AD.
Ref. Publications:	Learjet Inc. Model 45 Maintenance Manual JAA Supplement MM-104-JAA, Temporary Revision L45AMM4-34, dated 24 January 2011. Learjet Inc. Model 45 (commercial designation Learjet 40) Maintenance Manual EASA Supplement MM-105-EASA, Temporary Revision L40AMM4-23, dated 24 January 2011. 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. 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. FAA AD 2011-25-03 was previously shown on the Agency website as ‘adopted’ – that action was in error and has now been corrected by the publication of this AD. 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: Learjet, Inc., One Learjet Way, Wichita, Kansas 67209-2942, United States of America, telephone + 1 316-946-2000; fax + 1 316-946-2220 email ac.ict@aero.bombardier.com Internet http://www.bombardier.com.