



No.	CF-2011-36R1	1/3
Issue Date	3 October 2012	

AIRWORTHINESS DIRECTIVE

The following airworthiness directive (AD) may be applicable to an aircraft which our records indicate is registered in your name. ADs are issued pursuant to **Canadian Aviation Regulation (CAR) 521 Division X**. Pursuant to **CAR 605.84** and the further details of **CAR Standard 625, Appendix H**, the continuing airworthiness of a Canadian registered aircraft is contingent upon compliance with all applicable ADs. Failure to comply with the requirements of an AD may invalidate the flight authorization of the aircraft. Alternative means of compliance shall be applied for in accordance with **CAR 605.84** and the above-referenced **Standard**.

This AD has been issued by the Continuing Airworthiness Division (AARDG), National Aircraft Certification Branch, Transport Canada, Ottawa, telephone 613 952-4357.

Number:	CF-2011-36R1
Subject:	Main Landing Gear – Retraction Actuator Corrosion
Effective:	18 October 2012
Revision:	Supersedes Airworthiness Directive CF-2011-36, dated 10 September 2011
Applicability:	Bombardier Inc. Aeroplanes: Model CL-600-2C10, serial numbers 10002 and subsequent Models CL-600-2D15 and CL-600-2D24, serial numbers 15001 and subsequent
Compliance:	As indicated below, unless already accomplished.
Background:	Corrosion of the main landing gear (MLG) retraction actuator components was found in-service, either at the interface of the rod end and the piston or at the bracket and its related pins. This can cause the MLG retraction actuator to disconnect, leading to an MLG extension without damping, and a potential for MLG structural damage and possible collapse during landing. This AD mandates the inspection and rectification of the MLG retraction actuator components. This revision is to mandate the installation of the new retraction actuator jam nut. This revision also corrects the background information and updates Service Bulletin (SB) references.
Corrective Actions:	Part I - Inspection of the MLG Retraction-Actuator For any MLG retraction actuator assembly with part number and serial number listed in Paragraph 1.A. Effectivity of Bombardier SB 670BA-32-031, Revision C, dated 17 April 2012, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada, perform a detailed visual inspection of the retraction actuator assembly for evidence of corrosion and security of jam nut, and rectify as applicable, in accordance with Part A of the Accomplishment Instructions of the above-mentioned SB using the following schedule: A. Initially, as of the effective date of this AD: 1. For MLG retraction actuator assemblies that have accumulated more than 8000 hours air time since new or since overhaul, or have been in service for more than 4 years since new or since overhaul: within 1200 hours air time or 12 months, whichever occurs first, from the effective date of this AD. 2. For MLG retraction actuator assemblies that have accumulated 8000 hours air time or less since new or since overhaul, or have been in service for 4 years or less since new or since overhaul: before reaching 9200 hours air time or 5 years into service, whichever occurs first.

Pursuant to **CAR 202.51** the registered owner of a Canadian aircraft shall, within seven days, notify the Minister in writing of any change of his or her name or address.

To request a change of address, contact the **Civil Aviation Communications Centre (AARC)** at **Place de Ville, Ottawa, Ontario K1A 0N8**, or **1-800-305-2059**, or **www.tc.gc.ca/civilaviation/communications/centre/address.asp**

B. Subsequently, at intervals not to exceed 1200 hours air time or 12 months, whichever occurs first.

The inspection specified in Part I of this AD is not required for any retraction actuator assembly identified with Mod Status "32-64" on the identification plate.

Inspection and rectification in accordance with Bombardier SB 670BA-32-031, Revision B, dated 29 July 2011, Revision A, dated 09 June 2011, or Initial Issue, dated 14 March 2011, also meet the requirements of Part I of this directive.

Part II - Inspection of the MLG Retraction-Actuator Bracket and Related Pins

For any MLG dressed shock strut with part number and serial number listed in Paragraph 1.A. Effectivity of Bombardier SB 670BA-32-033, Revision B, dated 26 June 2012, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada, perform a detailed visual inspection of the retract-actuator bracket assembly, associated pins and the mating lugs on the outer cylinder for evidence of corrosion, and rectify as applicable, in accordance with the above-mentioned SB within 4400 hours air time or 24 months, whichever occurs first, from the effective date of the original issue of this AD (22 September 2011).

Inspection and rectification in accordance with Bombardier SB 670BA-32-033, Revision A, dated 29 July 2011, or Initial Issue, dated 14 March 2011, also meet the requirements of Part II of this directive.

Note: The part numbers and serial numbers of the MLG dressed shock strut has been clarified in the above-mentioned service bulletin. Operators are advised to perform a records check to ensure all required actions have been completed.

Part III - Replacement of the MLG Retraction Actuator

As of the effective date of this directive, no person is permitted to install on an aeroplane, an MLG retraction actuator assembly with part number and serial number listed in Paragraph 1.A. Effectivity of Bombardier SB 670BA-32-031, Revision C, dated 17 April 2012, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada, unless a detailed visual inspection of the retraction actuator assembly has been performed, for evidence of corrosion and security of jam nut, and rectification as applicable, in accordance with Part A of the Accomplishment Instructions of the above-mentioned SB and the repetitive inspection of Part I of this AD is subsequently followed.

The inspection specified in Part I of this directive is not required for any retraction actuator assembly identified with Mod Status "32-64" on the identification plate.

Part IV - Replacement of the MLG Dressed Shock Strut

As of the effective date of this directive, no person is permitted to install on an aeroplane, an MLG dressed shock strut with part number and serial number listed in Paragraph 1.A. Effectivity of Bombardier SB 6470BA-32-033, Revision B, dated 26 June 2012, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada, unless the inspection, and rectification as applicable, specified in Part II of this directive has been completed.

Part V - Installation of the New Jam Nut

For any MLG retraction actuator assembly with part number and serial number listed in Paragraph 1.A. Effectivity of Bombardier SB 670BA-32-031, Revision C, dated 17 April 2012, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada, install the new jam nut part number 49606-5 in accordance with Part B of the Accomplishment Instructions of the above-mentioned SB within 20 000 hours air time or 10 years, whichever occurs first, from the effective date of this AD.