



No.	CF-2010-15	1/2
Issue Date	13 May 2010	

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- 2010-15

Subject: Main Landing Gear - Piston Axle Failure

Effective: 1 June 2010

Applicability: Bombardier Inc. Models CL-600-2C10, Serial Number (S/N) 10003 through 10265 and CL-600-2D15 and CL-600-2D24, S/N 15001 through 15154, with Main Landing Gear (MLG) piston axle, Part Number (P/N) 49203-3 or 49203-5, installed.

Compliance: As indicated below.

Background: There have been two reported cases of failure of the MLG piston axle, P/N 49203-3 or 49203-5, resulting from fretting between the inboard axle sleeve and axle thrust face, damage to the protective coating and consequent stress corrosion. In both cases, the MLG did not collapse.

In order to avoid future axle failures, which could potentially result in gear collapse and collateral damage, this directive mandates repetitive visual inspection and repair, as necessary, of the MLG piston axles, P/N 49203-3 and 49203-5.

Note: This directive is not applicable to piston axles, P/N 49203-7 and 49203-9, which were installed in production on CL-600-2C10 aircraft S/N 10266 and subsequent, and on CL-600-2D15 and CL-600-2D24 aircraft, S/N 15155 and subsequent.

Corrective Actions: **Part I: Initial Inspection**
A. Schedule:

- 1) For a piston axle that has been in service for 48 months or more at the effective date of this directive, carry out the initial inspection and repair, as necessary, as specified in Part I, paragraph B. of this directive, within 12 months from the effective date of this directive.
- 2) For a piston axle that has been in service for 24 months or more, but less than 48 months, at the effective date of this directive, carry out the initial inspection and repair, as necessary, as specified in Part I, paragraph B. of this directive, within 24 months from the effective date of this directive.

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

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- 3) For a piston axle that has been in service for less than 24 months at the effective date of this directive, carry out the initial inspection and repair, as necessary, as specified in Part I, paragraph B. of this directive, within 36 months from the effective date of this directive.

Note: For aeroplanes that have mark "32-45" in the MOD STATUS field of the piston axle nameplate, or have had one of the Bombardier Repair Engineering Orders (REO) listed in paragraph 1.D of Bombardier Service Bulletin (SB) 670BA-32-023, Revision C, dated 29 January 2009, incorporated, the initial inspection has already been accomplished. Refer to Part II for repeat inspection requirements.

B. Procedure

Carry out the inspection and repair, as necessary, of the piston axle P/N 49203-3 or P/N 49203-5 in accordance with the Accomplishment Instructions in Bombardier SB 670BA-32-023, Revision C, dated 29 January 2009 or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

Note: Inspection and repair, as necessary, of the piston axle in accordance with the original issue, dated 24 October 2007, Revision A, dated 7 January 2008 or Revision B, dated 5 March 2008, of Bombardier SB 670BA-32-023 also meets the intent of Part I of this directive.

Part II: Repeat Inspections

Within 30 months following each previous inspection or repair:

Repeat the inspection and repair, as necessary, of the piston axle P/N 49203-3 or P/N 49203-5 in accordance with the Accomplishment Instructions in Bombardier SB 670BA-32-023, Revision C, dated 29 January 2009 or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

Part III: Terminating Action

Installation of piston axle, P/N 49203-7 or P/N 49203-9, constitutes terminating action to both Parts I and II of this directive.

Authorization: For Minister of Transport, Infrastructure and Communities

ORIGINAL SIGNED BY

Derek Ferguson
Chief, Continuing Airworthiness

Contact: Richard Topham, Continuing Airworthiness, Ottawa, telephone 613-952-4357, facsimile 613-996-9178 or e-mail CAWWEBFeedback@tc.gc.ca or any Transport Canada Centre.