



No.	CF-2003-05R2	1/2
Issue Date	10 July 2009	

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) 593**. 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-2003-05R2

Subject: Air Supply Ducts and Bulkhead Check Valve – Inspections

Effective: 29 July 2009

Revision: Supersedes Airworthiness Directive (AD) CF-2003-05R1 issued 7 February 2006.

Applicability: Bombardier Inc. Model CL-600-2B19, serial number 7003 through 7477.

Compliance: As indicated below, unless already accomplished.

Background: The manufacturing procedure used to attach the flanges to the air supply ducts has resulted in bonds that may lose shear strength at elevated temperatures. This condition could potentially cause the duct to disconnect and in combination with the failure of a bulkhead check valve, result in the in-flight loss of aircraft pressurization.

This revision has been issued to cancel Part A of this directive. It has been superseded by AD CF-2009-31, issued 8 July 2009. The applicability of the directive has also been revised to reflect the applicability of Part B. There are no changes to Part B.

Corrective Action: **Part A – Bulkhead Check Valve**

1. Part A of this directive is superseded and cancelled by AD CF-2009-31, dated 8 July 2009.

Part B – Air Supply Ducts – Aircraft S/N 7003 through 7477

Air Supply Ducts – Compliance Schedule

2. Approved instructions for complying with requirements of Part B of this directive are detailed in the Accomplishment Instructions of Bombardier Alert Service Bulletin A601R-21-053 dated 8 November 2001, ASB A601R-21-053, Revision A, dated 28 January 2003, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.
3. Prior to accumulating 500 hours air time after 18 March 2003, comply with either of the following:
 - (a) Perform a visual inspection of the air supply ducts as detailed in paragraph 5 of this directive; or
 - (b) Replace the air supply ducts as detailed in paragraph 7 of this directive.
4. Prior to the accumulation of 5000 hours air time after 18 March 2003, comply with either of the following:
 - (a) Rework undamaged air supply ducts in accordance with paragraph 6 of this directive; or
 - (b) Replace the air supply ducts as detailed in paragraph 7 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

Air Supply Ducts – Visual Inspection

5. Remove the left-hand (LH) and right-hand (RH) air supply ducts and perform a detailed visual inspection of the two removed air supply ducts for disbonding of the flanges, and for tearing, delaminating or cracking of the Kevlar.
 - (a) If damage to the ducts is observed, prior to further flight, install new air supply ducts as detailed in paragraph 7 of this directive.
 - (b) If no damage is observed, comply with one of the following options:
 - (i) Re-install the undamaged duct and repeat the detailed visual inspection of the ducts in accordance with Paragraph 5 of this directive every 500 hours air time; or
 - (ii) Rework the air supply duct in accordance with paragraph 6 of this directive; or
 - (iii) Install new air supply ducts in accordance with paragraph 7 of this directive.

Air Supply Ducts – Rework

6. Rework undamaged air supply ducts in accordance with Bombardier Repair Engineering Order (REO) 601R-21-51-009, Revision C or Revision E. Rework of the air supply ducts provides both terminating action for the visual inspection required under paragraph 5 of this directive and an alternate means of compliance with the requirement to install new ducts under paragraph 7 of this directive.

Air Supply Ducts - Installation of New Ducts

7. Install new air supply ducts as follows:
 - (a) For aircraft S/N 7003 through 7349, remove air supply ducts P/N 601R95216-1 (LH) and P/N 601R95216-2(RH) and install air supply ducts P/N 601R95216-39 (LH) and P/N 601R95216-40 (RH);
 - (b) For aircraft S/N 7350 through 7477, remove air supply ducts P/N 601R95216-25 (LH) and P/N 60 R95216-26 (RH) and install air supply ducts P/N 601R95216-37 (LH) and P/N 601R95216-38 (RH).
8. Installation of new air supply ducts provides terminating action for the visual inspection required under paragraph 5 of this directive.

Authorization: For Minister of Transport, Infrastructure and Communities

D. Ferguson
Chief, Continuing Airworthiness

Contact: Mr. Richard Topham, Continuing Airworthiness, Ottawa, telephone 613 952-4428, facsimile 613 996-9178 or e-mail richard.topham@tc.gc.ca or any Transport Canada Centre.