No. CF-2011-10	1/2
Issue Date	
13 May 2011	

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- 2011-10

Subject: Oxygen Supply System – Deformation of the Pressure Regulator on the Oxygen

Cylinder and Regulator Assembly

Effective: 26 May 2011

Applicability: Bombardier Inc. Models BD-700-1A10 and BD-700-1A11, Serial Numbers 9002

through 9126, 9128 through 9312, 9314 through 9322, 9324 through 9335, 9337, 9338, 9340, 9341, 9343, 9344, 9346, 9347, 9350, 9353, 9355, 9356, 9358, 9361, 9365,

9372, 9374, 9384, 9402 and 9403.

Compliance: Before 31 December 2011, unless already accomplished.

Background: During a routine inspection, deformation was found at the neck of the pressure regulator

body on the oxygen Cylinder and Regulator Assemblies (CRA).

An investigation by the vendor, Avox Systems Inc., revealed that the deformation was attributed to two (2) batches of raw material that did not meet the required tensile strength. This may cause elongation of the pressure regulator neck, which could result in rupture of the oxygen cylinder, and in the case of cabin depressurization, oxygen not being available when required.

This directive mandates the replacement of oxygen CRAs containing pressure regulators, part number (P/N) 806370-06, that do not meet the required material properties.

Corrective Actions:

Part I – Inspection of the oxygen pressure regulator serial number:

- A. Inspect the serial number of each oxygen pressure regulator, P/N 806370-06, to determine if the serial number is listed in Table 2 of the applicable Bombardier Service Bulletin (SB) 700-35-011, Revision 1, or SB 700-1A11-35-010, Revision 1, both dated 01 February 2011, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.
- B. If the serial number of the pressure regulator, P/N 806370-06, is listed in Table 2 of the above-mentioned SBs, proceed to Part II of this directive.
- C. If the serial number of the pressure regulator, P/N 806370-06, is not listed in Table 2 of the above-mentioned SBs, no further action is required and compliance with this directive is complete.



Part II – Replacement of the affected oxygen CRA:

Replace the affected oxygen CRA, in accordance with the accomplishment instructions in Section 2. C. Part B, of the above-mentioned SBs.

Part III - Future Installation of the oxygen CRA:

As of the effective date of this directive, installation of an oxygen pressure regulator, P/N 806370-06, with a serial number listed in Table 2, of the above-mentioned SBs, is not permitted on any BD-700-1A10 or BD-700-1A11 aeroplane unless the serial number has a suffix "A" beside the serial number.

Authorization: For the Minister of Transport, Infrastructure and Communities

ORIGINAL SIGNED BY

Derek Ferguson

Chief, Continuing Airworthiness

Contact: Mr. Robert Farinas, Continuing Airworthiness, Ottawa, telephone 613-952-4357,

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Canada Centre.