



No.	<b>CF-2010-21</b>	1/1
Issue Date	<b>20 July 2010</b>	

# 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- 2010-21

**Subject:** Fuel System – Inadequate Electrical Bonding of the Motive Flow Check Valve

**Effective:** 16 August 2010

**Applicability:** All Bombardier Inc. DHC-8 Aeroplanes Models 400, 401, and 402, Serial Numbers 4001 through 4190, 4199 through 4201 and 4203 through 4216, equipped with Motive Flow Check Valve Part Number 2960018-101.

**Compliance:** As indicated below unless already accomplished

**Background:** During production quality inspections of the aeroplane fuel motive flow system, it was discovered that some motive flow check valves (MFCV) were manufactured with an outlet fitting containing red anodized threads. These MFCV do not provide adequate electrical bonding between the valve and the adjacent fitting.

In the absence of proper electrical bonding within the motive flow system, the aeroplane fuel tank could be exposed to ignition sources in the case of a lightning strike.

This directive is issued to verify the proper configuration of the MFCV and if required, replace the affected MFCV with a MFCV that has a chemically filmed (gold color) outlet valve fitting, which provides adequate electrical bonding.

- Corrective Actions:**
1. Within 6000 hours air time from the effective date of this directive, inspect the threads of the outlet fitting of the MFCV part number (P/N) 2960018-101 installed in the left and right wing fuel tanks in accordance with Bombardier Service Bulletin (SB) 84-28-08, initial revision, dated 11 March 2010, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada. If the MFCV has a chemical film (gold color) check valve outlet fitting, no further action is required other than compliance with paragraph 3 of this directive.
  2. If the MFCV has a red anodized check valve outlet fitting, replace this MFCV before further flight with a MFCV having a chemical film (gold color) outlet fitting in accordance with Bombardier SB 84-28-08, initial revision, dated 11 March 2010, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.
  3. As of the effective date of this directive, no replacement MFCV P/N 2960018-101 with a red anodized check valve outlet fitting is allowed to be installed on DHC-8 series 400 aeroplanes.

**Authorization:** For Minister of Transport, Infrastructure and Communities

ORIGINAL SIGNED BY  
 Robin Lau for  
 Derek Ferguson  
 Chief, Continuing Airworthiness

**Contact:** Mr. Gordanko Jeremic, Continuing Airworthiness, Ottawa, telephone 613-952-4357, facsimile 613-996-9178 or e-mail [CAWWEBFeedback@tc.gc.ca](mailto:CAWWEBFeedback@tc.gc.ca) or any Transport Canada Centre.

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](http://www.tc.gc.ca/civilaviation/communications/centre/address.asp)

