



No.	CF-2012-03	1/2
Issue Date	11 January 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- 2012-03
- Subject:** Electrical Power – Wire Chafing within the Alternating Current Contactor Box
- Effective:** 26 January 2012
- Applicability:** Bombardier Inc. DHC-8 Aeroplane Models 400, 401 and 402, Serial Numbers 4001 and subsequent.
- Compliance:** As indicated below, unless already accomplished.
- Background:** There has been one (1) reported in-service incident where the propeller de-icing system became unavailable due to burnt/chafed wires within the Alternating Current Contactor Box (ACCB). There has also been a number of additional minor events of wires found chafed within ACCBs.

An investigation revealed that inadequate clearance between the wires and metallic structure within the ACCB could cause chafed wires.

Damaged, chafed or loose wiring within an ACCB could affect the operation of the windshield heater, ice detector, angle of attack (AOA) vane heater, pitot probe heater, engine intake heater or propeller de-icing system. Loss of one of these systems could adversely affect the aeroplane’s flight characteristics in icing conditions.

This Airworthiness Directive (AD) mandates the inspection and rectification of the wiring installation within each ACCB.

- Corrective Actions:** **Part I – Applicable to Aeroplane Serial Numbers 4001 through 4354 and 4356 through 4366.**

Within 6000 hours air time or 36 months, whichever occurs first, from the effective date of this AD, inspect and rework the ACCB in accordance with the Accomplishment Instructions in the applicable Bombardier Service Bulletins (SB) listed below, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

Service Bulletin	Date
84-24-47 Revision A	14 September 2011
84-24-48 Revision A	14 September 2011
84-24-49 Revision A	14 September 2011
84-24-50 Revision A	14 September 2011

Inspection and rework of the ACCB in accordance with the Initial Issue of the above-mentioned Service Bulletins satisfies the requirements of Part I of this AD.

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



Part II – Applicable to Aeroplane Serial Numbers 4001 and subsequent.

As of the effective date of this AD, no person may install an ACCB with the following combination of part numbers and series on any aeroplane:

Part Number	Series
1152130-6	1, 2, 4
1152148-6	1, 2, 4, 5
1152090-6	1, 2, 4
1152124-6	1, 2, 4, 5

Authorization: For the Minister of Transport, Infrastructure and Communities

ORIGINAL SIGNED BY

Derek Ferguson
Chief, Continuing Airworthiness

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