



No.	CF-2008-28	1/2
Issue Date	10 July 2008	

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), Aircraft Certification Branch, Transport Canada, Ottawa, telephone 613 952-4357.

Number: CF-2008-28

Subject: Spoiler Cable Disconnect Sensing Device – Incorrect Assembly

Effective: 31 July 2008

Applicability: Bombardier Inc. DHC-8 Models 102, 103, 106, 201, 202, 301, 311, 314 and 315, Serial Numbers 003 thru 644, and
Bombardier Inc. DHC-8 Models 400, 401 & 402, Serial Numbers 4003, 4004, 4006 and 4008 thru 4164.

Compliance: Is required as indicated unless already accomplished.

Background: A fuselage spoiler cable disconnect sensing device was installed in production on later DHC-8 Series 100/200/300 aircraft and on all DHC-8 Series 400 aircraft. On earlier DHC-8 Series 100/200/300 aircraft, its installation was mandated by Airworthiness Directive CF-2006-13.

However, several incorrectly assembled spoiler cable disconnect sensing devices have recently been discovered on in-service aircraft. A pulley and plastic spacer had been inadvertently interchanged during assembly of the device in production, resulting in the spoiler cable sliding on the spacer rather than on the pulley, as designed.

Continued operation with an incorrectly assembled spoiler cable disconnect sensing device could result in impaired operation of the sensing device and/or an eventual fuselage spoiler cable disconnect, with possible reduced controllability of the aircraft.

Corrective Actions: **A. Applicable to Bombardier Inc. DHC-8 Models 102, 103, 106, 201, 202, 301, 311, 314 and 315, Serial Numbers 003 thru 561:**

- 1) For aircraft that have already had the fuselage spoiler cable disconnect sensing device, Modsum 8Q100898, installed:

Note: Modsum 8Q100898 may have already been incorporated in service (Service Bulletin 8-27-89 and Airworthiness Directive CF-2006-13 apply).

Within 1000 hours air time after the effective date of this directive, inspect the fuselage spoiler cable disconnect sensing device for correct assembly. Paragraph 3.B, PART A of Bombardier Service Bulletin (SB) 8-27-107, initial issue dated 16 October 2007, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada, provides approved instructions for the inspection.

- 2) For aircraft that have not yet had the fuselage spoiler cable disconnect sensing device, Modsums 8Q100898, installed:

Concurrently with the incorporation of Modsums 8Q100898 (SB 8-27-89 and Airworthiness Directive CF-2006-13 apply), inspect the fuselage spoiler cable disconnect sensing device for correct assembly. Paragraph 3.B, PART A of Bombardier SB 8-27-107, initial issue dated 16 October 2007, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada, provides approved instructions for the inspection.

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



- 3) If the sensing device is correctly assembled, no further action is required.
- 4) If an incorrectly assembled sensing device is detected, inspect the components, replace if worn or damaged and correctly re-assemble the device. Paragraph 3.B, PART B of Bombardier SB 8-27-107, initial issue dated 16 October 2007, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada, provides approved instructions for re-assembly of the sensing device, including inspection of the pulley, plastic spacers and control cable, and replacement of any of these parts if worn or damaged.

B. Applicable to Bombardier Inc. DHC-8 Models 102, 103, 106, 201, 202, 301, 311, 314 and 315, Serial Numbers 562 thru 644:

Note: The fuselage spoiler cable disconnect sensing device was installed in production.

- 1) Within 1000 hours air time after the effective date of this directive, inspect the fuselage spoiler cable disconnect sensing device for correct assembly. Paragraph 3.B, PART A of Bombardier SB 8-27-107, initial issue dated 16 October 2007, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada, provides approved instructions for the inspection.
- 2) If the sensing device is correctly assembled, no further action is required.
- 3) If an incorrectly assembled sensing device is detected, inspect the components, replace if worn or damaged and correctly re-assemble the device. Paragraph 3.B, PART B of Bombardier SB 8-27-107, initial issue dated 16 October 2007, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada, provides approved instructions for re-assembly of the sensing device, including inspection of the pulley, plastic spacers and control cable, and replacement of any of these parts if worn or damaged.

C. Applicable to Bombardier Inc. DHC-8 Models 400, 401 & 402, Serial Numbers 4003, 4004, 4006 and 4008 thru 4164:

Note: The fuselage spoiler cable disconnect sensing device was installed in production.

- 1) Within 1000 hours air time after the effective date of this directive, inspect the fuselage spoiler cable disconnect sensing device for correct assembly. Paragraph 3.B, PART A of Bombardier SB 84-27-34, initial issue dated 3 October 2007, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada, provides approved instructions for the inspection.
- 2) If the sensing device is correctly assembled, no further action is required.
- 3) If an incorrectly assembled sensing device is detected, inspect the components, replace if worn or damaged and correctly re-assemble the device. Paragraph 3.B, PART B of Bombardier SB 84-27-34, initial issue dated 3 October 2007, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada, provides approved instructions for re-assembly of the sensing device, including inspection of the pulley, plastic spacers and control cable, and replacement of any of these parts if worn or damaged.

Authorization: For Minister of Transport, Infrastructure and Communities

Derek Ferguson
Acting Chief, Continuing Airworthiness

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