



No.	CF-2005-39	1/2
Issue Date	21 November 2005	

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-2005-39

Subject: Incorrect Rivets Installed at Control Column Torque Tube

Effective: 22 December 2005

Applicability: The following Bombardier Inc. Models:

1. DHC-8-102, DHC-8-103, DHC-8-106, DHC-8-201, DHC-8-202, DHC-8-301, DHC-8-311, DHC-8-314, DHC-8-315, Serial Numbers 528 through 602 and 606.
2. DHC-8-400, DHC-8-401 and DHC-8-402, Serial Numbers 4003, 4004, 4006, 4008 through 4080 and 4082.

Compliance: Compliance is required as indicated unless already accomplished.

Background: It was discovered on several aircraft that incorrect rivets having lower than required strength were installed on the control column torque tube during production. This condition, if not corrected, could result in shear failure of control column torque tube rivets during a jam of the pitch control circuit, when the pilot of the non-jammed pitch control tries to free the control by applying a large force.

Although there has been no known incident of rivet failure, such failure could reduce the controllability of the aircraft due to unexpected decoupling of the elevators and large unwanted deflection of the free elevator.

Corrective Action: 1. **Applicable to DHC-8-102, DHC-8-103, DHC-8-106, DHC-8-201, DHC-8-202, DHC-8-301, DHC-8-311, DHC-8-314, DHC-8-315, Serial Numbers 528 through 602, and 606.**

- (a) Within 5500 hours air time after the effective date of this directive, carry out an inspection of the left and right control column torque tube assemblies to determine the rivet types installed, in accordance with Part A of the Accomplishment Instructions of Bombardier Service Bulletin (SB) 8-27-104, dated 26 October 2004, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.
- (b) If any rivet is found to be of an incorrect type or the type cannot be identified, prior to further flight, rework the control column torque tube in accordance with Part B of the Accomplishment Instructions of the above noted SB 8-27-104.

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



2. Applicable to DHC-8-400, DHC-8-401 and DHC-8-402, Serial Numbers 4003, 4004, 4006, 4008 through 4080 and 4082.

- (a) Within 5500 hours air time after the effective date of this directive, carry out an inspection of the left and right control column torque tube assemblies to determine the rivet types installed, in accordance with Part A of the Accomplishment Instructions of Bombardier Service Bulletin (SB) 84-27-24, revision A, dated 28 September 2005, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.
- (b) If any rivet is found to be of an incorrect type or the type cannot be identified, prior to further flight, rework the control column torque tube in accordance with Part B of the Accomplishment Instructions of the above noted SB 84-27-24.

Authorization: For Minister of Transport



for B. Goyaniuk
Chief, Continuing Airworthiness

Contact: Mr. Philip Tang, Continuing Airworthiness, Ottawa, telephone 613 952-4379, facsimile 613 996-9178 or e-mail tangp@tc.gc.ca or any Transport Canada Centre.