



No.	CF-2002-44	1/2
Issue Date	18 October 2002	

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-2002-44
- Subject:** BOMBARDIER DHC- 8 – Vent And Scavenge Line Fittings
- Effective:** 29 November 2002
- Applicability:** Bombardier Inc. DHC-8 Models 102, 103, 106, 201, 202, 301, 311, 314 and 315, serial numbers 003 through 586.
- Compliance:** Within 12 months after the effective date of this directive unless already accomplished.
- Background:** A report has been received of a contact condition between the lockwire pigtail of a Wiggins fitting and the stiffener located on the inside surface of a wing fuel access cover. Contact between the pigtail and the stiffener could serve as an ignition source within the fuel tank if the cover were to be struck by lightning. An investigation indicated that the Wiggins coupler had been installed in an incorrect orientation.
- Corrective Actions:** Accomplish the following in accordance with Bombardier Alert Service Bulletin (ASB) A8-28-33 dated 03 June 2002 or later revisions approved by Chief, Continuing Airworthiness, Transport Canada.
1. Visually inspect the 10 Wiggins fitting assemblies – five in the LH and five in the RH wing tanks - to determine the orientation of the fittings. Ensure that the larger diameter nut at each Wiggins fitting is facing inboard. Before further flight, reorient any fittings that are not installed correctly. When reorienting fittings, inspect the condition of the O ring and replace if damaged.
 2. Visually inspect, and as appropriate, rework or replace, the lockwire on each Wiggins fitting to ensure compliance with the following installation requirements:
 - (a) The lockwire tail is located on the smaller diameter nut of the Wiggins fitting.
 - (b) The lockwire tail is trimmed to 0.25 inches maximum (3 twists) after the wire passes through the last hole in the fitting.
 - (c) The lockwire tail is bent back under the nut in the direction of increasing tension.
 3. Visually inspect the stiffeners on the underside of each fuel tank access cover for chafing damage. Remove any damage to the stiffeners by blending smooth up to the limits specified in the above referenced ASB. Contact Bombardier for repair instructions if removal of the damage requires blending in excess of limits specified.

4. Within 14 days of completing the inspection, report any cases of the lockwire tail chafing on the stiffener to Bombardier.

Authorization: For Minister of Transport



B. Goyaniuk
Chief, Continuing Airworthiness

Contact: Mr. Ian McLellan, Continuing Airworthiness, Ottawa, telephone (613) 952-4362, facsimile (613) 996-9178 or e-mail mclelli@tc.gc.ca or any Transport Canada Centre.