



No.	CF-2011-22	1/1
Issue Date	13 July 2011	

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-2011-22

Subject: Electrical – AC Generator Rotor Band Failure

Effective: 28 July 2011

Applicability: Bombardier Inc. DHC-8 Aeroplane, Models 400, 401, and 402, Serial Numbers 4001 through 4338 with Honeywell AC Generator part number 1152218-4 or 1152218-5 installed.

Compliance: As indicated below, unless already accomplished.

Background: There have been several reports of AC Generator failures in-service. The root cause has been attributed to an incomplete fusion in the weld joint of the AC Generator rotor band assembly. If not rectified, the rotor band may fail allowing the rotor windings to come in contact with the generator housing. The resulting debris could contaminate and potentially block the engine oil scavenge system, leading to loss of oil pressure and an in-flight shutdown of the engine.

Bombardier has issued Service Bulletin (SB) 84-24-45 to inspect, rebuild if necessary and re-identify the affected AC generators to a new part number (P/N) 1152218-6 unit in order to rectify the problem and ensure integrity of the affected units.

Corrective Actions: Within 6000 hours air time or 3 years after the effective date of this directive, whichever occurs first, inspect and re-identify the affected left and right AC generators in accordance with Bombardier Service Bulletin 84-24-45, dated 13 January 2011, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

Upon installation of AC Generator P/N 1152218-6 on the aeroplane, it is not permissible to replace it with AC Generator P/Ns 1152218-5, 1152218-4 or 1152218-3.

Authorization: For the Minister of Transport, Infrastructure and Communities

ORIGINAL SIGNED BY

Derek Ferguson
Chief, Continuing Airworthiness

Contact: Mr. Robin Lau, Continuing Airworthiness, Ottawa, telephone 613-952-4357, facsimile 613-996-9178 or email 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

