



No.	CF-2014-03R1	1/2
Issue Date 24 July 2014		

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-2014-03R1

ATA: 24 **Type Certificate:** A-142

Subject: Direct Current Starter/Generator – Terminal-Block Missing Insulating Sleeves

Effective Date: 7 August 2014

Revision: Supersedes AD CF-2014-03, issued 10 January 2014.

Applicability: Bombardier Inc. model DHC-8-102, -103, -106, -201, -202, -301, -311, -314 and -315 aeroplanes, serial numbers 003 through 672, with Terminal Block part number 82450075-001 installed.

Compliance: Within 2500 flight cycles or 14 months, whichever occurs first, from the effective date of this AD, unless already accomplished.

Background: There has been one in-service report of heat damage on a nacelle firewall found after an unsuccessful engine ground start. There have also been several reports of heat damage found on Direct Current Starter/Generator terminal block assemblies, part number (P/N) 82450075-001.

The investigation determined that in all cases, the heat damage was caused by arcing between the firewall and terminal blocks with missing insulating sleeves on the conductive bushings. The insulating sleeves may have been inadvertently omitted during the incorporation of Modsum 8/1926, or during the installation of terminal blocks P/N 82450075-001.

Arcing with the firewall becomes an ignition source, creating a potential fire hazard when combined with a fuel or hydraulic fluid leak.

The original issue of this AD mandated the inspection and rectification, as required, of the nacelle firewall and terminal block assembly P/N 82450075-001 installed with Modsum 8/1926.

Revision 1 of this AD is issued to revise the Applicability to ensure that the terminal blocks have the insulating sleeves installed.

Corrective Actions: A. Perform a detailed visual inspection of the right hand side and left hand side nacelle firewalls and terminal block assemblies in accordance with the Accomplishment Instructions in Bombardier Service Bulletin (SB) 8-24-92, Revision A, dated 11 April 2014 or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

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

- B. If no damage is found on the engine firewalls and the terminal blocks, and the insulating sleeves are installed on both terminal blocks, no further action is required; compliance with this AD is complete.
- C. If no insulating sleeves are installed, or the existing sleeves are damaged, and there is no damage to the nacelle firewall and terminal block, before further flight, install the replacement insulating sleeves in accordance with the Accomplishment Instructions of the above-mentioned SB. Compliance with this AD is complete.
- D. If no insulating sleeves are installed and there is no damage to the nacelle firewall, but there is damage to the terminal block, before further flight, replace the terminal block assembly in accordance with the Accomplishment Instructions of the above-mentioned SB. Compliance with this AD is complete.

Note: The replacement terminal block assembly already includes insulating sleeves.

- E. If no insulating sleeves are installed and there is damage to the nacelle firewall and the terminal block, contact the Bombardier Technical Help Desk for an approved repair and incorporate the repair before further flight. The approved repair must specifically reference this AD.

Inspection and rectification of the nacelle firewalls and terminal blocks, as required, in accordance with Bombardier SB 8-24-92, Initial Issue, dated 25 September 2013, prior to the effective date of this AD, also meets the requirements of this AD.

Authorization: For the Minister of Transport,

ORIGINAL SIGNED BY

Robin Lau
Acting Chief, Continuing Airworthiness

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