



# AIRWORTHINESS DIRECTIVE

*This Airworthiness Directive (AD) is issued pursuant to Civil Aviation Regulation (CAR) 521.427. No person shall conduct a take-off or permit a take-off to be conducted in an aircraft that is in their legal custody and control, unless the requirements of CAR 605.84 pertaining to ADs are met. Standard 625 - Aircraft Equipment and Maintenance Standards Appendix H provides information concerning alternative means of compliance (AMOC) to ADs.*

**Number:**

CF-2012-29R1

**Effective Date:**

28 April 2015

**ATA:**

24

**Type Certificate:**

A-142

**Subject:**

Electrical Power – Alternating Current Generator Mounting Plate Corrosion

**Revision:**

Supersedes AD CF-2012-29, issued 22 November 2012.

**Applicability:**

Bombardier Inc. DHC-8 aeroplane models 102, 103, 106, 201, 202, 301, 311, 314 and 315, serial numbers 003 through 672.

**Compliance:**

As indicated below, unless already accomplished.

**Background:**

An incident has been reported, on the DHC-8 aeroplane, where a pilot commanded in-flight engine shut down in response to an engine low oil pressure warning indication.

Further investigation revealed the mounting studs in the engine mounted alternating current (AC) generator mounting plate were pulled out of position and the threaded interface in the plate corroded. This resulted in a gap between the AC generator and the generator mounting plate, leading to the loss of engine oil and the ensuing illumination of the associated engine low oil pressure warning indication.

To ensure the integrity of the affected units, Part I of this AD mandates an inspection of the affected AC generator mounting adapters part numbers (P/N) 31708-500 or 31708-501, and, as applicable, replacement with new or serviceable mounting plates.

Part II of this AD mandates the incorporation of a repeat Maintenance Review Board (MRB) inspection applicable to the replacement of the AC generator mounting adapters P/Ns 31708-510 or 31708-511 only.

Revision 1 of this AD is issued to include additional aeroplane serial numbers (003 through 018) to the Applicability section, and to clarify the compliance schedules in Part I B. and Part II below.

**Corrective Actions:**

**Part I – Inspection / Rectification - Applicable to aeroplane equipped with the AC Generator Mounting Adapter Kit P/Ns 31708-500 or 31708-501.**

- A. Within 6000 hours air time, or 3 years, or when the AC generator is removed for service, whichever occurs first, from the effective date of the original issue of this AD (7 December 2012), perform an inspection of the affected AC generator mounting adapters, and replace as applicable with serviceable mounting adapters P/Ns 31708-510 or 31708-511, or serviceable mounting adapters P/Ns 31708-500 or 31708-501, in accordance with Bombardier Service Bulletin 8-24-88 Revision A dated 23 September 2014 or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

Compliance with Bombardier SB 8-24-88, dated 13 December 2011, prior to the effective date of this AD, meets the requirement of Part I A. of this AD.

- B. For in-service mounting adapters P/Ns 31708-500 or 31708-501, repeat the inspections in Part I A. of this AD at intervals not to exceed 6000 hours air time, or 3 years, or when the AC generator is removed for maintenance, whichever occurs first.
- C. For aeroplanes with AC generator mounting adapters P/Ns 31708-500 or 31708-501 older than 10 years from date of manufacture, within 1 year, or 2000 hours air time, or when the AC generator is removed for service, whichever occurs first, replace with the new AC generators mounting adapter kit P/Ns 31708-510 or 31708-511.

**Part II – Amendment to the Maintenance Schedule - Applicable to aeroplanes equipped with the AC Generator Mounting Adapter Kit P/Ns 31708-510 or 31708 511.**

Within 30 days after installation of AC Generator Mounting Adapter Kit P/Ns 31708-510 or 31708-511, incorporate MRB task 2420/14 into the approved scheduled maintenance program for the applicable aeroplane, as detailed in the applicable Temporary Revisions (TR) of the DHC-8 Maintenance Program Manual specified below:

DHC-8 Series	PSM No.	TR Number
100	1-8-7	MRB-153
200	1-82-7	MRB 2-31
300	1-83-7	MRB 3-162

**Authorization:**

For the Minister of Transport,

*ORIGINAL SIGNED BY*

Derek Ferguson  
Chief, Continuing Airworthiness  
Issued on 14 April 2015

**Contact:**

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