

# AIRWORTHINESS DIRECTIVE

This Airworthiness Directive (AD) is issued pursuant to Canadian 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:	Effective Date:
CF-2017-25	14 August 2017
ATA:	Type Certificate:
30	A-142

#### Subject:

Windows – Windshield Cracking

#### Applicability:

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

#### Compliance:

As indicated below, unless already accomplished.

#### Background:

There have been several reports of arcing and smoke emanating from the windshields. Investigation of these incidents revealed that de-icing fluid and water could enter between the windshields and side window posts, leading to possible damage of the windshield heater terminal lugs creating arcing and smoke. In addition, investigation also revealed that the windshield heater terminal lugs tend to loosen over time. Loose terminal lugs could also have a similar effect of arcing and smoke. Both events could lead to burning of the lugs and, due to the excessive heat, cracking of the windshields. If not corrected, these conditions could cause a loss of cabin pressure resulting in an emergency descent.

#### **Corrective Actions:**

 Within 30 days from the effective date of this AD, incorporate the Temporary Revisions (TRs) of the Maintenance Review Board (MRB) Tasks for General Visual Inspection of the windshield Moisture Seal Task Number 5610/01 as follows:

Aeroplane Model	Maintenance Requirement Manual (MRM)	Temporary Revision	Issue date
DHC-8 models -102, -103, and -106	PSM 1-8-7	MRB - 157	9 December 2016
DHC-8 models -201 and -202	PSM 1-82-7	MRB 2-36	9 December 2016
DHC-8 models -301, -311, -314, and -315	PSM 1-83-7	MRB 3-165	9 December 2016

 Within 1600 hours air time or 12 months, whichever occurs first, from the effective date of this AD, perform the initial General Visual Inspection of the Windshield Moisture Seal, MRB Task Number 5610/01. References for the applicable aeroplane models and MRM manuals are listed in the above table.

Incorporation of the superseding TRs or later revisions of the above mentioned MRMs approved by Transport Canada, also meets the requirements of paragraph 1 and paragraph 2 of this AD.

3. Within 8000 hours air time or 60 months, whichever occurs first, from the effective date of this AD, re-torque the windshield heater terminal lugs and apply the Humiseal coating to the screw heads of the windshield heater. Service Bulletin (SB) SB 8-30-41, Revision A, dated 24 March 2017, or later



revisions approved by the Chief, Continuing Airworthiness, Transport Canada, provides the approved instructions for re-torqueing of the terminal lugs screws and Humiseal application.

Accomplishment of the SB 8-30-41, initial issue, dated 31 March 2016, also meets the requirements of paragraph 3 of this AD.

## Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Matthew Weeks Acting Chief, Continuing Airworthiness Issued on 31 July 2017

### Contact:

Gordanko Jeremic, Continuing Airworthiness, Ottawa, telephone 1-888-663-3639, facsimile 613-996-9178 or e-mail <u>AD-CN@tc.gc.ca</u> or any Transport Canada Centre.