



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) with ADs.

Number:

CF-2023-55

Effective Date:

1 August 2023

ATA:

28

Type Certificate:

A-131

Subject:

Fuel – Fouling Condition between Fuel Scupper Attachment Bolt and Wire Harness

Applicability:

Bombardier Inc. model CL-600-2B16 aeroplanes, serial numbers 5775 through 5990 and 6050 through 6178.

Compliance:

As indicated below, unless already accomplished.

Background:

During aeroplane refueling, a spark was seen when the fuel cap chain contacted one of the fuel scupper bolts. An inspection was performed and one of the fourteen bolts that surround the fuel inlet was found touching an electrical wire behind the scupper. Due to vibrations during flight, the bolt damaged the wire insulation and when the bolt was grounded to the airframe a spark was generated.

This condition, if not corrected, could lead to electrical sparks during refueling resulting in a fire hazard. This AD requires the inspection of the affected wire bundle and repair if necessary, and the removal of one of the fuel scupper attachment bolts.

Corrective Actions:

Part I – Inspection of Electrical Wires

Within 48 months from the effective date of this AD, visually inspect the electrical wires attached to the aeroplane connector located behind the fuel scupper in accordance with Section 2.B of the Accomplishment Instructions of the applicable Bombardier Service Bulletin (SB) referenced in Table 1 below.

Part II – Repair of Electrical Wires and Removal of Fuel Scupper Attachment Bolts

If electrical wires are not damaged, before further flight, re-install the fuel scupper in accordance with Section 2.C of the Accomplishment Instructions of the applicable Bombardier (SB) referenced in Table 1 below.

If electrical wires are damaged, before further flight, repair the damaged wires and re-install the fuel scupper in accordance with Section 2.D of the Accomplishment Instructions of the applicable Bombardier (SB) referenced in Table 1 below.

Table 1 – SB References

Aeroplane Model (Marketing Designation)	Aeroplane Serial Number	Applicable Bombardier SB
CL-600-2B16 (Challenger 605)	5775 through 5990	605-28-014, Basic Issue dated 10 May 2023 or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada
CL-600-2B16 (Challenger 650)	6050 through 6178	650-28-003, Basic Issue dated 10 May 2023 or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Jenny Young
Chief, Continuing Airworthiness
Issued on 18 July 2023

Contact:

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