



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-2022-19

Effective Date:

3 May 2022

ATA:

49

Type Certificate:

A-234

Subject:

Auxiliary Power Unit (APU) – Tailcone Upper Firewall Cracking

Applicability:

Bombardier Inc. model BD-100-1A10 aeroplanes, serial numbers 20003 through 20500 and 20501 through 20916.

Compliance:

Within 48 months from the effective date of this AD, unless already accomplished.

Background:

Operators have reported finding cracks in the tailcone upper firewall where the APU muffler electrical bonding strap is attached. A crack in this area, if not addressed, can result in a breach of the firewall, reduced lightning strike protection and increased radio interference. Crack initiation is related to the rigid electrical bonding strap.

In order to prevent crack initiation, a flexible APU muffler jumper cable assembly has been introduced to replace the rigid APU electrical bonding strap.

This AD mandates the inspection of the tailcone upper firewall for cracks, the repair of cracks or defects (if required) and the replacement of the APU rigid electrical bonding strap with the flexible APU muffler jumper cable assembly.

Corrective Actions:

Part I – Detailed Visual Inspection of the Tailcone Upper Firewall

Perform a detailed visual inspection of the tailcone upper firewall for the presence of cracks or other defects in accordance with Section 2.B. of the Accomplishment Instructions of the applicable Bombardier service bulletin (SB) listed in Table 1 below, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

If no cracks or other defects are found, proceed to Part III of this AD.

Part II – Repair of the Tailcone Upper Firewall

If any cracks or other defects are found during the detailed visual inspection performed in Part I of this AD, before further flight, repair cracks or defects in accordance with Section 2.D. of the Accomplishment Instructions of the applicable Bombardier SB listed in Table 1 below, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada. The repair disposition must specifically refer to this AD.

Part III – Replacement of the APU Electrical Bonding Strap

Replace the APU electrical bonding strap with a new flexible APU muffler jumper cable assembly in accordance with Section 2.C. of the Accomplishment Instructions of the applicable Bombardier SB listed

in Table 1 below, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

Table 1 – SB References

Aeroplane Serial Number	Applicable SB
20003 through 20500	100-53-35 Basic Issue, dated 6 December 2021
20501 through 20916	350-53-004 Basic Issue, dated 6 December 2021

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Rémy Knoerr
Chief, Continuing Airworthiness
Issued on 19 April 2022

Contact:

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