



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-2020-16

Effective Date:

29 May 2020

ATA:

36

Type Certificate:

A-177

Subject:

Pneumatics - Cabin Pressure Control System - Safety Valve – Overtorque

Applicability:

Bombardier Inc. model BD-700-1A10 and BD-700-1A11 aeroplanes, serial numbers 9810 through 9838, 9840 through 9842, 9844 through 9846, 9854 and 9855.

Compliance:

As indicated below, unless already accomplished.

Background:

During post installation inspection at Bombardier, it was discovered that some of the left and right cabin pressure control system safety valves (part number (P/N) GG435-3006-3) at the FS861.00 pressure bulkhead in the baggage compartment, were not being installed in accordance with the drawing requirements. The trunnion nuts that are used to fasten the V-band clamp were found over-torqued. These V-Band clamps hold the valves to the aircraft bulkhead flange. Over-torquing of this V-Band clamp trunnion nut can cause reduction in the safety valve fatigue life or can cause damage to the safety valve flange. This condition, if not corrected could result in pressure leakage or cabin depressurization at altitude.

This AD mandates an inspection of the V-Band clamp trunnion nut torque on both the left and right cabin pressure control system safety valves (P/N GG435-3006-3). This AD also mandates an inspection of the valve and aircraft bulkhead flange for damage and deformations, replacing the valve and repairing damage if necessary.

Corrective Actions:

For the purpose of this AD, the term “the applicable SB” refers to the applicable service bulletin (SB) to the aeroplane model as listed in Table 1 of this AD.

- A. Prior to 31 August 2020, inspect the V-Band Clamp trunnion nut torque on both cabin pressure control system safety valves (P/N GG435-3006-3) in accordance with the instructions provided in Part A of the applicable SB.
- B. For safety valves with a V-Band Clamp trunnion nut torque of less than 80 lbf-in:
 - a. Before further flight, perform a visual inspection in accordance with paragraph Part A subsection (3)(a) of the applicable SB.
 - b. If no cracks or deformations exist on the safety valve or aircraft bulkhead flange, before further flight complete the remainder of the instructions contained in the applicable SB, omitting Part B.
 - c. If cracks or deformations exist on the safety valve, before further flight replace the safety valve in accordance with the instructions provided in Part B of the applicable SB.

- C. For safety valves with a V-Band Clamp trunnion nut torque of 80 lbf-in or higher:
- a. Before further flight, perform a magnification inspection in accordance with paragraph Part A subsection (4)(b) of the applicable SB.
 - b. If no cracks or deformations exist on the safety valve or aircraft bulkhead flange:
 - i. Before further flight, complete the remainder of the instructions contained in the applicable SB, omitting Part B.
 - ii. Prior to 31 August 2021, replace the safety valve in accordance with the instructions provided in Part B of the applicable SB.
 - c. If cracks or deformations exist on the safety valve, before further flight, replace the safety valve in accordance with the instructions provided in Part B of the applicable SB.

Table 1: SB References

Aeroplane Model	Bombardier SB
BD-700-1A10	SB 700-21-6009 Revision 02, dated 31 March 2020 or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada. Incorporation of SB 700-21-6009 Revision 01, dated 19 Mar 2020 or SB 700-21-6009 Basic Issue, dated 23 January 2020 prior to the effective date of this AD, also satisfies the requirements of this AD.
BD-700-1A11	SB 700-21-5009 Revision 02, dated 31 March 2020 or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada. Incorporation of SB 700-21-5009 Revision 01, dated 19 Mar 2020 or SB 700-21-5009 Basic Issue, dated 23 January 2020 prior to the effective date of this AD, also satisfies the requirements of this AD.

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Rémy Knoerr
Chief, Continuing Airworthiness
Issued on 15 May 2020

Contact:

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