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AD Number: CF-2022-25

# 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: Effective Date:
CF-2022-25 17 May 2022
ATA: Type Certificate:
32 A-177

Subject:

Landing Gear - Introduction of New Brake Accumulator Life Limit

Replacement:

Supersedes AD CF-2022-14, issued 31 March 2022.

Applicability:

Bombardier Inc. model BD-700-1A10 and BD-700-1A11 aeroplanes, serial numbers 9002 through 9998, and 60001 through 60046.

Compliance:

As indicated below, unless already accomplished.

### Background:

Following the in-service failures of brake accumulators on other types of aeroplanes with similar components, the supplier determined the need to introduce life limits (airworthiness limitations) on three brake accumulator part numbers.

A brake accumulator surpassing this life limit could fail, resulting in loss of hydraulic pressure on the associated hydraulic system, which services the main and emergency/parking brakes on the main landing gear. Loss of either of these hydraulic systems could result in reduced or total loss of available braking, and possibly a runway excursion.

AD CF-2022-14 was issued to require incorporation of the life limits into the maintenance schedule, in addition to determining the number of landings already accumulated on the brake accumulators in accordance with Bombardier Service Bulletins (SBs). This AD is issued to correct certain SB references within Table 1.

#### **Corrective Actions:**

- A. Within 90 days from 14 April 2022, the effective date of AD CF-2022-14:
  - a. Amend the operator's Transport Canada approved maintenance schedule to incorporate the following tasks, as introduced in Part 2 Section 5-10-11 of the applicable Time Limits/Maintenance Checks (TLMC) manuals as identified in Table 1 below, or later revisions approved by Transport Canada:
    - For aeroplane serial numbers 9002 through 9998, and 60001 through 60030: Chapter 5 Task No. 32–43–37–101 Discard the No. 2 Brake Accumulator, Part No. GW415–1250–1; and
    - ii. For aeroplane serial numbers 9002 through 9998, and 60001 through 60046: Chapter 5 Task No. 32–44–05–101 Discard the No. 3 Brake Accumulator, Part No. GW415–1200–1/–3, or Discard the No. 3 Brake Accumulator, Part No. GW415–1200–3 as applicable to the aeroplane's TLMC.



- b. For all aeroplanes identified in the Applicability Section of this AD: Determine the accumulated landings on the installed No. 2 and No. 3 brake accumulators in accordance with the accomplishment instructions of the applicable SB identified in Table 1 below, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada. Prior to the effective date of this AD, the use of SBs identified in Table 1 below at Basic Issue, is acceptable.
- B. Initial compliance with the above-mentioned life limits is required by the later of the following:
  - a. Before reaching the life limits indicated in the TLMC for the above-mentioned tasks; or
  - b. Within 6 months from 14 April 2022, the effective date of AD CF-2022-14.
- C. Thereafter, replace each component before exceeding the applicable life limit indicated in the TLMC for the above-mentioned tasks.

Table 1: Applicable TLMC Manuals and SBs

Aeroplane Model and TLMC Manual	Chapter 5 Task No. 32–43–37–101 (No. 2 Brake Accumulator) TLMC Revision, dated 17 August 2020	Chapter 5 Task No. 32–44–05–101 (No. 3 Brake Accumulator) TLMC Revision, dated 11 November 2021	SB Number, Revision 1, dated 8 March 2022
BD-700-1A10 GL 700 TLMC	Revision 31	Revision 33	700-32-043
BD-700-1A10 GL XRS TLMC	Revision 18	Revision 20	700-32-043
BD-700-1A10 GL 6000 TLMC	Revision 12	Revision 14	700-32-6020
BD-700-1A10 GL 6500 TLMC	See Note 1	Revision 3	700-32-6506
BD-700-1A11 GL 5000 TLMC	Revision 22	Revision 24	700-1A11-32-030
BD-700-1A11 GL 5000 GVFD TLMC	Revision 12	Revision 14	700-32-5020
BD-700-1A11 GL 5500 TLMC	See Note 1	Revision 3	700-32-5506

Note 1: This task was present at the initial revision of the TLMC for these aeroplanes, therefore no action is required by this AD to ensure compliance.

## **Authorization:**

For the Minister of Transport,

ORIGINAL SIGNED BY

Rémy Knoerr Chief, Continuing Airworthiness Issued on 3 May 2022

# Contact:

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