



# 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-2024-38

**Effective Date:**

26 November 2024

**ATA:**

27

**Type Certificate:**

A-234

**Subject:**

Flight Controls – Horizontal Stabilizer Trim Actuator (HSTA) – Incomplete Overhaul

**Applicability:**

Bombardier Inc. model BD-100-1A10, all serial numbers.

**Compliance:**

As indicated below, unless already accomplished.

**Background:**

Bombardier (BA) has been advised that the overhaul required by Certification Maintenance Requirement (CMR) task 27-40-00-104\* was not fully completed on some units. On the affected HSTAs, some of the parts that were required to be replaced as part of the overhauled task were re-installed in error. This condition has been isolated to 27 HSTAs that are installed on in-service aeroplanes. This condition, if not corrected can lead to the failure of HSTA components, which can contribute to horizontal stabilizer surface disconnect at the actuator level and could lead to loss of continued safe flight and landing.

To address this unsafe condition, this AD requires the removal and replacement of the affected HSTAs.

**Corrective Actions:**

For the purpose of this AD, the following definition applies:

**The applicable SB:** Bombardier Service Bulletin (SB) 100-27-23 and SB 350-27-014, Basic Issue, dated 28 October 2024, as applicable, or later revisions of these SBs approved by the Chief, Continuing Airworthiness, Transport Canada.

**Part I – Verification of the Aeroplane Technical Records**

- A. Verify the aeroplane technical records to determine if the serial number of the HSTA, part number (P/N) C47100-004 or C47100-005, is listed in Section 1.A. of the applicable BA SB, within the compliance time indicated in Table 1 below.

**Table 1 – Compliance Time**

<b>HSTA Total Hours Air Time Accumulated as of the Effective Date of this AD</b>	<b>Compliance Time</b>
10 000 or more	Before accumulating 14 500 component total hours air time, or 7500 component total flight cycles, or within 24 months from the effective date of this AD, whichever occurs first
9700 or more but less than 10 000	Before accumulating 14 500 component total hours air time, or 7500 component total flight cycles, or within 36 months from the effective date of this AD, whichever occurs first;
Less than 9700	Before accumulating 14 500 component total hours air time, or 7500 component total flight cycles, or within 48 months from the effective date of this AD, whichever occurs first

- B. If the verification of the aeroplane technical records cannot be performed or if an inspection of the HSTA is preferred to a records check, complete Section 2.B. part A of the Accomplishment Instructions of the applicable BA SB within the compliance time indicated in Table 1 above and proceed to Part I Paragraph C of this AD.
- C. If the serial number of the HSTA is not listed in Section 1.A. of the applicable BA SB, then Part II of this AD is not required.
- D. If the serial number of the HSTA, P/N C47100-004 or C47100-005, is listed in Section 1.A. of the applicable BA SB, then proceed to Part II of this AD.

### **Part II – Removal, Replacement and Installation**

Complete Section 2.C. and 2.D. of the Accomplishment Instructions of the applicable BA SB within the compliance time indicated in Table 1.

### **Part III – Installation Prohibition of Components**

As of the effective date of this AD, it is prohibited to install HSTA, P/N C47100-004 or C47100-005, as a replacement part, if the serial number is listed in Section 1.A. of the applicable BA SB, unless it has a modification plate marked with Moog SB C47100-27-07.

#### **Authorization:**

For the Minister of Transport,

*ORIGINAL SIGNED BY*

Jenny Young  
Chief, Continuing Airworthiness  
Issued on 12 November 2024

#### **Contact:**

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