



適航指令發布單

Airworthiness Directive Issuance Form

民航局 AD 編號 AD number	CAA-2020-08-007	發布日期 Date issued	2020/8/27
適用之航空產品 Applied to (models, serial numbers or part numbers, as applicable)	Bombardier Inc. model BD-700-1A10 and BD-700-1A11 aeroplanes, all serial numbers.		
主旨摘要	Flight Controls - Elevator Control System - Vertical Torque Tube Seizure - Sand Contamination of Bearing		
<div style="text-align: center;">民航局 CAA</div> <input type="checkbox"/> 本國產品 Native products <input type="checkbox"/> 其他個案 Other	<div style="text-align: center;">設計國民航主管機構 Original Authorities</div> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <input type="checkbox"/> FAA <input type="checkbox"/> EASA <input type="checkbox"/> Brazil <input checked="" type="checkbox"/> Transport Canada Civil Aviation <input type="checkbox"/> DGAC </div> <div style="width: 45%;"> <input type="checkbox"/> Germany LBA <input type="checkbox"/> CAA-NL <input type="checkbox"/> UK CAA <input type="checkbox"/> Japan CAB <input type="checkbox"/> CAA of Israel <input type="checkbox"/> Other _____ </div> </div>		
	設計國 AD 編號 Original AD number	CF-2020-29	
	1. 直接採用原 AD 之內容?(Is the original AD directly adopted?) <input checked="" type="checkbox"/> 是(Yes) <input type="checkbox"/> 否(No) _ a. 生效日期另訂為(Re-specify the effective date as) : _____ b. 執行時限另訂為(Re-specify the compliance time or period as) : _____ 2. 使用人是否需要將 AD 執行結果向民航局提出報告?(Do Users need to report the status of compliance to the CAA?) <input type="checkbox"/> 是(Yes) <input checked="" type="checkbox"/> 否(No)		
備註 Note	ATA 27, SB References: BD-700-1A10 700-27-083, Basic Issue 23 July 2020 and BD-700-1A10 700-27-6012, Basic Issue 23 July 2020, and BD-700-1A10 700-27-6503, Basic Issue 23 July 2020, and BD-700-1A11 700-1A11-27-041, Basic Issue 23 July 2020, and BD-7		
註： 1. AD 內容後附。 2. 航空器產品使用人得向民航局提出豁免、替代符合方法、執行時限之展延之申請。 3. 如有任何問題，請聯絡交通部民用航空局初始適航科。Tel：(02)2349-6331~3, Fax：(02)2545-8464, e-mail： adcaa@mail.caa.gov.tw Note： 1. The AD text is enclosed. 2. Exemption, an alternative method of compliance or adjustment of the compliance time may be proposed to the CAA for approval. 3. For further information, please contact Civil Aeronautics Administration on Tel：(02)2349-6331~3, Fax：(02)2545-8464, e-mail： adcaa@mail.caa.gov.tw			



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-2020-29

Effective Date:

4 September 2020

ATA:

27

Type Certificate:

A-177

Subject:

Flight Controls – Elevator Control System – Vertical Torque Tube Seizure – Sand Contamination of Bearing

Applicability:

Bombardier Inc. model BD-700-1A10 and BD-700-1A11 aeroplanes, all serial numbers.

Compliance:

As indicated below, unless already accomplished.

Background:

There have been two in-service findings where both the left-hand and right-hand elevator torque tube bearings were contaminated with sand and corroded, restricting free rotation. Free rotation of the elevator torque tubes is required for elevator operation. Left uncorrected, sand contamination of the elevator torque tube bearings could lead to binding or seizure of the bearings, and potentially a reduction in or loss of aeroplane pitch control.

This AD is issued to mandate visual inspections of elevator torque tube bearings as well as functional tests of the elevator control system, to detect and replace contaminated bearings. Findings of the inspection and functional tests are required to be reported to Bombardier Inc. to assist in the investigation of this issue and possible development of alternative or additional corrective actions.

Corrective Actions:

- A. Within 36 months from the effective date of this AD or within 63 months from the date of aeroplane manufacture, as identified on the identification plate of the aeroplane, whichever occurs later, perform an initial inspection of the left-hand and right-hand elevator torque tube bearings and perform the functional test of the elevator control system. Replace any contaminated bearings as required, and report the inspection findings in accordance with the Accomplishment Instructions of the applicable Bombardier Inc. Service Bulletin (SB) listed in Table 1 below, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.
- B. Following the initial inspection and functional test indicated above, repeat the inspection, functional test, on-condition bearing replacement and reporting of findings as indicated above, at intervals not to exceed 63 months.

Table 1: SB References

Aeroplane Model	Bombardier SB	Issue Date
BD-700-1A10	700-27-083, Basic Issue	23 July 2020
BD-700-1A10	700-27-6012, Basic Issue	23 July 2020
BD-700-1A10	700-27-6503, Basic Issue	23 July 2020
BD-700-1A11	700-1A11-27-041, Basic Issue	23 July 2020
BD-700-1A11	700-27-5012, Basic Issue	23 July 2020
BD-700-1A11	700-27-5503, Basic Issue	23 July 2020

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Rémy Knoerr
 Chief, Continuing Airworthiness
 Issued on 21 August 2020

Contact:

Christopher Banken, Continuing Airworthiness, Ottawa, telephone 888-663-3639, facsimile 613-996-9178
 or e-mail AD-CN@tc.gc.ca or any Transport Canada Centre.