



適航指令發布單

Airworthiness Directive Issuance Form

民航局 AD 編號 AD number	CAA-2021-09-002	發布日期 Date issued	2021/9/9
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	Oxygen - Passenger Oxygen Boxes Non-Conformity		
<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-2021-30	
	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) <div style="margin-left: 40px;"> 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) : _____ </div>		
	2. 使用人是否需要將 AD 執行結果向民航局提出報告?(Do <input type="checkbox"/> 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 35. Ref. BD-700-1A10 700-35-6004 Revision 5, dated 27 August 2021 and BD-700-1A10 700-35-6502 Basic Issue, dated 27 August 2021 and BD-700-1A11 700-35-5004 Revision 2, dated 27 August 2021 and BD-700-1A11 700-35-5502 Basic Issue, dated 27 August		
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-2021-30

Effective Date:

21 September 2021

ATA:

35

Type Certificate:

A-177

Subject:

Oxygen – Passenger Oxygen Boxes Non-Conformity

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 multiple instances in production whereby passenger oxygen box dual manifolds have had their pistons ejected during functional tests. An investigation discovered a non-conformity of the dual manifold which occurred during the manufacturing process of certain passenger oxygen boxes.

Left uncorrected, an affected unit may eject the piston in-service when used for emergency descent, smoke or fire, resulting in a high rate of oxygen leakage. Consequently, this leakage may deplete the oxygen for all passengers when it is still needed.

This AD requires a one-time inspection of the passenger oxygen boxes on certain aeroplanes to find and remove affected units, and a prohibition against installing affected passenger oxygen boxes on all aeroplanes.

Corrective Actions:

Part I – Inspection and Replacement of Affected Assemblies (Applicable to Aeroplane Serial Numbers 9771, 9779, 9784, 9788 through 9824, 9853 through 9857, 9859 through 9879, and 60001 through 60042)

Within the compliance times indicated below, inspect all passenger oxygen box dual manifold assemblies to verify if any are affected, and replace affected assemblies in accordance with the applicable Bombardier service bulletin (SB) as indicated in Table 1 below, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

- A. For aeroplane serial numbers 9771, 9779, 9784, 9788 through 9824, 9853 through 9857 and 9859 through 9876, within 4 months from the effective date of this AD; and
- B. For aeroplane serial numbers 9877 through 9879 and 60001 through 60042, within 30 months from the effective date of this AD.

Table 1 – Applicable SBs

Aeroplane Model	Applicable SB
BD-700-1A10	700-35-6004 Revision 5, dated 27 August 2021
BD-700-1A10	700-35-6502 Basic Issue, dated 27 August 2021
BD-700-1A11	700-35-5004 Revision 2, dated 27 August 2021
BD-700-1A11	700-35-5502 Basic Issue, dated 27 August 2021

Compliance with earlier revisions of the applicable SB as indicated in Table 1 above, prior to the effective date of this AD, also satisfies the requirement to inspect all passenger oxygen box dual manifold assemblies and replace affected assemblies.

Part II – Installation Prohibition (applicable to all aeroplane serial numbers)

For all aeroplanes, as of the effective date of this AD, it is prohibited to install an affected part. Affected parts are passenger oxygen box assemblies having dual manifold assemblies with part number 100-009-39, with lot and serial numbers as shown in Table 2 below.

Table 2 – Affected Parts

Lot Numbers Affected	Serial Numbers Affected
3516-001	3516-001-01 through 3516-001-60
3538-002	3538-002-01 through 3538-002-60
3598-001	3598-001-01 through 3598-001-60
3568-001	3568-001-01 through 3568-001-60
3724-001	3724-001-01 through 3724-001-20
3724-002	3724-002-01 through 3724-002-12
3706-001	3706-001-01 through 3706-001-40

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Rémy Knoerr
Chief, Continuing Airworthiness
Issued on 7 September 2021

Contact:

Daniel Gosselin, Continuing Airworthiness, Ottawa, telephone 888-663-3639, facsimile 613-996-9178 or e-mail TC.AirworthinessDirectives-Consignesdenavigabilite.TC@tc.gc.ca or any Transport Canada Centre.