



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-2023-61

Effective Date:

30 August 2023

ATA:

78

Type Certificate:

A-177

Subject:

Exhaust – Thrust Reverser – Disbonded or Missing Pivot Door Seal on Fixed Structure

Applicability:

Bombardier Inc. model BD-700-2A12 aeroplanes, serial numbers 70007, 70008, 70010, 70012 through 70047, 70049, 70051 through 70053, 70055 through 70077, 70079 through 70081, 70083 through 70133, 70135 through 70138, 70142 through 70148, 70150, 70152 and 70158.

Compliance:

Within 750 hours air time or 18 months, whichever occurs first, from the effective date of this AD, unless already accomplished.

Background:

It has been reported that pivot door pressure seals on the thrust reverser fixed structure were found disbonded or missing on several aeroplanes. The investigation revealed that the seal disbond condition was caused by the variation in the installation process of the seals during bonding surface preparation and sealant application.

Missing seals on the thrust reverser fixed structure could result in engine thrust loss due to flow path overboard leakage during forward thrust operation. During one-engine inoperative (OEI) condition, the thrust reduction due to missing seals could reduce the aeroplane performance in climb margin and OEI ceiling altitude, which could lead to an unsafe condition.

To address this condition, Bombardier issued a Service Bulletin (SB) 700-78-7501, Revision 1, dated 13 July 2023, to inspect for seal bonding conditions on the affected aeroplanes.

This AD mandates the inspection of pivot door seals in accordance with the above-mentioned Bombardier SB.

Corrective Actions:

Perform a one-time inspection of each thrust reverser pivot door pressure seal, and repair or replace each damaged or disbonded seal as required, in accordance with the Accomplishment Instructions of Bombardier SB 700-78-7501 Revision 1, or later revision approved by the Chief, Continuing Airworthiness, Transport Canada.

Inspection and repair/replacement of the thrust reverser pivot door pressure seal, in accordance with Bombardier SB 700-78-7501 Basic Issue, dated 12 April 2023, prior to the effective date of this AD, also meets the requirement of this paragraph.

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Jenny Young
Chief, Continuing Airworthiness
Issued on 16 August 2023

Contact:

Zhiwei Wang, 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.