



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-2022-47R1

Effective Date:

25 October 2022

ATA:

27

Type Certificate:

A-177

Subject:

Flight Controls – Multi-Function Spoiler (MFS) – Replacement of MFS 1, MFS 2, and MFS 3 Anti-Rotation Plates

Revision:

Supersedes AD CF-2022-47, issued 16 August 2022.

Applicability:

Bombardier Inc. model BD-700-2A12 aeroplanes, serial numbers 70006 through 70129.

Compliance:

Within 36 months from 30 August 2022, the effective date of AD CF-2022-47, unless already accomplished.

Background:

It has been reported that some of the MFS anti-rotation plates failed in-service due to a thin wall design. The MFS anti-rotation plates were designed with overlapping tolerances on the inside and outside diameters, allowing for an extremely thin wall thickness once machined. Failed MFS anti-rotation plates can result in wear and failure of the inboard and outboard hinge pins. Significant wear and fracture of the pins could result in that particular hinge no longer supporting the load.

AD CF-2022-47 was issued to require the inspection of all MFS anti-rotation plates for cracks and hinge bolts for any possible evidence of rotation, and the replacement of all MFS anti-rotation plates with redesigned parts.

After the release of AD CF-2022-47, it was identified that a number of aeroplanes had incorporated the Basic Issue of Bombardier Service Bulletin (SB) 700-27-7504 prior to delivery. This AD gives credit for aeroplanes that incorporated the Basic Issue of the SB prior to the effective date of this AD.

Corrective Actions:

In accordance with the Accomplishment Instructions of Bombardier SB 700-27-7504 Revision 1, dated 11 July 2022 or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada:

- A. Remove MFS anti-rotation plates part number (P/N) G05770140-103 and P/N G05770160-101, inspect the MFS anti-rotation plates for cracks and the hinge bolts for any possible evidence of rotation. If cracks or evidence of rotation is found, contact Bombardier for an approved disposition and incorporate that disposition before further flight.
- B. Install MFS anti-rotation plates P/N G05770140-105.

Compliance with the above paragraphs of this AD, prior to the effective date of this AD, in accordance with SB 700-27-7504 Basic Issue, dated 2 March 2022, also meets the intent of this AD.

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Philippe Ngassam
Director, National Aircraft Certification
Issued on 11 October 2022

Contact:

Scott W. Wales, 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.