



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-2023-23

Effective Date:

19 April 2023

ATA:

27

Type Certificate:

A-236

Subject:

Flight Controls – Replacement of Horizontal Stabilizer Trim Actuator (HSTA) Upper Gimbal Bushing Flanges

Applicability:

Airbus Canada Limited Partnership (formerly C Series Aircraft Limited Partnership (CSALP), Bombardier Inc.) aeroplanes:

Model BD-500-1A10, serial numbers 50010 through 50017, and 50020 through 50023;

Model BD-500-1A11, serial numbers 55003 through 55048.

Compliance:

Before accumulating 9350 hours air time from the effective date of this AD, unless already accomplished.

Background:

During development and validation of a new aircraft maintenance publication task, a fouling condition was found between a gimbal bushing and the aeroplane HSTA structural fitting, which prevented engagement of the secondary load path. On multiple other aeroplanes, similar fouling caused visible damage, but the secondary load path was successfully engaged. Inability to engage the HSTA secondary load path, following a failure of the primary load path, may result in a loss of pitch control of the aeroplane.

Airbus Canada Limited Partnership has released a Service Bulletin (SB) which provides instructions to replace the existing upper gimbal bushing flanges with new flanges that have material removed.

Originally, the SB was implemented as a managed fleet campaign without the issuance of an AD. Before the end of this campaign, it was determined that certain aeroplanes had not been modified within the planned compliance time. This AD requires the SB to be performed on affected aeroplanes to prevent interference which may inhibit secondary load path engagement.

Corrective Actions:

Replace the HSTA upper gimbal bushing flanges, in accordance with the Accomplishment Instructions of Airbus Canada Limited Partnership SB BD500-274002, Issue 002, dated 18 February 2021, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

This paragraph gives credit for the replacement of the HSTA upper gimbal bushing flanges performed before the effective date of this AD, in accordance with earlier revisions of the above-mentioned SB.

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Jenny Young
Chief, Continuing Airworthiness
Issued on 5 April 2023

Contact:

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