



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-2022-21

Effective Date:

5 May 2022

ATA:

55

Type Certificate:

A-142

Subject:

Stabilizers – Horizontal Stabilizer to Vertical Stabilizer Joint – Non-Conforming Saddle Washer (Radius Filler)

Applicability:

De Havilland Aircraft of Canada Limited (formerly Bombardier Inc.) model DHC-8-401 and -402 aeroplanes, serial numbers 4001 and 4003 through 4633.

Compliance:

Within 8000 hours air time from the effective date of this AD, unless already accomplished.

Background:

An investigation has revealed that saddle washers (radius filler), part number (P/N) 85517197-101 and P/N 85517197-105 for the front spar joint, and P/N 85517197-103 and P/N 85517197-107 for the rear spar joint, may have been incorrectly manufactured for several years. Non-conforming saddle washers (radius filler) could potentially become deformed when installed, and lead to gaps at the horizontal stabilizer to vertical stabilizer joint, that would result in reduction of the pre-load at the joint. Upon analysis, it was determined that a reduction of pre-load at this joint could have the potential to reduce the life of the bolt, which in turn could introduce an unsafe condition as the structural integrity of the horizontal stabilizer to vertical stabilizer joint would be affected. This AD mandates the inspection of the saddle washers (radius filler) for non-conformity and replacement of non-conforming parts with conforming saddle washers (radius filler).

Corrective Actions:

Inspect the horizontal stabilizer to vertical stabilizer joint for signs of gapping or bending of the saddle washers (radius filler) and/or adjacent washers and replace with new saddle washers (radius filler), as required, in accordance with Section 3.B. of the Accomplishment Instructions of De Havilland Aircraft of Canada Service Bulletin (SB) 84-55-12, Revision A, dated 16 February 2022, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

Inspections and rectifications, if required, performed in accordance with Section 3.B. of the Accomplishment Instructions of De Havilland Aircraft of Canada SB 84-55-12, Initial Revision, dated 7 September 2021 also meet the requirements of this AD.

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Rémy Knoerr
Chief, Continuing Airworthiness
Issued on 21 April 2022

Contact:

Philip Lynch, 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.