



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-2021-11

Effective Date:

12 April 2021

ATA:

36

Type Certificate:

A-142

Subject:

Pneumatic System – Wing Check Valve Bleed Air Leak

Applicability:

De Havilland Aircraft of Canada Limited (formerly Bombardier Inc.) model DHC-8-401 and -402 aeroplanes, serial numbers 4001 and 4003 through 4624.

Compliance:

As indicated below, unless already accomplished.

Background:

There have been multiple in-service reports of bleed air leak issues in the wing box area occurring as a result of damaged check valve seals in the wing bleed air check valve installation. These reports also make mention of a failure of the nearby leak detection shroud. An undetected bleed air leak could result in hot engine bleed air being directed onto the aircraft structure, the main landing gear (MLG) emergency release cable and the static air temperature (SAT) sensor, which could cause damage.

This AD mandates the removal and replacement of the affected V-band coupling and check valve seals with a redesigned assembly to stop the bleed air leakage.

Corrective Actions:

Part I – Replacement

Within 48 months or 8000 flight hours, whichever occurs first, from the effective date of this AD, remove and replace the affected V-band coupling and check valve seals in accordance with the Accomplishment Instructions Paragraph 3.B. of De Havilland Service Bulletin (SB) 84-36-06 Revision NC, dated 15 December 2020, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

Part II – Installation Prohibition of Affected Parts

As of the effective date of this AD, the affected V-band coupling part number (P/N) DSC361-250 and the check valve seal P/N MS35769-71 referred to in Paragraph 2.D. of De Havilland SB 84-36-06 Revision NC, dated 15 December 2020, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada, are not eligible for installation on DHC-8-401/-402 aeroplanes as replacement parts for the V-band coupling and check valve seals removed from the centre wing front spar area in accordance with Part I of this AD.

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Rémy Knoerr
Chief, Continuing Airworthiness
Issued on 29 March 2021

Contact:

Marie-Claude Cardinal, 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.