



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-2021-50

Effective Date:

4 January 2022

ATA:

28

Type Certificate:

A-236

Subject:

Fuel – Distribution – Fuel Pressure Switch Missing Lockwire

Replacement:

Supersedes AD CF-2021-21, issued 30 June 2021.

Applicability:

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

Model BD-500-1A10, serial numbers 50001 through 50018 and 50020 through 50062,

Model BD-500-1A11, serial numbers 55001 through 55016 and 55018 through 55143.

Compliance:

As indicated below, unless already accomplished.

Background:

It has been reported that certain fuel system pressure switches have been installed without a secondary locking feature (lockwire). The fuel pressure switches are installed on the alternating current (AC) boost pump cartridge located in the wing dry bay (outboard of rib 6) and near the engine feed pressure switch, on the rear spar (between ribs 8 and 9). Both installations exist on the left-hand and right-hand wings for a total of four affected locations on the aircraft. Without the secondary locking feature, the fuel pressure switches may become loose and allow fuel to leak in the affected areas, creating a fire hazard.

AD CF-2021-21 was issued to mandate a visual inspection of the torque identification stripe on the fuel pressure switch nut at the AC boost pump cartridges, torquing of the fuel pressure switch if required and installing lockwire.

AD CF-2021-21 also mandated a repetitive visual inspection of the torque identification stripe on the fuel pressure switch nut at the engine feed pressure switches and torquing of the fuel pressure switch if required until the installation of a new flange adaptor to the fuel pressure switches and lockwire could be accomplished.

Since AD CF-2021-21 was issued, a new flange adaptor has been developed for the engine feed pressure switches, which allows the installation of lockwire. This AD retains the requirements of AD CF-2021-21 at the AC boost pump cartridge locations. This AD also retains the initial and repetitive inspections at the engine feed pressure switch locations but introduces a new requirement to install a new flange adaptor with lockwire to terminate the repetitive inspection.

Additionally, a change was made to the applicability of the latest service bulletin (SB). Certain serial numbers are no longer included because the unsafe condition has been addressed in production for these aircraft. The applicability of this AD reflects this change.

Corrective Actions:**Part I – AC Boost Pump Cartridge Locations, Applicable to BD-500-1A10, Serial Numbers 50010 through 50018, 50020 through 50062, and BD-500-1A11, Serial Numbers 55003 through 55016, 55018 through 55106, 55108 through 55112 and 55114 Aeroplanes**

Before accumulating more than 2450 hours air time from 14 July 2021, the effective date of AD CF-2021-21, complete the visual inspection of the torque identification stripes, torquing of the fuel pressure switches (if required) and installation of lockwire at the two AC boost pump cartridges in accordance with the Accomplishment Instructions of Airbus Canada SB BD500-282013 Issue 001, dated 19 March 2021 or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

Part II – Engine Feed Pressure Switch Locations, Applicable to all Aeroplanes Identified in the Applicability Section of this AD

- A. Before accumulating more than 935 hours air time from 14 July 2021, the effective date of AD CF-2021-21, complete a visual inspection of the torque identification stripes and torquing of the fuel pressure switches (if required) at the two engine feed pressure switches in accordance with the Accomplishment Instructions Part A of Airbus Canada SB BD500-282014 Issue 003, dated 7 December 2021 or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada. Thereafter, repeat the inspection at intervals not to exceed 935 hours air time from the initial inspection date.
- B. Inspections and on-condition torquing of the fuel pressure switches performed in accordance with SB BD500-282014 Issue 001, before the effective date of this AD, are acceptable for compliance with the requirements of this AD.
- C. Before accumulating 9350 hours air time from the effective date of this AD, install a new flange adaptor and lockwire in accordance with the Accomplishment Instructions Part B of Airbus Canada SB BD500-282014 Issue 003, dated 7 December 2021 or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada. Following incorporation of Part B of this SB, the requirement for repetitive inspection in Part II Paragraph A of this AD is terminated.

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Rémy Knoerr
Chief, Continuing Airworthiness
Issued on 21 December 2021

Contact:

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