



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-2023-53

Effective Date:

28 July 2023

ATA:

24

Type Certificate:

A-177

Subject:

Electrical Power – Transformer Rectifier Unit (TRU) Fan Inoperative

Applicability:

Bombardier Inc. model BD-700-2A12 aeroplanes, serial numbers 70006 through 70166.

Compliance:

As indicated below, unless already accomplished.

Background:

The fan in a TRU can become inoperative in a manner which is not detectable by the fan monitoring circuit. An inoperative fan leads to higher TRU operating temperatures, which can trigger the activation of load shed function to reduce electrical load and temperature in the TRU. If the TRU temperature continues to rise and exceeds the maximum temperature threshold, the TRU will automatically disconnect. The shed electrical load will be transferred to the remaining two TRUs, which may lead to overheating and cascading failures on the remaining TRUs.

To address this unsafe condition, this AD requires replacement of TRU2 with a new unit which incorporates a correction to the fan and the monitoring circuit in accordance with a Bombardier Service Bulletin (SB).

Corrective Actions:

Within 1500 hours air time or 3 years, whichever occurs first, from the effective date of this AD, replace TRU2 Part Number (P/N) G02404521-001 with P/N G02404521-003 in accordance with the Accomplishment Instructions of Bombardier SB 700-24-7507 Revision No. 01, dated 19 May 2023, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

This paragraph gives credit for the replacement of TRU2 P/N G02404521-001 with P/N G02404521-003 before the effective date of this AD when done in accordance with the Accomplishment Instructions of Bombardier SB 700-24-7507 Basic Issue, dated 31 March 2023.

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Jenny Young
Chief, Continuing Airworthiness
Issued on 14 July 2023

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.