



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) to ADs.

Number:

CF-2019-38

Effective Date:

13 November 2019

ATA:

24

Type Certificate:

A-177

Subject:

Electrical Power – Ram Air Turbine (RAT) Deployment Actuator Galling

Applicability:

Bombardier Inc. model BD-700-1A10 and BD-700-1A11 aeroplanes, serial numbers 9001 through 9828, 9830, 9832 through 9835, 9840, 9854, 9855 and 9998.

Compliance:

As indicated below, unless already accomplished.

Background:

Bombardier Inc. has informed Transport Canada that the anti-fretting coating on the piston rods of the RAT deployment actuators may have been incorrectly applied to certain units. Incorrect application of this anti-fretting coating may lead to galling of the piston rod over time which could cause the unit to seize and fail to fully deploy. This condition, if not corrected, could result in the inability to power essential systems in the event that other sources of power are also lost.

This AD mandates the removal and replacement of affected RAT deployment actuators.

Corrective Actions:

Part I – Records Check

Within 36 months from the effective date of this AD, check the aeroplane maintenance records to determine the serial number of the RAT Deployment Actuator, Part Number (P/N) BZ02001-01 (GL456-1301-1), installed on the aeroplane.

- i. If the serial number of the RAT Deployment Actuator is not listed in the table referred to in Paragraph 2B, Part A - Special Check, of the applicable Bombardier Inc. Service Bulletin (SB) listed in table 1 below, no further action is required.
- ii. If the serial number of the RAT Deployment Actuator is listed in the table referred to in Paragraph 2B, Part A - Special Check, of the applicable Bombardier SB listed in table 1 below, proceed to Part III of this AD.
- iii. If the records check is inconclusive or if an inspection of the RAT Deployment Actuator is preferred to a records check, proceed to Part II of this AD.

Table 1

Aeroplane Model	Applicable Bombardier SB
BD-700-1A10	700-24-090, Basic Issue, dated 22 February 2019 or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada
BD-700-1A10	700-24-6015, Basic Issue, dated 22 February 2019 or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada
BD-700-1A11	700-1A11-24-029, Basic Issue, dated 22 February 2019 or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada
BD-700-1A11	700-24-5015, Basic Issue, dated 22 February 2019 or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada

Part II Inspection

Within 36 months from the effective date of this AD, verify the serial number of the RAT Deployment Actuator, P/N BZ02001-01 (GL456-1301-1), in accordance with the procedure in Paragraph 2B, Part A – Special Check, of the applicable Bombardier SB listed in table 1 above. If the serial number of the RAT Deployment Actuator is listed in the table referred to in Paragraph 2B, Part A - Special Check, of the applicable Bombardier SB listed in table 1 above, proceed to Part III of this AD.

Part III – Replacement

If the serial number of the part installed is listed in the table referenced in Paragraph 2B, Part A – Special Check of the applicable Bombardier SB listed in table 1 above, within 36 months from the effective date of this AD, remove and replace the RAT Deployment Actuator P/N BZ02001-01 (GL456-1301-1) in accordance with Paragraph 2C, Part B – Modification, of the applicable Bombardier SB listed in table 1 above.

Part IV – Prohibit Installation of Affected Part

As of the effective date of this AD, a RAT Deployment Actuator P/N BZ02001-01 (GL456-1301-1) with a serial number referred to in Paragraph 2B, Part A of the applicable Bombardier SBs as shown in table 1 above, is not eligible for installation on BD-700-1A10 and BD-700-1A11 aeroplanes.

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Rémy Knoerr
Chief, Continuing Airworthiness
Issued on 30 October 2019

Contact:

Marie-Claude Cardinal, Continuing Airworthiness, Ottawa, telephone 888-663-3639, facsimile 613-996-9178 or e-mail AD-CN@tc.gc.ca or any Transport Canada Centre.