



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-2021-49

Effective Date:

3 January 2022

ATA:

32

Type Certificate:

A-276

Subject:

Landing Gear – Landing Gear System – General

Applicability:

MHI RJ Aviation ULC. (MHIRJ) (formerly Bombardier Inc.) model CL-600-2C10, CL-600-2C11, CL-600-2D15, CL-600-2D24 and CL-600-2E25 aeroplanes, all serial numbers.

Compliance:

As indicated below, unless already accomplished.

Background:

Part 1 of the Maintenance Requirements Manual (MRM) sets the landing gear overhaul at every 20 000 flight cycle (FC) interval, without a calendar time limit. Following a customer request for a maintenance deviation on the landing gear, MHIRJ assessed that the customer's landing gear age was higher than expected for gear overhaul. As the landing gear ages, the risk of corrosion can increase. Undetected corrosion could lead to main landing gear (MLG) and/or nose landing gear (NLG) collapse, and consequent damage to the aeroplane and injury to the aeroplane occupants.

In order to mitigate this unsafe condition, this AD mandates the verification of the NLG and MLG component maintenance documents and, if necessary, the removal and replacement of the affected landing gear components.

Corrective Actions:

For the purpose of this AD, the component **calendar age** is defined as the calendar time since the MLG and/or NLG component entry-into-service for the components with no overhaul performed or the calendar time since entry-into-service following the last component overhaul, as of the effective date of this AD.

Part I – Verification of Aeroplane and/or Aeroplane Technical Records

Within 90 days from the effective date of this AD, verify the aeroplane and/or the aeroplane technical records to determine the calendar age of the MLG and NLG components in accordance with Section 2 Part A of the Accomplishment Instructions of MHIRJ Service Bulletin (SB) 670BA-32-062 Revision A, dated 2 December 2021, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

Part II – Removal and Replacement of Affected NLG Components Identified in Part I of this AD with Calendar Age over 10 years

- A. Within the applicable compliance time indicated in Table 1 of this AD, remove the affected NLG components identified in Part I of this AD in accordance with Section 2 Part B of the Accomplishment Instructions of MHIRJ SB 670BA-32-062 Revision A, dated 2 December 2021, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

- B. Before further flight, replace the removed components with serviceable components, in accordance with Section 2 Part D of the Accomplishment Instructions of MHIRJ SB 670BA-32-062 Revision A, dated 2 December 2021, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

Part III – Removal and Replacement of Affected MLG Components Identified in Part I of this AD with Calendar Age over 10 years

- A. Within the applicable compliance time indicated in Table 1 of this AD, remove the affected MLG components identified in Part I of this AD in accordance with Section 2 Part E or H, as applicable, of the Accomplishment Instructions of MHIRJ SB 670BA-32-062 Revision A, dated 2 December 2021, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.
- B. Before further flight, replace the removed components with serviceable components, in accordance with Section 2 Part G or J, as applicable, of the Accomplishment Instructions of MHIRJ SB 670BA-32-062 Revision A, dated 2 December 2021, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

Table 1 – Compliance Time

For Components (NLG and/or MLG) with Calendar Age as Determined in Part I of this AD	Compliance Time
10 years or more and less than 12 years	Within 36 months from the effective date of this AD or prior to reaching 14 years component calendar age, whichever occurs first
12 years or more and less than 13 years	Prior to reaching 14 years component calendar age
13 years or more and less than 14 years	Within 12 months from the effective date of this AD
14 years or more	Within 6 months from the effective date of this AD

Part IV – Installation Prohibition of Components Without Overhaul

As of the effective date of this AD, the installation of MLG and NLG components with a component calendar age of 12 years or more without overhaul is prohibited.

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Rémy Knoerr
Chief, Continuing Airworthiness
Issued on 20 December 2021

Contact:

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