



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-2018-26

Effective Date:

19 October 2018

ATA:

32

Type Certificate:

A-131

Subject:

Landing Gear – Main Landing Gear Side Stay Actuators Contain Non-Conforming Split Ball Bearing

Applicability:

Bombardier Inc. model CL-600-2B16 aeroplanes, serial numbers 5301 through 5665, 5701 through 5988, and 6050 through 6091, equipped with split ball bearing part number 104467672.

Compliance:

As indicated below, unless already accomplished.

Background:

The landing gear supplier has informed Bombardier Inc. about a quality escape involving Main Landing Gear (MLG) side stay actuators that have been assembled using non-conforming split ball bearings. The affected bearings are manufactured from material that does not meet the required material properties. If not corrected, this condition can result in potentially asymmetric MLG gear extension or retraction and subsequent gear collapse during landing.

This AD mandates verification of the installed MLG side stay actuator assemblies and replacement of the affected parts.

Corrective Actions:

- A. Verify the serial number (S/N) of the left and right MLG side stay actuator assembly part number (P/N) 19011-103 or 19011-105, as applicable, in accordance with Table 1 in Paragraph 2.B. Part A – Special Check of the following Service Bulletins (SB):

Table 1

Aeroplane Model	Aeroplane S/N	Applicable SB
CL-600-2B16	5301 through 5665	604-32-029, Revision 1, dated 5 February 2018, or later revisions, approved by the Chief, Continuing Airworthiness, Transport Canada.
CL-600-2B16	5701 through 5988	605-32-006, Revision 1, dated 5 February 2018, or later revisions, approved by the Chief, Continuing Airworthiness, Transport Canada.
CL-600-2B16	6050 through 6091	650-32-002, Revision 1, dated 5 February 2018, or later revisions, approved by the Chief, Continuing Airworthiness, Transport Canada.

Verification of the S/N shall be accomplished according to the following schedule:

Table 2

Aeroplane Cycles	Compliance
As of the effective date of this AD: 3350 total flight cycles or less (side stay split ball bearing)	Before the side stay split ball bearing reaches 3750 total flight cycles or 48 months, whichever occurs first, from the effective date of this AD.
As of the effective date of this AD: more than 3350 total flight cycles (side stay split ball bearing)	Within the next 400 flight cycles or 12 months, whichever occurs first, from the effective date of this AD.

- B. If the S/N of the part installed is listed in Table 1, Paragraph 2.B., Part A – Special Check or in one of the three SBs listed in Table 1 of this AD, replace the split ball bearing P/N 104467672 in accordance with Paragraph 2.C. Part B – Modification – Replacement of the split ball bearing, of the applicable SB.
- C. If the S/N of the part installed is not listed in Table 1 of the SB 604-32-029, Revision 1, dated 5 February 2018, or SB 605-32-006, Revision 1, dated 5 February 2018, or SB 650-32-002, Revision 1, dated 5 February 2018, or later revisions of these SBs, approved by the Chief, Continuing Airworthiness, Transport Canada, no further action is required.
- D. Accomplishment of the Basic Issues of the SB 604-32-029, dated 18 December 2017, or SB 605-32-006, dated 18 December 2017, or SB 650-32-002, dated 18 December 2017, meets the intent of Paragraph B of this AD. Revision 1 of these SBs must be used for serial number verification.
- E. As of the effective date of this AD, it is prohibited for anyone to install the MLG side stay actuator on CL-600-2B16 aeroplanes with S/N listed in Table 1, Paragraph 2.B. of the SB 604-32-029, Basic Issue, dated 18 December 2017, or SB 605-32-006, Basic Issue, dated 18 December 2017, or SB 650-32-002, Basic Issue, dated 18 December 2017 or later revisions of these SBs, approved by the Chief, Continuing Airworthiness, Transport Canada, unless the split bearing P/N 104467672 has been previously replaced.

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Rémy Knoerr
Chief, Continuing Airworthiness
Issued on 5 October 2018

Contact:

Gordanko Jeremic, Continuing Airworthiness, Ottawa, telephone 1-888-663-3639, facsimile 613-996-9178 or e-mail AD-CN@tc.gc.ca or any Transport Canada Centre.