



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-2025-05

Effective Date:

31 January 2025

ATA:

32

Type Certificate:

A-131

Subject:

Landing Gear – Uncommanded Steering

Applicability:

Bombardier Inc. model CL-600-1A11 aeroplanes, serial numbers 1004 through 1085

Bombardier Inc. model CL-600-2A12 aeroplanes, serial numbers 3001 through 3066

Bombardier Inc. model CL-600-2B16 aeroplanes, serial numbers 5001 through 5194, 5301 through 5665, 5701 through 6049, and 6050 and subsequent

Compliance:

As indicated below, unless already accomplished.

Background:

A Challenger aeroplane experienced an uncommanded nose wheel steering event followed by a lateral deviation from the centerline during landing. Flight data recorder data interpretation confirmed that the aeroplane drift was the result of an uncommanded steering input combined with the temporary inability to bring the system into free-castoring mode for a period of about 12 seconds.

The investigation of the event described above, showed that free-castoring may be precluded if the Transfer Valve (TV) is failed dormant in non-free-castoring mode. A periodic inspection must be included in the Time Limits/Maintenance Checks (TLMC) to address the dormant failure in non-free-castoring mode of the TV within the nose wheel steering manifold assembly.

This AD requires a periodic functional test of the TV.

Corrective Actions:

Within the thresholds and repeat intervals identified within the tasks complete the functional test of the TV in accordance with the new limitation contained in the Airworthiness Limitation (AWL) section of the Bombardier TLMC publications identified in Table 1 below as applicable to the aeroplane model and configuration

Compliance with superseding Temporary Revisions (TR) affecting this task or later revisions of the applicable TLMC approved by Transport Canada also meets the intent of this AD.

Table 1 – Aeroplane Model CL-600-1A11, CL-600-2A12, CL-600-2B16 TLMC Manual Revisions

Aeroplane Model (Marketing Designation)	TLMC Manual and Revision	TLMC Task Number
CL-600-1A11 (Challenger 600)	PSP 605 TLMC TR 5-166, dated 30 September 2024	32-50-11-101
CL-600-2A12 (Challenger 601)	PSP 601-5 TLMC TR 5-271, dated 30 September 2024	32-50-11-101
CL-600-2B16 (Challenger 601-3A/3R Variant)	PSP 601A-5 TLMC TR 5-285, dated 30 September 2024	32-50-11-101
CL-600-2B16 (Challenger 604 Variant - Challenger 604)	CH 604 TLMC TR 5-2-75, dated 30 September 2024	32-51-10-101
CL-600-2B16 (Challenger 604 Variant - Challenger 605)	CH 605 TLMC TR 5-2-31, dated 30 September 2024	32-51-10-101
CL-600-2B16 (Challenger 604 Variant - Challenger 650)	CH 650 TLMC TR 5-2-8, dated 30 September 2024	32-51-10-101

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Jenny Young
Chief, Continuing Airworthiness
Issued on 17 January 2025

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