



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-2018-11

Effective Date:

19 April 2018

ATA:

32

Type Certificate:

A-234

Subject:

Landing Gear – Uncommanded Nose Wheel Steering Due to Failure of the Steering Selector Valve

Applicability:

Bombardier Inc. model BD-100-1A10 aeroplanes, serial numbers (S/Ns) 20002 to 20744.

Compliance:

As indicated below, unless already accomplished.

Background:

An incident of uncommanded nose wheel steering occurred in-service. Subsequent investigation revealed that the steering selector valve (SSV) was vulnerable to jamming in the open position due to particulate contamination of the hydraulic system. If not corrected, a jam of the SSV, following the independent failure of a second component of the nose wheel steering system, could result in uncommanded nose wheel steering and a risk of runway excursion.

This AD requires the incorporation of a hydraulic fluid filter in the line supplying pressure from the direct current motor pump to the nose wheel steering system.

Corrective Actions:

Within 2000 flight cycles or 60 months, whichever occurs first, from the effective date of this AD, modify the left hand hydraulic system to install a filter in accordance with the accomplishment instructions of Bombardier Inc. Service Bulletin (SB) 100-32-31 or 350-32-007, as applicable, both at Revision 03, dated 27 March 2018.

For aeroplanes that have incorporated SB 100-32-31 or 350-32-007, at Basic Issue, dated 4 January 2018, Revision 01, dated 23 January 2018, or Revision 02, dated 14 March 2018, prior to the effective date of this AD, retroactive action is required. Before accumulating 50 hours air time from the effective date of this AD, torque the fittings on tube assembly, part number K1000070395-401, in accordance with the Retroactive Action instructions within SB 100-32-31 or 350-32-007, as applicable, at Revision 03 dated 27 March 2018.

The use of later revisions of SB 100-32-31 or 350-32-007 approved by the Chief, Continuing Airworthiness, Transport Canada, are acceptable for compliance to the requirements of this AD.

Authorization:

For the Minister of Transport,

ORIGINAL SIGNED BY

Rémy Knoerr
Chief, Continuing Airworthiness
Issued on 5 April 2018

Contact:

Daniel Gosselin, 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.