No. CF-2010-10 Issue Date 26 March 2010

## AIRWORTHINESS DIRECTIVE

The following airworthiness directive (AD) may be applicable to an aircraft which our records indicate is registered in your name. ADs are issued pursuant to CAR 605.84 and the further details of CAR Standard 625, Appendix H, the continuing airworthiness of a Canadian registered aircraft is contingent upon compliance with all applicable ADs. Failure to comply with the requirements of an AD may invalidate the flight authorization of the aircraft. Alternative means of compliance shall be applied for in accordance with CAR 605.84 and the above-referenced Standard.

This AD has been issued by the Continuing Airworthiness Division (AARDG), National Aircraft Certification Branch, Transport Canada, Ottawa, telephone 613 952-4357.

Number: CF-2010-10

Subject: Hydraulic Systems Number 2 and 3: Damage caused by Main Landing Gear Tire

**Failure** 

**Effective:** 16 April 2010

Applicability: Bombardier Inc. Models BD-700-1A10 and BD-700-1A11, Serial Numbers 9002 through

9401

**Compliance:** Within 30 months after the effective date of this directive, unless already accomplished.

Background: There have been two in-service reports of main landing gear (MLG) tire failure on

landing, during which a flailing tire tread caused damage to No. 2 and No. 3 hydraulic system lines in the wing auxiliary spar area on the left side of the aircraft. This damage resulted in the loss of supply pressure to the inboard and outboard brakes, as the only remaining braking source available was the No. 3 hydraulic system accumulator. The degradation of the brake system performance could adversely affect the aircraft during

landing.

This directive mandates the relocation of the No. 2 and No. 3 hydraulic system lines in the wing auxiliary spar area on the left side of the aircraft, together with a modification to the left wing rib and debris shield, in order to prevent damage to the hydraulic lines in the event of a MLG tire failure. The debris shield on the right side is also modified for part

commonality.

Corrective Actions:

Relocate the No. 2 and No. 3 hydraulic system lines in the wing auxiliary spar area on the left side of the aircraft, together with a modification to the left wing rib and left and right debris shields, in accordance with the Accomplishment Instructions in Bombardier Service Bulletin (SB) 700-29-021, Revision 1 or 700-1A11-29-004 Revision 1, whichever is applicable, both dated 25 January 2010, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

Note: Accomplishment in accordance with the original issue of Bombardier SB 700-29-021 or 700-1A11-29-004 whichever is applicable, both dated

3 April 2009, also meets the intent of this directive.

Authorization: For Minister of Transport, Infrastructure and Communities

ORIGINAL SIGNED BY

Derek Ferguson

Chief, Continuing Airworthiness

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Canada Centre.

