



No.	CF-2012-21	1/2
Issue Date	25 June 2012	

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 **Canadian Aviation Regulation (CAR) 521 Division X**. 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-2012-21

Subject: Main Landing Gear Up-lock Wear

Effective: 9 July 2012

Applicability: Bombardier Inc. DHC-8 aeroplane models 400, 401 and 402, serial numbers 4001 and subsequent, equipped with main landing gear up-lock assembly part number 46500-7 or 46500-9

Compliance: As indicated below, unless already accomplished.

Background: The main landing gear up-lock assembly part number (P/N) 46500-7 was introduced as the terminating action to AD CF-2002-13R2. The main landing gear up-lock assembly P/N 46500-9 was later introduced as a product improvement and has the same up-lock hook as P/N 46500-7.

Due to a delay in the release of the new Maintenance Review Board (MRB) task associated with P/Ns 46500-7 and 46500-9, it is anticipated that in-service aeroplanes may be operating with up-lock hooks worn beyond the wear limit. An up-lock hook worn beyond the wear limit could prevent the successful extension of the main landing gear using the primary landing gear extension system. In combination with an alternate extension system failure, this could result in the inability to extend the main landing gear.

This AD mandates the incorporation of the MRB task number 323100-202.

Corrective Actions: **Part I – Phase-in Schedule of Maintenance Review Board Task**

Within 30 days from the effective date of this AD, revise the Transport Canada approved maintenance schedule to incorporate MRB task number 323100-202 as introduced by Temporary Revision (TR) MRB-66 of the Dash 8-400 Maintenance Requirements Manual, PSM 1-84-7, dated 7 December 2011.

For main landing gear up-lock assemblies that have accumulated hours air time or calendar time which exceeds the task interval, perform the initial task using the following phase-in schedule:

- A. For up-lock hook assemblies with 15 000 flight cycles or more accumulated as of the effective date of this AD, within 600 flight cycles from the effective date of this AD.
- B. For up-lock hook assemblies with 12 000 flight cycles or more, but less than 15 000 flight cycles accumulated as of the effective date of this AD, within 1200 flight cycles from the effective date of this AD but not to exceed 15 600 flight cycles.

Pursuant to **CAR 202.51** the registered owner of a Canadian aircraft shall, within seven days, notify the Minister in writing of any change of his or her name or address.

To request a change of address, contact the **Civil Aviation Communications Centre (AARC)** at Place de Ville, Ottawa, Ontario K1A 0N8, or 1-800-305-2059, or www.tc.gc.ca/civilaviation/communications/centre/address.asp

- C. For up-lock hook assemblies with less than 12 000 flight cycles accumulated as of the effective date of this AD, within 6000 flight cycles from the effective date of this AD, but not to exceed 13 200 flight cycles.

Bombardier Repair Drawing 8/4-32-0190, Issue 1, dated 2 April 2012, provides temporary relief to up-lock assemblies worn beyond the wear limit, and may only be used following initial compliance of the above-mentioned task performed within 36 months from the effective date of this AD.

Compliance with superseding TR or later revisions of the above-mentioned Maintenance Requirements Manual approved by Transport Canada, also meets the requirements of this AD.

Part II – Reporting Requirements

Within 14 days from the performance of the initial task in Part I of this AD, report results to Bombardier Aerospace via the Bombardier Technical Help Desk. Reporting form can be found in Bombardier All Operator Message No. 515.

Authorization: For the Minister of Transport, Infrastructure and Communities

ORIGINAL SIGNED BY

Derek Ferguson
Chief, Continuing Airworthiness

Contact: Helen Tsai, Continuing Airworthiness, Ottawa, telephone 613-952-4357, facsimile 613-996-9178 or e-mail ADs@tc.gc.ca or any Transport Canada Centre.