


EASA	EMERGENCY AIRWORTHINESS DIRECTIVE	
	<p style="text-align: center;">AD No : 2007-0252-E</p> <p style="text-align: center;">Date: 13 September 2007</p>	
No person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of that Airworthiness Directive unless otherwise agreed with the Authority of the State of Registry.		
Type Approval Holder's Name :	Type/Model designation(s) :	
Bombardier, Inc.	DHC-8-400 series aircraft	
TCDS Number: EASA IM.A.191; Canada A-142		
Foreign AD: Transport Canada Civil Aviation (TCCA) Emergency Airworthiness Directive (EAD) No. CF-2007-20, issued 12 September 2007.		
Supersedure: For aircraft operated under EU regulations, the requirements of this EAD take precedence over those contained in TCCA EAD CF-2007-20.		
ATA 32	Landing Gear – Main Landing Gear System & Parts - Inspection	
Manufacturer(s):	Bombardier, Inc.	
Applicability:	<p>Model DHC-8-401 and DHC-8-402 aircraft, all serial numbers.</p> <p>Note: The TCCA EAD applies also to Model DHC-8-400 aircraft; as this Model has not been validated in Europe at this time, no aircraft operated under EU regulations and/or registered in EU Member States are affected. For that reason, this EAD cannot be applied to those aircraft.</p>	
Reason:	<p>Two recent cases of main landing gear collapse on Bombardier Model DHC-8-400 series aircraft have been reported, occurring shortly after touchdown. Main landing Gear collapse during landing can result in loss of control of the aircraft.</p> <p>To address and correct the unsafe condition described above, Transport Canada Civil Aviation (TCCA), the responsible authority of the State of Design for the affected type design, has issued Emergency Airworthiness Directive (EAD) CF-2007-20 on 12 September 2007. That EAD requires, before further flight, general and detailed visual inspections to be accomplished on the Main Landing Gear (MLG) system, the MLG Retract Actuator Jam Nut and the MLG Retract Actuator and corrective actions, as necessary. In addition, that EAD requires, within 7 days after each inspection, to report any discrepancies found during any of the above inspections to Bombardier Technical Help Desk.</p> <p>This EASA EAD requires those same actions, but establishes a date for these required actions to become effective for all aircraft operated under EU regulations, and requires the initial inspection and corrective actions, as necessary, to be accomplished before next flight after that date. For ferry flights, reference is made to</p>	

	Airplane Flight Manual (AFM) Supplement No.94. The provisions in that document take precedence over points 4 (the reference to AOM Section 4.8), 5 and 6 of paragraph E "Flight Crew Limitations and Procedures". In all other aspects, this EAD contains the same requirements as TCCA EAD CF-2007-20, which is attached to this directive.
Effective Date:	13 September 2007
Compliance:	<p>(a) Before next flight after the effective date of this directive, accomplish the tasks described in paragraphs A, B and C.1 of TCCA EAD CF-2007-20 (attached to this EASA EAD);</p> <p>(b) Within the next 500 flight hours after the effective date of this directive, accomplish the tasks described in paragraph C.2 of TCCA EAD CF-2007-20.</p> <p>(c) In deviation from paragraph E "Flight Crew Limitations and Procedures" points 4, 5 and 6 of TCCA EAD CF-2007-20, ferry flights are permitted only in accordance with the instructions, procedures and limitations as specified in EASA-approved Supplement No.94 "Ferry Flight with Landing Gear Extended" to DHC-8 Series 400 (Q400) AFM Document No. PSM 1-84-1A (JAA).</p> <p>All other aspects and requirements of TCCA EAD CF-2007-20 remain unchanged and can be considered as 'adopted' in accordance with EASA ED Decision 2/2003.</p>
Ref. Publications:	<p>Bombardier Repair Drawing (RD) 8/4-32-059; and</p> <p>Bombardier DHC-8 Series 400 Maintenance Requirements Manual (PSM 1-84-7), Part 1 (Maintenance Review Board Report), tasks Z700-03E (left hand) and Z700-04E (right hand).</p> <p>Bombardier All Operator Message No. 236A also pertains to this subject.</p>
Remarks :	<ol style="list-style-type: none"> 1. If requested and appropriately substantiated, EASA can accept Alternative Methods of Compliance for this AD. 2. The safety assessment has requested not to implement the full consultation process and an immediate publication and notification. 3. Enquiries regarding this AD should be referred to the AD Focal Point - Certification Directorate, EASA. E-mail: ADs@easa.europa.eu . 4. For any question concerning the technical content of the requirements in this AD, please contact: Bombardier, Inc. 123 Garratt Boulevard, Toronto, Ontario M3K 1Y5 Canada; telephone +1-416-375 4000; facsimile +1-416375 4539; E-mail thd.qseries@aero.bombardier.com

SUPERSEDED



No.	CF-2007-20	1/2
Issue Date	12 September 2007	

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) 593**. 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), Aircraft Certification Branch, Transport Canada, Ottawa, telephone 613 952-4357.

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TRANSPORT CANADA EMERGENCY AIRWORTHINESS DIRECTIVE

PLEASE FORWARD IMMEDIATELY TO THE PERSON RESPONSIBLE FOR THE OPERATION AND MAINTENANCE OF YOUR AIRCRAFT

Number: CF--2007-20

Subject: DHC-8-400 Main Landing Gear

Effective: Immediately upon received.

Applicability: Bombardier Inc. DHC-8 aircraft, Models 400, 401 and 402, serial numbers 003 and subsequent.

Compliance: As indicated below.

Background: Two recent cases of main landing gear collapse have been reported. Main landing gear collapse may result in unsafe landing of the aircraft.

Corrective Actions: **A. General Visual Inspection of the Main Landing Gear System:**

For all aircraft, before further flight, perform a general visual inspection of the left hand and right hand main landing gear system in accordance with Bombardier DHC-8 Series 400 Maintenance Requirements Manual (PSM 1-84-7), Part 1 (Maintenance Review Board Report), tasks Z700-03E (left hand) and Z700-04E (right hand). Rectify any discrepancy found prior to further flight.

B. General Visual Inspection of the Main Landing Gear Retract Actuator Jam Nut:

For all aircraft, before further flight, perform a general visual inspection of the left hand and right hand main landing gear retract actuator jam nut to ensure the wire lock is in place and the nut is secured. If the wire lock is not in place or the jam nut is not secured, accomplish Bombardier Repair Drawing (RD) 8/4-32-059 prior to further flight.

C. Detailed Visual Inspection of the Main Landing Gear Retract Actuator:

1. For aircraft main landing gear retract actuator (p/n 46550-7 or 46550-9) that have accumulated 8,000 or more landings or in service for more than 4 years

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



since new, whichever occurs first, perform detailed visual inspection in accordance with Bombardier RD 8/4-32-059 before further flight.

2. For aircraft main landing gear retract actuator (p/n 46550-7 or 46550-9) that have accumulated between 4,000 to 7,999 landings or in service between 2 to 4 years since new, whichever occurs first, perform detailed visual inspection in accordance with RD 8/4-32-059 within 500 flight hours after the effective date of this directive.

D. Reporting Requirement:

Within 7 days after each inspection, report any discrepancies found during any of the above inspections to Bombardier Technical Help Desk.

E. Ferry Flight:

To permit the ferry of an aircraft to a location where the inspection requirements of this directive can be accomplished, adhere to the following procedures and limitations:

Flight Crew Limitations and Procedures:

1. Ferry Flight with gear extended and pinned.
2. Landing to be conducted at a minimum descent rate.
3. Minimize braking on landing.
4. Flight to be conducted per Aircraft Operating Manual (AOM) Section 4.8.
5. Essential crew only on board.
6. Flight in known or forecast icing condition is prohibited.

Maintenance Procedures:

1. Inspect the left hand and right hand main landing gear retract actuator jam nut to ensure the wire lock is in place and the nut is secure.
2. Perform the general visual inspections as defined in accordance with Bombardier All Operators Message No. 236 Rev A or later revisions.
3. If items 1 and 2 results are satisfactory, insert main landing gear ground lock pins and lockwire in place.
4. Ensure the nose landing gear ground lock is engaged.

Authorization: For Minister of Transport, Infrastructure and Communities

B. Goyaniuk
Chief, Continuing Airworthiness

Contact: Mr. Anthony Wan, Continuing Airworthiness, Ottawa, telephone 613-952-4410, facsimile 613-996-9178 or e-mail wana@tc.gc.ca or any Transport Canada Centre.