



No.	CF-2003-20R1	1/3
Issue Date	28 September 2011	

# 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- 2003-20R1

**Subject:** Life Limited Landing Gear Parts Not Serialized

**Effective:** 18 October 2011

**Revision:** Supersedes Airworthiness Directive CF-2003-20

**Applicability:** Bombardier Inc. Model CL-600-2B16 (Challenger 604 Variant), serial numbers 5301 through 5595

**Compliance:** As indicated below, unless already accomplished.

**Background:** Certain landing gear parts that are listed in the aeroplane model Airworthiness Limitations Section as safe life items with structural life limits, could be rotatable and may not have been serialized, making tracking difficult. This directive mandates that such parts be serialized. This directive also provides the procedure to determine the number of landings for those parts where the service history cannot be established.

Revision 1 of this directive adds paragraphs E, F and G to mandate serialization of three additional landing gear parts.

**Corrective Actions:**

A. Prior to reaching the life limit specified in the aeroplane model Airworthiness Limitations Section for the landing gear part affected, but no later than the earliest of the following:

- eight (8) years from the effective date of the Original Issue of this directive, (29 August 2003) or
- prior to the installation of a new landing gear part, or
- prior to the reinstallation of a used landing gear part.

Add serial numbers and part numbers, when applicable, to the following parts, as directed in Bombardier Service Bulletin (SB) 604-32-014, Basic Issue, dated 31 May 2002, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

1. Applicable to aeroplane serial numbers 5301 to 5445:

Left and Right Main Landing Gear:

- |   |             |
|---|-------------|
| (a) Main Fitting/Trailing Arm Pivot Pin | P/N 19039-1 |
| (b) Shock Strut Cylinder Pin            | P/N 19134-3 |
| (c) Trailing Arm/Shock Strut Pin        | P/N 19146-3 |

2. Applicable to aeroplane serial numbers 5301 to 5513:

Nose Landing Gear:

(a) Shock Strut Sliding Tube	P/N 200811707
(b) Pivot Pins	P/N 200811601
(c) Sliding Tube/End fitting Pin	P/N 200811602
(d) Axle Fitting	P/N 200811308

- B. At the compliance times applicable in paragraph A, if the part does not have a serial number and the Cycles Since New (CSN) have not been tracked, the number of landings on such part are to be established as follows:

1. For parts listed under paragraphs A. 1(a), A. 1(b) and A. 1(c):

Landings = 2300 + the actual number of landings  
on the aeroplane since 31 May 2001.

2. For parts listed under paragraphs A. 2(a), A. 2(b) and A. 2(d):

Landings = 8900 + the actual number of landings  
on the aeroplane since 31 May 2001.

3. For parts listed under paragraph A. 2(c):

Landings = 6704 + the actual number of landings  
on the aeroplane since 20 October 1993.

- C. At the times that paragraphs A. and B. are complied with, amend the aeroplane technical records to incorporate the new part numbers, serial numbers and landings assigned to these parts.

- D. Within 30 days after the effective date of the Original Issue of this directive (29 August 2003) revise the Transport Canada approved maintenance schedule to incorporate the life limits for landing gear parts as introduced by the following Temporary Revision (TR) of the Challenger aeroplane Time Limits/Maintenance Check (TLMC) Manual:

TR Number	Date	TLMC Manual	Manual Section
5-2-6	11 April 2002	CL-604 TLMC	5-10-10

- E. Prior to reaching the life limit specified in the aeroplane model Airworthiness Limitations Section for the landing gear part affected, but no later than the earliest of the following:

- eight (8) years from the effective date of this directive, or
- prior to the installation of a new landing gear part, or
- prior to the reinstallation of a used landing gear part.

Add serial numbers and part numbers, when applicable, to the following parts, as directed in Bombardier Service Bulletin (SB) 604-32-014, Revision 02, dated 09 May 2011, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

1. Applicable to aeroplane serial numbers 5301 to 5513:

Nose Landing Gear:

(a) Main Fitting/Drag Stay Pin	P/N 200811721
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Addition of serial number and part number in accordance with Revision 01 of Bombardier SB 604-32-014, dated 29 October 2007, also satisfies the requirement of paragraph E. 1(a) of this directive.

2. Applicable to aeroplane serial numbers 5301 to 5573, 5579 and 5595:

Nose Landing Gear:

- |                       |               |
|-----------------------|---------------|
| (a) Crossbeam Pins    | P/N 200814601 |
| (b) Centre Hinge Pins | P/N 200814624 |

F. At the compliance times applicable in paragraph E, if the part does not have a serial number and the Cycles Since New (CSN) have not been tracked, the number of landings on such part are to be established as follows:

Use Appendix 1 of Bombardier SB 604-32-014, Revision 02, dated 09 May 2011, or later revision approved by the Chief, Continuing Airworthiness, Transport Canada, to calculate the number of landings.

Use of Bombardier Service Bulletin Information Sheet of Bombardier SB 604-32-014, dated 06 July 2010, to calculate the number of landings also satisfies the requirements of paragraph F of this directive.

G. At the times that paragraphs E and F are complied with, amend the aeroplane technical records to incorporate the new part numbers, serial numbers and landings assigned to these parts.

**Authorization:** For the Minister of Transport, Infrastructure and Communities

*ORIGINAL SIGNED BY*

David Turnbull  
Director, National Aircraft Certification

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