

No. **CF-2009-19** Issue Date **29 April 2009**

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

- Number: CF- 2009-19
- Subject: Nose Landing Gear Selector Valve and Nose Landing Gear Door Selector Valve End Caps – Incorrect Assembly
- Effective: 19 May 2009
- Applicability: Bombardier Inc. Model CL-600-2B19, Serial Numbers 7003 and subsequent.
- **Compliance:** Within 1600 hours air time or within 18 months after the effective date of this directive, whichever comes first.
- **Background:** A specific batch of nose landing gear (NLG) and NLG door selector valves, part number (P/N) 601R75146-1 (Kaiser Fluid Technologies P/N 750006000), may have had their end caps incorrectly lock-wired and/or incorrectly torqued during assembly. This condition can lead to the end cap backing off, with consequent damage to a seal and internal leakage within the valve. Subsequently, if electrical power is transferred or removed from the aircraft before the NLG safety pin is installed, any pressure, including residual pressure, in the No. 3 hydraulic system can result in an uncommanded NLG retraction and/or uncommanded opening of the NLG doors. There have been six cases reported on CL600-2B19 aircraft, one of which resulted in the collapse of the NLG at the departure gate.

This directive mandates a check of the NLG and NLG door selector valves installed on all aircraft in the Applicability section above. Depending on the results, replacement, rework and/or additional identification of the valves may be required.

Notes:

- 1. Valves that have a Serial Number (S/N) with suffix "T" have been manufactured by Tactair Fluid Controls Inc. and do not require any corrective action.
- Valves manufactured by Kaiser Fluid Technologies, P/N 750006000, with S/N 0001 through 2126 and ink stamp "SB750006000-1", have already been checked and reworked as necessary and do not require any additional corrective action.
- The Illustrated Parts Catalog (CSP A-006) gives instructions not to install a valve manufactured by Kaiser Fluid Technologies, P/N 750006000, with S/N 0001 through 2126, if marking "SB750006000-1" is not ink stamped on the valve.

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



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Corrective Part I: Identification Check

Actions:

- A. Check the S/N and identification markings on both the NLG selector valve and NLG door selector valve that are installed on the aircraft:
 - (1) If either or both selector valve S/Ns is in the range 0001 through 2126, and there is no suffix "T" or marking "SB750006000-1" on the valve, proceed to Part II of this directive.
 - (2) If both selector valves are identified with one or more of the following S/Ns or identification markings, no further action is required. Compliance with this directive is complete:
 - S/N outside the range 0001 through 2126;
 - suffix "T";
 - marking "SB750006000-1".

Part II: Valve End Cap Check

For each NLG selector valve and NLG door selector valve installed on the aircraft, that has a S/N in the range 0001 through 2126 but is not identified with suffix "T" or marking "SB750006000-1":

Check the valve and replace, rework and/or identify the valve, as required, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 601R-32-104, dated 3 March 2009, or later revisions approved by the Chief, Continuing Airworthiness, Transport Canada.

Authorization: For Minister of Transport, Infrastructure and Communities

Derek Ferguson Acting Chief, Continuing Airworthiness

Contact: Mr. Richard Topham, Continuing Airworthiness, Ottawa, telephone 613-952-4428, facsimile 613-996-9178 or e-mail richard.topham@tc.gc.ca or any Transport Canada Centre.