

SERVICE BULLETIN SUMMARY

This Service Bulletin is available at:

www.cic.bombardier.com

MODEL BD-100-1A10 (CL-300)

ATA 24-61

ELECTRICAL POWER

**SPECIAL CHECK/MODIFICATION – DC POWER CENTER (DCPC) SYSTEM –
INSPECTION AND REPLACEMENT OF INTERNAL FUSES
IN THE L/H AND R/H DC POWER CENTER (DCPC)**

The information below is provided for your reference. For full details, please see corresponding paragraph contained within this bulletin.

RECOMMENDED RELIABILITY/DISPATCHABILITY/COST AVOIDANCE	COMPLIANCE TIME Not applicable		
EFFECTIVITY: A/C Serial No. 20003 to 20334			
MANPOWER: 5 man-hours			
TLMC, CH 5, PART 4 REQUIREMENT	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>	
KITS and/or PARTS	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	
TOOLING/GSE	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	
PLANNING INFORMATION: See important information at the start of Paragraph 1.	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	
DEDICATED SCHEDULE	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>	
PREREQUISITE SERVICE BULLETINS: N/A			

To place an order for parts or kits, please call Bombardier Parts Services at:

514-855-2999 or 1-866-538-1247

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1. PLANNING INFORMATION

- NOTES:
1. This Service Bulletin is applicable to the LH DCPC Part No. 975GC02Y04, 975GC02Y05 and 975GC02Y06 before Serial No. 257, and to the RH DCPC Part No. 970GC02Y04, 970GC02Y05 and 970GC02Y06 before Serial No. 255.
 2. This Service Bulletin is also applicable to the LH and RH DCPC in the operator's stock room.
 3. To reduce aircraft downtime, it is suggested to incorporate this Service Bulletin with SB 100-24-12, SB 100-24-15, SB 100-24-17 and SB 100-24-18, if applicable.

A. Effectivity

BD-100-1A10 aircraft, Serial No. **20003** to **20334**.

NOTE: The instructions given in this Service Bulletin are only applicable to the systems and parts installed at the time of delivery of the aircraft or as changed by Bombardier Aerospace Service Bulletin(s).

Before you do this bulletin, examine all STC, STA or equivalent action changes to make sure that this bulletin can be completed.

Refer to applicable governmental agency regulations and requirements and make sure that the work described in this Service Bulletin is performed in compliance with manufacturer's recommendations and/or acceptable industry standards.

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B. Reason

Internal visual inspections of the DCPC have shown that a white powder residue from fuses was found in significant amounts and migrating over electronic card connections, relays and contactors. Although the fuse residue has not been identified as the cause of any system failures, this is not a desirable condition.

There is a new fuse design which is sealed with a silicon type product that does not degrade with time. This Service Bulletin gives instructions to replace existing internal fuses in the affected DCPCs with the new fuse model.

C. Description

This Service Bulletin gives instructions to:

- Get access to the LH and RH DCPC,
- Verify the LH and RH DCPCs serial number,
- Do the Zodiac Aerospace Service Bulletin 975GC02Y-24-011, for the LH DCPC if necessary,
- Do the Zodiac Aerospace Service Bulletin 970GC02Y-24-011, for the RH DCPC if necessary,
- Do the necessary tests to make sure that the system operates correctly.

D. Compliance

Recommended – Reliability/Dispatchability/Cost Avoidance

E. Approval

This Service Bulletin does not contain modification information that revises the approved configuration and therefore does not require governmental or other regulatory approval.

F. Manpower

NOTES: 1. The man-hours given are estimates to help you schedule the tasks given in this bulletin. The estimates are for direct labor performed by an experienced crew and do not include the time for familiarization, planning, aircraft preparation in hangar such as towing and positioning of scaffolds, removal of interior furnishings, repainting, supervision and inspection.

For more information related to the manpower estimates, refer to SB 100-00-02.

2. This Service Bulletin may require consumable materials that have specific curing times (refer to Paragraph 3). The accumulated curing time is not included in the labor estimates and should be considered for planning purposes before you schedule this Service Bulletin.

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5 man-hours are necessary to do this Modification.

The labor required to do this Service Bulletin is at no cost for aircraft in and out of warranty if:

- (i) The work is done at Bombardier Business Aviation Services (BBAS) or Authorized Service Facilities (ASF), and
- (ii) This Service Bulletin is scheduled in less than 12 months from its release date (Basic Issue).

G. Material - Cost and Availability

No kit is required to do this Special Check/Modification. For material data, refer to Paragraph 3.

For the parts that may be necessary to do this Special Check/Modification, refer to Paragraph 3.B.

Parts necessary to do this Special Check/Modification are available at no cost for aircraft in and out of warranty if:

- (i) A no-charge purchase order is sent to Bombardier Aerospace in less than 12 months from this Service Bulletin release date (Basic Issue).

During or after the above free period, Smart Parts Plus does not pay for the parts.

H. Tooling

GSE REFERENCE NO.	PART NO.	DESCRIPTION
Commercially Available	-	Digital, Multimeter
Commercially Available	-	Socket – Metric, 10 mm, 6-point
Commercially Available	-	Wrench, Torque

- NOTES:
- 1. Refer to the BD-100 Illustrated Tool and Equipment Manual to make sure that you use the correct equipment configuration.
 - 2. Refer to the Liability Statement for acceptable GSE equivalents.

I. Weight and Balance

No change.

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J. Electrical Load Data

No change.

K. References

- BD-100 Aircraft Maintenance Manual (AMM), Chapters 6, 24 and 52.
- BD-100 Aircraft Illustrated Parts Catalog (AIPC), Chapter 24.
- Zodiac Aerospace, Service Bulletin No. 970GC02Y-24-011 (attached).
- Zodiac Aerospace, Service Bulletin No. 975GC02Y-24-011 (attached).

L. Other Publications Affected

None.

M. Equivalent Service Bulletin

None.

2. ACCOMPLISHMENT INSTRUCTIONS

- NOTES:
1. All TASKs given in the procedures that follow are from the BD-100, Aircraft Maintenance Manual unless otherwise specified.
 2. All references made to zones, access panels and/or doors, are from the BD-100, Aircraft Maintenance Manual, Chapter 6.

A. Aircraft Setup

- (1) Obey all electrical/electronic safety precautions. Refer to TASK 24-00-00-910-801.
- (2) Obey all Electrostatic-Discharge Safety Precautions. Refer to TASK 24-00-00-910-802.
- (3) Open the aft equipment compartment door 182GL. Refer to TASK 52-41-00-010-801.

B. Inspection

- (1) Verify the LH and RH DCPCs serial number to see if they are in the applicable range. Refer to Paragraph 1. A. (3) of the Zodiac Aerospace, Service Bulletin No. 970GC02Y-24-011 and 975GC02Y-24-011.
- (2) Go to Paragraph 2.C. if the DCPCs are in the applicable range.
- (3) Go to Paragraph 2.E. if the DCPCs are not in the applicable range.

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C. Modification

- (1) Remove the external dc power from the aircraft. Refer to TASK 24-41-00-861-802.
- (2) Disconnect the batteries. Refer to TASK 24-32-00-040-801.
- (3) Do the modification of the LH DCPC as instructed in the Zodiac Aerospace, Service Bulletin No. 975GC02Y-24-011.

NOTE: It is recommended to change the fuses one at a time to make sure they do not get mixed up. Make sure you install the same fuse rating that was removed.

- (4) Do the modification of the RH DCPC as instructed in the Zodiac Aerospace, Service Bulletin No. 970GC02Y-24-011.

NOTE: It is recommended to change the fuses one at a time to make sure they do not get mixed up. Make sure you install the same fuse rating that was removed.

D. Testing

- (1) Connect the batteries. Refer to TASK 24-32-00-440-801.
- (2) Connect and energize the external dc power. Refer to TASK 24-41-00-861-801.
- (3) Make sure there is no CAS message related to the electrical system.
- (4) Verify on the Electrical page that the LH and RH AUX BUSES are green.
- (5) Measure the voltage between the studs and the local ground as per the table that follows:

DCPC	Terminal Lug	Voltage
RH DCPC	T5	28V
RH DCPC	T4	28V
RH DCPC	T6	28V
LH DCPC	T10	28V
LH DCPC	T6	28V
LH DCPC	T5	28V
LH DCPC	T4	28V

- (6) Do the Operational Test of the LH and RH Main Generator. Refer to TASK 24-31-05-710-801.

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E. Close-out

- (1) Remove all tools, equipment and unwanted materials from the aircraft.
- (2) Close the aft equipment compartment door 182GL. Refer to TASK 52-41-00-410-801.

F. Recording

When this Service Bulletin is completed, make an entry in the aircraft log and send the attached Incorporation Notice to Bombardier Business Aircraft Customer Services (BBACS).

In an effort to improve the quality of our technical communications, we are requesting your feedback. Please take a moment to fill out our easy on-line Service Bulletin survey:

<http://csefeedback.aero.bombardier.com>

3. MATERIAL INFORMATION

A. Kit

No kit required.

B. Parts

The parts that follow may be necessary to do this Service Bulletin and are available from Bombardier Aerospace Parts Services, Montreal:

NEW PART NO.	QTY	ITEM	USED PART NO.	INSTRUCTIONS - DISPOSITION
GC0002940Y00	1	Modification, Kit RH DCPC	-	-
GC0002941Y00	1	Modification, Kit LH DCPC	-	-

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C. Material

The materials that follow, or equivalent, are necessary to do this Service Bulletin. These can be purchased from a local supplier. Bombardier Aerospace does not pay for these consumables.

DESCRIPTION	PART No./NAME	SPECIFICATION	QUANTITY	SUPPLIER (See Note)
Brush, Soft Bristle	-	-	-	Code: A
Cleaning Solvent	Isopropyl Alcohol	TT-I-735	As Necessary	Code: A

- NOTES:**
1. Refer to the table that follows for each supplier's address listed by codes.
 2. The Curing Time (CT), if applicable, for each consumable material is indicated with the description of each product.
 3. At time of release of this Service Bulletin, the information on the supplier was valid and accurate. In the event that this information has changed, the operator is encouraged to use the World Wide Web to find a local supplier.

SUPPLIERS ADDRESSES BY CODES
Code: A Commercially Available

D. Publications

No publications required.

SERVICE BULLETIN EVALUATION FORM

(Your ideas will help us provide better bulletins)

SERVICE BULLETIN: 100-24-20 **ISSUE:** Basic **DATED:** Jan 31/2012

TITLE: Special Check/Modification – DC Power Center (DCPC) System – Inspection and Replacement of Internal Fuses in the L/H and R/H DC Power Center (DCPC)

In an effort to improve the quality of our technical communications, we are replacing the standard **Service Bulletin Evaluation Form** with an on-line **Service Bulletin Survey** and we are requesting your feedback. Please take a moment to fill out our easy on-line Service Bulletin survey:

<http://csefeedback.aero.bombardier.com>

SERVICE BULLETIN INCORPORATION SHEET – “100-24-20”

**BOMBARDIER
SUBMISSION**

Upon completion of the Service Bulletin, please fill-in, fax to (514) 855-8798 or e-mail to Fracas at fracas.montreal@aero.bombardier.com

If your aircraft is registered on CAMP and you are reporting to them, please do not send the incorporation sheet to Bombardier. If your aircraft is on another tracking system, please contact Bombardier to make arrangements for automated data submission.

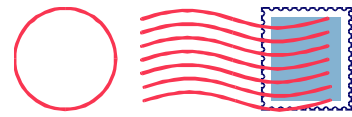
Service Bulletin Number	Rev.	* Parts Completed	<u>COMPLIED WITH</u>			Remarks/Reason
			YES	NO	N/A	
100-24-20	Basic	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
-	-	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
-	-	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

Actual hours to accomplish Service Bulletin: _____

* **NOTES:**

- Where the Service Bulletin is divided into a number of parts (e.g., PARTS A, B, C, D, etc.) which can be carried out separately, indicate only those parts completed at this time.
- For repetitive checks (usually PART A) only the initial check should be reported unless otherwise stated in the Service Bulletin.
- When more than one part is carried out at the same time, each part should be reported.

Aircraft Serial No. _____	Aircraft Reg. No. _____
Airframe Hours: _____	Airframe Landings _____
S.B. Incorporation date _____ (dd/mm/yy)	Service Order No. _____
Facility Incorporating S.B. _____	
Name _____	Signature _____ Date _____ (dd/mm/yy)
Signature not required if sent by E-Mail	



Bombardier Business Aircraft Customer Services (BBACS)

P.O. Box 6087, Station Centre-ville
Montreal, Québec, Canada H3C 3G9

Attention: Customer Support Department, Maintenance Engineering
