

## SERVICE BULLETIN REVISION TRANSMITTAL SHEET

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

Discard the Basic Issue of this Service Bulletin dated Apr 09/2021 and the Information Sheets dated Dec 23/2022 and Jul 21/2021, and replace in its entirety with this Revision 01.

Service Bulletin No. 100-24-29

Date of Basic Issue Apr 09/2021

Revision No. 01 Dated Jul 27/2023

**This revision has no effect for aircraft on which the Basic Issue of this Service Bulletin was done thus no other action is necessary. Do not sign the log book if you have not done this revision. Keep the previous log book entry. You may make an entry as "Not Applicable" for this revision.**

This revision is issued to:

1. Change, in the Service Bulletin Summary Sheet, to revise the AD Note.
2. Revise the Service Bulletin to reflect the latest template.
3. Incorporated Info Sheet dated Dec 23/2022, in Paragraph 1., to revise Note 5.
4. Change, in Paragraph 1., to add a new Note 3 and 6, update Notes 4 and 5, and move and update old Note 3 to Note 7.
5. Change, in Paragraph 1.K., to update TCCA AD number, add Advisory Wire reference and a Service Bulletin reference.
6. Change, in Paragraph 2.B., to revise Step (1) and sub steps.
7. Incorporated Info Sheet dated Jul 21/2021, in Paragraph 2.B., to add a CAUTION statement before step (2).
8. Change, in Paragraph 2.B., to update the Note in Step (4).
9. Incorporated Info Sheet dated Dec 23/2022, in Paragraph 3.B., to add new alternate part number.

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10. Make miscellaneous minor changes, as necessary, with no change of context.

# BOMBARDIER

## SERVICE BULLETIN SUMMARY

This Service Bulletin is available at:  
[my.businessaircraft.bombardier.com](http://my.businessaircraft.bombardier.com)

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

ATA 24-31

ELECTRICAL POWER

### SPECIAL CHECK/REWORK – DC POWER CENTER (DCPC) SYSTEM – REPLACEMENT OF THE LEFT DC POWER CENTER

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

<b>RECOMMENDED</b>	<b>COMPLIANCE TIME</b>	
SPECIFIED TIME COMPLIANCE	Refer to Paragraph 1.D.	
<b>EFFECTIVITY:</b> A/C Serial No. <b>20001</b> to <b>20500</b>		
<b>MANPOWER:</b> 8 man-hours		
<b>CONTINUED AIRWORTHINESS (CAW) FLEET CAMPAIGN</b>	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
<b>TLMC, CH 5 AFFECTED</b>	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
<b>KITS and/or PARTS</b>	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
<b>TOOLING/GSE</b>	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
<b>PLANNING INFORMATION:</b> See important information at the start of Paragraph 1.	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
<b>DEDICATED SCHEDULE</b>	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
<b>PREREQUISITE SERVICE BULLETINS:</b> None		
<b>NOTE:</b> This Service Bulletin is mandated by TCCA Airworthiness Directive (AD) CF-2023-35, which will make it necessary to implement this Service Bulletin.		

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

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

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[my.businessaircraft.bombardier.com](https://my.businessaircraft.bombardier.com)

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

ATA 24-31

ELECTRICAL POWER

<p><b>SPECIAL CHECK/REWORK – DC POWER CENTER (DCPC) SYSTEM – REPLACEMENT OF THE LEFT DC POWER CENTER</b></p>
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## 1. PLANNING INFORMATION

**NOTES:** 1. **Before you do this Service Bulletin, examine all STC, STA or equivalent action changes to make sure that this Service Bulletin can be completed.**

2. This Service Bulletin is covered by a dedicated schedule. Dedicated schedules are used to reserve and manage inventory due to limited availability of rotatable stock, parts and/or kits. Parts are limited, therefore, advance part scheduling with our In-Service Implementation Team (ISIT) is recommended prior to a maintenance visit. They can be reached at [bacs\\_isit@aero.bombardier.com](mailto:bacs_isit@aero.bombardier.com). The parts will be allocated on a first come first serve basis.

Should you require additional information, please contact your Regional Sales Manager (RM) or Field Service Representative (FSR).

For more information on dedicated schedules, refer to SB 100-00-02.

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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3. Left DCPC Part No. 975GC02Y08 fully meets the intent of Service Bulletins 100-24-29 and 100-24-30.

For operators of Challengers 300 with left DCPC part numbers 975GC02Y04 or 975GC02Y05 installed, options are:

- Upgrade the aircraft right and APU DCPC's to the Y06 electrical system configuration (SB 100-24-12 or 100-24-15). Left DCPC part number 975GC02Y07 can be intermixed with other Y06 configured DCPC's on the same aircraft.
  - Send the left DCPC part numbers 975G02Y04 or 975G02Y05 to Safran for the deep cleaning (customer own repair). Due to the vendor limited repair capacity, the shipment will need to be closely coordinated in advance with Bombardier Component Repair & Overhaul team. Since no exchange unit will be provided by Bombardier, a sufficient aircraft downtime should be allocated for the unit rework.
4. This Service Bulletin is applicable for aircraft with left DC Power Center (DCPC) part numbers 975GC02Y04, 975GC02Y05, 975GC02Y06 or 975GC02Y07 that have accumulated 3500 flight hours or more by Dec 31/2023.
  5. Bombardier only provides left DCPC exchange unit Part No. 975GC02Y08 for this campaign.
  6. SB 100-24-29 is a prerequisite to SB 100-24-30 and must be done before or at the same time as this Service Bulletin.
  7. An update to the TLMC manual for this special check/rework is scheduled for Q4/2023.

**A. Effectivity**

BD-100-1A10 aircraft, Serial No. **20001** to **20500**.

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 Aviation Service Bulletin(s).

**B. Reason**

Condition:

Reports found that aircraft may experience electrical system misleading indication (PBA, EICAS) as a result of left DCPC internal communication data bus contamination, inducing poor electrical contact performance.

Objective/Benefit:

This Service Bulletin gives instructions to check and replace the left DCPC to prevent the occurrence of an electrical system misleading indication.

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**C. Description**

This Service Bulletin gives instructions to:

- Get access to the left DCPC,
- Establish the total flight hours of left DCPC,
- If necessary, remove the left DCPC,
- Send the left DCPC to the address shown in Paragraph 1.G.,
- Install the left DCPC, and
- Do the necessary tests to make sure that the system operates correctly.

**D. Compliance**

Recommended before Dec 31/2023, for all the affected left DC power (DCPC) units that have accumulated 3500 total flight hours or more since date of manufacture.

**NOTE:** If it is not possible to complete all the instructions in this Service Bulletin because of the aircraft configuration, submit an SRPSA for analysis and to get an approved disposition to complete this Service Bulletin. Standard SRPSA fees may apply. Refer to the Services section of the Bombardier customer portal for the latest prices, rates and fees.

**E. Approval**

The technical content of this Service Bulletin has been approved under the authority of Transport Canada Civil Aviation (TCCA) Design Approval Organization (DAO) No. DAO #93-Q-02.

- NOTES:**
1. The technical content of this Service Bulletin is accepted by the FAA under the Canada/USA bilateral Aviation Safety Agreement.
  2. The technical content of this Service Bulletin is accepted by EASA under the Canada/EU bilateral Aviation Safety Agreement.

**F. Manpower**

- NOTES:**
1. The man-hours given are to help you schedule the tasks given in this Service Bulletin. The man-hours 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, refer to SB 100-00-02.

2. Labor hours are based on the fact that the modification will be done at the next scheduled maintenance task or inspection. Therefore no man-hours are allotted to prepare the aircraft for maintenance or to prepare for this Service Bulletin.

8 man-hours are necessary to do this modification.

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Bombardier Aviation does not pay for the labor to do this Service Bulletin.

**G. Material – Cost and Availability**

No kit is necessary to do this modification.

The part in Paragraph 3.B. may be necessary to do this Service Bulletin.

Bombardier Aviation does not pay for the part to do this Service Bulletin.

This Service Bulletin is covered by a dedicated schedule. Dedicated schedules are used to reserve and manage inventory due to limited availability of rotatable stock, parts and/or kits. Parts are limited, therefore, advance part scheduling with our In-Service Implementation Team (ISIT) is recommended prior to a maintenance visit. They can be reached at [bacs\\_isit@aero.bombardier.com](mailto:bacs_isit@aero.bombardier.com). The parts will be allocated on a first come first serve basis.

Should you require additional information, please contact your Regional Sales Manager (RM) or Field Service Representative (FSR).

For more information on dedicated schedules, refer to SB 100-00-02.

Send the removed left DCPC, Part No. 975GC02Y04, 975GC02Y05, 975GC02Y06 or 975GC02Y07 to Bombardier Aviation at one of the two addresses given below:

Learjet Inc. – Core Returns  
251-A Wille Road  
Des Plaines, Illinois  
60018-1861  
USA

or

Distribution Centre Frankfurt – Core Returns  
Bombardier Aviation Company GmbH  
Hans-Boeckler-Strasse 9  
GROSS-GERAU Hesse 64521  
Germany

Refer to your Material Return Authorization (MRA) form to find the applicable return address.

**NOTE:** Bombardier Aviation is maintaining a rotatable pool of replacement left DCPC, to be supplied to the operators under the terms and conditions given below:

- The removed left DCPC, Part No. 975GC02Y04, 975GC02Y05, 975GC02Y06 or 975GC02Y07, must be returned to Bombardier Aviation, Parts Services in less than 10 days of receipt of replacement unit, with documentation showing the serial number of the aircraft.
- If the removed left DCPC, Part No. 975GC02Y04, 975GC02Y05, 975GC02Y06 or 975GC02Y07 is not returned in less than 10 days, the operator will be charged for the replacement units full cost.

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For all parts transactions, Bombardier Aviation's current Spare Parts and Component Repair Price Catalogue General Terms and Conditions apply. These terms and conditions are found on the Bombardier Customer Portal at:

[my.businessaircraft.bombardier.com](http://my.businessaircraft.bombardier.com)

All parts to be upgraded need to be coordinated with Bombardier Aviation Component Repair and Overhaul organization.

Smart Parts pays for the part until Dec 31/2023 and unit accumulated more than 3500 total flight hours from the Service Bulletin distribution date (Basic Issue).

## **H. Tooling**

The equipment and tools listed below are necessary to do this modification:

<b>GSE REFERENCE NO.</b>	<b>PART NO.</b>	<b>DESCRIPTION</b>
Commercially Available	–	Torque Wrench 2.21 lbf in (0.25 Nm)
Commercially Available	–	Torque Wrench 20 to 25 lbf in (2.26 to 2.82 Nm)
Commercially Available	–	Torque Wrench 33.80 to 41.58 lbf in (3.82 to 4.70 Nm)
Commercially Available	–	Torque Wrench 60.69 to 80.69 lbf in (6.86 to 9.12 Nm)
Commercially Available	–	Torque Wrench 98.47 to 134.49 lbf in (11.13 to 15.20 Nm)

- NOTES:**
1. Refer to the BD-100 Illustrated Tool and Equipment Manual (ITEM) to make sure that you use the correct equipment configuration.
  2. Refer to the Liability Statement in the ITEM for the BD-100 for acceptable GSE equivalents.
  3. This list is provided for a quick reference. In case of discrepancy between this list and the tool called out in the SPM-WM, Chapter 20, then the tool called in the SPM-WM will prevail. Other approved alternative tools are acceptable and can also be used.

## **I. Weight and Balance**

No change.

## **J. Electrical Load Data**

No change.



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**K. References**

- TCCA Airworthiness Directive, CF-2023-35.
- Bombardier Aviation, Restriction and/or Special Instruction (RSI), C-100-000-24-0098, Rev. --.
- Bombardier Aviation, SB 100-24-30 "Modification-DC Power Center (DCPC) System-Installation of Protective Tape on the Left DCPC Card Cage".
- Safran Electrical & Power (ECE), Service Bulletin 975GC02Y-24-018 (Attached).
- Advisory Wire, AW300-24-0141.
- Bombardier Aviation, Standard Practices Manual (SPM), Chapter 51.
- CH 300 Aircraft Maintenance Manual (AMM), Chapters 6, 24 and 52.

**L. Other Publications Affected**

None.

**M. Equivalent Service Bulletin**

- For the Challenger 350 aircraft, use Service Bulletin 350-24-004.

**2. ACCOMPLISHMENT INSTRUCTIONS**

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

**A. Aircraft Setup**

- (1) Obey all the electrical/electronic safety precautions. Refer to AMM 24-00-00-910-801.
- (2) Obey all the electrostatic-discharge safety precautions. Refer to AMM 24-00-00-910-802.
- (3) Open the aft equipment compartment door (182GL). Refer to AMM 52-41-00-010-801.
- (4) Disconnect the batteries. Refer to AMM 24-32-00-040-801.

**B. Special Check – Left DCPC Total Flight Hours**

NOTE: If it is not possible to establish the total flight hours of left DCPC, submit an SRPSA by email at [SRPSA@aero.bombardier.com](mailto:SRPSA@aero.bombardier.com) and request for assistance to determine the flight hours of the unit.

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- (1) Establish the left DCPC total flight hours (since date of manufacture).

NOTE: For original left DCPC units, the total flight hours accumulated is the same than the aircraft total accumulated flight hours.

– Left DCPC total flight hours (since unit date of manufacture): \_\_\_\_\_

- (a) With unit Part No. 975GC02Y08 installed, go to Paragraph 2.D. (Close-out).
- (b) With units with SB 100-24-29 already incorporated, then incorporate SB 100-24-30.
- (c) With units with more than 3500 total flight hours accumulated and SB 100-24-29 not incorporated, go to Step 2.B.(2).
- (d) If one of the steps above is followed, the intent of the SBs 100-24-29 and 100-24-30 will be met.
- (e) With units that have less than 3500 total flight hours accumulated and SB 100-24-29 not incorporated, no further action is required until they reach 3500 total flight hours time in service. Proceed to Paragraph 2.E. (Close-out).

NOTE: This Service Bulletin is recommended before Dec 31/2023. Units that have not reached the 3500 flight hours threshold at the moment of this check might reach it before Dec 31/2023 and the SB 100-24-29 will need to be incorporated.

CAUTION: MAKE SURE THE DCPC THAT YOU REMOVED IS CORRECTLY PUT IN THE SHIPPING CONTAINER. USE THE SHIPPING CONTAINER AGAIN WITH ALL PROTECTIVE MATERIAL SUPPLIED WITH THE NEW DCPC. IF YOU DO NOT DO THIS, DAMAGE TO THE DCPC CAN OCCUR DURING SHIPMENT.

- (2) Remove the left DCPC. Refer to AMM 24-61-01-000-801.
- (3) Return the left DCPC to the address shown in Paragraph 1.G.
- (4) Install the replacement left DCPC. Refer to AMM 24-61-01-400-801.

NOTE: The left DCPC received is POST Safran Service Bulletins 975GC02Y-24-018 (Deep Cleaning) and 975GC02Y-24-020 (Improvement of PCB Protection). The incorporation of this Service Bulletin resets the unit total flight hours to zero at the date of incorporation. The Service Bulletin number and date of incorporation can be found onto the left DCPC identification placard. This date of incorporation should be used in the future calculations of the total flight hours of this left DCPC.

- (5) Perform the electrical bonding test for the left DCPC. Refer to SPM-MM 51-80-00-760-801.

### C. Testing

- (1) Connect the batteries. Refer to AMM 24-32-00-440-801.
- (2) Do the functional test of the DC power center (DCPC). Refer to AMM 24-61-01-720-801.

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**D. Close-out**

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

**E. 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).

For information, correction(s), comment(s) and/or feedback regarding Service Bulletins released on the Customer Portal, please contact the Service Bulletin Group at the following email address:

[bbad\\_SBgroup@aero.bombardier.com](mailto:bbad_SBgroup@aero.bombardier.com)

**3. MATERIAL INFORMATION**

**A. Kit**

No kits required.

**B. Parts**

The part that follows may be necessary to do this Service Bulletin and is available from Bombardier Aviation Parts Services, Montreal:

NEW PART NO.	QTY	ITEM	USED PART NO.	INSTRUCTION - DISPOSITION
975GC02Y04 or 975GC02Y05 or 975GC02Y06 or 975GC02Y07 or 975GC02Y08 Post VSB 975GC02Y-24-018	1	Left DC Power Center	975GC02Y04 or 975GC02Y05 or 975GC02Y06 or 975GC02Y07	Return to Bombardier. Refer to Paragraph 1.G.

**NOTES:** 1. The part number for the item listed above is subject to change without revision to this Service Bulletin. In case of discrepancy between this list and any other list, the Illustrated Parts Catalog prevails and shall be used to determine the latest part number.

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2. All parts to be upgraded need to be coordinated with Bombardier Aviation Component Repair and Overhaul organization.

**C. Material**

No consumables are required.

**D. Publications**

No publications required.

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## SERVICE BULLETIN EVALUATION FORM

(Your ideas will help us provide better bulletins)

**SERVICE BULLETIN:** 100-24-29    **ISSUE:** Rev. 01    **DATED:** Jul 27/2023

**TITLE:**        SPECIAL CHECK/REWORK – DC POWER CENTER (DCPC) SYSTEM –  
REPLACEMENT OF THE LEFT DC POWER CENTER

For any information, correction(s), comment(s) and/or feedback regarding Service Bulletins released on the Customer Portal, please contact the Service Bulletin Group at the following email address:

[bbad\\_SBgroup@aero.bombardier.com](mailto:bbad_SBgroup@aero.bombardier.com)

NOTE: Please use Salesforce **only** for troubleshooting issues or when Engineering deviation is necessary to accomplish the Service Bulletin modification.

# BOMBARDIER

## SERVICE BULLETIN INCORPORATION SHEET – "100-24-29"

<b>BOMBARDIER SUBMISSION</b>	<p>Upon completion of the Service Bulletin, please fill-in, fax to (514) 855-8798 or e-mail to Fracas at <a href="mailto:fracas.montreal@aero.bombardier.com">fracas.montreal@aero.bombardier.com</a></p> <p><b>If you're reporting Service Bulletin (SB) Incorporations to CAMP, sending this Incorporation Sheet to Bombardier is not mandatory.</b> If your aircraft is on another tracking system, please contact Bombardier to make arrangements for automated data submission.</p>
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Service Bulletin Number	Rev.	* Parts Completed	COMPLIED WITH			Remarks/Reason (Mandatory if N/A)
			YES	NO	N/A	
100-24-29	01	_____	<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"/>	_____
_____	_____	_____	<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:**
1. 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.
  2. For repetitive checks (usually PART A) only the initial check should be reported unless otherwise stated in the Service Bulletin.
  3. When more than one part is carried out at the same time, each part should be reported.
  4. Fill in 'Remark/Reason' to explain compliance method when N/A is selected. (E.g. Part not installed, N/A by effectivity, N/A by Part Serial Number, etc.)
  5. PCW means 'Previously Complied With'.

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	