

SERVICE BULLETIN REVISION TRANSMITTAL SHEET

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

Discard the Basic Issue of this Service Bulletin dated Oct 15/2010, and replace in its entirety with this Revision 01.

Service Bulletin No. 100-78-01

Date of Basic Issue Oct 15/2010

Revision No. 01 Dated Dec 15/2011

This revision has no effect for aircraft on which the Basic Issue of this Service Bulletin was done thus no other action is necessary.

This revision is issued to:

1. Add a Note in the Planning Information.
2. Revise, in Paragraph 1.D., the specified compliance time.
3. Add, in Paragraph 1.D., NOTE 2.
4. Add, in Paragraph 1.K., a reference to Bombardier Aerospace, Restriction and/or Special Instruction (RSI), C-100-000-78-0012, Rev. --.
5. Add, in Paragraph 2. C. (1), a NOTE.
6. Revise Paragraph 2.E. to add an on-line Service Bulletin survey link.
7. Revise the format of the Service Bulletin to show the latest format.
8. Make miscellaneous minor changes, as necessary, with no change of context.

SERVICE BULLETIN SUMMARY

This Service Bulletin is available at:

www.cic.bombardier.com

BD-100-1A10 (CL-300)

ATA 78-30

EXHAUST

SPECIAL CHECK – THRUST REVERSER – DOOR AND BEAM ASSEMBLY CORROSION INSPECTION

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

RECOMMENDED SPECIFIED TIME COMPLIANCE	COMPLIANCE TIME Refer to Paragraph 1.D.	
EFFECTIVITY: Airframe Propulsion System (APS), Serial No. 0003 to 999 (L/R) installed at the time of delivery on: A/C Serial No. 20003 to 20999		
MANPOWER: PART A: 2 man-hours PART B: 4 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

SERVICE BULLETIN

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EXHAUST

SPECIAL CHECK – THRUST REVERSER – DOOR AND BEAM ASSEMBLY CORROSION INSPECTION

1. PLANNING INFORMATION

NOTE: After Service Bulletin 100-78-02 has been completed on your aircraft, this Service Bulletin is no longer required.

A. Effectivity

Airframe Propulsion System (APS), Serial No. 0003 to 999 (L/R) installed at the time of delivery on:

BD-100-1A10 aircraft, Serial No. **20003** to **20999**.

- NOTES:**
1. This Service Bulletin is applicable for all AS 907 Thrust Reverser Assemblies 13A010-00-0G, 13A012-00-0G and 13A013-00-0G Series with the door and beam assemblies listed in the attached Aircelle Service Bulletin, SB 907 78-30-006.
 2. The inspection and allowable corrosion limit in this Service Bulletin supersedes the limit and fly-on allowance outlined in general REO 1007830022 Rev A (Reference: Advisory Wire AW300-78-099 Rev 1).
 3. 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

Several operators have discovered surface corrosion on the pivot doors and side beams inner air washed panels of the thrust reverser. The corrosion is believed to be caused by sulphur-based compounds in the exhaust gas.

The purpose of this Service Bulletin in conjunction with Aircelle Service Bulletin, SB 907 78-30-006, is to inspect the thrust reverser inner panels for corrosion in accordance with the compliance given in Paragraph 1.D. Continued operation with minor surface corrosion is permitted provided any corrosion found is within the allowable limits.

The inspection plan outlined in this Service Bulletin is a short-term solution to allow continued operation until a permanent repair and improved coating to prevent this corrosion is available and incorporated on the thrust reverser. A permanent repair solution is expected to be released in the second half of 2011 following a field evaluation.

C. Description

This Service Bulletin gives instructions in PART A to:

- Visually examine each thrust reverser for corrosion, and
- If corrosion is limited to Zone 1 or none is found, send an e-mail with the inspection results to the applicable persons.

This Service Bulletin gives instructions in PART B to:

- If corrosion is found beyond Zone 1, do the detail visual inspection to determine the corrosion depth,
- Record the inspection results,
- If results are in the permitted limits, send an e-mail with the inspection results to the applicable persons, and
- If results are not in the permitted limits, submit an SRPSA to request a disposition of the inspection results to SRPSA@aero.bombardier.com.

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D. Compliance

Specified time compliance is as follows:

- For aircraft with less than 2400 flight hours, the inspection is required to be done within 800 flight hours from this Service Bulletin release date (Basic Issue).
- For aircraft with less than 2400 flight hours, that have had their reversers previously inspected, the inspection is required to be done within 800 flight hours from the previous inspection.
- For aircraft with more than 2400 flight hours, the inspection is required to be done within 400 flight hours from this Service Bulletin release date (Basic Issue).
- For aircraft with more than 2400 flight hours, that have had their reversers previously inspected and corrosion was found, the inspection is required to be done within 400 flight hours from the previous inspection.
- For aircraft with more than 2400 flight hours, that have had their reversers previously inspected and corrosion was not found, the inspection is required to be done within 800 flight hours from the previous inspection.

NOTES: 1. The inspection procedure in this Service Bulletin will have to be repeated within the repeat threshold flight hour interval outlined in the accomplishment instructions until a permanent repair solution for this corrosion is available and incorporated on the aircraft. A permanent repair solution is expected to be released in the second half of 2011 following a field evaluation.

2. Repeat inspections may be accomplished up to 40 hours after the Inspection due time, if required, to align the interval with a normal inspection procedure.

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 the JAA and by EASA in accordance with established procedures.

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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.

The manpower necessary to accomplish PART A and/or PART B is as follows:

- 2 man-hours are necessary to do PART A.

NOTE: 1 man-hour for each thrust reverser.

- If required, 4 additional man-hours are necessary to do PART B.

NOTE: 2 man-hours for each thrust reverser.

The labor required to do this Service Bulletin is available at no cost if:

- (i) the work is done at Bombardier Business Aviation Services (BBAS) or Authorized Service Facilities (ASF).
- (ii) the Service Bulletin is scheduled in accordance with the specified time compliance given in Paragraph 1.D.

G. Material - Cost and Availability

Aircelle Kits BLPK-PR143 and BLPK-10P4/2 are necessary to do PART B of this Service Bulletin.

The kits are available at no cost if a no-charge purchase order is sent to Bombardier Aerospace.

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

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H. Tooling

GSE REFERENCE NO.	PART NO.	DESCRIPTION
-	Commercially Available	Pencil Grinder (See Note 3 and 4)
-	Commercially Available	Depth Gauge or Dial Test Indicator (See Note 3 and 4)
GSE 24-00-24	S4933959-501	Tag, Circuit Breaker

- 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.
 3. These tools are shown in Aircelle Service Bulletin, SB 907 78-30-006.
 4. These tools are only used if PART B of this Service Bulletin is to be done.

I. Weight and Balance

No change.

J. Electrical Load Data

No change.

K. References

- Bombardier Aerospace, Restriction and/or Special Instruction (RSI), C-100-000-78-0012, Rev. --.
- BD-100 Aircraft Maintenance Manual (AMM), Chapters 6, 24, 29, 71, and 78.
- Aircelle Service Bulletin, SB 907 78-30-006 (attached).
- Advisory Wire AW300-78-099.

L. Other Publications Affected

- BD-100 Aircelle Component Maintenance Manual (CMM), 78-30-01.

M. Equivalent Service Bulletin

None.

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2. ACCOMPLISHMENT INSTRUCTIONS

- NOTES:
1. All TASKs referenced 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.
 3. The accomplishment instructions are applicable to the upper and lower doors, and the inboard and outboard beams of the left and right thrust reverser.

A. Aircraft Setup

- (1) Open both Thrust Reversers Pivot Doors. Refer to TASK 78-30-00-710-801 – “Operational Test of the Thrust Reverser”.
- (2) Record in the Mapping Template (Appendix 2 of Aircelle Service Bulletin, SB 907-78-30-006) the Thrust Reverser and Pivot Door serial and part numbers.
- (3) Close both Thrust Reversers Pivot Doors. Refer to TASK 78-30-00-710-801 – “Operational Test of the Thrust Reverser”.
- (4) Obey all the hydraulic safety precautions. Refer to TASK 29-00-00-910-801.
- (5) Obey all the electrical/electronic safety precautions. Refer to TASK 24-00-00-910-801.
- (6) Obey all the engine safety precautions. Refer to TASK 71-00-00-910-801.
- (7) Obey all the thrust reverser safety precautions. Refer to TASK 78-30-00-910-801.
- (8) Do a deactivation of the thrust reverser (for maintenance). Refer to TASK 78-30-00-040-801.

B. PART A: Special Check – General

- (1) Visually examine each thrust reverser for corrosion in accordance with the attached Aircelle Service Bulletin, SB 907 78-30-006.
 - (a) If no corrosion is found:

Send an e-mail to steven.boost@aero.bombardier.com and geoff.harris@gknaerospace.com. Please note the aircraft number, inspection date, aircraft hours /cycles, and that no corrosion was found. The information will be used for fleet monitoring purposes only. Repeat the inspection per this Service Bulletin within 800 flight hours or carry out the approved repair with an improved coating (SB 100-78-02) within 800 flight hours.

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- (b) If corrosion is found but it is limited to Zone 1:
Complete the mapping template as outlined in Aircelle Service Bulletin, SB 907 78-30-006 and forward the information via e-mail to **steven.boost@aero.bombardier.com** and **geoff.harris@gknaerospace.com**. The information will be used for fleet monitoring purposes only. Repeat the inspection per this Service Bulletin within 400 flight hours, or carry out the approved repair with an improved coating (SB 100-78-02) within 400 flight hours.
- (c) If corrosion is found and it extends beyond Zone 1:
Do the detailed visual inspection per PART B.

C. PART B: Special Check – Detailed Visual Inspection

NOTE: This detailed visual inspection should be performed on the thrust reverser only if corrosion is present beyond zone 1.

The kits referenced in Paragraph 1.G. are required to perform this detailed inspection.

- (1) Do the localized detailed visual inspection in accordance with Paragraph 3.C. of the attached Aircelle Service Bulletin, SB 907 78-30-006.

NOTE: Care should be taken to remove material in small increments to make sure minimum material removal from corroded area. Remove only the minimum material necessary to reach the bottom of the deepest corrosion pit in the locally blended area.

- (2) Record the inspection results in accordance with the corrosion mapping template. Refer to Appendix 2 of the attached Aircelle Service Bulletin, SB 907 78-30-006.

- (a) If results are in the permitted limits:
Complete the mapping template as outlined in Aircelle Service Bulletin, SB 907 78-30-006 and forward the information via e-mail to **steven.boost@aero.bombardier.com**, and **geoff.harris@gknaerospace.com**. The information will be used for fleet monitoring purposes only. Repeat the inspection per this bulletin within 400 flight hours, or carry out the approved repair with an improved coating (SB 100-78-02) within 400 flight hours.

- (b) If results are not in the permitted limits:
Submit an SRPSA to request a disposition of the inspection results to: **SRPSA@aero.bombardier.com**.

Make sure to include the completed mapping template with all the requested information and photos. Bombardier, together with the supplier of the thrust reverser will review the inspection results and advise if continued operation of the reverser can be allowed, or if any components need to be replaced or re-inspected within a specific time.

NOTE: The SRPSA form is available at: www.cic.bombardier.com

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D. Close-out

- (1) Remove all tools, equipment and unwanted materials from the aircraft.
- (2) Do an activation of the thrust reverser (for maintenance). Refer to TASK 78-30-00-440-801.

E. Recording

Each time this Service Bulletin inspection is performed, make an entry in the aircraft log and send the attached Incorporation Notice to Bombardier Business Aircraft Customer Support (BBACS). When Service Bulletin 100-78-02 is completed, this Service Bulletin is no longer required to be performed.

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 kits required.

B. Parts

The parts that follow are necessary to do PART B: Special Check – Detailed Visual Inspection, and are available from Bombardier Aerospace Parts Services, Montreal. Refer to the attached Aircelle Service Bulletin, SB 907 78-30-006 for kit details.

NEW PART NO.	QTY	ITEM	USED PART NO.	INSTRUCTIONS - DISPOSITION
BLPK-10P4/2	1	Epoxy Green Primer	-	-
BLPK-PR143	1	Epoxy Matt Black Primer	-	-

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C. Material

The materials that follow, or equivalent, are necessary to do PART B: Special Check – Detailed Visual Inspection. They can be purchased from a local supplier. Bombardier Aerospace does not pay for these consumables:

DESCRIPTION	PART No./NAME	SPECIFICATION	QUANTITY	SUPPLIER (See Note)
Chemical Coating Conversion	Alodine 1200	MIL-DTL-81706, Class 1A	As Necessary	Code: A
Cleaner, Manual Solvent	DS-108 Wipe Solvent or Equivalent	-	As Necessary	Code: A
Cloth, No-Lint	-	-	As Necessary	Code: A
Paper, Abrasive, Aluminum Oxide 150/400-Grit	-	-	As Necessary	Code: A
Paper, Protective	-	MIL-P-17667	As Necessary	Code: A
Tape, Masking	-	-	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.

Code: A
 Commercially Available

D. Publications

No publications required.

SERVICE BULLETIN EVALUATION FORM

(Your ideas will help us provide better bulletins)

SERVICE BULLETIN: 100-78-01 **ISSUE:** Rev. 01 **DATED:** Dec 15/2011

TITLE: Special Check – Thrust Reverser – Door and Beam Assembly Corrosion Inspection

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 – “100-78-01”

**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	
100-78-01	01	PART A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
“	“	PART B	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
-	-	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

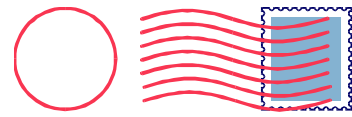
Actual hours to accomplish Service Bulletin: _____

* **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
