

# SERVICE BULLETIN SUMMARY

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MODEL BD-700-1A10 (BD-700)

ATA 23-71

## COMMUNICATIONS

**MODIFICATION – VOICE RECORDER SYSTEM – INSTALLATION OF RECORDER INDEPENDENT POWER SUPPLY (RIPS) FOR COCKPIT VOICE RECORDER (CVR)**

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

<b>OPTIONAL</b> OPERATIONAL ENHANCEMENT	<b>COMPLIANCE TIME</b> Not applicable	
<b>EFFECTIVITY:</b> A/C Serial No. <b>9388</b> and <b>9390</b> to <b>9429</b>		
<b>MANPOWER:</b> 3 man-hours		
<b>INSTRUCTIONS FOR CONTINUED AIRWORTHINESS (ICA)</b>	YES <input type="checkbox"/>	<b>NO</b> <input checked="" type="checkbox"/>
<b>KITS and/or PARTS</b>	<b>YES</b> <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
<b>TOOLING/GSE</b>	<b>YES</b> <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
<b>PLANNING INFORMATION:</b>	YES <input type="checkbox"/>	<b>NO</b> <input checked="" type="checkbox"/>
<b>DEDICATED SCHEDULE</b>	YES <input type="checkbox"/>	<b>NO</b> <input checked="" type="checkbox"/>
<b>PREREQUISITE SERVICE BULLETINS:</b> N/A		

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

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

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[www.cic.bombardier.com](http://www.cic.bombardier.com)

MODEL BD-700-1A10 (BD-700)

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COMMUNICATIONS

**MODIFICATION – VOICE RECORDER SYSTEM – INSTALLATION OF RECORDER  
INDEPENDENT POWER SUPPLY (RIPS) FOR COCKPIT VOICE RECORDER (CVR)**

## 1. PLANNING INFORMATION

### A. Effectivity

BD-700-1A10 aircraft, Serial No. **9388** and **9390** to **9429**.

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.

### B. Reason

The FAA has mandated a requirement for a backup power supply that will maintain power to the CVR for 10 +/- 1 minutes after all aircraft power is lost. This affects all FAA registered aircraft with a manufacture date after 6 April 2010 and operate under Part 135.

This Service Bulletin introduces an independent power source for the CVR that meets the FAA requirements. Incorporation of this Service Bulletin will ensure that the operator has met the new FAA requirement.

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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### **C. Description**

This Service Bulletin gives instructions to:

- Get access to aft equipment compartment 311BB.
- Get access to the CVR.
- Remove the CVR.
- Install the RIPS.
- Install the CVR, and
- Do the necessary tests to make sure that the system operates correctly.

### **D. Compliance**

Optional – Operational Enhancement

### **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.

### **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 700-00-002.

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.
3. 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.

3 man-hours are necessary to do this modification.

Bombardier Aerospace does not pay for the labor to do this modification.

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**G. Material - Cost and Availability**

No kit is necessary to do this modification.

The RIPS part that follows is necessary to do this modification. Only the U.S. domestic price is shown:

PART NO.	PRICE
100-2010-101	\$18,002.00

The above price can change. For the price outside of the U.S., refer to the last applicable Spare Parts Price Catalog. This data is also available from Bombardier Business Aviation Services (BBAS) at the addresses shown in the catalog.

Sufficient parts will be kept for the estimated amount of orders.

Bombardier Aerospace does not pay for the part in Paragraph 3.B., to do this modification.

The part can be purchased by sending a purchase order to Bombardier Aerospace Parts Logistics, Montreal.

**H. Tooling**

GSE REFERENCE NO.	PART NO.	DESCRIPTION
20X-00-04	M1-G-KIT	Portable Bonding Tester
32-61-01	-	Target – Proximity Sensor
32-61-02	-	Antitarget – Proximity Sensor
-	-	Two Headsets

**NOTES:** 1. Refer to the Global Express XRS 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**

WEIGHT	MOMENT
+5.90 pounds (2.68 kg)	+6162.0 pound-inches (71.0 kgm)

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## J. Electrical Load Data

This modification increases the continuous load as follows:

BUS	AMPS	KW	KVAR
DC ESS	0.2 amps (continuous)	-	-

## K. References

- Bombardier Aerospace, Modification Summary, 700T97567, Rev. A2.
- Bombardier Aerospace, Kit Drawing KGD991-3101, Rev. - -.
- Global Express XRS BD-700 Aircraft Maintenance Manual, Chapters 6, 23 and 24.
- Global Express XRS BD-700 Standard Practices Manual (SPM), Chapter 51.

## L. Other Publications Affected

N/A

## M. Equivalent Service Bulletin

For the Global 5000 BD 1A11 (BD-700) aircraft, use SB 700-1A11-23-030.

## 2. ACCOMPLISHMENT INSTRUCTIONS

NOTES: 1. All TASKs given in the procedures that follow are from the Global Express XRS BD-700 Aircraft Maintenance Manual unless otherwise specified.

2. All references made to zones, access panels and/or doors, are from the Global Express XRS BD-700 Aircraft Maintenance Manual, Chapter 6.

### A. Aircraft Setup

CAUTION: OBEY ALL ELECTROSTATIC DISCHARGE SAFETY PRECAUTIONS WHEN YOU DO MAINTENANCE ON ELECTROSTATIC DISCHARGE SENSITIVE (ESDS) COMPONENTS. STATIC VOLTAGE CAN CAUSE DAMAGE TO ESDS COMPONENTS.

- (1) Obey all electrostatic discharge safety precautions. Refer to TASK 24-00-00-910-802.
- (2) Remove the CVR. Refer to TASK 23-71-01-000-801.

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## B. Modification

- (1) Remove the protective covers from the electrical connectors on the CVR and the RIPS.
- (2) Install the RIPS on the CVR mounting tray and ensure the electrical connectors are properly engaged.
- (3) Install the CVR on the RIPS. Refer to Kit Drawing KGD991-3101.
- (4) Set, tighten and engage the captive front clamps on the CVR.
- (5) Do the bonding test between the CVR and aircraft structure. Refer to SPM TASK 51-80-00-760-801.

NOTE: The value between the CVR and aircraft structure must be less than 10 milliohms.

## C. Testing

- (1) Set the circuit breaker that follows to IN (refer to TASK 24-00-00-863-802):

SYSTEM NAME	CIRCUIT BREAKER NAME	BUS NAME
IND/RECORD	CVR	DC ESS

- (2) Do the operational test of the CVR. Refer to TASK 23-71-00-710-801.
- (3) Set the circuit breaker that follows to LOCKED (refer to TASK 24-00-00-863-801):

SYSTEM NAME	CIRCUIT BREAKER NAME	BUS NAME
IND/RECORD	CVR	DC ESS

- (4) Connect one of the headsets into the CVR control panel.
- (5) Speak into the area microphone from a distance of three feet (0.9 m) and make sure you hear the audio in the monitor headset.

NOTE: The RIPS battery will supply power to the CVR for 10 +/- 1 minutes.

## D. Close-out

- (1) Remove all tools, equipment and unwanted materials from the aircraft.
- (2) Close the aft equipment compartment door 311BB.

## 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).

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### 3. MATERIAL INFORMATION

#### A. Kit

No kits required.

#### B. Parts

The part that follows is necessary to do this Service Bulletin and is available from Bombardier Aerospace Parts Logistics, Montreal:

NEW PART NO.	QTY	ITEM	USED PART NO.	INSTRUCTIONS - DISPOSITION
100-2010-101	1	Recorder Independent Power Supply	-	-

**NOTE:** 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.

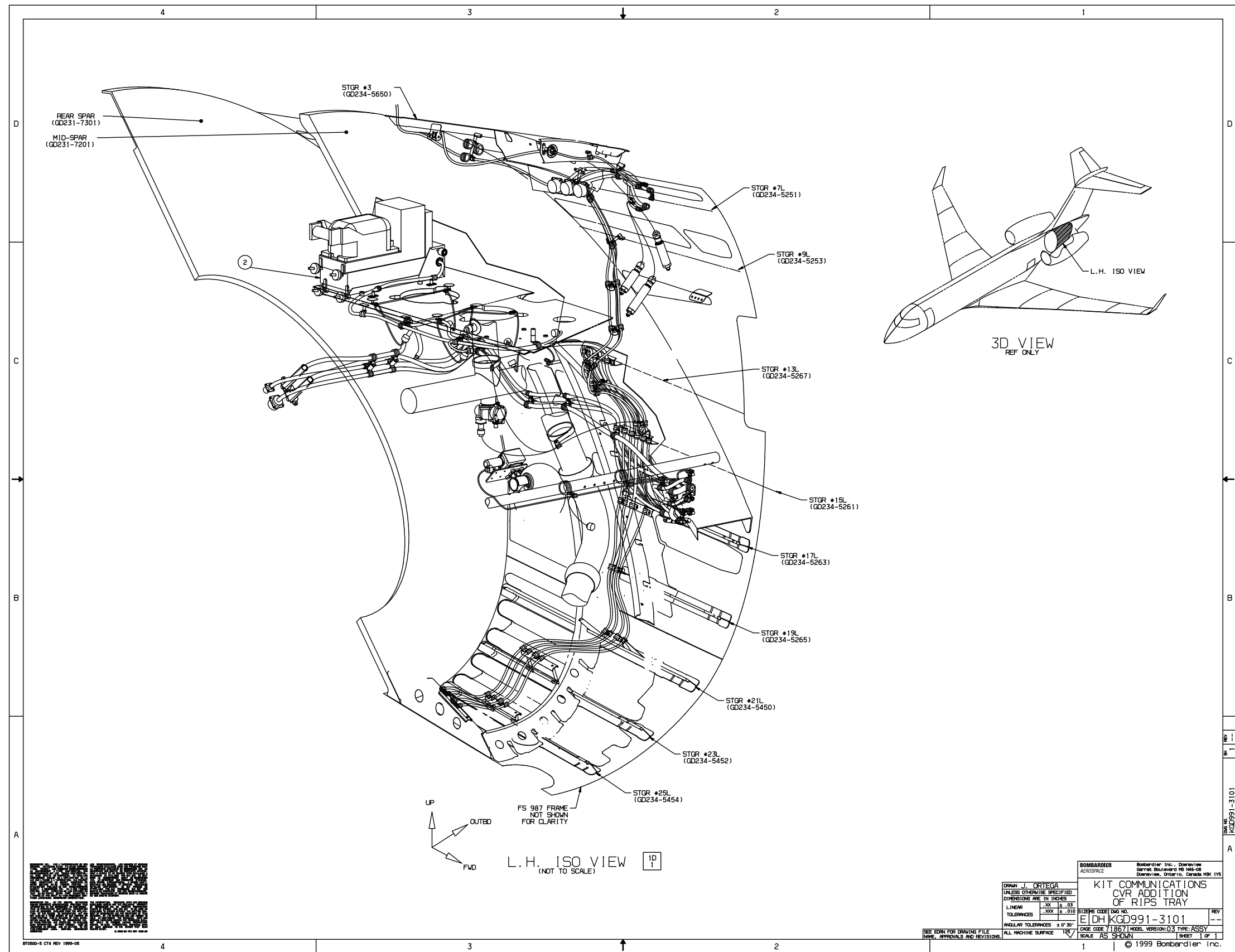
#### C. Material

No materials required.

#### D. Publications

No publications required.





**KDG991-3101** – Kit – Communications CVR - Addition of RIPS Tray  
(Sheet 1 of 1, Rev. - -)

Basic Issue: Oct 12/2010

**700-23-033**  
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SB700-23-033-3101-NC-S1

## SERVICE BULLETIN EVALUATION FORM

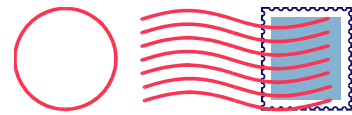
(Your ideas will help us provide better bulletins)

<b>SERVICE BULLETIN:</b> <u>700-23-033</u>	<b>ISSUE:</b> <u>Basic</u>	<b>DATED:</b> <u>Oct 12/2010</u>
<b>TITLE:</b> Modification – Voice Recorder System – Installation of Recorder Independent Power Supply (RIPS) for Cockpit Voice Recorder (CVR)		

- |   | STRONGLY<br>DISAGREE     | DISAGREE                 | AGREE                    | STRONGLY<br>AGREE        | N/A                      |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| <ul style="list-style-type: none"> <li>• <b>Instructions to do the Service Bulletin were accurate.</b><br/>Comments:</li> </ul>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• <b>Illustration(s), figure(s), and/or kit drawing(s) were helpful to carry out instructions.</b><br/>Comments:</li> </ul>  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• <b>If a kit and/or parts were required, did the contents of the kit and/or parts received agree with the contents listed in the bulletin?</b><br/>Comments:</li> </ul> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• <b>The consumable materials listed under Paragraph 3 were easily procured.</b><br/>Comments:</li> </ul>  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• <b>Work was accomplished in the prescribed time.</b><br/>Comments:</li> </ul>  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <ul style="list-style-type: none"> <li>• <b>Overall, I was satisfied with this Service Bulletin.</b><br/>Comments:</li> </ul>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

<i>For administrative use only</i>	PLEASE SUPPLY US WITH THE FOLLOWING DATA AND FAX TO: (514) 855-7634 or E-MAIL TO: <a href="mailto:MTL_BBAD_SB_Evaluation@aero.bombardier.com">MTL_BBAD_SB_Evaluation@aero.bombardier.com</a>	
522GR	OPERATOR:	
	AIRCRAFT SERIAL NO.	
	TELEPHONE:	
	FACSIMILE:	
	NAME: (Please print)	

THANK YOU FOR YOUR RESPONSE!  
 PLEASE RETURN THIS COMPLETED EVALUATION FORM BY MAIL, E-MAIL OR FAX



**Bombardier Business Aircraft Customer Services (BBACS)**

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

Attention: Customer Support Department

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## SERVICE BULLETIN INCORPORATION SHEET – “700-23-033”

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](mailto: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.

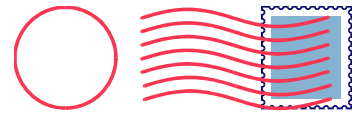
Service Bulletin Number	Rev.	* Parts Completed	COMPLIED WITH			Remarks/Reason
			YES	NO	N/A	
700-23-033	Basic	-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
-		-	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
-	-	-	<input type="checkbox"/>	<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  
Montréal, Québec, Canada H3C 3G9

Attention: Customer Support Department, Maintenance Engineering

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