

SERVICE BULLETIN SUMMARY

This Service Bulletin is available at:

www.cic.bombardier.com

BD-100-1A10 (CL-300)

ATA 21-31

AIR CONDITIONING

**MODIFICATION – CABIN-PRESSURE CONTROL SYSTEM –
SOFTWARE CHANGE OF THE INTEGRATED AIR SYSTEM CONTROLLER (IASC)
PART NO. 92175A030400 TO PART NO. 92175A030500**

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 20291			
MANPOWER: 3 man-hours			
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 type="checkbox"/>	NO <input checked="" type="checkbox"/>
DEDICATED SCHEDULE	YES	<input type="checkbox"/>	NO <input checked="" type="checkbox"/>
PREREQUISITE SERVICE BULLETINS: SB 100-21-05 is a prerequisite and must be done before or at the same time as this Service Bulletin.			

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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1. PLANNING INFORMATION

A. Effectivity

BD-100-1A10 aircraft, Serial No. **20003** to **20291**.

All other subsequent BD-100-1A10 aircraft are scheduled for the modification in production (Ref.: Modification Summary GG100T010464).

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

This Service Bulletin changes the Integrated Air System Controller (IASC) Part No. 92175A030400 to a controller Part No. 92175A030500 with a software upgrade. The software upgrade is done to eliminate the nuisance EICAS message (PACK COOL AIR FAIL) related to the monitoring of the RARV, allow the recording of an MDC message following an internal failure of the outflow valve, eliminate a leg number discrepancy between the MDC and the IASC, and indicate the location of a bleed leak in percentage in addition to the existing Wing Station (WS) or Fuselage Station (FS). For additional information, see Liebherr Service Bulletin 92175-21-03, Paragraph 1.C.

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 both IASCs,
- Change the software in both IASCs to a new release,
- Change the nameplate on the IASCs to correspond to the new part number, and
- Do the necessary tests to make sure that the system operates correctly.

D. Compliance

Recommended – Reliability/Dispatchability/Cost Avoidance

The access and time required to perform this modification are minimal, and we therefore recommend you perform this modification at the earliest opportunity.

NOTE: This Service Bulletin is in reference to Advisory Wires AW300-21-0039 and AW300-21-0047.

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.
 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 man-hours are necessary to do this modification.

The labor required to do this Service Bulletin is at no cost 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).

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G. Material - Cost and Availability

No kit is necessary to do this modification. For parts, refer to Paragraph 3.B.

The parts are available at no cost if:

- (i) the work is done at Bombardier Business Aviation Services (BBAS) or Authorized Service Facilities (ASF),
- (ii) a no-charge purchase order is sent to Bombardier Aerospace in less than 12 months from this Service Bulletin release date (Basic Issue), and
- (iii) a no-charge purchase order is sent to Bombardier Aerospace.

- NOTES:
1. Contact Parts Logistics, in Montreal, for price and delivery lead times if the modification is not done at the Service Facilities listed below.
 2. A programming bench, the necessary cables and the CD-ROMs will be available at the following Service Facilities at the time of release of this Service Bulletin.

BAS Wichita

BAS Fort-Lauderdale

BAS Dallas

BAS Tucson

BAS Hartford

LBAS Berlin

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

H. Tooling

GSE REFERENCE NO.	PART NO.	DESCRIPTION
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 the BD-100 for acceptable GSE equivalents.

I. Weight and Balance

No change.

J. Electrical Load Data

No change.

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K. References

- Bombardier Aerospace, Modification Summary, BB100T010464, Rev. B.
- Bombardier Aerospace, Modification Summary, GG100T010464, Rev. A-1.
- Bombardier Aerospace, Kit Drawing K1000070157, Rev. A.
- BD-100 Aircraft Maintenance Manual (AMM), Chapters 6, 21 and 24.
- Liebherr, Service Bulletin 92175-21-03 (attached).

L. Other Publications Affected

- BD-100 Aircraft Illustrated Parts Catalog (AIPC), Chapter 21.
- BD-100 Component Maintenance Manual (CMM), Chapter 21.

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) Open and tag the circuit breakers that follow:

LOCATION	CB NO.	NAME	ZONE
LCBP	D14	PRESS 1 / PACK	211
LCBP	E10	L WING BLD LK	211
RCBP	D14	PRESS 2 / TRIM	212
RCBP	E10	RWING BLD LK	212

- (2) Remove the access panel 141BL to get access to the IASC A55.
- (3) Remove the necessary interior furnishings to get access to the IASC A56 electrical connectors.

NOTE: The IASC A56 is in the lavatory behind the vanity cabinet.

B. Modification – Software Change of the Integrated Air System Controller

- (1) Disconnect electrical connectors A55P1, A55P2, A55P3 and A55P4 from the IASC A55.
- (2) On the IASC A55, do the vendor Service Bulletin 92175-21-03 (attached).
- (3) Make sure the identification plate is replaced to re-identify the IASC.
- (4) Connect electrical connectors A55P1, A55P2, A55P3 and A55P4 to the IASC A55.

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- (5) Disconnect electrical connectors A56P1, A56P2, A56P3 and A56P4 from the IASC A56.
- (6) On the IASC A56, do the vendor Service Bulletin 92175-21-03 (attached).
- (7) Make sure the identification plate is replaced to re-identify the IASC.
- (8) Connect electrical connectors A56P1, A56P2, A56P3 and A56P4 to the IASC A56.

C. Testing

- (1) Remove the tags and close the circuit breakers that follow:

LOCATION	CB NO.	NAME	ZONE
LCBP	D14	PRESS 1 / PACK	211
LCBP	E10	L WING BLD LK	211
RCBP	D14	PRESS 2 / TRIM	212
RCBP	E10	RWING BLD LK	212

- (2) Connect and energize the external DC power. Refer to TASK 24-41-00-861-801.
- (3) To verify the IASC part number and software version on the Maintenance Diagnostic Computer (MDC), do the procedures that follow:

NO.	STEP	EXPECTED RESULT
1	On the Cursor Control Panel (CCP) set the toggle switch to R.	-
2	Press the A/ICE, ECS and the FUEL pushbuttons.	The MAINTENANCE MAIN MENU APPEARS on the right multi-function display (MFD).
3	On the MAINTENANCE MAIN MENU page, select CONFIGURATION DATA.	The CONFIGURATION DATA page is shown.
4	On the CONFIGURATION DATA page, select LRU CONFIGURATION DATA.	The LRU CONFIGURATION DATA page is shown

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NO.	STEP	EXPECTED RESULT
5	On the LRU CONFIGURATION DATA page select IASC 1A.	Make sure: a) The part number displayed is 92175A030500 b) The software version number is L92175AAAW
6	Return to the LRU CONFIGURATION DATA page and select IASC 2A.	Make sure: a) The part number displayed is 92175A030500 b) The software version number is L92175AAAW
7	Return to the LRU CONFIGURATION DATA page and select IASC 1B.	Make sure: a) The part number displayed is 92175A030500 b) The software version number is L92175ABAT
8	Return to the LRU CONFIGURATION DATA page and select IASC 2B.	Make sure: a) The part number displayed is 92175A030500 b) The software version number is L92175ABAT
9	Press the TR/WX pushbutton	Exit from MDC mode.

- (4) Do the operational test of the IASC A55 and IASC A56. Refer to TASK 21-31-01-710-801.

D. Close-out

- (1) Remove the external DC power. Refer to TASK 24-41-00-861-802.
- (2) Install the access panel 141BL.
- (3) Install the necessary interior furnishings that were removed to access to the IASC A56 electrical connectors.
- (4) Remove all tools, equipment and unwanted materials from the aircraft.

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 parts that follow are necessary to do Liebherr Service Bulletin 92175-21-03 and are available from Bombardier Aerospace Parts Logistics, Montréal:

NEW PART NO.	QTY	ITEM	USED PART NO.	INSTRUCTIONS - DISPOSITION
774891	2	PNR Identification Plate	774734	Discard
92617A010000 (procedure 1)	1	Programming Bench with Power Supply Cable and Interface Cable RS232	-	-
Or 99200A010000 (procedure 2)		Programming Bench with Power Supply Cable		
L92617AB0	1	CD-ROM Software	-	-
15019A010201	1	CD-ROM	-	-
15020A010201	1	CD-ROM	-	-
15021A010201	1	CD-ROM	-	-
15022A010201	1	CD-ROM	-	-
92094-1300	1	Interface Cable	-	-
-	1	Interface Cable RS232 DB9 Male-Female (straight-through) (procedure 2)	-	-
-	1	Personal Computer with Microsoft Windows 2000 or XP Operating System with Serial Link RS232	-	-

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NEW PART NO.	QTY	ITEM	USED PART NO.	INSTRUCTIONS - DISPOSITION
-	1	Power Supply Capable to supply 220 VAC or 115 VAC	-	-

- NOTES:** 1. Contact Parts Logistics, in Montreal, for price and delivery lead times if the modification is not done at Bombardier Business Aviation Services (BBAS) or Authorized Service Facilities (ASF).
2. The personal computer, the interface cable and the power supply can be purchase locally.

C. Material

The material that follows, or equivalent, is necessary to do this Service Bulletin. It can be purchased from a local supplier. Bombardier Aerospace does not pay for this consumable.

DESCRIPTION	PART No./NAME	SPECIFICATION	QUANTITY	SUPPLIER (See Note)
Cleaning Material	Isopropyl alcohol or LRM200DB	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: 100-21-10 **ISSUE:** Basic **DATED:** Feb 23/2010

TITLE: Modification – Cabin-Pressure Control System – Software Change of the Integrated Air System Controller (IASC) Part No. 92175A030400 to Part No. 92175A030500

	STRONGLY DISAGREE	DISAGREE	NEUTRAL	AGREE	STRONGLY AGREE
<ul style="list-style-type: none"> • Instructions to do the Service Bulletin were accurate. Comments: 	<input type="checkbox"/>				
<ul style="list-style-type: none"> • Illustration(s), figure(s), and/or kit drawing(s) were helpful to carry out instructions. Comments: 	<input type="checkbox"/>				
<ul style="list-style-type: none"> • If a kit was required, did the kit contents received agree with the contents listed in the bulletin? Comments: 	<input type="checkbox"/>				
<ul style="list-style-type: none"> • The loose parts listed under Paragraph 3 were easily procured. Comments: 	<input type="checkbox"/>				
<ul style="list-style-type: none"> • Work was accomplished in the prescribed time. Comments: 	<input type="checkbox"/>				
<ul style="list-style-type: none"> • Overall, I was satisfied with this Service Bulletin. Comments: 	<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: MTL_BBAD_SB_Evaluation@aero.bombardier.com	
	052LB	
	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

SERVICE BULLETIN INCORPORATION SHEET – “100-21-10”

**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	
100-21-10	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 _____ Service Order No. _____
 (dd/mm/yy)

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
