SERVICE BULLETIN
REVISION TRANSMITTAL SHEET

MODEL CL-600-2B16

Discard the Basic Issue and Revision 01 of this Service Bulletin dated Jul 31/2012 and Oct 15/2012, and replace in its entirety with this Revision 02.

Service Bulletin No.	605-34-027		
Date of Basic Issue	Jul 31/2012		
Revision No.	01	Dated	Oct 15/2012
Revision No.	02	Dated	Dec 20/2012

For aircraft that incorporated Revision 01 of this Service Bulletin, 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.

For aircraft that have the Basic Issue incorporated with or without any additional Bombardier approved engineering as stated in planning information section, Revision 2 of this Service Bulletin must be entered in the log book in order to comply with the Airworthiness Directive.

This revision is issued to:

1. Remove the note in Paragraph 1, to remove the dedicated campaign and incorporate the change related to the Information Sheet dated Oct 24/2012.
2. Add, in Paragraph 1.A., two tables for the SNIEO and RNC references and NOTES 1, 2 and 3.
3. Add a note in Paragraph 1.D., Compliance, the TCCA Airworthiness Directive, CF-2012-30.
4. Remove the dedicated campaign information note in Paragraph 1.G., Material – Cost and Availability.
5. Change, in Paragraph 1.K., the Modsum 600-6331, to Rev. A-1.
6. Add, in Paragraph 1.K., the TCCA Airworthiness Directive, CF-2012-30.
7. Make miscellaneous minor changes, as necessary, with no change of context.

SERVICE BULLETIN SUMMARY

This Service Bulletin is available at:
www.cic.bombardier.com

MODEL CL-600-2B16

ATA 34-11

NAVIGATION

MODIFICATION – PITOT-STATIC AND TEMPERATURE SENSING SYSTEM – REPLACEMENT OF PITOT-STATIC VISUAL DRAIN BOTTLES TO LARGER CAPACITY BOTTLES

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** **Within 24 months from this Service Bulletin release date (Basic Issue).**			
EFFECTIVITY: A/C Serial No. **5701** to **5918**				
MANPOWER: 6.5 man-hours				
CONTINUED AIRWORTHINESS (CAW) FLEET CAMPAIGN	**YES**	☐	**NO**	☒
KITS and/or PARTS	**YES**	☒	**NO**	☐
TOOLING/GSE	**YES**	☒	**NO**	☐
PLANNING INFORMATION: See important information at the start of Paragraph 1.	**YES**	☒	**NO**	☒
DEDICATED SCHEDULE	**YES**	☐	**NO**	☒
PREREQUISITE SERVICE BULLETINS: N/A				

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

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

SERVICE BULLETIN

This Service Bulletin is available at:
www.cic.bombardier.com

MODEL CL-600-2B16

ATA 34-11

NAVIGATION

MODIFICATION – PITOT-STATIC AND TEMPERATURE SENSING SYSTEM – REPLACEMENT OF PITOT-STATIC VISUAL DRAIN BOTTLES TO LARGER CAPACITY BOTTLES

1. PLANNING INFORMATION

A. Effectivity

CL-600-2B16 aircraft, Serial No. **5701** to **5918**.

The intent of Service Bulletin 605-34-027 (Revision 02) was met on the aircraft that follow VIA the incorporation of Service Bulletin 605-34-027 (Basic Issue) and the Service Non-Incorporated Engineering Orders (SNIEO) listed in the table that follows:

AIRCRAFT SERIAL NO.						Drawing 604-51027 SNIEO NO.
5904	**5905**	**5906**	**5908**	**5909**	**5910**	SNIEO S01
5911	**5913**	**5915**	**5916**	**5917**	**5918**	

The intent of Service Bulletin 605-34-027 (Revision 02) was met on the aircraft that follow VIA the incorporation of Service Bulletin 605-34-027 (Basic Issue) and the Report of Non Compliance (RNC) listed in the table that follows:

AIRCRAFT SERIAL NO.	RNC NO.
5892	C312063687
5893	C312055374
5894	C312056133
5898	C312058292
5897	C312061730

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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All other subsequent CL-600-2B16 aircraft are scheduled for the modification in production (Ref.: Modification Summary 600-6258).

NOTES: 1. If the Basic Issue was entered in the aircraft log book, Revision 02 can be entered into the log book without doing any physical changes to the aircraft.

2. If the Basic Issue and SNIEO S01 was entered in the aircraft log book, you can enter Revision 02 into the log book without doing any physical changes to the aircraft.

3. If the Basic Issue and RNC's listed above were entered into the aircraft log book, you can enter Revision 02 into the log book without doing any physical changes to the aircraft.

4. The instructions 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 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

There is a possibility, when flying into adverse weather conditions, of water ingress in the pitot and static lines. The presence of water in the pitot and static lines could restrict the air passage which can result in fluctuating and incorrect flight display data for airspeed and altitude indications.

This Service Bulletin replaces the current drain bottle assemblies related to the pitot and static lines with an improved design and larger capacity drain bottles. Replacement of the drain bottle assemblies will reduce incorrect flight display data for airspeed or altitude.

C. Description

This Service Bulletin gives instructions to:

- Get access to the cockpit under floor,
- Remove the existing drain bottles and fittings,
- Install the new drain bottles and fittings, and
- Do the necessary tests to make sure that the system operates correctly.

D. Compliance

Recommended within 24 months from this Service Bulletin release date (Basic Issue).

NOTE: This Service Bulletin is in reference to TCCA Airworthiness Directive, CF-2012-30.

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 605-00-002.

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.

6.5 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 during new aircraft warranty period, and

(ii) the work is done at Bombardier Business Aviation Services (BBAS) or Authorized Service Facilities (ASF), and

(iii) this Service Bulletin is scheduled and is incorporated under the dedicated schedules in less than 24 months from its release date (Basic Issue).

G. Material - Cost and Availability

Kit 605K34-027 is necessary to do this modification. Only the U.S. domestic price is shown:

KIT NO.	PRICE
605K34-027	$2,939.30

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.

This kit is available at no cost if:

(i) ordered during new aircraft warranty period, and

(ii) a no-charge purchase order is sent to Bombardier Aerospace to schedule your aircraft under the dedicated schedule in less than 24 months, from this Service Bulletin release date (Basic Issue).

For those aircraft in new aircraft warranty at the time of Service Bulletin distribution, Smart Parts Plus does not pay for the kit(s) at any time.

For those aircraft out of new aircraft warranty at the time of Service Bulletin distribution, Smart Parts Plus pays for the kit for up to 24 months from this Service Bulletin distribution date (Basic Issue).

H. Tooling

GSE REFERENCE NO.	PART NO.	DESCRIPTION
GSE 24−00−24	-	Tag, Circuit Breaker
Commercially Available	-	Torque Wrench

NOTES: 1. Refer to the CL-605 Illustrated Tool and Equipment Manual to make sure that you use the correct equipment configuration.

2. Refer to the Liability Statement in the ITEM for acceptable GSE equivalents.

I. Weight and Balance

No change.

J. Electrical Load Data

No change.

K. References

- Bombardier Aerospace, Modification Summary, 600-6258, Rev. B1.
- Bombardier Aerospace, Modification Summary, 600-6331, Rev. A-1.
- Bombardier Aerospace, Restriction and/or Special Instruction (RSI), C-4082, Rev. A.
- Bombardier Aerospace, Standard Practices Manual (SPM), Chapter 20.
- Bombardier Aerospace, Structural Repair Manual (SRM), Chapter 51.
- CL-605 Aircraft Maintenance Manual (AMM), Chapters 6, 24, 34 and 51.
- TCCA Airworthiness Directive, CF-2012-30.

L. Other Publications Affected

- CL-605 Aircraft Illustrated Parts Catalog (AIPC), Chapter 34.

M. Equivalent Service Bulletins

- For the CL-601 Challenger aircraft, use SB 601-0617.
- For the CL-604 Challenger aircraft, use SB 604-34-065.

2. ACCOMPLISHMENT INSTRUCTIONS

NOTES: 1. All TASKs given in the procedures that follow are from the CL-605 Aircraft Maintenance Manual unless otherwise specified.

2. All references made to zones, access panels and/or doors, are from the CL-605 Aircraft Maintenance Manual, Chapter 6.

A. Aircraft Setup

(1) Obey all electrical/electronic safety precautions. Refer to TASK 24-00-00-910-801.

(2) Open and tag the circuit breakers that follow:

CB PANEL	CB NO.	NAME	ZONE
CBP−2	A14	HEATERS R PITOT	222
CBP−2	A15	HEATERS R STATIC	222
CBP−3	B4	HEATERS L PITOT	221
CBP−3	B6	HEATERS PITOT STBY	221
CBP−3	B7	HEATERS L STATIC	221

(3) Open the main avionics-compartment door.

B. Modification – Replacement of ADC Drain Bottles

NOTE: Refer to the Standard Practice Manual for torquing of plumbing line fittings. Refer to TASK 20-22-00-910-801.

(1) When applicable, remove the necessary equipments to gain access to the drain bottles.

(2) In the forward avionics compartment, replace the drain bottles for the pitot and static lines of the ADCs as follows:

(a) With a wrench, remove the old drain bottles (1) and (2) attached to the pitot line and the static line of the ADCs. Refer to Figure 1.

(b) On the pitot line of the ADCs, remove and discard the old tee fittings (3), retain the existing washers. Refer to Figure 1.

(c) Install the new tee fittings, Part No. AS1033W040406 (3) with the retained washers on the pitot line of the ADCs. Refer to Figure 1.

(d) Install an adaptor assembly, Part No. 5QM5A06-07 (4) to the tee fittings, Part No. AS1033W040406 (3). Refer to Figure 1.

(e) Do the pitot line P1 contamination removal. Refer to TASK 34-11-01-100-801.

(f) Do the pitot line P2 contamination removal. Refer to TASK 34-11-01-100-802.

(g) Do the pilot's S1/S2 static line contamination removal. Refer to TASK 34-11-01-100-803.

(h) Do the copilot's S1/S2 static line contamination removal. Refer to TASK 34-11-01-100-804.

(i) Install the new drain bottle Part No. 50036-001 (1) and (2) to the adaptor assembly, Part No. 5QM5A06-07 (4). Refer to Figure 1.

NOTE: Make sure that a click sound is heard when you push the drain bottles (1) and (2) into the adaptor assemblies (4).

(3) Remove and replace the old drain bottle bracket with a new drain bottle bracket, Part No. 604-52268-1 or -1S (6) as shown in Figure 2.

NOTES:1. Ensure that the new bracket is prepared for bonding as per SPM MM 51-24-05-100-801.

2. Use the appropriate size Hi Lite fasteners as supplied in the kit. It is permissible to use the supplied oversized Hi Lite fasteners if necessary.

3. When rivets are removed, re-install appropriate diameter rivets supplied in kit. Refer to Structural Repair Manual, Chapter, 51-42-08 and Chapter, 51-42-36.

4. When installing the bracket, make sure to have an edge distance no lower than 1.3 times the fastener diameter on any of the 4 holes.

5. Refer to the SPM MM 20-22-00-910-801 for torquing of plumbing line fittings.

(4) Once bracket is installed, perform a visual inspection using 10X magnification and make sure that there are no visible cracks on the bracket around the fasteners.

(5) Do the pitot Line P3 Contamination removal. Refer to TASK 34-11-04-100-801.

(6) Install the new drain bottle, Part No. 50036-002 (5) to the adapter, Part No. 5QM5A06-07 (10). Refer to Figure 2.

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

CB PANEL	CB NO.	NAME	ZONE
CBP−2	A14	HEATERS R PITOT	222
CBP−2	A15	HEATERS R STATIC	222
CBP−3	B4	HEATERS L PITOT	221
CBP−3	B6	HEATERS PITOT STBY	221
CBP−3	B7	HEATERS L STATIC	221

C. Testing

(1) Do a Leak Test of the P1 and Pilot's S1 and copilot's S2 Systems. Refer to TASK 34-11-00-790-801.

(2) Do a Leak Test of the P2 and Pilot's S2 and copilot's S1 Systems. Refer to TASK 34-11-00-790-802.

(3) Do a Leak Test of the P3 and S3 systems. Refer to TASK 34-11-00-790-803.

D. Close-out

(1) Remove all tools, equipment and unwanted materials from the aircraft.

(2) Close the main avionics compartment door.

E. Recording

When this Service Bulletin is completed, make an entry in the aircraft log.

Then 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

Kit 605K34-027 is necessary to do this Service Bulletin and contains the parts that follow:

NEW PART NO.	QTY	ITEM	USED PART NO.	INSTRUCTIONS - DISPOSITION
50036-001	4	Drain Bottle	50029-001 or 50030-001	Discard Old
50036-002	1	Drain Bottle	50030-001 or 50034-002	Discard Old
5QM5A06-07	5	Adapter	-	New
604-52268-1S	1	Bracket	604-52260-5	Discard Old
AN924-6D	1	Nut	AN924-4D	Discard Old
AS1033W040406	2	Tee	AN783D6	Discard Old
AS1037W0604	1	Adapter	AN783D4	Discard Old
B0203013-3	2	Kaynar Nut	-	New
B0203038-3	2	Kaynar Nut (over size)	-	New
B0206001AG6-3	2	Hi Lite Fastener	-	New
HST110AG-6-3	2	Hi Lite Fastener (over size)	-	New
MS20470AD4-6	2	Rivets	-	New
MS20470AD5-7	2	Rivets	-	New
NAS1149D0963J	1	Washer	AN960JD716	Discard Old

NOTES: 1. In case of discrepancy between this list and the “Service Bulletin Kit Parts List” contained in the respective kit, then the latter list prevails.

2. The actual quantity for some of the hardware contained in the kit can be greater than the amount shown in the table as these items are supplied in prepackaged quantities.

B. Parts

No additional parts required.

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.

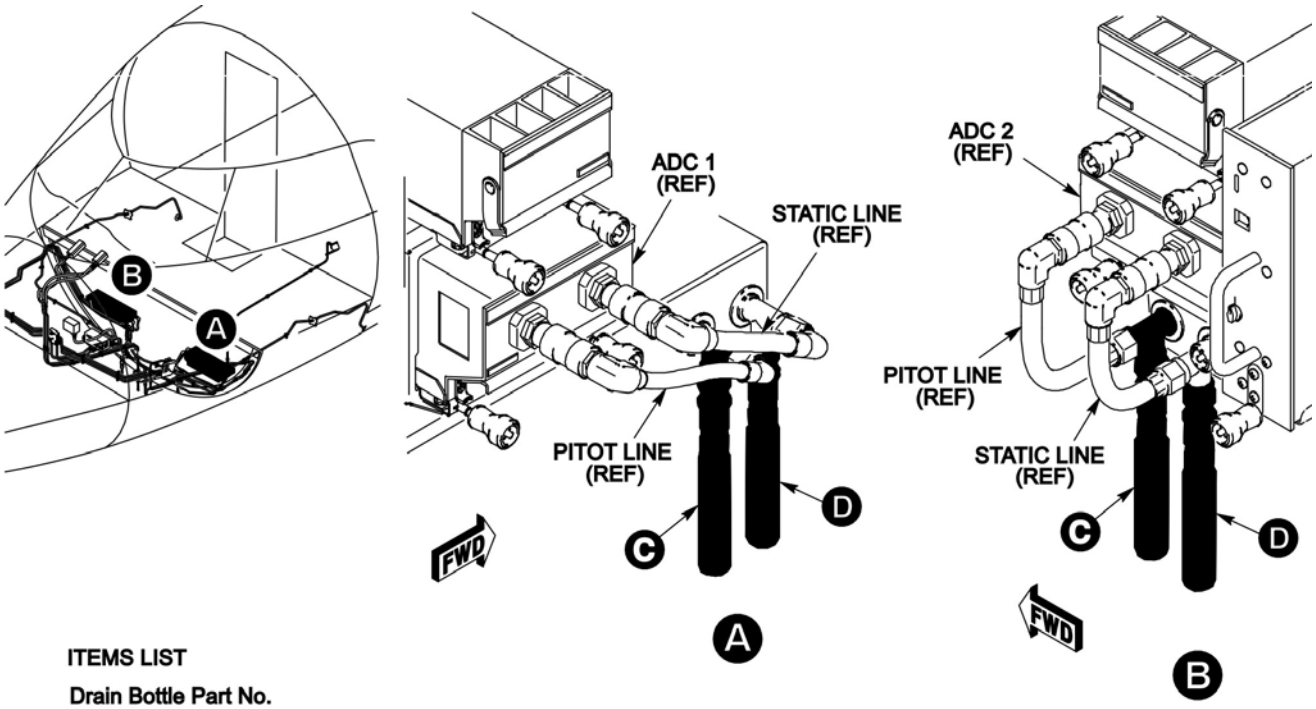
DESCRIPTION	PART No./NAME	SPECIFICATION	QUANTITY	SUPPLIER (See Note)
Alodine	1200S	MIL-C-81706	As Necessary	Code: A
Sealant CT: 1/2 hours	Pro-Seal 870 A-1/2	MIL-PRF- 81733 Type I-1/2, Class 1, Grade A	As Necessary	Code: A
Primer	-	MIL-P-23377F Type I	As Necessary	Code: B
Solvent	Diestone DLS or Diestone HFP or HFE-71DA	-	As Necessary	Code: C

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 PRC-Desoto International 5430 San Fernando Road, PO Box 1800, Glendale, CA, 91209 Tel.: 1-800-228-5635 or 1-818-240-2060 Fax.: 1-818-549-7790 www.ppg.com/coatings/aerospace/	**Code: B** JacksonLea 1715 Conover Blvd East Conover NC 28613 U.S.A. Tel.: 1-800-438-6880 Tel.: (828) 464-1376 E-mail: cherman@jacksonlea.com
Code: C MagChem Inc 1271 Ampere Boucherville, Que. Canada, J4B 5Z5 Tel.: (450) 655-1344 www.magchem.com	

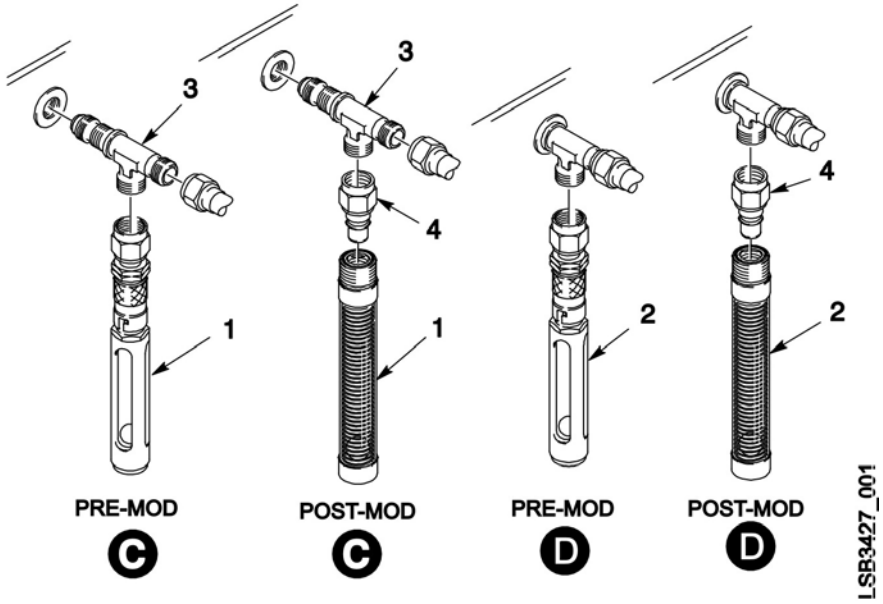
D. Publications

No publications required.



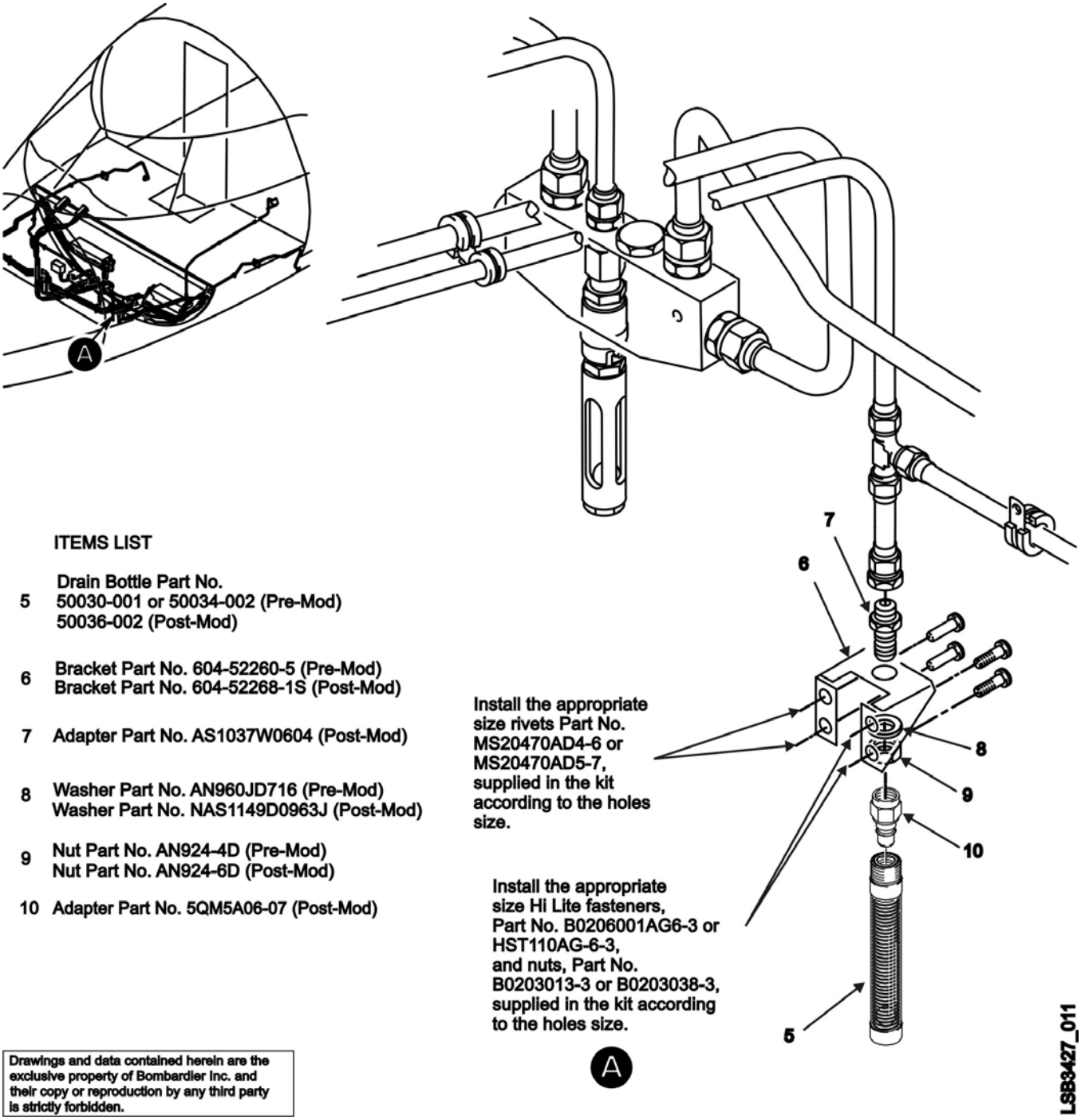
ITEMS LIST

1. Drain Bottle Part No.
   50030-001 or 9035001 (Pre-Mod)
   50036-001 (Post-Mod)
2. Drain Bottle Part No.
   50029-001 or 9035000 (Pre-Mod)
   50036-001 (Post-Mod)
3. Tee Fitting Part No.
   AN804-4D (Pre-Mod)
   AS1033W040406 (Post-Mod)
4. Adapter Part No.
   5QM5A06-07 (Post-Mod)



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Pitot Static Drain Replacement
Figure 1



ITEMS LIST

5 Drain Bottle Part No.
50030-001 or 50034-002 (Pre-Mod)
50036-002 (Post-Mod)

6 Bracket Part No. 604-52260-5 (Pre-Mod)
Bracket Part No. 604-52268-1S (Post-Mod)

7 Adapter Part No. AS1037W0604 (Post-Mod)

8 Washer Part No. AN960JD716 (Pre-Mod)
Washer Part No. NAS1149D0963J (Post-Mod)

9 Nut Part No. AN924-4D (Pre-Mod)
Nut Part No. AN924-6D (Post-Mod)

10 Adapter Part No. 5QM5A06-07 (Post-Mod)

Install the appropriate size rivets Part No. MS20470AD4-6 or MS20470AD5-7, supplied in the kit according to the holes size.

Install the appropriate size Hi Lite fasteners, Part No. B0206001AG6-3 or HST110AG-6-3, and nuts, Part No. B0203013-3 or B0203038-3, supplied in the kit according to the holes size.

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Pitot Static Drain Replacement
Figure 2

SERVICE BULLETIN EVALUATION FORM

(Your ideas will help us provide better bulletins)

SERVICE BULLETIN:	605-34-027	ISSUE:	Rev. 02	DATED:	Dec 20/2012

TITLE: Modification – Pitot-Static and Temperature Sensing System – Replacement of Pitot-Static Visual Drain Bottles to Larger Capacity Bottles

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 – "605-34-027"

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	COMPLIED WITH YES	NO	N/A	Remarks/Reason
605-34-027	02	-	☐	☐	☐	
-	-	-	☐	☐	☐	
-	-	-	☐	☐	☐	

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.

Aircraft Serial No. _____ Aircraft Reg. No. _____

Airframe Hours: _____ Airframe Landings _____

S.B. Incorporation date _____ Service Order No. _____

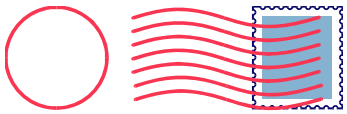
(dd/mm/yy)

Facility Incorporating S.B. _____

Name _____ Signature _____ Date _____

Signature not required if sent by E-Mail (dd/mm/yy)

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Bombardier Business Aircraft Customer Services (BBACS)

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

Attention: Customer Support Department, Maintenance Engineering

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