

SERVICE BULLETIN REVISION TRANSMITTAL SHEET

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

Discard the Revision 01 of this Service Bulletin dated Nov 07/2011, and replace in its entirety with this Revision 03.

Service Bulletin No.	100-24-04		
Date of Basic Issue	Jul 31/2006		
Revision No.	01	Dated	Feb 14/2011
Revision No.	02	Dated	Nov 07/2011
Revision No.	03	Dated	Jul 03/2014

For action applicable to aircraft on which the Basic Issue of this Service Bulletin was done, refer to the retroactive action box on Page 1 of this Service Bulletin.

This revision has no effect for aircraft on which the Revision 01 or Revision 02 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 and Paragraphs 1.A, 1.F, and 2.B (1), the effectivity to limit to aircraft, Serial No. 20500.
2. Add, in Paragraph 1.M, a reference to SB 350-24-001.
3. Change in Paragraph 2.C., the Testing.
4. Make miscellaneous minor changes, as necessary, with no change of context, to show the latest format.

PILOTS INFORMATION SHEET

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

ATA 24-33

ELECTRICAL POWER

MODIFICATION – EMERGENCY DC-POWER SYSTEM – INSTALLATION OF THE HYDRAULIC MOTOR DRIVEN GENERATOR (HMDG) OPTION (C24-300)

The HMDG system supplies an emergency dc power-conversion from the left or right main engine driven hydraulic power sources. The system will operate when the engine-driven generators are not available.

The system is started when the pilot pushes the HYD GEN SWITCH push-button-annunciator (PBA) on the ELECTRICAL control panel. This PBA has a black ON legend. In usual operation, the light in the PBA is not on. When the PBA is pushed, the light in the PBA comes on which shows the ON legend and the HMDG is in operation. When the PBA is pushed again, the light in the PBA goes off and the HMDG is not in operation.

An ELEC HYD GEN ON (S) message will be displayed on the EICAS when the system is activated.

SERVICE BULLETIN SUMMARY

This Service Bulletin is available at:

www.cic.bombardier.com

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ELECTRICAL POWER

MODIFICATION – EMERGENCY DC-POWER SYSTEM – INSTALLATION OF THE HYDRAULIC MOTOR DRIVEN GENERATOR (HMDG) OPTION (C24-300)

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

OPTIONAL CUSTOMER CONVENIENCE/PREFERENCE	COMPLIANCE TIME Not applicable		
EFFECTIVITY: A/C Serial No. 20001 to 20500			
MANPOWER: Refer to Paragraph 1.F.			
CONTINUED AIRWORTHINESS (CAW) FLEET CAMPAIGN	YES <input type="checkbox"/>	NO	<input checked="" type="checkbox"/>
TLMC, CH 5 AFFECTED	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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www.cic.bombardier.com

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ATA 24-33

ELECTRICAL POWER

**MODIFICATION – EMERGENCY DC-POWER SYSTEM – INSTALLATION OF THE
HYDRAULIC MOTOR DRIVEN GENERATOR (HMDG) OPTION (C24-300)**

RETROACTIVE ACTION

THE ACTION THAT FOLLOWS IS RECOMMENDED FOR AIRCRAFT ON WHICH
THE BASIC ISSUE OF THIS SERVICE BULLETIN WAS DONE:

Do Service Bulletin 100-24-14 (Basic Issue).

1. PLANNING INFORMATION

- NOTES:**
1. Due to the lead-time required for obtaining kits and parts, operators are advised to order the kits and parts in advance before scheduling the incorporation of this Service Bulletin. Please contact Parts Services, in Montreal, for delivery lead times and confirmation of prices.
 2. Proximity sensor electronic unit (PSEU), Part No. 30227-0302 or later, is a prerequisite and must be installed before or at the same time as this Service Bulletin. If Part No. 30227-0302 or later is required, do Service Bulletin 100-32-12.

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 O M B A R D I E R
CHALLENGER 300
MODEL BD-100-1A10 (CL-300)

A. Effectivity

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

BD-100-1A10 aircraft, Serial No. **20309** already met the intent of this SB 100-24-04, Rev. 01 before delivery, thus no further action is required.

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 introduces the HMDG system for which all aircraft have provisions installed in production. The wiring and some of the hardware have been installed in production to minimize the down time and reduce the cost to install this modification in service.

The HMDG system is offered as an option recommended for remote long-range mission in order to provide a third reliable non-time limited electrical power source for operation during emergency.

C. Description

This Service Bulletin gives instructions to:

- Get access to the forward wing-to-fuselage fairing,
- Remove electrical harness assembly, Part No. 1009109634-001,
- Install electrical harness assembly, Part No. 1009109634-003,
- Install the HMDG,
- Install the HMDG Power Center,
- Replace the Control Panel,
- Install the Generator Control Unit (GCU), and
- Do the necessary tests to make sure the system operates correctly.

D. Compliance

Optional – Customer Convenience/Preference.

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 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.

For aircraft Serial No. **20001** to **20087**, 37 man-hours are necessary to do this modification.

For aircraft Serial No. **20088** to **20163**, 33 man-hours are necessary to do this modification.

For aircraft Serial No. **20164** to **20500**, 23 man-hours are necessary to do this modification.

Bombardier Aerospace does not pay for this modification.

G. Material - Cost and Availability

Kit 100K24-04 is necessary to do this modification.

KIT NO.	PRICE
100K24-04	Please contact Bombardier Aerospace Parts Services, in Montreal, for delivery lead times and confirmation of prices.

In addition to the kit shown above, the parts given in Paragraph 3.B. are also necessary to do this Service Bulletin.

Bombardier does not pay for the kit or the parts that are required to do this modification.

NOTE: Due to the lead-time required for obtaining kits and parts, operators are advised to order the kits and parts in advance before scheduling the incorporation of this Service Bulletin. Please contact Parts Services, in Montreal, for delivery lead times and confirmation of prices.

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H. Tooling

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

GSE REFERENCE NO.	PART NO.	DESCRIPTION
24-00-24	S4933959-501	Tag, Circuit Breaker
29C-00-01	54300GMZCM	Hydraulic Power Unit
-	(See Note 3)	Crimping tools and dies for AWG 0 and 6 size terminals

- 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. For crimping tool and die part numbers, refer to the Tyco-Electronics website at: www.tycoelectronics.com and search for the required crimping tools by entering the terminal part number directly on the web page.

I. Weight and Balance

WEIGHT	MOMENT
+41.00 pounds (18.60 kg)	+20039.98 pound-inches (230.86 kgm)

J. Electrical Load Data

No change.

K. References

- Bombardier Aerospace, Modification Summary, 100T010275, Rev. A.
- Bombardier Aerospace, Modification Summary, 100T090031, Rev. K-2.
- Bombardier Aerospace, Modification Summary, 100T091037, Rev. A-1.
- Bombardier Aerospace, Modification Summary, 100T091101, Rev. A.
- Bombardier Aerospace, Modification Summary, 100T091126, Rev. A.
- Bombardier Aerospace, Modification Summary, 100T091148, Rev. A.
- Bombardier Aerospace, Modification Summary, 100T505193, Rev. B.
- Bombardier Aerospace, Modification Summary, 100T091152, Rev. A.
- Bombardier Aerospace, Kit Drawing, K1002430002, Rev. A.
- Bombardier Aerospace, Kit Drawing, K1005324025, Rev. B.
- Bombardier Aerospace, Kit Drawing, K1005349607, Rev. G.
- Bombardier Aerospace, Kit Drawing, K1005357458, Rev. B.
- BD-100 Aircraft Maintenance Manual (AMM), Chapters 6, 24, 29, 32, 33, 52 and 53.

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- BD-100 Standard Practices Manual (SPM), Chapters 20 and 51.
- BD-100 Structural Repair Manual (SRM), Chapter 51.
- Functional Test Engineering Requirements (FTER), SA100-243001, Rev. B.
- Tyco Electronics, RPIP-696-00, RPIP-696-03 and RPIP-696-04.
- Appendix 1 - HMDG Testing (attached).

L. Other Publications Affected

- BD-100 Aircraft Maintenance Manual (AMM), Chapter 24.
- BD-100 Aircraft Illustrated Parts Catalog (AIPC), Chapter 24.
- BD-100 Wiring Manual (WM), Chapter 24.
- Airplane Flight Manual, CSP 100-1 (Imperial or Metric), Revision 16, dated Jul 14/2010.
- Flight Crew Operating Manual, CSP 100-6, Vol. 2 (FCOM 2), Revision 16, dated Jul 14/2010.

M. Equivalent Service Bulletin

For the Challenger 350 aircraft, use SB 350-24-001.

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.

A. Aircraft Setup

- (1) Obey all the electrical/electronic safety precautions. Refer to TASK 24-00-00-910-801.
- (2) Obey all the hydraulic safety precautions. Refer to TASK 29-00-00-910-801.
- (3) Obey all the hydraulic technical precautions. Refer to TASK 29-00-00-910-802.
- (4) Release the hydraulic pressure from the left hydraulic system. Refer to TASK 29-10-00-862-802.
- (5) Remove the external DC power. Refer to TASK 24-41-00-861-802.
- (6) Disconnect the batteries. Refer to TASK 24-32-00-040-801.
- (7) Open and tag the circuit breakers that follow:

LOCATION	CB NO.	NAME	ZONE
LSPC	E6	WING INSP	221
RSPC	B5	HYD GEN POWER/TEST	222

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- (8) For aircraft, Serial No. 20001 to 20087, install circuit breaker tag, Part No. S4933959-501 on the circuit breaker that follows:

LOCATION	CB NO.	NAME	ZONE
RSPC	B4	HYD GEN HTR	222

- (9) Remove the forward maintenance access-panel 181BL. Refer to TASK 53-63-17-000-801.
- (10) Disconnect the electrical connector to the wing inspection light DS21, on the forward wing-to-fuselage fairing 181AL. Refer to TASK 33-45-01-000-801.
- (11) Remove the forward wing-to-fuselage fairing 181AL. Refer to TASK 53-63-01-000-801.
- (12) Open the aft equipment-compartment door 182GL. Refer to TASK 52-41-00-010-801.
- (13) Remove the aft lower nose-compartment panel 141BL. Refer to TASK 52-45-01-000-801.

B. Modification

NOTE: The BAPS or BAERD numbers (i.e. BAPS150) referenced in the drawings are process documents used by manufacturing. The information given in these process documents are also reflected in the BD-100 Standard Practices Manual or the BD-100 Structural Repair Manual. The tables below give cross-references of BAPS, BAERD numbers to TASK numbers or Chapter numbers.

BD-100 STANDARD PRACTICES MANUAL REFERENCE – MAINTENANCE		
BAPS NO.	TASK NO.	TITLE
150-002	20-21-00-910-801	Torquing of Threaded Fasteners
150-003	20-50-00-400-801	Installation of Lockwire

BD-100 STANDARD PRACTICES MANUAL REFERENCE – STRUCTURES		
BAPS NO.	TASK NO.	TITLE
145-002	51-80-00-140-801	Preparation of Bonding Surfaces
157-028	51-23-00-390-809	Wet Installation of Fasteners

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**BD-100 STANDARD PRACTICES MANUAL REFERENCE –
 WIRING**

BAPS NO.	CHAPTER NO.	TITLE
145-003	20-12-00	Wiring - Maintenance Practices
145-008	20-12-05	Stowage of Electrical Wiring – Maintenance Practices

BD-100 STRUCTURAL REPAIR MANUAL REFERENCE

BAERD NO.	CHAPTER NO.	TITLE
BD100-001	51-01-00	Protective and Decorative Paint Finishes
GEN-004	51-01-04	Finish Codes
GEN-006	51-23-00	Sealing Procedures
BAPS NO.	CHAPTER NO.	TITLE
150-000	51-41-04	Bolts, Screws and Related Items
151-001	51-42-08	Solid Rivets

NOTE: Make sure PSEU Part No. 30227-0302, or later, is installed in the aircraft.

- (1) For aircraft, Serial No. **20001** to **20087**, replace the HMDG electrical harness assembly as follows:

NOTE: For aircraft, Serial No. **20088** to **20500**, the electrical harness assembly should not be replaced. Proceed directly to Paragraph 2.B (2).






- (a) Disconnect and remove electrical harness assembly Part No. 1009109634-001 from the aircraft. Refer to Kit Drawing K1005349607, sheet 1, zone 3D, “1005348002 REF”.

NOTE: This harness assembly is composed of connector P424 and connectors P3, P4 and P5.

- (b) Install new harness assembly, Part No. 1009109634-003.

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- (2) Install the HMDG and its related hardware, shock mounts and bonding strap, and ecology bottle: Refer to Kit Drawing K1005349607.
 (a) Torque the HMDG attaching hardware as follows:

KIT DRAWING K1005349607 TORQUE TABLE			
DESCRIPTION	ITEM NO.	DRAWING REFERENCE	TORQUE
Nut	5	Sheet 1, Zone 8C	90.00 - 125.00 lbf in (10.17 - 14.13 Nm)
Bolt	7	Sheet 2, Zone 8C	20 to 25 lbf in (2.26 to 2.82 Nm)
Bolt	9	Sheet 1, Zone 2B	20 to 25 lbf in (2.26 to 2.82 Nm)
Bolt	17	Sheet 1, Zone 5A	20 to 25 lbf in (2.26 to 2.82 Nm)
DC Feeder Shield Fastener	24 See NOTE: 	Sheet 1, Zone 7B	8 to 10 lbf in (0.90 to 1.13 Nm)
Bolt/Nut	25/26	Sheet 2, Zone 7C	90 to 125 lbf in (10.17 to 14.13 Nm)
Bolt	31	Sheet 2, Zone 9D	20 to 25 lbf in (2.26 to 2.82 Nm)
Negative A/C Lead Fastener	See NOTE: 	Sheet 2, Zone 2B	65 to 70 lbf in (7.34 to 7.91 Nm)
Positive A/C Lead Fastener	See NOTE: 	Sheet 2, Zone 2B	144 to 168 lbf in (16.27 to 18.98 Nm)
Terminal Block Cover Fasteners	See NOTE: 	Sheet 2, Zone 2B	48 to 53 lbf in (5.42 to 5.99 Nm)
Bolt connecting bonding strap to HMDG	See NOTE 	Sheet 2, Zone 4B	97 to 107 lbf in (10.96 to 12.09 Nm)

- (b) Do the electrical bonding test of the HMDG. Refer to SPM TASK 51-80-00-760-801.
NOTE: The maximum allowable resistance is less than 10 milliohms between the unit and the aircraft primary structure.
- (c) Remove and discard the caps already installed at the end of the hydraulic lines next to the HMDG.

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- (d) Install the quick disconnect fittings, Part No. 3031155-001 (pressure) and Part No. 3031156-001 (return) where the caps were previously installed.
- (e) Install and torque hydraulic hose assemblies, Part No. AS116-06-0083 to 100 to 250 lbf in (135.58 to 338.95 Nm), and Part No. AS115-08-0125 to 210 to 420 lbf in (284.72 to 569.44 Nm).

NOTE: The hoses are installed between the HMDG and the quick disconnect fittings.

- (f) Connect T1, T2, shield and connectors G4P3, G4P4 and G4P5 to the HMDG.

NOTE: Use only one clamp for the support of T1/T2/shield harness. Additional clamp provided as provision is to be discarded.

- (g) Install two adhesive mounting baseplates on the interior side of the forward wing-to-fuselage fairing 181AL as shown in Figure 1. Refer to TASK 51-21-37-100-801 and 51-21-37-340-801.

NOTE: Disregard this step if baseplates are already installed as shown in Figure 1.

- (3) Install and connect the HMDG PC as follows. Refer to Kit Drawing K1005357458.

- (a) Install the HMDG PC.

KIT DRAWING K1005357458 TORQUE TABLE			
DESCRIPTION	ITEM NO.	DRAWING REFERENCE	TORQUE
Screw	6	Sheet 1, Zone 4C	20 to 25 lbf in (2.26 to 2.82 Nm)

- (b) Do the electrical bonding test of the HMDG PC. Refer to SPM TASK 51-80-00-760-801.

NOTE: The maximum allowable resistance is less than 10 milliohms between the unit and the aircraft primary structure.

- (c) Connect connector A205P1 to the HMDG PC.

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(d) Connect electrical wires as follows:

KIT DRAWING K1005357458 TORQUE TABLE			
DESCRIPTION	LOCATION	DRAWING REFERENCE	TORQUE
Nuts	HMDG PC T2 & T3	Sheet 1	99.0 – 134 lbf in (11.19 – 15.14 Nm)
Nut	HMDG PC T1	Sheet 1	61 – 80 lbf in (6.89 – 9.04 Nm)
Nuts	L/R DCPC T7	Sheet 1	99 – 134 lbf in (11.19 – 15.14 Nm)

NOTES: 1. Electrical wire SAR0001 is to be disconnected from A35T7 and A36T7, capped and stowed as given in note 6 of Kit Drawing K1005357458.

2. It is possible that the wires to be connected to the HMDG PC and the L/R DCPC have no terminal lugs installed on them. If this condition occurs, use the terminal lugs supplied in Kit 100K24-04 to terminate these wires before connecting them.

(4) Do the flight compartment modification as follows:

(a) Replace the electrical panel assembly. Refer to Kit Drawing K1005324025 and the table that follows:


UNIT NAME	REMOVAL TASK 24-31-01-000-801	INSTALLATION TASK 24-31-01-400-801
Electrical Panel Assembly	OLD PART NO. (1005326012-031)	NEW PART NO. (1005326009-001)

(b) Install the label on the maintenance panel. Refer to Kit Drawing K1005324025, sheet 1, zone 9D.

(i) Install the HMDG Generator Control Unit (GCU). Refer to Kit Drawing K1005324025.

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(ii) Torque the GCU captive fasteners as follows:

KIT DRAWING K1005324025 TORQUE TABLE			
DESCRIPTION	ITEM NO.	DRAWING REFERENCE	TORQUE
Fastener	See NOTE: 	Sheet 1	20.00 - 25.00 lbf in (2.26 - 2.83 Nm)

(iii) Do the electrical bonding test of the GCU. Refer to SPM TASK 51-80-00-760-801.

NOTE: The maximum allowable resistance is less than 10 milliohms between the unit and the aircraft primary structure.

(iv) For aircraft, Serial No. 20001 to 20163, do the GCU connectors A206P1 and A206P2 modification. Refer to Kit Drawing K1002430002, Figure 2 and SPM, Chapter 20, Wiring.

NOTES: 1. The Tyco Electronics Hexashield Installation Procedure RPIP-696-00 and RPIP-696-03, and RPIP-696-04 referenced in the Kit Drawing K1002430002, can be used for reference. These documents are available on the Tyco Electronic, document search website at:
<http://www.tycoelectronics.com>

2. For BD-100-1A10 aircraft, Serial No. 20164 to 20500 the GCU connectors (A206P1 and A206P2) were installed in production (Ref.: Modification Summary 100T505193).

(v) Install the EE-SEAL, Part No. 5911661-4 on connector A206P2.

(vi) Connect connector A206P1 and A206P2 to the GCU.

(5) Do continuity checks on all wiring installed or disturbed by this Service Bulletin.

C. Testing

(1) Connect the batteries. Refer to TASK 24-32-00-440-801.

(2) Make sure that the circuit breaker that follows is closed:

CB PANEL	CB NO.	NAME	ZONE
HMDG PC	CB7-1	HYD GEN POR	311/312

(3) Remove the tag and close the circuit breaker that follows:

CB PANEL	CB NO.	NAME	ZONE
HMDG PC	CB7-1	HYD GEN POR	311/312

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- (4) Do the operational test of the ELECTRICAL control panel. Refer to TASK 24-31-01-710-802.
- (5) Do the operational test of the hydraulic motor-driven generator. Refer to TASK 24-33-00-710-801.

D. Close-out

- (1) Install the forward wing-to-fuselage fairing 181AL. Refer to TASK 53-63-01-400-801.

NOTE: Make sure there are no hydraulic leaks around the HMDG fittings. If necessary, clean up hydraulic fluid.

- (2) Connect the electrical connector to the wing inspection light DS21, on the forward wing-to-fuselage fairing 181AL. Refer to TASK 33-45-01-400-801.
- (3) Remove the tag and close the circuit breaker that follows:

LOCATION	CB NO.	NAME	ZONE
LSPC	E6	WING INSP	221

- (4) Connect and energize the external DC power. Refer to TASK 24-00-00-861-801.
- (5) On the LIGHTING control panel, do the steps that follow:

NO.	STEP	EXPECTED RESULT
1	Set the WING INSP light switch to WING INSP.	The wing inspection lights come on.
2	Set the WING INSP light switch to OFF.	The wing inspection lights go off.

- (6) Remove the external DC power. Refer to TASK 24-00-00-861-802.
- (7) Safety the HMDG electrical harness as given in Figure 1 (Sheet 2 of 2).
- (8) Remove all tools, equipment and unwanted materials from the aircraft.
- (9) Install the forward maintenance access-panel 181BL. Refer to TASK 53-63-17-400-801.
- (10) Close the aft equipment-compartment door 182GL. Refer to TASK 52-41-00-410-801.
- (11) Install the aft lower nose-compartment panel 141BL. Refer to TASK 52-45-01-400-801.

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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).

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 100K24-04 is necessary to do this Service Bulletin and contains the parts that follow:

NEW PART NO.	QTY	ITEM	USED PART NO.	INSTRUCTIONS DISPOSITION
1005349603-001	1	Drain Line	-	-
1005349608-001S	1	Mounting Bracket	-	-
1005349609-001	1	Drain Line	-	-
1005349637-001S	1	Bracket Eco Bottle	-	-
1754A0000-01 (see NOTE 3)	1	Ecology Bottle	-	-
323171	1	Terminal Lug (HMDG PC T1)	-	-
323180	4	Terminal Lug	-	-
AS115-08-0125	1	Hose Assy., Return	-	-
AS116-06-0083	1	Hose Assy., Pressure	-	-
B0803121-17-A6-1	2	Backshell, 90 deg.	B0803008 -70-12L	Discard
B0816019-003	20	Strap, Tiedown	-	-
B0816035CR3N	2	Baseplate	-	-
D38999/26FE26PN	1	Connector	-	-
D38999/26FE26SN	1	Connector	-	-
HET-A-02C	10	Ferrule	-	-
HET-A-03C	10	Ferrule	-	-
J-19235-9	4	Shock Mounts	-	-

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NEW PART NO.	QTY	ITEM	USED PART NO.	INSTRUCTIONS DISPOSITION
K1005324025-007	1	Label	-	-
M39029/56-351	26	Pin	-	-
M39029/58-363	26	Pin	-	-
M85052/2-7	1	P-Clip	-	-
MS20470AD5-5A	4	Rivet	-	-
MS21084-04	4	Nut	-	-
MS27488-20	30	Plug	-	-
MS35207-297	1	Bolt	-	-
MS35338-41	1	Washer, Lock-Spring Helical	-	-
MS35338-45	1	Washer, Lock-Spring Helical	-	-
MS35650-3312	1	Nut	-	-
NAS1149D0316J	4	Washer	-	-
NAS1149D0332J	20	Washer	-	-
NAS1149D0432J	4	Washer	-	-
NAS1149D0532J	2	Washer	-	-
NAS1149DN632J	1	Washer	-	-
NAS1801-06-6	1	Bolt	-	-
NAS1801-3-10	4	Screw	-	-
NAS1922-0225-3	1	Clamp	-	-
NAS43DD3-42FC	1	Spacer	-	-
NAS6203-11	1	Bolt	-	-
NAS6203-3	4	Bolt	-	-
NAS6203-4H	15	Bolt	-	-
NAS6203-5H	1	Bolt	-	-
S6914-1	4	Clamp	-	-

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.

B O M B A R D I E R
CHALLENGER 300
 MODEL BD-100-1A10 (CL-300)

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.
3. Ecology bottle is supplied with cap, Part No. 9111A0008-1.

B. Parts

The parts that follow are necessary to do this Service Bulletin and are available from Bombardier Aerospace Parts Services, Montreal:

NEW PART NO.	QTY	ITEM	USED PART NO.	INSTRUCTIONS DISPOSITION
1005326009-001	1	Panel Assy	1005326012-031	Return to Bombardier
1009109634-003 (See NOTE 2)	1	Electrical Harness Assembly	1009109634-001	Discard
1704243A (See NOTE 3)	1	HMDG	-	-
1704245B	1	HMDG GCU	-	-
430GC03Y00	1	HMDG Power Center	-	-

- NOTES:**
1. The part numbers for the items listed above are 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.
 2. The electrical harness assembly is required for aircraft, Serial No. **20001** to **20087** only.
 3. The HMDG is supplied with quick disconnect fittings Part No. 3031155-001 and 3031156-001.

B O M B A R D I E R
CHALLENGER 300
 MODEL BD-100-1A10 (CL-300)

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)
Sealant CT: 30 hours	-	MIL-PRF-81733, Type II	As Necessary	Code: A
Adhesive, Epoxy CT: 24 hours	EA 9309 3NA	-	As Necessary	Code: B
Adhesive, Epoxy CT: 24 hours	EA 9345 A/B	-	As Necessary	Code: B
Coating Chemical Conversion	Alodine 1200s	MIL-DTL-81706 Class 1A, Form II, Method B	As Necessary	Code: B
Primer	Aerodur HS Primer 37092	BAMS 565-001	As Necessary	Code: C
Adhesive, Epoxy CT: 6 hours	Magnobond 6380	-	As Necessary	Code: D
Lock Wire	MS20995-C32	NASM20995	As Necessary	Code: E
Sleeving	S10155H()	AMS3655	As Necessary	Code: E

- 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.

B O M B A R D I E R
CHALLENGER 300
 MODEL BD-100-1A10 (CL-300)

SUPPLIERS ADDRESSES BY CODES	
<p style="text-align: center;">Code: A</p> <p style="text-align: center;">PRC-DeSoto International Incorporated 5454 San Fernando Road Post Office Box 1800 Glendale, CA 91209 U.S.A. Tel.: (818) 240-2060 Fax: (818) 549-7790 www.ppgaerospace.com</p>	<p style="text-align: center;">Code: B</p> <p style="text-align: center;">Henkel Loctite Corporation 2850 Willow Pass Road Post Office Box 312 Bay Point, CA 94565 U.S.A. Tel.: (925) 458-8000 Fax: (925) 458-8030 www.Loctiteaero.com</p>
<p style="text-align: center;">Code: C</p> <p style="text-align: center;">Akzo Nobel Aerospace Coatings Incorporated East Water Street Waukegan, Illinois 60085 U.S.A. Tel.: (847) 623-4200 Fax: (847) 625-3200 www.akzonobelaerospace.com</p>	<p style="text-align: center;">Code: D</p> <p style="text-align: center;">Magnolia Plastics Incorporated 5547 Peachtree Industrial Blvd. Chamblee, GA 30341 U.S.A. Tel.: (770) 451-2777 Tel.: (800) 831-8031 Fax: (770) 451 5376 http://www.magnapoxy.com/contact.htm</p>
<p>Code: E</p> <p>Commercially Available</p>	

D. Publications

The publications that follow are required after this Service Bulletin has been incorporated.

- Airplane Flight Manual, CSP 100-1 (Imperial or Metric), Revision 16, dated Jul 14/2010.
- Flight Crew Operating Manual, CSP 100-6, Vol. 2 (FCOM 2), Revision 16, dated Jul 14/2010.

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

QTY REQ'D		FIND NO.	ZONE SHEET	CAGE CODE	PART, DASH OR IDENTIFYING NO.	DESCRIPTION	SIZE	MATERIAL SPEC	FNSH CODE	REV
1	1			K4585	K1005349607-001	HMDG OPTION CENTRE FUSE BD100			A003	G
2	2									
3	5A/2			99167	1704243A	HMDG	①			9
4	8D/1			76005	J-19235-9	SHOCK MOUNTS	⑤			
4	8C/1			96906	MS21084-04	NUT				
4	8C/1			80205	NAS1149D0432J	WASHER				
15	7 8C/2			80205	NAS6203-4H	BOLT				
20	8 VAR			80205	NAS1149D0332J	WASHER				
4	9 2B/1			80205	NAS6203-3	BOLT				
1	10 5B/1			81343	AS115-08-0125	HOSE ASSY, RETURN				
1	11 6B/1			81343	AS116-06-0083	HOSE ASSY, PRESSURE				
1	12 4A/1			D9893	1754A0000-01	ECOLOGY BOTTLE	②③			18
1	13 5A/1			80205	NAS1922-0225-3	CLAMP				
1	14 5A/1			80205	NAS43DD3-42FC	SPACER				
4	15 4B/1			88308	S6914-1	CLAMP				
1	16 5A/1			81349	M85052/2-7	P-CLIP				
1	17 5A/1			80205	NAS6203-11	BOLT	④			
1	18 2A/1			K4585	1005349637-001	BRACKET ECO BOTTLE				
1	19 2B/1			K4585	1005349608-001	MOUNTING BRACKET				
1	20 5B/1			K4585	1005349609-001	DRAIN LINE				
1	21 4A/1			K4585	1005349603-001	DRAIN LINE				
4	22 2A/1			96906	MS20470AD5-5A	RIVET				
	23			96906	MS20995-C32	WIRELOCK	60"			

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BOMBARDIER AEROSPACE
Supplier Name and Cage Code: SHORT BROTHERS PLC K4585
Supplier Name and Cage Code: E. MORGAN PLK1005349607
Title: HMDG OPTION CENTRE FUSE BD100
Model Version: 00 Model Type: ASSY
Sheet 1 of 4

PL K1005349607 – HMDG Option Centre Fuse BD100
(Sheet 1 of 4, Rev. G)

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B O M B A R D I E R
CHALLENGER 300
MODEL BD-100-1A10 (CL-300)

BOMBARDIER AEROSPACE		Bombardier Inc. 400 Cote Vertu Road, West Dorval, Quebec, Canada H4S 1Y9		DRAWN BY: E. MORGAN	SHEET 2	MS CODE SH	PL K1005349607 G	REV G	
		CAGE CODE 3AB48			MODEL VERSION: 00	MODEL TYPE: MAST			
QTY REQ'D PER RH	FIND NO.	ZONE SHEET	CAGE CODE	PART, DASH OR IDENTIFYING NO.	DESCRIPTION	SIZE	MATERIAL SPEC	FNH CODE	P F N
	1	24	7B/1	80205	NAS1801-06-6	BOLT			
	1	25	7C/2	96906	MS35207-297	BOLT			
	1	26	7C/2	96906	MS35650-3312	NUT			
	1	27	7C/2	80205	MS35338-45	WASHER LOCK-SPRING HELICAL			
	1	28	7B/1	80205	NAS1149DN632J	WASHER			
	1	29	7B/1	96906	MS35338-41	WASHER LOCK-SPRING HELICAL			
	2	30	7C/2	80205	NAS1149D0532J	WASHER			
	1	31	9D/2	80205	NAS6203-5H	BOLT			
		33							
		34							
		35							
		36							
		37							
		38							
		39							
		40							
		41							
		42							
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		48							
		49							
		50							

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810501-2 C14 REV 1999-01

SB100-24-033-49607-G-S2-PL

PL K1005349607 – HMDG Option Centre Fuse BD100
(Sheet 2 of 4, Rev. G)

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Revision 03: Jul 03/2014

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B O M B A R D I E R
CHALLENGER 300
MODEL BD-100-1A10 (CL-300)

DRAWN BY: R. BLACKMORE	SHEET 3	MS CODE SH	PLK1005349607	REV G
CAGE CODE 3AB48	MODEL VERSION: 00 MODEL TYPE: MAST			

BOMBARDIER
AEROSPACE

NOTES

- 1 INTERPRET DRAWING AS PER MIL-STD-100
- 2 INTERPRET DIMENSIONS AND TOLERANCES AS PER ASME Y14.24M-1994
- 3 FINISH SPEC AS PER BAERD BD100-001
- 4 FINISH CODES AS PER BAERD GEN-004
- 5 INSTALL RIVETS PER BAPS_151-001
- 6 WET ASSEMBLE (INCLUDING RIVETS) PER BAPS_157-028
- 7 INSTALL BOLTS AS PER BAPS_150-000
- 8 SEALING REQUIREMENTS PER BAERD GEN-006
- 9 DO NOT GENERATE AN ORDER SPEC. PART SUPPLIED BY SYSTEMS PARTNERS SEE SDD S1003450003
- 10 ELECTRICAL BOND PER BAPS_145-002
- 11 WIRELOCK PER BAPS_150-003
- 12 TORQUE MOUNTING FASTENER TO 90-125 IN LBS
- 13 AFTER ATTACHING THE DC FEEDER SHIELD TORQUE NOTED FASTENER TO 8-10 IN-LBS
- 14 AFTER NEGATIVE A/C LEAD IS ATTACHED TORQUE NOTED FASTENER TO 65-70 IN LBS
- 15 AFTER ATTACHING THE POSITIVE A/C LEAD TORQUE NOTED FASTENER TO 144-168 IN LBS
- 16 AFTER INSTALLING A/C LEADS REPLACE TERMINAL BLOCK COVER AND TORQUE NOTED FASTENERS TO 48-53 IN-LBS
- 17 REPLACE EXISTING NAS1801 BOLT (REF 1005348003) WITH ITEM 31
- 18 DO NOT GENERATE AN ORDER SPEC. PART SUPPLIED BY SYSTEMS PARTNERS SEE SDD S1002430001
- 19 CONTROLLED-INTERCHANGEABLE-PART.
- 20 REMOVE PRESSURE CAPS P/N AE81617G AND AE81617H FROM SUPPLY / RETURN LINE QD'S UPON KIT INSTALLATION.
- 21 TORQUE BONDING STRAP ATTACHMENT TO 97-107 IN-LBS.
- 22 IF HARNESS CLIPPING & ASSOCIATED HARDWARE, FOR CAP & STOW PROVISIONS IS INSTALLED ON FWD HMDG SUPPORT M/C, IT IS TO BE REMOVED & DISCARDED BEFORE INSTALLING HMDG UNIT SHOCK MOUNTS.

FILENAME: - DRG. K100. 534. 9607. CAT

BT0501-2 C14 REV 1999-01

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SB100-24-033-49607-G-S3-PL

PL K1005349607 – HMDG Option Centre Fuse BD100
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B O M B A R D I E R
CHALLENGER 300
 MODEL BD-100-1A10 (CL-300)

BOMBARDIER
 AEROSPACE

DRAWN BY: R. BLACKMORE	SHEET 4	MS CODE SH	PLK1005349607	REV G
CAGE CODE 3AB48	MODEL VERSION: 00 MODEL TYPE: MAST			

CODE NO.	SUPERSEDED CONFIGURATION			REPLACED BY			QTY REQ	REFER TO MODSUM
	FIND NO.	PART OR IDENTIFYING NO.	QTY REQ	FIND NO.	PART OR IDENTIFYING NO.	QTY REQ		
⑤	4	J-19235-8	4	4	J-19235-9	4	SH100T091126	
④	17	NAS6203-15	1	17	NAS6203-11	1	SH100T091037	
③	32	9111A0008-1	1	32			SH100-090031	
③	12	301-200	1	12	1754A0000-01	1	SH100-090031	
②	32			32	9111A0008-1	1	SH100-090031	
②	12	1754A0000-01	1	12	301-200	1	SH100-090031	
①	3	1704243	1	3	1704243A	1	SH100T090031	

CONFIGURATION CONTROL TABLE

BT0501-2 C74 REV 1999-01

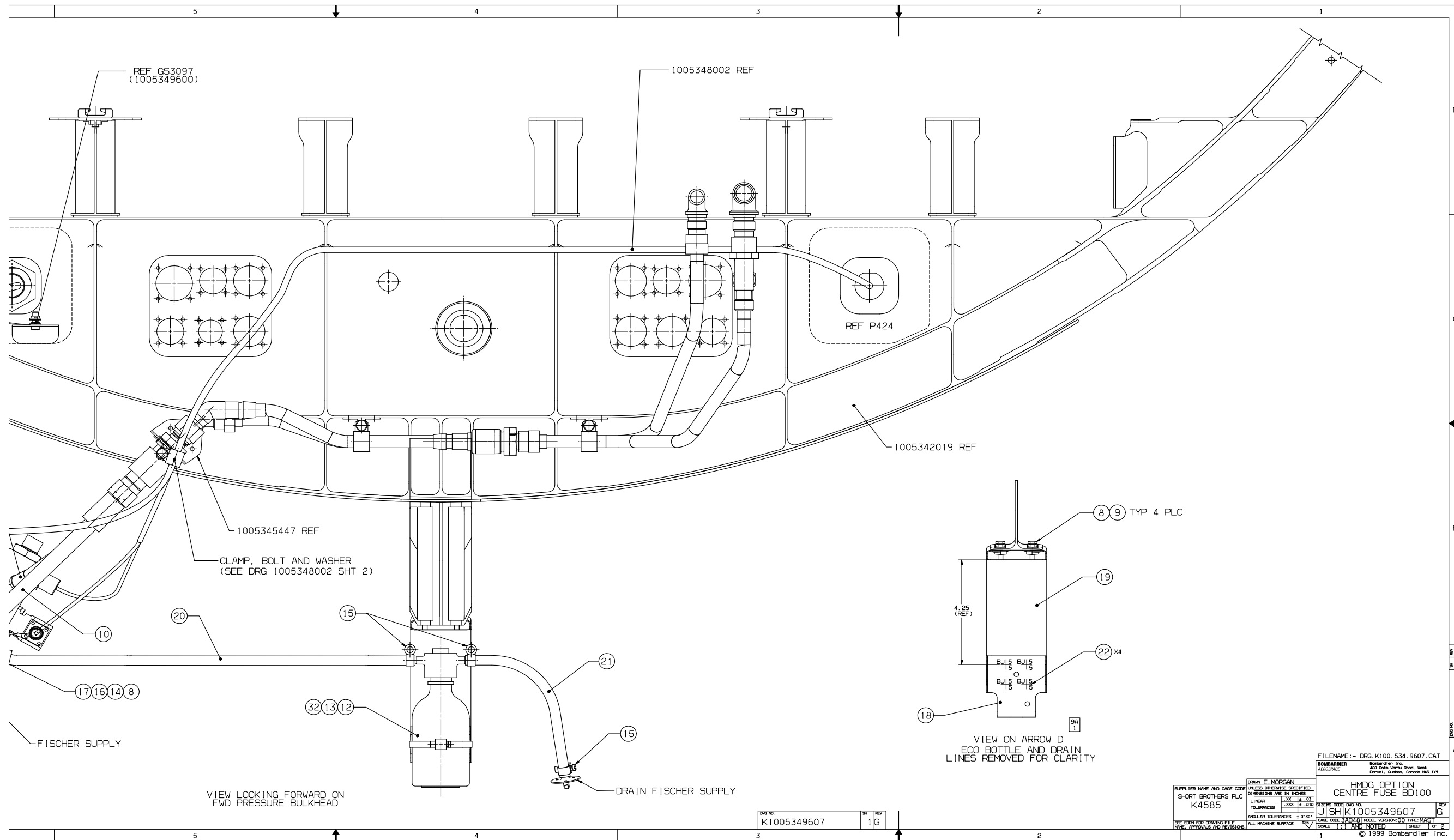
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SB100-24-033-49607-G-S4-PL

PL K1005349607 – HMDG Option Centre Fuse BD100
 (Sheet 4 of 4, Rev. F)

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VIEW LOOKING FORWARD ON
FWD PRESSURE BULKHEAD

VIEW ON ARROW D
ECO BOTTLE AND DRAIN
LINES REMOVED FOR CLARITY

DRAWN BY: DR. E. MORGAN		CHECKED BY: []	
SUPPLIER NAME AND CAGE CODE: SHORT BROTHERS PLC K4585		HMDG OPTION CENTRE FUSE BD100	
DIMENSIONS ARE IN INCHES		UNLESS OTHERWISE SPECIFIED	
LINEAR	.XX	.03	
TOLERANCES	.XXX	.005	
ANGULAR TOLERANCES	± 0.30°		
ALL MACHINE SURFACES	TEXT		
SEE EDPN FOR DRAWING FILE NAME, APPROVALS AND REVISIONS	DATE: 11/11/03	SCALE: 1:1 AND NOTED	SHEET 1 OF 2

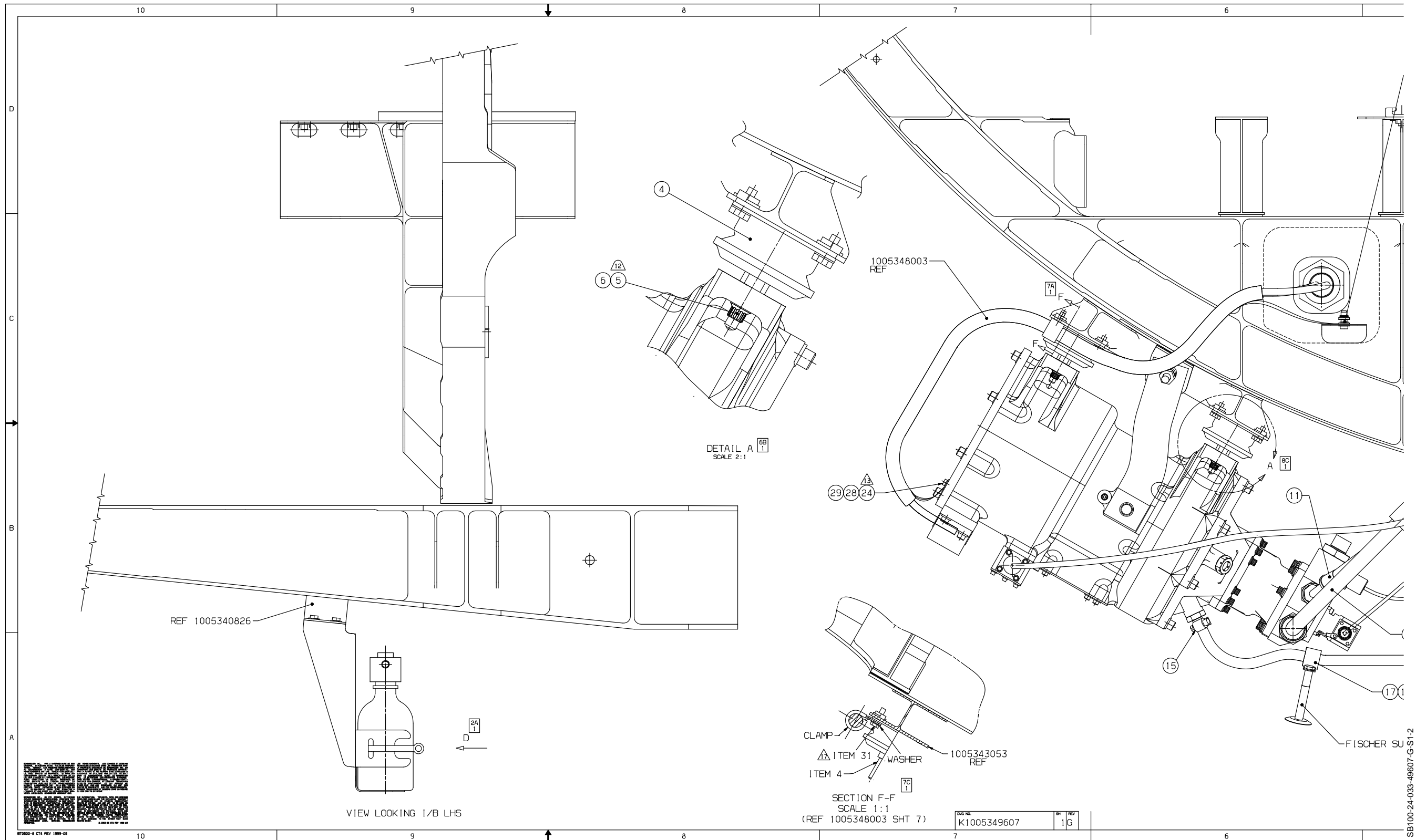
FILENAME: - DRG.K100.534.9607.CAT
 BOMBARDIER Aerospace
 400 Goulet Road, West
 Dorval, Quebec, Canada H9S 1Y9
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DRG NO: K1005349607 SH: 1 REV: G

K1005349607 – HMDG Option Centre Fuse BD100
(Sheet 1 of 2, Rev. G)

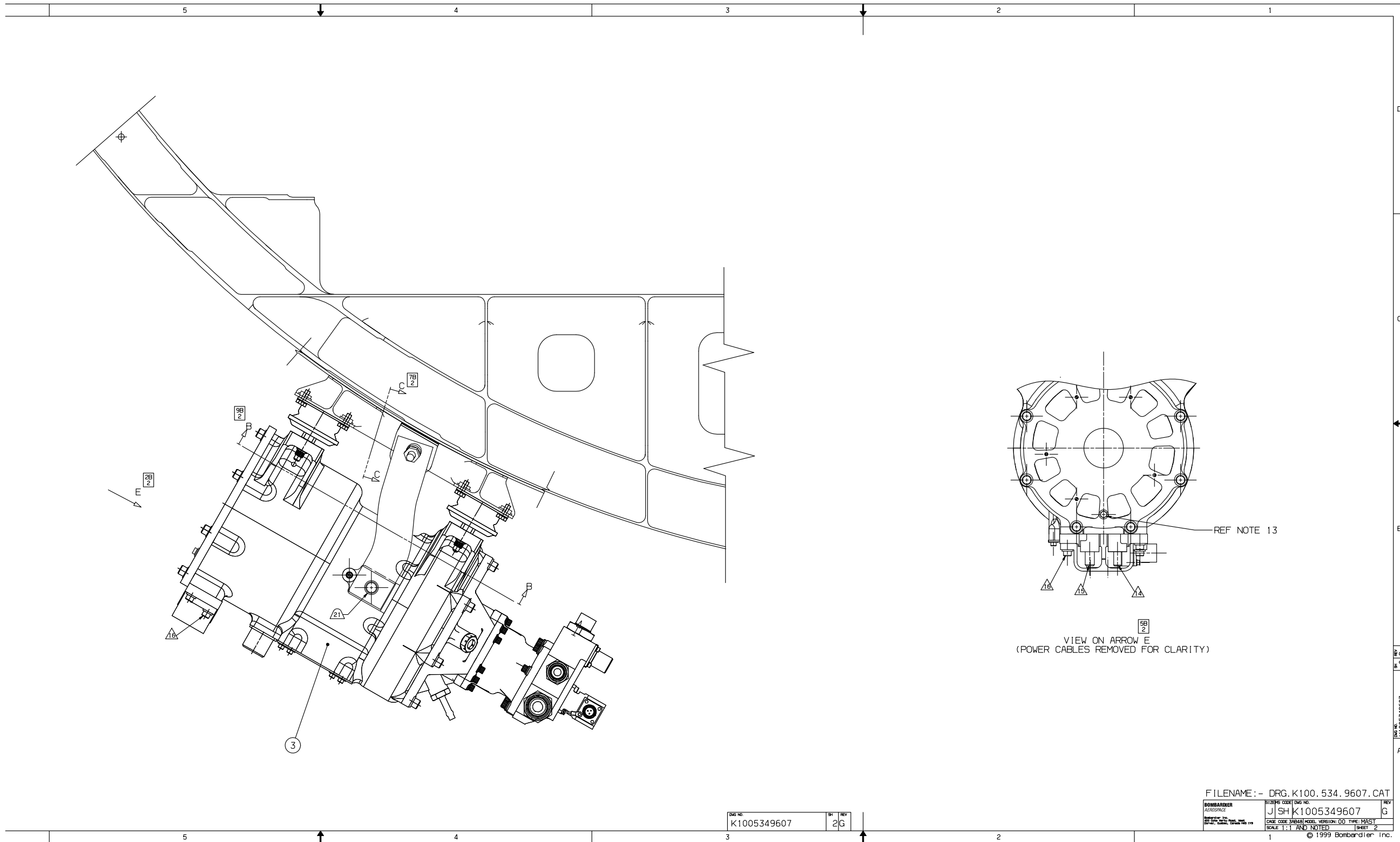
Basic Issue: Jul 31/2006
Revision 03: Jul 03/2014

SB100-24-033-49607-G-S1-1



K1005349607 – HMDG Option Centre Fuse BD100
 (Sheet 1 of 2, Rev. G - continued)

SB100-24-033-49607-G-S1-2



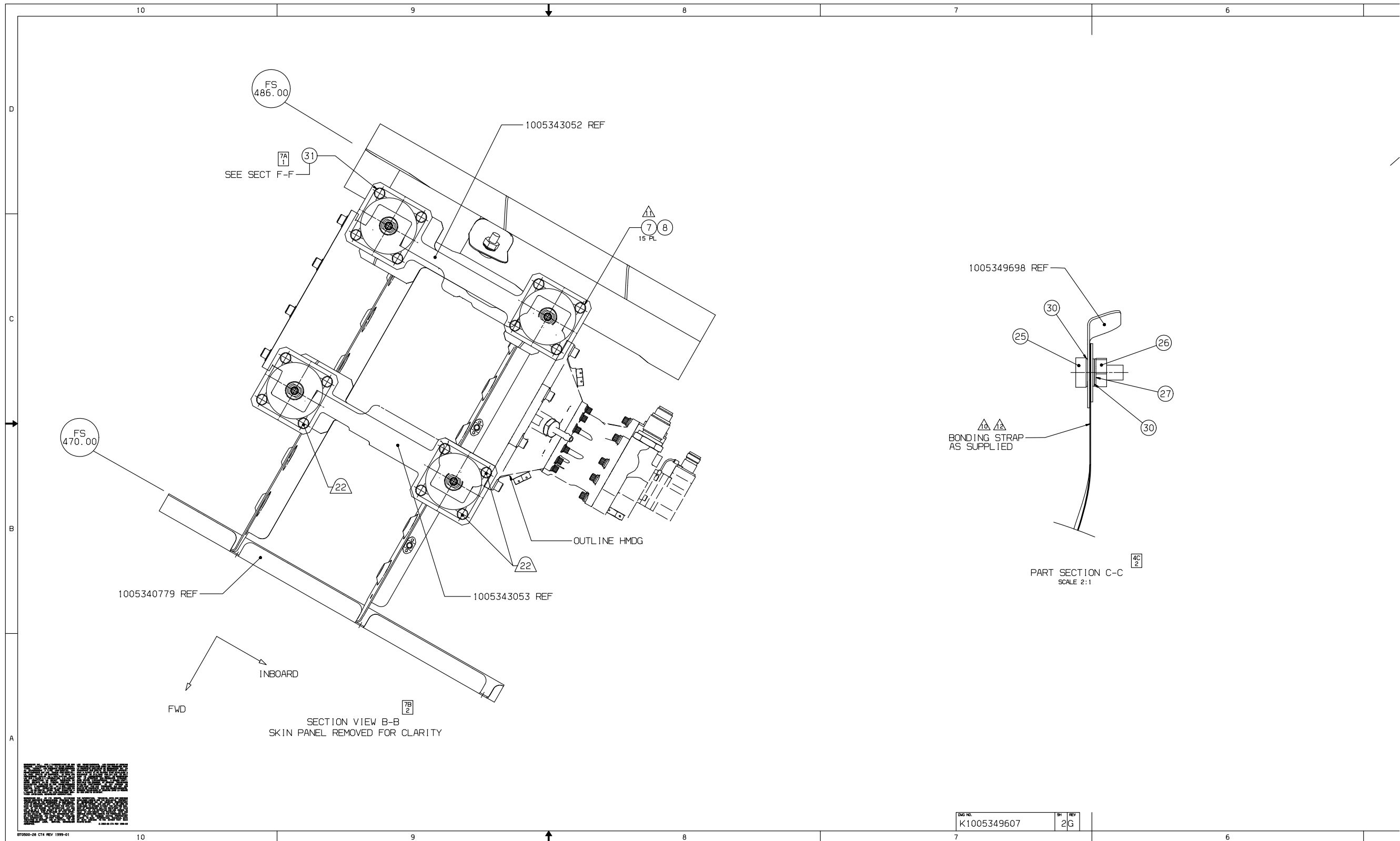
DWG NO.	REV
K1005349607	2G

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BOMBARDIER AEROSPACE	SIZE CODE J SH K1005349607
DATE CODE 00	REVISION 00
SCALE 1:1 AND NOTED	SHEET 2
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K1005349607 – HMDG Option Centre Fuse BD100
(Sheet 2 of 2, Rev. G, continued)

Basic Issue: Jul 31/2006
Revision 03: Jul 03/2014

SB100-24-03-49607-G-S2-1



K1005349607 – HMDG Option Centre Fuse BD100
 (Sheet 2 of 2, Rev. G, continued)

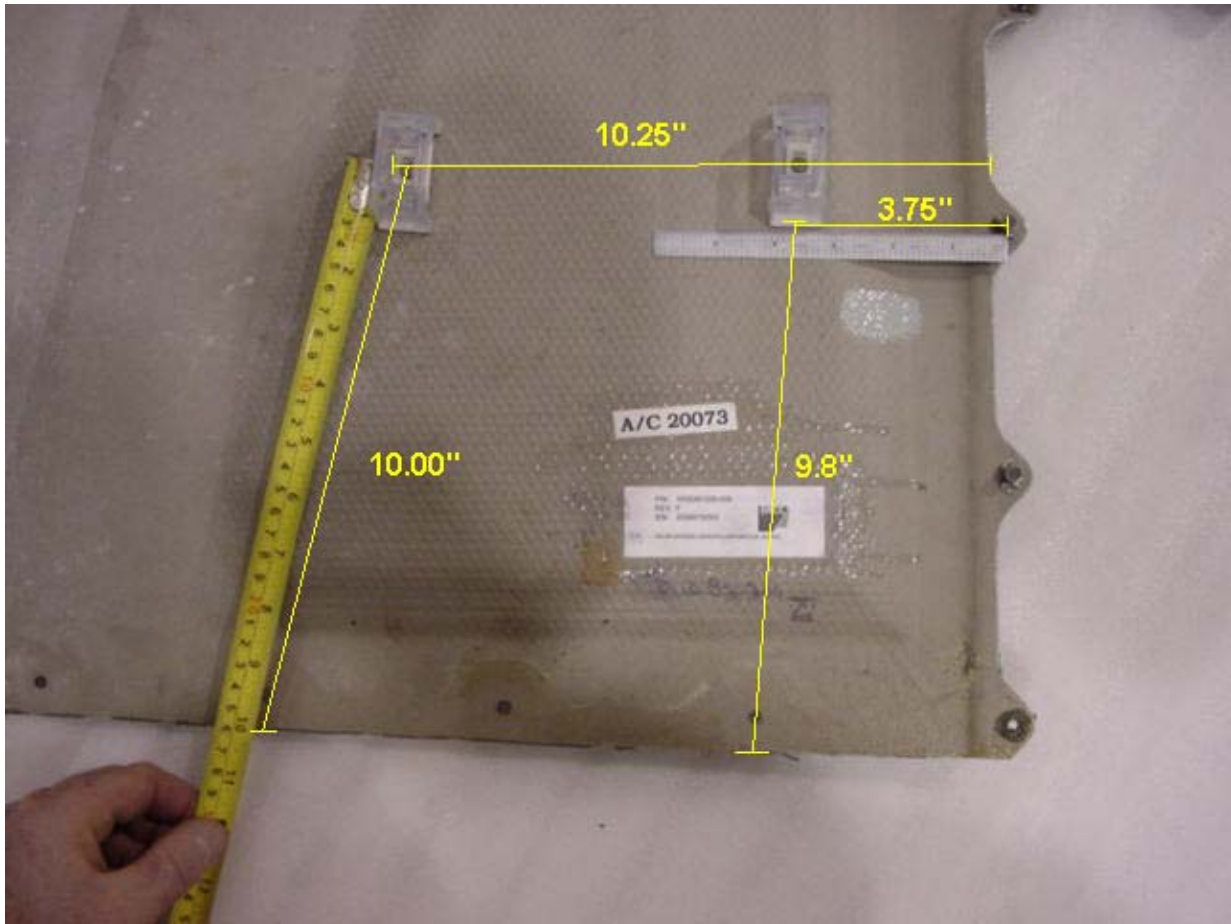
100-24-04
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Basic Issue: Jul 31/2006
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DWG NO.	REV
K1005349607	2G

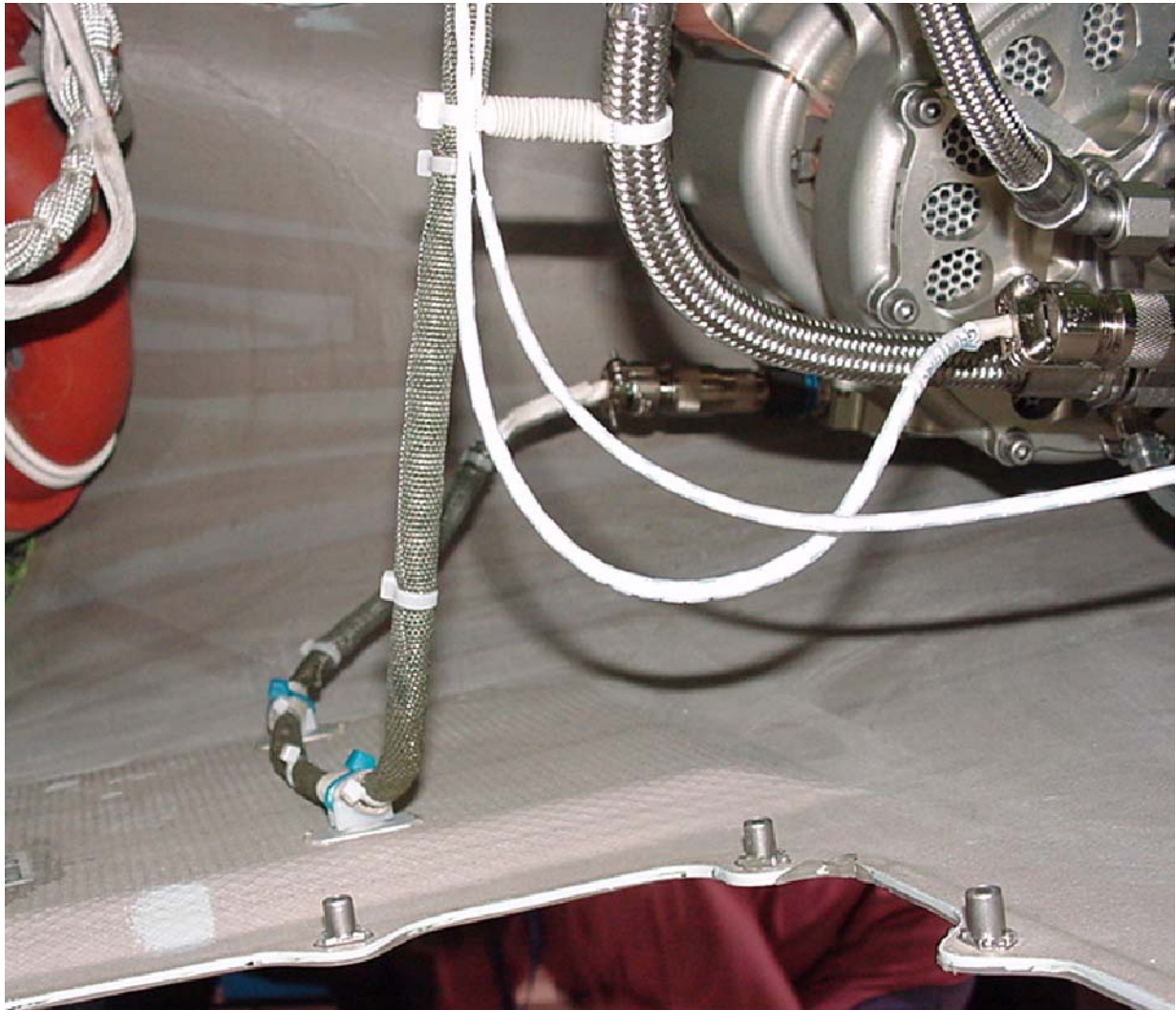
SB100-24-033-49607-G-S2-2

BOMBARDIER
CHALLENGER 300
MODEL BD-100-1A10



Baseplate Installation
Figure 1 (Sheet 1 of 2)

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



Baseplate Installation
Figure 1 (Sheet 2 of 2)

B O M B A R D I E R
CHALLENGER 300
 MODEL BD-100-1A10 (CL-300)

BOMBARDIER AEROSPACE Bombardier, Inc. 400 Cote Vertu Road, West Dorval, Quebec, Canada H4S 1Y9	DRAWN BY: HUI TSENG CAGE CODE 3AB48	SHEET 2	MS CODE AI	PLK1005357458	REV B
MODEL VERSION: 05 MODEL TYPE: ASSY					

NOTES :

1. FINISH SPEC PER BAERD BD 100-001.
2. FINISH CODES PER BAERD-GEN-004.
3. IDENTIFY PER BAPS 144-005.
4. TORQUE VALUES: .375-24 STUDS (98.5 - 134.5 IN/LB). MOUNTING HARDWARE PER STUD (SUPPLIED). MS35650-3382 NUT. MS3538-46 LOCKWASHER, QTY 2 NAS1149F0632P WASHER.
5. ELECTRICAL BONDING CONTACT AREAS SHALL BE THOROUGHLY CLEANED PRIOR TO ASSEMBLY PER BAPS 145-002. THE CONTACT RESISTANCE TO BE 10 MILLI OHM MAX, WHICH IS ATTAINED BETWEEN UNIT AND STRUCTURE.
6. CLAMP WAS USED TO INSTALL SAR0001 CABLE SEE 1005357500 FOR MORE DETAILS. WHEN OPTION C24-300 IS SELECT, UNINSTALL SAR0001 FROM CLAMP, THEN CORE SAR0001 SHALL BE CAPPED AND STOWED AT BOTH ENDS PER BAPS145-008.
7. UNCAP THE CABLES CONNECTED TO A205.
8. PART QTY REQ SHOWN IS FOR REFERENCE ONLY, DO NOT GENERATE AN ORDER SPECIFICATION. PART REQUIREMENTS FOR ORDER SPECIFICATION ARE CALLED UP ON THE SYSTEM DEFINITION DRAWING S1002400002, AND SUPPLIED TO THE FINAL LINE DIRECTLY FROM SUPPLIER.
9. TORQUE VALUES: .3125-24 STUDS (60.7 - 80.7 IN/LB). MOUNTING HARDWARE PER STUD (SUPPLIED). MS35650-3312 NUT. MS3538-45 LOCKWASHER, QTY 2 NAS1149F0563P WASHER.

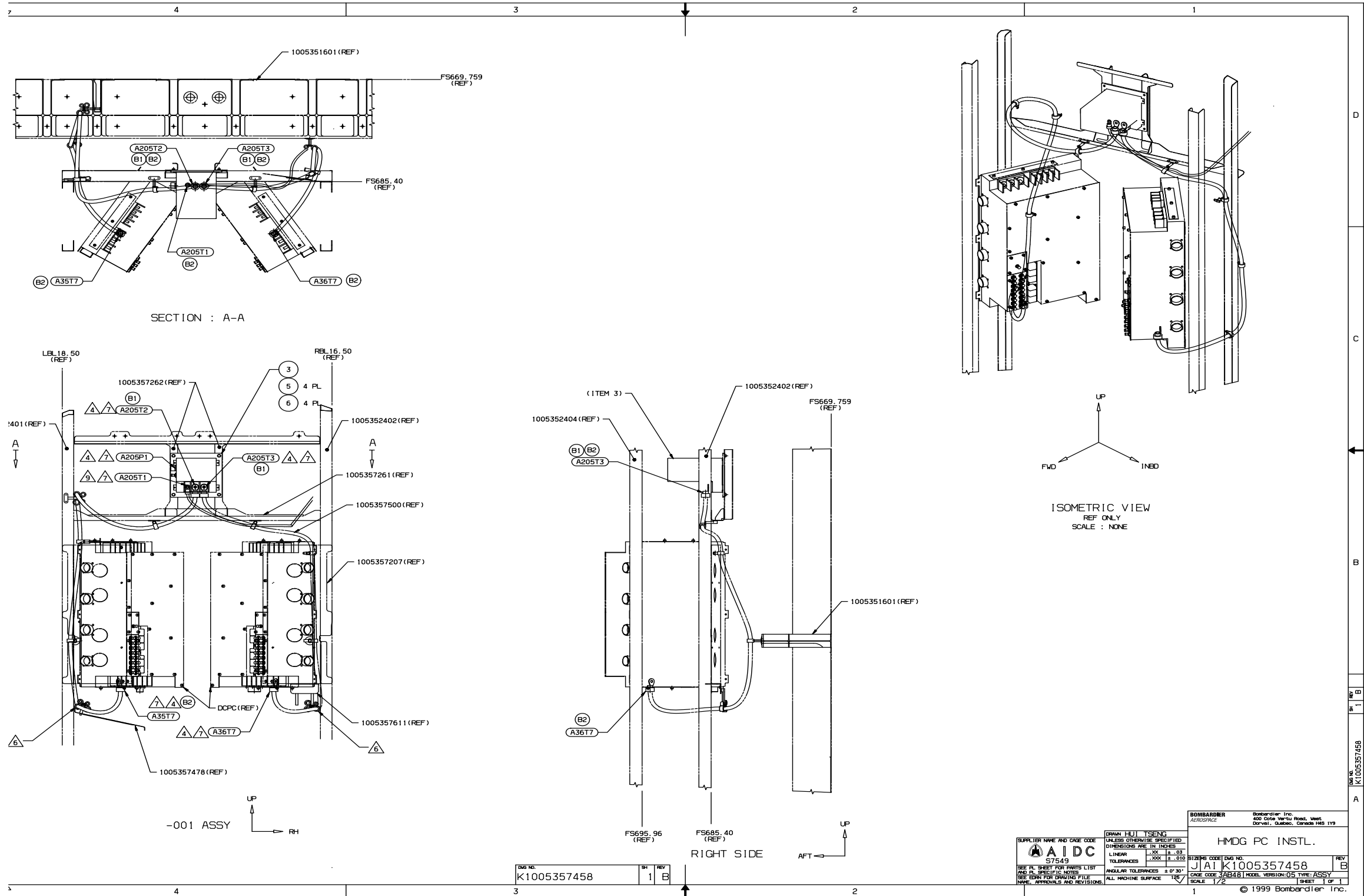
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BT0501-2 CT14 REV 1999-01

SB100-24-004-57458-B-S1-S2-PL

PL K1005357458 – HMDG PC Installation
 (Sheet 2 of 2, Rev. B)

Basic Issue: Jul 31/2006
 Revision 03: Jul 03/2014



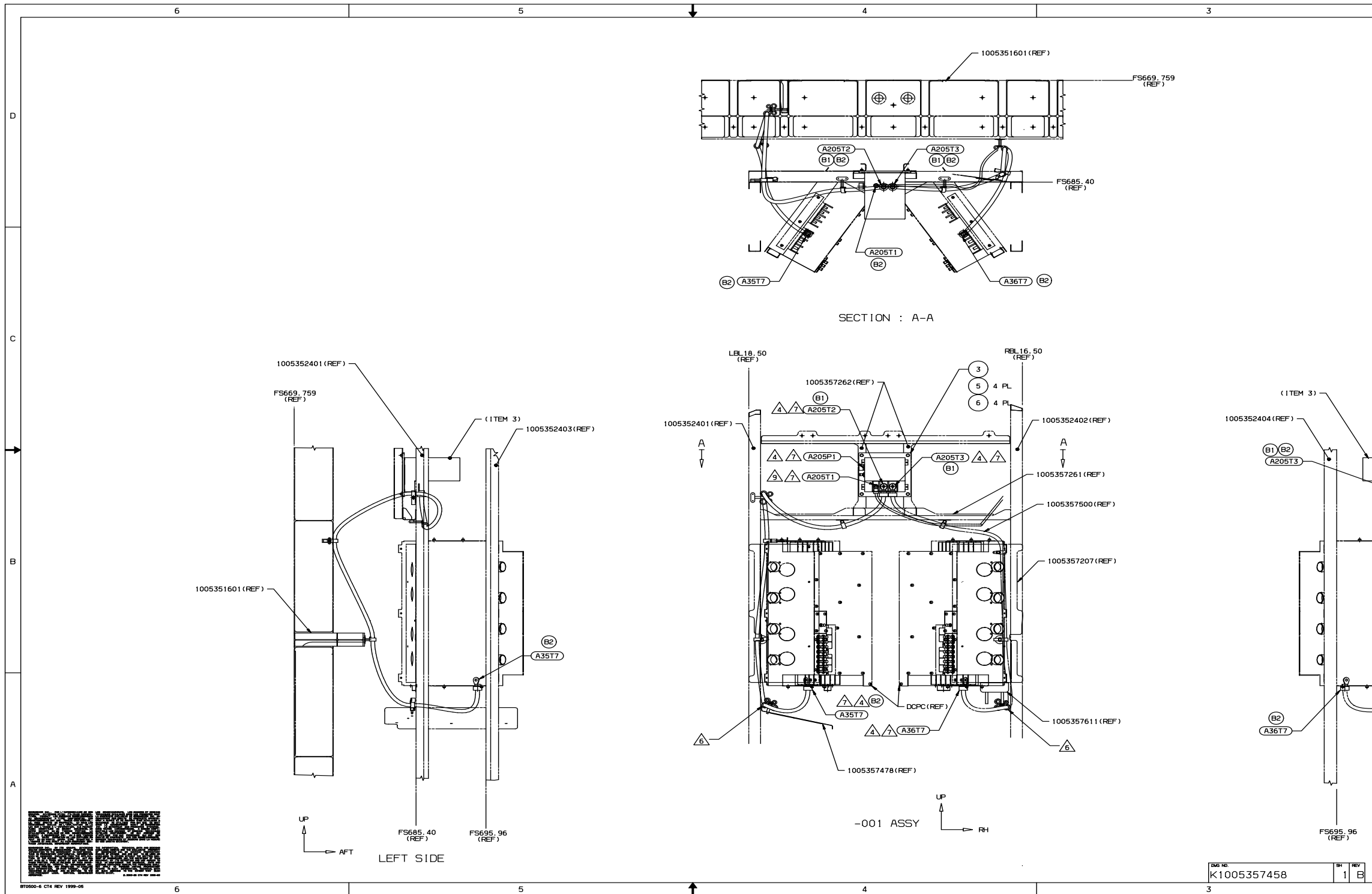
DRG NO.	REV
K1005357458	1 B

SUPPLIER NAME AND CASE CODE AIDC S7549		DRAWN HUI TSENG UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES LINEAR .002 ± .03 TOLERANCES .000 ± .010 ANGULAR TOLERANCES ± 0°30' ALL MACHINE SURFACES 12.5		BOMBARDIER Aerospace Bombardier Inc. 400 Circle Vertu Road, West Dorval, Quebec, Canada H9S 1Y9	
SEE PL SHEET FOR PARTS LIST AND ALL SPECIFIC NOTES SEE DRAWING FOR DIMENSIONS NAME, APPROVALS AND REVISIONS		HMDG PC INSTL. JJA1 K1005357458 CASE CODE 34548 INDEX VERSION 05 TYPE ASSY SCALE 1/2		REV B SHEET 1 OF 1	
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K1005357458 – HMDG PC Installation
(Sheet 1 of 1, Rev. B)

Basic Issue: Jul 31/2006
Revision 03: Jul 03/2014

SB100-24-004-57458-B-S1-1



K1005357458 – HMDG PC Installation
(Sheet 1 of 1, Rev. B - continued)

Basic Issue: Jul 31/2006
Revision 03: Jul 03/2014

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B O M B A R D I E R
CHALLENGER 300
 MODEL BD-100-1A10 (CL-300)

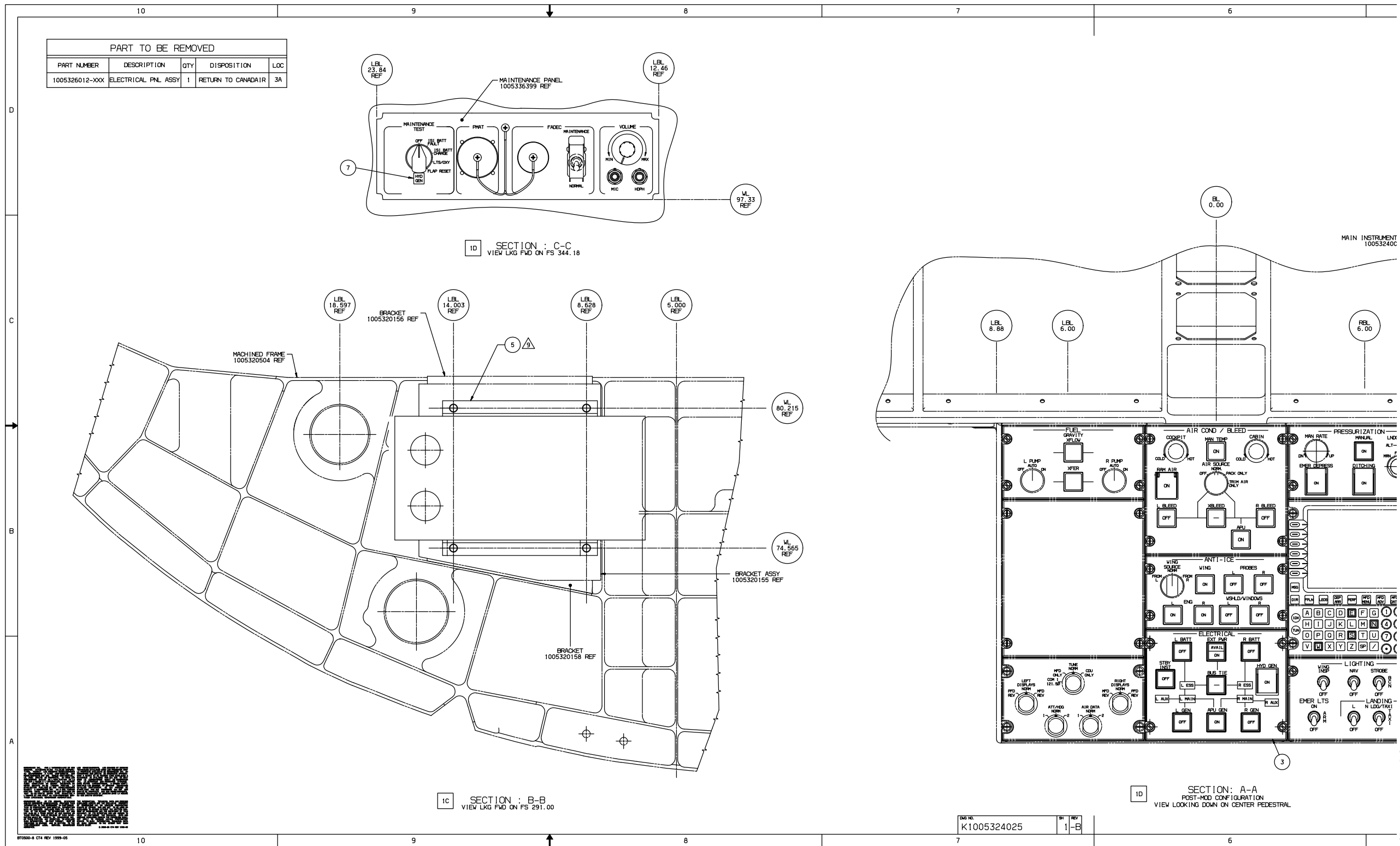
<p>BOMBARDIER AEROSPACE</p> <p>Bombardier, Inc. 400 Cote Vertu Road, West Dorval, Quebec, Canada H4S 1Y9</p>	DRAWN BY: P. BENAL IL	SHEET 2	MS CODE CC	PL_K1005324025	REV -B
CAGE CODE 3AB48		MODEL VERSION: 07 MODEL TYPE: ASSY			
<p>NOTES</p> <ol style="list-style-type: none"> 1. FINISH SPEC PER BAERD BD 100-001 2. FINISH CODES PER BAERD-GEN-004 3. IDENTIFY PER BAPS 144-005 ⚠ PART QTY REQ SHOWN IS FOR REFERENCE ONLY. DO NOT GENERATE AN ORDER SPECIFICATION. PARTS REQUIREMENTS FOR ORDER SPECIFICATION ARE CALLED UP ON THE SYSTEM DEFINITION DRAWING S1002430001. 5. ELECTRICAL BONDING TEST PER FTER BD100-518004 6. TORQUE CAPTIVE FASTENERS TO 20-25 inch-lbs PER BAPS 150-002 7. SYSTEM TEST FOR HMDG PER FTER #SA100-243001 ⚠ FABRICATE LABEL PER BAPS 138-048, TEXT HEIGHT .100 AND INSTALL PER BAPS 138-007. ⚠ ESEAL P/N 5911661-4 IS SUPPLIED BY SUNSTRAND LOOSE WITH THE HMDG GCU. THE ESEAL MUST BE INSERTED IN THE HARNESS CONNECTOR A206P2. THE ESEAL MUST BE ORIENTED WITH THE ESEAL LOGO UP AND SLIGHTLY CUPPED SO THAT THE PIN "A" HOLE CAN BE SLIPPED DOWN OVER THE CORRESPONDING PIN IN THE CONNECTOR. USE A FINGER TIP TO PUSH THE ESEAL DOWN OVER THE HEAD OF THE PIN. THE REMAINING PINS ARE WORKED IN THE SAME MANNER. THE ESEAL IS INTENTIONALLY OVERSIZE. THE ESEAL CAN BE FULLY SEATED ONCE THE HARNESS CONNECTOR IS MATED TO THE HMDG GCU CONNECTOR. 					
BT0501-2 C14 REV 1999-01					
ID: <u>BD_100_K1005324025 -B_REL_ASSY 7 2004-12-17</u>					
SB100-24-004-24025-B-S2-PL					

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PL K1005324025 – Kit Installation – HMDG GCU and Control Panel
 (Sheet 2 of 2, Rev. B)

Basic Issue: Jul 31/2006
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K1005324025 – Kit Installation – HMDG GCU and Control Panel
(Sheet 1 of 1, Rev. B - continued)

Basic Issue: Jul 31/2006
Revision 03: Jul 03/2014

<p>1 WITH REFERENCE TO SHEET 2. REMOVE WIRING FROM A206PI AND A206PIB CONNECTOR A206PI WAS :- D38999/26ME26SN BACKSHELL A206PIB WAS :- B0803008-70-12L RE-INSTALL WIRING TO A206PI AND A206PIB USING CONNECTOR A206PI :- D38999/26FE26SN BACKSHELL A206PIB :- B0803120-17-A6-1</p> <p>2 WITH REFERENCE TO SHEET 2. REMOVE WIRING FROM A206P2 AND A206P2B CONNECTOR A206P2 WAS :- D38999/26ME26PN BACKSHELL A206P2B WAS :- B0803008-70-12L RE-INSTALL WIRING TO A206P2 AND A206P2B USING CONNECTOR A206P2 :- D38999/26FE26PN BACKSHELL A206P2B :- B0803120-17-A6-1</p> <p>3 FOR 'UC' WIRE HARNESS REPORT REFER TO I009109100. FOR HMDG POWER AND CONTROL WIRING DIAGRAM REFER TO I002439004 FOR HMDG POWER WIRING DIAGRAM REFER TO I002439005 FOR FITTING OF EE-SEAL REFER TO K1005324025</p> <p>4 RE-INSTALL WIRING PER BAPS145-003 RE-TERMINATE SHIELDS AND ASSEMBLE HEXASHIELD BACKSHELL PER RPIP-696-04 INSTALLATION PROCEDURE</p> <p>5 NO CHANGES TO WIRING, WIRES SHOWN AS REFERENCE ONLY.</p>	<p style="text-align: center;">PARTS LIST</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>ITEM NO.</th> <th>DESCRIPTION</th> <th>PART NUMBER</th> <th>CAGE CODE</th> </tr> </thead> <tbody> <tr> <td>A206PI</td> <td>CONNECTOR</td> <td>D38999/26FE26SN</td> <td>81349</td> </tr> <tr> <td>A206PIB</td> <td>BACKSHELL</td> <td>B0803121-17-A6-1</td> <td>3AB48</td> </tr> <tr> <td>A206P2</td> <td>CONNECTOR</td> <td>D38999/26FE26PN</td> <td>81349</td> </tr> <tr> <td>A206P2B</td> <td>BACKSHELL</td> <td>B0803121-17-A6-1</td> <td>3AB48</td> </tr> </tbody> </table>	ITEM NO.	DESCRIPTION	PART NUMBER	CAGE CODE	A206PI	CONNECTOR	D38999/26FE26SN	81349	A206PIB	BACKSHELL	B0803121-17-A6-1	3AB48	A206P2	CONNECTOR	D38999/26FE26PN	81349	A206P2B	BACKSHELL	B0803121-17-A6-1	3AB48	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="4">REVISIONS</th> <th colspan="2">APPROVED</th> </tr> <tr> <th>1</th> <th>2</th> <th>3</th> <th>4</th> <th>DESIGN</th> <th>STRESS</th> </tr> <tr> <th>REWORKABLE</th> <th>NON-REWORKABLE</th> <th>NOTED</th> <th>NA</th> <th></th> <th></th> </tr> <tr> <th>ZONE</th> <th>REV</th> <th colspan="2">DESCRIPTION</th> <th>EFFECTIVITY</th> <th>DISP/DATE</th> </tr> </thead> <tbody> <tr> <td>--</td> <td></td> <td colspan="2">SEE EDRN</td> <td></td> <td></td> </tr> <tr> <td>A</td> <td></td> <td colspan="2">SEE EDRN</td> <td></td> <td></td> </tr> </tbody> </table> <p style="text-align: center;">NOTE Details enlarged for clarity.</p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td colspan="2">DASH NO.</td> <td colspan="2">REVISION</td> <td rowspan="2">LIST OF ACTIVE SHEETS</td> </tr> <tr> <td colspan="2">2 1 PL</td> <td colspan="2">SHEET</td> </tr> <tr> <td colspan="2">DRAWN S. CATNEY</td> <td colspan="2">JULY 04</td> <td rowspan="2" style="text-align: center;">PARTS LIST</td> </tr> <tr> <td colspan="2">BOMBARDIER INC., AEROSPACE</td> <td colspan="2">BOMBARDIER AEROSPACE</td> </tr> <tr> <td colspan="2">CAGE CODE 3AB48</td> <td colspan="2">BOMBARDIER INC. 400 Côte Vertu Road, West Dorval, Quebec, Canada H4S 1Y9</td> <td rowspan="2" style="text-align: center;">HMDG CONNECTOR MODIFICATION KIT</td> </tr> <tr> <td>SIZE D BH</td> <td>MS CODE</td> <td>DWG NO. K1002430002</td> <td>REV A</td> </tr> <tr> <td>CAGE CODE 3AB48</td> <td>MODEL VERSION: 00</td> <td colspan="2">TYPE: WD</td> </tr> <tr> <td>SCALE NTS</td> <td colspan="3">SHEET 1 OF 2</td> </tr> </table>	REVISIONS				APPROVED		1	2	3	4	DESIGN	STRESS	REWORKABLE	NON-REWORKABLE	NOTED	NA			ZONE	REV	DESCRIPTION		EFFECTIVITY	DISP/DATE	--		SEE EDRN				A		SEE EDRN				DASH NO.		REVISION		LIST OF ACTIVE SHEETS	2 1 PL		SHEET		DRAWN S. CATNEY		JULY 04		PARTS LIST	BOMBARDIER INC., AEROSPACE		BOMBARDIER AEROSPACE		CAGE CODE 3AB48		BOMBARDIER INC. 400 Côte Vertu Road, West Dorval, Quebec, Canada H4S 1Y9		HMDG CONNECTOR MODIFICATION KIT	SIZE D BH	MS CODE	DWG NO. K1002430002	REV A	CAGE CODE 3AB48	MODEL VERSION: 00	TYPE: WD		SCALE NTS	SHEET 1 OF 2		
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WIR.K1002430002.A.1
DATE - 20-12-05
STATUS - RL

DASH NO.	NEXT ASSY	QTY PER ACFT	MODEL

THIS IS A CAD DRAWING

F.844-3 REV 89/10 /MOD 4

SB100-24-004-30002-A-S1

Applicable for aircraft Serial No. **20001** to **20163**
K1002430002 – HMDG Connector Modification Kit
(Sheet 1 of 2, Rev. A)

Basic Issue: Jul 31/2006
Revision 03: Jul 03/2014

100-24-04
Page 37 of 40

B O M B A R D I E R
CHALLENGER 300
MODEL BD-100-1A10 (CL-300)

STEP 1

ASSEMBLE

Shielded wire ferrules, Part No. HET-A-02C. For shielded wires ferrule installation and length dimension, refer to Figure 2 detail "B" and RPIP-696-03. For unshielded wire ferrules Part No. HET-A-03C installation, refer to RPIP-696-00.

STEP 3

ASSEMBLE

Clamping nut (1), star (2), conic ring assembly (3), body (4) and connector (5). For the HMDG GCU connector A206P1 and A206P2 plug-in charts, refer to kit drawing K1002430002.

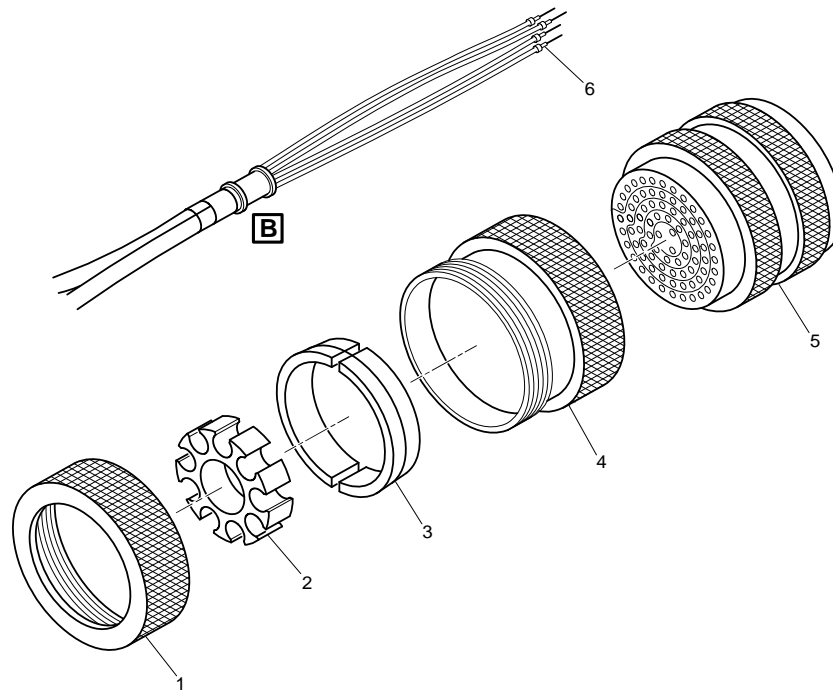
STEP 2

INSTALL

Contacts (6). For connector A206P1, use contacts Part No. M39029/56-351 and for connector A206P2, use contacts Part No. M39029/58-363. Refer to Standard Practices Manual, Chapter 20, Wiring.

NOTE:

<http://www.tycoelectronics.com>.



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CSB2404_001

Hexashield Connector
Figure 2 (Sheet 1 of 2)

B O M B A R D I E R
CHALLENGER 300
 MODEL BD-100-1A10 (CL-300)

STEP 1
 ASSEMBLE

Shielded wire ferrules, Part No. HET-A-02C. For shielded wires ferrule installation and length dimension, refer to Figure 2 detail "B" and RPIP-696-03. For unshielded wire ferrules Part No. HET-A-03C installation, refer to RPIP-696-00.

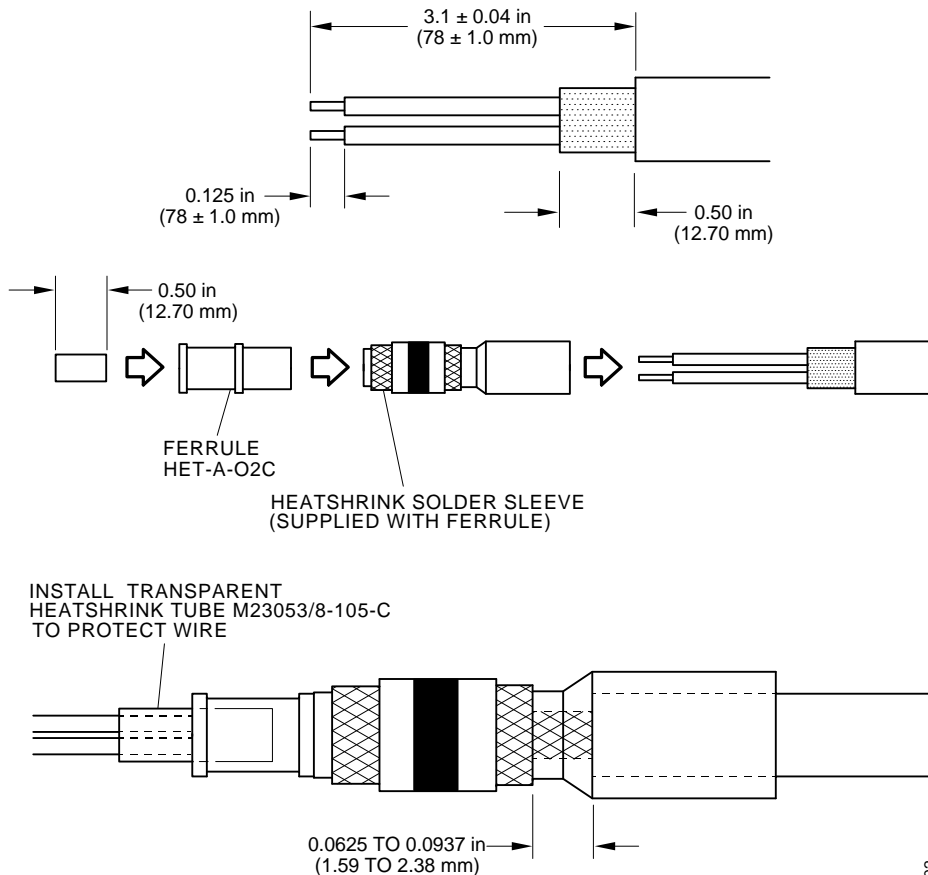
STEP 2
 INSTALL

Contacts (6). For connector A206P1, use contacts Part No. M39029/56-351 and for connector A206P2, use contacts Part No. M39029/58-363. Refer to Standard Practices Manual, Chapter 20, Wiring.

STEP 3
 ASSEMBLE

Clamping nut (1), star (2), conic ring assembly (3), body (4) and connector (5). For the HMDG GCU connector A206P1 and A206P2 plug-in charts, refer to kit drawing K1002430002.

NOTE: The Tyco Electronics hexashield installation procedure RPIP-696-04, referenced in kit drawing K1002430002 and the ferrule installation procedure RPIP-696-00 and RPIP-696-03, can be used for reference. These documents are available on the Tyco Electronic, document search website at: <http://www.tycoelectronics.com>.



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B

CSB2404_002

Hexashield Connector
 Figure 2 (Sheet 2 of 2)

SERVICE BULLETIN EVALUATION FORM

(Your ideas will help us provide better bulletins)

SERVICE BULLETIN: 100-24-04 **ISSUE:** Rev. 03 **DATED:** Jul 03/2014

TITLE: Modification – Emergency DC-Power System – Installation of the Hydraulic Motor Driven Generator (HMDG) Option (C24-300)

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 – “100-24-04”

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			Remarks/Reason
			YES	NO	N/A	
100-24-04	03	-	<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



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