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CRASH-FIRE-RESCUE MANUAL

To: Distribution

Subject: Dash 8 Series 400, Crash-Fire-Rescue Manual, PSM 1-84-14

This is Revision 3 of the Dash 8 Series 400, Crash-Fire-Rescue Manual, PSM 1-84-14, dated Nov 05/2014.

We are providing you with the entire manual as the majority of the pages were revised. Please remove the last issue of this manual from the binder and replace it with the contents of this package.

We recommend that this letter of transmittal be retained and placed in the front of the manual for record purposes.



CRASH–FIRE–RESCUE MANUAL

PSM 1–84–14

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CRASH-FIRE-RESCUE MANUAL

EFFECTIVE TEMPORARY REVISIONS

List of Temporary Revisions effective in your Manual at Revision 3 dated Nov 05/2014.

TR No.	CHAPTER / SECTION / SUBJECT	ISSUE DATE
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EFFECTIVITY: ALL



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LIST OF EFFECTIVE PAGES

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The asterisk (*) indicates pages revised, added or deleted by current revision.

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CHAPTER 00

CHAPTER TITLE



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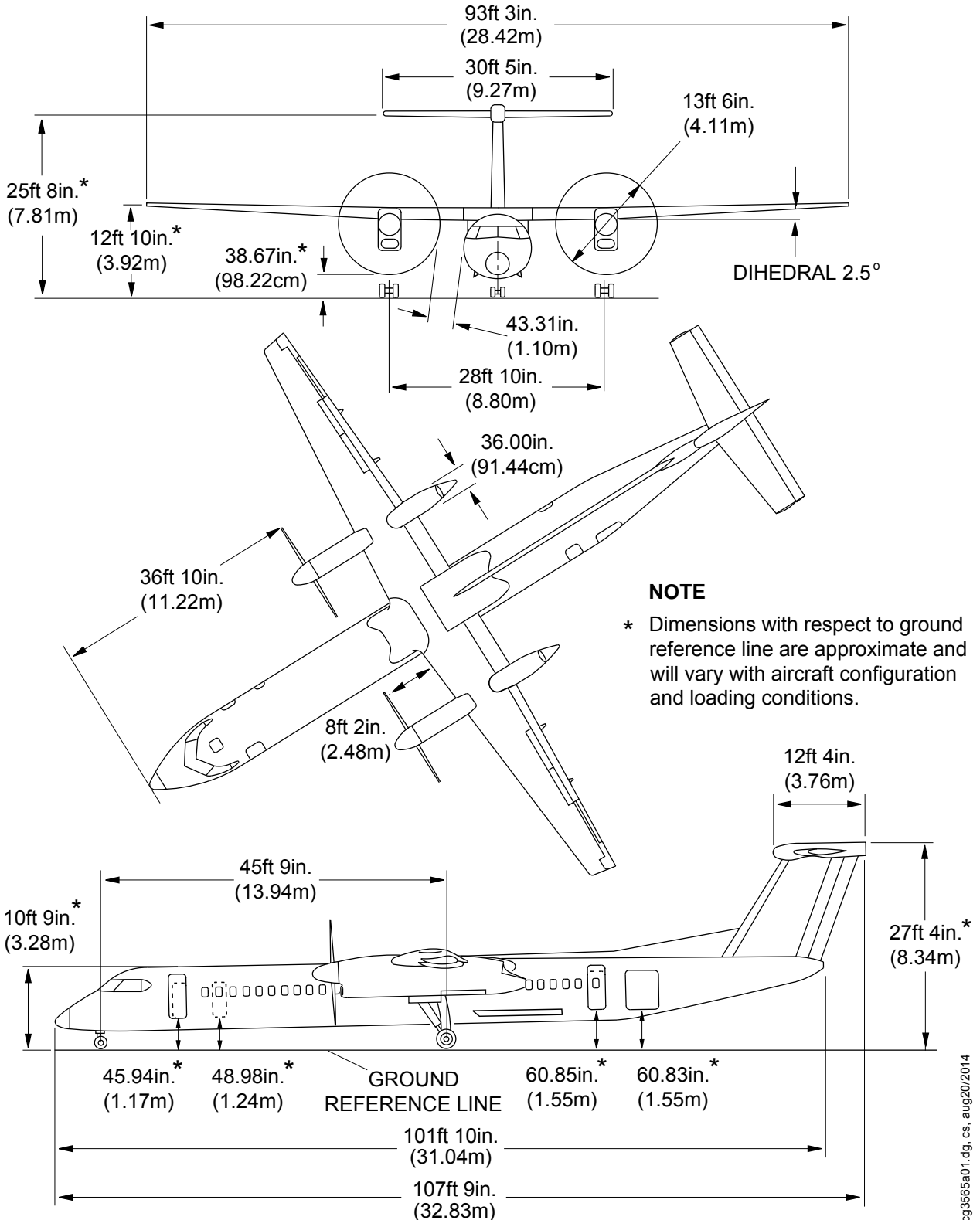
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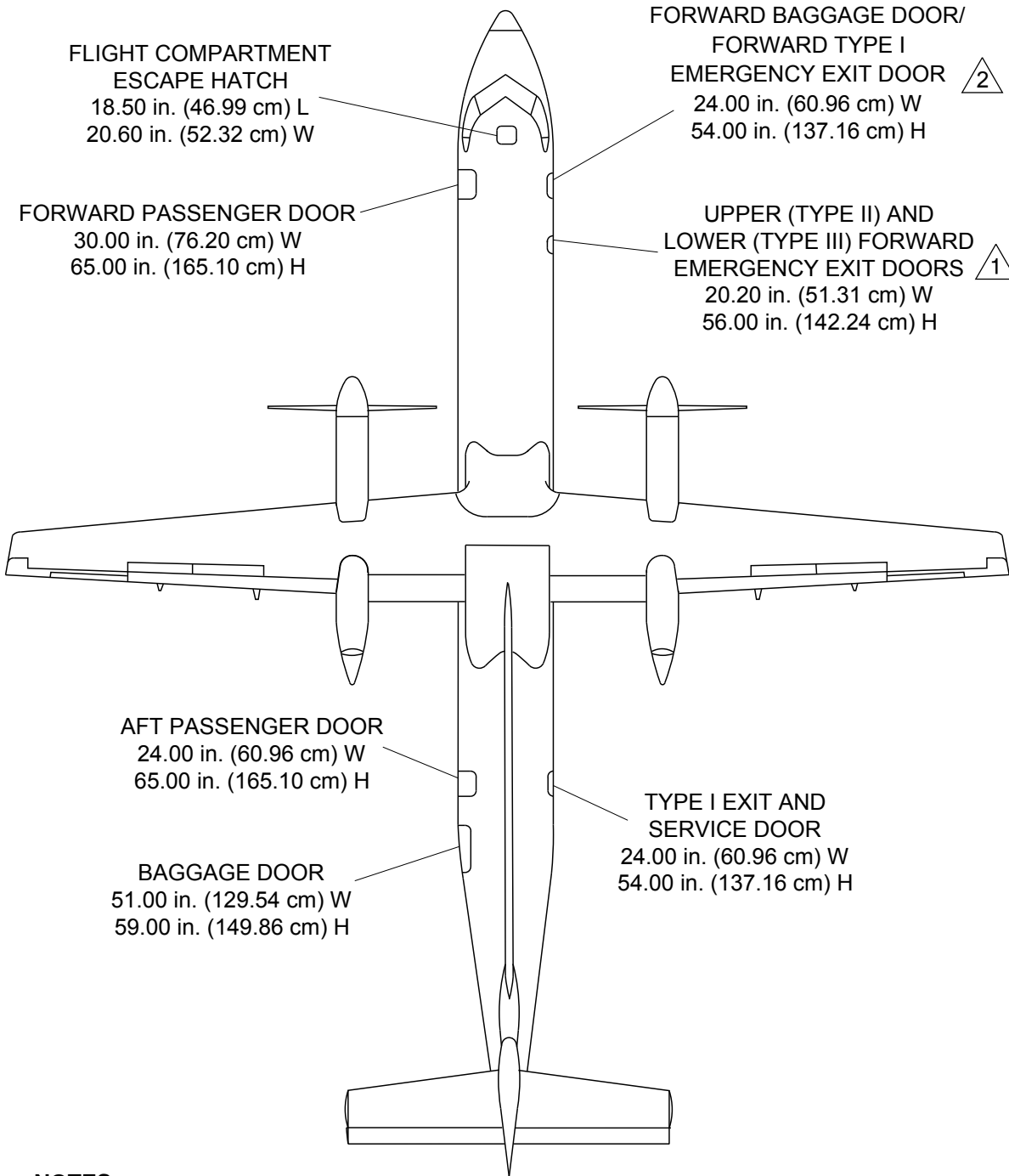
AIRCRAFT DIMENSIONS (INCL EXTRA CAPACITY CONFIGURATION) (Sheet 1 of 2)

Figure 00 - 1

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cg3565a01.dg, cs, aug20/2014

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NOTES

- 1 Type II/III emergency exit door is de-activated for the extra capacity configuration.
- 2 Forward type I emergency exit door is installed only on aircraft with extra capacity configuration.

AIRCRAFT DIMENSIONS (INCL EXTRA CAPACITY CONFIGURATION) (Sheet 2 of 2)

cg3565a02.dg, cs, aug20/2014

Figure 00 - 1

Model 400



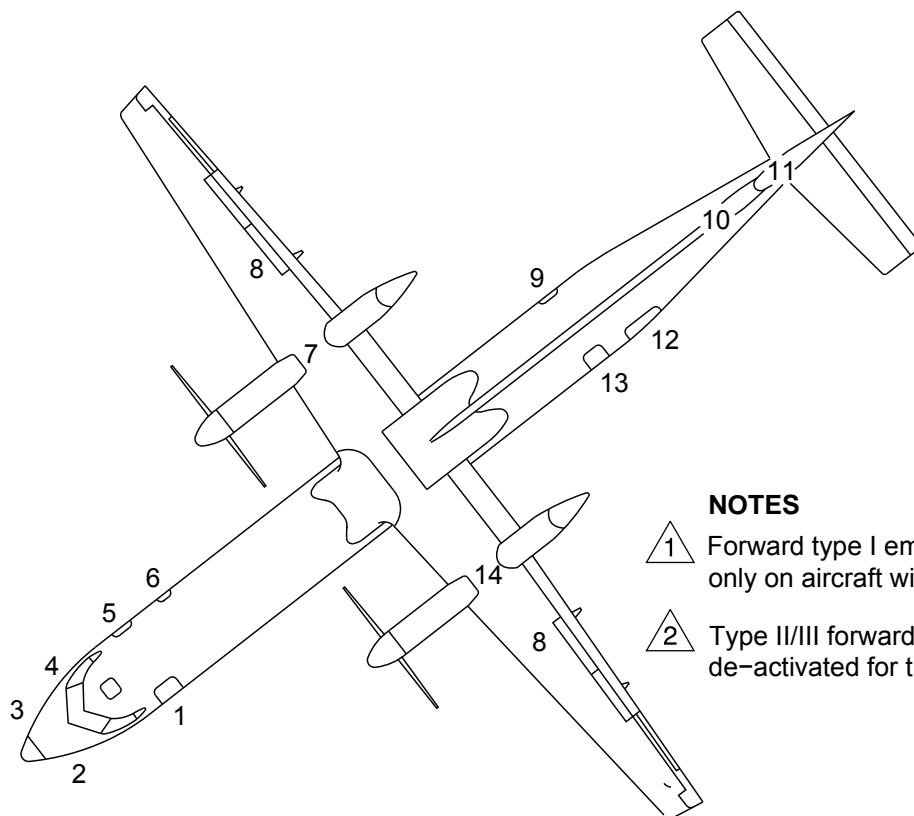
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NOTES

- △ 1 Forward type I emergency exit door is installed only on aircraft with extra capacity configuration.
- △ 2 Type II/III forward emergency exit door is de-activated for the extra capacity configuration.

EXTERIOR WALK AROUND SEQUENCE (FOR CREW TRAINING PURPOSES)

1. Airstair door location and demo of external opening sequence.
2. Nose fuselage access door – batteries and contactor box locations.
3. Crew oxygen bottle.
4. Nose landing gear location and description, auxiliary hydraulic reservoir and hydraulic lines location and description.
5. Forward baggage door location and demo of external opening sequence, fire bottle location /forward type I emergency exit location and demo of external opening sequence. △ 1
6. Type II/III emergency exit door location and demo of external opening sequence. △ 2
7. No. 2 nacelle – main landing gear location and description, hydraulic reservoir and hydraulic lines location and description, fire bottle locations.
8. Fuel tanks location and description.
9. Service door location and demo of external opening sequence.
10. Aft equipment bay access door–opening sequence, flight data recorder and cockpit voice recorder locations.
11. Auxiliary power unit (APU) bay access door – APU location and description.
12. Aft baggage door location and demo of external opening sequence, fire bottle locations.
13. Aft passenger door location and demos of external opening sequence, optional folding stairs (if equipped).
14. No. 1 nacelle – main landing gear location and description, hydraulic reservoir and hydraulic lines location and description, fire bottle locations.

EXTERIOR WALK-AROUND

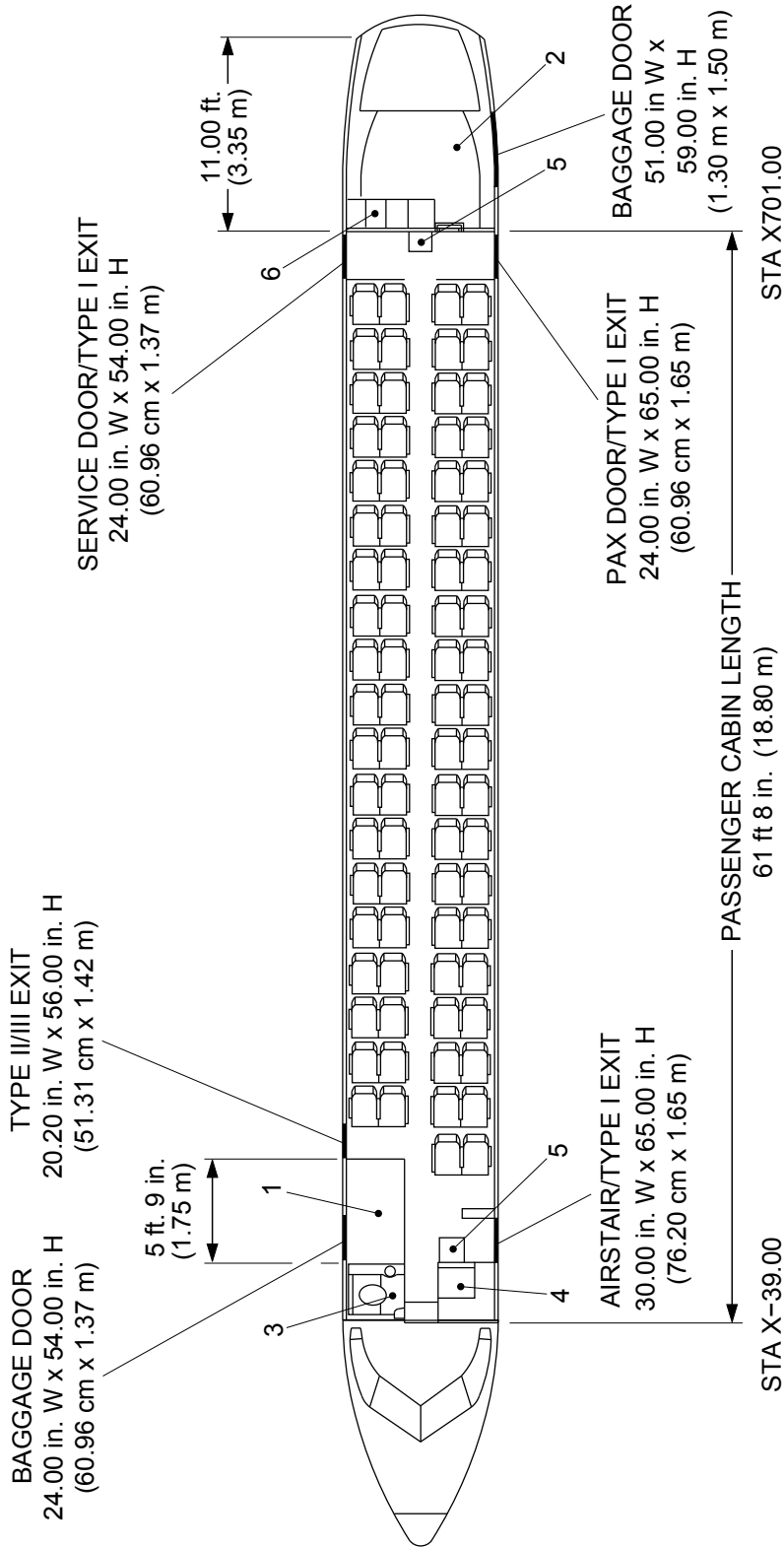
Figure 00 – 2

Model 400

brb94a01.dg, gv/cs, jul13/2014



CRASH-FIRE-RESUE MANUAL



LEGEND

1. Forward baggage compartment
91.00 ft³ (2.58 m³).
2. Rear baggage compartment
365.00 ft³ (10.33 m³).
3. Lavatory.
4. Wardrobe.
5. Flight attendant.
6. Galley.

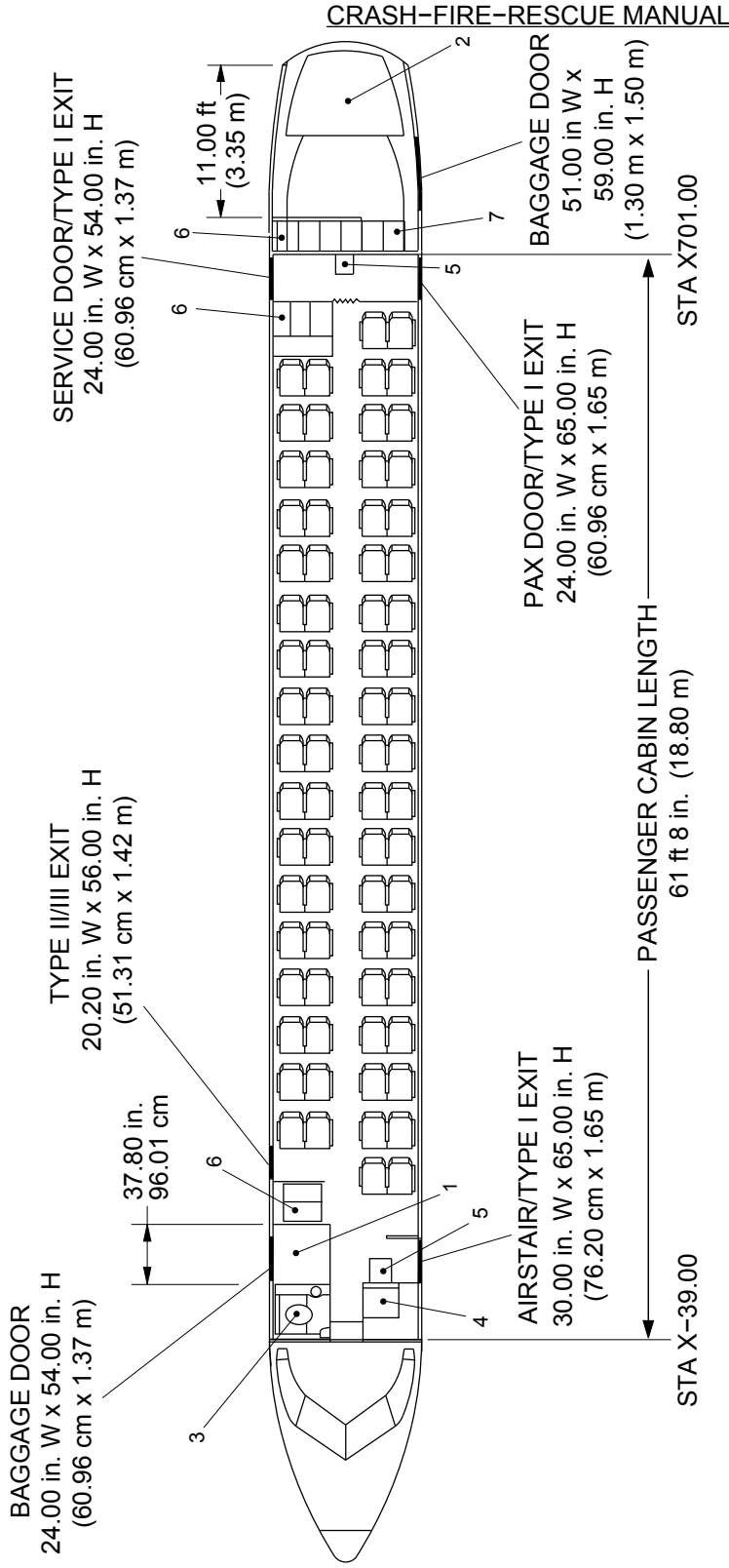
NOTE
Layout may vary with optional configurations.

br70a01.dg, pt/kmw, aug08/2008

TYPICAL SERIES 400 INTERIOR CONFIGURATIONS (Sheet 1 of 4)

Figure 00 - 3

Model 400



LEGEND

1. Forward Baggage Compartment
51.00 ft³ (1.44 m³).
2. Rear Baggage Compartment
365.00 ft³ (10.33 m³).
3. Lavatory.
4. Wardrobe.
5. Flight Attendant Seat.
6. Galley.
7. Cart Storage.

NOTE
Layout may vary with optional configurations.

brt70a02.dg, pt/kmw, aug08/2008

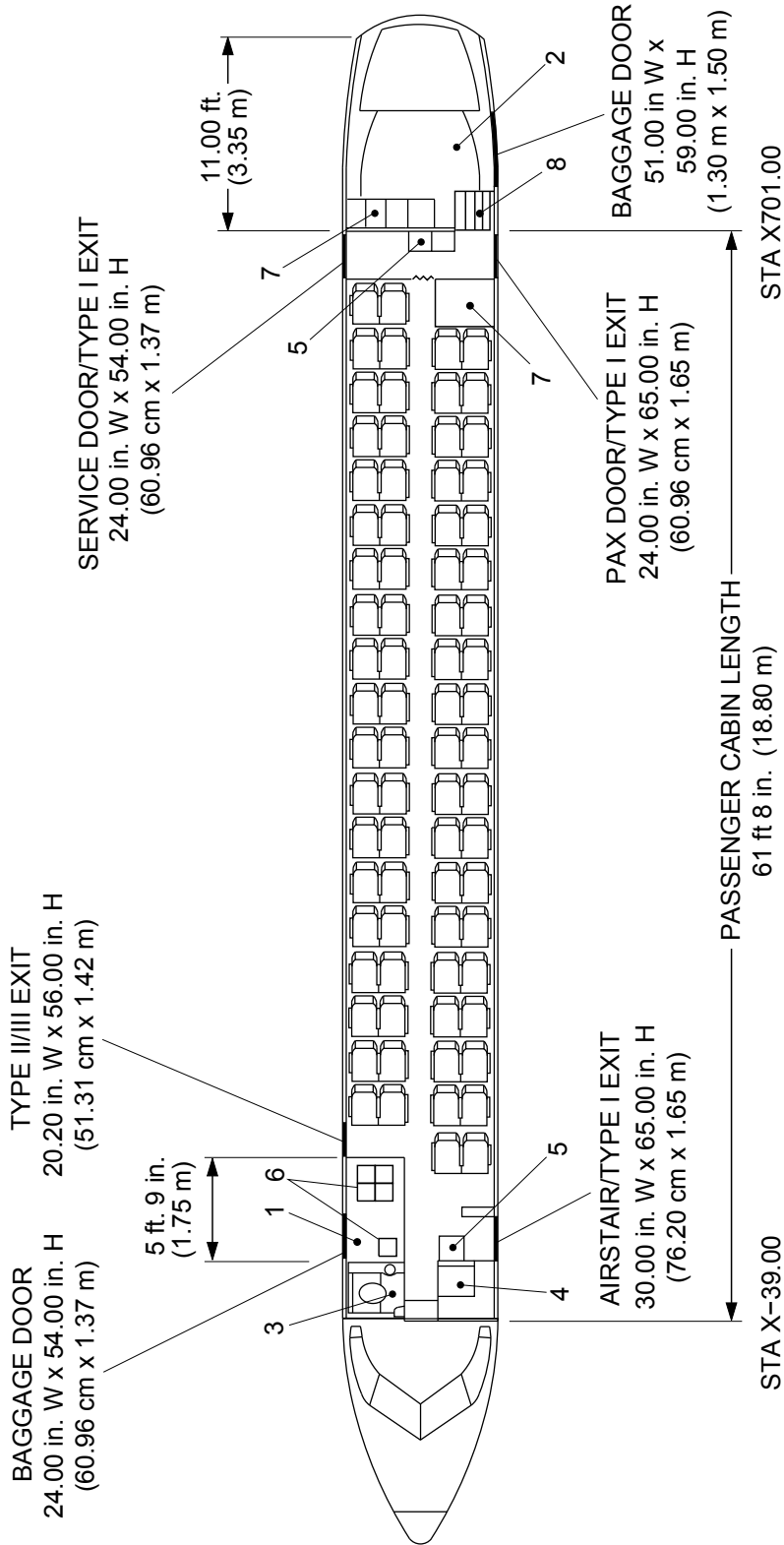
TYPICAL SERIES 400 INTERIOR CONFIGURATIONS (Sheet 2 of 4)

Figure 00 - 3

Model 400



CRASH-FIRE-RESCUE MANUAL



LEGEND

- 1. Forward baggage compartment
91.00 ft³ (2.58 m³).
- 2. Rear baggage compartment
354.00 ft³ (10.0 m³) approx.
- 3. Lavatory.
- 4. Wardrobe.
- 5. Flight attendant.
- 6. Beverage cart stowage.
- 7. Galley.
- 8. Folding stairs (optional).

NOTE

Layout may vary with optional configurations.

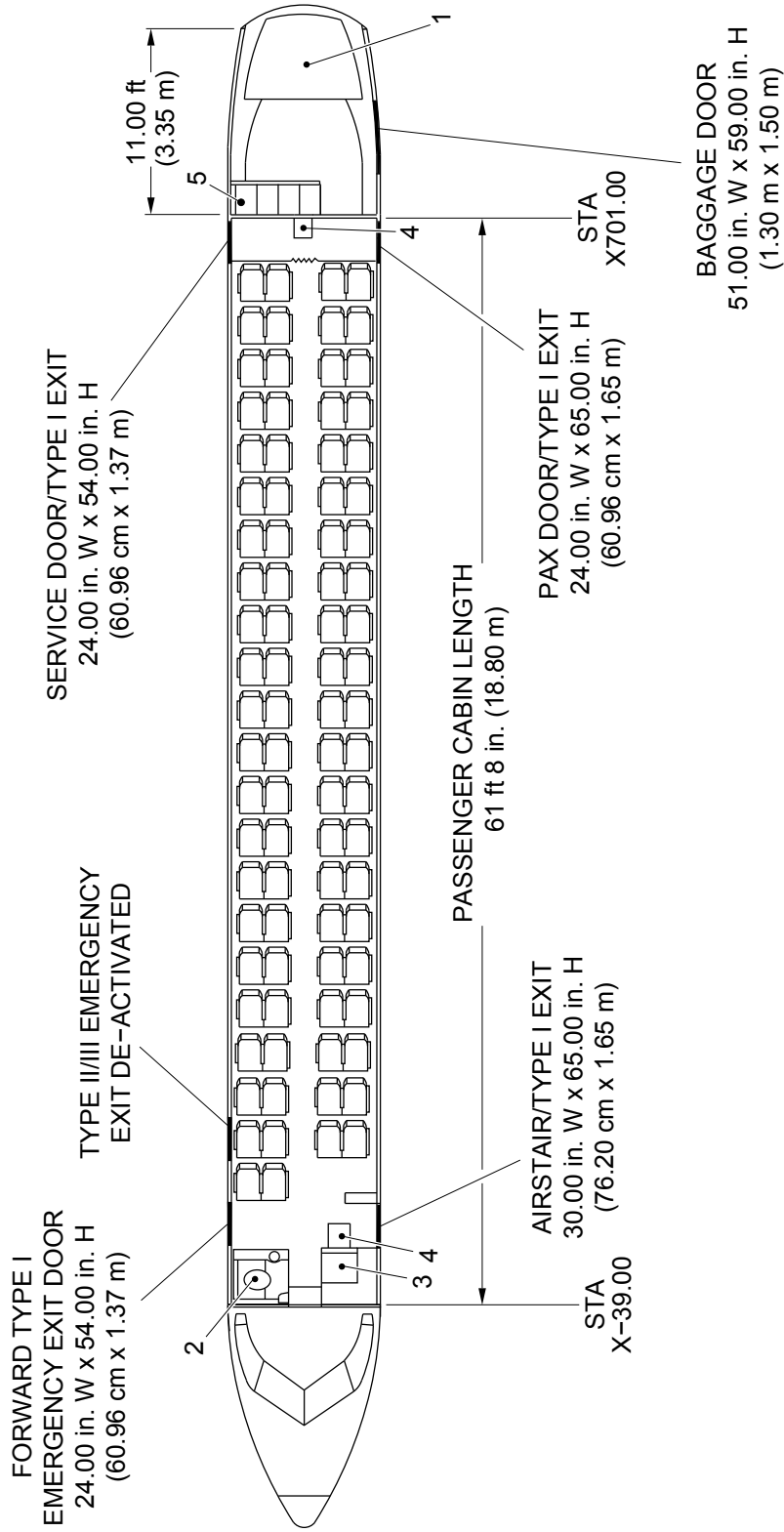
br70a03.dg, pt/kmw, aug12/2008

TYPICAL SERIES 400 INTERIOR CONFIGURATIONS (Sheet 3 of 4)

Figure 00 - 3

Model 400

CRASH-FIRE-RESCUE MANUAL



LEGEND

1. Rear baggage compartment
365.00 ft³(10.33 m³).
2. Lavatory.
3. Wardrobe.
4. Flight attendant Seat.
5. Galley.

NOTE

Layout may vary with optional configurations.

brr70a04.dg, cs, jul31/2014

TYPICAL SERIES 400 INTERIOR CONFIGURATIONS (Sheet 4 of 4)

Figure 00 - 3

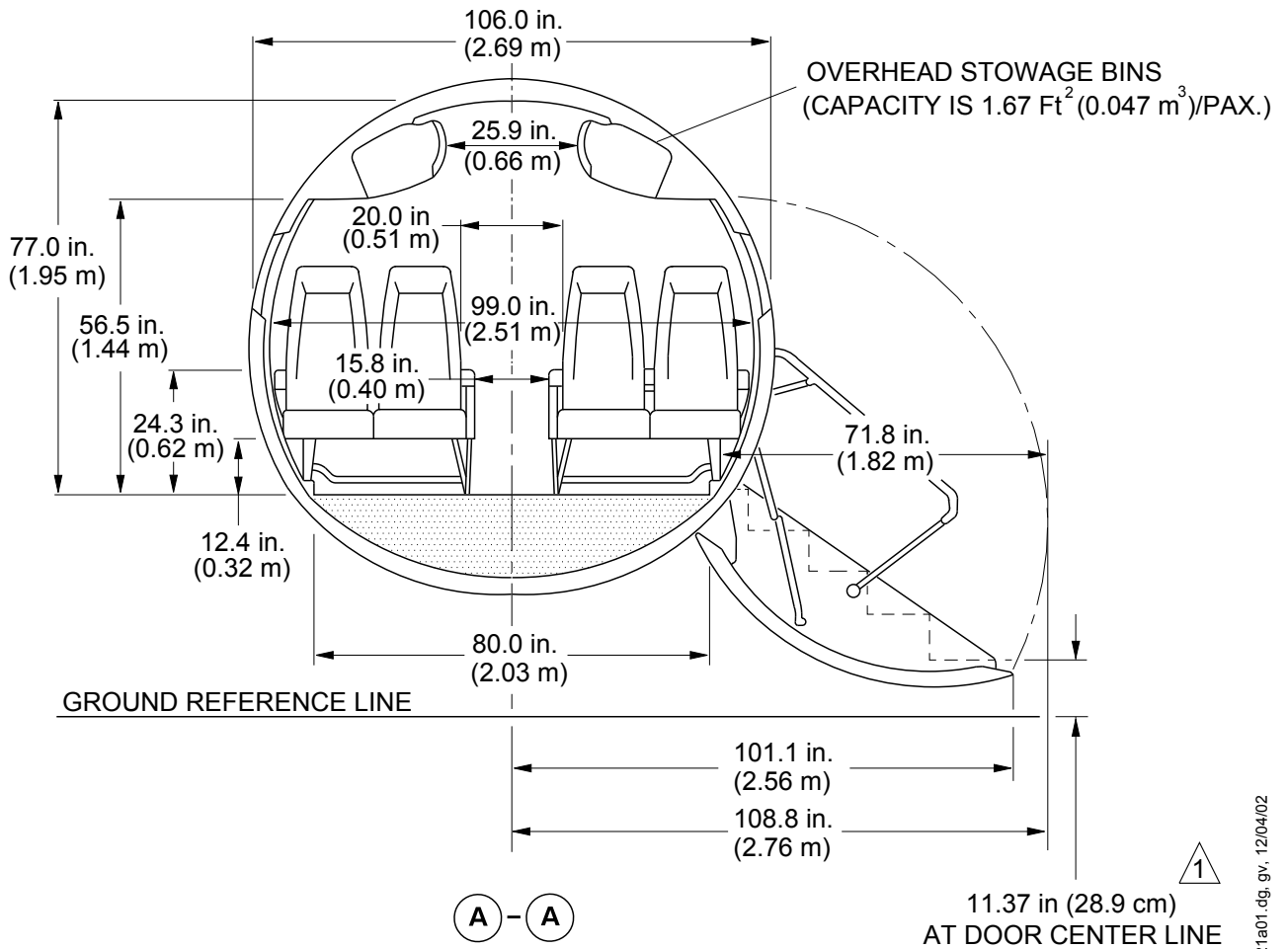
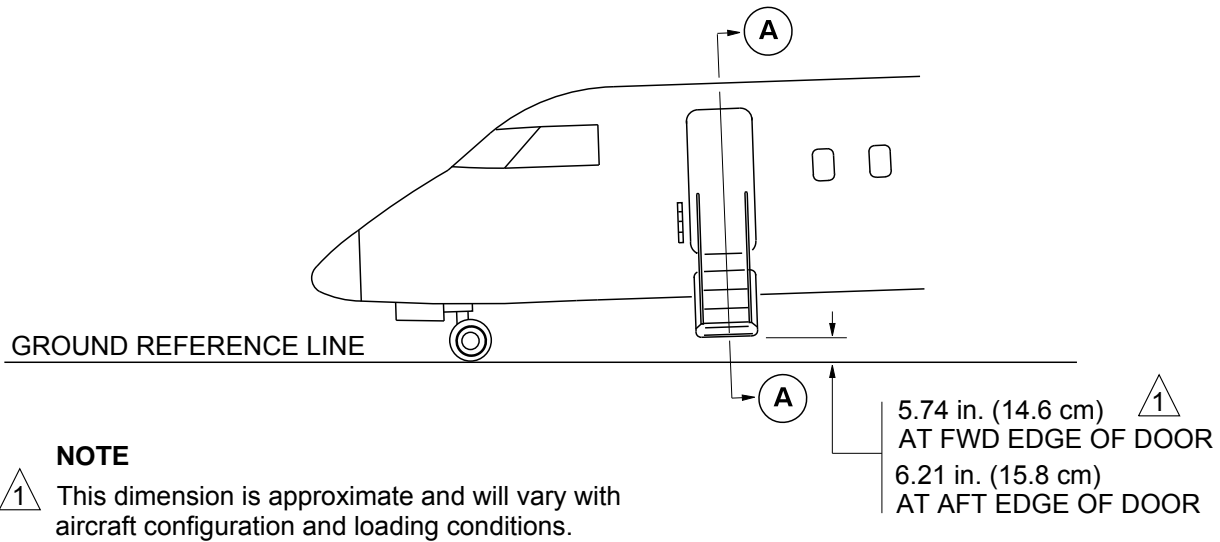
Model 400



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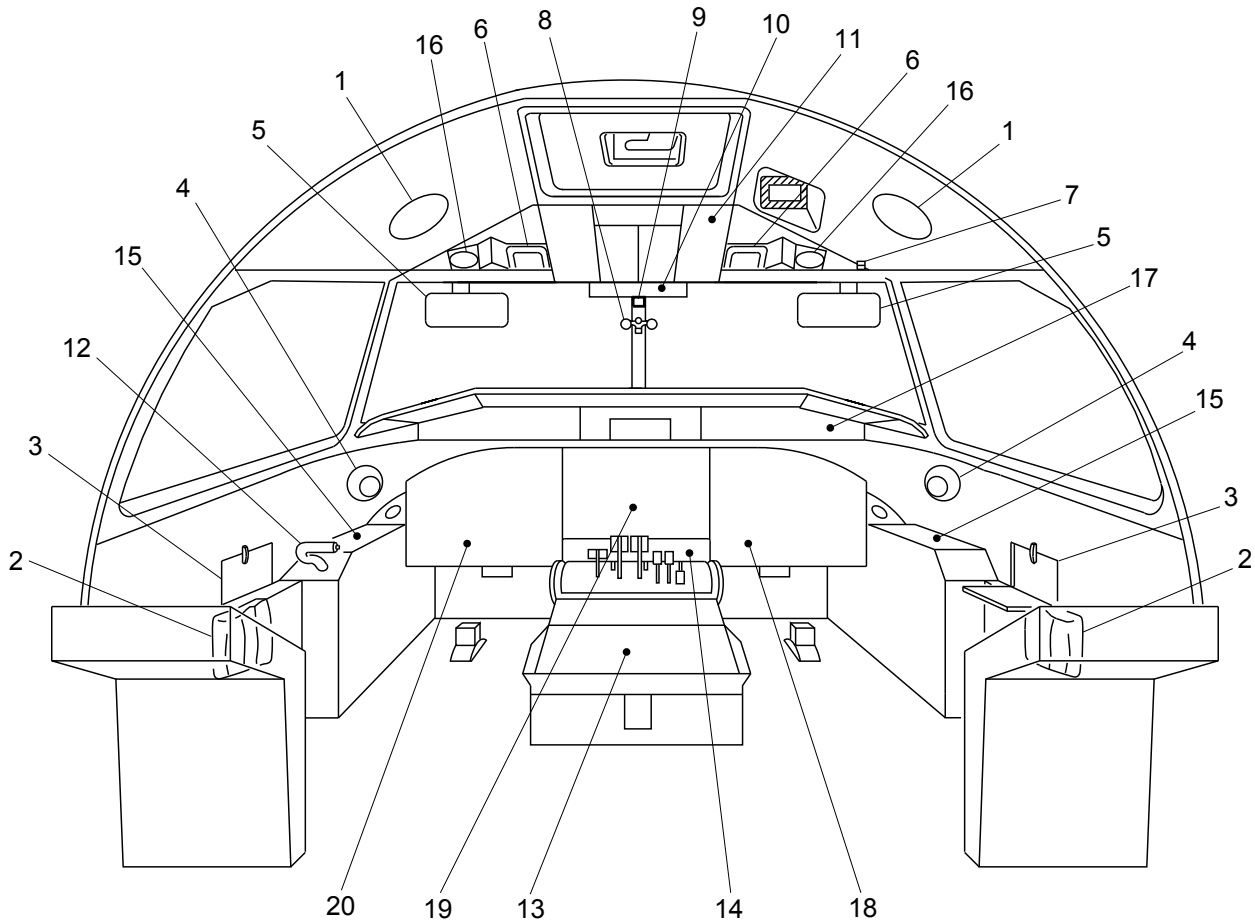
PASSENGER COMPARTMENT CROSS SECTION

Figure 00 - 4

Model 400

br721a01.dg, gv, 12/04/02

CRASH-FIRE-RESCUE MANUAL



LEGEND

- | | |
|-----------------------------------|--------------------------------------|
| 1. Overhead speakers. | 11. Overhead panel. |
| 2. Stowage pockets. | 12. Nosewheel steering hand control. |
| 3. Map tables. | 13. Center console (aft). |
| 4. Gaspers. | 14. Center console (fwd). |
| 5. Sun visors. | 15. Side console (pilot & copilot). |
| 6. Hand holds. | 16. Utility lights. |
| 7. Compass calibration card. | 17. Glareshield panel. |
| 8. Eye level indicator. | 18. Copilot's instrument panel. |
| 9. Standby compass. | 19. Engine instrument panel. |
| 10. Caution/Warning lights panel. | 20. Pilot's instrument panel. |

TYPICAL FLIGHT COMPARTMENT ARRANGEMENT (LOOKING FORWARD)

Figure 00 - 5

Model 400

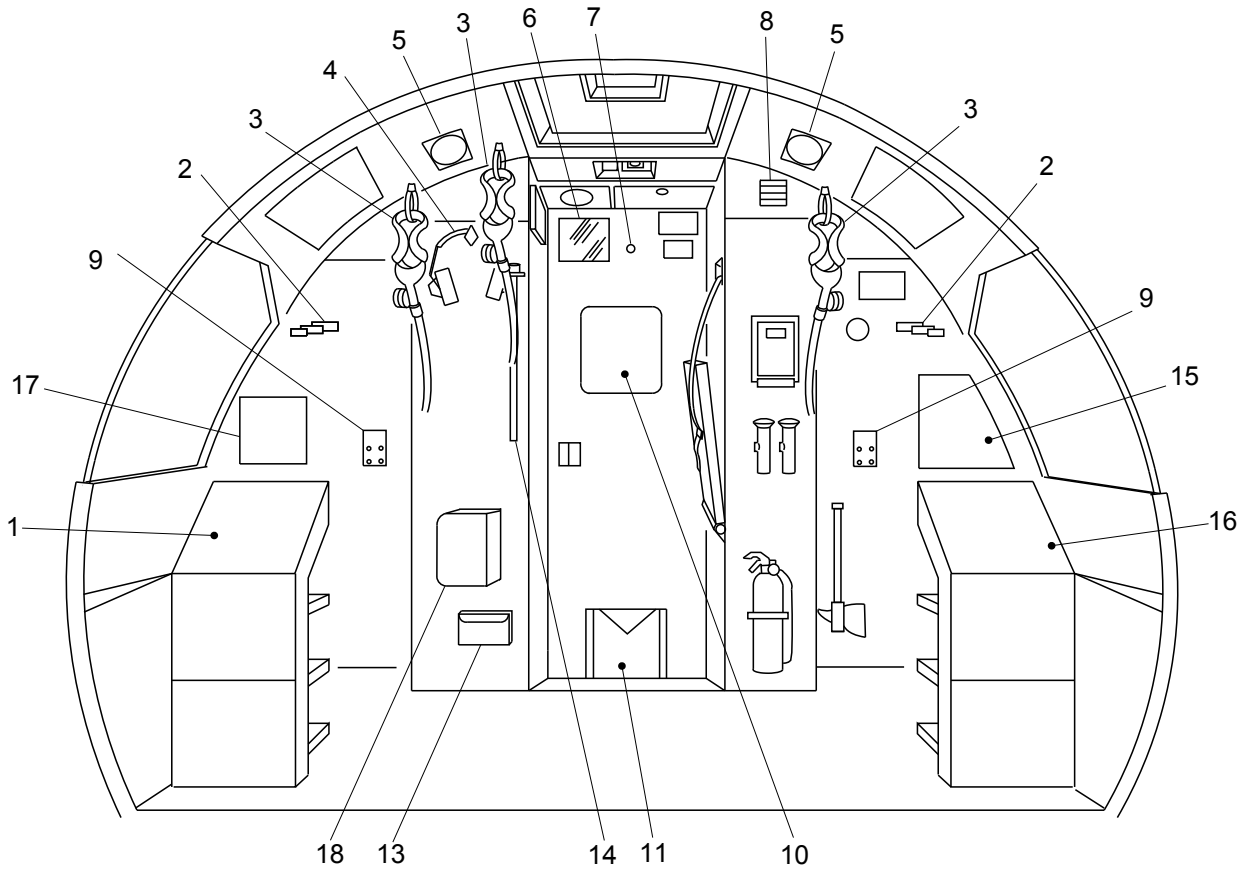
br251a01.dg, pt. 05/05/00



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LEGEND

- | | |
|---|---|
| 1. Right DC circuit breaker panel. | 10. Observer's seat backrest. |
| 2. Circuit breaker panel lights. | 11. Weight and balance papers. |
| 3. Oxygen masks (Pilot's and Copilot's). | 12. C of A and C of R holders. |
| 4. Observers headset stowage. | 13. Observer's smoke goggles. |
| 5. Dome lights. | 14. Landing gear emergency extension handpump handle. |
| 6. Mirror. | 15. Avionics circuit breaker panel. |
| 7. Viewer. | 16. Left DC circuit breaker panel. |
| 8. Avionics bay air vent. | 17. Variable frequency AC circuit breaker panel. |
| 9. Headset jacks. | 18. Crew PBE. |

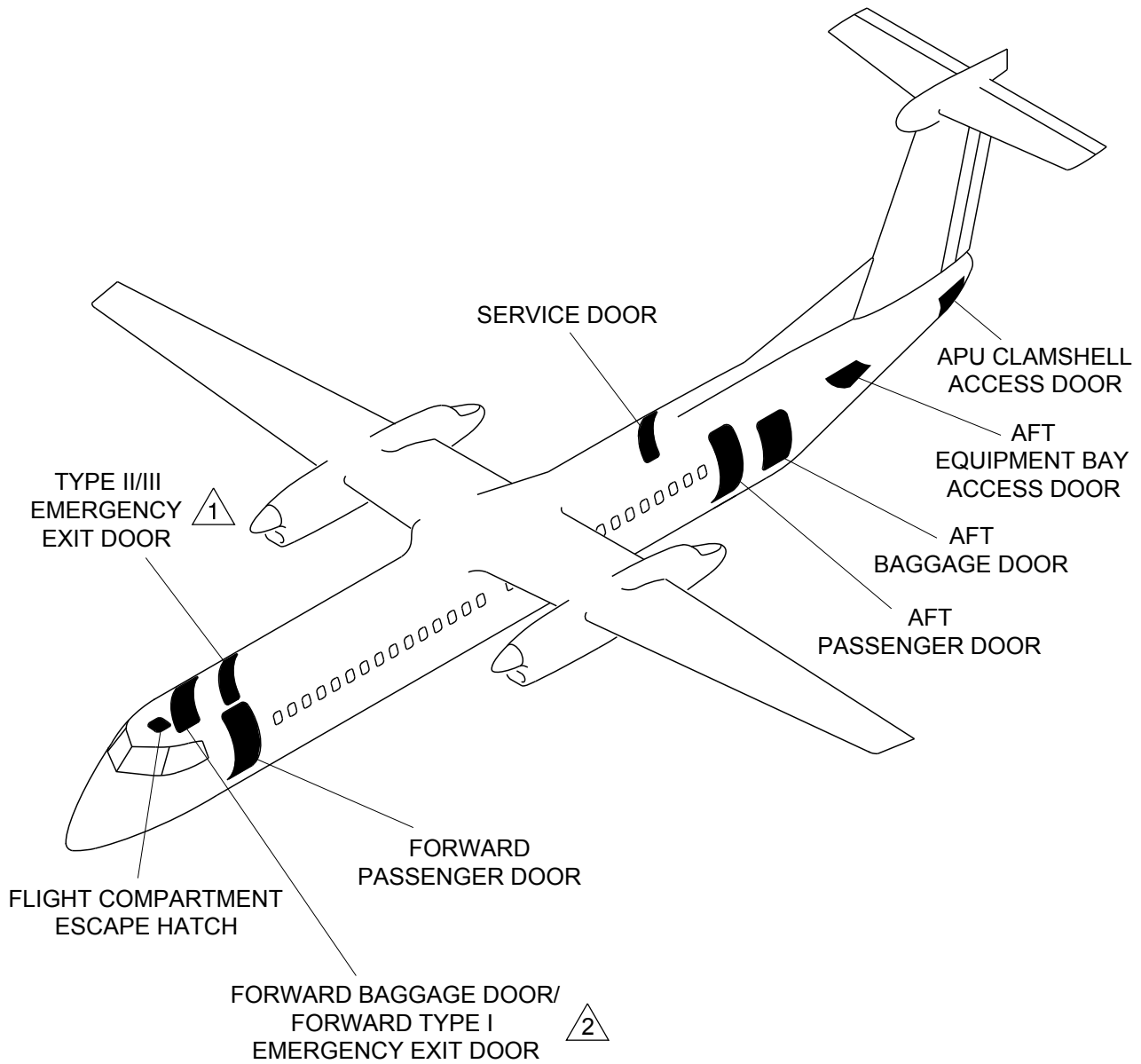
TYPICAL FLIGHT COMPARTMENT ARRANGEMENT (LOOKING AFT)

Figure 00 - 6

Model 400

br252a01.dg, pt. 12/1/98

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NOTES

- 1 Type II/III emergency exit door is de-activated for the extra capacity configuration.
- 2 Forward type I emergency exit door is installed only on aircraft with extra capacity configuration.

AIRCRAFT DOORS AND GROUND SERVICE PANELS (INCL EXTRA CAPACITY CONFIGURATION)

Figure 00 - 7

cg3566a01.dg, cs, aug20/2014

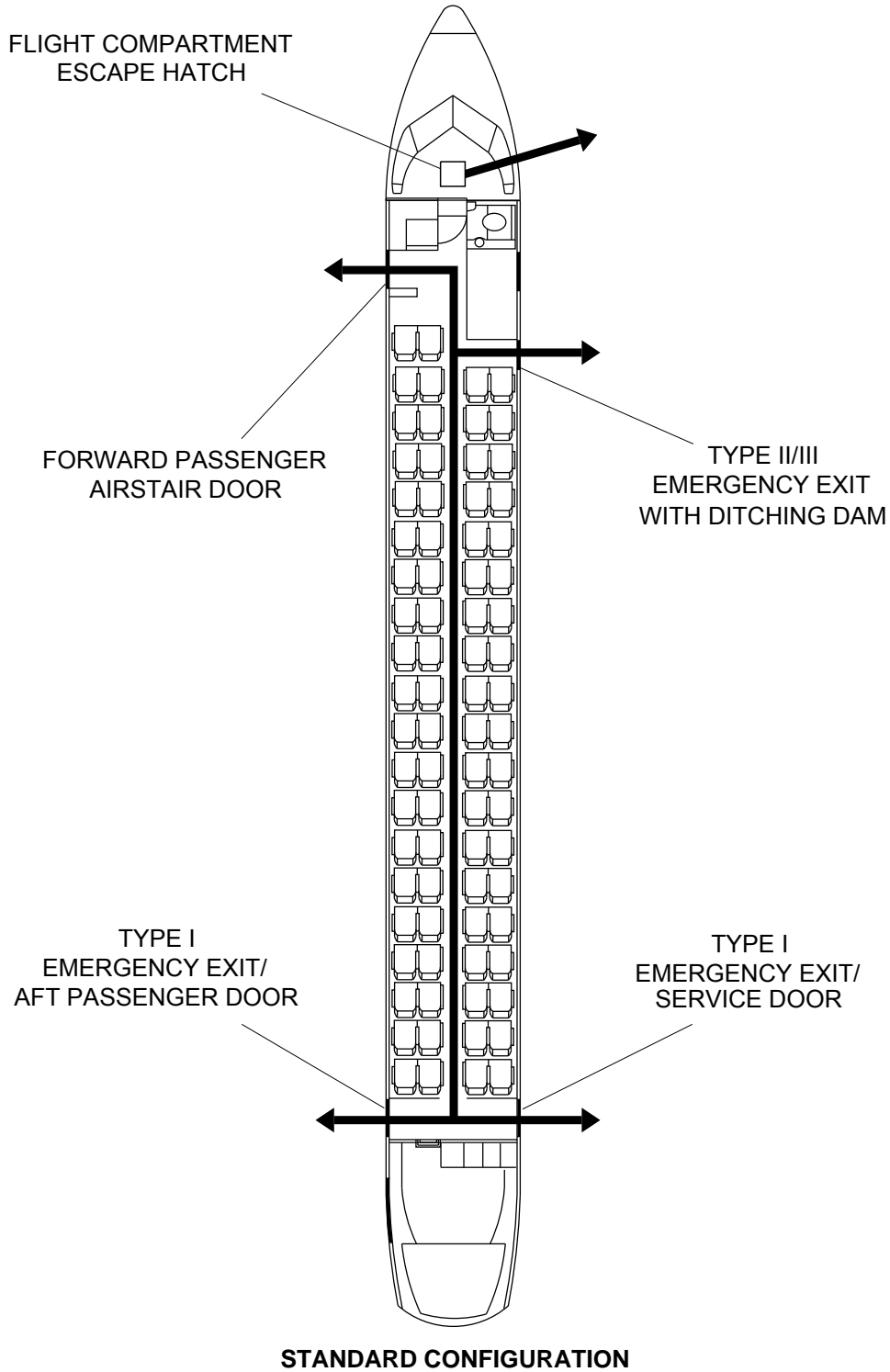
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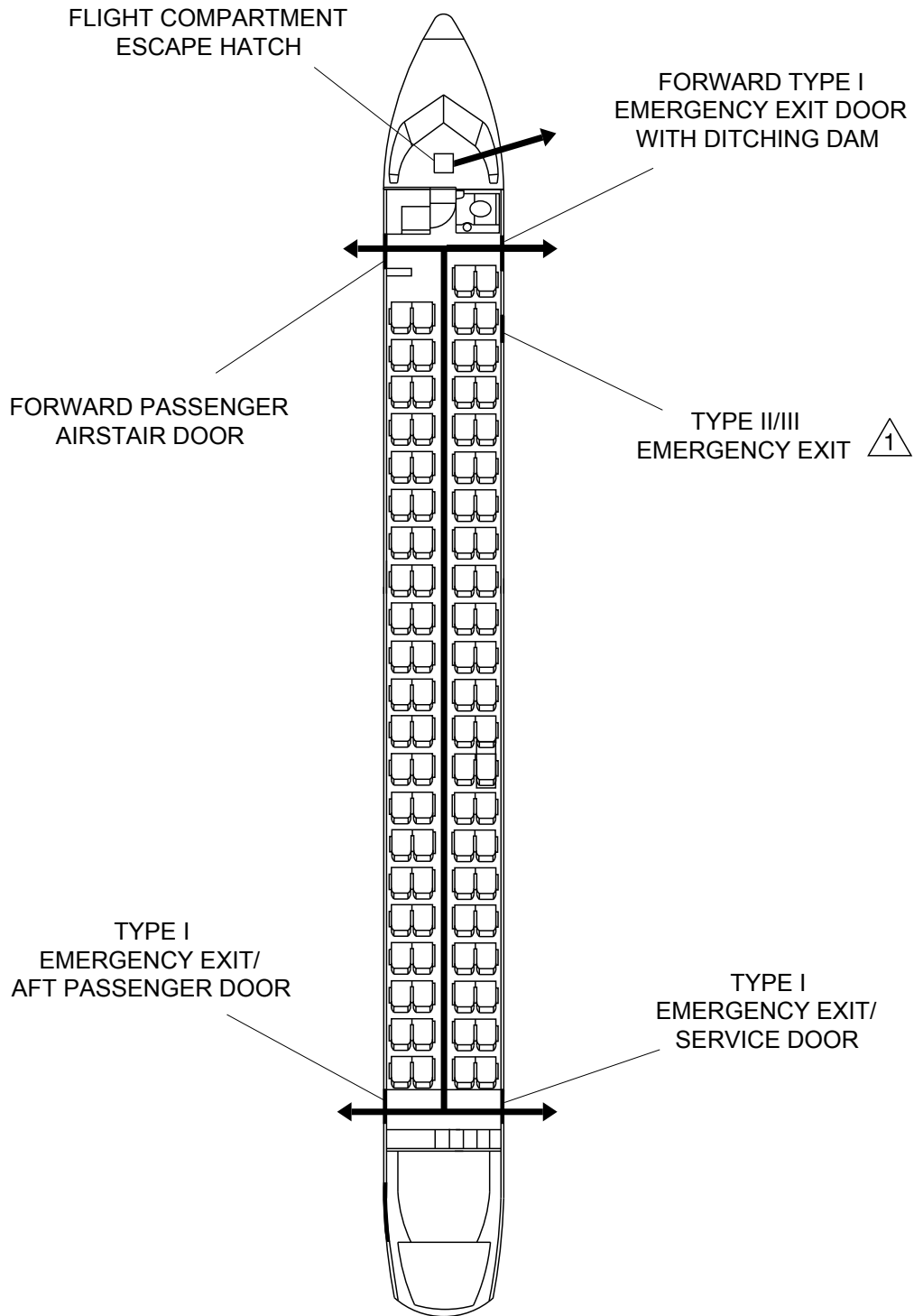
EVACUATION ROUTES (Sheet 1 of 2)

Figure 00 - 8

Model 400

brp92a01.dg, gv/kmw, sep16/2014

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NOTE

△ Type II/III emergency exit door is de-activated for the extra capacity configuration

EXTRA CAPACITY CONFIGURATION

EVACUATION ROUTES (Sheet 2 of 2)

Figure 00 - 8

brb92a02.dg, cs/kmw, sep 15/2014

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Passenger and Crew Escape Systems

A. General

1. There are five emergency exits on the aircraft.
 - a. A flight compartment emergency escape hatch for the flight crew. This is installed in the flight compartment roof. The hatch is operated by an internal handle.
 - b. The forward passenger door is an airstair type door. This is installed on the forward left side of the fuselage. The forward passenger door is operated by internal or external handles.
 - c. The forward Type I emergency exit door which is a translating type door. This is installed on the forward right side of the fuselage for the extra capacity configuration. It consists of an upper and a lower door. The lower door can be kept closed by a internal locking handle in the event of a ditching procedure. This emergency exit can be operated by internal or external handles.

NOTE: The forward Type I emergency door is installed in lieu of forward baggage door for the extra capacity configuration.

- d. A type II/III emergency exit door is installed on the forward right side of the fuselage. It consists of an upper and a lower door. The lower door can be kept closed in the event of a ditching procedure. This emergency exit can be operated by internal or external handles.

NOTE: The type II/III emergency exit is de-activated for the extra capacity configuration.

- e. The aft passenger door which is a translating type door is installed on the aft left side of the fuselage. This can be operated by internal or external handles.
 - f. The aft service door which is also a translating type door is installed on the aft right side of the fuselage. This can be operated by internal or external handles.

B. Forward Passenger Door Operation

1. Stay on the left side of the door.
2. Push in the flap at the top of the door operating handle. Pull the door operating handle down quickly and fully.

NOTE: This will unlock the door and move it up a small distance and out.

3. Hold the door and lower it to the open position.

NOTE: You can use the door lowering assist to help you to do this.

4. Push down on the struts of the handrail to lock the door in the open position.

C. Aft Passenger Door Operation

NOTE: The door will come out 16 inch (40 cm) before it swings to the left. Make sure the ladder or platform is placed more than this distance.

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1. Push in the flaps at the top of the handle with your fingers.
2. Pull the door operating handle out.

■ NOTE: This will unlock the handle and open the vent door

3. Turn the door operating handle 90° counterclockwise.

■ NOTE: This will unlock the door and move it up and out a small distance.

4. Use the handle to pull and move the door fully to the left to engage the gust lock.

■ NOTE: This will lock the door in the open position.

■ NOTE: Optional folding stairs may be installed. The stairs slide forward from their enclosure (located in the aft baggage bulkhead, just inboard of the aft passenger door threshold) and are unfolded and extended by hand. The folding stairs are intended for use in normal ramp operations only.

■ D. Forward Type I Emergency Exit Door Operation

■ NOTE: The forward Type I emergency exit door is installed in lieu of forward baggage door on aircraft with the extra capacity configuration.

■ NOTE: The Forward Type I Emergency Exit Door consists of an upper and a lower door. The lower door is kept closed by a internal locking handle in the event of a ditching procedure.

■ NOTE: The door will come out 16 inch (40 cm) before it swings to the right. Make sure the ladder or platform is placed more than this distance.

1. Push in the flaps at the top of the handle with your fingers.
2. Pull the door operating handle out.

■ NOTE: This will unlock the handle and open the vent door.

3. Turn the door operating handle 90° clockwise.

■ NOTE: This will unlock the door and move it up and out a small distance.

4. Use the handle to pull and move the door fully to the right to engage the gust lock.

■ NOTE: This will lock the door in the open position.

■ E. Type II/III Emergency Exit Door Operation

■ NOTE: The Type II/III emergency exit door is de-activated on aircraft with the extra capacity configuration.

■ NOTE: The weight of the door is 29 lb (13.15 kg)

1. Operate the pushbutton on the handle to release it.
2. Turn the handle counterclockwise to the open marking.

■ NOTE: This will unlock the door and move it in.



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3. Push the door in.

NOTE: With the ditching dam handle in the LAND position, the lower door will fall open.
With the ditching dam handle in the SEA position, the lower door will stay closed.

F. Service Door Operation

NOTE: The door will come out 16 inch (40 cm) before it swings to the right. Make sure the ladder or platform is placed more than this distance.

1. Push in the flaps at the top of the handle with your fingers.
2. Pull the door operating handle out.

NOTE: This will unlock the handle and open the vent door.

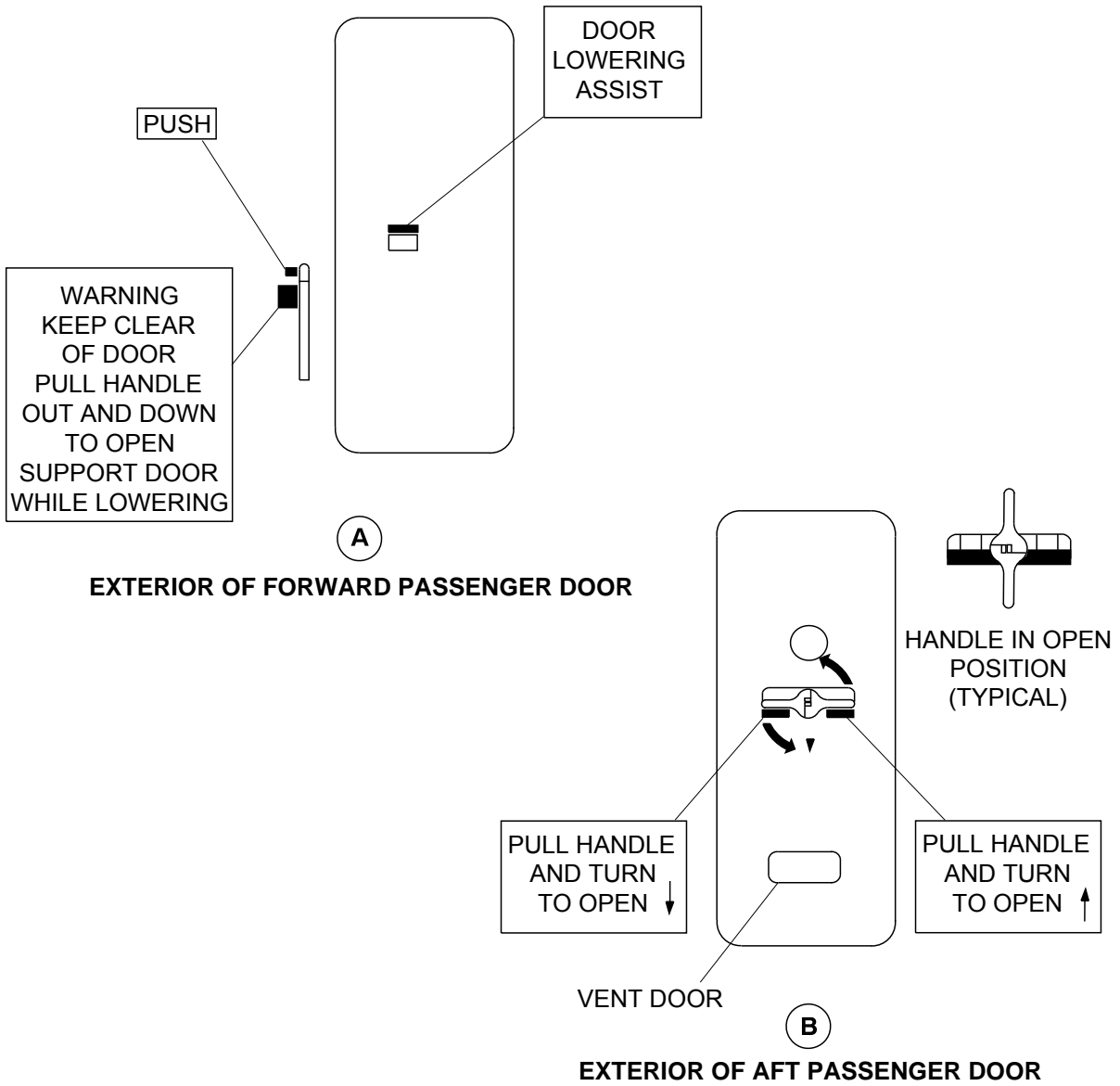
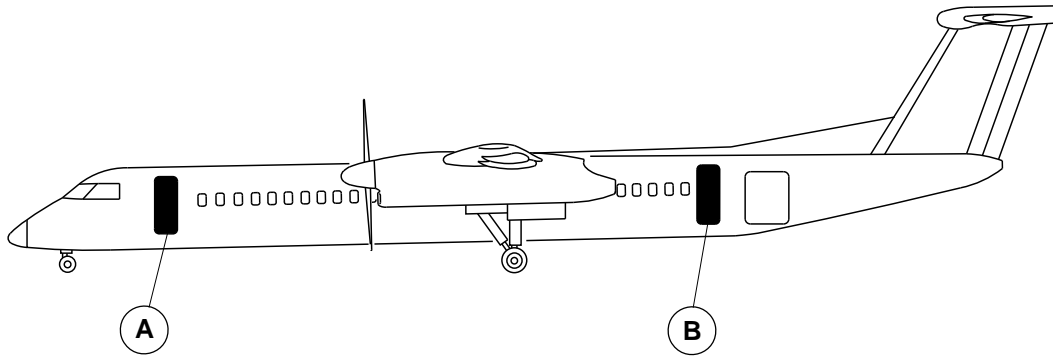
3. Turn the door operating handle 90° clockwise.

NOTE: This will unlock the door and move it up and out a small distance.

4. Use the handle to pull and move the door fully to the right to engage the gust lock.

NOTE: This will lock the door in the open position.

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brb90ae01.dg, gv/kmw, sep11/2014

PASSENGER AND CREW ESCAPE SYSTEMS (Sheet 1 of 2)

Figure 00 - 9

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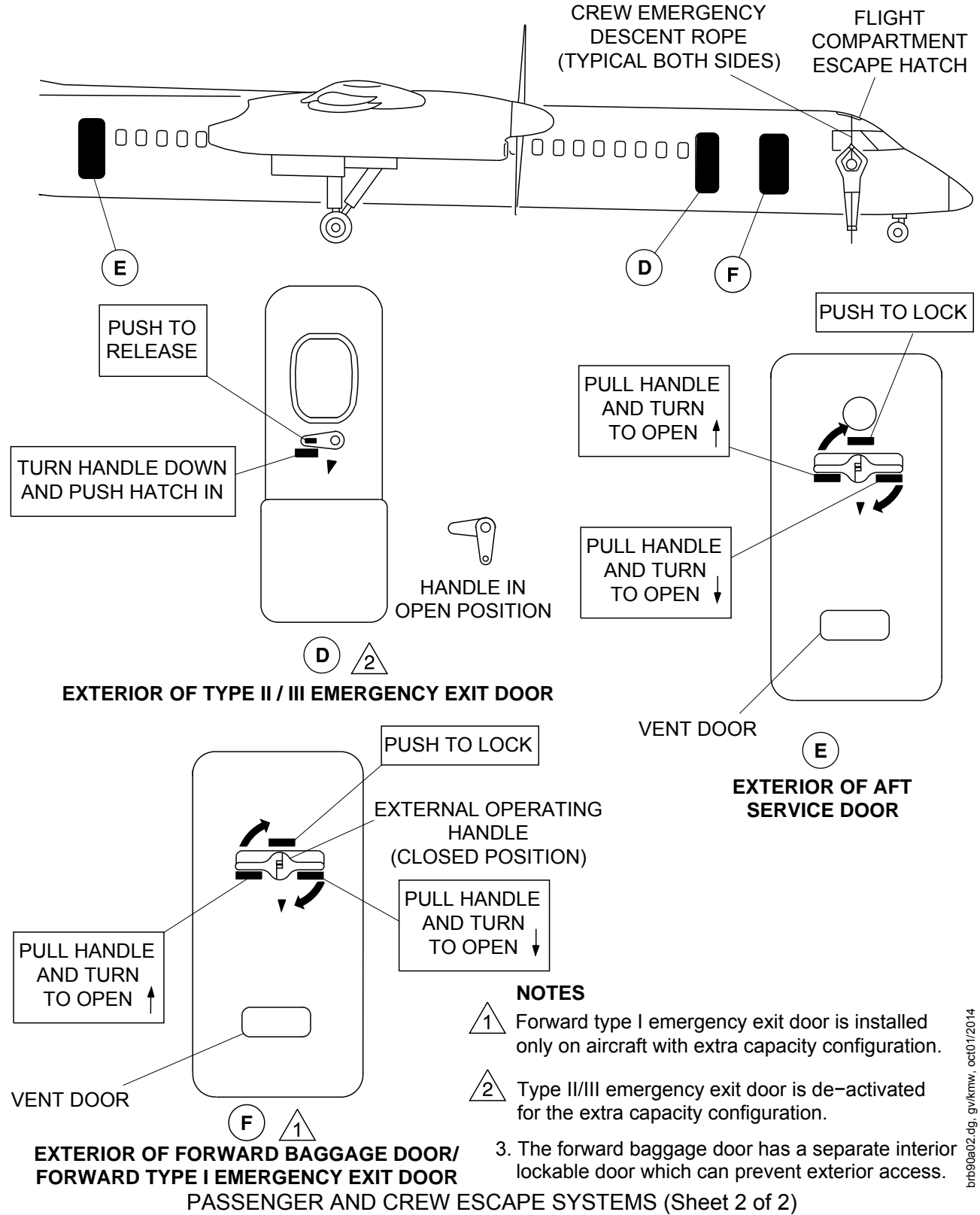


Figure 00 - 9

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Forward Passenger Door–Ditching Dam Operation

A. Deploy the ditching dam as follows:

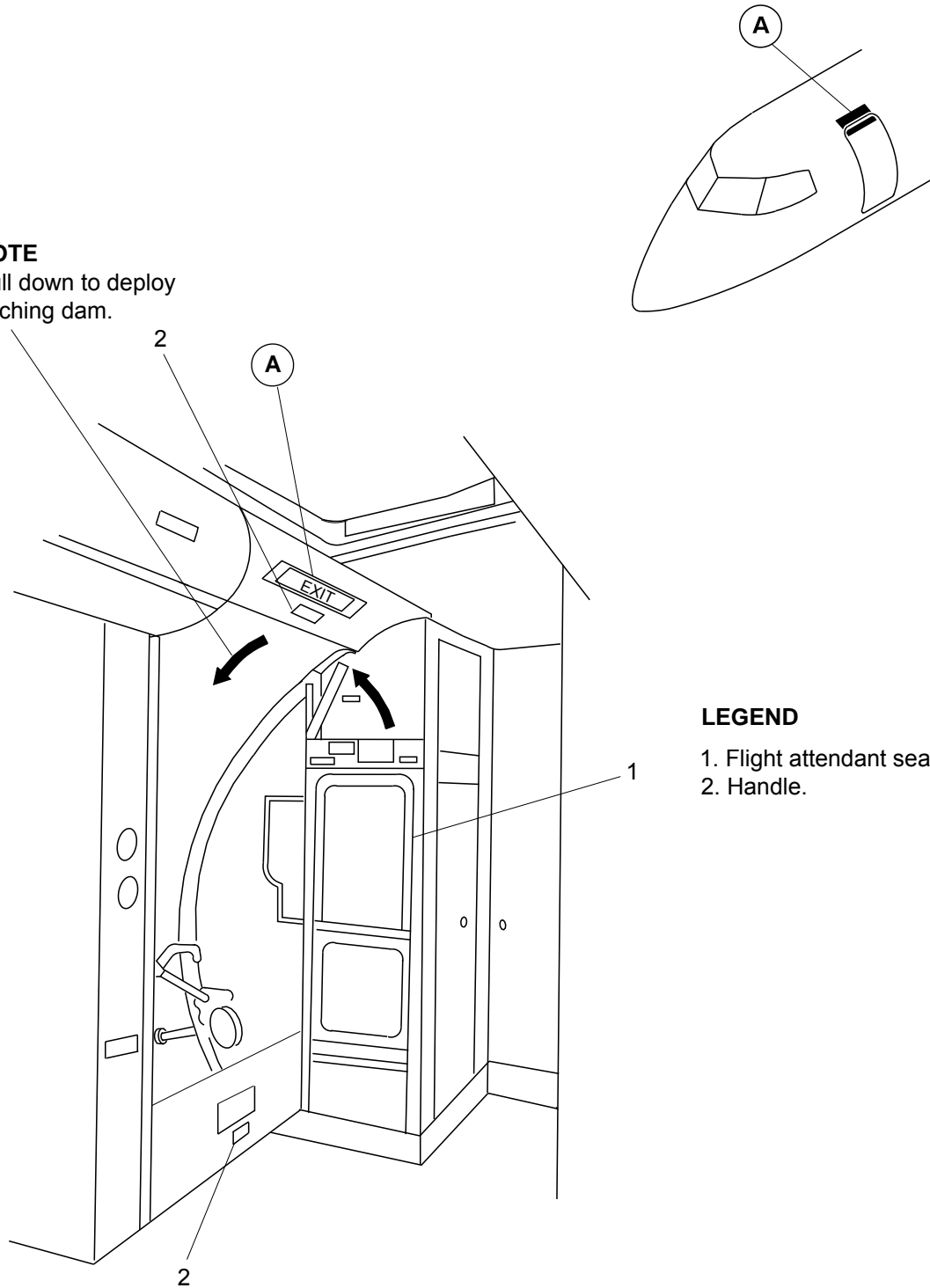
1. Pull the ditching dam down by its handle until it is at chest level.
2. Put your hand on the top surface of the ditching dam and push it down to the floor.

NOTE: With the ditching dam correctly deployed, it will be inclined slightly outboard.

3. Open the forward passenger door for evacuation.

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NOTE
Pull down to deploy
ditching dam.



LEGEND

- 1. Flight attendant seat.
- 2. Handle.

FORWARD PASSENGER DOOR – DITCHING DAM OPERATION

Figure 00 – 10

Model 400

br110a01.dg, sw, 23/07/99

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I Forward Baggage Door Operation/Forward Type I Emergency Exit Door

A. Forward Baggage Door Operation

I NOTE: The forward baggage compartment is removed and forward Type I emergency exit door is installed in lieu of forward baggage door for the extra capacity configuration.

NOTE: Do not attempt to enter the passenger cabin from the forward baggage compartment (i.e. through the interior compartment door). Access may be restricted by optional galley stowage equipment and/or baggage and there is no handle on the baggage-compartment side of the door.

I NOTE: The door will come out 16 inch (40 cm) before it swings to the right. Make sure the ladder or platform is placed more than this distance.

1. Push in the flaps at the top of the handle with your fingers.
2. Pull the door operating handle out.

I NOTE: This will unlock the handle and open the vent door.

3. Turn the door operating handle 90° clockwise.

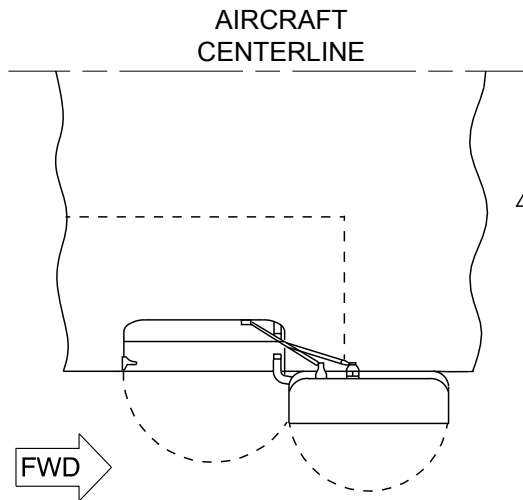
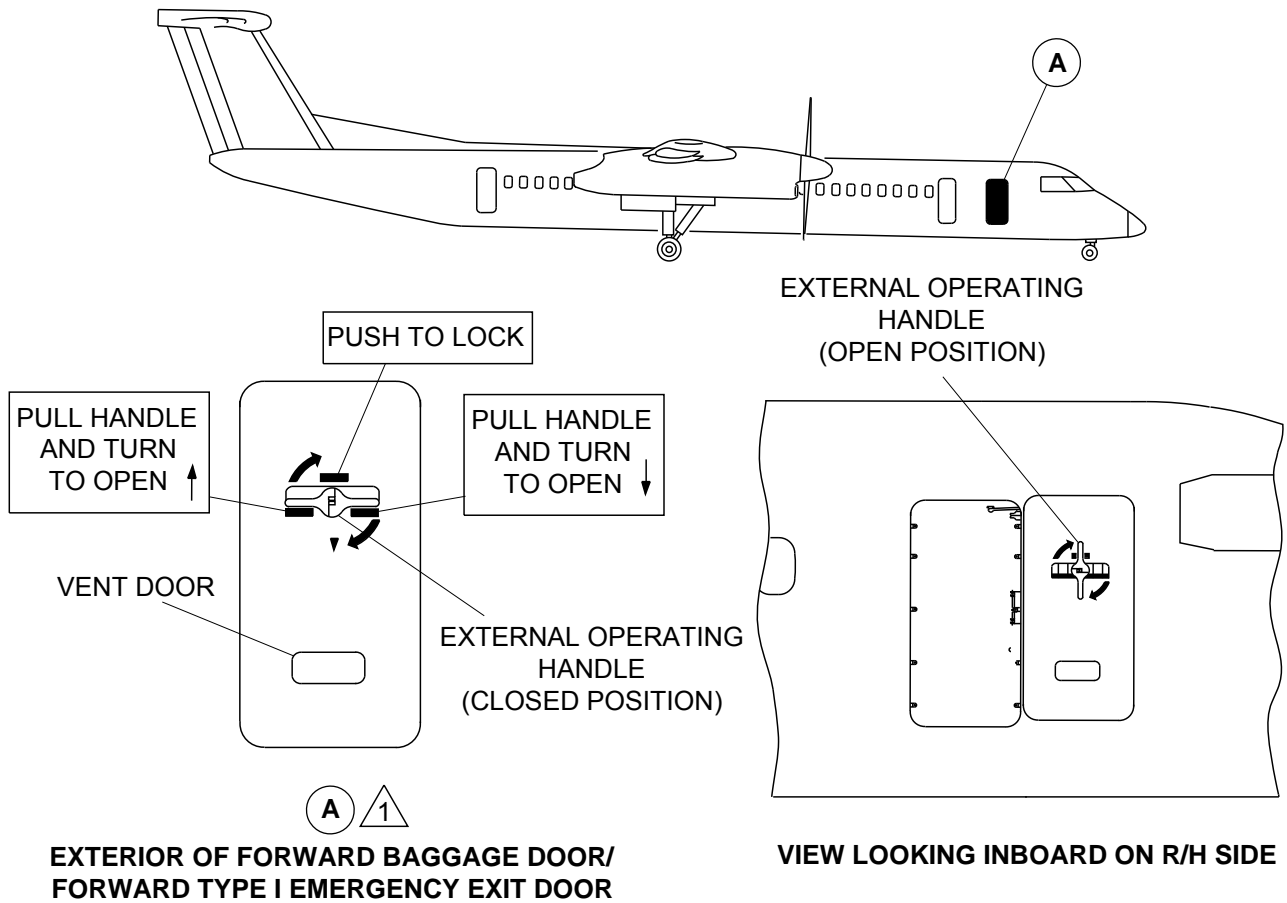
I NOTE: This will unlock the door and move it up and out a small distance.

4. Use the handle to pull and move the door fully to the right to engage the gust lock.

I NOTE: This will lock the door in the open position.



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NOTES

- 1 Forward type I emergency exit door is installed only on aircraft with extra capacity configuration.
- 2. The forward baggage door has a separate interior lockable door which can prevent exterior access.

FORWARD BAGGAGE DOOR/ FORWARD TYPE I EMERGENCY EXIT DOOR OPERATION

Figure 00 - 11



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■ **Forward RH Type I Emergency Exit Door–Ditching Dam Operation**

■ A. Deploy the ditching dam as follows:

■ 1. Turn the ditching dam handle clockwise from the horizontal position.

■ NOTE: This will extend the lock pins to engage the ditching dam to the surround structure and disengage from the emergency exit door.

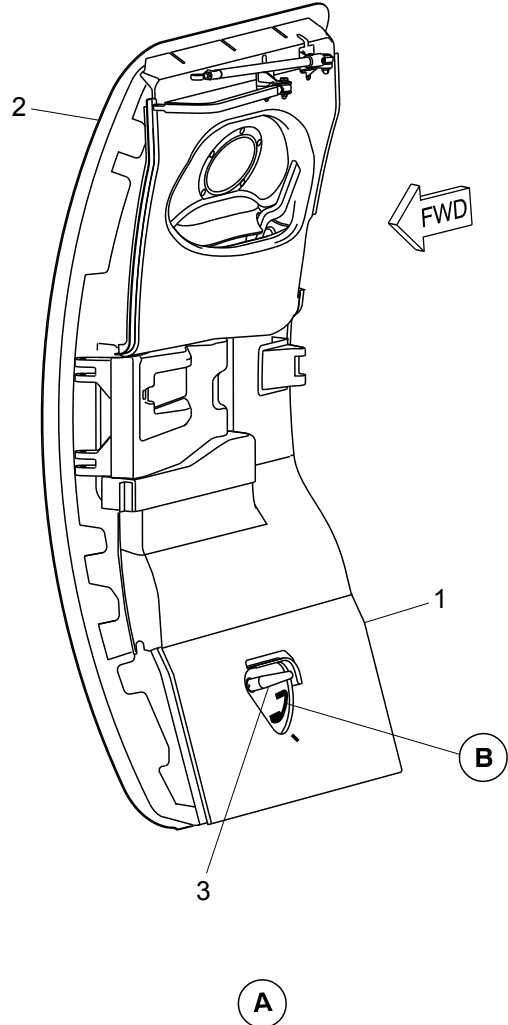
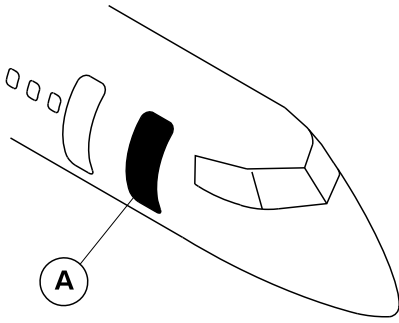
■ 2. Open the forward Type I emergency exit door for the evacuation.



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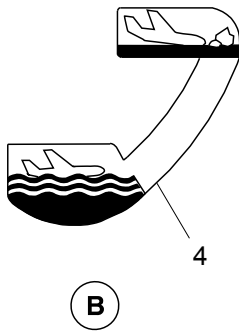


CRASH-FIRE-RESCUE MANUAL



LEGEND

- 1. Ditching dam.
- 2. Type I emergency exit door.
- 3. Ditching dam handle.
- 4. Label, ditching dam operation.



VIEW LOOKING OUTBOARD

FORWARD TYPE I EMERGENCY EXIT DOOR – DITCHING DAM OPERATION

Figure 00 – 12

Model 400

brbs45a01.dg, kmw, sep16/2014



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CRASH-FIRE-RESCUE MANUAL

Aft Baggage Door Operation

A. Aft Baggage Door Operation

1. Push the pushbutton on the door operating handle to release the handle from the recess.
2. Turn the handle 90° counterclockwise.

NOTE: This will unlock the door and move it in.

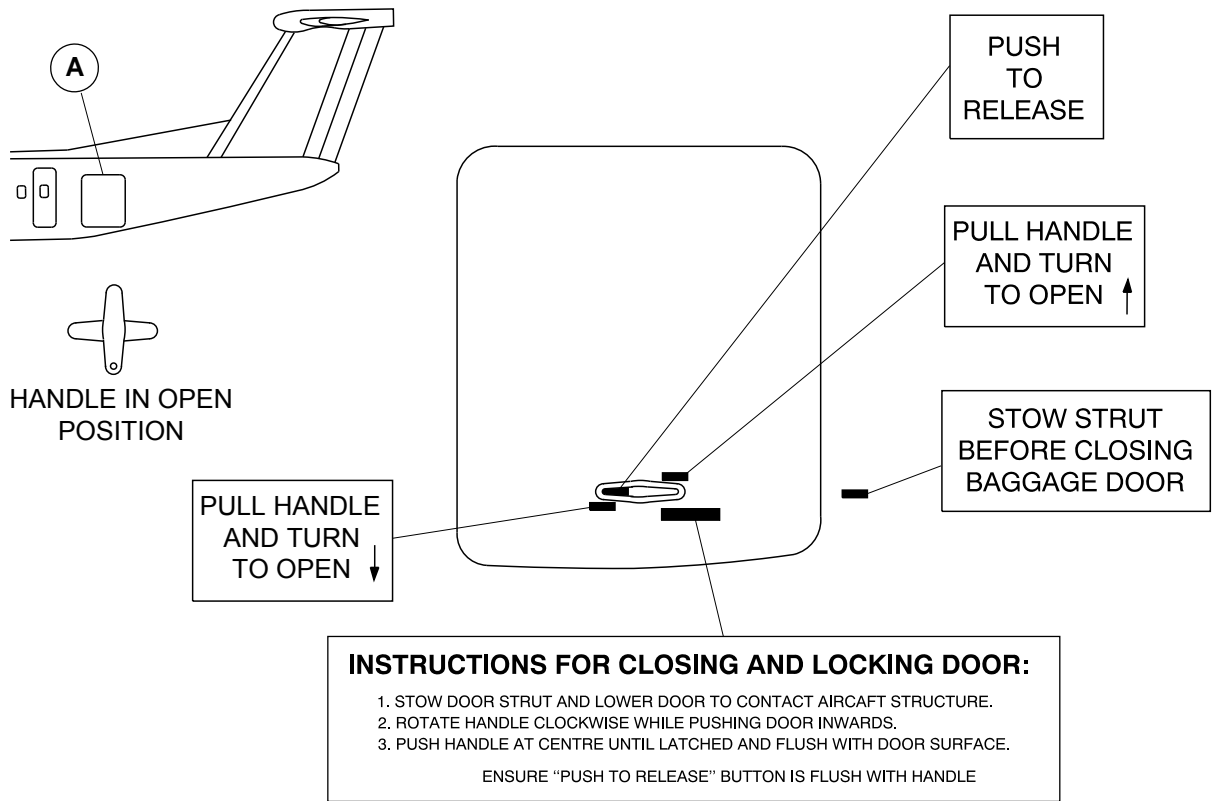
3. Lift the door up a sufficient distance that you can get access to the telescopic strut. Remove the telescopic strut from the stowed position.

NOTE: Make sure you do this before you open the door fully or it will be too high to close easily.

4. Continue to lift the door until it is fully open.
5. Attach the telescopic strut to the receptacle on the lower left side of the door opening. This will give more support to the door.

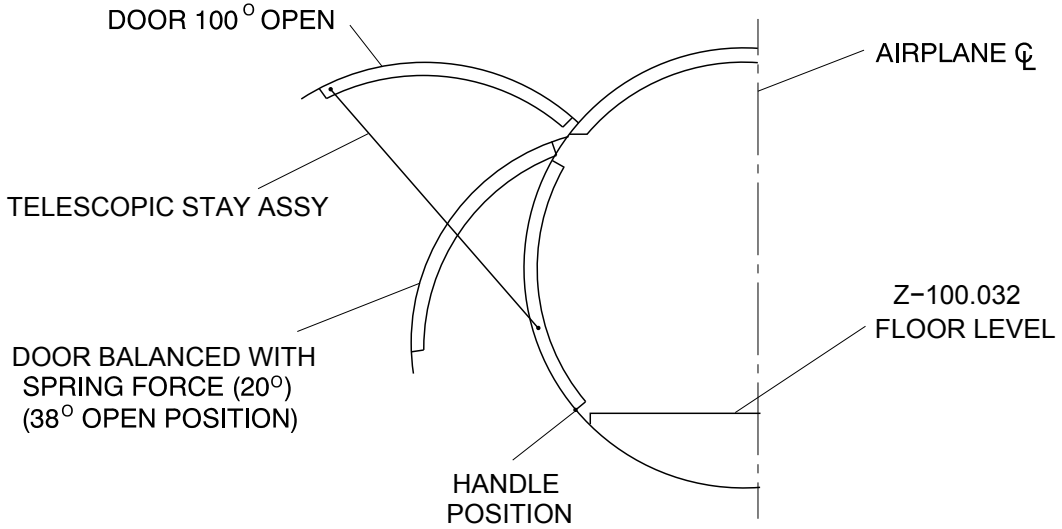


CRASH-FIRE-RESCUE MANUAL



A

**EXTERIOR OF AFT BAGGAGE COMPARTMENT DOOR
(CLOSED POSITION)**



SIDE VIEW OF DOOR IN OPEN POSITION
AFT BAGGAGE COMPARTMENT DOOR – LOCATION AND OPERATION

Figure 00 – 13

Model 400

br642a01.dg, sw/gw, jan25/2011



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CRASH-FIRE-RESCUE MANUAL

Flight Compartment Escape Hatch

NOTE: In an emergency, you can try to get access by cutting through the outer skin to move the operating handle from the outside. Then push the hatch down.

WARNING: HOLD THE ESCAPE HATCH DURING THE PROCEDURE. IF YOU DO NOT DO THIS, THE ESCAPE HATCH CAN FALL AND CAUSE INJURIES TO PERSONS AND DAMAGE TO THE EQUIPMENT.

- A. Open the flight compartment escape hatch as follows:
1. Turn the handle 72 degrees counterclockwise. The escape hatch opens approximately 1 in. at the front.
 2. Pull the door down with 40 lb of force to release the rollers from the lock mechanism.

CRASH-FIRE-RESCUE MANUAL

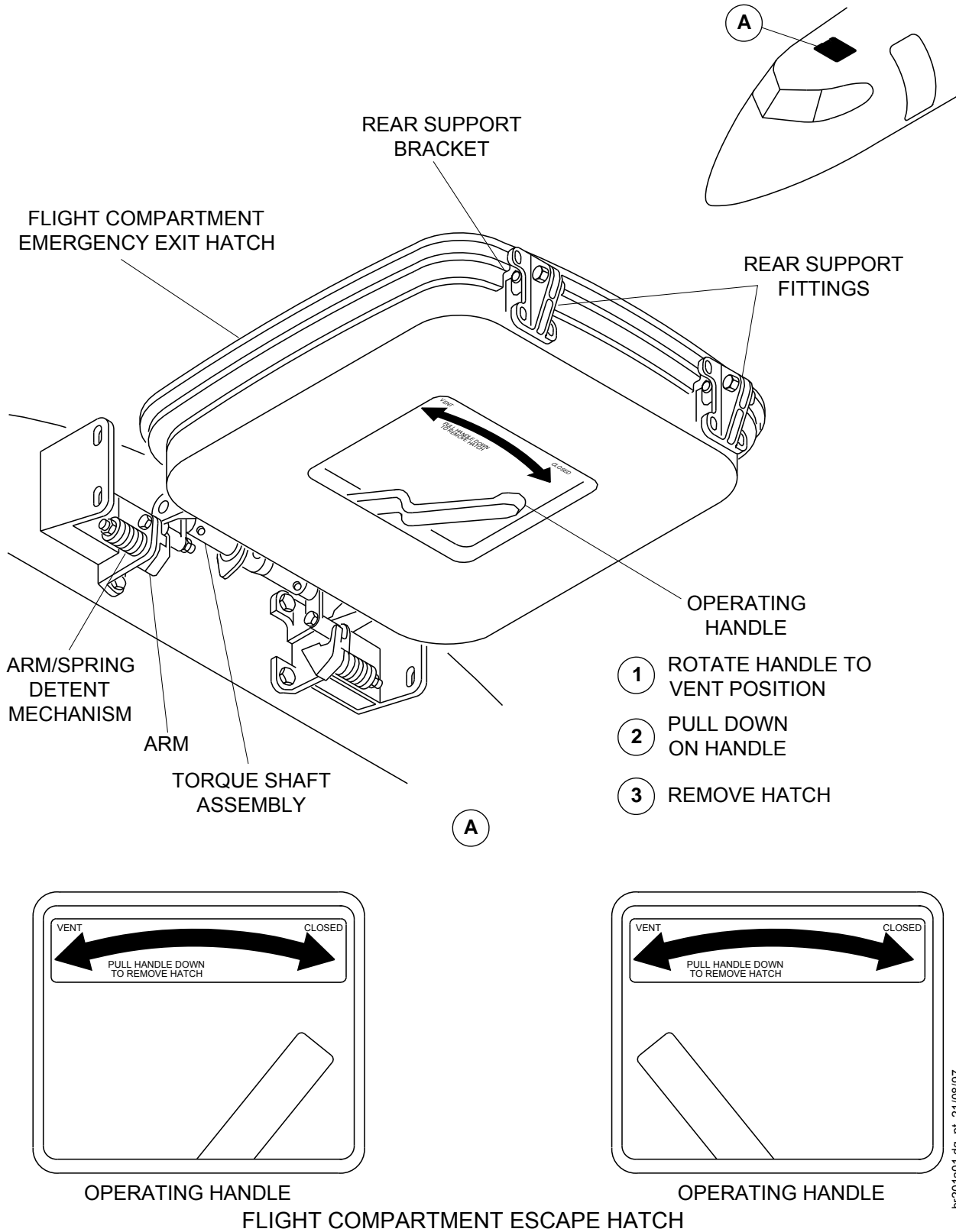


Figure 00 - 14

Model 400



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CRASH-FIRE-RESCUE MANUAL

Fortified Flight Compartment Door Operation

- A. Opening Flight Compartment Door from Flight Compartment Side
 - 1. Pull slide latch to the right and push flight compartment door open.
 - 2. If engaged, rotate deadbolt handle 90 degrees clockwise to the unlatched position (two red dots on dead bolt plate behind knob will become visible).
- B. Opening Flight Compartment Door from Cabin Side
 - 1. Emergency Access

In an emergency, use a pry bar. Work the pry bar into the door jam at the slide latch and deadbolt location until the door frame distorts sufficiently to allow the flight compartment door to open.

- 2. Optional Entry

NOTE: U.S. registered aircraft do not have Remote Access System.

Press the Remote Access System Flight Attendant Access Switchlight on the wardrobe maintenance panel. A white light will illuminate on the switch. The flight compartment door will automatically open after a timed delay of 40 seconds if there is no response by the flight crew. An amber light will illuminate on the Flight Attendant Access Switchlight indicating that the flight compartment door is unlatched.

OR

The Remote Access System can be disabled by removing electrical power from the aircraft (i.e. disconnect batteries and ground power). Door latch solenoid will de-energize and door will open.

NOTE: The Fortified Flight Compartment Door will not open if the deadbolt lock is engaged.

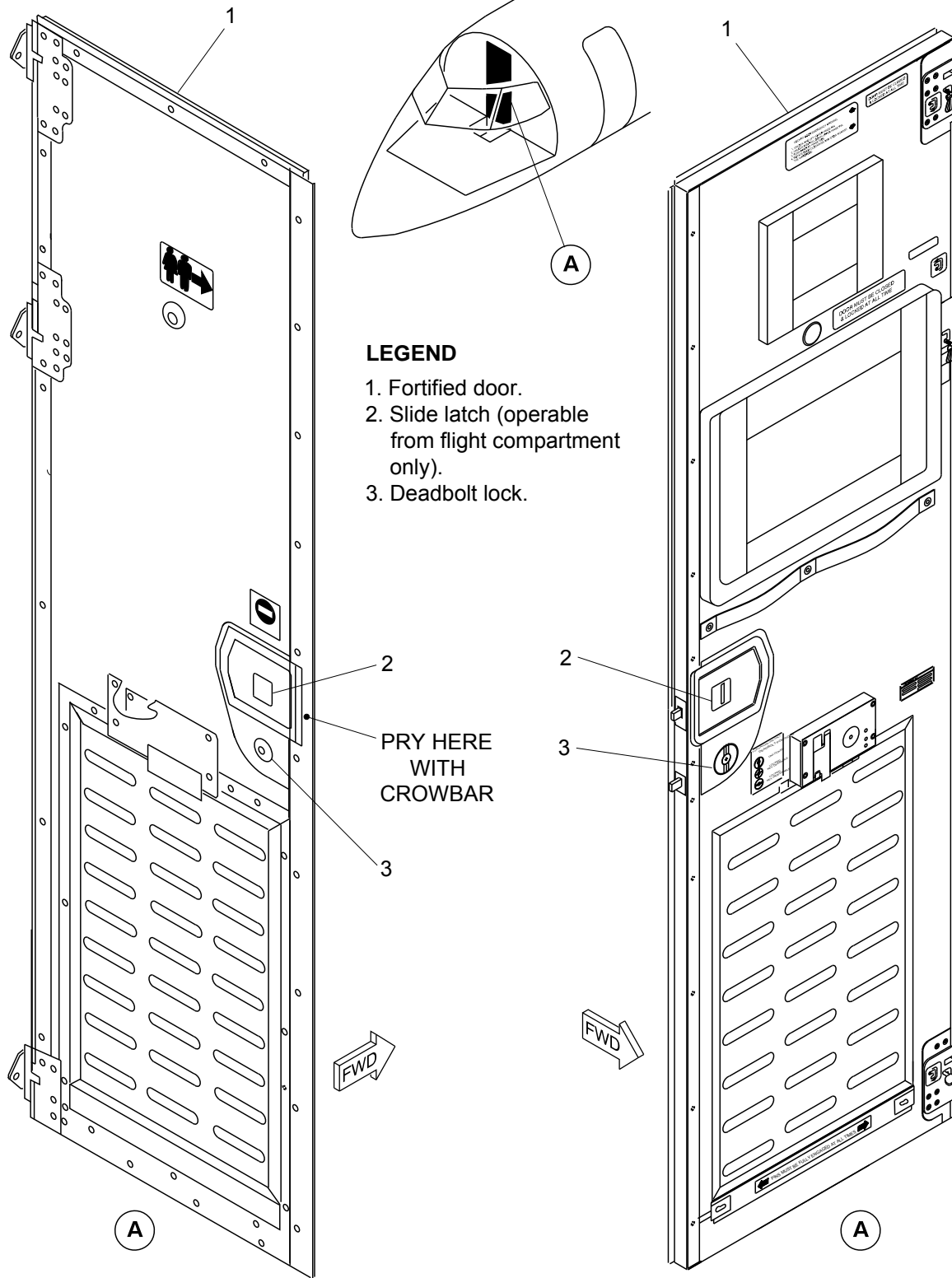
NOTE: The key access feature for the deadbolt lock will be disabled if both arms of the rotary knob on the flight compartment side are set to the latched position .



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CRASH-FIRE-RESCUE MANUAL



LEGEND

- 1. Fortified door.
- 2. Slide latch (operable from flight compartment only).
- 3. Deadbolt lock.

FORTIFIED FLIGHT COMPARTMENT DOOR DETAIL


Figure 00 - 15

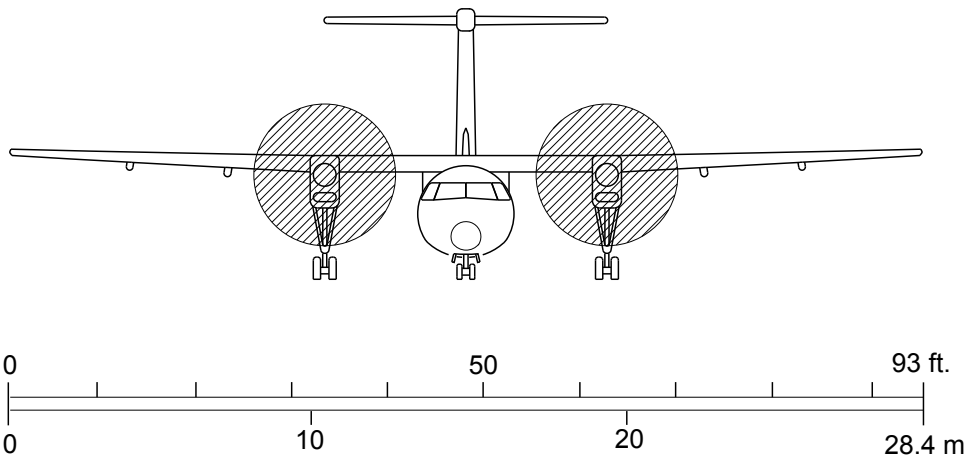
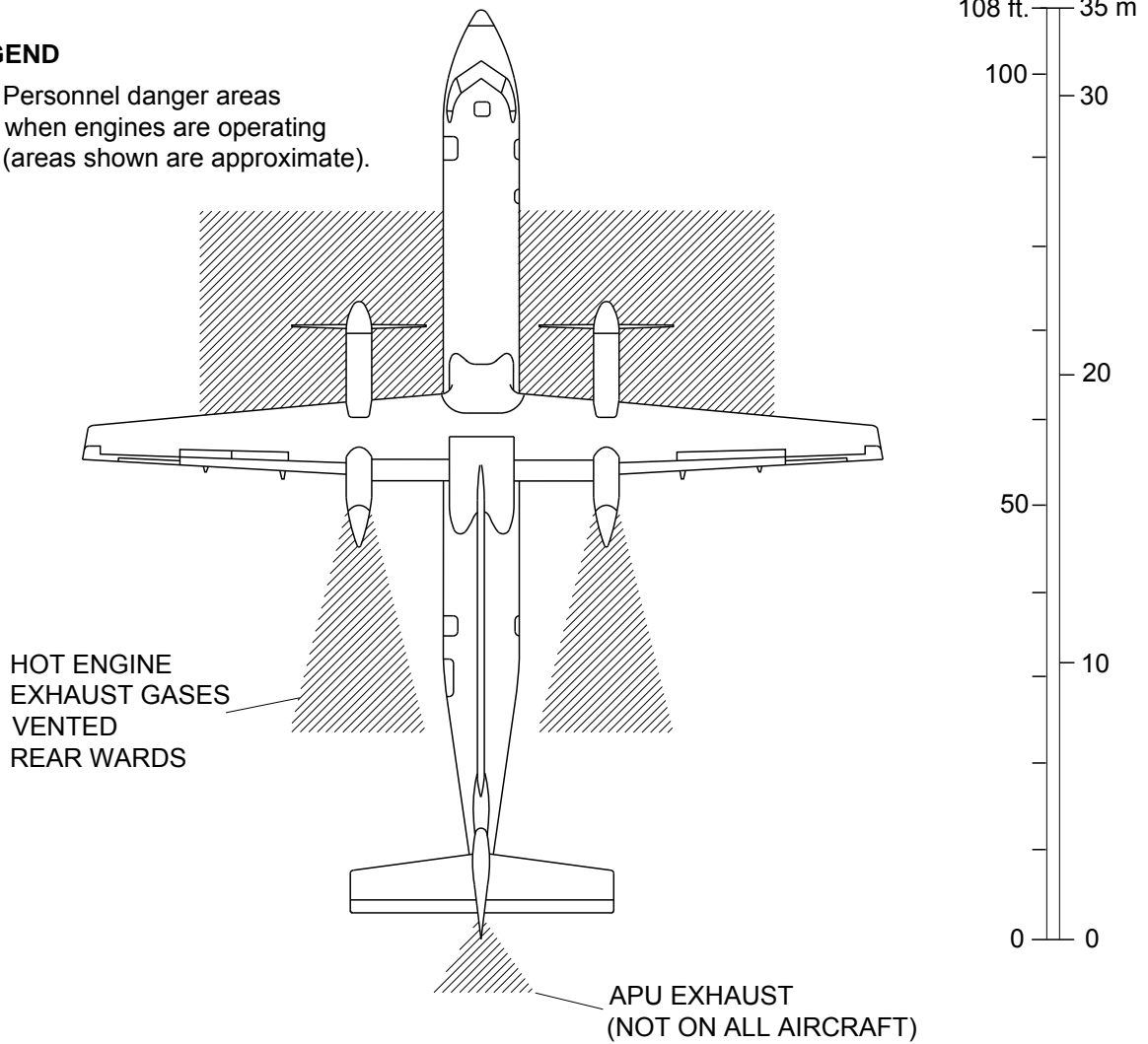
Model 400

bray38a01.dg, gw, 01/03/05

CRASH-FIRE-RESCUE MANUAL

LEGEND

 Personnel danger areas when engines are operating (areas shown are approximate).



PROPELLER / ENGINE EXHAUST DANGER AREAS (Sheet 1 of 2)

Figure 00 - 16

Model 400

brg35a01.dg, pt. 09/02/00

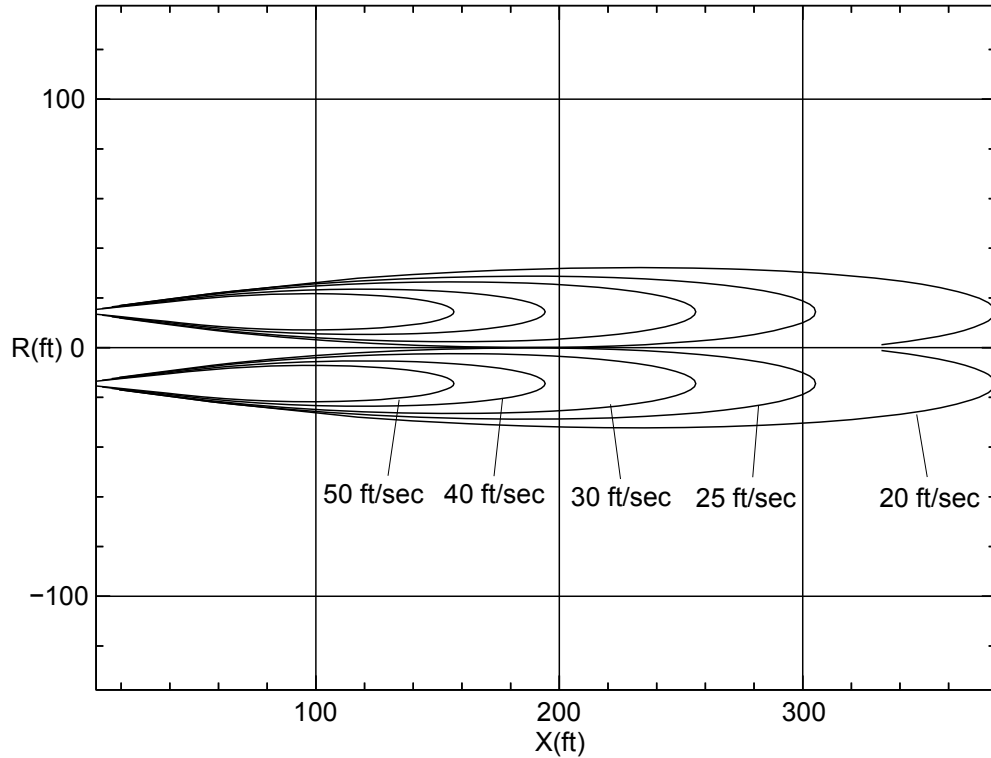


BOMBARDIER
AEROSPACE

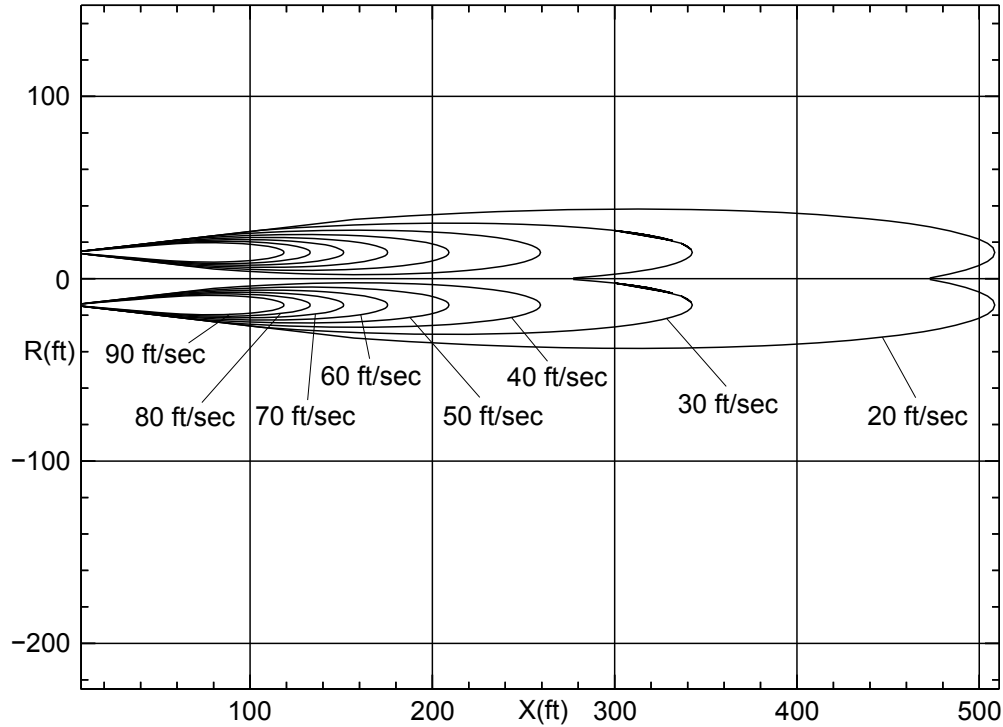


CRASH-FIRE-RESCUE MANUAL

SLIPSTREAM VELOCITY CONTOURS (~18% TORQUE) (STATIONARY ON GROUND)



SLIPSTREAM VELOCITY CONTOURS (~43% TORQUE) (STATIONARY ON GROUND)



PROPELLER / ENGINE EXHAUST DANGER AREAS (Sheet 2 of 2)

brg35a02.dwg, sb, may17/2011

Figure 00 - 16

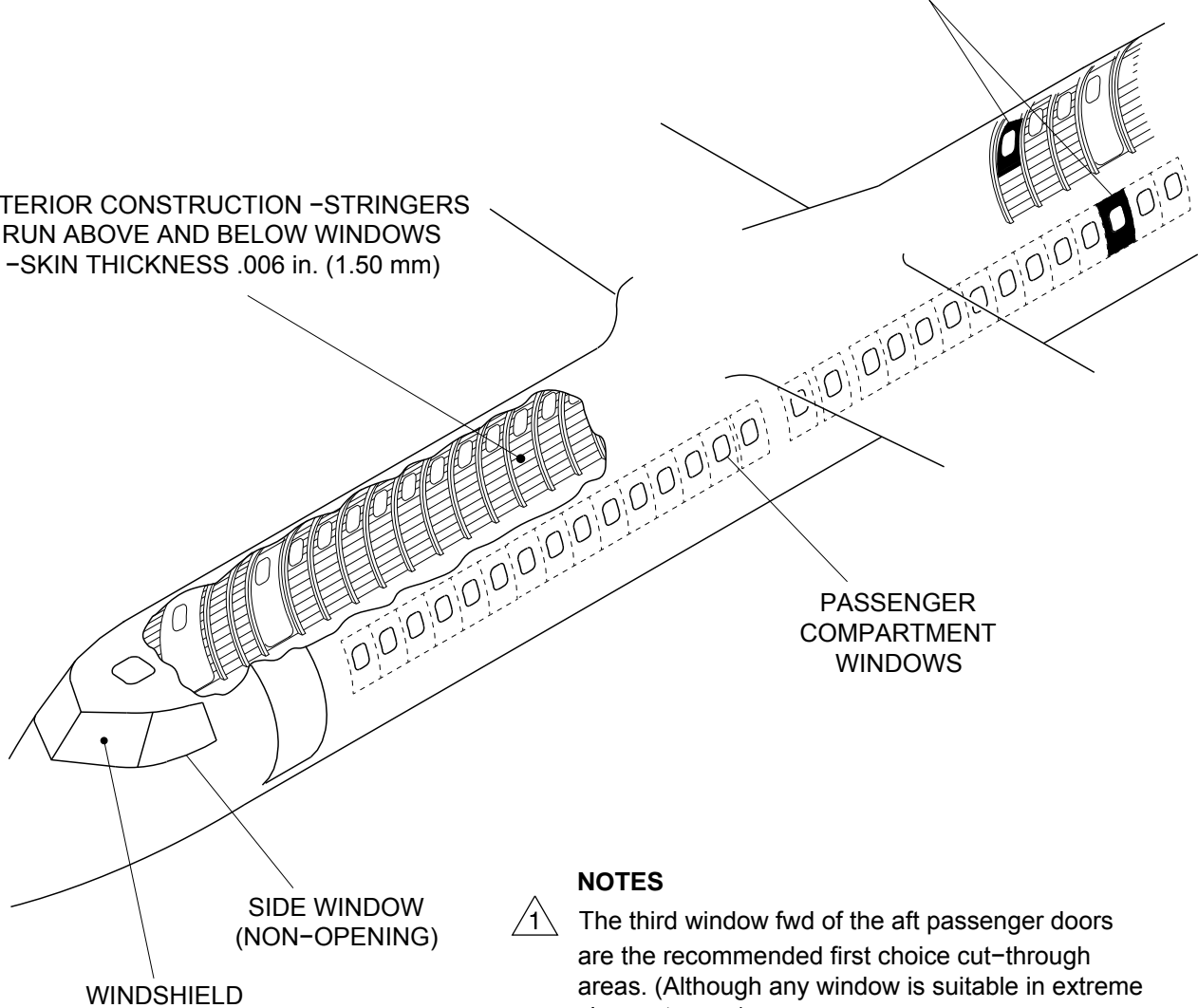
Model 400

CRASH-FIRE-RESCUE MANUAL

1 RECOMMENDED
CUT-THROUGH

AREA DIMENSIONS
45.0 x 20.0 in. (1143 x 508 mm)

INTERIOR CONSTRUCTION -STRINGERS
RUN ABOVE AND BELOW WINDOWS
-SKIN THICKNESS .006 in. (1.50 mm)



NOTES

1 The third window fwd of the aft passenger doors are the recommended first choice cut-through areas. (Although any window is suitable in extreme circumstances).

"Cut-through" areas require portable metal cutting equipment. It is recommended that major effort to gain access be directed to doors and hatches due to the type of structure and possible injury to personnel within.

2. Cut-through areas shown in red on Rescue Chart may appear as other colours on the aircraft.

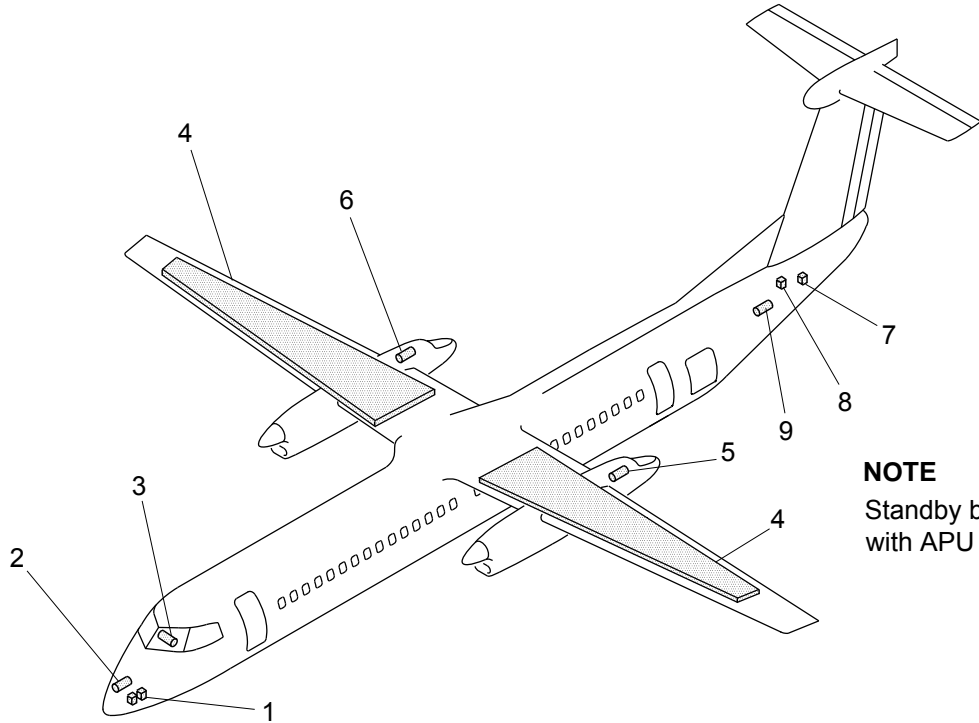
CUT-THROUGH AREAS

Figure 00 - 17

Model 400

brd22a01, gvi/pl, 13/03/01

CRASH-FIRE-RESCUE MANUAL



NOTE
Standby battery in nose with APU installed.

ITEM No.	ITEM NAME	ITEM LOCATION	ACCESS PANEL/DOOR
1	Main Battery and Auxiliary Battery	Nose lower compartment-left side	113AL
2	Crew Oxygen Cylinder	Nose lower compartment-right side	112AR
3	Crew PBE	Flight compartment, behind co-pilot's seat	
4	Fuel Tank	Integral	
5	No. 1 Hydraulic Reservoir	Left nacelle	413CR
6	No. 2 Hydraulic Reservoir	Right nacelle	423CR
7	Cockpit Voice Recorder and Flight Data Recorder	Aft fuselage	311AB
8	Standby Battery	Aft fuselage	311AB
9	No. 3 Hydraulic Reservoir	Aft fuselage	311AB

△1
△2
△3
△3
△3

NOTES △1 39.8 Cu Ft A.T.

△2

TOTAL FUEL CAPACITY				
Based on specific gravity of 0.816 (single tank - divide by 2)				
US Gal.	Imp. Gal.	L	LB	Kg
1785	1486	6756	12138	5506

△3

HYDRAULIC FLUID CAPACITY			
Reservoir	US Qt.	Imp. Qt.	L
No. 1 System	8.3	6.9	7.9
No. 2 System	12.5	10.4	11.8
No. 3 System	2.6	2.2	2.5
Aux. System (Nose)	1.06	1.27	1.20

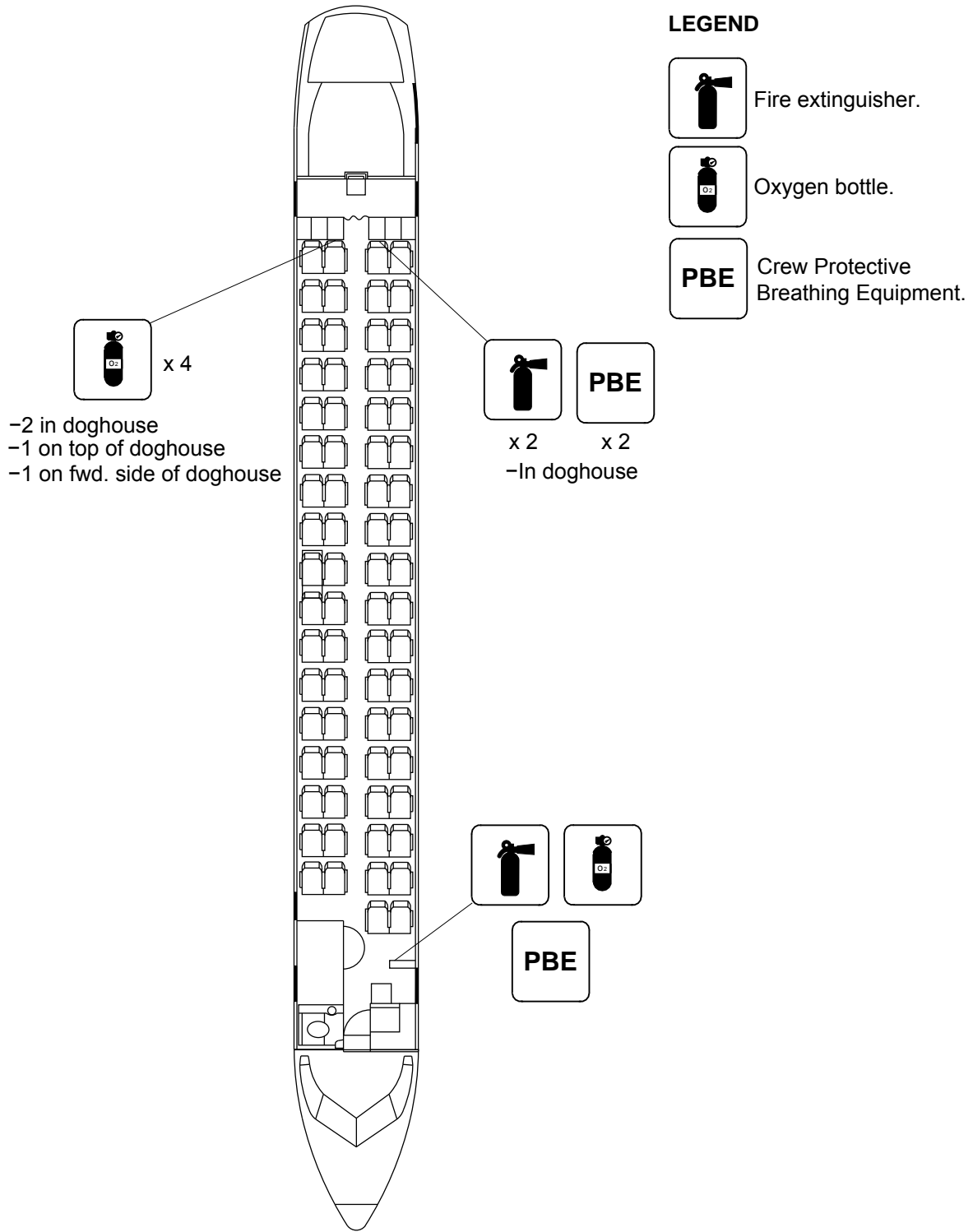
brd50a01.dg.jp/pt.05/06/00

FLAMMABLE MATERIAL LOCATIONS (EXCLUDING PASSENGER CABIN)

Figure 00 - 18

Model 400

CRASH-FIRE-RESCUE MANUAL



-2 in doghouse
-1 on top of doghouse
-1 on fwd. side of doghouse

x 2 x 2
-In doghouse

STANDARD CONFIGURATION

FLAMMABLE/HAZARDOUS MATERIAL LOCATIONS IN PASSENGER CABIN (Sheet 1 of 4)

brn16a01.dg, sw/cs, aug25/2014

Figure 00 - 19

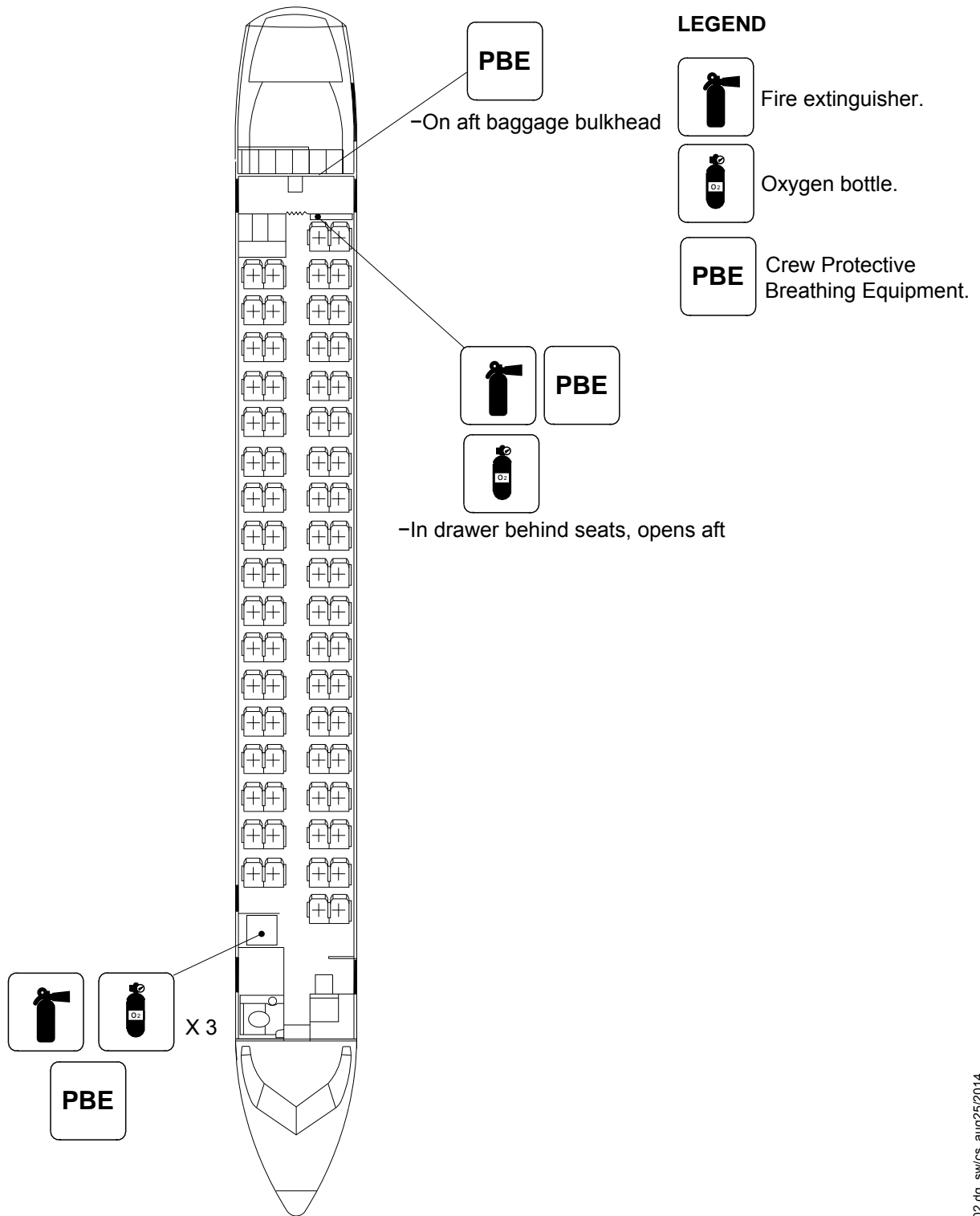
Model 400



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CRASH-FIRE-RESCUE MANUAL



STANDARD CONFIGURATION

FLAMMABLE/HAZARDOUS MATERIAL LOCATIONS IN PASSENGER CABIN (Sheet 2 of 4)

Figure 00 - 19

Model 400

bru16a02.dg, sw/cs, aug25/2014

CRASH-FIRE-RESCUE MANUAL

LEGEND



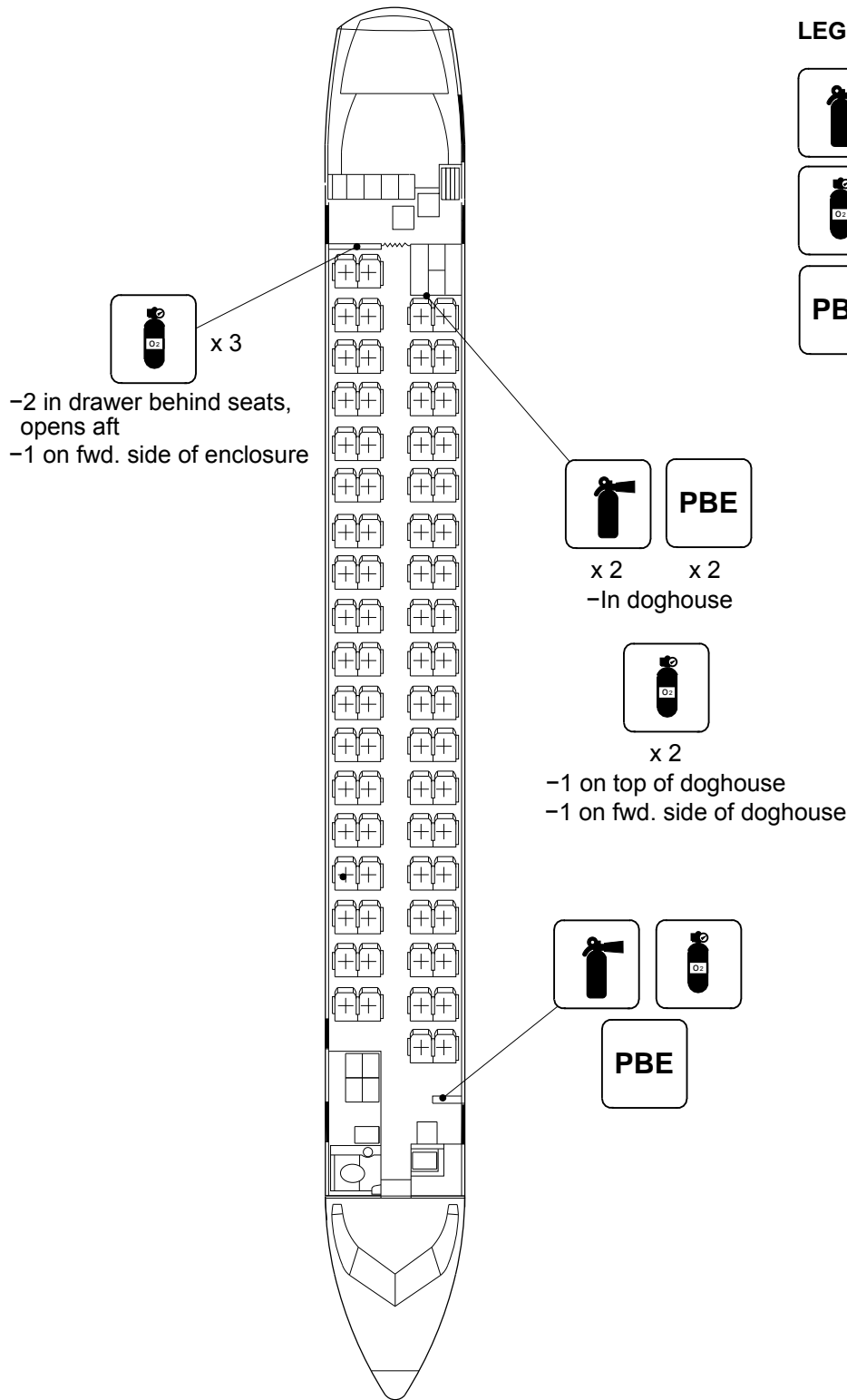
Fire Extinguisher.



Oxygen bottle.



Crew Protective Breathing Equipment.



STANDARD CONFIGURATION

FLAMMABLE/HAZARDOUS MATERIAL LOCATIONS IN PASSENGER CABIN (Sheet 3 of 4)

brn16a03.dg, sw/cs, aug25/2014

Figure 00 - 19

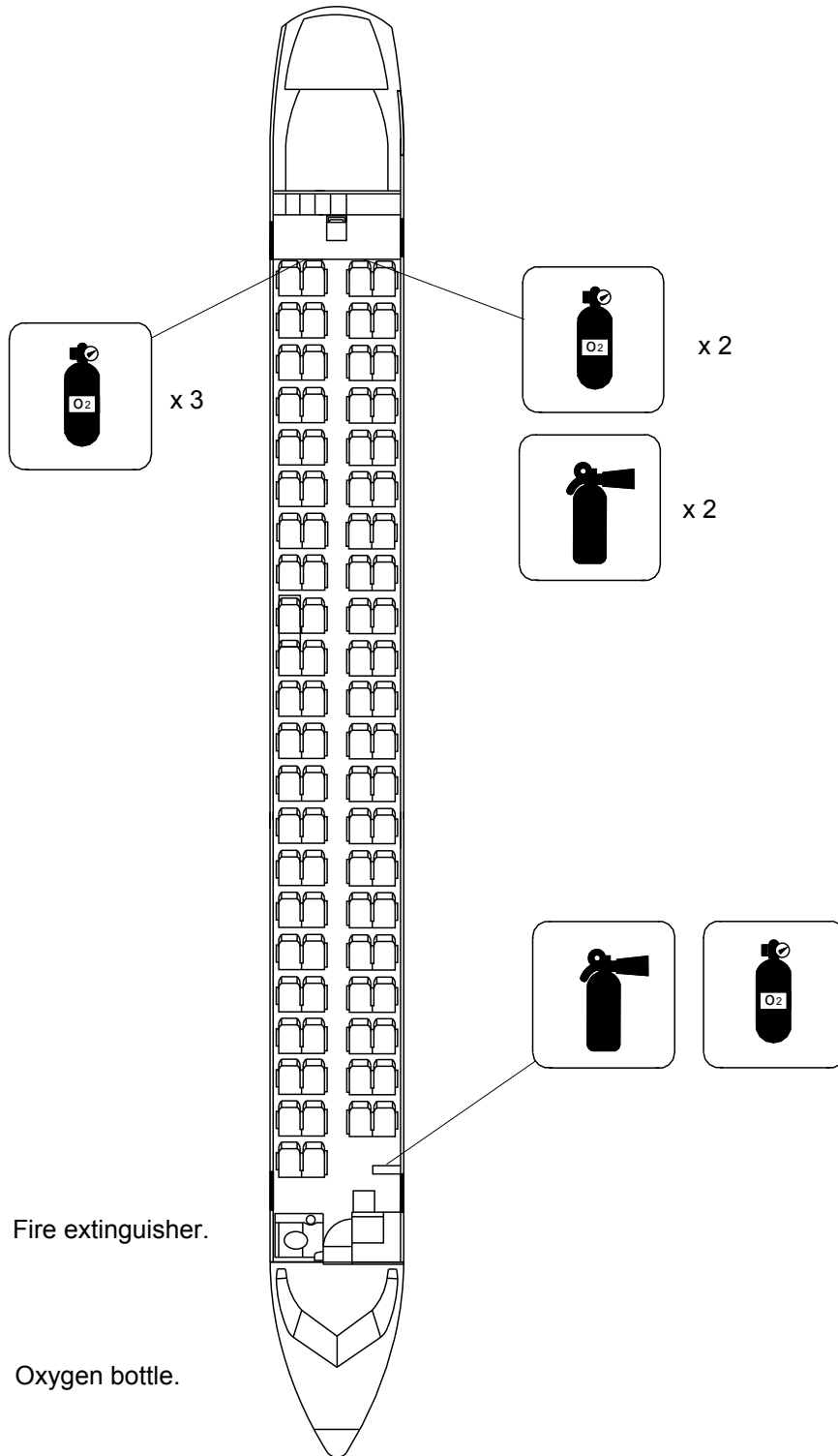
Model 400



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CRASH-FIRE-RESCUE MANUAL



LEGEND



Fire extinguisher.



Oxygen bottle.

EXTRA CAPACITY CONFIGURATION

FLAMMABLE/HAZARDOUS MATERIAL LOCATIONS IN PASSENGER CABIN (Sheet 4 of 4)

Figure 00 - 19

Model 400

bru16a04.dg, cs, aug25/2014

CRASH-FIRE-RESCUE MANUAL
Fire Control Recommendations

A. Fire Area	Extinguisher Type			Notes
	Preferred	Alternative	Avoid	
Aircraft Structural Fire	Foam	Halon 1211*		Dry chemical powder/Carbon dioxide may be used as complimentary agents in conjunction with foam
Engine Fire	Halon 1211*	Dry chemical powder (corrosive) Carbon dioxide (can damage engine)	Foam	Avoid foam unless adjacent structures are at risk
Fuel Fire	1. Dry chemical powder for leaking fuel 2. Water fog or foam on ground spill area			
Wheel Fire	Dry chemical powder or water fog (intermittent application)	Halon 1211*	Carbon Dioxide-wheel breakage is possible	1. Wheels are equipped with fusible plugs which will blow between 342°F to 360°F (172°C to 182°C) Approach landing gear from forward or aft. Stand upwind of fire to avoid 'Skydrol' fumes
Electrical Fire	Halon 1211*	Dry chemical powder/Carbon dioxide	Water	
Hydraulic Service Bay Fire	Halon 1211*	Dry chemical powder/Carbon dioxide	Water	
Galley Fire	Halon 1211*	Dry chemical powder	Water	
Flight Compartment/Cabin Fire	Halon 1211*	Dry chemical powder	Water	Water can be used in flight compartment/cabin if electrical/flammable liquids not involved (eg. upholstery)
Cargo Compartment Fire	Halon 1211*	Dry chemical powder/Carbon dioxide	Water	



BOMBARDIER
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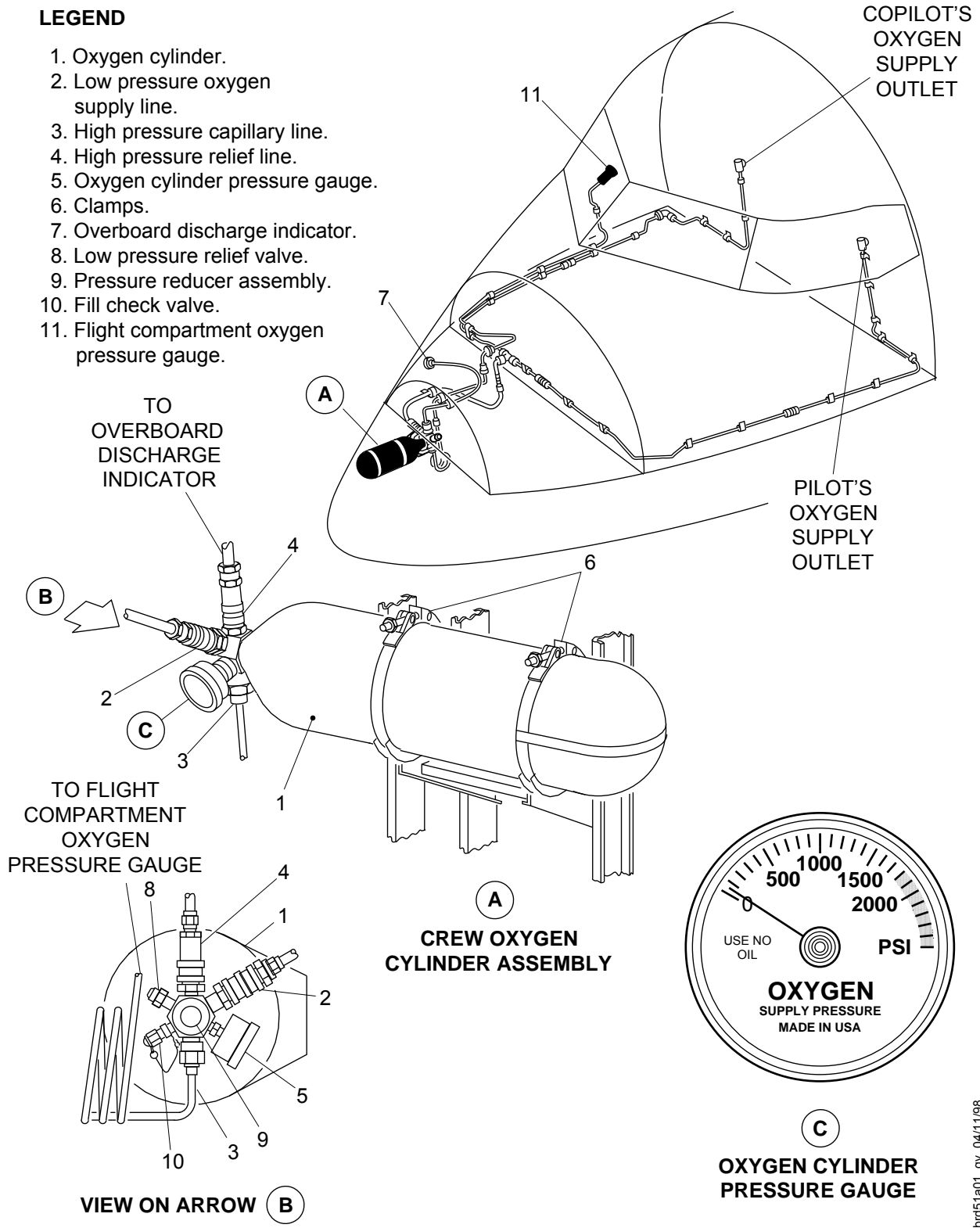
CRASH-FIRE-RESCUE MANUAL

* Use of Halon 1211 may be restricted by local authority.

CRASH-FIRE-RESCUE MANUAL

LEGEND

1. Oxygen cylinder.
2. Low pressure oxygen supply line.
3. High pressure capillary line.
4. High pressure relief line.
5. Oxygen cylinder pressure gauge.
6. Clamps.
7. Overboard discharge indicator.
8. Low pressure relief valve.
9. Pressure reducer assembly.
10. Fill check valve.
11. Flight compartment oxygen pressure gauge.



CREW OXYGEN SYSTEM

Figure 00 - 20

brd51a01, gv, 04/11/98

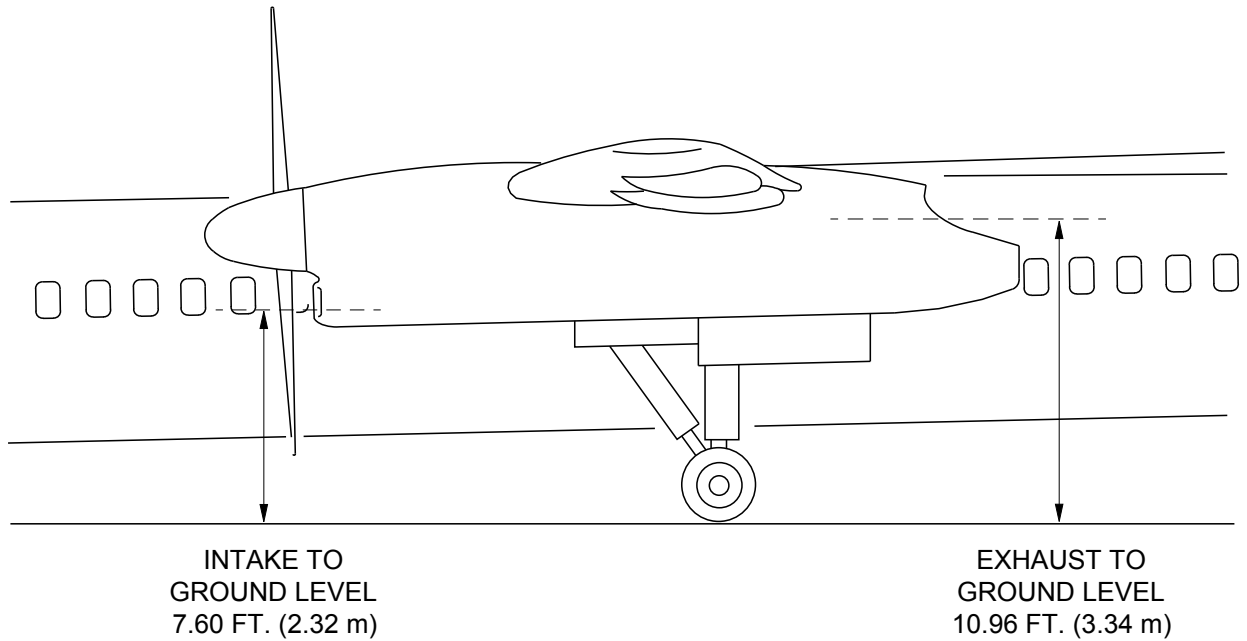
Model 400



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CRASH-FIRE-RESCUE MANUAL



NOTES

1. Approximately 3 ft. lower in wheels-up situation.
2. There are no externally accessible fire access panels.

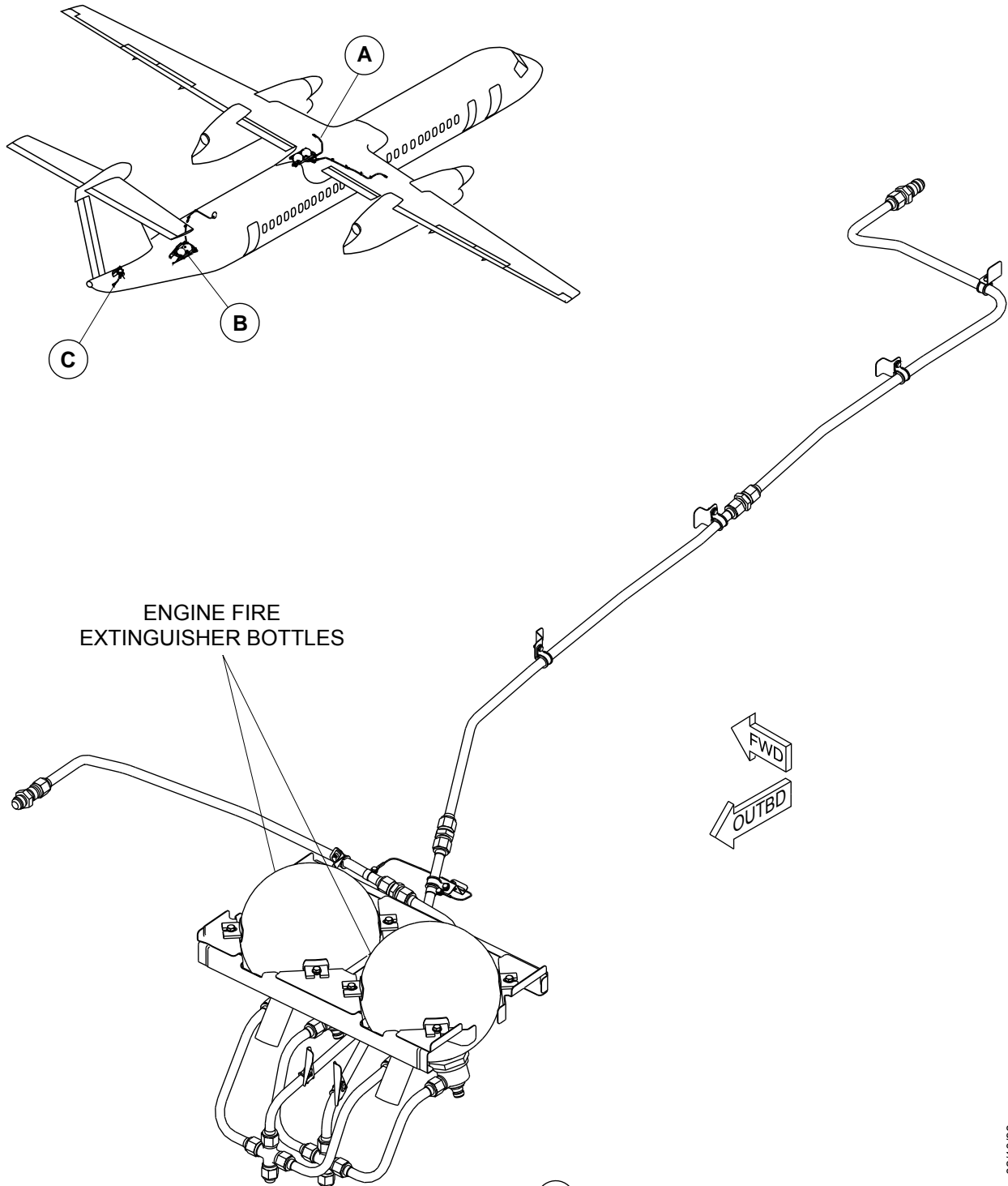
ENGINE FIRE ACCESS LOCATIONS

Figure 00 – 21



brd49a01, gv, 05/11/98

CRASH-FIRE-RESCUE MANUAL



(A)

**VIEW LOOKING INBOARD
ON LH SIDE**

FIRE EXTINGUISHING SYSTEMS LOCATIONS (Sheet 1 of 2)

brb95a01.dg, rm, 02/10/98

Figure 00 - 22

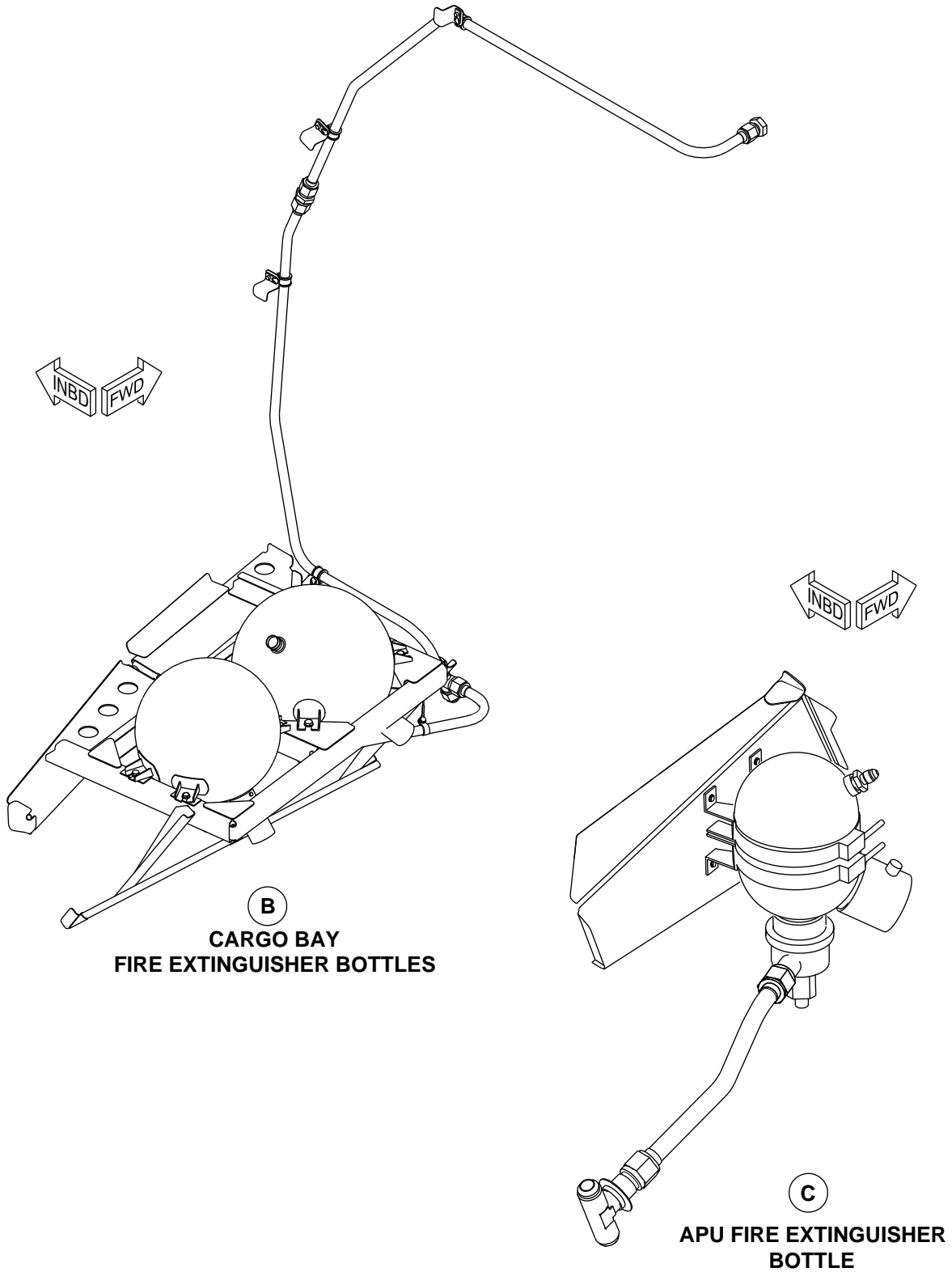
Model 400



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CRASH-FIRE-RESCUE MANUAL



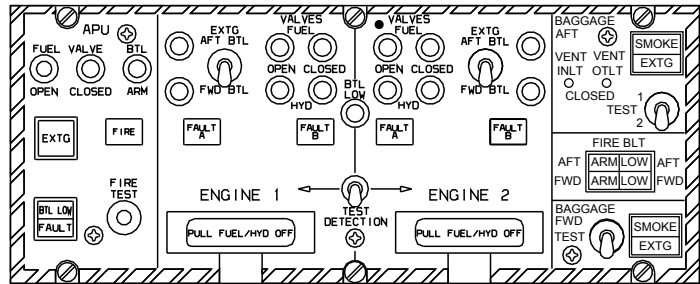
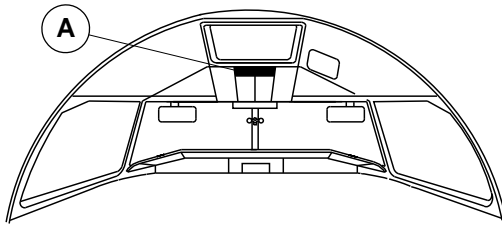
FIRE EXTINGUISHING SYSTEMS LOCATIONS (Sheet 2 of 2)

Figure 00 - 22

Model 400

brb95a02.dg, rm, 02/10/98

CRASH-FIRE-RESCUE MANUAL



ENGINE FIRE

1. POWER levers – FLT IDLE.
2. Condition levers – FUEL OFF.
3. PULL FUEL/HYD OFF handle (affected engine) – Pull. Check FUEL VALVE CLOSED and HYD VALVE CLOSED advisory lights illuminate.
4. TANK 1 AUX PUMP and TANK 2 AUX PUMP switches – OFF.
5. EXTG switch (affected engine) – FWD BTL.

Wait up to 30 seconds, if fire persists:

6. EXTG switch – AFT BTL.
7. BATTERY MASTER switch – OFF.
8. DC CONTROL EXT PWR and AC CONTROL EXT PWR switches – OFF.
9. PARK/EMERG BRAKE lever – PARK.
10. Evacuate airplane.

APU FIRE

1. Check APU automatically shuts down (APU RUN advisory light out), APU BTL LOW and FUEL VALVE CLOSED advisory lights illuminate.

If APU BTL ARM or APU FIRE advisory lights remain illuminated after 7 seconds:

2. EXTG switch – EXTG.

BAGGAGE AFT COMPARTMENT FIRE

1. Check for illumination of VENT INLT and VENT OTLT and FIRE BOTTLE AFT ARM advisory lights.
2. Illuminated SMOKE/EXTG switch – Press. Check FIRE BOTTLE AFT LOW advisory light illuminates and FIRE BOTTLE AFT ARM advisory light out.

NOTE

The FIRE BOTTLE FWD LOW advisory light will illuminate approximately seven minutes after the FIRE BOTTLE AFT LOW advisory light illuminates.

BAGGAGE FWD COMPARTMENT FIRE

1. Check for illumination of FIRE BOTTLE FWD ARM advisory light.
2. Illuminated SMOKE/EXTG switch – Press. Check FIRE BOTTLE FWD LOW and AFT LOW advisory lights illuminate and FIRE BOTTLE FWD ARM advisory light out.

FIRE EXTINGUISHING SYSTEMS OPERATIONS (STANDARD CONFIGURATION)

FIRE EXTINGUISHING SYSTEMS OPERATIONS (Sheet 1 of 2)

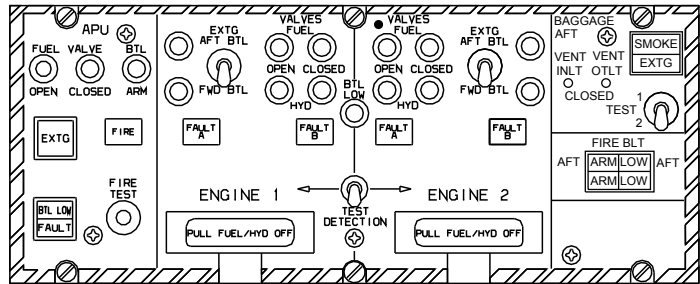
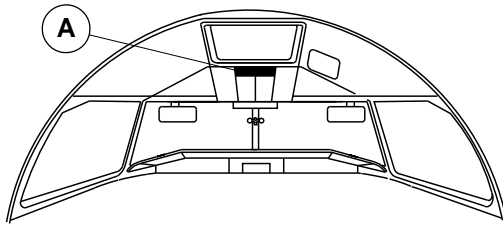
Figure 00 – 23

Model 400

brd48a01.dg, gv/cs, sep09/2014



CRASH-FIRE-RESCUE MANUAL



ENGINE FIRE

1. POWER levers – FLT IDLE.
2. Condition levers – FUEL OFF.
3. PULL FUEL/HYD OFF handle (affected engine) – Pull. Check FUEL VALVE CLOSED and HYD VALVE CLOSED advisory lights illuminate.
4. TANK 1 AUX PUMP and TANK 2 AUX PUMP switches – OFF.
5. EXTG switch (affected engine) – FWD BTL.

Wait up to 30 seconds, if fire persists:

6. EXTG switch – AFT BTL.
7. BATTERY MASTER switch – OFF.
8. DC CONTROL EXT PWR and AC CONTROL EXT PWR switches – OFF.
9. PARK/EMERG BRAKE lever – PARK.
10. Evacuate airplane.

APU FIRE

1. Check APU automatically shuts down (APU RUN advisory light out), APU BTL LOW and FUEL VALVE CLOSED advisory lights illuminate.

If APU BTL ARM or APU FIRE advisory lights remain illuminated after 7 seconds:

2. EXTG switch – EXTG.

BAGGAGE AFT COMPARTMENT FIRE

1. Check for illumination of VENT INLT and VENT OTLT and FIRE BOTTLE AFT ARM advisory lights.
2. Illuminated SMOKE/EXTG switch – Press. Check FIRE BOTTLE AFT LOW advisory light illuminates and FIRE BOTTLE AFT ARM advisory light out.

NOTE

The FIRE BOTTLE FWD LOW advisory light will illuminate approximately seven minutes after the FIRE BOTTLE AFT LOW advisory light illuminates.

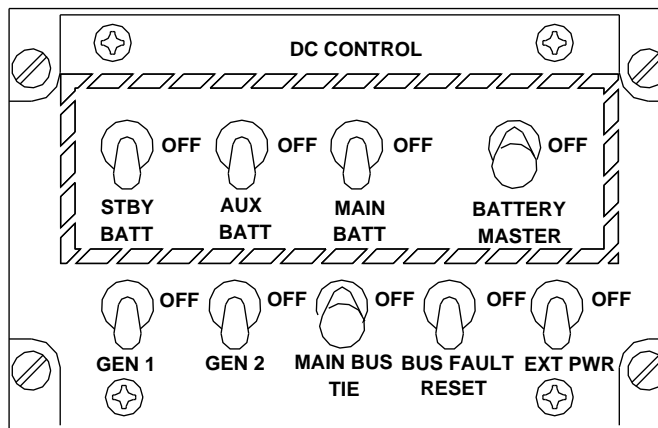
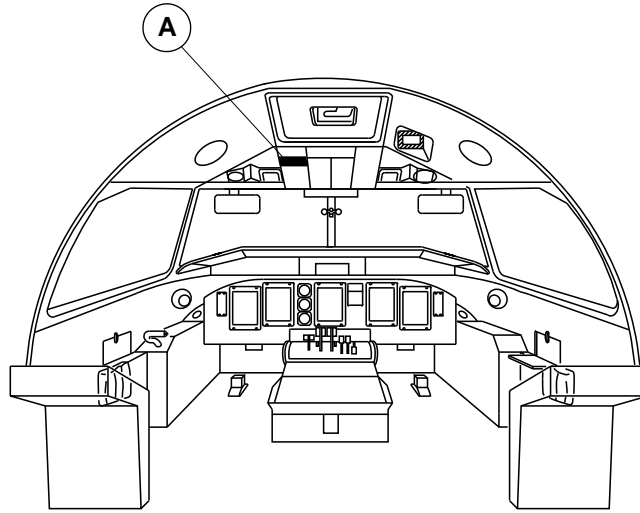
FIRE EXTINGUISHING SYSTEMS OPERATIONS (EXTRA CAPACITY CONFIGURATION)

FIRE EXTINGUISHING SYSTEMS OPERATIONS (Sheet 2 of 2)

Figure 00 – 23

Model 400

CRASH-FIRE-RESCUE MANUAL



A

- A. Set the MAIN BATT switch to the OFF position.
- B. Set the AUX BATT switch to the OFF position.
- C. Set the MAIN BUS TIE switch to the OFF position.
- D. If necessary, set the STBY BATT switch to the OFF position.
- E. Set the BATTERY MASTER switch to the OFF position.
- F. Make sure that the AC EXT PWR switch and the DC EXT PWR switch are both set to the OFF position.

BATTERY POWER SWITCH LOCATIONS

Figure 00 - 24

Model 400

brd47a01, gv, 05/11/98