

**Service Bulletin No:** 28-003**Ref No:** 76**Modification No:** EC-19-0281, EC-19-0745**ATA Chapter:** 28**FUEL - DISTRIBUTION  
FUEL DRAIN MAST AND REFUEL/DEFUEL DRAIN PIPE INTEGRATION****1. Planning information****A. Effectivity**

PC-24 aircraft MSN 101 thru MSN 184.

This modification will be incorporated on MSN 185 and subsequent during production.

**B. Concurrent requirements**

None.

**C. Reason**

A design change to the fuel drain system has been developed which will improve the fuel drainage from the aircraft. The installation of a drain mast, and a new 5-way drain fitting, will be introduced at the location of the dedicated drain hole which will allow for a new fuel drain pipe routing improvement.

The installation of the drain mast ensures that fuel will drain, and separate, from the aircraft and have no contact with the aircraft fuselage.

**D. Description**

This Service Bulletin gives the data and instructions necessary to:

- Do the modification for the new fuel drain pipe routing improvement
- Do the modification to install the new drain mast.

Revision No. 1 of this Service Bulletin is issued to include the:

- Additional anti-chafe tape in the Materials Information section
- Instructions to install the anti-chafe tape on the new RH underwing stringer.

Operators that have accomplished this Service Bulletin at the initial issue must make sure that the anti-chafe tape is installed on the new RH underwing stringer.

**E. Compliance**

Mandatory.

At the next 600 FH / 12 Months scheduled maintenance check, but not later than 15 Months from the issue date of this Service Bulletin.

**F. Approval**

The technical content of this Service Bulletin is approved under the authority of DOA No. EASA. 21J. 357.

Pilatus advises Operators/Owners to check with their designated Airworthiness Authority for any changes, local regulations or sanctions that may affect the embodiment of this Service Bulletin.

**G. Copyright and legal statement**

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**H. Manpower**

Description	Man-Hours
Preparation	2.50
Modification	8.00
Requirements after job completion	1.50
<b>TOTAL MAN-HOURS</b>	<b>12.00</b>

**NOTE:** Man-hours do not include the time necessary to cure sealants, paints and adhesives.

**I. Weight and balance****(1) Weight change**

+0.712 lb (+0,323 kg).

**(2) Moment change**

+227.972 lb\*in (+2,627 kg\*m).

**J. Electrical load change data**

Not changed.

**K. Software**

Not changed.

**L. References**

Aircraft Maintenance Manual:

PC24-A-A00-50-0000-00A-070A-A	PC24-A-A06-40-0000-00A-040A-A
PC24-A-E20-10-0003-00A-913A-A	PC24-A-E20-20-0001-00A-040A-A
PC24-A-E20-40-0010-00A-913A-A	PC24-A-E20-50-0001-01A-913A-A
PC24-A-E20-50-0005-00A-913A-A	PC24-A-E20-60-0005-00A-913A-A
PC24-A-E24-00-0000-00A-913A-A	PC24-A-E34-45-0001-00A-320A-A
PC24-A-E34-45-0001-00A-520A-A	PC24-A-E34-45-0001-00A-720A-A
PC24-A-E53-10-0002-00A-520A-A	PC24-A-E53-10-0002-00A-720A-A.

**M. Publications affected**

Airplane Flight Manual (AFM).

Aircraft Maintenance Manual (AMM).

Flight Crew Operating Manual (FCOM).

Illustrated Parts Data (IPD).

**N. Interchangeability of parts**

Not interchangeable.

**2. Material information**
**A. Material - Price and availability**

Operators that require additional information and/or Service Bulletin material can contact their authorized Pilatus Service Center, or Pilatus Customer Support on [www.pilatus-aircraft.com](http://www.pilatus-aircraft.com) → contact us.

**NOTE:** Part numbers given in this Service Bulletin are correct at the time of approval. Pilatus Aircraft Ltd. reserves the right to change the part numbers as necessary. Part numbers of items delivered with a kit are correct when the kit is dispatched. This could lead to differences between those part numbers quoted in a Service Bulletin and a kit if parts are superseded. Operators are requested to check the Illustrated Parts Data (IPD) for delivered parts that differ from those listed in the Service Bulletin materials kit list.

Operators are requested to advise Pilatus Aircraft Ltd. of the Manufacturer's Serial Number (MSN), the flying hours and landings of aircraft that are allocated for this Service Bulletin.

**B. Warranty**

Credit will be issued for parts and labour for all affected aircraft on approval of a warranty claim, provided the work is accomplished by an authorized Service Center within 6 months of the issue date of this Service Bulletin.

**C. Material necessary for each aircraft**

Modification kit number	Price	Availability
500.50.24.048	Contact as above	Approximately 1 to 2 weeks

Tool kit number	Price	Availability
500.70.24.005	Contact as above	Approximately 1 to 2 weeks

**(1) Material to order from Pilatus**

Modification kit number 500.50.24.048

New part No.	Description	Old part No.	Qty	Disp. code	Fig	Item
553.51.24.239	Stringer, Underwing, RH, Assy	-	1	N	2	15
		553.50.24.848	1	D	1	19
528.22.24.115	Drain Mast, Spare Part	-	1	N	2	37
528.22.24.112	Drain Fitting Assy	-	1	N	2	3
		553.50.24.417	1	D	1	11
528.22.24.113	Gasket	-	1	N	2	36

Disposition Codes: D - Discard / N - New / R - Return to Pilatus

New part No.	Description	Old part No.	Qty	Disp. code	Fig	Item
528.50.24.118	Drain Pipe, Fuel	-	1	N	2	23
528.50.24.116	Drain Hose, Fuel, Front	- 528.50.24.038	1 1	N D	2 1	32 8
528.50.24.117	Drain Hose, Fuel, Rear	-	1	N	2	33
532.30.21.018	Roller, Locking	-	2	N	2	25
932.35.10.067	Screw, Hex, ST, CD-PL, 4.2*12.7	-	6	N	2	29
932.35.10.073	Screw, Hex, ST, CD-PL, 4.2*20.6	-	2	N	2	21
933.71.61.308	Screw, Csk, Cres, Pass, 4.2*18.3	-	4	N	2	38
938.77.11.111	Washer, ST, CD-PL, 4.2*0.8	-	10	N	2	22 26 28
938.07.68.513	Nut, Hex, Lub, ST, CD-PL, 4.2*3.2	-	2	N	2	27
946.31.05.117	Clamp, One-sided, 1/ 4*0.8, AL	-	8	N	2	24
946.33.21.704	Clamp, Hose, Mini, ST, 11-19	-	8	N	2	31
939.31.89.053	Riv, Bl, Csk, Mon, AL-C, 3.2*8.2	-	4	N	2	C
938.43.05.201	Nutpl, 2-lug, Cres, Pass, 4.2*6.4	-	4	N	2	4
939.31.87.255	Riv, Bl, Csk, Cres, Pass, 2.4*7.4	-	8	N	2	B
939.27.81.104	Riv, So, Csk, AL, CCC, 3.2*5.6	-	2	N	2	A
917.73.17.060	Tape, PTFE, Chafe, AFR, 0.3*25.4MM	-	AR	N	2	-

Disposition Codes: D - Discard / N - New / R - Return to Pilatus

Tool kit number 500.70.24.005

New part No.	Description	Old part No.	Qty	Disp. code	Fig	Item
513.28.24.037	Drill template, fuel	-	1	N	2	5

Disposition Codes: D - Discard / N - New / R - Return to Pilatus

**(2) Additional material to procure**

New part No.	Description	Old part No.	Qty	Disp. code	Fig	Item
511.20.24.152 (See Note 1 and 2 below)	Silk Screen, Fuel Shroud, Drain	-	AR (2)	N	2	35
		511.20.24.067	1	D	1	2
		511.20.24.068	1	D	1	4
938.07.68.404 (If necessary)	Nut, Hex, Cres, AG-PL, 4.8*4.8	-	AR	N	2	14 20

Disposition Codes: D - Discard / N - New / R - Return to Pilatus

**NOTE 1:** The silk screen part number listed above is a Pilatus engineering drawing, it is not a physical part to order. This drawing contains the necessary information to produce the silk screen stencil. Operators that require additional information or assistance can contact their authorized Pilatus Service Center, or Pilatus Customer Support on: [www.pilatus-aircraft.com](http://www.pilatus-aircraft.com) → contact us.

**NOTE 2:** A silk screen stencil can be used more than once to apply the same marking. The quantity (Qty) given denotes how many times the silk screen marking is to be applied to the aircraft.

**D. Operator supplied materials**

**NOTE:** Refer to AMM, PC24-A-A00-50-0000-00A-070A-A:

Material No.	Description	Qty	Remarks
P01-011	Isopropyl alcohol	AR	-
P02-031	Absorbent paper	AR	-
P02-032	Abrasive paper (3M Trizact P3000 D32 MM)	AR	-
P02-033	Lamb wool pad	AR	-
P02-043	Micro fiber cloth	AR	-
P04-041	Aeroshell grease 58	AR	-
P05-007	Grinding polish (M85)	AR	-
P05-010	Fine cleaner	AR	-
P07-007	Primer (Epoxy primer, 37035A)	AR	-
P07-010	Paint, hardener	AR	P/N 910.07.05.101
P07-010	Paint, retarder	AR	P/N 910.09.00.904
P07-010	Paint, thinners	AR	P/N 910.09.00.508
P07-010	Paint, Series 658-00 (White)	AR	P/N 910.07.05.103

Material No.	Description	Qty	Remarks
P07-010	Paint, Series 658-603 (Gray matt)	AR	P/N 910.07.05.105
P07-021	Alodine 1132	AR	-
P08-070	Sealant (Electrically Conductive, PR1764 MB-2)	AR	For RH underwing stringer installation
P08-073	Sealant (MC-780 C-2)	AR	Overcoat sealant for drain fitting (See note* and/or alternatives below)
P10-013	CPC (Ardrox AV 40)	AR	Bare metal surfaces at Frame 28
*Alternative (cure time) options for P08-073			
P08-094	Sealant (MC780 C-1/3)	AR	P/N 907.10.11.234 (See note*)

**NOTE:** \* The value after the C- denotes the Hours necessary for the sealant to cure.

**E. Material necessary for each spare**

Not applicable.

**F. Re-identified parts**

Not applicable.

**G. Tools and equipment**

Tools and equipment	Recommended Pilatus part
Tool kit, mechanic	Local supply
Scriber (or center punch)	Local supply
Drill bit (2,50 mm)	Local supply
Drill bit (3,10 mm)	Local supply
Drill bit (3,30 mm)	Local supply
Drill bit (4,30 mm)	Local supply
Drill bit (4,80 mm)	Local supply
Drilling machine	Local supply
Countersink bit	Local supply

Tools and equipment	Recommended Pilatus part
Rivet gun	For NAS1921M04S03A U, NAS1097AD4-3-5 and CR2672-3-03 countersunk blind rivets
Gripper pins (or equivalent) (if necessary)	Local supply
Clamp (or equivalent)	Local supply
Coating blade	Local supply
Screen printing frame	Local supply
Sanding head (if necessary)	Local supply
Non-metallic scraper	Local supply
Polishing machine	Local supply



**3. Accomplishment instructions**

**WARNING:** BE CAREFUL WHEN YOU DO WORK ON THE ELECTRICAL SYSTEM OR A SYSTEM THAT USES THE ELECTRICAL POWER. MAKE SURE THAT IT IS SAFE BEFORE YOU APPLY ELECTRICAL POWER TO THE AIRCRAFT OR ENERGIZE THE AIRCRAFT ELECTRICAL SYSTEMS. THE ELECTRICAL POWER CAN CAUSE DEATH OR INJURY TO PERSONNEL AND CAUSE DAMAGE TO EQUIPMENT.

**WARNING:** MAKE SURE THAT THERE ARE NO SPARKS, FLAMES OR OTHER POSSIBLE IGNITION SOURCES AROUND THE WORK AREA. THE MIXTURE OF AIR AND FUEL VAPOR AND AN IGNITION SOURCE CAN CAUSE AN EXPLOSION. AN EXPLOSION CAN CAUSE DEATH OR INJURY TO PERSONNEL AND CAUSE DAMAGE TO EQUIPMENT.

**WARNING:** USE THE APPLICABLE PERSONAL PROTECTIVE EQUIPMENT WHEN YOU WORK WITH FUEL. OBEY THE LOCAL REGULATIONS WHEN YOU DISCARD CONTAMINATED CLOTHING / EQUIPMENT. FUEL IS POISONOUS AND CAN CAUSE DEATH OR INJURY.

**WARNING:** YOU MUST WEAR A FILTER MASK, EYE PROTECTION AND GLOVES WHEN YOU MECHANICALLY REMOVE PAINT. THE DUST PRODUCED WHEN YOU MECHANICALLY REMOVE PAINT IS DANGEROUS TO HEALTH.

**WARNING:** PUT ON PROTECTIVE CLOTHING, GOGGLES AND DUST MASK BEFORE YOU DO WORK WITH ABRASIVE PAPER. THE ABRASIVE DUST CAN CAUSE INJURY TO PERSONNEL.

**WARNING:** BE CAREFUL WHEN YOU USE THE CONSUMABLE MATERIALS. OBEY THE MANUFACTURERS' HEALTH AND SAFETY INSTRUCTIONS.

**CAUTION:** Make sure that all openings on the fuel system are covered. This will keep dirt, debris or other unwanted material out of the fuel system.

**NOTE:** Refer to the manufacturer's instructions for the necessary time for consumable materials to cure/dry.

**A. Preparation**

- (1) Obey the safe maintenance practices as necessary. Refer to AMM, PC24-A-E20-10-0003-00A-913A-A.
- (2) For aircraft with the Automatic Direction Finder (ADF) factory option installed:
  - (a) Remove the ADF 1 antenna. Refer to AMM, PC24-A-E34-45-0001-00A-520A-A.
  - (b) Remove the ADF ground plane assembly. Refer to AMM, PC24-A-E53-10-0002-00A-520A-A.
- (3) De-energize the aircraft electrical system. Refer to AMM, PC24-A-E24-00-0000-00A-913A-A.
- (4) Put a "**DO NOT CONNECT ELECTRICAL POWER**" placard on the overhead control panel.
- (5) Put "**FUEL LINES OPEN**" placards around the aircraft.

- (6) Open/Remove the access panels/fairings in Table 1. Refer to AMM, PC24-A-A06-40-0000-00A-040A-A and PC24-A-E53-10-0002-00A-520A-A.

**Table 1: Access panels/fairings to be opened/removed**

Panel number	Panel name
141BB	Access panel FWD
141BR	Panel, wing fairing FWD aft, RH
142AB	Panel, underwing
142ABR	Panel, wing fairing, underwing, RH
143ABL	Panel, wing fairing, MLG, FWD, LH
143ABR	Panel, wing fairing, MLG, FWD, RH

## B. Modification

- (1) **Remove the fuel drain hose and drain fitting. Refer to Figure 1 (Sheet 3)**

**WARNING:** WEAR EYE PROTECTION WHEN YOU DRILL COMPONENTS. HOT AND SHARP SWARF AND PARTICLES OF MATERIAL CAN CAUSE INJURY TO PERSONNEL.

**WARNING:** BE CAREFUL WHEN YOU USE THE CONSUMABLE MATERIALS. OBEY THE MANUFACTURERS' HEALTH AND SAFETY INSTRUCTIONS.

- (a) Loosen the two hose clamps (6) and disconnect the fuel drain hose (8) from the slider shroud drain-fitting (5) and the drain fitting (7) on Frame 23.
- (b) Remove and discard the fuel drain hose (8) (P/N 528.50.24.038) and the two hose clamps (6) (P/N 946.33.21.704).
- (c) Use a 3,10 mm drill bit and remove the two rivets that attach the fuel drain fitting (7) to Frame 23.
- (d) Remove and discard the fuel drain fitting (7) (P/N 528.50.24.073).
- (e) Remove the unwanted material and remove all sharp edges.
- (f) Apply a thin layer of sealant (Material No. P08-073) to each of the two new rivets (A) (P/N 939.27.81.104).
- (g) Wet install the two rivets (A), from the outer surface of the Frame 23, in the two rivet holes where the fuel drain fitting (7) was installed.

**(2) Remove the RH underwing stringer. Refer to Figure 1 (Sheet 4)**

- (a) Remove the two nuts (18), the two washers (17), the two bolts (13) and the two washers (14). Record the position where these fasteners are installed.
- (b) Move the bonding mount (15) away from the wing fairing rear-spar (20) and the RH Rib 2 angle (16).
- (c) Remove the 19 nuts (26), the 19 washers (25), the 19 bolts (23) and the 19 washers (22). Record the position where these fasteners are installed.
- (d) Remove the RH underwing stringer (19) (P/N 553.50.24.848) from the:
  - Wing fairing fwd-spar (24)
  - Wing fairing rear-spar (20)
  - LH and RH Rib 2 angle (16) (21).
- (e) Discard the RH underwing stringer (19).

**(3) Remove the 4-way drain fitting. Refer to Figure 1 (Sheet 3)**

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- (a) Loosen the four hose clamps (10) that attach the four fuel drain hoses (9) to the 4-way drain fitting (11).
- (b) Disconnect the four fuel drain hoses (9) from the 4-way drain fitting (11).
- (c) Install a blanking cap on each of the four fuel drain hoses (9).
- (d) Remove the necessary attachment fasteners and remove the wing fairing U-Channel (143ABZ) (12). Record the position of the attachment fasteners when you remove them. Refer to AMM, PC24-A-A06-40-0000-00A-040A-A.
- (e) Use a 3,10 mm diameter drill bit and remove the four rivets that attach the 4-way drain fitting (11) to the wing fairing U-Channel (12).
- (f) Remove and discard the 4-way drain fitting (11) (P/N 553.50.24.417).
- (g) Use a non-metallic scraper to remove any remaining sealant from the wing fairing U-Channel (12) where the 4-way drain fitting (11) was installed.
- (h) Remove the unwanted material and remove all sharp edges.

**(4) Remove the silk screen markings. Refer to Figure 1 (Sheet 2)**

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**WARNING:** PUT ON PROTECTIVE CLOTHING, GOGGLES AND DUST MASK BEFORE YOU DO WORK WITH ABRASIVE PAPER. THE ABRASIVE DUST CAN CAUSE INJURY TO PERSONNEL.

**WARNING:** BE CAREFUL WHEN YOU USE THE CONSUMABLE MATERIALS. OBEY THE MANUFACTURERS' HEALTH AND SAFETY INSTRUCTIONS.

**NOTE:** The procedure to remove each of the existing silk screen markings is the same.

**NOTE:** For aircraft with the ADF factory option installed, the existing silk screen marking is installed on the ADF ground plane assembly.

- (a) Find the existing silk screen marking (2)/(4) on the fwd access panel (1)/wing fairing U-Channel (3). Refer to Figure 1, (Sheet 1 and 2, View B and C).
- (b) Use abrasive paper (Material No. P02-032) and carefully remove the existing silk screen marking (2)/(4) (P/N 511.20.24.067/511.20.24.068).
- (c) Attach a lamb wool pad (Material No. P02-033) to the polishing machine. Make sure that the lamb wool pad is clean and wet.
- (d) Apply a small quantity of grinding polish (Material No. P05-007) to the lamb wool pad (Material No. P02-033).
- (e) Use the polishing machine and carefully polish the area where you removed the silk screen marking. Make sure that you do not damage the topcoat.
- (f) Apply fine cleaner (Material No. P05-010) to the area where you removed the silk screen marking.
- (g) Use a micro fiber cloth (Material No. P02-043) and rub the area until it is clean and dry. Make sure that the area is fully cleaned.
- (h) Do the above procedure again (Step **(4)**(a) thru Step **(4)**(g)) to remove the other existing silk screen markings, where necessary.

**(5) Drill the holes for the four new nut plates. Refer to Figure 2 (Sheet 2)**

**WARNING:** WEAR EYE PROTECTION WHEN YOU DRILL COMPONENTS. HOT AND SHARP SWarf AND PARTICLES OF MATERIAL CAN CAUSE INJURY TO PERSONNEL.

**NOTE:** Use the measurements shown in Figure 2 (Sheet 2, View B) to determine the position of the four (4,80 mm) holes to be made in the wing fairing U-Channel.

- (a) Use a scribe (or center punch) to make marks for the position of each of the four holes to be drilled.
- (b) Use a 4,80 mm diameter drill bit and drill the four holes (at the marks that you made) in the wing fairing U-Channel (1).
- (c) Remove the unwanted material and remove all sharp edges.
- (d) For aircraft with the ADF factory option installed. Refer to Figure 2 (Sheet 2, View C):

**NOTE:** Use the 4,80 mm holes that you drilled in the wing fairing U-Channel as a template to drill the holes in the ADF ground-plane assembly.

- 1 Temporarily install the ADF ground-plane assembly (2), with a sufficient quantity of screws, on the wing fairing U-Channel (1). Make sure that the ADF ground-plane assembly (2) is in the correct position.
- 2 Use a 4,80 mm diameter drill bit and drill the four holes (through the holes that you made in the wing fairing U-Channel) in the ADF ground-plane assembly (2) (P/N 534.50.24.095).
- 3 Remove the ADF ground-plane assembly (2) from the wing fairing U-Channel (1).
- 4 Remove the unwanted material and remove all sharp edges.
- 5 Use absorbent paper (Material No. P02-031) made moist with isopropyl alcohol (Material No. P01-011) and clean the area in and around the four holes.
- 6 Let the isopropyl alcohol dry.
- 7 Apply alodine 1132 (Material No. P07-021) as necessary to the bare metal surfaces of each hole. Refer to AMM, PC24-A-E20-40-0010-00A-913A-A.
- 8 Let the alodine dry.
- 9 Apply primer (Material No. P07-007) as necessary to each hole.
- 10 Let the primer dry.

- (e) Drill the rivet holes for the new nut plates (4):

**NOTE:** The procedure to drill the rivet holes for each of the nut plates is the same.

1 Put a new nut plate (4) (P/N 938.43.05.201) in position on the wing fairing U-Channel (1) and align the center hole in the nut plate (4) with the 4,80 mm hole that you made.

2 Install a gripper pin (or equivalent) in the center hole to hold the nut plate (4) in the correct position. Refer to Figure 2 (Sheet 3, View D).

**NOTE:** Use the empty rivet holes in the nut plate as a template to drill the two rivet holes in the wing fairing U-Channel.

3 Use a 2,50 mm diameter drill bit and drill the two rivet holes (through the empty rivet holes in the nut plate) in the wing fairing U-Channel (1).

4 Remove the gripper pin (or equivalent) and remove the nut plate (4).

5 Use a countersink bit and countersink the two rivet holes on the outer surface of the wing fairing U-Channel (1). Refer to AMM, PC24-A-E20-50-0005-00A-913A-A.

6 Remove any unwanted material and remove all sharp edges.

7 Do the above procedure again to drill the rivet holes for the other nut plates (4).

**(6) Install the new 5-way drain fitting. Refer to Figure 2 (Sheet 3)**

**WARNING:** BE CAREFUL WHEN YOU USE THE CONSUMABLE MATERIALS. OBEY THE MANUFACTURERS' HEALTH AND SAFETY INSTRUCTIONS.

**NOTE:** Refer to the manufacturer's instructions for the necessary time for consumable materials to cure/dry.

- (a) Put the new 5-way drain fitting (3) (P/N 528.22.24.112) in position on the inner surface of the wing fairing U-Channel (1) and align the holes with the existing rivet holes.
- (b) Install two gripper pins (or equivalent) to hold the 5-way drain fitting (3) in the correct position.
- (c) Install two of the new rivets (C) from the outer surface of the wing fairing U-Channel (1).
- (d) Remove the two gripper pins (or equivalent).
- (e) Install the other two new rivets (C) from the outer surface of the wing fairing U-Channel (1) to attach the 5-way drain fitting (3).
- (f) Apply overcoat sealant (Material No. P08-073 or alternative) over the flanges and rivet heads, and around the drain fitting (3) as shown in Figure 2 (Sheet 3, View E).
- (g) Remove unwanted sealant with absorbent paper (Material No. P02-031) made moist with isopropyl alcohol (Material No. P01-011).

**(7) Install the four new nut plates. Refer to Figure 2 (Sheet 3)**

**NOTE:** The procedure to install each of the nut plates is the same.

- (a) Put a new nut plate (4) (P/N 938.43.05.201) in position on the inner surface of the wing fairing U-Channel (1) and align the holes.
- (b) Install a gripper pin (or equivalent) in the center hole to hold the nut plate (4) in the correct position.
- (c) Install the two rivets (B) (P/N 939.31.87.255), from the outer surface, to attach the nut plate (4) to the wing fairing U-Channel (1).
- (d) Remove the gripper pin (or equivalent).
- (e) Do the above procedure again to install the other nut plates (4).

**(8) Drill the two holes in the wing fairing, Frame 28. Refer to Figure 2 (Sheet 4)**

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**NOTE:** Refer to the manufacturers instructions for the necessary time for consumable materials to cure/dry.

- (a) Put the drilling template (5) (P/N 513.28.24.037) in position on Frame 28, as shown in Figure 2 (Sheet 4, View F), and make sure that the:
  - Drilling template (5) is fully against Frame 28
  - LH side of the drilling template (5) is fully against the Frame 28 fitting (6).
- (b) If necessary, use a clamp (or equivalent) to hold the drilling template (5) in position.

**NOTE:** Use the empty holes in the drilling template as a template to drill the two 4,30 mm holes in Frame 28.

- (c) Use a 4,30 diameter drill bit and drill the two holes (through the empty holes in the drilling template) in Frame 28.
- (d) If installed, remove the clamp (or equivalent) and remove the drilling template (5) from Frame 28.
- (e) Remove any unwanted material and remove all sharp edges.
- (f) Use absorbent paper (Material No. P02-031) made moist with isopropyl alcohol (Material No. P01-011) and clean the area in and around the two holes.
- (g) Let the isopropyl alcohol dry.
- (h) Apply alodine 1132 (Material No. P07-021) as necessary to the bare metal surfaces of each hole. Refer to AMM, PC24-A-E20-40-0010-00A-913A-A.

- (i) Let the alodine dry.
- (j) Apply primer (Material No. P07-007) as necessary to each hole.
- (k) Let the primer dry.
- (l) Prepare the new 14,00 mm diameter mating surfaces on Frame 28 for electrical bonding. Refer to:
  - Figure 2 (Sheet 4, View G)
  - AMM, PC24-A-E20-60-0005-00A-913A-A.

**(9) Install the new RH underwing stringer. Refer to Figure 2 (Sheet 5)**

**WARNING:** BE CAREFUL WHEN YOU USE THE CONSUMABLE MATERIALS. OBEY THE MANUFACTURERS' HEALTH AND SAFETY INSTRUCTIONS.

**NOTE:** Refer to the manufacturers instructions for the necessary time for consumable materials to cure/dry.

- (a) Install the new anti-chafe tape (P/N 917.73.17.060) on the new RH underwing stringer (15) (P/N 553.51.24.239). Refer to:
  - Figure 2 (Sheet 5, View K) for the installation positions and dimensions
  - AMM, PC24-A-E20-50-0001-01A-913A-A.
- (b) If necessary, apply a thin layer of grease (Material No. P04-041) to the threads of the 19 bolts (10) and the two bolts (16).
- (c) Put the new RH underwing stringer (15) (P/N 553.51.24.239) in position between the:
  - Wing fairing fwd-spar (12)
  - Wing fairing rear-spar (7)
  - LH and RH Rib 2 angle (9) and (8).
- (d) Loosely install the 19 washers (11), the 19 bolts (10), the 19 washers (13) and the 19 nuts (14) in the position that you recorded in the removal procedure. Use new nuts (14) (P/N 938.07.68.404) where necessary.
- (e) Clean the mating surfaces for the electrical bonding on the:
  - Bonding mount (18)
  - RH Rib 2 angle (8)
  - Wing fairing rear-spar (7).

Refer to AMM, PC24-A-E20-60-0005-00A-913A-A.



**NOTE:** When you apply the sealant, refer to the manufacturer's instructions for the time to cure. Complete steps (f) thru (j) before the sealant has cured.

- (f) Apply a thin layer of electrically conductive sealant (Material No. P08-070) to the mating surfaces of the:
- Bonding mount (18)
  - RH Rib 2 angle (8)
  - Wing fairing rear-spar (7).
- (g) Put the bonding mount (18) in position on the RH Rib 2 angle (8) and the wing fairing rear-spar (7).
- (h) Loosely install the two washers (17), the two bolts (16), the two washers (19) and the two nuts (20) in the position that you recorded in the removal procedure. Use new nuts (20) (P/N 938.07.68.404) where necessary.
- (i) Torque the 19 bolts (10) and the two bolts (16), plus the run-down torque. Refer to AMM, PC24-A-E20-20-0001-00A-040A-A.
- (j) Remove unwanted sealant with absorbent paper (Material No. P02-031) made moist with isopropyl alcohol (Material No. P01-011).

**(10) Install the two new silk screen markings. Refer to Figure 2 (Sheet 8 and 9)**

**WARNING:** BE CAREFUL WHEN YOU USE THE CONSUMABLE MATERIALS. OBEY THE MANUFACTURERS' HEALTH AND SAFETY INSTRUCTIONS.

**CAUTION:** Do not prepare more paint than necessary. The paint will become hard very quickly. Refer to the manufacturers instructions to prepare the paint.

**NOTE:** The procedure to install each of the silk screen markings is the same.

- (a) Prepare the paint. Use the paint, as applicable, to get the correct contrast for the aircraft paint scheme:
- Paint, white (Material No. P07-010) (if necessary)
  - Paint, grey (Material No. P07-010) (as applicable)
  - Paint, hardener (Material No. P07-010)
  - Paint, retarder (Material No. P07-010)
  - Paint, thinners (Material No. P07-010).
- (b) Make sure that the screen printing frame and the coating blade are clean.
- (c) Make sure that the silk screens are free of paint residues, cracks and there is no damage.
- (d) Find the applicable position to install the new silk screen marking on the:
- Wing fairing U-Channel (1). Refer to the measurements given in Figure 2 (Sheet 8, View R).

OR

- ADF ground-plane assembly (2) (If ADF factory option installed only). Refer to the measurements given in Figure 2 (Sheet 9, View S).
- (e) Put the new silk screen (35) (P/N 511.20.24.152) in position in the screen printing frame.
- (f) Put the screen printing frame in position on the aircraft.
- (g) Apply a thick layer of the paint across one end of the screen printing frame.
- (h) Use a coating blade to apply the paint. Hold the coating blade at approximately 45 degrees from vertical and apply an even layer of paint over the silk screen. Do not use pressure.
- (i) Hold the coating blade at approximately 15 degrees from vertical. Apply hand pressure to the coating blade and apply the paint to the silk screen in one smooth stroke.
- (j) Let the paint dry and remove the screen printing frame.
- (k) Do the above procedure again (Step **(10)**(a) thru Step **(10)**(j)) to install the other silk screen marking (35) as necessary.

**(11) Install the new fuel drain pipe and the fuel drain hoses. Refer to Figure 2 (Sheet 6 and 7)**

**WARNING:** BE CAREFUL WHEN YOU USE THE CONSUMABLE MATERIALS. OBEY THE MANUFACTURERS' HEALTH AND SAFETY INSTRUCTIONS.

- (a) Put the new fuel drain pipe (23) (P/N 528.50.24.118) approximately in position:
- From the wing fairing fwd-spar (12)
  - Through the holes in the wing fairing rear-spar (7) and Frame 28
  - Against the RH underwing stringer (15).
- (b) At the RH underwing stringer (15):
- 1 Apply a thin layer of grease (Material No. P04-041) to the threads of the six new screws (29) (P/N 932.35.10.067).
  - 2 Loosely install the items that follow to attach the fuel drain pipe (23) to the brackets on the RH underwing stringer (15):
    - Six new clamps (24) (P/N 946.31.05.117)
    - Six new washers (28) (P/N 938.77.11.111)
    - Six new screws (29) (P/N 932.35.10.067).
  - 3 Make sure that the fuel drain pipe (23) is in a position so that it does not touch the wing fairing rear-spar (7) and Frame 28.
  - 4 Torque the six screws (29) plus the run-down torque. Refer to AMM, PC24-A-E20-20-0001-00A-040A-A.

- (c) At Frame 28:
- 1 Clean the mating surface for electrical bonding on:
    - Frame 28
    - One of the new locking rollers (25) (P/N 532.30.21.018).Refer to AMM, PC24-A-E20-60-0005-00A-913A-A.
  - 2 Apply a thin layer of grease (Material No. P04-041) to the threads of the two new screws (21) (P/N 932.35.10.073).
  - 3 Loosely install the items that follow to attach the fuel drain pipe (23) to Frame 28:
    - Two new locking rollers (25) (P/N 532.30.21.018)
    - Two new clamps (24) (P/N 946.31.05.117)
    - Two new washers (22) (P/N 938.77.11.111)
    - Two new screws (21) (P/N 932.35.10.073)
    - Two new washers (26) (P/N 938.77.11.111)
    - Two new nuts (27) (P/N 938.07.68.513).
  - 4 Torque the two nuts (27) plus the run-down torque. Refer to AMM, PC24-A-E20-20-0001-00A-040A-A.
  - 5 Apply Corrosion Preventative Compound (CPC) (Material No. P10-013) on any bare metal surfaces (at the 14,00 mm electrical bonding surface) on Frame 28.
- (d) Put two new hose clamps (31) (P/N 946.33.21.704) on the new fuel drain hose (front) (32) (P/N 528.50.24.116).
- (e) Connect the new fuel drain hose (front) (32) to the slider shroud drain-fitting (30).
- (f) Put the fuel drain hose (front) (32) through the hole in the wing fairing fwd-spar (12) and connect it to the fuel drain pipe (23).
- (g) Move the two hose clamps (31) in to position and tighten them.
- (h) Put two new hose clamps (31) (P/N 946.33.21.704) on the new fuel drain hose (rear) (33) (P/N 528.50.24.117).
- (i) Install the wing fairing U-Channel (143ABZ) (1). Use the same attachment fasteners that you removed, in the same positions that you recorded. Refer to AMM, PC24-A-A06-40-0000-00A-040A-A.
- (j) Connect the new fuel drain hose (rear) (33) to the 5-way drain fitting (3) and the fuel drain pipe (23).
- (k) Move the two hose clamps (31) in to position and tighten them.
- (l) Remove the blanking cap from each of the four fuel drain hoses (34).

- (m) Put a new hose clamp (31) (P/N 946.33.21.704) on each of the four fuel drain hoses (34).
- (n) Connect the four fuel drain hoses (34) to the 5-way drain fitting (3).
- (o) Move the four hose clamps (31) in to position and tighten them.
- (p) Do a check to make sure that the fuel drain pipe (23), the front and rear drain hoses (32) and (33) and all of the hose clamps (31) are correctly installed.

**(12) Install the new drain mast. Refer to Figure 2 (Sheet 8 and 9)**

**WARNING:** BE CAREFUL WHEN YOU USE THE CONSUMABLE MATERIALS. OBEY THE MANUFACTURERS' HEALTH AND SAFETY INSTRUCTIONS.

- (a) For aircraft with the ADF factory option installed:
  - 1 Close/install the access panels/fairings in Table 2. Refer to AMM, PC24-A-A06-40-0000-00A-040A-A and PC24-A-E53-10-0002-00A-720A-A.

**Table 2: Access panels/fairings to be closed/installed**

Panel number	Panel name
143ABL	Panel, wing fairing, MLG, FWD, LH
143ABR	Panel, wing fairing, MLG, FWD, RH

- 2 Install the ADF ground plane assembly on the aircraft. Refer to AMM, PC24-A-E53-10-0002-00A-720A-A.

**NOTE:** When you do the installation procedure referenced below, it is not necessary to do the operation test of the ADF 1 antenna at this time. The instruction to do the operation test is given later in this Service Bulletin.

- 3 Install the ADF 1 antenna. Refer to AMM, PC24-A-E34-45-0001-00A-720A-A.
- (b) Apply a thin layer of grease (Material No. P04-041) to the threads of the four new screws (38) (P/N 933.71.61.308).
  - (c) Put the new gasket (36) (P/N 528.22.24.113) and the new drain mast (37) (P/N 528.22.24.115) in position on the:
    - Wing fairing U-Channel (1). Refer to Figure 2 (Sheet 8, View R).

OR

    - ADF ground-plane assembly (2) (If ADF factory option installed only). Refer to Figure 2 (Sheet 9, View S).
  - (d) Loosely install the four new screws (38) to attach the drain mast (37).
  - (e) Torque the four screws (38) plus the run-down torque. Refer to AMM, PC24-A-E20-20-0001-00A-040A-A.

**C. Requirements after job completion**

- (1) If you removed/installed the ADF 1 antenna, do the operation test. Refer to AMM, PC24-A-E34-45-0001-00A-320A-A.
- (2) Make sure that the work area is clean and clear of tools and other items.
- (3) Close/Install the access panels/fairings in Table 3. Refer to AMM, PC24-A-A06-40-0000-00A-040A-A and PC24-A-E53-10-0002-00A-720A-A.

**Table 3: Access panels/fairings to be closed/installed**

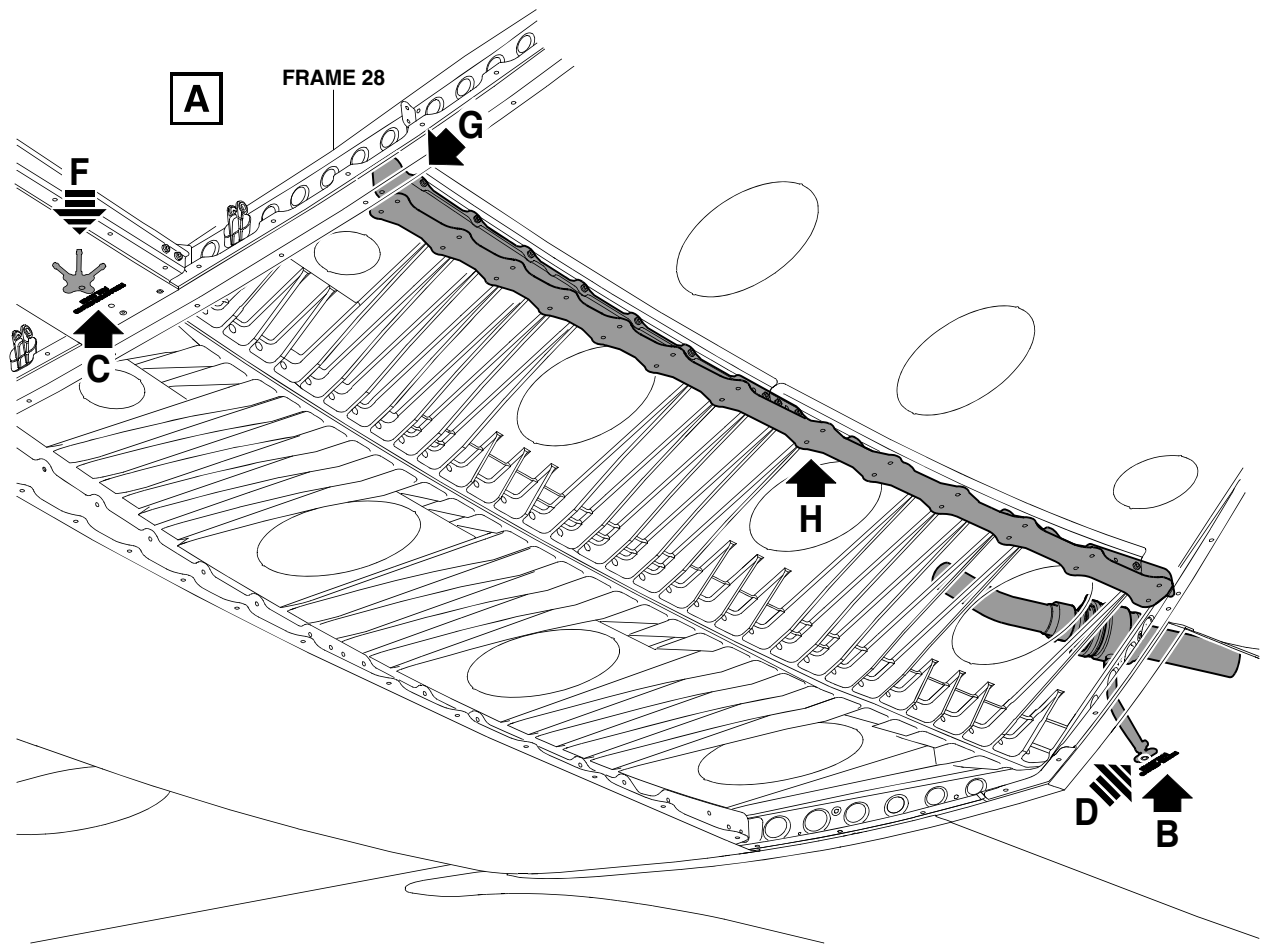
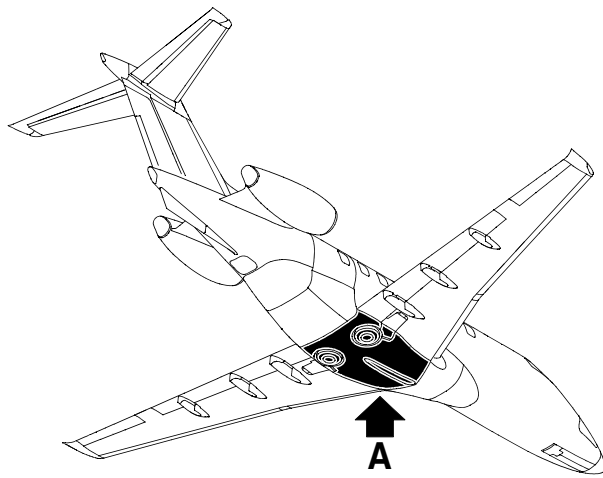
Panel number	Panel name
141BB	Access panel FWD
141BR	Panel, wing fairing FWD aft, RH
142AB	Panel, underwing
142ABR	Panel, wing fairing, underwing, RH
143ABL	Panel, wing fairing, MLG, FWD, LH (If necessary)
143ABR	Panel, wing fairing, MLG, FWD, RH (If necessary)

- (4) Remove all warning placards from the aircraft.

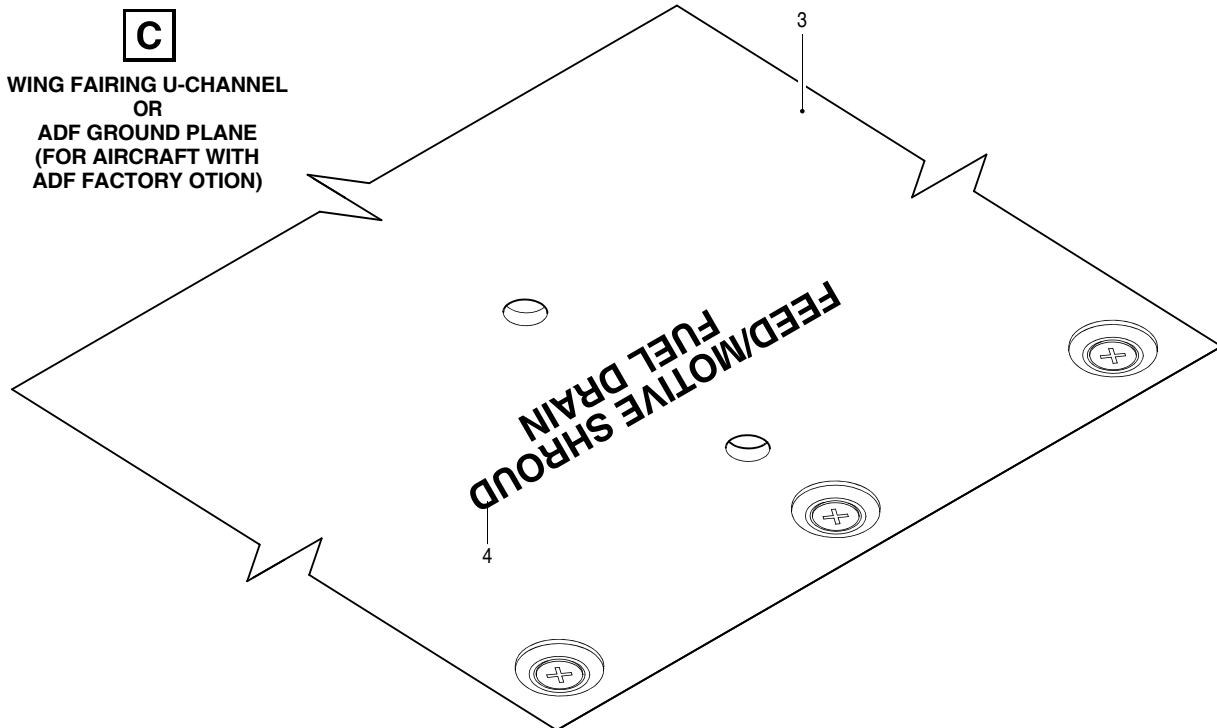
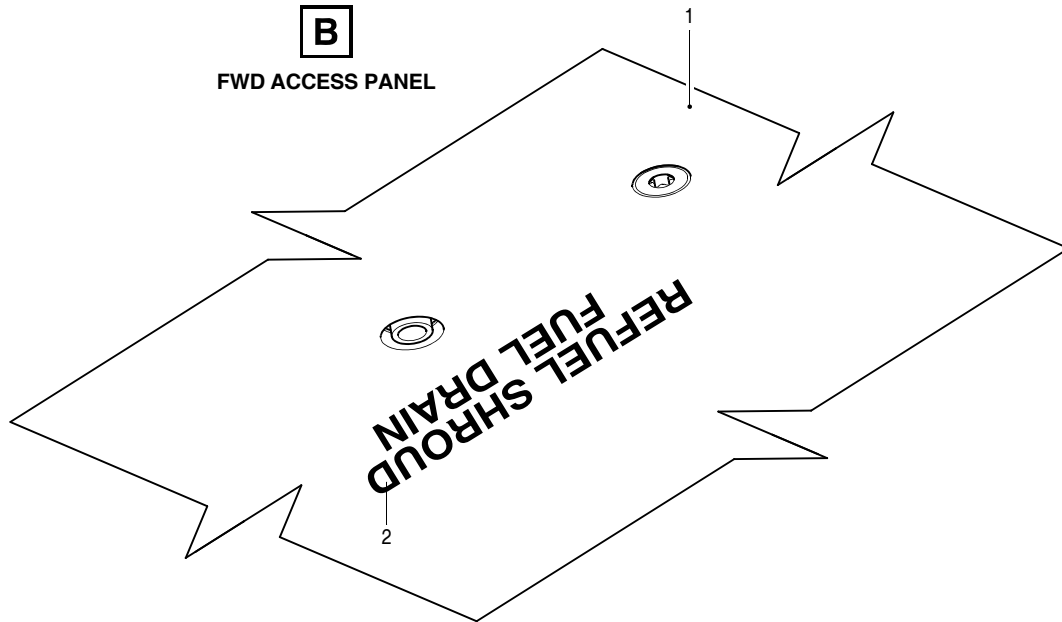
**D. Documentation**

- (1) Make sure that you have the latest Issue and Revision of AFM 02371.
- (2) Make an entry in the Aircraft Logbook and AFM 02371 to record the incorporation of this Service Bulletin.
- (3) Make sure that the Aircraft Logbook shows any new Pilatus Part Number(s) and/or Serial Number(s), as applicable.
- (4) Inform CAMP of the incorporation of this Service Bulletin and any new Pilatus Part Number(s) and/or Serial Number(s), as applicable. Send to: [fax@campsystems.com](mailto:fax@campsystems.com)

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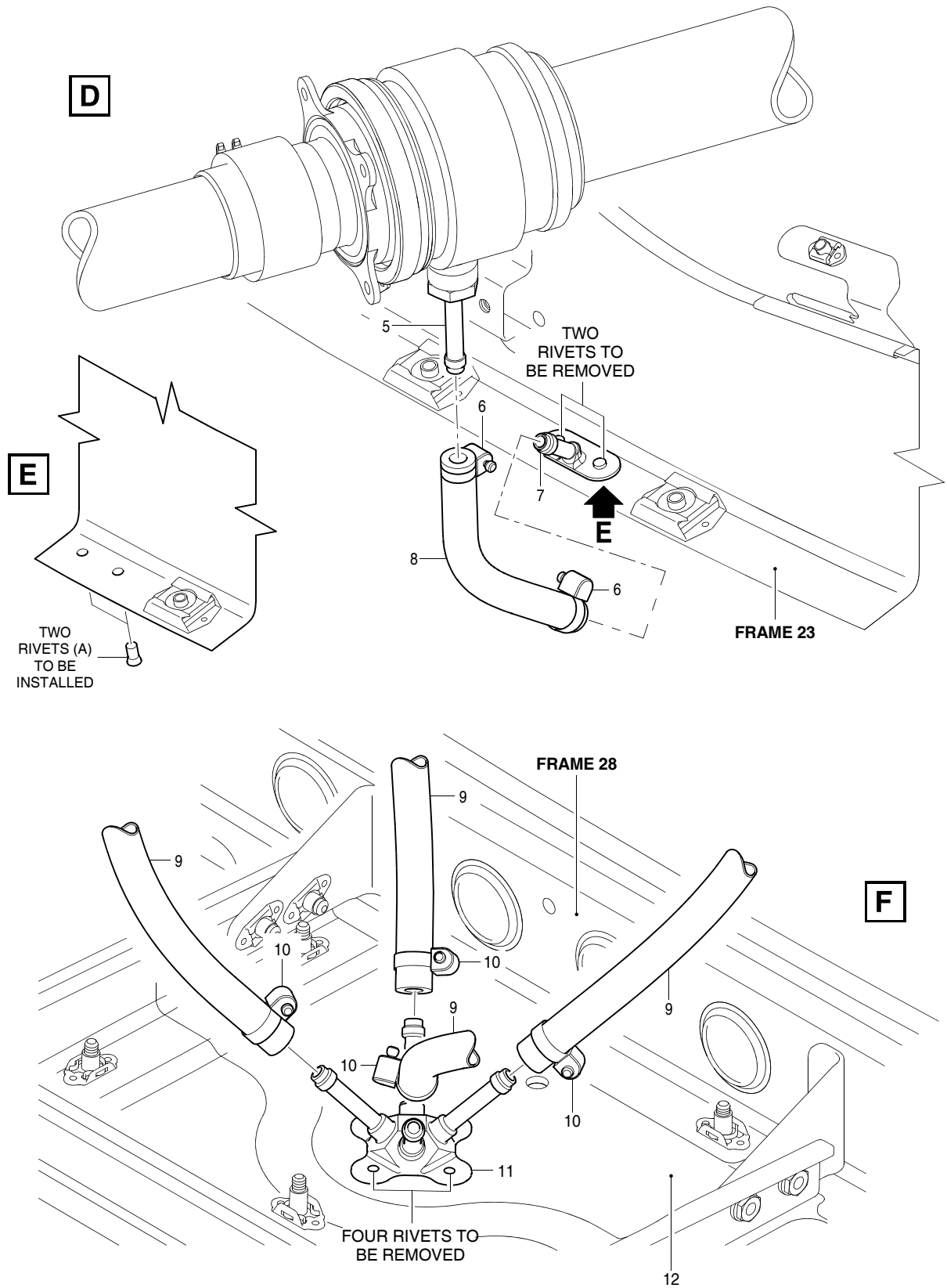
Fuel drain mast and refuel/defuel drain pipe integration  
Figure 1 (Sheet 1 of 4)



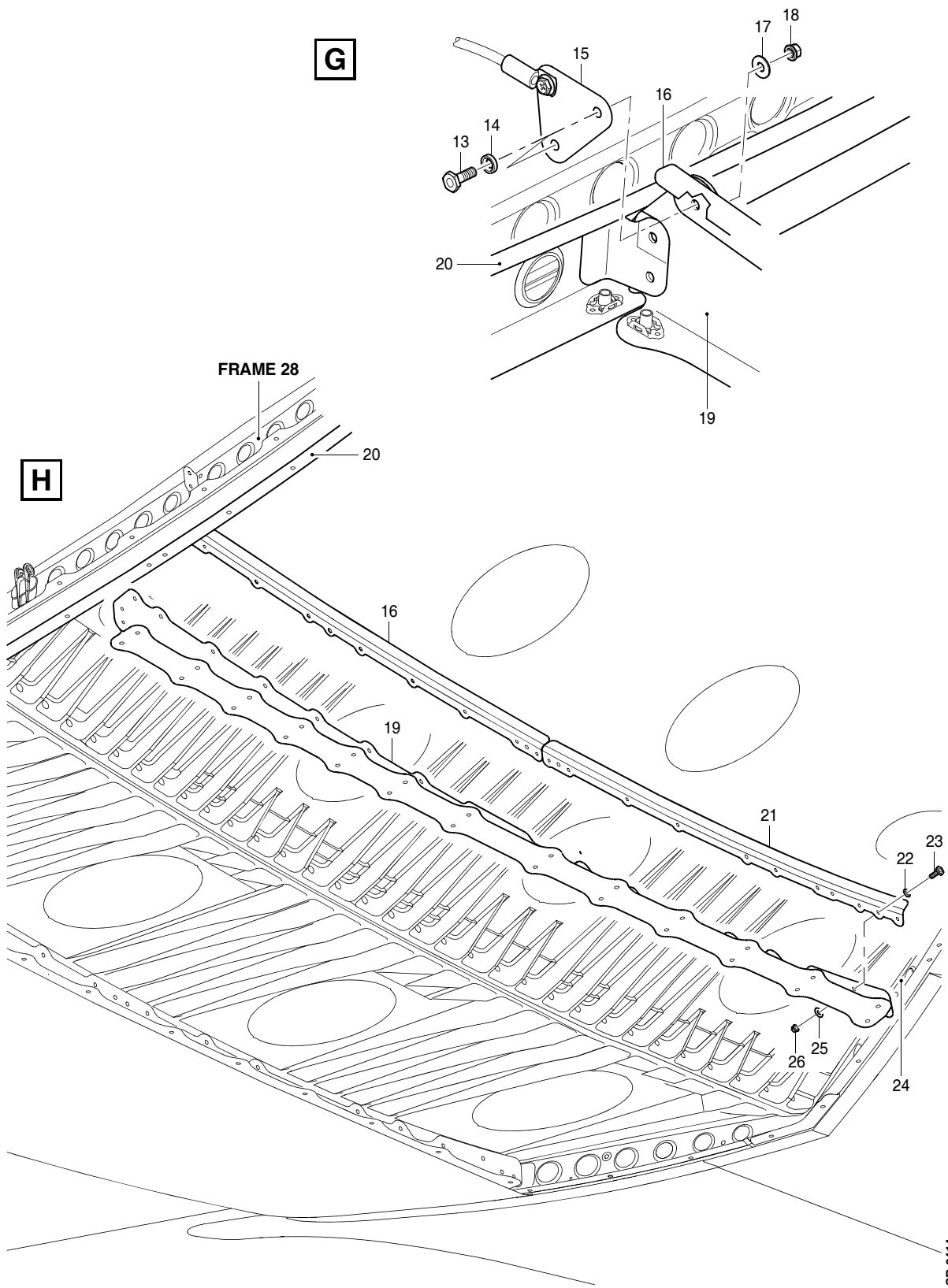
Fuel drain mast and refuel/defuel drain pipe integration  
Figure 1 (Sheet 2 of 4)

SB 3412



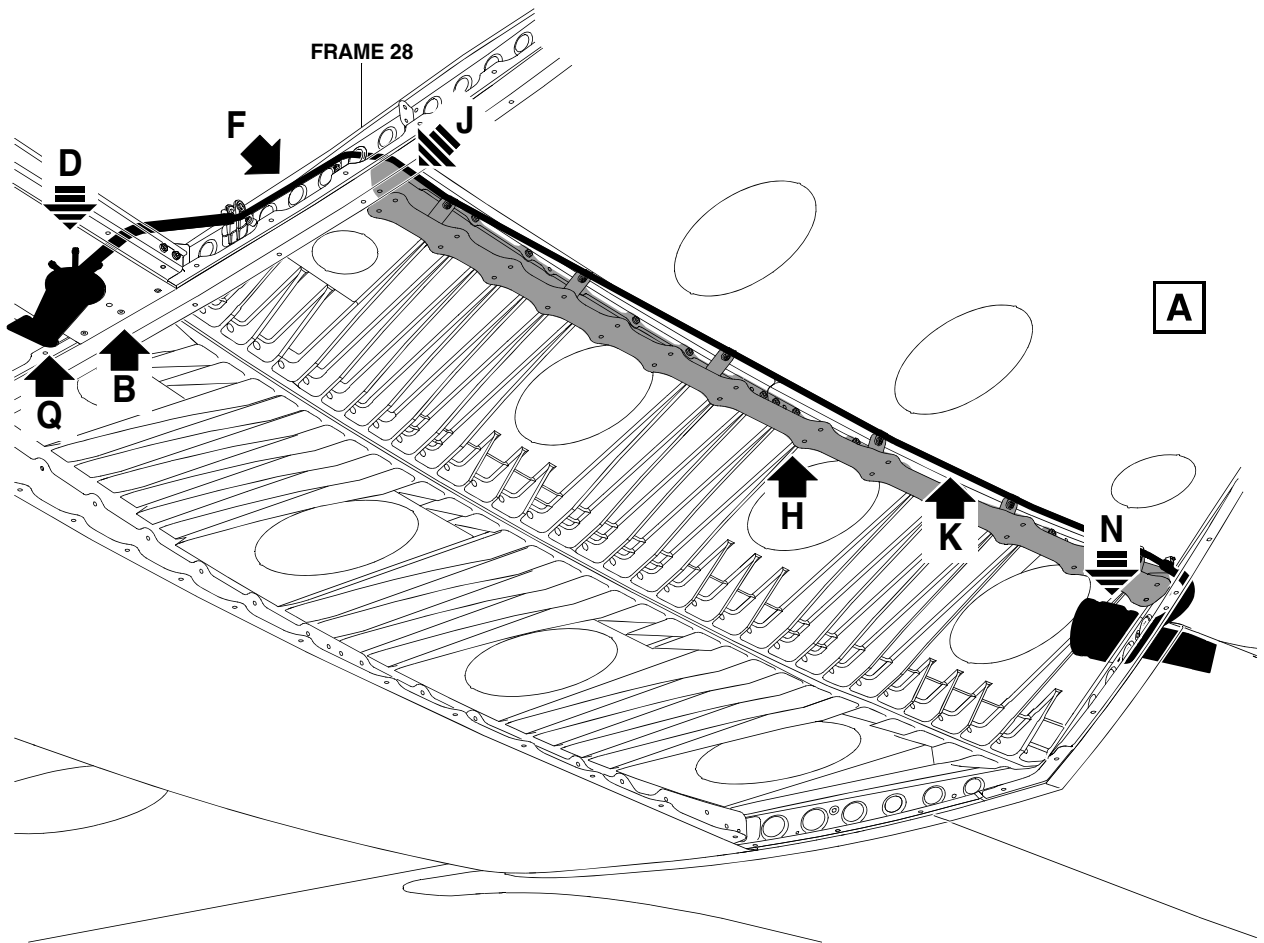
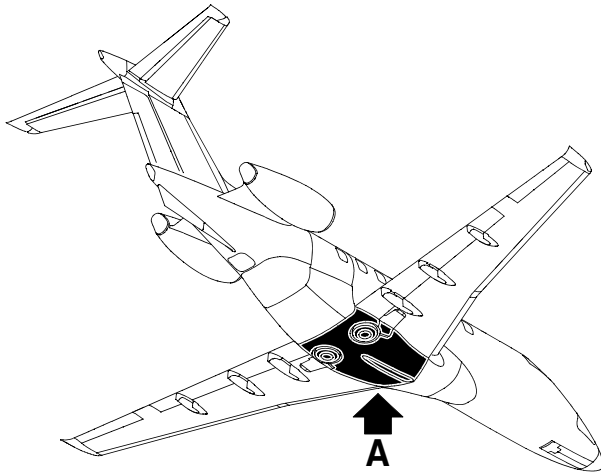


Fuel drain mast and refuel/defuel drain pipe integration  
Figure 1 (Sheet 3 of 4)

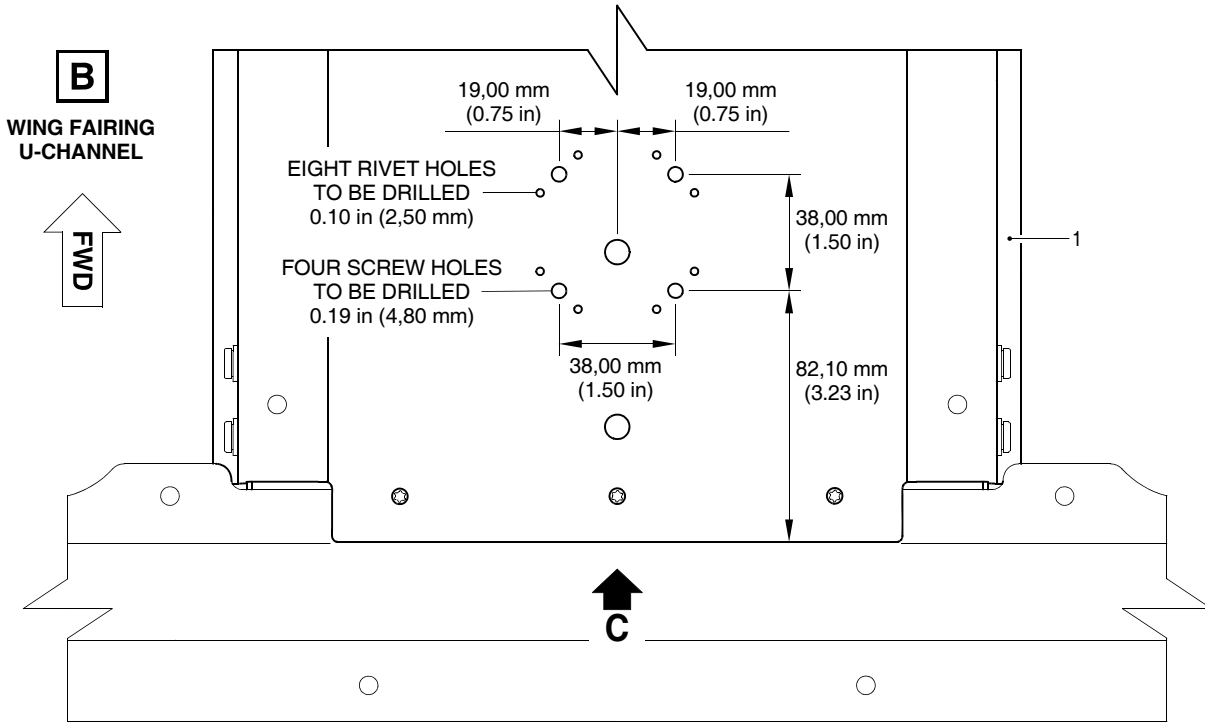


SB 3414

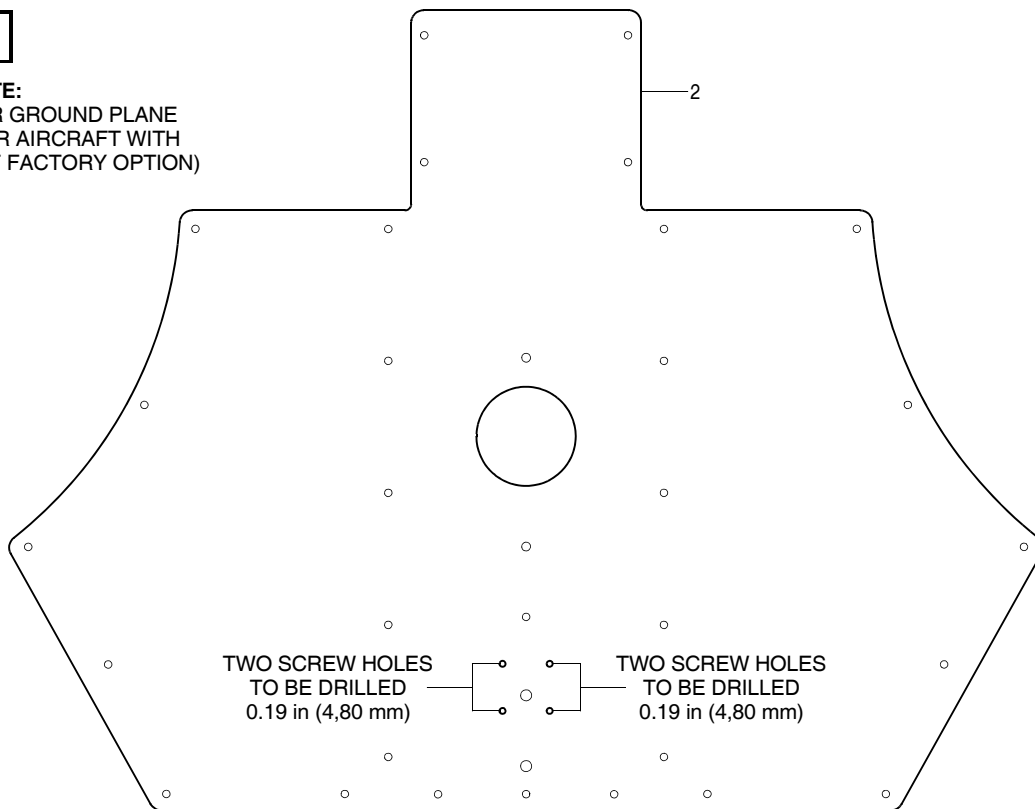
Fuel drain mast and refuel/defuel drain pipe integration  
Figure 1 (Sheet 4 of 4)



Fuel drain mast and refuel/defuel drain pipe integration  
Figure 2 (Sheet 1 of 9)



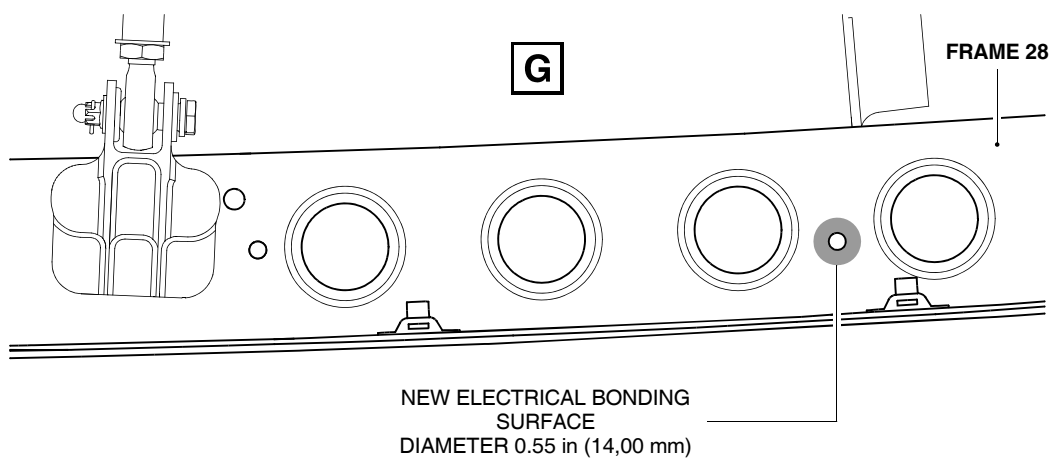
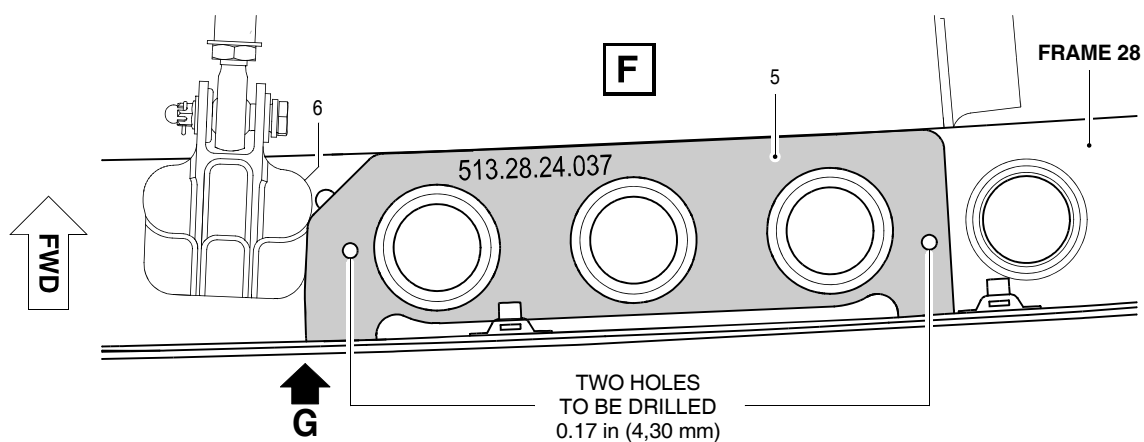
**C**  
**NOTE:**  
ADR GROUND PLANE  
(FOR AIRCRAFT WITH  
ADF FACTORY OPTION)



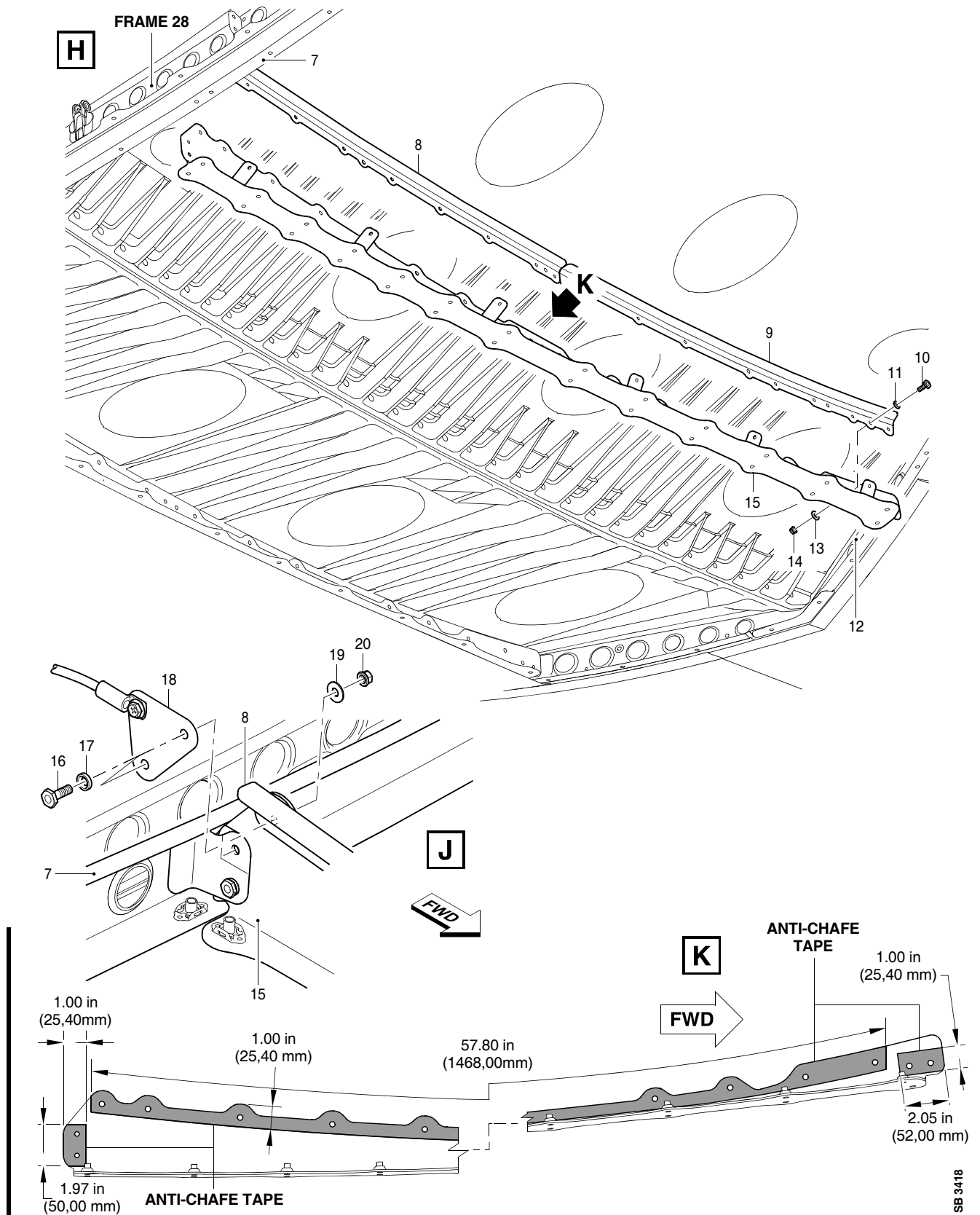
SB 3416

Fuel drain mast and refuel/defuel drain pipe integration  
Figure 2 (Sheet 2 of 9)

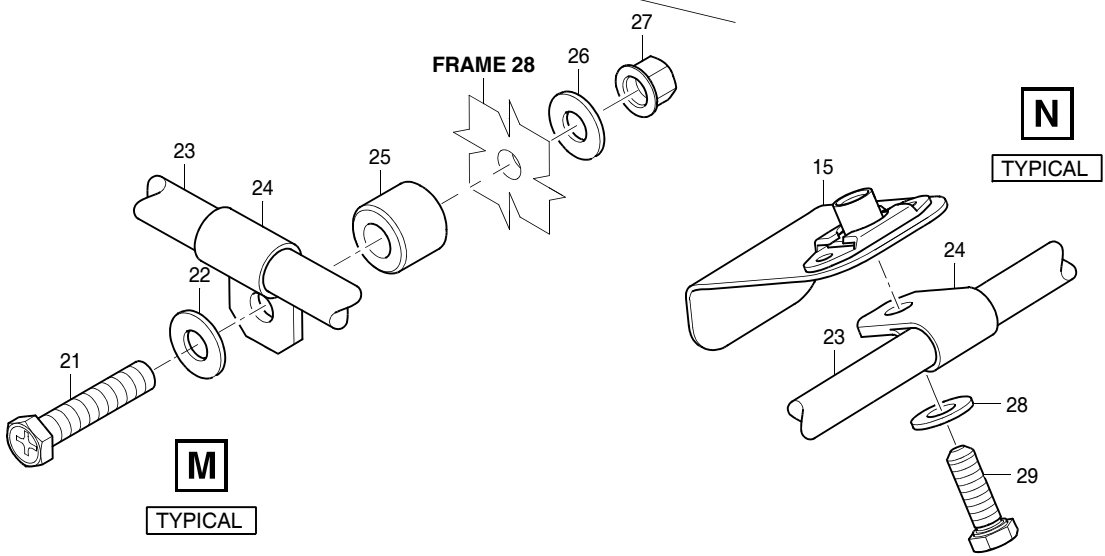
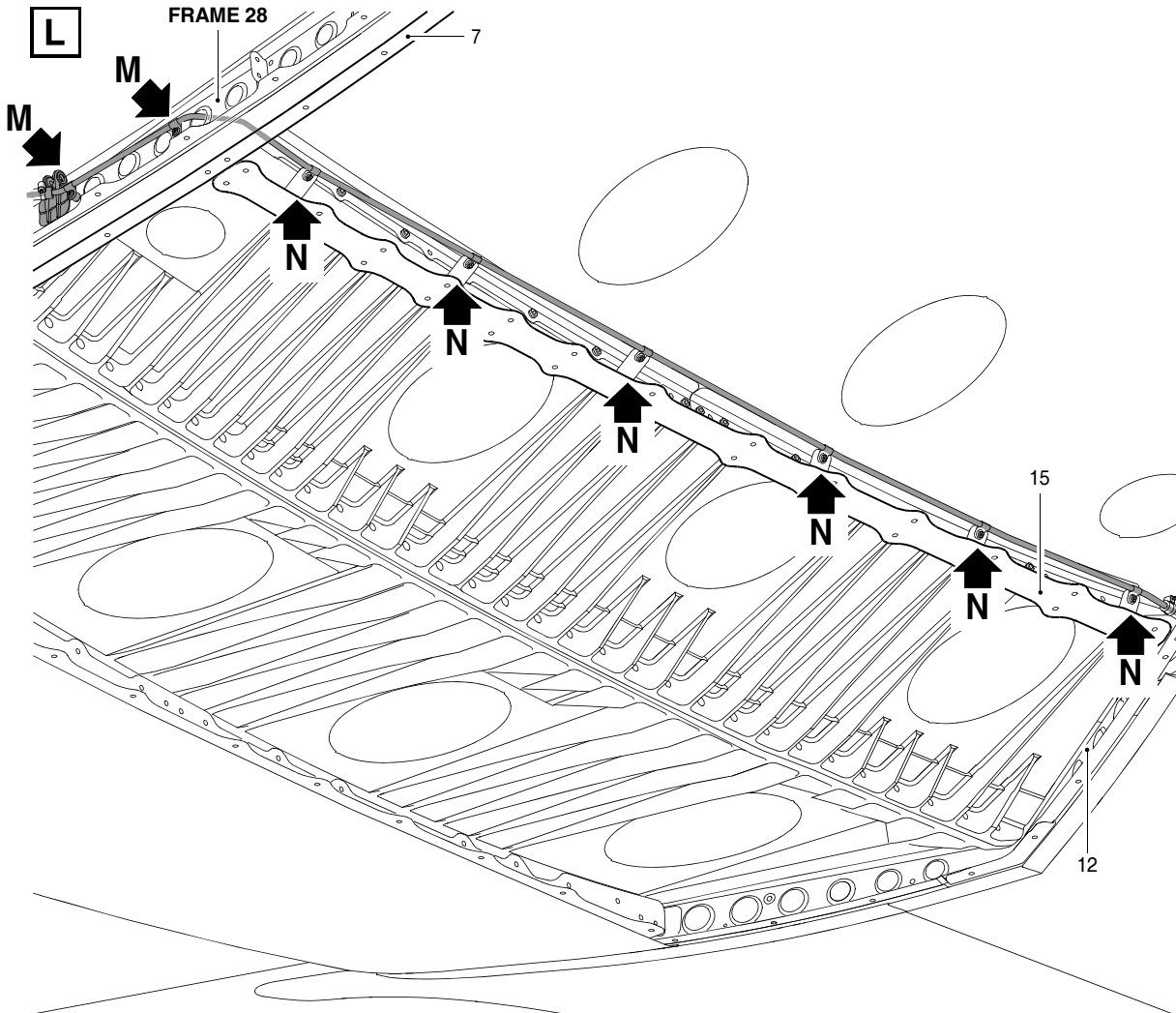




Fuel drain mast and refuel/defuel drain pipe integration  
Figure 2 (Sheet 4 of 9)



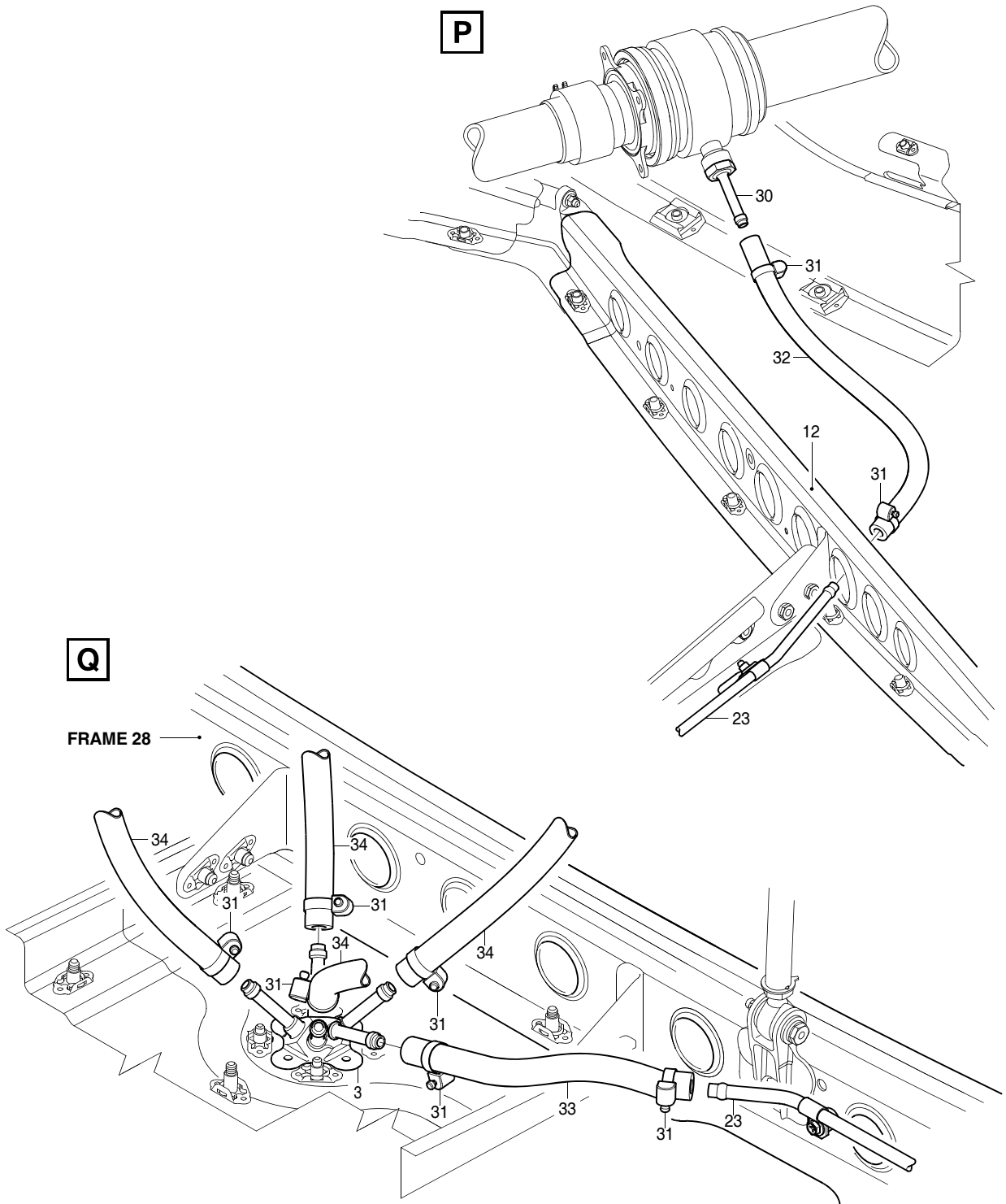
Fuel drain mast and refuel/defuel drain pipe integration  
Figure 2 (Sheet 5 of 9)



Fuel drain mast and refuel/defuel drain pipe integration  
Figure 2 (Sheet 6 of 9)

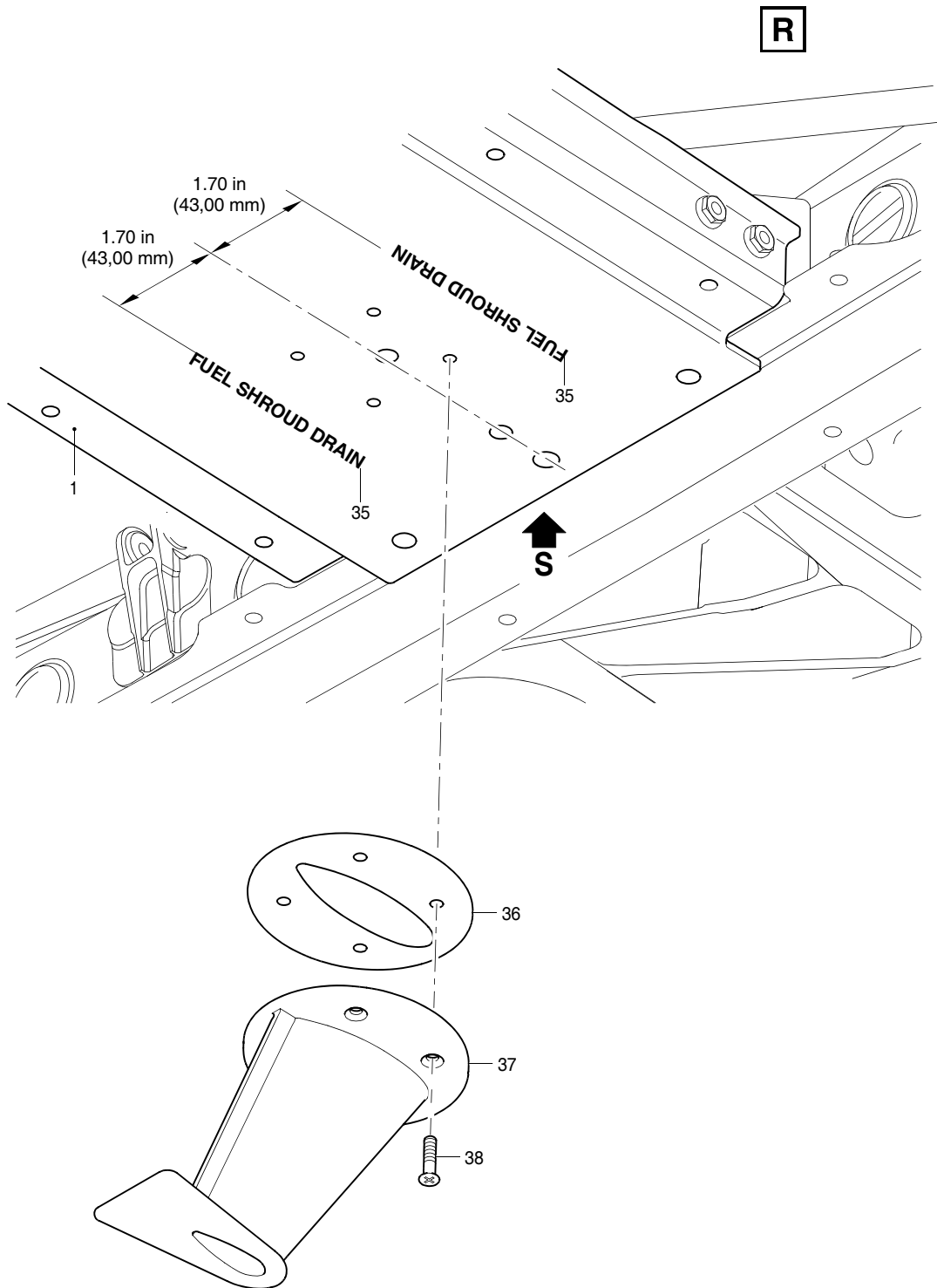
SB 3419





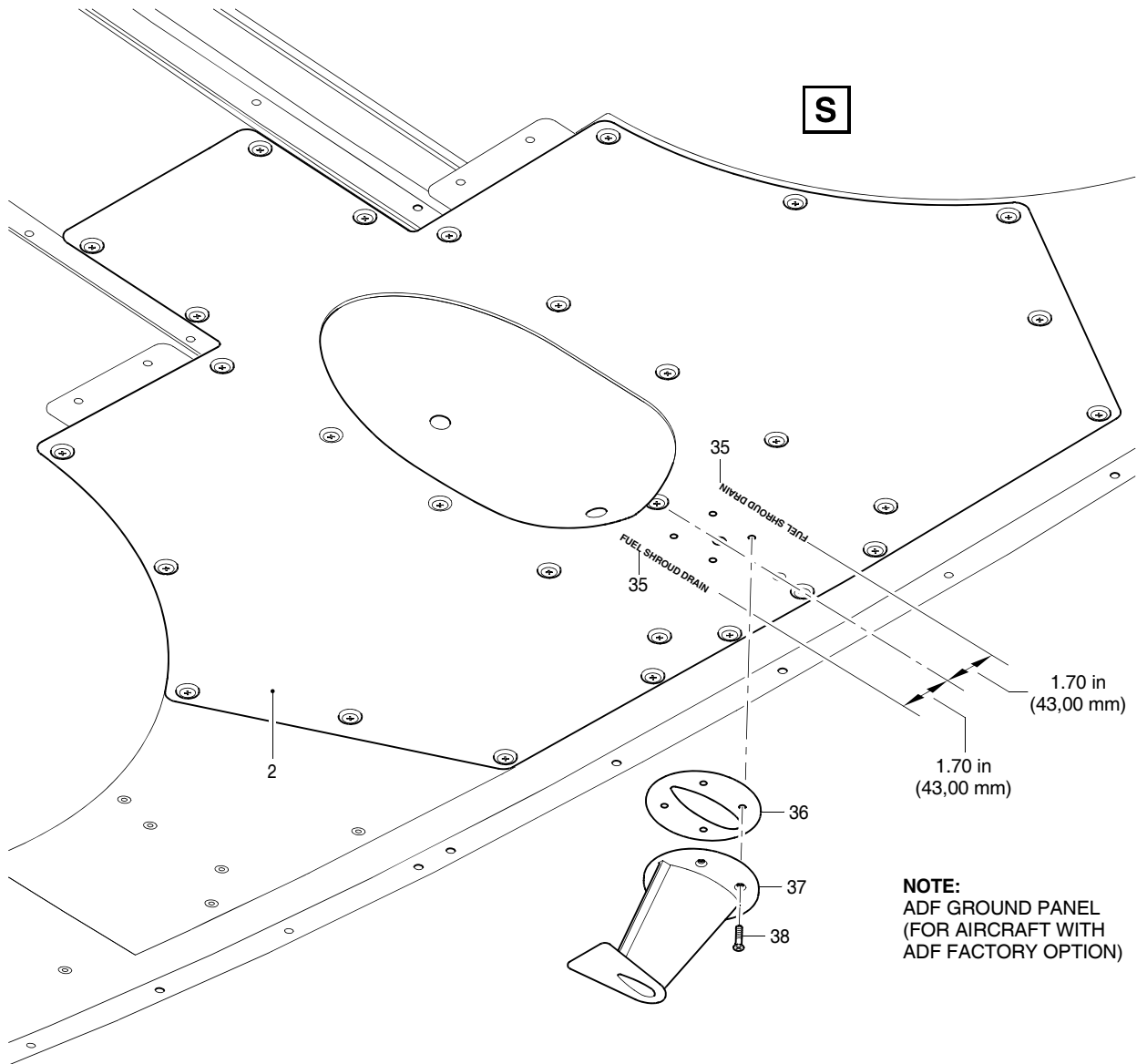
SB 3420

Fuel drain mast and refuel/defuel drain pipe integration  
Figure 2 (Sheet 7 of 9)



Fuel drain mast and refuel/defuel drain pipe integration  
Figure 2 (Sheet 8 of 9)

SB 3421



Fuel drain mast and refuel/defuel drain pipe integration (ADF factory option only)  
Figure 2 (Sheet 9 of 9)

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