

Project No: **BDHRN002**Job Card No **0063**

Notif.No.: 10049065

Activity: **1002**

Rev No: 20000622

Model.: F900EX

Sheet 1 of 1

A/C Regn: **D-AHRN**

Serial No.: 096

Type: F900EX

Starting Phase: Routine

Starting Work Centre: FALCON A/C TEAM

**Job Description: CLN Sterilize Potable Water System**

ETOPS A/C: No

RVSM A/C: No

Warranty: -

ATA: 38

Check Type: 1A+ Inspection

Work Center	
FALCON A/C	

**Zone:** 200,300**Access Required for this task:**

BAG,PAX

## Corrective Action

0001	<b>Task carried out in accordance with the attached Customer Card that quotes the Operator code detailed below.</b>					  Order: 80069274 Operation: 0010 Phase: Routine - scheduling activity Work Center:FALCON A/C TEAM
	Accomplished		Inspected			
	Pers. No.	Date	Pers. No.	Date		
	Stamp		Stamp			

Completed & Confirmed on SAP IAW MOE 2.13.

**Defect Card Raised**

## Components Removed/Installed

	Part Number	Part Name	S/N	Location	Comm. Off/On
OFF					
ON					
OFF					
ON					
OFF					
ON					
OFF					
ON					

Occurance Report Raised? YES ☐

Operations Above &amp; Notifications Completed IAW MOE 2.13.

OEM Code: 38-10-00-670-801

Operator Code: 38-10-00-670-801-01

Form No: JA-SAP-MTX-002

Printed by: ADAMOVIC G



Printed: 03.09.2012

13:34:17

Print No: 1

Operator: **HERON AVIATION**

Work Card No.: **38.020**

Serial No.: **096**

Model: **FALCON 900EX**

**PKG # 12 2A+ INSPECTION**

Reg No.: **D-AHRN**

Workorder No.: \_\_\_\_\_

	Date	A/C HRS	AFL	APH			
Due At	<b>25-NOV-2012</b>						
Accomplished							

TECHNICIAN SIGNATURE: \_\_\_\_\_ KIND OF CERTIFICATE & NO.: \_\_\_\_\_

INSPECTED BY: \_\_\_\_\_ KIND OF CERTIFICATE & NO.: \_\_\_\_\_

TECH	INSP	LABOR-HRS HRS.MINS
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**>38-10-00-670-801- STERILIZATION OF THE POTABLE WATER SYSTEM  
01**

REMARKS : \_\_\_\_\_

AMM 38-10-00-670-801

# FALCON 900EX AIRCRAFT MAINTENANCE MANUAL

## TASK 38-10-00-670-801 STERILIZATION OF THE POTABLE WATER SYSTEM

**WARNING: IT IS MANDATORY TO OBSERVE THE SPECIFIED QUANTITIES OF PRODUCTS WHEN PREPARING THE DISINFECTING SOLUTION.**

### 1. OVERVIEW OF THE JOB

Operation code: 38-10-00-670-801-01

NOTE 1: The potable water tank capacity is 55 liters (14.5 USG).

NOTE 2: The two drain containers located under the front and the rear drain masts must be removed only at the end of this procedure.

### 2. LOGISTICS

#### A. References

Reference	Designation
• <a href="#">20-31-00-910-803</a>	USE OF THE PUROGENE PRODUCT
• <a href="#">24-00-00-860-801</a>	ENERGIZATION / DE-ENERGIZATION OF THE AIRCRAFT
• <a href="#">38-10-00-610-801</a>	PRESSURE REFILLING OF THE POTABLE WATER SYSTEM
• <a href="#">38-10-00-610-802</a>	GRAVITY REFILLING OF THE POTABLE WATER SYSTEM
• <a href="#">38-10-00-680-801</a>	DRAINING OF THE POTABLE WATER SYSTEM
• <a href="#">38-13-01-960-801</a>	REPLACEMENT OF THE MAIN FILTER CARTRIDGE
• <a href="#">38-31-13-960-801</a>	REPLACEMENT OF THE GALLEY WATER FILTER

#### B. Tools and Ground Support Equipment

Reference	Designation	Quantity
• <a href="#">F7XC202000008</a>	TOOL BOX	

#### C. Ingredients and Consumable Products

Designation	Additional designation
• <a href="#">WATER STERILIZATION PRODUCT</a>	

#### D. Energy

- ELECTRICAL
- PNEUMATIC

#### E. Access

Reference	Designation
• <a href="#">BAG</a>	BAGGAGE COMPARTMENT DOOR
• <a href="#">PAX</a>	PASSENGER DOOR

#### F. Miscellaneous

- DRAIN CONTAINER (LOCAL PROCUREMENT) (QTY : 2)
- FUNNEL (LOCAL PROCUREMENT)
- CONTAINER WITH POURING SPOUT (LOCAL PROCUREMENT)

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- LP SOURCE OF AIR 7 BAR (100 PSI) (LOCAL PROCUREMENT)

### **3. STERILIZATION OF POTABLE WATER TANK (500MD) AND DELIVERY SYSTEM FOR A/C EQUIPPED WITH AN ELECTRIC PUMP**

Refer to **fig. 1** and **fig. 3**

- A. Drain the potable water system (Refer to [TASK 38-10-00-680-801](#)).
- B. In a container, prepare the disinfecting solution of **water sterilization product** as follows:
  - (1) 0.48 g (7.4 gr) diluted in 3 l (0.8 US gal) of potable water, if the calcium hypochlorite product is used.
  - (2) (Refer to [TASK 20-31-00-910-803](#)), paragraph "Sterilization and permanent use", if the purogene product is used.
- C. In the rear toilet compartment:
  - (1) Remove gravity filling plug (1).
  - (2) Pour the disinfecting solution in potable water tank (500MD) through the gravity filling port, using a funnel.
  - (3) Only if you use the purogene product:
    - (a) Replace the main filter cartridge of water filter (506MD) (Refer to [TASK 38-13-01-960-801](#)).
    - (b) Replace the front galley filter (Refer to [TASK 38-31-13-960-801](#)).
  - (4) Fill potable water tank (500MD) at least halfway with water while rinsing the gravity filling port (Refer to [TASK 38-10-00-610-802](#)).
  - (5) Fill potable water tank (500MD) by gravity (Refer to [TASK 38-10-00-610-802](#)) or under pressure (Refer to [TASK 38-10-00-610-801](#)).
- D. Connect the electrical power unit (Refer to [TASK 24-00-00-860-801](#), paragraph "Connection of the Electrical Ground Power Unit").
- E. Check that "GALLEY MASTER" (1HR) and "LAV MASTER" (21HR) circuit breakers are engaged.
- F. Energize the aircraft systems (Refer to [TASK 24-00-00-860-801](#), paragraph "Energization with the Electrical Ground Power Unit").
- G. Pressurize the potable water system as follows:
  - (1) Check that shut-off valve (505MD) is set to "OPEN".
  - (2) Press "WATER PUMP" switch/light (2MD) in the RH front galley.
  - (3) Prime electric pump (3MD) by opening the cold and hot water faucets in the rear toilet.
  - (4) When electric pump (3MD) is primed (automatic operation), successively open all the rear and the front hot and cold water faucets (coffee machine included) until water flows out.
  - (5) Close all the rear and the front faucets.
- H. If calcium hypochlorite is used:

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- (1) Wait half an hour for the disinfecting solution for **water sterilization product** to take effect.
  - (2) Drain the potable water system (Refer to **TASK 38-10-00-680-801**).
  - (3) Fill potable water tank (**500MD**) by gravity (Refer to **TASK 38-10-00-610-802**) or under pressure (Refer to **TASK 38-10-00-610-801**).
  - (4) Pressurize the potable water system as follows:
    - press "WATER PUMP" switch/light (**2MD**) in the RH front galley,
    - prime electric pump (**3MD**) by opening the cold and hot water faucets in the rear toilet,
    - when electric pump (**3MD**) is primed (automatic operation), successively open all the rear and the front hot and cold water faucets (coffee machine included) until water flows out,
    - allow the water to flow for 1 minute,
    - close all the rear and the front faucets.
  - (5) Drain the potable water system (Refer to **TASK 38-10-00-680-801**).
  - (6) Replace the main filter cartridge of filter (**506MD**) (Refer to **TASK 38-13-01-960-801**).
  - (7) Replace the front galley filter (Refer to **TASK 38-31-13-960-801**).
  - (8) Fill potable water tank (**500MD**) by gravity (Refer to **TASK 38-10-00-610-802**) or under pressure (Refer to **TASK 38-10-00-610-801**).
- I. De-energize the aircraft systems (Refer to **TASK 24-00-00-860-801**, paragraph "De-energization with the Electrical Ground Power Unit").
- J. Disconnect the electrical power unit (Refer to **TASK 24-00-00-860-801**, paragraph "Disconnection of the Electrical Ground Power Unit").
- K. Remove and empty the two drain containers.

#### **4. STERILIZATION OF POTABLE WATER TANK (500MD) AND DELIVERY SYSTEM FOR A/C EQUIPPED WITH PRESSURIZED AIR**

Refer to **fig. 2**

- A. Drain the potable water system (Refer to **TASK 38-10-00-680-801**).
- B. In a container, prepare the disinfecting solution of **water sterilization product** as follows:
- (1) 0.48 g (0.00106 lb) diluted in 3 l (0.8 US gal) of potable water, if the calcium hypochlorite product is used,
  - (2) (Refer to **TASK 20-31-00-910-803**), paragraph "Sterilization and permanent use", if the purogene product is used.
- C. In the rear toilet compartment:
- (1) Press the gravity filling plug to de-pressurize potable water tank (**500MD**).
  - (2) Rotate the gravity filling plug counterclockwise to open it.  
**NOTE:** A red indicator shows on the gravity filling plug when it is unlocked.
  - (3) Remove the gravity filling plug.

## FALCON 900EX AIRCRAFT MAINTENANCE MANUAL

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- (4) Pour the disinfecting solution in potable water tank (500MD) through the gravity filling port, using a funnel.
  - (5) Only if you use the purogene product:
    - (a) Replace the main filter cartridge of water filter (506MD) (Refer to [TASK 38-13-01-960-801](#)).
    - (b) Replace the front galley filter (Refer to [TASK 38-31-13-960-801](#)).
  - (6) Fill potable water tank (500MD) at least halfway with water while rinsing the gravity filling port (Refer to [TASK 38-10-00-610-802](#)).
  - (7) Fill potable water tank (500MD) by gravity (Refer to [TASK 38-10-00-610-802](#)) or under pressure (Refer to [TASK 38-10-00-610-801](#)).
- D. Pressurize the potable water tank system as follows:
- (1) on the control panel, check that "AIR SUPPLY" valve (608HU) is set to "ON".
  - (2) on the control panel, check on "WATER TANK PRESSURE" gauge (609HU) that the potable water tank is pressurized.
- NOTE: If potable water tank (500MD) is not pressurized (accumulator (605HU) discharged), pressurize it by connecting a source of dry compressed air to air supply charging valve (602HU), or by starting up the APU (see the Airplane Flight Manual).
- E. On the control panel, check that "VANITY WATER SUPPLY" valve (505MD) and "CABIN WATER SUPPLY" valve (531MD) are set to "ON".
- F. Bleed the potable water distribution system by opening the following faucets until the water flows out:
- rear washbasin mixer faucet (507MD),
  - the galley-mixer faucet (if any),
  - the front washbasin mixer faucet (if any).
- G. Close the following faucets:
- rear washbasin mixer faucet (507MD),
  - the galley-mixer faucet (if any),
  - the front washbasin mixer faucet (if any).
- NOTE: If purogene is used, it is not mandatory to drain then to fill the potable water system at the end of this paragraph "Sterilization of potable and delivery system".
- H. If calcium hypochlorite is used:
- (1) Wait half an hour for the disinfecting solution for **water sterilization product** to take effect.
  - (2) Drain the potable water system (Refer to [TASK 38-10-00-680-801](#)).
  - (3) Fill potable water tank (500MD) by gravity (Refer to [TASK 38-10-00-610-802](#)) or under pressure (Refer to [TASK 38-10-00-610-801](#)).
  - (4) Pressurize the potable water tank system as follows:
    - (a) on the control panel, check that "AIR SUPPLY" valve (608HU) is set to "ON".

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- (b) on the control panel, check on "WATER TANK PRESSURE" gauge (609HU) that the potable water tank is pressurized.
- NOTE: If potable water tank (500MD) is not pressurized (accumulator (605HU) discharged), pressurize it by connecting a source of dry compressed air to air supply charging valve (602HU), or by starting up the APU (see the Airplane Flight Manual).
- (5) On the control panel, check that "VANITY WATER SUPPLY" valve (505MD) and "CABIN WATER SUPPLY" valve (531MD) are set to "ON".
- (6) Bleed the potable water distribution system by opening the following faucets until the water flows out:
- rear washbasin mixer faucet (507MD),
  - the galley-mixer faucet (if any),
  - the front washbasin mixer faucet (if any).
- (7) Allow the water to flow for 1 minute.
- (8) Close the following faucets:
- rear washbasin mixer faucet (507MD),
  - the galley-mixer faucet (if any),
  - the front washbasin mixer faucet (if any).
- (9) Drain the potable water system (Refer to [TASK 38-10-00-680-801](#)).
- (10) Replace the main filter cartridge of filter (506MD) (Refer to [TASK 38-13-01-960-801](#)).
- (11) Replace the front galley filter (Refer to [TASK 38-31-13-960-801](#)).
- (12) Fill potable water tank (500MD) by gravity (Refer to [TASK 38-10-00-610-802](#)) or under pressure (Refer to [TASK 38-10-00-610-801](#)).
- I. Shut down the APU (see the Airplane Flight Manual), as applicable.
- J. Disconnect the source of dry compressed air, as applicable.
- K. Remove and empty the two drain containers.

### **5. SHOCK TREATMENT FOR A/C EQUIPPED WITH AN ELECTRIC PUMP**

Refer to **fig. 1** and **fig. 3**

**WARNING: THE DISINFECTING SOLUTION USED AT THE CONCENTRATION REQUIRED FOR SHOCK TREATMENT MUST BE FULLY DRAINED BEFORE ANY USE OF THE WATER SYSTEM FOR CATERING PURPOSES.**

**CAUTION: THIS TREATMENT IS DONE ONLY ONCE ALL THE CLEANING OPERATIONS HAVE BEEN PERFORMED AND IF THE SULPHUROUS SMELL PERSISTS.**

- A. In a container, prepare the disinfecting solution of **water sterilization product** as follows:
- (1) 0.96 g (14.8 gr) diluted in 3 l (0.8 US gal) of potable water, if the calcium hypochlorite product is used.
- (2) (Refer to [TASK 20-31-00-910-803](#)), paragraph "Shock treatment", if the purogene product is used.

## FALCON 900EX AIRCRAFT MAINTENANCE MANUAL

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- B. In the rear toilet compartment:
- (1) Remove gravity filling plug (1).
  - (2) Pour the disinfecting solution in potable water tank (500MD) through the gravity filling port, using a funnel.
  - (3) Fill potable water tank (500MD) at least halfway with water while rinsing the gravity filling port (Refer to [TASK 38-10-00-610-802](#)).
  - (4) Fill potable water tank (500MD) by gravity (Refer to [TASK 38-10-00-610-802](#)) or under pressure (Refer to [TASK 38-10-00-610-801](#)).
- C. Connect the electrical power unit (Refer to [TASK 24-00-00-860-801](#), paragraph "Connection of the Electrical Ground Power Unit").
- D. Check that "GALLEY MASTER" (1HR) and "LAV MASTER" (21HR) circuit breakers are engaged.
- E. Energize the aircraft systems (Refer to [TASK 24-00-00-860-801](#), paragraph "Energization with the Electrical Ground Power Unit").
- F. Pressurize the potable water system as follows:
- (1) Check that shut-off valve (505MD) is set to "OPEN".
  - (2) Press "WATER PUMP" switch/light (2MD) in the RH front galley.
  - (3) Prime electric pump (3MD) by opening the cold water and the hot water faucets in the rear toilet.
  - (4) When electric pump (3MD) is primed (automatic operation), successively open all the rear and the front hot and cold water faucets (coffee machine included) until water flows out.
  - (5) Close all the rear and the front faucets.
- G. Wait an hour for the disinfecting solution for [water sterilization product](#) to take effect.
- H. Rinse (drain and fill) potable water tank (500MD) three times:
- (1) Drain the potable water system (Refer to [TASK 38-10-00-680-801](#)).
  - (2) Fill potable water tank (500MD) by gravity (Refer to [TASK 38-10-00-610-802](#)) or under pressure (Refer to [TASK 38-10-00-610-801](#)).
  - (3) Pressurize the potable water system as follows:
    - press "WATER PUMP" switch/light (2MD) in the RH front galley,
    - prime electric pump (3MD) by opening the cold and the hot water faucets in the rear toilet,
    - when electric pump (3MD) is primed (automatic operation), successively open all the rear and the front hot and cold water faucets (coffee machine included) until water flows out,
    - allow the water to flow for 1 minute,
    - close all the rear and the front faucets.
- I. Drain the potable water system (Refer to [TASK 38-10-00-680-801](#)).
- J. Replace the main filter cartridge of filter (506MD) (Refer to [TASK 38-13-01-960-801](#)).



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- K. Replace the front galley filter (Refer to [TASK 38-31-13-960-801](#)).
- L. Fill potable water tank ([500MD](#)) by gravity (Refer to [TASK 38-10-00-610-802](#)) or under pressure (Refer to [TASK 38-10-00-610-801](#)).
- M. De-energize the aircraft systems (Refer to [TASK 24-00-00-860-801](#), paragraph "De-energization with the Electrical Ground Power Unit").
- N. Disconnect the electrical power unit (Refer to [TASK 24-00-00-860-801](#), paragraph "Disconnection of the Electrical Ground Power Unit").
- O. Remove and empty the two drain containers.

### 6. SHOCK TREATMENT FOR A/C EQUIPPED WITH PRESSURIZED AIR

Refer to **fig. 2**

**WARNING: THE PUROGENE SOLUTION USED AT THE CONCENTRATION REQUIRED FOR SHOCK TREATMENT MUST BE FULLY DRAINED BEFORE ANY USE OF THE WATER SYSTEM FOR CATERING PURPOSES.**

**CAUTION: THIS TREATMENT IS DONE ONLY ONCE ALL THE CLEANING OPERATIONS HAVE BEEN PERFORMED AND IF THE SULFUROUS SMELL PERSISTS.**

- A. Drain the potable water system (Refer to [TASK 38-10-00-680-801](#)).
- B. In a container, prepare the disinfecting solution of **water sterilization product** as follows:
  - (1) 0.96 g (0.00212 lb) diluted in 3 l (0.8 US gal) of potable water, if the calcium hypochlorite product is used,
  - (2) (Refer to [TASK 20-31-00-910-803](#)), paragraph "Shock treatment", if the purogene product is used.
- C. In the rear toilet compartment:
  - (1) Press the gravity filling plug to de-pressurize potable water tank ([500MD](#)).
  - (2) Rotate the gravity filling plug counterclockwise to open it.  
**NOTE:** A red indicator shows on the gravity filling plug when it is unlocked.
  - (3) Remove the gravity filling plug.
  - (4) Pour the disinfecting solution in potable water tank ([500MD](#)) through the gravity filling port, using a funnel.
  - (5) Fill potable water tank ([500MD](#)) at least halfway with water while rinsing the gravity filling port (Refer to [TASK 38-10-00-610-802](#)).
  - (6) Fill potable water tank ([500MD](#)) by gravity (Refer to [TASK 38-10-00-610-802](#)) or under pressure (Refer to [TASK 38-10-00-610-801](#)).
- D. Pressurize the potable water tank system as follows:
  - (1) on the control panel, check that "AIR SUPPLY" valve ([608HU](#)) is set to "ON".

## FALCON 900EX AIRCRAFT MAINTENANCE MANUAL

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- (2) on the control panel, check on "WATER TANK PRESSURE" gauge (609HU) that the potable water tank is pressurized.
- NOTE: If potable water tank (500MD) is not pressurized (accumulator (605HU) discharged), pressurize it by connecting a source of dry compressed air to air supply charging valve (602HU), or by starting up the APU (see the Airplane Flight Manual).
- E. On the control panel, check that "VANITY WATER SUPPLY" valve (505MD) and "CABIN WATER SUPPLY" valve (531MD) are set to "ON".
- F. Bleed the potable water distribution system by opening the following faucets until the water flows out:
- rear washbasin mixer faucet (507MD),
  - the galley-mixer faucet (if any),
  - the front washbasin mixer faucet (if any).
- G. Close the following faucets:
- rear washbasin mixer faucet (507MD),
  - the galley-mixer faucet (if any),
  - the front washbasin mixer faucet (if any).
- H. Wait an hour for the disinfecting solution for water sterilization product to take effect.
- I. Rinse (drain and fill) potable water tank (500MD) three times:
- (1) Drain the potable water system (Refer to TASK 38-10-00-680-801).
  - (2) Fill potable water tank (500MD) by gravity (Refer to TASK 38-10-00-610-802) or under pressure (Refer to TASK 38-10-00-610-801).
  - (3) Pressurize the potable water tank system as follows:
    - (a) on the control panel, check that "AIR SUPPLY" valve (608HU) is set to "ON".
    - (b) on the control panel, check on "WATER TANK PRESSURE" gauge (609HU) that the potable water tank is pressurized.

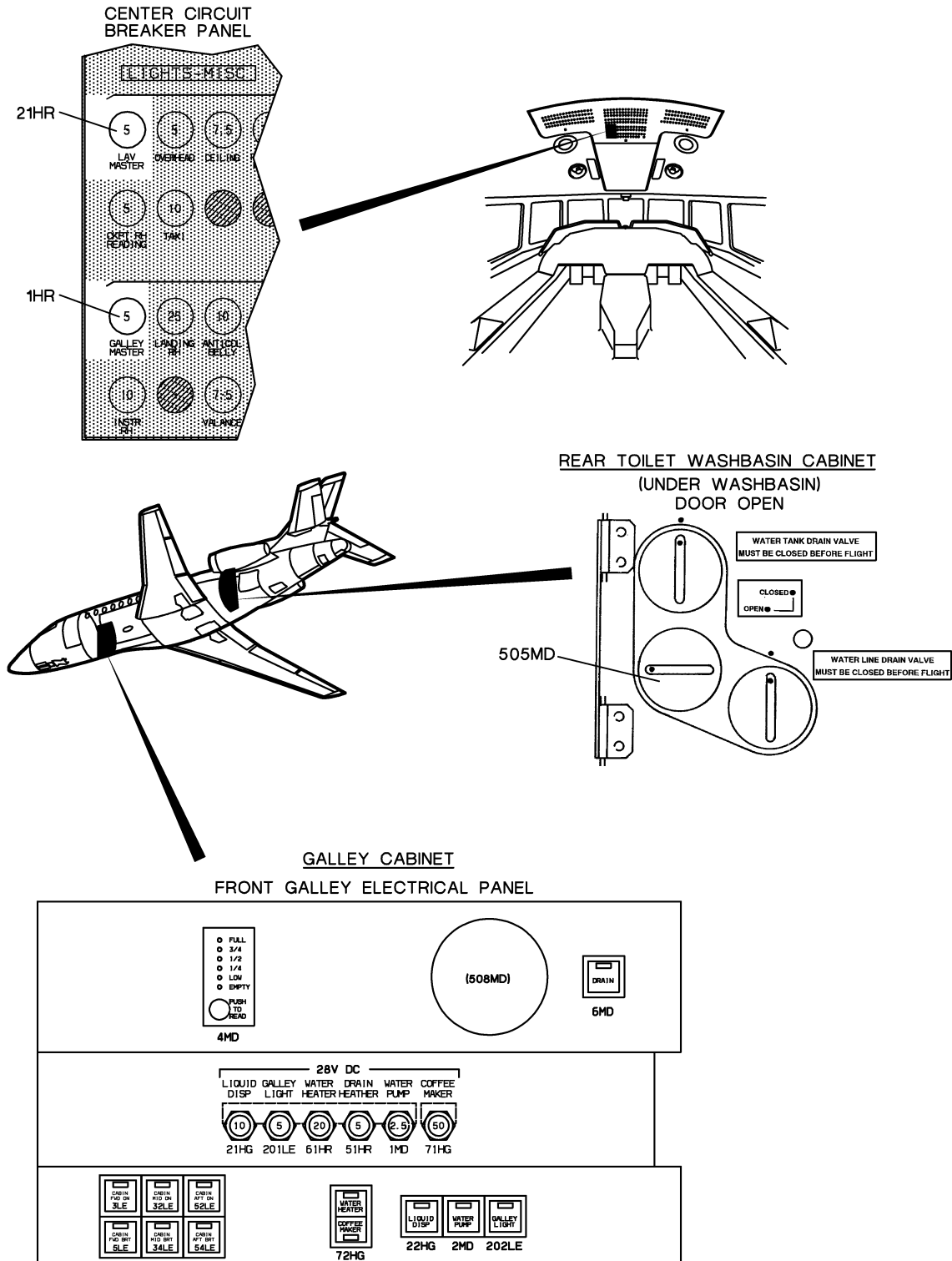
NOTE: If potable water tank (500MD) is not pressurized (accumulator (605HU) discharged), pressurize it by connecting a source of dry compressed air to air supply charging valve (602HU), or by starting up the APU (see the Airplane Flight Manual).
    - (c) open the following faucets and let the water flow for 1 minute:
      - rear washbasin mixer faucet (507MD),
      - the galley-mixer faucet (if any),
      - the front washbasin mixer faucet (if any).
    - (d) Close the following faucets:
      - rear washbasin mixer faucet (507MD),
      - the galley-mixer faucet (if any),
      - the front washbasin mixer faucet (if any).
- J. Drain the potable water system (Refer to TASK 38-10-00-680-801).
- K. Replace the main filter cartridge of filter (506MD) (Refer to TASK 38-13-01-960-801).

## **FALCON 900EX AIRCRAFT MAINTENANCE MANUAL**

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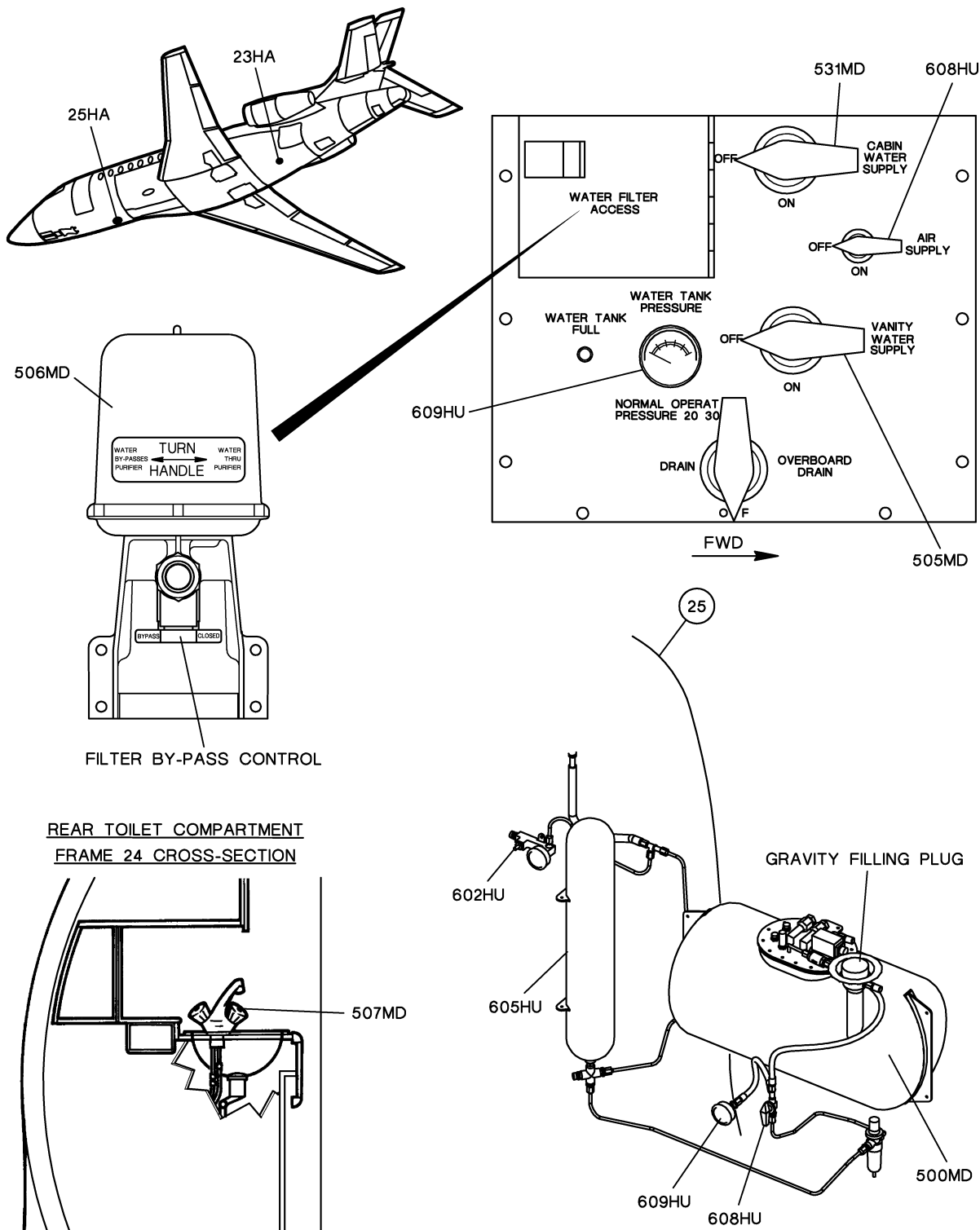
- L. Replace the front galley filter (Refer to [TASK 38-31-13-960-801](#)).
- M. Fill potable water tank ([500MD](#)) by gravity (Refer to [TASK 38-10-00-610-802](#)) or under pressure (Refer to [TASK 38-10-00-610-801](#)).
- N. Shut down the APU (see the Airplane Flight Manual), as applicable.
- O. Disconnect the source of dry compressed air, as applicable.
- P. Remove and empty the two drain containers.

## FALCON 900EX AIRCRAFT MAINTENANCE MANUAL



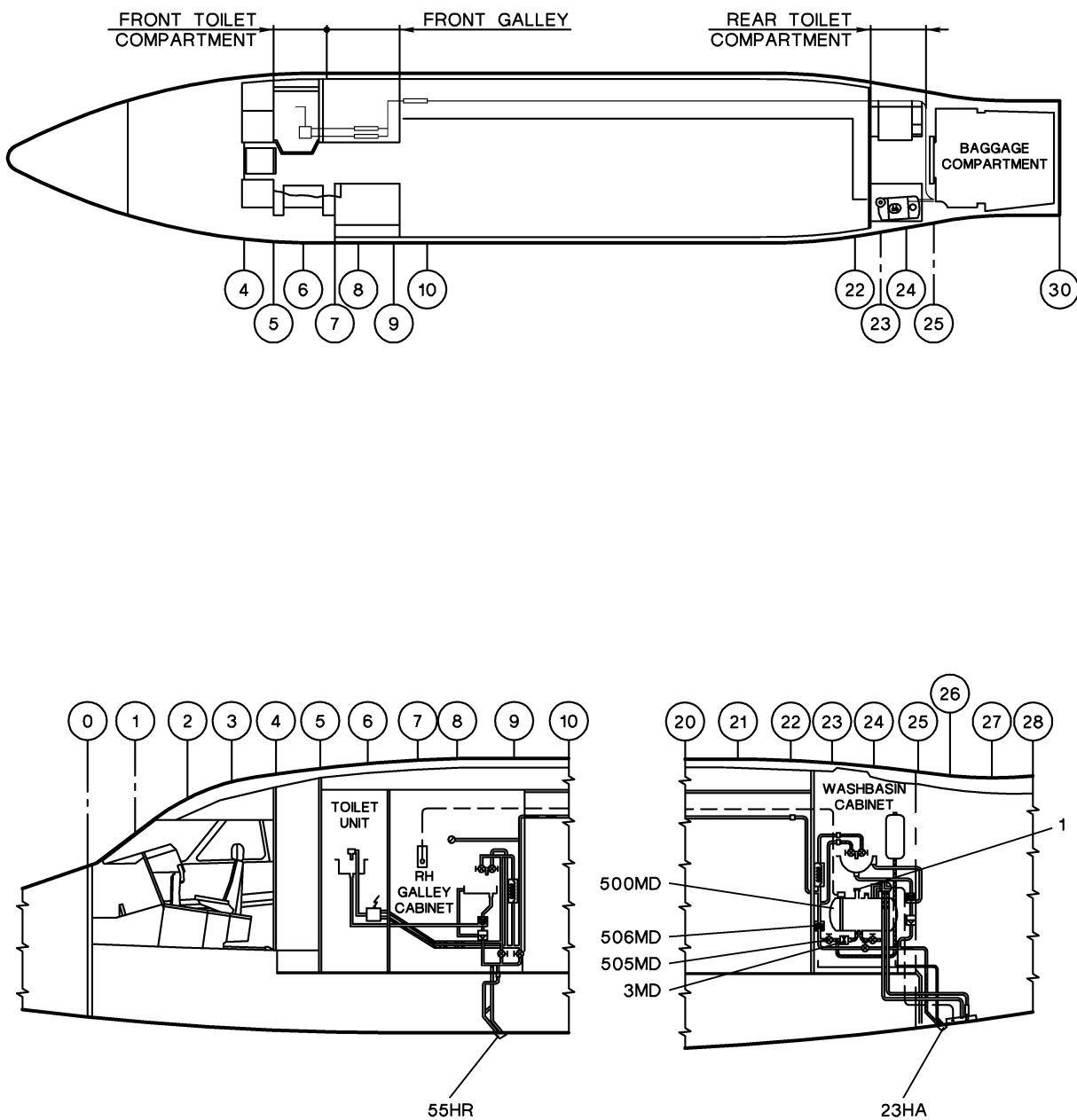
**Figure 1: Location of Controls and Equipment (A/C EQUIPPED WITH AN ELECTRIC PUMP)**

## FALCON 900EX AIRCRAFT MAINTENANCE MANUAL



**Figure 2: Location of Controls and Equipment (A/C EQUIPPED WITH PRESSURIZED AIR)**

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**Figure 3: Principle Diagram (A/C EQUIPPED WITH AN ELECTRIC PUMP)**