

**FPU® SYSTEMS OPERATION MANUAL  
(INCLUDING REPAIR PARTS & SPECIAL TOOL LIST)  
BOH CONTAINERIZED 5 PERSON SHOWER  
BOH FPU Field Pack-up Units**

**CHAPTER 4  
OPERATOR MAINTENANCE INSTRUCTIONS**

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**OPERATOR MAINTENANCE INSTRUCTIONS****FPU® SYSTEMS OPERATION MANUAL  
(INCLUDING REPAIR PARTS & SPECIAL TOOL LIST)  
BOH CONTAINERIZED 5 PERSON SHOWER  
BOH FPU Field Pack-up Units****SERVICE UPON RECEIPT**

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**INITIAL SETUP:****Materiel/Parts**

None

**References**

None

**Personnel Required**

One

**Equipment Condition**Shower set-up

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**SERVICE UPON RECEIPT**

Upon receipt of the BOH Containerized Shower, ensure all components are in proper working order. Note the following requirements.

**Unpacking**

The BOH Containerized Shower is shipped with all components and equipment packed inside. To unpack upon receipt, set up the BOH Containerized Shower as described in (WP 0004)

1. Six compartment doors with retaining chains, locks, tag holder and door spring restraint.
2. Six Overhead light fixtures.
3. Five Shower stalls with shower valves and shower head.
4. Five Vanity and sink with wall mirrors.
5. Main water shutoff valve stored next to the ground rod.
6. Nine Floor drains.
7. Six Wall outlets GFCI.
8. One Exterior outlet weather proof GFCI
9. One Exterior Electrical Box
10. GFCB Circuit Breakers.
11. One Hot water heater in utility room.
12. 4" grey water drain and ¾" cold water inlet.
13. 4" Clean out line and cap.

**END OF WORK PACKAGE**

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## OPERATOR MAINTENANCE INSTRUCTIONS

### FPU® SYSTEMS OPERATION MANUAL (INCLUDING REPAIR PARTS & SPECIAL TOOL LIST) BOH CONTAINERIZED 5 PERSON SHOWER BOH FPU Field Pack-up Units

#### INTRODUCTION TO PREVENTATIVE MAINTENANCE CHECKS & SERVICES (PMCS)

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##### INITIAL SETUP:

###### Materiel/Parts

None

###### Personnel Required

Two

###### References

WP 0004

###### Equipment Condition

Shower Set-ups

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#### PREVENTATIVE MAINTENANCE CHECKS & SERVICES (PMCS)

Preventative Maintenance Checks and Services (PMCS) are performed to keep the BOH Shower containers in good operating condition. These checks aid in finding, correcting, or reporting problems. Operator personnel are to perform the PMCS tasks as shown in the PMCS table.

Perform PMCS procedures each day the BOH Containerized Shower is in operation, using the PMCS table in WP 0013 00. There are different intervals to perform PMCS procedures: before, during and after using the equipment, as well as weekly and monthly. Look at the table carefully to identify the required PMCS interval.

Perform all checks and services keeping in mind the following guidelines:

- Before you begin using the BOH CONTAINERIZED SHOWER , do **Before Operation PMCS**
- While the BOH CONTAINERIZED SHOWER is in use, do **During Operation PMCS**
- After using the BOH CONTAINERIZED SHOWER , do **After Operation PMCS**

If you find something wrong when performing PMCS, fix it using troubleshooting and/or maintenance procedures. Pay attention to WARNING and CAUTION statements. A **WARNING** means someone could be injured or killed. A **CAUTION** means equipment could be damaged.

If tools that are required to perform PMCS are not listed in the procedures, notify your supervisor.

#### Inspection

Look for signs of trouble. Use your senses to feel, smell, hear, or see problems that may exist. Inspect to see if items are in good condition. Are components correctly installed and secured? Is any damage to the frame or components visible? Correct any faults or notify Unit Maintenance.

## Associated Components

There are some common items to check on the BOH Shower container and associated equipment. These include the following:

- Condition and proper connection of waste water drain hose.
- Condition of the container level.
- Condition and connection of the 1" water supply.
- Condition and connection of the ground device.
- Condition and connection of the electrical supply.

## Service

Proper service of the BOH Containerized Shower and components is an integral part of maintenance. Regular cleaning prevents possible problems in the future, so make it a habit to clean the BOH Containerized Shower and components whenever necessary.

### NOTE

The exterior of the container is Polyurethane Paint, clean with water only.

### WARNING



The electrical ground must be established first to prevent electrical shock to personnel. Ensure all circuit breakers and the power source is switched off before making electrical connections. Ensure the electrical proper 120 VAC cable connectors are installed by a certified electrician (Army MOS 21R).

### CAUTION

The Containerized Shower must be placed on a level surface of a platform, pillars or ground surface to operate properly and prevent waste water backups.

### CAUTION

Ensure sanitation of the Shower

### WARNING



Always establish a safe footing operational site. The interior floor should be kept dry and clean.

## OPERATOR MAINTENANCE INSTRUCTIONS

### FPU® SYSTEMS OPERATION MANUAL (INCLUDING REPAIR PARTS & SPECIAL TOOL LIST) BOH CONTAINERIZED 5 PERSON SHOWER BOH FPU Field Pack-up Units

#### PMCS TABLES

**INITIAL SETUP:**
**Materiel/Parts**

Rags, Water

**Personnel Required**

Two

**References**

None

**Equipment Condition**

SHOWER Set-ups

**Table 1 Preventative Maintenance Checks and Services for the BOH CONTAINERIZED SHOWER**  
PMCS B (Before), D (During), A (After), W (Weekly), M (Monthly)

	B	D	A	W	M	Inspection Item and Procedure	Equipment Not Ready/Available If
1	*		*	*		<b>Grey Water Drain</b> Inspect drain connection <b>WARNING</b> Rubber gloves should be worn when handling or cleaning the grey water connections.	Grey water discharge clogged/ does not flow freely.
2	*		*			<b>Electrical Cable Connections</b> Inspect cable and cable end connections for damage. <b>WARNING</b> Damaged cable connections may cause improper connection and electrical shock.	Poor or improper electrical connections
3					*	Lubricate hinges, locks and latches, as required.	Hinges, locks or latches will not operate smoothly.
4	*		*	*	*	<b>Shower head</b> Check shower heads for flow and clogs.	Poor or weak water flow from shower head.

	B	D	A	W	M	Inspection Item and Procedure	Equipment Not Ready/Available If
5	*	*	*	*		<b>Vanity Doors and Sink</b> Check interior for dirt and debris. Clean with Detergent, Water, and Rags as required.	Not sanitized, water leaks or has dirt or debris.
6	*		*		*	<b>Door Seal</b> Check door seals for cuts, cracks, distortion, proper alignment and attachment. Reattach with proper glue or replace if necessary. Check for moisture on floor.	Failure of the seal will allow water and moisture, dirt and sand to enter the container compartment and damage the floor; Wet slippery floor.
7	*		*		*	<b>Attachment Hardware</b> Check for missing or loose attachment hardware, door handles, drawer latches.	Loose or missing hardware will impede the operation and may cause injury or damage.
8	*		*		*	<b>Forklift Base</b> Check for weld cracks, bends, dents or frame distortion. Schedule weld shop repair if needed.	Failure to repair welds will cause damage or injury.
9	*	*	*	*	*	<b>Shower Floor Drains</b> Check for clogs and debris	Standing water or clogged floor drain.
10			*		*	<b>Data Plates</b> Check plates for legibility, damage and/or missing. Clean with water and rag. Replace as needed.	Operation, Cautions and Warnings will not be legible.
End of Table							

## END OF WORK PACKAGE



## OPERATOR MAINTENANCE INSTRUCTIONS

### FPU® SYSTEMS OPERATION MANUAL (INCLUDING REPAIR PARTS & SPECIAL TOOL LIST) BOH CONTAINERIZED 5 PERSON SHOWER BOH FPU Field Pack-up Units

#### CLEANING AND LUBRICATING

##### INITIAL SETUP:

##### Materiel/Parts

Rags, Water, Detergent

##### Personnel Required

One

##### References

None

##### Equipment Condition

Shower Set-up

#### CLEANING AND LUBRICATING

Cleaning and Lubricating of the BOH Containerized Showers is performed to keep the shower and its associated equipment in good operating condition. The cleaning and lubrication of the shower can be conducted along with the Preventative Maintenance Checks and Services (PMCS) procedures described in WP 0013 00. Specific areas described below need to be cleaned after an operational event or periodically if stored/staged outside of a fixed facility to keep the containers and accessories performing as designed. Cleaning also assists in maintaining the condition of the materiel stored within the system. Any damage discovered when cleaning and/or lubricating that cannot be corrected using the troubleshooting procedures described in WP 0013 00 should be reported for corrective maintenance.

#### CLEANING AND SANITATION SUPPLIES

##### WARNING



Never blend or mix cleaning supplies. Toxic vapors may develop causing injury or death.  
Follow proper storage and use instructions on the cleaning product labels.

Cleaning Table 1

Cleaning Table 1 Continued

SURFACE	OIL/GREASE	SALT/MUD/DIRT DEBRIS	RUST/CORROSION and SANITATION
Exterior Walls	Clean with rags.	Check all exterior surfaces for cracks, dents that effect the operation of the Shower. Check for accumulations of dirt, debris, ice, snow or salt. Clean as required.	Clean dirt with water, and/or ice and snow with a nonmetal brush

<b>SURFACE</b>	<b>OIL/GREASE</b>	<b>SALT/MUD/DIRT DEBRIS</b>	<b>RUST/CORROSION and SANITATION</b>
Interior painted wall surfaces (All)	Nonabrasive Chlorine based Detergent, Water, Rags	Water, Rags	Dry Rag or Spot Paint
Seals and Gaskets	Damp and Dry Rags	Damp and Dry Rags	N/A
Vanity Door handles, latches	Detergent, Water, Rags	Soapy Water, Brush, Rags	Corrosion Removal Wire Brush, Dry Rags; Coat with Lube Oil or Spot Paint
Door Hinges, latches and locks	Detergent, Water, Rags	Brush, Rag and lubricate as needed to ensure door opens freely	Corrosion Removal Compound and Wire Brush, Dry with Rags and Lubricate as needed
Shower and utility room floor	Nonabrasive Chlorine based Detergent, Water, Mop	Damp Mop and Dry Rags	Sanitation Required
Vanity sinks	Detergent, Water, Rags	Damp and Dry Rags	Sanitation Required
Water heater	Detergent, Water, Rags	Damp and Dry Rags	Dry Rag or Spot Paint
<b>End Of Cleaning Table 1</b>			

**Table 2 Lubrication**

<b>USAGE</b>	<b>FLUID or LUBRICANT</b>	<b>CAPACITIES</b>	<b>EXPECTED TEMPERATURES</b>	<b>INTERVAL</b>
Door Hinges	General Purpose Lubricating Oil 10W	As Required	All Temperatures	Monthly or as required if under adverse conditions
Door Locks	Molykote Multipurpose Synthetic Grease P/N 26040124	As Required	All Temperatures	Monthly or as required if under adverse conditions
Door Seals	Molykote Multipurpose Synthetic Grease P/N 26040124	As Required	All Temperatures	Monthly or as required if under adverse conditions
<b>End of Lubrication Table 2</b>				

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BOH CONTAINERIZED 5 PERSON SHOWER  
BOH FPU Field Pack-up Units****INSPECTION OF INTERIOR AND EXTERIOR****INITIAL SETUP:****Materiel/Parts**

None

**Personnel Required**

One

**References**

WP 0004 00-3

**Equipment Condition**

Operational Set-up

**INSPECT SHOWER EXTERIOR**

1. Inspect exterior surfaces for damage, cracks, holes, dents, etc.
2. Inspect the container for being level.
3. Inspect door operation.
4. Inspect waste water connection.
5. Inspect the fresh water connection and main shutoff valve.
6. Inspect clean out plug.

**INSPECT SHOWER INTERIOR**

1. Inspect door seals for cuts, cracks or damage.
2. Inspect fluorescent lighting.
3. Inspect floor for evidence of leaks.
4. Inspect floor drain for debris.
5. Inspect shower for leaks and water flow.
6. Inspect shower floor drain for debris.
7. Inspect vanity sinks for operation, water and drainage.
8. Inspect for shower cleanliness and sanitation.
9. Inspect hot water heater for leaks and proper operation.

**END OF WORK PACKAGE**

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## OPERATOR MAINTENANCE INSTRUCTIONS

### FPU® SYSTEMS OPERATION MANUAL (INCLUDING REPAIR PARTS & SPECIAL TOOL LIST) BOH CONTAINERIZED 5 PERSON SHOWER BOH FPU Field Pack-up Units

#### INSPECT ELECTRICAL SERVICE

##### INITIAL SETUP:

##### Material/Parts

None

##### Personnel Required

One

##### Tools

Flashlight, Automotive Trouble Light or Electric Circuit Test Light.

##### References

WP 0004

##### Equipment Condition

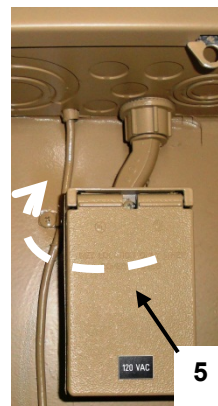
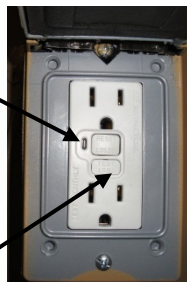
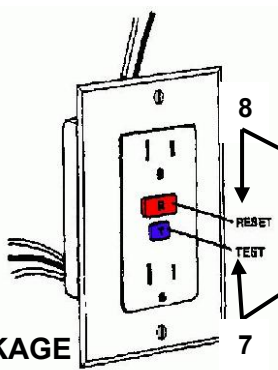
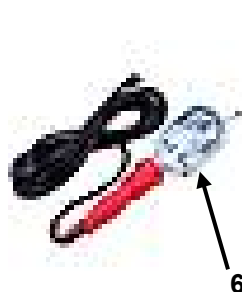
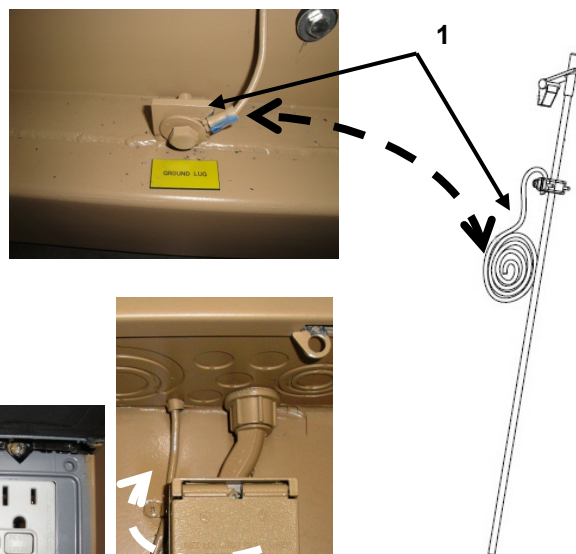
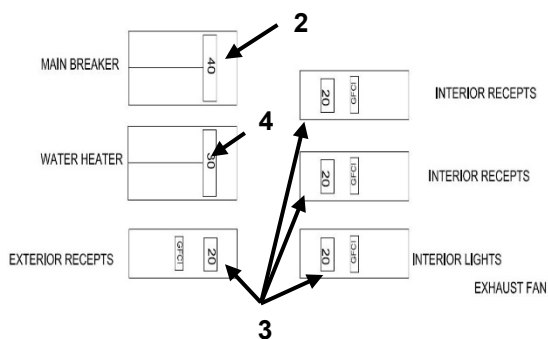
Operational

#### ELECTRICAL SERVICE

1. Inspect the ground lug and ground rod for connection (1).
2. Open circuit box door.
3. Switch on the main circuit (2).
4. Switch on the circuits for electrical receptacles, fan and lights (3).
5. Switch on the water heater (4) once water heater is filled.
6. Press GFCB test buttons. Circuit should trip to off.
7. Switch circuit breakers back to the on position to reset the circuit.
8. Open the lid on the external GFCI Outlet (5), plug in the trouble light (6), press the GFCI test button (7). The trouble light (6) should go out.
9. Depress the GFCI reset button (8); the trouble light (6) should come on.
10. Unplug the trouble light (6).

#### NOTE

If any of the above conditions fail, contact an electrician for maintenance.



#### END OF WORK PACKAGE

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RECEPTACLE TYPE GFCI

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## OPERATOR MAINTENANCE INSTRUCTIONS

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#### INSPECT VENT FAN COVER

##### INITIAL SETUP:

##### Materiel/Parts

None

##### Personnel Required

One

##### Tools

Rags, 1" paint brush

##### References

Appendix B

##### Equipment Condition

Operational

#### INSPECT

##### NOTE

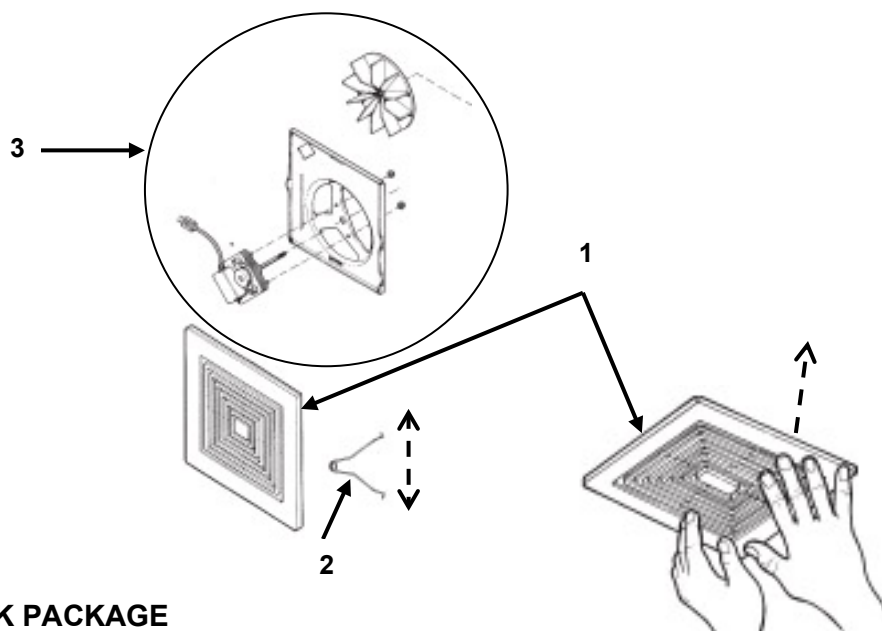
For detailed repair information, refer to Appendix B, BROAN Vent Fan Specification Sheet.

1. Turn off the vent fan switch off the circuit breaker
2. Pull down the vent grille (1).
3. Compress the mounting spring clips (2) to detach the grille.

##### NOTE

The grille (1) is nonmetallic and may be washed with soap and water when there is excessive dirt.

4. Inspect and clean the grille (1) and internal parts (3) with the rags and paint brush.
5. Attach the spring clips (2) and push the grille (1) back into place.
6. Switch on the circuit breaker and fan switch.



#### END OF WORK PACKAGE



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BOH CONTAINERIZED 5 PERSON SHOWER  
BOH FPU Field Pack-up Units****INSPECT LIGHT FIXTURE****INITIAL SETUP:****Materiel/Parts**

New Fluorescent Tube

**Personnel Required**

One

**Tools**

Rags, Flashlight

**References**

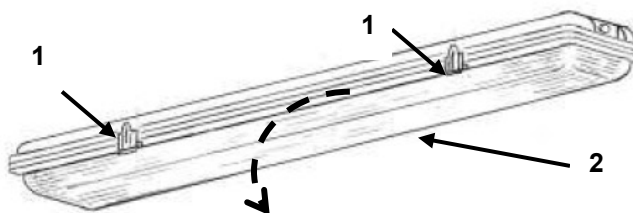
Appendix B

**Equipment Condition**

Operational

**LIGHT FIXTURE**

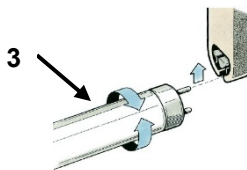
1. Switch off the lighting and switch off the circuit breaker.
2. Release the latches (1) to open the fluorescent light fixture cover (2).



3. Wipe the cover (2) clean with a damp rag.
4. Wipe off the fluorescent tube (3) with a dry rag.
5. Replace faulty tubes and cover, switch on the circuit breaker and lighting switch.

**NOTE**

With power on, check for defective fluorescent tube (3) by twisting it in place and ensure contact.

**WARNING**

Fluorescent tubes may contain hazardous material.

**END OF WORK PACKAGE**

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## OPERATOR MAINTENANCE INSTRUCTIONS

### FPU® SYSTEMS OPERATION MANUAL (INCLUDING REPAIR PARTS & SPECIAL TOOL LIST) BOH CONTAINERIZED 5 PERSON SHOWER BOH FPU Field Pack-up Units

#### INSPECT HOT WATER HEATER

##### INITIAL SETUP:

##### Materiel/Parts

None

##### Personnel Required

One

##### Tools

Rags, Flashlight

##### References

Appendix A

##### Equipment Condition

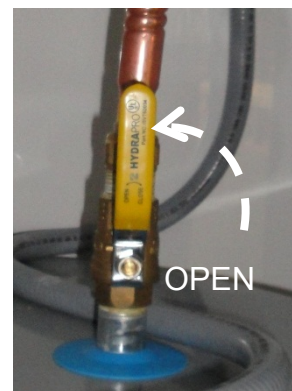
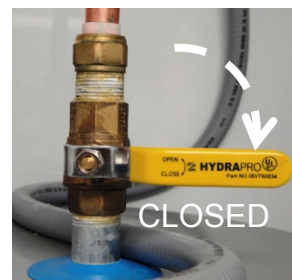
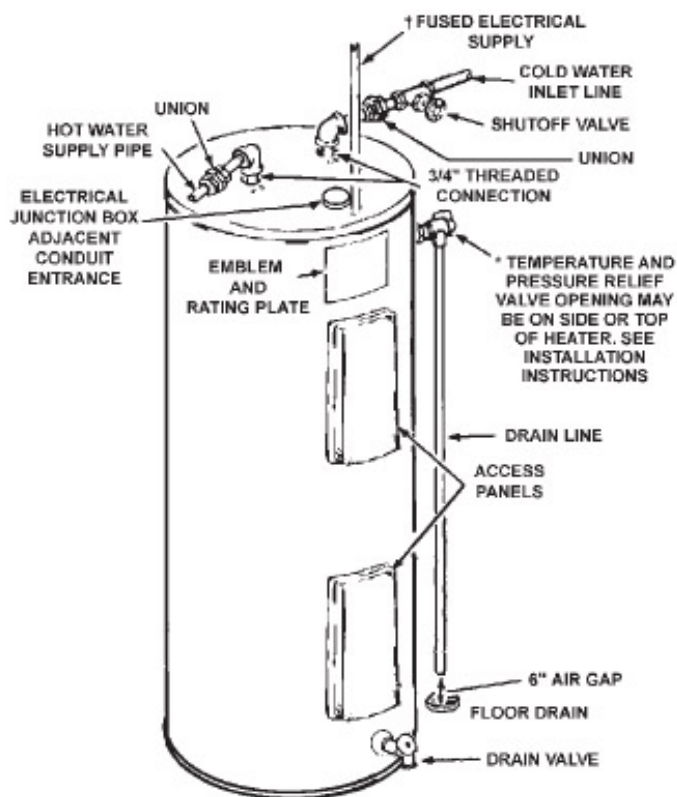
Operational

#### HOT WATER HEATER

Review Appendix A for water heater manufacturer's maintenance and repair data.

Only a certified electrician (Army MOS 21R) should attempt repair or replacement.

1. Inspect for leaks; ensure the water supply is open.



Water Shutoff Valve

#### END OF WORK PACKAGE

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## OPERATOR MAINTENANCE INSTRUCTIONS

### FPU® SYSTEMS OPERATION MANUAL (INCLUDING REPAIR PARTS & SPECIAL TOOL LIST) BOH CONTAINERIZED 5 PERSON SHOWER BOH FPU Field Pack-up Units

#### INSPECT DOORS

##### INITIAL SETUP:

##### Materiel/Parts

None

##### Personnel Required

One

##### Tools

Damp Rags, Spray lubricant, Door Keys

##### References

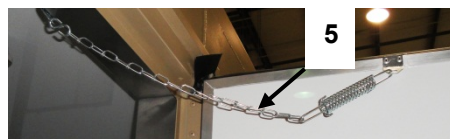
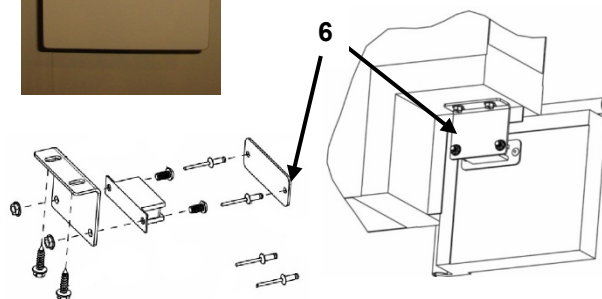
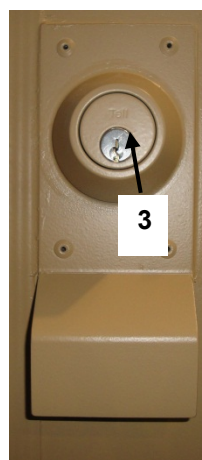
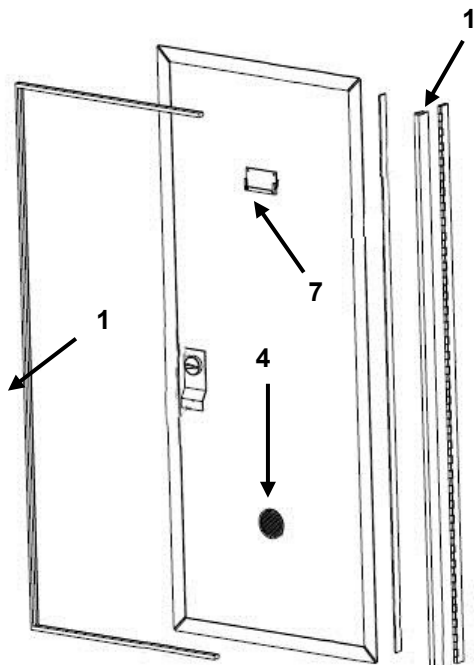
None

##### Equipment Condition

Operational

#### INSPECT DOORS

1. Inspect and clean the door seals (1).
2. Report damage to maintenance for replacement.
3. Wipe with damp rags.
4. Inspect interior magnetic door latch (2) and key lock (3); lubricate as needed.
5. Inspect Door intake vent (4); clean debris with damp rags.
6. Inspect for missing door chain (5).
7. Inspect exterior door retention latch (6).
8. Check Label holder (7).



#### END OF WORK PACKAGE

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(INCLUDING REPAIR PARTS & SPECIAL TOOL LIST)  
BOH CONTAINERIZED 5 PERSON SHOWER  
BOH FPU Field Pack-up Units****INSPECT SINK and FAUCET****INITIAL SETUP:****Materiel/Parts**

None

**Personnel Required**

One

**Tools**

Damp Rags, Flashlight, Slip Joint Pliers, Adjustable wrench

**References**

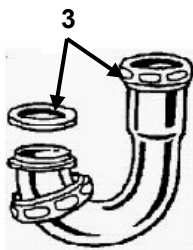
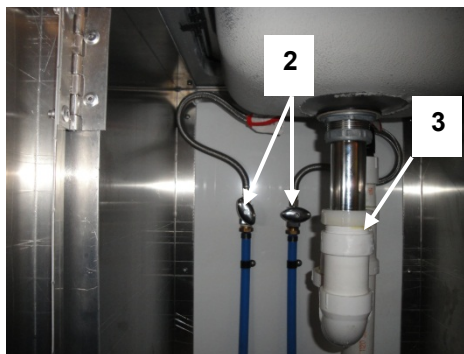
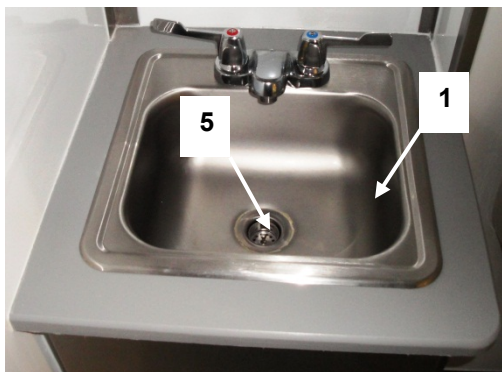
Appendix D and E

**Equipment Condition**

Operational

**INSPECT SINK AND FAUCET**

1. Inspect sink (1) for cleanliness.
2. Open water supply valves under the sink (2).
3. Inspect sink water supply connections (2) for leaks. Tighten as needed.
4. Check trap joints (3) for leaks. Tighten as needed.
5. Check faucet (4) for leaks.
6. Check sink drain strainer (5) for debris.
7. Test faucet water flow.

**END OF WORK PACKAGE**



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BOH CONTAINERIZED 5 PERSON SHOWER  
BOH FPU Field Pack-up Units****INSPECT FLOOR DRAIN and CLEAN OUT PLUG****INITIAL SETUP:****Materiel/Parts**

None

**Personnel Required**

One

**Tools**

Damp Rags, Flashlight, Slip Joint Pliers, Adjustable wrench

**References**

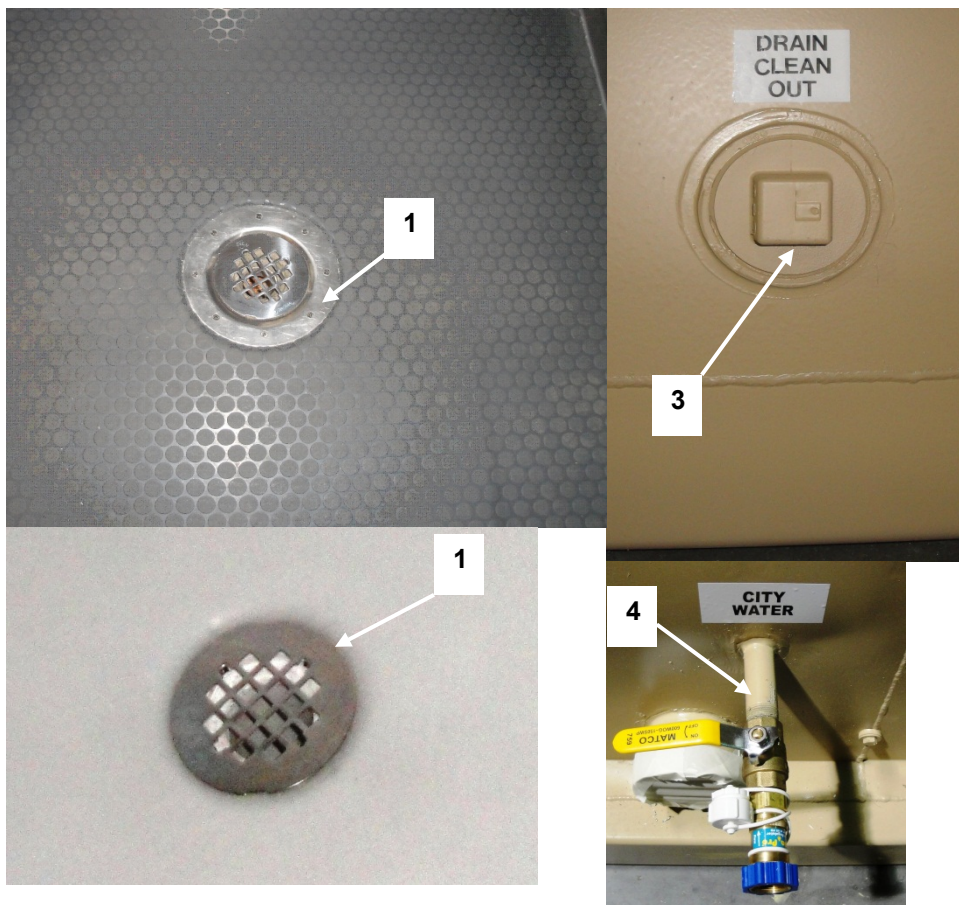
None

**Equipment Condition**

Operational

**INSPECT FLOOR DRAIN AND CLEAN OUT PLUG**

1. Inspect interior floor and shower floor drains (1) for debris.
2. Inspect for missing or loose exterior clean out plug (3).
3. Inspect for missing main water shutoff valve assembly (4).

**END OF WORK PACKAGE**BOH-PM-04-4  
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