

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

CHAPTER 5

UNIT MAINTENANCE INSTRUCTIONS

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UNIT MAINTENANCE INSTRUCTIONS**FPU® SYSTEMS OPERATION MANUAL
(INCLUDING REPAIR PARTS & SPECIAL TOOL LIST)
BOH CONTAINERIZED LATRINES
BOH FPU Field Pack-up Units****Door assembly and rivet replacement****INITIAL SETUP:****Material/Parts**

Door Seal Kit

Personnel Required

One

Tools

Rags, 1/4 hp Electric Drill, Pop Rivet Tool, 3/16" drill bit

References

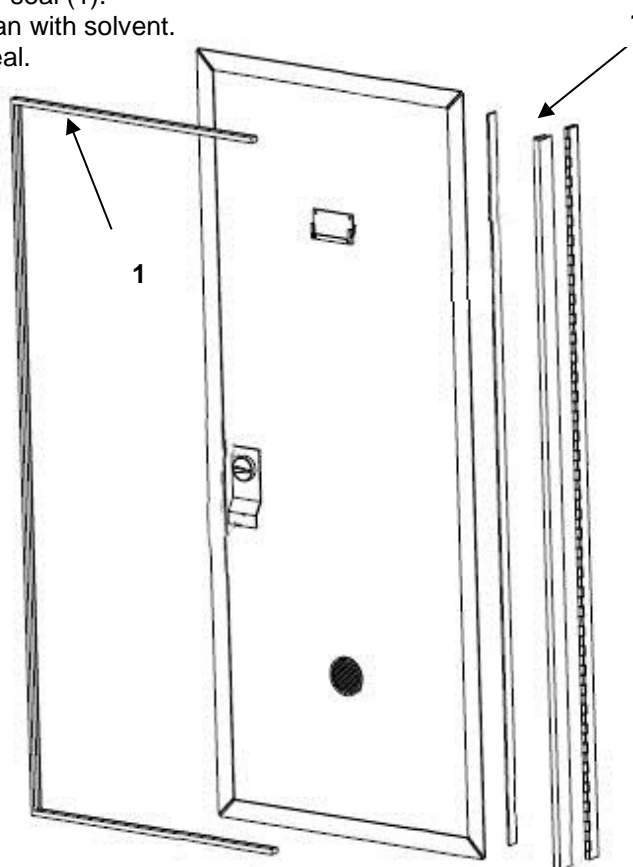
None

Equipment Condition

Latrine Door Seal Repair

INSPECT, REPAIR**REPAIR OR REPLACE DOOR SEALS**

1. Inspect door seals for cracks or damage.
2. Prop the door in the open position.
3. Remove the damaged door seal (1).
4. Wipe the rivet surfaces clean with solvent.
5. Apply new self-adhesive seal.

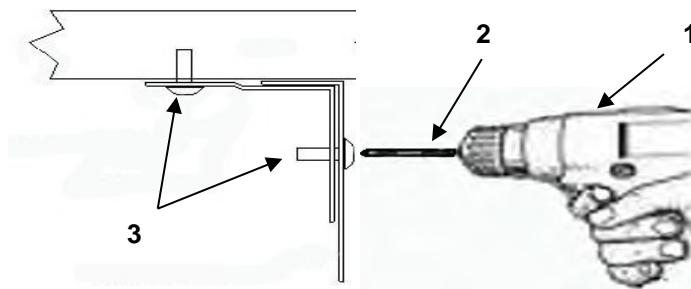


General Rivet Repair

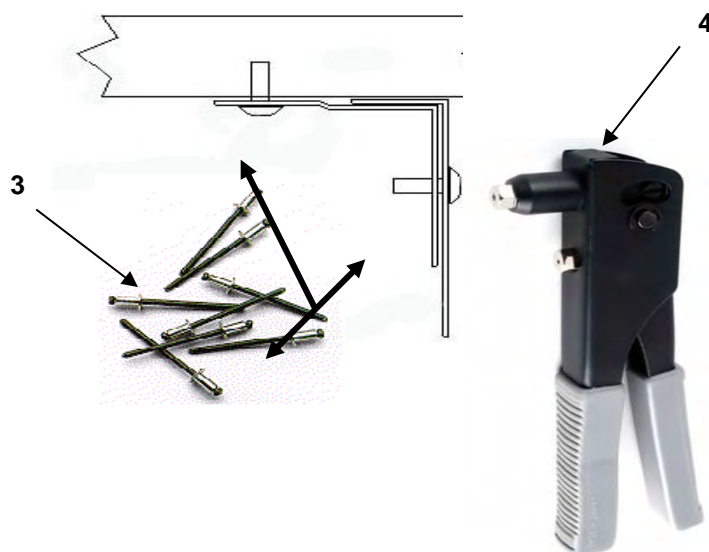


WARNING

Use proper eye protection when operating a drill.



1. For rivets, use a 1/2 hp electric drill (1) with a 3/16" drill bit (2), and drill through the center core of the rivet (3).
2. Remove the remainder of any pop rivet debris with needle nose pliers and wipe the hole clean with a rag.
3. Insure the holes are properly aligned.
4. Insert a new pop rivet, 3/16" DIA (2), through the holes of both items to be secured and into the pop rivet tool (4).
5. Use the pop rivet tool (4) to secure the pop rivet (3) and item in place.
6. Check for proper alignment and tight attachment of the item.
7. Return the door to the closed position and check the door operation and seal contact.



END OF WORK PACKAGE

UNIT MAINTENANCE INSTRUCTIONS

FPU® SYSTEMS OPERATION MANUAL (INCLUDING REPAIR PARTS & SPECIAL TOOL LIST) BOH CONTAINERIZED LATRINES

BOH FPU Field Pack-up Units

Latrine Magnetic Door Latch

INITIAL SETUP:

Materiel/Parts

Magnetic Door Latch Kit

Personnel Required

One

Tools

1/4 hp Electric Drill, Pop Rivet Tool, .201" drill bit, Sharpy Marker, 3/8" and 7/16" Socket Wrench and 5/32" Allen Wrench

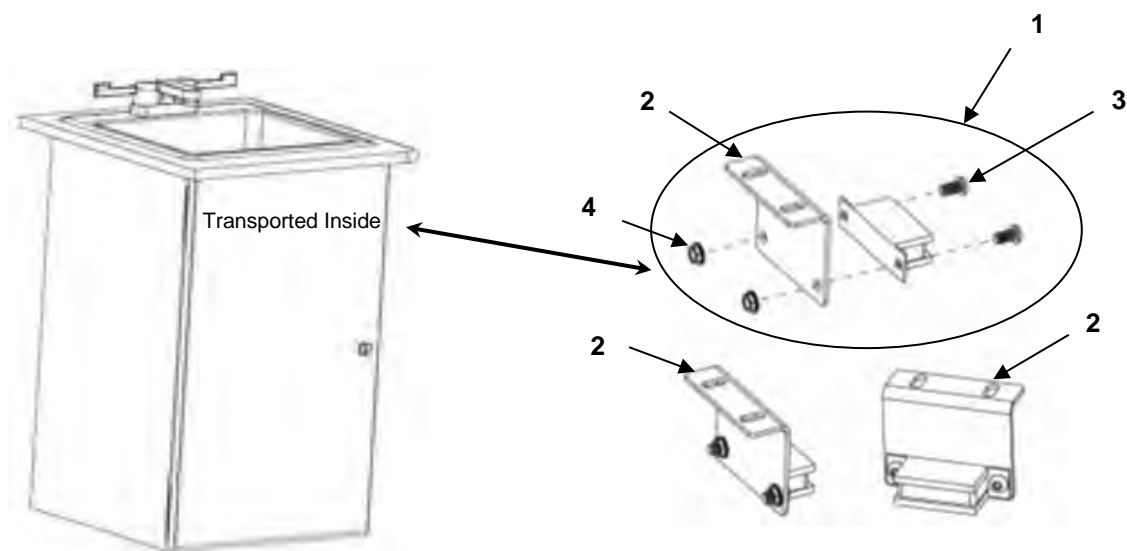
References

None

Equipment Condition

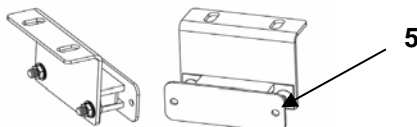
Latrine Door Latch Replacement

INSPECT, REPLACE, INSTALL



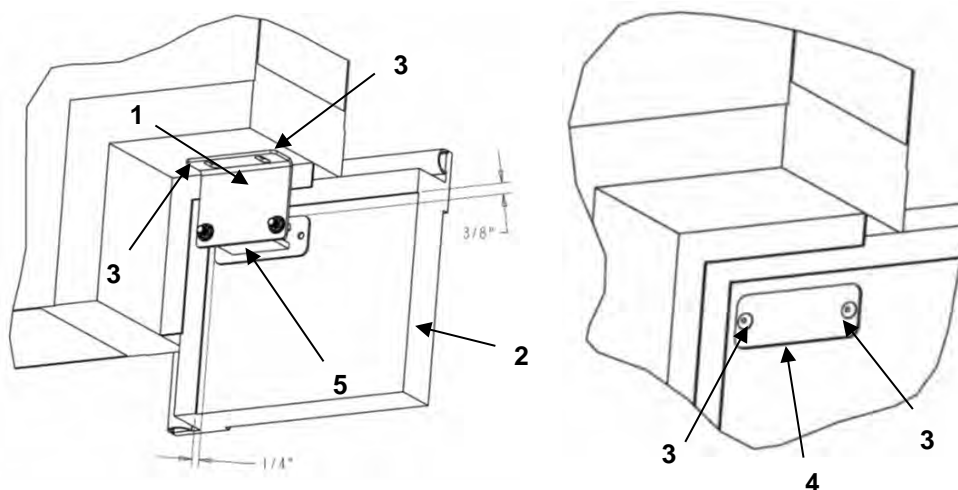
Replace

1. Assemble magnetic door latch (1) and mounting bracket (2), as shown, with the 1/4" button head screws (3) and nuts (4), by using a 5/32" Allen wrench and 7/16" socket or wrench.



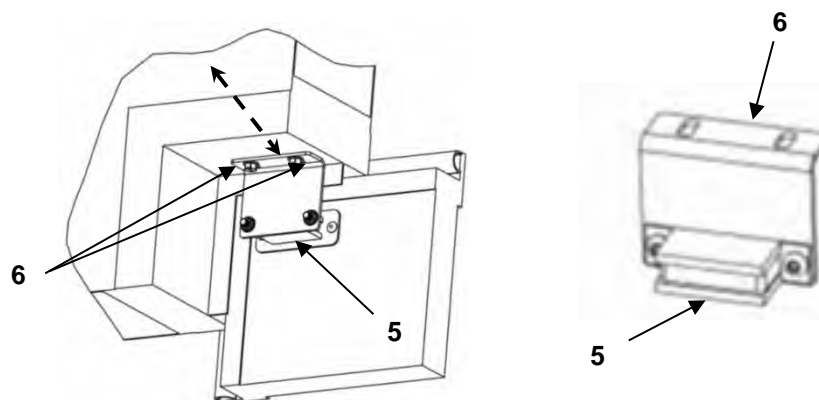
2. Attach and center striker plate (5) to the magnet, as shown.

Latch Location



1. The latch kit is installed on the opposite side of the door hinges.
2. Mockup the magnet and striker plate assembly (1), as shown on upper right, or upper left corner of door (2), depending on unit side. The striker plate should be positioned $\frac{3}{8}$ " from the top door trim and $\frac{1}{4}$ " from the side door trim as shown.
3. Mark the pilot hole locations (3) for rivets and self- tapping screws with the Sharpy marker.
4. Drill holes for rivets and self- tapping screws using the 0.201" drill bit.
5. Remove striker plate (4) from magnet (5) and mounting bracket (6).
6. Assemble striker plate (4) with two provided rivets as shown.

Install



1. Install magnet (5) and mounting bracket assembly (6) as shown using two provided #14 self-tapping screws and the $\frac{3}{8}$ " socket or wrench.
2. Adjust contact of magnet (5) and striker plate (4) and tighten self-tapping screws until mounting bracket (6) is firmly attached to the header trim.
3. If existing door retention latch was removed from the door, plug the remaining holes using the additional rivets provided.
4. Test the door retention and adjust the mounting bracket (6) if needed.

.END OF WORK PACKAGE

UNIT MAINTENANCE INSTRUCTIONS

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VENT FAN

INITIAL SETUP:

Materiel/Parts

See Appendix B parts list

Personnel Required

One

Tools

Rags, 1" Paint Brush

References

Appendix B

Equipment Condition

Latrine Vent Fan Model 671

INSPECT, REPAIR

NOTE

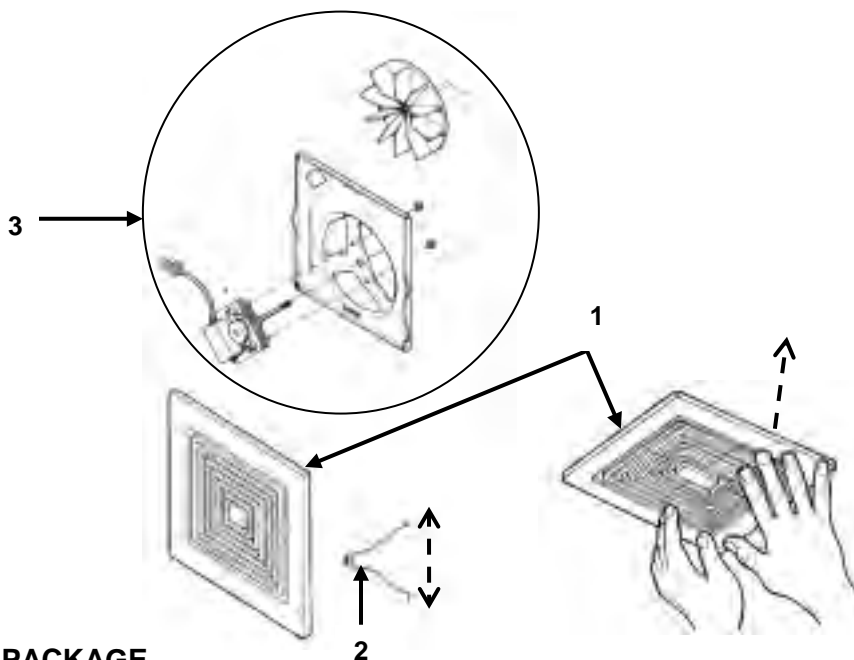
For detailed repair information, refer to Appendix B, BROAN Vent Fan Specification Sheet.

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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UNIT MAINTENANCE INSTRUCTIONS

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LIGHT FIXTURE

INITIAL SETUP:

Material/Parts

New Fluorescent Tube

Personnel Required

One

Tools

Rags, Flashlight

References

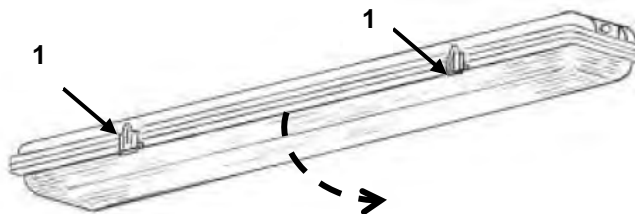
Appendix C

Equipment Condition

Latrine Florescent Light Fixture

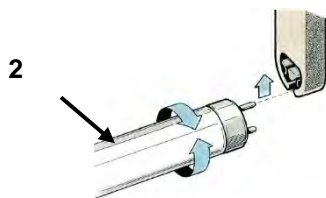
INSPECT, REPAIR

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



NOTE

Remove and replace defective fluorescent tube (2) by twisting it in place and ensure contact.



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

WARNING



Fluorescent tubes may contain hazardous material.

END OF WORK PACKAGE

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UNIT MAINTENANCE INSTRUCTIONS

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TOILET

INITIAL SETUP:

Material/Parts

Toilet repair parts

Personnel Required

One Plumber ARMY MOS 21K

Tools

Rags, Flashlight, Plunger, Slip Joint Pliers, Bucket, Adjustable Wrench

References

WP 0004 00-4

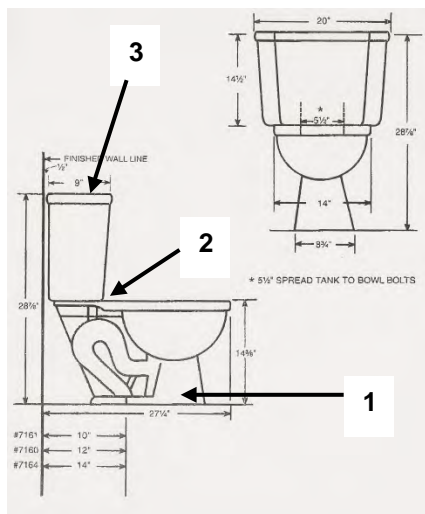
Equipment Condition

Latrine Toilet Repair

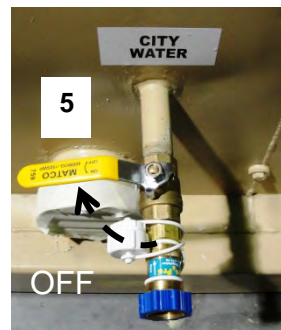
INSPECT, REPAIR

Leakage at the floor

1. With a flashlight, inspect the base for leaks at the floor level (1).
2. Inspect the tank gasket and bowl for leakage (2).
3. Shut off the water supply valve at the floor level (1).
4. Turn off the main city water valve (5)
5. Flush and drain the bowl and tank for repair.
6. Remove tank cover (3).
7. Check the tank water level.
8. Remove the two retaining nuts and washers at the sides of the toilet.
9. Remove the toilet for base floor leakage.
10. Replace with a wax ring and hardware kit (4).
11. Reinstall the toilet.
12. Tighten the retaining nuts and washers.
13. Reconnect the water supply connection.
14. Open the water supply valve and test the toilet.
15. Replace the tank cover.



Example



Note

The Main Shutoff valve (5) is located at the City Water connection.

Leakage between the Tank and Bowl

1. Shut off the water supply at the floor.
2. Remove the cover.
3. Disconnect the fill/float valve supply connection.
4. Flush and drain the tank for repair.
5. Remove the retaining nuts and washer from under the tank and bowl.
6. Replace the tank gasket.
7. Check the fill/float valve nut for tightness and leaks.
8. Replace the gasket if needed.
9. Reinstall the tank; tighten the tank/bowl nuts and washers.
10. Connect the water supply line.
11. Open the supply valve.
12. Test the tank by flushing.
13. Adjust the overflow water level.

Example



Example



Water Continuous Flow

1. Operate the flush valve to test if water flow will not cease.
2. Remove the tank lid.
3. Check and adjust the fill/float valve.
4. Check the flap valve.
5. Replace the fill/float valve.
6. Shut off water supply at the floor.
7. Disconnect the fill/float valve supply connection.
8. Drain the tank.
9. Remove the fill/float retaining nut and gasket.
10. Replace the fill/float valve.
11. Tighten the retaining nut and gasket.
12. Open the water supply at the floor.
13. Test the toilet.

END OF WORK PACKAGE

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URINAL

INITIAL SETUP:

Materiel/Parts

Urinal repair parts and sanitation supplies

Personnel Required

One Plumber ARMY MOS21K

Tools

Rags, Flashlight, Plunger, Slip Joint Pliers, Bucket, Adjustable Wrench, 1/16" Allen Wrench

References

Appendix A and WP 0004 00-4

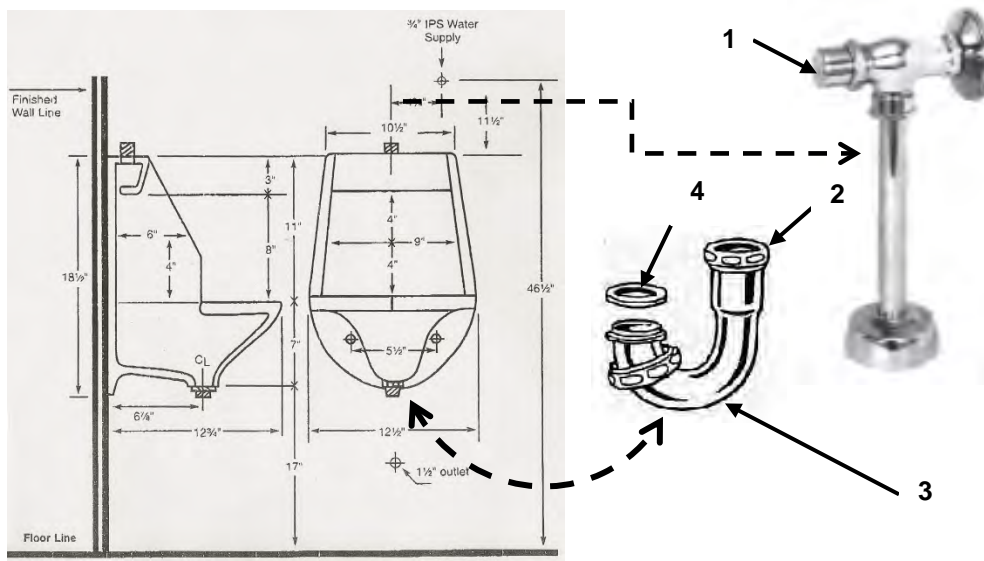
Equipment Condition

Latrine Urinal Repair

URINAL

Clogged Urinal Trap

1. Use a plunger to force clog through.
2. Operate the flush valve (1) to test.
3. If clog remains, turn off the urinal water supply valve under the sink in the vanity cabinet.
4. Turn off the urinal water supply valve under the sink in the vanity cabinet.
5. Place a catch bucket under the urinal.
6. Loosen the retaining nuts (2) on the trap (3).
7. Empty the trap (3) and flush with water.
8. Install or replace the trap (3) if needed.
9. Ensure the gaskets (4) are in place; tighten the retaining nuts (2) by hand.
10. Pour some water in the urinal to test for leakage.
11. Open the water supply valve located under the sink and operate the flush valve (1) to test.



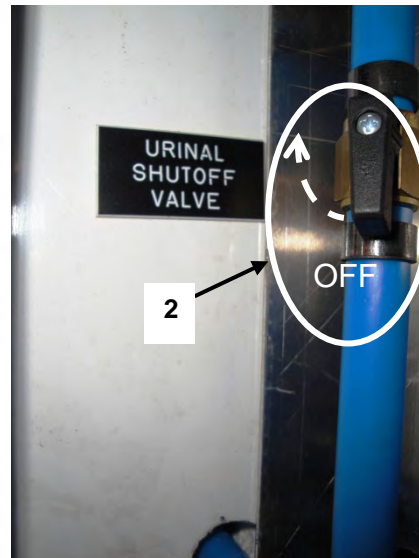
Water Flush Valve

1. Operate the flush valve several times (1) to test.
2. If water flow will not cease, turn off the urinal water supply valve (2).

NOTE

Valve flow adjustment is done with a 1/16" Allen Wrench.
Adjust closing time from 3 to 15 seconds

3. Operate the flush valve to clear of water.
4. Loosen and pull back both covers for access to the connections.
5. If adjustment fails, loosen the retaining connections and remove the flush valve.
6. Replace the flush valve and tighten the retaining connections.
7. Open the water supply valve.
8. Flush the urinal to test the valve.



END OF WORK PACKAGE

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Replacement Circuit Breakers

Personnel Required

One Certified Electrician (Army MOS 21R)

Tools

Electrical Tool Set

References

None

Equipment Condition

Operational Set Up

INSPECT, REPAIR**WARNING**

Only a certified electrician should be permitted to remove and repair the electrical connections and components of the system. The electrical ground must be established first to prevent electrical shock to personnel. Consult DOD 60055.9-STD Chapter 7 Grounding.



**MAIN and #1, #2, #3 and #4 GFCB
Circuit Breakers**

Electrical System

NOTE

Circuits have been labeled to match the circuit breakers.

Ground Wire Bus on the Left

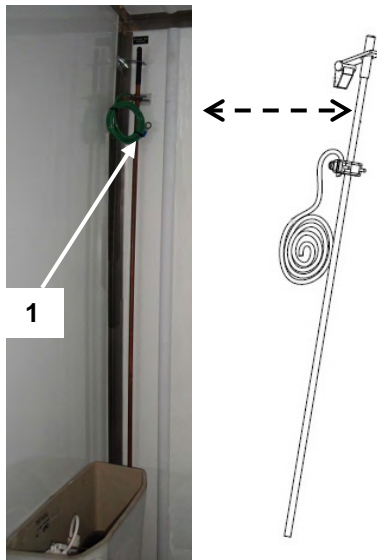


Neutral Wire Bus on the Right

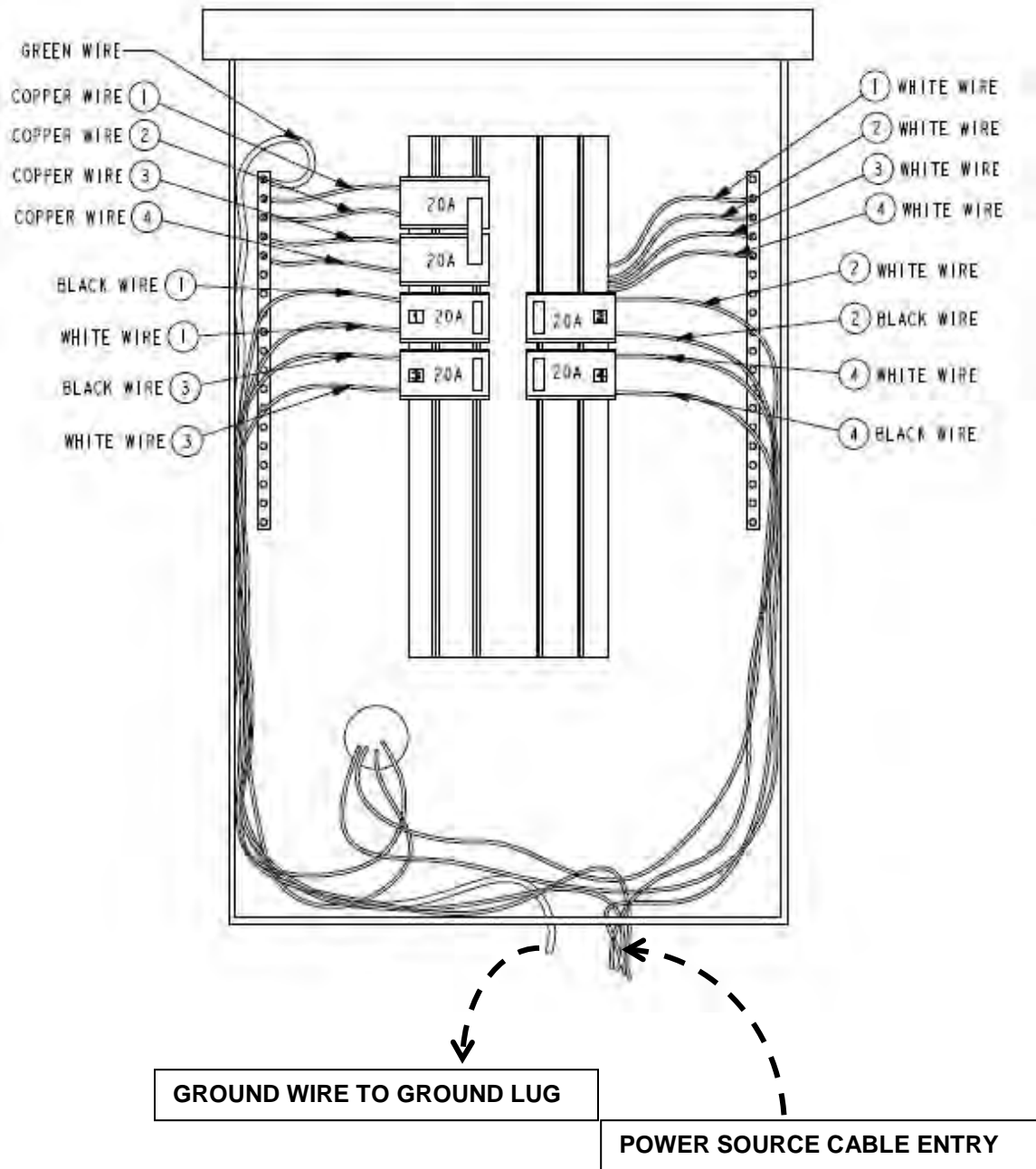


NOTE

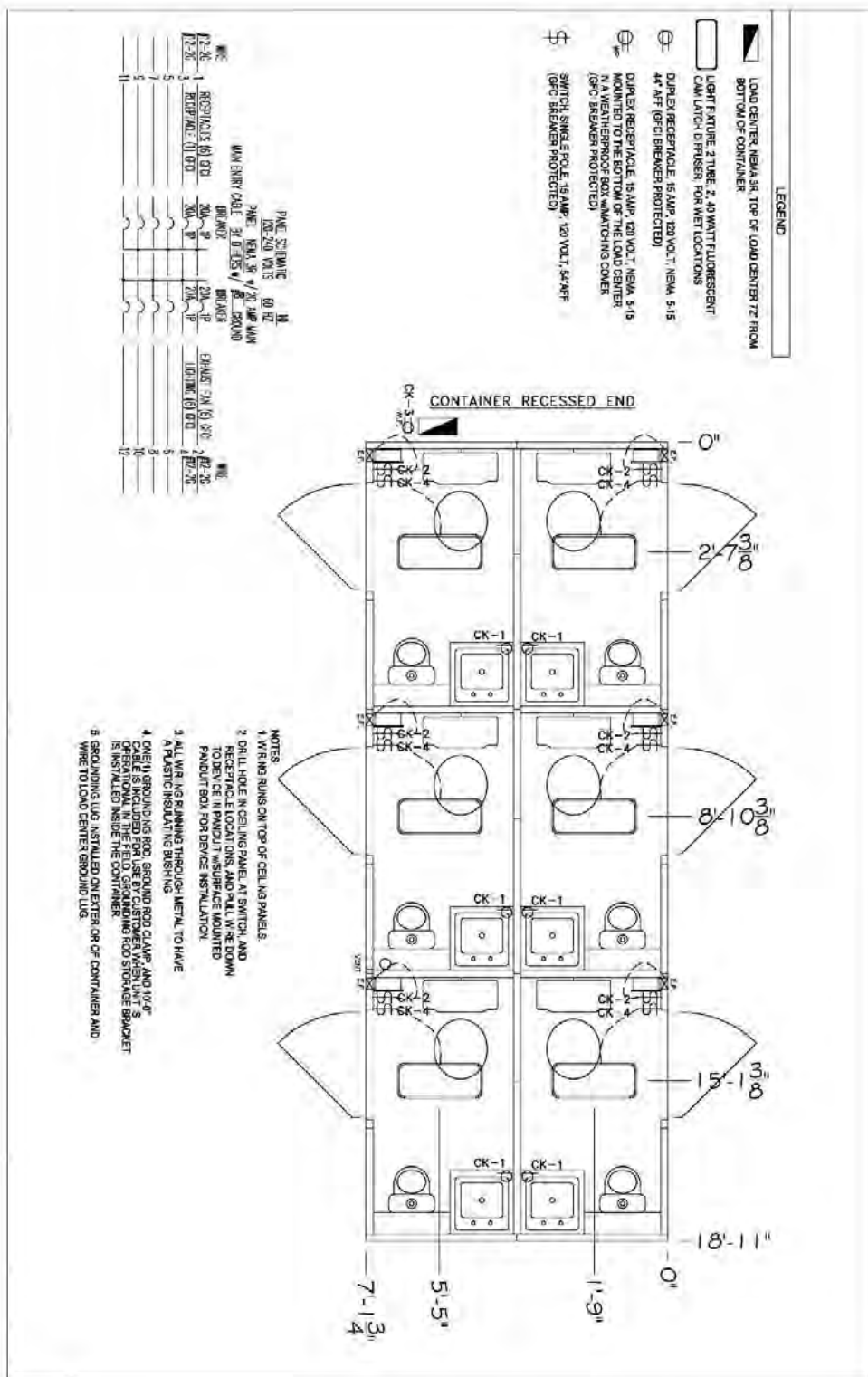
The Ground Rod (1) is stored in one of the compartments next to the Toilet.



Load Center Wiring Layout



Container Electrical System Layout



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