

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

**CHAPTER 3  
TROUBLESHOOTING PROCEDURES**

This page was intentionally left blank

**TROUBLESHOOTING PROCEDURES**  
**FPU® SYSTEMS OPERATION MANUAL**  
**(INCLUDING REPAIR PARTS & SPECIAL TOOL LIST)**  
**BOH CONTAINERIZED MISSION SYSTEMS**  
**CCC and EWCC**  
**BOH FPU Field Pack-up Units**

**INTRODUCTION**

---

**INTRODUCTION**

The malfunction/symptom index in WP 0014 00 is a quick reference for finding the troubleshooting procedures. Associated with each symptom name is a table number representing the starting point in a troubleshooting sequence contained in WP 0015 00. The troubleshooting index is broken down by component. Find the component and malfunction/symptom, review the referenced table for the test or inspection and perform the corrective action. This type of activity continues until successful fault isolation is achieved.

**Troubleshooting Procedures**

The troubleshooting work package contains tables listing the malfunctions, checks or inspections, and corrective actions required to return the equipment to normal operation. Perform the steps in the order they appear in the tables.

The work package is headed by an initial setup. This setup outlines what is needed as well as the conditions that must be met before starting the task. **DO NOT START A TASK UNTIL:**

- You understand the malfunction.
- You understand what you are to do to correct the malfunction.
- You understand what is needed to do the work.
- You have the things you need.

This manual cannot list all malfunctions that may occur, or all tests, inspections and corrective actions. If a malfunction is not listed or is not corrected by listed corrective actions, notify unit maintenance.

**General Information**

When troubleshooting the electrical system with power connected, place all switches and circuit breakers in the OFF position. Ensure all switches and circuit breakers are identified as "in work" to prevent accidental powering of equipment while servicing equipment in work. If any circuit breaker trips after it has been reset, notify unit maintenance.

**END OF WORK PACKAGE**

This page was intentionally left blank

**TROUBLESHOOTING PROCEDURES**  
**FPU® SYSTEMS OPERATION MANUAL**  
**(INCLUDING REPAIR PARTS & SPECIAL TOOL LIST)**  
**BOH CONTAINERIZED MISSION SYSTEMS**  
**CCC and EWCC**  
**BOH FPU Field Pack-up Units**  
**TROUBLESHOOTING INDEXES**

**CCC and EWCC TROUBLESHOOTING INDEX (OPERATOR)**

Malfunction/Symptom	Refer to WP 0009 00 Table 1, Procedure Number
<b>INITIAL SETUP</b>	
<b>BOH Containerized Mission Systems CCC and EWCC</b>	
Unable to unlock/open the entrance door.	1
Entrance door swings freely.	2
<b>CCC and EWCC Electrical Service</b>	
<b>WARNING</b> Do not attempt to make electrical repairs. Report electrical failures to maintenance.	
Overhead lighting will not come on.	3
Overhead lighting is dimming.	4
No overhead red lights.	5
HVAC unit will not operate.	6
HVAC unit will not cool/heat properly.	7
No power to electrical outlets.	8
<b>Operating Desk File Cabinet Drawers</b>	
Unable to open drawers.	9
Unable to close drawer.	10
<b>Operating The EWCC EXPANDOs</b>	
EXPANDO will not deploy or retract.	11
<b>Water Leaks</b>	
Water is found inside the unit.	12

**END OF WORK PACKAGE**

This page was intentionally left blank

**TROUBLESHOOTING PROCEDURES**

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

**TROUBLESHOOTING PROCEDURES**

**INITIAL SETUP:**

**Materiel/Parts**

None

**Personnel Required**

One

**Tools**

General Mechanic's Tool Kit

**References**

None

**Equipment Condition**

BOH CMS Setup

**NOTE**

If corrective action does not correct the malfunction, notify unit maintenance.

**TABLE 1 OPERATOR TROUBLESHOOTING**

Malfunction	Test or Inspection	Corrective Action Required
1. Unable to unlock/open the entrance door.	Make sure you have the proper key.	Obtain the proper key.
	Rotate the handle as described on the door handle sign.	Access the opposite Door and open the door from inside. <b>NOTE:</b> The EWCC EXPANDO #2 and # 3 need to be moved to gain access to the opposite door. Notify maintenance if there is damage to the door.
	Check the lockset for dirt or corrosion.	Clean and lubricate with WD-40.
2. Entrance door swings freely	Check door damper cylinder.	Replace as needed.
3. Overhead lighting will not come on.	Ensure the power source is active, ground rod is in place, and connected properly by a certified electrician e.g. Army MOS 21R.	Report to maintenance certified electrician e.g. Army MOS 21R.
	Check the position of the fluorescent tubes for proper contact.	Remove the light fixture cover and twist and reposition the fluorescent tubes until they make proper contact or replace as needed.
4. Overhead lighting is dimming.	Unplug additional appliances (coffee pots, microwaves, etc.) and restart HVAC.	If HVAC operates properly, ensure 110/220, single phase, 60 Hz shore power is provided or refrain from use of these appliances when HVAC is in operation. <b>WARNING</b> Do not attempt to make electrical repairs. Report improper connection to maintenance.

TABLE 1 OPERATOR TROUBLESHOOTING (cont'd)

Malfunction	Test or Inspection	Corrective Action Required
5. No overhead red lights	Check the light selector switches position at the door.	Check and activate circuit breakers, report malfunction to maintenance electrician e.g. Army MOS 21R.
	Ensure there is a red sleeve on one of the fluorescent tube.	Install a red sleeve on the red active fluorescent tube.
	Check the position of the fluorescent tubes for proper contact.	Remove the light fixture cover and twist and reposition the fluorescent tubes until they make proper contact or replace as needed.
6. HVAC unit will not operate	Check Thermostat setting at the door.	Adjust temperature setting.
		Reset thermostat (see Chapter 5 page 0029 00-10 for procedure).
	Check the HVAC circuit breaker.	Actuate the circuit breaker. Report failure to maintenance.
	Check the HVAC filter.	Clean or replace the filter.
7. HVAC unit will not cool/heat properly	Check Thermostat setting at the door.	Adjust temperature setting.
		Reset thermostat (see Chapter 5 page 0029 00-9 for procedure).
	Ensure there is some condensation in the catch pan.	Only drain condensation when retracting the HVAC.
	Check the HVAC filter.	Clean or replace the filter.
	Unplug additional appliances (coffee pots, microwaves, etc.) and restart HVAC.	If HVAC then operates properly, ensure 110/220, single phase, 60 Hz shore power is provided or refrain from use of these appliances when HVAC is in operation. <b>WARNING</b> Do not attempt to make electrical repairs. Report improper connection to maintenance.
	Check power source connections.	Ensure 110/220, single phase, 60 Hz power source is provided. <b>WARNING</b> Do not attempt to make electrical repairs. Report improper connection to maintenance.
Inspect the Freon charge.	Recharge the Freon.	



TABLE 1 OPERATOR TROUBLESHOOTING (cont'd)

Malfunction	Test or Inspection	Corrective Action Required
8. No Power to electrical outlets	Check power circuit breakers.	Actuate the power circuit breakers. Report failure to maintenance.
	Check power source connections.	<b>WARNING</b> Do not attempt to make electrical repairs. Report improper connection to maintenance.
9. Unable to open drawers.	Check the key and lock set.	Obtain the proper key.
		Lubricate the lock set with WD 40.
10. Unable to close drawer.	Check material in the drawer	Rearrange material.
		Remove excess material.
11. EXPANDO will not deploy or retract	Ensure the path of the EXPANDO is clear of sand, snow, rocks or brush.	Clear the EXPANDO path of debris.
	Ensure both ratchet strap actions are synchronized.	Redirect the ratchet strap action to synchronized motion.
12. Water is found inside the unit.  <b>CAUTION</b> Immediately upon initial observation, it is the responsibility of the owner to address the water leak to prevent a hazardous situation and potential damage to other interior components.	Ensure EWCC expando units are fully sealing in either the deployed or retracted positions. Check for debris.	Redeploy/retract the unit and ensure the expando is pushed evenly and properly seals. Remove debris if found.
	Check all seals (HVAC, shore power, window, EWCC expando) for damage	Replace seals as needed.
	Check all exterior caulking/sealants for damage or deterioration	Recaulk and paint as needed.
	Ensure the unit is on level ground	Reposition the unit on level ground and verify level inside the unit before deploying EXPANDO units.
<b>END OF TABLE 1</b>		

END OF WORK PACKAGE

This page was intentionally left blank