

**FPU® SYSTEMS OPERATION MANUAL  
(INCLUDING REPAIR PARTS & SPECIAL TOOL LIST)  
FPU/BOH CARGO CONTAINERS MODELS  
FPU-8-2, BOH-CARGO-12-1, BOH-CARGO-6 & FPU-20-1 & FPU-20-2  
BOH FPU Field Pack-up Units**

**CHAPTER 3  
TROUBLESHOOTING PROCEDURES**

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## TROUBLESHOOTING PROCEDURES

### FPU® SYSTEMS OPERATION MANUAL (INCLUDING REPAIR PARTS & SPECIAL TOOL LIST) FPU/BOH CARGO CONTAINERS MODELS FPU-8-2, BOH-CARGO-12-1, BOH-CARGO-6 & FPU-20-1 & FPU-20-2 BOH FPU Field Pack-up Units

## INTRODUCTION

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### INTRODUCTION

The malfunction/symptom index in WP 0011 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 0012 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.

### END OF WORK PACKAGE

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FPU/BOH CARGO CONTAINERS MODELS  
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BOH FPU Field Pack-up Units**

**TROUBLESHOOTING INDEXES**

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**TABLE 1 TROUBLESHOOTING INDEX (OPERATOR)**

Malfunction/Symptom	Refer to WP 0012 Table 1, Procedure Number
<b>INITIAL SETUP</b>	
<b>Connecting/Disconnecting FPU</b>	
Unable to Insert Horizontal Interconnectors into ISO Corner Blocks of BOH-CARGO-12 or FPU-8-2.	1
Unable to Join FPU-8-2 to BOH-CARGO-12-1.	2
Unable to Separate FPU-8-2/BOH-CARGO-12-1 Containers.	3
<b>OPERATION OF FPU CONTAINERS</b>	
<b>Operation of FPU Pocket Doors FPU8-2, FPU 20-1 and FPU 20-2</b>	
Unable to Open Door	4
Unable to Close Door	5
Doors Leaking	6
<b>Operation of FPU Barn Style Doors BOH CARGO 12-1 and BOH CARGO-6</b>	
Unable to Open Door	7
Unable to Close Door	8
Doors Leaking	9
<b>Operating Adjustable Drawers (BOH-CARGO-12 configured with Parts Storage Aids)</b>	
Unable to Remove Drawer Slide Ledge Assembly from Vertical Rack Frame.	10
Unable to Install Drawer Slide Ledge Assembly onto Vertical Rack Frame.	11
<b>Opening and Closing Drawers (Boh-Cargo-12 configured with Parts Storage Aids)</b>	
Unable to Open Drawer.	12
Drawer Does Not Lock in the Fully Extended Position.	13
Unable to Close Drawer.	14

TABLE 1 TROUBLESHOOTING INDEX (OPERATOR) Continued

Malfunction/Symptom	Refer to WP 0012 Table 1, Procedure Number
<b>Pallet Rack System (FPU Configured with Bulk Storage Aids)</b>	
Unable to Insert a Pallet.	15
Unable to Remove a Pallet.	16
<b>Adjusting Pallet Position</b>	
Unable to Remove Pallet Ledge Assembly from Vertical Rack Frame.	17
Unable to Install Pallet Ledge Assembly onto Vertical Rack Frame.	18
<b>Securing FPU Cargo Using Nets (2-inch Drawers and HAZMAT Pallets only)</b>	
Male Parachute Clips on Nets Do Not Align with Female Clips on Drawer/Pallet.	19
<b>Securing Cargo Using Floor Nets (FPU Configured with Bulk Storage Aids)</b>	
Safety Snaps Will Not Stretch Between Rings at Bottom of Vertical Rack Frames.	20
<b>LOADING OPERATION OF FPU MODULES</b>	
<b>Loading/Unloading FPU Modules</b>	
Unable to Insert Module and Lock in Position	21
Unable to Remove Module	22
<b>End of Table</b>	

END OF WORK PACKAGE

## TROUBLESHOOTING PROCEDURES

### FPU® SYSTEMS OPERATION MANUAL (INCLUDING REPAIR PARTS & SPECIAL TOOL LIST) FPU/BOH CARGO CONTAINERS MODELS FPU-8-2, BOH-CARGO-12-1, BOH-CARGO-6 & FPU-20-1 & FPU-20-2 BOH FPU Field Pack-up Units

## TROUBLESHOOTING PROCEDURES

#### INITIAL SETUP:

##### Material/Parts

None

##### Personnel Required

One

##### Tools

General Mechanic's Tool Kit

##### References

None

##### Equipment Condition

FPU set up

#### NOTE

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

#### TABLE 1 OPERATOR TROUBLESHOOTING

Malfunction	Test or inspection	Corrective action required
1. Unable to Insert Horizontal Interconnectors into ISO Corner Blocks of FPU-8-2 or BOH-CARGO-12-1	Ensure the ears on horizontal interconnectors are fully open.	Using appropriate tools, fully retract horizontal interconnector bolts. (Review Chapter 5 WP 0005 00)
	Inspect for debris in ISO corner blocks.	Clean corner blocks as required. (Review chapter 5 WP 0005 00)
2. Unable to Join FPU-8 to BOH-CARGO-12-1	Inspect BOH-CARGO-12-1 for proper orientation.	Realign containers as required (Review chapter 5 WP 0005 00)
3. Unable to Separate FPU-8-2/ BOH-CARGO-12-1 Containers	Check for cocked/twisted condition.	Push back container into connected position, realign MHE and repeat disconnecting process (Review chapter 5 WP 0005 00)
	Check to ensure horizontal interconnectors are fully retracted.	Retract horizontal interconnector adjuster bolt to the fully retracted position. (Review chapter 5 WP 0005 00)
4. Unable to Open Door/Doors on FPU-8-2, FPU-20-1 and FPU-20-2	Inspect container position to ensure it is on level ground.	Relocate container to level ground. (Refer to WP 0006 00-1 to 00-5).
	Inspect door for misalignment, to determine if inner door handle is in the open position.	Realign door/doors. (Refer to WP 0006 00-1 to 00-5).

TABLE 1 OPERATOR TROUBLESHOOTING (cont'd)

Malfunction	Test or inspection	Corrective action required
5. Unable to Close Door/Doors on FPU-8-2, FPU-20-1 and FPU-20-2	Inspect for debris or obstructions in door threshold and pocket door channels.	Clean debris from threshold and pocket door channels. (Refer to WP 0006 00-1 to 00-5).
	Inspect container position to ensure it is on level ground.	Relocate container to level ground. (Refer to WP 0006 00-1 to 00-5).
	Inspect to ensure door is being closed with proper sequence, to mate the seals.	Retry with right door slightly ahead of the left to ensure proper seal orientation. (Refer to WP 0006 00-1 to 00-5).
6. Doors Leaking	Inspect container door threshold for dirt, gravel or other obstructions.	Clean debris from door threshold. (Refer to WP 0006 00-1 to 00-5).
	Inspect door seals for proper lubrication.	Wipe clean and lubricate as needed. (Refer to WP 00014 00 and 0015 00.
	Inspect seal for damage	Replace damaged seals
7. Unable to open FPU Barn Style Doors BOH-CARGO-12-1 and BOH-CARGO-6	Inspect for debris or obstructions in door threshold	Clean debris from threshold (Refer to WP 0008 00).
	Inspect container position to ensure it is on level ground.	Relocate container to level ground. (Refer to WP 0008 00).
8. Unable to close FPU Barn Style Doors BOH-CARGO-12-1 and BOH-CARGO-6	Inspect for debris or obstructions in door threshold	Clean debris from threshold (Refer to WP 0006 00-1 to 00-5).
	Inspect container position to ensure it is on level ground.	Relocate container to level ground. (Refer to WP 0006 00-1 to 00-5).
	Inspect to ensure door is being closed with proper sequence, to mate the seals.	Retry with right door slightly ahead of the left to ensure proper seal orientation. (Refer to WP 0006 00-1 to 00-5).



TABLE 1 OPERATOR TROUBLESHOOTING (cont'd)

Malfunction	Test or inspection	Corrective action required
9. Door leaking	Inspect container door threshold for dirt, gravel or other obstructions.	Clean debris from door threshold. (Refer to WP 0006 00-1 to 00-5).
	Inspect door seals for proper lubrication.	Wipe clean and lubricate as needed. (Refer to WP 00014 00 and 0015 00.
	Inspect seal for damage.	Replace damaged seals. (Refer to WP 0006 00-1 to 00-5).
10. Unable to Remove Drawer Slide Ledge Assembly from Vertical Rack Frame.	Inspect to ensure all securing bolts have been removed.	Ensure all four carriage bolt nuts are loose.
	Check drawer ledge position to ensure it is clear of the vertical rack stanchion tab windows	Using 2X4 or similar object, tap upward on the drawer ledge until clear of vertical rack tab window
11. Unable to Install Drawer Slide Ledge Assembly onto Vertical Rack Frame.	Check internal thread for dirt, sand and grit.	Clean dirt, sand and grit from threads.
	Check for bent or damaged vertical rack.	Report damage to maintenance.
12. Unable to Open Drawer.	Inspect drawer-locking handles to ensure they are in the unlocked position.	Position drawer locking handles into the unlocked position and extend outward.
	Inspect for an obstruction inside the drawer.	Clear obstruction and reposition, remove any excess material.
13. Drawer Does Not Lock in the Fully Extended Position.	Inspect drawer to ensure drawer is fully extended.	Pull back firmly on drawer to fully extend and turn locking handles to their locked position.
14. Unable to Close Drawer.	Inspect drawer-locking handle to ensure they are in the open position	Position drawer locking handles into the unlocked position and close the drawer.
	Check for an obstruction in the drawer.	Clear obstruction and reposition, remove any excess material.
15. Unable to Insert a Pallet.	Inspect pallet-locking rod to ensure it is in the fully retracted position.	Fully retract the pallet-locking rod, continue inserting pallet.
	Inspect pallet and pallet ledge area to ensure nets or straps on the pallet are not hung up on the pallet ledge.	Clear any obstructions.
16. Unable to Remove a Pallet.	Inspect pallet-locking rod to ensure it is in the fully retracted position.	Fully retract the pallet-locking rod, continue removing pallet.
	Inspect pallet and pallet ledge area to ensure nets or straps on the pallet are not hung up on the pallet ledge.	Clear any obstructions.

**TABLE 1 OPERATOR TROUBLESHOOTING (cont'd)**

<b>Malfunction</b>	<b>Test or inspection</b>	<b>Corrective action required</b>
17. Unable to Remove Pallet Ledge Assembly from Vertical Rack Frame.	Inspect to ensure all securing bolts have been removed.	remove all ten carriage bolts and nuts
	Check pallet ledge position to ensure it is clear of the vertical rack stanchion tab windows.	Using 2X4 or similar object, tap upward on the drawer ledge until clear of vertical rack frame tab window.
18. Unable to Install Pallet Ledge Assembly onto Vertical Rack Frame.	Inspect pallet ledge tabs to ensure they are seated inside vertical rack frame tab windows.	Remove and reposition vertical rack with all bayonet tabs inside frame tab windows and the ten carriage bolts are aligned inside their appropriate slots.
	Ensure pallet ledge is seated.	Tap downward with a 2X4 or similar object until carriage bolts are completely at the bottom of their slots.
19. Male Parachute Clips on Nets Do Not Align with Female Clips on Drawer/Pallet.	Check the orientation of net to ensure it is properly fitted.	Turn net to orientate properly.
20. Safety Snaps on Floor Nets Will Not Stretch Between Rings at Bottom of Vertical Rack Frames.	Check orientation of net to ensure it is properly fitted.	Turn net to orientate properly.
21. Unable to Insert Module and Lock In Position.	Check module adapter plate cradles for debris.	Clean as necessary.
	Check cradles to ensure all rubber pads are in place.	Replace rubber pads as necessary. Clear module locking-arm of any obstructions.
	Check module-locking arm to ensure it is in the fully open position.	Extend module-locking arm to its fully open position.
22. Unable to Remove Module.	Check module-locking arm to ensure it is in its fully open position.	Extend module-locking arm to its fully open position.
<b>End of TABLE 1 OPERATOR TROUBLESHOOTING</b>		

**END OF WORK PACKAGE**