

CHAPTER 3
TROUBLESHOOTING PROCEDURES

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**FPU SYSTEMS OPERATION MANUAL
(INCLUDING REPAIR PARTS & ACCESSORIES)
FOR
STANDARD AND SPECIALIZED FPU MODULES
BOH FPU Field Pack-up Units**

TROUBLESHOOTING PROCEDURES

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 task.
- You understand what you are to do.
- 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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TROUBLESHOOTING INDEXES**

TROUBLESHOOTING INDEX (OPERATOR)

| Malfunction/Symptom | Refer to WP 0014 00 Table 1, Procedure Number |
|--|--|
| INITIAL SETUP | |
| LOADING OPERATION OF FPU MODULES | |
| Loading/Unloading FPU Modules | |
| Unable to insert module and lock in position | 1 |
| Unable to remove module | 2 |
| Operating Module Doors | |
| Unable to open door | 3 |
| Unable to close door | 4 |
| Door seal leaking | 5 |
| Operating Adjustable Drawers | |
| Unable to open drawers | 6 |
| Unable to close drawer | 8 |
| Securing FPU Cargo Using Nets | |
| Male parachute clips on nets do not align with female clips on drawer/pallet | 9 |
| Securing Cargo Using Floor Nets (FPU Configured with Bulk Storage Aids) | |
| Safety snaps will not stretch between rings at bottom of vertical rack frames | 10 |
| FPU BULK MODULE | |
| Shelf Binding | 11 |
| Shelf Latch Sticking | 12 |
| | |
| | |
| | |
| For Stackable Modules 13 thru 20 consult the PDF manual on the B Web site. http://www.bohenvironmental.com | 13-20 |
| END OF TABLE | |

END OF WORK PACKAGE

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TROUBLESHOOTING PROCEDURES

INITIAL SETUP:**Materiel/Parts**

None

Personnel Required

One

Tools

General Mechanic's Tool Kit

References

None

Equipment Condition

FPU set up

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 insert module and lock in position | Inspect floor plate-locking rod to ensure it is in the fully retracted position. Inspect module and container area to ensure nets or straps on the module are not hung up on the container. | Fully retract the floor plate-locking rod. Untangle and continue inserting module. |
| 2. Unable to remove module | Inspect floor plate-locking rod to ensure it is in the fully retracted position. Inspect module and container area to ensure nets or straps on the module are not hung up on the container. | Fully retract the floor plate-locking rod. Untangle and continue inserting module. |
| 3. Unable to open door | Inspect container position to ensure it is on level ground. Inspect Door for misalignment. Inspect to determine if Door Lock Set is clear of debris. | Relocate container to level ground. Apply lube spray, to key slot. (Hazmat corrosive locker) Operate vent valve on door to relieve internal vacuum. |
| 4. Unable to close door | Inspect for debris in door threshold. Inspect door for misalignment. Inspect module position to ensure it is on level ground. Inspect to ensure door is being closed with proper seal orientation. | Clean debris from threshold. Clear excess material. Relocate container to level ground. Replace damaged seal. Repair or replace bent or damaged door. |

TABLE 1 OPERATOR TROUBLESHOOTING (cont'd)

| Malfunction | Test or Inspection | Corrective Action Required |
|---|---|---|
| 5. Module doors leaking | Inspect container door threshold for dirt, gravel or other obstructions. Inspect door seals for proper lubrication. | Clean as necessary. Lubricate as required. |
| 6. Unable to open module drawer | Inspect drawer-locking handles and latches to ensure they are in the unlocked position. Inspect for an obstruction inside the drawer. | Position drawer locking handles or latches into the unlocked position and extend outward. Clear obstruction and open. |
| 8. Unable to close module drawer | Inspect drawer-locking handle and latches to ensure they are in the open position. Check for an obstruction in the drawer. | Position latches in the open position and push inward. Clear/remove the obstruction. |
| 9. Male parachute clips on nets do not align with female clips on drawer/pallet | Check the orientation of net to ensure it is proper fitted. | Turn net to orientate properly. Reposition material. |
| 10. Safety snaps on floor nets will not stretch between rings at bottom of vertical rack frames | Check orientation of net to ensure it is proper fitted. | Turn net to orientate properly. Reposition material. |
| 11. shelf binding | Check for loose frame bolts. Check for dirt rust and debris in roller tracks. Check rollers for free movement. | Tighten frame bolts and check adjustment; FPU BULK MODULE see page 0010 00-18 and 00-19. Clean roller track. Adjust roller bolts or replace roller. Note: Rollers are self lubrication. |
| 12. shelf latch sticking | Check for dirt rust and adjustment. | Loosen adjust latch bolt, clean dirt and rust then lube spray; FPU BULK MODULE see page 0010 00-16 Note: Latches should fall freely. |
| | | |

Note

For Stackable Modules 13 thru 20 consult the PDF manual on the BOH Web site.

For further product detailed information contact:

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| Malfunction | Test or Inspection | Corrective Action Required |
|---|--|---|
| 13. Unable to remove a Stackable drawer | Ensure ratchet straps are not over tightened. Ensure the drawer frame latch is up and secure. | Loosen the ratchet straps until stress on the frames is relieved. Raise and secure the drawer latch. Raise the thumb latch and pull out the drawer. |
| 14. One or more Stackable drawers are jammed | Inspect for drawer lid binding in the frame due to overloaded drawer. | Release ratchet straps and un-stack from the top down as/per un-stacking instructions. |
| 15. Unable to close Stackable drawer lid | Inspect for debris or material above the dividers or wrong dividers under the left and right drawer gas cylinders. Check drawer seal for alignment. | Clear, align or rearrange material, seal and dividers as required. |
| 16. Stackable drawers are difficult to pull out or push in | Inspect for dirt sand grit on the self lubricating bearing pads of the drawer slides. | Clean as required with soap and water. Note: Do Not lubricate; bearing pads lubrication attracts more dirt, grit and sand. |
| 17. Unable to remove Stackable drawer from the slide frame | Insure the drawer is fully extended. Check for dirt corrosion in dowel slots and dowel pins on drawer. | Pull drawer to the full extended position. Clear debris, rust or dirt from slots or pins. |
| 18. Stackable drawer lid seal leaking | Inspect drawer seal for damage, dirt, gravel. | Clean or replace as necessary. |
| 19. Stackable drawer frame latch will not latch or unlatch properly | Inspect the spring and rolled pin. | Clean and lubricate. Replace if damaged or missing. |
| 20. Unable to stack Stackable drawer assemblies | Inspect pins and grommet assembly for missing grommets or bent pins. | Repair or replace bent pins Replace damaged or missing grommet assemblies. |
| End Of Table | | |

END OF WORK PACKAGE

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