# FPU<sup>®</sup> SYSTEMS OPERATION MANUAL (INCLUDING REPAIR PARTS & SPECIAL TOOL LIST) Small Cabinet Module (SCM) BOH FPU Field Pack-up Units

# **CHAPTER 4**

# **OPERATOR MAINTENANCE INSTRUCTIONS**

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# FPU<sup>®</sup> SYSTEMS OPERATION MANUAL (INCLUDING REPAIR PARTS & SPECIAL TOOL LIST) SMALL CABINET MODULE (SCM) BOH FPU Field Pack-up Units

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

INITIAL SETUP:	
Materiel/Parts	References
None	None
Personnel Required	Equipment Condition
One	BOH SCM MODULE Set-up

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

Preventative Maintenance Checks and Services (PMCS) are performed to keep the FPU System 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 SCM MODULE is in operation, using the PMCS table in WP 0014 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 SCM MODULE , do Before Operation PMCS
- While the BOH SCM MODULE is in use, do During Operation PMCS
- After using the BOH SCM MODULE , 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.

#### Service

Proper service of the BOH SCM MODULE 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 SCM MODULE and components whenever necessary.

# END OF WORK PACKAGE

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#### PMCS TABLE

INITIAL SETUP:	
Materiel/Parts	References
Rags, Water	None
Personnel Required	Equipment Condition
One to four	BOH SCM MODULE Set-up

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

	В	D	Α	W	М	Inspection Item and Procedure	Equipment Not Ready/Available If
1	*		*			Hulls Check all hulls for cracks, dents, holes, or loose/missing hardware. Check slam latches for freedom of operation. Check bezels for dents or distortion. Check for accumulations of dirt and debris. Clean as required. Replace missing or damaged hardware.	Loose or missing hardware will limit the ability to secure cabinets, drawers and security bar. Dirt or debris will inhibit the operation of the SCM
2					*	Lubricate drawer slides, slam latches, with Molykote lubricant as required.	Slam latches or drawer slides will not operate smoothly.
3	*		*	*		Drawer Exterior Check all exterior cabinet surfaces for cracks, dents that effect the operation of the module system. Check drawer lids for cracks or distortion. Check drawer latches and tray slide detent for proper operation. Check for loose rivets. Check for accumulations of dirt, debris. Clean as required.	Damage to the cabinet, drawer lids, tray slide detents, may cause injury to personnel. Damage, dirt or debris may cause malfunction inhibit loading material and of operation of the module system.

# Table 1 Preventative Maintenance Checks and Services for the BOH SCM MODULE (Continued) PMCS B (Before), D (During), A (After), W (Weekly), M (Monthly)

	в	D	Α	w	м	Inspection Item and Procedure	Equipment Not Ready/Available If
4	*	*	*	*		<b>DRAWER Interior</b> Check drawer for dirt and debris. Clean with a brush or rags as required. Check all drawer dividers for dents, bends or distortion. Check for missing, bent or distorted center dividers. Replace dividers if needed.	Drawer dividers with dents, bends or distortion inhibit the arrangement of material.
5	*		*	*	*	Drawer Lid Seal Check drawer lid seals for cuts, cracks, distortion, proper alignment and attachment. Reattach with proper glue or replace if necessary. Check for moisture on or in material.	Failure of the seal will allow moisture to enter the drawer and may damage the stored material in the drawer.
6	*		*	*	*	Attachment Rivets Check for missing or loose attachment rivets on drawer handles, drawer latches, pads. Schedule maintenance replacement as needed.	Loose or missing rivets will impede the safe operation and may cause injury or damage.
7	*					<b>Cabinet Base</b> Check for weld cracks, bends, dents or frame distortion. Replace or schedule weld shop repair immediately.	Failure to repair welds may cause damage to equipment or injury.
8	*		*		*	Data Labels Check plates for legibility, damage and/or missing. Clean with water and rag. Replace immediately.	The unit cannot be identified with missing or illegible data labels. Illegible weight labels may cause injury to personnel.
End of PMCS Table							

# END OF WORK PACKAGE

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#### **CLEANING AND LUBRICATING**

INITIAL SETUP:	
Materiel/Parts	References
Rags, Water, Detergent	None
Personnel Required	Equipment Condition
One	BOH SCM MODULE Set-up

#### CLEANING AND LUBRICATING

Cleaning and Lubricating of the BOH SCM MODULES is performed to keep the module and its associated equipment in good operating condition. The cleaning and lubrication of the module can be conducted along with the Preventative Maintenance Checks and Services (PMCS) procedures described in WP 0014 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 modules, 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 0012 00 should be reported for corrective maintenance.

SURFACE	OIL/GREASE	SALT/MUD/DIRT DEBRIS	RUST/CORROSION and LUBRICATION		
Exterior and Interior Surfaces (All)	Detergent, Water, Rags	Soapy Water, Brush, Rags	Corrosion Removal Compound and Wire Brush, Dry Rag and Spot Paint		
Drawer Seals	Damp and Dry Rags	Damp and Dry Rags	N/A		
Module Cabinets, Drawer Trays, Drawer Handles and Slam Latches	Detergent, Water, Rags	Soapy Water, Brush, Rags	Corrosion Removal Compound and Wire Brush, Dry Rags, Spot Paint		
Cabinet Base	Detergent, Water, Rags	Brush, Soapy Water, Brush, Rags	Corrosion Removal Compound and Wire Brush, Dry Rags, Spot Paint		
Cabinet Guide Channels	Detergent, Water, Rags	Damp and Dry Rags	Corrosion Removal Compound and Wire Brush, Dry Rags, Spot Paint		
Drawer Lid Latches	Damp and Dry Rags	Damp and Dry Rags	Molykote lubricant		
Tray Slide Detents	Detergent, Water, Rags	Damp and Dry Rags	Molykote lubricant		
Tray Slides	Detergent, Water, Rags	Damp and Dry Rags	Molykote lubricant		
End of Cleaning Table 1					

# Table 1 Cleaning

Table 2	Lubrication
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USAGE	FLUID or LUBRICANT	CAPACITIES	EXPECTED TEMPERATURES	INTERVAL
Drawer tray Slide and Detent	Molykote Multipurpose Synthetic Grease P/N 26040124	As Required	All Temperatures	Monthly or as required if under adverse conditions
Drawer tray Slam Latches	Molykote Multipurpose Synthetic Grease P/N 26040124	As Required	All Temperatures	Monthly or as required if under adverse conditions
End of Lubrication Table 2				

END OF WORK PACKAGE

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## **INSPECTION OF LATCHES and SLIDE DETENTS**

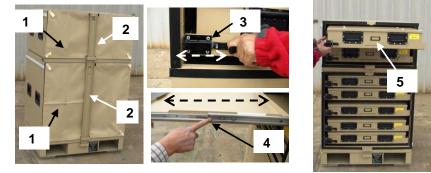
INITIAL SETUP: Materiel/Parts None Personnel Required One

References Chapter 2 WP 0007 & 0008 Equipment Condition BOH SCM MODULES Set-up

#### INSPECT



Slam latches (3) and slide detents (4) that do not operate properly and may not secure the drawers (5) must be replaced immediately. Failure to replace could cause damage to the equipment or injury to personnel.



- 1. Remove and inspect both 18" and 30" 3G bars (2) for damage.
- 2. Remove and inspect both dust covers (1) for damage.
- 3. Actuate all the slam latches (3) and slide detents (4); test the spring action to ensure they return and retain the drawers (5).
- 4. Lubricate slam latches (3) and detent (4) as needed. Report inoperative or damaged slam latches (3) or detents (4) to maintenance for replacement.



Do not depress the detent to release it; always use the release lever (4) to prevent a pinched finger.

# END OF WORK PACKAGE

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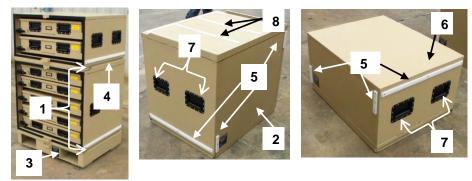
# **INSPECTION OF SCM 18" and 30" CABINETS/HULLS**

INITIAL SETUP: Materiel/Parts Bezel Replacement Kit and Slide Tape Kit Personnel Required Two Tools Phillips Screwdriver #2 and rags and Lubricant

References Chapter 2 WP 0007 & 0008 Equipment Condition BOH SCM MODULES Set-up

#### INSPECT

Exterior



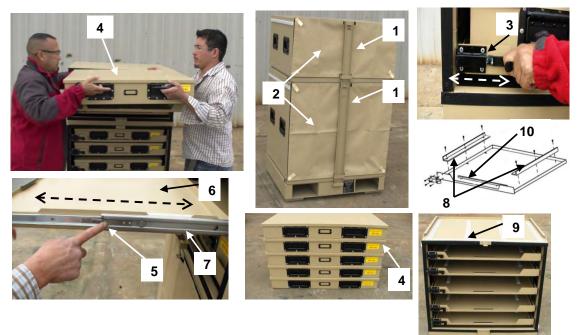
- 1. Visually inspect both of the bezels (1) on each side of the 30" cabinet (2) and cabinet base (3) for damage.
- 2. Replace the damaged 30" cabinet bezels (4) with the #2 Philips screw driver, if required.
- 3. Inspect the bumper strips (5) on the sides and rear of the 30" cabinet (2) and 18" cabinet (6) for damage.
- 4. Report any damaged bumper strips (4) to maintenance.
- 5. Inspect all handles (7) for smooth operation and damage, lubricate if needed.
- 6. Inspect for missing or damaged slide tape (8) on the top of the 30 "cabinet (2) and cabinet base (3), replace if needed. Apply adhesive Turbo Fuse series 130PR and reattach.



Cabinet bezels (1) that do not operate properly may not secure and retain the 18" (6) and 30" cabinet (2) and must be replaced immediately. Failure to replace could cause damage to the equipment or injury to personnel.

# INSPECT

#### 18" and 30" Hull Assemblies



- 1. Remove and inspect the 3G bars (1) and dust covers (2), replace if damaged.
- 2. Release the slam latch (3) and pull out the drawer tray (6) until the detent (5) is engaged.
- 3. With assistance, remove each drawer (4) and stack the drawers (4) out of the traffic area.
- 4. Inspect each drawer tray (6) for dirt or damage.
- 5. Check the tray slides (7) for smooth movement, lubricate as needed.
- 6. Inspect the drawer spacer angles (8) for dirt or damage; wipe clean with a damp rag.
- 7. Inspect the slide detents (5); test the spring action to ensure they retain the drawers.
- 8. Inspect the tray front edge protector (10), replace if missing or damaged. Apply adhesive Turbo Fuse series 130PR and reattach.
- 9. Inspect the hull (9) for dents or damage. With assistance, remove the hull (9) and schedule repair of any damage to the hull (9) with maintenance.
- 10. With assistance, install and close each drawer (4), ensure each slam latch (3) is engaged.
- 11. Install the dust covers (2) and 3G bars (1).



Assistance is required when lifting any SCM component. Failure to comply will cause injury and damage to equipment. Slam latches (3), 3G bars (1) and tray slide detents (5) that do not operate properly may not secure the drawers and hulls. They must be replaced immediately. Failure of these items could cause damage to the equipment or injury to personnel.

# END OF WORK PACKAGE

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#### INSPECTION OF THE SCM DRAWER ASSEMBLIES

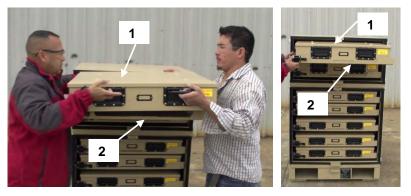
INITIAL SETUP: Materiel/Parts Seal Replacement Kit Personnel Required Two Tools Putty Knife

References Chapter 2 WP 0007 & 0008 Equipment Condition BOH SCM MODULES Set-up

#### INSPECT

NOTE

Drawer assemblies (1) may be inspected in the trays (2) and do not have to be removed. If the drawers are to be removed; follow the Warning below.

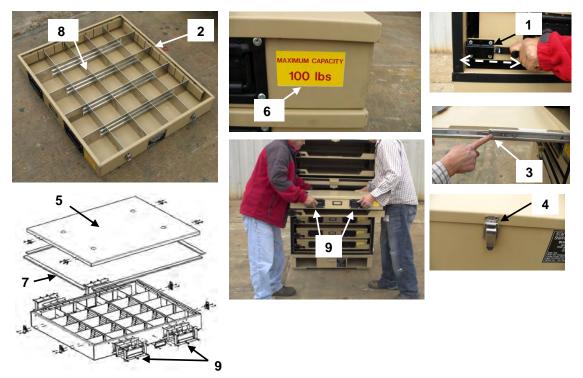




Seek assistance when removing empty drawers (1). Always stack the drawers (1) away from the traffic area. Align the drawers (1) in a stack so the dimples (top and bottom) mate to prevent the drawers (1) from sliding off the stack. Failure to follow the procedure may cause injury to personnel or damage to the equipment.



#### INSPECT



- 1. Release the slam latch (1) and pull the drawer (2) out until the slide detent (3) is engaged.
- 2. Inspect the lid latches (4) for damage, report damage to maintenance.
- 3. Release the lid latches (4) on each side and remove the lid (5).
- 4. Inspect the drawer weight labels (6) for clarity, clean or replace if needed.
- 5. Inspect the lid (5) for damage or distortion, replace as needed.
- 6. Inspect the lid seal (7) for damage or distortion.
- 7. Remove the seal (7) with the putty knife and replace the seal (7) if damaged.
- 8. Inspect the drawer dividers (8) for damage, replace as needed.
- 9. Inspect the front and rear handles (9) for smooth movement, lubricate as needed.
- 10. Check the handles (9) for damage or loose rivets, report damage to maintenance.
- 11. Return and latch the lid (5), ensure stored material does not interfere with the lid (5).
- 12. Release the detent (3) on the tray and push the drawer in until the slam latch (1) is engaged.
- 13. Inspect each drawer (2) in the same manner, follow steps 1 through 10.



Assistance is required when lifting any SCM drawers (2). Failure to comply will cause injury and damage to equipment.

# END OF WORK PACKAGE

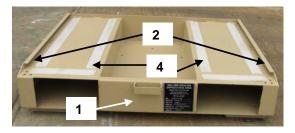
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# INSPECTION OF THE SCM CABINET BASE

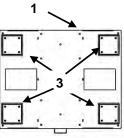
INITIAL SETUP: Materiel/Parts None Personnel Required Two Tools Putty Knife

References Chapter 2 WP 0007 & 0008 Equipment Condition BOH SCM MODULES Set-up

### INSPECT







NOTE

**Bottom View** 

The cabinet base can be visually inspected for damage without disassembling the entire SCM module.

- 1. Visually inspect the cabinet base (1) for dents, weld cracks or damage, report damage to maintenance.
- 2. Visually inspect the cabinet base bezels (2) for dents or damage, report damage to maintenance.
- 3. Inspect the SCM module for stability. Unstable SCM may indicate damage to the foot pads (3).
- 4. Report unstable SCM module for disassembly and repair to maintenance.
- 5. If disassembling the SCM module to gain access to the foot pads, review and follow chapter 2 pages WP 0007 00-1 to 00-4.
- 6. With assistance, tip the cabinet base (1) on edge and inspect the foot pads (3).
- 7. Report damaged foot pads to maintenance.
- 8. Inspect slide tapes (4) for ware or damage; remove with the putty knife and apply adhesive Turbo Fuse series 130PR and reattach.

WARNING		
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Assistance is required when lifting the SCM cabinet base (1). Failure to comply will cause injury and damage to equipment.

# END OF WORK PACKAGE