BOH SOLUTIONS OPERATION MANUAL (INCLUDING REPAIR PARTS) EXPEDITIONARY JOINT OPPERATIONS CENTER (EJOC®)

CHAPTER 5

UNIT MAINTENANCE INSTRUCTIONS

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BOH SOLUTIONS OPERATION MANUAL (INCLUDING REPAIR PARTS) EXPEDITIONARY JOINT OPPERATIONS CENTER (EJOC®)

RIVET REPLACEMENT

INITIAL SETUP:

Materiel/Parts
Rivet Replacement Kit
Personnel Required

One **Tools**

References

None

Equipment ConditionRivet Replacement

Rags, 1/2 hp. Electric Drill, Pop Rivet Tool, 3/16" drill bit and Needle Nose Pliers

INSPECT AND REPAIR

Remove and Replace Rivets

CAUTION

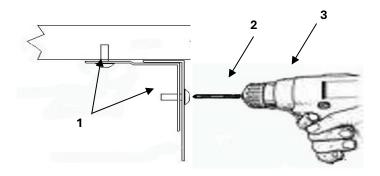
When removing a rivet [1], always ensure that the drill bit [2] will not contact or damage other parts behind the rivet [1].

- 1. For any rivet replacement, ensure there is nothing behind the area of the rivet [1] to be replaced that might be impacted by the drill bit [2].
- 2. To remove a rivet, wipe the rivet surfaces clean, use a 1/2 hp. electric drill [3] with a 3/16" drill bit [2], and drill through the center core of the rivet [1].

WARNING



Use proper eye protection when operating a drill.



- 3. Remove the remainder of any rivet debris with needle nose pliers and wipe the hole clean with a rag.
- 4. Ensure the holes are properly aligned.
- 5. Insert a new rivet (2), 1/8" or 3/16" DIA, through the holes of both items to be secured and into the pop rivet tool (1).
- 6. Use the pop rivet tool (1) to secure the rivet (2) and item in place.
- 7. Check for proper alignment and tight attachment of the item.



BOH SOLUTIONS OPERATION MANUAL (INCLUDING REPAIR PARTS) EXPEDITIONARY JOINT OPPERATIONS CENTER (EJOC®)

GENERAL EXTERIOR

INITIAL SETUP:

Materiel/Parts

Detergent, Lubricant, Prescribed Replacement Parts

Personnel Required

One

Tools

Rags, General Mechanic's Tool Kit

References

Chapter 4

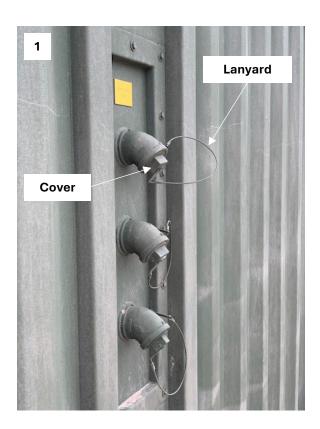
Equipment Condition

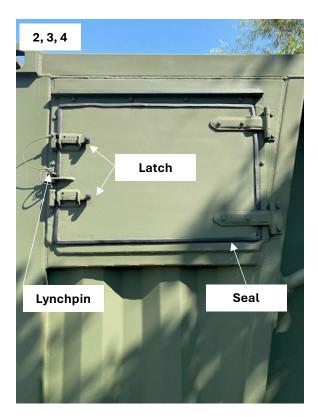
EJOC Operation Set-up

INSPECT

- 1. Examine the communications inlet covers for any missing or damaged components.
- 2. Verify the HVAC access door lynchpin is intact and not damaged.
- 3. Test the operation HVAC access door by removing lynchpin and opening the door. Latches should have smooth movement while providing tension. (Leave HVAC access door open for interior inspection).
- 4. Inspect HVAC access door seals for cuts, cracks, or missing sections.

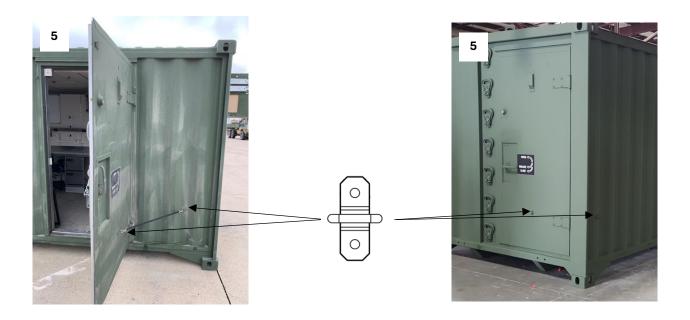






- 5. Check for missing or damaged entrance door retaining strap rings.
- 6. Inspect the power cable door latches and hinges for signs of wear or damage.
- 7. Inspect the roof for missing or damaged tie-down rings.













SERVICE

- 3. Clean and lubricate HVAC access door latches to provide smooth movement (See chapter 4 WP 0013 00 Table 1 and 2).
- 4. Wipe HVAC access door seal surfaces clean and apply a light coat of lubrication (See chapter 4 WP 0013 00 Table 1 and 2) to seal mating surfaces.
- 6. Clean and lubricate Exterior Power Door Hinges to provide smooth movement (See chapter 4 WP 0013 00 Table 1 and 2).

REPLACE

- 1. Replace communications inlet covers if damaged or missing.
- 2. Replace HVAC access door lynchpin if damaged or missing.
- 3. Replace HVAC access door latches if damaged or missing. (See chapter 5 WP 0015 for HVAC access door hinges)
- 4. Replace HVAC access door seals if there are any visible gouges, cracks, rips or tears
- 5. Replace door retaining strap rings if damaged or missing.
- 6. Replace power cable door if damaged.
- 7. Replace roof tie-down rings if damaged or missing.

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BOH SOLUTIONS OPERATION MANUAL (INCLUDING REPAIR PARTS) EXPEDITIONARY JOINT OPPERATIONS CENTER (EJOC®)

HVAC ACCESS DOOR HINGES

INITIAL SETUP:

Materiel/Parts
Detergent, Lubricant, Prescribed Replacement Parts

Personnel Required

Two

Tools

Rags, General Mechanic's Tool Kit, Ladder

References Chapter 4

Equipment ConditionEJOC Operation Set-up

INSPECT

Test the HVAC access door by removing the lynchpin, releasing the two latches, and opening the door. Ensure that the door swings freely and is capable of moving in a full 180-degree arc from the closed to the fully open position.

SERVICE

Lubricate Exterior HVAC access door hinges with 10W40 oil between moving parts. (See chapter 4 WP 0013 00 Table 2).

REPLACE

1. Remove hinge bolts [1], locknuts [2] and brackets [3], and hinge [4] to be replaced.

NOTE

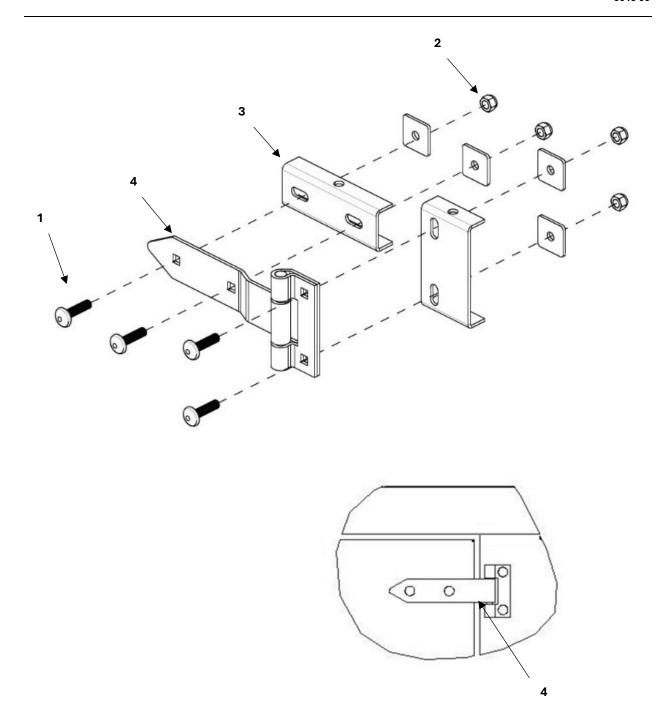
Only replace one hinge at a time to avoid alignment problems.

- 2. Install and tighten brackets [3], bolts [4], locknuts [2], and replacement hinge [4].
- 3. Check door operation, alignment and align as required.

WARNING



Always use proper safety equipment when working on a ladder. Ensure the ladder is placed on a stable, level surface, and maintain three points of contact (two hands and one foot, or two feet and one hand) at all times. Avoid overreaching, as this may cause loss of balance.



BOH SOLUTIONS OPERATION MANUAL (INCLUDING REPAIR PARTS) EXPEDITIONARY JOINT OPPERATIONS CENTER (EJOC®)

FOLDING STEPS

INITIAL SETUP:

Materiel/Parts

Loctite 262, Prescribed Replacement Parts

Personnel Required

Two

Tools

General Mechanic's Tool Kit, Ladder

References

Chapter 4

Equipment Condition

EJOC Operation Set-up

INSPECT

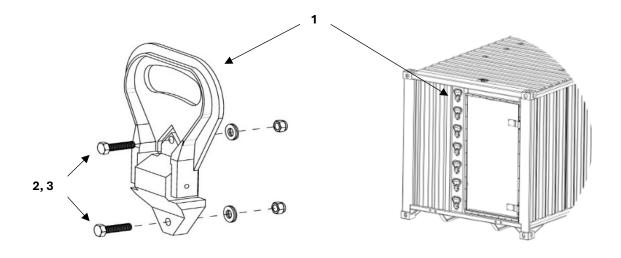
Raise and lower each of the steps [1] to ensure they stow and operate properly.

SERVICE

Lubricate the folding steps with 10W40 oil between moving parts. (See chapter 4 WP 0013 00 Table 2).

REPLACE

- 1. Remove the mounting bolts and washers [2, 3] with a 9/16-inch socket and ratchet.
- 2. Install replacement step [1], apply Loctite 262 to the bolt threads, replace bolts and washers [2, 3] with the 9/16" socket and ratchet.



WARNING



Always use proper safety equipment when working on a ladder. Ensure the ladder is placed on a stable, level surface, and maintain three points of contact (two hands and one foot, or two feet and one hand) at all times. Avoid overreaching, as this may cause loss of balance.

BOH SOLUTIONS OPERATION MANUAL (INCLUDING REPAIR PARTS) EXPEDITIONARY JOINT OPPERATIONS CENTER (EJOC®)

REAR ROLLER ASSEMBLY

INITIAL SETUP:

Materiel/Parts

Rags, Water, Prescribed Replacement Parts

Personnel Required

Two plus Supervisor

Tools

General Mechanic's Tool Kit, MHE Support

References

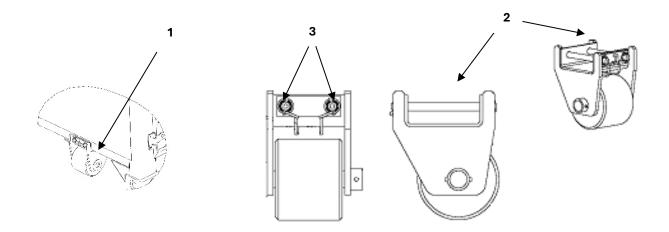
Chapter 2 and 4

Equipment Condition

EJOC Operation Set-up w/ Rollers Wheels

attached

INSPECT



- 1. Inspect the rear roller assembly [1] for dirt/debris that would affect performance. Clean as required.
- 2. Inspect the rear roller assembly for the presence of connector pins [2] and Lynch pin retaining clips [3].

SERVICE

Remove debris from the roller assembly and clean with a wet rag.

REPLACE

1. Raise container by lifting with the HEMTT or properly rated MHE.

IMPORTANT



For proper loading of the EJOC with a HEMTT-PLS or similar vehicle, it is essential to use Auto Mode and ensure the hook arm sensors are fully functional. Auto Mode minimizes the risk of equipment contact during loading. If the sensors are not operational or Auto Mode is unavailable, only experienced and trained operators should perform the loading to prevent damage or misalignment.

WARNING



The EJOC was designed and tested to interface, load directly on to and lock on to the HEMTT-PLS or LHS. Use of any other vehicle that is not designed with the same function and features as the HEMTT-PLS or LHS may cause damage to the EJOC, injury or death.

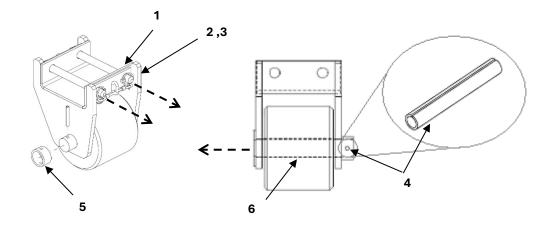
WARNING



Ground guides and the MHE operators must maintain direct line of sight and insure that personnel are clear of the containers during this operation. Overhead power lines and obstructions can cause serious injury or damage to property. Forklift operators, truck drivers and ground guides should always clear overhead when loading, unloading the EJOC.

- 2. Remove the two 1/4-inch lynch pins from the rear of the rear roller assembly attaching pins.
- 3. While supporting the roller assembly, remove the 3/4-inch rear roller attaching pins, then remove the roller assembly.
- 4. Attach new rollers by aligning the holes in the rollers with the holes in the container and inserting 3/4-inch retention pins.

REPAIR



1. Elevate the container enough to remove with MHE support.

IMPORTANT



For proper loading of the EJOC with a HEMTT-PLS or similar vehicle, it is essential to use Auto Mode and ensure the hook arm sensors are fully functional. Auto Mode minimizes the risk of equipment contact during loading. If the sensors are not operational or Auto Mode is unavailable, only experienced and trained operators should perform the loading to prevent damage or misalignment.

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The EJOC was designed and tested to interface, load directly on to and lock on to the HEMTT-PLS or LHS. Use of any other vehicle that is not designed with the same function and features as the HEMTT-PLS or LHS may cause damage to the EJOC, injury or death.

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Ground guides and the MHE operators must maintain direct line of sight and insure that personnel are clear of the containers during this operation. Overhead power lines and obstructions can cause serious injury or damage to property. Forklift operators, truck drivers and ground guides should always clear overhead when loading, unloading the EJOC.

- 2. Remove the roller assembly [1] from the EJOC; see chapter 2, WP 0007 00-7.
- 3. Remove the Lynch Pins [2] and Frame Pins [3].
- 4. Drive the roller pin [3] with a 5/16-inch flat punch, holding retaining collar to roller pin assembly.
- 5. Remove retaining collar [4].
- 6. Slide roller pin [4] from roller frame [1].
- 7. Replace worn/broken or damaged parts.
- 8. Apply lubrication; refer to chapter 4 WP 0013 00 Table 1 and 2.
- 9. Reinsert roller pin [6].
- 10. Reinsert the retaining collar [5] and secure with 5/16-inch rolled pin [4] with the hammer and flat punch.
- 11. Position the roller assembly [1], insert the frame pins [3] and insert the lynch pins [2].

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BOH SOLUTIONS OPERATION MANUAL (INCLUDING REPAIR PARTS) EXPEDITIONARY JOINT OPPERATIONS CENTER (EJOC®)

ENTRY EXIT DOORS

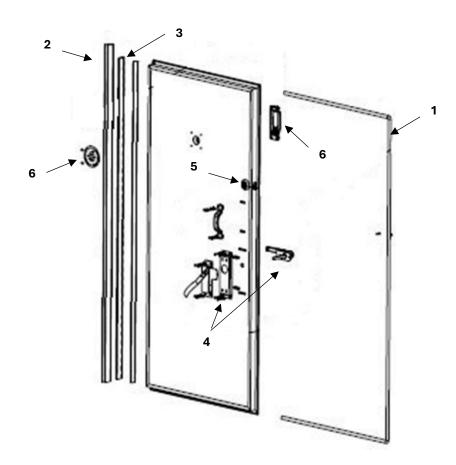
INITIAL SETUP:

Materiel/Parts
Detergent, Lubricant
Personnel Required
One

References Chapter 4 Equipment Condition EJOC Operation Set-up

INSPECT

- 1. Inspect the door seal for cracks, tears and damage [1].
- 2. Inspect the exterior hinge gasket for cracks, tears and damage [2].
- 3. Inspect the door hinge [3].
- 4. Inspect door handle mechanisms [4] for freedom of movement.



SERVICE

- 1. Clean and lubricate door seals (3). See chapter 4 WP 0013 00 Table 1 & 2.
- 2. Clean and lubricate door mechanisms (4). See chapter 4 WP 0013 00 Table 1 & 2.
- 3. Lubricate the door hinge. See chapter 4 WP 0013 00 Table 1 & 2.

BOH SOLUTIONS OPERATION MANUAL (INCLUDING REPAIR PARTS) EXPEDITIONARY JOINT OPPERATIONS CENTER (EJOC®)

GENERAL INTERIOR

INITIAL SETUP:

Materiel/Parts

Detergent, Lubricant, Prescribed Replacement Parts

Personnel Required

One

Tools

Rags, General Mechanic's Tool Kit

References

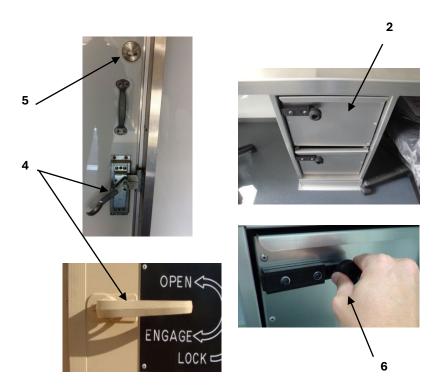
Chapter 4

Equipment Condition

EJOC Operation Set-up

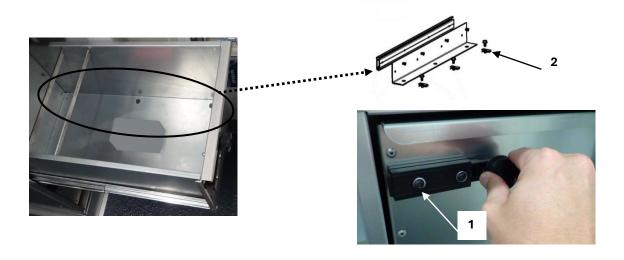
INSPECT

- 1. Inspect door lock set [1] for smooth operation.
- 2. Inspect slam latches [6] on cabinet drawers for smooth movement, spring tension and retention of the drawer in the fully closed position.
- 3. Open and close file drawers [2] to ensure proper operation and alignment.
- 4. Inspect overhead door latches [3].



SERVICE

- 1. Clean and lubricate door mechanisms. Repair or replace if lock sets are dysfunctional.
- 2. Use Allen wrench to repair or replace damaged cabinet drawer latches [1].
- 3. If drawer is not opening/closing properly, lubricate, repair or replace as needed. If drawer is damaged, use socket wrench to unscrew the 6 screws [3 each side] [2] inside the drawer to detach the drawer from the slides.
- 4. Replace overhead door latch if damaged.



BOH SOLUTIONS OPERATION MANUAL (INCLUDING REPAIR PARTS) EXPEDITIONARY JOINT OPPERATIONS CENTER (EJOC®)

GENERAL ELECTRICAL SYSTEM

INITIAL SETUP:

Materiel/Parts
Power Source Connecters
Personnel Required

Two Operator / Electrician

References

Chapter 2 WP 0008 **Equipment Condition**EJOC Operation Set-up

EXTERIOR ELECTRICAL POWER CABLES

INSPECT

Inspect the wires inside the power cables box to ensure the exposed part of the wires are free from corrosion.



WARNING



The EJOC must only be connected, disconnected, and serviced by a certified electrical technician. Failure to follow this guideline may result in serious injury, equipment damage, or electrical hazards (See Chapter 2 WP 0008).

WARNING



The electrical ground must be established first to prevent electrical shock to personnel. Army end-users ARMY TM 5-811-3 Chapter 2 and MIL-HDBK 149A Chapter 2-5 and DOD 60055.9-STD Chapter 7 Grounding. All other end-users must consult and strictly follow specific safety rules and regulations, particularly related to electrical installations to ensure the safety of both personnel and equipment

WARNING



Ensure all circuit breakers and the main power source is switched off before making electrical connections. Ensure the proper electrical cable connectors (60 Hz, 120/208v, 3-phase) are installed by a certified electrical technician.

SERVICE

Clean power cable connections with soapy water and a wire brush. If dirt or corrosion persists, consult a certified electrical technician to determine if trimming the cable back to the plastic casing is advisable. If approved, carefully remove approximately one inch of the casing to expose clean, undamaged wire. If trimming is not appropriate, the entire cable will need to be replaced to ensure a safe and reliable connection.

REPLACE

If any wire requires replacement, contact a certified electrical technician to ensure proper installation and compliance with safety standards.

INTERIOR ELECTRIC PANNEL

INSPECT

With the power source is connected enter the container switch on all circuit breakers located in the middle of the utilities wall on the curbside of the container to ensure the system is being powered properly.



SERVICE

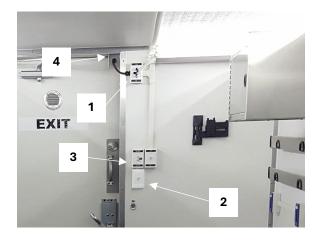
If the system is not receiving power, test each circuit breaker by using the GFCI reset button located on each breaker switch.

REPLACE

If the system is not receiving power after using the GFCI reset, please contact a certified electrical technician before any repairs or troubleshooting is attempted.

LIGHTING SYSTEMS

- 1. Verify that the LED lighting is securely plugged into the outlets [1] located at the top left of each entry/exit door.
- 2. Ensure the master lighting switches [2] are in the "ON" position.
- 3. With the lighting circuit breaker switched on, activate and test the red and white LED lighting system switches [3] at the door. Check that the door interrupter switch [4] functions correctly by opening and closing the door (refer to Chapter 2, Page 0008 00-5).





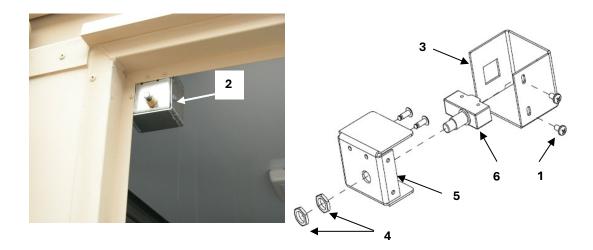
DOOR LIGHTING INTERRUPTER SWITCH

REPLACE

WARNING



Ensure all circuit breakers and the power source is switched off before making electrical connections or electrical repair. Any and all electrical repairs must be made by a certified electrician



- 1. Switch the Main circuit breaker off.
- 2. Remove the two #2 Philips screws (1) on the side of the switch box (2).
- 3. Remove the ¾" jam and lock nuts (4) from the switch front mount (5).
- 4. Pull the rear cover (3) back to expose the switch, disconnect the switch wires.
- 5. Replace the switch and reconnect the wires.
- 6. Insert the switch (6) into the front mount (5), replace and tighten the ¾" lock and jam nuts (4).
- 7. Insert the rear cover (3) over the mounted switch (6) and tighten the two #2 Philips screws (1).
- 8. Switch the main circuit breaker on and test the door interrupter switch.

HVAC

The HVAC operator's manual is stored in the file cabinet closest to the HVAC unit. For proper maintenance and operation, please refer to the HVAC operator's manual or contact Northern Air Systems directly.