

CHAPTER 2
OPERATOR INSTRUCTIONS

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**OPERATOR INSTRUCTIONS
FPU SYSTEMS OPERATION MANUAL
(INCLUDING REPAIR PARTS & SPECIAL TOOL LIST)
FOR
MODELS FPU-8-4/BOH-CARGO-12-3 & FPU-20-3
PREPARATION FOR MOVEMENT**

INITIAL SETUP:

FPU Packed out
Maintenance Level
Operator/Crew

Personnel Required
Two (plus one supervisor)

PREPARATION FOR MOVEMENT

This work package provides step-by-step instructions for the download, set-up and moving of the FPU containers.

WARNING

If a container is dropped during transit movement of any kind, extreme care should be taken when opening the doors to preclude material from falling on and injuring personnel.

Site Requirements**WARNING**

Container must be operated on level ground. To maintain control, consider the ground surface conditions for adequate traction, such as mud, snow, ice, sand.

If the container is transported on the HEMTT-LHS truck or PLS trailer, the selected site must have a minimum of 50 ft x 30 ft of flat level, open space to provide setup space for the container. Care should be taken to ensure that no overhead obstructions interfere with the offload of the container from the HEMTT.

CAUTION

Flood plane conditions should be considered since the containers have vent holes for the ventilation system that are not designed to withstand flooding. If in doubt, consult the operations supervisor or commander.

PREPARING FPU FOR USE

The FPU is designed for a ground-based operation, never attempt to access the containers when the containers are on any transporting equipment or not downloaded and established in an operational site. Once downloaded from the HEMTT truck or trailer, the FPU is ready for immediate use in most circumstances. If delivered as separated FPU-8-4 and BOH-CARGO-12-3 foot containers, they must be connected before loading on the HEMTT vehicle.

OPERATION OF ROOF ACCESS SYSTEM

The Roof Access System consists of seven retractable steps, on the end of the BOH-CARGO-12-3, FPU-8-4 and the FPU-20-3 with handles recessed in the roof for three-point control while climbing.

WARNING



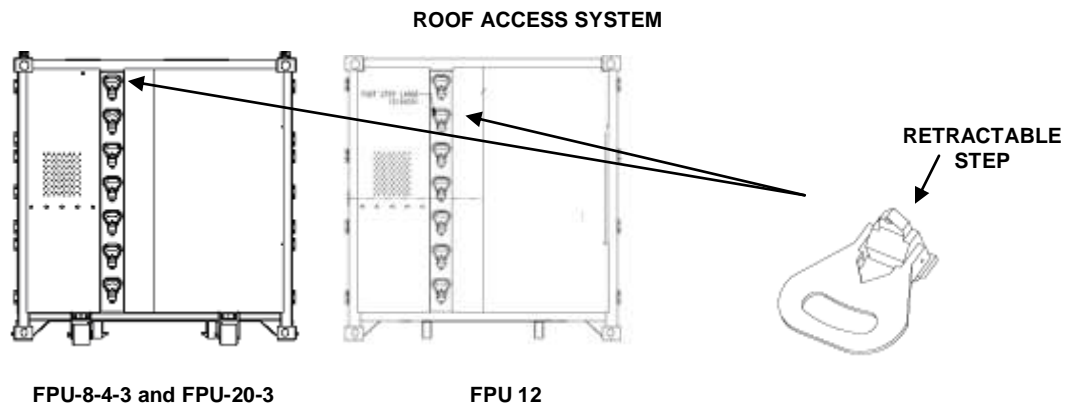
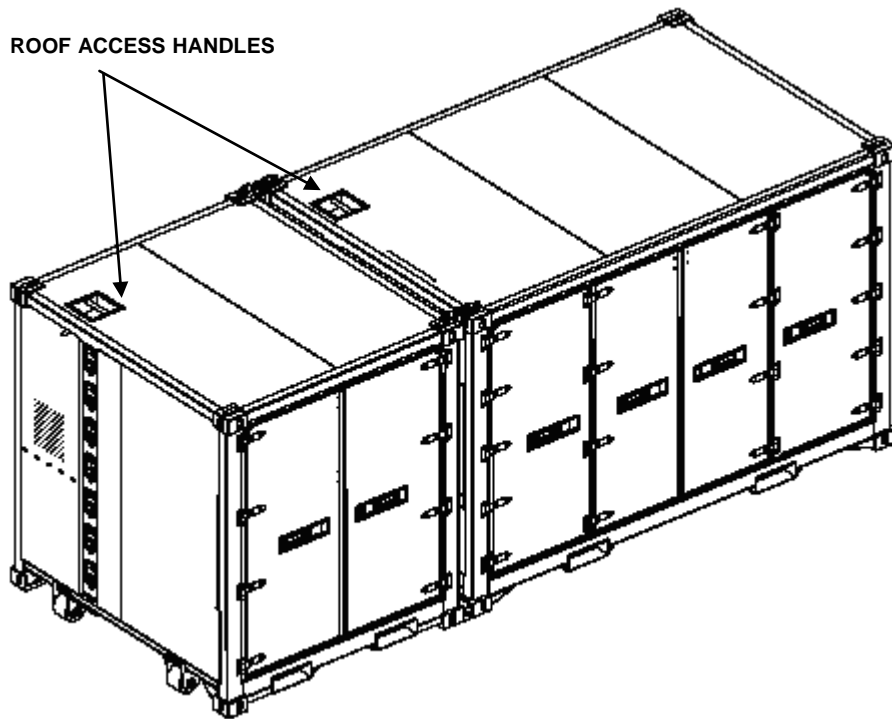
Fall hazards exist when climbing onto, returning from or working from the top of the container. Always maintain three points of contact to the ladder and FPU container when climbing onto the FPU container. Never move, step, or walk backwards when working on top of the system. All movement should be in the forward direction. A fall can occur if the worker loses concentration and steps backwards off of the edge. Stand erect only if necessary and only away from the edge. Working from a kneeling position helps reduce the threat of a fall.

BOH FPU-8-4/BOH-CARGO-12-3 and FPU-20-3 containers are marked with the following ISO marking. It's meaning is provided below:

WARNING



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 or accessing the roof of the containers.



DISCONNECTING FPU-8-4 AND BOH-CARGO-12-3 CONTAINERS (NOT APPLICABLE TO THE FPU-20-3)

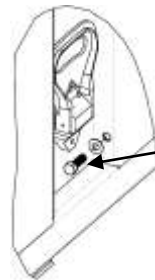
NOTE

Four people and a driver are required to perform this task.

1. Select a firm, level road surface to disconnect the containers.
2. Access the roof via the roof access system located on the rear end of the FPU-8-4 to remove the bridge lock connectors as follows.

WARNING

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 or accessing the roof of the containers. When the container is in position establish a ground connection located at the folding steps See MIL-HDBK-419A



GROUND LUG BOLT

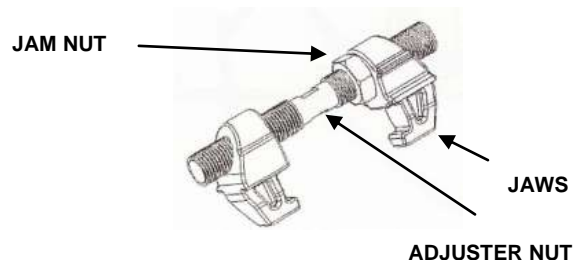
WARNING

Fall hazards exist when climbing onto, returning from or working from the top of the container. Always maintain three points of contact to the ladder and FPU container when climbing onto the FPU container. Never move, step, or walk backwards when working on top of the system. All movement should be in the forward direction. A fall can occur if you lose concentration and step backwards off of the edge. Stand erect only if necessary and only away from the edge. Working from a kneeling position helps reduce the threat of a fall.

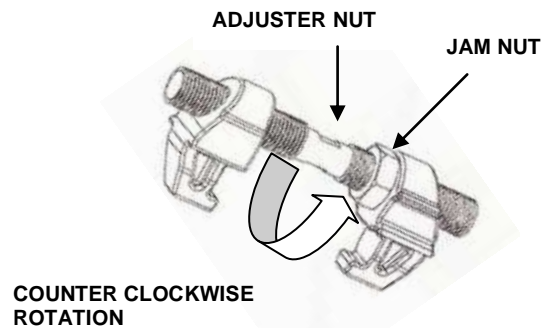
CAUTION

Bridge Lock connectors are used in conjunction with horizontal interconnectors for loading and ground transportation and must be removed for maritime shipping to meet container width and height requirements of ISO certification standards.

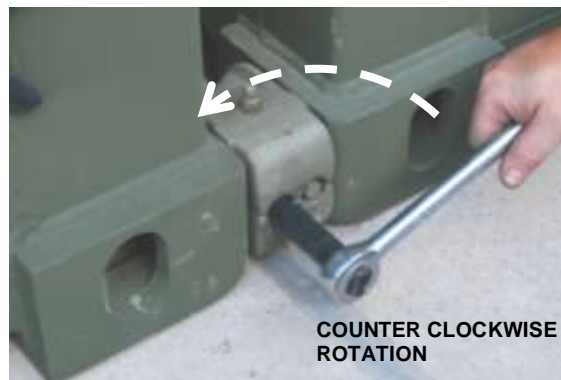
Note: The Bridge Lock has one 2 1/8-inch jam nut and a 1-inch adjuster nut. The nut in the center is the adjuster nut and opens/closes the locks. The other is the jam nut and secures the locks in position after the adjuster nut has been tightened (refer to BII list in WP 0040 00).



3. In a kneeling position and using the 2 1/8" open end wrench from BII bag turn the jam nut to loosen (refer to BII list in WP 0040 00).

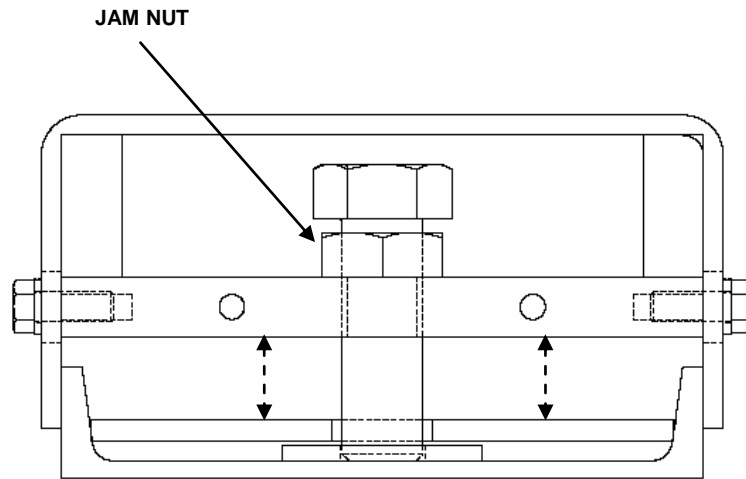


4. Using 2 1/8" open end wrench from the BII bag, expand/retract adjuster nut until jaws will come free of the corner block.
5. There are two 9/16" bolts located on the side of the horizontal interconnectors. One is on the FPU-8-4 side and the other on the BOH-CARGO-12-3 side. Loosen only the FPU-8-4 side horizontal interconnector bolts.
6. Retract fully the adjuster nuts on the two top horizontal interconnectors (FPU-8-4 side).



7. Return to ground via roof access system at the end of the FPU-8-4.

8. Using 1 ½-inch open-end wrench loosen jam nut on the transverse stabilizer tensioning blocks (refer to BII list in WP 0040 00).



9. Fully retract adjuster bolt on transverse stabilizer block.
10. Retract fully adjuster nuts on the two lower horizontal interconnectors (FPU-8-4 side).
11. If using a HEMTT, attach the loading hook to the bail bar on BOH-CARGO-12-3. Ensure the HEMTT is in a straight line with the container to prevent cocking.
12. Lift slightly until front end is approximately 1-inch off the ground, and pull forward until the loading rail adapters are completely clear of the loading rails of both containers. Containers are at least 4-feet apart.
13. Lower and disconnect from HEMTT.

NOTE

The transverse stabilizer may bind at this point and could prevent the containers from coming apart. If this happens the operator will have to push the containers back together and retry pulling them apart until successful. Hint: You can assist this operation by, using a 2 X 4 board or equivalent, pry open the sticking side of the transverse stabilizer.

14. If using a forklift or other vehicle as listed in the table on page 7 in this work package to pull FPU-8-4 from the BOH-CARGO-12-3, attach a chain from the towing vehicle to both of the bottom two ISO blocks on the rear of FPU-8-4.
15. Ensure the towing vehicle is in a straight line with the container and that chain spacing is equal on both sides to prevent cocking.

16. Slowly pull forward until containers are separated and the loading rail adapters are completely clear of the loading rails of both containers (containers are at least 4-feet apart).

NOTE

The transverse stabilizer may bind at this point and could prevent the containers from coming apart. If this happens the operator will have to push the containers back together with forklift using approved MHE procedures and retry pulling them apart until successful. You can assist this operation by, using a 2 X 4 board or equivalent, pry open the sticking side of the transverse stabilizer.

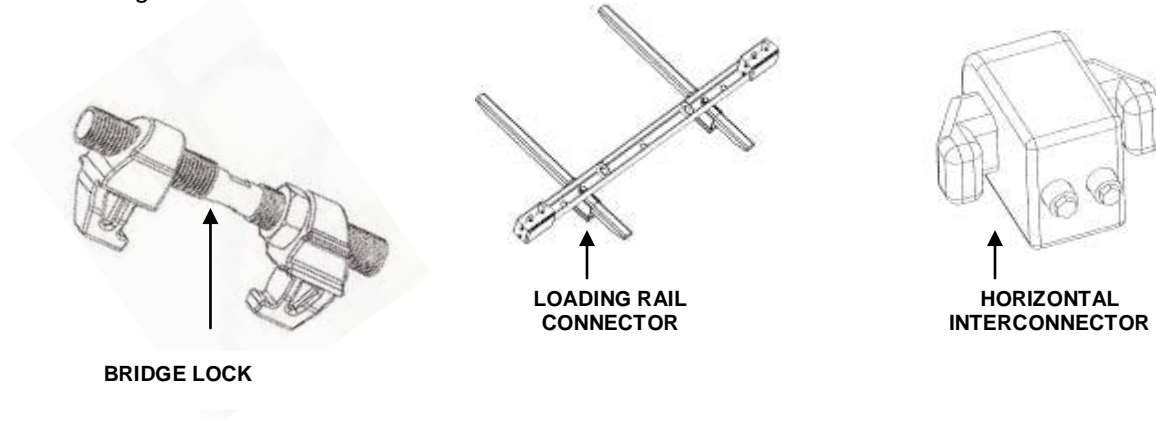
17. Using the 1 1/8-inch socket, 1/2-inch drive flex head wrench and 2 1/2-inch long extension (refer to BII list in WP 0040 00), disconnect the transversal stabilizer cross bar from the loading rail connectors.
18. Return to the roof via the roof access system located on the roller end of the BOH-CARGO-12-3 to remove the upper horizontal interconnectors.
19. While supporting the horizontal inter-connector, completely retract adjuster nuts on the two upper horizontal interconnectors (BOH-CARGO-12-3 side) and remove. Store in a safe place.
20. Return to ground via roof access system at the end of the BOH-CARGO-12-3.
21. Completely retract adjuster nuts on the two lower horizontal interconnectors (BOH-CARGO-12-3) and remove and store in a safe place.
22. Using suitable MHE, raise end of the container still retaining loading rail connectors slightly off the ground (approximately 1-inch).
23. Slide both of the loading rail connectors from the loading rails. Store in a safe place.

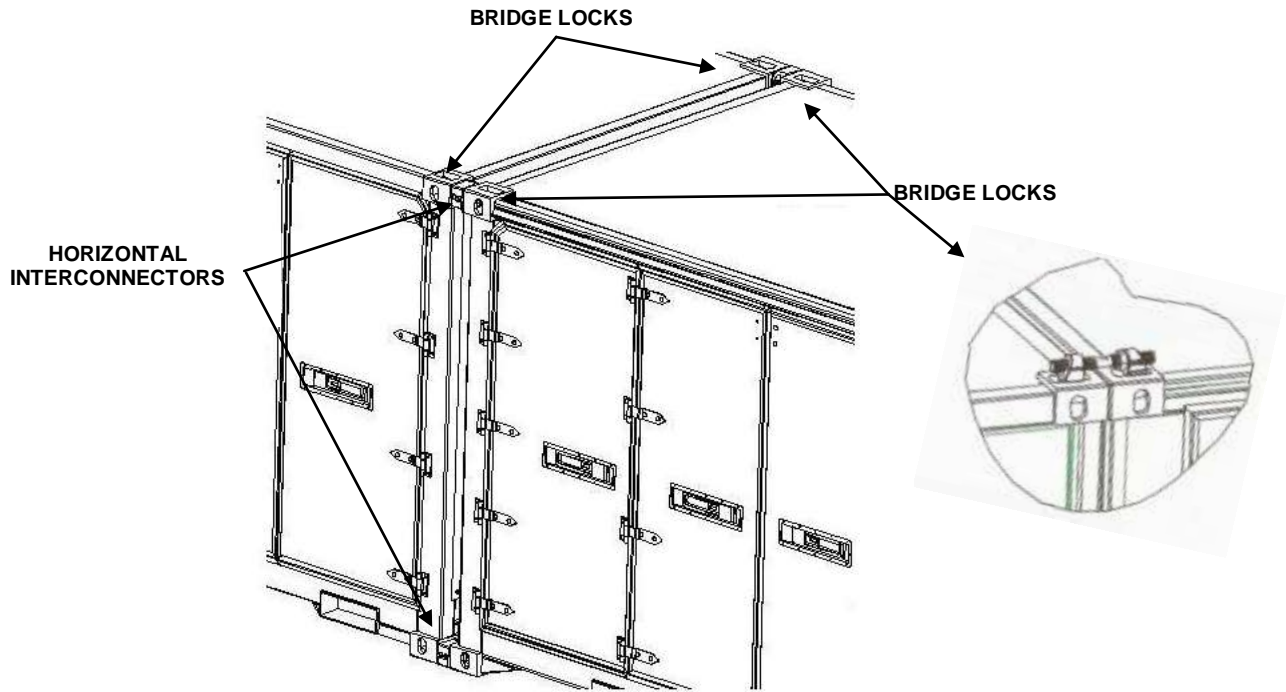
CONNECTING FPU-8-4/BOH-CARGO-12-3 CONTAINERS

CAUTION

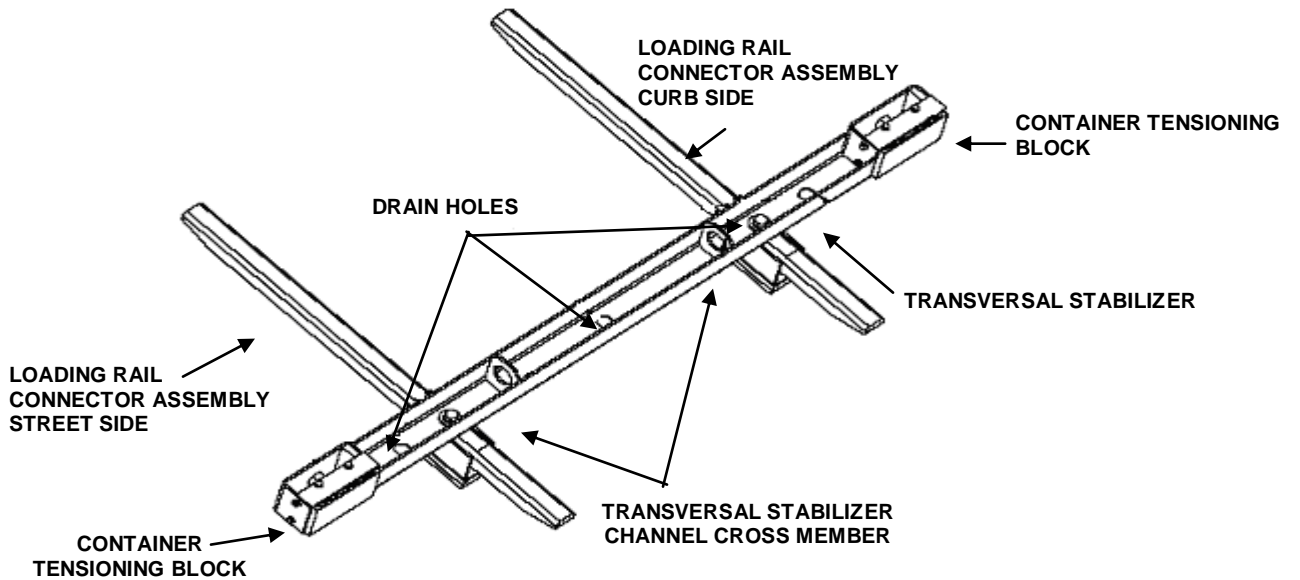
Bridge lock connectors are used in conjunction with ISO horizontal interconnectors for loading and transportation, but must be removed for maritime shipping to meet ISO certification standards.

BOH FPU-8-4 and BOH-CARGO-12-3 containers are connected using four horizontal interconnectors on the ISO corner blocks of each container, two bridge lock connectors at the top of the ISO blocks and the one loading rail connectors between the containers.





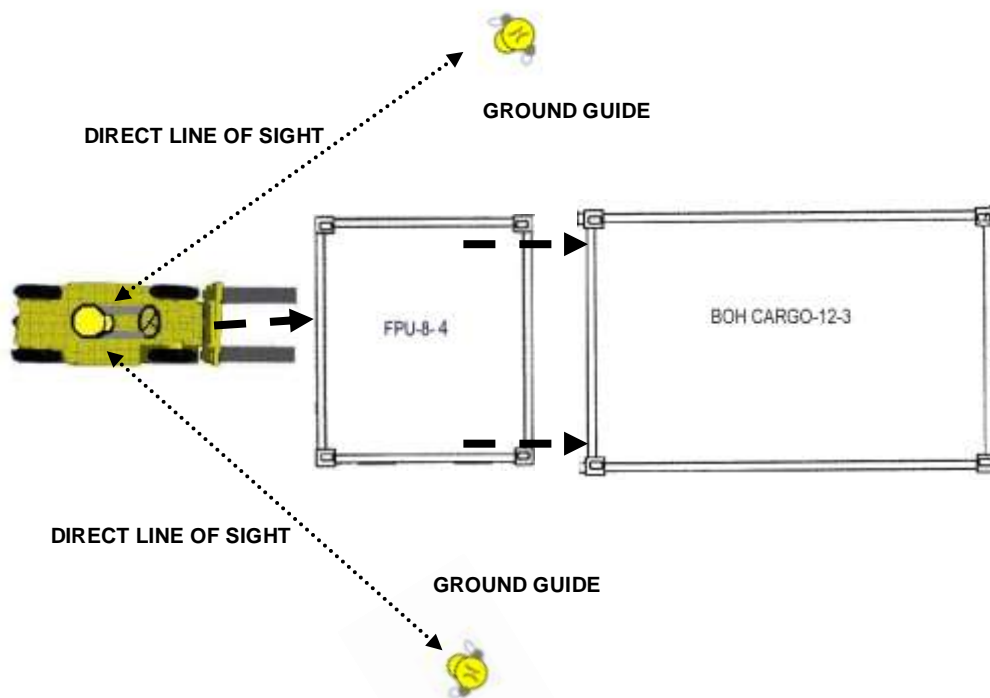
INSTALLING THE LOADING RAIL CONNECTOR ASSEMBLY & HORIZONTAL INTERCONNECTORS BETWEEN FPU-8-4 AND BOH-CARGO-12-3 CONTAINERS (NOT APPLICABLE FOR FPU-20-3 CONTAINERS)



WARNING



Ground guides and the HME operators must maintain direct line of sight and insure that personnel are clear of the containers during this operation.



1. Select only a firm level road surface to connect the containers. Align the container ends to be connected. Leave about four feet between the containers to allow working space for attaching the container connectors.
2. Horizontal interconnectors should have both arms extended in the open position and the lubrication plugs positioned inboard toward each other to prevent their damage.

WARNING



Fall hazards exist when climbing onto, returning from, or working from the top of the container. When climbing on the FPU containers, always maintain three points of contact to the steps and roof access handle located on the containers. Never move, step, or walk backwards when working on top of the system. All movement should be in the forward direction. A fall can occur if the worker loses concentration and steps backwards off of the edge. Stand erect only if necessary and only away from the edge. Working from a kneeling position helps reduce the threat of a fall.

3. To install the upper horizontal interconnectors, access the roof via the roof access system in the end of the BOH-CARGO-12-3.
4. Insert horizontal interconnectors in the two top ISO corner block openings of the BOH-CARGO-12-3 container.
5. While holding the horizontal inter-connector in place, tighten the bolt in the inter-connector body closest to the BOH-CARGO-12-3 until seated firmly using a 9/16-inch hex socket, 2 ½-inch long extension and ½-square drive flex head wrench. The bolt will be recessed and flush with the connector housing when complete.

WARNING



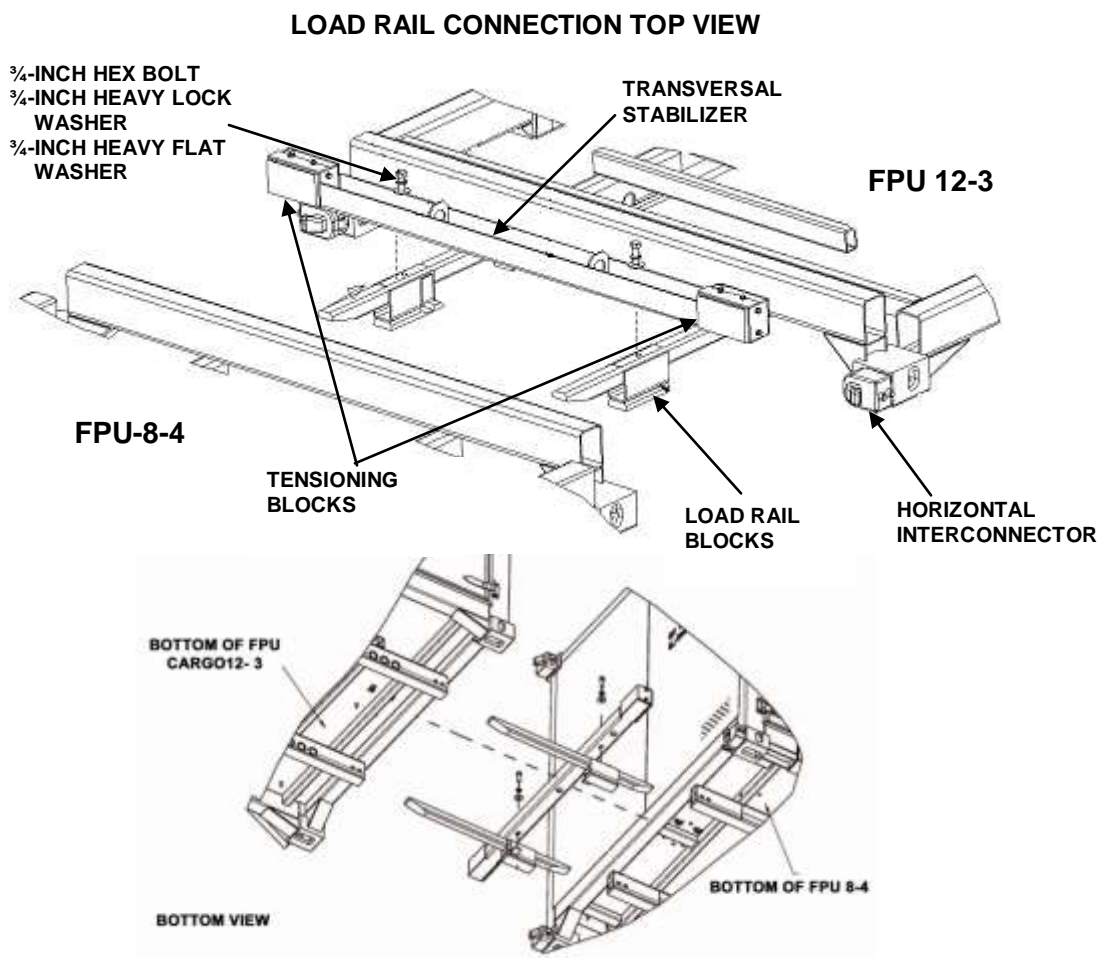
Make sure all container connectors are properly seated and locked secured. Failure to comply could cause serious injury.

6. After the (2) upper horizontal interconnectors are secured in place climb from the roof via roof access system.
7. Insert horizontal interconnectors connectors into the two lower ISO corner block openings in the BOH-CARGO-12-3 container.
8. While holding the horizontal inter-connector in place, tighten the bolt in the inter-connector body closest to the BOH-CARGO-12-3 until seated firmly using a 9/16-inch Hex Socket, 2 ½-inch long extension and ½-inch square drive flex head wrench. The bolt will be recessed and flush with the connector housing when complete.

WARNING

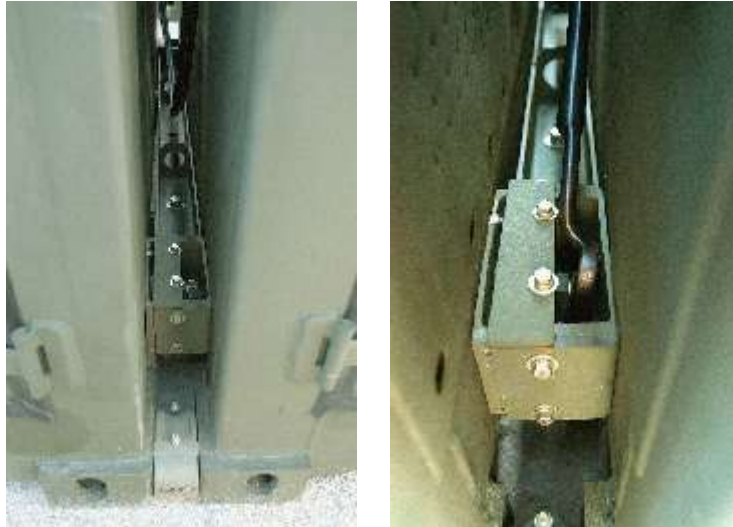
Make sure all container connectors are properly seated and locked secured. Failure to comply could cause serious injury.

9. Insert the long end of the loading rail connectors into the open ends of the Loading Rails on the BOH-CARGO-12-3. Fully insert until they are firmly seated with the load rail blocks contacting the ends of the loading rails and just under the edge of the BOH-CARGO-12-3 container.

**CAUTION**

Check Loading Rail Assembly connection areas to be sure they are free of debris before mating assembly pieces.

10. Install the transversal stabilizer crossbar onto the load rail connectors. Using the 1 1/8-inch socket, 1/2-inch drive flex head wrench and 2 1/2-inch long extension, tighten the 3/4-inch bolts (With flat washer closest to stabilizer and lock washer above insert the 3/4-inch bolts and tighten firmly).
11. Ensure the two expandable end-tensioning blocks are fully retracted by adjusting tensioning block bolts and jam nuts.



12. Ensure that all the climbing steps on the end of the BOH-CARGO-12-3 are collapsed and in their upright stowed position prior to performing next step.

WARNING



To prevent personnel injury, there should be no personnel on the roof before proceeding to next step.

13. With two Ground Guides directing the MHE operator, align the containers to accept the loading rail connectors into the open ends of the load rails on the FPU-8-4.

14. Slowly move the FPU-8-4 forward as loading rail connectors penetrate the loading rails. As the FPU-8-4 approaches the horizontal interconnectors, be sure the jaws on these connectors engage into the opening of the ISO corner blocks on the FPU-8-4.

CAUTION

Use lumber between the lift carriage and container to protect to end of the container from damage when pushing the container.



WARNING



Use extreme caution when connecting Field Pack-Up Unit (FPU) containers into a combination system. Keep hands, finger, and feet clear of the container and components during this operation. Forklift support is required. Make sure all container connectors are properly seated and locked secure. Failure to comply could cause serious injury. Failure to follow proper connection procedures may result in damage to the equipment.

Standard forklift principles apply when working with or on the FPU container. When working with ground guides during the loading or unloading of a module, never move the module into the FPU container while the ground guide is between the fork, module, and the FPU container. Serious injury could occur if the ground guide is pinned between the forklift and the FPU container. Forklift operators must maintain visual contact with their ground guides at all times.

Always follow standard forklift procedures. Ground guides and the HME operators must insure that personnel are clear of the containers during this operation. A tilt hazard exists when forklift operators try to lift a partially loaded FPU container from the wrong side. Always lift a container with the heavier side closest to the forklift operator. This places the heavier part of the load back into the tines versus out on the tips. A tilt situation exists when the heaviest part of the load is out on the tips of the tines, on uneven ground, with forks fully extended, and while traveling. Operators should always keep loads low and close to the forklift carriage. Operators should never travel when the load is in the fork's extended position.

15. Continue moving forward until connectors are firmly seated and the loading rail blocks are under the edge of the FPU-8-4 container.
16. Return to the roof via the roof access system located on the roller end of the FPU-8-4 to tighten the upper Horizontal interconnectors.

WARNING



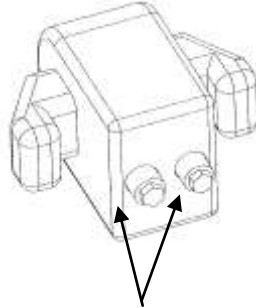
Fall hazards exist when climbing onto, returning from or working from the top of the container. Always maintain three points of contact to the ladder and FPU container when climbing onto the FPU container. Never move, step, or walk backwards when working on top of the system. All movement should be in the forward direction. A fall can occur if the worker loses concentration and steps backwards off of the edge. Stand erect only if necessary and only away from the edge. Working from a kneeling position helps reduce the threat of a fall. Do not allow personnel to access the roof via Forklift or other MHE.

17. When the FPU-8-4/Boh-Catgo-12-3 containers are mated and the horizontal interconnectors are seated, using a 9/16-inch hex socket (refer to BII list in WP 0040 00), 2 1/2-inch long extension and 1/2-square drive flex head wrench, tighten the locking bolts in a balanced sequential manner. Tighten until all four horizontal interconnectors are tight and seated. This will take several evolutions to ensure all connectors are properly seated and tightened. Tightening Sequence Example:

1. Top Right
2. Bottom Left
3. Top Left
4. Bottom Right



18. Repeat tightening sequence several times until no more bolt movement is experienced. Ensure that all four horizontal interconnectors are sufficiently tightened prior to the next steps.



**9/16-INCH HEX HEAD LOCKING
ADJUSTMENT BOLTS**

19. The locking adjustment bolts will be recessed and flush with the connector housing when completed.
20. Return to the ground via the roof access system on the end of the FPU-8-4.
21. After all the connector blocks have been tightened, and using the 1 ½-inch open end wrench, adjust the transversal stabilizer tensioning blocks between the containers to a very tight condition.
22. Lock down the jam nut after tightening the stabilizer.

WARNING



Make sure all container connectors are properly seated and secured. Failure to comply could cause serious injury.

OPERATION/INSTALLATION OF BRIDGE LOCKS

Bridge Locks are connecting devices that utilize the top openings in the ISO corner blocks. These are an enhancement to the connection of the two containers and are designed to be used strictly during ground transportation. Bridge locks should be installed whenever the FPU is to be transported on the HEMTT-LHS, PLS, PLS Trailer, container transport trailer, flat bed trailer, etc. Bridge locks must be removed before turning over to maritime shipping personnel.

CAUTION

Bridge Lock connectors are used in conjunction with horizontal interconnectors for loading and ground transportation and must be removed for maritime shipping to meet container width and height requirements of ISO certification standards.

The Bridge Lock has one 2 1/8-inch jam nut and one 1-inch flat adjuster nut (refer to BII list in WP 0040 00). The nut in the center is the adjuster nut and opens/closes the locks. The other is the jam nut and secures the locks in position after the adjuster nut has been tightened.

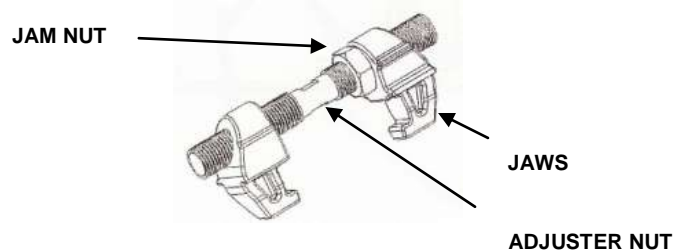
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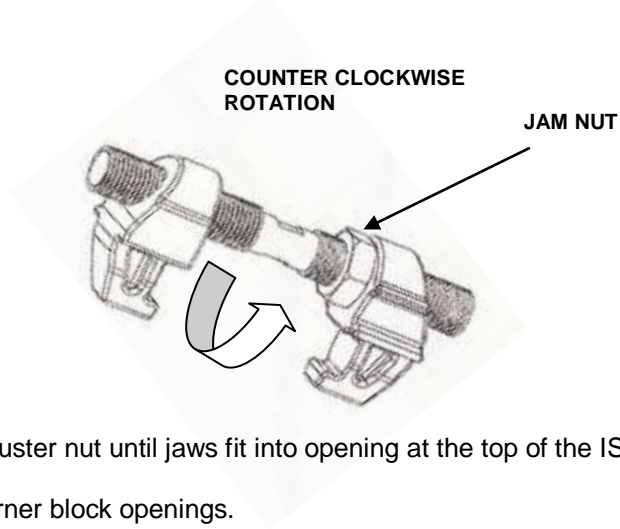
1. Return to the roof via the roof access system located on the roller end of the FPU-8-4 to tighten the upper horizontal interconnectors.
2. In a kneeling position, orient bridge lock so that jaws turned towards the installer and jam nut is to the installer's right. Positioning the jam nut to the installer's right will ensure that the installer is pulling when tightening the adjuster and jam nuts.

WARNING

Always orient the jam nut to the installer's right to ensure that operator is always pulling towards him in a safe manner. Improper orientation may result in installer falling from the container roof causing serious injury.



3. Turn the jam nut counterclockwise so that it is positioned close to the adjuster nut.



4. Expand/retract adjuster nut until jaws fit into opening at the top of the ISO connector.
5. Place jaws into corner block openings.
6. Tighten jaws using the 21/8" open end wrench by turning the 1-inch flat adjuster nut as tight as possible towards the installer (refer to BII list in WP 0040 00).
7. Turn jam nut towards the closest jaw and tighten counterclockwise firmly.
8. Repeat procedure for opposite side of containers.
9. Return to the ground via the roof access system on the end of the FPU-8-4.

WARNING

Fall hazards exist when climbing onto, returning from or working from the top of the container. Always maintain three points of contact to the ladder and FPU container when climbing onto the FPU container.

All BOH FPU cargo containers are marked with the following ISO marking. Its meaning is provided below:

WARNING

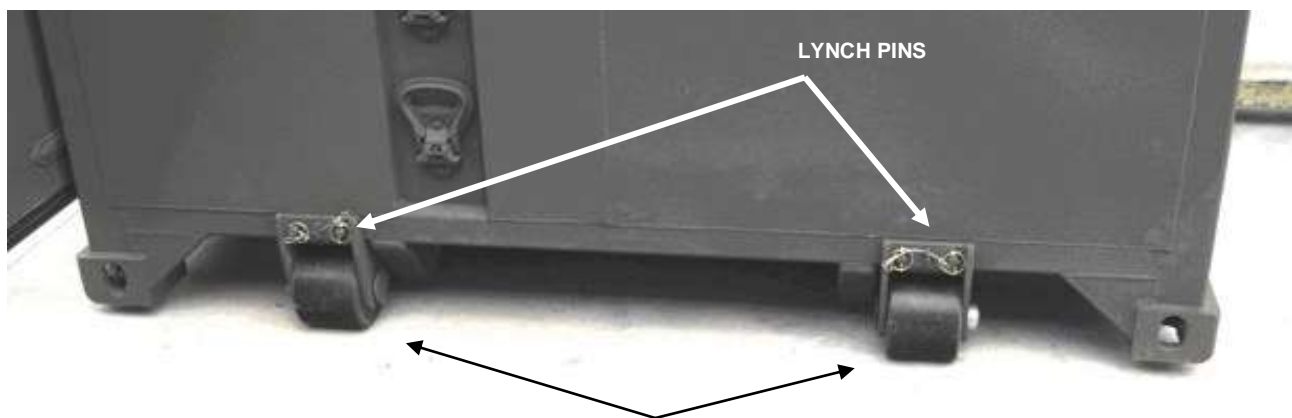
Overhead power lines and obstructions can cause serious injury or damage to property. Forklift operators, truck drivers and ground guides should always clear overhead when loading, unloading or accessing the roof of the containers.

INSTALLING/REMOVING REAR ROLLER ASSEMBLY

Detachable dual 7-inch rollers are mounted under the rear end of the FPU-8-4 end and on the FPU-20-3 container and are attached to the underside of the lower end rail with two $\frac{3}{4}$ -inch attaching pins and secured by four lynch-pins. When attached to the FPU-8-4 and combined with the BOH-CARGO-12-3, the rear rollers enable the container to be loaded on the HEMTT-LHS, PLS and PLS trailer. The rear rollers are off center in the roller frame so the roller extends past the rear of the FPU-8-4 frame when properly installed. When detached and stored within the BOH-CARGO-12-3 or FPU-20-3, they permit the container to be stacked or transported via standard ISO container transportation methods and devices.

ROLLER INSTALLATION/REMOVAL

After all container connection actions have been successfully completed the roller assemblies can be installed. This installation will require two people.



REAR ROLLERS ATTACHED FPU-8-4 LADDER END OR THE FPU-20-3 LADDER END

Installation

1. Using proper MHE (properly rated forklift, crane or HEMTT), lift the FPU-8-4 or FPU-20-3 container approximately 12-inches off the ground at the FPU roller end to allow access to the rear frame assembly of the container. Leave roller attached for transport and unloading.

WARNING



Do not allow the system to swing if using overhead lift. Always ensure an appropriate sling is used in the lift. Always use properly sized forklift, crane-lifting device. Always use appropriate blocking/bracing in conjunction with proper MHE when working under the container. Failure to comply with these safety measures could cause serious injury or damage to equipment.

2. Safely block/brace both sides of container with suitable safety support material near rear before proceeding.
3. Position roller assembly, which includes pins, so that the roller extends outside the container frame (lanyard retaining ring with lanyards and lynch-pins facing away from the container).
4. Person number one fits the roller saddle to the underside of the container frame and aligns the two pinning holes.
5. Second person inserts the two pins through the aligned holes to attach roller assembly to container frame.
6. Secure the two pins in place using the four lynchpins attached to the exterior side of the roller assembly.
7. Repeat process for other roller.

Removal

1. Using proper MHE (properly rated forklift or crane), lift the FPU container approximately 12-inches off the ground at the FPU-8-4 end or the FPU-20-3 to allow access to the rear frame assembly of the container.
2. Safely block/brace both sides of container with suitable safety support material near rear before proceeding.
3. Remove the four lynchpins from the exterior side of the roller assembly.
4. Remove the two pins holding the roller assembly to the container frame.
5. Remove roller assembly from container frame.

WARNING

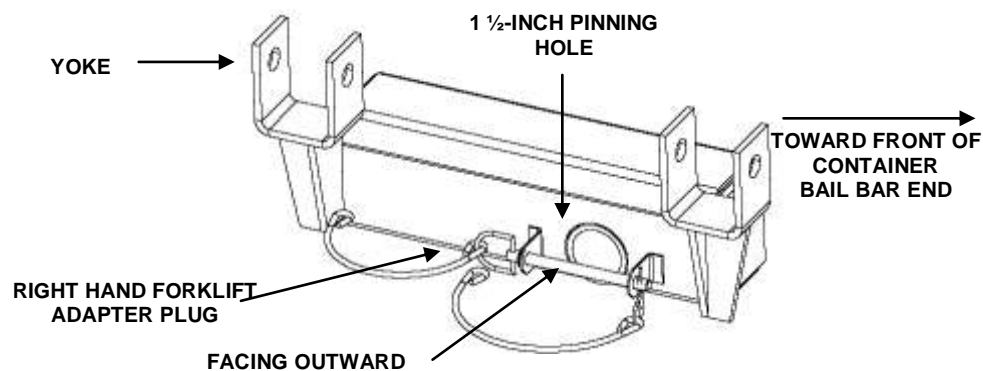
Ensure all container connectors are properly seated and locked. Additionally, ensure all internal material is secured through the use of drawer locking mechanisms, load constraint bars, cargo strap/netting, pallet lock rods, module locking devices (WP 0005 00 - 0006 00). Failure to comply could cause serious injury.

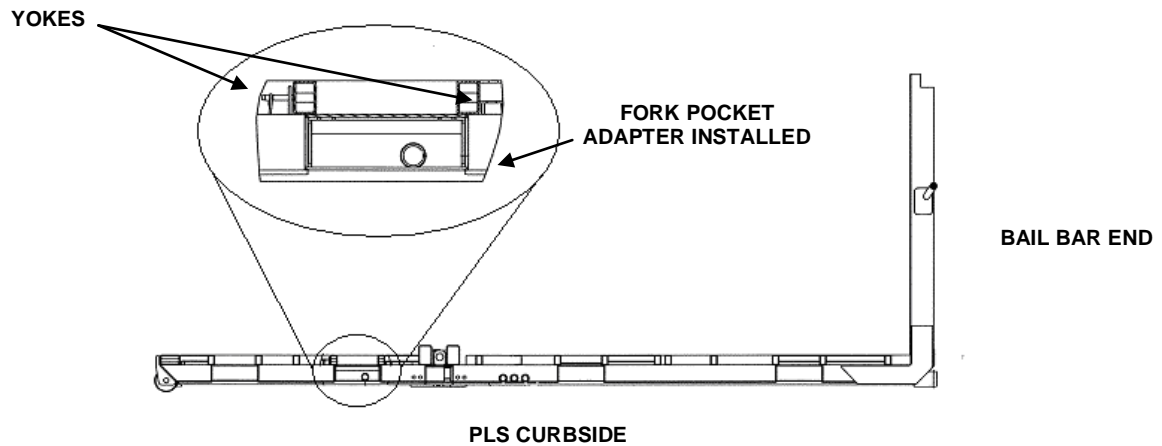
INSTALLING THE FORK POCKET ADAPTER PLUG (APPLICABLE ONLY TO THE FPU-8-4/BOH-CARGO-12-3)
WARNING

To prevent serious personal injury, the HEMTT truck should be turned off and have its breaks set prior to performing this task.

The installation of the fork pocket adapter plug is accomplished after the FPU system has been loaded onto the PLS trailer. With FPU safely position on the HEMTT, fork pocket adapter plug can be inserted into forward fork pocket openings of the FPU-8-4 container. This fork pocket adapter plug is installed when it is to be loaded on to a PLS trailer and transported by rail.

Forklift pocket adapter plugs are hand oriented. With the yoke-attaching bracket facing outward the 1 ½-inch pinning hole is always closest to the front of the container.



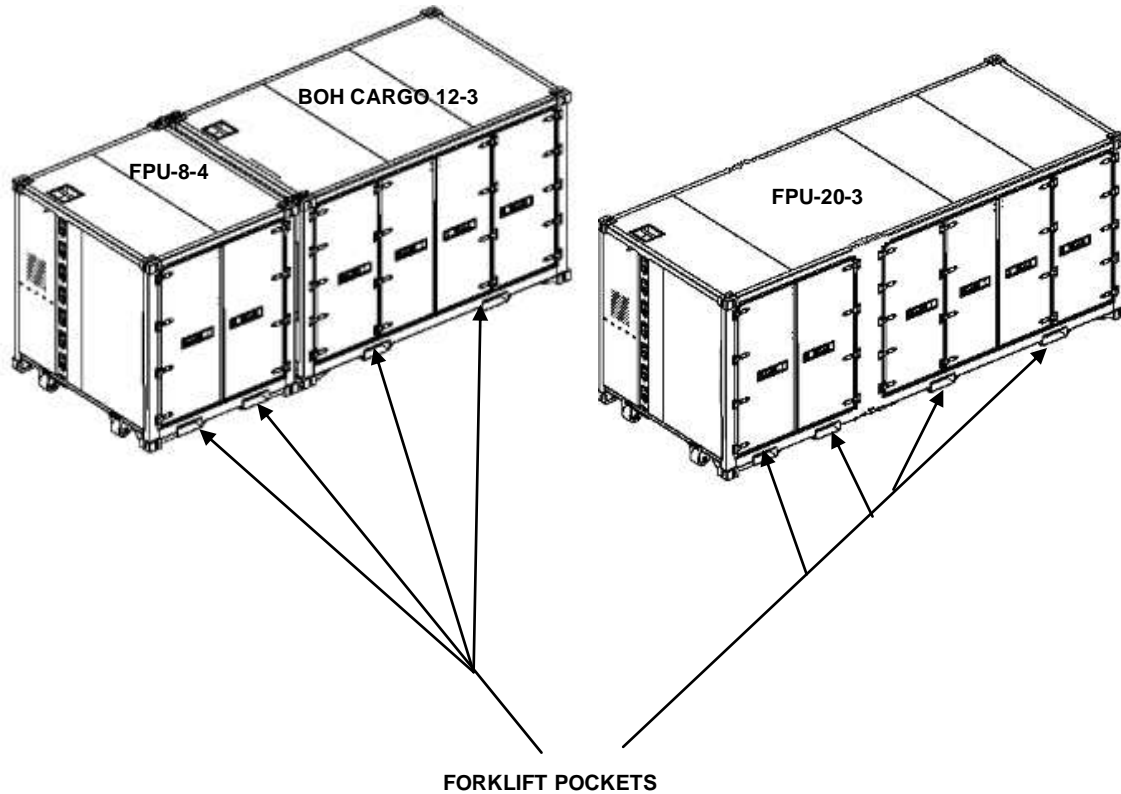


INSTALL/REMOVE

1. Select the proper forklift adapter plug to be installed, dependent on the side being installed. An improper plug will not align properly.
2. Position yoke to saddle under container cross members at proper fork pocket opening.
3. Slide fork pocket adapter plug into fork pocket opening until yoke retainer holes align with mating holes in cross members.
4. Insert the two ½-inch connector pins and secure with spring wire retainers.
5. Repeat steps 1 through 4 for the roadside.

MOVING THE FPU USING MHE (FORKLIFT)

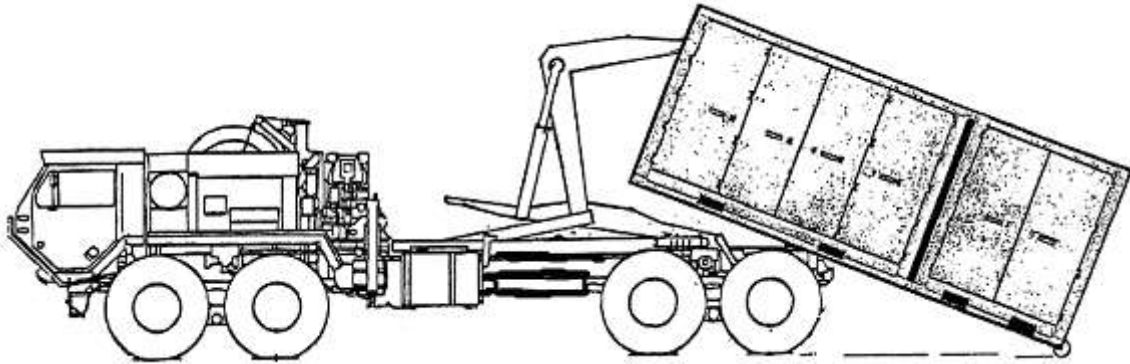
The FPU-8-4 and BOH-CARGO-12-3 containers are designed with forklift pockets located on their sides. When the two containers are connected together the two inside forklift pockets are used. The FPU-20-3 has 1 set of inside forklift pockets that are used to move it when empty and one set of outside forklift pockets to move it when loaded.

**NOTE**

The forklift Pockets on the FPU-20-3 are centered for greater load balance of the container.

LOADING THE FPU USING A HEMTT**NOTE**

Loading and unloading procedures for the HEMTT apply to both the FPU-8-3/BOH-12-3 and the FPU-20-3 containers



Loading and unloading via the HEMTT-LHS and PLS must be accomplished as indicated in HEMTT-LHS and PLS technical manuals. Loading and unloading onto and off of a M1076 Palletized Load-handling System Trailer (PLST) must be accomplished as indicated in the PLS trailer technical manual (TM9-2320-364-10).

CAUTION

Do not exceed 26,000 lbs. Maximum Gross Weight (MGW) for loading FPU systems aboard HEMTT-LHS transport. Refer to the weight chart in Chapter 1.

CAUTION

Caution must be exercised when transporting the FPU on the PLS trailer on cross-country terrain which can produce excessive vibration and shock. When conditions simulate the 6-inch washboard effect, damage may result to the FPU container and the material stored within if excessive speed for this condition is allowed to happen. Operators should always adjust driving speed to local conditions ensuring a safe operation based on local conditions. If a 6-inch washboard effect is encountered, it may be necessary to reduce speed to as low as 3 miles per hour to avoid damage to the FPU and its contents.

SECURING FPU TO PLS TRAILER**CAUTION**

When transporting the FPU on cross-country terrain which produce excessive vibration and shock. When conditions produce 6-inch washboard effect, damage may result to the FPU container and material stored within if excessive speed is allowed. Operators should adjust driving speed to local conditions. If a 6-inch washboard condition is encountered operators should reduce speed to as low as 3 mile per hour to avoid damage to the FPU and its contents.

Refer to the PLS trailer TM to determine when the PLS is to be used. FPU forklift adapter pocket plugs and rear rollers are required to be installed for the following operation.

1. After loading the FPU on to the trailer, pinning holes must align with mating holes in trailer frame. If these do not align, recheck orientation of rear roller assembly, orientation of fork pocket adapter plugs and ensure rollers on rear roller assemblies are contacting the roller stops on the PLS trailer. Correct as necessary.
2. Remove the 1 ½-inch diameter PLS trailer load securing pins and insert into fork pocket adapter plug pinning holes.
3. Secure PLS load securing pins in place by insert the 3/8-inch by 4-inch long hitch pins through pin retainer brackets.
4. Secure hitch pins by Inserting hairpin into hitch pin safety hole.

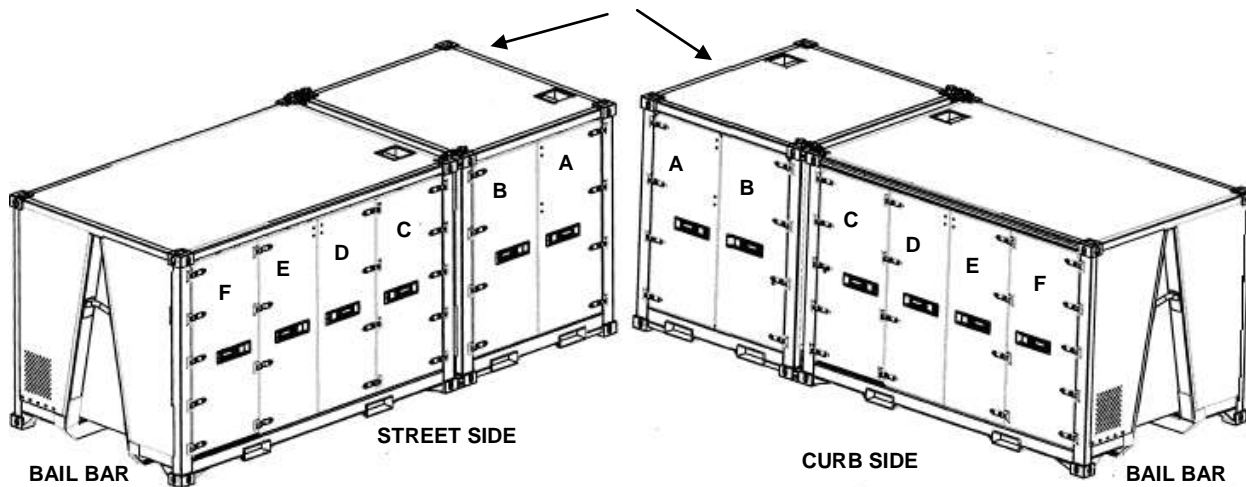
END OF WORK PACKAGE

**OPERATOR INSTRUCTIONS
FPU SYSTEMS OPERATION MANUAL
(INCLUDING REPAIR PARTS & SPECIAL TOOL LIST)
FOR
MODELS FPU-8-4/BOH-CARGO-12-3 & FPU-20-3
OPERATION OF FPU CONTAINERS**

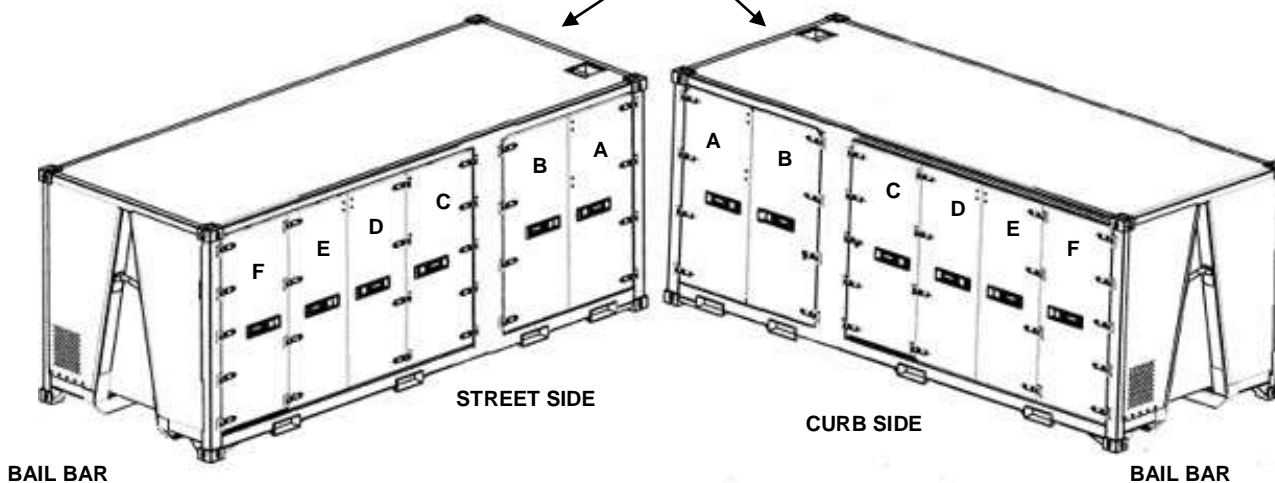
OPERATION OF FPU CONTAINERS

This work package provides procedures associated with safe and efficient operation of the FPU and FPU components. Familiarity with these procedures will allow military units to derive maximum benefit from FPU modularity and the options for FPU configuration.

FPU-8-4 CONNECTED TO BOH-CARGO-12-3



FPU 20-3



OPERATION OF FPU DOORS

Opening the Doors

NOTE

The FPU-20-3 doors are in the same configuration as the combined FPU 8-4 and BOH-CARGO-12-3. All of the following Warnings, Cautions and procedural steps apply to the FPU-20-3 when opening, closing and securing the doors.

WARNING



Use care when opening door while containers are on an incline, to maintain control consider the ground surface conditions for adequate traction, such as mud, snow, ice, sand and seek assistance from fellow soldiers to prevent strain or injury.

Doors on the FPU-8-4 should be opened simultaneously. When opening the BOH-CARGO-12-3, open the left and right center doors D and E simultaneously, then open both left and right doors C and F.

CAUTION

When closing the BOH-CARGO-12-3 and FPU 20-3 center doors or the FPU-8-4 doors always allow the right hand door to lead slightly to mate the door seal edges and prevent damage to the seals.

CAUTION

The FPU containers will exceed the width requirement if a heavy security padlock is used to secure the exterior doors. Padlocks not exceeding one-inch shank length will allow the width requirements to be met. Padlocks may be taped to the exterior doors to ensure further measures will stay within the ISO envelope.

FPU-8-4 and FPU 20-3 Rear Container Doors

1. Using your right palm for left-hand doors and left palm for right hand doors, depress locking latch while using your free hand to prevent handle from springing outwards.

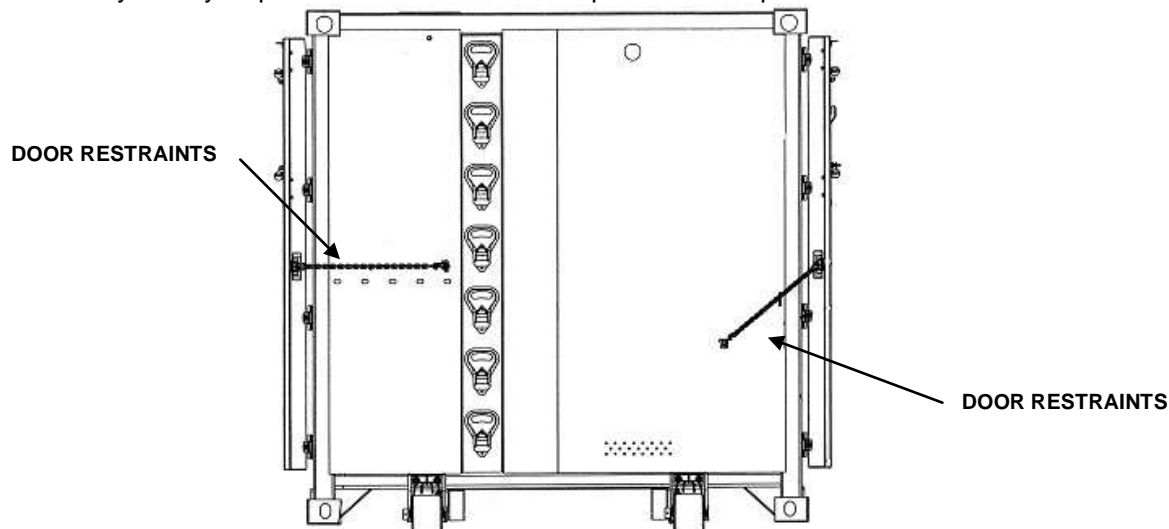
WARNING



The container door release grip has limited room allocated for hand space. This creates a pinch point at the handles when closing the door. Place the door handles in the closed position after opening the doors so they will fold against each other.

2. Rotate both handles to their full open position.

3. Pull both handles simultaneously. Because containers are constructed with tubular steel and are subject to flexing when containers are sitting on an un-level surface doors may be difficult to open. In this event you may require the assistance of other personnel to open the doors.



WARNING



Use care when opening door while containers are on an incline, to maintain control consider the ground surface conditions for adequate traction, such as mud, snow, ice, sand and seek assistance from fellow soldiers to prevent strain or injury.

CAUTION

After doors are open, door handles must be re-latched in their closed position to prevent equipment damage to handles as doors are folded back in the open position.

4. The FPU-8-4 and FPU-20-3 end container doors are retained by fabric straps with shackles to welded rings on the end and interior of the door. Secure doors using door restraints.

WARNING



To prevent injury to personnel, after opening each door install door restraints to prevent accidental closing due to wind or when container is resting on an un-level surface.

BOH-CARGO-12-3 and FPU-20-3 Container Doors

1. Using your right palm for left-hand doors and left palm for right hand doors, depress locking latch while using your free hand to prevent handle from springing outwards.

WARNING

The container door release grip has limited room allocated for hand space. This creates a pinch point at the handles when closing the door. Place the door handles in the closed position after opening the doors so they will fold against each other.

NOTE

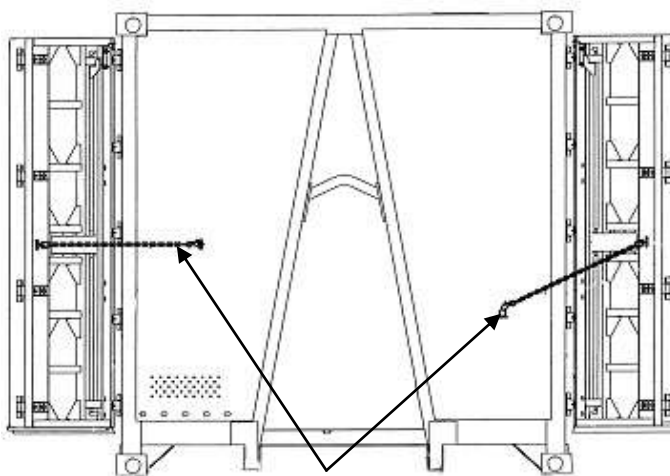
Unlatch all four doors prior to attempting to open doors. Unlatching all door handles will assist in unseating doors.

2. Rotate handles to their full open position.

CAUTION

When doors are open, door handles must be latched in closed position to prevent equipment damage to handles as doors are folded back in the open position.

3. Grasp both the center door handles and pull bi-fold doors simultaneously. Because containers are constructed with tubular steel and are subject to flexing when containers are sitting on an un-level surface, doors may be difficult to open. In this event you may require the assistance of other personnel to open the doors. While pulling on center doors simultaneously, have additional personnel pull handles on doors.
4. Fold doors and retract away from the container.
5. The BOH-CARGO-12-3 and FPU-20-3 front section container doors are retained by straps with shackles to welded rings on the end and interior of the door. There is a restraint strap that secures the FPU-8-4 and BOH-Cargo doors together where the FPU-8-4 and BOH-CARGO-12-3 doors meet at their connection point. Secure doors using door restraints.

**DOOR RESTRAINTS**

WARNING

To prevent injury to personnel, after opening each door install door restraints to prevent accidental closing due to wind or container resting on an un-level surface.

Closing the Doors

FPU door seals consist of a double lip design in which the inter lip forms a tight seal against a fixed surface around the door opening while the outer seal over laps the door facing to provide a double sealing protection against the environment. Over lapping doors requires one door (left side) to have double seal lips while the adjacent door (right side) has a single seal lip (no outer seal lip). During the closing process, as the over lapping doors begin to mate, be sure that the door with no outer seal lip (right side) is ahead of the double seal lip door (left side).

CAUTION

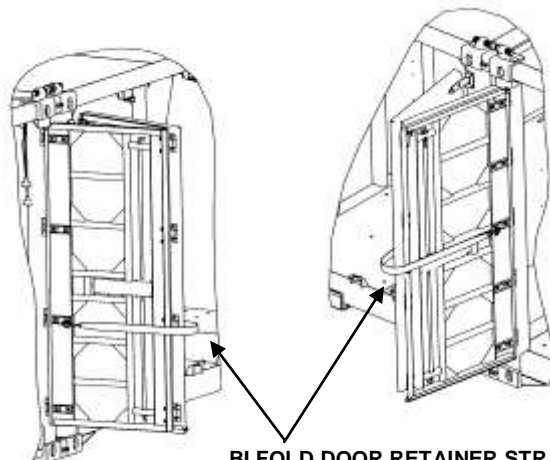
Prior to beginning the door closing procedure, ensure that the container threshold is completely free of debris (dirt, sand, gravel, etc.). This will provide for proper sealing of the doors and prevent leaks.

FPU-8-4/BOH-CARGO-12-3 and FPU-20-3

The center set of BOH-CARGO-12-3 and FPU-8-4 doors as well as the FPU-20-3 doors are retained by a strap that goes across the door edges and are shackled to a ring welded to the interior of the door.

NOTE

When the FPU-8-4 and BOH-CARGO-12-3 containers are separated they each have additional rings that are welded on the end of each container to accept the strap shackles. (Not applicable to the FPU-20-3).

**BI FOLD DOOR RETAINER STRAPS**

1. Disconnect door restraint devices from doors. Doors should be in perpendicular position for ease of restraint removal.
2. Hook restraints to the doors.

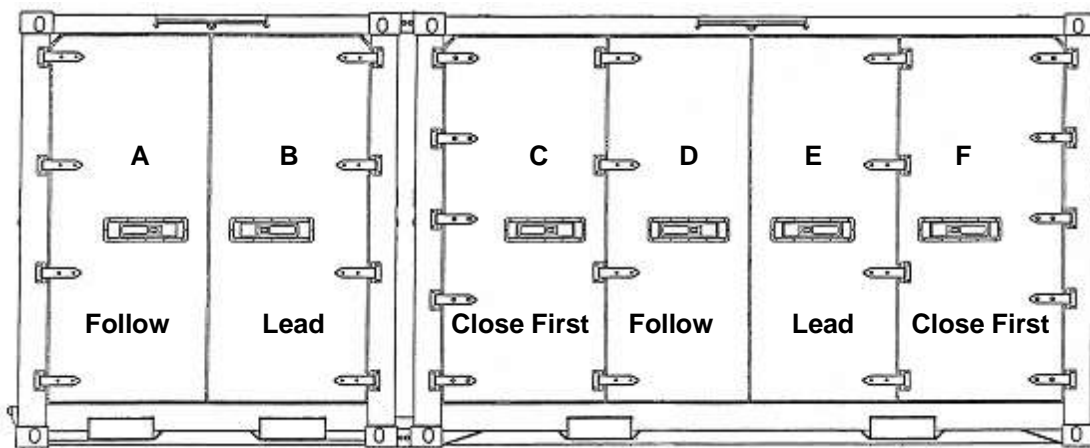
NOTE

The FPU-20-3 doors are in the same configuration as the combined FPU 8-4 and BOH-CARGO-12-3. All of the following Warnings, Cautions and procedural steps apply to the BOH-CARGO-12-3 and FPU-20-3 when opening, closing and securing the doors.

WARNING

To prevent injury to personnel, caution should be exercised when releasing more than one door at a time from door restraints during the closing procedure.

3. Unlatch door handles by depressing the locking latch and rotate handles to their full open position.
4. Close and latch both outer doors C and F first, then close both doors D and E simultaneously aligning the single seal lip of the right door E to be slightly ahead of the double seal lip left door D.

Closing the FPU 8-4/BOH-CARGO-12-3 Doors**CAUTION**

During the closing process, as the over lapping doors begin to mate be sure that the door with no outer seal lip (right side) is ahead of the double seal lip door (left side).

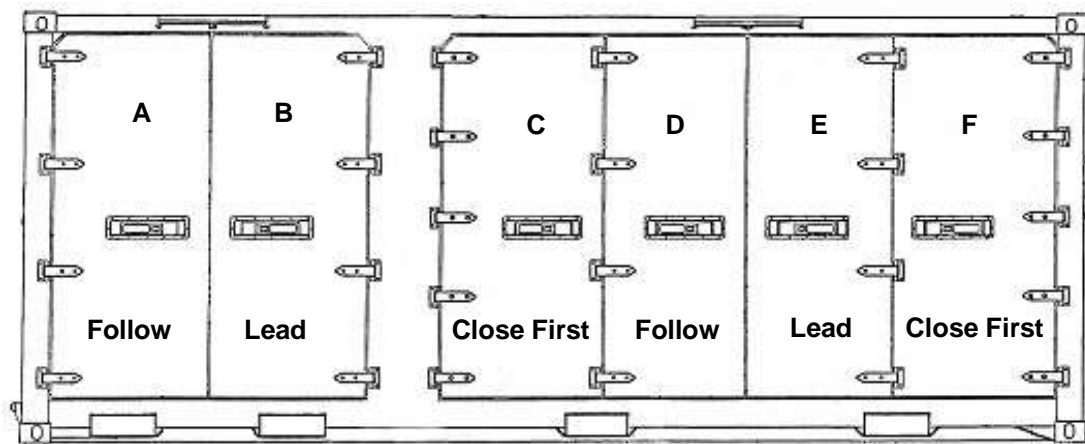
5. Push firmly until the door cams engage the door cam keepers inside the container.
6. Rotate door handles to the full closed position. Ensure the locking latch has fully engaged the handle.

NOTE

If the top or bottom of the door does not seat inside the doorframe, the doors have not made proper contact with the door cam keeper.

CAUTION

When doors are open, door handles must be latched in closed position to prevent equipment damage to handles as doors are folded back in the open position.

Closing the FPU-20-3 Doors

1. Close and latch both outer doors C and F first, then close both doors D and E simultaneously aligning the single seal lip of the right door E to be slightly ahead of the double seal lip left door D.

CAUTION

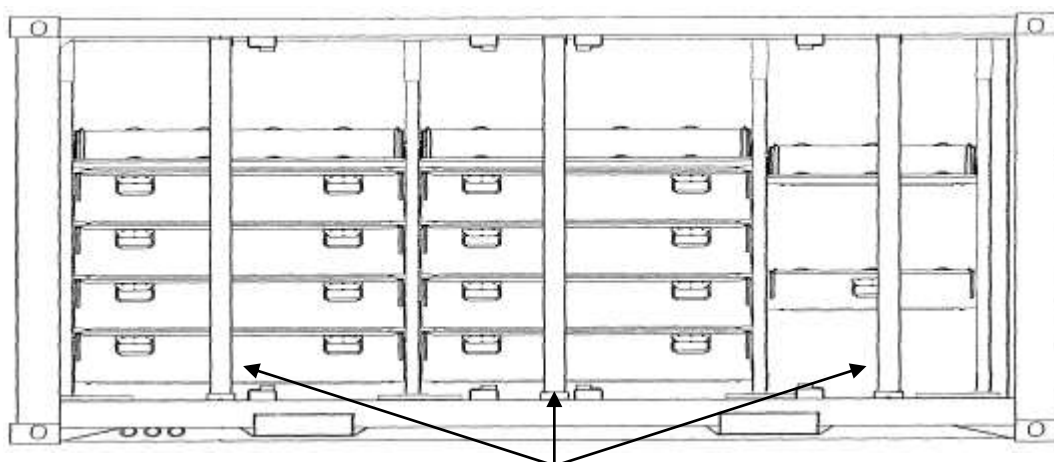
During the closing process, as the over lapping doors begin to mate be sure that the door with no outer seal lip (right side) is ahead of the double seal lip door (left side).

2. Push firmly until the door cams engage the door cam keepers inside the container.
3. Rotate door handles to the full closed position. Ensure the locking latch has fully engaged the handle.

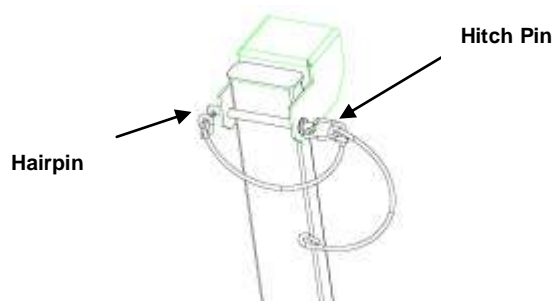
REMOVING/INSTALLING FPU LOAD CONSTRAINT BARS WHEN CONFIGURED WITH PARTS STORAGE AIDS (BOH-CARGO-12-3 and front section of the FPU-20-3)

NOTE

The FPU-20-3 Constraint Bars are in the same configuration as the combined FPU 8-4 and BOH-CARGO-12-3. All of the following Warnings, Cautions and procedural steps apply to the BOH-CARGO-12-3 and FPU-20-3 removing installing and securing the constraint bars



LOAD CONSTRAINT BARS



NOTE

Constraint Bars are not provided nor required for FPU Bulk Pallet containers

Load Constraint Bars are designed to keep drawers from sliding out during transport. The Load Constraint bars are located in the center of each row of drawers. Load constraint bars are full height vertical bars fitting into a lower receptacle and retained in place using a pin system located at the top of the bars.

1. Open doors.
2. Remove the hairpin.
3. With one hand, retain constraint bar into position.
4. Grasp the hitch pin with free hand and remove. Hitch pin is secured to the restraint bar by a security lanyard so may be released after removing.

5. With both hands, remove the freed Load Constraint Bar from its receptacle.
6. Load Constraint Bars should be stowed on the floor under 12-inch parts drawers of the BOH-CARGO-12-3 or FPU-20-3 container.

WARNING

Fall hazard exists when the Load Constraint Bars are not properly stowed during operation. Ensure there is no protrusion of the Load Constraint Bars when stowed.

7. Reverse the procedure to install the Load Constraint Bars. NOTE: Ensure lower receptacle is clean of debris before beginning this process.

OPERATING ADJUSTABLE DRAWERS WHEN CONFIGURED WITH PARTS STORAGE AIDS (BOH-CARGO-12-3 and front section of the FPU-20-3)**NOTE**

The FPU-20-3 adjustable drawers are in the same configuration as the FPU 12-3. All of the following Warnings, Cautions and procedural steps apply to the FPU-20-3 when removing, installing adjusting and securing the drawers

Adjustable drawer slide ledges have been installed in the BOH-CARGO-12-3 and FPU-20-3 parts container. These slide ledge assemblies are attached to the vertical rack frame at two locations by four ¼ inch carriage bolts at each point of attachment. Drawers are mounted to these ledges by four bolts on each ledge.

All drawers are full extension and are operationally secured by locking rod handles to prevent opening during transport or accidental closing during use. Drawers consist of fixed longitudinal dividers and moveable transversal dividers that allow adjustment on two-inch centers. Drawers are rated with a maximum capacity weight limit of 150 lbs per drawer.

CAUTION

Do not exceed maximum weight limit of 150lbs per drawer. Exceeding load limits may damage slide and drawer systems.

Opening and Closing Drawers (FPU parts only)**WARNING**

Use care when opening drawers while containers are on an incline. Physical injury may occur. The container should be placed on as level a terrain as possible and periodically be checked for shift in its position from its level state.

WARNING

Do not use bottom drawers or pallets as step substitutes when trying to access ASL located on upper drawers and pallets. It is recommended that an optional 4-step stairway with handrail be used to access upper drawer and pallet material.

**CAUTION**

Never allow material to exceed the height of the drawer sides. Material exceeding drawer height will interfere with travel of that drawer and the drawer above.

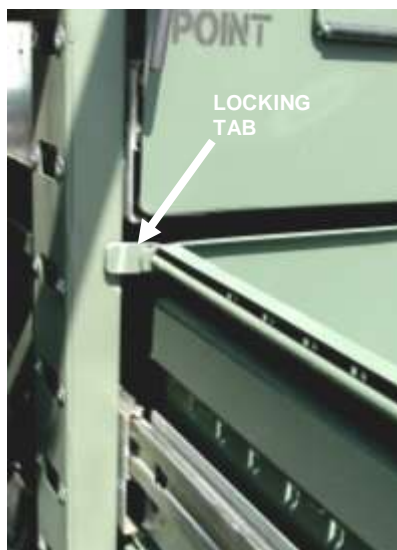
Opening

Rotate the two locking mechanism handles upward toward the center of the drawer and hold in the open position. Pull out until the locking handles can be released to lock the drawer in the open position.

NOTE: Drawers will lock in both the closed and fully extended position.

Closing

Rotate the two locking mechanism handles upward toward the center of the drawer and hold in the open position. Push the drawer in until the locking handles can be released to lock the drawer in the closed position.

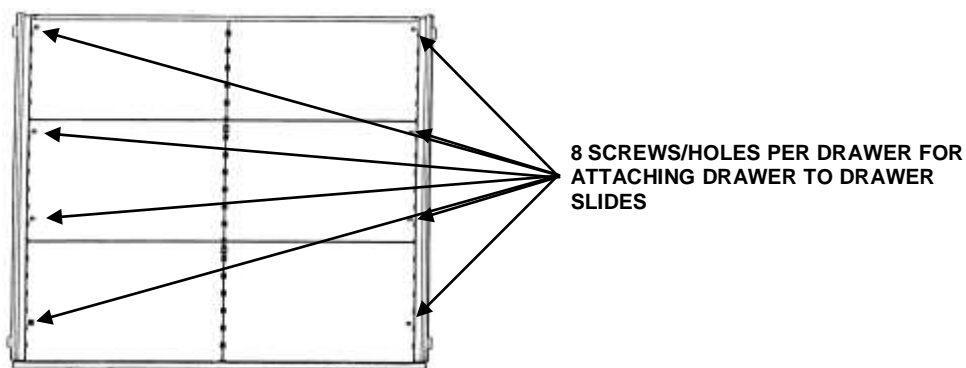


Moving/Adjusting Drawer Dividers

Drawers consist of fixed longitudinal dividers and moveable transversal dividers that allow adjustment on 2-inch centers from front to rear. To move a divider, grasp each side of the divider at the top and pull upward until free. Select the desired position and insert divider into slots on drawer. Be sure divider is inserted into slots directly across from each other. Twelve-inch drawers consist of multiple slots for maximum retention of divider. Ensure divider is engaged in all the slots at the chosen location and is seated completely to the drawer bottom surface.

Repositioning Drawers (BOH-CARGO-12-3 Parts only)

1. Fully extend and lock the drawer in open position.
2. Remove all stored material from drawer.
3. Remove eight ¼-inch screws located in the bottom of the drawer at either side.

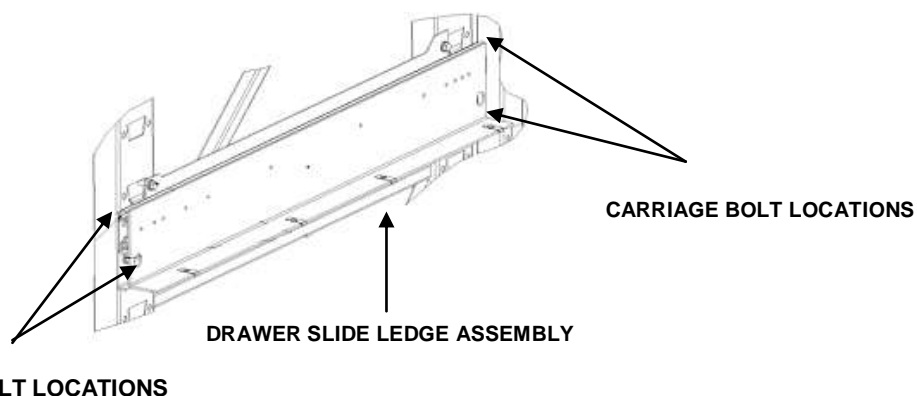


4. Lift drawer from slide ledges.

CAUTION

If a bolt is lost or damaged beyond use, obtain a replacement. Do not install with less than the proper number of bolts or equipment damage may occur.

5. Loosen but do not remove the four front and rear ¼-inch nuts on the carriage bolts using a ¼-inch socket with ratchet and extension.



6. Slide ledges are retained on the vertical rack frame by four bayonet tabs protruding into the windows of the vertical rack frame. This requires the ledge to be loosened from the vertical rack frame. While one person securely holds the slide ledge, the second person applies an upward force by tapping the under side of the ledge at the attached point with a 2 X 4 soft wooden block or similar material.
7. Place the drawer slides ledges in their desired positions by inserting the bayonet tabs into the vertical rack frame windows while aligning the four carriage bolts into their appropriate slots. Tap down on the ledge a 2 X 4 soft wooden block or similar material. Ensure the carriage bolts drop completely down in the slots.

NOTE

Drawers may be adjusted in 4-inch increments.

8. Tighten drawer slide ledge to rack frame by tightening the four ¼ -inch carriage bolt nuts bolts using a ¼ -inch socket with ratchet and extension.
9. Reposition the drawer on to the slide ledge careful to align mounting holes.
10. Install all eight bolts and lightly hand-tighten.
11. After hand tightening and prior to full tightening of the eight ¼-inch mounting screws, push drawer completely closed and pull back to its full-extended position to allow the drawer to seat into its proper location on the drawer slide ledge.
12. Being careful not to over tighten, secure the eight ¼-inch mounting screws.

OPERATING FPU PALLETS (BOH-CARGO-12-3/8 BULK ONLY)

Each pallet position in the pallet rack system consists of a pallet and left and right load centering adjustable pallet mounting ledges. Ledge assemblies are attached to the vertical rack frame at two locations by ten ¼ -inch carriage bolts and nuts. When pallet is inserted on pallet ledges, they are secured by rear cam locks and held in front by two adjustable lock rods that seat the pallet into position when tightened. All pallets are provided with nets or ratchet straps to secure material. Pallets are rated with a maximum capacity weight limit of 1,000 lbs.

NOTE

The FPU-20-3 adjustable drawers are in the same configuration as the BOH-CARGO-12-3. All of the following Warnings, Cautions and procedural steps apply to the BOH-CARGO-12-3 and FPU-20-3 when removing, installing adjusting and securing the drawers

CAUTION

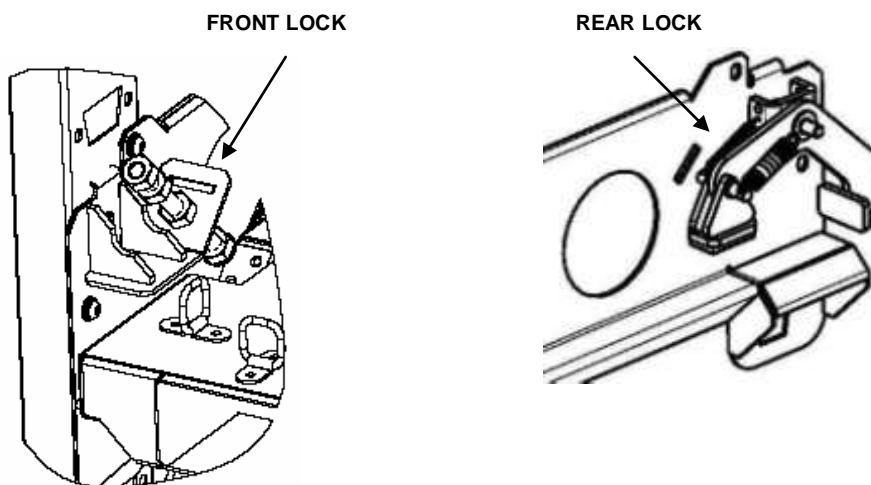
Do not exceed maximum weight limit of 1,000 lbs per pallet. Exceeding load limits may damage pallets and pallet ledges.

CAUTION

Ensure the lock rods have been completely retracted prior to removing or inserting the pallets.

WARNING

Never work underneath loaded pallets. Failure to comply could cause serious injury or death.

**Inserting Pallets**

The following process will require a forklift operator and a ground guide.

1. Adjust forklift tines to match fork pockets of pallet to be installed.
2. Pick up pallet with forklift.

NOTE

Pallets are designed with a forklift tine stop to ensure proper distance is maintained between the forklift bridge and the FPU container. It also assists in inserting the pallet to the rear locked position.

3. Using the ground guide align pallet to the pallet ledge opening.

CAUTION

Ensure the lock rods have been completely retracted prior to removing or inserting the pallets.

4. Once approximately 12-inches into the pallet ledge, lower the pallet and allow it to slide along the pallet ledge into the lock position.
5. Retract forklift.
6. Tighten the lock rods evenly using 7/8-inch deep well socket and 1/2-inch drive flex head wrench (refer to BII list in WP 0005 00) to secure the front of the pallets.

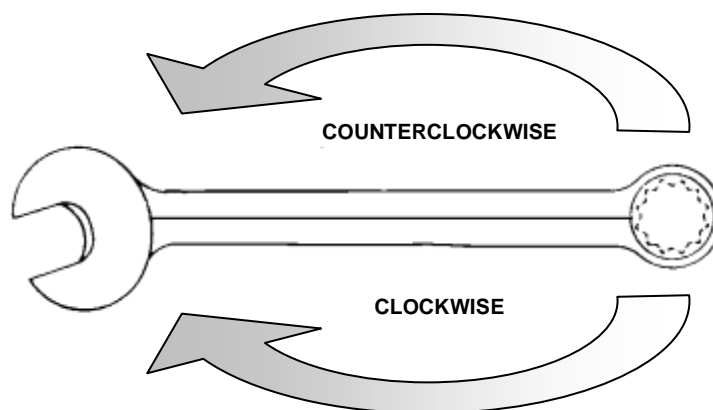
NOTE

Alternate tightening sequence left to right to ensure proper alignment of pallet on pallet ledges.

7. Tighten Jamb nut using 7/8-inch combination wrench to hold lock rod in the closed position.

Removing Pallets

1. Loosen jam nuts using 7/8-inch combination wrench.



NOTE

All hardware, bolts, jam nuts, and screws are loosened with a counter clockwise rotation.
All hardware, bolts, jam nuts, and screws are tightened with a clockwise rotation.

2. Completely retract lock rods using 7/8-inch deep well socket and 1/2-inch drive flex head wrench (refer to BII list in WP 0040 00). Turn lock roads counterclockwise fully until retracted. The rod will bottom out when fully retracted.
3. Adjust forklift tines to match fork pockets of pallet to be removed.
4. Using the Ground Guide insert tines into pallet until contact with pallet stops is made.
5. Using one of the 2-inch ratchet straps provided, attach one hook to left front pallet D-ring.
6. Feed strap through the forklift bridge to opposite side and attach to right front pallet D-ring.
7. Raise the forks approximately 1-inch.
8. Back out slowly approximately 12-inches to allow pallet to clear rear cam lock.
9. Tilt forks back to obtain approximately 1-inch of clearance between the pallet and pallet ledge.

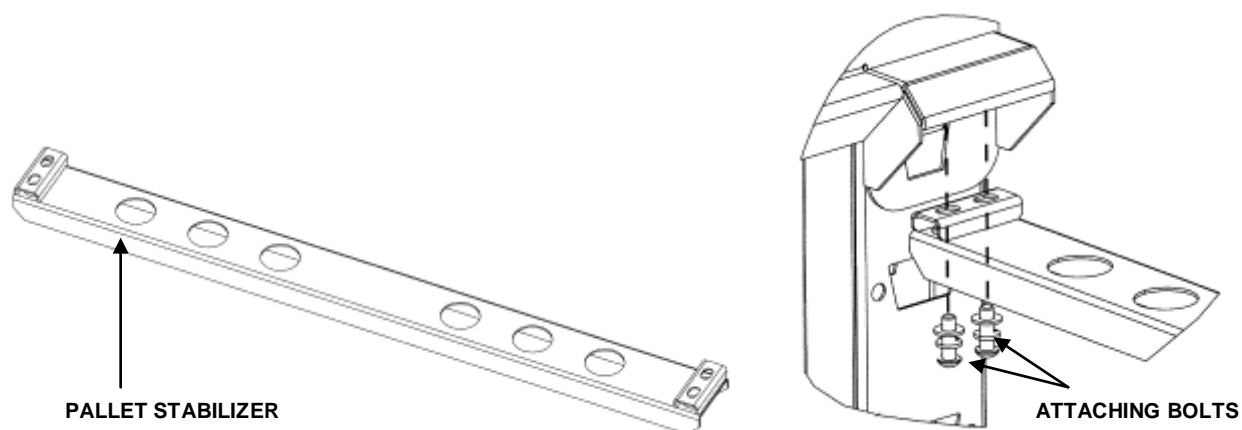
10. Continue backing out until clear. Once clear of container position pallet to desired location and lower to the ground.
11. Disconnect ratchet straps from pallet D-rings and remove from forklift bridge.

Adjusting Pallet Position

1. Remove the pallet to be relocated and any pallets located above prior to beginning the following steps (Refer to inserting/removing pallet procedures).
2. Remove front and rear pallet ledge stabilizer by turning attaching bolts counterclockwise on each side of the stabilizer using 3/16-inch hex driver socket and 3/8-inch ratchet with extension.

NOTE

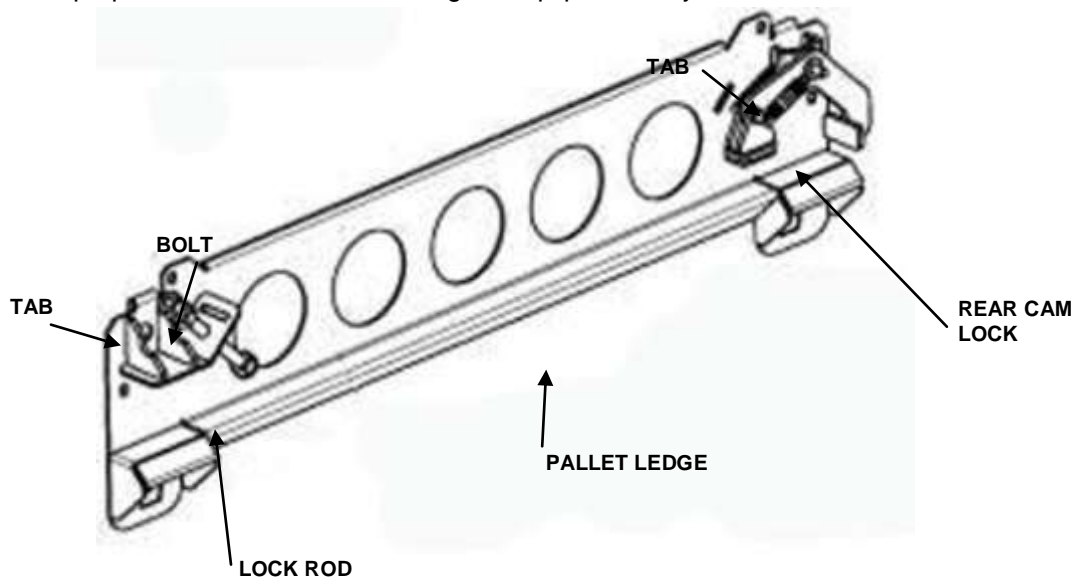
The operator must crawl into the container to remove the rear Allen bolts.



3. Loosen but do not remove the ten carriage bolt nuts using 1/4 -inch socket and ratchet with extension from the two pallet ledges on the vertical rack frame.

CAUTION

If a bolt is lost or damaged beyond use, obtain a replacement. Do not install with less than the proper number of bolts or damage to equipment may occur.



4. Pallet ledges are retained on the vertical rack frame by ten ¼-inch carriage bolts and four bayonet tabs protruding into the windows of the vertical rack frame. This requires the ledge to be loosened from the vertical rack frame. While one person securely holds the pallet ledge, the second person applies an upward force by tapping the under side of the ledge at the attached point with a 2 X 4 soft wooden block or similar material.
5. Place the drawer slides ledges in their desired positions by inserting the bayonet tabs into the vertical rack frame windows while aligning the ten carriage bolts into their appropriate slots. Ensure that pallet ledges are at same height in the vertical rack frame. Ensure all bayonet tabs have engaged the vertical rack frame windows before tapping into place. Tap down on the ledge with a 2 X 4 soft wooden block or similar material. Ensure the carriage bolts drop completely down in the slots.

NOTE

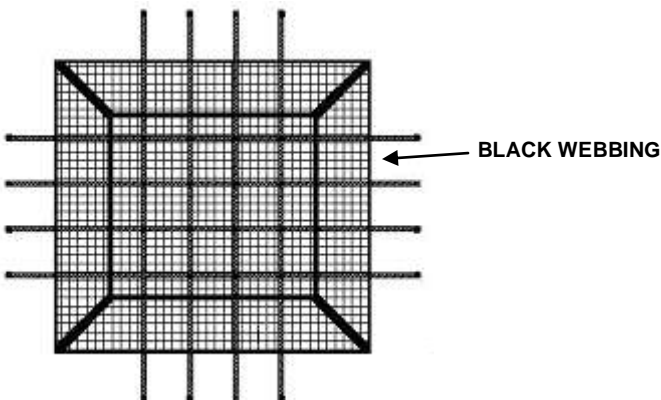
Pallets may be adjusted in 4-inch increments.

6. Tighten the ten carriage bolt nuts using a ¼-inch socket, ratchet and extension.
7. Reinstall rear pallet ledge stabilizer, four Allen Bolts using 3/16-inch hex driver socket and 3/8-inch ratchet with extension (refer to BII list in (WP 0065 00) from the two positions of each pallet ledge. Four bolts located at each vertical rack frame.
8. Reinstall front pallet ledge stabilizer four Allen Bolts using 3/16-inch hex driver socket and 3/8-inch ratchet with extension (refer to BII list in WP 0040 00) from the two positions of each pallet ledge. Four bolts located at each vertical rack frame.
9. Reinstall pallet.

SECURING FPU CARGO USING NETS (2-foot Drawers and HAZMAT Pallets Only)

FPU Cargo netting is attached to HAZMAT pallets and the tops of 2-inch parts drawers and are then tightened around the stowed material by means of adjustable straps with parachute clips.

1. Place material to be secured in the 2-inch drawer or HAZMAT pallet.
2. Arrange net to ensure male and female parachute clips are aligned.
3. Attach the male ends of the parachute clips located on nets to the female clips located on the pallet.
4. Pull loose ends of the straps to remove slack.
5. To remove, detach parachute clips.



SECURING FPU CARGO USING FLOOR NETS (When configured with bulk/pallet storage aids)

WARNING



Some HAZMATs may react negatively with other HAZMATs. The MSDS for each type of hazardous material to be shipped must be referenced prior to shipment. All recommend safety procedures must be followed. Be sure to use the appropriate absorbent material inside the containers to absorb spills. All HAZMATs must be double wrapped prior to shipment in lined HAZMAT storage pallets. Failure to do so may result in damage to pallets, FPU cargo, and hardware and/or injury to personnel.

FPU floor cargo nets are designed to secure cargo directly to the floor of the FPU-8-4/BOH-CARGO-12-3 and FPU-20-3 containers configured with bulk storage aids. These floor nets consist of a net with four safety snaps positioned to fit into the recessed rings located at the bottom of the vertical rack frames and an adjustable cinch rope that runs along the outer edge of the net.

There are three sizes of floor cargo nets:

- Two large (used in FPU-8-4 Bulk containers)
- Four medium (used in BOH-CARGO-12-3 Bulk containers)
- Two small (used in BOH-CARGO-12-3 Bulk containers)

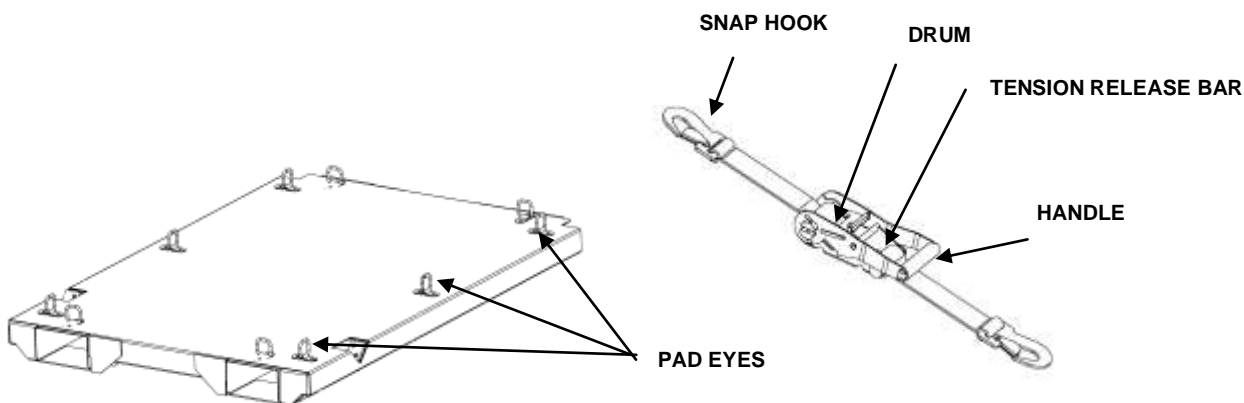
1. Remove pallets directly above the position that the cargo is to be secured.
2. Insert load to be stored and secured.
3. Align net and attach the two safety snaps to the two rear rings of the vertical rack frame.
4. Feed the net over and around the load.
5. Attach the remaining two safety snaps to the two front rings of the vertical rack frame.
6. Pull cinch rope tightly to secure load in place.

SECURING FPU CARGO USING RATCHET STRAPS

FPU pallets are designed with a series of D-rings around their edges. D-rings have a load limitation of 1,000 lb per pallet. Pallets (except HAZMAT Pallets) are provided with four 2-inch ratchet straps that utilize a tension ratchet and snap hook ends to secure. These straps hook directly on to the D-rings. Proper position of these straps depends on size and shape of the material stored on the pallet.

Ratchet Strap

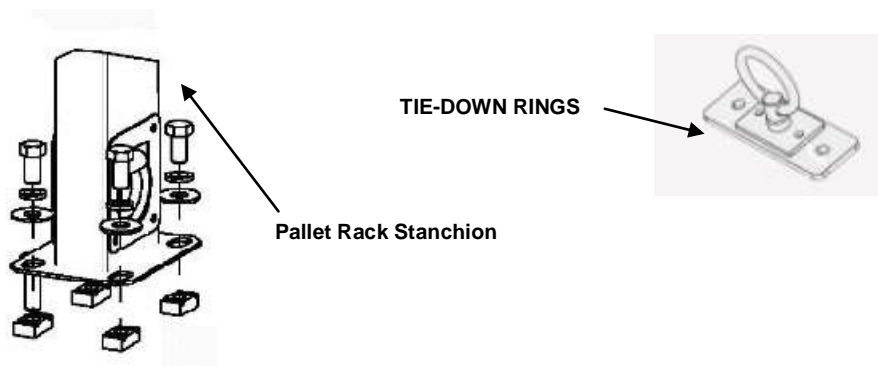
1. Extend the ratchet strap and fasten one snap hook end to one of the pad eyes on the edge of the pallet and extend the strap over the material to be secured until you can connect the other snap hook end to another pad eye on the opposite side of the pallet.
2. Grasp the loose end of the blue strap and take-up the slack in the drum and strap until the strap has firm contact with the material.
3. Use the ratchet handle to tighten and add tension to secure the material.
4. To remove the straps, grasp the tension release bar and pull toward the handle.



FLOOR TIE-DOWN RINGS

Floor Tie-Down Rings are used to secure large material to the floor of the container in place of the pallet rack stanchions with ratchet straps and have a load limitation of 5,000 lb.

1. Remove the Pallet Rack Stanchions top and bottom.
2. Replace with the Tie-Down Rings to the desired location on the floor.

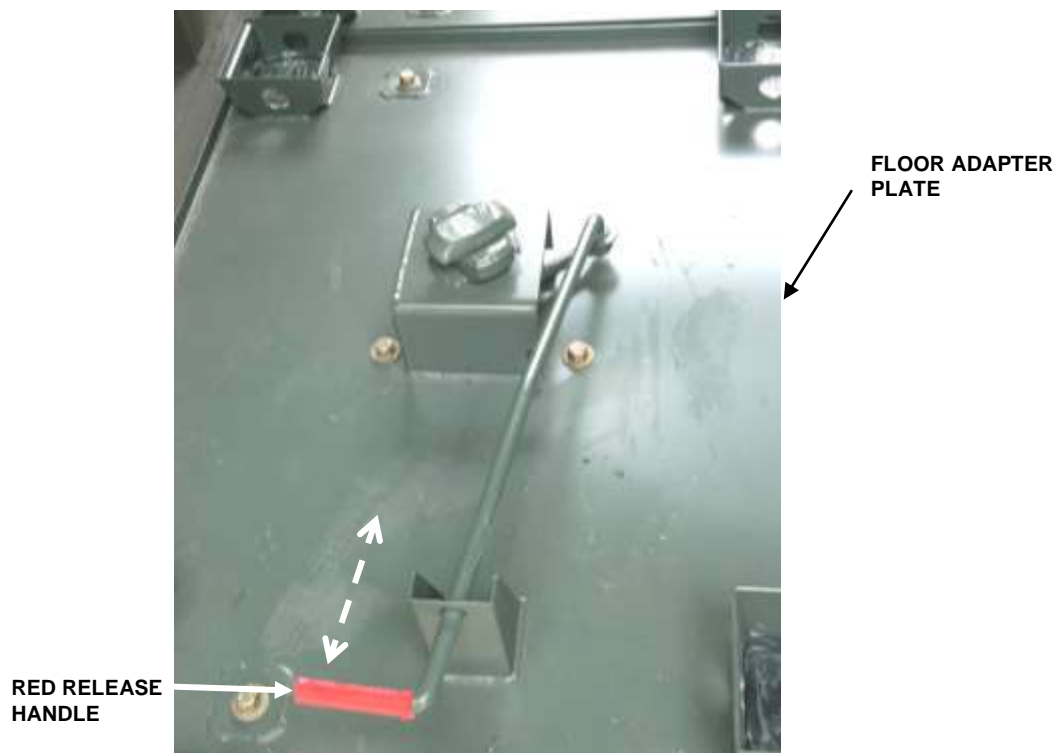


FLOOR ADAPTER PLATE

Each floor adapter plate secures two FPU Modules in the FPU-8-4 and/or the rear section of the FPU-20-3 container using four receptacles with rubber pads and a center twist lock. The center twist lock connects to a female receptacle located on the bottom of FPU Modules. Floor adapter plates are affixed to the FPU-8-4 Parts container using twelve hex head bolts.

To lock FPU Modules into the FPU-8-4 and/or FPU-20-3 containers with floor adapter plate installed, push the red handle completely in after module has been installed into position.

To remove, pull the red handle completely out.



END OF WORK PACKAGE

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**OPERATOR INSTRUCTIONS
FPU SYSTEMS OPERATION MANUAL
(INCLUDING REPAIR PARTS & SPECIAL TOOL LIST)
FOR
MODELS FPU-8-4/BOH-CARGO-12-3 & FPU-20-3**

LOADING/UNLOADING FPU MODULES

LOADING/ UNLOADING FPU MODULES (FPU-8-4 and 8 ft compartment of the FPU-20-3 PARTS ONLY)

The FPU Module System consists of a storage/shipping module and a floor adapter plate. FPU modules are designed to be easily inserted/removed from the FPU-8-4 or rear section of the FPU-20-3 when module cradles have been installed. Modules consist of four tapered feet and a female receiver located on the bottom that allows them to be mounted directly to the floor adapter plate. Modules are retained in place using twist lock on the floor adapter plate. Modules are locked on to the floor adapter plate by pulling out or pushing in on the module-locking arm. Floor plate adapters provide four module storage positions.

Removing FPU Modules

1. Be sure modules 3-G bar is pinned in place.



2. Pull the red module-locking arm handle fully out to its open position.



3. Adjust forklift tines to fit forklift pockets on the FPU module.



4. With the assistance of a ground guide, insert tines into module.

NOTE

Be sure to enter the forklift pockets with tines above the red handle and allow approximately 18-inches between the forklift-bridge and module to prevent damage to the forklift or container.

5. Lift module directly upward maintaining a level position to a height just above the module receptacles on the floor adapter plate.

6. Using ground guide, slowly back out paying close attention to the guide and the upper clearance between the basket and container door cam keeper that protrudes downward from the top of the container frame. The module may have to be raised or lowered during this process if the tilt is too far forward or backwards.



7. Continue backing until completely clear of the container.
8. Transport to desired drop area and slowly lower until the module is resting fully on the ground.
9. Slowly back away until completely clear of the module.

Inserting FPU Modules

1. Be sure the 3-G bar is pinned in place.
2. Be sure red handle on the module-locking arm located on the floor adapter plate is pulled fully out to its open position.
3. Adjust forklift tines to fit forklift pockets on the FPU module.
4. With the assistance of a ground guide, insert tines into module. Stop with about 12-inches between the FPU module and the forklift bridge. This will allow for the clearance needed between the forklift bridge and the container frame when loading the module to prevent the bridge from making contact with the container frame.
5. Using ground guide, lift module and position feet directly above the receptacles located on the floor adapter plate at the desired module storage position.
6. Lower the module until it settles into its position (shifting the tines left/right as necessary to align properly).
7. Push the module-locking arm in completely.

8. Slowly back away from the module until the tines have completely cleared.
9. Verify that the red handle on the module-locking arm is pushed completely to its closed and locked position.



END OF WORK PACKAGE

**OPERATOR INSTRUCTIONS
FPU SYSTEMS OPERATION MANUAL
(INCLUDING REPAIR PARTS & SPECIAL TOOL LIST)
FOR
MODELS FPU-8-4/BOH-CARGO-12-3 & FPU-20-3
OPERATION UNDER UNUSUAL CONDITIONS**

INITIAL SETUP:

FPU Downloaded and Operating

Maintenance Level

Operator/Crew

Personnel Required

Two (plus one supervisor)

OPERATION UNDER UNUSUAL CONDITIONS

This work package provides instructions for the operation of the FPU under unusual conditions. These include adverse weather, nuclear, biological and chemical attack, and emergency blackout conditions.

Operation in Rain and/or Mud

1. Provide an adequate drainage ditch to prevent standing water around the FPU.
2. Secure all accessories and container during extremely harsh rain.

Operation in Hot Weather**Operation in Snow, Ice, or Extreme Cold****WARNING**

In extreme cold, do not touch metal parts with bare hands. Severe skin damage may result.

Fording

The FPU is not watertight. It should never be submerged in any depth of water or material damage may result. When mounted on a trailer or HEMTT truck, hard-bottom water crossings no deeper than approximately two feet can be forded. When in doubt, refer to Unit Standard Operating Procedures.

Interim Nuclear, Biological, and Chemical (NBC) Decontamination Procedures**WARNING**

The FPU is NOT designed to be operated in contaminated NBC Environments. Do not operate the FPU in contaminated NBC environments. If possible cease operation of the ALSMS prior to a NBC event and close all doors.

END OF WORK PACKAGE