

# Prepare & Pack Dispenser for Transport

## MAX Series Dispense System

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### Safety Notice



**CAUTION:** Only qualified service or maintenance personnel should perform the shutdown machine procedure required to prepare the machine for packing and transport.

### Tools, Equipment, Documentation

- Forklift - 2 ton capacity
- Allen wrenches, metric
- Allen wrenches, U.S. customary
- Utility knife
- Screwdriver
- Open end wrench
- Steel banding stretch-&-secure tools
- *Dispenser Operator Guide* and *Dispenser Service Guide*



### Packing Materials

#### Available from GPD Global

Items can be purchased from GPD Global or supplied by the customer:

- Hose - heavy duty, PVC, 5/8 ID, braided (PN 10/1432)
- Tie Wraps - heavy duty (PN 10/4216)
- Shipping Lock Bolts - (PN SACAN1032100, PN SACAN1032150)
- Shipping Tags

#### Supplied by Customer

- Wooden pallet [(I.D.) 60" W x 48" D], crate walls and lid plus 4"x4" supports under pallet
- Tape and small bags - for sets of screws
- Cardboard box (18"x18"x18") - for "loose parts"
- Monitor packaging and box - original or comparable
- Solid hard case(s) - provided with each original valve and kit order
- Dense foam, "1.7 lb. blue T-Lam" **OR** Shipping Lock Bolts (1" 10x32 and 1-1/4" 10x32)
- Bubble wrap - pink anti-static, 2' W with perforations every 12"
- Foam wrap - pink anti-static, 48" W with perforations every 24"
- Plastic machine-stretch-film
- Shipping labels
- Steel banding

## Preparation Instructions

The following preparatory steps must be performed before the machine can be packaged and crated for transport.

- [1. Remove Product & Pallet](#) (pg 2)
- [2. Shutdown Machine](#) (pg 2)
- [3. Disconnect Hoses, Cables, & Clamps](#) (pg 2)
- [4. Removable Parts](#) (pg 3)
- [5. Stabilize Gantry](#) (pg 8)
- [6. Finalize Securing Gantry](#) (pg 12)
- [7. Lock Doors & Hood](#) (pg 12)

### 1. Remove Product & Pallet

Remove all product and pallets from the machine.

### 2. Shutdown Machine



**CAUTION:** Only qualified service or maintenance personnel should perform the shutdown machine procedure required to prepare the machine for packing and transport.

To shutdown the machine:

- If conveyor rails are present, verify a gap of approximately 6" exists between the rails prior to machine shutdown.
- Perform the *Prepare for Shutdown* procedure detailed in the *Dispenser Service Guide*.
- If the machine is equipped with optional UPS (uninterrupted power supply) control, perform the UPS shutdown sequence detailed in *UPS Control* of the *Operating Detail* section of the *Dispenser Operator Guide*.
- From the main menu bar, click on Operations > Shutdown System. A shutdown verification prompt displays.
- Click YES to shutdown the system. Wait until a System Stopped prompt displays.
- Press the red Emergency Stop button.

### 3. Disconnect Hoses, Cables, & Clamps

- Disconnect the following items from the rear service panel:
  - compressed air hose
  - power cable
- If present, disconnect the following items from the rear service panel:
  - printer cord
  - Ethernet cables
  - SMEMA cables
  - camera cables
- If present, disconnect any ventilation hoses from the machine.
- If present, remove seismic tie down clamps from the machine feet.
- Place SMEMA cables in the box used in [4. Removable Parts](#) (pg 3).

## 4. Removable Parts

Remove the following hardware from the machine, pack each item separately in bubble wrap or a solid hard case, and then place them in the “loose parts” box (refer to [Secure Monitor & “Loose Parts” Boxes](#) (pg 15)).

NOTE: The keyboard and trackball may remain in place on the machine.

### Valves

1. Remove and clean all valves. For details, refer to the *Dispenser Service Guide*.
2. Place each valve in its original solid hard case.
3. Place all solid hard cases in the “loose parts” box.

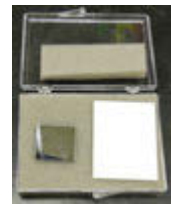
### Touch Probe

1. If a contact surface sensor is present, remove the touch probe from it:
  - a. Raise the Z axis to the top of its Z travel so adequate room exists to remove the full length of the touch probe. For instructions on how to release the Z-axis brake, refer to [Step 3 \(pg 8\)](#).
  - b. Remove the touch probe from the contact surface sensor by grasping the knurled nut at the base of the touch probe and pulling straight downward until both the nut and touch probe pull away from and out of the mount.
  - c. Snap the nut back into place on the contact surface sensor.
2. Place the touch probe in its original small box, and then place the small box in the “loose parts” box.



### Calibration Chips

1. If a calibration station is present, remove the calibration chip and backlit ceramic chip (if present) from it.
2. Place chips in between foam pads in their original small box.
3. Place the small box in the “loose parts” box.



### Monitor

Monitor removal requires both metric and U.S. customary Allen wrenches.

1. Disconnect the monitor power and signal cables.
2. Unscrew the monitor from the monitor mount. Bag and tape screws to monitor mount.
3. Unscrew the monitor mount from the machine. Bag and tape screws to the monitor mount.
4. Wrap the monitor mount in pink foam.
5. Place both the monitor and monitor mount in the original monitor packaging.
6. Place packaged monitor either in or on top of the “loose parts” box.


## Stack Light

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1. Depending on the type of fasteners present, either unscrew the jam nut or the set screws securing the stack light to the top of the machine. Bag and tape the set screws to the stack light.
2. Taking care not to pull on the still-connected stack light wiring, bubble wrap the stack light and then lay it down on top of and in the middle of the machine hood.

## Weigh Scale

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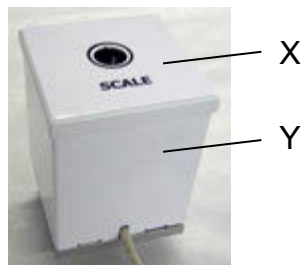
 **CAUTION:** The weigh scale is a precision instrument - handle with care.

- [Packing Scale Model WMC24-SH](#) (pg 4)
- [Packing Scale Model CP](#) (pg 7)

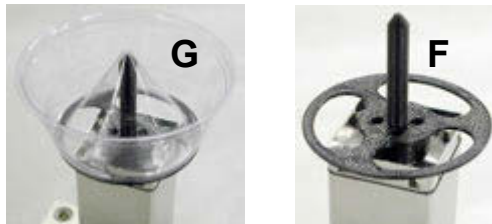
### Packing Scale Model WMC24-SH.

If a WMC24-SH model scale is present:

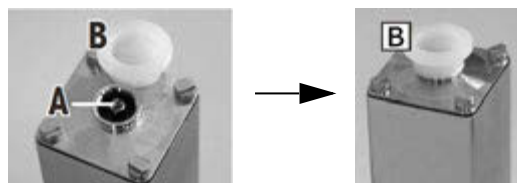
1. Remove the draft shield lid (X) from the outer draft shield (Y). Set the lid aside.



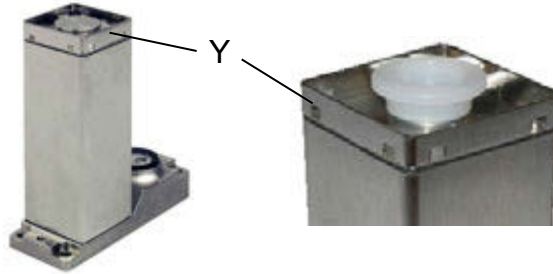
2. If a Purge Cup (G) is present on the scale, remove it. If a Purge Cup Support (F) is present, carefully lift it upward and away from the scale without exerting any torque on the Weighing Pan Support on which the Purge Cup Support rests.



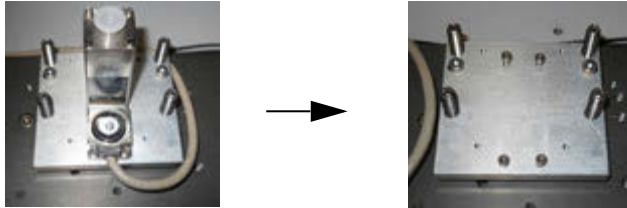
3. Place the white, protective plastic Cover (B) that came with the scale on the Weighing Pan Support (A). This prevents moisture and debris from entering the internal portion of the scale.



4. To remove the inner draft shield (Y), carefully unbolt the shield at its base. Without contacting the scale, carefully lift the shield and its internal insulation panels upward and away from the scale and set aside.



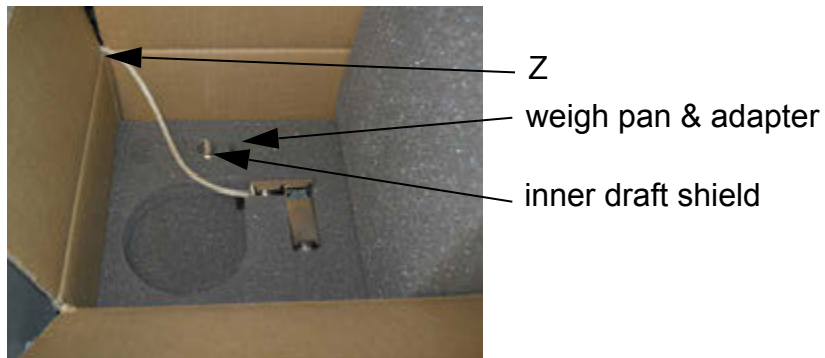
5. Carefully free the scale and the scale cable from the dispense system work area:
  - a. Cut all zip ties securing the scale cable to the dispense system work area.
  - b. Gently pull cable slack from inside the machine. Do not disconnect the scale cable from the scale.
  - c. Unbolt the scale from the system base plate and gently set the scale to the side of the base plate. Screw all screws back into the base plate.



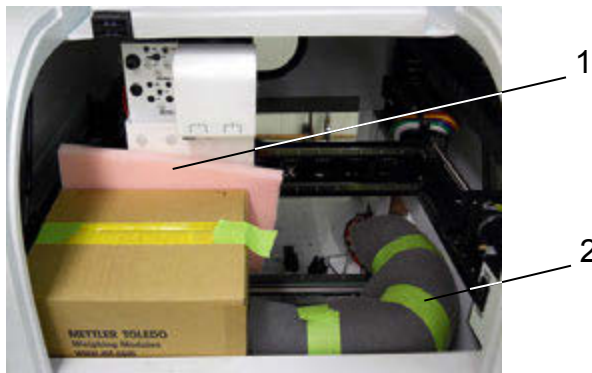
- d. Place the outer draft shield and lid securely on the base plate.



6. Pack the scale in its original packaging:
  - a. Modify the original packing box to allow for the scale cable by cutting a slit (Z) in the corner of the box.



- b. Gently place the scale and inner draft shield in the box, sliding the cable into the box slit created during prior step.
    - c. Place foam cover in box.
    - d. Tape box closed.
  7. Secure the boxed scale in the system work area:
    - a. Place foam pad (1) in front of the camera to protect the camera.



- b. Without pulling or putting strain on the scale cable, position the box in the front left corner of the work area.
        - c. Add enough additional packing material (2) to secure the box in place.

**Packing Scale Model CP.**

If a **CP** model precision weight scale is present:

1. Remove the scale from the machine work area.
2. Package this precision equipment in a secure manner that will prevent damage during transport due to bouncing.
3. Place boxed scale in the “loose parts” box.

**Kits & Cables**

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1. Pack all machine kits in their original solid hard cases and then place in the “loose parts” box.
2. Place SMEMA cables and any other cables removed from the machine in the “loose parts” box.

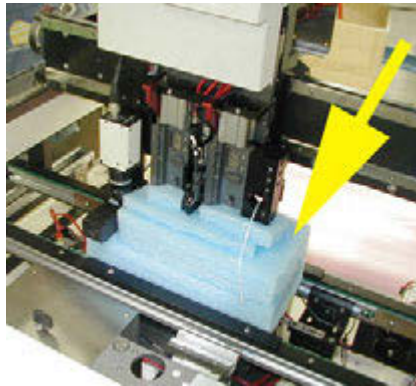
## 5. Stabilize Gantry

Use one of the following methods to secure the gantry:

### Stacked Foam Method

If conveyor rails are present, a gap of approximately 6" between the rails should be established prior to machine shutdown.

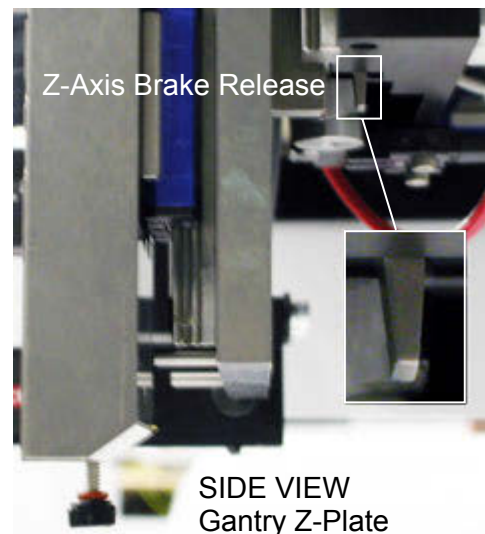
1. Manually position the gantry in the approximate center of the X axis and over the center of gap between the conveyor rails.
2. Stack a minimum of 6" of dense foam ("1.7 lb. blue T-Lam" is recommended) on the work area surface (or between the conveyor rails) to support the gantry.



3. Pull the Z-axis brake release toward the front of the machine while pressing the Z-axis gantry downward into the foam.

When you cease to exert downward pressure, the Z-axis gantry will automatically travel upward a short distance to the proper tension for transport.


**NOTE:** The manual brake release is only operational when system power is off.





## Bolt Method

The required bolt holes must already be present on your machine; otherwise, use the [Stacked Foam Method](#) (pg 8).

 **CAUTION:** Every shipping bolt must be tagged because if the bolt is not removed prior to the next power up sequence, machine damage is likely to occur.

### Z Axis

1. Manually position the gantry to align the horizontal bolt hole in the Z axis front plate with the bolt hole in the X gantry plate.
2. Tag a 1" 10x32 bolt and screw it through the front plate until it stops.



Tag and horizontal bolt for Z axis

### X Axis

1. Locate the vertical bolt hole in the X gantry plate.
2. Tag a 1-1/4" 10x32 bolt and screw it all the way into the X gantry plate.

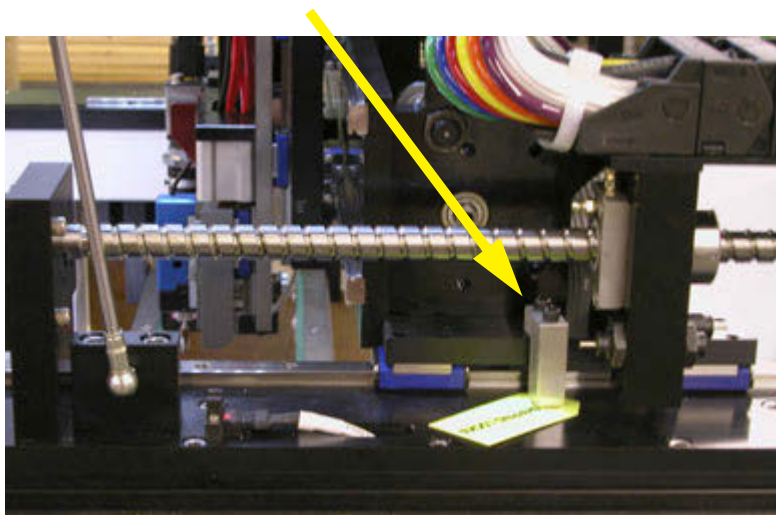


Vertical bolt for X axis  
(Right-hand side and rear of machine)

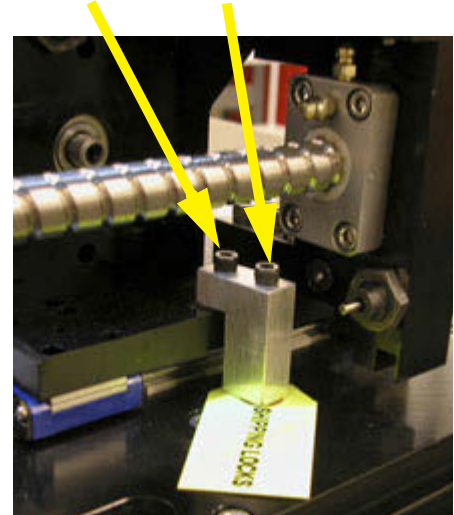
**Y Axis**

1. On the right-hand side of the machine, locate and align the vertical bolt hole in the Y gantry plate with a hole in the X gantry plate.
2. Align a shipping lock block (p/n 22204682) with the two holes.
3. Using Loctite Blue 242 on both fasteners:
  - a. Tag a 1-3/4" 10x32 bolt and then screw it through the shipping lock block into the Y gantry plate hole.
  - b. Screw a 3/4" 10x32 bolt through the shipping lock block into the X gantry plate hole.

Shipping lock block installed.  
(Right-hand side of machine.)

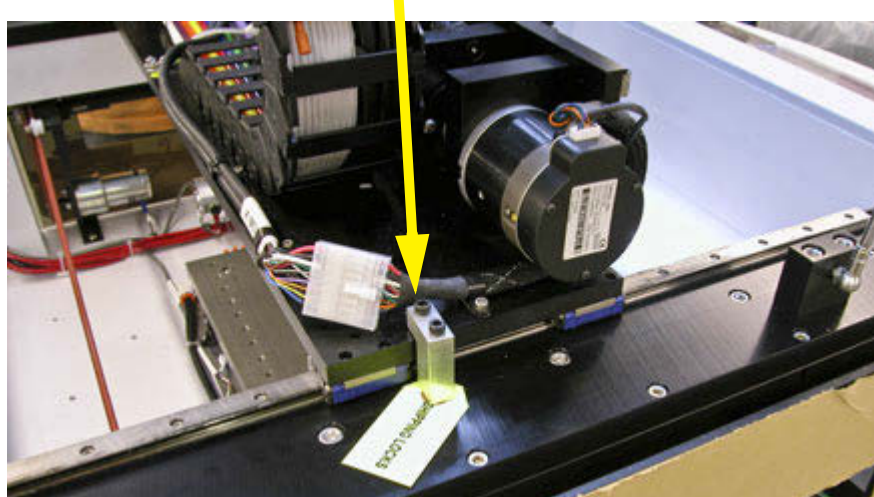


short bolt    long bolt



4. On the left-hand side of the machine, repeat the process and install a second shipping lock block on the Y gantry plate.

Second shipping lock block installed.  
(Left-hand side of machine.)



### Contact Surface Sensor

Tag and wrap a tie wrap vertically around the entire body of the contact surface sensor to prevent the touch probe mount from dropping down.

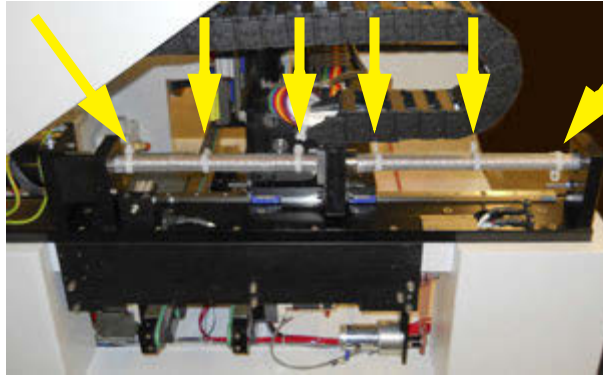


Tie and tag touch probe

## 6. Finalize Securing Gantry

Finish securing the gantry by covering the exposed ball screws with lengths of hose.

1. At the back of the machine, open the machine hood.
2. Measure and cut a length of hose to cover the exposed ball screw at one end of the Y axis.
3. Split the piece of hose lengthwise.
4. Slip the piece of hose onto the ball screw and secure it in place with three (3) tie wraps, one near each end of the hose and one in the middle.

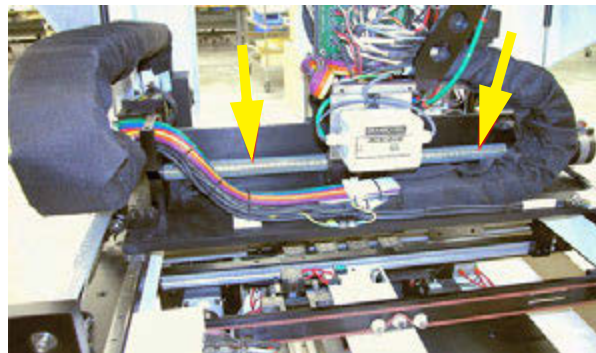


**Y Axis secured**  
3 ties per tube

(viewed from right  
side of machine)

5. Repeat [Step 2](#) through [Step 4](#) for the remaining Y axis ball screw.
6. Repeat [Step 2](#) through [Step 4](#) for the X axis ball screw.

**EXCEPTION:** You may opt to skip this step if you used [Bolt Method](#) (pg 9) in section [5. Stabilize Gantry](#) (pg 8).



**X Axis secured**  
*Tie wraps not  
shown*

(viewed from back  
of machine)

## 7. Lock Doors & Hood

1. Close and lock all doors and the front safety shield.
2. Before closing and locking the rear hood, place a cushion of foam wrap between the hood and machine frame where they meet (left and right).
3. Place the set of keys provided for the doors and hood in the “loose parts” box.

## Packing Instructions

Follow these instructions for wrapping and crating the machine for transport:

[1. Wrap Machine](#) (pg 13)

[2. Crate Machine](#) (pg 13)

[3. Mark Crate](#) (pg 16)

[4. Transport Notes](#) (pg 16)

### 1. Wrap Machine

To protect the machine from dirt, moisture, and abrasion:

1. Wrap the entire machine in foam wrap (48" wide), front-to-back over the top and side-to-side over the top.
2. Then wrap the entire machine in plastic machine-stretch-film, stretching it around the machine and then over the top, front-to-back and side-to-side.

### 2. Crate Machine

#### Build Pallet

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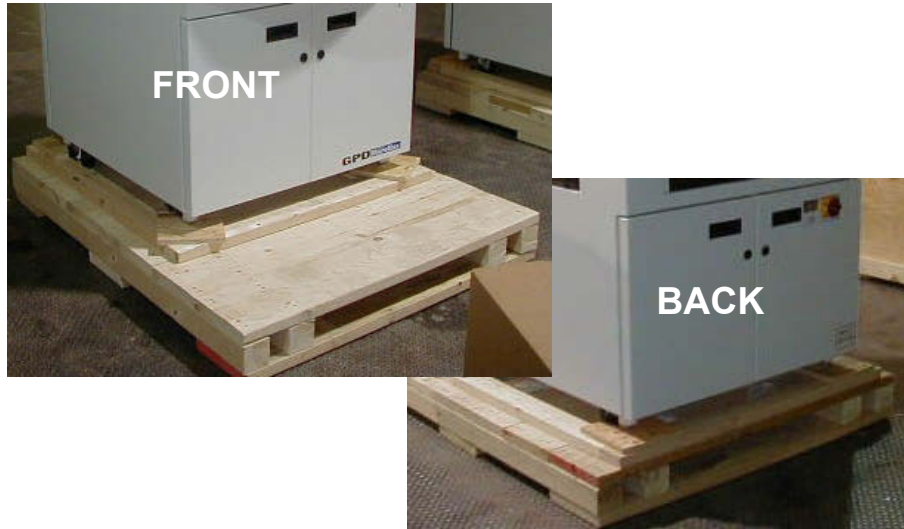
Crate Dimensions (ID) approximately 60" W x 48" D x 68.5" H

- Make the skid large enough to completely enclose the machine inside the skid area with extra room at the front for the "loose parts" box.
- Add two 4"x4" boards to the underside of the pallet, aligning the boards so they will be positioned beneath the machine feet.
- Use standard tools and 2-1/2" screws to build the pallet and crate; no special tools are required.

### Secure Machine to Pallet

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1. Position the fork lift at the machine so the forks are both under the machine and also inside the location of the rolling casters.
2. Move the machine onto the pallet.
3. Slide 2"x4" against machine legs and screw the board to the pallet. Repeat for all sides of machine.



4. Adjust the machine feet downward as far as possible while still allowing space for wooden wedges (installed during the next step). Tighten all the jam nut on each foot before installing the wedges.
5. Chock all feet by adding a wooden corner wedge at each machine foot to prevent side-to-side movement during transport.

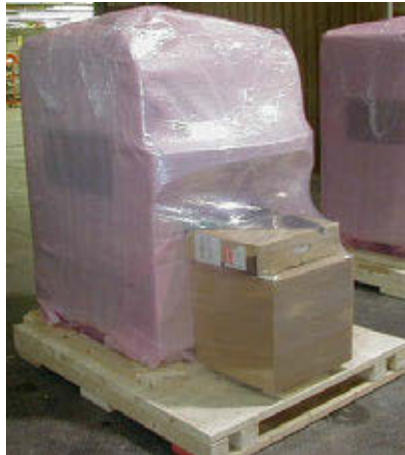
Position each wedge between the two nuts of a foot, and then use an open end wrench to adjust foot height onto the wedges.

6. Screw the wedges to the pallet.

### Secure Monitor & “Loose Parts” Boxes

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1. Seal the “loose parts” box and position it in front of machine. If the box does not have enough room to sit flat on the pallet due to the 2”x4” in front of the machine, secure another length of 2”x4” to the front of the pallet so the “loose parts” box can sit level on both 2”x4” boards.
2. Set the packaged monitor on top of the “loose parts” box or inside of the larger box if space is available.
3. Secure the box(es) in place by wrapping them to the machine with plastic machine-stretch-film.



### Crate Sides & Top

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Add wooden crate side walls and lid.

### Steel Banding

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Per your local requirements, wrap the entire crate with steel banding, stretching it with tools made specifically for stretching and securing steel banding.



### 3. Mark Crate

Add a complete set of these labels to each side of the crate:

- “WARNING Shock Watch handle with care”
- “CAUTION This Side Up”
- “FRAGILE Please handle with care”
- “Do Not Stack”
- Customer shipping label



### 4. Transport Notes

Load the crated machine onto transport vehicle using a fork lift.



**CAUTION:** Always use **air ride van** transport vehicle.



**CAUTION:** Always transport the crated machine in the upright position. DO NOT turn crate on its side.