

Prepare & Pack Dispenser for Transport

DS Series Dispense System

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)

Supplied by Customer

- Wooden pallet - approximately 96" W x 60" D - size may vary according to conveyor length and presence of optional hardware.
- Wooden crate walls and lid plus 4"x4" supports under pallet
- Tape and small bags - for sets of screws
- Painter's masking tape
- 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"
- 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
- Vapor barrier wrap
- 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 Conveyor](#) (pg 7)
- [6. Stabilize Gantry](#) (pg 8)
- [7. Secure Gantry](#) (pg 9)
- [8. Doors & Shields](#) (pg 10)

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:

1. If conveyor rails are present, verify a gap of approximately 6" exists between the rails prior to machine shutdown.
2. Perform the *Prepare for Shutdown* procedure detailed in the *Dispenser Service Guide*.
3. 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*.
4. From the main menu bar, click on Operations > Shutdown System. A shutdown verification prompt displays.
5. Click YES to shutdown the system. Wait until a System Stopped prompt displays.
6. Press the red Emergency Stop button.

3. Disconnect Hoses, Cables, & Clamps

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

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 13)].

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 box, and then place the small box in the “loose parts” box.



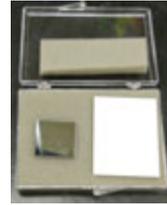
Calibration Station Touch Pad

Secure the calibration station touch pad with a piece of painter's masking tape to prevent it from bouncing during transport.



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

Requires metric 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.

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

3. Wrap the monitor mount in pink foam.
4. Rotate the monitor arm and mount until flush with the side of the machine.
5. Place the monitor in the original monitor packaging.
6. Place packaged monitor either in or on top of the “loose parts” box.

Stack Light

1. Remove the fasteners securing the stack light to the top of the machine. Bag and tape the fasteners to the stack light.
2. Disconnect the stack light cable from the underside of the hood.
3. Bubble wrap the stack light, insert it into the original stack light packaging, and then place on top of the “loose parts” box.

Weigh Scale



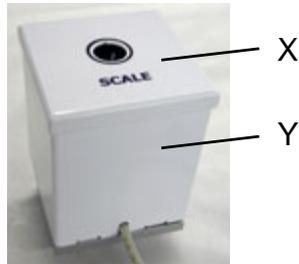
CAUTION: The weigh scale is a precision instrument - handle with care.

- [Packing Scale Model WMC24-SH](#) (pg 5)
- [Packing Scale Model CP](#) (pg 7)

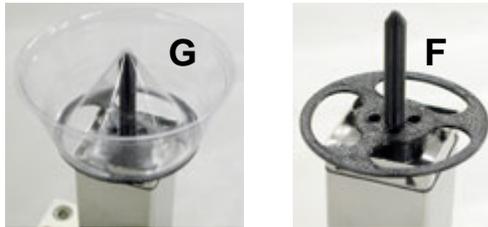
Packing Scale Model WMC24-SH.

If a WMC24-SH model scale is present:

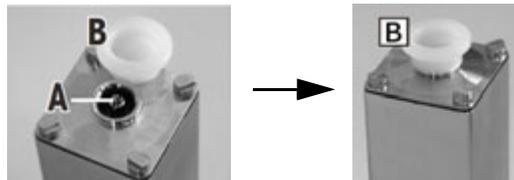
1. Remove the draft shield lid (X) from the outer draft shield (Y). Set the lid aside.



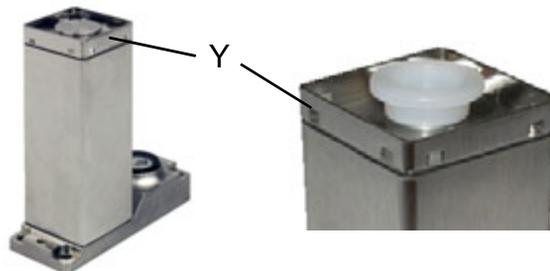
2. If a Purge Cup (G) is present on the scale, remove it. If a Purge Cup Support (F) is present, carefully lift it upward and away from the scale without exerting any torque on the Weighing Pan Support on which the Purge Cup Support rests.



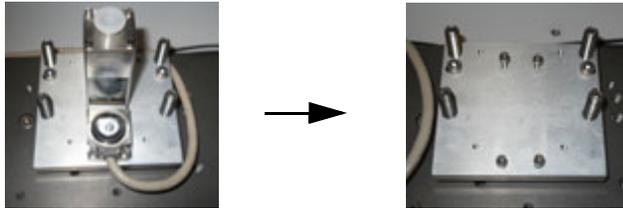
3. Place the white, protective plastic Cover (B) that came with the scale on the Weighing Pan Support (A). This prevents moisture and debris from entering the internal portion of the scale.



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.



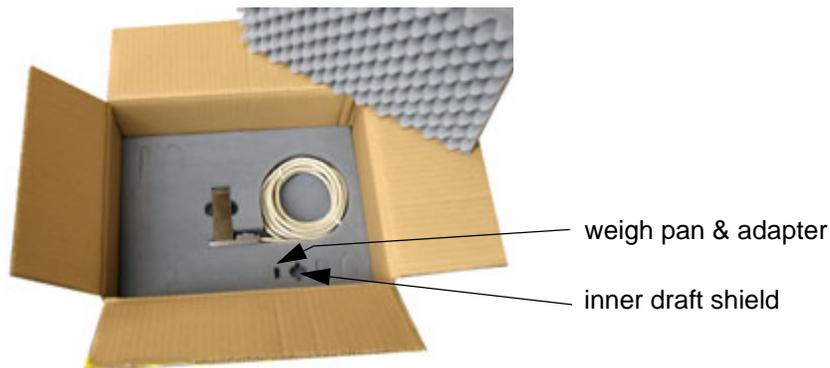
5. Carefully free the scale and the scale cable from the dispense system work area:
 - a. Cut all zip ties securing the scale cable to the dispense system work area.
 - b. Gently pull cable slack from inside the machine. Do not disconnect the scale cable from the scale.
 - c. Unbolt the scale from the 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. To pack the scale in its **original packaging**:
 - a. Leaving the scale cable attached to the scale and without pulling or putting strain on the scale cable, disconnect the scale cable from the dispense system.
 - b. Gently place the scale and cable, inner draft shield, and weigh pan and adapter in the original packing box.



- c. Place foam cover in the box.
- d. Tape the box closed.

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.

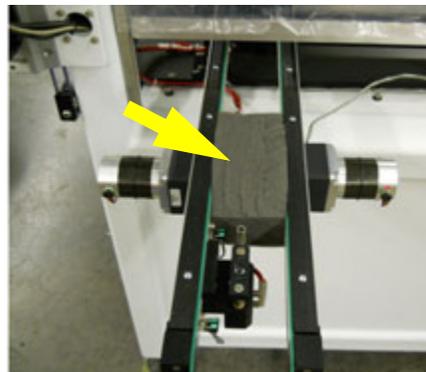
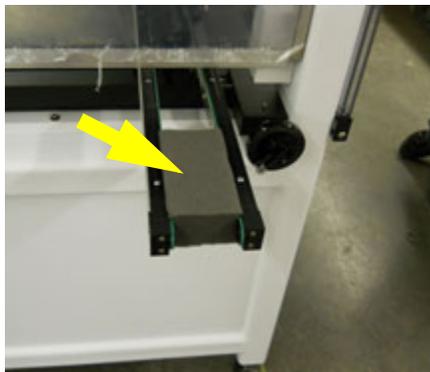
Kits & Cables

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 Conveyor**All Models with Conveyor**

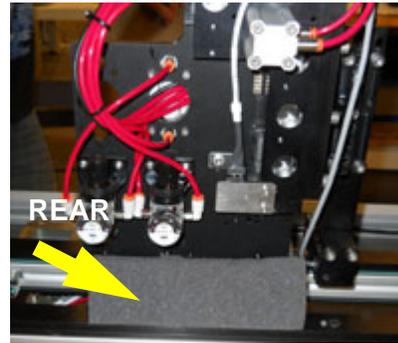
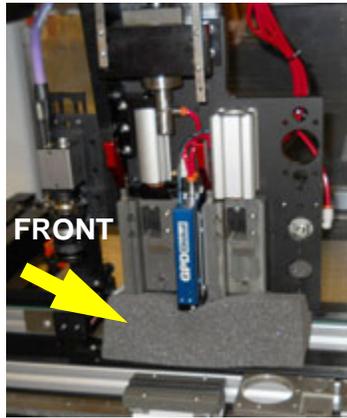
NOTE: If conveyor rails are present, a gap of approximately 6” between the rails should have been established prior to machine shutdown.

Slide a 6” wide piece of dense foam (“1.7 lb. blue T-Lam” is recommended) between the conveyor rails at each end of the machine.



6. Stabilize Gantry

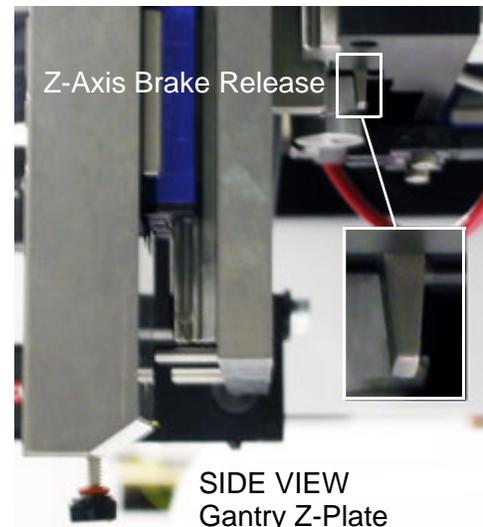
1. Manually position the gantry in the approximate center of the X axis and over the center of the gap between the conveyor rails.
2. Stack a minimum of 6" of dense foam (1.7 lb. blue T-Lam is recommended) on the work area surface or between the conveyor rails to support the gantry.



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.

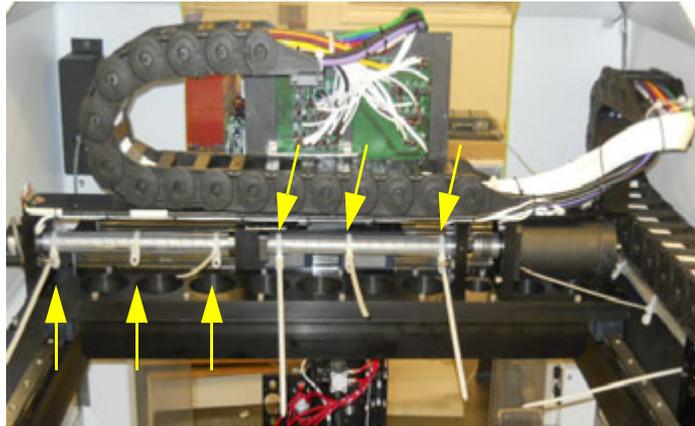
NOTE: The manual brake release is only operational when system power is off.



7. Secure Gantry

Secure the gantry by covering the exposed ball screws with lengths of hose:

1. Open the machine hood at the back of the machine.
2. Measure and cut a length of hose to cover the exposed ball screw at one end of the **X axis**.
3. Split the hose piece lengthwise.
4. Slip the hose piece onto the ball screw and secure it in place with **three (3) tie wraps - one near each end of the hose plus one in the middle**.
5. Repeat [Step 2](#) through [Step 4](#) for the remaining **X axis** ball screw.

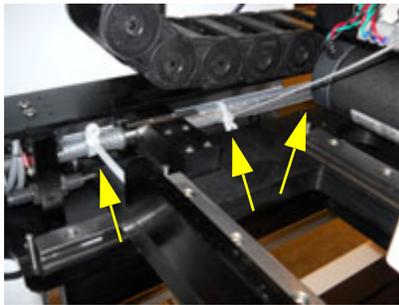


Tie wraps - 3 per hose section

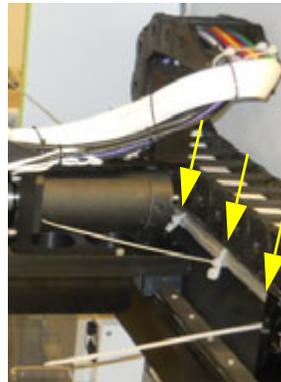
REAR VIEW

6. Repeat [Step 2](#) through [Step 4](#) for both **Y axis** ball screws.

Tie wraps - 3 per hose section

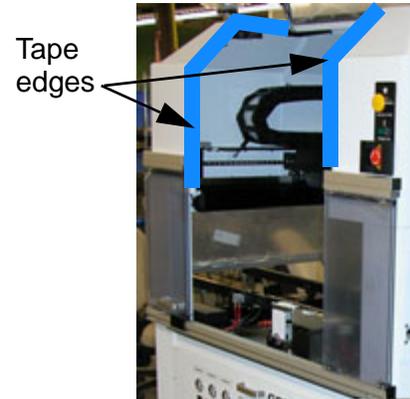


REAR VIEW



8. Doors & Shields

1. Screw the rear hood in place.
2. Close the rear service panel.
3. Screw the front drawer in place.
4. Before closing the front hood shield, apply painter's masking tape along the length of each hood edge to prevent the paint from chipping during transport.
5. Close the sliding shield doors and secure them together with a tie wrap through both door handles.



Packing Instructions

To wrap and crate the machine for transport:

- [1. Wrap Machine](#) (pg 11)
- [2. Crate Machine](#) (pg 11)
- [3. Mark Crate](#) (pg 15)
- [4. Transport Notes](#) (pg 15)

1. Wrap Machine

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

1. Place several (minimum of 3 suggested) desiccant packages in the work area.
2. Wrap the entire machine in foam wrap (48" wide), front-to-back over the top and side-to-side over the top.
3. 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.
4. Wrap the entire machine once more in foam wrap.

2. Crate Machine

Build Pallet

Crate Dimensions approximately 96" W x 60" D x 72" H - size may vary according to conveyor length and presence of optional hardware.

- Make the skid large enough to completely enclose the machine inside the skid area with extra room at the right under the monitor arm 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

1. Optional - Lay enough vapor barrier wrap over the pallet skid to enclose the machine and extra box(es) later in the packing procedure.
2. Position the fork lift at the machine so the forks are both under the machine and also inside the location of the optional rolling casters (if present).
3. Move the machine onto the pallet.
4. Slide a 2"x4" against machine legs and screw the board to the pallet. Repeat for all sides of machine.



5. Adjust the machine feet downward as far as possible while still allowing space for wooden wedges (installed during the next step). Tighten all jam nuts on each foot before installing the wedges.
6. 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.



7. Screw the wedges to the pallet.

Secure Monitor & “Loose Parts” Boxes

1. Seal the “loose parts” box and position beside machine under conveyor arm. If there is not enough room for the box 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. Choose one:
 - Secure the box(es) in place by wrapping them to the machine with plastic machine-stretch-film or
 - enclose machine and all boxes with vapor barrier material previously laid under machine.



Crate Sides & Top

Add wooden crate side walls and lid.



Steel Banding

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 the following 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.