Attached an Incorrect Patient Bag

When fulfilling an order, it is imperative for patient safety to maintain the integrity of the patient bag. Be careful not to make the mistake of scanning the bar code label on one patient bag, becoming distracted, and then attaching a different patient bag to the load cell. This may result in patient harm due to a patient receiving an incorrect order.

You should always attach the bag to the outlet tube and secure it to the load cell before scanning the bar code label on the bag. Please refer to the Operator Manual for complete instructions on attaching a patient bag or contact your local Baxter Technical Support for additional assistance.

Bag Not Empty

In most cases, when you tap *Run* to fulfill an order, the compounder is expecting an empty delivery bag. If the compounder detects that the delivery bag is not empty, an information screen will appear alerting the operator.

This may occur when users are changing Universal Ingredients and forget to exchange the patient bag with a waste bag. The user should not continue until the problem is resolved.

Visually check the bag and refer to your Operator Manual for instructions on removing and attaching bags. If preparing a patient bag, tap *No*, remove the partially filled bag, and replace with an empty patient bag.

It is important to note that if you tap *Yes*, the compounder will reset the measured weight to zero, despite the fact that the bag contains fluid. This unintended volume or ingredient may result in patient harm.

You should only tap *Yes* when using a waste or calibration bag.

If you were to tap *Yes* during the fulfillment of an order, the *Override destination bag not empty warning* will be noted in the Details section of the MixCheck Report.

Please refer to your Operator Manual or contact your local Baxter Technical Support for assistance as necessary.

Bubble Detected

An air bubble can occur at any time, but it most frequently occurs after priming the inlet during setup or after replacing a source container. A bubble can be caused by an improperly spiked container, an empty container, or incomplete priming.

When the bubble detector finds an air bubble in the outlet tube, the compounding process pauses and an alarm beeps. A message also appears on the screen indicating which port was pumping when the air bubble was detected.

Warning: A bubble in the common fluid pathway displaces the volume of one or more ordered ingredients, causing an under-delivery of these ingredients.

Lift the pump door and check the size of the air bubble against the EXACTAMIX 2400 Bubble Chart to determine the volume of fluid displaced.

A pharmacist must determine the clinical significance.

At the message, tap *OK* and you will be returned to the Pump Screen. If the air bubble is determined to be insignificant, you can resume compounding by tapping the *Resume* button on the top left-hand corner.

If the air bubble is determined to be significant, immediately write an “X” on the patient bag and tap *Stop* on the Pump Screen. You will receive a message asking if you want to *Really abort the current solution?* Tap *Yes*. You’ll then receive a message that the operation has been canceled. Tap *Ok*.

Follow the onscreen instructions to flush the fluid path with a Universal Ingredient and follow proper techniques to remove and discard the aborted bag and replace with a new patient bag.

To reduce the occurrence of air bubbles and ensure that they are accurately detected, make sure to

- Spike containers properly
- Re-prime inlets with visible air bubbles, and
- Increase the priming volume in the configuration

To minimize false bubble detections, make sure to

- Clean the channel over the bubble detector, and
- Ensure the proper positioning of the outlet tube, which should be at the bottom of the channel over the bubble detector

If you need additional assistance with bubble detection errors or issues, please contact your local Baxter Technical Support.

Incompatible Ingredients

When a formula contains incompatible ingredients with an insufficient amount of flush volume between them, you will receive a *Formula Conflict* message. The message will indicate which ingredients are incompatible. The compounder cannot make this formula as ordered, and the solution must be cancelled. When you receive this message, tap *Cancel* to cancel the solution, and remove the patient bag from the load cell. It is recommended to print the configuration report and confirm that all incompatible ingredients are properly separated and have sufficient flush between them. For example, with Phosphate and Calcium, any ingredient containing calcium is pumping last in the sequence. If not, please contact Baxter Technical Support. Contact your local Baxter Technical Support if you require further assistance.

Not Enough Universal Ingredient

Every formula must contain a minimum of 25 mL of UI to complete the required flushing of the common fluid pathway. (Baxter recommends using at least 30 mL.)

Any order that does not contain a minimum of 30 mL of UI is NOT compoundable.

In this example, the operator attempts to fulfill an order, but a *Formula Conflict* message appears on the screen stating that the formula does not contain enough UI to properly flush the fluid pathway. If the configuration contains a second identified UI AND the order has a minimum of 30 mL of the second UI, then the user has 2 choices: change the UI or cancel the order.

In this example, the user chooses to change the Universal Ingredient by tapping the *Change UI to…* button, and then tapping *OK*. The system suggests replacing the current UI with dextrose 70%. Dextrose has been previously identified as an acceptable UI for this facility. Select Dextrose 70% and tap *OK*. The new UI will need to flush the fluid pathway, so a calibration bag must be attached.

Do not use a patient bag during UI flushes. The patient bag may contain an unintended volume and/or ingredient, resulting in patient harm.

Continue by removing the patient bag from the load cell. Remember to always use aseptic technique and to clamp the bag's fill port.

It is important to visually inspect the finished solution to make sure it complies with the standards
Then, connect a sterile calibration bag to the outlet tube and attach the bag to the load cell. Place the holes in the corners of the bag over the guide pins on the load cell. Route the bag's fill port through the load cell's fill port holder, making sure that the outlet tube is curved, not twisted or kinked.

Tap *OK* and wait until the flush is complete and the calibration bag is filled. It is important to note that when changing to a new UI, the new ingredient must have an ordered amount of at least 25 mL (Baxter recommends using a minimum of 30 mL), must be designated as a UI in the formulary, and must be attached to any of appropriate UI ports. This is the last 6 ports on the EXACTAMIX 2400 Compounder (numbers 19 to 24).

When the *Completed Flushing* message appears, remove the calibration bag using aseptic technique. Reconnect the patient bag back onto the load cell using the same technique and tap *Ok* when you are finished.

You will now be required to restart the compounding process by scanning the bar code on the patient bag and tapping *Start*. For additional information or assistance, please refer to your Operator Manual or contact your local Baxter Technical Support.

Occlusion Detected

An occlusion is a disruption in the pumping process by a blockage in the fluid pathway. It may be caused by an empty syringe, stuck syringe plunger, kinked tube, or other obstruction in the inlet. When an occlusion is detected, the compounding process is paused and an alarm beeps.

In this example, the dose preparation is progressing normally until a *Warning* message appears on the Pump Screen stating that an occlusion was detected. The message identifies the port from which fluid was being pumped when the occlusion was detected.

Examination of the ingredient button for the port shows a red occlusion symbol icon has appeared next to the button for Port 2.

To return the system to proper operation, the occlusion must first be resolved, and the common fluid pathway flushed with Universal Ingredient.

When an occlusion is detected, immediately place a large “X” on the patient label, and discard the bag.

To resolve the occlusion, check that

- The outlet tube is straight and flat on the occlusion detector
- The occlusion detector is not damaged or dirty
- The inlets have no obstructions, kinks or tangles
- The appropriate inlet is used with each source container
- Each syringe has fluid and its plunger is not stuck

If the issue persists, contact your local Baxter Technical Support for assistance.

Pump Door Opened

If you need to temporarily stop compounding, you can tap *Pause*, or just open the pump door. Compounding will pause and a message will appear stating *Pump door was opened*. Close the pump door, tap *OK*, and tap *Resume* to start compounding again.

It is important to note that if the pump door is opened, this event will be logged in the Details section of the MixCheck Report.

Note that Baxter recommends NOT opening the pump door during the compounding of a dose. If this message appears unexpectedly, check to make sure the magnet on the bottom of the pump door is still attached. Without the magnet, this message will appear, and compounding cannot continue.

Weight Out of Range

When compounding is finished, a message will appear displaying details about the patient bag. This includes

- The expected weight
- The actual weight
- The difference, and
- Whether the difference is outside of the acceptable limit defined by the facility. Typically an acceptable difference is set to +/-5%

If the final bag weight is out of range, it is suggested that you discard the bag and perform the following steps:

- Check that all the source containers are spiked properly.
- Check that the rollers on the pump rotor are clean and move freely.
- Check that the outlet tube is installed properly.
- Calibrate the load cell and pump.

If the issue still persists, contact your local Baxter Technical Support for assistance.

Weight Out of Range With Possible Cause

In some cases the compounder may identify possibly causes of a weight variance. If the final weight of a solution is outside of the acceptable +/- 5% limit, you will receive an error stating as such. You will also receive a message if the weight is within range, but an individual ingredient delivery is out of range. Additionally, the compounder will list any individual ingredient that is over 100 mL and is outside the acceptable limit of +-5%.

In this example, the compounder indicates that dextrose may weigh less than the original amount ordered.

If you receive this message, it is suggested that you discard the bag and perform the following steps:

- Check that all the ingredients and inlets are correct.
- Check that the tube set is installed properly.
- On the MixCheck Report, check for references to occlusions and bubbles.
- Check that all the source containers are spiked properly.
- Check that the rollers on the pump rotor are clean and move freely.
- Calibrate the load cell and pump.

If the issue still persists, contact your local Baxter Technical Support for assistance.

Formula Not Found

The error message shown here indicates that the compounder is not able to find or access the designated formula file. This may be due to network/connectivity issues.

Perform the following steps to resolve the issue:

- Check that the Ethernet cables are connected properly.
- Check that the network is functioning.
- Check that the .PAT file directory is the same on both the order-entry computer and the compounder.
- Reboot the compounder.

If the issue persists, contact your local Baxter Technical Support for assistance.

Unable to Measure Stable Weight

If you are calibrating the compounder and the load cell is impacted by conditions such as anything touching the scale, air flow, vibrations, hood placement, etc, you may receive an error stating *Unable to measure stable weight*.

Check and address the issues mentioned and retry as necessary. Remember to always allow a few seconds after placing the calibration weight onto the load cell so the load cell can stabilize before tapping OK. If you are unable to resolve the weight conflict, contact your local Baxter Technical Support.

Pump Warnings

There are two possible errors that may occur during the pumping process that involve the position of the pump rotor. Let's take a few minutes to review these fault states.

If you receive an error message stating *Unable to start the pump because it is in a fault state,* a pump fault occurred.

To resolve the error, tap *Ok* and then follow the onscreen instructions. The pump should reset itself. This error is typically caused by the user manually rotating the rotor at the wrong time. The only times a user should rotate the rotor are:

1. During the change tube set process in the Setup Wizard and in the Hang Source Containers screen, or
2. When the devise is shut off

The second type of fault is indicated when a user receives an error message stating *Pump is faulted.* To resolve this error, check the valve set installation and ensure the output tube is routed around the rotor correctly and not jammed between the rotor and the wall of the rotor housing. In addition, ensure that the rotor and rollers are clean and the thumb screw is tightly wound. Tap *Ok* and follow the onscreen instructions. The system will likely require you to reboot the compounder.

Please note: This should never be performed until the compounder is completely powered off.

If you are unable to resolve either of these issues, contact your local Baxter Technical Support for assistance.