PRIMING

1. Remove administration set (tubing) from pouch. Discard if package is damaged or if protective end caps are missing or loose inside package.
2. Close lower roller clamp. Verify upper clamp is open.
3. Insert spike into solution container. Fill drip chamber at least one-third full. A completely filled drip chamber is acceptable.
4. Prime administration set by inverting cassette with flat side facing you. Slowly open lower roller clamp and allow solution to fill entire set. When all air has been expelled, close lower roller clamp.
5. Hang solution container so bottom of drip chamber is at least 6 to 12 inches above pump.

PUMP OPERATION

1. Pull door latch to open door.
2. Hold the cassette with flat side facing you. Place cassette in pump by aligning 4 holes in cassette with 4 pins.
3. Place safety clip in slot and push fully inward.
4. Close and latch door.
5. Press Rate and enter desired rate.
6. Press Volume to be Infused and enter desired volume.
7. Press Total Volume and press * to clear previous total volume.
8. Press Occlusion Alarm Setting to select the correct setting.
9. Open roller clamp.
10. Press Run to begin infusion. To stop infusion press Hold. When Volume to be Infused reaches zero, pump switches automatically to KVO rate.

SECONDARY INFUSION

1. Press Hold.
2. Press Secondary.
3. Press Rate and enter secondary rate.
4. Press Volume to be Infused and enter secondary volume.
5. Press Run.
Model 3000 and Model 3100 Micro Modular Infusion Systems

TROUBLESHOOTING

Visual alarms appear in the Message Display and are accompanied by a corresponding audio alarm. If a problem cannot be eliminated, remove pump from patient use and have it repaired by a Deltec certified technician.

DANGER: To avoid electric shock, never open the infusion pump housing. Refer all servicing to a Deltec-qualified technician.

NOTE: During Insistent, Back Up, and Continuous audio alarms, the pump automatically stops fluid delivery. When a Non-Insistent audio alarm occurs, the pump continues to deliver fluid.

MESSAGE DISPLAY | AUDIO ALARM TYPE | CAUSES AND CORRECTION
--- | --- | ---
Close clamp! Load Safety Clp Insistent Alarm | Tubing safety clip not correctly located. To load safety clip:
1. Close lower roller clamp first.
2. 0 pen door.
3. Load safety clip.
4. Close door.
5. Close lower roller clamp.

Loading problem Check tubing set Insistent Alarm | Problem detected as door was being closed.
1. 0 pen door.
2. 0 pen upper tubing clamp, if necessary.
3. Eliminate upper tubing restriction, if any.
3. Reload cassette, if necessary.
4. Close door.
5. Pump on hold 2 minutes with door closed, or 6 minutes with door open.
6. Press Silence or Hold to silence audio alarm.
7. Press Run to begin infusion, or turn pump off if not in use.

Air in cassette Insistent Alarm | Air detected in cassette. To remove air:
1. Close lower roller clamp.
2. 0 pen door latch.
3. W air briefly for cassette to fill.
4. Slowly close door latch.
5. Repeat if necessary.

No flow above pump Insistent Alarm | Insufficient flow from container to pump.
1. If empty, replace container.
2. Rate container height so bottom of drip chamber is at least 6-12 inches above pump.
3. 0 pen upper tubing clamp if closed, or eliminate upper tubing restriction, if any.
4. Replace administration set if vent filter is wet, spike is damaged, or other set problem.

Occlusion below pump Insistent Alarm | Pressure below pump exceeds Occlusion Alarm Setting.
1. 0 pen lower roller clamp if closed, or eliminate lower tubing restriction, if any.
2. Change Occlusion Alarm Setting if not appropriate for infusion.
3. Verify patient access device is patent.

Door open Insistent Alarm | Door was opened while pump was running.
1. Press Hold before opening door.
2. Secondary was set Non-Insistent Alarm (repeated twice) Secondary Volume to be infused was set, but Primary was started.
3. Reset Secondary, if desired, and press Run while Secondary is selected.
4. Rate change not completed Non-Insistent Alarm Running Rate Change was attempted but not properly completed.
5. Press Silence or Run to silence audio alarm. Re-enter Running Rate Change.
6. KVO ml this infusion Insistent Alarm Infusion is complete and has switched to KVO rate.
7. Press Silence or Run to continue KVO delivery without alarm (pump re-alarms every 6 minutes)
8. Press Hold and program new infusion, or remove set and turn pump off, if finished.

MESSAGE DISPLAY | AUDIO ALARM TYPE | CAUSES AND CORRECTION
--- | --- | ---
Low battery Plug in cord Non-Insistent Alarm | Battery nearly depleted (1/2 hour or less remains).
1. Plug in cord, if possible.
2. Press Silence or Run to silence alarm for 6 minutes and continue running.

Battery too low Plug in cord Insistent Alarm | Battery is depleted.
1. Cord must be plugged in to continue infusion.

System check Turn off, then on Insistent, Back Up, or Continuous Alarm | Potential pump problem detected.
1. Turn pump off, then on. If alarm persists, remove pump from use and have it repaired by a Deltec-qualified technician.

Pump needs service Insistent, Back Up, or Continuous Alarm | Electrical or mechanical problem.

MESSAGE DISPLAY | AUDIO ALARM TYPE | CAUSES AND CORRECTION
--- | --- | ---
Dose setup not completed Non-Insistent Alarm | Dose-Rate Calculation setup began with pump running dose variables not completed.
1. Press Silence or Run to silence alarm.
2. If desired, re-enter dose variables.

Dose change not completed Non-Insistent Alarm | Running Dose Change was attempted, but not properly completed.
1. Press Silence or Run to silence audio alarm.
2. Re-enter Running Dose Change.

Dose change not accepted Non-Insistent Alarm | Entered dose or calculated rate is invalid.
1. Press Silence or Run to silence audio alarm.
2. Re-enter appropriate dose variables.

MESSAGE DISPLAY | CAUSES AND CORRECTION
--- | ---
Keypad locked Keypad Lockout Button (on rear of pump) has been pressed.
1. Unlock by pressing Keypad Lockout Button.
2. Taper ml this infusion Quick Rate Change optional function has been selected.
3. Rate Taper optional function has been selected.
4. Infusion variable(s) must be changed.

Dose-Rate Calculation pumps only:
1. If a problem exists which cannot be eliminated, do not use pump. Refer it to a Deltec-qualified technician.