

TROUBLESHOOTING FOR THE SAPPHIRE INFUSION PUMP

If the alarm occurs during an infusion, the infusion automatically stops. However, you may continue the infusion after the problem has been resolved. Instructions for resolution of the problem are displayed on the touch screen. The following keys are available during an alarm:

- **Mute:** Silences the auditory alarm for 2 minutes.
- **OK:** Displays the Paused screen. The infusion may then be resumed after the problem is solved.
- **Prime:** Enables automatic priming. This key appears only during an Air in Line alarm

| ALARM TITLE | DISPLAYED TEXT | OTHER INFORMATION |
|----------------------|--|---|
| Air in Line | <p>Accumulated air in line is over the limit. Please disconnect patient and prime administration set.</p> <p>Please disconnect patient and prime (flush) administration set.</p> | <p>Tiny, harmless, air bubbles that become lodged at the point of the air sensor have been causing false alarms. For visible air bubbles, disconnect patient, and prime. If air is not seen, disconnect patient, turn cassette so that arrow is pointing up. Flick the line, on both sides of the cassette, with your finger to release the air bubbles. Replace the cassette and continue infusion.</p> |
| Cassette Misplaced | <p>The administration cassette is not loaded or misplaced. Please reload the cassette.</p> <p>Reinsert the cassette. If the problem persists contact technician.</p> <p>Remove the administration cassette and make sure to correctly reinsert it. If alarm reoccurs please contact authorized technician.</p> | <p>Make sure that when you load the cassette that you start from the bottom and, at an angle, place the saddle on the round metal anchor and clip the upper end of the cassette into the metal lock. Verify that the arrow on the cassette is pointing towards the bottom of the pump.</p> |
| Check for Occlusion | <p>Please verify clamps are open and set is not occluded.</p> | <p>Common causes of occlusion are kinks in tubing and closed clamps. Verify that these are not causing the alarm. For subcutaneous infusions, changing the site may resolve the problem. If intravenous infusion, verify that catheter is not occluded.</p> |
| Occlusion | <p>To clear occlusions verify: 1. Clamps are open; 2. Administration cassette is properly positioned; 3. Line is not kinked; 4. No occlusion at the output connection. If all occlusions were cleared press OK to continue.</p> | <p>Common causes of occlusion are kinks in tubing and closed clamps. Verify that these are not causing the alarm. For subcutaneous infusions, changing the site may resolve the problem. If intravenous infusion, verify that catheter is not occluded.</p> |
| Flow Error | <p>Verify that the administration cassette is correctly positioned and battery is sufficiently charged. If alarm reoccurs contact authorized technician.</p> | |
| Insufficient Battery | <p>Low battery voltage for current rate. Please connect pump to power supply.</p> | <p>The life of the battery is dependent on the rate of the infusion, the frequency of pressing the keys, and whether the backlight is on. For lower rates (PCA), the battery should last 48-72 hours. A full charge is reached after 4 hours and the pump will continue to operate while it is plugged in. It is recommended that the battery be charged every night, or remained plugged in, to avoid a low battery alarm. The battery charge level icon on the screen indicates remaining battery capacity: 5 bars = 100%; 4 bars = 75%; 3 bars = 50%; 2 bars = 25%, 1 bar = Low.</p> |
| Low Battery | <p>30 minutes left to battery depletion. Connect to power supply.</p> | |