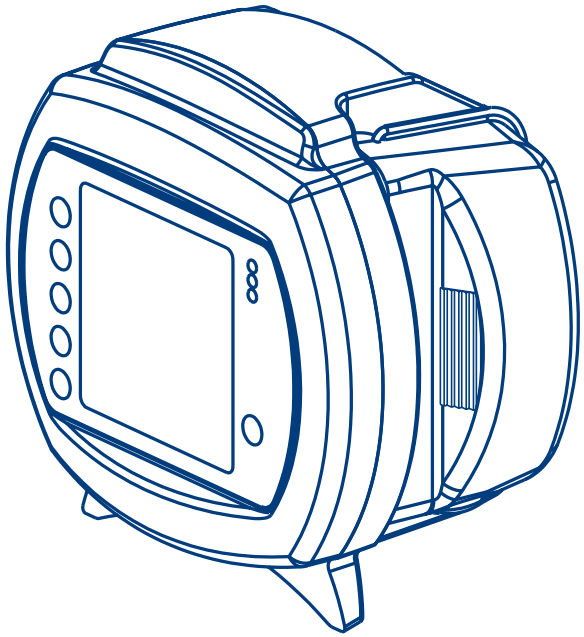
COVIDIEN™

Performance Certification

# Kangaroo™

## Epump Enteral Feed and Flush Pump with Pole Clamp Programmable



COVIDIEN

*Performance Certification*

# Kangaroo™

☐ **Epump Enteral Feed and Flush Pump with Pole Clamp**

☐ **Joey Enteral Feed and Flush Pump with Pole Clamp**

Serial Number _____

Date of Certification _____

**The undersigned hereby certifies that the above referenced pump has been tested per the pump performance tests protocol with the following results:**

| | |
|---|---|
| Exterior Cleaning/Inspection | ☐ Passed |
| Operational Inspection | ☐ Passed |
| Motor Speed - Pump Accuracy | ☐ Passed |
| Flow Sensor | ☐ Passed |
| Flush Operation (if applicable) | ☐ Passed |
| Rotor Error Alarm | ☐ Passed |
| Feeding Set Identification and Dislodged Error | ☐ Passed |
| Feed/Flush Set Identification and Dislodged Error (if applicable) | ☐ Passed |

Inspector _____
*(Name)* *(Signature)*

Facility _____

Address _____

_____



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REV 05/2012 SMF0811-003

Rx ONLY

Consult instructions for use

CE 0123

# Performance Tests

**Caution:** Disconnect pump from AC power source before cleaning. Do not immerse pump or power cord in water or other cleaning solutions. Clean using a damp (not wet) cloth or sponge only. Do not connect to AC power source until pump and power cord are thoroughly dry.

As with any AC powered electrical device, care must be taken to prevent liquid from entering the pump. Failure to follow the cleaning procedures herin could result in electrical shock, fire hazard or damage to electrical components. Do not use strong cleaners such as Spray Nine™*, pHisoHex™*, Hibiclens™*, or Vesta Syde™* because damage to the pump case housing can result.

**Note: Refer to figure 1A for visual description of product. It is recommended this test be completed no less than once every two years.**

## Performance Tests

**Note: Reuse of feeding set acceptable**

### 1. Exterior Cleaning/Inspection: (Refer to Section VII and Cleaning)

#### a. Power cord inspection

- ☐ I. Power cord not damaged
- ☐ II. Power cord prongs free from damage
- ☐ III. Green LED operational (plug into AC)

#### b. Pump

- ☐ I. Exterior housing free from damage
- ☐ II. Clean case, rotor and AFF valve pocket (Refer to Section VII and Cleaning)
- ☐ III. Proper attachment of overlay
- ☐ IV. LCD free of visible damage
- ☐ V. Pole clamp stud free from damage

### 2. Operational Inspection

#### a. Power button operation

- ☐ Press power button and verify that the pump turns on.

#### b. LED/Backlight operates properly

- ☐ I. As pump is turning on, verify Red, Yellow, and Green LED operation.
- ☐ II. Verify that backlight is on. If light is not on, press any of the buttons on the left side of LCD. Backlight should illuminate for 60 seconds.

#### c. LCD free from damage

- ☐ Visual inspect LCD once unit is powered on for defects or damage.

#### d. Proper adjustment button (5) operation

- ☐ With a feeding set loaded, proceed to ADJUST SETTINGS screen, press each button on the left side of LCD. Confirm that each operates correctly as indicated by screen changes (press DONE or hold ADJUST SETTINGS after each button to return to SET LOADED screen).

#### e. Buzzer adjustment

- ☐ Proceed to SET LOADED screen, press MORE button, then BUZZER button. Verify that buzzer can be adjusted up and down in volume.

**f. Battery Operation**

- ☐ With pump powered on, remove AC power and confirm pump operation. (If pump displays LOW BATTERY or immediately powers off, plug pump into AC power for a minimum of 1 hour and repeat test).

**3. Motor Speed - Pump Accuracy**

- ☐ a. With feeding set loaded, set feed rate to 125 mL/hr and press RUN and wait 1 minute before proceeding to step b.
- ☐ b. Using a stopwatch, determine the time elapsed between rotor start to next rotor start (9.2 - 11.2 seconds: Epump), (7.7 - 9.4 seconds: Joey).

**4. Flow Sensor**

- ☐ a. With pump running at a rate of 400 mL/hr, clamp upstream tubing so that flow is interrupted.
- ☐ b. Confirm pump issues a FEED ERROR within 1 minute.

**5. Flush Operation** (if applicable)

- ☐ a. With pump running in FEED mode, press FLUSH NOW and set a volume of 10 mL.
- ☐ b. Confirm pump begins to deliver flush volume.
- ☐ c. Confirm that once pump has delivered 10 mL flush (as displayed on screen totalizer), pump transitions back into FEED mode.

**6. Rotor Error Alarm**

- ☐ a. With pump running at 400 mL/hr, place pump in HOLD mode. Carefully remove tube from around rotor while keeping the MISTIC connector secured within MISTIC pocket.
- ☐ b. Press RUN to begin operation.
- ☐ c. Confirm pump issues ROTOR error within 30 seconds.

**7. Feeding set Identification and Dislodged Error**

- ☐ a. With pump powered on and LOAD SET screen displayed, load pump with a Feed Only feeding set.
- ☐ b. Confirm that screen displays SET LOADED.
- ☐ c. Confirm that FLUSH settings are not displayed.
- ☐ d. Input a feed rate and press RUN to begin operation.
- ☐ e. Confirm pump screen displays RUNNING.
- ☐ f. Remove MISTIC connector from pocket.
- ☐ g. Confirm that pump stops operation and issues a SET DISLODGED error.

**8. Feed/Flush set Identification and Dislodged Error** (if applicable)

- ☐ a. With pump powered on and LOAD SET screen displayed, load pump with a Feed/Flush set.
- ☐ b. Confirm that screen displays SET LOADED.
- ☐ c. Confirm that FLUSH settings are displayed.
- ☐ d. Input a feed rate and press RUN to begin running.
- ☐ e. Confirm pump screen displays RUNNING.
- ☐ f. Press FLUSH NOW and enter 100 mL.
- ☐ g. Press ENTER and confirm the pump begins flushing.
- ☐ h. Remove MISTIC connector from pocket.
- ☐ i. Confirm that pump stops operation and issues a SET DISLODGED error.