

Kangaroo™ Joey
Enteral Feed and Flush Pump

TRAINING MANUAL

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General Information

This training guide aims to provide you with information about the Kangaroo™ Joey Enteral Feed and Flush Pump, associated feeding sets and how to use them. The Kangaroo™ brand has been a trusted name in Enteral Feeding for over 30 years.

The Kangaroo™ Joey Enteral Feed and Flush Pump is the first feeding and hydrating ambulatory device, that can be programmed to deliver the optimal amount of nutrition and pre-programmed hydration, helping to ensure patients stay well-nourished, perfectly hydrated, while providing them with freedom and mobility.

Easy to use and simple to program, the Kangaroo™ Joey Enteral Feed and Flush Pump can be programmed to automatically flush the feed line, keeping it ready for the next nutritional delivery. Fully programmable variable flush and hydration functions save nursing time and allow clinician to set a distinct flush rate and interval based on a patient's specific needs.

The pump incorporates:

- Unique ambulatory feeding and flushing capabilities
- A range of pump sets which are interoperable with all feeds and provide flexibility in terms of choice of feed for your patients
- ATM-style interface to make programming intuitive
- Large screen displays for easy and quick visualisation
- Simple set loading procedures with auto and manual priming options
- DEHP-free, anti free-flow sets and multiple alarm options for enhanced patient safety

SET UP

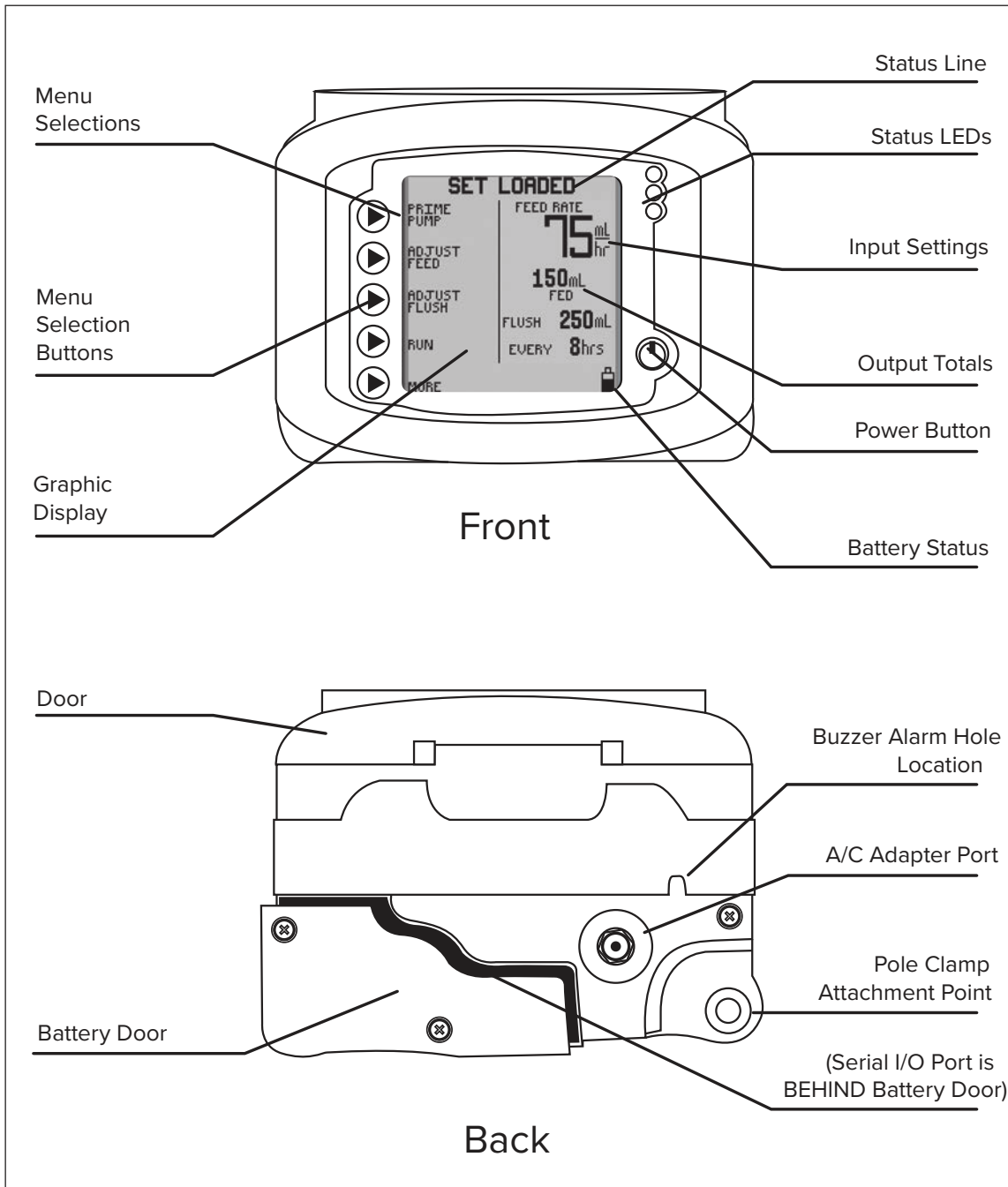


Figure 1A. Kangaroo™ Joey Enteral Feed and Flush Pump features, front and back views.

SET UP



1 Connect the power lead to the pump.



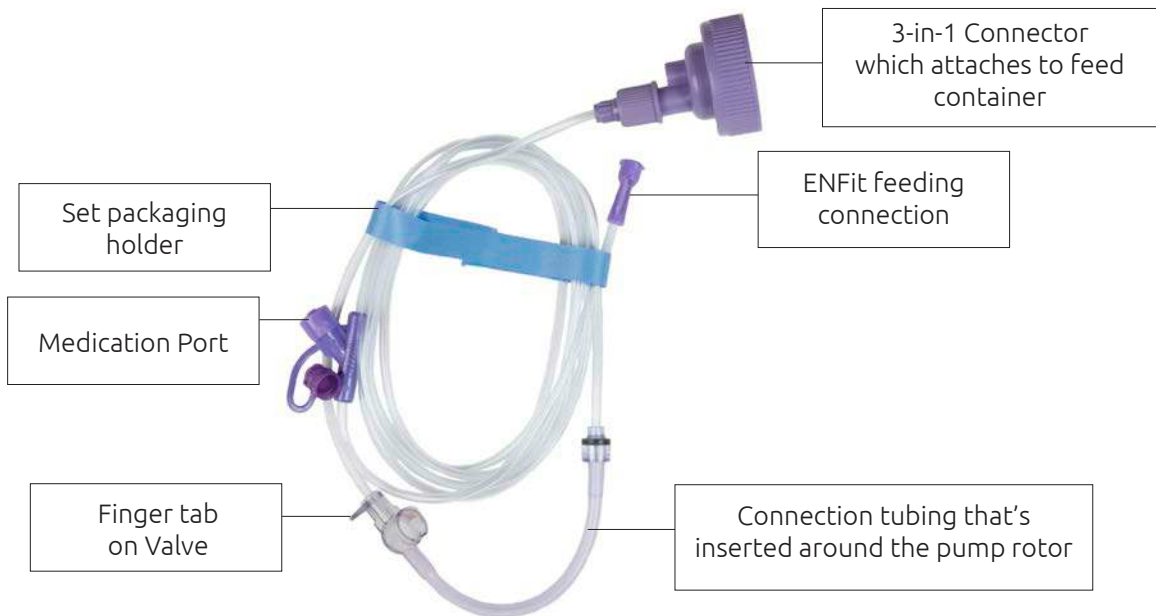
2 Connect the pole clamp to the wider section at the bottom of the infusion stand.



3 Attach the pump at the pole clamp attachment point on the back of the pump as per *Figure 1A, Page 5*.

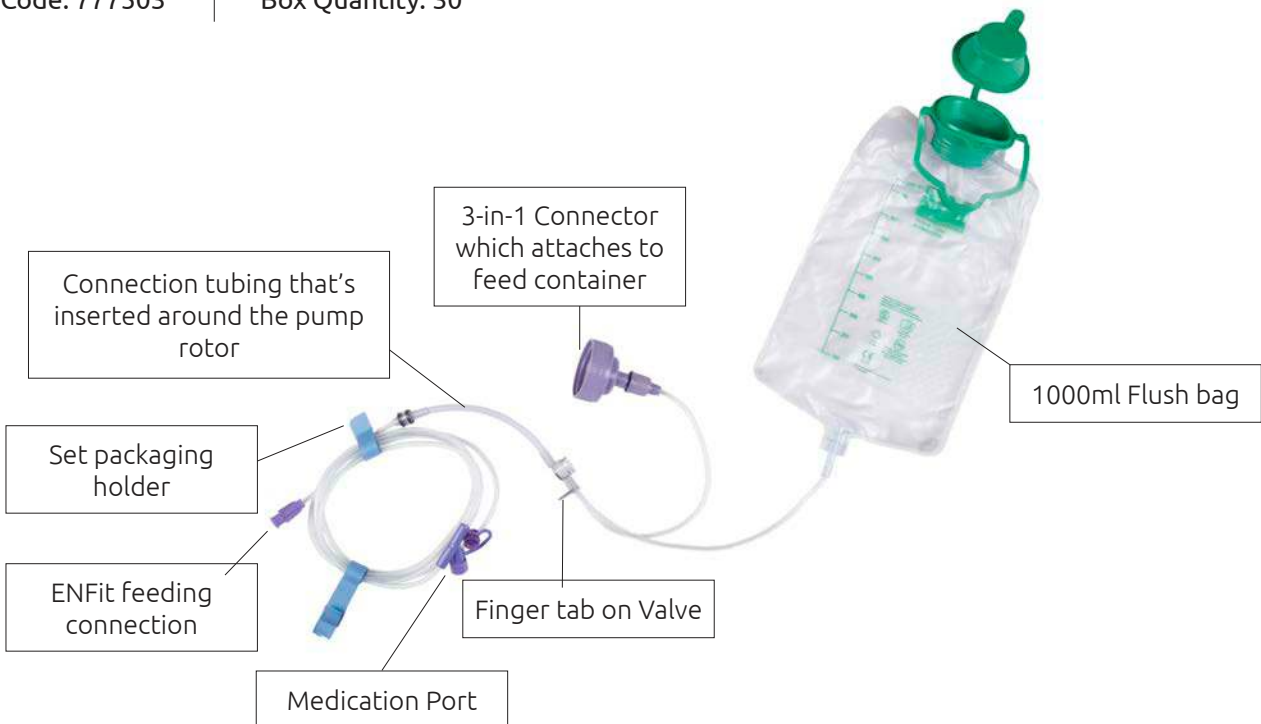


CHOOSING YOUR SET



Kangaroo™ Joey 3-in-1 Feed Set

Code: 777503 | Box Quantity: 30



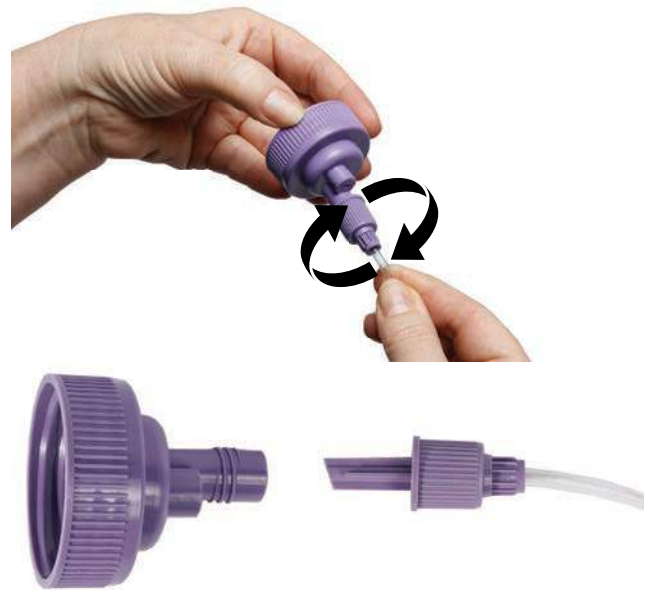
Kangaroo™ Joey 3-in-1 Feed and 1000ml Flush Set

Code: 777506 | Box Quantity: 36

THE KANGAROO™ JOEY 3-IN-1 CONNECTOR ON ALL SETS



1 The 3-in-1 set provides an interoperable solution for all feed containers as it has a choice of **screw** or **spike** connector on it. Choose which connector you need for the feed container you're using.



2 Simply unscrew the screw connection from the top of the set connection and you are left with your spike connection.



3 **Screw** connection on the 3-in-1 set.



4 **Spike** connection on 3-in-1 set.

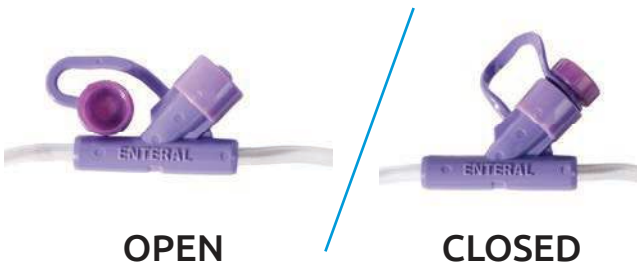
THE KANGAROO™ JOEY 3-IN-1 COMPONENTS ON ALL SETS



5 ENFit connection on the feeding set which connects to the feeding tube.



6 Dust Cover over the ENFit connection on the feeding set. Remove this cover when connecting to your feeding tube.



OPEN

CLOSED

7 Medication port Open & Closed on feeding set. Ensure medication port is **closed** before commencing feeding.



8 This section of tubing is inserted around the rotor on the pump. The **MISTIC** connection on all feeding set enables the pump to recognise the set type.

HOW TO USE AND CONNECT FEED TO THE KANGAROO™ JOEY FEED ONLY



1 For a feed with a **screw type connector**, unscrew the protective cap from the feed container. Do not touch or pierce the foil lid.



2 Then screw on the purple screw connection on the feeding set to the feed container.



3 For a feed with a **spike connector**, unscrew the protective cap from the feed container. Do not touch or pierce the foil lid.



4 Then screw on the purple spike connection on the feeding set to the feed container.



5 For a feed with a **spike connector**, unscrew the protective cap from the feed container. Do not touch or pierce the foil lid.



6 Then screw on the purple spike connection on the feeding set to the feed container.



7 **Close** the medication port on the feeding set before commencing feeding.



8 Hang the feed container on the infusion stand/ IV pole.

HOW TO USE AND CONNECT FEED TO THE KANGAROO™ JOEY FEED AND FLUSH SETS



Kangaroo™ Joey 3-in-1 Feed and Flush Set

If you are using a 3-in-1 Feed and Flush Set:

1. Identify what connection type is on the feed container e.g. **Screw** or **Spike**. Then choose the screw or spike option connector on the Kangaroo™ Joey Enteral Feed and Flush Set – please refer to page 10, section: *How to Use and Connect Feed to the Kangaroo™ Joey Feed Only Sets*.
2. Review page 10 for connecting to a screw feed container and for connecting to a spike feed container.
3. You will see an additional flush bag (with green cap) on the set. This flush bag provides you with an automatic flushing capability for flushing the sets lines before and after feed and medications and also for providing hydration.



- 1 Fill the flush bag with the green cap with water as prescribed.

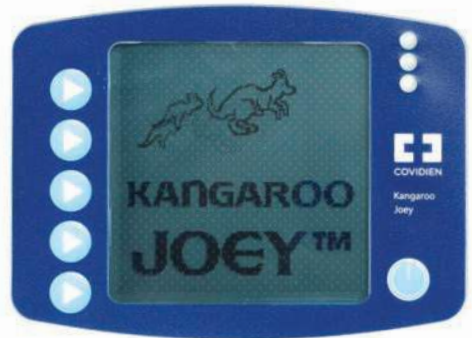


- 2 To close the flush bag close down the lid by pressing all around the edges and pull down the grip tab between the clasp.

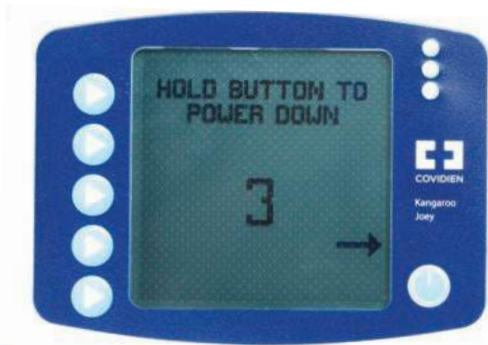
POWER ON/OFF



1 To **Power On** the pump, press the **POWER** button on the lower right of the front panel.



2 You will see Kangaroos jumping across the screen and hear beeps on start up.



3 To **Power Off** the pump, press and hold the **POWER** button. A countdown will begin on the display; when the countdown reaches 0, immediately release the Power button.



4 The display backlight and Status LED array will remain on for a short period after releasing the Power button while the pump completes its internal power down process and will then extinguish.

PUMP SET LOADING PROCEDURE



1 Locate power button on lower right hand corner of pump. Press to turn pump on.



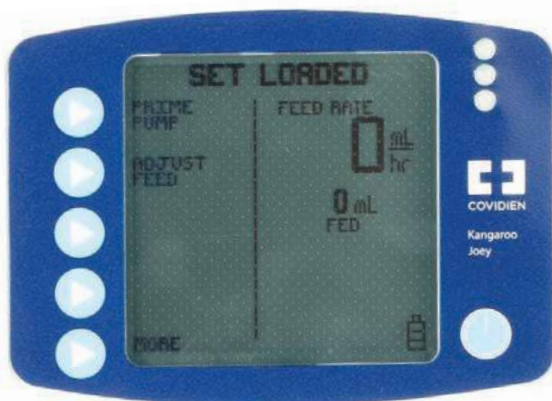
2 Confirm if you want to **KEEP** or **CLEAR** any prior pump settings.



3 Open blue door at top of pump. Grasp finger tab on valve and insert valve into valve slot on the left of pump.



4 Grasp tubing at end of black retainer (where fingers are on tubing) and gently wrap tubing anti-clockwise around rotor. Pull up retainer and insert into slot. Close blue door at top of pump.



5 Connect prescribed feeding set to prescribed feed container.

- If using a 3-in-1 Feed Only Set go to *page 10, Section How to Use and Connect Feed to the Kangaroo™ Joey Feed Only Sets.*
- If using a 3-in-1 Feed and Flush Set, go to *Page 11, Section How to Use and Connect Feed to a Kangaroo™ Joey Feed and Flush Set.*

PUMP SET LOADING PROCEDURE



Close the medication port on the feeding set before commencing feeding.

PRIMING

- 1** To prime the **3-in-1 Feed Only Set:** The pump can be primed automatically (press **AUTO PRIME**) or manually (press **HOLD TO PRIME FEED**).
- 2** The pump will then indicate **PRIMING** is taking place.
- 3** To complete the **AUTO PRIME**, press **HOLD TO PRIME FEED** until the feed reaches the ENFit Feeding Connection.
- 4** Press **DONE** to return to main screen.

To prime the **3-in-1 Feed and Flush Set:** The pump can be primed automatically (press **AUTO PRIME**) or manually (press **HOLD TO PRIME**). If manually priming: press and hold the **HOLD TO PRIME FLUSH** first, followed by pressing and holding the **HOLD TO PRIME FEED** option.



THE KANGAROO™ JOEY MODES

The Kangaroo™ Joey Enteral Feed and Flush Pump has **3 different Modes**:

(1) Continuous, (2) Intermittent, (3) EZ

(1) CONTINUOUS MODE

The Continuous feeding mode will deliver the enteral nutrition at a steady rate, either until the programmed volume has been delivered or until the supply has been exhausted. A feed and flush set can also be used in this mode, enabling the pump to be programmed to automatically flush the feed line and to deliver the optimal amount of nutrition and pre-programmed hydration, helping to ensure patients stay well-nourished and perfectly hydrated.

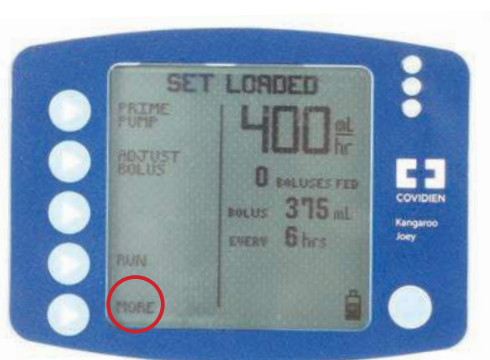
(2) INTERMITTENT MODE

The Intermittent feeding mode delivers boluses of enteral nutrition at programmed time intervals. The bolus volume and feed rate are also programmed. A feed and flush set can also be used in this mode, enabling the pump to be programmed to automatically flush the feed line and to deliver the optimal amount of nutrition and pre-programmed hydration, helping to ensure patients stay well-nourished and perfectly hydrated.

(3) THE EZ MODE

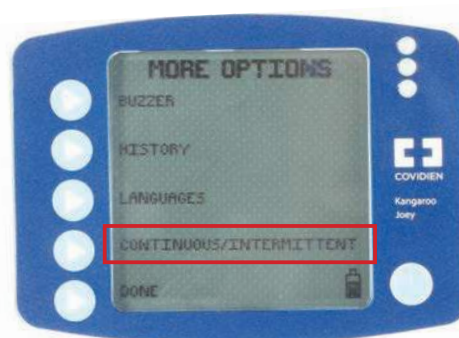
The EZ Mode option is a limited, continuous mode only setting. It feeds non-stop (no Volume To Be Delivered (VTBD) option) at a rate 0-400mL/hr as defined by the user until manually stopped. (It has no bolus, flushing, run mode screen lock or autoresume capability and displays no history information.) A Feed and Flush Set can't be used in this mode.

HOW TO SELECT CONTINUOUS OR INTERMITTENT MODE



1

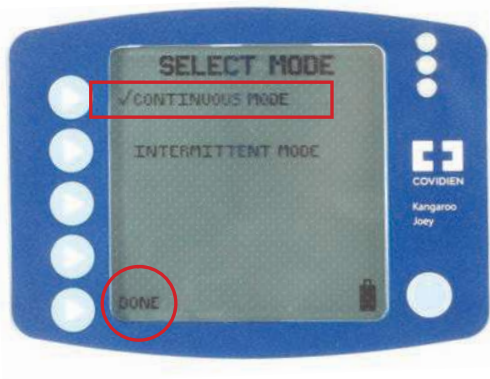
To select Continuous or Intermittent feed mode, press **MORE** on the opening menu.



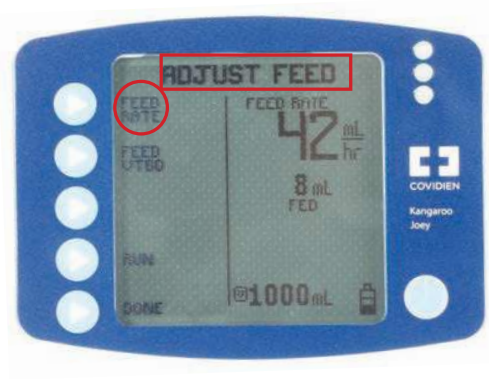
2

This provides access to the **MORE OPTIONS** menu. Select **CONTINUOUS/INTERMITTENT** option. Then select **DONE** twice to confirm.

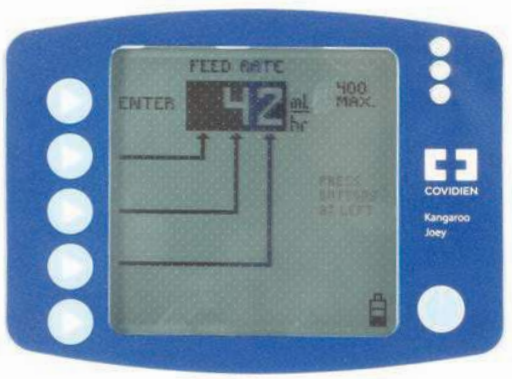
SELECTING FEED MODE (1) CONTINUOUS MODE: 3-IN-1 FEED ONLY SET



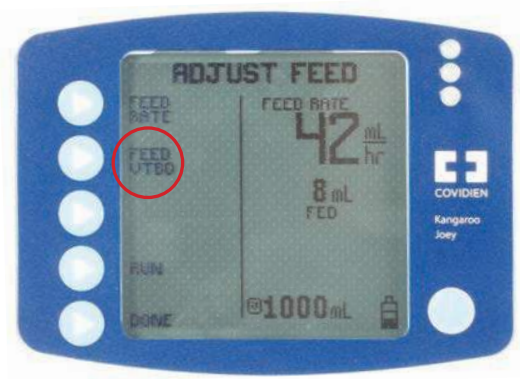
1 Select **CONTINUOUS MODE** and select **DONE** twice to exit to **MORE OPTIONS** menu.



2 Press **ADJUST FEED** followed by **FEED RATE** to adjust hourly delivery rate.

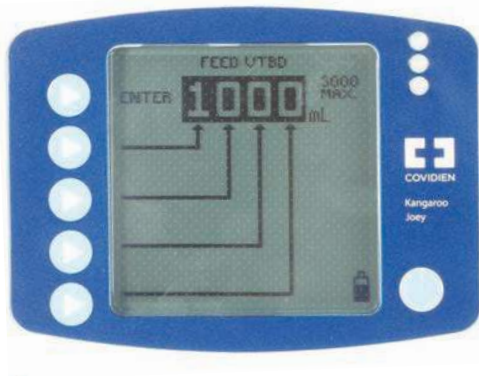


3 Press buttons on left to program hourly feed rate. Press **ENTER** to confirm rate.

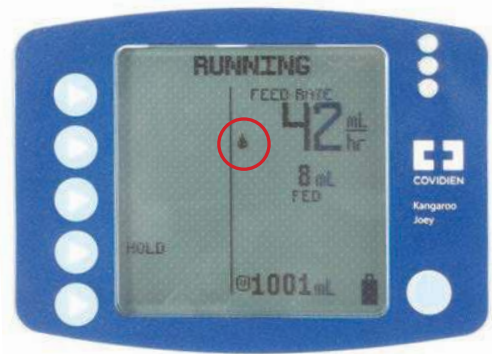


4 If Volume to be Delivered (VTBD) is required, select **FEED VTBD**. Note: if **VTBD** is set to zero, the pump will run until the feed container is empty.

SELECTING FEED MODE (1) CONTINUOUS MODE: 3-IN-1 FEED ONLY SET



5 Press buttons on left to program volume of feed to be delivered (**VTBD**). Press **ENTER** to confirm rate.

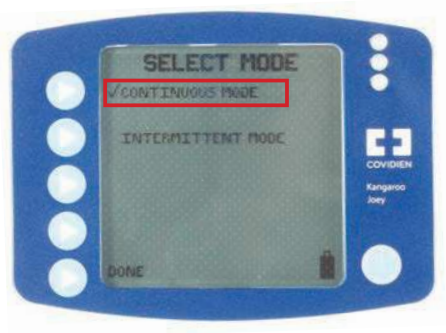


6 Press **DONE** to return to main screen and then press **RUN** to commence feeding regime. The status line indicates **RUNNING** and the droplet icon moves vertically on the screen.

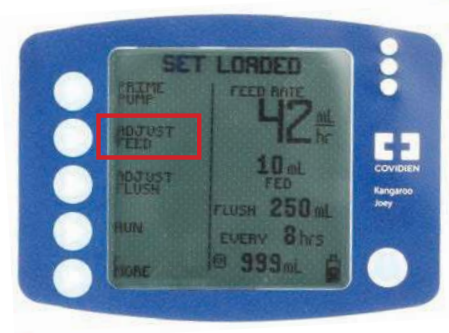


7 In order to achieve proper accuracy, the initial fluid line in the feeding set container must be 15cm/6" above the top of the feeding pump when initiating the feeding cycle.

SELECTING FEED MODE (1) CONTINUOUS MODE: 3-IN-1 FEED AND FLUSH SET



1 Select **CONTINUOUS MODE** and select **DONE** to exit to **MORE OPTIONS** menu.



2 Select **ADJUST FEED** option.



3 Select **FEED RATE** and then press buttons on left to program hourly feed rate. Press **ENTER** to confirm rate.



4 Select **FEED VTBD** (Volume To Be Delivered) and then press on the left to program volume of feed to be delivered. Press **ENTER** to confirm Volume, followed by **DONE** to return to main screen.



5 Select **ADJUST FLUSH** option.



6 Select **FLUSH VOLUME**.

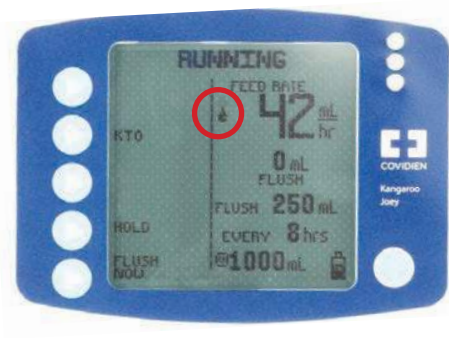
SELECTING FEED MODE (1) CONTINUOUS MODE: 3-IN-1 FEED AND FLUSH SET



7 Press buttons on the left to program **FLUSH VOLUME**. Press **ENTER** to confirm volume.



8 Select **FLUSH INTERVAL** to program interval between each flush. Press buttons on the left to program **FLUSH INTERVAL**. Press **ENTER** to confirm interval, followed by **DONE** to return to main screen.

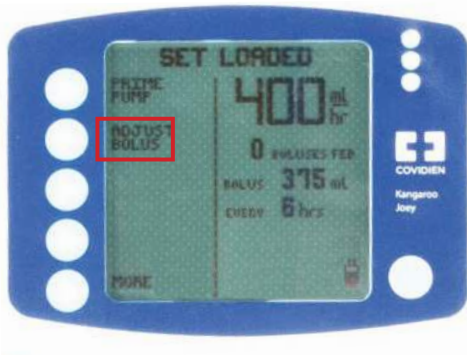


9 Select **RUN** to commence feeding regime. The status line indicates **RUNNING** and the droplet icon moves vertically on the screen.

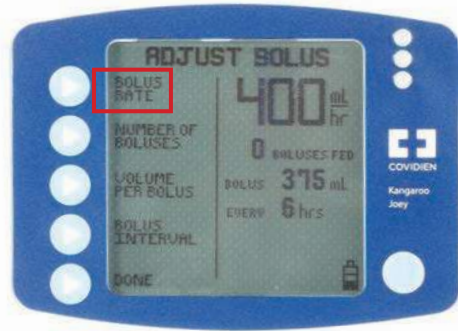


10 In order to achieve proper accuracy, the initial fluid line in the feeding set container must be 15cm/6" above the top of the feeding pump when initiating the feeding cycle.

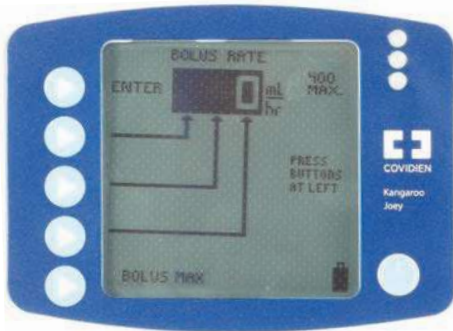
SELECTING FEED MODE (2) INTERMITTENT MODE: 3-IN-1 FEED ONLY SET



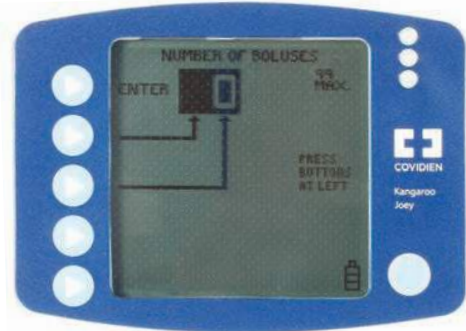
1 Select **ADJUST BOLUS** to provide access to bolus options.



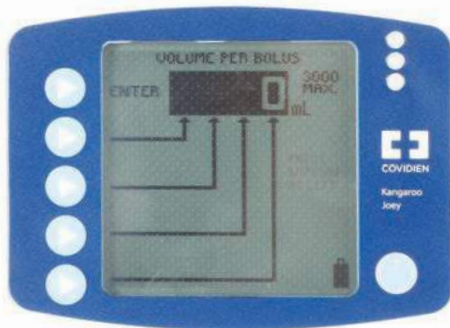
2 Select **BOLUS RATE** to define rate of delivery.



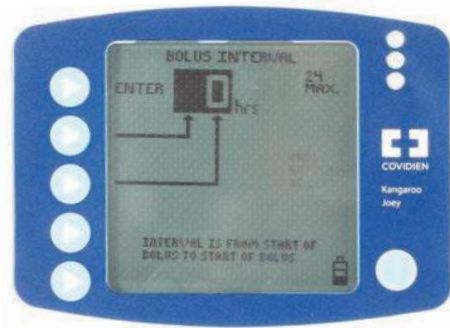
3 Press buttons on the left to program the **BOLUS RATE**. Select **ENTER** to confirm rate.



4 Select **NUMBER OF BOLUSES** to define the total number of boluses to be delivered. Press buttons on the left to program the number of boluses. Press **ENTER** to confirm.



5 Select **VOLUME PER BOLUS** to define the volume to be delivered in each bolus. Press buttons on the left to program the **VOLUME PER BOLUS**. Press **ENTER** to confirm.



6 Select **BOLUS INTERVAL** to define the time interval between starts of bolus deliveries. Press buttons on the left to program the **BOLUS INTERVAL**. Press **ENTER** to confirm.

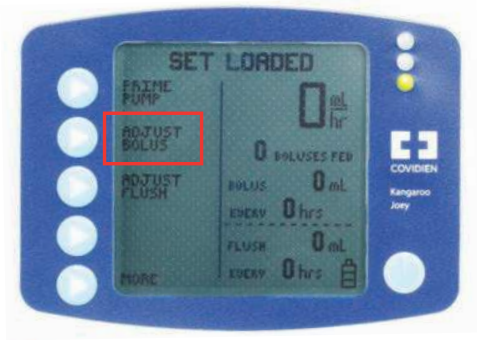
7 Press **DONE** to return to the main screen and press **RUN** to commence feeding regime. The status line indicates **RUNNING** and the droplet icon moves vertically on the screen.

SELECTING FEED MODE (2) INTERMITTENT MODE: 3-IN-1 FEED ONLY SET

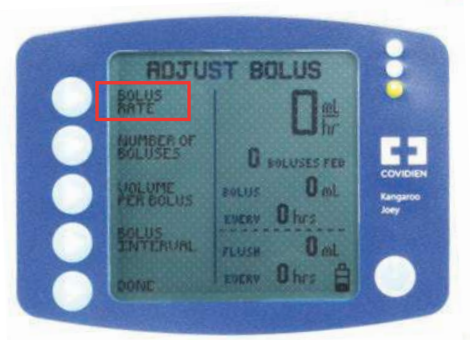


Bolus MAX option used to deliver a bolus at a high rate (similar to gravity feeding). Press **BOLUS MAX** in the **BOLUS RATE** menu. The feeding rate for BOLUS MAX is 999mL/hr.

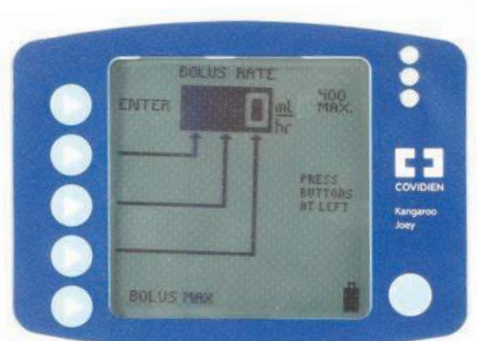
SELECTING FEED MODE (2) INTERMITTENT MODE: 3-IN-1 FEED AND FLUSH SET



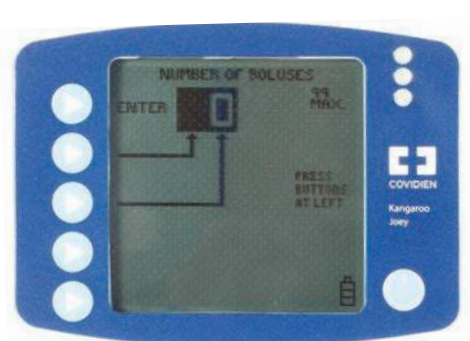
1 Press **ADJUST BOLUS** to provide access to bolus options.



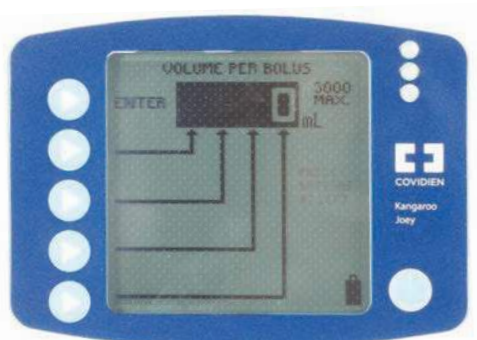
2 Press **BOLUS RATE** to define rate of delivery.



3 Press buttons on the left to program the **BOLUS RATE**. Press **ENTER** to confirm.



4 Select **NUMBER OF BOLUSES** to define the total number of boluses to be delivered. Press buttons on the left to program the **NUMBER OF BOLUSES**. Press **ENTER** to confirm.

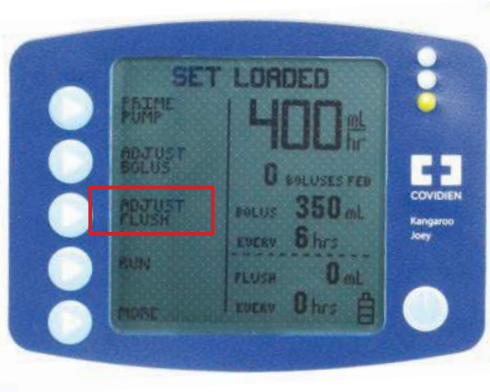


5 Select **VOLUME PER BOLUS** to define the Volume to be delivered in each bolus. Press buttons on the left to program the **VOLUME PER BOLUS**. Press **ENTER** to confirm.

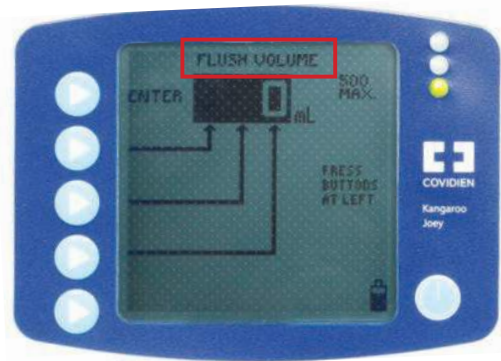


6 Select **BOLUS INTERVAL** to define the time interval between starts of bolus deliveries. Press buttons on the left to program the **BOLUS INTERVAL**. Press **ENTER** to confirm. Press **DONE** to bring you back to main menu.

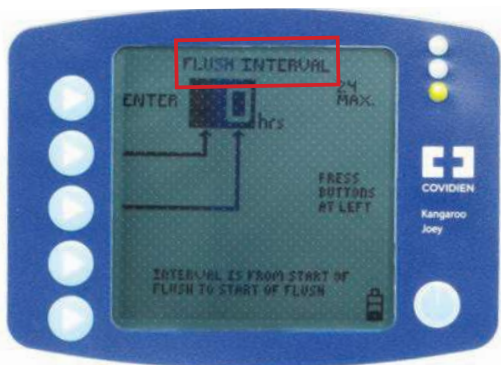
SELECTING FEED MODE (2) INTERMITTENT MODE: 3-IN-1 FEED AND FLUSH SET



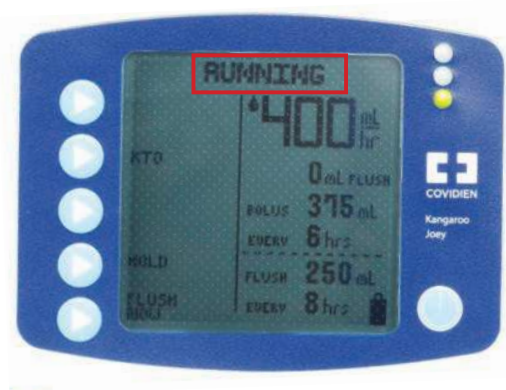
7 Select **ADJUST FLUSH** to program the flushing parameters.



8 Select **FLUSH VOLUME** to define the volume per flush cycle. Press buttons on the left to program the **FLUSH VOLUME**. Press **ENTER** to confirm.



9 Select **FLUSH INTERVAL** to define the time interval between starts of flushing. Press buttons on the left to program the **FLUSH INTERVAL**. Press **ENTER** to confirm. Press **DONE** to return to main menu.



10 Select **RUN** to start operation. The status line indicates **RUNNING** and the droplet icon moves vertically on the screen. The green **LED** indicator will be illuminated.

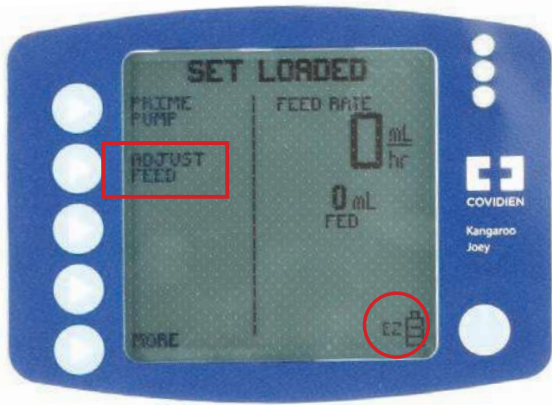
SELECTING FEED MODE (3) THE EZ MODE: 3-IN-1 FEED ONLY SET



1 Access **EZ MODE** through Biotech Options.



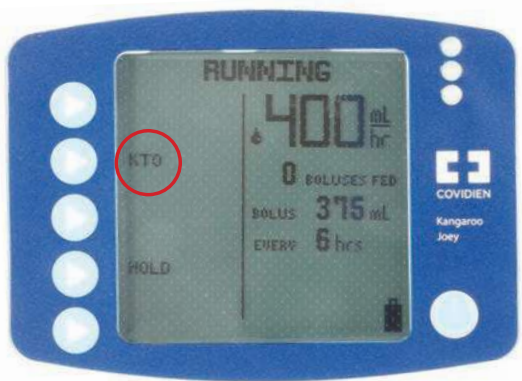
2 Press **EZ PUMP MODE**.



3 Press **ADJUST FEED** and program the **FEED RATE**. Press **ENTER** to exit the menu. The EZ icon appears at the bottom of the right hand corner of the pump to indicate you are in EZ mode.

KEEP TUBE OPEN (KTO)

The KTO function helps prevent a blockage of the feeding set by moving the feeding solution periodically within the tube.

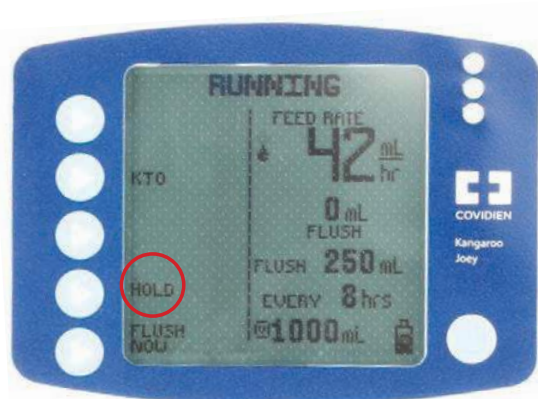


1 Press **KTO** to input desired time.

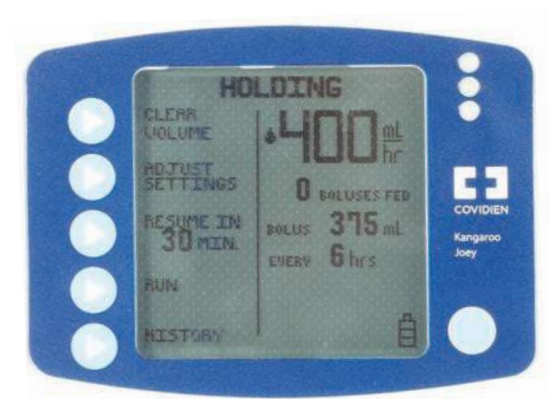


2 Each press increments the **KTO** time by **5** minute increments up to **30** minutes. Each additional press increments in larger step times up to **240** minutes. No other input is needed. The status line indicates **KTO** and the droplet icon moves vertically on the screen.

HOLD



3 Press **HOLD** while the pump is **RUNNING**.



4 The pumps status will change to **HOLDING**. The pumps alarm will sound if it has been left **HOLDING** for **10** minutes without further input.

FLUSHING AND ADMINISTRATION OF MEDICATIONS

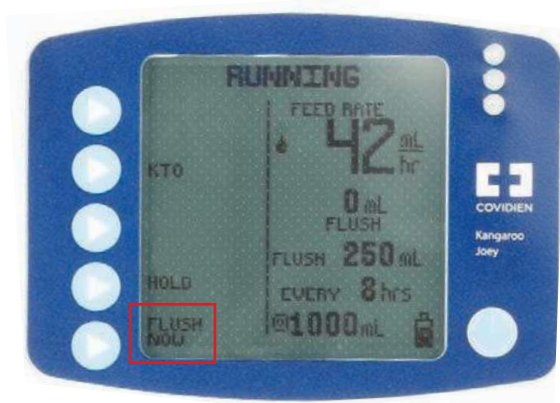
It is recommended by European Society for Clinical Nutrition and Metabolism (ESPEN) to flush the tube before and after feed and administration of each medication. Medication should be given separately to prevent possible interaction.

If you are using a **Feed and Flush Set**, you can use the **FLUSH NOW** function on the pump where it can be diverted to immediately perform a flush.

If you are using a **Feed Only Set**, you can flush as normal with an enteral syringe.

FLUSH NOW

On the **RUNNING** menu, the pump can be diverted to immediately perform a flush (flush on demand) when a feed and flush set is loaded.



- 1 Press **FLUSH NOW** in the **RUNNING** menu, input the desired flush volume, then press **ENTER** to apply and to exit the screen.



- 2 Alternatively, you can use an **ENFit** syringe for flushing through the medication port on the feeding set.

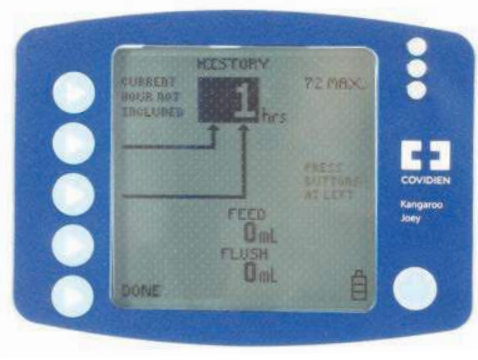
HISTORY, LOCK SCREEN FEATURE AND GENERAL CLEANING DIRECTIONS

History

The Kangaroo™ Joey Enteral Feed and Flush pump stores the previous 72 hours of feed and flush history. It provides an hour by hour breakdown of nutrition and water delivered.



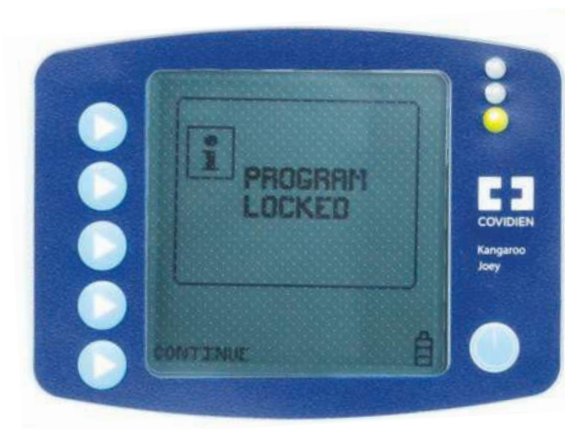
- 1 Select **HISTORY** in the **MORE OPTIONS** menu.



- 2 Program the time history of interest. The totals of **FEED** mL and **FLUSH** mL (if using Feed and Flush set) will be shown for the requested history time.

Lock Screen Feature

The pump has a lock feature. In BioTech Options, (follow instructions on page 24 for access) choose **LOCK SETTINGS**. To unlock choose the same options and uncheck **LOCK SETTINGS**.



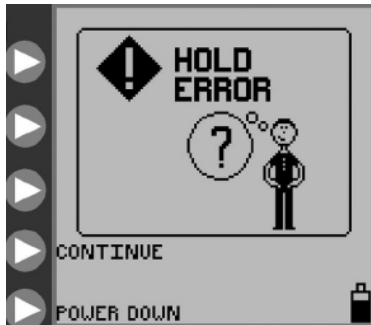
General Cleaning Directions

Cleaning should be performed as needed.

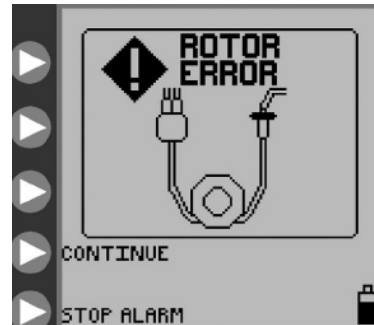
- (1) Disconnect pump from AC power source before cleaning. After cleaning, do not connect to AC power source until pump and A/C Power Adapter are thoroughly dry.
- (2) A mild detergent should be used for general cleaning. For disinfection a 10% hypochlorite solution, isopropyl alcohol or Ammonium Chloride based solutions may be used. Allow excess moisture to evaporate from the cord prior to use of A/C Power Adapter.

CAUTION: Do not immerse pump or A/C Power Adapter in water or other cleaning solution.

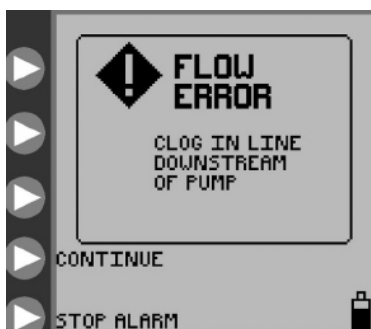
ALARMS/ERROR CODE INFORMATION



HOLD ERROR:
Pump left in Hold for more than 10 minutes. Press **CONTINUE** followed by **RUN** to start pump running or power down pump.



ROTOR ERROR:
Problem with pump set tubing around the rotor. Ensure silicone tubing is correctly loaded around rotor.



FLOW ERROR:
Obstruction in line downstream from pump. Check for kinked or blocked tubing below pump and rectify.



FEED ERROR:
Feed container empty or obstruction in the line upstream from pump. Check for kinked tubing or obstruction in line above pump or attach new/refilled feed container.

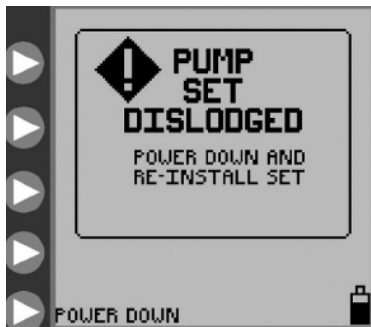


FLUSH ERROR:
Water container empty or obstruction in the line upstream from pump. Check for kinked tubing or obstruction in flush line above pump or refill flush container.

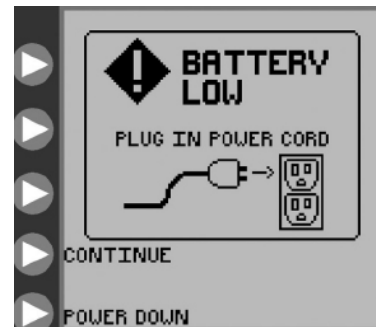


FEEDING COMPLETE:
Programmed feed has been delivered. Power down pump.

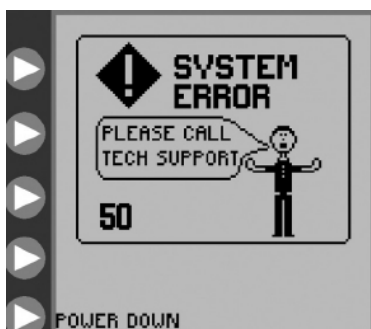
ALARMS/ERROR CODE INFORMATION



PUMP SET DISLODGED:
Black retainer ring (MISTIC) is not properly loaded in MISTIC pocket.
Ensure pump set is correctly loaded.



BATTERY LOW:
Battery must be recharged immediately.
Plug power cord into AC outlet.



SYSTEM ERROR:
General error – see pump manual.
Send pump for service.

Contact:

Healthcare 21 Customer Service
(9am-5pm)
1890 777 444

Out of Hours Emergency
Freephone Number (5pm-9am)
1800 911 921



BACKPACK USER GUIDE



1 Load set into pump as per 'Pump Set Loading Procedure' on page 13.



2 Place pump into elasticated pouch on bottom right of backpack.



3 Pass both ends of feeding set through opening on left side of pouch.



4 Attach feeding set to feed container.

BACKPACK USER GUIDE



5

Attach feed container to clips at top of backpack.



6

Pass end of feeding set which will connect to the feeding tube through the opening on the left hand side. Ensure medication port is closed.



7

Connect the feeding set to the feeding tube and commence feeding regime as per clinicians instructions. Open front pouch of backpack to view settings if required.



KANGAROO™ JOEY ENTERAL FEED AND FLUSH PUMP SYSTEM CODES

CODE	DESCRIPTION	PACK SIZE
Kangaroo™ Joey Enteral Feed and Flush Pump		
383400	Kangaroo™ Joey Enteral Feed and Flush Pump with pole clamp and power adapter	1
Feed Only Sets		
777503	3-in-1 Feed Only Set	30
777502	Dual Spike Feed Set	30
Feed and Flush Sets		
777506	3-in-1 Feed and 1000ml Flush Set	36
777507	Spike Feed and Vented Spike Flush Set	30
Reservoir Sets		
666064	500ml Reservoir Set	30
666106	1000ml Reservoir Set	30
668104	1000ml Feed and 1000ml Flush Reservoir Set	30
Accessories		
1814340236	Infusion Stand	1
770036	Large Backpack	1
770026	Small Backpack Blue	1
770034	Small Backpack Pink	1
382491	Power Adapter	1
382493	Plug Attachment	1
OVEACC416	ENFit to funnel feeding tube adaptor	300
H84104852	ACE Connector	50
952	Hold-n-Place Securement Device	50
H84101602	NasoGastric Tube Holder One Size	50
H84101612	NasoGastric Tube Holder Small	50

CONTACTS & SUPPORT

Healthcare 21 supplies the Kangaroo™ Joey Enteral Feed and Flush Pump and associated feeding sets. These are ordered through the Dietician or Public Health Nurse.

If you require further training or assistance on the pump please contact the Healthcare 21 Customer Service team on **1890 777 444**. If your query is out of hours (between the hours of 5pm to 9am) please contact our Out of Hours Emergency Freephone number on **1800 911 921**.

If you have a medical emergency, please contact your Dietician, Public Health Nurse or GP.

IMPORTANT PHONE NUMBERS:

Healthcare 21 Customer Service	1890 777 444
Dietician	
Public Health Nurse	
GP	
Out of Hours Emergency Freephone Number	1800 911 921

MY KANGAROO™ JOEY ENTERAL FEED AND FLUSH PUMP DETAILS:

Pump Serial Number

Kangaroo Joey Feeding Set Code

