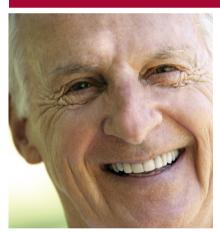
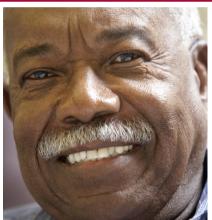
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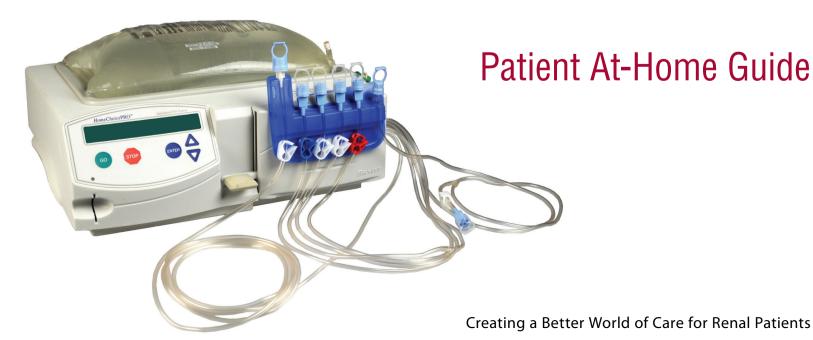
## HomeChoice HomeChoice PRO APD Systems













# The HomeChoice and HomeChoice PRO APD Systems

**Patient At-Home Guide** 

Document Number 07-19-61-244 October 2, 2009

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# Section



Glossary

1

#### **Glossary**

#### 1.1 Terms Used in This Guide

#### # of Day Exchanges

The number of CAPD manual exchanges performed using an **UltraBag** system. If no manual exchanges are performed on a given day, enter a zero (0). The maximum number of manual exchanges allowed is five (5).

#### Abdomen

The area of your body that includes your stomach.

#### **Abdominal Fullness**

A patient's feeling of fullness, sometimes referred to as "overfill" or "overfull." This feeling can come from Increased Intraperitoneal Volume (IIPV), or can come from eating a large meal, constipation, or abdominal masses. See also IPV and IIPV.

#### **Air Infusion**

Air in the patient line delivered to the peritoneal cavity. Air infusion can cause pain in the abdomen and/or shoulder. An incomplete prime can cause air infusion.

#### **Aseptic Technique**

The practice of cleanliness in handling items associated with your therapy. It means you should put on a face mask and thoroughly wash and dry your hands every time you connect or disconnect.

#### **Automated Peritoneal Dialysis (APD)**

APD is any form of peritoneal dialysis that is performed by a mechanical device, known as a cycler. Treatment settings are programmed on the cycler and are performed automatically, generally while you sleep.

Before you go to sleep, you attach the tubing and solution bags to the cycler. You then connect the tubing to your transfer set attached to your catheter. The cycler then performs the peritoneal dialysis by automatically delivering the prescribed Fills, Dwells, and Drains of each therapy cycle throughout the night.

#### **Blood Pressure, Diastolic**

The lowest number of your daily blood pressure (mmHg) when your heart relaxes.

#### **Blood Pressure, Systolic**

The highest number of your daily blood pressure (mmHg) when your heart pumps blood.

#### **Bypass**

An option you can select to go on to the next therapy phase if the therapy or an alarm has been stopped. Some therapy or alarm conditions can not be bypassed.

#### Cassette

The clear rectangular plastic piece of the disposable set that is inserted behind the door of the *HomeChoice/HomeChoice* PRO APD System.

#### **Catheter (PD Catheter)**

In peritoneal dialysis, a catheter is used to deliver dialysis solution into the peritoneal cavity and drain it out.

#### Contamination

The presence of foreign material that makes a substance impure or harmful.

#### **Continuous Ambulatory Peritoneal Dialysis (CAPD)**

With CAPD, the blood is being cleaned continuously, both day and night. The dialysis solution passes from a plastic bag through the catheter and into the peritoneal cavity. The solution stays in the peritoneal cavity with the transfer set closed. After several hours, the solution is drained into a disposable bag. Then the peritoneal cavity is refilled with fresh solution through the catheter to begin the cleaning process again. This is a manual type of peritoneal dialysis (PD) and does not use a cycler.

#### **Continuous Cycling Peritoneal Dialysis (CCPD)**

CCPD is a form of APD. It is a continuous therapy in which a cycler performs exchanges while you sleep. Dialysis solution can be left in the peritoneal cavity during the daytime, or it can be completely drained before ending the treatment (referred to as Nocturnal Intermittent Peritoneal Dialysis, or NIPD).

#### Cycle (Exchange)

In peritoneal dialysis, a cycle consists of three phases: a Fill phase, a Dwell phase, and a Drain phase. Every APD therapy contains one or more cycles.

#### Cycler

A mechanical device that performs peritoneal dialysis solution exchanges in regular cycles. Your *HomeChoice/HomeChoice* PRO APD System device is a cycler.

#### Day Fills

The amount of solution the system delivers to your peritoneal cavity for a daytime exchange. During the Dwell phase of a daytime exchange, you can disconnect from the system and have the freedom to conduct your normal daytime activities. The daytime exchanges are a part of Hi-Dose therapy. See also Hi-Dose CCPD/Hi-Dose Tidal.

#### **Day Fill Volume**

The volume of solution for each daytime exchange. This volume is based on your prescription.

#### **Dextrose**

A form of sugar that is an ingredient in most of the solutions used for peritoneal dialysis. The dextrose draws extra fluid from the body into the dialysis solution.

#### **Dialysis**

The process of cleaning waste from the blood artificially. This job is normally done by the kidneys. If the kidneys fail, the blood must be artificially cleaned with special equipment. The two major forms of dialysis are hemodialysis and peritoneal dialysis. See also Peritoneal Dialysis (PD).

#### **Dialysis Solution**

A special liquid used in both hemodialysis and peritoneal dialysis to clean the blood. Dialysis solution contains dextrose (a sugar) and other compounds similar to those in the body.

#### **Disconnect Cap**

A povidone-iodine solution-filled cap that is placed over the connectors on the transfer set or the connector on the patient line of the disposable set. **FlexiCap** and **MiniCap** are disconnect caps.

#### **Disposable Set**

The organizer and attached tubing lines that connect a patient to the solution and drain bags. The disposable set is used to deliver dialysis solution to the peritoneal cavity during therapy. The disposable set is used only once.

#### **Drain/Full Drain**

The removal of the dialysis solution from your peritoneal cavity. Depending on the time of day and type of therapy, the amount of fluid drained may be a complete Drain or a partial Drain (Tidal therapy).

The volume of fluid is measured in milliliters (mL). One liter is equal to 1000 milliliters.

#### **Drain Bag**

The optional bag into which fluid from your peritoneal cavity drains.

#### **Drain Line Extension**

An optional extension line that attaches to the drain line of the disposable set. This extra length allows you to drain into a shower, tub, or toilet.

#### **Drain Volume**

The volume of a Drain after a Dwell cycle.

#### **Dry Weight**

Your weight after a dialysis session when all of the extra fluid in your body has been removed.

#### **Dwell and Dwell Time**

The amount of time the fluid remains in your body during each cycle. Dwell Time or Dwell is part of the therapy cycle.

#### **Effluent**

The used dialysis solution drained from the body as part of an exchange.

#### **End-Stage Kidney Disease (ESKD)**

Kidney failure. Requires dialysis or a kidney transplant.

#### **End-Stage Renal Disease (ESRD)**

Kidney failure. Requires dialysis or a kidney transplant.

#### **Exchange**

The draining of used dialysis solution from the abdomen, followed by refilling with a fresh bag of solution.

#### **Face Mask**

A mask covering the mouth and nose. A face mask is used to prevent bacteria from contaminating the sterile components of the disposable set, lines, and solution bags.

#### **Fill Volume**

The volume of fluid to be delivered to your peritoneal cavity during each cycle. The appropriate volume of fluid is determined by your physician.

#### First Fill

The first Fill cycle of your therapy following an Initial Drain (I-Drain).

#### Fluid Overload

Too much fluid in the body. This is caused by more fluid going into your body than is coming out. Fluid overload can be dangerous to your heart.

#### Flush

The process by which the system pumps a small amount of dialysis solution from the supply bags to the drain line after the supply line connections have been made. This helps reduce infection from supply line contamination.

#### Hi-Dose CCPD / Hi-Dose Tidal

The goal of Hi-Dose therapy is to provide a 24-hour therapy that combines conventional nighttime therapies, such as CCPD or Tidal, with additional daytime exchanges. This may help improve the outcome of your dialysis treatment.

During the Dwell phase of each Hi-Dose exchange, you can disconnect from the system and have the freedom to conduct your normal daytime activities.

#### Hypothermia

A body temperature that is too far below normal.

#### **Increased Intraperitoneal Volume (IIPV)**

This condition is when there is more fluid in your abdomen than was prescribed. This condition is sometimes called "overfill." IIPV could result in a feeling of abdominal discomfort, serious injury, or death. See 18.8, *Increased Intraperitoneal Volume (IIPV)*, on page 18-58.

#### **Initial Drain (I-Drain)**

The Drain that occurs at the beginning of each therapy, before the first regular Fill.

#### **I-Drain Volume**

The volume of an Initial Drain.

#### **Intermittent Peritoneal Dialysis (IPD)**

A form of peritoneal dialysis in which dialysis sessions take place two to four times a week, 12 to 20 hours per session. The dialysis solution is drained completely at the end of the session and the peritoneal cavity remains empty between the sessions.

#### **Intraperitoneal Volume (IPV)**

The amount of fluid in the peritoneal cavity at a given point in time.

#### **Last Fill Concentration**

This is the concentration strength of dialysis solution used for the Last Fill. The Last Fill dialysis solution concentration may be different from the heater bag and supply bag concentration.

#### **Last Fill Volume**

The Last Fill of solution that is delivered at the end of your therapy and left in the peritoneal cavity during the day. This is also referred to as a Wet Day.

#### **Low Fill Mode**

This mode is available only to patients whose Fill volumes are less than 1000 mL. These patients typically weigh less than 44 lbs (20 kg).

In Low Fill Mode, the Drain logic has lower alarm limits for Slow Flow and No Flow. A Minimum Drain Time must be set, in addition to a Minimum Drain Volume. The Negative UF alarm and a Positive UF alarm can be set when in this mode. Low Fill Mode must be used with the Low Recirculation Volume Set.

### Low Recirculation Volume APD Set with Cassette (Low Recirculation Volume Set)

A disposable set with a 7.5-foot (2.9-meter) patient line made with a smaller inside diameter tubing than the other lines in the set. This reduces the fluid flow to patients using Low Fill Mode. The internal recirculation volume of this set is 17 mL.

#### Nite (Night) Therapy Time

The total amount of time for the nighttime portion of Hi-Dose therapy. This time is fixed and begins as soon as you complete your daytime exchanges.

#### **Night Concentration 1**

This is the concentration of the primary solution bag placed on the heater pan.

#### **Night Concentration 2**

This concentration is for the supply solutions that may be different from the heater bag solution.

#### No Flow

This occurs when there is no measurable flow rate of solution. No Flow can reduce the Dwell Time and decrease the amount of effective dialysis time. This can be caused by a kink or closed clamp on one or more of the lines or by an empty bag.

#### **Occluder**

The occluder clamps the solution lines if a power failure occurs or when the system is off. This prevents any solution from being delivered to the patient. The occluder is located inside the door on the front of the cycler.

#### **Organizer**

The blue plastic piece that holds the tubing lines and connectors of the disposable set during preparation for therapy. The organizer hooks onto the door of the cycler.

#### Overfill

A feeling of fullness in the abdomen. This feeling can come from IIPV, or can come from eating a large meal, constipation, or abdominal masses. See also Abdominal Fullness, Intraperitoneal Volume (IPV), and Increased Intraperitoneal Volume (IIPV).

#### **Patient Line Extension**

An optional extension line that attaches to the patient line of the disposable set. This extra length allows you to be up to an additional 12 feet (3.7 meters) away from your system during therapy.

#### **Peritoneal Cavity**

The space around your internal organs inside the lower abdomen.

#### **Peritoneal Dialysis (PD)**

A form of dialysis that uses the lining of your abdomen, called the peritoneal membrane, as a filter to remove waste products from your body.

A tube known as a catheter is surgically placed through the wall of your abdomen. Dialysis solution flows from a bag through the catheter and into the peritoneal cavity. Waste products and excess fluids from your body pass from the blood through the peritoneal membrane and into the dialysis solution. The dialysis solution, now filled with waste, is then drained from the peritoneal cavity. This cycle may be performed multiple times.

Peritoneal dialysis can be performed with or without a mechanical device. See also Automated Peritoneal Dialysis (APD).

#### **Peritoneal Membrane**

The layer of tissue that lines your abdominal cavity. A membrane can act as a filter, allowing some particles to pass from one part of the body to another while not allowing others to pass. The peritoneal membrane is used as a filter during peritoneal dialysis.

#### **Peritonitis**

Inflammation of the peritoneal membrane, usually caused by infection.

#### **Phase**

A part of a cycle or an exchange. Each exchange is divided into three phases: a Fill phase, a Dwell phase, and a Drain phase.

#### **Positional Drainer**

A patient who may increase Drain Volume by changing his/her position, or who drains best in one position.

#### **Priming**

To prepare for therapy, priming is the process the system uses to fill all tubing lines of the disposable set with solution. Priming removes air from the system.

#### **PRO Card**

The small electronic card that stores information about your treatment sessions and your system settings. This is used only with a *HomeChoice* PRO APD System.

#### **Pushback**

A small amount of fluid is pushed back from the cycler to the patient. This verifies that the patient line is not occluded when a Drain ends due to No Flow. The next Fill begins at this volume.

#### **Recovered I-Drain Volume**

The amount of solution that did not drain during Initial Drain. This amount was drained by doing a Manual Drain during first Fill or early in the Dwell phase of the first cycle. This amount is not part of your ultrafiltration (UF) for this therapy.

#### Slow Flow

This occurs when the flow rate of solution is very slow. Slow Flow can reduce the Dwell Time and decrease the amount of effective dialysis therapy. This can be caused by a partial kink or closed clamp on one or more of the lines or by an empty bag.

#### **Solution Bags**

Bags that contain the prescribed dialysis solution for your therapy. When attaching these solution bags to your cycler and disposable set, make sure you are using the correct solution.

#### Standard Fill Mode

The Standard Fill operating mode is typically prescribed for patients with Fill volumes over 1000 mL. The Drain cycle Slow Flow alarm/move on threshold is 50 mL/minute and the Drain cycle No Flow alarm/move on threshold is 12 mL/minute.

#### **System**

The *HomeChoice* and *HomeChoice* PRO APD Systems include the cycler, disposable set, solution bags, drain lines, and Patient At-Home Guide. The *HomeChoice* PRO APD System also includes the PRO Card.

#### **Tidal Peritoneal Dialysis (TPD)**

Tidal dialysis is a form of APD where only a portion of the solution in your peritoneal cavity is drained and filled each cycle.

#### **Tidal Volume**

The volume of solution filled during each Tidal cycle.

#### **Tidal Volume Percentage**

The Tidal Volume expressed as a percent (%) of the Fill Volume.

#### **Total UF**

Total UF (ultrafiltration) is the sum of the UF for all of your cycles. The Initial Drain and your Last Fill Volume are not included in your Total UF.

#### **Total Volume**

The Total Volume of dialysis solution for the entire course of therapy, including the Last Fill Volume.

#### **Transfer Set**

Tubing that connects the patient line on the disposable set or UltraBag set to the catheter.

#### **Ultrafiltration (UF)**

UF is the additional fluid removed from your body as part of your dialysis therapy. It is the difference between the total amount of fluid filled and the amount of fluid drained.

#### **Universal Precautions**

Universal precautions refers to the practice, in medicine, of avoiding contact with patients' bodily fluids, by means of wearing nonporous articles such as medical gloves, goggles, and face shields.

#### **Uremia**

The condition in which a person gets sick from wastes (toxins) that build up in the blood. Someone who has uremia may experience nausea, weakness, weight loss, memory problems, and/or trouble sleeping.

# 1.2 Symbols Used on the *HomeChoice* and *HomeChoice* PRO APD Systems

~	Alternating current
*	Type B applied part
$\sim$	Date of manufacture
SN	Serial number
-	Fuse – Replace only with same type and rating
	Recovery / Recyclable
	<ul> <li>Crossed-out wheeled bin:</li> <li>Do not dispose of this product as unsorted municipal waste.</li> <li>Collect this product separately.</li> <li>Use collection and return systems available to you.</li> <li>Bar below bin:</li> <li>Product brought to market after August 13, 2005.</li> </ul>
IPX1	<ul> <li>Ingress protection:</li> <li>Not protected against ingress of solid foreign objects.</li> <li>Protected against ingress of vertical dripping water.</li> </ul>
C+/<	Contains rechargeable battery

NONSPILLABLE BATTERY Pb	Nonspillable lead-acid battery is recyclable
C US	Canadian Standards Association – Meets applicable requirements for the U.S. and Canada.
	Manufacturer: Baxter Healthcare Corporation Renal Division McGaw Park, IL 60085 U.S.A. Baxter Healthcare SA 8010 Zurich Switzerland
OI	Mains Power (Off) / Mains Power (On)
	Fragile
10	Humidity limitation for transport and storage
	Keep dry

#### 1. Glossary

5	Stacking limit; do not stack more than 5 high
-32°C − 54°C	Temperature limitation for transport and storage
<u> </u>	This way up
	ATTENTION: Consult accompanying documents. Read all instructions before using.

# Section

**User Assistance Information** 

2

#### **User Assistance Information**

2.1

This information is important. Keep this information available at all times.

**Personal and Cycler Information** 

Name:	
Patient ID Number:	
Cycler Serial Number:	
Cycler Model Number:	
2.2 Numbers to 0	Call for Assistance
For Baxter Technical Assistance contact:	24-HOUR TECHNICAL ASSISTANCE 1-800-553-6898
Dialysis Center:	
Name:	
Phone:	
Times Available:	

# 2. User Assistance Information Other Important Information:

# Section

**Warnings and Cautions** 

3

#### **Warnings and Cautions**

#### 3.1 Side Effects and Contraindications

Baxter's *HomeChoice* and *HomeChoice* PRO APD Systems are not designed, sold, or intended for use except as indicated. See Section 4, *Indications for Use*.

Baxter's *HomeChoice* and *HomeChoice* PRO APD Systems are not intended to be a substitute for monitoring the patient's overall condition by trained and qualified personnel.

#### 3.2 Warnings

#### **WARNING**

Warnings are related to things that can cause harm to you.

#### READ ALL INSTRUCTIONS BEFORE USING THIS CYCLER!

#### 3.2.1 Treatment

- Use aseptic technique to reduce the chance of infection:
  - When you connect yourself to the cycler
  - When you disconnect yourself from the cycler
  - Any time you handle fluid lines and solution bags

Contaminating any part of the fluid path can result in peritonitis. Peritonitis is an inflammation of the peritoneal membrane, usually caused by infection.

- Caregivers should use universal precautions when handling effluent dialysis solution or contaminated disposables. Failure to use universal precautions can result in infection or injury to the caregiver.
- All therapies using the *HomeChoice/HomeChoice* PRO APD System must be prescribed and performed under the responsibility of a physician who is familiar and well-informed about peritoneal dialysis. Improper use of the *HomeChoice* APD System can result in serious patient injury or death.
- Do not change the settings for your therapy unless directed by your physician or nurse. Using incorrect settings can cause symptoms and signs of uremia, including fluid overload.
- Contact your dialysis center if:
  - You did not complete your treatment
  - You skipped your prescribed Last Fill
  - Other conditions occur, as instructed by your dialysis center

Too many incomplete or skipped treatments can cause reduced Dwell or Therapy Time. This can lead to symptoms and signs of end-stage renal disease (ESRD), including fluid overload.

- Always look at your patient line after priming to make sure there is no air in the line. An incomplete prime can cause air infusion. Air infusion can cause abdominal and/or shoulder pain.
- Conditions that can cause poor catheter drainage include:
  - Constipation
  - Fibrin accumulation due to a peritonitis infection
  - Blockage of the catheter lumen or drainage holes with fibrin, blood clots, or intestines
  - Kinking of the catheter
  - Movement of the catheter to the upper portion of the peritoneal cavity

#### 3.2.2 Treatment - Overfill / IIPV

Overfilling or not draining enough can result in excess fluid in the abdomen, also known as Increased Intraperitoneal Volume (IIPV). While some people may not exhibit symptoms, most commonly observed symptoms include:

- Feeling full, bloated, or overfull
- Abdominal pain or discomfort
- Expanded or tense abdomen
- Vomiting or spitting-up
- Difficulties feeding
- Localized swelling around the PD catheter exit site, belly button, groin region, or genital area
- Leakage of fluid from the PD catheter exit site
- Difficulty breathing
- A child complaining of a "funny feeling" in the abdomen
- A child crying
- Unexpected increase in blood pressure

IIPV can occur because of one or more of the following reasons:

- Low Fill Mode is not programmed for patients whose fill volumes are less than 1000 mL. These patients typically weigh less than 44 lbs (20 kg). The Negative UF Limit should not be raised above 50% and the Minimum Drain Volume % should not be lowered below 85% (the default values).
- The Initial Drain Alarm is programmed too low. The system may move on to the first Fill before you are completely drained if:
  - Your last therapy left you with more than your normal Last Fill Volume
  - You did not perform a manual drain
  - A slow flow condition occurs before you are completely drained

Temporarily increase your I-Drain Alarm setting or perform a Manual Drain to make sure that your Initial Drain is complete.

■ The patient line length is greater than 12 feet (3.6 meters) and Initial Drain Alarm is set below 30 mL. This can cause your Initial Drain to end early.

- The Minimum Drain Volume % is programmed too low. This can cause your Drain cycles to end early.
- Day Fill Volume, Night Fill Volume, or Last Fill Volume is programmed too high. This can cause you to be overfilled if the volume is not appropriate for your body's size.
- For Tidal therapies, Total UF volume is programmed too low. This can cause a gradual buildup of UF volume during the therapy.
- Last Manual Drain is programmed to No, or the UF Target for the Last Manual Drain is programmed too low. This can cause an incomplete last Drain.
- Stop and Go are pressed during Tidal dwells over multiple dwell cycles. This can reduce the volumetric accuracy of the device over the course of successive Tidal Dwell cycles.
- After a power failure during Prime, the **Go** button is pressed to start therapy without closing all clamps first. This can cause a free flow of fluid from one bag to another and/or to the patient during the time when LOAD THE SET is displayed.
- The door is opened during an alarm or System Error without closing all clamps first. This can cause a free flow of fluid from one bag to another and/or to the patient.
- The transfer set is connected to the patient line before CONNECT YOURSELF appears on the display screen. This can cause air to be delivered to your peritoneal cavity, which can cause IIPV if you had fluid in your peritoneal cavity prior to the Initial Drain.
- At the start of Fill 1, the patient line clamp is opened after a Check Patient Line alarm or Check Your Position alarm appears on the display screen without first initiating a manual drain. This can cause air to be delivered to your peritoneal cavity, which can cause IIPV if you had fluid in your peritoneal cavity prior to the Initial Drain.
- **Go** is pressed at the end of therapy before all clamps are closed when CLOSE ALL CLAMPS appears on the display screen. This can cause a free flow of fluid from one bag to another and/or to the patient.

- The door is opened at the end of therapy before all clamps are closed. This can cause a free flow of fluid from one bag to another and/or to the patient.
- Any Drain phase is bypassed, including Initial Drain, Day Drain, or Night Drain. This can cause the system to deliver a full Fill in addition to any fluid left in the peritoneal cavity.
- DRAIN NOT FINISHED, LOW UF, LOW DRAIN VOLUME, or CAUTION: NEGATIVE UF alarms are bypassed. This can cause the system to deliver a full Fill in addition to any fluid left in the peritoneal cavity.
- A Manual Drain performed during Fill is stopped or bypassed. This can cause the system to deliver a full Fill in addition to any fluid left in the peritoneal cavity.

IIPV could result in a feeling of abdominal discomfort, serious injury, or death.

#### IF IIPV IS SUSPECTED, PLEASE DO THE FOLLOWING:

- 1. Press **STOP** immediately, then press ∇and initiate a Manual Drain. The Manual Drain procedure is located on the next page. See 18.8, *Increased Intraperitoneal Volume (IIPV)*, on page 18-58 if IIPV is suspected.
- 2. Once the fluid is completely drained from the abdomen, call your nephrologist.
- 3. Call your nephrologist immediately if you have ANY complaints or symptoms of IIPV including those listed above.
- 4. For assistance in performing the above steps, call the Baxter Customer Service line which is available 24 hours a day, 7 days a week at 1-800-553-6898 Prompt 1.
- 5. If you are unable to reach your dialysis center, nephrologist, or the Baxter Customer Service Line, and you or the patient are experiencing symptoms of IIPV, call 911 immediately or go to the nearest Emergency Room.

#### 3. Warnings and Cautions

Steps to perform a Manual Drain		Display screen
The current FILL phase appears on the display screen.		FILL 3 OF 5
1.	Press <b>STOP.</b>	STOPPED: FILL
2.	Press $\nabla$ .	FILL VOLUME: ML
3.	Press $\nabla$ .	BYPASS
4.	Press $\nabla$ .	CHANGE PROGRAM
5.	Press $\nabla$ .	MAKE ADJUSTMENTS
6.	Press $\nabla$ .	MANUAL DRAIN
7.	Press <b>ENTER.</b>	DRAINING: ML
	The display screen shows the Drain volume. The system continues to drain until flow is no longer detected.	
8.	Press <b>GO</b> to return to therapy.	
9.	Reinitiate a Manual Drain if it is stopped during Fill.	

#### 3.2.3 Supplies - General

Use only Baxter Healthcare Corporation accessories, solutions, disposable sets, and supplies with your HomeChoice/HomeChoice PRO APD System. Baxter can not ensure that the dialysis products of other manufacturers, when connected with Baxter's products, will function in a safe and satisfactory manner.

- Make sure that you are able to complete all of your treatments as prescribed by your physician:
  - Order your supplies on time
  - Keep extra supplies on hand
  - Keep supplies for a manual exchange available
  - If your cycler can not begin or complete your treatment, or your APD supplies are not available, perform a manual exchange as instructed by your dialysis center.

Too many incomplete or skipped treatments can cause reduced Dwell or Therapy Time. This can lead to symptoms and signs of end-stage renal disease (ESRD), including fluid overload.

#### 3.2.4 Supplies - Solutions

- Add medication to the solution only as prescribed by a physician. Failure to follow proper instructions can result in contamination. Adding the wrong dosage of medication can make your condition worse.
- Check each solution bag to ensure:
  - The solution is clear.
  - The solution matches the prescribed type
  - The dextrose concentration is correct
  - The volume of solution in the bag is correct
  - The expiration date has not passed
  - The pull ring and medication port are in place
  - There are no leaks

If any problems are found, discard the bag and get a fresh dialysis solution supply bag. Using wrong or damaged bags can result in inadequate therapy or contamination of the fluid lines. Contamination of any portion of the fluid or fluid path can result in peritonitis.

- The solution bag must be placed properly on the heater pan.
  - Place the edge of the bag against the bag stops on the right side of the heater pan.
  - Be sure that the bag completely covers the silver heater sensor button.
  - If the solution bag is not placed properly, overheated or underheated dialysis fluid can be delivered.
- Place the solution bags on a flat, stable surface. To prevent bags from falling, do not stack bags on top of each other. Falling bags can result in a disconnect or leak. Possible contamination of the fluid or fluid pathways can result if a fluid leak occurs. Contamination of any portion of the fluid or fluid path can result in peritonitis.
- For storage and preparation of the dialysis solution, follow the labeling instructions that come with the solution. Failure to follow the solution labeling instructions can lead to insufficient therapy or patient injury.
- Do not use the dialysis solution if you think you may be allergic to any component of the solution. Check the labeling provided with your solution for details to reduce the potential of an allergic reaction.
- Make sure the solution bag placed on the heater pan is big enough to hold the largest programmed Fill Volume plus a replenish buffer of at least 500 mL. Use of a smaller solution bag on the heater pan can cause the heater bag to be filled in excess of its designed volume. These bags heat slower and can burst.
- Do not replace empty solution bags or reconnect disconnected solution bags during your therapy. Possible contamination of the fluid or fluid pathways can result. Contamination of any portion of the fluid or fluid path can result in peritonitis.
  - If a bag becomes disconnected during your therapy, follow the instructions in 18.6, *End Therapy Early Procedure*, on page 18-55. Notify your dialysis center.

- When attaching your solution bags to your system and disposable set:
  - Make sure the solution bags are connected to the proper lines on the organizer.
    - If the solution bag connected to the line with the RED clamp is not placed on the heater pan, room temperature solution can be delivered. Room temperature solution is cooler than body temperature. If a patient is unconscious or asleep and therapy continues for many hours, hypothermia can develop.
  - Make sure you use the correct dialysis solution.
    - If the concentration or type of solution is different from your prescription, you may not receive the dialysis therapy you need. This may lead to an increase or decrease in the amount of fluid ultrafiltrated during the therapy. When performing a Tidal therapy, your intraperitoneal volume can increase or decrease if the volume ultrafiltrated does not equal the programmed Total UF.
  - Make sure to connect enough bags of the right volume to deliver your prescribed Fill Volume.
    - Multiple incomplete or skipped treatments can cause reduced Dwell or Therapy Time. This can lead to symptoms and signs of end-stage renal disease (ESRD), including fluid overload.
- Discard the disposable set and all solution bags at the end of therapy. Possible contamination of the fluid or fluid pathways can result if disposables are reused. Contamination of any portion of the fluid or fluid path can result in peritonitis.

#### 3.2.5 Supplies – Disposable Set

- Do not apply alcohol, hydrogen peroxide, or antiseptic containing alcohol to the disposable set or to the cassette interface inside the door of the cycler. Using these products can cause the cassette to develop cracks. Using damaged sets can result in contamination of the fluid or fluid pathways. Contamination of any portion of the fluid or fluid path can result in peritonitis.
- Do not use the disposable set more than once. Discard after each use. Reusing the disposable set can increase the risk of contamination, which can result in peritonitis.
- Be sure to use the correct disposable set for your prescribed therapy. Using the wrong disposable set can result in an inadequate therapy.
- Check all disposable set connections for a secure fit before beginning your therapy. Make sure all clamps on unused fluid lines are closed securely. Contamination of any portion of the fluid path can result in peritonitis.
- Before loading the disposable set, inspect the cassette and tubing for damage. Using damaged sets can result in contamination of the fluid or fluid pathways. Contamination of any portion of the fluid or fluid path can result in peritonitis.
  - Inspect the flexible surfaces of the cassette for obvious signs of damage, including cuts, tears, or punctures.
  - Ensure the tip protectors on the ends of the tubing are on and unbroken. If damage is found, obtain a new disposable set and repeat the inspection procedure.
  - Tubing indentations can be present on disposable sets due to the flexible and supple nature of the tubing. Slight tubing indentations are cosmetic and should have no impact on the functionality of the product.

#### 3.2.6 General

- Leave an air gap (space) between the end of the drain line and any fluid in the drain or container when using a drain line extension. This prevents non-sterile fluid from flowing backwards up the drain line. Non-sterile fluid can contaminate the fluid path resulting in peritonitis.
- Verify the operation of the display screen before starting your therapy. If the display screen is not working correctly, it can display an inaccurate number. This can lead to insufficient therapy or patient injury.
- Verify the operation of the audible alarm. If the audible alarm is not working, you will not be notified of an alarm situation. This can lead to insufficient therapy or patient injury.
- The modem must be Class II and approved to IEC/EN, CSA/UL 60950-1 with a TNV-1 circuit (accessible circuit is limited to 60Vrms). Using an unapproved modem may increase the risk of electrical shock.
- Do not open the *HomeChoice/HomeChoice* PRO APD System cycler. Electrical circuitry inside can pose a shock hazard.
- Unplug the *HomeChoice/HomeChoice* PRO APD System power cord from the wall outlet, or other AC power source, before cleaning the system. Failure to do so can cause an electric shock.
- Do not use external heating sources, such as a microwave, to warm solution bags. This can result in overheated solution delivered into your peritoneal cavity. Dialysis solution should only be heated by the HomeChoice/HomeChoice PRO APD System.
- Do not attempt to operate the system in an explosive atmosphere (i.e., when gas is present). This is an explosion hazard and can cause personal injury and damage to equipment.
- Do not operate this product where the following are in use:
  - Aerosol spray products
  - Flammable anesthetic agents
  - Nitrous oxide
  - Oxygen-enriched environment (for example, oxygen tent)

Operating this device in these environments can cause an explosion or fire.

- Do not use this product outdoors. Outdoor use can increase the risk of shock or damage the device.
- Do not use electrical nerve stimulation pain management devices while performing your dialysis therapy. Some of these devices, when used at the same time as the *HomeChoice/HomeChoice* PRO APD Systems, have been shown to cause damage to the system and to the cassette. Baxter can not ensure that the systems function in a safe and satisfactory manner when the system is damaged. Damage to the cassette can lead to air infusion into the peritoneal cavity. Air infusion can cause mild to moderate abdominal pain.
- Do not connect any devices to the HomeChoice/HomeChoice PRO APD System other than those specified by Baxter as part of the system. Baxter can not ensure that the dialysis products of other manufacturers, when connected with Baxter's products, function in a safe and satisfactory manner.
- The *HomeChoice/HomeChoice* PRO APD System should not be used near other equipment. However, if it is necessary to use the cycler close to other equipment, the cycler should be observed to verify normal operation.
- Do not turn on or use hand-held personal communications devices, such as mobile two-way radios or cellular phones, near the cycler. Use of these types of devices can cause the cycler to malfunction. However, cordless phones up to 2.5 GHz are permitted. Follow the recommended separation distance chart, Table 19-4 on page 19-8 in Section 19, *Technical Data*, if a hand-held device must be used.
- Do not operate this product if it:
  - Has a damaged cord or plug
  - Is not working properly
  - Has been dropped or damaged
  - Has been dropped into water

Baxter can not ensure that a cycler will function in a safe and satisfactory manner under these conditions.

Return the product to Baxter Technical Assistance for examination and repair if damage occurs. Contact Technical Assistance at the number listed in 2.2, *Numbers to Call for Assistance*, on page 2-1. Baxter Technical Assistance is available 24 hours a day for *HomeChoice/HomeChoice* PRO APD System users.

- To reduce the risk of burns, electrocution, fire, or injury to persons:
  - Close supervision is necessary when this product is used by, on, or near children or those unable to care for themselves.
  - Use this product only for its intended use as described in this guide.
  - Do not use attachments, products, or supplies not recommended by Baxter.
  - Keep the power cord away from heated surfaces.
  - Do not use while bathing.
  - Do not place or store product where it can fall or be pulled into a tub or sink.
  - Do not place in or drop into water or other liquid.
  - Do not reach for the system if it has fallen into water. Unplug it right away.

#### 3.3 Cautions

#### **CAUTION**

Cautions are related to things that can damage the *HomeChoice* and *HomeChoice* PRO APD Systems.

- The cycler you are using may be the property of Baxter Healthcare Corporation. Improper care or use may result in additional expense.
- Wipe up any spills right away. This reduces the chance of moisture entering the system and causing a malfunction. This also reduces the chance of bacteria contamination or an unsanitary condition.
- To prevent the cycler from falling, place it on a sturdy, stable nightstand or table large enough to hold the cycler and the solution bags. Falling can damage the cycler or cause personal injury.
- If an extension cord is used, make sure the ampere rating of the HomeChoice/HomeChoice PRO APD System does not exceed the extension cord ampere rating.
  - Use only heavy-duty extension cords rated at 1200 watts (10 amp for 110V systems).
  - Use only extension cords less than 12 feet (3.5 meters) in length.
  - The extension cord must have the third grounding wire that mates with the grounding plug on the *HomeChoice/HomeChoice* PRO APD System power cord.

Failure to follow this advice can result in excessive heating or fire.

■ Do not attempt to service the *HomeChoice/HomeChoice* PRO APD System yourself. Doing so can result in fire, burns, electrocution, or other personal injury. For servicing, contact Technical Assistance at the number listed in 2.2, *Numbers to Call for Assistance*, on page 2-1. Baxter Technical Assistance is available 24 hours a day for *HomeChoice/HomeChoice* PRO APD System users. A service manual for this product is not available.

- Do not use chemical cleaning agents or aerosol spray cleaners. These products might damage the plastics or surface finishes. Use a small amount of mild soap and water on a damp cloth to wipe the exterior of the system. Because the system uses a disposable set, it does not need to be sterilized or disinfected between uses.
- For product disposal (according to WEEE 2002/96/EC or other applicable regulations), please do the following:
  - For more information on return, recovery, or recycling of this product, please contact Baxter Technical Assistance at the number listed in 2.2, Numbers to Call for Assistance, on page 2-1. Baxter Technical Assistance is available 24 hours a day for HomeChoice and HomeChoice PRO APD Systems users.
  - Return this product to your dialysis center or to Baxter by calling Baxter Technical Assistance.
  - Do not dispose of this product as unsorted municipal waste.
  - Use the collection and return systems available to you.
  - Follow your local guidelines for disposal of dialysis waste materials.

Failure to follow disposal instructions can result in groundwater contamination or a fine.

## 3.4 Battery Precautions

- The *HomeChoice/HomeChoice* PRO APD System contains both a lead-acid and a lithium battery. The lead-acid battery is automatically checked and recharged during the *HomeChoice/HomeChoice* PRO APD System operation. The batteries require no periodic maintenance.
- There is danger of explosion if either battery, located within the HomeChoice/HomeChoice PRO APD System, is incorrectly replaced.
- In case replacement of either battery is needed, contact technical assistance at the number listed in 2.2, *Numbers to Call for Assistance*, on page 2-1. Baxter Technical Assistance is available 24 hours a day for *HomeChoice/HomeChoice* PRO APD System users.



Contains lead-acid and lithium batteries. Must be recycled or disposed of properly.

# Section



**Indications for Use** 

4

# **Indications for Use**

Baxter's *HomeChoice* and *HomeChoice* PRO APD Systems are intended for automatic control of dialysis solution exchanges in the treatment of pediatric and adult renal failure patients undergoing peritoneal dialysis.

#### **WARNING**

Read all warnings, cautions and instructions carefully before use. (Refer to Section 3, *Warnings and Cautions*.) Improper use of the *HomeChoice* APD System can result in serious patient injury or death.

CAUTION: Federal (U.S.A.) Law restricts this device to sale by or on order of a physician.

#### 4.1 About This Guide

This Patient At-Home Guide provides instructions necessary for the proper operation of the *HomeChoice* and *HomeChoice* PRO APD Systems (the "system").

This guide is meant to be used with and after your training on the system. It does not provide instructions for the prescription or administration of peritoneal dialysis.

This guide contains examples that show typical therapy values. The values for your therapy may vary.

# Section

**Description** 

5

# **Description**

This section describes the functions, components, and features of the *HomeChoice* and *HomeChoice* PRO APD Systems (the "system") and the basics of Peritoneal Dialysis (PD).

You should learn the names of the system components, where they are located, and how they function before beginning to use the procedures in this guide.

## 5.1 Introduction to *HomeChoice* APD Systems

Baxter's *HomeChoice* and *HomeChoice* PRO APD Systems are designed to provide Automated Peritoneal Dialysis (APD) therapy for pediatric and adult renal patients. Their Fill volumes can range from 60 mL to 3000 mL.

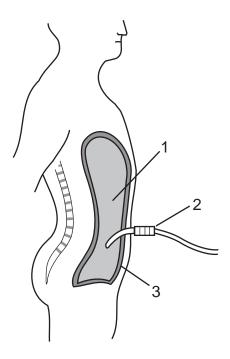
HomeChoice and HomeChoice PRO APD Systems are intended to be operated by:

- Home patients whose physicians have prescribed this system. Patients, or their caregivers, must have received adequate training to use the system.
- Clinicians who are using the system for patients under their care and under a prescription. Clinicians must have received adequate training to use the system.

Since Drain and volume requirements vary among patients, both the *HomeChoice* and *HomeChoice* PRO APD Systems software have a choice of modes, either Standard Mode or Low Fill Mode. The dialysis center selects the Fill mode for the patient before therapy begins.

## 5.2 Introduction to Peritoneal Dialysis

Peritoneal Dialysis (PD) is a procedure that cleans and filters the blood. Peritoneal dialysis rids the body of unwanted waste and excess fluid, helps to control blood pressure, and maintains the proper balance of chemicals such as potassium, sodium, and bicarbonate in the body. This process of cleansing the blood uses the body's own peritoneal membrane as a filter. See Figure 5-1.



- 1. Peritoneal Cavity
- 2. Catheter
- 3. Peritoneal Membrane

Figure 5-1. Peritoneal Cavity

The basic steps of PD are the following:

- 1. Peritoneal dialysis usually begins with an initial drain to remove existing fluid from the peritoneal cavity.
- 2. The peritoneal cavity is filled with fresh dialysis solution. Solution enters through a catheter that has been surgically placed through the wall of the abdomen and into the peritoneal cavity.

- 3. The solution is allowed to remain (dwell) in the cavity for a period of time. During this time, waste products pass from the bloodstream through the peritoneal membrane and into the dialysis solution.
- 4. The used dialysis solution containing waste products and excess fluids, called effluent, is then drained from the peritoneal cavity.
- 5. The peritoneal cavity is then refilled with fresh solution to remain (dwell) for another period of time.

The draining of used dialysis solution from the abdomen, followed by refilling with a fresh bag of solution, is known as a *dialysis exchange*.

#### 5.2.1 Continuous Ambulatory Peritoneal Dialysis (CAPD)

With CAPD, the blood is always being cleaned. Dialysis exchanges are done manually three to five times a day. This type of peritoneal dialysis does not use an automatic cycler. This method can be used to continue your treatments if you are unable to use your cycler; for example, during a power failure.

Dialysis solution flows by gravity from a plastic bag through the catheter and into the peritoneal cavity. The solution stays in the peritoneal cavity with the transfer set closed. Dwell periods typically last four to six hours during the daytime, and up to eight hours overnight. After the Dwell period, the used solution is drained into a disposable bag. Then the peritoneal cavity is refilled with fresh solution to begin the cleaning process again.

#### 5.2.2 Automated Peritoneal Dialysis (APD)

All peritoneal dialysis techniques that use a cycler to perform exchanges are referred to as Automated Peritoneal Dialysis (APD).

APD exchanges are usually referred to as cycles. Each cycle consists of three (3) phases:

- Fill phase
- Dwell phase
- Drain phase

Treatment settings, such as the amount of solution to be infused and the length of time the solution remains in the peritoneal cavity, are programmed on the cycler. The cycler then automatically performs the treatment. In APD, the treatment settings can be modified to meet the needs of each patient.

There are four (4) types of APD therapy:

- Continuous Cycling Peritoneal Dialysis/Intermittent Peritoneal Dialysis (CCPD/IPD)
- Tidal Peritoneal Dialysis (TPD)
- Hi-Dose Continuous Cycling Peritoneal Dialysis (Hi-Dose CCPD)
- Hi-Dose Tidal Peritoneal Dialysis (Hi-Dose TPD)

See Section 1, *Glossary* for definitions of each of these therapies.

# 5.3 HomeChoice APD Systems Functions

The *HomeChoice* and *HomeChoice* PRO APD Systems perform peritoneal dialysis by directing the flow of fluid between the solution bags, the cassette, your peritoneal cavity, and your drain option.

Once you have connected all solution bags and your drain option, and have connected yourself to the disposable set, you have created a *fluid circuit*. The system manages your PD by the following methods:

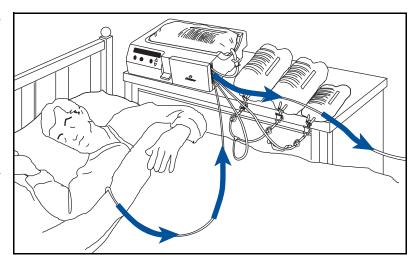
- With the cassette loaded in the cycler, the system is able to draw fluid into the cassette chambers by opening and closing the correct combination of valves on the cassette.
- The system measures the fluid in the cassette chambers. It then opens and closes the required valves on the cassette to move fluid to the correct destination. This allows the system to deliver the programmed Fill Volume to your peritoneal cavity with high accuracy.
- The measurements taken during the Drain cycle allow the system to calculate how much ultrafiltrate (UF) was removed from your peritoneal cavity during each Drain cycle. These values are stored in the system so that you can view them at the end of your therapy.

#### 5.3.1 Fluid Pathways: Drain, Fill, and Dwell

Fluid pathways change during the therapy. They are pictured below for the three (3) main phases of therapy.

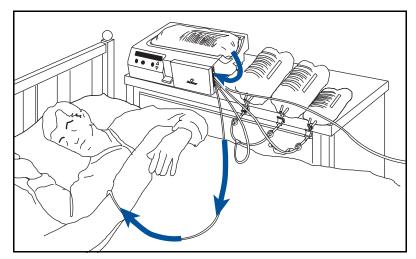
#### 1. DRAIN

During the Drain phase, the system pulls fluid from your peritoneal cavity to the disposable cassette where it is measured. The fluid is then sent to the drain option. This process is repeated until the system determines you are empty. The system calculates the UF volume for each Drain cycle.



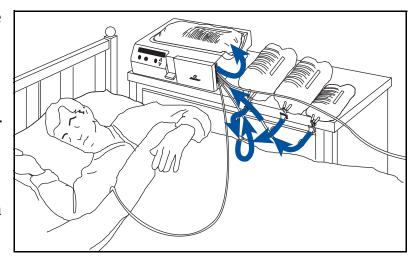
#### 2. FILL

During the Fill phase, the system pulls fluid from the heater bag to the disposable cassette where it is measured. The fluid is then delivered to your peritoneal cavity. This process is repeated until the programmed Fill Volume has been delivered to your peritoneal cavity.



#### 3. DWELL

During the Dwell phase, the system pulls fluid from the supply bags to the disposable cassette where it is measured. This fluid is then delivered to the heater bag to replenish the solution that was used during the previous Fill phase. This is done to warm the fluid in the heater bag to prepare for the next Fill phase.



#### 5.3.2 Fluid Flow During Power Failure

If there is a power failure, all valves on the cassette close so there is no fluid flow. Valves remain closed as long as the door remains locked. See 18.9, *Power Failure*, on page 18-62 for complete instructions.

#### 5.3.3 Situations When Fluid Lines are Not Controlled

There are three (3) situations during the use of the system when the fluid lines are not clamped by the internal occluder (behind the door of the cycler) or not closed by the valves in the cassette.

#### All lines should be clamped when any of the following situations take place:

- When the door is open.
- During treatment setup when LOAD THE SET appears on the display screen.
- At the end of treatment when REMOVE THE SET appears on the display screen.

During these three situations, the system does not have control of the valves and fluid pathways. Therefore, solution can move freely between pathways. This can result in an increased intraperitoneal volume (IIPV) situation.

# 5.4 HomeChoice APD Systems Features

Features of the *HomeChoice/HomeChoice* PRO APD System cycler include:

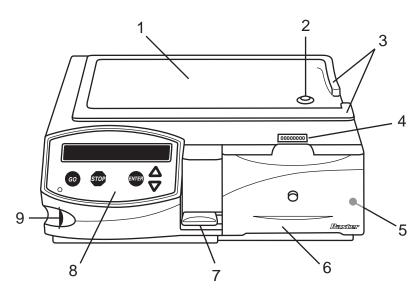
- The controls: an On/Off switch, and buttons for *GO*, *STOP*, *ENTER*, up arrow  $(\Delta)$ , and down arrow  $(\nabla)$ .
- Prompts and directions lead you step-by-step through each setting, assuring you that each setting is correct.
- Audible alarms and signals alert you to check the display screen.
- The cassette, with attached fluid lines, fits into the system only one way so you always insert it correctly. Connections are color coded.
- Settings are changed or adjusted by following the prompts on the display screen and pressing the appropriate button.
- In the event that there is a problem, an alarm sounds and a message appears on the screen. Most situations can be corrected. If you can not correct the problem, call the phone number located in Section 2, *User Assistance Information*, for assistance.

# 5.5 HomeChoice APD Systems Description

There are two models of Baxter *HomeChoice* APD System cyclers described in this guide:

- HomeChoice PRO APD System cycler
- HomeChoice APD System cycler

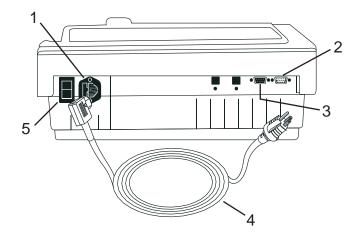
#### 5.5.1 The HomeChoice PRO APD System Cycler



- 1. Heater Pan
- 2. Silver Heater Sensor Button
- 3. Bag Stops
- 4. Serial Number
- 5. Occluder (behind Door)

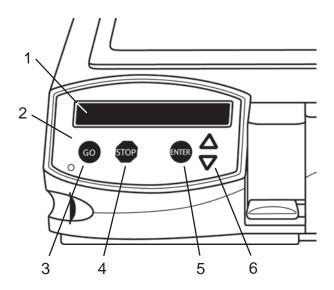
- 6. Door
- 7. Handle (shown in locked position)
- 8. Control Panel
- 9. PRO Card Port

Figure 5-2. Front and Top of the HomeChoice PRO APD System Cycler



- 1. Power Entry
- 4. Power Cord
- 2. J1 Service Port 5. On/Off Switch
- 3. J2 Modem Port

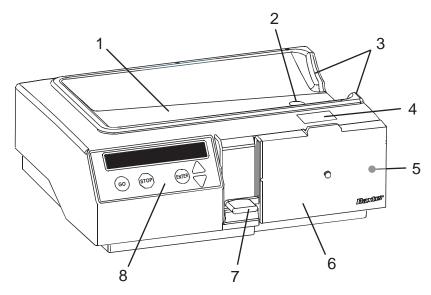
Figure 5-3. HomeChoice PRO APD System Back Panel



- 1. Display Screen
- 4. STOP Button
- 2. Control Panel
- 5. ENTER Button
- 3. GO Button
- 6. UP/DOWN Buttons

Figure 5-4. HomeChoice PRO APD System **Display Screen and Control Panel** 

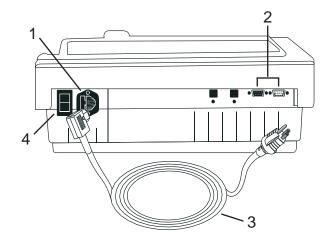
#### 5.5.2 The *HomeChoice* APD System Cycler



- 1. Heater Pan
- 2. Silver Heater Sensor Button
- 3. Bag Stops
- 4. Serial Number
- 5. Occluder (behind Door)

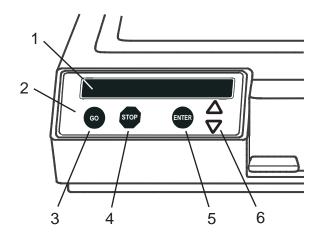
- 6. Door
- 7. Handle (shown in locked position)
- 8. Control Panel

Figure 5-5. Front and Top of the *HomeChoice* APD System Cycler



- 1. Power Entry
- 3. Power Cord
- 2. Service Ports
- 4. On/Off Switch

Figure 5-6. HomeChoice APD System Back Panel



- 1. Display Screen
- 4. STOP Button
- 2. Control Panel
- 5. ENTER Button
- 3. GO Button
- 6. UP/DOWN Buttons

Figure 5-7. *HomeChoice* APD System Display Screen and Control Panel

#### 5.5.3 Control Panel Buttons

The general functions of the control panel buttons are described below.

#### **GO Button**



(Green)

Press the **GO** button to:

- Start or continue therapy
- Continue therapy after an alarm sounds
- Continue therapy after a daytime Dwell

#### **STOP Button**



(Red)

Press the **STOP** button to:

- Return to the previous menu
- Cancel a setting change
- Stop therapy
- Mute to silence an audible alarm

#### **ENTER Button**



(Blue)

Press the **ENTER** button to:

- View a secondary menu
- Edit a setting
- Accept an edited setting
- Move to the next field when editing the date or time

#### **Up/Down Buttons**



(Blue)



Press the up and down buttons to navigate menu items.

## 5.6 Disposable Sets

Disposable sets have one of two types of connections:

- Luer
- Spike

The following disposable sets are available with either connection type:

- Automated PD Set with Cassette 4 Prong
- Integrated APD Set
- Low Recirculation Volume APD Set with Cassette

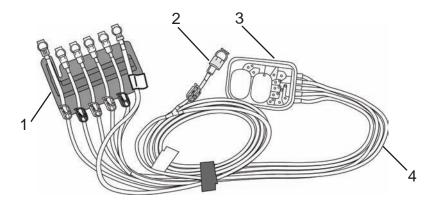
Your dialysis center determines which type of disposable set and connection you use.

Figure 5-8 and Figure 5-9 show a 4-prong Luer disposable set. Figure 5-10 and Figure 5-11 show a 4-prong spike disposable set. Your disposable set may look different.

The instructions in this manual apply to all disposable sets approved for use with the *HomeChoice* and *HomeChoice* PRO APD Systems.

For instructions specific to the type of set you are using, refer to the package insert for your disposable set.

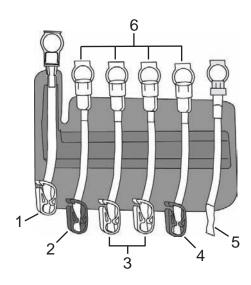
#### **Luer Disposable Set** 5.6.1



1. Organizer

- 3. Cassette
- 2. Effluent Sampling Site
- 4. Lines

Figure 5-8. Luer 4-Prong Disposable Set

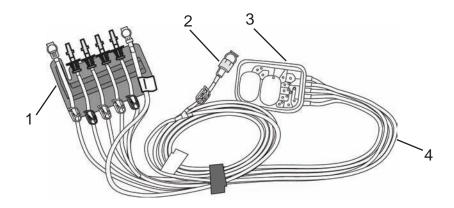


1. Patient Line

- 4. Heater Line (Red Clamp)
- 2. Final Line (Blue Clamp)
- 5. Drain Line
- 3. Supply Lines (White Clamps) 6. Luer Connectors

Figure 5-9. Luer 4-Prong Lines and Connectors

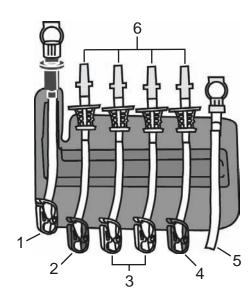
#### 5.6.2 Spike Disposable Set



1. Organizer

- 3. Cassette
- 2. Effluent Sampling Site
- 4. Lines

Figure 5-10. Spike 4-Prong Disposable Set



1. Patient Line

- 4. Heater Line (Red Clamp)
- 2. Final Line (Blue Clamp)
- 5. Drain Line
- 3. Supply Lines (White Clamps) 6. Spike Connectors

Figure 5-11. Spike 4-Prong Lines and Connectors

# 5.7 HomeChoice APD System and HomeChoice PRO APD System Differences

The *HomeChoice* APD System and *HomeChoice* PRO APD System are the same in operation, except for the PRO Card feature. The PRO Card feature stores prescription and therapy data. The data can be transferred between your cycler and your clinician. The two systems use the same disposable sets and solutions. They perform the same therapies the same way.

Section 8, *Operating Instructions – PRO Card and Modem*, of this guide describes the PRO Card and modem features of the *HomeChoice* PRO APD System. All other sections apply to both the *HomeChoice* APD System and the *HomeChoice* PRO APD System.

Illustrations shown in the rest of this guide are of the *HomeChoice* PRO APD System; however, the instructions apply to both systems.

# Section



**Environmental Conditions** 

6

# **Environmental Conditions**

# 6.1 Operating Conditions

The *HomeChoice* and *HomeChoice* PRO APD Systems are designed for use in these conditions:

- Temperature between 59°F to 96.8°F (15°C to 36°C)
- Humidity between 15% and 85%
- Altitude of -1,100 ft to +10,000 ft (-340 m to +3,050 m)

# 6.2 Use While Traveling

The system is designed to be portable and to allow you to travel. To be sure that your therapies continue smoothly, contact your dialysis center about the following:

- When you will not be taking your supplies with you, arrange with your dialysis center well in advance of your trip. Your solution and disposable sets can be delivered to you at your destination.
- If you are traveling out of the region where you live, inquire about any emergency contact information that you will need.
- If you are traveling to another country, the solution bag connection method may be different. Your dialysis center can provide you with information about any differences in supplies and connection methods.
- Some regions of the world use different voltage levels, frequencies, and plug shapes. Ask your dialysis center about the use of approved plug adaptors. Also ask about step-up or step-down isolation transformers with a minimum rating of 500 watts (continuous). Use an isolation transformer in countries with the same voltage as the U.S. if there is any doubt about the proper grounding of an electrical outlet.

To avoid any interruption in your therapy during long trips, obtain the needed supplies for at least a full day's manual exchanges (CAPD). Perform manual exchanges if your cycler is lost or damaged in transit, or your supplies do not arrive on time.

# Section

**Setup and Check-out** 

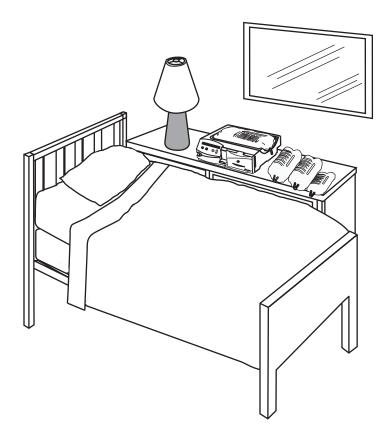
# **Setup and Check-out**

Setup and check-out refers to installing the *HomeChoice* APD System or *HomeChoice* PRO APD System (the "system") in your home.

#### 7.1 Check-out

- 1. Check the cycler for external damage. See 5.5, *HomeChoice APD Systems Description*, on page 5-8 for a description of the system and its components.
- 2. Verify that a power cord was included in the box.
- 3. If you see any damage on the cycler or the cord is missing, contact Baxter Technical Assistance. See 2.2, *Numbers to Call for Assistance*, on page 2-1.

# 7.2 Set Up the HomeChoice APD System



Place the *HomeChoice/HomeChoice* PRO APD System cycler on a stable, clean, flat surface (table or nightstand) in a well-lighted area. The table should be large enough to hold the cycler and all of the solution bags. Make sure a **three-prong grounded outlet** is nearby. See 7.3, *Grounding Instructions*, on page 7-4 for warnings concerning the three-prong outlet.

Be sure the cycler is placed at the same height as you when you are lying in bed.

- To *decrease* the flow rate during Drain, raise the cycler by approximately 6 inches (15 cm).
- To *increase* the flow rate during Drain, lower the cycler by approximately 6 inches (15 cm).

#### **WARNING**

Do not place the cycler more than 12 inches (30 cm) higher or lower than you when you are lying in bed.

- Placing the cycler more than 12 inches (30 cm) above your position can produce higher than normal flow rates during Fill and lower than normal flow rates during Drain. This can cause pain or discomfort during Fill and extend the duration of the Drain phase. This can result in a loss in Dwell Time or an increase in LOW DRAIN VOLUME alarms.
- Placing the cycler more than 12 inches (30 cm) below your position can produce higher than normal negative pressure during Drain if the peritoneal membrane is in contact with the catheter. This can cause pain, discomfort or, in extreme cases, peritoneal membrane damage.

#### **WARNING**

Place the solution bags on a flat, stable surface. To prevent bags from falling, do not stack bags on top of each other. Falling bags can result in a disconnect or leak. Possible contamination of the fluid or fluid pathways can result if a fluid leak occurs. Contamination of any portion of the fluid or fluid path can result in peritonitis.

#### **WARNING**

The *HomeChoice/HomeChoice* PRO APD System should not be used next to, or stacked with, other electrical equipment. Such equipment may cause the cycler to operate incorrectly. However, if it is necessary to use the cycler close to other equipment, the cycler should be monitored to verify normal operation.

## 7.3 Grounding Instructions

This product must be grounded. In the event of an electrical short circuit, grounding reduces the risk of electric shock by providing an escape wire for the electric current. This product is equipped with a cord that has a grounding wire with a grounding plug. The plug must be inserted into an outlet that is properly installed with a verified ground. Please contact your dialysis center for any questions concerning the outlet.

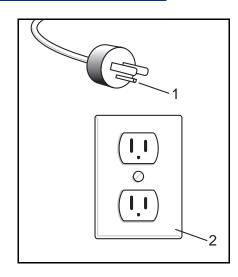
#### **WARNING**

If you do not understand these grounding instructions, contact a qualified service person. Improper use of the grounding plug can result in a risk of electric shock.

#### **WARNING**

If you can not insert the power cord plug into the wall outlet, do not alter the plug. Contact an electrician to modify or replace the wall outlet.

When the *HomeChoice/HomeChoice* PRO APD System is used on a 120V circuit, make sure that the plug is as shown at right.



- 1. Grounding Pin
- 2. Grounded Outlet Box

## Section

Operating Instructions – PRO Card and Modem

## Operating Instructions – PRO Card and Modem

### 8.1 Introduction

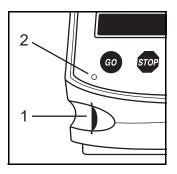
NOTE: If your dialysis center does not use the PRO Card feature, skip this section and continue with Section 9, *Operating Instructions – Change Program*. The PRO Card feature can only be used with the *HomeChoice* PRO APD System.

Your *HomeChoice* PRO APD System has a computerized data transfer feature – the **PRO Card**.

During your initial training, your dialysis nurse or physician showed you a small electronic data card that fits into your system. The PRO Card holds treatment information and is used by your dialysis center to automatically set up your therapy. The PRO Card also records information about each treatment.

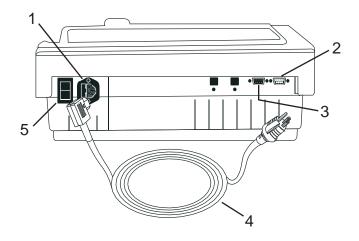
The PRO Card holds at least two months of treatment information. This feature provides information to your dialysis center to help improve your therapy.

You might also use a modem and a phone line to transfer PRO Card information to the dialysis center. See 8.4, *Install the Modem Option*, on page 8-14.



- 1. PRO Card Port
- 2. Indicator Light

Figure 8-1. PRO Card Port



- 1. Power Entry
- 4. Power Cord
- 2. J1 Service Port
- 5. On/Off Switch
- 3. J2 Modem Port

Figure 8-2. HomeChoice PRO APD System Back Panel

## 8.2 Using the PRO Card

At the time of your initial training, your physician gave you a PRO Card. The PRO Card contains your personal therapy settings prescribed for you by your physician.

Just insert your PRO Card into your *HomeChoice* PRO APD System. Treatment results from your therapy are recorded to the PRO Card. This data provides your physician with important information about your therapy.

**NOTE:** The PRO Card must remain in the *HomeChoice* PRO APD System until you bring it with you to your next dialysis center visit.

#### 8.2.1 Care and Handling of the PRO Card

The PRO Card is compact and durable. It is designed to be carried to and from your dialysis center visits. It must remain inserted in the *HomeChoice* PRO APD System at all other times.

Please follow these guidelines for handling your PRO Card:

- Make sure that the main power switch of the *HomeChoice* PRO APD System is OFF before you insert or remove the PRO Card.
- Do not use excessive force when you insert or remove the PRO Card from the port. The PRO Card slides easily into the PRO Card port.
- Do not insert anything other than your PRO Card into the PRO Card port.
- Do not bend the PRO Card.
- Always store the PRO Card in its case to transport it.
- Keep the PRO Card away from magnets.

#### 8.2.2 Confirm Your PRO Card

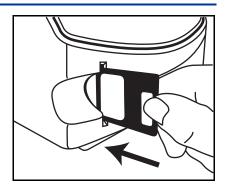
When you return from a visit to your dialysis center with a new or reprogrammed PRO Card, you must verify that you have the correct card.

The following steps help you to confirm your name and patient ID.

#### **Steps to confirm your PRO Card**

## 1. With the cycler power OFF, insert the PRO Card into the PRO Card port.

#### **Display screen**



2. Turn on the *HomeChoice* PRO APD System.

Wait until the CONFIRM CARD message appears.

3. Press **ENTER**.

Your name appears.

4. Press **ENTER**.

Your patient identification number appears.

5. Press **ENTER**.

CONFIRM CARD

CONT TAM CAND

(YOUR NAME)

(YOUR ID#)

#### 8.2.3 Confirm a New Therapy

CONFIRM NEW PROGRAM appears if the therapy settings on your PRO Card have changed. Press **ENTER** if the setting is correct.

The steps below show an example of a CCPD/IPD therapy. The steps taken to confirm HI-DOSE CCPD/IPD, TIDAL, or HI-DOSE TIDAL therapies are similar. Only the settings that changed appear.

NOTE: Press STOP if a displayed item is not correct. PROGRAM REJECTED appears. Keep the PRO Card in the device to collect treatment information. You must report this to your dialysis center and verify your therapy settings manually before proceeding with treatment. Press GO to proceed to PRESS GO TO START.

	Steps to confirm a New Therapy –  CCPD/IPD example Display screen						
		IEW PROGRAM appears if the therapy your PRO Card have changed.	CONFIRM NEW PROGRAM				
1.	Press <b>E</b>	INTER.	THERAPY: CCPD/IPD				
2.	Press <b>E</b>	NTER.	TOTAL VOL: ML				
3.	Press <b>E</b>	NTER.	THERAPY TIME: HH:MM				
4.	Press <b>E</b>	NTER.	FILL VOL: ML				
>	NOTE:	Your Fill Volume in milliliters (mL) should values shown in Table 19-7 on page 19-15 center to confirm your Fill Volume if it exc	5. Contact your dialysis				
5.	Press <b>E</b>	NTER.	LAST FILL VOL: ML				

### 8. Operating Instructions – PRO Card and Modem

	ps to confirm a New Therapy – PD/IPD example <i>(Continued)</i>	Display screen		
6.	Press <b>ENTER.</b>	DEXTROSE:		
	Skip this step if the LAST FILL VOLUME = 0			
7.	Press <b>ENTER.</b>	MIN DRAIN VOL: %		
8.	Press <b>ENTER.</b>	MODE: LOW FILL		
	(This setting appears in Low Fill Mode only.)			
9.	Press <b>ENTER.</b>	NEG UF LIMIT: %		
	(This setting appears in Low Fill Mode only.)			
10.	Press <b>ENTER.</b>	POS UF LIMIT: OFF%		
	(This setting appears in Low Fill Mode only.)			
11.	Press <b>ENTER.</b>	PLEASE WAIT		
	HomeChoice PRO APD System then calculates and briefly displays CYCLES and DWELL TIME.	CYCLES:		
	PROGRAM ACCEPTED then appears.	DWELL TIME: HH:MM		
		PROGRAM ACCEPTED		

PRESS GO TO START appears when all information is confirmed, accepted, and saved by the *HomeChoice* PRO APD System. The *HomeChoice* PRO APD System is then ready for you to begin your therapy. See Section 11, *Operating Instructions – Prepare for Therapy*.

NOTE: If you make manual programming changes on your system after you confirm the program on your PRO Card, those changes are saved in a "swap" file on your PRO Card. The changes are also written in your treatment file. The cycler uses these new settings for your treatment. The original prescription remains unchanged on your PRO Card.

#### 8.2.4 HomeChoice PRO APD System Prompts

The *HomeChoice* PRO APD System records information needed by your physician, such as your weight, blood pressure, and day or manual exchanges. The system displays daily messages to prompt you to enter this information.

Three buttons are used to enter data: **ENTER**,  $\triangle$  (up arrow), and  $\nabla$  (down arrow). The data entry menu only appears when you turn on the *HomeChoice* PRO APD System.

Shown below are the basic steps for entering data in the entry prompts. The setting shown for each entry is zero (0) until you enter your data.

Ba	sic steps for entering data	Display screen
1.	Press <b>ENTER</b> when the data entry prompt appears.	WEIGHT: 000.0LB
	The zero setting is replaced with the previous day's data. The digits blink.	(Digits blink)
2.	Press $\triangle$ and $\nabla$ to adjust the setting.	WEIGHT: <u>160. 0</u> LB
3.	Press <b>ENTER</b> to save the setting.	WEIGHT: 160. OLB
	The digits stop blinking.	(Blinking stops)
4.	Press $ abla$ to display the next data entry prompt.	BL00D PRES: 000/000
5.	Continue entering data for each of the prompts by repeating Steps 2 through 4.	
6.	Press <b>STOP</b> when all data is entered or to exit the data entry menu.	PRESS GO TO START
	PRESS GO TO START appears. Data that was entered is saved on the PRO Card along with data from the upcoming treatment.	

**NOTE:** To return to the *HomeChoice* PRO APD System data entry prompts, the system must be turned OFF and then back ON *before the therapy begins*.

#### 8.2.5 Definitions of Data Entry Prompts

Table 8-1 and Table 8-2 list all the prompts available on the *HomeChoice* PRO APD System. See *Basic steps for entering data* on page 8-7.

NOTE: Only those prompts selected by your dialysis nurse appear on your cycler.

Table 8-1. Definitions of Data Entry Prompts

Prompt	Display and Definition
Weight	WEIGHT: 0. OLB
	Your daily weight to the tenths place.
Blood Pressure	BL00D PRES: 000/000
	The systolic and diastolic numbers of your daily blood pressure.
Night Concentration 1	NIGHT CONC. 1: 0.00
Concentration	This is the concentration of the primary solution bag placed on the heater pan. Available concentrations are: 4.25%, 2.5%, and 1.5%.
Night Concentration 2	NIGHT CONC. 2: 0.00
Concentration 2	The second night concentration is for the supply solutions that may be different from the heater bag solution. Available concentrations are: 4.25%, 2.5%, and 1.5%.
Last Fill Concentration	LAST FILL CONC: 0.00
Concentration	The Last Fill Concentration is for the last solution bag. The Last Fill Concentration may be different from the heater bag and other supply bag concentrations. Available concentrations are: <b>Dianeal</b> 4.25%, 2.5%, 1.5%, and <b>Extraneal</b> .

**Table 8-2. Definitions of Manual Daytime Exchanges Prompts** 

Prompt	Display and Definition
# of Day Exchanges	# OF DAY EXCHANGES:
	The number of CAPD manual exchanges performed using an <b>UltraBag</b> system. If no manual exchanges were performed on a given day, a 0 (zero) is entered.
_	are repeated for each manual exchange. The <i>n</i> is a to indicate the manual exchange for the data entered.
Exchange Time <i>n</i>	EXCH TIME n: 00:00AM
	This is the time of day (AM/PM format) that the <i>n</i> th manual exchange was performed.
Day Drain <i>n</i>	DAY DRAIN n: 0000ML
	This is the volume of solution that the patient drained during the <i>n</i> th manual exchange. This volume must be measured and entered in mL.
Day Fill <i>n</i>	DAY FILL n: 0000ML
	This is the <i>n</i> th manual exchange Fill Volume in mL.
Day Concentration <i>n</i>	DAY CONC. n: 0.00
	This is the concentration of the <i>n</i> th manual exchange solution.

#### 8.2.6 Remove Your PRO Card

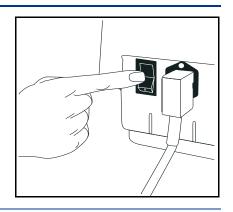
**NOTE:** The PRO Card must remain in the *HomeChoice* PRO APD System until your next visit to your dialysis center.

When you visit your doctor or dialysis center, you are usually asked to bring the PRO Card with you.

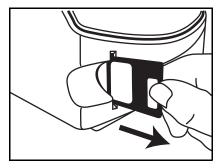
Follow the steps below to remove your PRO Card.

#### Steps to remove your PRO Card

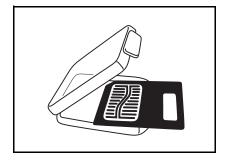
1. Turn off the *HomeChoice* PRO APD System.



- 2. Slide the PRO Card gently out of the slot.
  - ➤ **NOTE**: Do not bend the PRO Card.



3. Place the PRO Card in its case.



## 8.3 Display Messages

The PRO Card port has an indicator light located on the control panel directly above the port. See Figure 8-1 on page 8-2. This light can be green or yellow.

- **Green** means the card is fully inserted and working.
- **Yellow** means there is a problem with the PRO Card or card reader inside the cycler.

If there is a problem with the PRO Card or the card reader, the following messages can appear.

#### 8.3.1 No PRO Card

Display Message:		NO PRO CARD
Indicator Light:	Fla	shing Yellow
		e PRO Card is not inserted when you turn on the device, or the end of your therapy.
To Correct:	1.	Turn the power switch OFF.
	2.	Insert the PRO Card and turn the power switch ON.
		The indicator light turns Green if the PRO Card is inserted correctly.
		– OR –
	1.	If you can not correct the problem, press <i>GO</i> to continue.
		No therapy information is recorded to the PRO Card. You must report this to your dialysis center.

#### 8.3.2 Card Reader Disabled

Display Message:	CARD READER DISABLED		
Indicator Light:	Off		
Cause:		ur dialysis center disabled the PRO Card functions on your meChoice PRO APD System.	
To Correct:	1.	Call your dialysis center to verify that your PRO Card is disabled.	
	2.	Press <i>GO</i> to proceed to PRESS GO TO START.	

#### 8.3.3 PRO Card Full

Display Message:		PRO CARD FULL
Indicator Light:	Yel	low
Cause:		e PRO Card is full of treatment information not read by ur dialysis center.
To Correct:	1.	Bring your PRO Card to your dialysis center.
		– OR –
	1.	Press <b>GO</b> to continue.
		Information for your next treatment is recorded. However, the oldest treatment record is deleted to make room for the latest treatment.

### 8.3.4 Invalid PRO Card, Program Not Valid

Display Message:		INVALID PRO CARD		PROGRAM NOT VALID
Indicator Light:	Yel	low		
Cause:		e system found a probl y be blank, corrupted,		with the PRO Card. The card amaged.
To Correct:	1. 2.	verify your therapy so	to P sys ettir	RESS GO TO START.  tem is not changed. You must ngs manually with your dialysis d with treatment. Future

#### 8.3.5 Card Reader Error

Display Message:	C	ARD READER ERROR
Indicator Light:	Yel	low
Cause:		e system found a problem with the card reader inside the meChoice PRO APD System.
To Correct:	1.	Call Baxter Technical Assistance. See 2.2, <i>Numbers to Call for Assistance</i> , on page 2-1.
	2.	Press <i>GO</i> to proceed with your treatment.
		Future treatment information can be lost if the problem is not corrected.

## 8.4 Install the Modem Option

In addition to the PRO Card, your *HomeChoice* PRO APD System can also transfer therapy information via a phone line using a modem. If your dialysis center uses this option, you are given a modem to install with your *HomeChoice* PRO APD System. Read the instructions that were provided with your modem for modem operation.

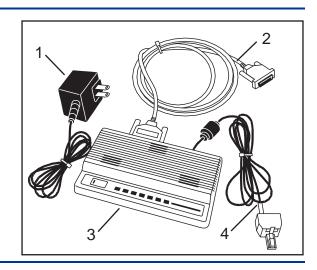
- NOTE: The modem must be Class II and approved to IEC/EN, CSA/UL 60950-1 with a TNV-1 circuit (accessible circuit is limited to 60Vrms).
- **NOTE:** Maintenance of the external modem must only be performed by qualified Baxter Service personnel. See 2.2, *Numbers to Call for Assistance*, on page 2-1.
- NOTE: The modem must be located at least 5 feet (1.5 meters) away from the patient.

Follow the steps below to install your modem.

#### Steps to install your modem

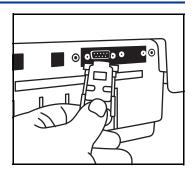
1. Unpack the modem.

- 1. Power Adapter
- 2. Data Cable
- 3. Modem
- 4. Telephone Line with Double Connector for Wall Jack

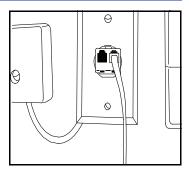


#### Steps to install your modem (Continued)

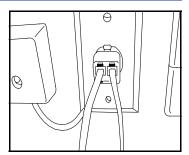
2. Plug the data cable into the J2 Port, as shown.



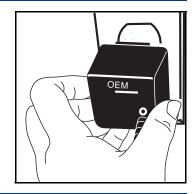
- 3. Unplug the telephone line from the wall jack.
- 4. Plug the double connector into the wall jack.



5. Plug the telephone line and modem line into the double connector.

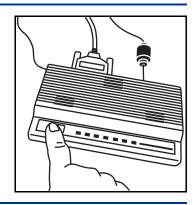


6. Plug the modem power adapter into the wall outlet.



#### Steps to install your modem (Continued)

7. Turn modem power on.



#### 8.4.1 Test the Modem Installation

After you install the modem, call your dialysis center to let them know you are ready to test your modem connection. If possible, use a different phone line to call the dialysis center, such as a cell phone.

A transfer of therapy information is initiated by the dialysis center. The center will then request that you put the *HomeChoice* PRO APD System in the MODEM CONNECT mode.

Follow the steps below to test your modem connection.

	eps to test your odem connection	Display screen
1.	Be sure the modem is installed properly and the modem power is turned on.	
2.	Turn on the <i>HomeChoice</i> PRO APD System.	PRESS GO TO START
3.	Press $\nabla$ until you see MODEM CONNECT.	MODEM CONNECT
>	<b>NOTE:</b> MODEM CONNECT can not occur while your therapy is in progress.	
4.	Press <b>ENTER</b> .	CONNECT I NG

#### Steps to test your modem connection (Continued) Display screen Hang up the telephone, if necessary, and allow the TRANSFERRING. . . dialysis center to call back with their modem. The *HomeChoice* PRO APD System automatically answers. An error message, MODEM ERROR n appears if a MODEM ERROR n problem occurs. Call Baxter Technical Service and report the Modem Error number. See 2.2, Numbers to Call for Assistance, on page 2-1. If an urgent need occurs to use the phone during the transfer, press **STOP**. The transfer stops immediately and the telephone can be used. 6. When the transfer is complete, your telephone is PRESS GO TO START available for use. You do not need to unplug the phone line.

## 8.5 If You Require a New System or "Swap"

If your *HomeChoice* PRO APD System must be returned (or swapped) for service, remove the PRO Card from the old cycler. Insert the PRO Card into the new cycler and turn on the power.

When the display prompts you to CONFIRM CARD, follow the procedures in 8.2.2, *Confirm Your PRO Card*, on page 8-4 and 8.2.3, *Confirm a New Therapy*, on page 8-5. When the card is confirmed, the new system is updated to match the therapy settings on your old system, including any manual changes you made.

NOTE: If you used a modem with your old system, detach the cable from your old system and plug it into the new system. See 8.4, *Install the Modem Option*, on page 8-14 for instructions.

# Section



Operating Instructions – Change Program

# **Operating Instructions – Change Program**

#### 9.1 Introduction

#### **CHANGE PROGRAM**

This section contains information about reviewing and changing your prescribed treatment and system settings. This can be done at the CHANGE PROGRAM prompt.

Even if you have a PRO Card, you still need to learn how to manually change the settings on your *HomeChoice* PRO APD System. To program your system with your PRO Card, see Section 8, *Operating Instructions – PRO Card and Modem*.

## 9.2 About Your System's Settings

Your physician prescribes your treatment and system settings. You view your prescription settings and other system settings on the display screen. Even though you may not have to change your settings, you may be asked for their values by your nurse or your physician.

#### 9.2.1 Nurse's Settings

There are some settings available only to your dialysis nurse. Your dialysis nurse should refer to the *HomeChoice* APD Systems Trainer's Guide for information on programming those settings.

#### 9.3 The Nurse's Menu

NURSE'S MENU

The NURSE'S MENU allows your nurse to tailor the therapy to meet your special needs.

Your dialysis nurse completes the information below to record the data programmed in the Nurse's Menu. Please keep this information available.

**Instructions:** Please have your dialysis nurse check the appropriate box below.

- ☐ The Nurse's Menu has not been changed and the factory default settings are being used.
- ☐ The Nurse's Menu has been adjusted for this patient's special needs. This system is programmed as recorded in Table 9-1.

Table 9-1. Nurse's Menu Settings

Setting	Description	
Mode	MODE: STANDARD (default setting)	
	- or -  MODE: LOW FILL	
Minimum Drain Volume	MIN DRAIN VOL: %	
Minimum Drain Time	MIN DRAIN TIME: (hh:mm) Low Fill Mode only.	
Negative Ultrafiltration (UF) Limit	NEG UF LIMIT: %  Low Fill Mode only.	

Table 9-1. Nurse's Menu Settings (Continued)

Setting	Description
Positive Ultrafiltration (UF)	POS UF LIMIT: ML
Limit	Low Fill Mode only.
Smart Dwells	SMART DWELLS: YES or NO
Heater Bag Empty	HEATER BAG EMPTY: YES or NO
Tidal Full Drains	TIDAL FULL DRNS: YES or NO
	Tidal Mode only.
Language	LANGUAGE:
Flush	FLUSH: YES or NO
Program Locked	PROGRAM LOCKED: YES or NO

## 9.4 If You Receive a New System or "Swap"

If your system must be returned for service, call your dialysis center, and then call Baxter Technical Assistance for instructions. See 2.2, *Numbers to Call for Assistance*, on page 2-1.

In most regions, when a replacement cycler ("swap") is delivered by Baxter, it is *not* programmed with your therapy settings. Your dialysis center is responsible for knowing and entering your therapy settings.

## 9.5 Manual Programming

To manually program your *HomeChoice* APD System or *HomeChoice* PRO APD System (the "system"), press  $\nabla$  (down arrow) before you press *GO* to start your therapy. You can also review or change your settings during your therapy by pressing  $\nabla$ .

#### WARNING

Do not change the settings for your therapy unless directed by your physician. Using incorrect settings can cause patient injury.

#### 9.5.1 Basic Steps for Manual Programming

Three buttons are used to manually review or change your therapy settings: **ENTER**,  $\triangle$  (up arrow), and  $\nabla$  (down arrow).

Your dialysis center determines if you can change your therapy settings.

If you are not allowed to change your settings, the display screen will say REVIEW PROGRAM instead of CHANGE PROGRAM.

See 9.6, *Therapy Type*, on page 9-8, 9.7, *Standard Mode (Standard Fill Mode)*, on page 9-9, and 9.8, *Low Fill Mode*, on page 9-34 for definitions and the allowable ranges for the available setting options.

If you are allowed to change your settings, follow the instructions in *Basic steps to change settings*.

**NOTE:** The values used in the following steps are examples and not intended as recommended values.

Basic steps to change settings		Display screen	
1.	Press $\nabla$ to change or review settings ( <i>before</i> you press <b>GO</b> to start your therapy).	PRESS GO TO START	
	– OR –		
	Press $\nabla$ during your therapy.		
2.	Press <b>ENTER</b> to access the CHANGE PROGRAM menu.	CHANGE PROGRAM	
	THERAPY is the first setting that appears.	THERAPY: CCPD/IPD	
3.	If you do not want to change this setting, press $\nabla$ to see TOTAL VOL (Total Volume).	TOTAL VOL: 15000ML	
4.	Press <b>ENTER</b> to change the setting, if needed.	TOTAL VOL: 15000ML (The option or value blinks)	
5.	Press $\Delta$ and $\nabla$ to change the value.	TOTAL VOL: 14000ML	
6.	Press <b>ENTER</b> to save the new value.	TOTAL VOL: 14000ML (Blinking stops)	
7.	Press $ abla$ to display THERAPY TIME.	THERAPY TIME: 8:00	
	NITE THER TIME (Night Therapy Time) appears for Hi-Dose therapies.	NITE THER TIME: 8:00	
8.	Make changes, if needed, by following Steps 4–6.		
9.	Press $\nabla$ to display FILL VOL (Fill Volume).	FILL VOL: ML	
	NITE FILL VOL (Night Fill Volume) appears for Hi-Dose therapies.	NITE FILL VOL: ML	
10.	Make changes, if needed, by following Steps 4–6.		

## 9. Operating Instructions – Change Program

Basic steps to change settings (Continued)		Display screen
	Press $ abla$ to display LAST FILL VOL (Last Fill Volume).	LAST FILL VOL: ML
12. N	Make changes, if needed, by following Steps 4–6.	
13. F	Press $ abla$ to display DEXTROSE.	DEXTROSE: SAME
,	This setting only appears if you use Last Fill.	L
14. N	Make changes, if needed, by following Steps 4-6.	
15. F	Press $ abla$ to display # OF DAY FILLS.	# OF DAY FILLS:
Т	Γhis setting only appears for Hi-Dose therapies.	
16. N	Make changes, if needed, by following Steps 4-6.	
17. F	Press $ abla$ to display DAY FILL VOL (Day Fill Volume).	;DAY FILL VOL: ML;
	This setting only appears for Hi-Dose therapies.	. 201 2122 132 111 102 .
18. N	Make changes, if needed, by following Steps 4-6.	
19. F	Press $ abla$ to display TIDAL VOL (Tidal Volume).	:TIDAL VOL: %:
,	This setting only appears for Tidal therapies.	
20. N	Make changes, if needed, by following Steps 4-6.	
21. F	Press $ abla$ to display TOTAL UF.	:TOTAL UF: ML:
,	This setting only appears for Tidal therapies.	
22. N	Make changes, if needed, by following Steps 4–6.	
	Press <b>STOP</b> when the option or value is not olinking to exit Change Program.	

#### Basic steps to change settings (Continued)

#### **Display screen**

**NOTE:** The following prompts appear if you do not change the value for Last Fill Volume:

The system calculates the number of cycles. CYCLES appears briefly on the display screen.

CYCLES:

Then the system calculates the Dwell Time. DWELL TIME appears briefly on the display screen.

DWELL TIME: HH: MM

In Tidal therapies, the system also calculates:

TIDAL VOLUME

TIDAL VOLUME:

UF (ultrafiltration) PER CYCLE

**UF PER CYCLE:** 

24. PRESS GO TO START appears on the display screen after the calculated settings.

PRESS GO TO START

You are now ready to press **GO** to begin the setup for your therapy.

- OR -

If you *do* change the value for Last Fill Volume:

CHECK I-DRAIN VOLUME appears on the display screen.

CHECK I-DRAIN VOLUME

25. Press **STOP**.

The I-DRAIN (Initial Drain) ALARM submenu from

I-DRAIN ALARM: <u>60ML</u>

the Make Adjustments menu is shown. This allows you to update the I-Drain Alarm setting to be consistent with the new Last Fill Volume. See

10.2.7, *I-Drain Alarm*, on page 10-9.

(The value blinks)

## 9.6 Therapy Type

The first setting on the Change Program menu is THERAPY type. There are four Therapy types available, as shown in Table 9-2.

**Table 9-2. Therapy Type Options** 

Therapy Type	Display
CCPD/IPD	THERAPY: CCPD/IPD (default setting)
Hi-Dose CCPD	THERAPY: HI-DOSE CCPD
Tidal	THERAPY: TIDAL
Hi-Dose Tidal	THERAPY: HI-DOSE TIDL

See *Terms Used in This Guide* in Section 1, *Glossary*, for the definitions of APD, CCPD, IPD, Tidal, Hi-Dose CCPD, and Hi-Dose Tidal.

## 9.7 Standard Mode (Standard Fill Mode)

The following sections define the therapy settings for Standard Fill Mode. For Low Fill Mode settings, see 9.8, *Low Fill Mode*, on page 9-34.

#### 9.7.1 CCPD/IPD Therapy Settings

THERAPY: CCPD/IPD

Table 9-3 shows the settings programmed for CCPD/IPD therapy in the Standard Fill Mode.

Table 9-3. CCPD/IPD Settings – Standard Fill Mode

Setting	Description
Total Volume	TOTAL VOL: ML
	Total Volume of solution used for the therapy. Includes the total Fill Volume for all cycles and the Last Fill Volume.
	<ul> <li>Minimum setting is 200 mL</li> <li>Maximum setting is 80000 mL</li> <li>Default setting is 200 mL</li> <li>Setting increments: <ul> <li>50 in the 200 to 2000 mL range</li> <li>100 in the 2000 to 5000 mL range</li> <li>500 in the 5000 to 80000 mL range</li> </ul> </li> </ul>
Therapy Time	THERAPY TIME: HH:MM
	Total time for the nighttime portion of therapy. This time is fixed and begins with Initial Drain.
	<ul> <li>Minimum setting is 10 minutes</li> <li>Maximum setting is 48 hours</li> <li>Default setting is 10 minutes</li> <li>Setting increment is 10 minutes</li> </ul>

Table 9-3. CCPD/IPD Settings – Standard Fill Mode (Continued)

#### Setting Description

#### **WARNING**

Your Fill Volume in milliliters (mL) should normally not exceed the values shown in Table 19-7 on page 19-15. Contact your dialysis center to confirm your Fill Volume if it exceeds this volume. Exceeding this volume can result in an increased intraperitoneal volume (IIPV) situation.

IIPV could result in a feeling of abdominal discomfort, serious injury, or death. See page 18-58 for IIPV symptoms or if IIPV is suspected.

Additional care should be taken to monitor for IIPV symptoms for those patients not able to communicate essential information to their caregiver during treatment.

#### **Fill Volume**

FILL VOL: ML

Volume of solution for each nighttime cycle based on your prescription.

- Minimum setting is 100 mL
- Maximum setting is 3000 mL
- Default setting is 250 mL
- Setting increments:
  - 10 in the 100 to 500 mL range
  - 50 in the 500 to 1000 mL range
  - 100 in the 1000 to 3000 mL range

Table 9-3. CCPD/IPD Settings – Standard Fill Mode (Continued)

Setting	Description
Last Fill Volume	LAST FILL VOL: ML
volume	Last Fill Volume delivered at the end of the therapy and left in the peritoneal cavity during the day. Also called "Wet Day."
	<ul> <li>Minimum setting is 0 or 100 mL</li> <li>Maximum setting is 3000 mL</li> <li>Default setting is 0 mL</li> <li>Setting increments: <ul> <li>10 in the 100 to 500 mL range</li> <li>50 in the 500 to 1000 mL range</li> <li>100 in the 1000 to 3000 mL range</li> </ul> </li> </ul>
Dextrose	DEXTROSE: SAME (default setting)
	- or -
	DEXTROSE: DIFFERENT
	The Last Fill Volume can be the same dextrose concentration as the other Fills or it can be different.
	<ul> <li>This setting does not appear if LAST FILL VOL = 0.</li> <li>This setting only appears if you use Last Fill.</li> </ul>

#### 9.7.2 CCPD/IPD Calculated Settings

HomeChoice/HomeChoice PRO APD System calculates the number of night cycles and the Dwell Time. The calculated values are shown on the display screen when you press **STOP** after you have completed reviewing your therapy settings.

Table 9-4. Definitions for CCPD/IPD Calculated Settings

Setting	Description
Cycles	Total number of cycles at night, not including the Last Fill. This parameter is calculated by the system.
Dwell Time	Calculated amount of time the dialysis solution remains in the peritoneal cavity during each cycle. The system may automatically adjust the Dwell Time based on your actual flow rates during Fill and Drain, if your clinician chooses this option.

### 9.7.3 Hi-Dose CCPD Therapy Settings

THERAPY: HI-DOSE CCPD

Table 9-5 shows the settings programmed for Hi-Dose CCPD therapy in the Standard Fill Mode.

Table 9-5. Hi-Dose CCPD Settings – Standard Fill Mode

Setting	Description	
Total Volume	TOTAL VOL: ML	
	Total Volume of solution used for the therapy. Includes the total Day Fill Volume and Night Fill Volume for all cycles, and the Last Fill Volume.	
	<ul> <li>Minimum setting is 200 mL</li> <li>Maximum setting is 80000 mL</li> <li>Default setting is 200 mL</li> <li>Setting increments: <ul> <li>50 in the 200 to 2000 mL range</li> <li>100 in the 2000 to 5000 mL range</li> <li>500 in the 5000 to 80000 mL range</li> </ul> </li> </ul>	
# of Day Fills	# OF DAY FILLS:  Number of daytime exchanges. This setting only appears for a Hi-Dose therapy.	
	<ul> <li>Minimum setting is 0</li> <li>Maximum setting is 9</li> <li>Default setting is 0</li> <li>Setting increment is 1</li> </ul>	

Table 9-5. Hi-Dose CCPD Settings – Standard Fill Mode (Continued)

#### Setting Description

#### **WARNING**

Your Day Fill Volume in milliliters (mL) should normally not exceed the values shown in Table 19-7 on page 19-15. Contact your dialysis center to confirm your Day Fill Volume if it exceeds this volume. Exceeding this volume can result in an increased intraperitoneal volume (IIPV) situation.

IIPV could result in a feeling of abdominal discomfort, serious injury, or death. See page 18-58 for IIPV symptoms or if IIPV is suspected.

Additional care should be taken to monitor for IIPV symptoms for those patients not able to communicate essential information to their caregiver during treatment.

## Day Fill Volume

#### DAY FILL VOL: ML

Volume of solution for each daytime exchange, based on your prescription. This setting only appears for a Hi-Dose therapy.

- Minimum setting is 100 mL
- Maximum setting is 3000 mL
- Default setting is 250 mL
- Setting increments:
  - 10 in the 100 to 500 mL range
  - 50 in the 500 to 1000 mL range
  - 100 in the 1000 to 3000 mL range

➤ **NOTE:** Day Fill Volume may be a different volume from the Night Fill Volume.

Table 9-5. Hi-Dose CCPD Settings – Standard Fill Mode (Continued)

Setting	Description
Night Therapy Time	NITE THER TIME:HH:MM
	Total time for the nighttime portion of therapy. This time is fixed and begins as soon as you complete daytime exchanges.
	<ul> <li>Minimum setting is 10 minutes</li> <li>Maximum setting is 48 hours</li> <li>Default setting is 10 minutes</li> <li>Setting increment is 10 minutes</li> </ul>

#### **WARNING**

Your Night Fill Volume in milliliters (mL) should normally not exceed the values shown in Table 19-7 on page 19-15. Contact your dialysis center to confirm your Night Fill Volume if it exceeds this volume. Exceeding this volume can result in an increased intraperitoneal volume (IIPV) situation.

IIPV could result in a feeling of abdominal discomfort, serious injury, or death. See page 18-58 for IIPV symptoms or if IIPV is suspected.

Additional care should be taken to monitor for IIPV symptoms for those patients not able to communicate essential information to their caregiver during treatment.

Night Fill Volume	NITE FILL VOL: ML
	Volume of solution for each nighttime cycle based on your prescription.
	<ul> <li>Minimum setting is 100 mL</li> <li>Maximum setting is 3000 mL</li> <li>Default setting is 250 mL</li> <li>Setting increments: <ul> <li>10 in the 100 to 500 mL range</li> <li>50 in the 500 to 1000 mL range</li> <li>100 in the 1000 to 3000 mL range</li> </ul> </li> </ul>

Table 9-5. Hi-Dose CCPD Settings – Standard Fill Mode (Continued)

Setting	Description
Last Fill Volume	LAST FILL VOL: ML
T GIGING	Last Fill Volume delivered at the end of the therapy and left in the peritoneal cavity during the day. Also called "Wet Day."
	<ul> <li>Minimum setting is 0 or 100 mL</li> <li>Maximum setting is 3000 mL</li> <li>Default setting is 0 mL</li> <li>Setting increments: <ul> <li>10 in the 100 to 500 mL range</li> <li>50 in the 500 to 1000 mL range</li> <li>100 in the 1000 to 3000 mL range</li> </ul> </li> </ul>
Dextrose	DEXTROSE: SAME (default setting)
	– or –
	DEXTROSE: DIFFERENT
	The Last Fill Volume can be the same dextrose concentration as the other Fills or it can be different.
	<ul> <li>This setting does not appear if LAST FILL VOL = 0.</li> <li>This setting only appears if you use Last Fill.</li> </ul>

## 9.7.4 Hi-Dose CCPD Calculated Settings

HomeChoice/HomeChoice PRO APD System calculates the number of night cycles and the Dwell Time. The calculated values are shown on the display screen when you press **STOP** after you have completed reviewing your therapy settings.

Table 9-6. Definitions for Hi-Dose CCPD Calculated Settings

Settings	Description
Cycles	Total number of cycles at night, not including the Last Fill. This parameter is calculated by the system.
Dwell Time	Calculated amount of time the dialysis solution remains in the peritoneal cavity during each cycle. The system may automatically adjust the Dwell Time based on your actual flow rates during Fill and Drain, if your clinician chooses this option.

## 9.7.5 Tidal Therapy Settings

THERAPY: TIDAL

With Tidal therapy, only a portion of the solution in your peritoneal cavity is drained and replaced with new solution during each therapy cycle.

#### WARNING

Pressing the STOP and GO buttons during successive Tidal Dwell cycles can lead to a gradual increase in intraperitoneal volume (IPV). An increased intraperitoneal volume (IIPV) situation can result for patients with a low Fill Volume and a high number of cycles.

IIPV could result in a feeling of abdominal discomfort, serious injury, or death. See page 18-58 for IIPV symptoms or if IIPV is suspected.

Additional care should be taken to monitor for IIPV symptoms for those patients not able to communicate essential information to their caregiver during treatment.

- **NOTE:** Changing from CCPD to Tidal mode will automatically reset the Tidal Volume % and Total UF to the default settings (5% and 0 mL respectively). If your cycler is programmed with these default settings, contact your clinician to verify that they are correct for you.
- NOTE: The Tidal Volume (Fill Volume x Tidal Volume %) must be at least 95 mL or a CHECK TIDAL VOL PCT alarm will occur. See 18.3.3, *Check Therapy Setting Value*, on page 18-10.
- **NOTE:** Prescription settings can not be adjusted during a Tidal therapy.

Table 9-7, on the following page, shows the settings programmed for Tidal therapy in the Standard Fill Mode.

Table 9-7. Tidal Settings – Standard Fill Mode

Setting	Description
Total Volume	Total Volume of solution used for the therapy. Includes the
	total Fill Volume for all cycles and the Last Fill Volume.
	Minimum setting is 200 mL
	<ul><li>Maximum setting is 80000 mL</li><li>Default setting is 200 mL</li></ul>
	Setting increments:
	<ul> <li>50 in the 200 to 2000 mL range</li> </ul>
	- 100 in the 2000 to 5000 mL range
	<ul> <li>500 in the 5000 to 80000 mL range</li> </ul>
Therapy Time	THERAPY TIME: HH:MM
	Total time for the nighttime portion of the therapy. This time begins with Initial Drain.
	<ul><li>Minimum setting is 10 minutes</li></ul>
	Maximum setting is 48 hours
	<ul><li>Default setting is 10 minutes</li><li>Setting increment is 10 minutes</li></ul>

Table 9-7. Tidal Settings – Standard Fill Mode (Continued)

#### **WARNING**

Your Fill Volume in milliliters (mL) should normally not exceed the values shown in Table 19-7 on page 19-15. Contact your dialysis center to confirm your Fill Volume if it exceeds this volume. Exceeding this volume can result in an increased intraperitoneal volume (IIPV) situation.

IIPV could result in a feeling of abdominal discomfort, serious injury, or death. See page 18-58 for IIPV symptoms or if IIPV is suspected.

Additional care should be taken to monitor for IIPV symptoms for those patients not able to communicate essential information to their caregiver during treatment.

#### **Fill Volume**

## FILL VOL: ML

Volume of solution used for each cycle based on your prescription.

- Minimum setting is 100 mL
- Maximum setting is 3000 mL
- Default setting is 250 mL
- Setting increments:
  - 10 in the 100 to 500 mL range
  - **–** 50 in the 500 to 1000 mL range
  - 100 in the 1000 to 3000 mL range

## Tidal Volume %

## TIDAL VOL: %

Volume of fluid drained and refilled during each cycle. This is expressed as a percentage of the initial Fill Volume.

- Minimum setting is 5%
- Maximum setting is 95%
- Default setting is 5%
- Setting increment is 5%

➤ **NOTE:** When the Therapy type is changed from CCPD to Tidal, the Tidal Volume % reverts to the default setting of 5%.

Table 9-7. Tidal Settings – Standard Fill Mode (Continued)

#### **WARNING**

A Total UF volume set too low can result in a gradual buildup of UF volume during the therapy. This can result in an increased intraperitoneal volume (IIPV) situation.

IIPV could result in a feeling of abdominal discomfort, serious injury, or death. See page 18-58 for IIPV symptoms or if IIPV is suspected.

Additional care should be taken to monitor for IIPV symptoms for those patients not able to communicate essential information to their caregiver during treatment.

#### **Total UF**

## TOTAL UF: ML

Total ultrafiltration (UF) expected for the therapy. The system calculates the UF Per Cycle. The UF Per Cycle plus the Tidal Volume is the amount of solution drained during each Tidal Drain.

- Minimum setting is 0 mL
- Maximum setting is 10000 mL
- Default setting is 0 mL
- Setting increments:
  - 10 in the 0 to 1000 mL range
  - 100 in the 1000 to 10000 mL range

#### ➤ NOTES:

- When the Therapy type is changed from CCPD to Tidal, the Total UF reverts to the default setting of zero (0).
- A Total UF volume set too high can result in an increased number of LOW DRAIN VOLUME alarms.

NOTES continued on next page.

Table 9-7. Tidal Settings – Standard Fill Mode (Continued)

Setting	Description
	➤ NOTES: (Continued)
	Seventy percent (70%) of your normal Night UF is a good starting point for determining your optimum Total UF. For help in converting 70% of your expected total therapy UF into a value that can be programmed as your Total UF for your Tidal therapy, see 19.17, Determining Tidal Total UF and Last Manual Drain UF Target Volume Settings, on page 19-18.
	If you use a solution for your Tidal therapy that is different from the solution used in your previous therapy, you may need to adjust your Total UF based on the concentration of the new solution. Contact your dialysis center for recommendations regarding setting your Total UF in this situation.
Last Fill Volume	LAST FILL VOL: ML
Volume	Last Fill Volume delivered at the end of therapy and left in the peritoneal cavity during the day. Also called "Wet Day."
	<ul> <li>Minimum setting is 0 or 100 mL</li> <li>Maximum setting is 3000 mL</li> <li>Default setting is 0 mL</li> <li>Setting increments: <ul> <li>10 in the 100 to 500 mL range</li> <li>50 in the 500 to 1000 mL range</li> <li>100 in the 1000 to 3000 mL range</li> </ul> </li> </ul>

Table 9-7. Tidal Settings – Standard Fill Mode (Continued)

Setting	Description
Dextrose	DEXTROSE: SAME (default setting)
	- or -
	DEXTROSE: DIFFERENT
	The Last Fill Volume can be the same dextrose concentration as the other Fills or it can be different.
	<ul> <li>This setting does not appear if LAST FILL VOL = 0.</li> <li>This setting only appears if you use Last Fill.</li> </ul>
Full Drains Every	FULL DRAINS EVERY:
Lvery	The frequency of Full Drains during Tidal therapy. Only appears if MODE: STANDARD and TIDL FULL DRNS: YES is set in the Nurse's Menu.
	<ul> <li>Minimum setting is 1</li> <li>Maximum setting is 99</li> <li>Default setting is 1</li> <li>Setting increment is 1</li> </ul>

## 9.7.6 Tidal Calculated Settings

The *HomeChoice/HomeChoice* PRO APD System calculates the number of night cycles and the Dwell Time. For a Tidal therapy, the system also calculates Tidal Volume and ultrafiltration (UF) per cycle. The calculated values are shown on the display screen when you press **STOP** after you have completed reviewing your therapy settings.

 Table 9-8.
 Definitions for Tidal Calculated Settings

Setting	Description
Cycles	Total number of cycles at night, not including the Last Fill. This parameter is calculated by the system.
Dwell Time	Calculated amount of time the dialysis solution remains in the peritoneal cavity during each cycle. The system may automatically adjust the Dwell Time based on your actual flow rates during Fill and Drain, if your clinician chooses this option.
Tidal Volume	Actual Tidal Volume calculated based on the Tidal Volume % programmed and the Fill Volume.
UF Per Cycle	Estimated UF Per Cycle based on Total UF programmed and number of cycles calculated.

## 9.7.7 Hi-Dose Tidal Therapy Settings

THERAPY: HI-DOSE TIDL

With Tidal therapy, only a portion of the solution in your peritoneal cavity is drained and replaced with new solution during each therapy cycle.

#### **WARNING**

Pressing the STOP and GO buttons during successive Tidal Dwell cycles can lead to a gradual increase in intraperitoneal volume (IPV). An increased intraperitoneal volume (IIPV) situation can result for patients with a low Fill Volume and a high number of cycles.

IIPV could result in a feeling of abdominal discomfort, serious injury, or death. See page 18-58 for IIPV symptoms or if IIPV is suspected.

Additional care should be taken to monitor for IIPV symptoms for those patients not able to communicate essential information to their caregiver during treatment.

- **NOTE:** Changing from CCPD to Tidal mode will automatically reset the Tidal Volume % and Total UF to the default settings (5% and 0 mL respectively). If your cycler is programmed with these default settings, contact your clinician to verify that they are correct for you.
- NOTE: The Tidal Volume (Fill Volume x Tidal Volume %) must be at least 95 mL or a CHECK TIDAL VOL PCT alarm will occur. See 18.3.3, *Check Therapy Setting Value*, on page 18-10.
- **NOTE:** Prescription settings can not be adjusted during a Tidal therapy.

Table 9-9 shows the settings programmed for Hi-Dose Tidal therapy in the Standard Fill Mode.

Table 9-9. Hi-Dose Tidal Settings – Standard Fill Mode

Setting	Description
Total Volume	TOTAL VOL: ML
	Total Volume of solution used for the therapy. Includes the total Day Fill Volume and Night Fill Volume for all cycles, and the Last Fill Volume.
	<ul> <li>Minimum setting is 200 mL</li> <li>Maximum setting is 80000 mL</li> <li>Default setting is 200 mL</li> <li>Setting increments: <ul> <li>50 in the 200 to 2000 mL range</li> <li>100 in the 2000 to 5000 mL range</li> <li>500 in the 5000 to 80000 mL range</li> </ul> </li> </ul>
# of Day Fills	# OF DAY FILLS:  Number of daytime exchanges. This setting only appears for a Hi-Dose therapy.
	<ul> <li>Minimum setting is 0</li> <li>Maximum setting is 9</li> <li>Default setting is 0</li> <li>Setting increment is 1</li> </ul>

Table 9-9. Hi-Dose Tidal Settings – Standard Fill Mode (Continued)

# **Description**

#### WARNING

Your Day Fill Volume in milliliters (mL) should normally not exceed the values shown in Table 19-7 on page 19-15. Contact your dialysis center to confirm your Day Fill Volume if it exceeds this volume. Exceeding this volume can result in an increased intraperitoneal volume (IIPV) situation.

IIPV could result in a feeling of abdominal discomfort, serious injury, or death. See page 18-58 for IIPV symptoms or if IIPV is suspected.

Additional care should be taken to monitor for IIPV symptoms for those patients not able to communicate essential information to their caregiver during treatment.

### Day Fill Volume

Setting

#### DAY FILL VOL: ML

Volume of solution for each daytime exchange, based on your prescription. This setting only appears for a Hi-Dose therapy.

- Minimum setting is 100 mL
- Maximum setting is 3000 mL
- Default setting is 250 mL
- Setting increments:
  - 10 in the 100 to 500 mL range
  - 50 in the 500 to 1000 mL range
  - 100 in the 1000 to 3000 mL range

## **Night Therapy** Time

## NITE THER TIME:HH:MM

Total time for the nighttime portion of the therapy. This time will begin as soon as you start the last Drain of the daytime exchange.

- Minimum setting is 10 minutes
- Maximum setting is 48 hours
- Default setting is 10 minutes
- Setting increment is 10 minutes

Table 9-9. Hi-Dose Tidal Settings – Standard Fill Mode (Continued)

#### **WARNING**

Your Night Fill Volume in milliliters (mL) should normally not exceed the values shown in Table 19-7 on page 19-15. Contact your dialysis center to confirm your Night Fill Volume if it exceeds this volume. Exceeding this volume can result in an increased intraperitoneal volume (IIPV) situation.

IIPV could result in a feeling of abdominal discomfort, serious injury, or death. See page 18-58 for IIPV symptoms or if IIPV is suspected.

Additional care should be taken to monitor for IIPV symptoms for those patients not able to communicate essential information to their caregiver during treatment.

# Night Fill Volume

## NITE FILL VOL: ML

Volume of solution used for each cycle based on your prescription.

- Minimum setting is 100 mL
- Maximum setting is 3000 mL
- Default setting is 250 mL
- Setting increments:
  - 10 in the 100 to 500 mL range
  - 50 in the 500 to 1000 mL range
  - 100 in the 1000 to 3000 mL range

Table 9-9. Hi-Dose Tidal Settings – Standard Fill Mode (Continued)

Setting	Description
Night Tidal Volume %	NITE TIDAL VOL: %
	Volume of fluid drained and refilled during each cycle. This is expressed as a percentage of the initial Fill Volume.
	<ul> <li>Minimum setting is 5%</li> <li>Maximum setting is 95%</li> <li>Default setting is 5%</li> <li>Setting increment is 5%</li> </ul>
	➤ <b>NOTE:</b> When the Therapy type is changed from CCPD to Tidal, the Night Tidal Volume % reverts to the default setting of 5%.

Table 9-9. Hi-Dose Tidal Settings – Standard Fill Mode (Continued)

#### **WARNING**

A Total UF volume set too low can result in a gradual buildup of UF volume during the therapy. This can result in an increased intraperitoneal volume (IIPV) situation.

IIPV could result in a feeling of abdominal discomfort, serious injury, or death. See page 18-58 for IIPV symptoms or if IIPV is suspected.

Additional care should be taken to monitor for IIPV symptoms for those patients not able to communicate essential information to their caregiver during treatment.

## **Night UF**

## NITE UF: ML

Total ultrafiltration (UF) expected for the therapy. The system calculates the UF Per Cycle. The UF Per Cycle plus the Tidal Volume is the amount of solution drained during each Tidal Drain.

- Minimum setting is 0 mL
- Maximum setting is 10000 mL
- Default setting is 0 mL
- Setting increments:
  - 10 in the 0 to 1000 mL range
  - 100 in the 1000 to 10000 mL range

### ➤ NOTES:

- When the Therapy type is changed from CCPD to Tidal, the Night UF reverts to the default setting of zero (0).
- A Total UF volume set too high can result in an increased number of LOW DRAIN VOLUME alarms.

NOTES continued on next page.

Table 9-9. Hi-Dose Tidal Settings – Standard Fill Mode (Continued)

Setting	Description
	➤ NOTES: (Continued)
	Seventy percent (70%) of your normal Night UF is a good starting point for determining your optimum Total UF. For help in converting 70% of your expected total therapy UF into a value that can be programmed as your Total UF for your Tidal therapy, see 19.17, Determining Tidal Total UF and Last Manual Drain UF Target Volume Settings, on page 19-18.
	■ If you use a solution for your Tidal therapy that is different from the solution used in your previous therapy, you may need to adjust your Total UF based on the concentration of the new solution. Contact your dialysis center for recommendations regarding setting your Total UF in this situation.
Last Fill Volume	Last Fill Volume delivered at the end of therapy and left in the
	peritoneal cavity during the day. Also called "Wet Day."
	<ul> <li>Minimum setting is 0 or 100 mL</li> <li>Maximum setting is 3000 mL</li> <li>Default setting is 0 mL</li> <li>Setting increments: <ul> <li>10 in the 100 to 500 mL range</li> <li>50 in the 500 to 1000 mL range</li> <li>100 in the 1000 to 3000 mL range</li> </ul> </li> </ul>

Table 9-9. Hi-Dose Tidal Settings – Standard Fill Mode (Continued)

Setting	Description
Dextrose	DEXTROSE: SAME (default setting)
	– or –
	DEXTROSE: DIFFERENT
	The Last Fill Volume can be the same dextrose concentration as the other Fills or it can be different.
	<ul> <li>This setting does not appear if LAST FILL VOL = 0.</li> <li>This setting only appears if you use Last Fill.</li> </ul>
Full Drains Every	FULL DRAINS EVERY:
Lvery	The frequency of Full Drains during Tidal therapy. Only appears if MODE: STANDARD and TIDL FULL DRNS: YES is set in the Nurse's Menu.
	<ul> <li>Minimum setting is 1</li> <li>Maximum setting is 99</li> <li>Default setting is 1</li> <li>Setting increment is 1</li> </ul>

## 9.7.8 Hi-Dose Tidal Calculated Settings

The *HomeChoice/HomeChoice* PRO APD System calculates the number of night cycles and the Dwell Time. For a Tidal therapy, the system also calculates Tidal Volume and ultrafiltration (UF) per cycle. The calculated values are shown on the display screen when you press **STOP** after you have completed reviewing your therapy settings.

Table 9-10. Definitions for Hi-Dose Tidal Calculated Settings

Setting	Description
Cycles	Total number of cycles at night, not including the Last Fill. This parameter is calculated by the system.
Dwell Time	Calculated amount of time the dialysis solution remains in the peritoneal cavity during each cycle. The system may automatically adjust the Dwell Time based on your actual flow rates during Fill and Drain, if your clinician chooses this option.
Tidal Volume	Actual Tidal Volume calculated based on the Tidal Volume $\%$ programmed and the Night Fill Volume.
UF Per Cycle	Estimated UF Per Cycle based on Total UF programmed and number of cycles calculated.

## 9.8 Low Fill Mode

The following sections describe the therapy settings for Low Fill Mode. For Standard Fill Mode settings, see 9.7, *Standard Mode (Standard Fill Mode)*, on page 9-9.

### **WARNING**

Patients whose Fill volumes are less than 1000 mL may normally drain slowly. These patients typically weigh less than 44 lbs (20 kg). Use of the Low Fill Mode minimizes the incidence of LOW DRAIN VOLUME and CAUTION: NEGATIVE UF alarms. These alarms can not be bypassed to prevent an increased intraperitoneal volume (IIPV) situation in Low Fill Mode. The Negative UF Limit should not be raised above 50% and the Minimum Drain Volume % should not be lowered below 85%, (the default values). It is required that the Low Recirculation Volume Set be used with Low Fill Mode procedures.

IIPV could result in a feeling of abdominal discomfort, serious injury, or death. See page 18-58 for IIPV symptoms or if IIPV is suspected.

Additional care should be taken to monitor for IIPV symptoms for those patients not able to communicate essential information to their caregiver during treatment.

# 9.8.1 CCPD/IPD Therapy Settings

THERAPY: CCPD/IPD (Low Fill Mode)

Table 9-11 shows the settings programmed for CCPD/IPD therapy in the Low Fill Mode.

Table 9-11. CCPD/IPD Settings – Low Fill Mode

Setting	Description
Total Volume	TOTAL VOL: ML
	Total Volume of solution used for the therapy. Includes the total Fill Volume for all cycles and the Last Fill Volume.
	<ul> <li>Minimum setting is 200 mL</li> <li>Maximum setting is 80000 mL</li> <li>Default setting is 200 mL</li> <li>Setting increments: <ul> <li>50 in the 200 to 2000 mL range</li> <li>100 in the 2000 to 20000 mL range</li> <li>500 in the 20000 to 80000 mL range</li> </ul> </li> </ul>
Therapy Time	THERAPY TIME: HH:MM  Total time for the nighttime portion of therapy. This time is fixed and starts with the Initial Drain.  Minimum setting is 10 minutes  Maximum setting is 48 hours  Default setting is 10 minutes  Setting increment is 10 minutes

Table 9-11. CCPD/IPD Settings – Low Fill Mode (Continued)

#### **WARNING**

Your Fill Volume in milliliters (mL) should normally not exceed the values shown in Table 19-7 on page 19-15. Contact your dialysis center to confirm your Fill Volume if it exceeds this volume. Exceeding this volume can result in an increased intraperitoneal volume (IIPV) situation.

IIPV could result in a feeling of abdominal discomfort, serious injury, or death. See page 18-58 for IIPV symptoms or if IIPV is suspected.

Additional care should be taken to monitor for IIPV symptoms for those patients not able to communicate essential information to their caregiver during treatment.

#### **Fill Volume**

FILL VOL: ML

Volume of solution for each nighttime cycle based on your prescription.

- Minimum setting is 60 mL
- Maximum setting is 1000 mL
- Default setting is 250 mL
- Setting increments:
  - 1 in the 60 to 100 mL range
  - 10 in the 100 to 500 mL range
  - 50 in the 500 to 1000 mL range

Table 9-11. CCPD/IPD Settings – Low Fill Mode (Continued)

Setting	Description
Last Fill Volume	LAST FILL VOL: ML
Volumo	Last Fill Volume delivered at the end of the therapy and left in the peritoneal cavity during the day. Also called "Wet Day."
	<ul> <li>Minimum setting is 0 or 60 mL</li> <li>Maximum setting is 1000 mL</li> <li>Default setting is 0 mL</li> <li>Setting increments: <ul> <li>1 in the 60 to 100 mL range</li> <li>10 in the 100 to 500 mL range</li> <li>50 in the 500 to 1000 mL range</li> </ul> </li> </ul>
Dextrose	DEXTROSE: SAME (default setting)
	– or –
	DEXTROSE: DIFFERENT
	The Last Fill Volume can be the same dextrose concentration as the other Fills or it can be different.
	<ul> <li>This setting does not appear if LAST FILL VOL = 0.</li> <li>This setting only appears if you use Last Fill.</li> </ul>

## 9.8.2 CCPD/IPD Calculated Settings

HomeChoice/HomeChoice PRO APD System calculates the number of night cycles and the Dwell Time. The calculated values are shown on the display screen when you press **STOP** after you have completed reviewing your therapy settings.

Table 9-12. Definitions for CCPD/IPD Calculated Settings

Setting	Description
Cycles	Total number of cycles at night, not including the Last Fill. This parameter is calculated by the system.
Dwell Time	Calculated amount of time the dialysis solution remains in the peritoneal cavity during each cycle. The system may automatically adjust the Dwell Time based on your actual flow rates during Fill and Drain, if your clinician chooses this option.

## 9.8.3 Hi-Dose CCPD Therapy Settings

THERAPY: HI-DOSE CCPD (Low Fill Mode)

#### **WARNING**

Patients whose Fill volumes are less than 1000 mL may normally drain slowly. These patients typically weigh less than 44 lbs (20 kg). Use of the Low Fill Mode minimizes the incidence of LOW DRAIN VOLUME and CAUTION: NEGATIVE UF alarms. These alarms can not be bypassed to prevent an increased intraperitoneal volume (IIPV) situation in Low Fill Mode. The Negative UF Limit should not be raised above 50% and the Minimum Drain Volume % should not be lowered below 85%, (the default values). It is required that the Low Recirculation Volume Set be used with Low Fill Mode procedures.

IIPV could result in a feeling of abdominal discomfort, serious injury, or death. See page 18-58 for IIPV symptoms or if IIPV is suspected.

Additional care should be taken to monitor for IIPV symptoms for those patients not able to communicate essential information to their caregiver during treatment.

Table 9-13 shows the settings programmed for Hi-Dose CCPD therapy in the Low Fill Mode.

Table 9-13. Hi-Dose CCPD Settings – Low Fill Mode

Setting	Description
Total Volume	TOTAL VOL: ML
	Total Volume of solution used for the therapy. Includes the total Day Fill Volume and Night Fill Volume for all cycles, and the Last Fill Volume.
	<ul> <li>Minimum setting is 200 mL</li> <li>Maximum setting is 80000 mL</li> <li>Default setting is 200 mL</li> <li>Setting increments: <ul> <li>50 in the 200 to 2000 mL range</li> <li>100 in the 2000 to 20000 mL range</li> <li>500 in the 20000 to 80000 mL range</li> </ul> </li> </ul>
# of Day Fills	# OF DAY FILLS:
	Number of daytime exchanges. This setting only appears for a Hi-Dose therapy.
	<ul> <li>Minimum setting is 0</li> <li>Maximum setting is 9</li> <li>Default setting is 0</li> <li>Setting increment is 1</li> </ul>

Table 9-13. Hi-Dose CCPD Settings – Low Fill Mode (Continued)

#### **WARNING**

Your Day Fill Volume in milliliters (mL) should normally not exceed the values shown in Table 19-7 on page 19-15. Contact your dialysis center to confirm your Day Fill Volume if it exceeds this volume. Exceeding this volume can result in an increased intraperitoneal volume (IIPV) situation.

IIPV could result in a feeling of abdominal discomfort, serious injury, or death. See page 18-58 for IIPV symptoms or if IIPV is suspected.

Additional care should be taken to monitor for IIPV symptoms for those patients not able to communicate essential information to their caregiver during treatment.

# Day Fill Volume

## DAY FILL VOL: ML

Volume of solution for each daytime exchange, based on your prescription. This setting only appears for a Hi-Dose therapy.

- Minimum setting is 60 mL
- Maximum setting is 1000 mL
- Default setting is 250 mL
- Setting increments:
  - 1 in the 60 to 100 mL range
  - 10 in the 100 to 500 mL range
  - 50 in the 500 to 1000 mL range

## Night Therapy Time

## NITE THER TIME:HH:MM

Total time for the nighttime portion of therapy. This time is fixed and begins as soon as you complete daytime exchanges.

- Minimum setting is 10 minutes
- Maximum setting is 48 hours
- Default setting is 10 minutes
- Setting increment is 10 minutes

Table 9-13. Hi-Dose CCPD Settings – Low Fill Mode (Continued)

#### **WARNING**

Your Night Fill Volume in milliliters (mL) should normally not exceed the values shown in Table 19-7 on page 19-15. Contact your dialysis center to confirm your Night Fill Volume if it exceeds this volume. Exceeding this volume can result in an increased intraperitoneal volume (IIPV) situation.

IIPV could result in a feeling of abdominal discomfort, serious injury, or death. See page 18-58 for IIPV symptoms or if IIPV is suspected.

Additional care should be taken to monitor for IIPV symptoms for those patients not able to communicate essential information to their caregiver during treatment.

## Night Fill Volume

## NITE FILL VOL: ML

Volume of solution for each nighttime cycle based on your prescription.

- Minimum setting is 60 mL
- Maximum setting is 1000 mL
- Default setting is 250 mL
- Setting increments:
  - 1 in the 60 to 100 mL range
  - 10 in the 100 to 500 mL range
  - 50 in the 500 to 1000 mL range

Table 9-13. Hi-Dose CCPD Settings – Low Fill Mode (Continued)

Setting	Description
Last Fill Volume	LAST FILL VOL: ML
Volumo	Last Fill Volume delivered at the end of the therapy and left in the peritoneal cavity during the day. Also called "Wet Day."
	<ul> <li>Minimum setting is 0 or 60 mL</li> <li>Maximum setting is 1000 mL</li> <li>Default setting is 0 mL</li> <li>Setting increments: <ul> <li>1 in the 60 to 100 mL range</li> <li>10 in the 100 to 500 mL range</li> <li>50 in the 500 to 1000 mL range</li> </ul> </li> </ul>
Dextrose	DEXTROSE: SAME (default setting)
	– or –
	[DEXTROSE: DIFFERENT]
	The Last Fill Volume can be the same dextrose concentration as the other Fills or it can be different.
	<ul> <li>This setting does not appear if LAST FILL VOL = 0.</li> <li>This setting only appears if you use Last Fill.</li> </ul>

## 9.8.4 Hi-Dose CCPD Calculated Settings

HomeChoice/HomeChoice PRO APD System calculates the number of night cycles and the Dwell Time. The calculated values are shown on the display screen when you press **STOP** after you have completed reviewing your therapy settings.

**Table 9-14. Definitions for Hi-Dose CCPD Calculated Settings** 

Setting	Description
Cycles	Total number of cycles at night, not including the Last Fill. This parameter is calculated by the system.
Dwell Time	Calculated amount of time the dialysis solution remains in the peritoneal cavity during each cycle. The system may automatically adjust the Dwell Time based on your actual flow rates during Fill and Drain, if your clinician chooses this option.

## 9.8.5 Tidal Therapy Settings

THERAPY: TIDAL (Low Fill Mode)

With Tidal therapy, only a portion of the solution in your peritoneal cavity is drained and replaced with new solution during each therapy cycle.

#### **WARNING**

Pressing the STOP and GO buttons during successive Tidal Dwell cycles can lead to a gradual increase in intraperitoneal volume (IPV). An increased intraperitoneal volume (IIPV) situation can result for patients with a low Fill Volume and a high number of cycles.

IIPV could result in a feeling of abdominal discomfort, serious injury, or death. See page 18-58 for IIPV symptoms or if IIPV is suspected.

Additional care should be taken to monitor for IIPV symptoms for those patients not able to communicate essential information to their caregiver during treatment.

#### **WARNING**

Patients whose Fill volumes are less than 1000 mL may normally drain slowly. These patients typically weigh less than 44 lbs (20 kg). Use of the Low Fill Mode minimizes the incidence of LOW DRAIN VOLUME and CAUTION: NEGATIVE UF alarms. These alarms can not be bypassed to prevent an increased intraperitoneal volume (IIPV) situation in Low Fill Mode. The Negative UF Limit should not be raised above 50% and the Minimum Drain Volume % should not be lowered below 85%, (the default values). It is required that the Low Recirculation Volume Set be used with Low Fill Mode procedures.

IIPV could result in a feeling of abdominal discomfort, serious injury, or death. See page 18-58 for IIPV symptoms or if IIPV is suspected.

Additional care should be taken to monitor for IIPV symptoms for those patients not able to communicate essential information to their caregiver during treatment.

NOTE: The Tidal Volume (Fill Volume x Tidal Volume %) must be at least 95 mL or a CHECK TIDAL VOL PCT alarm will occur. See 18.3.3, *Check Therapy Setting Value*, on page 18-10.

NOTE: Prescription settings can not be adjusted during a Tidal therapy.

Table 9-15 shows the settings programmed for Tidal therapy in the Low Fill Mode.

**Table 9-15. Tidal Settings – Low Fill Mode** 

Setting	Description
Total Volume	Total Volume of solution used for the therapy. Includes the total Fill Volume for all cycles and the Last Fill Volume.  Minimum setting is 200 mL  Maximum setting is 80000 mL  Default setting is 200 mL  Setting increments:  50 in the 200 to 2000 mL range
	<ul> <li>100 in the 2000 to 20000 mL range</li> <li>500 in the 20000 to 80000 mL range</li> </ul>
Therapy Time	THERAPY TIME: HH:MM  Total time for the nighttime portion of therapy. This time begins with Initial Drain.  Minimum setting is 10 minutes  Maximum setting is 48 hours  Default setting is 10 minutes  Setting increment is 10 minutes

Table 9-15. Tidal Settings – Low Fill Mode (Continued)

#### **WARNING**

Your Fill Volume in milliliters (mL) should normally not exceed the values shown in Table 19-7 on page 19-15. Contact your dialysis center to confirm your Fill Volume if it exceeds this volume. Exceeding this volume can result in an increased intraperitoneal volume (IIPV) situation.

IIPV could result in a feeling of abdominal discomfort, serious injury, or death. See page 18-58 for IIPV symptoms or if IIPV is suspected.

Additional care should be taken to monitor for IIPV symptoms for those patients not able to communicate essential information to their caregiver during treatment.

#### **Fill Volume**

FILL VOL: ML

Volume of solution used for each cycle based on your prescription.

- Minimum setting is 60 mL
- Maximum setting is 1000 mL
- Default setting is 250 mL
- Setting increments:
  - 1 in the 60 to 100 mL range
  - 10 in the 100 to 500 mL range
  - 50 in the 500 to 1000 mL range

Table 9-15. Tidal Settings – Low Fill Mode (Continued)

Setting	Description
Tidal Volume %	TIDAL VOL: %
	Volume of fluid drained and refilled during each cycle. This is expressed as a percentage of the initial Fill Volume.
	<ul> <li>Minimum setting is 5%</li> <li>Maximum setting is 95%</li> <li>Default setting is 5%</li> <li>Setting increment is 5%</li> </ul>
	➤ <b>NOTE:</b> When the Therapy type is changed from CCPD to Tidal, the Tidal Volume % reverts to the default setting of 5%.

Table 9-15. Tidal Settings – Low Fill Mode (Continued)

#### **WARNING**

A Total UF volume set too low can result in a gradual buildup of UF volume during the therapy. This can result in an increased intraperitoneal volume (IIPV) situation.

IIPV could result in a feeling of abdominal discomfort, serious injury, or death. See page 18-58 for IIPV symptoms or if IIPV is suspected.

Additional care should be taken to monitor for IIPV symptoms for those patients not able to communicate essential information to their caregiver during treatment.

#### **Total UF**

## TOTAL UF: ML

Total ultrafiltration (UF) expected for the therapy. The system calculates the UF Per Cycle. The UF Per Cycle plus the Tidal Volume is the amount of solution drained during each Tidal Drain.

- Minimum setting is 0 mL
- Maximum setting is 10000 mL
- Default setting is 0 mL
- Setting increments:
  - 10 in the 0 to 1000 mL range
  - 100 in the 1000 to 10000 mL range

### ➤ NOTES:

- When the Therapy type is changed from CCPD to Tidal, the Total UF reverts to the default setting of zero (0).
- A Total UF volume set too high can result in an increased number of LOW DRAIN VOLUME alarms.

(NOTES continued on following page.)

Table 9-15. Tidal Settings – Low Fill Mode (Continued)

Setting	Description	
	➤ NOTES: (Continued)	
	<ul> <li>Seventy percent (70%) of your normal Night UF is a good starting point for determining your optimum Total UF. For help in converting 70% of your expected total therapy UF into a value that can be programmed as your Total UF for your Tidal therapy, see 19.17, Determining Tidal Total UF and Last Manual Drain UF Target Volume Settings, on page 19-18.</li> <li>If you use a solution for your Tidal therapy that is different from the solution used in your previous therapy, you may need to adjust your Total UF based on the concentration of the new solution. Contact your dialysis center for recommendations regarding setting your Total UF in this situation.</li> </ul>	
Last Fill Volume	LAST FILL VOL: ML	
	Last Fill Volume delivered at the end of therapy and left in the peritoneal cavity during the day. Also called "Wet Day."	
	<ul> <li>Minimum setting is 0 or 60 mL</li> <li>Maximum setting is 1000 mL</li> <li>Default setting is 0 mL</li> <li>Setting increments: <ul> <li>1 in the 60 to 100 mL range</li> <li>10 in the 100 to 500 mL range</li> <li>50 in the 500 to 1000 mL range</li> </ul> </li> </ul>	

Table 9-15. Tidal Settings – Low Fill Mode (Continued)

Setting	Description	
Dextrose	DEXTROSE: SAME (default setting) - or -	
	DEXTROSE: DIFFERENT	
	The Last Fill Volume can be the same dextrose concentration as the other Fills or it can be different.	
	<ul> <li>This setting does not appear if LAST FILL VOL = 0.</li> <li>This setting only appears if you use Last Fill.</li> </ul>	
Full Drains Every	FULL DRAINS EVERY:  This setting appears when the therapy type is set to Tidal, a Tidal Full Drains is enabled in the Nurse's Menu by your nurse.	
	<ul> <li>Minimum setting is 1</li> <li>Maximum setting is 99</li> <li>Default setting is 1</li> <li>Setting increment is 1</li> </ul>	
	➤ <b>NOTE:</b> The Full Drains Every setting always defaults to "1" when Tidal Full Drains is enabled. This must be changed in the Therapy menu to prevent full drains <i>every</i> cycle.	
	➤ NOTE: Use this setting to get a full Drain mid-therapy when you have a large number of Tidal cycles. This reduces over- (or under-) fills due to under-(or over-) estimating the Total UF for the Tidal therapy.	

#### 9.8.6 Tidal Calculated Settings

HomeChoice/HomeChoice PRO APD System calculates the number of night cycles and the Dwell Time. For a Tidal therapy, the system also calculates Tidal Volume and ultrafiltration (UF) per cycle. The calculated values are shown on the display screen when you press **STOP** after you have completed reviewing your therapy settings.

**Table 9-16. Definitions for Tidal Calculated Settings** 

Setting	Description	
Cycles	Total number of cycles at night, not including the Last Fill. This parameter is calculated by the system.	
Calculated amount of time the dialysis solution rem the peritoneal cavity during each cycle. The system automatically adjust the Dwell Time based on your flow rates during Fill and Drain, if your clinician chooption.		
Tidal Volume	Actual Tidal Volume calculated based on the Tidal Volume % programmed and the Fill Volume.	
UF Per Cycle	Estimated UF Per Cycle based on Total UF programmed and number of cycles calculated.	

#### 9.8.7 Hi-Dose Tidal Therapy Settings

THERAPY: HI-DOSE TIDL (Low Fill Mode)

With Tidal therapy, only a portion of the solution in your peritoneal cavity is drained and replaced with new solution during each therapy cycle.

#### **WARNING**

Pressing the STOP and GO buttons during successive Tidal Dwell cycles can lead to a gradual increase in intraperitoneal volume (IPV). An increased intraperitoneal volume (IIPV) situation can result for patients with a low Fill Volume and a high number of cycles.

IIPV could result in a feeling of abdominal discomfort, serious injury, or death. See page 18-58 for IIPV symptoms or if IIPV is suspected.

Additional care should be taken to monitor for IIPV symptoms for those patients not able to communicate essential information to their caregiver during treatment.

#### **WARNING**

Patients whose Fill volumes are less than 1000 mL may normally drain slowly. These patients typically weigh less than 44 lbs (20 kg). Use of the Low Fill Mode minimizes the incidence of LOW DRAIN VOLUME and CAUTION: NEGATIVE UF alarms. These alarms can not be bypassed to prevent an increased intraperitoneal volume (IIPV) situation in Low Fill Mode. The Negative UF Limit should not be raised above 50% and the Minimum Drain Volume % should not be lowered below 85%, (the default values). It is required that the Low Recirculation Volume Set be used with Low Fill Mode procedures.

IIPV could result in a feeling of abdominal discomfort, serious injury, or death. See page 18-58 for IIPV symptoms or if IIPV is suspected.

Additional care should be taken to monitor for IIPV symptoms for those patients not able to communicate essential information to their caregiver during treatment.

NOTE: The Tidal Volume (Fill Volume x Tidal Volume %) must be at least 95 mL or a CHECK TIDAL VOL PCT alarm will occur. See 18.3.3, *Check Therapy Setting Value*, on page 18-10.

NOTE: Prescription settings can not be adjusted during a Tidal therapy.

Table 9-17 shows the settings programmed for Hi-Dose Tidal therapy in the Low Fill Mode.

Table 9-17. Hi-Dose Tidal Settings – Low Fill Mode

Setting	Description	
Total Volume	TOTAL VOL: ML	
	Total Volume of solution used for the therapy. Includes the total Day Fill Volume and Night Fill Volume for all cycles, and the Last Fill Volume.	
	<ul> <li>Minimum setting is 200 mL</li> <li>Maximum setting is 80000 mL</li> <li>Default setting is 200 mL</li> <li>Setting increments: <ul> <li>50 in the 200 to 2000 mL range</li> <li>100 in the 2000 to 20000 mL range</li> <li>500 in the 20000 to 80000 mL range</li> </ul> </li> </ul>	
# of Day Fills	# OF DAY FILLS:  Number of daytime exchanges. This setting only appears for a	
	<ul> <li>Hi-Dose therapy.</li> <li>Minimum setting is 0</li> <li>Maximum setting is 9</li> <li>Default setting is 0</li> <li>Setting increment is 1</li> </ul>	

Table 9-17. Hi-Dose Tidal Settings – Low Fill Mode (Continued)

#### Setting Description

#### **WARNING**

Your Day Fill Volume in milliliters (mL) should normally not exceed the values shown in Table 19-7 on page 19-15. Contact your dialysis center to confirm your Day Fill Volume if it exceeds this volume. Exceeding this volume can result in an increased intraperitoneal volume (IIPV) situation.

IIPV could result in a feeling of abdominal discomfort, serious injury, or death. See page 18-58 for IIPV symptoms or if IIPV is suspected.

Additional care should be taken to monitor for IIPV symptoms for those patients not able to communicate essential information to their caregiver during treatment.

#### **Day Fill Volume**

#### DAY FILL VOL: ML

Volume of solution for each daytime exchange. This parameter appears only when the Number of Day Fills has been set to greater than zero (0).

- Minimum setting is 60 mL
- Maximum setting is 1000 mL
- Default setting is 250 mL
- Setting increments:
  - 1 in the 60 to 100 mL range
  - 10 in the 100 to 500 mL range
  - 50 in the 500 to 1000 mL range

#### Night Therapy Time

#### NITE THER TIME:HH:MM

Total time for the nighttime portion of therapy. This time begins as soon as you start the last Drain of the daytime exchange.

- Minimum setting is 10 minutes
- Maximum setting is 48 hours
- Default setting is 10 minutes
- Setting increment is 10 minutes

Table 9-17. Hi-Dose Tidal Settings – Low Fill Mode (Continued)

#### Setting Description

#### **WARNING**

Your Night Fill Volume in milliliters (mL) should normally not exceed the values shown in Table 19-7 on page 19-15. Contact your dialysis center to confirm your Night Fill Volume if it exceeds this volume. Exceeding this volume can result in an increased intraperitoneal volume (IIPV) situation.

IIPV could result in a feeling of abdominal discomfort, serious injury, or death. See page 18-58 for IIPV symptoms or if IIPV is suspected.

Additional care should be taken to monitor for IIPV symptoms for those patients not able to communicate essential information to their caregiver during treatment.

ML

#### Night Fill Volume

#### NITE FILL VOL:

Volume of solution used for each cycle based on your prescription.

- Minimum setting is 60 mL
- Maximum setting is 1000 mL
- Default setting is 250 mL
- Setting increments:
  - 1 in the 60 to 100 mL range
  - 10 in the 100 to 500 mL range
  - 50 in the 500 to 1000 mL range

#### Night Tidal Volume %

# NITE TIDAL VOL:

Volume of fluid drained and refilled during each cycle. This is expressed as a percentage of the initial Fill Volume.

- Minimum setting is 5%
- Maximum setting is 95%
- Default setting is 5%
- Setting increment is 5%
- ➤ **NOTE:** When the Therapy type is changed from CCPD to Tidal, the Night Tidal Volume % reverts to the default setting of 5%.

Table 9-17. Hi-Dose Tidal Settings – Low Fill Mode (Continued)

#### Setting Description

#### **WARNING**

A Total UF volume set too low can result in a gradual buildup of UF volume during the therapy. This can result in an increased intraperitoneal volume (IIPV) situation.

IIPV could result in a feeling of abdominal discomfort, serious injury, or death. See page 18-58 for IIPV symptoms or if IIPV is suspected.

Additional care should be taken to monitor for IIPV symptoms for those patients not able to communicate essential information to their caregiver during treatment.

#### **Night UF**

#### NITE UF: ML

Total ultrafiltration (UF) expected for the therapy. The system calculates the UF Per Cycle. The UF Per Cycle plus the Tidal Volume is the amount of solution drained during each Tidal Drain.

- Minimum setting is 0 mL
- Maximum setting is 10000 mL
- Default setting is 0 mL
- Setting increments:
  - 10 in the 0 to 1000 mL range
  - 100 in the 1000 to 10000 mL range

#### ➤ NOTES:

- When the Therapy type is changed from CCPD to Tidal, the Night UF reverts to the default setting of zero (0).
- A Total UF volume set too high can result in an increased number of LOW DRAIN VOLUME alarms.

(NOTES continued on following page.)

Table 9-17. Hi-Dose Tidal Settings – Low Fill Mode (Continued)

Setting	Description	
	➤ NOTES: (Continued)	
	<ul> <li>Seventy percent (70%) of your normal Night UF is a good starting point for determining your optimum Total UF. For help in converting 70% of your expected total therapy UF into a value that can be programmed as your Total UF for your Tidal therapy, see 19.17, <i>Determining Tidal Total UF and Last Manual Drain UF Target Volume Settings</i>, on page 19-18.</li> <li>If you use a solution for your Tidal therapy that is different from the solution used in your previous therapy, you may need to adjust your Total UF based on the concentration of the new solution. Contact your dialysis center for recommendations regarding setting your Total UF in this situation.</li> </ul>	
Last Fill Volume	LAST FILL VOL: ML	
Volume	Last Fill Volume delivered at the end of therapy and left in the peritoneal cavity during the day. Also called "Wet Day."	
	<ul> <li>Minimum setting is 0 or 60 mL</li> <li>Maximum setting is 1000 mL</li> <li>Default setting is 0 mL</li> <li>Setting increments: <ul> <li>1 in the 60 to 100 mL range</li> <li>10 in the 100 to 500 mL range</li> <li>50 in the 500 to 1000 mL range</li> </ul> </li> </ul>	

Table 9-17. Hi-Dose Tidal Settings – Low Fill Mode (Continued)

Setting	Description	
Dextrose	DEXTROSE: SAME (default setting)	
	– or –	
	[DEXTROSE: DIFFERENT]	
	The Last Fill Volume can be the same dextrose concentration as the other Fills or it can be different.	
	<ul> <li>This setting does not appear if LAST FILL VOL = 0.</li> <li>This setting only appears if you use Last Fill.</li> </ul>	
Full Drains Every	FULL DRAINS EVERY:	
Lvcry	This setting appears when the therapy type is set to Tidal, and Tidal Full Drains is enabled in the Nurse's Menu by your nurse.	
	<ul> <li>Minimum setting is 1</li> <li>Maximum setting is 99</li> <li>Default setting is 1</li> <li>Setting increment is 1</li> </ul>	
	➤ <b>NOTE:</b> The Full Drains Every setting always defaults to "1" when Tidal Full Drains is enabled. This must be changed in the Therapy menu to prevent full Drains <i>every</i> cycle.	
	➤ NOTE: Use this setting to get a full Drain mid-therapy when you have a large number of Tidal cycles. This reduces over- (or under-) fills due to under-(or over-) estimating the Total UF for the Tidal therapy.	

#### 9.8.8 Hi-Dose Tidal Calculated Settings

The *HomeChoice/HomeChoice* PRO APD System calculates the number of night cycles and the Dwell Time. For a Tidal therapy, the system also calculates Tidal Volume and ultrafiltration (UF) per cycle. The calculated values are shown on the display screen when you press **STOP** after you have completed reviewing your therapy settings.

**Table 9-18. Definitions for Hi-Dose Tidal Calculated Settings** 

Setting	Description
<b>Cycles</b> Total number of cycles at night, not including the Last This parameter is calculated by the system.	
Calculated amount of time the dialysis solution remains the peritoneal cavity during each cycle. The system may automatically adjust the Dwell Time based on your actuflow rates during Fill and Drain, if your clinician chooses option.	
Tidal Volume  Actual Tidal Volume calculated based on the Tidal Volume programmed and the Night Fill Volume.	
UF Per Cycle	Estimated UF Per Cycle based on Total UF programmed and number of cycles calculated.

# Section

Operating Instructions – Make Adjustments

# Operating Instructions – Make Adjustments

# 10.1 Make Adjustments Menu

#### MAKE ADJUSTMENTS

The following options are available from the MAKE ADJUSTMENTS menu.

- Adjust Brightness
- Adjust Loudness
- Auto Dim
- Set Clock
- Set Date
- I-Drain Time (Low Fill Mode only)
- I-Drain Alarm
- Comfort Control
- Last Manual Drain
- UF Target and Alarm

#### 10.1.1 Changing Settings

The settings for these options can be changed by your dialysis nurse or physician using your PRO Card, or you can adjust them manually. These settings are not part of your prescription. They do not have to be reviewed or changed every treatment.

# 10. Operating Instructions – Make Adjustments

Follow the basic steps below to make adjustments to your settings.

Basic steps to Make Adjustments		Display screen
1.	Before you press $GO$ to start your therapy, press $\nabla$ .	PRESS GO TO START
	CHANGE PROGRAM appears on the display screen.	CHANGE PROGRAM
2.	Press $\nabla$ again.	MAKE ADJUSTMENTS
	MAKE ADJUSTMENTS appears.	
3.	Press <b>ENTER</b> to access the Make Adjustments menu.	ADJUST BRIGHTNESS
	ADJUST BRIGHTNESS appears.	
4.	If you do not want to change this setting, press $\nabla$ to see the next option.	ADJUST LOUDNESS
5.	Press <b>ENTER</b> to select the setting you want to change.	ADJUST LOUDNESS  (The option or value blinks)
6.	Press $\triangle$ and $\nabla$ to change the option or value.	
7.	Press <b>ENTER</b> to save the option or value.	ADJUST LOUDNESS
8.	Press $\nabla$ to display the next option.	(Blinking stops)
9.	Continue to review or change settings by repeating Steps 4 through 8.	
10.	Press <b>STOP</b> to exit Make Adjustments.	PRESS GO TO START
	The system saves the settings until you change them again.	

# 10.2 Option Settings

# 10.2.1 Adjust Brightness

Follow the steps below to adjust the brightness of the display screen.

Ste	eps to Adjust Brightness	Display screen
1.	Press <b>ENTER</b> to access the MAKE ADJUSTMENTS menu.	MAKE ADJUSTMENTS
2.	ADJUST BRIGHTNESS is the first option.	ADJUST BRIGHTNESS
3.	Press <b>ENTER</b> .	PLEASE ADJUST NOW
	The display screen blinks.	(The display screen blinks)
4.	Press $\triangle$ or $\nabla$ .	PLEASE ADJUST NOW
	The brightness of the display screen will change as you press $\Delta$ or $\nabla$ .	
5.	Press <b>ENTER</b> to save the new brightness level.	ADJUST BRIGHTNESS
	The display screen stops blinking.	(Blinking stops)
6.	Press $ abla$ to display the next option.	ADJUST LOUDNESS
	– OR –	
7.	If you do not want to make any other adjustments, press <b>STOP</b> to exit Make Adjustments.	PRESS GO TO START

# 10.2.2 Adjust Loudness

Follow the steps below to adjust the loudness of the beeps and alarms.

Steps to Adjust Loudness	
ess the MAKE ADJUSTMENTS	MAKE ADJUSTMENTS
T LOUDNESS appears.	ADJUST LOUDNESS
	PLEASE ADJUST NOW
links.	(The display screen blinks)
	PLEASE ADJUST NOW
peep will change as you	
e the new loudness level.	ADJUST LOUDNESS
tops blinking.	(Blinking stops)
ne next option.	AUTO DIM: NO
	e the new loudness level. tops blinking. ne next option.

#### 10.2.3 Auto Dim

If AUTO DIM is set to YES, the display screen turns off during your therapy if no buttons are pressed for five (5) minutes. A single dot will move from left to right across the screen. The display screen will turn back on if an alarm occurs or if a button is pressed.

The default setting is AUTO DIM: NO.

**NOTE:** AUTO DIM will not operate when the display screen is showing the current time or estimated treatment end time.

Follow the steps below to change the Auto Dim option.

Ste	eps to set Auto Dim	Display screen
1.	Press <b>ENTER</b> to access the MAKE ADJUSTMENTS menu.	MAKE ADJUSTMENTS
2.	Press ∇ until AUTO DIM appears.	AUTO DIM: NO
3.	Press <b>ENTER</b> .	AUTO DIM: NO
	The YES or NO blinks.	(YES or NO blinks)
4.	Press $\triangle$ or $\nabla$ to change the setting.	AUTO DIM: YES
5.	Press <b>ENTER</b> to save the new setting.	AUTO DIM: YES
	The blinking stops.	(Blinking stops)
6.	Press $\nabla$ to display the next option.	SET CLOCK: 7:10 AM
	– OR –	
7.	If you do not want to make any other adjustments, press <b>STOP</b> to exit Make Adjustments.	PRESS GO TO START

#### 10.2.4 Set Clock

Follow the steps below to adjust the hour and minutes of the clock.

**NOTE**: The time can not be changed during therapy.

Steps to set the Clock		Display screen
1.	Press <b>ENTER</b> to access the MAKE ADJUSTMENTS menu.	MAKE ADJUSTMENTS
2.	Press    V until SET CLOCK appears.	SET CLOCK: 7:10 AM
3.	Press <b>ENTER</b> .	SET CLOCK: 7:10 AM
	The hour digits blink.	(The hour blinks)
4.	Press $\triangle$ or $\nabla$ to change the hour.	SET CLOCK: 8:10 AM
5.	Press <b>ENTER</b> to save the hour.	SET CLOCK: 8:10 AM
	The minute digits then blink.	(The minutes blink)
6.	Press $\triangle$ or $\nabla$ to change the minutes.	SET CLOCK: 8:30 AM
7.	Press <b>ENTER</b> to save the minutes.	SET CLOCK: 8:30 AM
	AM/PM then blinks.	(AM / PM blinks)
8.	Press $\triangle$ or $\nabla$ to change AM/PM.	SET CLOCK: 8:30 PM
9.	Press <b>ENTER</b> to save the new time.	SET CLOCK: 8:30 PM
	The blinking stops.	(Blinking stops)
10.	Press $\nabla$ to display the next option.	SET DATE: 8 JAN 2000
	– OR –	
11.	If you do not want to make any other adjustments, press <b>STOP</b> to exit Make Adjustments.	PRESS GO TO START

#### 10.2.5 Set Date

Follow the steps below to change the day, month, or year.

**NOTE**: The date can not be changed during therapy.

Steps to set the Date		Display screen
1.	Press <b>ENTER</b> to access the MAKE ADJUSTMENTS menu.	MAKE ADJUSTMENTS
2.	Press ∇ until SET DATE appears.	SET DATE: 8 JAN 2008
3.	Press <b>ENTER</b> .	SET DATE: 8 JAN 2008
	The day digits blink.	(The day blinks)
4.	Press $\triangle$ or $\nabla$ to change the day.	SET DATE: 9 JAN 2008
5.	Press <b>ENTER</b> to save the new day.	SET DATE: 9 JAN 2008
	The month then blinks.	(The month blinks)
6.	Press $\triangle$ or $\nabla$ to change the month.	SET DATE: 9 FEB 2008
7.	Press <b>ENTER</b> to save the new month.	SET DATE: 9 FEB <u>2008</u>
	The year then blinks.	(The year blinks)
8.	Press $\triangle$ or $\nabla$ to change the year.	SET DATE: 9 FEB 2009
9.	Press <b>ENTER</b> to save the new date.	SET DATE: 9 FEB 2009
	The blinking stops.	(Blinking stops)
10.	Press $\nabla$ to display the next option.	I-DRAIN TIME: 10:22
	– OR –	13 ==
11.	If you do not want to make any other adjustments, press <b>STOP</b> to exit Make Adjustments.	PRESS GO TO START

#### 10.2.6 I-Drain Time

**NOTE:** Initial Drain Time (I-DRAIN TIME) appears in Low Fill Mode only.

Review or adjust the I-DRAIN TIME setting if you change your Last Fill Volume or if you perform a CAPD exchange during the day.

Steps to set the I-Drain Time		Display screen
1.	Press <b>ENTER</b> to access the MAKE ADJUSTMENTS menu.	MAKE ADJUSTMENTS
2.	Press ∇ until I-DRAIN TIME appears.	I-DRAIN TIME: 0:22
3.	Press <i>ENTER</i> . The digits blink.	I-DRAIN TIME: 0:22 (The digits blink)
4.	Press $\triangle$ or $\nabla$ to change the minutes. 30 minutes is the maximum time you can set.	I-DRAIN TIME: 0:25
5.	Press <i>ENTER</i> to save the Initial Drain Time. The blinking stops.	I-DRAIN TIME: 0:25 (Blinking stops)
6.	Press ∇ to display the next option.  - OR -	I-DRAIN ALARM:1400ML
7.	If you do not want to make any other adjustments, press <b>STOP</b> to exit Make Adjustments.	PRESS GO TO START

#### 10.2.7 I-Drain Alarm

The Initial Drain Alarm (I-DRAIN ALARM) volume is used to determine the minimum amount of Drain Volume expected during your Initial Drain.

#### **WARNING**

Too low an I-Drain Alarm volume can result in an incomplete Initial Drain followed by a full Fill. This can result in an increased intraperitoneal volume (IIPV) situation.

See Table 10-1 on page 10-11 for the recommended starting points when determining your optimum I-Drain Alarm volume.

IIPV could result in a feeling of abdominal discomfort, serious injury, or death. See page 18-58 for IIPV symptoms or if IIPV is suspected.

Additional care should be taken to monitor for IIPV symptoms for those patients not able to communicate essential information to their caregiver during treatment.

#### **WARNING**

Patients whose Fill volumes are less than 1000 mL may normally drain slowly. These patients typically weigh less than 44 lbs (20 kg). Use of the Low Fill Mode minimizes the incidence of LOW DRAIN VOLUME and CAUTION: NEGATIVE UF alarms. These alarms can not be bypassed to prevent an increased intraperitoneal volume (IIPV) situation in Low Fill Mode. The Negative UF Limit should not be raised above 50% and the Minimum Drain Volume % should not be lowered below 85%, (the default values). It is required that the Low Recirculation Volume Set be used with Low Fill Mode procedures.

IIPV could result in a feeling of abdominal discomfort, serious injury, or death. See page 18-58 for IIPV symptoms or if IIPV is suspected.

Additional care should be taken to monitor for IIPV symptoms for those patients not able to communicate essential information to their caregiver during treatment.

Too high an I-Drain Alarm volume can result in an increased number of LOW DRAIN VOLUME alarms.

If the volume of fluid drained is less than the expected volume, a LOW DRAIN VOLUME alarm sounds. When Slow Flow or No Flow conditions occur during the Initial Drain, the I-Drain Alarm volume is used to determine whether the system alarms or moves on to the Fill cycle.

Review or adjust the I-Drain Alarm setting if you change your Last Fill Volume or if you perform a CAPD exchange during the day. Refer to Table 10-1 on page 10-11 for the recommended settings based on a percentage of the Last Fill Volume.

Table 10-1. Recommended Starting Point for I-Drain Alarm Setting

Last Fill Solution	Last Fill Dwell Time	% of Last Fill Volume
Dianeal	8 to 16 hours	70%*
Dianeal	2 to 4 hours	85%*
Extraneal	8 to 16 hours	95%*

<sup>\*</sup> The settings for these percentages are calculated for you in Table 19-8 on page 19-17 in 19.16, *Determining Initial Drain Alarm Volume Settings*.

▶ NOTE: If the I-DRAIN ALARM is set to OFF, the *HomeChoice* APD System moves on to Fill when a No Flow condition occurs. Baxter recommends that this setting not be used since there is no Minimum Drain Volume requirement. A LOW DRAIN VOLUME alarm is posted if the flow rate is below 50 mL/min for 10 minutes. Subsequent alarms are posted every 5 minutes. The I-DRAIN: OFF option is not available in the Low Fill Mode.

NOTE: For "Dry Day" patients, set the I-Drain Alarm to 0 mL, or a very small volume. If your patient line is greater than 12 feet (3.6 meters) in length, set the I-Drain Alarm to at least 30 mL. Check with your dialysis center for the correct number to set. Setting the I-Drain Alarm to NO in the Standard Fill Mode will activate a No Flow or Slow Flow alarm.

# 10. Operating Instructions – Make Adjustments

Steps to set the I-Drain Alarm		Display screen
1.	Press <b>ENTER</b> to access the MAKE ADJUSTMENTS menu.	MAKE ADJUSTMENTS
2.	Press ∇ until I-DRAIN ALARM appears.	I-DRAIN ALARM: 1400ML
3.	Press <b>ENTER.</b> The volume digits blink.	I-DRAIN ALARM: 1400ML (The volume blinks)
4.	Press $\triangle$ or $\nabla$ to change the setting.	I-DRAIN ALARM: 1800ML
5.	Press <b>ENTER</b> to save the new Initial Drain Alarm volume. The blinking stops.	I-DRAIN ALARM: 1800ML (Blinking stops)
6.	Press ∇ to display the next option.  – OR –	COMFORT CONTROL: 36
7.	If you do not want to make any other adjustments, press <b>STOP</b> to exit Make Adjustments.	PRESS GO TO START

#### 10.2.8 Comfort Control

Follow the steps below to adjust the temperature of the heater bag. The range is from 35°C to 37°C. The default setting is 36°C.

eps to adjust the temperature	Display screen
Press <b>ENTER</b> to access the MAKE ADJUSTMENTS menu.	MAKE ADJUSTMENTS
Press $ abla$ until COMFORT CONTROL appears.	COMFORT CONTROL: 36
Press <b>ENTER</b> .	COMFORT CONTROL: 36
The temperature digits blink.	(The temperature blinks)
Press $\triangle$ or $\nabla$ to change the temperature.	COMFORT CONTROL: 37
Press <b>ENTER</b> to save the new temperature.	COMFORT CONTROL: 37
The blinking stops.	(Blinking stops)
Press $\nabla$ to display the next option.	LAST MANUAL DRAIN: N
– OR –	
If you do not want to make any other adjustments, press <b>STOP</b> to exit Make Adjustments.	PRESS GO TO START
	menu.  Press ∇ until COMFORT CONTROL appears.  Press ENTER.  The temperature digits blink.  Press △ or ∇ to change the temperature.  Press ENTER to save the new temperature.  The blinking stops.  Press ∇ to display the next option.  - OR -  If you do not want to make any other adjustments,

#### 10.2.9 Last Manual Drain

Baxter recommends YES be selected for the LAST MANUAL DRAIN option. A good starting point for setting your Target UF is 70% of your expected Total UF. If the UF is less than the Target UF at the end of the last Drain of the therapy, the system stops and a LOW UF alarm appears on the display screen.

Occasionally, the location of the catheter tip can be in a less-than-optimal position. This can lead to an incomplete Drain of the dialysis solution when lying down. With the Last Manual Drain option, you may want to change position before the Last Fill is performed by the system.

**NOTE:** If a LAST MANUAL DRAIN is set to YES, a UF Target and a UF Alarm must be set. See 10.2.10, *UF Target and Alarm*, on page 10-15.

Follow the steps below to set Last Manual Drain.

Ste	eps to set Last Manual Drain	Display screen
1.	Press <b>ENTER</b> to access the MAKE ADJUSTMENTS menu.	MAKE ADJUSTMENTS
2.	Press $ abla$ until LAST MANUAL DRAIN appears.	LAST MANUAL DRAIN: N
3.	Press <b>ENTER</b> . The N (NO) or Y (YES) blinks.	LAST MANUAL DRAIN: N (N or Y blinks)
4.	Press $\triangle$ or $\nabla$ to change the setting.	LAST MANUAL DRAIN: Y
5.	Press <b>ENTER</b> to save the new setting. The Y or N stops blinking.	LAST MANUAL DRAIN: Y (Blinking stops)
6.	If LAST MANUAL DRAIN is set to YES, press ∇.  UF TARGET appears.  - OR -	UF TARGET: OML
<del></del> 7.	If LAST MANUAL DRAIN is set to NO, press <b>STOP</b>	PRESS GO TO START
	to exit Make Adjustments.	FRESS UU IU SIARI

#### 10.2.10 UF Target and Alarm

This option only appears on the Make Adjustments menu if Last Manual Drain is set to YES.

#### **WARNING**

Setting your UF Target too low can cause an incomplete last Drain, leaving fluid in your peritoneal cavity. This can result in an increased intraperitoneal volume (IIPV) situation during your next Fill.

IIPV could result in a feeling of abdominal discomfort, serious injury, or death. See page 18-58 for IIPV symptoms or if IIPV is suspected.

Additional care should be taken to monitor for IIPV symptoms for those patients not able to communicate essential information to their caregiver during treatment.

The UF TARGET allows you to set a minimum amount of UF that must be drained before the Last Manual Drain option is enabled. Seventy percent (70%) of your expected UF is a good starting point for setting your UF Target. For help in converting 70% of your expected total therapy UF into a value that can be programmed as your Total UF for your Tidal therapy, see 19.17, *Determining Tidal Total UF and Last Manual Drain UF Target Volume Settings*, on page 19-18. If the accumulated UF for the therapy (including nighttime UF and Hi-Dose UF) is below the UF Target at the end of the last regular Drain, the therapy stops and a LOW UF alarm occurs.

# 10. Operating Instructions – Make Adjustments

The ALARM must be programmed YES or NO.

- If ALARM: YES is set, and the UF TARGET is not met, the HomeChoice/HomeChoice PRO APD System beeps continuously. A LOW UF alarm appears on the display screen.
- If ALARM: NO is set, and the UF TARGET is not met, only the LOW UF alarm appears on the display screen. The system will not beep. It will wait for you to wake up and finish draining. At that time, you can change your position and initiate a Manual Drain.

Ste	eps to set UF Target	Display screen
If L	AST MANUAL DRAIN is set to YES:	LAST MANUAL DRAIN: Y
1.	Press $ abla$ to display the UF TARGET screen.	UF TARGET: OML
2.	Press <b>ENTER</b> .	UF TARGET: OML
	The volume digits blink.	(The volume blinks)
3.	Press $\triangle$ or $\nabla$ to change the setting.	UF TARGET: 1200ML
4.	Press <b>ENTER</b> to save the new setting.	UF TARGET: 1200ML
	The blinking stops.	(Blinking stops)
5.	Press $\nabla$ to display the ALARM option.	ALARM: NO
6.	Press <b>ENTER</b> .	ALARM: NO
	The NO or YES blinks.	(NO or YES blinks)
7.	Press $\triangle$ or $\nabla$ to select YES or NO.	ALARM: YES
8.	Press <b>ENTER</b> to save the new setting.	ALARM: YES
	The blinking stops.	(Blinking stops)
9.	If you do not want to make any other adjustments, press <b>STOP</b> to exit Make Adjustments.	PRESS GO TO START

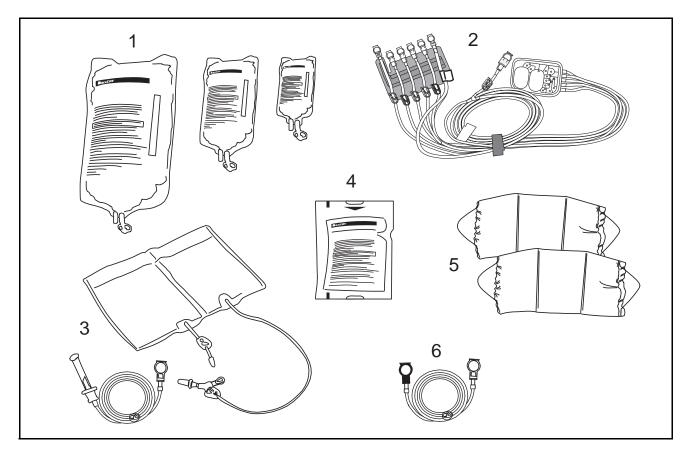
# Section

Operating Instructions – Prepare for Therapy

# **Operating Instructions -Prepare for Therapy**

#### **Gather Your Supplies** 11.1

Gather all the supplies necessary for your dialysis treatment.



- 1. Solution Bags
- 2. Disposable Set (Luer shown)
  - Standard set for Fill volumes above 1000 mL
     Face Mask(s)
  - Low Recirculation Volume set for Fill volumes at or below 1000 mL
- 3. Drain Bag or Drain Line Extension
- 4. Disconnect Cap(s)
- 6. Patient Line Extension, if needed

Figure 11-1. Supplies

#### **WARNING**

Do not use a Patient Line Extension with the Low Recirculation Set. Using an extension with this set increases the recirculation volume and reduces therapy effectiveness.

#### **WARNING**

Do not extend the patient line beyond 34 feet (10.4 meters) for the standard set. Extending the patient line beyond this length increases the recirculation volume and reduces therapy effectiveness.

#### **WARNING**

Do not use a Patient Line Extension Set if tip protectors are not in place. If the tip protectors are not secure, possible contamination of the fluid or fluid pathways can result. Contamination of any portion of the fluid or fluid path can result in peritonitis.

#### **WARNING**

If the solution is not clear, do not use and discard the bag. Follow the labeling instructions supplied with the dialysis solution for storage and preparation. Failure to follow the solution labeling instructions can lead to insufficient therapy or adverse clinical reaction.

# 11.2 Prepare Your Solution Bags

#### **WARNING**

Follow aseptic technique taught by your dialysis center when handling lines and solution bags to reduce the possibility of infection. Always put on a face mask and wash and dry (or disinfect) your hands thoroughly.

#### **WARNING**

If any problems are found while preparing the solution bags, DO NOT USE THE SOLUTION SUPPLY BAG. DISCARD THE BAG and get a fresh dialysis solution supply bag. Using wrong or damaged bags can result in inadequate therapy or contamination of the fluid lines. Contamination of any portion of the fluid or fluid path can result in peritonitis.

Contact Baxter or your dialysis center to report any problems with the bags. See 2.2, *Numbers to Call for Assistance*, on page 2-1.

#### **WARNING**

The solution bag must be positioned properly on the heater pan. The edge of the bag should be placed against the bag stops on the right side of the heater pan. Be sure that the bag completely covers the silver heater sensor button. Failure to properly position the solution bag can result in the delivery of overheated or underheated dialysis fluid.

#### **WARNING**

DO NOT use external heating sources (i.e., microwave oven) to warm solution bags. This can result in overheated solution delivered into your peritoneal cavity.

## 11. Operating Instructions – Prepare for Therapy

For your comfort, and to avoid alarms during priming: If you perform your treatment or if you store your supplies in an area colder than 15°C/59°F, turn on the *HomeChoice/HomeChoice* PRO APD System and place your bag on the heater pan 30 to 60 minutes prior to starting setup. In addition, place the cassette on top of heater bag to help warm it.

Follow the steps below to prepare your solution bags.

#### **Steps to prepare solution bags**

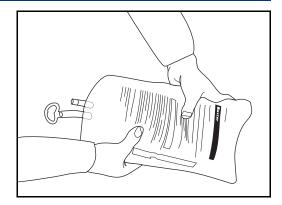
1. Check each solution bag.

Remove the overpouch (protective wrapping) and check the following:

- The solution is clear
- The solution matches the prescribed type
- The dextrose concentration is correct
- The volume of solution in the bag is correct
- The expiration date has not passed
- The pull ring and medication port are in place
- Ensure there are no leaks by:
  - Wiping condensation from the bag and ensuring bag port is separated from bag surface
  - Squeezing the bag
  - Inspecting all seal areas, port areas, and front/back surfaces for leaks

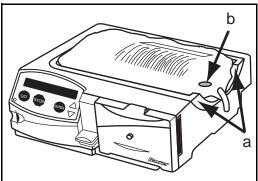
Your clinician may have taught you to check solution bags for **SEAL**:

- Strength
- Expiration Date
- Amount
- Leaks



#### Steps to prepare solution bags (Continued)

- 2. Place one bag on the heater pan.
  - a. Place the edge of the bag against the bag stops on the right side of the heater pan.
  - b. Make sure that the bag completely covers the silver heater sensor button.
  - ➤ **NOTE:** This bag remains on the heater pan throughout the treatment.



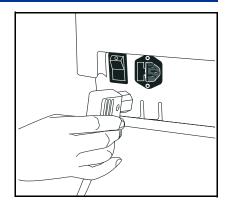
# 11.3 Turn On Your HomeChoice APD System

NOTE: Please read Section 3, Warnings and Cautions, before you turn on your HomeChoice or HomeChoice PRO APD System (the "system").

Follow the steps below to turn on your system.

#### Steps to turn on the system

- 1. Plug the power cord into the back of the cycler.
- 2. Plug the other end of the power cord into a grounded electrical outlet.



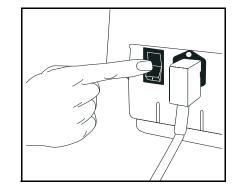
➤ **NOTE:** Be sure to unplug the power cord before you move the cycler.

➤ **NOTE:** If your physician is using the PRO Card option, make sure that the PRO Card is in the system before you turn it on. See Section 8, *Operating Instructions – PRO Card and Modem*, for information regarding the PRO Card.

## 11. Operating Instructions – Prepare for Therapy

#### Steps to turn on the system (Continued)

3. Press the On/Off Switch to the ON position (1). The On/Off Switch is located on the back of the cycler, next to the power cord.

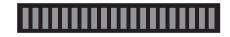


- 4. After turning on the system, make sure you hear the beep that verifies that the audible alarm is working.
- 5. Observe that all of the characters on the display screen have all pixels ON (not blinking) for several seconds.



Pixels are the small dots that form the displayed letters and numbers.

6. Next, observe that all of the characters have all pixels (display dots) OFF for several seconds.



- ➤ **NOTE:** If the display performs differently than stated in Steps 4, 5, and 6, contact Baxter Technical Assistance.
- ➤ **NOTE:** If your dialysis center is using the *HomeChoice* PRO APD System prompts option, the prompts will appear at this time. See Section 8, *Operating Instructions PRO Card and Modem* for information about this option.
- 7. The current operating mode (STANDARD MODE or LOW FILL MODE) appears for a few seconds.

STANDARD MODE ON

When the system is ready, PRESS GO TO START appears.

PRESS GO TO START

➤ **NOTE:** If you have received a new system, or "swap," or your prescription has changed, verify the therapy settings are correct, as directed by your dialysis nurse. See Section 9, *Operating Instructions – Change Program*, for instructions on verifying your therapy settings.

# 11.4 Menu Options at Startup

Prior to starting a therapy you can review your therapy settings, last therapy results, and other information. Table 11-1 lists the options you can select *before* you press *GO* to start your dialysis treatment.

- 1. Press  $\nabla$  to view each option.
- 2. Press *ENTER* to select an option.
- 3. Press **STOP** to return to the previous menu.

Table 11-1. Options Available at Startup

Option	Description
Start Setup	PRESS GO TO START
	Shows that the system is ready for you to begin preparing for your treatment.
Change Program	CHANGE PROGRAM
– OR –	Press <b>ENTER</b> to change your therapy settings. Press <b>STOP</b>
Review Program	to return to the previous menu.
	REVIEW PROGRAM
	REVIEW PROGRAM appears if the program is locked.
	See Section 9, <i>Operating Instructions – Change Program</i> for instructions.
Make Adjustments	MAKE ADJUSTMENTS
1 13,400	Press <b>ENTER</b> to change or review system settings. Press <b>STOP</b> to return to the previous menu.
	See Section 10, Operating Instructions – Make Adjustments, for instructions.

Table 11-1. Options Available at Startup (Continued)

Option	Description
Initial Drain Volume	I-DRAIN VOL: 65ML
VOIUIIIC	Shows the volume from the Initial Drain of your last treatment.
Last Manual Drain	LAST M-DRAIN: 60ML
Diani	Only appears if you drained some fluid using the Manual Drain option after a Last Fill. Shows the amount of solution drained.
Last Ultrafiltration	LAST UF: 350ML
Ultrafiltration	Amount of ultrafiltrate removed during the last treatment. Press <i>ENTER</i> to review cycle-by-cycle information. Press <i>STOP</i> to return to the previous menu.
	If this value is lower than usual, or negative, temporarily increase your I-Drain Alarm setting when Verify I-Drain is displayed prior to the start of the Initial Drain. This ensures a complete Initial Drain. See 10.2.7, <i>I-Drain Alarm</i> , on page 10-9.
Average Dwell Time	AVG DWELL TIME: 1:34
Time	Average actual Dwell Time per cycle for the last treatment. Press <i>ENTER</i> to review cycle-by-cycle information. Press <i>STOP</i> to return to the previous menu.
Alarm Log	ALARM LOG
	Press <b>ENTER</b> to review the last 20 alarms. Press <b>STOP</b> to return to the previous menu.
	LOG IS EMPTY appears if no alarms occurred.

Table 11-1. Options Available at Startup (Continued)

Option	Description
Therapy Log	THERAPY LOG
	Press <b>ENTER</b> to review information about the 5 or 6 most recently performed treatments. It does not include the treatment in process. Press <b>STOP</b> to return to the previous menu.
Modem Connect	MODEM CONNECT
	Press <b>ENTER</b> to begin a modem data transfer. See 8.4, <i>Install the Modem Option</i> , on page 8-14 for details.
Current Time	9:30 PM
	Shows the current time. See 10.2.4, <i>Set Clock</i> , on page 10-6 if you need to change the time.
Software Version	SOFTWARE VER: 10.210
	Shows the software version of the <i>HomeChoice/HomeChoice</i> PRO APD System.
	➤ NOTE: The software version that appears on your system may differ from this example.

# 11.5 Load the Disposable Set

#### WARNING

Connect yourself only when CONNECT YOURSELF appears on the display screen.

Connecting yourself before CONNECT YOURSELF appears can cause air to be delivered to your peritoneal cavity. This can result in shoulder and abdominal pain.

This can also result in an increased intraperitoneal volume (IIPV) situation if you had fluid in your peritoneal cavity prior to the Initial Drain.

IIPV could result in a feeling of abdominal discomfort, serious injury, or death. See page 18-58 for IIPV symptoms or if IIPV is suspected.

Additional care should be taken to monitor for IIPV symptoms for those patients not able to communicate essential information to their caregiver during treatment.

#### **WARNING**

Before loading the disposable set, inspect the cassette and tubing for damage. Using damaged sets can result in contamination of the fluid or fluid pathways. Contamination of any portion of the fluid or fluid path can result in peritonitis.

- Inspect the flexible surfaces of the cassette for obvious signs of damage, including cuts, tears, or punctures.
- Ensure the tip protectors on the ends of the tubing are on and unbroken.

If damage is found, obtain a new disposable set and repeat inspection procedure.

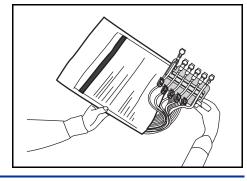
Tubing indentations can be present on disposable sets due to the supple nature of the tubing. Slight tubing indentations are cosmetic in nature and should have no impact on the functionality of the product.

Follow the steps below to load the disposable set.

#### Steps to load the disposable set

- 1. Prepare the disposable set.
  - Open the packaging and remove the disposable set.
  - Close all clamps.
    - 3-prong set has 5 clamps
    - 4-prong set has 6 clamps

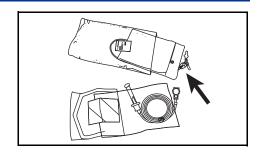




# 11. Operating Instructions – Prepare for Therapy

#### Steps to load the disposable set (Continued)

- 2. Prepare drain option.
  - *For Drain Bag* close the clamp on the line with the blue pull ring.
  - For Drain Line Extension leave the line clamp open.

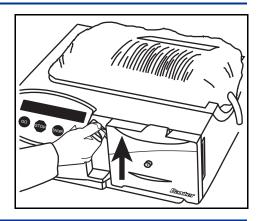


- 3. If you are using a Patient Line Extension Set, open the package and place it on a clean surface.
- 4. Press *GO* when you are ready to begin.

LOAD THE SET appears.

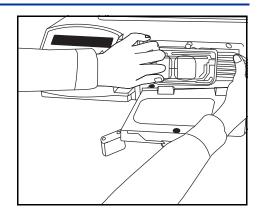
LOAD THE SET

- ➤ NOTE: LOW FILL MODE IS OFF appears if your Fill Volume is less than 1000 mL and you are not using the Low Fill Mode. If this occurs, call your dialysis center to see if your treatment should be performed in the Low Fill Mode. Otherwise, if you are sure the Fill Volume and therapy mode settings are correct, press *GO* again to see LOAD THE SET.
- 5. Push up the handle on the front of the cycler to unlock and open the door.
  - ➤ NOTE: The door must be opened within 2 minutes (30 seconds for Low Fill Mode). If you do not open the door within that time, press *STOP* and *GO* again to retract the occluder for an additional 2 minutes (30 seconds for Low Fill Mode).

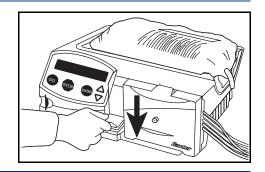


#### Steps to load the disposable set (Continued)

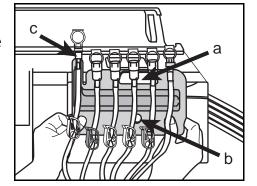
- Load the cassette.
  - The cassette only fits in one way, with the lines leading to the right of the cycler.
  - Insert the cassette bottom edge first, then press in the top.
  - Pull the lines back toward the rear to lock the cassette into the cycler.



- ➤ **NOTE:** Connect yourself only when CONNECT YOURSELF appears on the display screen.
- 7. Press down the handle to close and lock the door.
- ➤ **NOTE:** Do not open the door until ending therapy.



- 8. Place the organizer:
  - a. Place the long slot of the organizer over the hook at the top of the door.
  - b. Snap the lower slot of the organizer over the post at the front of the door.
  - c. Make sure the end of the patient line is correctly positioned in the organizer as shown.



➤ **NOTE:** Connect yourself only when CONNECT YOURSELF appears on the display screen.

# 11.6 Attach the Drain Option

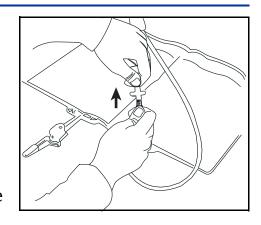
#### **WARNING**

When a drain line extension is used instead of a drain bag, you must leave an air gap (space) between the end of the drain line and any fluid in the drain or container. This prevents non-sterile fluid from flowing backwards up the drain line. Non-sterile fluid can contaminate the fluid path resulting in peritonitis.

Follow the steps below to attach your drain option.

#### Steps to attach a drain option

- 1. Attach your drain option:
  - Drain Line Extension remove tip protectors from both ends of drain.
  - OR -
  - 15L Drain Bag close clamp on short tube to prevent leakage.
  - ➤ **NOTE:** If you use more than one drain bag, use a drain manifold to connect the bags.





- 2. Open all clamps in the drain lines.
- 3. Press *GO*.

The display screen changes to SELF TESTING.

SELF TESTING...

When the self-test is complete, CONNECT BAGS appears.

CONNECT BAGS

# 11.7 Connect the Solution Bags

NOTE: Connect yourself only when CONNECT YOURSELF appears on the display screen.

#### **WARNING**

If the solution bag on the heater pan does not cover the heater button on the right end of the heater, delivery of overheated solution can result. In some circumstances, this can cause injury to the patient. Additional care should be taken when positioning small solution bags on the heater pan.

#### **WARNING**

If you use a Last Fill with a different solution, the line with the BLUE clamp must be connected to the Last Fill solution bag. If the solution concentration is incorrect or the wrong solution is connected to the Last Fill line, UF alarms can occur during therapy because the wrong solution can generate too much or not enough ultrafiltrate volume.

If you discover that your therapy was performed with an incorrect solution, or an incorrect solution was connected to the Last Fill (BLUE clamp) line, contact your dialysis center.

#### **WARNING**

Follow aseptic technique taught by your dialysis center when handling lines and solution bags to reduce the possibility of infection. Always put on a face mask and wash and dry (or disinfect) your hands thoroughly.

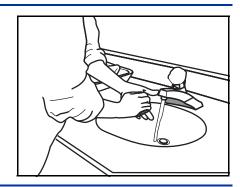
# 11. Operating Instructions – Prepare for Therapy

Follow the steps below to connect your solution bags.

NOTE: Connect yourself only when CONNECT YOURSELF appears on the display screen.

#### Steps to connect solution bags

1. Put on face mask and wash and dry (or disinfect) your hands thoroughly.



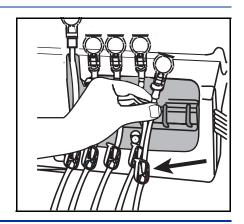
#### **WARNING**

Do not use a Patient Line Extension with the Low Recirculation Set. Using an extension with this set increases the recirculation volume and reduces therapy effectiveness.

#### **WARNING**

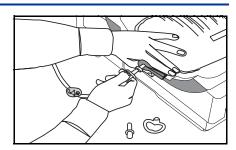
Do not extend the patient line beyond 34 feet (10.4 meters) for the standard set. Extending the patient line beyond this length increases the recirculation volume and reduces therapy effectiveness.

- 2. If you are using a patient extension line, connect it to the patient line.
- 3. Remove the line with the RED clamp.



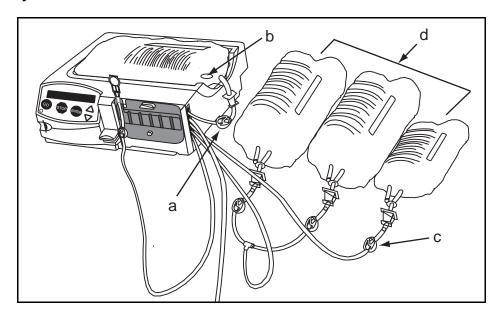
#### Steps to connect solution bags (Continued)

4. Connect the line to the heater bag as you have been taught by your dialysis trainer.



- 5. Repeat for all the solution bags necessary for your treatment.

  The lines with white clamps are for additional solution bags.
- 6. Leave any unused lines in the organizer with clamps closed.
- 7. Review your connections to make sure that:



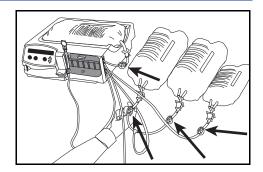
- a. The line with the RED clamp is connected to the solution bag on the heater pan.
- b. The solution bag on the heater pan covers the heater button on the right end of the heater.
- c. The line with the BLUE clamp must be connected to the Last Fill solution bag if you use a Last Fill with a different solution.
- d. You have connected enough bags of the right size to deliver your prescribed volume.

# 11.8 Prime the Disposable Set

Follow the steps below to prime your disposable set.

#### Steps to prime the disposable set

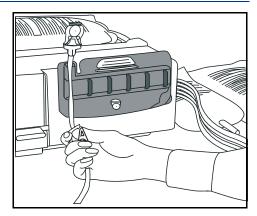
1. Open clamps only on lines connected to solution bags.



2. Open the clamp on the patient line.



- 3. Make sure the end of the patient line and/or extension line is correctly positioned in the organizer.
  - ➤ NOTE: Do NOT connect yourself until CONNECT YOURSELF appears on the display screen.



#### WARNING

Failure to open the clamp on the patient line after connecting the solution bags will prevent the patient line from being primed. This can cause air to be delivered to you during FILL 1.

If CONNECT YOURSELF appears on the display screen and you find the clamp is still closed, do NOT connect yourself. Instead, open the clamp and reprime the patient line. (See 11.8.1, *Reprime the Patient Line*, on page 11-23.) If you have already connected yourself and find the clamp is still closed, start a Manual Drain before you open the clamp. The Manual Drain procedure is located in 18.5, *Manual Drain Procedure*, on page 18-53.

#### Steps to prime the disposable set (Continued)

#### **WARNING**

If your patient line is greater than 12 feet (3.6 meters) in length, and your Initial Drain Alarm is set to less than 30 mL, the Initial Drain can end early and result in an increased intraperitoneal volume (IIPV) situation.

IIPV could result in a feeling of abdominal discomfort, serious injury, or death. See page 18-58 for IIPV symptoms or if IIPV is suspected.

Additional care should be taken to monitor for IIPV symptoms for those patients not able to communicate essential information to their caregiver during treatment.

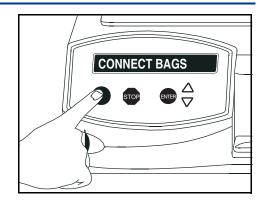
#### **WARNING**

Do not use a Patient Line Extension with the Low Recirculation Set. Using an extension with this set increases the recirculation volume and reduces therapy effectiveness.

#### **WARNING**

Do not extend the patient line beyond 34 feet (10.4 meters) for the standard set. Extending the patient line beyond this length:

- Increases the recirculation volume which can result in reduced therapy effectiveness.
- Impacts priming which can result in air infusion. Air infusion can cause abdominal and/or shoulder pain.
- 4. Press *GO*.



# 11. Operating Instructions – Prepare for Therapy

#### Steps to prime the disposable set (Continued)

PRIMING ... appears.

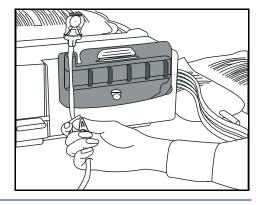
PRIMING...

The display screen alternates between CONNECT YOURSELF and CHECK PATIENT LINE.

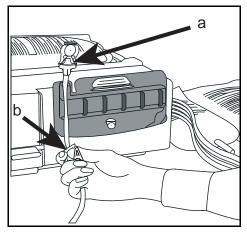
CONNECT YOURSELF

CHECK PATIENT LINE

5. Verify that the patient line is properly primed.



- 6. Before you wash your hands and connect yourself:
  - a. Make sure fluid is present near the connector at the end of the patient line.
  - b. Make sure the patient line clamp is open.



#### **WARNING**

# CHECK FLUID LEVEL IN PATIENT LINE BEFORE CONNECTING

Do not connect to your patient line unless the fluid level is at or near the connector at the end of the disposable set patient line. Connecting when air is present will result in sterile air being delivered during the first Fill if there was no Initial Drain. Air introduced into your peritoneal cavity can cause shoulder or abdominal pain.

#### To ensure proper priming:

- Verify that the white clamp on the patient line is open.
- Verify that the end of the patient line, or the end of the Patient Extension Line when an extension is used, is placed in the left slot in the blue organizer.

#### Before connecting yourself:

- Verify that the fluid level is at or near the connector at the end of the disposable set patient line.
- If the fluid level is not near the connector, reprime the patient line. Press the STOP then ∇ button to access the REPRIME PATIENT LINE screen. Verify that the patient line is properly primed. See 11.8.1, Reprime the Patient Line, on page 11-23. There is no need to load a new set.

➤ NOTE: If a Low Recirculation Volume set is not primed properly, and the Fill Volume is less than 100 mL, a LOW DRAIN VOLUME alarm can occur. Improper priming in these conditions can also contribute to negative UF alarms later in the therapy.

# IF THE POWER IS INTERRUPTED DURING PRIME:

To restart Priming after a power failure during prime:

- 1. Press GO to restart the treatment.
- 2. Press GO again when LOAD THE SET appears.
- 3. Open the bag clamps when CONNECT BAGS appears.
- 4. Make sure all clamps on the patient line and connected lines are open.

#### **WARNING**

If a disposable set is already present in the system after a power failure, CLOSE ALL CLAMPS before you press GO to start your therapy. This prevents flow of fluid from one bag to another and/or to the patient during the time when LOAD THE SET is displayed. Uncontrolled gravity flow of fluid can result in an increased intraperitoneal volume (IIPV) situation.

IIPV could result in a feeling of abdominal discomfort, serious injury, or death. See page 18-58 for IIPV symptoms or if IIPV is suspected.

Additional care should be taken to monitor for IIPV symptoms for those patients not able to communicate essential information to their caregiver during treatment.

#### 11.8.1 Reprime the Patient Line

If the fluid level is not at or near the connector at the end of the patient line, follow the steps below to reprime the patient line.

#### Steps to reprime the patient line

1. Press **STOP** when the display screen alternates between CONNECT YOURSELF and CHECK PATIENT LINE.

CONNECT YOURSELF

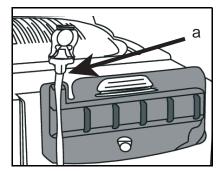
CHECK PATIENT LINE

2. Press  $\nabla$  until REPRIME PATIENT LINE appears.

REPRIME PATIENT LINE

- 3. Press **ENTER**.
- 4. Verify that the patient line is properly primed:
  - a. Make sure fluid is present near the connector at the end of the patient line.

The display screen alternates between CONNECT YOURSELF and CHECK PATIENT LINE.



5. Repeat Steps 1 through 4 until the patient line is primed.

# 11.9 Connect Yourself to the Disposable Set

#### WARNING

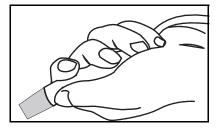
Follow aseptic technique taught by your dialysis center when handling lines and solution bags to reduce the possibility of infection. Always put on a face mask and wash and dry (or disinfect) your hands thoroughly.

Follow the steps below to connect yourself to the system.

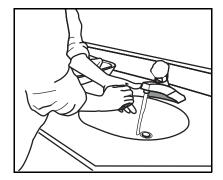
#### Steps to connect yourself

1. Get your transfer set ready.

Make the transfer set accessible, but do not remove the cap until after you have washed your hands.

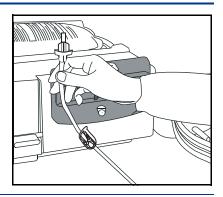


- 2. Prepare the room for treatment as instructed by your dialysis center.
- 3. Put on a face mask and wash and dry (or disinfect) your hands thoroughly.

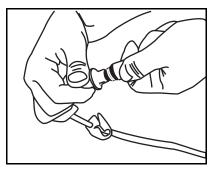


#### Steps to connect yourself (Continued)

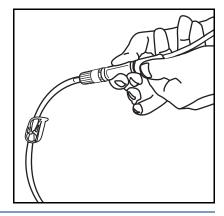
4. Remove the patient line from the organizer.



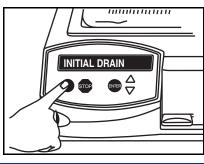
- 5. Connect the transfer set to the patient line.
  - a. Remove pull ring from patient line connector.
  - b. Remove cap from transfer set, and immediately connect to the patient line connector.



6. Open the transfer set.



- Press *GO* to start your treatment.
   Treatment begins with an INITIAL DRAIN.
- 8. Continue with Section 12, *Operating Instructions Perform Therapy*.



# 11. Operating Instructions – Prepare for Therapy

# Section

**Operating Instructions – Perform Therapy** 

# **Operating Instructions – Perform Therapy**

Be sure you have followed all instructions in Section 11, *Operating Instructions* – *Prepare for Therapy*, before proceeding with this section.

#### **Initial Drain** 12.1

Your treatment always begins with INITIAL DRAIN. During each Drain phase, used dialysis solution (effluent) containing waste products and excess fluids, is drained from the peritoneal cavity.

**NOTE:** Change position if the Drain stops and you believe that you are not empty. Fluid may have pocketed near your catheter and changing positions can assist draining.

#### WARNING

Do not replace empty solution bags or reconnect disconnected solution bags during your therapy. If a bag becomes disconnected during your therapy, follow the End Therapy Early procedure. (See 18.6, End Therapy Early Procedure, on page 18-55.)

Discard the disposable set and all solution bags at the end of therapy. Possible contamination of the fluid or fluid pathways can result if disposables are reused. Contamination of any portion of the fluid or fluid path can result in peritonitis.

#### **WARNING**

Bypassing an Initial Drain when there is still fluid left in the peritoneal cavity can result in an increased intraperitoneal volume (IIPV) situation later in your therapy. Change your position or sit up to aid draining completely during the Initial Drain.

IIPV could result in a feeling of abdominal discomfort, serious injury, or death.

If any patient, or patient caregiver, suspects the patient has IIPV during a treatment, press STOP immediately, then press  $\nabla$  and initiate a Manual Drain. The Manual Drain procedure is located in 18.5, *Manual Drain Procedure*, on page 18-53. See 18.8, *Increased Intraperitoneal Volume* (IIPV), on page 18-58 if IIPV is suspected.

Additional care should be taken to monitor for IIPV symptoms for those patients not able to communicate essential information to their caregiver during treatment.

#### **WARNING**

Inspect the initial drained effluent for clarity. If effluent is cloudy, call your dialysis center. Cloudy effluent may be a sign of peritonitis.

If your previous therapy ended early for any reason, or if you performed an off-cycler exchange, you can be left with more fluid in your peritoneal cavity than normal. If this occurs, your Initial Drain Alarm (I-DRAIN ALARM) setting may be too low. To minimize the potential for an increased intraperitoneal volume (IIPV) situation, do one of the following:

- If a VERIFY I-DRAIN: ML prompt appears, press **STOP** and press  $\triangle$  or  $\nabla$  to increase your I-DRAIN ALARM setting to at least 70% of your current expected peritoneal volume for this therapy only.
- OR –

■ If a VERIFY I-DRAIN prompt does not appear, press **STOP** and  $\nabla$  to MANUAL DRAIN. Press **ENTER** to initiate a Manual Drain.

The system will return to STOPPED: DRAIN when the Manual Drain ends. You can repeat the Manual Drain any number of times without an audible alarm. Resuming the Drain can result in an audible alarm.

If your I-DRAIN ALARM setting is OFF or zero (0) because you normally have a dry day, Baxter recommends it be set to a value greater than zero (0). If your patient line is greater than 12 feet (3.6 meters) in length, set the I-Drain Alarm to at least 30 mL. This increases the chance that your peritoneal cavity is completely emptied during Initial Drain. Refer to 10.2.7, *I-Drain Alarm*, on page 10-9 to permanently change your I-Drain Alarm setting.

The system will assume that you are empty at the end of the Initial Drain. If you are not empty, the fluid in your peritoneal cavity can contribute to IIPV.

If you need to end your therapy after the Initial Drain begins, you must follow the instructions in 18.6, *End Therapy Early Procedure*, on page 18-55.

# 12.1.1 Menu Options During Initial Drain

# INITIAL DRAIN

Table 12-1 lists the options you can select during INITIAL DRAIN.

- 1. Press  $\nabla$  to view each option.
- 2. Press **ENTER** to select an option.
- 3. Press **STOP** to return to the previous menu.

**Table 12-1. Options Available During Initial Drain** 

Option	Description
Drain Volume	DRAIN VOLUME: 60ML
	Initial Drain Volume updated every few seconds.
Review Program	REVIEW PROGRAM
	Allows you to review the programmed therapy.
Current Time	9:05 PM
	Current time.
Therapy End Time	FINISH AT 6:52 AM
	Estimated time when treatment will end.

## 12.2 Fill

#### **WARNING**

IIPV could result in a feeling of abdominal discomfort, serious injury, or death.

If any patient, or patient caregiver, suspects the patient has IIPV during a treatment, press STOP immediately, then press  $\nabla$  and initiate a Manual Drain. The Manual Drain procedure is located in 18.5, *Manual Drain Procedure*, on page 18-53. See 18.8, *Increased Intraperitoneal Volume* (IIPV), on page 18-58 if IIPV is suspected.

Additional care should be taken to monitor for IIPV symptoms for those patients not able to communicate essential information to their caregiver during treatment.

After the Initial Drain, the first FILL begins. The cycler pulls dialysis solution from the heater bag and delivers it to your peritoneal cavity. The Fill phase begins the cycle.

### 12.2.1 Menu Options During Fill

FILL X OF X

Table 12-2 lists the options you can select during the FILL phase.

- 1. Press  $\nabla$  to view each option.
- 2. Press *ENTER* to select an option.
- 3. Press **STOP** to return to the previous menu.

**Table 12-2. Options Available During Fill** 

Option	Description	
Fill Volume	FILL VOLUME: 60ML	
	Fill Volume delivered. This is updated every few seconds.	
Initial Drain Volume	I-DRAIN VOL: 65ML	
volume	Volume from Initial Drain of the current treatment.	
Total Ultrafiltration	TOTAL UF: 252ML	
Oltramitration	The total therapy UF, updated after each Drain is completed. Press <i>ENTER</i> to review cycle-by-cycle information. Press <i>STOP</i> to return to the previous menu.	
Average Dwell Time	AVG DWELL TIME: 1:32	
Time	Average actual Dwell Time for your treatment. Press <b>ENTER</b> to review cycle-by-cycle information. Press <b>STOP</b> to return to the previous menu.	
Review Program	REVIEW PROGRAM	
	Allows you to review the programmed therapy.	
Current Time	11:25 PM	
	Current time.	
Therapy End Time	FINISH AT 6:52 AM	
Title	Estimated time when treatment will end.	

# 12.3 Dwell Phase

After the first Fill, the first DWELL phase begins. During the Dwell phase, waste products and excess fluids pass from the bloodstream through the peritoneal membrane and into the dialysis solution. It is during the Dwell phase that the cycler pulls fluid from the supply bags to replenish the heater bag and warm the solution for the next Fill phase.

## 12.3.1 Menu Options During Dwell

#### DWELL X OF X

Table 12-3 lists the options you can select during the DWELL phase.

- 1. Press  $\nabla$  to view each option.
- 2. Press **ENTER** to select an option.
- 3. Press **STOP** to return to the previous menu.

**Table 12-3. Options Available During Dwell** 

Option	Description
Dwell Time Left	DWELL TIME LEFT 0:52
	Dwell Time left in the current cycle.
Initial Drain	I-DRAIN VOL: 65ML
Volume	Volume from Initial Drain of the current treatment.
Total Ultrafiltration	TOTAL UF: 252ML
Oltramitration	The total therapy UF, updated after each Drain is completed. Press <b>ENTER</b> to review cycle-by-cycle information. Press <b>STOP</b> to return to the previous menu.
Average Dwell Time	AVG DWELL TIME: 1:32
Time	Average actual Dwell Time for your treatment. Press <b>ENTER</b> to review cycle-by-cycle information. Press <b>STOP</b> to return to the previous menu.
Review Program	REVIEW PROGRAM
	Allows you to review the programmed therapy.
Current Time	12:01 PM
	Current time.
Therapy End	FINISH AT 6:52 AM
Time	Estimated time when treatment will end.

#### 12.4 Drain Phase

#### **WARNING**

Bypassing the Drain phase can leave fluid in the peritoneal cavity and result in an increased intraperitoneal volume (IIPV) situation.

IIPV could result in a feeling of abdominal discomfort, serious injury, or death.

If any patient, or patient caregiver, suspects the patient has IIPV during a treatment, press STOP immediately, then press  $\nabla$  and initiate a Manual Drain. The Manual Drain procedure is located in 18.5, *Manual Drain Procedure*, on page 18-53. See 18.8, *Increased Intraperitoneal Volume* (IIPV), on page 18-58 if IIPV is suspected.

Additional care should be taken to monitor for IIPV symptoms for those patients not able to communicate essential information to their caregiver during treatment.

The DRAIN phase completes the cycle.

# 12.4.1 Menu Options During Drain

DRAIN X OF X

Table 12-4 lists the options you can select during the DRAIN phase.

- 1. Press  $\nabla$  to view each option.
- 2. Press *ENTER* to select an option.
- 3. Press **STOP** to return to the previous menu.

**Table 12-4. Options Available During Drain** 

Option	Description
Drain Volume	DRAIN VOLUME: 60ML
	Drain Volume updated every few seconds.
Initial Drain Volume	I-DRAIN VOL: 65ML
volume	Volume from Initial Drain of the current treatment.
Total Ultrafiltration	TOTAL UF: 252ML
Oltramitration	The total therapy UF, updated after each Drain is completed. Press <b>ENTER</b> to review cycle-by-cycle information. Press <b>STOP</b> to return to the previous menu.
Average Dwell	AVG DWELL TIME: 1:32
Time	Average actual Dwell Time for your treatment. Press <b>ENTER</b> to review cycle-by-cycle information. Press <b>STOP</b> to return to the previous menu.
Review Program	REVIEW PROGRAM
	Allows you to review the programmed therapy.
Current Time	1:45 PM
	Current time.
Therapy End	FINISH AT 6:52 AM
Time	Estimated time when treatment will end.

# 12.5 Pause Therapy

Press **STOP** to pause your therapy. STOPPED and the current phase appears on your display screen.

#### 12.5.1 Menu Options When STOP is Pressed

STOPPED:	FILL
----------	------

This sample screen shows that **STOP** was pressed during the Fill phase.

Table 12-5 lists the options you can select when you press **STOP**.

- 1. Press  $\nabla$  to view each option.
- 2. Press *ENTER* to select an option.
- 3. Press *GO* to continue your therapy.

Table 12-5. Options Available When STOP is Pressed

Option	Description
Fill Volume	FILL VOLUME: 60ML
	Shows the status of the current phase.
Bypass	BYPASS
	Press <b>ENTER</b> to select.
	See 18.4, <i>Bypass Procedures</i> , on page 18-37 for instructions.
Change Program	CHANGE PROGRAM
– OR –	Press <b>ENTER</b> to change your therapy settings.
Review Program	REVIEW PROGRAM
	REVIEW PROGRAM appears if the program is locked.
	See Section 9, <i>Operating Instructions – Change Program</i> for instructions.
Make Adjustments	MAKE ADJUSTMENTS
Aujustinents	If you want to adjust system settings.
	See Section 10, Operating Instructions – Make Adjustments for instructions.
Manual Drain	MANUAL DRAIN
	Press <b>ENTER</b> to select.
Alarm Log	ALARM LOG
	Press <b>ENTER</b> to review the 20 most recent alarms. Press <b>STOP</b> to return to the previous menu.
Software Version	SOFTWARE VER: 10.210
	Displays the software version. The software version on your system may differ from this example.

# 12.6 Hi-Dose Therapy

This therapy allows you to combine your regular nighttime therapies, such as CCPD or Tidal, with additional daytime exchanges. This may help improve the quality of your dialysis treatment.

Key features of Hi-Dose therapy include:

- Daytime exchanges. These additional exchanges may help to improve the quality of your dialysis treatment.
- Flexible length daytime Dwells based on your needs and daytime schedule. During the Dwell phase of a daytime exchange, you can disconnect from the system and have the freedom to conduct your normal daytime activities.
- Use of a disconnect cap such as the FlexiCap or MiniCap disconnect caps between Hi-Dose exchanges.
- Different daytime and nighttime Fill volumes.
- Flexibility for up to nine (9) Hi-Dose exchanges. The number of Hi-Dose exchanges is pre-programmed and fixed.
- System setup and start of therapy takes place at the time of the first Hi-Dose exchange.

#### **WARNING**

Bypassing an Initial Drain when there is still fluid left in the peritoneal cavity can result in an increased intraperitoneal volume (IIPV) situation later in your therapy. Change your position or sit up to aid draining completely during the Initial Drain.

IIPV could result in a feeling of abdominal discomfort, serious injury, or death.

If any patient, or patient caregiver, suspects the patient has IIPV during a treatment, press STOP immediately, then press  $\nabla$  and initiate a Manual Drain. The Manual Drain procedure is located in 18.5, *Manual Drain Procedure*, on page 18-53. See 18.8, *Increased Intraperitoneal Volume* (IIPV), on page 18-58 if IIPV is suspected.

Additional care should be taken to monitor for IIPV symptoms for those patients not able to communicate essential information to their caregiver during treatment.

#### **WARNING**

Bypassing the Day Drain phase can leave fluid in the peritoneal cavity and result in an increased intraperitoneal volume (IIPV) situation.

IIPV could result in a feeling of abdominal discomfort, serious injury, or death.

If any patient, or patient caregiver, suspects the patient has IIPV during a treatment, press STOP immediately, then press  $\nabla$  and initiate a Manual Drain. The Manual Drain procedure is located in 18.5, *Manual Drain Procedure*, on page 18-53. See 18.8, *Increased Intraperitoneal Volume* (IIPV), on page 18-58 if IIPV is suspected.

Additional care should be taken to monitor for IIPV symptoms for those patients not able to communicate essential information to their caregiver during treatment.

# 12.6.1 Day Dwell Options

# DAY DWELL X OF X

Table 12-6 lists the options you can select during the DAY DWELL phase in Hi-Dose Therapy.

- 1. Press  $\nabla$  to view each option.
- 2. Press *ENTER* to select an option.
- 3. Press **STOP** to return to the previous menu.

**Table 12-6. Options Available During Day Dwell** 

Option	Description
Day Dwell Time	DAY DWELL TIME: 0:31
	The amount of time elapsed during the daytime Dwell.
Continue Therapy	PRESS GO TO CONTINUE
Connect Yourself	CONNECT YOURSELF  Press GO twice to drain the Day Fill and perform the next cycle.
Initial Drain Volume	I-DRAIN VOL: 65ML  Volume from Initial Drain.
Total Ultrafiltration	TOTAL UF: 252ML  The total therapy UF, updated after each Drain is completed. Press <i>ENTER</i> to review cycle-by-cycle information. Press <i>STOP</i> to return to the previous menu.

Table 12-6. Options Available During Day Dwell (Continued)

Option	Description
Average Dwell Time	AVG DWELL TIME: 0:00
	Average actual Dwell Time only reflects the average of the nighttime cycles. During daytime cycles, 0:00 appears.
	Press <b>ENTER</b> to review cycle-by-cycle information. Press <b>STOP</b> to return to the previous menu.
Review Program	REVIEW PROGRAM
	Allows you to review the programmed treatment.
Current Time	6:10 PM
	Current time.

## 12.7 Perform a Hi-Dose Day Exchange

NOTE: If you bypass a Hi-Dose daytime exchange, the solution volume from that exchange will be added to the available nighttime therapy volume.

Follow the steps below to perform daytime exchange.

Steps to perform a daytime exchange		Display screen	
Hi-Dose therapy begins when INITIAL DRAIN is complete.		INITIAL DRAIN	
1.	DAY FILL begins automatically when INITIAL DRAIN is complete.	DAY FILL 1 OF 1	

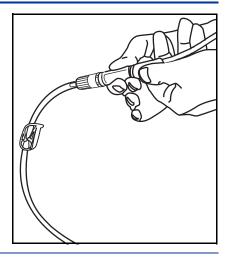
## Steps to perform a daytime exchange (Continued) Display screen When DAY FILL 1 is complete, DAY DWELL 1 DAY DWELL 1 OF 1 begins. During Day Dwell, you can disconnect from the cycler. See 12.7.1, Disconnect Yourself During Hi-Dose Dwell, on page 12-18. Press $\nabla$ to display elapsed DAY DWELL TIME in DAY DWELL TIME: 4:00 hours and minutes. Reconnect yourself when the appropriate Dwell Time is reached. See 12.7.2, Reconnect and Continue Treatment, on page 12-20. **NOTE:** Do not press $\nabla$ or **GO** during the last Day Dwell until you are ready to begin your nighttime treatment. 5. Press **GO**. DAY DRAIN 1 0F 1 The system automatically begins DAY DRAIN 1. — or — If this is the last Day Dwell, INITIAL DRAIN will begin. INITIAL DRAIN When DAY DRAIN 1 is complete, the nighttime FILL 1 0F 4 therapy begins with FILL 1. or - OR -DAY FILL 2 OF 2 If more than one Hi-Dose exchange is programmed, the next DAY FILL begins.

## 12.7.1 Disconnect Yourself During Hi-Dose Dwell

Follow the steps below if you choose to disconnect yourself during Hi-Dose Dwell.

## Steps to disconnect during Hi-Dose Dwell

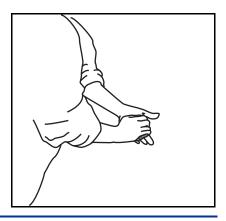
- 1. Close your transfer set.
- 2. Close the clamp on the patient line.



## **WARNING**

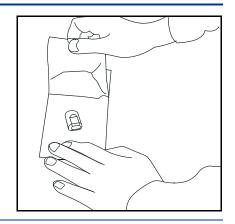
Follow aseptic technique taught by your dialysis center when handling lines and solution bags to reduce the possibility of infection. Always put on a face mask and wash and dry (or disinfect) your hands thoroughly.

3. Put on a face mask and disinfect your hands thoroughly.

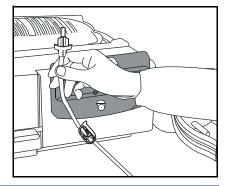


## **Steps to disconnect during Hi-Dose Dwell**

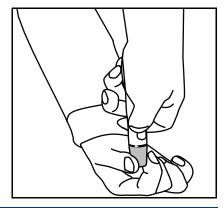
4. Open and remove new **MiniCap** and **FlexiCap** disconnect caps from the package.



- 5. Disconnect the transfer set from the patient line of the disposable set.
- 6. Place the patient line back on the organizer.



- 7. Immediately place the **MiniCap** disconnect cap on the transfer set.
  - Tighten the **MiniCap** until fully secured.



- 8. Attach the new **FlexiCap** disconnect cap to the patient line connector in the organizer.
  - Tighten the FlexiCap disconnect cap until fully secured.
- 9. You may now leave the system.

## 12.7.2 Reconnect and Continue Treatment

Follow the steps below to reconnect yourself and continue therapy.

## Steps to reconnect and continue treatment

1. During the Dwell phase, press  $\nabla$  to display elapsed DAY DWELL TIME in hours and minutes.

DAY DWELL TIME: 4:00

- 2. When the appropriate Dwell Time is reached, prepare the room for reconnect.
  - **NOTE:** Do not press  $\nabla$  or **GO** during the last Day Dwell until you are ready to begin your night treatment.
- 3. Press  $\nabla$ .

PRESS GO TO CONTINUE

4. Press GO.

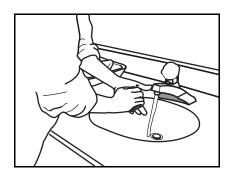
CONNECT YOURSELF

The system reminds you to connect yourself.

## **WARNING**

Follow aseptic technique taught by your dialysis center when handling lines and solution bags to reduce the possibility of infection. Always put on a face mask and wash and dry (or disinfect) your hands thoroughly.

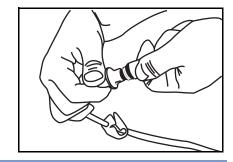
5. Put on a face mask and wash and dry hands thoroughly.



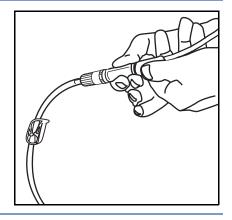
6. Remove the **FlexiCap** disconnect cap from the patient line connector.

## Steps to reconnect and continue treatment (Continued)

- 7. Remove the **MiniCap** disconnect cap from the transfer set connector.
- 8. Immediately connect the patient line connector to the transfer set.



- 9. Open the patient line clamp.
- 10. Open the transfer set.



11. Press **GO.** 

The system automatically begins DAY DRAIN 1.

DAY DRAIN 1 OF 1

12. Discard the used **MiniCap** disconnect cap and **FlexiCap** disconnect cap.

# Section 13

**Operating Instructions – End Therapy** 

## **Operating Instructions – End Therapy**

## 13.1 Ending Your Therapy

When the last phase of your treatment cycle is complete, the *HomeChoice* APD System or *HomeChoice* PRO APD System indicates that the therapy is complete.

## WARNING

Notify your dialysis center if you had an incomplete treatment, skipped the prescribed Last Fill, or in other situations as instructed by your clinician. Multiple incomplete or skipped treatments can cause reduced Dwell or Therapy Time. This can lead to symptoms and signs of end-stage renal disease (ESRD), including fluid overload.

## **WARNING**

Follow aseptic technique taught by your dialysis center when handling lines and solution bags to reduce the possibility of infection. Always put on a face mask and wash and dry (or disinfect) your hands thoroughly.

## 13. Operating Instructions – End Therapy

Follow the steps below to end your therapy and disconnect from the system.

## Steps to end your therapy **Display screen** 1. END OF THERAPY appears. END OF THERAPY Press $\nabla$ to view the end of therapy summary 2. I-DRAIN VOL: ML information. 3. Record your I-DRAIN VOLUME. The amount shown is the total Initial Drain Volume from the current therapy. Press $\nabla$ . 4. LAST M-DRAIN: ML LAST M-DRAIN appears only if LAST MANUAL DRAIN was set to YES. The amount shown is the volume of solution drained during the Last Manual Drain. Press $\nabla$ . 5 TOTAL UF: ML The amount shown is the TOTAL UF for the therapy. **NOTE:** A low, or negative, Total UF at the end of a therapy may indicate your last Drain was incomplete and too much fluid may still remain in your peritoneal cavity. Make sure the Last Manual Drain option is set to

- last Drain was incomplete and too much fluid may still remain in your peritoneal cavity. Make sure the Last Manual Drain option is set to ON, and a UF Target set with a value that equals around 70% of your expected UF. For help in converting 70% of your expected total therapy UF into a value that can be programmed as your Total UF for your Tidal therapy, see 19.17, Determining Tidal Total UF and Last Manual Drain UF Target Volume Settings, on page 19-18. See also 10.2.9, Last Manual Drain, on page 10-14.
- 6. Press **ENTER** to access cycle-by-cycle UF information starting with the last cycle. Press **STOP** to return to the previous menu.

CYCLE 5 UF:

ML

Steps to end your therapy (Continued)

**Display screen** 

## **WARNING**

A consistently high UF in the last cycle may indicate that UF is accumulating in your peritoneal cavity during the course of your therapy.

- For a CCPD therapy, your Minimum Drain Volume percent may be programmed too low.
- For a Tidal therapy, your expected Total UF may be programmed too low.

Either of these conditions can result in an increased intraperitoneal volume (IIPV) situation. Using a higher than normal dextrose concentration in combination with either of these conditions can further increase the risk of an IIPV situation.

IIPV can result in a feeling of abdominal discomfort, serious injury, or death.

If any patient, or patient caregiver, suspects the patient has IIPV during a treatment, press STOP immediately, then press  $\nabla$  and initiate a Manual Drain. The Manual Drain procedure is located in 18.5, Manual Drain Procedure, on page 18-53. See 18.8, Increased Intraperitoneal Volume (IIPV), on page 18-58 if IIPV is suspected.

Additional care should be taken to monitor for IIPV symptoms those patients not able to communicate essential information to their caregiver during treatment.

7. Press ∇ to continue accessing cycle UF values.

You can view up to 29 cycles.

CYCLE 4 UF: ML

8. Press ∇. AVG DWELL TIME:HH:MM

The average actual Dwell Time for the therapy is shown.

To review cycle-by-cycle information, press **ENTER.** Press **STOP** to return to END OF THERAPY.

## 13. Operating Instructions – End Therapy

Steps to end your therapy (Continued)		Display screen	
9.	Press ∇.	LOST DWELL: HH:MM	
	The amount of Dwell Time LOST or ADDED is based on the estimated Dwell Time calculated at the beginning of therapy.	ADDED DWELL: HH:MM	
	If the Lost Dwell is 30 minutes or longer, and you have not viewed this information, the system will beep and display the Lost Dwell Time.		
10.	Press $\nabla$ .	MANUAL DRAIN	
	Press <b>ENTER</b> to select MANUAL DRAIN.		
11.	Press $\nabla$ .	ALARM LOG	
	Press <b>ENTER</b> to review the 20 most recent alarms.		
	Press <b>STOP</b> to return to the previous menu.		
12.	Press <b>STOP</b> after you review and record your end of therapy summary.	END OF THERAPY	
13.	Press <b>GO</b> .	CLOSE ALL CLAMPS	
	CLOSE ALL CLAMPS appears.		

## Steps to end your therapy (Continued)

**Display screen** 

## **WARNING**

Do not press *GO* again until you have CLOSED ALL CLAMPS. This prevents the flow of fluid from one bag to another and/or to the patient during the time when DISCONNECT YOURSELF appears. This flow of fluid could result in an increased intraperitoneal volume (IIPV) situation.

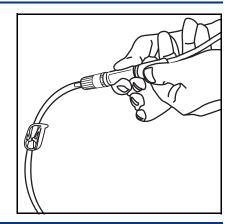
IIPV can result in a feeling of abdominal discomfort, serious injury, or death.

If any patient, or patient caregiver, suspects the patient has IIPV during a treatment, press STOP immediately, then press  $\nabla$  and initiate a Manual Drain. The Manual Drain procedure is located in 18.5, Manual Drain Procedure, on page 18-53. See 18.8, Increased Intraperitoneal Volume (IIPV), on page 18-58 if IIPV is suspected.

Additional care should be taken to monitor for IIPV symptoms those patients not able to communicate essential information to their caregiver during treatment.

- 14. Close the transfer set.
- 15. Close patient clamp on disposable set.
- 16. CLOSE ALL CLAMPS and disconnect yourself as instructed in the steps in 13.2, *Disconnect Yourself*, on page 13-6.

Do NOT press *GO* again until AFTER you have disconnected.



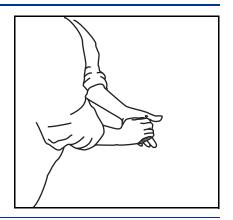
## 13.2 Disconnect Yourself

## **WARNING**

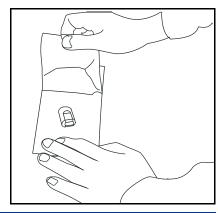
Follow aseptic technique taught by your dialysis center when handling lines and solution bags to reduce the possibility of infection. Always put on a face mask and wash and dry (or disinfect) your hands thoroughly.

## Steps to disconnect yourself

1. Put on a face mask and disinfect your hands thoroughly.

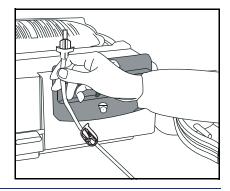


2. Open and remove new **MiniCap** disconnect cap from the package.

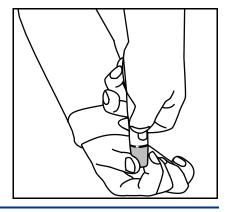


## Steps to disconnect yourself (Continued)

- 3. Disconnect the transfer set from the patient line of the disposable set.
- 4. Place the patient line back on the organizer.



- 5. Immediately place the **MiniCap** disconnect cap on the transfer set.
- 6. Tighten the **MiniCap** until fully secured.



## **WARNING**

Do NOT press *GO* again until AFTER you have disconnected! Touching any unsterile surface before completing your disconnect increases your risk of infection.

## 13.3 Shut Down

## **WARNING**

Discard the disposable set and all solution bags at the end of therapy. Possible contamination of the fluid or fluid pathways could result if disposables are reused. Contamination of any portion of the fluid or fluid path may result in peritonitis.

## **WARNING**

Do not open the door until you have CLOSED ALL CLAMPS.

This prevents the flow of fluid from one bag to another, and/or to the patient. Uncontrolled gravity flow of fluid can result in an increased intraperitoneal volume (IIPV) situation.

IIPV can result in a feeling of abdominal discomfort, serious injury, or death.

If any patient, or patient caregiver, suspects the patient has IIPV during a treatment, press STOP immediately, then press  $\nabla$  and initiate a Manual Drain. The Manual Drain procedure is located in 18.5, *Manual Drain Procedure*, on page 18-53. See 18.8, *Increased Intraperitoneal Volume* (IIPV), on page 18-58 if IIPV is suspected.

Additional care should be taken to monitor for IIPV symptoms those patients not able to communicate essential information to their caregiver during treatment.

## Steps to shut down the cycler

- ➤ **NOTE:** Close all clamps and disconnect yourself by following the steps in 13.2, *Disconnect Yourself*, on page 13-6 before continuing.
- 1. Press **GO.**

**CLOSE ALL CLAMPS** 

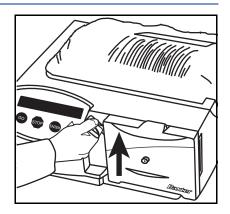
The display alternates between CLOSE ALL CLAMPS and DISCONNECT YOURSELF.

DISCONNECT YOURSELF

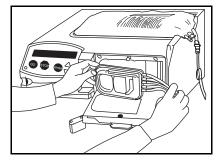
The occluder (behind door) retracts for 2 minutes (30 seconds for Low Fill Mode) to allow removal of the cassette.

- 2. Lift the latch up to unlock and open door.
- 3. If the occluder closes before you open the door, press **STOP** and then **GO**.

The occluder retracts again for a short time.



- 4. Remove and discard the disposable set and solution bags.
  - Follow your local guidelines for disposal of dialysis waste materials.



## 13. Operating Instructions – End Therapy

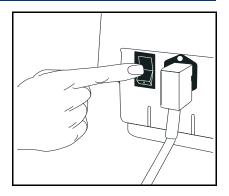
## Steps to shut down the cycler (Continued)

5. Press *GO*.

TURN ME OFF

TURN ME OFF appears.

6. Press the On/Off switch to the OFF position.



## 13.3.1 Menu Options During End of Therapy

**END OF THERAPY** 

Table 13-1 lists the options you can select during END OF THERAPY.

- 1. Press  $\nabla$  to view each option.
- 2. Press **ENTER** to select an option.
- 3. Press **STOP** to return to the previous menu.

**Table 13-1. End of Therapy Options** 

Option	Description		
Initial Drain Volume	I-DRAIN VOL: 65ML  Volume from Initial Drain of the current therapy.		
Last M-Drain	LAST M-DRAIN: 60ML  Only appears if you drained some fluid using the Manual Drain option before a Last Fill. Shows the amount of solution drained.		
Total Ultrafiltration	TOTAL UF: 150ML  The total amount of UF for the entire night's therapy. Press ENTER to review cycle-by-cycle information. Press STOP to exit cycle-by-cycle information.  ➤ NOTE: A lower than usual or negative Total UF at the end of a therapy may indicate that your last Drain was incomplete. The Last Manual Drain option should be turned ON and a UF Target programmed with a value that equals around 70% of your expected UF. For help in converting 70% of your expected total therapy UF into a value that can be programmed as your Total UF for your Tidal therapy, see 19.17, Determining Tidal Total UF and Last Manual Drain UF Target Volume Settings, on page 19-18. See also 10.2.9, Last Manual Drain, on page 10-14.		
Average Dwell Time	AVG DWELL TIME: 1:32  Average actual Dwell Time for your therapy. Press <i>ENTER</i> to review cycle-by-cycle information. Press <i>STOP</i> to exit cycle-by-cycle information.		

Table 13-1. End of Therapy Options (Continued)

Option	Description	
Lost Dwell	LOST DWELL: 1:05  - or -  ADDED DWELL: 1:05  Displays amount of Dwell Time "lost" or "added," based on estimated Dwell Time calculated at the beginning of therapy. This message displays automatically if Lost Dwell is 30 minutes or greater and you have not viewed this information.	
Manual Drain	MANUAL DRAIN Press ENTER to select.	
Alarm Log	ALARM LOG  Press ENTER to review the 20 most recent alarms. Press STOP to return to the previous menu.	

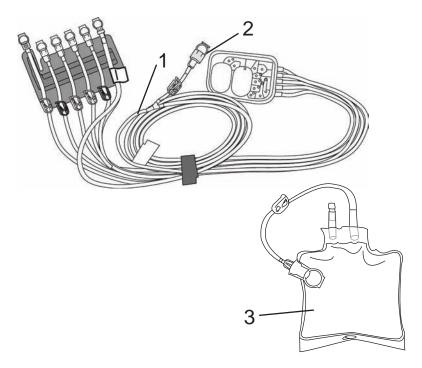
# Section 14

Operating Instructions – Effluent Sampling

## **Operating Instructions – Effluent Sampling**

## 14.1 Introduction

An effluent sample is a small amount of solution that has been drained from the peritoneal cavity during your regular drain. Your dialysis nurse will tell you how often you should take a sample.



- 1. Drain Line
- 2. Effluent Sampling Site
- 3. Effluent Sample Bag

Figure 14-1. Disposable Set

## WARNING

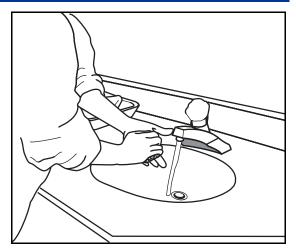
Follow aseptic technique taught by your dialysis center when handling lines and solution bags to reduce the possibility of infection. Always put on a face mask and wash and dry (or disinfect) your hands thoroughly.

## 14.2 Take an Effluent Sample

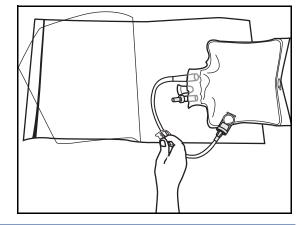
Follow the steps below to take an effluent sample.

## Steps to take an effluent sample

1. Put on a face mask and wash and dry your hands thoroughly.



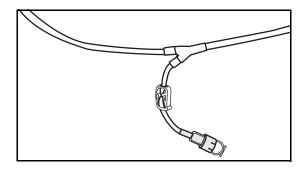
- 2. Open the effluent sample bag packaging.
- 3. Close the clamp on the effluent sample bag.



## Steps to take an effluent sample (Continued)

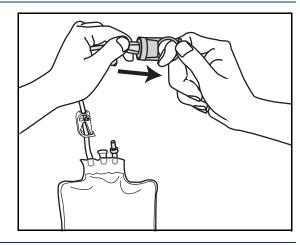
4. Prepare the sampling site.

Make sure the clamp is closed on the sampling line.

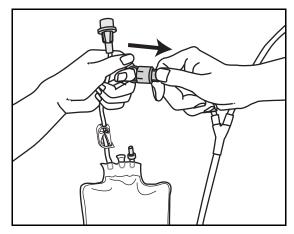


5. Remove the cap from the effluent sample bag.

Save the cap to recap the connectors.

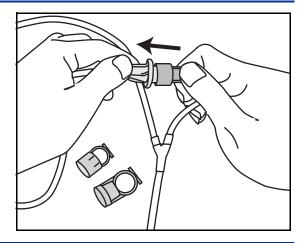


6. Remove the cap from the sampling site. Save the cap to recap the connectors.

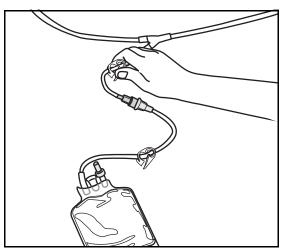


## Steps to take an effluent sample (Continued)

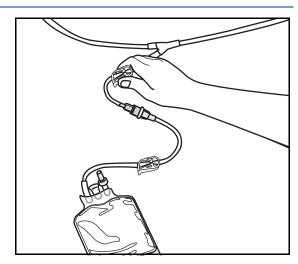
7. Connect the effluent sample bag and position the bag below the level of the drain line.



8. After draining for 2 or 3 minutes, open the clamps.

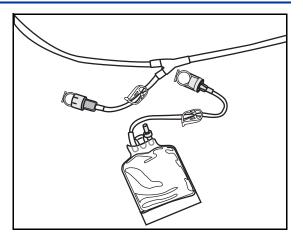


9. When the effluent sample bag is full, close both clamps.



## Steps to take an effluent sample (Continued)

10. Disconnect the effluent sample bag from the drain line and recap the connectors.



**NOTE:** Follow your dialysis nurse's instructions for handling the effluent sample.

## Section

**Cleaning** 

## 15

## **Cleaning**

## 15.1 Introduction

## **WARNING**

Do not open the *HomeChoice/HomeChoice* PRO APD System cycler. Electrical circuitry inside may pose a shock hazard.

## **WARNING**

Do not apply alcohol, hydrogen peroxide, or antiseptic containing alcohol to the disposable set or to the cassette interface inside the door of the cycler. Using these products can cause the cassette to develop cracks.

## **CAUTION**

Do not use chemical cleaning agents or aerosol spray cleaners. These products might damage the plastics or surface finishes.

➤ **NOTE:** The cycler does not need to be sterilized or disinfected between uses. The *HomeChoice/HomeChoice* PRO APD System uses a disposable set that provides a sterile fluid pathway.

## 15.2 Cleaning the Cycler

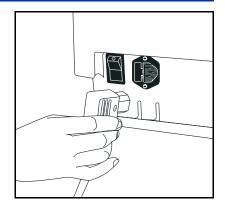
## **WARNING**

Unplug the *HomeChoice/HomeChoice* PRO APD System power cord from the wall outlet, or other AC power source, before cleaning the system. Failure to do so can cause an electric shock.

The surface of the cycler should only be cleaned using mild soap and water. Follow the steps below to clean your cycler.

## Steps to clean the cycler

- 1. Turn the cycler off.
- 2. Unplug the cycler from the power source.



3. Use a small amount of mild soap and water to wipe the exterior.

Do not apply alcohol, hydrogen peroxide, or antiseptic containing alcohol to the disposable set or to the cassette interface inside the door of the cycler.

4. Wipe up any solution spills as soon as possible.

Any residue may be cleaned with a mixture of mild soap and water.

## 15.3 Preparing the Cycler for Return to Baxter

## **IMPORTANT**

Return this cycler to your dialysis center or to Baxter by calling Baxter Technical Assistance.

Before you return the *HomeChoice* APD System cycler to Baxter, follow the steps below:

## Steps to prepare the cycler for return

- 1. Put on protective rubber gloves and an apron.
- 2. Mix a sanitizing solution of 1 gallon (3.8 liters) water and 16 oz or 2 cups (0.5 liter) household bleach.
- 3. Wipe all outer surfaces of the cycler with a sponge dampened with the sanitizing solution.
  - Be careful not to apply too much solution.
- 4. Use a clean cloth or paper towels to wipe any excess moisture from the surface.

If you have any questions or have difficulty with this procedure, contact Baxter Technical Assistance at the number listed in 2.2, *Numbers to Call for Assistance*, on page 2-1.

## Section

**Maintenance** 

# 16

## **Maintenance**

A regular maintenance schedule is not needed. The *HomeChoice/HomeChoice* PRO APD System monitors itself. It will notify you if service is needed.

The battery pack is automatically checked and recharged during operation. The battery does not need regular maintenance.

## Section



**Storage** 

17

# **Storage**

# 17.1 Cycler

The *HomeChoice/HomeChoice* PRO APD System should be stored in the following conditions:

- Temperature between -25°F to 130°F (-34°C to 54°C)
- Humidity between 10% and 95%
- Altitude −1,100 ft to +18,000 ft (−340 m to +5,500 m)

# 17.2 Battery

If the cycler is not used for more than 12 months, the battery pack must be removed. This must be done by a qualified Baxter service representative. See 2.2, *Numbers to Call for Assistance*, on page 2-1.

# 17.3 Dialysis Solution and Disposables

Follow the instructions on the label supplied with the dialysis solution and disposables for storage and preparation. Failure to follow the solution and disposable label instructions may lead to insufficient therapy or adverse clinical reaction.

# Section

# 18

**Troubleshooting** 

18

# **Troubleshooting**

This section contains information about alarms, and also contains special procedures related to alarm situations.

NOTE: Alarms pertaining to the PRO Card are described in 8.3, *Display Messages*, on page 8-11.

#### 18.1 List of Alarms and Procedures

The following is an alphabetical list of alarm messages and special procedures contained in this section:

Alarm Messages	Page
Caution: Negative UF	18-22
Caution: Positive UF	18-29
Check Drain Line	18-5
Check Final Line	18-5
Check Heater Line	18-5
Check Lines and Bags	18-9
Check Patient Line	18-5
Check Supply Line	18-5
Check Therapy Time	18-10
Check Tidal Volume %	18-10
Check Total UF	18-10

# 18. Troubleshooting

Alarm Messages	Page
Check Total Volume	18-10
Check Your Position	18-24
Drain Not Finished	18-11
Fill Not Finished	18-11
Load a New Set	18-12
Load New Set & Bags	18-12
Low UF	18-13
Low Drain Volume	18-15
Machine Tilted	18-20
Refill Not Finished	18-11
Reload the Set	18-26
Slow Flow Drain	18-19
Slow Flow Heater	18-19
Slow Flow Patient	18-19
Slow Flow Supply	18-19
System Errors 2240 or 2267	18-31
System Error nnnn	18-33
Temp Stabilizing	18-35
Verify I-Drain	18-30
Warming Solution	18-21

Special Procedures	Page
Bypass Procedures	18-37
Emergency Disconnect Procedure	18-65
End Therapy Early Procedure	18-55
Increased Intraperitoneal Volume (IIPV)	18-58
Manual Drain Procedure	18-53
Power Failure	18-62
Reprime Patient Line Procedure	18-57

# 18.2 Correcting Alarms

During therapy, the *HomeChoice/HomeChoice* PRO APD System (the "system") continually checks that the therapy is working properly. It also monitors the internal system. Whenever the system finds an issue, it will:

- Sound an alarm
- Stop moving solution, in some circumstances
- Display the type of alarm
- Record the issue on the PRO Card, if applicable

#### **18.2.1 Types of Alarms**

There are three (3) types of alarm messages that can occur during therapy:

#### Auto Restart

These alarms can be corrected by reading the display screen and checking for the problem explained in the alarm message.

- You do not need to press any buttons to correct these alarms.
- The alarms beep 3 times, then the system continues therapy.
- If the alarm continues, the system beeps 6 times then continues therapy.

After an Auto Restart Alarm occurs twice, the alarm becomes a Manual Restart Alarm.

#### Manual Restart

These alarms must be corrected by following the instructions in 18.3, *Alarms*.

- The alarms beep continuously until you press **STOP**.
- Press **STOP**, correct the problem, then press **GO** to continue your therapy.

#### System Error

These alarms are caused by problems inside the system. Contact Baxter for assistance when these occur. Baxter Technical Assistance is available 24 hours a day for *HomeChoice/HomeChoice* PRO APD System users. Call the number located in 2.2, *Numbers to Call for Assistance*, on page 2-1.

#### 18.3 Alarms

#### 18.3.1 Check Lines

#### **WARNING**

Do not replace empty solution bags or reconnect disconnected solution bags during your therapy.

Possible contamination of the fluid or fluid pathways can result if disposables are reused. Contamination of any portion of the fluid or fluid path can result in peritonitis.

If a bag becomes disconnected during your therapy, follow the End Therapy Early procedure. Discard the disposable set and all solution bags at the end of therapy. (See 18.6, End Therapy Early Procedure, on page 18-55.)

CHECK LINE		
Display Message:	CHECK DRAIN LINE CHECK PATIENT LINE	
	CHECK FINAL LINE CHECK SUPPLY LINE	
	CHECK HEATER LINE	
Cause 1:	This is an Auto Restart Alarm.  The line referenced on the display screen is blocked due to:  - Kinks - Closed clamps - Fibrin blockage - Disconnected solution bags - Empty solution bags	

#### **CHECK LINE (Continued)**

# To Correct Cause 1:

- 1. Check the line referenced on the display screen for:
  - Kinks
  - Closed clamps
  - Fibrin blockage
  - Disconnected solution bags
  - Empty solution bags
- 2. Correct the issue you found.

You do not need to press any buttons.

- OR -

If the alarm becomes a Manual Restart Alarm:

- 1. Press **STOP** to mute the alarm.
- 2. Check the line referenced on the display screen for:
  - Kinks
  - Closed clamps
  - Fibrin blockage
  - Disconnected solution bags
  - Empty solution bags
- 3. Correct the issue you found, if possible.
  - OR -

If the issue is not corrected, contact your dialysis center.

4. Press *GO* to return to the therapy.

#### **CHECK LINE (Continued)**

## Cause 2: CHECK PATIENT LINE appears at start of FILL 1 in Standard

Mode only.

The clamp on the patient line was not opened after connecting the solution bags or after you were connected.

This prevented priming of the patient line and caused the Initial Drain to end with little or no fluid drained.

If this alarm occurs, do NOT open the clamp.

#### **WARNING**

Opening the clamp, at this point, can cause air to be delivered to your peritoneal cavity. This can result in shoulder and abdominal pain.

This can also result in an increased intraperitoneal volume (IIPV) situation if you had fluid in your peritoneal cavity prior to the Initial Drain.

IIPV can result in a feeling of abdominal discomfort, serious injury, or death.

If any patient, or patient caregiver, suspects the patient has IIPV during a treatment, press STOP immediately, then press  $\nabla$  and initiate a Manual Drain. The Manual Drain procedure is located in 18.5, Manual Drain Procedure, on page 18-53. See 18.8, Increased Intraperitoneal Volume (IIPV), on page 18-58 if IIPV is suspected.

CHECK LINE (Continued)				
To Correct	If you suspect this is the cause:			
Cause 2:	1. Press <b>STOP.</b>			
	2. Press $\nabla$ until you see MANUAL DRAIN.			
	3. Press <b>ENTER</b> to initiate a Manual Drain. Then open the clamp on the patient line.			
	Do not open the clamp until after you press <b>ENTER</b> .			
	4. When the Manual Drain ends, STOPPED: FILL appears.			
	5. Press <b>GO</b> to resume Fill.			
Cause 3:	CHECK HEATER LINE appears at start of FILL 1 only.			
	The pump chambers are not able to fill from the heater or empty to the drain completely.			
	Blocked heater or drain line.			
To Correct	1. Check heater line.			
Cause 3:	2. Check drain line.			
	➤ <b>NOTE:</b> Even though CHECK HEATER LINE appears on the display screen, it is possible that the cause is a blocked drain line.			

#### 18.3.2 Check Lines and Bags

#### **WARNING**

Do not replace empty solution bags or reconnect disconnected solution bags during your therapy.

Possible contamination of the fluid or fluid pathways can result if disposables are reused. Contamination of any portion of the fluid or fluid path can result in peritonitis.

If a bag becomes disconnected during your therapy, follow the End Therapy Early procedure. Discard the disposable set and all solution bags at the end of therapy. (See 18.6, End Therapy Early Procedure, on page 18-55.)

CHECK LINES AND BAGS				
Display Message:	CH	CHECK LINES AND BAGS		
Cause:	One or more of the lines are blocked or solution bags are empty.			
	Th	is is a Manual Restart Alarm.		
To Correct:	1.	Press <b>STOP</b> to mute the alarm.		
	2.	Check all lines and bags for:		
		<ul> <li>Kinks</li> <li>Closed clamps</li> <li>Fibrin blockage</li> <li>Disconnected solution bags</li> <li>Empty solution bags</li> </ul>		
	3.	Correct the issue you found.		
	4.	Press <b>GO</b> to return to the therapy.		

# 18.3.3 Check Therapy Setting Value

Check value				
Display Message:	C	CHECK THERAPY TIME CHECK TIDAL VOL PCT		
		CHECK TOTAL UF		CHECK TOTAL VOLUME
Cause:	you for	The value of the programmed therapy setting is not valid. If you are using a <i>HomeChoice/HomeChoice</i> PRO APD System for the first time, this alarm occurs to remind you to program your therapy.		
	Thi	Γhis is a Manual Restart Alarm.		
To Correct:	1.	. Press <b>STOP</b> to mute the alarm.		
		The display screen automatically returns to the incorrect setting and flashes the value you need to change.		
	2.	Change the value or o	the	r values.
	3.	Press <b>STOP</b> to exit Ch	nang	ge Program.

#### 18.3.4 Phase Not Finished

#### **WARNING**

Bypassing the Drain phase can leave fluid in the peritoneal cavity and result in an increased intraperitoneal volume (IIPV) situation.

IIPV can result in a feeling of abdominal discomfort, serious injury, or death.

If any patient, or patient caregiver, suspects the patient has IIPV during a treatment, press STOP immediately, then press  $\nabla$  and initiate a Manual Drain. The Manual Drain procedure is located in 18.5, *Manual Drain Procedure*, on page 18-53. See 18.8, *Increased Intraperitoneal Volume* (IIPV), on page 18-58 if IIPV is suspected.

NOT FINISHED				
Display Message:	DRAIN NOT FINISHED REFILL NOT FINISHED			
	FILL NOT FINISHED			
Cause:	You have tried to bypass an alarm or phase and you have not completed the phase.			
	This is a Manual Restart Alarm.			

#### **NOT FINISHED** (Continued)

#### To Correct:

- 1. Press **STOP** to mute the alarm.
- 2. Check with your dialysis center to learn when it is safe to bypass. See 18.4, *Bypass Procedures*, on page 18-37.
- 3. If you are sure that you want to bypass the alarm or phase, press  $\nabla$  until the display screen shows BYPASS.
- 4. Press **ENTER** to select BYPASS.

You have bypassed the alarm or phase and moved to the next phase in your therapy.

#### 18.3.5 Load a New Set

LOAD A NEW SET				
Display Message:		LOAD A NEW SET & BAGS		
Cause:	The	The disposable set has failed testing during setup.		
	Thi	This is a Manual Restart Alarm.		
To Correct:	1.	. Press <b>STOP</b> to mute the alarm.		
	2.	Remove and discard the disposable set, and solution bags if necessary.		
3. Get a new disposable set, and new solu needed.		Get a new disposable set, and new solution bags if needed.		
	4.	Load the cassette.		
	5.	Press <b>GO</b> and follow the setup instructions on the display screen.		

#### 18.3.6 Low Ultrafiltration (UF)

#### WARNING

Bypassing a LOW UF alarm can leave fluid in the peritoneal cavity and result in an increased intraperitoneal volume (IIPV) situation.

IIPV can result in a feeling of abdominal discomfort, serious injury, or death.

If any patient, or patient caregiver, suspects the patient has IIPV during a treatment, press STOP immediately, then press  $\nabla$  and initiate a Manual Drain. The Manual Drain procedure is located in 18.5, *Manual Drain Procedure*, on page 18-53. See 18.8, *Increased Intraperitoneal Volume* (IIPV), on page 18-58 if IIPV is suspected.

LOW UF				
Display Message:	LOW UF			
Cause:	The UF Target was not met.			
	This setting is programmed as a part of the Last Manual Drain feature.			
	<ul> <li>When ALARM: YES is set, this is an audible Manual Restart Alarm.</li> <li>When ALARM: NO is set, this is a silent Manual Restart Alarm with a display message only.</li> </ul>			

#### LOW UF (Continued)

#### **To Correct:**

- 1. Press **STOP** to mute the alarm.
- 2. Press **GO** to continue draining automatically.
  - OR -
- 3. Press  $\nabla$  to:
  - View Manual Drain information.
  - Check with your dialysis center to learn when it is safe to bypass. To bypass the alarm, see *Steps to* bypass LOW UF alarm, below.
  - Initiate a Manual Drain.

Steps to bypass LOW UF alarm		Display screen
		LOW UF
1.	Press <b>STOP</b> .	DRAIN N OF N alternates with LOW UF
2.	Press $\nabla$ .	DRAIN VOLUME: ML
3.	Check DRAIN VOLUME.	
4.	Press $\nabla$ .	I-DRAIN VOL: ML
	An incomplete Initial Drain is not reflected in your UF.	
5.	Press $\nabla$ .	TOTAL UF: ML
	The volume shown is the TOTAL UF from the current Drain.	
6.	Press $\nabla$ .	BYPASS

Ste	eps to bypass LOW UF alarm (Continued)	Display screen
7.	Press <b>ENTER</b> to bypass.	END OF THERAPY
	END OF THERAPY or LAST FILL appears.	- or -
		LAST FILL

#### 18.3.7 Low Drain Volume

#### **WARNING**

Bypassing a LOW DRAIN VOLUME alarm can leave fluid in the peritoneal cavity and result in an increased intraperitoneal volume (IIPV) situation.

IIPV can result in a feeling of abdominal discomfort, serious injury, or death.

If any patient, or patient caregiver, suspects the patient has IIPV during a treatment, press STOP immediately, then press  $\nabla$  and initiate a Manual Drain. The Manual Drain procedure is located in 18.5, *Manual Drain Procedure*, on page 18-53. See 18.8, *Increased Intraperitoneal Volume* (IIPV), on page 18-58 if IIPV is suspected.

#### LOW DRAIN VOLUME **Display Message:** LOW DRAIN VOLUME Cause: A Slow Flow, No Flow, or air and fluid condition occurred before the programmed Minimum Drain Volume % (or Initial Drain Volume) completed. A No Flow condition occurred before the Low Fill Mode Minimum Drain Time completed. This is an Auto Restart Alarm. **To Correct:** Change your position to try to drain more fluid. 1. Check for kinks in your patient line. 2. 3. Correct the problem you found. You do not need to press any buttons. - OR -If the alarm becomes a Manual Restart Alarm: Press **STOP** to mute the alarm. 1. Change your position or lower the cycler by six (6) inches. Press **GO** to return to your therapy.

occurs regularly over multiple therapies:

1. Follow the steps below to check your Drain Volume.

If the alarm continues during your therapy, or if the alarm

2. Contact your dialysis center to learn when it is safe to bypass. See 18.4.5, *Bypass Low Drain Volume Alarm*, on page 18-45.

#### **WARNING**

Bypassing a LOW DRAIN VOLUME alarm can leave fluid in the peritoneal cavity and result in an increased intraperitoneal volume (IIPV) situation.

IIPV can result in a feeling of abdominal discomfort, serious injury, or death.

If any patient, or patient caregiver, suspects the patient has IIPV during a treatment, press STOP immediately, then press  $\nabla$  and initiate a Manual Drain. The Manual Drain procedure is located in 18.5, *Manual Drain Procedure*, on page 18-53. See 18.8, *Increased Intraperitoneal Volume (IIPV)*, on page 18-58 if IIPV is suspected.

Ste	eps to check the Drain Volume	Display screen
LO	W DRAIN VOLUME appears on the screen.	LOW DRAIN VOLUME
1.	Press ∇.	DRAIN VOLUME: ML
2.	Check DRAIN VOLUME.	
3.	Press $\nabla$ .	I-DRAIN VOL: ML
	An incomplete Initial Drain causes fluid to remain in your peritoneal cavity. This can cause the actual UF to be lower than the Total UF displayed.	
4.	Press $\nabla$ .	TOTAL UF: ML
	The volume shown is the TOTAL UF from the previous Drain.	
5.	Press ∇.	BYPASS

#### **Steps to check the Drain Volume (Continued)**

#### **Display screen**

- ➤ NOTE: Resume the Drain or select MANUAL DRAIN unless you have absorbed a lot of fluid. Resuming the Drain can result in an audible alarm. Using Manual Drain repeatedly does not generate an audible alarm.
- 6. Select one of the following options:

DRAIN 2 OF 5

a. Press *GO* to return to Drain if you do not want to bypass.

DRAINING: ML

This is the *recommended* option.

- OR -
- a. Press  $\nabla$  until MANUAL DRAIN appears.

MANUAL DRAIN

- b. Press **ENTER**.
- OR -
- a. Press **ENTER** to bypass only if your clinician instructs you to do so.

Contact your dialysis center to learn when it is safe to bypass.

You have bypassed the LOW DRAIN VOLUME alarm. The next FILL begins.

FILL 3 OF 5

- ➤ **NOTE:** Do NOT bypass if you have a Negative UF, if your current Drain Volume is lower than usual, if your abdomen feels full, or if you think you are full.
- ➤ **NOTE:** By selecting BYPASS, you indicate that you are empty. The system considers your volume zero (0) and delivers your entire prescribed Fill Volume.
- ➤ **NOTE:** If your Drain Volume is less than your prescribed Fill Volume, the difference is subtracted from the previous Drain Total UF to obtain your current UF.

#### 18.3.8 Slow Flow Rate

<b>SLOW FLOW</b>	
Display Message:	SLOW FLOW DRAIN SLOW FLOW HEATER
	SLOW FLOW PATIENT SLOW FLOW SUPPLY
Cause:	Flow rate is very slow. A slow flow rate can reduce the Dwe Time and decrease the amount of effective dialysis time. There can be a partial kink on the specified line.
	This is an Auto Restart Alarm.
To Correct:	1. Check the line shown in the display for:
	<ul> <li>Kinks</li> <li>Closed clamps</li> <li>Fibrin blockage</li> <li>Disconnected solution bags</li> <li>Empty solution bags</li> </ul>
	2. Correct the problem you found.
	You do not need to press any buttons.
	– OR –
	If the alarm becomes a Manual Restart Alarm:
	1. Press <b>STOP</b> to mute the alarm.
	2. Check the line shown in the display for:
	<ul> <li>Kinks</li> <li>Closed clamps</li> <li>Fibrin blockage</li> <li>Disconnected solution bags</li> <li>Empty solution bags</li> </ul>
	3. Correct the problem you found.

4. Press *GO* to return to the therapy.

### 18.3.9 Machine Tilted

MACHINE TILTED			
Display Message:		MACHINE TILTED	
Cause:	The	e cycler is tilted.	
		his alarm occurs during therapy, it is a Auto Restart rm.	
To Correct:	1.	Make sure that the system is on a flat surface and is not tilted.	
		– OR –	
	If the alarm becomes a Manual Restart Alarm or occ PRESS GO TO START:		
	1.	Press <b>STOP</b> to mute the alarm.	
	2.	Place the cycler on a flat, even surface.	
	3.	Press <b>GO</b> to return to the therapy.	

#### **18.3.10 Warming Solution**

WARMING	SOL	JTION

Display Message: WARMING SOLUTION

#### Cause:

The temperature of the fluid in the heater bag as measured by the cycler is below 33°C.

Fluid delivery is not allowed at this time.

The message continues to appear while the fluid in the heater bag is being heated.

The message clears 5 (five) minutes after the heater bag temperature reaches 33°C.

The message can also appear for an extended period if the heater bag is not in full contact with the heater plate during normal operation.

#### To Correct:

If the alarm becomes a WARMING TIMEOUT alarm after 45 minutes:

- 1. Press **STOP** to mute the alarm.
- 2. Press *GO* to gain another 45 minutes to heat the solution.
- 3. Press the heater bag down against the heater plate to improve the heating rate.

A SYSTEM ERROR appears if the heating system fails.

#### 18.3.11 Caution: Negative UF

#### WARNING

Bypassing a CAUTION: NEGATIVE UF alarm can leave fluid in the peritoneal cavity and result in an increased intraperitoneal volume (IIPV) situation.

IIPV can result in a feeling of abdominal discomfort, serious injury, or death.

If any patient, or patient caregiver, suspects the patient has IIPV during a treatment, press STOP immediately, then press  $\nabla$  and initiate a Manual Drain. The Manual Drain procedure is located in 18.5, *Manual Drain Procedure*, on page 18-53. See 18.8, *Increased Intraperitoneal Volume* (IIPV), on page 18-58 if IIPV is suspected.

Additional care should be taken to monitor for IIPV symptoms for those patients not able to communicate essential information to their caregiver during treatment.

**CAUTION: NEGATIVE UF** 

Display Message: CAUTION: NEGATIVE UF

Cause:

You have retained more than the allowable percentage of the programmed Fill Volume in either the current cycle or over the course of several cycles.

- The allowable percentage in Standard Fill Mode is 50%.
- In Low Fill Mode, it is adjustable from 20% to 60%.

This is a Manual Restart Alarm.

#### **CAUTION: NEGATIVE UF (Continued)**

#### To Correct:

- 1. Press **STOP** to mute the alarm.
- 2. Follow the steps below to check Total UF.
- 3. Change your position.
- 4. Press *GO* to return to the therapy.

Contact your dialysis center if this alarm continues. Do not bypass this alarm except on your dialysis center's advice. This alarm can be bypassed only once. See 18.4, *Bypass Procedures*, on page 18-37.

Ste	eps to check Total UF	Display screen				
1.	Press <b>STOP</b> .	CAUTION: NEGATIVE UF				
2.	Press $\nabla$ .	DRAIN VOLUME: 60ML				
3.	Press $\nabla$ .	I-DRAIN VOL: 500ML				
4.	Press $\nabla$ .	TOTAL UF: -500ML				
5.	Check your TOTAL UF.					
6.	Select one of the following options:	DRAIN 2 OF 5				
	a. Press <b>GO</b> to return to Drain if you do not want to bypass.					
	This is the <i>recommended</i> option.					

➤ **NOTE:** Unless you have absorbed a lot of fluid, resume the Drain or select MANUAL DRAIN. Using Manual Drain repeatedly does not generate an audible alarm.

Steps	to check Total UF (Continued)	Display screen		
_ (	OR –			
a.	Press $\nabla$ until MANUAL DRAIN appears.	MANUAL DRAIN		
b.	Press <b>ENTER</b> .			
_ (	OR –	DRAINING: ML		
a.	Press <b>ENTER</b> to bypass the alarm.	CAUTION: NEGATIVE UF		
	CAUTION: NEGATIVE UF appears briefly, then			
	the next FILL begins.	FILL 3 OF 5		

➤ **NOTE:** By selecting BYPASS, you indicate that you are empty. The system considers your volume zero (0) and delivers your entire prescribed Fill Volume.

#### 18.3.12 Check Your Position

CHECK YOUR POSITION		
Message Display:	CHECK YOUR POSITION	
Cause 1:	Your position is more than one foot (12 inches) above the cycler.	
	Thi	s is an Auto Restart Alarm.
To Correct	1.	Check the position of the system.
Cause 1:	2.	If the system is too low, raise it by at least six (6) inches.
		You do not need to press any buttons.
		– OR –

#### **CHECK YOUR POSITION (Continued)**

If the alarm becomes a Manual Restart Alarm:

- 1. Press **STOP** to mute the alarm.
- 2. Place the cycler on a surface that is approximately level with you.
- 3. Press *GO* to return to the therapy.

#### Cause 2:

(Start of FILL 1 in Standard Mode only)

The clamp on the patient line was not opened after connecting the solution bags and after you were connected.

This prevented priming of the patient line and caused the Initial Drain to end with little or no fluid drained.

If this alarm occurs, do NOT open the clamp.

#### **WARNING**

Opening the clamp, at this point, can cause air to be delivered to your peritoneal cavity.

This can result in shoulder and abdominal pain. This can also result in an increased intraperitoneal volume (IIPV) situation if you had fluid in your peritoneal cavity prior to the Initial Drain.

IIPV can result in a feeling of abdominal discomfort, serious injury, or death.

If any patient, or patient caregiver, suspects the patient has IIPV during a treatment, press *STOP* immediately, then press  $\nabla$  and initiate a Manual Drain. The Manual Drain procedure is located in 18.5, *Manual Drain Procedure*, on page 18-53. See 18.8, *Increased Intraperitoneal Volume (IIPV)*, on page 18-58 if IIPV is suspected.

#### **CHECK YOUR POSITION (Continued)**

# To Correct Cause 2:

If you suspect this is the cause:

- 1. Press **STOP.**
- 2. Press  $\nabla$  until you see MANUAL DRAIN.
- 3. Press **ENTER** to initiate a Manual Drain. Then open the clamp on the patient line.
  - Do not open the clamp until after you press **ENTER**.
- 4. When the Manual Drain ends, STOPPED: FILL appears.
- 5. Press **GO** to resume Fill.

#### 18.3.13 Reload the Set

#### **WARNING**

Do not open the door until you have CLOSED ALL CLAMPS.

This prevents the flow of fluid from one bag to another, and/or to the patient. Uncontrolled gravity flow of fluid can result in an increased intraperitoneal volume (IIPV) situation.

IIPV can result in a feeling of abdominal discomfort, serious injury, or death.

If any patient, or patient caregiver, suspects the patient has IIPV during a treatment, press STOP immediately, then press  $\nabla$  and initiate a Manual Drain. The Manual Drain procedure is located in 18.5, *Manual Drain Procedure*, on page 18-53. See 18.8, *Increased Intraperitoneal Volume* (IIPV), on page 18-58 if IIPV is suspected.

RELOAD THE SET			
Display Message:	RELOAD THE SET		
Cause:	The cassette is loaded incorrectly or there is a problem the system. See Table 18-1 on page 18-28 for possible causes.		
	Thi	s is a Manual Restart Alarm.	
To Correct:	1.	Press <b>STOP</b> to mute the alarm.	
	2.	CLOSE ALL CLAMPS.	
	3.	Open the door.	
	4.	Remove the cassette.	
	5.	Lift the cassette to drain fluid, if it is full.	
	6.	Reload the cassette.	
	7.	Hold tubing where it exits the cassette holder on your right and push back while you close the door.	
	8.	Open the clamps.	
	9.	Press <b>GO</b> .	
	10.	Press <b>GO</b> again when the display screen shows CONNECT BAGS.	
		The priming procedure begins.	

Table 18-1. Possible Causes for Reload the Set Alarms

Table 10-1. Possible Causes for Reload the Set Alaitis		
Reload Set Number	Possible Cause	
143, 163, 165–169	The occluder is unable to pinch off flow due to:	
	<ul><li>Cold solution</li><li>Cassette tubing overlapping or touching where it exits the door</li></ul>	
	➤ NOTE: Placing the heater bag and cassette on the heater pan prior to the start of therapy can often prevent this alarm.	
134–137, 156, 157	Clamped or kinked line	
	WARNING	
To prevent delivery of non-sterile air to your peritoneal cavity, load a new set and bags if RELOAD SET: 201 occurs and fluid flows from the patient line. Non-sterile air in the peritoneal cavity can cause peritonitis. Air in the peritoneal cavity can cause abdominal and/or shoulder pain.		
201	<ul> <li>Pneumatic leak between cassette and membrane gasket due to incorrect loading</li> <li>Debris on outside of cassette</li> <li>Hole in cassette sheeting</li> </ul>	
	➤ NOTE: Load a new set and bags if RELOAD SET: 201 occurs and fluid flows from the patient line.	
	➤ NOTE: Always check cassette for debris, slits, tears, or punctures before use.	
200, 202, 203	<ul> <li>Pneumatic leak between cassette and membrane gasket due to incorrect loading</li> <li>Debris on outside of cassette</li> <li>Hole in cassette sheeting</li> </ul>	
200, 202, 203	gasket due to incorrect loading <ul><li>Debris on outside of cassette</li></ul>	

#### 18.3.14 Caution: Positive UF

CAUTION: POSITIVE UF			
Message Display:	CAUTION: POSITIVE UF		
	Low Fill Mode only.		
Cause:	You have removed more than the allowable ultrafiltrate volume in either the current cycle or over the course of several cycles.		
	The allowable volume can be set between 0 (zero) and 5000 mL.		
	This is a Manual Restart Alarm.		
To Correct:	1. Press <b>STOP</b> to mute the alarm.		
	2. Press $\nabla$ until BYPASS appears.		
	3. Press <b>ENTER</b> to choose BYPASS.		
	You have bypassed the alarm and treatment resumes.		
	Notify your dialysis center if the alarm continues. Ultrafiltration (UF) may be set too high, or the alarm setting may be too low.		

# 18.3.15 Verify I-Drain

VERIFY IDRAIN				
Message Display:		VEI	RIFY IDRAIN: OFF	
Cause 1:	e 1: The I-DRAIN ALARM setting is OFF.			
To Correct		1.	Press the power switch OFF and ON again.	
Cause 1:		2.	Set the I-DRAIN ALARM to a value other than OFF. See 10.2.7, <i>I-Drain Alarm</i> , on page 10-9.	
➤ NOTE:		-	rmanently changed the Initial Drain Alarm setting for and all future therapy sessions.	
Cause 2:		The I-Drain Alarm setting is lower than expected.		
To Correct		1.	Press <b>STOP</b> and the setting blinks.	
Cause 2:		2.	Press $\triangle$ or $\nabla$ to temporarily change the minimum I-Drain Alarm setting.	
		3.	Press <b>ENTER</b> to accept the value.	
		4.	Press <b>GO</b> to resume Initial Drain.	
➤ NOTE:	treatme	nt se	mporarily changed the Initial Drain Alarm setting for this ession. To permanently change the I-Drain Alarm, see in Alarm, on page 10-9.	

#### 18.3.16 System Errors 2240 or 2267

#### **WARNING**

Do not attempt to reuse any disposable supplies. Possible contamination of the fluid or fluid pathways can result if disposables are reused. Contamination of any portion of the fluid or fluid path can result in peritonitis.

#### **WARNING**

Do not open the door until you have CLOSED ALL CLAMPS.

This prevents the flow of fluid from one bag to another, and/or to the patient. Uncontrolled gravity flow of fluid can result in an increased intraperitoneal volume (IIPV) situation.

IIPV can result in a feeling of abdominal discomfort, serious injury, or death.

If any patient, or patient caregiver, suspects the patient has IIPV during a treatment, press STOP immediately, then press  $\nabla$  and initiate a Manual Drain. The Manual Drain procedure is located in 18.5, *Manual Drain Procedure*, on page 18-53. See 18.8, *Increased Intraperitoneal Volume (IIPV)*, on page 18-58 if IIPV is suspected.

#### SYSTEM ERROR 2240 or 2267

Message Display: SYSTEM ERROR 2240 SYSTEM ERROR 2267

#### Cause:

The system detected air in the disposable tubing set and solution bag, and diverted flow to drain.

SYSTEM ERROR 2240 and SYSTEM ERROR 2267 can be caused by one or more of the following:

- Leaks
- Disconnected disposable tubing
- Loose connections
- Fluid level not at or near the patient connector after completing the prime cycle (incomplete prime)
- Unclamped, unused supply lines (if the tip protector has been disrupted)
- Use of "Dummy Tummy" during training

#### To Correct:

- 1. Press **STOP** to mute the alarm.
- 2. Write down the System Error number and treatment phase (Fill, Drain, or Dwell) that appears on the display screen.
- 3. Turn the power switch OFF and ON to end therapy. SYSTEM ERROR 2367 appears.
- Press the power switch OFF and ON again.PRESS GO TO START appears.
- 5. Close all clamps.
- 6. Discard the disposable set and solution bags.
- 7. Notify your dialysis nurse.
- ➤ **NOTE:** If you need help to correct the alarm, contact Baxter Technical Assistance at the number listed in 2.2, *Numbers to Call for Assistance*, on page 2-1.

#### **SYSTEM ERROR 2240 or 2267 (Continued)**

- 8. Complete your treatment with a manual exchange.
  - OR -
- 9. Set up the cycler with new supplies.

A device swap is not necessary.

#### 18.3.17 System Error nnnn

#### **WARNING**

Do not open the door until you have CLOSED ALL CLAMPS.

This prevents the flow of fluid from one bag to another, and/or to the patient. Uncontrolled gravity flow of fluid can result in an increased intraperitoneal volume (IIPV) situation.

IIPV can result in a feeling of abdominal discomfort, serious injury, or death.

If any patient, or patient caregiver, suspects the patient has IIPV during a treatment, press STOP immediately, then press  $\nabla$  and initiate a Manual Drain. The Manual Drain procedure is located in 18.5, *Manual Drain Procedure*, on page 18-53. See 18.8, *Increased Intraperitoneal Volume* (IIPV), on page 18-58 if IIPV is suspected.

SYSTEM ERROR nnnn				
Message Display:	S	SYSTEM ERROR nnnn		
Cause:	A problem occurred inside the system in the current cycle or over several cycles.			
To Correct:		Press <b>STOP</b> to mute the alarm.  Write down the System Error number and therapy phase that appears on the display screen.  For instructions and assistance, contact Baxter Technical Assistance at the number listed in 2.2, <i>Numbers to Call for Assistance</i> , on page 2-1.  Follow the instructions from Baxter Technical Assistance. Your next steps will vary, as shown in Table 18-2.		

Table 18-2. Steps to Correct System Error Alarms

System Error	Steps to Correct
2042, 2044, 2046	If this alarm occurs before you are connected, treat as a Reload Set Alarm. 18.3.5, <i>Load a New Set</i> , on page 18-12. Otherwise treat as a System Error.
2065 to 2071, 2098, 2265	Close all clamps. Press the power switch Off and On to end the therapy.
2240, 2267, 2367	See 18.3.16, <i>System Errors 2240 or 2267</i> , on page 18-31 for these alarms.
All others	One of the following:  - Continue the therapy - End the therapy early - Bypass a phase - Perform a Manual Drain

The *HomeChoice* APD System usually recovers from the System Error. Device swaps are necessary only if the System Error repeats with different disposables.

# 18.3.18 Temp Stabilizing

TEN	ИP S	TABI	LIZIN	G

Message Display: TEMP STABILIZING

### Cause:

The temperature of the fluid in the heater bag measured by the cycler is above 40°C.

Fluid delivery is not allowed at this time.

The room temperature combined with the heat from the system (even with the bag heater off) is raising the solution bag temperature too high to deliver safe fluids to you.

### To Correct:

- 1. Press the power switch OFF.
- 2. Allow the system to cool for 10 to 20 minutes.

Bags containing less fluid cool in less time.

3. Press the power switch ON.

POWER RESTORED appears on the display screen.

- 4. Press **STOP**.
- 5. Press *GO*.

Therapy automatically resumes if the fluid temperature falls below 40°C.

If the TEMP STABILIZING message continues to appear:

- 1. Press the power switch OFF.
- 2. Wait another 20 minutes.
- 3. Repeat Steps 3 through 5 above.

# **TEMP STABILIZING (Continued)**

➤ **NOTE:** The system provides a display alarm only. There is no audible alarm.

To avoid recurrence of this alarm for future therapies, reduce the room temperature by:

- Relocating the cycler, if it is in direct sunlight
- Opening windows in the room
- Turning on a window fan and directing the flow toward the cycler
- Turning on an air conditioner, if one is available

The use of an empty heater bag, or a heater bag that is close in volume to the programmed Fill Volume, can also reduce the chance for this alarm because a replenish occurs before each Fill.

➤ NOTE: Close windows and turn off fans before connecting or disconnecting yourself.

# 18.4 Bypass Procedures

# 18.4.1 Bypass Initial Drain

Follow the steps below to bypass an INITIAL DRAIN. Contact your dialysis center to learn when it is safe to bypass.

### **WARNING**

Bypassing an Initial Drain when there is still fluid left in the peritoneal cavity can result in an increased intraperitoneal volume (IIPV) situation later in your therapy. Change your position or sit up to aid draining completely during the Initial Drain.

IIPV can result in a feeling of abdominal discomfort, serious injury, or death.

If any patient, or patient caregiver, suspects the patient has IIPV during a treatment, press STOP immediately, then press  $\nabla$  and initiate a Manual Drain. The Manual Drain procedure is located in 18.5, *Manual Drain Procedure*, on page 18-53. See 18.8, *Increased Intraperitoneal Volume (IIPV)*, on page 18-58 if IIPV is suspected.

Additional care should be taken to monitor for IIPV symptoms for those patients not able to communicate essential information to their caregiver during treatment.

Steps to bypass Initial Drain	Display screen
INTIAL DRAIN appears on the display screen.	INITIAL DRAIN
1. Press <b>STOP</b> .	STOPPED: DRAIN
2. Press ∇.	DRAIN VOLUME: ML

•	eps 1	to by	pass Initial Drain (Continued)	Display scree	en
3.	Pre	ess $ abla$	7.	ВҮРА	SS
4.	Select one of the following options:			INITIAL	DRAIN
	a.		ss <b>GO</b> to return to INITIAL DRAIN if you do want to bypass.		
		Thi	s is the <i>recommended</i> option.		
>	NO	TE:	Unless you have absorbed a lot of fluid, resu MANUAL DRAIN. Using Manual Drain repeat an audible alarm.		
>	NO.	TE:	The Manual Drain can facilitate obtaining a command Drain ends due to Slow/No Flow, the STOPPED: DRAIN without alarming.	-	
	<b>– C</b>	DR –			
	a.	Pre	ss $ abla$ until MANUAL DRAIN appears.	MANUAL I	DRAIN
	a. b.		ss ∇ until MANUAL DRAIN appears. ss <b>ENTER</b> .		DRAIN
	b.		• •	MANUAL I	DRAIN ML
	b.	Pre <b>DR –</b>	• •	DRAINING:	ML
	b. <b>– C</b>	Pre OR – Pre Init	ss <b>ENTER</b> .		ML
	b. <b>– C</b>	Pre OR – Pre Init	ss <b>ENTER</b> . ss <b>ENTER</b> . tial Drain is bypassed and the first FILL tins.	DRAINING:	ML
	b. <b>– C</b>	Pre  Pre  Init beg  OR —  An	ss <b>ENTER</b> . ss <b>ENTER</b> . tial Drain is bypassed and the first FILL tins.	DRAINING:	ML OF 5 FINISHED

# 18.4.2 Bypass Low Drain Volume Alarm During Initial Drain

Follow the steps below to bypass a LOW DRAIN VOLUME alarm during an Initial Drain. Contact your dialysis center to learn when it is safe to bypass.

### **WARNING**

Bypassing a LOW DRAIN VOLUME alarm during Initial Drain when there is still fluid left in the peritoneal cavity can result in an increased intraperitoneal volume (IIPV) situation later in your therapy. Change your position or sit up to aid draining completely during the Initial Drain.

IIPV can result in a feeling of abdominal discomfort, serious injury, or death.

If any patient, or patient caregiver, suspects the patient has IIPV during a treatment, press STOP immediately, then press  $\nabla$  and initiate a Manual Drain. The Manual Drain procedure is located in 18.5, *Manual Drain Procedure*, on page 18-53. See 18.8, *Increased Intraperitoneal Volume* (IIPV), on page 18-58 if IIPV is suspected.

Additional care should be taken to monitor for IIPV symptoms for those patients not able to communicate essential information to their caregiver during treatment.

Steps to bypass Low Drain Volume alarm during I-Drain Display screen		
LOW DRAIN VOLUME appears on the display screen.	LOW DRAIN VOLUME	
1. Press <b>STOP</b> .	LOW DRAIN VOLUME	
	alternates with	
	INITIAL DRAIN	

			ypass Low Drain Volume alarm rain <i>(Continued)</i>	Display scree	n	
2.	Pre	ess 7	7.	DRAIN VOLUME	: <b>M</b> L	
	The	e DR	AIN VOLUME appears.			
3.	Pre	ess 7	7.	TOTAL UF:	ML	
	Ini	tial I	Orain is not included in TOTAL UF.			
4.	Pre	ess V	7.	BYPAS	S	
5.	Sel	ect c	one of the following options:			
	a.	Pre	ess $ abla$ until MANUAL DRAIN appears.	MANUAL D	RAIN	
		Thi	s is the <i>recommended</i> option.			
			ess <b>ENTER</b> .	DRAINING:	ML	
	– OR –					
	a.		ess <b>GO</b> to return to Drain if you do not want bypass.	DRAINING:	ML	
>	NOTE: When a Manual Drain ends due to low or No Flow conditions, LOW DRAIN VOLUME		LOW DRAIN	VOLUME		
				alternates		
			alternates with INITIAL DRAIN on the display screen.	INITIAL D	RAIN	
	<b>–</b> C	– OR –				
	a. Pr		a. Press <b>EN</b>	ess <b>ENTER</b> to bypass the I-Drain Alarm.	FILL 1 0	F X
		The	e next FILL begins.			
>	NO	TE:	By selecting BYPASS, you indicate that you a considers your volume zero (0) and delivers Fill Volume.			

	eps to bypass Low Drain Volume alarm ring I-Drain <i>(Continued)</i>	Display screen	
6.	Change your position and resume Initial Drain as often as necessary.	DRAIN VOLUME: M	ML
	Using Manual Drain repeatedly does not generate an audible alarm.		
7.	Press $\nabla$ from the alarm stopped state to see the total Initial Drain Volume (I-DRAIN VOL).	I-DRAIN VOL: M	ML

# 18.4.3 Bypass Drain Phase

### **WARNING**

Bypassing a Drain phase can leave fluid in the peritoneal cavity and result in an increased intraperitoneal volume (IIPV) situation.

IIPV can result in a feeling of abdominal discomfort, serious injury, or death.

If any patient, or patient caregiver, suspects the patient has IIPV during a treatment, press STOP immediately, then press  $\nabla$  and initiate a Manual Drain. The Manual Drain procedure is located in 18.5, *Manual Drain Procedure*, on page 18-53. See 18.8, *Increased Intraperitoneal Volume* (IIPV), on page 18-58 if IIPV is suspected.

Additional care should be taken to monitor for IIPV symptoms for those patients not able to communicate essential information to their caregiver during treatment.

Follow the next steps to bypass a non-Initial Drain phase. Contact your dialysis center to learn when it is safe to bypass.

<u></u>	ana ta hamana a Dusin mbasa	Diantarran	
Ste	eps to bypass a Drain phase	Display screen	
DRAIN phase number appears on the display screen.		DRAIN 2 OF 5	
1.	Press <b>STOP.</b>	STOPPED: DRAIN	
2.	Press $\nabla$ .	DRAIN VOLUME: ML	
	The DRAIN VOLUME is shown.		
3.	Press $\nabla$ .	I-DRAIN VOL: ML	
	The Initial Drain Volume (I-DRAIN VOL) is shown.		
4.	Press $\nabla$ .	TOTAL UF: ML	
	The TOTAL UF at the end of your previous Drain is shown.		
5.	Press ∇.	BYPASS	
6.	Press <b>ENTER.</b>	FILL 3 OF 5	
	The next FILL will begin. It will be a full Fill if no alarm occurred.		
	– OR –	DRAIN NOT FINISHED	
	If the volume drained is less than your Minimum Drain Volume, a DRAIN NOT FINISHED alarm appears if you try to bypass. See 18.4.4, <i>Bypass Drain Not Finished Alarm</i> , on page 18-43.		
	– OR –	CAUTION: NEGATIVE UF	
	A CAUTION: NEGATIVE UF alarm may appear. See 18.3.11, <i>Caution: Negative UF</i> , on page 18-22 and 18.4.6, <i>Bypass Caution: Negative UF Alarm</i> , on page 18-49.		

# 18.4.4 Bypass Drain Not Finished Alarm

### WARNING

Bypassing a DRAIN NOT FINISHED alarm can leave fluid in the peritoneal cavity and result in an increased intraperitoneal volume (IIPV) situation.

IIPV can result in a feeling of abdominal discomfort, serious injury, or death.

If any patient, or patient caregiver, suspects the patient has IIPV during a treatment, press STOP immediately, then press  $\nabla$  and initiate a Manual Drain. The Manual Drain procedure is located in 18.5, *Manual Drain Procedure*, on page 18-53. See 18.8, *Increased Intraperitoneal Volume (IIPV)*, on page 18-58 if IIPV is suspected.

Additional care should be taken to monitor for IIPV symptoms for those patients not able to communicate essential information to their caregiver during treatment.

Follow the next steps to bypass a DRAIN NOT FINISHED alarm. Contact your dialysis center to learn when it is safe to bypass.

	eps to bypass ain Not Finished alarm	Display screen
to l	e DRAIN NOT FINISHED alarm appears when you try bypass and your current Drain Volume is less than Minimum Drain Volume.	DRAIN NOT FINISHED
1.	Press <b>STOP</b> to silence the alarm.	
2.	Press $\nabla$ .	DRAIN VOLUME: ML
	The volume drained is subtracted from your Fill Volume. Your next Fill is reduced by this difference.	
	If this alarm occurs during Initial Drain, DRAIN VOLUME: ML does not appear.	
3.	Press $\nabla$ .	I-DRAIN VOL: ML
	The Initial Drain Volume (I-DRAIN VOL) from the current therapy is shown.	
4.	Press $\nabla$ .	TOTAL UF: ML
	The TOTAL UF from the end of the previous Drain is shown.	
5.	Press $\nabla$ .	BYPASS
6.	Press <b>ENTER</b> to bypass the DRAIN NOT FINISHED alarm.	FILL 3 OF 5
	The next FILL begins. The volume of fluid that was not drained is subtracted from the Fill Volume for this phase.	

# 18.4.5 Bypass Low Drain Volume Alarm

### **WARNING**

Bypassing a LOW DRAIN VOLUME alarm can leave fluid in the peritoneal cavity and result in an increased intraperitoneal volume (IIPV) situation.

IIPV can result in a feeling of abdominal discomfort, serious injury, or death.

If any patient, or patient caregiver, suspects the patient has IIPV during a treatment, press STOP immediately, then press  $\nabla$  and initiate a Manual Drain. The Manual Drain procedure is located in 18.5, *Manual Drain Procedure*, on page 18-53. See 18.8, *Increased Intraperitoneal Volume* (IIPV), on page 18-58 if IIPV is suspected.

Additional care should be taken to monitor for IIPV symptoms for those patients not able to communicate essential information to their caregiver during treatment.

A LOW DRAIN VOLUME alarm occurs to let you know that your Drain flow rates indicate that you are empty, but have not achieved your Minimum Drain Volume. Follow the steps below to bypass a LOW DRAIN VOLUME alarm. Contact your dialysis center to learn when it is safe to bypass.

Steps to bypass Low Drain Volume alarm Display screen			
LOW DRAIN VOLUME appears on the display screen.	LOW DRAIN VOLUME		
1. Press <b>STOP</b> to silence the alarm.	LOW DRAIN VOLUME		
	alternates with		
	DRAIN 2 OF 5		

	eps to bypass w Drain Volume alarm <i>(Continued)</i>	Display screen	
2.	Press ∇.	DRAIN VOLUME:	ML
	The DRAIN VOLUME is shown.		
3.	Press $\nabla$ .	I-DRAIN VOL:	ML
	The Initial Drain Volume (I-DRAIN VOL) from the current therapy is shown.		
4.	Press $\nabla$ .	TOTAL UF:	ML
	The TOTAL UF from the end of the previous Drain is shown.		

### **WARNING**

Bypassing a LOW DRAIN VOLUME alarm when the Total UF at the end of the last cycle is lower than normal for this point in the therapy can result in an increased intraperitoneal volume (IIPV) situation. A negative UF value can result in a greater potential for IIPV. Press GO to resume Drain.

IIPV can result in a feeling of abdominal discomfort, serious injury, or death.

If any patient, or patient caregiver, suspects the patient has IIPV during a treatment, press STOP immediately, then press  $\nabla$  and initiate a Manual Drain. The Manual Drain procedure is located in 18.5, *Manual Drain Procedure*, on page 18-53. See 18.8, *Increased Intraperitoneal Volume (IIPV)*, on page 18-58 if IIPV is suspected.

Additional care should be taken to monitor for IIPV symptoms for those patients not able to communicate essential information to their caregiver during treatment.

# Steps to bypass Low Drain Volume alarm (Continued) Display screen 5. Press $\nabla$ . **BYPASS** Bypassing confirms that you are empty and that you want the next Fill delivery to equal your prescribed Fill Volume. You will achieve negative UF if you bypass the Low Drain Alarm and your Drain Volume is less than your Fill Volume. Your UF decreases by the amount your Drain is short of your prescribed Fill Volume. Press **GO** to return to Drain. DRAIN 2 OF 5 This is the *recommended* option. - OR -Press **ENTER** to bypass. FILL 3 0F 5 The next FILL begins. Your full Fill Volume is delivered. If you pressed **ENTER** and the increase in negative CAUTION: NEGATIVE UF UF exceeds your Negative UF Limit, a CAUTION: NEGATIVE UF alarm occurs. See 18.4.6, *Bypass* Caution: Negative UF Alarm, on page 18-49. Press **STOP** to silence the alarm. a. CAUTION: NEGATIVE UF alternates with DRAIN 2 OF 5 b. Press **GO** to resume DRAIN. DRAIN 2 OF 5 **NOTE:** Change your position after you resume Drain. Occasionally, the location of the catheter tip can be in a less-than-optimal position. Changing your position may resolve the low Drain flow issue.

# Steps to bypass Low Drain Volume alarm (Continued)

### **Display screen**

- ➤ **NOTE:** If LOW DRAIN VOLUME alarms continue to occur after you resume Drain, and it is necessary to bypass the Drain (for example, to reverse the flow in the catheter to correct a fibrin blockage issue):
  - Press **STOP** to silence a LOW DRAIN VOLUME alarm.
  - Press GO to resume Drain.
  - Press STOP to stop the Drain (when no alarm is present).
  - Bypass the Drain phase. See 18.4.3, Bypass Drain Phase, on page 18-41.

A DRAIN NOT FINISHED alarm occurs if you have not met your minimum Drain Volume when bypassing a Drain phase. If a DRAIN NOT FINISHED alarm occurs, your next Fill will be reduced by the amount that your Drain Volume was less than your prescribed Fill Volume. If you do not encounter a DRAIN NOT FINISHED alarm, your next Fill Volume will equal your prescribed Fill Volume.

# 18.4.6 Bypass Caution: Negative UF Alarm

### **WARNING**

Bypassing a CAUTION: NEGATIVE UF alarm can leave fluid in the peritoneal cavity and result in an increased intraperitoneal volume (IIPV) situation.

IIPV can result in a feeling of abdominal discomfort, serious injury, or death.

If any patient, or patient caregiver, suspects the patient has IIPV during a treatment, press STOP immediately, then press  $\nabla$  and initiate a Manual Drain. The Manual Drain procedure is located in 18.5, *Manual Drain Procedure*, on page 18-53. See 18.8, *Increased Intraperitoneal Volume (IIPV)*, on page 18-58 if IIPV is suspected.

Additional care should be taken to monitor for IIPV symptoms for those patients not able to communicate essential information to their caregiver during treatment.

**NOTE:** Do not bypass this alarm except on your dialysis center's advice.

**NOTE:** This alarm can be bypassed only once.

Follow the next steps if you are sure it is safe to bypass a CAUTION: NEGATIVE UF alarm. Contact your dialysis center to learn when it is safe to bypass.

	eps to by ution: N	/pass egative UF alarm	Display screen
CAI	UTION: N	IEGATIVE UF appears on the display screen.	CAUTION: NEGATIVE UF
1.	The CA	<b>TOP</b> to silence the alarm. UTION: NEGATIVE UF alarm alternates with rent DRAIN phase.	CAUTION: NEGATIVE UF alternates with DRAIN 2 OF 5
>	NOTE:	The default value for the Negative UF alarm prescribed Fill Volume.	is 50% of your
<b>&gt;</b>	NOTE:	The Negative UF alarm limit can be program the Low Fill Mode.	med at 20% to 60% in
2.	Press ∇	7.	DRAIN VOLUME: ML
>	NOTE:	The amount that your Drain Volume is short Volume is subtracted from the previous Drain obtain your current UF that resulted in the N	n Total UF (see below) to
3.	Press ∇	7.	I-DRAIN VOL: ML
		cial Drain Volume (I-DRAIN VOL) from the therapy is shown.	
4.	Press $\nabla$	7.	TOTAL UF: ML
	The TOTAL UF from the end of the previous Drain is shown.		
5.	Press ∇	7.	BYPASS
>	NOTE:	Unless you have absorbed a lot of fluid, result MANUAL DRAIN. Using Manual Drain repeat an audible alarm.	

Steps to bypass **Caution: Negative UF alarm (Continued)** Display screen 6. Press **ENTER** to bypass. CAUTION: NEGATIVE UF alternates with DRAIN 2 OF 5 **NOTE:** Change your position to assist draining. Fluid may have pocketed near your catheter. Press **GO** to resume DRAIN. DRAIN 2 OF 5 - OR -Press  $\nabla$  until MANUAL DRAIN appears. MANUAL DRAIN b. Press **ENTER**. DRAINING: ML - OR -Press **ENTER** to bypass. a. FILL 3 0F 5 The next FILL begins. **NOTE:** By selecting BYPASS, you indicate that you are empty. The system considers your volume zero (0) and delivers your entire prescribed Fill Volume. ➤ **NOTE:** Bypassing a CAUTION: NEGATIVE UF alarm will temporarily increase your Minimum Drain Volume percentage to 100% of your prescribed Fill Volume. If your Drain Volume percentage is greater than 100%, it stays the same. Additional bypassing is allowed only if this Minimum Drain Volume has been met. Your Minimum Drain Volume

percentage will remain at 100% until your UF falls below the

Negative UF alarm limit (default value is 50%).

# 18.4.7 Check Supply Line Alarm During Replenish

An alarm is posted when there is insufficient fluid to complete an unscheduled replenish. This alarm can not be bypassed. To return to Fill, follow the steps below.

Steps to return to Fill		Display screen
		CHECK SUPPLY LINE
1.	Press <b>STOP</b> .	CHECK SUPPLY LINE alternates with REFILLING THE HEATER
2.	Press <b>GO</b> .	PLEASE WAIT appears briefly, then REFILLING THE HEATER
3.	Press <b>STOP.</b>	STOPPED: REFILLING
4.	Press $\nabla$ .	BYPASS
5.	Press <b>ENTER</b> .	PLEASE WAIT appears briefly, then REFILL NOT FINISHED
6.	Press <b>STOP.</b>	REFILL NOT FINISHED
7.	Press $\nabla$ .	BYPASS
8.	Press <b>ENTER</b> .	FILL N OF N

# 18.5 Manual Drain Procedure

### **WARNING**

Do not *STOP* or BYPASS a Manual Drain during Fill. An increased intraperitoneal volume (IIPV) situation can result.

IIPV can result in a feeling of abdominal discomfort, serious injury, or death.

If any patient, or patient caregiver, suspects the patient has IIPV during a treatment, follow the Manual Drain procedure below. See 18.8, *Increased Intraperitoneal Volume (IIPV)*, on page 18-58 for more information.

Additional care should be taken to monitor for IIPV symptoms for those patients not able to communicate essential information to their caregiver during treatment.

Steps to perform a Manual Drain  The current FILL phase appears on the display screen.		Display screen  FILL 3 0F 5	
2.	Press ∇.	FILL VOLUME: ML	
3.	Press ∇.	BYPASS	
4.	Press ∇.	CHANGE PROGRAM	
5.	Press ∇.	MAKE ADJUSTMENTS	
6.	Press ∇.	MANUAL DRAIN	

Steps to perform a Manual Drain (Continued)		Display screen	
7.	Press <b>ENTER.</b>	DRAINING:	ML
	The display screen shows the Drain volume. The system continues to drain until flow is no longer detected.		
8.	Press <b>GO</b> to return to therapy.		
9.	Reinitiate a Manual Drain if it is stopped during Fill.		

The amount of fluid drained is recorded in the following ways:

- If the Manual Drain occurs after the patient received a Last Fill, the amount drained is recorded as LAST M-DRAIN: ML and is shown in the menu at the beginning of your next therapy. See 11.4, *Menu Options at Startup*, on page 11-7.
- Fluid drained during all other Manual Drains is included as part of the Total UF for the therapy.

# 18.6 End Therapy Early Procedure

Follow the steps below to end your therapy early.

- ➤ NOTE: If you end your therapy early for any reason, you can be left with more fluid in your peritoneal cavity than normal. If this occurs, your Initial Drain Alarm (I-DRAIN ALARM) setting may be too low. To minimize the potential for an increased intraperitoneal volume (IIPV) situation, do one of the following at the beginning of your next therapy:
  - If a VERIFY I-DRAIN: ML prompt appears, press **STOP** and press  $\triangle$  or  $\nabla$  to increase your I-DRAIN ALARM setting to at least 70% of your current expected peritoneal volume for this therapy only.

### - OR -

If a VERIFY I-DRAIN prompt does not appear, press **STOP** and ∇ to MANUAL DRAIN. Press **ENTER** to initiate a Manual Drain. The system will return to STOPPED: DRAIN when the Manual Drain ends. You can repeat the Manual Drain any number of times without an audible alarm. Resuming the Drain can result in an audible alarm.

Steps to end therapy early		Display screen
1.	Press the power switch OFF.	
2.	Press the power switch ON.	PLEASE WAIT
	The alarm sounds.	
		POWER RESTORED
3.	Press <b>STOP.</b>	POWER RESTORED

Steps to end therapy early (Continued)		Display screen
4.	Press $\nabla$ .	FILL VOL: 60ML
		– or –
		DWELL TIME LEFT 1:05
		- or -
		DRAIN VOLUME: 60ML
5.	Press $\nabla$ .	I-DRAIN VOL: 65ML
	Volume from Initial Drain of the current therapy is shown.	
6.	Press $\nabla$ .	TOTAL UF: 150ML
	TOTAL UF is updated after each Drain is completed.	
7.	Press <b>ENTER</b> to review cycle-by-cycle information. Press <b>STOP</b> to return to the previous menu.	
8.	Press $\nabla$ .	AVG DWELL TIME: 1:32
	Average actual Dwell Time for your therapy.	
9.	Press <b>ENTER</b> to review cycle-by-cycle information. Press <b>STOP</b> to return to the previous menu.	
10.	Press $\nabla$ .	END THE THERAPY
	END THE THERAPY appears.	
11.	Press <b>ENTER.</b>	CLOSE ALL CLAMPS
	Proceed with the End Therapy procedure. See Section 13, <i>Operating Instructions – End Therapy</i> .	

# 18.7 Reprime Patient Line Procedure

If the fluid level is not at or near the connector at the end of the patient line, follow the steps below to reprime the patient line.

### Steps to reprime the patient line

### **Display screen**

1. Press **STOP** when the display screen alternates between CONNECT YOURSELF and CHECK PATIENT LINE.

CONNECT YOURSELF

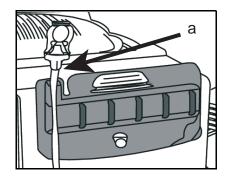
alternates with

CHECK PATIENT LINE

2. Press  $\nabla$  until REPRIME PATIENT LINE appears.

REPRIME PATIENT LINE

- 3. Press **ENTER**.
- 4. Verify that the patient line is properly primed:
  - a. Make sure fluid is present near the connector at the end of the patient line.



The display screen alternates between CONNECT YOURSELF and CHECK PATIENT LINE.

5. Repeat Steps 1 through 4 until the patient line is primed.

# 18.8 Increased Intraperitoneal Volume (IIPV)

Overfilling or not draining enough can result in excess fluid in the abdomen, also known as Increased Intraperitoneal Volume (IIPV). While some people may not exhibit symptoms, most commonly observed symptoms include:

- Feeling full, bloated, or overfull
- Abdominal pain or discomfort
- Expanded or tense abdomen
- Vomiting or spitting-up
- Difficulties feeding
- Localized swelling around the PD catheter exit site, belly button, groin region, or genital area
- Leakage of fluid from the PD catheter exit site
- Difficulty breathing
- A child complaining of a "funny feeling" in the abdomen
- A child crying
- Unexpected increase in blood pressure

IIPV can occur because of one or more of the following reasons:

- Low Fill Mode is not programmed for patients whose fill volumes are less than 1000 mL. These patients typically weigh less than 44 lbs (20 kg). The Negative UF Limit should not be raised above 50% and the Minimum Drain Volume % should not be lowered below 85% (the default values).
- The Initial Drain Alarm is programmed too low. The system may move on to the first Fill before you are completely drained if:
  - Your last therapy left you with more than your normal Last Fill Volume
  - You did not perform a manual drain
  - A slow flow condition occurs before you are completely drained

Temporarily increase your I-Drain Alarm setting or perform a Manual Drain to make sure that your Initial Drain is complete.

■ The patient line length is greater than 12 feet (3.6 meters) and Initial Drain Alarm is set below 30 mL. This can cause your Initial Drain to end early.

- The Minimum Drain Volume % is programmed too low. This can cause your Drain cycles to end early.
- Day Fill Volume, Night Fill Volume, or Last Fill Volume is programmed too high. This can cause you to be overfilled if the volume is not appropriate for your body's size.
- For Tidal therapies, Total UF volume is programmed too low. This can cause a gradual buildup of UF volume during the therapy.
- Last Manual Drain is programmed to No, or the UF Target for the Last Manual Drain is programmed too low. This can cause an incomplete last Drain.
- Stop and Go are pressed during Tidal dwells over multiple dwell cycles. This can reduce the volumetric accuracy of the device over the course of successive Tidal Dwell cycles.
- After a power failure during Prime, the **Go** button is pressed to start therapy without closing all clamps first. This can cause a free flow of fluid from one bag to another and/or to the patient during the time when LOAD THE SET is displayed.
- The door is opened during an alarm or System Error without closing all clamps first. This can cause a free flow of fluid from one bag to another and/or to the patient.
- The transfer set is connected to the patient line before CONNECT YOURSELF appears on the display screen. This can cause air to be delivered to your peritoneal cavity, which can cause IIPV if you had fluid in your peritoneal cavity prior to the Initial Drain.
- At the start of Fill 1, the patient line clamp is opened after a Check Patient Line alarm or Check Your Position alarm appears on the display screen without first initiating a manual drain. This can cause air to be delivered to your peritoneal cavity, which can cause IIPV if you had fluid in your peritoneal cavity prior to the Initial Drain.
- **Go** is pressed at the end of therapy before all clamps are closed when CLOSE ALL CLAMPS appears on the display screen. This can cause a free flow of fluid from one bag to another and/or to the patient.

- The door is opened at the end of therapy before all clamps are closed. This can cause a free flow of fluid from one bag to another and/or to the patient.
- Any Drain phase is bypassed, including Initial Drain, Day Drain, or Night Drain. This can cause the system to deliver a full Fill in addition to any fluid left in the peritoneal cavity.
- DRAIN NOT FINISHED, LOW UF, LOW DRAIN VOLUME, or CAUTION: NEGATIVE UF alarms are bypassed. This can cause the system to deliver a full Fill in addition to any fluid left in the peritoneal cavity.
- A Manual Drain performed during Fill is stopped or bypassed. This can cause the system to deliver a full Fill in addition to any fluid left in the peritoneal cavity.

IIPV could result in a feeling of abdominal discomfort, serious injury, or death.

NOTE: Additional care should be taken to monitor for IIPV symptoms for those patients not able to communicate essential information to the caregiver during treatment.

# IF IIPV IS SUSPECTED, PLEASE DO THE FOLLOWING:

- 1. Press **STOP** immediately, then press  $\nabla$  and initiate a Manual Drain.
  - The Manual Drain procedure is located on the next page.
- 2. Once the fluid is completely drained from the abdomen, call your nephrologist.
- 3. Call your nephrologist immediately if you have ANY complaints or symptoms of IIPV including those listed above.
- 4. For assistance in performing the above steps, call the Baxter Customer Service line which is available 24 hours a day, 7 days a week at 1-800-553-6898 Prompt 1.
- 5. If you are unable to reach your dialysis center, nephrologist, or the Baxter Customer Service Line, and you or the patient are experiencing symptoms of IIPV, call 911 immediately or go to the nearest Emergency Room.

Ste	eps to perform a Manual Drain	Display screen
Th	e current FILL phase appears on the display screen.	FILL 3 OF 5
1.	Press <b>STOP.</b>	STOPPED: FILL
2.	Press $\nabla$ .	FILL VOLUME: ML
3.	Press $\nabla$ .	BYPASS
4.	Press $\nabla$ .	CHANGE PROGRAM
5.	Press $\nabla$ .	MAKE ADJUSTMENTS
6.	Press $\nabla$ .	MANUAL DRAIN
7.	Press <b>ENTER.</b>	DRAINING: ML
	The display screen shows the Drain volume. The system continues to drain until flow is no longer detected.	
8.	Press <b>GO</b> to return to therapy.	
9.	Reinitiate a Manual Drain if it is stopped during Fill.	

# 18.9 Power Failure

When a power failure occurs (or if the power switch is turned OFF) during setup, the system closes the occluder and the display screen turns off.

When the power is restored, the system returns to PRESS GO TO START.

### **WARNING**

If a disposable set is already present in the system after a power failure, CLOSE ALL CLAMPS before you press *GO* to start your therapy. This prevents flow of fluid from one bag to another and/or to the patient during the time when LOAD THE SET is displayed. Uncontrolled gravity flow of fluid can result in a patient receiving an increased intraperitoneal volume (IIPV) situation.

IIPV can result in a feeling of abdominal discomfort, serious injury, or death.

If any patient, or patient caregiver, suspects the patient has IIPV during a treatment, press STOP immediately, then press  $\nabla$  and initiate a Manual Drain. The Manual Drain procedure is located in 18.5, *Manual Drain Procedure*, on page 18-53. See 18.8, *Increased Intraperitoneal Volume (IIPV)*, on page 18-58 if IIPV is suspected.

Additional care should be taken to monitor for IIPV symptoms for those patients not able to communicate essential information to their caregiver during treatment.

When a power failure occurs any time during or after Initial Drain, the system stops your therapy and the display screen turns off. To retrieve any therapy information during a power failure, the display can be activated by pressing any button.

Table 18-3 lists the options you can view during a loss of power.

- 1. Press any button to activate the display.
- 2. Press **STOP** to silence the alarm.
- 3. Press  $\nabla$  to view each option.

NOTE: If no button is pressed for two (2) minutes, the display turns off. Press any button to activate the display again.

**Table 18-3. Options Available During a Power Failure** 

Option	Description
Power Failure Alarm and Current Therapy Phase	POWER FAILURE alternates with FILL 3 0F 5
Current Status	FILL VOL: ML  - or -  DWELL TIME LEFTHH: MM  - or -  DRAIN VOL: ML
Initial Drain Volume	INITIAL DRAIN: ML
Total UF	TOTAL UF: ML
Average Dwell Time	AVG DWELL TIME:HH:MM
End The Therapy	END THE THERAPY  To end the therapy, press ENTER.

### If the power is restored within 30 minutes:

- The system automatically resumes therapy without any alarms.
- During the first 30 minutes of a power failure, press any key to retrieve therapy information. Press **STOP** and **GO** to start therapy after power is restored.

### If the power is not restored within 30 minutes:

- An alarm occurs after 30 minutes without power. Press **STOP** to mute the alarm.
- $\blacksquare$  Press  $\nabla$  to retrieve therapy information.

### If power is restored within approximately two hours:

- The therapy can be restarted. An alarm occurs again when power is restored.
- Press **STOP** and **GO** to restart therapy.

# If power is not restored within two hours:

- You must end your therapy. See 18.6, End Therapy Early Procedure, on page 18-55.
- Restart your therapy from the beginning, if needed.

# **18.10 Emergency Disconnect Procedure**

### WARNING

This procedure is intended for *emergency* disconnection for short periods of time only. Extended time away from the system during therapy can result in Lost Dwell Time. If Lost Dwell is 30 minutes or greater, a Lost Dwell message appears when therapy is completed.

### **WARNING**

Follow aseptic technique taught by your dialysis center when handling lines and solution bags to reduce the possibility of infection. Always put on a face mask and wash and dry (or disinfect) your hands thoroughly.

# 18.10.1 Disconnect from the System

### Steps to disconnect from the system

1. Press **STOP**.

The specific therapy phase and STOPPED appear on the display screen when **STOP** is pressed. If treatment is stopped during the Dwell phase, the system continues to count down the Dwell Time to zero (0).

- 2. Close the clamp on the patient line and close your transfer set.
- 3. Using aseptic technique, prepare to disconnect:
  - a. Open a new **FlexiCap** disconnect cap and a new **MiniCap** disconnect cap.
  - b. Disconnect the transfer set from the patient line.
  - c. Place the patient line back in the organizer.
  - d. Cap off the transfer set with a new **MiniCap** disconnect cap and tighten until fully secured.
  - e. Remove the patient line connector from the organizer and attach the new **FlexiCap** disconnect cap to the patient line connector.
  - f. Tighten the **FlexiCap** disconnect cap until it is fully secured.
  - g. Place the capped patient line connector back in the organizer.
- 4. You can now leave the *HomeChoice* APD System.
- ➤ **NOTE:** After 30 minutes, the system sounds an alarm. If you do not plan to return to therapy, follow the End Therapy Early procedure. See 18.6, *End Therapy Early Procedure*, on page 18-55.

# 18.10.2 Return to Therapy After an Emergency Disconnect

### **WARNING**

Follow aseptic technique taught by your dialysis center when handling lines and solution bags to reduce the possibility of infection. Always put on a face mask and wash and dry (or disinfect) your hands thoroughly.

### **Steps to return to therapy**

- 1. Using aseptic technique, prepare to connect:
  - a. Remove the **FlexiCap** disconnect cap from the patient line connector.
  - b. Remove the **MiniCap** disconnect cap from the transfer set connector.
  - c. Remove the patient line connector from the organizer.
  - d. Connect the patient line connector to the transfer set.
  - e. Open the clamp on the patient line.
  - f. Open your transfer set.
  - g. Press **GO.**
  - h. Discard the used **MiniCap** disconnect cap and **FlexiCap** disconnect cap.
- 2. Your therapy continues.

# Section

**Technical Data** 

19

# **Technical Data**

The specifications in this section apply to the Baxter *HomeChoice* and *HomeChoice* PRO APD Systems.

# 19.1 Physical Specifications

	U.S. Standard	Metric
Height:	7.0 in	17.8 cm
Width:	19.5 in	49.5 cm
Depth:	15.7 in	39.9 cm
Weight:	27 lbs	12.3 kg

# 19.2 Electrical Power Requirements

Product codes:	5C4471, 5C4471R, 5C8310, 5C8310R
Voltage range:	115 VAC ±10%
Frequency range:	50/60 Hz
Fuses:	F 5.0A – 125V
Mode of operation:	Continuous
Degree of protection against electrical shock:	Type B Applied Part
Type of protection against electrical shock:	Class I equipment
Power consumption:	Maximum: 600 VA (600 watts) Average: 100 VA (100 watts)
Degree of protection against ingress of water:	Meets the requirements of IEC 60601-2-39 (Clause 44.3)

Line voltage disturbances or improper grounding can adversely affect operation of the *HomeChoice* and *HomeChoice* PRO APD Systems. Variations in line voltage amplitude should be less than ±10 percent of nominal voltage. The duration of any voltage disturbance should be less than 5 milliseconds.

#### 19.2.1 Extension Cords

The use of extension cords is not recommended since they reduce the available voltage. Only heavy-duty extension cords rated for at least 1200 watts (10 Amps @ 120V) that are no longer than 12 feet should be used.

The extension cord must have the grounding wire that mates with the grounding plug on the *HomeChoice/HomeChoice* PRO APD System power cord.

# 19.3 System Performance

		U.S. Standard	Metric
	Fill & Drain Targeting:	Standard Mode: +5/–20 mL Low Fill Mode: +5/–10 mL	Standard Mode: +5/-20 mL Low Fill Mode: +5/-10 mL
Volumetric Accuracy	Volume Reported:	Greater of 2% or ±10 mL	Greater of 2% or ±10 mL
Display Precision	Volumetric:	1 mL	1 mL
Fluid Temperature Control (37°C setpoint typical)	Normal Ambient: Cold Ambient: Hot Ambient:	93.2°F to 100.4°F 91.4°F to 98.6°F 95°F to 104°F	34°C to 38°C 33°C to 37°C 35°C to 40°C
Temperature Measurement Range:		41°F to 122°F	5°C to 50°C
Temperature Accuracy:	Temperature Accuracy:		± 2°C
Fluid Temperature Cont	rol Setpoint:	95, 96.8, 98.6°F	35, 36, 37°C

# 19.4 Environmental Requirements

	U.S. Standard	Metric
Operating Temperature Limits:	59°F to 96.8°F 15°C to 36°C	
Operating Humidity:	15% to 85% N	Ioncondensing
Operating Atmospheric Pressure Range:	10.2 psia to 15.3 psia	70 kPa to 106 kPa
Storage Temperature Limits:	-25°F to 130°F	-32°C to 54°C
Storage Humidity:	10% to 95% N	loncondensing
Storage Atmospheric Pressure Range:7.3 psia to 15.3 psia50 kPa to 106 k		50 kPa to 106 kPa
Atmosphere:	Non-flammable, non-explosive, non-aerosolized with normal oxygen concentrations. Equipment not suitable for use in the presence of a flammable anesthetic mixture with air or with oxygen or nitrous oxide.	

# 19.5 Battery Backup

When power failure occurs during therapy, the *HomeChoice/HomeChoice* PRO APD System stops the therapy and the display screen turns off. However, the display powers up each time a key is pushed during the first 30 minutes of a power failure. If power is restored within two hours, the therapy can be restarted from where it left off. If the power is not restored within two hours, the therapy is not allowed to continue.

# 19.6 Electromagnetic Compatibility

# ONLY DEVICES MARKED WITH THIS SYMBOL ARE COMPLIANT TO THE IEC 60601-1-2 STANDARD



The *HomeChoice/HomeChoice* PRO APD System, as with all medical electrical equipment, needs special precautions regarding EMC (electromagnetic compatibility), and the following information must be followed when installing and putting the system into service.

Because the intensity of electromagnetic energy is greatest near the source of a transmitting antenna, portable and mobile RF communications equipment can affect medical electrical equipment.

The *HomeChoice/HomeChoice* PRO APD System has been designed to withstand the effects of EMI (electromagnetic interference) and meets the most current EMC standards that apply to the cycler. However, extremely high levels of electromagnetic energy (above the levels of IEC 60601-1-2) may still produce interference.

To reduce the risk of EMI, follow these recommendations:

Do not turn on or use hand-held personal communications devices, such as mobile two-way radios or cellular phones, near the cycler. If these devices need to be used, follow the recommended separation distance as shown in the following tables.

- In the case of unexplained EMI, consider the locations of nearby transmitters, such as radio or TV stations. You may have to move the cycler or place shield material between the transmitter and the cycler.
- Be aware that modifying the cycler or adding accessories or components not specifically authorized by Baxter may make the cycler more susceptible to interference from radio waves.
- The following cables and accessories have been approved for use with the HomeChoice/HomeChoice PRO APD System, and comply with current EMC standards:
  - Detachable power cord
  - Modem cable

When servicing the cycler, use only replacement components, cables and accessories authorized by Baxter and be sure to replace all shields, covers, screws, and gaskets in their exact locations. Failure to do so may result in increased emissions or decreased immunity of the cycler.

#### WARNING

The *HomeChoice/HomeChoice* PRO APD System should not be used next to, or stacked with, other electrical equipment. Such equipment may cause the cycler to operate incorrectly. However, if it is necessary to use the cycler close to other equipment, the cycler should be monitored to verify normal operation.

Table 19-1. Guidance and Manufacturer's Declaration – Electromagnetic Emissions

The <i>HomeChoice/HomeChoice</i> PRO APD System is intended for use in the ele The user of the system should assure that it is used in such an environment.	O APD System is in ure that it is used i	The <i>HomeChoice/HomeChoice</i> PRO APD System is intended for use in the electromagnetic environment specified below. The user of the system should assure that it is used in such an environment.
Emissions Test	Compliance	Electromagnetic Environment – Guidance
RF emissions CISPR 11	Group 1	The <i>HomeChoice/HomeChoice</i> PRO APD System uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF emissions CISPR 11	Class B	The HomeChoice/HomeChoice PRO APD System is suitable for use
Harmonic emissions IEC 61000-3-2	Class A	in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Voltage fluctuations/flicker emissions IEC 61000-3-3	Complies	

Table 19-2. Guidance and Manufacturer's Declaration – Electromagnetic Immunity

The <i>HomeChoice/F</i> . The user of the sys	<i>lomeChoice</i> PRO APD Sys tem should assure that i	The <i>HomeChoice/HomeChoice</i> PRO APD System is intended for use in the ele The user of the system should assure that it is used in such an environment.	The <i>HomeChoice/HomeChoice</i> PRO APD System is intended for use in the electromagnetic environment specified below. The user of the system should assure that it is used in such an environment.
Immunity Test	IEC 60601 Test Level	Compliance Level	Electromagnetic Environment – Guidance
Electrostatic Discharge (ESD) IEC 61000-4-2	±6 kV contact ±8 kV air	±6 kV contact ±8 kV air	Floors should be wood, concrete, or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Electrical fast transient/burst IEC 61000-4-4	±2 kV for power supply lines ±1 kV for input/output lines	±2 kV for power supply lines ±1 kV for input/output lines	Mains power quality should be that of a typical public low-voltage power supply network that supplies hospitals or buildings used for commercial or domestic purposes.
Surge IEC 61000-4-5	±1 kV differential mode ±2 kV common mode	±1 kV differential mode ±2 kV common mode	Mains power quality should be that of a typical public low-voltage power supply network that supplies hospitals or buildings used for commercial or domestic purposes.
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	<5% $U_{\rm T}$ (>95% dip in $U_{\rm T}$ ) for 0.5 cycles 40% $U_{\rm T}$ (60% dip in $U_{\rm T}$ ) for 5 cycles 70% $U_{\rm T}$ (30% dip in $U_{\rm T}$ ) for 25 cycles <5% $U_{\rm T}$ (>95% dip in $U_{\rm T}$ ) for 25 cycles	<5% $U_{\rm T}$ (>95% dip in $U_{\rm T}$ ) for 0.5 cycles 40% $U_{\rm T}$ (60% dip in $U_{\rm T}$ ) for 5 cycles 70% $U_{\rm T}$ (30% dip in $U_{\rm T}$ ) for 25 cycles <5% $U_{\rm T}$ (>95% dip in $U_{\rm T}$ ) for 5 seconds	Mains power quality should be that of a typical public low-voltage power supply network that supplies hospitals or buildings used for commercial or domestic purposes.  If the user of the system requires continued operation during power mains interruptions, it is recommended that the system be powered from an uninterruptible power supply.
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	3 A/m	3 A/m	Power frequency magnetic fields should be at levels characteristic of a typical public low-voltage power supply network that supplies hospitals or buildings used for commercial or domestic purposes.

**NOTE**:  $U_T$  is the a.c. mains voltage prior to application of the test level.

# Table 19-3. Guidance and Manufacturer's Declaration – Electromagnetic Immunity

The HomeChoice/HomeChoice PRO APD System is intended for use in the electromagnetic environment specified below. The user of the system should assure that it is used in such an environment.

Immunity Test	IEC 60601 Test Level	Compliance Level	Electromagnetic Environment – Guidance
			Portable and mobile RF communications equipment should be used no closer to any part of the <i>HomeChoice/HomeChoice</i> PRO APD System, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter.  Recommended separation distance:
Conducted RF IEC 61000-4-6	3Vrms 150 kHz to 80 MHz	3V	$d = [3.5 / 3] \sqrt{P}$
Radiated RF IEC 61000-4-3	3V/m 80 MHz to 2.5 GHz	3V/m	$d = [3.5 / 3] \sqrt{P}$ 80 MHz to 800 MHz
			$d = [7/3] \sqrt{P} 800 \text{ MHz to } 2.5 \text{ GHz}$
			where $P$ is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer, and $d$ is the recommended separation distance in meters (m).
			Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey <sup>a</sup> , should be less than the compliance level in each frequency range.
			Interference may occur in the vicinity of equipment marked with the following symbol:

# NOTES:

- At 80 MHz and 800 MHz, the higher frequency applies.
- These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects, and people.
- field strength in the location in which the system is used exceeds the applicable RF compliance level above, the system should be electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured amateur radio, AM and FM radio broadcast, and TV broadcast can not be predicted theoretically with accuracy. To assess the Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the system. ď
  - Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3V/m. <u>ن</u>

communications equipment and the *HomeChoice* APD System – for equipment Table 19-4. Recommended separation distance between portable and mobile RF and systems that are not life-supporting

The *HomeChoice/HomeChoice* PRO APD System is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The user of the system can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the system as recommended below, according to the maximum output power of the communications equipment.

	Separation dist	Separation distance according to frequency of transmitter m	cy of transmitter
Rated maximum output power of transmitter W	150 kHz to 80 MHz $d = [3.5 / 3] \sqrt{P}$	80 MHz to 800 MHz $d = [3.5/3] \sqrt{P}$	800 MHz to 2.5 GHz $d = [7/3] \checkmark P$
0.01	0.12	0.12	0.23
0.1	0.37	0.37	0.74
1	1.20	1.20	2.30
10	3.70	3.70	7.40
100	12.00	12.00	23.00

For transmitters rated at a maximum output power not listed above, the recommended separation distance d in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

# NOTES:

- At 80 MHz and 800 MHz, the higher frequency applies.
- These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

# 19.7 Solution Temperature Protective System

Overheated solution is prevented from reaching the patient by the solution temperature protective system that uses a microprocessor, temperature sensor, and cutoff switch that are independent of the temperature control system. The protective system temperature sensing is accurate to ±2°C. The *HomeChoice/HomeChoice* PRO APD System sounds a system alarm within 5 seconds of sensing an overheated condition.

# 19.8 Audible Alarm Silence Period

If the user presses the **STOP** button to silence an alarm and does not take action to clear the alarm, the *HomeChoice/HomeChoice* PRO APD System will reactivate the alarm in 30 minutes.

# 19.9 Range of Sound Pressure Levels

The *HomeChoice/HomeChoice* PRO APD System audible alarm can be set to produce sound pressure levels within the range of 65 dBA to 75 dBA at 1 meter. System alarms are always at maximum volume.

# 19.10 Maximum Pressures Used to Transfer Solution To and From the Patient

The *HomeChoice/HomeChoice* PRO APD System limits the pressure used to pump the solution to and from the patient to a maximum positive pressure of +10 kPa (+75 mmHg) (+1.5 psig) and a maximum negative pressure of -10 kPa (-75 mmHg) (-1.5 psig).

# 19.11 Protective System Preventing Air Infusion

The *HomeChoice/HomeChoice* PRO APD System is capable of detecting air in the vertically oriented pumping chambers. If air volumes exceeding 3 cc are detected, the air is pumped out of the top of the chamber to the drain line. Air volumes that are smaller than this are physically unable to exit the bottom of the chamber to the Fill line. This method is effective in preventing air from being pumped into the patient, as long as the cassette is undamaged and the patient line is primed with fluid at the beginning of the therapy. Refer to 11.5, *Load the Disposable Set*, on page 11-10 for information on inspecting the cassette for damage.

The disposable set patient line is primed manually using the weight of the fluid in the heater bag. The patient line is correctly primed when the fluid level is at or near the connector at the end of the patient line. The system can not detect whether the patient line is correctly primed. Refer to 11.8.1, *Reprime the Patient Line*, on page 11-23 for information on verifying proper priming.

# 19.12 Protective System Preventing IIPV

The *HomeChoice/HomeChoice* PRO APD System uses two independent fluid measurement systems to monitor Fill and Drain volumes. These two systems must agree within 0.1% or a system error will result. In case of a power failure or when the system is off, the occluder prevents any solution from being delivered to the patient. The volume measuring system is accurate to the greater of  $\pm 2\%$  or  $\pm 10$  mL.

If any patient, or patient caregiver, suspects the patient has an increased intraperitoneal volume (IIPV) situation during a therapy, press **STOP** immediately, then press  $\nabla$  and initiate a Manual Drain. The Manual Drain procedure is located in 18.5, *Manual Drain Procedure*, on page 18-53.

See 18.8, *Increased Intraperitoneal Volume (IIPV)*, on page 18-58 for more information.

# 19.13 Drain Logic Options

## 19.13.1 Standard Fill Mode Drain Logic

The *HomeChoice/HomeChoice* PRO APD System drains until the system encounters Slow Flow from the patient line for a period of time, or a single pump stroke of No Flow from the patient line.

If Slow Flow persists for a preset period of time, the system looks at the Minimum Drain Volume to determine what to do next.

- If the Minimum Drain Volume has not been met, a 3-beep auto restart LOW DRAIN VOLUME alarm is posted. If this alarm repeats, it is promoted first to a 6-beep auto restart alarm, and then a continuous beep alarm that requires operator intervention.
- If the Minimum Drain Volume has been met, the system will set the patient volume to zero (0) and move on to the Fill phase.

If No Flow occurs, the system checks to see if the No Flow condition also applies to flow to the patient.

- If the No Flow condition applies to both outflow and inflow, a CHECK PATIENT LINE alarm occurs.
- If the "pushback" flows normally toward the patient, the system looks at the Minimum Drain Volume to determine what to do next.
  - If the Minimum Drain Volume has not been met, a 3-beep auto restart LOW DRAIN VOLUME alarm occurs. If this alarm repeats, it is promoted first to a 6-beep auto restart alarm, and then a continuous beep alarm that requires operator intervention.
  - If the Minimum Drain Volume has been met, the system will set the patient volume to zero (0) and move on to the fill phase.

The Minimum Initial Drain Volume setting is made in the Make Adjustments menu. The Minimum Drain Volume percent setting is made in the Nurse's Menu. The Drain Volume percent is multiplied by the Day Fill Volume for day drains and the Night Fill Volume for night drains.

## 19.13.2 Low Fill Mode Drain Logic

The Low Fill Mode Drain Logic is similar to the Standard Fill Mode Drain Logic. The thresholds for Slow Flow and No Flow are lower because Low Fill Mode patients typically drain slower. The Low Fill Mode also has an Initial Drain Time (I-DRAIN TIME) setting in the Make Adjustments menu. There is a Minimum Drain Time (MIN DRAIN TIME) setting for Day and Night Drains in the Nurse's Menu.

The Minimum Drain Volume and the Minimum Drain Time settings must both be met for the system to advance to the Fill phase when Slow Flow or No Flow occurs. Some LOW DRAIN VOLUME alarms that could occur due to Slow Flow or No Flow are suppressed if the Minimum Drain Time is not met.

Table 19-5 compares the Standard Fill Mode Drain Logic with the Low Fill Mode Drain Logic.

**Table 19-5. Drain Logic Options** 

FLOW CONDITION		OF FLUID DRAINED ow Condition Occurs
Standard Fill Mode Drain Logic	Minimum Drain Volume HAS NOT been reached	Minimum Drain Volume HAS been reached
Slow Flow Below 50 mL/min	LOW DRAIN VOLUME alarm will sound.	Automatically moves on to Fill mode with 100% of Fill Volume being delivered.
No Flow* Below 12 mL/min	LOW DRAIN VOLUME alarm will sound.	Automatically moves on to Fill mode with 100% of Fill Volume being delivered.
Low Fill Mode Drain Logic	Minimum Drain Volume HAS NOT been reached	Minimum Drain Volume HAS been reached
Slow Flow Below 15 mL/min	If Minimum Drain Time has <i>not</i> elapsed, no alarm will sound. If Minimum Drain Time <i>has</i> elapsed, LOW DRAIN VOLUME alarm will sound.	If Minimum Drain Time <i>has</i> elapsed, moves on to Fill mode with 100% of Fill Volume being delivered.
No Flow* Below 3 mL/min	LOW DRAIN VOLUME alarm will sound.	If Minimum Drain Time has <i>not</i> elapsed, the Drain will continue with no alarm, unless 100% of the Fill Volume has been drained, in which case it moves on to Fill mode.
		If Minimum Drain Time <i>has</i> elapsed, moves on to Fill mode with 100% of Fill Volume being delivered.

<sup>\*</sup> A single pump stroke volume of fluid is pushed back to the patient when a Drain ends due to No Flow to verify that the patient line is not occluded. The next Fill begins at this volume.

The Low Fill Mode logic will continue to drain without alarming for lower flow rates when compared to the Standard Fill Mode logic. It also has a Minimum Drain Time setting that must be met along with the Minimum Drain Volume before the system can move on to Fill.

The Low Fill Mode is restricted to Fill volumes of 60 mL to 1000 mL. This mode is suitable for patients with small Fill volumes who may normally drain slowly. It is required that the Low Recirculation Volume Set be used with Low Fill Mode procedures.

The Standard Fill Mode Drain Logic can be used for patient volumes ranging from 100 mL to 3000 mL. It has higher Slow Flow alarm thresholds than the Low Fill Mode.

# 19.14 Replenish Logic

## 19.14.1 Scheduled Replenish

The system uses the first part of each cycle's Dwell Time to transfer solution from the supply bags to the heater bag. This replaces the solution used during the previous Fill. This is a *scheduled replenish* because it is a planned function of the system. The system does not alarm for a scheduled replenish if the fluid flow slows or stops.

The system stops replenishing if LAST FILL DEXTROSE is set to DIFFERENT when the supply bags (lines with white clamps) run empty. The system alarms REFILL NOT FINISHED if you try to bypass Dwell before replenish has finished.

The system tries to draw fluid from the Last Fill bag line (line with BLUE clamp) when the supply bags run empty and the LAST FILL DEXTROSE is set to SAME. The system never draws fluid from the supply bag line (lines with WHITE clamps) and Last Fill bag line (line with BLUE clamp) at the same time.

## 19.14.2 Unscheduled Replenish

If the heater bag empties before the end of the Fill phase, the system will usually, but not always, transfer solution from the supply bags to the heater bag in order to complete the Fill phase. This is an *unscheduled replenish* because the heater bag ran dry unexpectedly during Fill.

An unscheduled replenish is performed if the Fill Volume delivered to the patient when the heater bag empties is less than the volumes shown in the Table 19-6 on page 19-14. If the delivered Fill Volume is greater than the amounts shown in the table, the system considers the Fill complete and transitions from the Fill phase to the Dwell phase.

Table 19-6. Unscheduled Replenish Logic

Fill Descriptions	Unscheduled Replenish
Day Fill 1	Volume Delivered < 90% of Fill Volume
Day Fill 2 and up	Volume Delivered < 100% of Fill Volume
Fill 1 of <i>n</i>	Volume Delivered < 90% of Fill Volume
Fill 2 thru <i>n</i> -1	Volume Delivered < 100% of Fill Volume
Fill n	Volume Delivered < 75% of Fill Volume
Last Fill	Volume Delivered < 75% of Fill Volume

➤ **NOTE:** An alarm is posted when there is insufficient fluid to complete an unscheduled replenish. This alarm can not be bypassed. To return to Fill, see 18.4.7, *Check Supply Line Alarm During Replenish*, on page 18-52.

# 19.15 Determining Maximum Fill Volume

Table 19-7 on page 19-15 allows you to determine the highest Fill Volume that should be programmed for a given dry weight. This information allows you to verify that the entered Fill Volume is not accidentally programmed too high for you or a caregiver's patient. In fact, most patients require a Fill Volume that is much lower than the values listed in this table.

To use Table 19-7, find the row with your weight in pounds (or kilograms) and read across to find the corresponding Fill Volume Limit.

■ EXAMPLE: If dry weight is 120 pounds, the Fill Volume Limit is 2500 mL.

If your weight is between the values listed in two adjacent rows, choose the row with *lower* weight and read across to find the corresponding Fill Volume Limit.

■ EXAMPLE: If dry weight is 137 pounds, the Fill Volume Limit for 135 pounds is 2800 mL.

Use a Fill Volume Limit of 3000 mL if your weight is 145 pounds or greater.

**Table 19-7. Determining Maximum Fill Volume** 

We	eight	Fill Volume Limit
Pounds (lbs)	Kilograms (kg)	Milliliters (mL)
5	2	100
10	5	250
15	7	350
20	9	450
25	11	550
30	14	700
35	16	800
40	18	900
45	20	1000
50	23	1100
55	25	1200
60	27	1300
65	30	1400
70	32	1500
75	34	1600
C	ontinued in n	ext column

We	eight	Fill Volume Limit
Pounds (lbs)	Kilograms (kg)	Milliliters (mL)
coi	ntinued from <sub>s</sub>	first column
80	36	1700
85	39	1800
90	41	1900
95	43	2000
100	45	2100
105	48	2200
110	50	2300
115	52	2400
120	55	2500
125	57	2600
130	59	2700
135	61	2800
140	64	2900
145 or more	66 or more	3000

# 19.16 Determining Initial Drain Alarm Volume Settings

Table 19-8 on page 19-17 allows you to determine the Initial Drain Alarm (I-DRAIN ALARM) volume setting based on different percentages of the Last Fill Volume.

To use Table 19-8, identify the row with your Last Fill Volume (mL) and read across to the column with the desired percentage (%) to find the corresponding Initial Drain Alarm volume setting.

■ EXAMPLE: If your Last Fill Volume is 2000 mL and you desire a limit that is 85% of the Last Fill Volume, your Initial Drain Alarm volume setting is 1700 mL.

If your Last Fill Volume is between the values listed in two adjacent rows, choose the row with *lower* Last Fill Volume and read across to find the corresponding Initial Drain Alarm volume setting.

EXAMPLE: If your Last Fill Volume is 550 mL and you desire a limit that is 85% of the Last Fill Volume, your Initial Drain Alarm volume setting is 430 mL.

Table 19-8. Initial Drain Alarm Volume Based on % of Last Fill Volume

Last Fill Volume								Last Fill Volume		_				
(mL)	70%	75%	80%	85%	90%	95%		(mL)	70%	75%	80%	85%	90%	95%
60	40	50	50	50	50	60			con	st column				
80	60	60	60	70	70	80		700	490	550	550	600	650	650
100	70	80	80	90	90	100		800	550	600	650	700	700	750
120	80	90	100	100	110	110		900	650	700	700	750	800	850
140	100	110	110	120	130	130		1000	700	750	800	850	900	950
160	110	120	130	140	140	150		1100	750	850	900	950	1000	1000
180	130	140	140	150	160	170		1200	850	900	950	1000	1100	1100
200	140	150	160	170	180	190	Ì	1300	900	1000	1000	1100	1200	1200
220	150	170	180	190	200	210	Ì	1400	1000	1100	1100	1200	1300	1300
240	170	180	190	200	220	230		1500	1100	1100	1200	1300	1400	1400
260	180	200	210	220	230	250		1600	1100	1200	1300	1400	1400	1500
280	200	210	220	240	250	270		1700	1200	1300	1400	1400	1500	1600
300	210	230	240	260	270	290		1800	1300	1400	1400	1500	1600	1700
320	220	240	260	270	290	300		1900	1300	1400	1500	1600	1700	1800
340	240	260	270	290	310	320		2000	1400	1500	1600	1700	1800	1900
360	250	270	290	310	320	340		2100	1500	1600	1700	1800	1900	2000
380	270	290	300	320	340	360		2200	1500	1700	1800	1900	2000	2100
400	280	300	320	340	360	380		2300	1600	1700	1800	2000	2100	2200
420	290	320	340	360	380	400		2400	1700	1800	1900	2000	2200	2300
440	310	330	350	370	400	420		2500	1800	1900	2000	2100	2300	2400
460	320	350	370	390	410	440		2600	1800	2000	2100	2200	2300	2500
480	340	360	380	410	430	460		2700	1900	2000	2200	2300	2400	2600
500	350	380	400	430	450	480		2800	2000	2100	2200	2400	2500	2700
600	420	450	480	500	550	550		2900	2000	2200	2300	2500	2600	2800
continued in next column							3000	2100	2300	2400	2600	2700	2900	

# 19.17 Determining Tidal Total UF and Last Manual Drain UF Target Volume Settings

Table 19-9 on page 19-19 allows you to determine the:

- Total UF volume setting for a Tidal therapy, or
- UF Target volume setting for the Last Manual Drain

based on different percentages of the estimated Total UF volume.

To use Table 19-9, identify the row with your expected Total UF volume and read across to the column with the desired Total UF volume percentage (%) to find the recommended Total UF volume setting.

■ EXAMPLE 1: If your expected Total UF volume for the therapy is 1300 mL and you desire to program your Tidal Total UF volume at 70%, use a Total UF volume setting of 910 mL.

If your expected Total UF volume is between the values listed in two adjacent rows, choose the row with the *lower* Total UF volume and read across to find the corresponding UF Target volume setting.

■ EXAMPLE 2: If your expected Total UF volume for the therapy is 1300 mL and you desire to program your Total UF volume for the Last Manual Drain at 70%, your UF Target volume setting is 900 mL.

Table 19-9. Tidal Total UF and Last Manual Drain UF Target Volume Settings based upon % of Expected Total UF Volume

	1	OTAL U		dal ne Setti	U			ual Drai me Sett			
Expected Total UF (mL)	70%	75%	80%	85%	90%	95%	70%	75%	80%	85%	9
20	10	20	20	20	20	20	0	0	0	0	
40	30	30	30	30	40	40	50	50	50	50	
60	40	50	50	50	50	60	50	50	50	50	
80	60	60	60	70	70	80	50	50	50	50	
100	70	80	80	90	90	100	50	100	100	100	1
120	80	90	100	100	110	110	100	100	100	100	1
140	100	110	110	120	130	130	100	100	100	100	1
160	110	120	130	140	140	150	100	100	150	150	1
180	130	140	140	150	160	170	150	150	150	150	1
200	140	150	160	170	180	190	150	150	150	150	2
220	150	170	180	190	200	210	150	150	200	200	2
240	170	180	190	200	220	230	150	200	200	200	2
260	180	200	210	220	230	250	200	200	200	200	2
280	200	210	220	240	250	270	200	200	200	250	2
300	210	230	240	260	270	290	200	250	250	250	2
320	220	240	260	270	290	300	200	250	250	250	3
340	240	260	270	290	310	320	250	250	250	300	3
360	250	270	290	310	320	340	250	250	300	300	3
380	270	290	300	320	340	360	250	300	300	300	3
400	280	300	320	340	360	380	300	300	300	350	3
420	290	320	340	360	380	400	300	300	350	350	4
440	310	330	350	370	400	420	300	350	350	350	4
460	320	350	370	390	410	440	300	350	350	400	4
480	340	360	380	410	430	460	350	350	400	400	4
500	350	380	400	430	450	480	350	400	400	450	4
600	420	450	480	510	540	570	400	450	500	500	5
700	490	530	560	600	630	670	500	550	550	600	$\epsilon$
800	560	600	640	680	720	760	550	600	650	700	7
900	630	680	720	770	810	860	650	700	700	750	8

UF TARGET Volume Settings (mL)									
70%	75%	80%	85%	90%	95%				
0	0	0	0	0	0				
50	50	50	50	50	50				
50	50	50	50	50	50				
50	50	50	50	50	100				
50	100	100	100	100	100				
100	100	100	100	100	100				
100	100	100	100	150	150				
100	100	150	150	150	150				
150	150	150	150	150	150				
150	150	150	150	200	200				
150	150	200	200	200	200				
150	200	200	200	200	250				
200	200	200	200	250	250				
200	200	200	250	250	250				
200	250	250	250	250	300				
200	250	250	250	300	300				
250	250	250	300	300	300				
250	250	300	300	300	350				
250	300	300	300	350	350				
300	300	300	350	350	400				
300	300	350	350	400	400				
300	350	350	350	400	400				
300	350	350	400	400	450				
350	350	400	400	450	450				
350	400	400	450	450	500				
400	450	500	500	550	550				
500	550	550	600	650	650				
550	600	650	700	700	750				
650	700	700	750	800	850				

Table 19-9. Tidal Total UF and Last Manual Drain UF Target Volume Settings based upon % of Expected Total UF Volume (Continued)

	Т	OTAL U		dal ne Setti	ngs (mL	.)	Last Manual Drain UF TARGET Volume Settings (mL)						
Expected Total UF (mL)	70%	75%	80%	85%	90%	95%	70%	75%	80%	85%	90%	95%	
1000	700	750	800	850	900	950	700	750	800	850	900	950	
1100	770	830	880	940	990	1000	750	850	900	950	1000	1050	
1200	840	900	960	1000	1100	1100	850	900	950	1000	1100	1150	
1300	910	980	1000	1100	1200	1200	900	1000	1050	1100	1150	1250	
1400	980	1100	1100	1200	1300	1300	1000	1050	1100	1200	1250	1350	
1500	1100	1100	1200	1300	1400	1400	1050	1150	1200	1300	1350	1450	
1600	1100	1200	1300	1400	1400	1500	1100	1200	1300	1350	1450	1500	
1700	1200	1300	1400	1400	1500	1600	1200	1300	1350	1450	1550	1600	
1800	1300	1400	1400	1500	1600	1700	1250	1350	1450	1550	1600	1700	
1900	1300	1400	1500	1600	1700	1800	1350	1450	1500	1600	1700	1800	
2000	1400	1500	1600	1700	1800	1900	1400	1500	1600	1700	1800	1900	
2100	1500	1600	1700	1800	1900	2000	1450	1600	1700	1800	1900	2000	
2200	1500	1700	1800	1900	2000	2100	1550	1650	1750	1850	2000	2100	
2300	1600	1700	1800	2000	2100	2200	1600	1750	1850	1950	2050	2200	
2400	1700	1800	1900	2000	2200	2300	1700	1800	1900	2050	2150	2300	
2500	1800	1900	2000	2100	2300	2400	1750	1900	2000	2150	2250	2400	
2600	1800	2000	2100	2200	2300	2500	1800	1950	2100	2200	2350	2450	
2700	1900	2000	2200	2300	2400	2600	1900	2050	2150	2300	2450	2550	
2800	2000	2100	2200	2400	2500	2700	1950	2100	2250	2400	2500	2650	
2900	2000	2200	2300	2500	2600	2800	2050	2200	2300	2450	2600	2750	
3000	2100	2300	2400	2600	2700	2900	2100	2250	2400	2550	2700	2850	

# Section

**Quick Reference** 

# 20

# **Quick Reference**

This section is intended to guide you through common procedures. It should not replace the complete operating instructions contained in the other sections of this guide. Read the entire manual before operating the *HomeChoice* APD System or *HomeChoice* PRO APD System.

Following is a list of the topics covered in this section:

Topic	Page
Prepare for Therapy	20-2
Perform a Hi-Dose Therapy	20-13
End Therapy	20-19

# 20.1 Prepare for Therapy

# 1. Gather your supplies.

- 1 Solution Bags
- 2 Drain Option
- 3 Disposable Set
- 4 Disconnect Cap(s)
- 5 Face Mask(s)

Patient Line Extension, if needed (not pictured)

# 1 4 5

# **Check solution bags for SEAL:**

- Strength
- Expiration Date
- Amount
- Leaks

The solution bag must be positioned properly on the heater pan, covering the silver heater sensor button. Failure to properly position the solution bag can result in overheated or underheated dialysis fluid.

#### **WARNING**

DO NOT use external heating sources (i.e., microwave oven) to warm solution bags. This can result in overheated solution delivered into your peritoneal cavity.

# 2. Place a solution bag on the heater pan.



# 3. Turn on the cycler.

- Press the On/Off switch to the ON position.
- Observe that the characters on the display screen turn on and then off for several seconds.
- The current mode (STANDARD MODE or LOW FILL MODE) appears for a few seconds.
- When the system is ready, PRESS GO TO START appears.



Before loading the disposable set, inspect the cassette and tubing for damage. Using a damaged set can result in contamination of the fluid which can result in peritonitis.

# 4. Prepare the disposable set.

- Open the packaging by grasping the top and pulling down in opposite directions.
- Close all clamps on the disposable set.



# 5. Prepare your drain option.

- For Drain Bag: close the clamp on the line with the blue pull ring.
- For Drain Line Extension: leave the line clamp open.

When a drain line extension is used instead of a drain bag, you must leave a space between the end of the drain line and any fluid in the drain or container.



If a disposable set is already present in the cycler, CLOSE ALL CLAMPS before you press *GO*. This prevents fluid from flowing from one bag to another, or to the patient, when LOAD THE SET appears. The uncontrolled gravity flow of fluid can result in an increased intraperitoneal volume (IIPV) situation.

- 6. Press *GO* when you are ready to begin.
  - LOAD THE SET appears.



# 7. Open the door.

Push the handle up to unlock and open the door.



# 8. Load the cassette.

- The cassette only fits one way, with the lines leading to the right of the cycler.
- Press the handle down to close and lock the door.



# 9. Place the organizer.

 Place the long slot of the organizer over the hook at the top of the door.



# 10. Prepare your drain option.

- Drain Bag: close clamp on the short tube to prevent leakage.
- Drain Line Extension: remove tip protectors from both ends of drain.

# 11. Attach your drain option.

# 12. Open all drain clamps.



## 13. Press GO.

- SELF TESTING appears on the display screen.
- When the self-test is complete, CONNECT BAGS appears on the display screen.



Follow aseptic technique taught by your dialysis center when handling lines and solution bags to reduce the possibility of infection.

# 14. Put on face mask and wash and dry your hands thoroughly.



# 15. Connect bags.

- Connect the line with the RED clamp to the heater bag.
- Connect the line with the BLUE clamp to the Last Fill bag.
- Connect the lines with the white clamps to additional solution bags, if needed.



# 16. Check connections and open clamps.

- Open clamps only on lines connected to solution bags.
- Make sure the patient line is in the left slot of the organizer.
- Open the clamp on the patient line.



#### **WARNING**

Failure to open the clamp on the patient line after connecting the solution bags will prevent the patient line from being primed. This can cause air to be delivered to you during FILL 1.

# 17. Press *GO* to begin priming.



# 18. Priming complete.

 When priming is complete, the display screen alternates between CONNECT YOURSELF and CHECK PATIENT LINE.



#### WARNING

Verify that the fluid level is at or near the connector at the end of the disposable set patient line. Connecting when air is present can result in sterile air being delivered, which can cause shoulder or abdominal pain.

# 19. Get your transfer set ready.

Make sure your transfer set is available but do not remove the cap until after you have washed your hands.



# 20. Put on face mask and wash and dry your hands thoroughly.



# 21. Connect yourself.

- Remove the MiniCap from the transfer set.
- Connect the transfer set to the patient line by removing the pull ring and attaching the transfer set.
- Open the transfer set.



# 22. Press GO.

Treatment begins with INITIAL DRAIN.

If you perform a Hi-Dose therapy, skip to 20.2, *Perform a Hi-Dose Therapy*.

If you are not performing a Hi-Dose therapy, skip to 20.3, *End Therapy*, on page 20-19.



# 20.2 Perform a Hi-Dose Therapy

1. Hi-Dose therapy begins when INITIAL DRAIN is complete.



2. DAY FILL begins automatically when INITIAL DRAIN is complete.



# 3. During DAY DWELL, you may choose to disconnect yourself from the cycler.



# 4. If you choose to disconnect yourself:

- Close the transfer set.
- Clamp the patient line.
- Disconnect the transfer set from the patient line.
- Connect a MiniCap disconnect cap to the transfer set (shown).
- Connect a FlexiCap disconnect cap to the patient line.



5. Press 

to display the elapsed Dwell Time in hours and minutes.



6. When you are ready to continue your therapy, press ∇ until the display reads PRESS GO TO CONTINUE.



7. Press *GO* and the system prompts you to CONNECT YOURSELF.



8. Put on face mask and wash and dry your hands thoroughly.



## 9. Connect yourself.

- Remove the MiniCap disconnect cap from the transfer set.
- Remove the FlexiCap disconnect cap from the patient line.
- Connect the transfer set to the patient line.
- Open the transfer set.
- Open the patient line clamp.



# 10. Press *GO* and the system automatically begins DAY DRAIN 1.



11. When DAY DRAIN 1 is complete, the nighttime therapy begins with FILL 1.

- OR -

If more than one Hi-Dose exchange is programmed, the next DAY FILL begins.



### 20.3 End Therapy

1. The *HomeChoice* APD System tells you when your therapy is complete.



- 2. Press ∇ to view the end of therapy summary information.
- 3. Write the following on your treatment record, if required:
  - Initial Drain
  - Total UF
  - Average Dwell Time
  - Other data as instructed by your dialysis nurse



### 4. Press *GO*.

 CLOSE ALL CLAMPS appears on the display screen.

### 5. Close all clamps!



6. Put on face mask and wash and dry your hands thoroughly.



7. Open a new MiniCap disconnect cap.



- 8. Disconnect the transfer set from the patient line.
- 9. Connect a MiniCap disconnect cap to the transfer set.



### 10. Press GO.

 DISCONNECT YOURSELF appears on the display screen.

### 11. Open the door.

# 12. Remove and discard the disposable set.



#### 13. Press GO.

TURN ME OFF appears on the display screen.

# 14. Press the On/Off switch to the OFF position.



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07-19-61-244 October 2, 2009



Baxter Healthcare Corporation Renal Division McGaw Park, IL 60085 U.S.A 1.888.736.2543, press 4

Software version: 10.210