



Home Hemodialysis Patient Learning Checkpoints questions

Name: _____

Date: _____



Patient Learning Checkpoints

prepare for treatment

1. **Multiple Choice:** Which is an example of following proper aseptic technique?

- ☐ Touch the sterile ends of connections as you reconfigure the cyclor for Treatment.
- ☐ If you touch your phone during set-up, look at your hands to see if they're clean before continuing Treatment.
- ☐ Insert the priming spike into the saline bag, without touching the spike or the sterile port.
- ☐ Always use bleach to wash your cyclor after Treatment is complete.

2. **Select All That Apply:** When should you wash your hands?

- ☐ Before setting up equipment or disposables.
- ☐ After touching other items during setup (for example, your computer, phone, supply boxes).
- ☐ Before contact with your vascular access.
- ☐ After recording your vital signs during Treatment.

3. Your treatment information must be entered into the cyclor in the correct order. Put the **steps** to enter treatment information in the right order:

- | | |
|------------------------------|----------|
| Enter Dialysate Rate | 1. _____ |
| Verify Dialysate Volume | 2. _____ |
| Press Volume Toggle | 3. _____ |
| Enter Ultrafiltration Volume | 4. _____ |
| Enter Ultrafiltration Rate | 5. _____ |
| Press Volume Toggle | 6. _____ |
| Verify Blood Flow Rate | 7. _____ |

Patient Learning Checkpoints

prepare for treatment

4. **True/False:** Clean, well-washed hands are sterile.

☐ True

☐ False

5. **True/False:** On the cyclor, the Volume screen is your “home” screen.

☐ True

☐ False

6. **Multiple Choice:** What is dry weight?

☐ Your weight just before your dialysis Treatment.

☐ Your weight when your blood pressure is normal and no swelling exists.

☐ Your weight early in the morning, before you eat or drink anything.

☐ Your average weight over the course of a week.

7. **True/False:** If you increase the blood flow rate, you should increase the dialysate rate so that your treatment time and flow fraction remain correct.

☐ True

☐ False

Patient Learning Checkpoints

cannulation

1. **True/False:** If my blunt needle won't go into my buttonhole site, I should use a sharp needle at least 3/4" from the site.

☐ True

☐ False

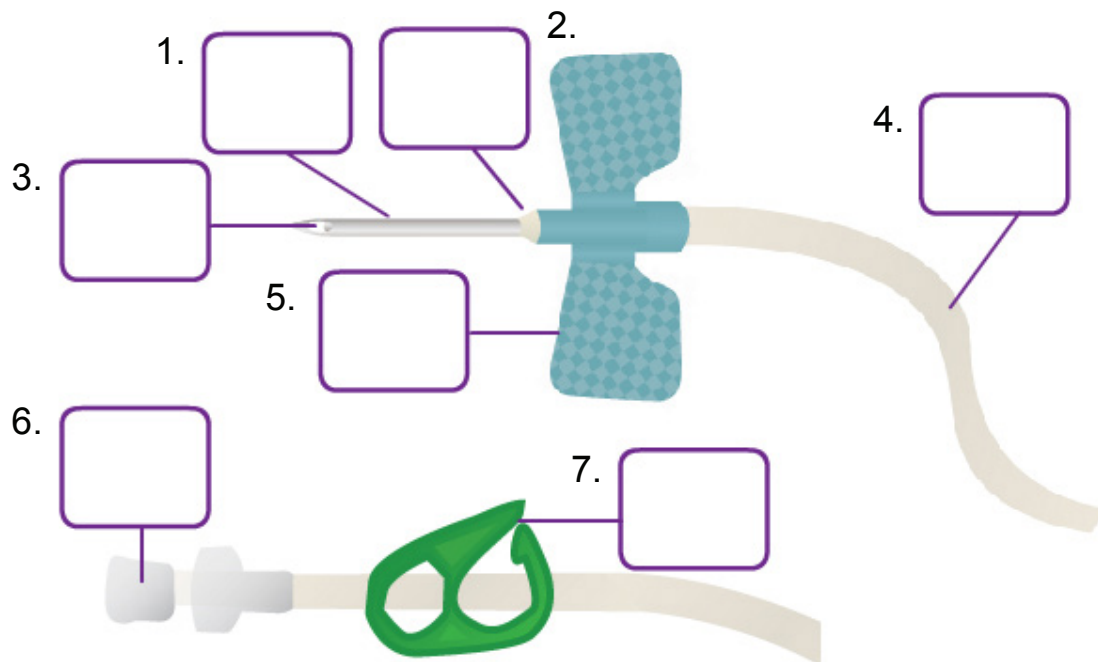
2. **True/False:** It's okay to cover your access with a blanket during treatment.

☐ True

☐ False

3. Do you know the pieces of the needle? Match each **label** onto the needle to where it belongs:

Bevel	Cap	Clamp	Hub	Needle	Tubing	Wings
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4. **True/False:** You can wear the same pair of gloves for disinfecting your access sites and for cannulation.

☐ True

☐ False

Patient Learning Checkpoints

catheter

1. **Select All That Apply:** When the catheter ports are open and/or the catheter dressing is changed, what is the proper aseptic technique?

- ☐ Wearing disposable gloves
 - ☐ Wearing a mask
 - ☐ Wearing sterile gloves
-

2. **Multiple Choice:** When cleaning the catheter exit site always start cleaning _____.

- ☐ Two inches from the exit site then moving inward.
 - ☐ From right to left across the exit site.
 - ☐ At the exit site then moving outward.
 - ☐ From top to bottom across the exit site.
-

3. **True/False:** When not in use, the catheter should have the caps securely connected and the clamps open.

- ☐ True
 - ☐ False
-

4. **Select All That Apply:** You should call your center nurse if the catheter exit site:

- ☐ Is bleeding.
- ☐ Is red.
- ☐ Is draining.
- ☐ Has the catheter cuff exposed.

Patient Learning Checkpoints

catheter

5. **True/False:** After you have rinsed back your blood and you are ready to instill the anticoagulant lock into the catheter lumens, it is important for you to firmly infuse and then quickly re-clamp the catheter limbs.

☐ True

☐ False

6. **Select All That Apply:** During your treatment, you have experienced multiple #24 red alarms. Check all of the actions that you may need to do to correct this problem.

☐ Lower the blood flow rate.

☐ Change your body position.

☐ End treatment and rinseback your blood.

☐ Call your dialysis center after treatment to report this problem.

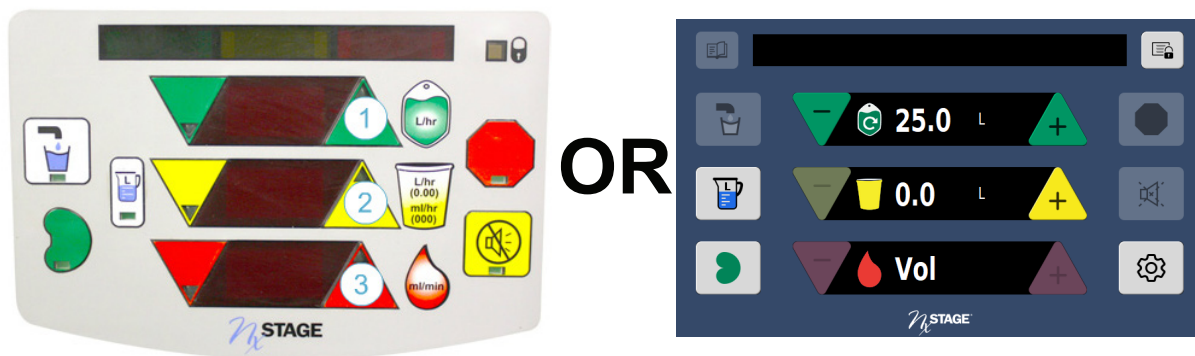
Patient Learning Checkpoints

cycler

1. **Multiple Choice:** During Treatment set-up, the cycler does not complete the self-test successfully. What should you do?

- ☐ Contact NxStage Technical Support.
- ☐ Contact your dialysis center.
- ☐ Record the issue in your treatment log and proceed with the treatment.
- ☐ Turn the power **OFF** and **ON**.

2. Match the **number** on each cycler RATE status window to the correct name.



Ultrafiltration Rate _____ Dialysate Rate _____ Blood Flow Rate _____

3. **Multiple Choice:** When using the cycler, how do you know when Treatment has ended?

- ☐ When the timer is at “0.00”.
- ☐ When the Dialysate and ultrafiltration rates read “0.00” and the blood pump stops running.
- ☐ When the blood pump stops running.
- ☐ “000” is displayed in the Yellow Caution bar and the dialysate and ultrafiltration rates read “0.00”.

4. **Multiple Choice:** Following RINSEBACK, how do you see your Treatment information to record in your dialysis center’s patient treatment record?

- ☐ Press the **VOLUME TOGGLE** button.
- ☐ Press the **TREATMENT** button.
- ☐ Turn the machine **OFF**, wait 20 seconds, and then turn it back **ON**.
- ☐ Press and hold the **STOP** key.

5. Match each **cycler button number** to the correct definition.

1. **ADD FLUID** button

2. **TREATMENT** button

3. **MUTE** button

4. **STOP** button

5. **VOLUME TOGGLE** button

6. Rate/Volume Adjustment Arrows

7. Green Operating bar

8. Yellow Caution bar

9. Red Alarm bar

- When pressed once during **TREATMENT**, it stops all pumps.
- When pressed once during an alarm, it initiates alarm recovery.
- When pressed and held for 2 seconds, it ends **TREATMENT** or **RINSEBACK**.

Begins or restarts therapy and all cycler pumps.

- During **PRIME**, starts the **PRIME** and Alarm Test.
- During **RINSEBACK**, returns blood.

When pressed, shifts the display from rate to volume for 10 seconds.

Temporarily silences beep (caution or alarm condition) and clears some caution conditions.

Displays a caution condition.

Displays an alarm condition.

Used to adjust the dialysate, ultrafiltration, and blood flow volume and rate.

- During **TREATMENT**, shows the “safe” operating condition.
- During **PRIME**, displays the time left in PRIME.

6. **Multiple Choice:** To obtain an accurate pre-dialysis weight, you should weigh yourself how many separate times, then use the averaged weight?

- ☐ 1
 - ☐ 2
 - ☐ 3
 - ☐ 4
-

7. **Multiple Choice:** When cleaning and disinfecting the exterior surfaces of dialysis equipment contaminated with blood, use a paper towel and _____.

- ☐ Mild detergent
 - ☐ A bleach solution
 - ☐ Undiluted bleach
 - ☐ Alcohol
-

8. **Multiple Choice:** How frequently should the cycler Blood Leak Detector be cleaned?

- ☐ After each Treatment
- ☐ Once a week
- ☐ Once a month or more frequently as required
- ☐ Never

9. The graphic shows the front view of the cycler. Match each **number** from the cycler to its label.

Lift/carry handle _____

Cycler door handle _____

Filter Holder _____

Serial number label _____



*Same location on all cyclers



10. **True/False:** The dialysate volume displayed must match your dialysate volume prescription.

☐ True

☐ False

11. The graphic shows the back view of the cycler. Match each **number** from the cycler to its label.

Power input _____

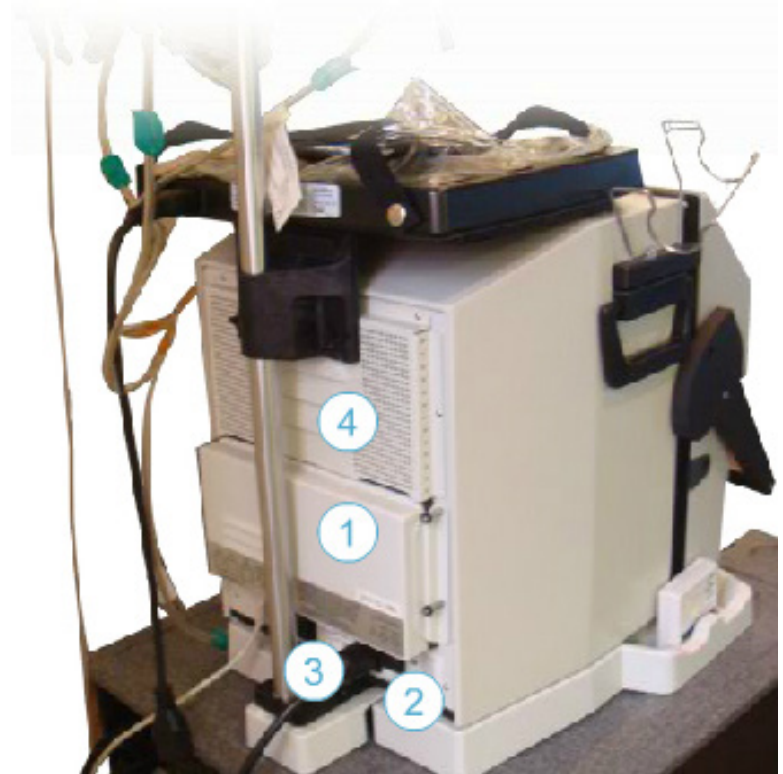
Power switch _____

Cooling fan _____

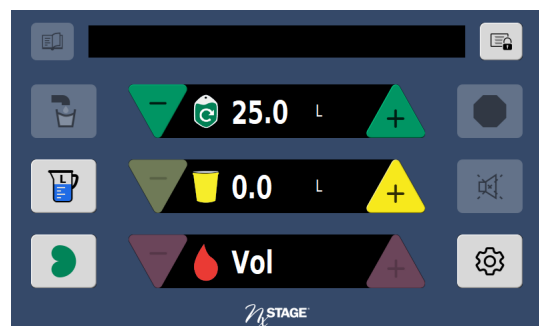
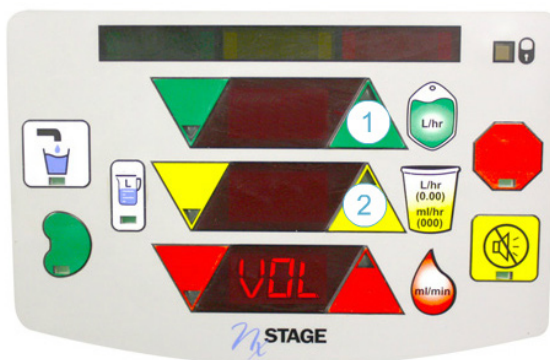
Jewel Box or
ConNxBox™
Computer _____



*Same location on all cyclers



12. Match the **number** on each cycler VOLUME status window to the correct name.



Ultrafiltration Volume _____

Dialysate Volume _____

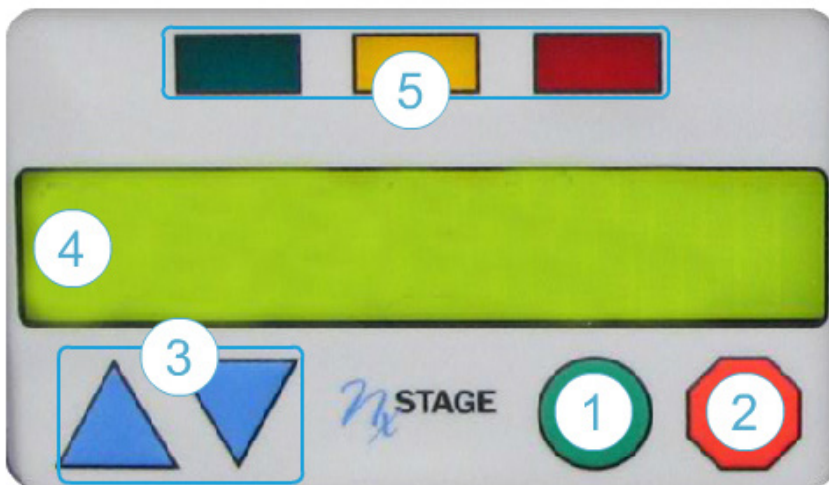
1. **True/False:** If you start draining a SAK accidentally, you can press **PAUSE** and continue using the batch.

- ☐ True
- ☐ False

2. **True/False:** You must use a primed PAK to make a batch of dialysate.

- ☐ True
- ☐ False

3. Match each PureFlow SL Control Panel **number** to the correct name.



- UP/DOWN buttons _____
- STOP button _____
- Status bar _____
- GO button _____
- Control Panel Display _____

4. **Multiple Choice:** The purpose of the PAK is to:

- ☐ Clean the blood during dialysis.
- ☐ Filter and purify source water.
- ☐ Turn source water into dialysate.
- ☐ Test water for contaminants.

5. **True/False:** You should always turn off the PureFlow SL between Treatments.

- ☐ True
- ☐ False
-

6. **Multiple Choice:** Approximately how long does it take for the PureFlow SL to make a 60 Liter batch of dialysate?

- ☐ 3 hours
- ☐ 5 hours
- ☐ 7 hours
- ☐ 10 hours
-

7. **Multiple Choice:** If your chloramines/chlorine test does not pass, what should you do?

- ☐ Call your dialysis center.
- ☐ Drain the batch.
- ☐ Use the batch and test again before your next Treatment.
- ☐ Retest a second sample of product water with a new test kit.
-

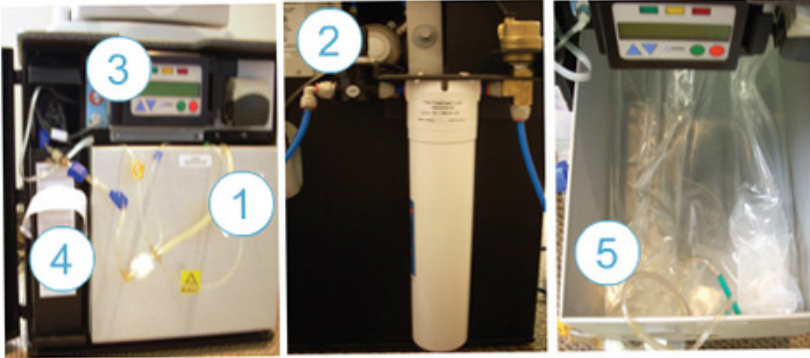
8. **Select All That Apply:** Which of the following are true about the PureFlow SL?

- ☐ It prepares dialysate for use during hemodialysis.
- ☐ It produces ultra-pure water and mixes this water with prepackaged dialysate concentrate in appropriate amounts.
- ☐ It cleans the blood during hemodialysis.
- ☐ It delivers the dialysate to the cyclor when needed for therapy.

Patient Learning Checkpoints

PureFlow SL

9. Match each **number** to its label.



- PAK _____
- Pre-Treatment Kit _____
- SAK _____
- Control Unit _____
- Cabinet with Tub _____

10. **True/False:** Chloramines/Chlorine testing should take place within 2 hours after completion of making a batch.

- ☐ True
- ☐ False
-

Patient Learning Checkpoints

cycler troubleshooting

1. **True/False:** The typical arterial pressure ranges are between -50 and -200 mmHg. The cycler displays the negative arterial pressure with a minus sign in front of it.

- ☐ True
- ☐ False
-

2. Number the steps for the standard response to a cycler **caution** so they are in the correct order.

- _____ Press **TREATMENT** or **ADD FLUID** for cautions that require action, OR press **MUTE** to silence cautions that only provide information.
- _____ Identify the cause and fix it.
- _____ See the caution number in the Yellow Caution bar.
-

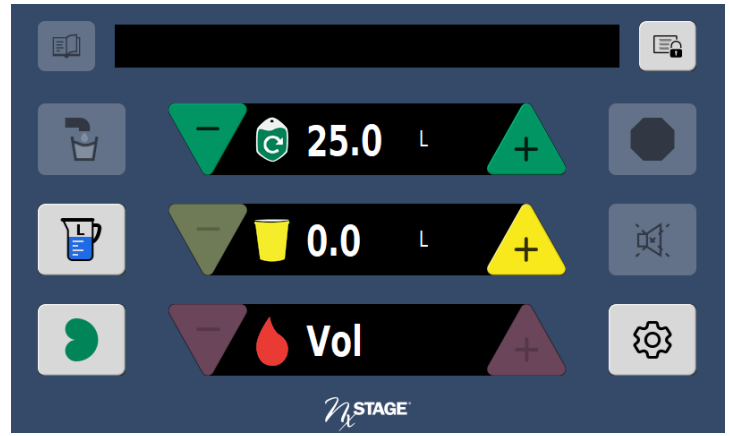
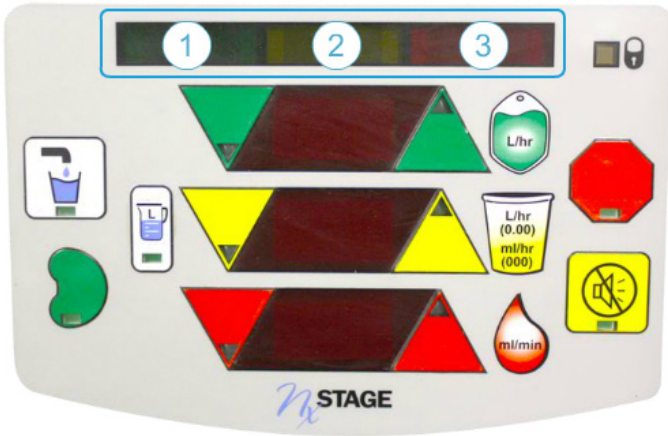
3. **Multiple Choice:** You have a Fluid Detection Sensor Alarm and you can't identify the source of the leak. What should you do first?

- ☐ Nothing, the alarm is most likely in error and may be ignored. Press **MUTE** and continue **TREATMENT**.
- ☐ Use the Fluid Detection Sensor User's Guide to identify and fix the cause.
- ☐ Call NxStage Technical Support.
- ☐ Call your dialysis center.

Patient Learning Checkpoints

cycler troubleshooting

4. Match each number from the **status bar** to the condition it represents.



Caution condition _____ Normal operating condition _____ Alarm condition _____

5. **Multiple Choice:** You are performing TREATMENT and the power in your home goes out but comes back on almost immediately -- would should you do?

- ☐ See the Caution 40, press **TREATMENT** to resume.
- ☐ Perform temporary disconnection.
- ☐ Press **STOP** and then press **TREATMENT**.

6. **Select All That Apply:** You use Emergency Rinseback when you need to return blood quickly. Under which of the following conditions should you **not** complete Emergency Rinseback:

- ☐ If blood circuit is clotted or hemolyzed.
- ☐ Air is seen in the blood circuit or in the patient blood lines.
- ☐ If blood flow stops for an extended time.

Patient Learning Checkpoints

cycler troubleshooting

7. **True/False:** The *How Do I Troubleshoot Common Alarms?* quick reference guide contains all the potential causes for alarms and cautions.

- ☐ True
- ☐ False
-

8. Number the steps for the standard response to a cycler **alarm** so they are in the correct order.

- _____ Press **TREATMENT** if in TREATMENT; press **ADD FLUID** if in PRIME or RINSEBACK.
 - _____ Identify the cause and fix it.
 - _____ Press **STOP**.
 - _____ Press **MUTE** to silence the alarm.
 - _____ See the alarm number in the Red Alarm bar.
-

9. **True/False:** It is important to monitor and report to your center arterial and venous pressures outside your normal range to address access flow issues and prevent alarms.

- ☐ True
- ☐ False

Patient Learning Checkpoints

cycler troubleshooting

10. **True/False:** The action you take when resolving alarms and cautions may vary depending on what mode you are in, i.e., PRIME, TREATMENT, or RINSEBACK.

☐ True

☐ False

11. **True/False:** Cycler blood circuit air alarms are the result of air being detected in the Arterial or Venous Patient Lines.

☐ True

☐ False

PureFlow SL troubleshooting

1. Number the steps for the standard response to a PureFlow SL **alarm** so they are in the correct order.

- _____ Press **STOP**.
 - _____ Press **GO**.
 - _____ Identify the cause and fix it.
 - _____ See the flashing Red Alarm light, the alarm number, and error message.
-

2. **True/False:** A cyclor 35 Alarm is likely to occur if the PureFlow SL Control Unit Drain Line is not flushed at least monthly.

☐ True

☐ False

3. When **priming a PAK**, water flows between four PureFlow SL components. Number the components in the order that the water flows to them.

- _____ Pre-Treatment Kit
- _____ Drain
- _____ PAK
- _____ Source water (Tap)

Patient Learning Checkpoints

PureFlow SL troubleshooting

4. When **making a batch**, water flows between four PureFlow SL components. Number the components in the order that the water flows to them.

- _____ SAK
 - _____ Source water (Tap)
 - _____ PAK
 - _____ Pre-Treatment Kit
-

5. Number the **steps** for the standard response to a PureFlow SL **caution** so they are in the correct order.

- _____ Press **GO**.
 - _____ See the flashing Yellow caution light, the caution number, and error message.
 - _____ Identify the cause and fix it.
-

6. **True/False:** The GO button on PureFlow SL mutes the PureFlow SL alarm.

- ☐ True
- ☐ False

PureFlow SL troubleshooting

7. **Select All That Apply:** The PureFlow SL alarm goes off if:

- ☐ The PAK is exhausted.
 - ☐ The SAK type displayed on the PureFlow SL Control Unit does not match the SAK type installed.
 - ☐ Fluid leak in tub.
 - ☐ The source water (tap) is not turned on when priming a PAK or making a batch.
 - ☐ The Drain Line is not positioned in the drain.
-

8. **True/False:** Pressing STOP on PureFlow SL also stops the cyclor and your treatment.

- ☐ True
 - ☐ False
-

answer key

Prepare for Treatment

1. Insert the priming spike into the saline bag, without touching the spike or the sterile port.
 2. A,B,C
 3. Press Volume Toggle 1; Verify Dialysate Volume 2; Enter Ultrafiltration Volume 3; Press Volume Toggle 4; Verify Blood Flow Rate 5; Enter Ultrafiltration Rate 6; Enter Dialysate Rate 7
 4. False
 5. False
 6. Your weight when your blood pressure is normal and no swelling exists.
-

Cannulation

1. True
 2. False
 3. Needle 1; Hub 2; Bevel 3; Tubing 4; Wings 5; Cap 6; Clamp 7;
 4. False
-

Catheter

1. A,B
2. At the exit site then moving outward.
3. False
4. All apply
5. True
6. All apply

answer key

Cycler

1. Contact NxStage Technical Support.
 2. 2,1,3
 3. “000” is displayed in the Yellow Caution bar and the dialysate and ultrafiltration rates read “0.00”.
 4. Press the **VOLUME TOGGLE** button.
 5. 4,2,1,5,3,8,9,6,7
 6. 3
 7. A bleach solution
 8. Once a month or more frequently as required
 9. 3,2,4,1
 10. True
 11. 3,2,4,1
 12. 2,1
-

Pureflow SL

1. False
2. True
3. 3,2,5,1,4
4. Filter and purify source water.
5. False
6. 7 hours
7. Retest a second sample of product water with a new test kit.
8. A,B,D
9. 4,2,5,3,1,
10. True

answer key

Cycler Troubleshooting

1. False
2. 3,2,1
3. Use the Fluid Detection Sensor User's Guide to identify and fix the cause.
4. 2,1,3
5. See the Caution 40, press **TREATMENT** to resume.
6. All apply
7. False
8. 5,3,4,2,1
9. True
10. True
11. True

PureFlow SL Troubleshooting

1. 2,4,3,1
2. True
3. 2,4,3,1
4. 4,1,3,2
5. 3,1,2
6. False
7. A,B,C,D
8. False

This document is not intended to replace the NxStage User Guide or PureFlow SL user guide or cartridge instructions for use and does not include all of the information necessary to use the system safely and effectively. Patients, partners, and providers should review and refer to the user guides and cartridge instructions for use for complete information including all warnings and precautions. CAUTION: Federal law restricts this device to sale by or on the order of a physician.



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