



1. Gather supplies in a clean, well-lit area:

- 1 TPN bag
- 1 Tubing Package
- Normal Saline Syringe
- Alcohol Wipes
- Prizm Pump
- Power Pack
- 9 Volt Battery
- Coin
- Sharps Container

**Additives:**

- Multivitamins
- 10 ml Syringe with Needle

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**2. Wash Hands**

3. Review TPN label for correct patient name, expiration date and additives.  
Add multivitamins and other additives to TPN bag as instructed:

MULTIVITAMINS - 2 Vial System:

- Remove multivitamin vials from container
- Remove plastic tops from both vials
- Scrub both vial tops with alcohol
- Open 10 ml syringe and tighten needle
- Pull plunger back to 5 ml mark
- Insert syringe into first vial of vitamins
- Invert vial (turn vial upside down)
- Push air into vial and allow fluid to enter syringe
- Pull needle down into the neck of the vial to remove all the fluid (there will be about 5 mls of fluid in the syringe)
- Remove syringe and needle from vial
- Draw back on syringe again to the 10 ml mark
- Insert syringe into second vial of vitamins
- Invert vial
- Push the air in and allow the fluid to enter syringe
- Pull tip of needle into the neck of vial to remove all the fluid (there will be about 10 mls of fluid in the syringe when done)
- Remove syringe from vial

Inject vitamins into TPN bag

- Scrub rubber port on TPN bag with an alcohol wipe
- Insert syringe of vitamins into the port and inject
- Remove syringe and dispose in sharps container
- Gently mix bag to disperse vitamins

**For additional Additives see attached instructions on page 6.**

4. Prepare pump:
  - Insert 9 Volt battery into pump; pump will 'chirp' if battery is inserted correctly
  - Pump screens will change as the pump reviews TPN program
  - Pump must be fully powered up before connecting tubing

**While you are waiting for pump to fully power up, proceed with step 5.**

5. Attach tubing to TPN bag:
  - Open tubing package
  - Remove paper tape from tubing and unwind
  - Locate and close clamp on TPN tubing
  - Remove tab on middle port of TPN bag
  - Remove protective cover from spiked end of tubing
  - Insert spike fully into port of TPN bag

Pump screen will now read **"STOPPED"** so you can proceed with step 6

**You must wait for the "STOPPED" message to appear on the screen before you attach the TPN tubing to the pump.**

6. Attach TPN tubing to the pump:
  - Attach tubing to pump using hinges
  - Press tubing to pump while you insert coin into latch to lock in place
  - Turn counter clockwise until the mark on the latch matches up with the solid dot
  - Pump will beep if latched correctly
  - Pump will read:  
**"High volume administration set latched  
Press next to continue"**
  - Press the **NEXT** button

7. Pump will ask:
  - "Reset Reservoir Volume to \_\_\_\_\_?"**
  - Press **Y** button
  - Pump will read **"infusion profile has been reset"**

8. Pump will ask:
  - "Prime Tubing?"**
  - Press **Y** button
  - Pump will instruct you to  
**"Open Clamps"**
  - Open clamp on TPN tubing that you closed earlier
  - Allow filter on tubing to hang freely from table while you prime**
  - Push and hold **Y** button to prime until TPN fluid fills tubing completely
  - Release **Y** button

9. Pump will ask:
  - "Continue Priming? Y or N"**
  - Press **N** button

10. Pump will ask:  
    **“Start the Pump?”**  
    **DO NOT PRESS Y OR N AT THIS TIME.**
  
11. Attach Power Pack to the pump by matching red dot to red dot. Do not twist.  
    Screen will read **“Power Pack Good”**
  
12. Flush IV catheter with Normal Saline
  - Remove syringe from wrapper
  - Hold syringe upright and push on plunger to break seal
  - Remove protective cover from syringe
  - Use care not to contaminate tip
  - Hold syringe upright and gently push on plunger to expel air
  - Scrub IV end cap with an alcohol wipe for 15 seconds
  - Push and screw syringe into IV end cap
  - Gently flush solution through IV catheter
  - Remove syringe from IV end cap and discard
  
13. Hook up TPN to patient
  - Remove protective cover from end of TPN tubing
  - Scrub IV end cap with alcohol
  - Push and screw TPN tubing into IV end cap
  
11. START PUMP
  - Pump screen may have faded
  - Press **START/STOP** button
  - “Start the Pump?”** will appear
  - Press Y button
  - Pump will perform automatic review of screens again and TPN will be administered

**“RUNNING” and UP Arrow  must be visible on screen**

TPN will infuse over \_\_\_\_\_ hours

### **When TPN is completed:**

1. Gather Supplies
  - 2 Normal Saline syringes
  - \_\_\_ Heparin syringe(s)
  - Alcohol wipes
  - Coin
  
3. Remove pump and tubing by:
  - Stop pump by pressing **STOP/START** button.
  - “**STOP THE PUMP?**” will appear.
  - Press **Y** button
  - Unscrew TPN tubing from IV end cap
  
4. Flush IV catheter with 20 mls Normal Saline (2 syringes)
  - Remove syringe from wrapper
  - Hold syringe upright and push on plunger to break seal
  - Remove protective cover from syringe
  - Use care not to contaminate tip
  - Hold syringe upright and gently push on plunger to expel air
  - Scrub IV end cap with an alcohol wipe for 15 seconds
  - Push and screw syringe into IV end cap
  - Gently flush solution through IV catheter
  - Remove syringe from IV end cap and discard
  
3. Repeat flush procedure with second syringe of Normal Saline
  
4. Flush IV catheter with heparin
  
5. **If you have a second lumen (tail) on IV catheter, flush this lumen now with 3 ml of heparin.**
  
7. Remove TPN tubing from CADD PRIZM and discontinue power source:
  - Remove Power Pack
  - Remove 9 Volt battery (put aside for next use or change as directed)
  - Remove TPN tubing from CADD PRIZM pump by using coin to unlock pump
  - Discard tubing and bag
  - Plug in Power Pack for recharging

## **THINGS TO REMEMBER:**

***Remember: once you scrub the IV end cap, be sure that this remains sterile until you enter the cap with syringe or tubing.***

***Remember: the tips of syringes and ends of TPN tubing are sterile under the protective covers. Do not contaminate the ends prior to insertion into the IV end cap and/or TPN bag.***

If you have an additional lumen (tail) on your IV catheter, flush this lumen daily with 3 ml of heparin.

When adding vitamins or medications to your TPN bag, add the smallest volume first to insure all medications get dispersed.

Check your IV site and temperature daily. If IV dressing is not intact or if you develop a fever, call your home care nurse.

Pump screen goes blank in order to save battery power.

When pump is running as it should, the green light will flash every few seconds

Check the pump every morning and evening to be sure green light is flashing.

If both green and yellow lights are flashing, the medication bag may be almost empty or the battery power may be low. Check the screen by pressing the **NEXT** button to determine the problem. Call your nurse if you need help.

If yellow light only is flashing, pump is stopped and may need to be restarted. Call your nurse for direction.

TPN and multivitamins should be stored in the refrigerator.

Store other additives as directed.

Remove TPN several hours before use.

Change 9 V battery

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## Additional Additives from a Vial

You may need to add other medications to your TPN that also come in a vial. Follow these instructions and **always add other medications before** adding Multivitamins.

**Be sure to note the amount of medication needed as you may not use the whole vial for certain additives. The amount needed will be clearly identified on the TPN label.**

### Draw up Additives :

- remove plastic top from vial
- scrub vial top with alcohol
- open syringe and tighten needle
- pull plunger back to correct volume (as indicated on label)
- insert syringe into vial
- invert vial (turn vial upside down)
- push air into vial and allow fluid to enter syringe to correct amount
- remove syringe and needle from vial

### Inject medications into TPN bag:

- scrub rubber port on TPN bag with an alcohol wipe
- insert syringe of medicine into the port and inject
- remove syringe and dispose in sharps container
- gently mix bag to disperse medications

# PRIZM PUMP

## USE OF 9 VOLT BATTERIES AND THE POWER PACK

1. Change the 9 volt battery in your pump every day.
2. Connect the battery power pack to your pump at night.

### TO CHARGE THE POWER PACK EACH DAY

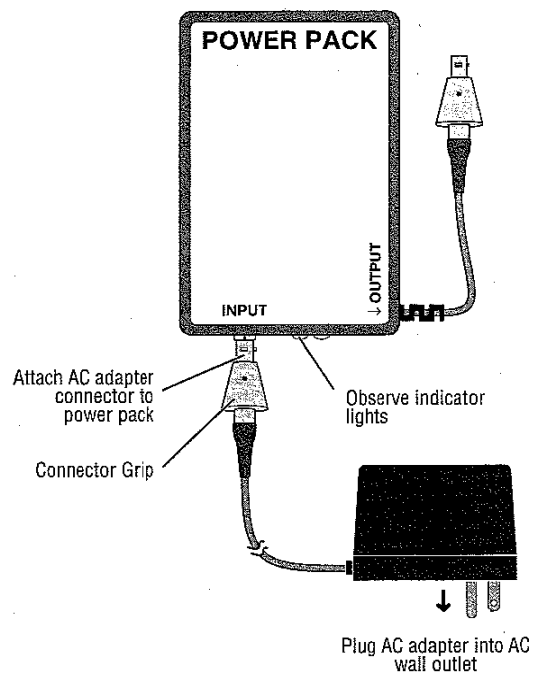
1. Attach the AC adapter connector to the power pack INPUT connector.

**NOTE: The power pack may remain attached to the pump during the charging. Running the pump while charging the power pack will not drain power from the power pack.**

2. Plug the AC adapter's 3-prong plug into an AC wall outlet.

**CAUTION: Do not remove the grounding prong of the AC adapter or use a 2-prong adapter with the AC adapter. This could result in an electrical problem.**

3. Observe the power pack's indicator lights:
  - The flashing amber (yellow) light indicates that the power pack is charging.
  - The power pack is fully charged when the green indicator light comes on.



If neither light is on, check the connections and AC outlet. Refer to CADD External Power Source (EPS) System booklet for troubleshooting.

## **Refreshing the Battery Pack (Required every 30 days)**

**The battery pack should be refreshed every 30 days** during regular use and if the battery is showing signs of reduced capacity as indicated by more frequent low battery alarms or run time being reduced. Please note the next date for refreshing your battery pack on your calendar as a reminder.

### **To Use the Battery Refresh Cycle:**

1. Attach the AC Adapter to the power pack INPUT connector. Plug the AC adaptor into an AC wall outlet. **DO NOT attach the power pack to the pump during this process.**

NOTE: The AC adapter must remain plugged into the wall outlet AND connected to the power pack throughout the entire Battery Refresh cycle. Do not push any buttons or unplug during this process.

2. Press the *Battery Refresh Cycle* button on the face of the power pack and place the power pack on a flat surface. The amber (yellow) light will flash while the battery is discharging.
3. It may take as long as 15 hours for the battery pack to recharge. When the power pack is completely discharged, the amber (yellow) light will stop flashing but will remain lit. The power pack will immediately begin recharging.
4. While the battery pack is recharging, should the pump be needed for infusion, use the second battery pack or the 9 volt batteries provided until the battery pack is completely recharged.
5. The battery pack is fully recharged when the green indicator light is lit. At this time, the battery pack may be used and recharged daily as indicated on the other side of this page.