

Refill Kit – CODMAN® 3000 Series

CONSTANT FLOW IMPLANTABLE PUMPS

WARNINGS

The pump must be implanted and refilled only by qualified medical personnel, knowledgeable in the surgical use and servicing of implantable devices and catheters, and trained specifically to implant or refill the pump. Use of the pump by personnel not properly trained in its implantation and/or servicing can lead to serious consequences involving either under or over-delivery of drug to the patient. In the event of an over-delivery of drug refer to the approved drug labeling for appropriate action.

Utilization of the pump requires the proper handling (filling, storage and dispensing) of a significant volume/dosage of drug. This amount of drug can be extremely harmful to the patient if delivered suddenly or inappropriately.

Bolus access and pump refill procedures must be performed using the correct access needle. Never attempt to refill the pump using a Special Bolus Needle. This use will result in giving a bolus injection to the patient and can cause a fatal drug overdose.

The CODMAN® 3000 Series Constant Flow Implantable Pumps contain a safety valve in-line with the bolus pathway to insure that a bolus procedure can only be performed when using a properly positioned Special Bolus Needle (REF AP-04013-5 or AP-04032-5).

REVIEW ALL INSTRUCTIONS BEFORE PROCEEDING:

PRECAUTION 1. A non-coring needle is provided in this kit. It is critical to the safe functioning of the Pump that no other needle be used to penetrate the septum.

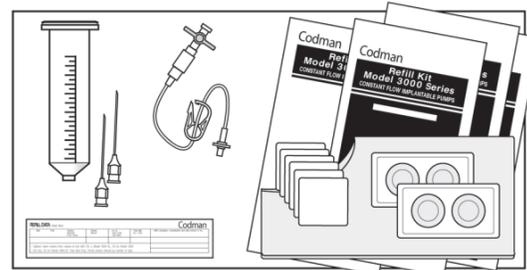
PRECAUTION 2. Do not aspirate fluid from the Pump. Aspiration can cause blood to be drawn into the catheter and result in occlusion.

PRECAUTION 3. It is important to precisely follow the Pump refill instructions as detailed in this pamphlet in order to successfully complete the Pump refill procedure. If the needle is not properly positioned, and verified as detailed in the Pump Refill Procedures, there is a possibility that a drug extravasation will occur.

Use the refill data sticker provided in this kit to maintain accurate Pump refill records.

Place patient in a supine position. Expose Pump pocket site. Palpate the Pump site and locate the raised septum. Fill a syringe with appropriate refill solution (16 mL for the CODMAN® 3000-16, 30 mL for the CODMAN® 3000-30 and 50mL for the CODMAN® 3000-50) and a 10 mL syringe with saline solution. Using sterile technique, expose kit contents.

Don sterile gloves. Use a disinfecting agent to prep the Pump site. Allow prepped area to dry. Place fenestrated drape over Pump site.

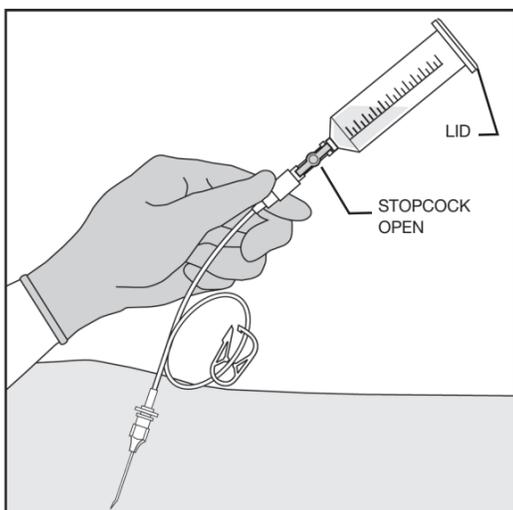


KIT CONTENTS

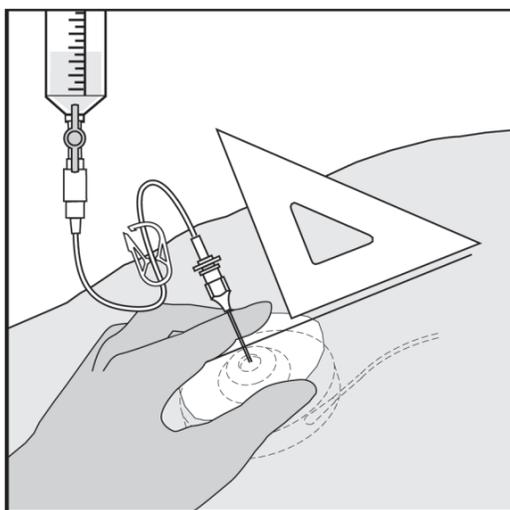
- | | |
|-------------------------------------|--------------------------|
| [1] 50 mL Calibrated Syringe Barrel | [2] Adhesive Bandages |
| [1] Tubing Set | [1] Refill Worksheet |
| [1] Stopcock | [1] INSTRUCTIONS FOR USE |
| [2] Huber Point Needles; | [2] INSTRUCTION POSTERS |
| 22 Gauge x 1.5" (3.8 cm) | |
| [6] Gauze Pads | |
| [1] Fenestrated Drape | |
| [1] Data Sticker | |

ITEMS NOT PROVIDED IN KIT:
Sterile gloves and syringes required for procedure.

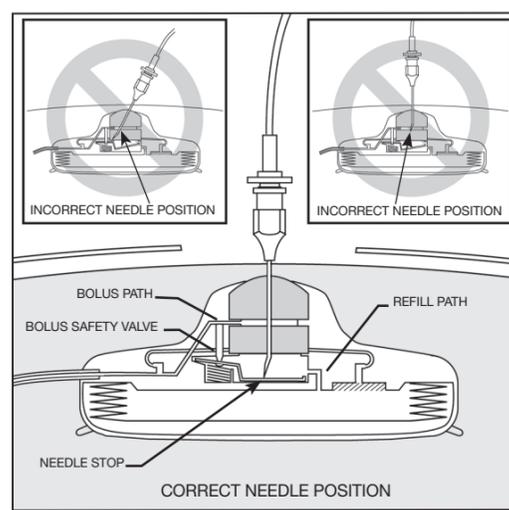
For 24-Hour Technical Assistance or to arrange an in-service Training Program, contact: **Codman & Shurtleff, Inc.**
+1 508 880 8156 or 800 660 2660.



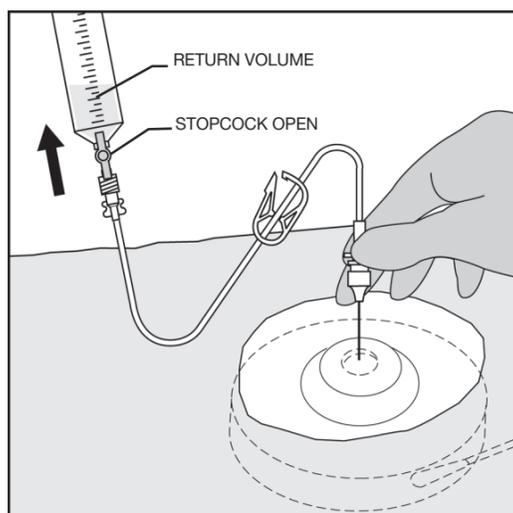
1. Attach the Needle and Stopcock to the tubing set. Stopcock and clamp are in the OPEN position. Next attach the 50 mL calibrated syringe barrel to the Stopcock. Tighten all connections.



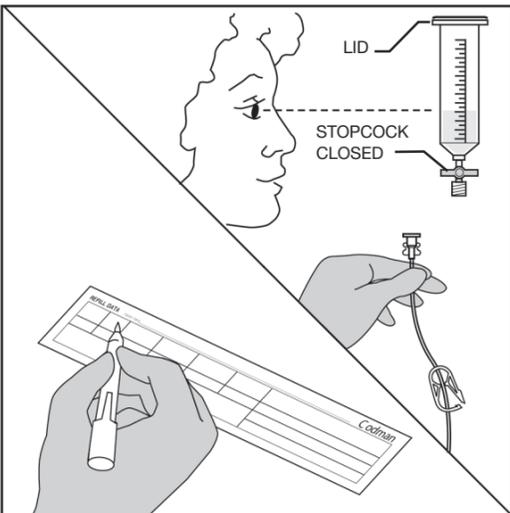
2. Re-palpate the Pump site and locate the raised septum. Insert the non-coring needle PERPENDICULAR to the Pump septum.



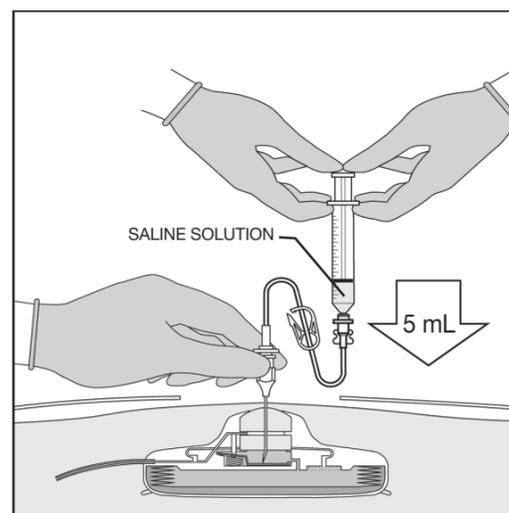
3. Advance needle until it is in contact with the needlestop.



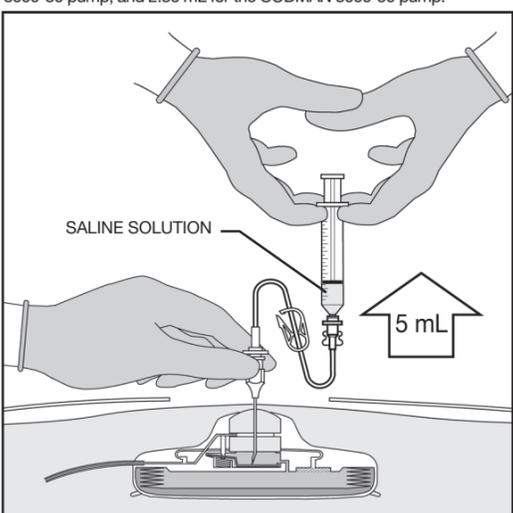
4. Allow the Pump reservoir to empty. Keep downward pressure on the needle throughout the procedure. **If no fluid returns to the syringe, refer to Troubleshooting Guide for assistance.**
NOTE: After allowing the Pump to "empty" into the syringe barrel, fluid from the previous refill will remain in the Pump. This residual volume is 2.33 mL for the CODMAN 3000-16 pump, 2.72 mL for the CODMAN 3000-30 pump, and 2.86 mL for the CODMAN 3000-50 pump.



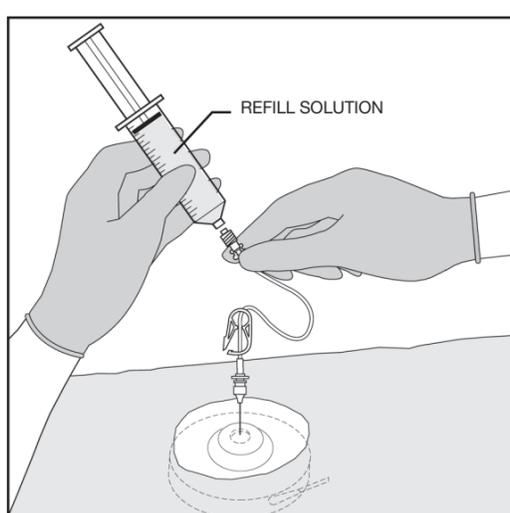
5. CLOSE STOPCOCK. Note return volume (mL) and record on refill data sticker provided. Discard syringe barrel and stopcock leaving the needle and refill set in place.



6. Expel air from the 10 mL syringe of saline. Attach the syringe to the proximal end of the refill set and confirm that the needle is still in contact with the needle stop. Keep downward pressure on the needle and inject 5 mL of saline into the Pump.

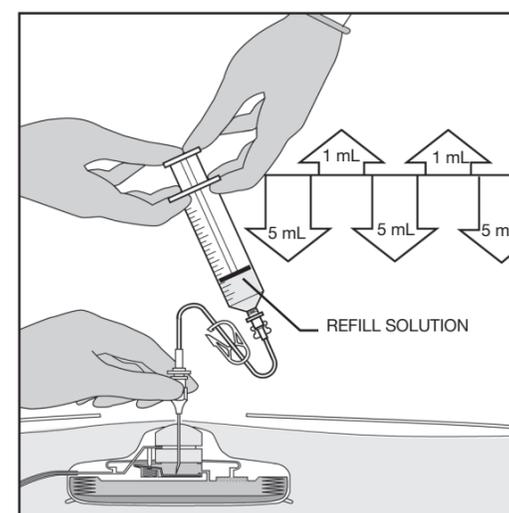


7. Release pressure on the plunger and allow the 5 mL injected to return to the syringe. This procedure reconfirms correct positioning of the needle. If no fluid returns, refer to Troubleshooting Guide for assistance. Disconnect the syringe from the refill set.



8. Expel air from refill syringe. Attach syringe to proximal end of refill set. Confirm that the needle is still in contact with the needle stop.

Refill Volume: CODMAN 3000-16 16 mL
CODMAN 3000-30 30 mL
CODMAN 3000-50 50 mL



9. Keep downward pressure on the needle and begin to inject refill solution into the Pump. Release pressure on plunger at 5 mL increments and allow 1 mL of solution to return to syringe. This will verify that the needle is in the correct position and the Pump reservoir is being filled. Continue to inject and check needle placement until the syringe is emptied.

PRECAUTION: If no fluid returns to the syringe upon release of the plunger, DO NOT CONTINUE TO INJECT REFILL SOLUTION UNTIL YOU HAVE VERIFIED THE NEEDLE PLACEMENT PER THE PROCEDURE IN THE TROUBLESHOOTING GUIDE.

10. After injecting the entire contents of the refill syringe, close the clamp on the tubing set and pull needle out of Pump septum. Remove drape and apply adhesive bandage to access site.

Troubleshooting Guide: If no fluid returns during Pump emptying, or during the Refill Injection Procedure, proceed as follows:

A. Confirm needle position and that a 22 gauge, non-coring needle is being used. Check that the needle is PERPENDICULAR to the Pump septum and is fully depressed and in contact with the needlestop. If no volume returns proceed with steps B, C, D.

B. Attach a 10 mL syringe containing normal saline solution to the refill tubing set.

C. Keep downward pressure on the needle and inject 5 mL of saline into the Pump. Release pressure on the syringe plunger and allow the fluid to return to the syringe. If fluid returns then the needle is in the proper position and indicates that the Pump was empty at the start of the refill procedure. Replace the 10 mL syringe with a syringe containing the Pump refill solution and continue with the refill procedure (steps 8 to 10).

D. If there is still no fluid return after injection of the 5 mL of saline, remove needle and refill tubing set. Flush the refill set to confirm that the system is patent. Re-insert the needle perpendicular to the Pump septum until it is in contact with the needlestop. Repeat step C.

E. Contact Codman & Shurtleff, Inc. for 24-Hour Technical Assistance at +1-508 880 8156 or 800 660 2660.

