

# LONG TERM REPAIR KIT

INSTRUCTIONS FOR USE (USE ASEPTIC TECHNIQUE)

The Long Term Repair Kit is designed to replace damaged female luer connectors, clamps or repair extensions where there is a minimum of 4.5CM viable extension tubing.

1. Strict aseptic technique must be used during insertion, maintenance, and catheter removal procedures. Provide a sterile operative field. The Operating Room is the preferred location for catheter repair. Use sterile drapes, instruments, and accessories. Perform surgical scrub. Wear gown, cap, gloves and mask. Have patient wear mask.
2. Examine entire length of extension tubing for damage. If the extension tubing is split, swollen, has other damage, or is shorter than 4.5cm, the catheter should be replaced.
3. Starting at the catheter hub, measure the length of usable extension tubing that will remain after connector and any damaged tubing are cut off. If the remaining tubing length is over 4.5cm, proceed with repair.
4. Use original clamp to clamp off the catheter between the catheter hub and the damaged portion of the catheter.
- 4a. For clamp repair: Remove damaged clamp and I.D. ring. Use temporary slide clamp provided.
5. Clean the external segment of the catheter extension with iodine-based solutions. After drying, place a sterile drape under cleaned segment of catheter.
6. Remove the end cap from the affected extension and aspirate any fluid in the extension tubing, using a 10cc Luer Lock syringe.
7. Apply the slide clamp provided in the kit onto the extension tubing adjacent to the catheter hub. **CAUTION: Do not clamp the dual lumen portion of the catheter. Clamp only the extensions. Do not use serrated forceps; use only the in-line clamps provided.**
8. Using the scissors included in the kit, cut off the damaged luer/extension tubing at a 90-degree angle. Make the cut as close to the luer as possible.
9. Replace existing clamp and I.D. ring with the appropriate color-coded (blue–venous, red–arterial) clamp provided in the kit, and close the clamp. It is important that the clamp is oriented per (Step A).

Step A



10. Remove the temporary slide clamp. Reposition the temporary slide clamp on the extension tubing between the clamp and the cut end of the extension.
11. Reposition clamp, sliding clamp partially over hub as shown in Step B close clamp on extension tubing. **WARNING: Failure to clamp could lead to air embolism or blood loss. (Step B)**

Step B



12. Remove temporary slide clamp. **WARNING: The slide clamp is provided for use during the repair procedure only. DO NOT reuse the temporary slide clamp.** Dispose of the slide clamp following the repair procedure.

13. Remove the extension replacement luer and cap from the package. **Note: Both components must be utilized to complete repairs.**



Repair Kit Luer Repair Kit Cap

14. Assemble the provided luer to the extension as follows: Slide repair kit cap over the extension tubing such that the taper faces the catheter hub. (Step C)

Step C



- Push barbed end of the repair kit luer into the extension tubing. Position completely over barbed end of fitting completely against threaded section of luer. (Step D)

Step D



- Gently tug the extension tubing to ensure snug fit. **CAUTION: Be sure to pull on the extension tubing and the connector only and not on the catheter In Situ.** Slide the repair kit cap toward the threads on the repair kit luer and rotate it to engage the threads. (Step E)

Step E



- Continue to thread the cap by hand onto the luer until secure. (Step F) A small gap between cap and luer may be present.

Step F



15. Grasping the luer in one hand, and the proximal extension tubing in the other, gently tug on the joint to test the security of the connector. If the luer pulls out of tubing, repeat the repair procedure. A connection failure may be due to one, or a combination of (1) the repair kit is not fully inserted into the extension tubing. (2) Verify 4.5CM–try to re-trim extension. (3) The extension tubing is damaged, preventing a secure connection. If the failure is due to damaged tubing, then the catheter may need to be removed and re-placed. **CAUTION: Be sure to pull on the extension tubing and the connector only and not the catheter In Situ.**
16. Attach end cap.
17. Use a sterile 10cc luer lock syringe to aspirate any air introduced during the repair of extension. **CAUTION: Assure that all air has been aspirated form the extension. Failure to do so may result in air embolism.**

## DETERMINING NEW PRIMING VOLUME

1. Connect saline filled syringe to catheter extension. Assure that extension clamps are open during irrigation procedure.
2. Flush catheter with 1-3cc of saline. Note the volume of saline in syringe after flushing.
3. Aspirate the catheter until first sign of blood flashback.
4. Note the new volume of saline in syringe.
5. Priming volume equals the final volume in syringe minus the initial volume.
6. Record lot number, priming volume, and site care information in the patient's chart. If catheter is not to be used immediately for treatment, follow the suggested catheter patency guidelines.
  - To maintain patency between treatments, an anticoagulant lock must be created in the lumen(s) of the catheter.
  - Follow hospital protocol for anticoagulant lock concentration.
7. Draw anticoagulant locking solution into syringes, corresponding to the amount previously determined. Assure that the syringes are free of air.
8. Remove end caps from the extensions.
9. Attach syringes containing anticoagulant locking solution on female luers of the extensions.
10. Open extension clamps.
11. Aspirate to ensure that no air will be forced into the patient.
12. Inject anticoagulant locking solution into each lumen using quick bolus technique. **Note: Each lumen should be completely filled with anticoagulant locking solution to ensure effectiveness.**
13. Close extension clamps. **CAUTION: Extension clamps should only be open for aspiration, flushing and dialysis treatment.**
14. Remove syringes.
15. Attach sterile end cap onto the catheter luers of the extensions.
 

*In most instances, no further anticoagulant locking solution is necessary for 48-72 hours, provided the lumen(s) has not been aspirated or flushed.*

## Ordering Information

**Code: RPK-01**

SOLD 5/BOX: (1) Luer Assembly (2) Clamps–1 Red & 1 Blue (2) End Cap (1) Scissors (1) Temporary Slide Clamp (1) Adhesive Backed Drape

\* Refer to Instructions for Use provided with the product for complete instructions, warnings, and contraindications. Observe all Instructions for Use prior to using products. Failure to do so may result in patient complications.