



LF01007 ADULT IV FOOT INSTRUCTION MANUAL



**WARNING: This product contains dry natural rubber.
Do not remove film from tubing!**

Life/form® Products by Nasco

Cautions

1. This synthetic blood is specially formulated to be compatible with the self-sealing veins and plastics used in manufacturing the foot.
2. DO NOT use dull or burred needles as these will cause leaks in the system. Burred needles will cause permanent damage. Use smaller needles (20- to 25-gauge).
3. DO NOT allow “blood” to dry on the simulator — it may stain the foot.
4. Use only 500 cc of infusion fluid as a larger amount will also increase the pressure of the venous system, resulting in leaks.
5. DO NOT clean the simulator with solvents or corrosive material as they will damage it.
6. The Nasco Vein Tubing Sealant Kit (**LF01099U**) will extend the useful life of the tubing.

Supplies/Replacement Parts for the Adult IV Foot

- LF00845U** *Life/form*® Arterial Blood, 1 quart
- LF00846U** *Life/form*® Arterial Blood, 1 gallon
- LF01007** Adult IV Foot
- LF01007A** Adult IV Foot White Replacement Skin Only
- LF01007B** Adult IV Foot Replacement Vein Only
- LF01007C** Adult IV Foot Skin and Vein Replacement Kit
- SB29863U** Fluid Supply Stand
- LF09919** Nasco Cleaner



About the Simulator...

The *Life/form* Adult IV Foot Simulator duplicates the human condition as closely as modern plastics technology allows — it is almost the real thing. Its care and treatment should be the same as with a patient; abuse or rough handling will damage the simulator — just as it would cause pain or injury to a patient.

This unit is the simulation of the entire human foot from the lower leg to the toe tips. Externally the skin texture is realistic to the touch.

Although this foot will provide you long trouble-free usage, the skin and veins can be readily replaced when needed. The outer skin is easily peeled off revealing the “core” and veins providing, literally, a brand new foot. The life of the replaceable skin and veins will be prolonged by utilizing smaller needle sizes (such as 20- to 25-gauge). However, if instruction with larger needle sizes is required, this can be done; the skin and veins will merely need to be replaced sooner. Replacement Skin and Vein Kits are available through Nasco (see list of supplies).

List of Components

- 3 cc syringe with needle
- 12 cc syringe with needle
- 22 gauge needle
- Small white towels (2 each)
- Infusion butterfly set
- IV bags (2 each) with clamps
- Lubricant (5 oz.)
- Foot stand
- Foam foot support
- Powdered red artificial blood



Figure 1

Internal Structure

Internally the vascular structure (rubber tubing) includes injectable long saphenous vein, short saphenous vein, and dorsal venous arch. The venous system is constructed of special self-sealing rubber tubing with the lumen being the approximate size of a human vein (Figure 1). The vascular structure has an inlet tube and an outlet tube above the ankle and it is via these tubes that the venous system is filled. Thus, the techniques of blood drawing and starting intravenous infusions may be practiced on the Adult IV Foot.

General Instructions for Use

The Adult IV Foot comes with all of the supplies necessary to perform most procedures. (To perform intravenous infusions the user must supply their own IV set and bag of solution.)



Figure 2

A. Preparing the Synthetic Blood

1. Add 1 pint of distilled water to the synthetic blood concentrate (Figure 2).
2. Hang one of the bags (bag A) approximately 28" above the level of the foot, making sure the clamp on the IV tubing is closed. Pour the blood into the bag.
3. Attach the fitting end of the IV tubing to one of the foot tubes.

Important Note: Before completing step 4, bag B must lie at foot level or below with the cap closed.

4. With the other foot tube attached to the empty IV bag (bag B), flush the vascular system with synthetic blood by opening the clamp of the filled IV bag (bag A). (Figure 3) Allow some

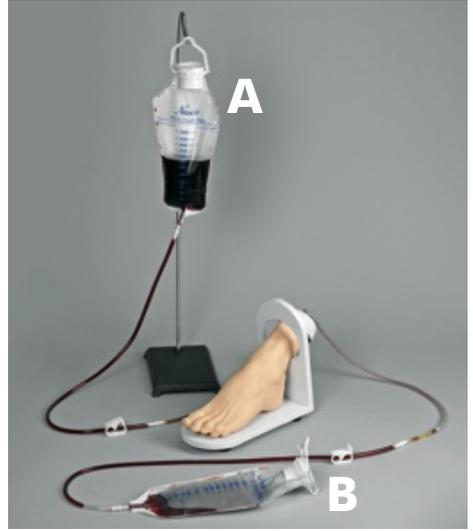


Figure 3

blood to pass through the system until the outlet foot tube to bag B runs free of bubbles. When the outlet tubing to bag B runs clear of bubbles, close the clamp on bag B.

5. The venous system is now full of "blood" and pressurized. Be sure to leave the clamp on the inlet tubing (bag A) opened.
6. The foot is now ready to practice drawing blood. "Blood" can be drawn anywhere along the pathway of the vein (see Figure 1). Distilled water should be used to prepare the sites. Synthetic blood will actually be aspirated once the vein is properly punctured.
7. Small diameter needles (20- to 25-gauge) should be used.

B. Preparing the Foot for Intravenous Infusions

(At this point you will need to supply an IV set and bag of solution. Hook them up and have them ready.)

1. To hook up the foot, refer back to steps 1-5 in section A.
2. Insert the butterfly needle into a vein. Flashback will indicate proper insertion.
3. If a flashback is observed, close the clamp on IV bag A. You are now ready to set up for the intravenous infusion.
4. Hang the IV solution bottle and connect the IV set to the butterfly needle already in the vein. With the clamp on bag A closed, open the clamp on bag B. Proof of the proper procedure is evidenced by the flow of the infusion fluid from the solution bag. Control the flow from the solution bag by adjusting the roller clamp on the tubing of the IV set.

Causes for Failure in Function

- A. Forgotten closed clamp.
- B. Kinks in tubing of the fluid bags.
- C. Tubing pinched shut by constant pressure of clamps. Lumen remains pinched occasionally even if the clamp is loosened. Slide clamp to new position and with fingers manipulate tubing at pinched site to restore

lumen. In heavy use, slide clamp to new position on tubing from time to time to prevent the “permanent pinch” caused by constant clamp pressure.

- D. If these measures do not unclog the venous system, try using a large (50 cc) syringe to force fluid through the tubing.

Care of Simulator

After each class use, close the clamps, disconnect bags, and return synthetic blood to storage container. Reconnect one IV bag to the system. Fill the bag with tap water and flush the venous system, allowing the open end to drain into a sink or basin. When the system runs clean, close the clamp and remove the IV bag. Excess water may be removed from the foot by raising the foot, lowering the leg, and draining it into a sink or basin. Wash the outside of the foot with Ivory® liquid detergent and water. Always remove the pinch clamps from the tubing and drain excess water from veins before storing.

Ordinary stains can be removed by washing the foot with soap and warm water. Newsprint, similar printed paper, or ink will permanently stain the simulator if prolonged contact occurs. Stubborn stains may be removed with Nasco Cleaner (**LF09919**), simply by dispensing it on the area and wiping with a soft cloth or paper towel.

Other Available *Life/form*® Simulators

- LF00698U** Adult Injectable Arm (White)
LF00855U Male Catheterization
LF00856U Female Catheterization
LF00901U Prostate Examination
LF00906U Ostomy Care
LF00929U Surgical Bandaging
LF00957U Enema Administration
LF00958U Pediatric Injectable Arm
LF00961U Intramuscular Injection
LF00984U Breast Examination
LF00995U Arterial Puncture Arm
LF00999U Pediatric Injectable Head
LF01005U First Aid Arm
LF01008U Intradermal Injection Arm
LF01012U Heart Catheterization (TPN)
LF01019U Ear Examination
LF01027U Peritoneal Dialysis
LF01028U Suture Practice Arm
LF01034U Suture Practice Leg
LF01036U Spinal Injection
LF01037U Hemodialysis Practice Arm
LF01038U Episiotomy Suturing Set
LF01042U Suture Kit
LF01062U Pelvic, Normal & Abnormal
LF01063U Stump Bandaging, Upper
LF01064U Stump Bandaging, Lower
LF01069U Cervical Effacement
LF01070U Birthing Station
LF01082U Cricothyrotomy
LF01083U Tracheostomy Care
LF01084U Sigmoidoscopic Examination
LF01087U Central Venous Cannulation
LF01095U Blood Pressure Arm
LF01108U Infant Intraosseous Infusion
LF01121U Advanced IV Arm
LF01131U Venipuncture and Injection Arm
LF01139U Advanced IV Hand
LF01142U Auscultation Trainer
LF01143U Testicular Exam
LF01152U Male & Female Catheter
LF01155U Advanced CPR Dog
LF01162U Venatech IV Trainer
LF01174U NG Tube & Trach Skills
LF01184U Venatech IM & Sub Q
LF01193U Special Needs Baby
LF03000U **CPARLENE**® Series
LF03601U Adult Airway Management Trainer with Stand
LF03602U Adult Airway Management Manikin
LF03609U Child Airway Management Trainer with Stand
LF03616U Child **CRISIS**™ Manikin
LF03617U Deluxe Child **CRISIS**™ Manikin with Arrhythmia Tutor
LF03620U PALS Update Kit
LF03623U Infant Airway Management Trainer with Stand
LF03632U Child Intraosseous Infusion/Femoral Access Leg on a Stand
LF03633U Child Airway Management Trainer Torso
LF03693U **Basic Buddy**® CPR Manikin
LF03699U "Airway Larry" Airway Management Trainer
LF03709U Infant **CRISIS**™ Manikin
LF03720U **Baby Buddy**™ Infant CPR Manikin
LF03750U Fat Old Fred
LF03760U Airway Management/Cricoid Pressure Trainer
LF03770U Chest Tube
LF03953U **CRISIS**™ Manikin, Complete
LF03955U Deluxe **CRISIS**™ Manikin
LF03956U Deluxe "Plus" **CRISIS**™ Manikin
LF03965U Adult **CRISIS**™ Auscultation Manikin
LF03966U Adult **CRISIS**™ Auscultation Manikin with ECG Simulator
LF04000U **GERI**™/**KERI**™ Manikin Series
LF04200U Adult Sternal Intraosseous Infusion
LF06001U CPR Prompt® Adult/Child Manikin
LF06012U CPR Prompt® Infant Manikin
LF06200U CPR Prompt® Keychain Rescue Aid
LF06204U CPR Prompt® Rescue and Practice Aid

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