

# PEDIATRIC INJECTABLE TRAINING HEAD SIMULATOR LF00999U INSTRUCTION MANUAL



WARNING: Product contains dry natural rubber.

*Life/form*<sub>®</sub> Products by Nasco

## About the Simulator

The *Life/form*® Pediatric Injectable Training Head Simulator is a dramatic and exciting training aid for practicing and demonstrating intravenous therapy on the newborn. Visual and tactile realism are combined in this simulator to provide students with the most realistic training possible for temporal and jugular puncture. A special, extremely thin, synthetic skin and rubber tubing, with appropriately small lumen and thin walls, make the use of the *Life/form*® Pediatric Injectable Training Head Simulator a realistic training exercise.

With proper care, this *Life/form*® Simulator will provide years of reliable service. Please read instructions carefully.

#### List of Components

- IV Bag
- 2 Infusion Sets
- 3 cc Syringe
- Life/form
   Venous Blood 1 Pint
- 2 Small Towels
- 1 Clamp



#### Internal Structure

The diagram above shows the position of tubing embedded within the head to simulate veins. The tubing is superficial in its full length, offering a wide selection of injection sites. Careful palpation should allow the student to locate the veins.

## **General Instructions for Use**



# A. Prepare Synthetic Blood

Concentrated blood colorant is provided. Fill the 16-oz. container with tap water for proper dilution.



#### B. Fill IV Supply Bag

Pour diluted *Life/form*<sup>®</sup> Blood into IV container. Hang bag at 18" height.

#### C. Connect to Head

Insert connector from IV tubing into tubing coming from head. Connect as shown. Be certain the clamp on the IV tube is closed.





#### D. Fill Venous System

- 1. Hold open tubing end over container.
- 2. Open clamp and allow *Life/form* Blood to flow through system until steady stream exits through open tubing end.
- 3. Place pinch clamp on open tubing end.



## E. Ready for Use

The *Life/form*® Pediatric Injectable Training Head Simulator is now ready for use. The flow control clamp should be left open during use. Venous pressure is altered by varying the height of the supply bag. A height of 18" is a good starting point. Excessive height may cause leakage through previous puncture sites. Needle size should be kept as small as possible to minimize damage to the skin and tubing. Refer to page 1 for identification of vein sites.



## F. Skin Replacement

- 1. Remove used skin from head of model.
  - a. Open snaps on head.
  - b. Lubricate EXTERIOR of skin with Life/form
     Simulator Lubricant.
  - c. Peel skin off by turning inside out.
  - d. Remove old tubing.
- 2. Install new tubing. Place new section of tubing in channel of core. Be certain equal portions of tubing protrude from the base of the model.
- Pour Life/form
   Simulator
   Lubricant (LF00985U) inside of
   skin and swish around to coat all
   inside surfaces.



**CAUTION:** The thin *Life/form*® Skin used to provide realism is tender. Care must be taken not to stretch or tear the material when installing.

- 4. Install new skin.
  - a.) Slide open end of skin over core.
  - b.) Grasp the skin with both hands and slide over core.
  - c.) Check tubing location. If tubing has moved from channel, try to work into place by palpating through skin. If unsuccessful, peel skin back (invert) until tubing can be replaced properly, then roll skin over core.
  - d.) Draw skin snugly into place.
  - e.) Snap closed.
- 5. Rinse.

Wash excess lubricant from exterior of skin. The *Life/form*® Pediatric Injectable Training Head Simulator is now fully reconditioned and ready to train hundreds of new medical personnel.

#### Procedures That Can Be Performed on This Simulator

An invaluable tool for demonstrating and practicing infusions and injections in the temporal and jugular veins of a newborn to 12-month-old infant.

#### Care of Simulator

This training simulator has been designed to provide the greatest possible durability and lowest maintenance while not compromising realism. Following are some suggestions for helping you yield the maximum life from this unique simulator.

#### A. Needles

Hypodermic needles are actually small cutting tools. Puncturing the skin and vein with needles results in small cuts or slits which will eventually lead to deterioration. The larger the needles, the larger the cuts made in the skin and the shorter the life of the simulator. It is recommended that 20-gauge or smaller needles be used. Always use sharp needles, since dull or bent needles cause excessive tearing.

## **B.** Distribution of Punctures

The vein is in contact with the skin from the point it enters the head to the point of exit. If the injections can be distributed along the length of the vein, without deviation from acceptable practice, the model will last longer.

## C. Tubing Sealant

The Vein and Artery Tubing Sealant Kit (LF05126U) has been developed for use with *Life/form*<sup>®</sup> Injectable Simulators. The sealant will effectively seal punctures in tubing.

#### D. Skin Replacement

After prolonged use for injections, the skin on your training head will show track marks and need replacing. Use Pediatric Head Replacement Skin Kit (LF01003U).

## E. Height of IV Container

Fluid pressure increases as the height of the container increases. A height of 18" above the head provides a realistic "flashback." Elevating the bag higher raises the pressure and will cause leakage through previous puncture holes.

#### F. IV Solutions

Use only water or *Life/form*® Venous Blood. Use of other solutions may block the tubing.

#### G. Cleaning

Use a mild solution of Ivory<sup>®</sup> liquid detergent and water to clean surface of skin. Nasco Cleaner (LF09919U) will remove stubborn stains from simulator. Simply spray soiled areas and wipe clean with a soft cloth or paper towel.

#### H. Site Preparation

Clean water is recommended for swabbing injection sites and will help lubricate the skin surface to minimize damage from punctures. Alcohol, iodine, or other antiseptics are not recommended as they will stain the skin permanently.

#### I. Storing

- 1. Disconnect IV supply bag and pour fluid back into storage container.
- 2. Rinse IV bag.
- 3. Disconnect administration set from head and flush set with water.
- 4. Drain head. Open pinch clamp and tip head up until fluid is removed. Flush tubing with water. Rinse exterior with water. Dry all surfaces.
- 5. Replace pinch clamps on tubing.
- 6. Place in plastic bag. Return all components to case.

#### Cautions

Solvents or corrosive materials will damage the simulator. Never place simulator on any kind of printed paper or plastic. These materials will transfer an indelible stain. Ball-point pens will also make an indelible stain.

*Life/form*® products are carefully designed and produced to provide the most realistic training aids possible.

#### Supplies/Replacement Parts for Pediatric Injectable Training Head Simulator

LF01003U	Pediatric Head Skin and Vein Replacement
LF05126U	Vein and Artery Tubing Sealant Kit
LF09919U	Nasco Cleaner
LF00845U	<i>Life/form</i> <sup>®</sup> Venous Blood — 1 Quart
LF00846U	<i>Life/form</i> <sup>®</sup> Venous Blood — 1 Gallon

# 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

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LF01184U	Venatech IM & Sub Q
LF01193U	Special Needs Baby
LF03000U	. ,
LF03601U	Adult Airway Management
	Trainer with Stand
LF03602U	Adult Airway Management
	Manikin
LF03609U	Child Airway Management
	Trainer with Stand
LF03616U	Child <b>CRiSis</b> ™ Manikin
LF03617U	Deluxe Child <b>CRiSis</b> ™
	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 <sup>®</sup> CPR Manikin
LF03699U	
	Management Trainer
LF03709U	Infant <b>CRiSis™</b> Manikin
LF03720U	Baby Buddy <sup>™</sup> Infant CPR Manikin
LF03750U	Fat Old Fred
LF03760U	Airway Management/Cricoid
	Pressure Trainer
LF03770U	Chest Tube
LF03953U	<b>CRiSis™</b> Manikin, complete
LF03955U	
LF03956U	Deluxe "Plus" <b>CRiSis™</b> Manikin
LF03965U	Adult <b>CRISIS™</b> Auscultation
	Manikin
LF03966U	Adult <i>CRiSis</i> ™ Auscultation
	Manikin with ECG Simulator
LF04000U	
LF04200U	Adult Sternal Intraosseous
	Infusion
LF06001U	CPR Prompt <sup>®</sup> Adult/Child
	Manikin
LF06012U	
LF06200U	
	Rescue Aid
LF06204U	(PR Prompt <sup>®</sup> Rescue and
	Practice Aid

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