



**PEDIATRIC INJECTABLE
TRAINING HEAD SIMULATOR
LF00999U
INSTRUCTION MANUAL**



WARNING: Product contains dry natural rubber.

Life/form® Products by NASCO

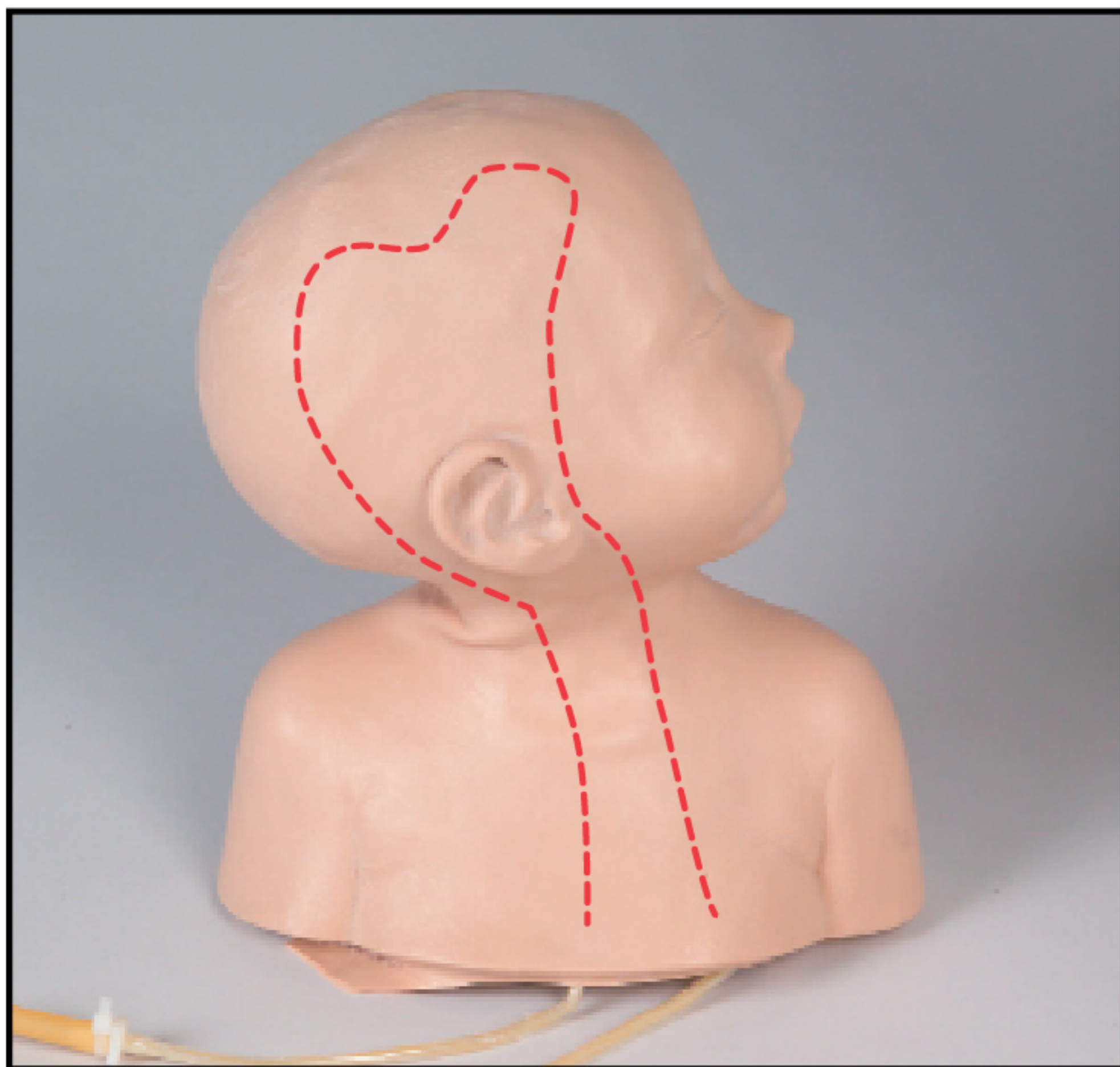
About the Simulator...

The **Life/form**® Pediatric injectable Training Head Simulator is a dramatic and exciting training aid for practicing and demonstration intravenous therapy of 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

1. IV Bag
2. 2 Infusion Sets
3. 3 cc Syringe
4. **Life/form**® Venous Blood —
1 Pint
5. 2 Small Towels
6. 1 Clamp



Internal Structure

The diagram above shows the position of tubing imbedded 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® 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 clamp on 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.

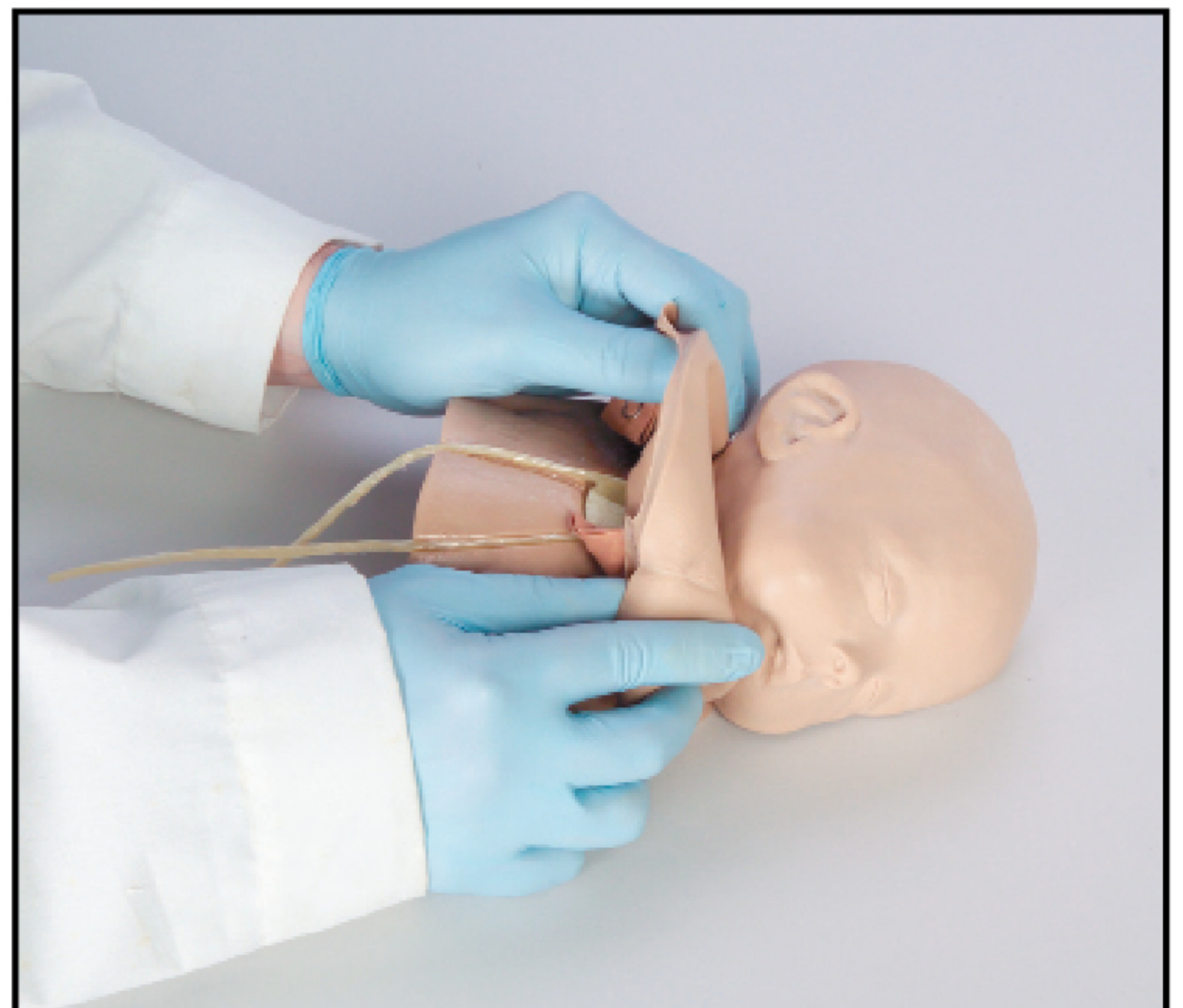


E. Ready for Use

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.

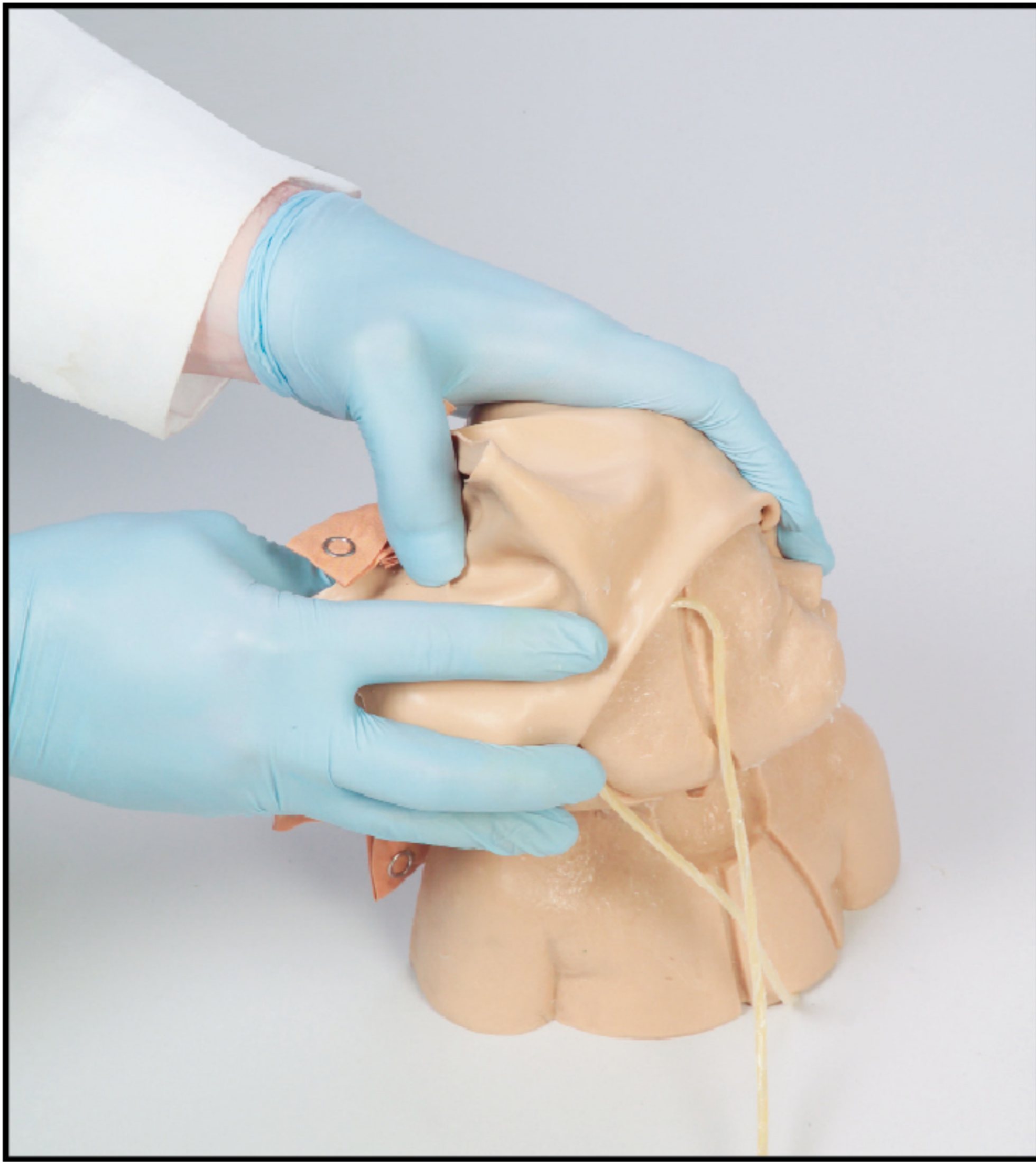
F. Skin Replacement

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.
3. Pour **Life/form**® Simulator Lubricant (LF00985U) inside of skin and swish around to coat all inside surfaces.

4. Install new skin.
 - a.) Slide open end of skin over core.
 - b.) Grasp the skin with both hands and slide over core.



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.

- 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 and 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 Injectabel 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®** 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 needs 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 mild solution of Ivory liquid detergent and water to clean surface of skin. REN Cleaner (W09919U) 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 till 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. Those 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

W09919U REN Cleaner

LF00845U **Life/form®** Venous Blood — 1 Quart

LF00846U **Life/form®** Venous Blood — 1 Gallon

Other Available *Life/form*® Simulators

- LF00698U** Adult Injectable Arm (White)
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
LF00997U Adult Injectable Arm (Black)
LF00999U Pediatric Injectable Head
LF01008U Intradermal Injection Arm
LF01012U Heart Catheterization (TPN)
LF01019U Ear Examination
LF01020U Supplementary Ear Set
LF01025U Male Cath-Ed I
LF01026U Female Cath-Ed II
LF01027U Peritoneal Dialysis
LF01028U Suture Practice Arm
LF01036U Spinal Injection
LF01053U Cross-Sectional Anatomy, Torso, Head
LF01054U Cross-Sectional Anatomy, Head
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 Intraosseous Infusion Simulator
LF01142U Auscultation Trainer
LF01162U Venatech IV Trainer
LF03000U **CPARLENE**® Series
LF03601U Adult Airway Management Trainer
LF03602U Adult Airway Management on Manikin
LF03603U Adult Airway Management Head Only
LF03609U Child Airway Management Trainer
LF03610U Child Airway Management Trainer Head Only
LF03611U Child Defibrillation Chest Skin
LF03612U Child IV Arm
LF03613U Child Blood Pressure Arm
LF03614U Child Intraosseous Infusion/Femoral Access Leg Only
LF03615U Complete Child **CRiSis**™ Update Kit
LF03616U Child **CRiSis**™ Manikin
LF03617U Deluxe Child **CRiSis**™ Manikin with Arrhythmia Tutor
LF03620U PALS Update Kit
LF03621U Infant Airway Management Trainer Head Only
LF03622U Intraosseous Infusion Right Leg
LF03623U Infant Airway Management Trainer
LF03626U Child Femoral Access Injection Pad Replacement
LF03632U Child Intraosseous Infusion/Femoral Access Leg on a Stand
LF03633U Child Airway Management Trainer with Torso
LF03693U **Basic Buddy** CPR Manikin
LF03699U "Airway Larry" Airway Management Trainer
LF03720U **Baby Buddy** Infant CPR Manikin
LF03953U **CRiSis**™ Manikin
LF03955U Deluxe **CRiSis**™ Manikin
LF04001U **GERi**™ Nursing Manikin
LF04020U **KERi**™ Nursing Manikin
LF04021U **KERi**™ Basic Manikin
LF04022U **KERi**™ Advanced Manikin
LF04030U **GERi**™ Advanced Manikin
LF04040U **GERi**™ Basic Manikin

Nasco Fort Atkinson

901 Janesville Avenue, P.O. Box 901
 Fort Atkinson, Wisconsin 53538-0901
 1-800-558-9595

www.eNASCO.com • E-mail: lifeform@eNASCO.com