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# PEDIATRIC INJECTABLE TRAINING HEAD SIMULATOR — LF00999U INSTRUCTION MANUAL

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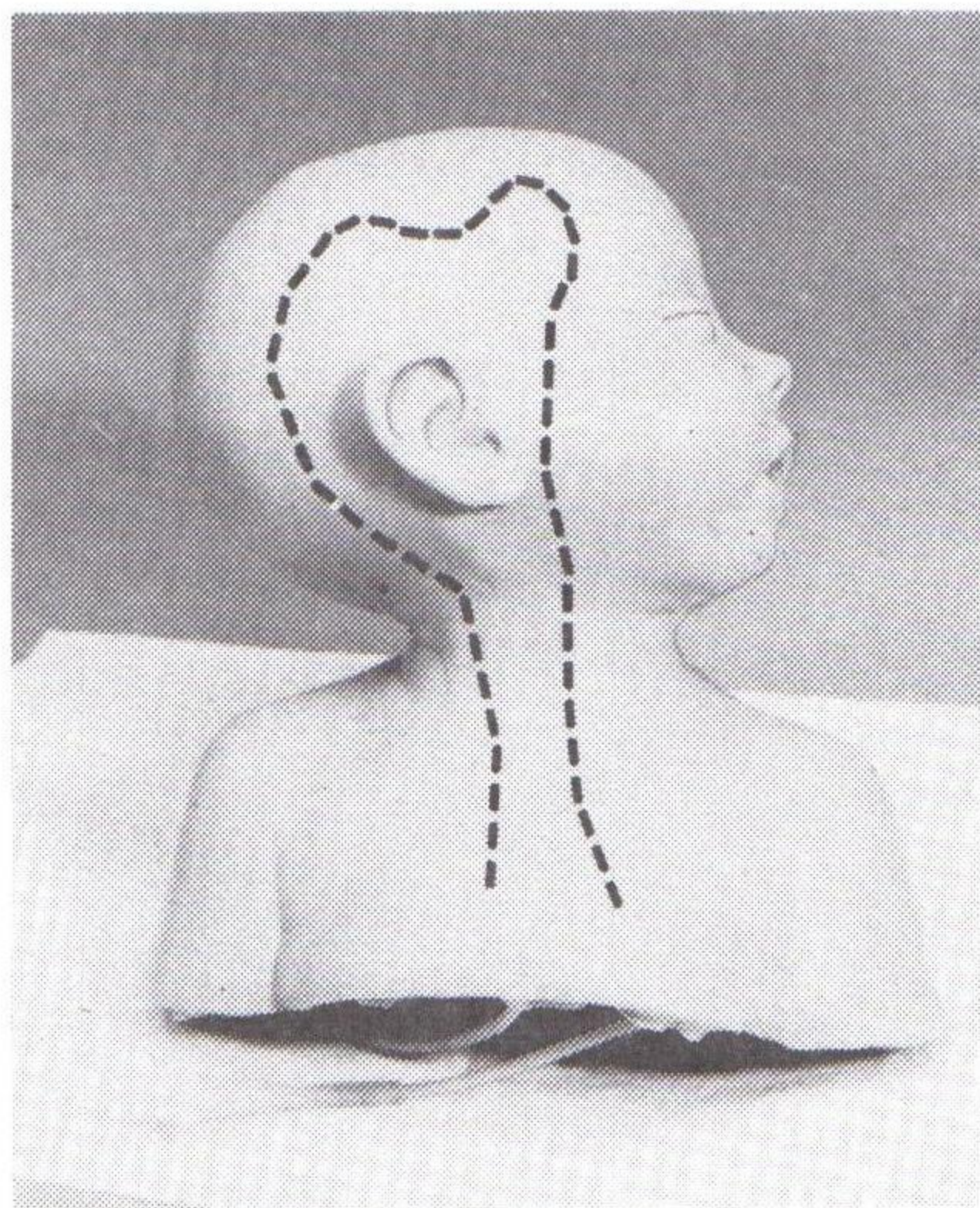


DO NOT REMOVE FILM FROM TUBING!!!!!!

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

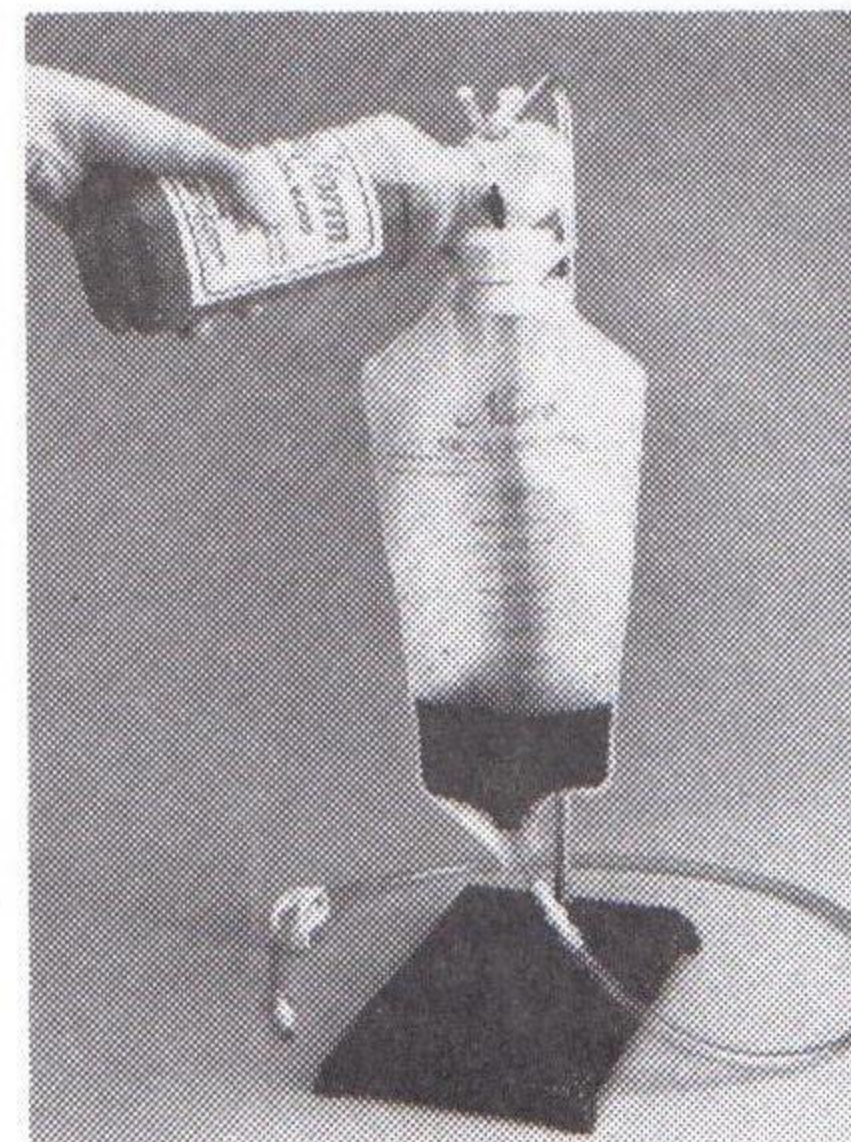
of tubing imbedded within the head to simulate veins. The tubing is superficial in its full length, offering a wide selection of injection sites. Careful palpation should allow the student to locate the veins.

### General Instructions for Use



#### A. Prepare Synthetic Blood

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

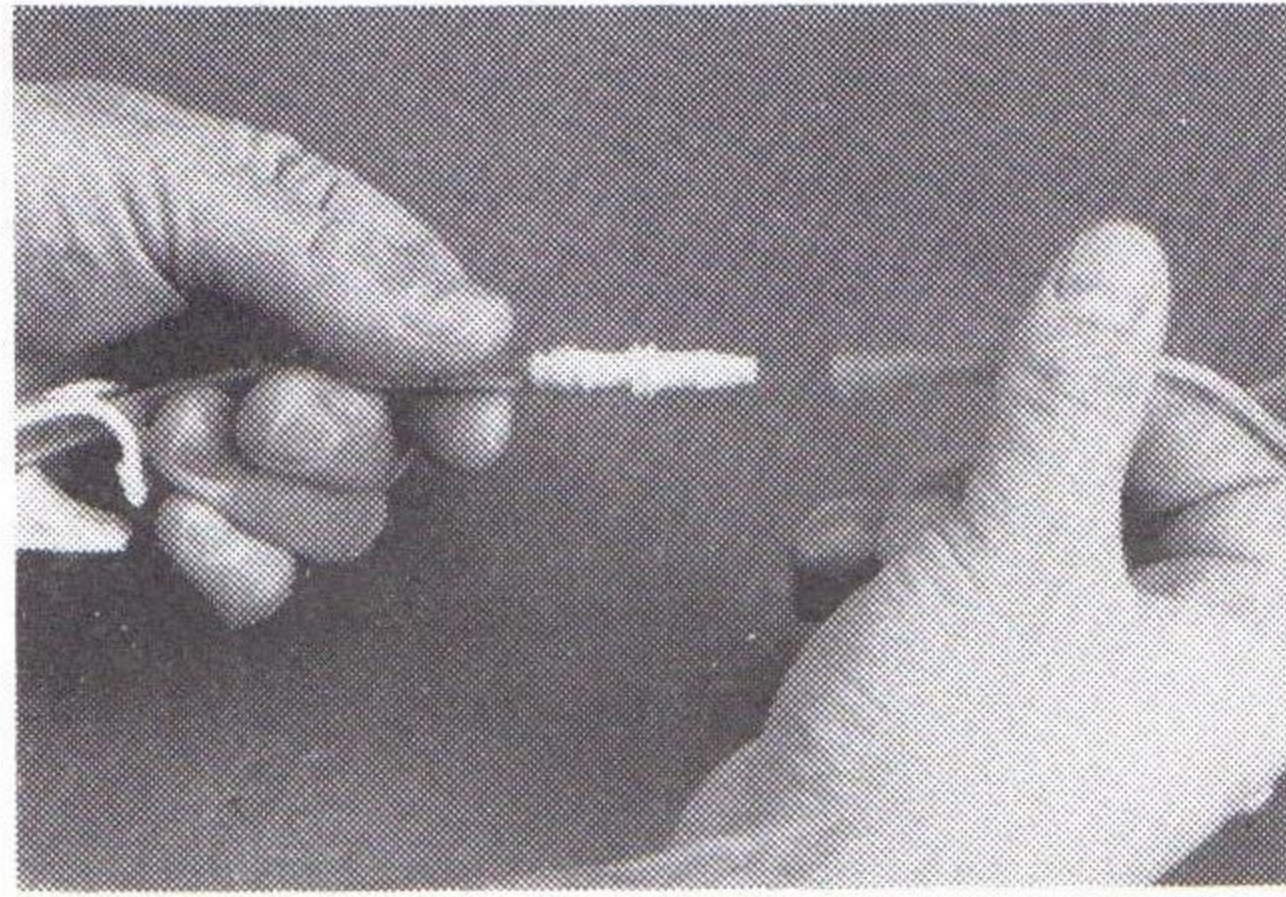


#### B. Fill IV Supply Bag

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

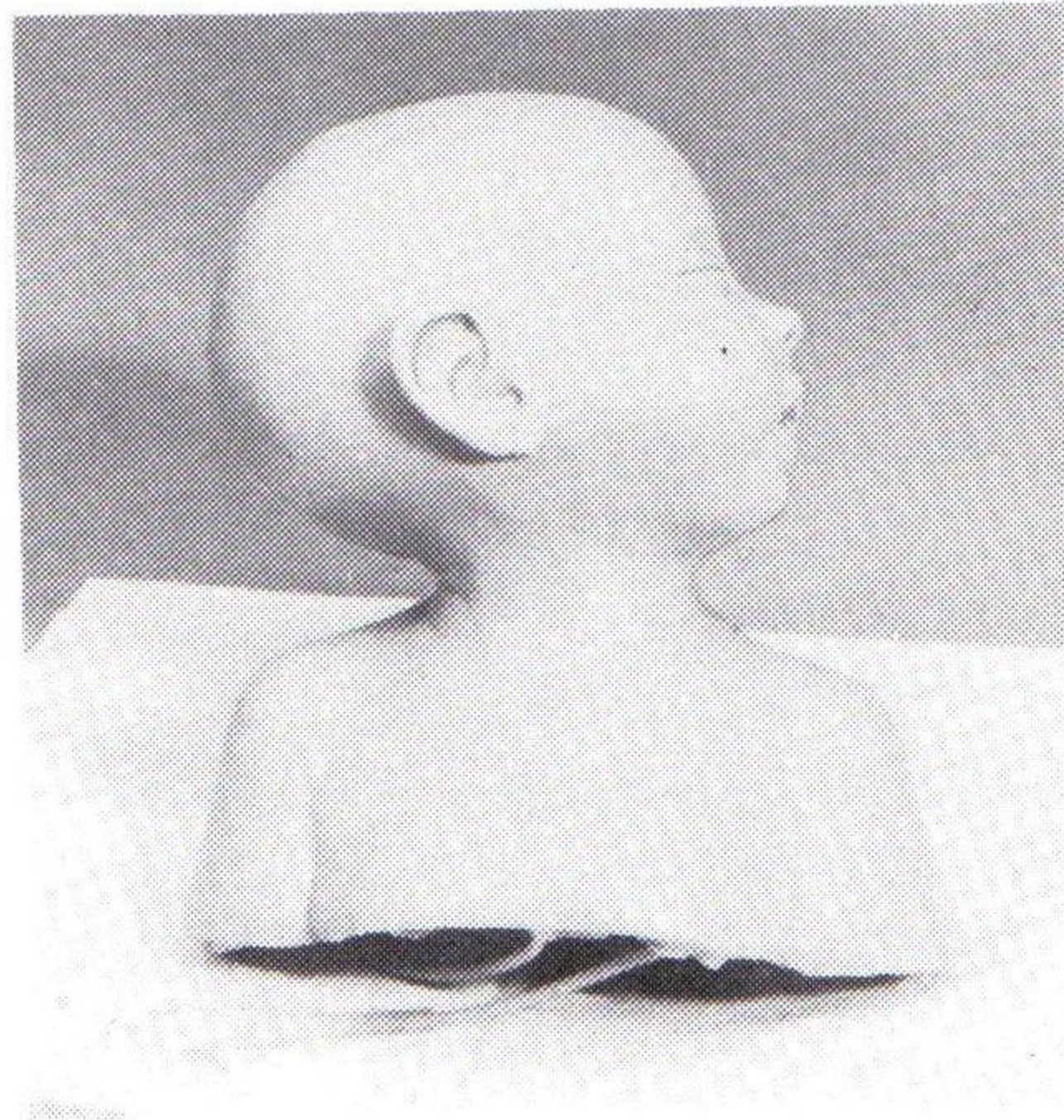
#### C. Connect to Head

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.

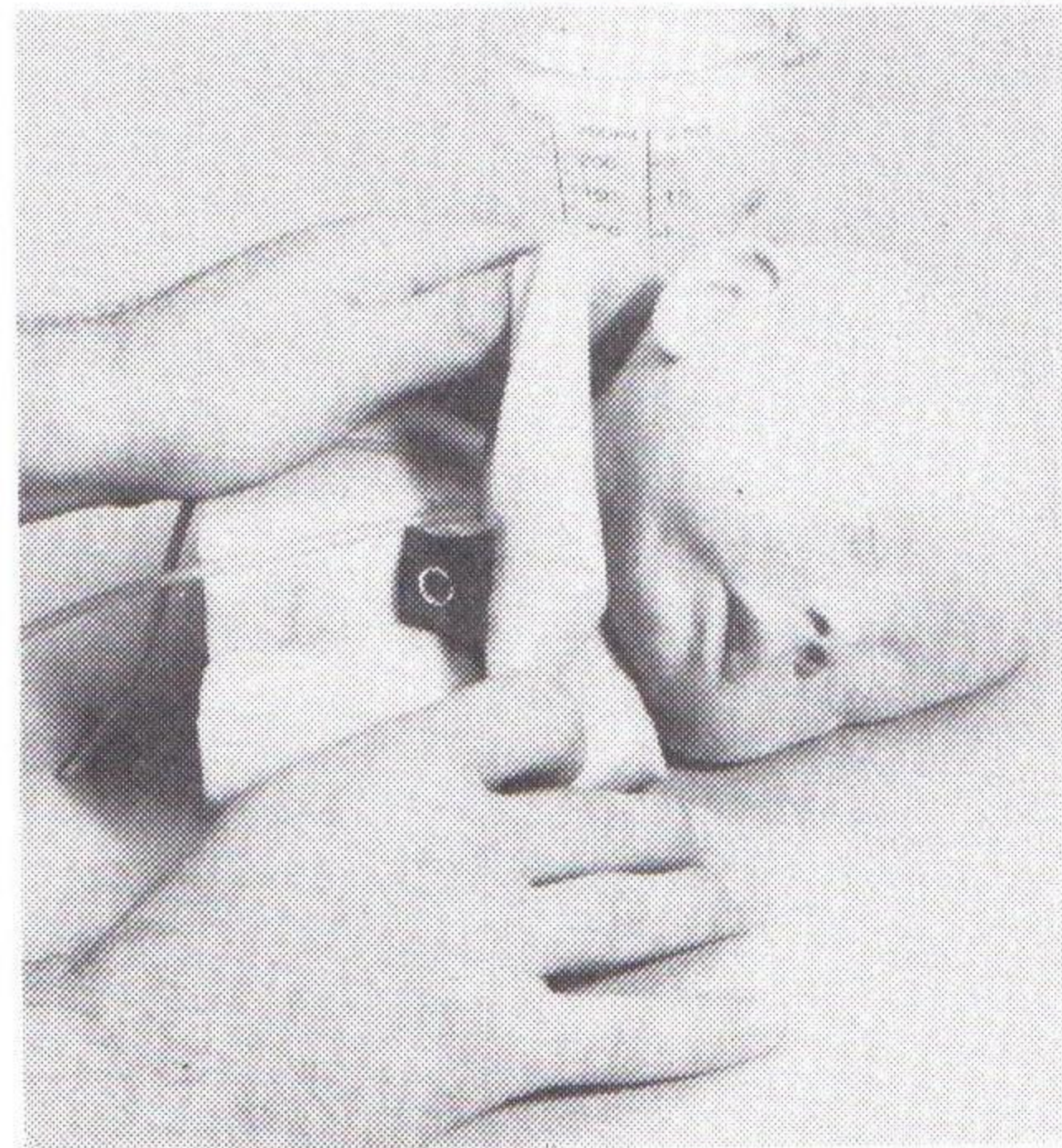


#### E. Ready for Use

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.

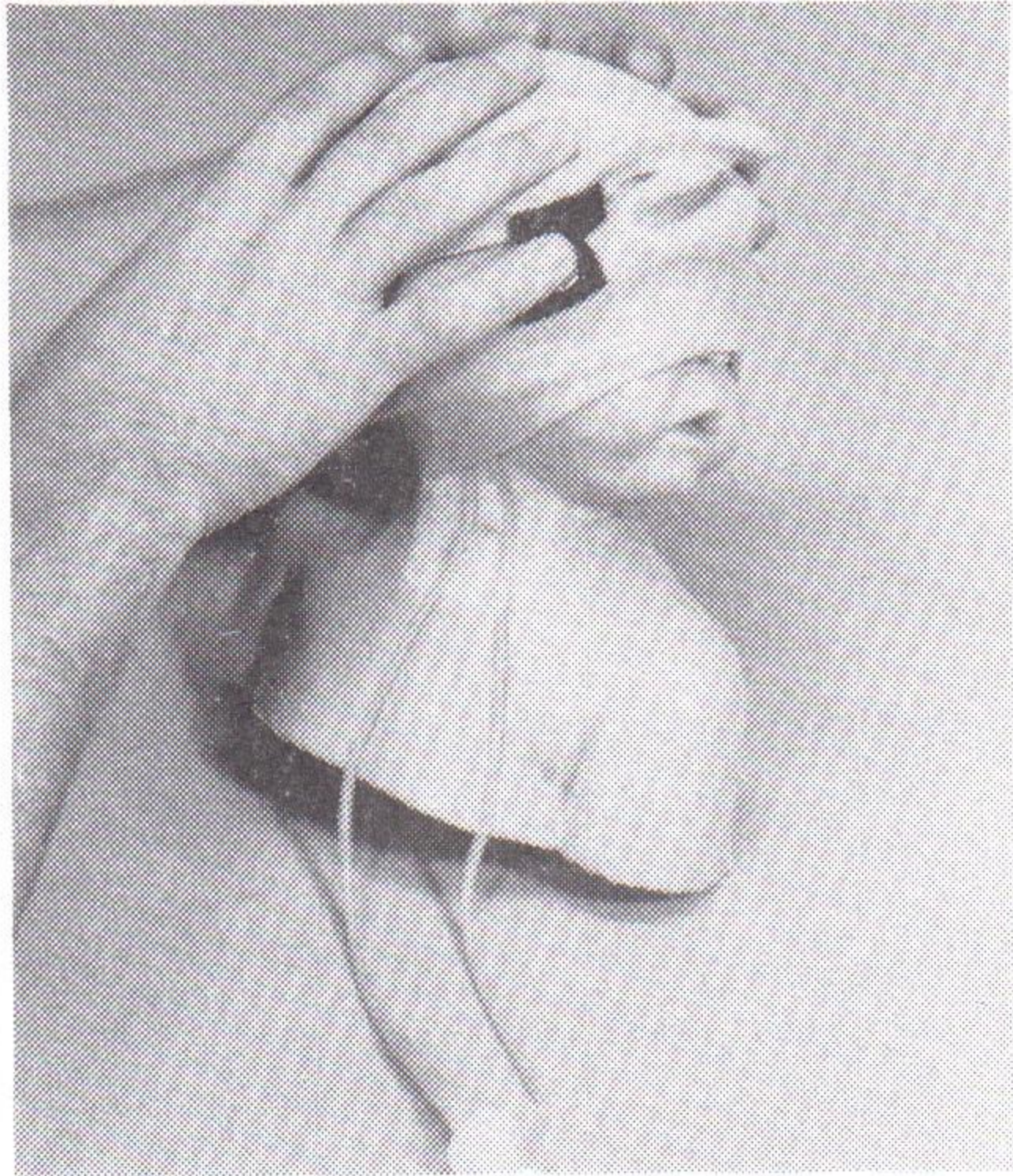
#### F. Skin Replacement

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 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*® 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 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**

<b>LF01003U</b>	Pediatric Head Skin and Vein Replacement
<b>LF05126U</b>	Vein and Artery Tubing Sealant Kit
<b>W09919U</b>	REN Cleaner
<b>LF00845U</b>	<i>Life/form</i> ® Venous Blood — 1 Quart
<b>LF00846U</b>	<i>Life/form</i> ® Venous Blood — 1 Gallon