

Dedicated to Delivery  
**Nasco** **Life/form**®

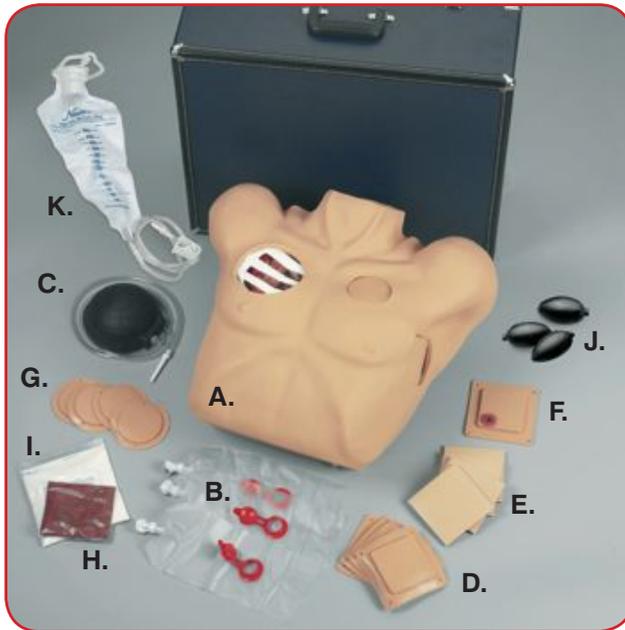
# Pericardiocentesis Simulator with Chest Tube and Pneumothorax LF03769U Instruction Manual



CAUTION: PRODUCT CONTAINS DRY NATURAL RUBBER!

**Life/form**® Products by Nasco





## About the Manikin

The Nasco **Life/form**® Pericardiocentesis Simulator with Chest Tube and Pneumothorax has been designed specifically to teach the skills needed to perform these difficult procedures correctly, as well as ongoing chest tube maintenance and the management of pre-hospital chest trauma.

The simulator has a pressurized tension pneumothorax site and a site for the surgical placement of a functional chest tube. Fluid color, volume, and viscosity can be controlled by the instructor. The manikin may be used with any commercially available closed water seal drainage unit.

Pericardiocentesis may be performed in the left subxiphoid space and in the left fifth intercostal space. Accurate placement of the needle will allow for the withdrawal of fluid from the simulated pericardium.

## List of Components

- A.** Torso
- B.** Fluid Reservoir Bag (3)
- C.** Foot Pump (1)
- D.** Surgical Skin Pads (5)
- E.** Subcutaneous Surgical Pads (5)
- F.** Nurse Training Pad (1)
- G.** Pneumothorax Pads (5)
- H.** Blood Powder (1 pack)
- I.** Methyl Cellulose Thickener (1 pack)
- J.** Simulated Pericardium Bulb (3)
- K.** IV Bag (1)

## Setting Up the Trainer

### Pneumothorax Site

Plug the foot pump hose into the top port located at the base of the trainer. (See figure 1.) Pump several times to fill the inner air bladder. (The bladder has a pressure relief valve to prevent overinflation and rupture.) The procedure may now be performed at the second intercostal space, midclavicular line. While the pneumothorax pad may be punctured repeatedly, it will eventually need to be replaced. Simply remove the chest skin overlay and replace the old pad with a new one. (See figure 2.)

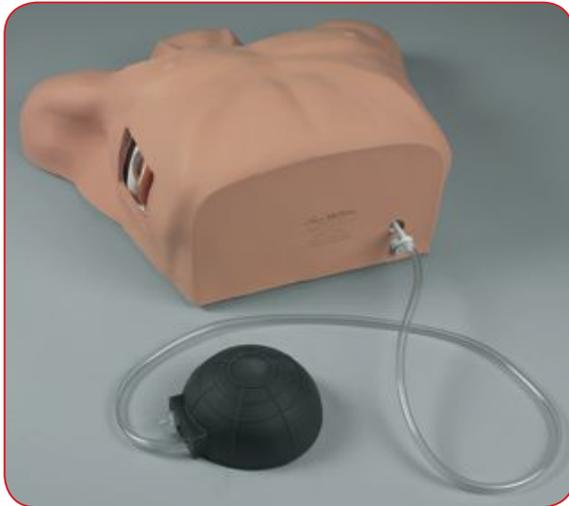


Figure 1



Figure 2



**Figure 3**

### Chest Tube Insertion Site

Fill a reservoir bag with fluid that has been mixed to the desired color and consistency according to the directions on the packet. Connect the bag to the quick-disconnect fitting in the base of the trainer. **(See figure 3.)** The procedure may now be performed using a #32 French chest tube (not included). The site, located at the fifth intercostal space, just anterior to the midaxillary line, consists of an outer surgical skin pad, simulated ribs, and an inner subcutaneous surgical pad. **(See figure 4.)** Each pad can be used four times by rotating it a quarter turn after each procedure. Simply remove the chest skin overlay and the surgical skin pad. Snap out the rib insert.

**(See figure 5.)** Turn the subcutaneous surgical pad to a fresh site. Snap in the rib insert, replace the surgical pad in its new position, and replace the chest skin overlay. Discard both pads and insert new ones after four procedures.



**Figure 4**



**Figure 5**

### Nurse Training Pad

Designed to fit under the chest skin overlay, the nurse training pad can be used for site care and appliance maintenance only. **(See figure 6.)**



**Figure 6**

## Pericardiocentesis Site

Remove the back panel. Close the clamp on the IV bag and fill with fluid. Use plain water for easy cleanup, or add blood powder or methyl cellulose for added realism. Hang the bag no more than 18" above the work surface. Feed the tubing through the hole in the neck. Attach the pericardium bulb, open the clamp, and squeeze the bulb firmly two or three times to expel all the air. Snap the bulb securely into the cage inside the body. **(See figure 7.)** Replace the back panel, top edge first, making sure that the clear support tube is seated in the holder on the chest wall. Turn the manikin over and begin training.



**Figure 7**

To disassemble the system with minimum leakage, remove the bulb from the cage. (Do not disconnect from the tubing.) Slide the open clamp close to the end of the tubing line, squeeze the bulb to expel fluid, and close the clamp. Disconnect the bulb from the tubing. Drain all fluid from the system, rinse if needed, and allow to dry.

**Note:** You may experience some leakage from the bulb, especially if it has been punctured repeatedly. Leakage can be minimized by using the smallest needle size consistent with accurate training, by rotating the bulb from time to time during use, and by keeping the IV bag height as low as possible. Replace the bulb when leakage becomes severe. The outer skin pad may also be replaced as needed.

## Care of the Trainer

1. Normal soil may be removed from the skin with mild soap and water, or with Nasco Cleaner (LF09919U).
2. Never place the skin on any printed material, as the ink will cause indelible stains.
3. Handle synthetic blood with care, as it will stain fabrics, skin, and surfaces.
4. Rinse the fluid reservoir bag thoroughly after each use; leave the cap open so it can dry, especially if it will be stored for any length of time.
5. Disassemble, rinse if needed, and drain the pericardiocentesis system. Allow all components to air dry before storage.
6. Change the location of the IV bag clamp from time to time to prevent damage to the tubing.
7. Do not expose the trainer to extreme temperatures.

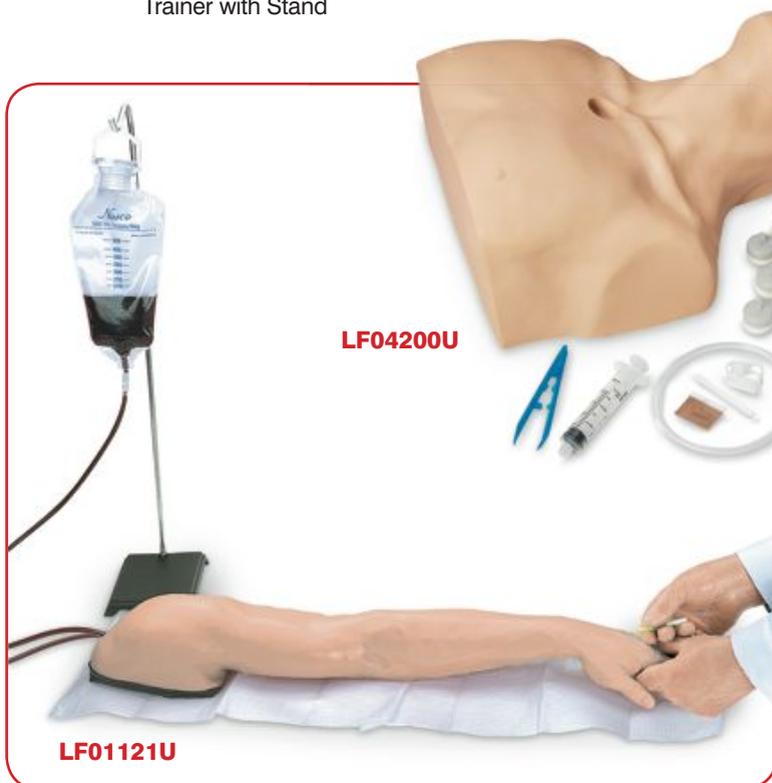
## **Available Supplies**

<b>LF03771U</b>	Surgical Skin Pads (Pk/5)
<b>LF03772U</b>	Subcutaneous Surgical Pads (Pk/5)
<b>LF03773U</b>	Pneumothorax Pads (Pk/5)
<b>LF03774U</b>	Methyl Cellulose
<b>LF03775U</b>	Blood Powder
<b>LF09919U</b>	Nasco Cleaner
<b>LF03768U</b>	Simulated Pericardium (Pk/10)

Actual product may vary slightly from photo. Nasco reserves the right to change product color, materials, or function as needed.

## Other Available *Life/form*® Simulators

- |                 |  |                 |   |
|-----------------|--|-----------------|---|
| <b>LF00698U</b> | Adult Injectable Arm (White)               | <b>LF03602U</b> | Adult Airway Management Manikin                               |
| <b>LF01005U</b> | First Aid Arm                              | <b>LF03770U</b> | Chest Tube  |
| <b>LF01028U</b> | Suture Practice Arm                        | <b>LF03953U</b> | <b>CRiSis</b> ™ Manikin, Complete                             |
| <b>LF01034U</b> | Suture Practice Leg                        | <b>LF03955U</b> | Deluxe <b>CRiSis</b> ™ Manikin                                |
| <b>LF01036U</b> | Spinal Injection                           | <b>LF03956U</b> | Deluxe "Plus" <b>CRiSis</b> ™ Manikin                         |
| <b>LF01042U</b> | Suture Kit                                 | <b>LF03965U</b> | Adult <b>CRiSis</b> ™ Auscultation Manikin                    |
| <b>LF01082U</b> | Cricothyrotomy                             | <b>LF03966U</b> | Adult <b>CRiSis</b> ™ Auscultation Manikin with ECG Simulator |
| <b>LF01095U</b> | Blood Pressure Arm                         | <b>LF04200U</b> | Adult Sternal Intraosseous Infusion                           |
| <b>LF01121U</b> | Advanced IV Arm                            |                 |   |
| <b>LF01131U</b> | Venipuncture and Injection Arm             |                 |   |
| <b>LF01139U</b> | Advanced IV Hand                           |                 |   |
| <b>LF01142U</b> | Auscultation Trainer                       |                 |   |
| <b>LF03601U</b> | Adult Airway Management Trainer with Stand |                 |   |



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