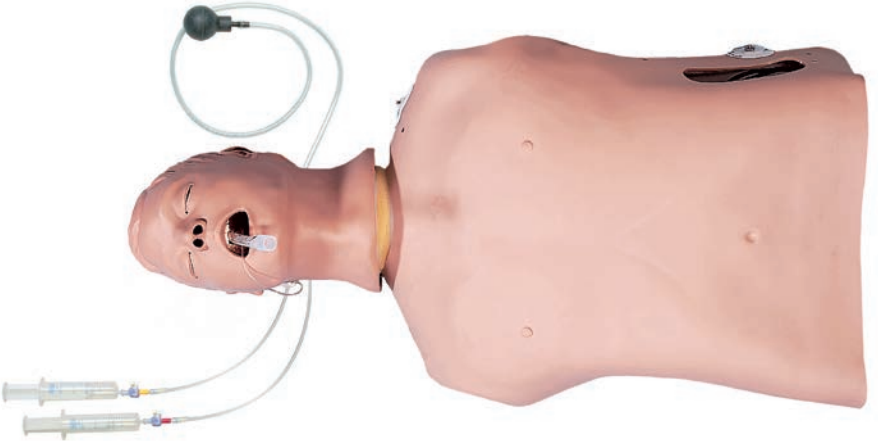
Dedicated to Delivery

Nasco

Life/form®

3 Life/form. Year Warranty Simulators & Trainers

Advanced "Airway Larry" *CRiSis*™ Torso with Defibrillation Features LF03960U Instruction Manual



Life/form® Products by Nasco

Limited Warranty

Nasco warrants to the purchasers of ***CRiSis***™ products that they will be free from defects in material and workmanship for a period of three years from the date of purchase. Nasco will repair any defect reported within three years of the date of purchase at no charge. Products found to be defective may be returned to the authorized Nasco dealer from whom the item was purchased, or returned directly to Nasco. Nasco will be liable under this limited warranty only if ***CRiSis***™ products have been serviced properly as directed in the operating manual.

Nasco will not be responsible for damage caused by unauthorized repairs or modifications that have been made, or if the product has been damaged through misuse, accident, or abuse. This warranty does not cover wear and tear or expendables such as batteries, lubricant, and replacement lungs. There are no other expressed or implied warranties of merchantability, fitness of purpose, or otherwise on “Airway Larry” products, parts, and accessories.

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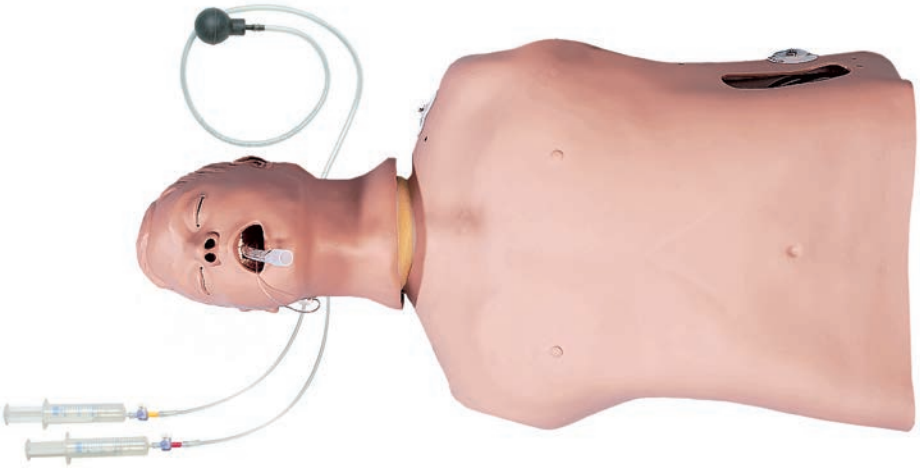


The Advanced "Airway Larry" Torso with Defibrillation Features is a Complete Resuscitation System consisting of modular components which allow you to create a manikin to suit your changing needs. The components may be purchased as a complete package or separately to update your existing manikin. Update packages are compatible with all versions of both **CPARLENE**® and non-modular Resusci® Anne™*.

This manual will guide you in setting up, using, and maintaining each of the available components. Each section also includes a list of replacement parts, supplies, and auxiliary equipment.

By reading and following all instructions carefully and completely, you can be sure your ***Life/form***® Advanced "Airway Larry" Torso with Defibrillation Features will provide years of valuable service.

Cleaning

Normal surface soil can be removed from the trainer with mild soapy water. Stubborn stains may be removed with Nasco Cleaner (LF09919U). Simply apply the Nasco Cleaner to the soiled area and wipe clean with a soft cloth.

Note: Avoid using cleaner around the mouth area if students will be applying direct mouth-to-mouth resuscitation techniques, as the cleaner may be toxic if ingested. NEVER place the trainer on any kind of printed paper or plastic. These materials, as well as ball-point pens, will transfer indelible stains. Do not use any cosmetics.

List of Components

- Advanced "Airway Larry" Torso Manikin
- Defibrillation Chest Skin
- 8-oz. Pump Spray Lubricant
- 20 cc syringe (2)

*Resusci® Anne™ is a trademark of Laerdal Medical Corporation.



Nasco *Life*/*form*® Airway Management Torso

About the Simulator

The *Life*/*form*® Advanced Airway Management Trainer Torso is the most realistic simulator available for the training of intubation and other airway management skills. Now with the added features of laryngospasm and tongue swelling, this trainer will provide students with an easy-to-use model that will build their confidence and expertise while still providing a realistic intubation experience.

Nasco has taken great care to create an advanced airway management trainer that is anatomically correct in respect to both size and detail. Landmarks include nostrils, teeth, tongue, oral and nasal pharynx, larynx, cricoid ring, epiglottis, arytenoid, false and true vocal cords, trachea, esophagus, "Airway Larry" lung set, and stomach.

Nasco's Advanced Airway Management Trainer Torso allows you to practice oral, digital, and nasal intubation. E.T., E.O.A., PTL®, LMA, and Combitube® insertion can all be practiced as well (please see "Using the Combitube®"). Suction techniques and proper cuff inflation can also be performed and evaluated.

Lubrication

Before using the Advanced Airway Management Trainer Torso, lubricate both the simulator and supplies being used with the Nasco lubricant provided. ***(See figures 1 & 2.)***

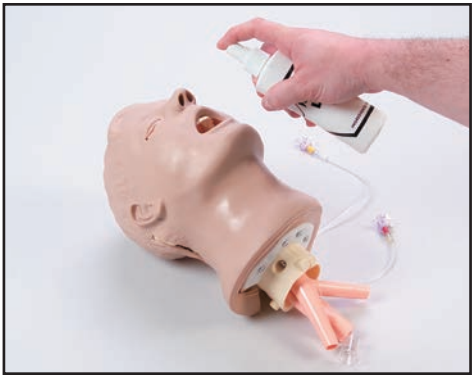


Figure 1



Figure 2

Note: Nasco recommends the use of the provided lubricant or a similar vegetable-based lubricant for the "Airway Larry" Management Trainer Torso. The use of a silicone-based lubricant may cause damage to the simulator, thus voiding Nasco's warranty on the trainer.



Figure 3

Laryngospasm

Pull back the plunger of a 20 cc syringe and attach it to the red stopcock. ***(See figure 3.)*** Depress the plunger to force 1-5 cc of air into the system. Close the tubing port at the stopcock to maintain the pressure within the larynx. The syringe may be removed at this point.

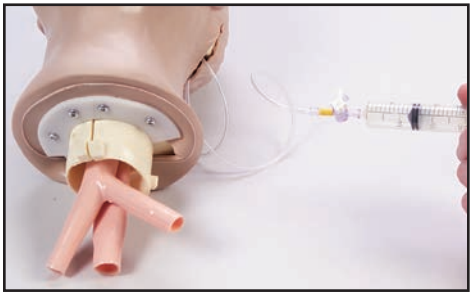


Figure 4

Tongue Swelling

Pull back the plunger of a 20 cc syringe and attach it to the yellow stopcock. ***(See figure 4.)***. Depress the plunger to force approximately 10 cc of air into the system. Close the tubing port at the stopcock to maintain the pressure. The syringe may be removed at this point.

Caution: Do not overinflate! Excessive pressure may rupture the system. Stop inflation when resistance is felt or the larynx is observed to close. Always release the pressure when finished training by opening the tubing port at the stopcock.



Figure 5

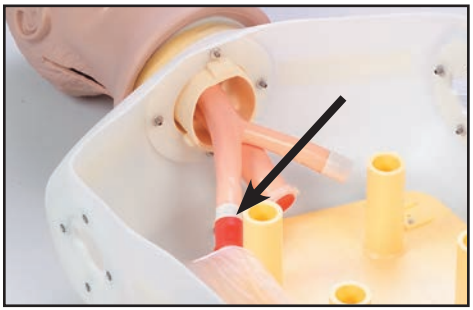


Figure 6

Cleaning and Maintenance

To clean the Airway Management Trainer head you will need to remove the head from the manikin. To do this, first remove the chest skin and then the chest plate exposing the lungs. ***(See figure 5.)*** Feed the lungs through the hole in the upper compression plate and then lift off the plate. Disconnect the lungs from the bronchi by pulling the red caps from the white connectors. ***(See figure 6.)***

Now that the head has been disconnected from the airway, rotate it 180° so that it is facing backwards. The large tab on the front of the neck should be aligned with the keyway in the torso. Tilt the head upward until it snaps free. ***(See figure 7.)*** Disengage the smaller rear tabs from the neck opening and pull the head from the body. Reverse the above steps to reattach the head.

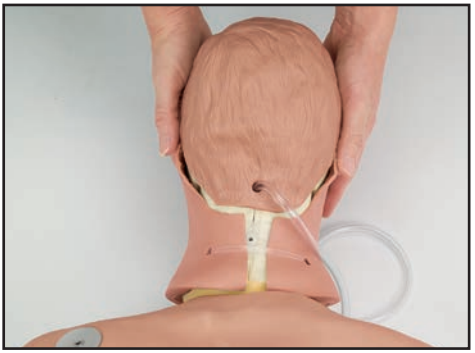


Figure 7

Once the head is off the body, place a cap plug (supplied) on each end branch of the bronchi (the esophagus already has one in place). ***(See figure 8.)*** You are now ready to begin the cleaning process. Take the head to an area with a sink and open counter space. Stabilize the head on the counter face-up (towels work well for this) with the plugged tubes hanging over the sink. Carefully pour warm soapy water (a mild dish soap works best) into the mouth until the water level reaches halfway up the tongue. Now tilt the head back and bring the neck up 3" off the countertop.

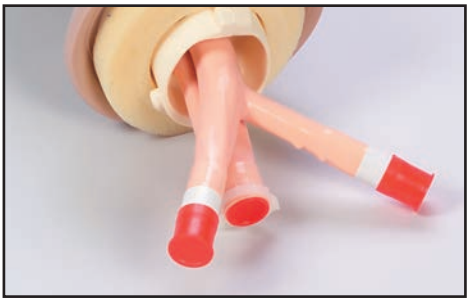


Figure 8



Figure 9

Continue filling until the water level covers the tongue. At this point, take a small soft brush and gently scrub the inside of the mouth. (A small toothbrush works well for this.) Cotton swabs can be used to scrub inside the nostrils. When done, pull the plug from the esophagus and drain into the sink. Now pick the head up, hold it in a vertical position, and pull the plug from the trachea to completely empty the system. ***(See figure 9.)***

Rinsing the Airway

To rinse the airway, follow the same procedure using clean, warm tap water. Repeat this process until all the soap has been flushed from the system.

Disinfecting the Airway

To disinfect, repeat the standard cleaning procedure, but this time use a bleach solution instead of soapy water, as specified by the Centers for Disease Control. Fill the system with the solution until it reaches the corners of the mouth. Remember to start filling with the head flat and finish with the neck slightly elevated to ensure that the solution completely fills all airway passages.

Once completely filled with the bleach solution, allow the head to sit for at least 10 minutes. Drain as described earlier and repeat the rinsing process to flush out all of the bleach solution. Set the head aside and allow it to dry completely.

Using the Combitube®

Thoroughly read and follow the instructions that come with the Combitube®. The trainer will accept either a full size or a small adult tube. As with a live patient, it may be necessary to back the tube out slightly if ventilation cannot be established.

Note: Depending on tube placement, the large cuff may not accept the recommended amount of air. In this case, simply inflate the cuff to its maximum volume (when the plunger stops), detach the syringe from the blue pilot balloon, and proceed.

Supplies/Replacement Parts for Airway Management Trainer Torso

LF03285U	Replacement Lung/Stomach System
LF03644U	Pump Spray Lubricant
LF09919U	Nasco Cleaner

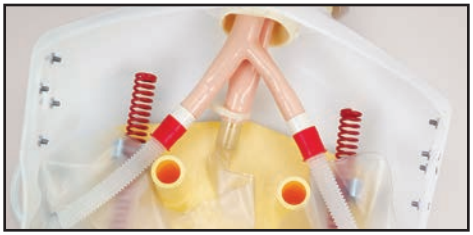


Figure 1

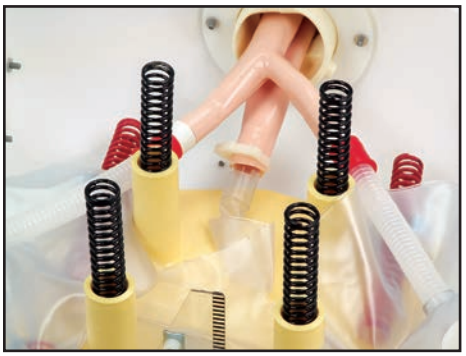


Figure 2

Torso Set Up

A. Connecting the Airway

1. The manikin's airway has been disconnected to prevent damage during shipping. To connect the airway, remove the chest skin, chest plate, compression springs, and upper compression plate.

   Note: Caution must be taken not to damage the defibrillation electronics attached to the chest skin when removing the skin from the manikin.

2. Remove the lung bags from the upper compression plate. Connect the right and left lung bags to the adapters in the right and left bronchi. ***(See figure 1.)***

B. Installing the Chest Compression Plate

1. Remove the compression springs from packaging. Insert the springs into the four plastic cylinders extending up from the lower compression plate. ***(See figure 2.)***

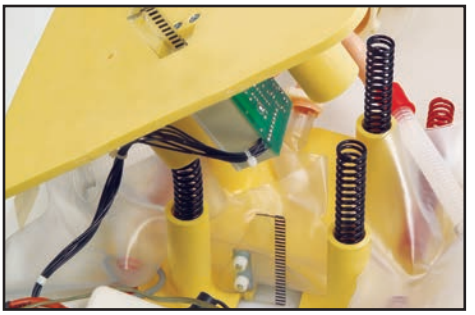


Figure 3

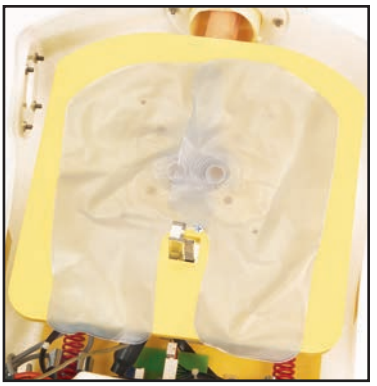


Figure 4

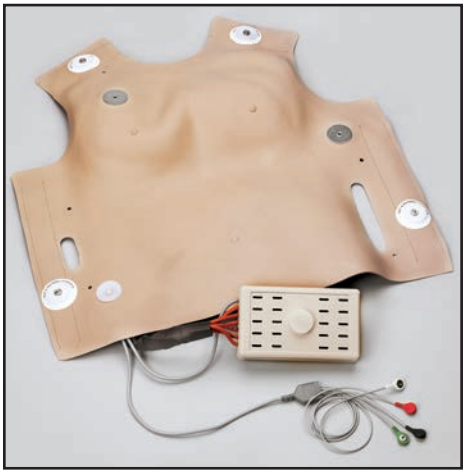
2. Before replacing the upper compression plate, make sure the lung bags are connected to the tracheal tube extending from the lower portion of the neck of the Airway Management Trainer head.

3. Position the upper compression plate over the springs so that each of the springs fits up into a cylinder on the bottom of the upper compression plate. ***(See figure 3.)***

4. Place the lung bags through the hole in the center of the upper compression plate so they rest on top of the plate. ***(See figure 4.)***

5. Place the chest plate back over the upper compression plate and lungs.

6. Reattach the chest skin by adjusting the hook-and-loop edges. Again, be careful not to damage the electronics attached to the chest skin.



Nasco *Life*/*form*® Defibrillation Chest Skin

About the Simulator

The ***CRiSis***™ System Defibrillation Chest Skin has been designed to absorb a maximum of 360 joules of energy*. Although capable of absorbing 360 joules, we do recommend that the smallest energy level possible be used while training with the skin.

The ***CRiSis***™ System Defibrillation Chest Skin will enable you to practice defibrillation using manual, semiautomatic, and automatic external defibrillators (AEDs). When using any one of these in training, always follow the recommended operating procedures for that particular defibrillator.

The "Airway Larry" Manikin comes with the Defibrillation Chest Skin in place and ready for use. Connect the defibrillation chest skin to your arrhythmia or patient simulator using the four-lead snap cable.

Note: 360 joules is the maximum energy level that Nasco recommends administering to the Defibrillation Chest Skin. Energy levels in excess of 360 joules may cause irreparable damage to the chest skin, circuitry, and patient simulator being used — thus voiding Nasco's warranty and endangering your equipment. Nasco assumes no liability for damage or injury that may be caused by the use and/or misuse of this equipment. All normal safety precautions for defibrillation training should be followed, and energy levels should be minimized. Nasco did not design nor intend this Defibrillation Chest Skin to be used as anything other than a training apparatus for defibrillation.

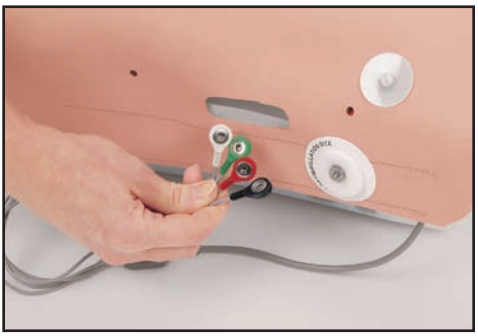


Figure 1

Connecting Your Arrhythmia or Patient Simulator

Nasco has designed the ***CRiSis***™ System to be compatible with a variety of patient simulators. This is possible via the standard four-lead snap cable. ***(See figure 1.)*** If your patient simulator has only two output posts, the red and black leads must be connected to the patient simulator.

You may want to connect the manikin to the simulator that came with your defibrillator. If your patient simulator doesn't have the standard snap connectors, it will be necessary to purchase the corresponding adapters from Nasco. To order, please see "Supplies/Replacement Parts" on page 8.

Once your manikin is connected to your patient simulator, you will be able to pick up the ECG waves either through the monitor hook-ups on the skin or through the two disks attached to the skin on the defibrillation sites.

These disks will enable you to pick up the ECG wave using either the "Quick Look" paddle option or directly through gel pads, just like on a real patient.

It is possible to use AED gel pads with the cable connectors built into the gel — the same ones you use on patients. In an effort to help you save money, Nasco does offer a set of defibrillation pad and patient simulator adapters that will correspond to your particular AED unit. These defibrillation pad and patient simulator adapters can be used again and again. They come as a set. (See"Supplies/ Replacement Parts" at right.)

Troubleshooting

Problem ECG wave is not being picked up from the manikin.

Solution

1. Check your connections on the patient simulators; one or more may be disconnected.
2. Check to make sure your patient simulator is plugged in and working properly.

Problem ECG wave is inverted.

Solution

Recheck the position of the red and black lead snaps on the patient simulator.

Note: If the defibrillation skin is not functioning or wiring comes undone, please contact us to repair or replace the unit. Failure to do so, or unauthorized repair, may void the warranty or cause further harm or damage to you or your equipment.

Supplies/Replacement Parts for Defibrillation Chest Skin

LF03656U Physio Control Training Pad Adapters and Patient Simulator Adapters for LifePak 10 and LifePak 20

LF03657U Marquette Electronics Training Pad Adapters and Patient Simulator Adapters

LF03658U SpaceLabs/Laerdal/ Headstart/First Medic Training Pad Adapters and Patient Simulator Adapters

LF03961U Zoll Training Cables with Adapters

LF03962U Physio Control Training Cables with Adapters for LifePak 12

Note: If you need help selecting the training pad adapters that correspond to your AED unit, please feel free to call us at 1-800-558-9595 for assistance.

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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