



Assembly & Operation Instructions

# ADULT CPR FULL BODY MANIKIN



**Adult CPR Full Body Manikin with Options**

**The purpose of this instruction manual is to familiarize the user with the function, care and maintenance of Simulaids' Adult CPR Full Body manikin.**



## Assembly & Operation Instructions

# ADULT CPR FULL BODY MANIKIN

This manual is not meant to provide instruction in Cardiopulmonary Resuscitation (CPR) or other emergency life support procedures. This product can be used for demonstrating and teaching proper CPR and first aid techniques.

Features include: a carotid pulse, the normal range of motion of the extremities, and a full human body for realistic practice in transport-rescue and lifesaving procedures. The lifelike anatomical landmarks include: sternum,

ribcage, substernal notch, and the natural resistance to chest compression. Add our trauma options to allow training in basic CPR, lifesaving rescue procedures and trauma rescue.

The chart (above) shows the products covered by this instruction. Export models are sold with mouth/nose pieces with the nares drilled. This allows for nose pinch procedures and ventilation through the nose.

All other features of the manikin are the same. The light console box for "with electronics" models is battery operated. Four (4) AA batteries are included.

Replacement part numbers are listed at the end of the instruction booklet.

ITEM	DESCRIPTION	QUALIFIER
2700	Adult CPR Full Body Caucasian Rescue/Trauma	base unit
2700Export	Adult CPR Full Body Caucasian	mouthpiece nares drilled
2700 SPEC.	Adult CPR Full Body Caucasian	Includes IV arm, carry bag, trauma moulage kit
2725	Adult CPR Full Body Caucasian w/console	light box included
2725Export	Adult CPR Full Body Caucasian w/Console	light box included, mouthpiece nares drilled
2730EXPORT	CPR Adult Full Body Export 145 lbs.	weighted, mouthpiece nares drilled
2725B	Adult CPR Full Body African/American w/console	Black 2700, light box included
2750	Adult CPR Full Body African/American	Black 2700
2750EXPORT	Adult CPR Full Body African/American	Black 2700, mouthpiece nares drilled
2725EXPORTB	Adult CPR Full Body African/American w/Console	Black, light box included, mouthpiece nares drilled



### What You Receive:

- Each carton is packed with the manikin and:
- 5 Additional mouthpieces (replacements sold in 10-packs)
- 5 Additional lung systems (replacements sold in 10-packs)
- 1 Ball valve assembly (2028; electronic model 2701) installed
- 1 Squeeze bulb assembly for the carotid pulse (item 2028)
- 1 Pair of logo shorts.
- 1 Console box "with electronics" that indicates proper hand position, adequate ventilations and adequate compressions.



### Options That You May Order Include:

**Item 2725:** CPR Full Body with electronics (a console with LEDs that indicate proper hand position, adequate ventilations and adequate compressions is included)

**Item 2704:** Transport Rescue Head to use during rough handling when you want to protect the CPR head from damage

**Item 1373:** A full body sized carry bag for the manikin and supplies

**Item 1374:** IV Lower Arm with Hand

**Item 6701:** Trauma Moulage Kit

See [www.simulaids.com/6701.htm](http://www.simulaids.com/6701.htm) for a full list of these wounds.

### Construction

The CPR Manikin's body is suspended on a skeleton of steel and flexible cable. Some enlargement of the body segments (joints), cable connector openings or gaps between the body joints may develop with extended use without affecting the serviceability of the manikin.

**Do not allow print material to come in contact with the skin of your product. The ink will embed in the porous surface and be impossible to remove. Ink stains are not covered under warranty.**

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## Assembly & Operation Instructions

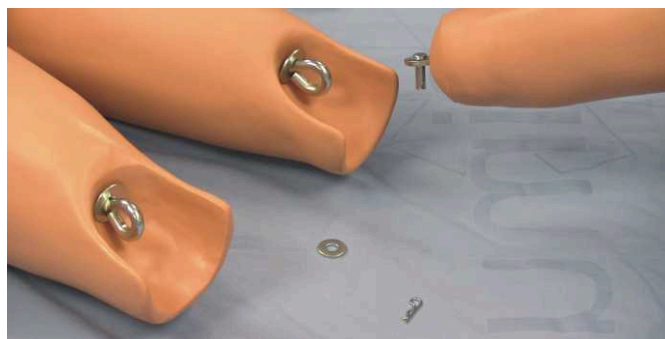
# ADULT CPR FULL BODY MANIKIN

### To Attach Lower Legs:

**Steps:** 1. Place the manikin face down.



2. Align lower legs with the appropriate thigh
3. Push pin through cable eye of lower leg



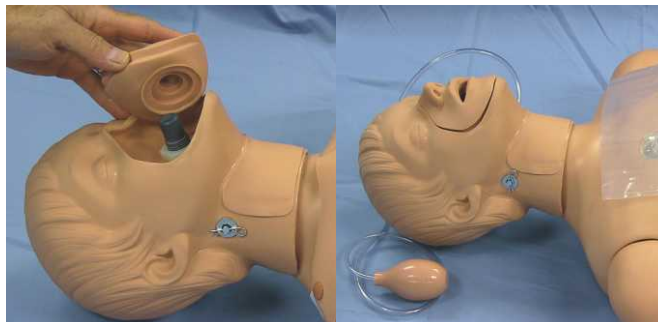
4. Align pin with eye of thigh bolt and insert
5. Secure with washer and pin clip



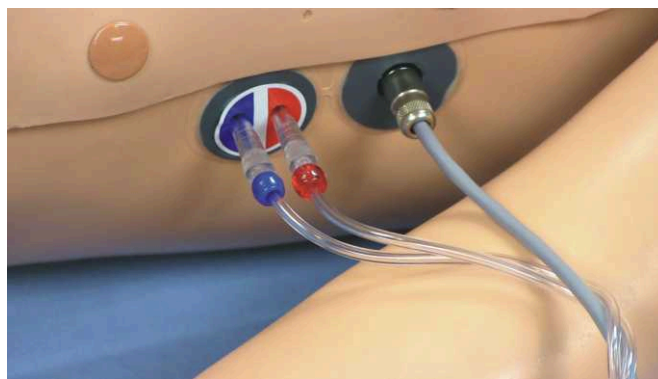
### How It Operates:

To promote sanitary practice, Simulaids' Adult CPR Full Bodied Manikin uses a system which incorporates individual MOUTH/ NOSE pieces that are to be provided to each student and inserted into the face cavity of the manikin during that student's turn to do ventilations. These mouthpieces can be disinfected with any CDC protocol solution designed for that purpose. Dry the mouthpieces thoroughly before storing them.

It is important that the MOUTH/ NOSE piece be seated securely on the stem of the ball valve in the mouth portion of the head. The photo below shows how the mouthpiece is inserted.



### Electronic Model Only - Connect the Console



### Inflation

When the head is in a neutral position, the ball in the AIRWAY CUT-OFF VALVE is in a forward position, preventing air from entering the lungs. This replicates an obstructed airway of an unconscious person in need of emergency ventilation. When proper head tilt and chin lift are applied, the ball will roll rearward, open the valve and allow the air to pass through the non-rebreathing valve to the lung, which causes a visible rise in the chest. When inflation ceases, the non-re-breathing valve closes and prevents the return of air to the mouth and nose. However, the air will discharge from the lung through the back port of the valve so that you will see the chest deflate.

**Electronic Model Only:** The green ventilation light on the console will light when proper ventilation is performed.

### Electronic Model Only - Cardiac Compression

A hand position switch is attached to the sternum. Pressure on the switch activates a sensor in the console box, lighting the blue correct hand position light. When the chest is compressed, another sensor activates the white light which indicates the correct depth of compression.

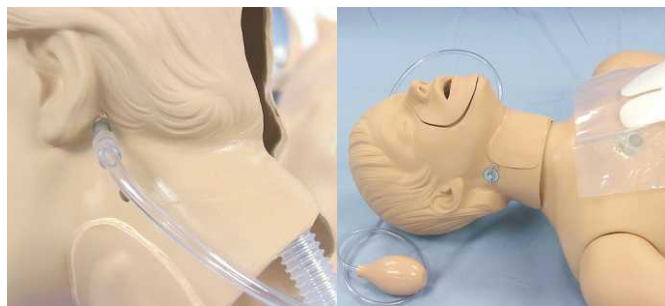
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# ADULT CPR FULL BODY MANIKIN

## Carotid Pulse

To activate the pulse, plug the connector from the squeeze bulb assembly into the portal behind the left ear. Rhythmically squeeze to simulate the pulse.



## Disassembly

To remove the contaminated lung system and replace it:

- Steps:**
1. Remove mouth/nose piece from face.
  2. Remove chest skin from torso by detaching strap snaps



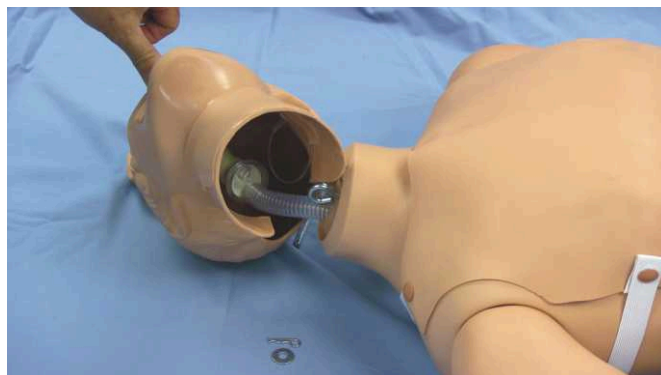
3. Remove or displace the Chest Plate



4. Remove and discard the disposable lung.



5. Remove head
  - a. Pull cotter pin from rod
  - b. Pull out the rod
  - c. Lift off head
  - d. Detach the airway tube from ball valve by twisting the airway valve while pulling it away from the ball valve base



6. Pull airway tube from chest cavity.



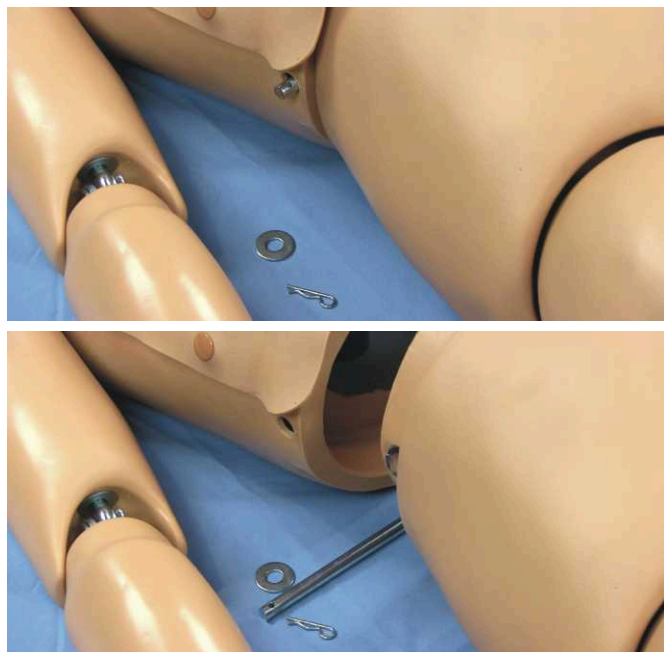
7. Remove the ball valve assembly from the head if necessary
  - a. Unscrew the white nylon nut (will require wrench or pliers)

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### Electronic Model:

It is necessary to access the interior of the chest cavity in this model when you are changing the airway tubing. Separate the pelvis from the torso.

- Steps:**
1. Remove the hair cotter pin at the waist.
  2. Slide the rod out.
  3. The torso and pelvis will now separate with a gentle tug of the pelvis away from the torso.

### To attach the torso to the pelvis, take these steps:

- Steps:**
1. Align body parts
  2. Insert shaft from the left side
  3. Install washer and hairpin

### Cleaning & Disinfecting

The only components of Simulaids Full Bodied CPR Manikin that require scrupulous disinfection are the airway cutoff ball valve and the mouth/nose pieces. The airway tubing and valve are designed to be disposed of at the end of the training class. However, they may be reused after carrying out the following procedure:

- Steps:**
1. Clean in mild soap and water.
  2. Rinse thoroughly in clear water.
  3. Disinfect as per C.D.C. protocols.
  4. Rinse thoroughly and dry.

### Reassembly

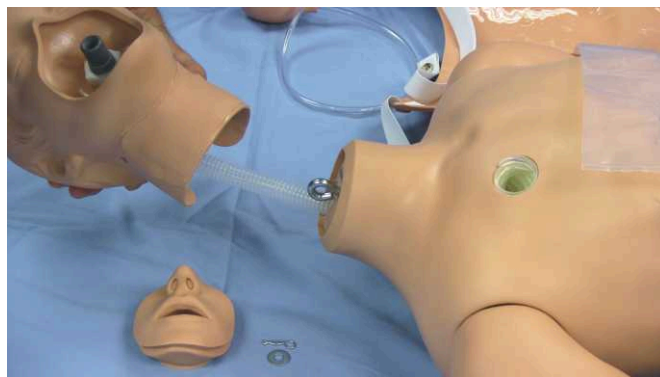
- Steps:**
1. Secure the ball valve into head, making sure that the

longitude of the ball valve pipe is oriented straight and parallel with the center line of the head

2. Replace nylon nut if you removed it. Make sure that the alignment is correct and tighten the nut securely with a wrench or pliers to hold the ball valve securely in position.



3. Insert the one way valve located at the top of the airway into the opened port of the ball valve inside the head.
4. Feed tubing down through hole in neck.



5. Re-attach head with clevis pin and hair cotter pin.



6. Attach lung to airway tube.
7. Reposition Chest Plate and secure with strap snap

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8. Reposition overlay and attach snaps of the waist strap and the shoulder straps by crossing them to the opposite side of the body.



9. Attach squeeze bulb assembly if carotid pulses are desired. Twist the tubing when inserting it into the neck connection. This will assist it in staying in place.

### Electronic Model:

- Steps:**
1. Reach into chest cavity and feed airway tubing through the hole in chest cavity
  2. Attach the lung to airway tube.
  3. Fit upper and lower torso together
    - a. Feed the rod through the waist tube
    - b. Position washer over the end of the rod
    - c. Attach hair cotter pin.
  4. Put Chest plate and Chest skin in place.

### Rescue Head Use

The product comes with the CPR head attached. When you are focused on skills other than airway maintenance, you may wish to put the Rescue Head on the manikin to preserve the integrity of the CPR Head functions.

#### To Install the Rescue Head:

- Steps:**
1. Remove the CPR Head
    - a. Pull the clip pin out of the neck rod
    - b. Remove the neck rod
    - c. Carefully lift the head off from the torso

- d. Disconnect the airway tube
2. Install the Rescue Head
    - a. Position the head on the neck
    - b. Put a washer on the neck rod
    - c. Push the neck rod through the neck rod hole
    - d. Install a washer on the end of the rod
    - e. Insert the clip pin in the hole in the neck rod to secure it

### Optional IV Arm Use

**The IV arm includes two fluid reservoir bags.**

- Steps:**
1. Make sure that both shut off clamps are closed on the fluid reservoir bags.
  2. Fill one bag with simulated blood and close the fill plug. When closing the plug, gently squeeze all the remaining air out of the bag so that as little air as possible remains trapped in the fluid reservoir bag.
  3. Connect the fluid reservoir bag tubing to the training model by applying a small drop of liquid dish washing soap on the tip of the fluid reservoir tubing. This will act as a lubricant and allow you to easily insert the tubing tip all the way into the vein tubing. It is important to make sure that the serrated edges of the fluid reservoir tubing of both reservoir bags is pushed far enough into the tubing to affect a seal on the smooth portion of the tip. Otherwise, leaks may develop.
  4. Connect the empty bag to the other IV vein line, which is a continuation of the other vein line to which you have connected the blood bag. See step 3 to lubricate tubing tip.
  5. Open the clamp to the empty reservoir bag and open the red plug to the empty reservoir bag. This allows any air trapped in the veins to escape the system so that it will not be a factor later.
  6. Open the blood fluid reservoir line clamp and let some of the fluid enter the empty bag.
  7. Close the lower bag clamp and shut the red plug filler cap to the lower bag. You now have a full vein for access. Leaving the clamp to the lower bag closed will allow you to attain a flash in the catheter as you insert the needle into the vein. The higher the fluid reservoir bag of blood is hung, the more pressure is created in the system to flash.
  8. Once the catheter is installed and secured, open the lower bag tubing clamp to allow titration of the drip in the IV set-up.
  9. Phlebotomy can be accomplished without opening the lower tubing clamp.
  10. When the simulated blood has run from the supply bag and the lower bag is full, change the positions of the two bags and the blood flow will reverse and continue to fill the veins.

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# ADULT CPR FULL BODY MANIKIN

## Storage

If possible, the manikin should be stored at normal room temperature (62°F to 80°F). The optional Carry/Storage Bag (#1373) is an excellent way of keeping your manikin clean and damage-free while not in use. Electronic model: disconnect the console box when not in use. **Batteries should be removed for long term storage.**

## Care And Maintenance

Since Simulaids' Adult CPR Full Bodied Manikin takes the place of a live victim in your training program, it should be maintained with care and treated as you would any other valuable training tool. It should not be dropped nor subjected to temperatures above 100°F. These precautions will prevent deformation of the body and possible damage to the internal skeletal structure. Care should be taken to ensure that the body and limbs are not punctured or torn. Simulaids' Adult CPR Full Bodied Manikin features fully articulated limbs. However, care should be taken not to twist the arms and legs into positions that a human body would not normally withstand. After each training exercise, or when needed, the manikin can be washed with hot, soapy water. Do not immerse the product. The use of solvents or strong cleansers is not recommended. However, an "all-purpose" cleaner (i.e., 409 or Fantastic) may be used.

Special care should be taken not to have any print material come in contact with the skin surface. Ink will transfer to the plastic parts and be next to impossible to remove. You will end up with a stain if ink embeds on the plastic. Do not wrap it with newspaper or other print material when storing it. Ink stains are not covered under warranty.

## Warranty

Simulaids warrants this product to be free from any defect in materials and/or workmanship for a period of three years from the date of purchase, as evidenced by the date of invoice when the product was shipped to the end user. This warranty expressly does not cover abuse, accidental or purposeful damage, or any form of modification to the product. Simulaids reserves the right to either repair or replace affected parts or the entire unit, at their sole discretion, after investigating and reviewing the actual product and the damage. In most instances, a digital photo of the product in question showing the damage will help qualify a product for return to the factory. At no time will any product be accepted at the plant without proper return authorization issued by Simulaids.

Freight and Shipping charges are the sole responsibility of the end user. No product will be received with shipping charges due. Any product considered for warranty work must be identified by serial number and invoice number from the agency through whom the product was purchased. Without this information the product will not receive a return authorization number as required.

## Return Policy

Should it be necessary to return an item for credit or for any other reason, contact our Customer Service Department to obtain an RGA Number. Please refer to your invoice number when phoning in your request for returning merchandise. Should you have any questions or wish further information on any product we manufacture call or write our Customer Service Department.

## Replacement Parts List

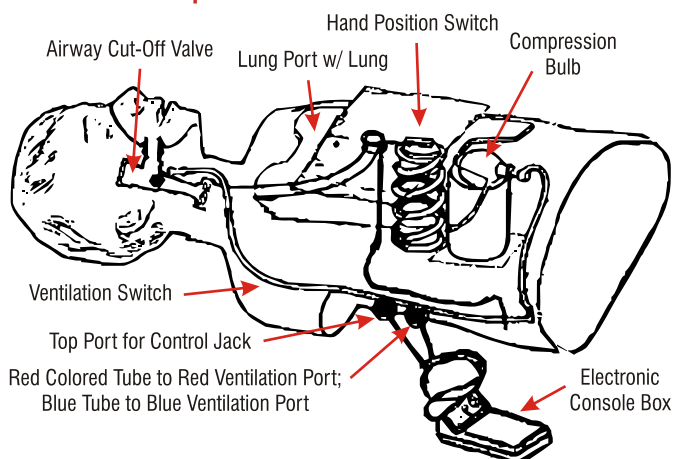
- 2701** Airway Cutoff Ball Valve for CPR/Trauma Manikin
- 2727** Airway Cutoff Ball Valve for Electronic Model
- 2023** Channel Mouth/Nose Pieces (10 Pack)
- 2601** Channel Mouth/Nose Pieces (10 Pack African-American)
- 2507** Airways with Lungs (10 Pack)
- 2030** Lungs only (20 Pack)
- 2703** CPR Head (Rigid)
- 2704** Transport Rescue Head
- 2754** Transport Rescue Head (African-American)
- 1373** Carry, Storage Bag
- 1374** IV Lower Arm with Hand
- 1374B** IV Lower Arm with Hand (African-American)
- 6701** Trauma Moulage Kit
- 6701B** Trauma Moulage Kit (African-American)

## Weights & Dimensions

Manikin Weight 49 lbs. - Shipping Weight 60 lbs.

Shipping Dimensions: 50" L x 12" H x 21" W

### Illustration of Internal Parts and the Optional Console Box Connections





**Manufacturers of Training Manikins, Casualty Simulation Kits & Medical Training Devices**

PO Box 1289 • 16 Simulaids Drive • Saugerties, NY 12477  
(845) 679-2475 • 1-800-431-4310 • FAX: (845) 679-8996  
[www.simulaids.com](http://www.simulaids.com)