

# CPR-2 Bag

## Disposable Manual Resuscitator

### INDICATIONS FOR USE:

Provides emergency respiratory support by means of a face mask or a tube inserted into a patient's airway.

### ACCESSORIES:

Mercury Medical: Manometer, PEEP Valve, OMNI-Link, Face Masks, Filter, Disconnect Wedge

### WARNINGS:

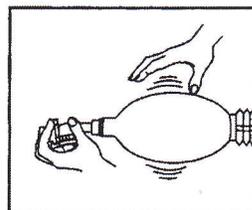
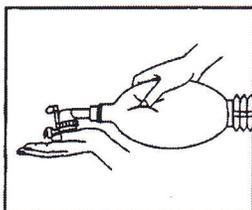
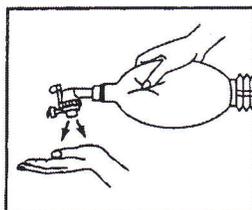
1. Incorrect operation of this device can be hazardous.
2. If used with supplemental oxygen, do not allow smoking or use unit near sparking equipment, open flame, oil or other flammable chemicals.
3. Should not be used in toxic or hazardous atmospheres.

### PRECAUTIONS:

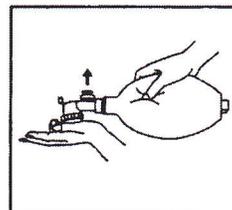
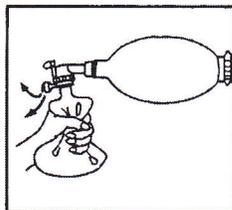
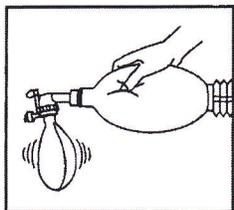
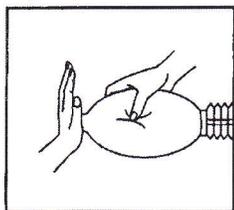
1. Resuscitator should be used only by personnel trained in cardiopulmonary resuscitation.
2. Never wait to begin mouth-to-mask resuscitation if a manual resuscitator is not immediately available or cannot be used effectively (see your department manual for accepted patient resuscitation procedure).
3. Infant and Child units are equipped with a pressure-limiting device which opens at approximately 40 cm H<sub>2</sub>O. However, an abrupt, high-volume inspiratory delivery may cause the unit to exceed this level.
4. Verify proper function of the resuscitator and clear patient airway by monitoring for the following:
  - That the patient is being ventilated, as indicated by rise and fall of chest. The use of an airway pressure manometer is recommended.
  - Proper CPR-2 Bag valve action (refer to "Test the Resuscitator" prior to using).
  - That the mask and valve are free from obstruction. To clear valve obstructions, squeeze and shake the bag briskly or rinse with water.
5. Do not sterilize the CPR-2 Bag. This product is designed for single-patient use only and parts are not designed for re-use.

### DIRECTIONS FOR USE:

1. Remove the resuscitator from the outer protective poly bag. Expand the CPR-2 Bag to its operating position. For units equipped with expandable reservoirs, expand fully before use.
2. Inspect the unit to be sure the system is complete.
3. Prior to using; "Test the Resuscitator":

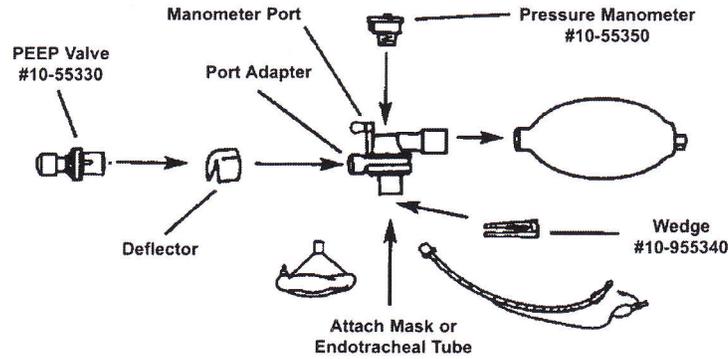


- a) Compress the resuscitator bag with one hand, then occlude patient valve outlet with your other hand. Release the grip on the bag. Rapid bag re-expansion confirms efficient air intake.



- b) Remove patient valve, close the neck opening and try to compress the bag. If the bag cannot be compressed with reasonable force, or if bag compression forces the air out between your hand and neck of the bag, the intake valve is efficiently preventing backward escape of air.
- c) Attach the patient valve to the bag. Place a test lung over the valve connector (patient side). Test the resuscitator by squeezing and releasing the resuscitator bag with one hand as rapidly as possible for at least 10 breaths. Fully compress the resuscitator bag with each squeeze. This should fill the test lung and confirm that the patient valve efficiently directs inspiration air to the patient.  
**Note:** If the resuscitator continues to inflate because of the stacking of breaths, suspect a faulty patient valve and remove the resuscitator from service.
- d) Compress the filled test lung. Air should vent to the atmosphere through the deflector and not return to the ventilation bag.
- e) When using unit with a pressure-limiting device, test for proper function by occluding patient valve outlet and compressing the bag to verify opening of the pressure-limiting device.  
**Note:** If the resuscitator does not pass all criteria as described under "Test the Resuscitator", take immediate action by replacing resuscitator.
4. **INSPIRATION PRESSURE-LIMITING DEVICE.** The infant and child resuscitators may feature a patient valve with a special pressure-limiting device mounted on the upper valve housing. If inspiration meets with pulmonary resistance, venting will occur, limiting pressure to 40 +5/-10cm H<sub>2</sub>O, thereby reducing the risk of stomach distension. A hissing sound can be heard as the device opens. The patient valve provides a built-in port for pressure monitoring, recommended when resuscitating infants and small children, remove the cap and attach your monitoring device, re-attach cap when not using.  
**Note:** When higher inspiration pressures are necessary, the pressure-limiting device can be closed with the tip of the index finger or by engaging the lock-out clip while squeezing the bag. The use of an airway pressure manometer is recommended when doing this procedure.

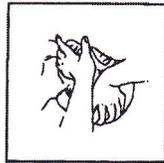
5. If resuscitating where high concentrations of oxygen are needed, attach oxygen tubing adapter to proper oxygen source, such as a flow meter or adjustable oxygen regulator.
6. The Patient Valve features a built-in PEEP Adapter Port. To attach the PEEP Valve to the Port, remove the exhalation deflector and add the PEEP Valve with a slight twist as you push together the parts to assure a tight, secure fit. When adjusting the MERCURY MEDICAL® PEEP Valve, connect a manometer in-line with the patient breathing system and read the manometer during adjustment. Rotate adjustment cap clockwise to increase PEEP or counterclockwise to decrease PEEP. The adjustment range is 0 - 20 cm H<sub>2</sub>O (mbar).



**OPERATING INSTRUCTIONS:**



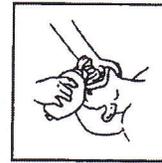
a. Clear mouth of foreign matter.



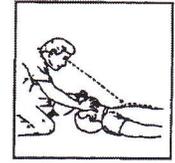
b. Position patient for open airway.



c. Apply mask firmly to face to achieve a tight seal. If patient is intubated, attach the patient valve connector to the tube adapter.



d. Squeeze and release bag quickly, allowing enough time between inspirations for the patient to exhale and the bag to re-expand.



e. Observe rise and fall of patient's chest and listen for air flow from patient valve as patient exhales.

**Note:** If these do not occur, patient's airway or patient valve may be blocked. Take immediate action by replacing the resuscitator or use an alternative procedure appropriate for situation.

**SPECIFICATIONS AND PERFORMANCE\*:**

The MERCURY MEDICAL® CPR-2 Bag was designed to meet ISO 10651-4 and ISO 5356-1 requirements.

OXYGEN CONCENTRATION:	LPM	Rate	Tidal Volume	w/Reservoir	w/Expandable Reservoir	w/22mm Aerosol Reservoir	w/o Reservoir
Adult:	10	12	500 ml	100 %	90 %	97 %	53 %
Child:	10	20	250 ml	99 %	N/A	97 %	60 %
Infant:	4	30	40 ml	100 %	N/A	95 %	71 %

MAXIMUM STROKE VOLUME:	One Hand	Two Hands	PATIENT BODY MASS RECOMMENDATIONS:			RESUSCITATOR MASS: (Patient valve and bag only)	
			Adult	Child	Infant	Adult	Child
	1110 ml	1560 ml	Adult	Over 20 Kg	Adult	343 grams	
	370 ml	n/a	Child	10 - 20 Kg	Child	212 grams	
	180 ml	n/a	Infant	Under 10 Kg	Infant	167 grams	

The correct ventilation frequency may vary. Please follow the current ventilation frequency recommended by the AHA.

EXTERNAL RESUSCITATOR DIMENSIONS (Patient valve and bag only):		MEASURED VOLUME:	
		Bag	Reservoir
Adult	34 cm long x 14 cm diameter	Adult	1675 ml / 2679 ml
Child	28 cm long x 10 cm diameter	Child	501 ml / 2679 ml
Infant	27 cm long x 7 cm diameter	Infant	244 ml / 695 ml

**EXPIRATORY RESISTANCE:** 2.1 cm H<sub>2</sub>O @ 50 LPM  
**INSPIRATORY RESISTANCE:** 2.9 cm H<sub>2</sub>O @ 50 LPM Child

**OXYGEN TUBING CONNECTION:** Universal adapter fits C.G.A. D.I.S.S. 1240 or .250 inch hose barb.

**IMPACT TEST:** The Mercury Medical CPR-2 Bag showed no signs of damage, or degradation of performance as a result of a one meter drop onto a concrete surface.

**OPERATING ENVIRONMENTAL LIMITS:** -10° to +50° C

**STORAGE ENVIRONMENTAL LIMITS:** -40° to +60° C

**DEAD SPACE:** 7 ml

\*Performance values given are achievable under test conditions but may vary during actual use. Information on test methods is available from MERCURY MEDICAL®.

**Mercury Medical** **EC REP**  
 Scanlan Group B.V.  
 Postbus 75664  
 Schiphol-Tripport 1118 ZS  
 The Netherlands



Patent # US 5,557,049 B1  
 # US 5,357,951 B1



Do Not Reuse

**Rx**

By Prescription Only



Latex Free



Non Sterile

11300 - 49th Street North  
 Clearwater, Florida 33762-4807 USA [www.mercurymed.com](http://www.mercurymed.com)

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 Additional copies of the "CPR-2 Bag Directions for Use" are available on request. Contact the Marketing Dept. at 800-237-6418