

*Mercury*Medical®

Your Need ... Our Innovation®

# ONLY ONE

CPR-2 Small Adult Bag with *LiteSaver*® Manometer



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Since 1963



## Your Need . . . Our Innovation<sup>®</sup>

Mercury's **ONLY ONE** SMALL ADULT Bag Adds Value, Offering BETTER Patient Outcomes. . .

### **How often are patients either ventilated too fast, with too high of a pressure or too much volume?**

When it comes to tidal volumes, less is better when comparing an adult size (1600 mL) self-inflating bag/BVM to a small adult (1000 mL) bag. Smaller self-inflating bags can help reduce the incidence of over inflation, gastric distention and regurgitation. It is becoming more evident that larger tidal volumes and ventilation rates can be associated with these complications whereas smaller tidal volumes are becoming safer and more acceptable.

### **The Small Adult Bag/BVM Offers Adequate Stroke Volume**

Adult self-inflating bags/BVM's typically had a max capacity between 1000-1600 mL since the long past standards had recommended larger tidal volume delivery of 10-12 mL/kg. Current AHA guidelines recommend delivered tidal volumes of 400 to 500 mL or 6-7 mL/kg per ACEP's strategy to avoid overinflation, gastric distention and regurgitation. \*(Ref studies). Clinicians can more easily comply with delivered tidal volume guidelines by using Mercury's Small Adult size bag.

For example, according to CDC, an average adult weighs approximately 195.5 lbs which is 88.8 kg (195.5/2.2) 88.8 kg x 6 mL = 532.8 mL (7 mL = 621.6 mL).

Larger bag volumes may lead to: vomiting or aspiration, barotrauma, volutrauma or reduction in blood pressure. A small adult bag is not only **easier** to squeeze, it offers adequate stroke volume as shown below.

| CPR-2 Size  | mL Volume | Stroke Volume (one-hand/two-hands) |
|-------------|-----------|------------------------------------|
| Adult       | 1685      | 700-1050                           |
| Small Adult | 1000      | 450-725                            |
| Child       | 500       | 250                                |
| Infant      | 240       | 90                                 |

Furthermore, standard ventilator volume settings are in the 500-600 mL range. Studies are showing the same may be true using self-inflating manual resuscitators.

### **Streamlined Inventory**

SMALL ADULT size bag also helps streamline inventory, saving space and costs by not having to purchase multiple bag sizes! (Save space: Crash carts, Pediatric ICU, EMS departments & trauma bags)

### **Pop-Off (Override Button with Lock-clip)**

A configuration with a pop-off valve and override clip (on the patient valve) enables the use for pediatrics! It prevents accidental over ventilating by keeping peak inspiratory pressure (PIP) below 40 cm H<sub>2</sub>O. The pop-off comes with an override button and lock-clip which allows the option of ventilating a patient over 40 cm H<sub>2</sub>O PIP pressure if needed. (Pop-off is an ISO standard for pediatric patients.)

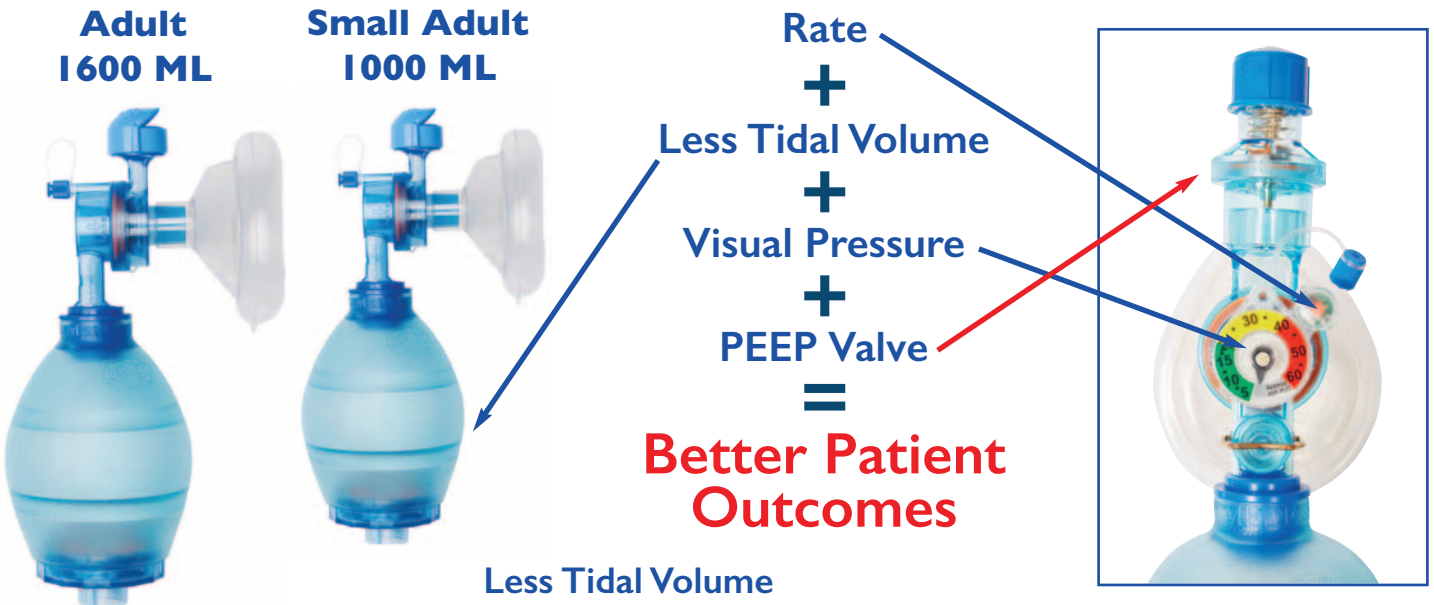
### **LiteSaver<sup>®</sup> Manometer Helps Meet AHA Guidelines for Ventilation Rate**

Adding a color-coded manometer is critical for reducing the risk of aspiration which typically occurs between 20-25 cm H<sub>2</sub>O; and at the same time, reduces chances of lung injury such as barotrauma. But when adding the **ONLY ONE** LiteSaver Manometer with integrated timing light to the equation, it offers one more measure of safety. LiteSaver Manometer assists in reduced stacking of breaths, helping to maintain correct respiratory rate (every 6 seconds, 10 breaths/minute, recommended by AHA) for advanced airway patients and allows the patient to completely exhale... It virtually takes the guess work out of when to deliver ventilation. All in all, a winning combination to keep track of rate, volume and pressure.

# The Equation for Successful Ventilation

## Less is BETTER. . . Small Adult Size

How often are patients either ventilated too fast, with too high of a pressure or too much volume?



### Rate

- Reduce breath stacking
- Enable patient to breathe
- Meets AHA standard for advanced airway patients

### PEEP Valve

- Prevents lung collapse
- Helps keep alveoli open at the end of expiration
- Improves oxygenation

### Less Tidal Volume

- Prevent aspiration due to higher volumes
- Prevent higher volumes that lead to higher pressure causing barotrauma
- Prevent higher volumes that cause volutrauma
- ACEP Recommendation is 6-7 mL per kg: According to CDC, avg adult male weighs 88.8 kg (195 lbs)  $88.8 \times 6 \text{ mL} = 532.8 \text{ mL}$  recommended tidal volume

### Visual Pressure

- Measure and document pressure
- Lower pressures help reduce chances of barotrauma
- Lower chances of vomiting and aspiration

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## ORDERING INFORMATION

| PART #    | CPR (Synthetic Rubber) Dark Blue | CPR-2 (PVC) Light Blue | Oxygen Bag Reservoir | Aerosol Tubing Reservoir (22mm) | Expandable Large Bore Oxygen Reservoir | Adult Cushion Mask | Small Adult Cushion Mask | Color-Coded Mask with Flange #3 | Pediatric Cushion Mask | Child Cushion Mask | Infant Cushion Mask | PEEP w/Filter | PEEP Valve | Pop-Off | StatCO <sub>2</sub> Detector | Manometer | LiteSaver Timing Light with 0-60 cm H <sub>2</sub> O Manometer | OTHER        |
|-----------|----------------------------------|------------------------|----------------------|---------------------------------|--|--------------------|--------------------------|---------------------------------|------------------------|--------------------|---------------------|---------------|------------|---------|------------------------------|-----------|--|--------------|
| #10-56402 |                                  | X                      | X                    |                                 |  |                    | X                        |                                 |                        |                    |                     |               | X          |         | X                            | X         |  |              |
| #10-56403 |                                  | X                      | X                    |                                 |  |                    | X                        |                                 |                        |                    |                     |               |            |         |                              | X         |  |              |
| #10-56404 |                                  | X                      | X                    |                                 |  |                    | X                        |                                 |                        |                    |                     |               |            | X       |                              | X         |  |              |
| #10-56411 |                                  | X                      | X                    |                                 |  |                    | X                        |                                 |                        |                    |                     |               |            | X       |                              |           |  |              |
| #10-56412 |                                  | X                      | X                    |                                 |  |                    |                          |                                 |                        |                    |                     |               | X          | X       |                              | X         |  |              |
| #10-56423 |                                  | X                      | X                    |                                 |  |                    | X                        |                                 | X                      |                    |                     |               | X          | X       |                              | X         |  |              |
| #10-56424 |                                  | X                      | X                    |                                 |  |                    | X                        |                                 | X                      |                    |                     |               | X          | X       |                              |           |  |              |
| #10-56432 |                                  | X                      | X                    |                                 |  |                    | X                        |                                 |                        |                    |                     |               | X          | X       |                              |           |  |              |
| #10-56435 |                                  | X                      | X                    |                                 |  | X                  |                          |                                 |                        | X                  |                     |               | X          | X       |                              | X         |  |              |
| #10-56437 |                                  | X                      | X                    |                                 |  | X                  |                          |                                 |                        |                    |                     |               | X          | X       |                              |           |  |              |
| #10-56438 |                                  | X                      | X                    |                                 |  |                    |                          | X                               |                        |                    |                     |               | X          | X       |                              |           |  |              |
| #10-56440 |                                  | X                      | X                    |                                 |  | X                  |                          |                                 |                        |                    |                     |               | X          |         |                              |           |  |              |
| #10-58500 |                                  | X                      | X                    |                                 |  |                    |                          |                                 |                        |                    |                     |               | X          |         |                              |           |  | X            |
| #10-58501 |                                  | X                      | X                    |                                 |  |                    |                          | X                               |                        |                    |                     |               |            | X       |                              |           |  | X            |
| #10-58502 |                                  | X                      | X                    |                                 |  |                    | X                        |                                 |                        |                    |                     |               |            | X       |                              |           |  | X            |
| #10-58503 |                                  | X                      | X                    |                                 |  |                    | X                        |                                 | X                      |                    |                     |               |            | X       |                              |           |  | X            |
| #10-58506 |                                  | X                      | X                    |                                 |  | X                  |                          |                                 |                        |                    |                     |               | X          | X       |                              |           |  | X            |
| #10-58507 |                                  | X                      | X                    |                                 |  |                    |                          |                                 |                        |                    |                     |               | X          | X       |                              |           |  | X            |
| #10-58509 |                                  | X                      | X                    |                                 |  | X                  |                          |                                 |                        |                    |                     |               | X          | X       |                              |           |  | X            |
| #10-58512 |                                  | X                      | X                    |                                 |  | X                  |                          |                                 | X                      |                    |                     |               | X          | X       |                              |           |  | X            |
| #10-55901 | X                                |                        |                      |                                 | X                                      |                    | X                        |                                 |                        |                    |                     |               |            |         |                              |           |  |              |
| #10-55904 | X                                |                        | X                    |                                 |  |                    | X                        |                                 |                        |                    |                     |               |            |         |                              |           |  |              |
| #10-55907 | X                                |                        |                      | X                               |  |                    | X                        |                                 |                        |                    |                     |               |            |         |                              |           |  |              |
| #10-55909 | X                                |                        |                      |                                 | X                                      |                    |                          |                                 | X                      |                    |                     |               |            | X       |                              |           |  |              |
| #10-55910 | X                                |                        | X                    |                                 |  |                    |                          |                                 |                        | X                  |                     |               |            |         |                              | X         |  |              |
| #10-55912 | X                                |                        |                      |                                 | X                                      |                    |                          |                                 |                        |                    |                     |               | X          |         |                              |           |  |              |
| #10-55913 |                                  |                        |                      | X                               |  |                    |                          |                                 | X                      | X                  | X                   |               |            | X       |                              | X         |  | No lock clip |
| #10-55915 | X                                |                        | X                    |                                 |  |                    |                          |                                 |                        |                    |                     |               | X          | X       |                              | X         |  |              |
| #10-55916 | X                                |                        | X                    |                                 |  |                    |                          |                                 |                        |                    |                     |               |            | X       |                              |           |  |              |
| #10-55917 | X                                |                        |                      | X                               |  |                    |                          |                                 | X                      |                    |                     |               |            | X       |                              | X         |  |              |
| #10-55918 | X                                |                        | X                    |                                 |  |                    | X                        |                                 |                        |                    |                     |               | X          |         | X                            | X         |  |              |
| #10-55922 | X                                |                        | X                    |                                 |  |                    | X                        |                                 | X                      |                    |                     |               | X          |         | X                            | X         |  |              |
| #10-55923 | X                                |                        | X                    |                                 |  | X                  |                          |                                 |                        |                    |                     |               |            |         |                              | X         |  |              |
| #10-55924 | X                                |                        | X                    |                                 |  |                    | X                        |                                 |                        |                    |                     |               |            | X       |                              | X         |  |              |
| #10-55928 | X                                |                        |                      | X                               | X                                      |                    |                          |                                 |                        |                    |                     |               |            |         |                              |           |  |              |
| #10-58400 | X                                |                        | X                    |                                 |  | X                  |                          |                                 |                        |                    |                     |               |            |         |                              |           |  | X            |
| #10-55365 |                                  |                        |                      |                                 |  |                    |                          |                                 |                        |                    |                     |               |            |         |                              |           |  |              |
| #10-55366 |                                  |                        |                      |                                 |  |                    |                          |                                 |                        |                    |                     |               |            |         |                              |           |  |              |
| #10-55367 |                                  |                        |                      |                                 |  |                    |                          |                                 |                        |                    |                     |               |            |         |                              |           |  |              |

= CPR-2 Small Adult Bags

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