

**THUMPER<sup>®</sup>**  
**1007CC**  
**Continuous Compression**  
**Cardiopulmonary Resuscitator System**



*...every 90 seconds, someone in the United States  
suffers from cardiac arrest.*



**The World's Leader in Effective CPR!**

[www.michiganinstruments.com](http://www.michiganinstruments.com)  
1-800-530-9939



# THUMPER<sup>®</sup> CPR VS. MANUAL CPR

The comparison of Thumper<sup>®</sup> CPR vs. typical manual CPR illustrates some of the reasons why the Thumper<sup>®</sup> produces the highest level of cardiac support available today.

Other advantages below show why Thumper<sup>®</sup> is the most effective CPR today.

Compression	Manual CPR	Thumper <sup>®</sup> CPR
<b><i>Duration - 50% systole</i></b>	Very difficult to maintain 50% systole because of need to hold force on chest	Thumper <sup>®</sup> operates consistently at programmed Systole/Diastole ratio (factory preset at 50:50) regardless of operator size or physical condition
<b><i>Magnitude of Sternal Deflection</i></b>	Difficult to measure and control	Consistent and clearly delivered as measured
<b><i>Direction of Force</i></b>	May vary from perpendicular	Consistently perpendicular
<b><i>Rhythm and Amount</i></b>	Variable	Constant
<b><i>Patient Size</i></b>	Difficult if not impossible to effectively compress the obese patient	3.15" maximum compression stroke allow resuscitation of obese patients
<b>Trauma</b>	Cracked ribs and vomitus aspiration common	Controlled chest compressions reduce traumatic risks
<b>Monitoring and Defibrillation</b>	Interruptions necessary for ECG Monitoring and defibrillation	Thumper <sup>®</sup> need not be removed for monitoring and defibrillation
<b>Operators</b>		
<b><i>Number Required</i></b>	Usually two	Usually one
<b><i>Fatigue</i></b>	Unavoidable	Nonexistent
<b><i>Safety</i></b>	Operator in ambulance is not restrained and is unprotected	Possible for operator to sit with safety belt fastened

## The Thumper<sup>®</sup>

A life support device used in many EMS and hospital applications

**Pre-hospital applications include:**

- \*Ambulances
- \*Air Medivac Units
- \*EMT Rescue Units
- \*Fire Rescue Units

**Within the hospital, the Thumper can be found in:**

- \*Emergency Departments
- \*Coronary and Intensive Care Units
- \*Cardiac Catheterization Labs
- \*Organ Transplant facilities

# 2005 AHA GUIDELINES

Quote:

...“once an advanced airway (eg. tracheal tube, laryngeal mask airway (LMA) or esophageal-tracheal combitube) has been inserted during 2-rescuer CPR, one rescuer should provide 8-10 ventilations/min while the other delivers 100 compressions/min. The rescuer performing the chest compressions should not pause chest compressions for delivery of ventilations.”<sup>1\*</sup>

## 1007CC The Continuous Compression Thumper<sup>®</sup> CPR System

Provides compressions at a rate of 100 per minute for effective cardiopulmonary resuscitation. In both clinical and research settings, the Thumper<sup>®</sup> has proven to be the standard in providing the most effective CPR possible.

The Thumper<sup>®</sup> is proven and reliable technology—over 3,600 in use today. The Thumper has been an adjunct to many ambulance and fire departments for over 40 years. The Thumper<sup>®</sup> can be rapidly set up with virtually no loss of CPR in transition from manual to Thumper<sup>®</sup> CPR. Easy to operate and will accommodate a wide range of patients, from small adults to bariatric patients over 300 pounds. The Thumper<sup>®</sup> is very affordable and can be used repeatedly with no expensive disposables.



## 1007CC Only Two Controls are Needed to Operate

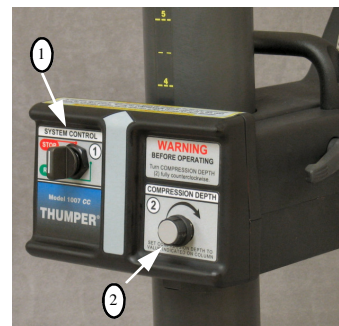
### 1. RUN/STOP:

**Run:** With the control in this position, The Thumper<sup>®</sup> is operational and able to deliver 100 continuous compressions per minute.

**Stop:** With the control in this position, chest compressions stop.

### 2. COMPRESSION DEPTH:

This control adjusts the depth of compression to correspond to the measured A-P (Anterior-Posterior) diameter shown on the back of the column.



\*NOTE: Before an advanced airway is established, the piston can be operated with Run/Stop to allow a 30:2 compression/ventilation ratio.

# THUMPER<sup>®</sup> MODEL 1007CC SPECIFICATIONS

## COMPRESSIONS:

- Compression Frequency: 100 compressions per minute
- Compression Stroke Range: Adjustable, 0.0 to 3.15 in (0.0 to 8.0 cm)
- Duty Cycle: Preset for 50/50 cycle
- Chest Compression Waveform: Exponential wave with a time constant of less than 60.0 msec

## INPUT:

- Compressed O<sub>2</sub> at 50 to 90 PSI (3.5 to 6.3 kgf/cm<sup>2</sup>)
- Gas Consumption: Maximum 45 LPM
- Indicator to show adequate input pressure: 52 PSI (3.7 kgf/cm<sup>2</sup>)
- Pressure relief valve set at 100 PSI (7.3 kgf/cm<sup>2</sup>)
- Filters to prevent contamination
- Standard oxygen connectors



## SIZE:

Assembled:

- Width: 9 in. (22.86 cm)
- Length: 19 in. (48.26 cm)
- Height: 22 in. (55.88 cm)
- Weight: 16 lbs. (33 kg)

## ADDITIONAL ACCESSORIES

The Thumper<sup>®</sup> Backboard is intended for either manual or mechanical CPR. It is designed to provide a firm, non-rebounding surface upon which CPR can be performed, and a light hyperextension of the neck to facilitate upper airway management. It allows use of the Thumper<sup>®</sup> on either right or left side of patient. Two separate sets of straps help immobilize the patient and secure the Backboard to a stretcher or spine board.



The Thumper<sup>®</sup> Case is designed to offer rugged protection for your Thumper<sup>®</sup> while keeping the package small and lightweight.

The Mobile Oxygen Carrier (MOC) is designed to accommodate two 'D' or 'E' size tanks. Adaptors for all standard hospital pipeline outlet are also available, as well as regulators to fit 'EE' or 'DD' tanks, or to fit 'G' or 'H' outlets.



**MICHIGAN INSTRUMENTS, INC.** has designed and manufactured specialized medical equipment for over 40 years. Our founders have built an enviable reputation for products of unexcelled quality. This has earned us the respect of customers and medical professionals throughout the world.