



# LUCAS Device

EMT-Basic

Advanced EMT

Paramedic

## PROCEDURE

- Ensure ongoing high quality CPR while device is set up. Limit interruptions with coordinated planning of device application.
- Power on the device, green light should be illuminated next to Adjust Button
- Place back plate behind patient's upper torso
- Ensure the CPR feedback puck is removed from the sternum to allow for adequate seal
- Lock the arms into the back plate and pull up to verify device is locked in
- In Adjust mode – lower the suction cup and verify that the lower edge is immediately above the xiphoid process
- Press the Pause button to lock compressor into position, verify placement
- Start compressions by pressing the Active button
  - Select 30:2 if an advanced airway has not been established
  - Select continuous if an advanced airway has been established
- Compressions should be paused only to adjust device position and for pulse/rhythm checks
- In case of ROSC, do not remove device in case patient re-arrests
- LUCAS may be used in traumatic arrest, but the FOCUS SHOULD BE ON LSI's (life-saving interventions) FIRST.

## REFERENCE GRAPHICS



## KEY POINTS

- Anticipate refractory VF cases early, the device will need to be removed in case the pads vector needs to be changed
- Do not place any device (CPR feedback sensor or defibrillation pad) directly under the LUCAS plunger
  - Move the sensor cushion between the defib pads slightly to the side to continue data collection
- Download data from device if capable of doing so
- Patients eligible for treatment:
  - Sternum height of 6.7 to 11.9 inches (17-30cm)
  - Maximum chest width 17.7 inches (45cm)
  - Using the LUCAS device is not restricted by the patients weight as many larger patients carry their weight throughout their mid-section
  - If the patient is too small the device will alert with 3 fast signals when lowering the suction cup and you can not enter the pause or active mode
- Recommended settings for use:
  - Compression rate: **111** per minute
  - Initial compression/ventilation ratio: **30:2**
  - Once an advanced airway has been placed, switch to **continuous** compressions
  - Suction Cup Start Position: **QuickFit (1.2 in)**
  - Pressure Pad Release: No setting required
  - Audible alerts: **Agency choice**
  - Ventilation in continuous mode: **10** per min
  - Audible timer: **Agency choice**

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